

#### Consideration of Comments on Reliability Coordination (Project 2006-06)

The Reliability Coordination Standard Drafting Team thanks all commenters who submitted comments on the proposed revisions to the standards for Project 2006-06 — Reliability Coordination. These standards were posted for a 45-day public comment period from January 4, 2010 through February 18, 2010. The stakeholders were asked to provide feedback on the standards through a special Electronic Comment Form. There were 42 sets of comments, including comments from more than 150 different people from over 50 companies representing all of the 10 Industry Segments as shown in the table on the following pages.

http://www.nerc.com/filez/standards/Reliability\_Coordination\_Project\_2006-6.html

#### **Summary Consideration:**

Stakeholders had three general concerns with the definition of Interpersonal Communications.

1) The definition of Interpersonal Communication to be ambiguous in terms of distinguishing between verbal communications and data transfers; The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.

The RCSDT believes that data communication is covered under IRO-010, R3 which states:

Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)

- 2) The definition should also clarify that the communication is between individuals in different entities or physical locations; The SDT believes that the revised Requirements of COM-001-2 satisfy this concern.
- 3) Use of the term "method" may imply a communication style; The RCSDT changed "method" to "medium" in definition.

Several stakeholders indicated that a definition of Alternative Interpersonal Communications was not needed. The RCSDT disagrees because there is an important part of the definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an alternative "Interpersonal Communications". The proposed definition contains the words: "which does not utilize the same infrastructure (medium)". Also, some stakeholders had concerns with the usage of "normal". The RCSDT does not propose defining "Normal" Interpersonal Communications and has removed it from the definition. Based on the consensus of stakeholders, we have revised the two definitions to:

Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.



Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.

Stakeholders pointed out that COM-001, R1 was a compound requirement and suggested creating separate requirements. Stakeholders also suggested revising the VRF to "Medium" as it does not meet the guidelines for a "High" VRF. The intent of R1 was three-fold.

- 1 Identify (have) an Alternative Interpersonal Communication capability
- 2 Test that capability periodically and
- If the test failed, fix it or identify another Alternative Communications Capability.

Based on comments received, we have revised R1 (now R9) to eliminate the compound requirement and therefore created more specific requirements to delineate Interpersonal and Alternative Interpersonal Communication, and applicable entity responsibility. The VRF is changed to "Medium."

The RCSDT also made extensive revisions to COM-001 to provide explicit Interpersonal Communications and Alternative Interpersonal Communications capabilities based on the relationships between various entities. The RCSDT believes that the proposed requirements meet the reliability objectives of the standard as well as the FERC Order 693 directives.

The comments received regarding the definition of Reliability Directive (for COM-002 and IRO-001) ranged from the being "too open-ended" (PPL) to not "flexible" enough (Public Service Enterprise Group Companies). The SDT expected and viewed these as attempting to reach middle ground.

There were also value added comments such as removing the unnecessary and redundant terms "actual or expected" from the definition, which the SDT agrees with. The definition was revised to:

A communication initiated by a Reliability Coordinator, Transmission Operator or Balancing Authority where action by the recipient is necessary to address an Emergency.

A number of commenter's expressed a concern about the definition not including three-part communication, clearly identifying a Reliability Directive at the time of issue, and applying to verbal communications. The SDT believes responsibilities should not be imbedded in a definition and, as drafted, the requirements of COM-002 with the proposed definition of Reliability Directive fully address the identification and verbal concerns.

The bulk of the comments received on COM-002 regarded the VSL for R3. The SDT agreed with suggestions for the VSLs and has deleted the Severe VSL and moved the High VSL to Severe. We believe that there are two possible actions within the requirement and failure to perform either warrants a Severe VSL.

Several commenter's expressed concern about three-part communication. The SDT believes that the requirements as drafted, with the issue, repeat back, and acknowledgement of a Reliability Directive, three-part communication is covered.



There was one commenter suggesting the addition of the DP to the applicability The RCSDT notes that, per the Functional Model, a DP may "direct" an LSE to communicate requests for voluntary load curtailment and not reliability situations: Item 9 on page 47 of version 5 of the Functional Model: "Directs Load-Serving Entities to communicate requests for voluntary load curtailment." Furthermore, The RCSDT will forward this comment to the FMWG for their consideration in revising the language.

The comments regarding the use of Reliability Directive in IRO-001 ranged from small entities being excluded to whether regulatory or statutory requirements covers NERC standards. The SDT addressed these by noting registration is not in the SDT scope and NERC's general council should be contacted for regulatory issues.

A few commenter's expressed concern with the VSL for R2 and one suggested the words "per Requirement 2," should be added. The SDT believes the phrase "per Requirement 2" is not necessary as a VSL is only applied AFTER a compliance violation is determined.

Value added comments such as a concern of the use of the word "threat" as it can be defined as cyber-related and suggested replacing "Operating Personnel" with "System Operator" were also made. The SDT concurred and removed the word "threat" and replaced it with "condition" and also made the revision to System Operator.

There were numerous comments regarding the definition of Reliability Directive with multiple wording suggestions. While slightly out of scope for question six, the SDT expected and viewed these as attempting to reach middle ground.

Some commenter's expressed concern over clarify that the RC has three separate actions. The RC can act, direct others to act, or issue Reliability Directives. The SDT modified R1 to read: "Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts"

Note: Based on discussions with FERC Staff, the SDT agreed to make the following changes:

IRO-001-2 Requirements R4, R5 and associated Measures and VSLs are moved to IRO-005-4

IRO-001-2 Requirements R6, R7 and associated Measures and VSLs are moved to IRO-002-2

Several commenters made suggestions regarding IRO-014, R2. The original requirement was designed to accomplish in one requirement what is proposed by the commenters as three procedural requirements. R2 is worded to focus on defining what a "compliant plan" is. In the current requirement a "proposed plan" is not the same as a "compliant plan".

The SDT viewed what the commenters are suggesting as follows:

- The initiating RC would submit its "proposed plan" to the other RCs
- The receiving RCs would provide the initiating RC with their responses indicating whether or not they agree with the proposed roles/actions offered by the initiating RC



- If one or more RCs do not agree with the roles/actions, then the initiating RC would be required to offer an alternative proposal (and go back to the first bullet)
- When all RCs acknowledge that the proposed roles/actions in the revised "proposed plan" are acceptable, then and only then would the "proposed plan" become a "compliant plan"

A closer reading of the current R2 would show the current R2 accomplishes the exact same result but does so without interjecting the need for documenting the intervening processes. The SDT does not see the need to document why each proposal was or was not accepted; nor does the SDT see the need for document the negotiations that are involved in getting to "an agreed to plan". For example the comments' subrequirement to show the RC submitted its plan would require a paper trail for the request; followed by a paper trail for the responses, followed by more paperwork if the RCs are not in agreement. In the end, the only action that matters (in both the SDT version and in the commenters alternative version) is a plan that works, and a plan that if others are involved must have their concurrence that those others will participate.

R2 does not impose a requirement to get agreements; what R2 does is to require that a "compliant plan" be developed. A proposed plan does not solve problems. That proposed plan is NOT compliant with R2 if it only assumes that other RC will effect the actions in the proposal; neither is it compliant if the proposed actions are not acceptable to the other RCs who are required to act. To be compliant the initiating RC must either have the concurrence (i.e. agreement) of the other RCs for their respective part(s) in the proposed plans OR the plan must not include those RCs.

R2 says to be compliant the other RC must agree with the "proposed plan" before that "proposed plan" is acceptable as a "compliant plan". Having a plan that requires someone else to do an action, but that other entity will not effect that action, will not resolve the problem at hand. Further having documentation that someone refuses to participate in the proposed plan does nothing to solve the problem at hand.

In general, the RC SDT feels that the concept of a Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with the applicable parts of the directives in FERC Order 693. The work of the RC SDT along with the OPCP SDT and the RTO SDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by commenters. Consensus appears to have been achieved with respect to the definition of Reliability Directive and the requirements that the RC SDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their proposed requirements in COM-003. The intent of this DT is to preserve a method for RCs, BAs and TOPs to make the determination of "what actions are required" and clearly communicate the importance to the receiver at a heightened method to normal day-to-day operational communications. The trigger of "Reliability Directive" by the issuer highlights these actions as needed to maintain BES reliability and shall be carried out as directed (unless such actions would violate safety, equipment, regulatory or statutory requirement per the language of the requirement) and all parties to the conversation need to be very cognizant of the system conditions that are requiring actions. The DT has attempted to craft clear and specific language that support BES reliability and hopes that this work can



support and enhance the development of the OPCP SDT. The RCSDT has also attempted to eliminate redundancy and ambiguity while not creating any reliability gaps. Several comments were received on the RC's ability to "act". The RC must "act" (ie. do something, "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts". This may include analysis, coordination of cooperative actions or the issuance of "Reliability Directives". "Act" does not imply solely the manipulation of BES elements.

RC control of "analysis tools" is critical to maintaining the wide area view. Control by the RC over the tools is imperative and beyond administrative, since it is intended to prevent planned reliability tool outages without the consent or knowledge of operating personnel. Although the DT agrees with the premise that many other requirements may be violated by ineffective communications, the intent of the requirement is to ensure there are effective communications methods in place for communicating BES activity across entities. Effective communication are a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more significant performance type standard requirements due to ineffective communications before they impact the BES. Failure of the RC to control outages of analysis tools was mentioned as a contributing factor in the 2003 blackout.

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, Gerry Adamski, at 609-452-8060 or at <a href="mailto:gerry.adamski@nerc.net">gerry.adamski@nerc.net</a>. In addition, there is a NERC Reliability Standards Appeals Process.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The appeals process is in the Reliability Standards Development Procedures: http://www.nerc.com/standards/newstandardsprocess.html.

# Index to Questions, Comments, and Responses

1.	Do you agree with the proposed definition of Interpersonal Communication
	(COM-001-2)? If not, please explain in the comment area
2.	Do you agree with the proposed definition of Alternative Interpersonal
	Communication (COM-001-2)? If not, please explain in the comment area25
3.	Do you agree with the revisions made to Requirement 1 in COM-001-2 as
	shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
4.	Do you agree with the definition of Reliability Directive (COM-002-2)? If not, please explain in the comment area
5.	Do you agree with the revisions to the Requirements in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.
6.	Do you agree with the use of the defined term "Reliability Directive" in revisions to the Requirements in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area 67
7.	Do you agree with the revisions to the Requirements in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.
8.	Do you have any other comment, not expressed in questions above, for the RC SDT?

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

		Commenter	Organization				Ind	ustry	Segn	nent					
				1	2	3	4	5	6	7	8	9	10		
1.	Group	Guy Zito	Northeast Power Coordinating Council										Х		
	Additional Member		Additional Organization	l		Regio	n		ı	Segme	ent Se	ection	n		
1.	Alan Adamson		New York State Reliability Council, LLC	NPC	С				10						
2.	Gregory Campoli		New York Independent System Operator	NPC	С				2						
3.	Roger Champagne		Hydro-Quebec TransEnergie	NPCC 2											
4.	Kurtis Chong		Independent Electricity System Operator	NPCC 2											
5.	Sylvain Clermont		Hydro-Quebec TransEnergie	NPC	NPCC 1										
6.	Chris de Graffenri	ed	Consolidated Edison Co. of New York, Inc.	NPC	С				1						
7.	Brian D. Evans-M	ongeon	Utility Services	NPC	С				8						
8.	Mike Garton		Dominion Resources Services, Inc.	NPC	С				5						
9.	Brian L. Gooder		Ontario Power Generation Incorporated	NPC	С				5						
10.	Kathleen Goodma	an	ISO - New England	NPC	С				2						
11.	David Kiguel	Hydro One Networks Inc. NPCC							1						
12.	Michael R. Lomba	ardi	Northeast Utilities	NPCC 1											
13.	Randy MacDonal	d	New Brunswick System Operator	NPCC 2											
14.	Greg Mason		Dynegy Generation	NPCC 5											

		Industry Segment															
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15.	. Bruce Metruck	1	New York Power Authority	NPC	С						6						ı
16.	. Chris Orzel		FPL Energy/NextEra Energy	NPC	C						5						
17.	. Robert Pellegrini		The United Illuminating Company	NPC	C						1						
18.	. Saurabh Saksena	а	National Grid	NPC	C						1						
19.	. Michael Schiavor	ne	National Grid	NPC	C						1						
20.	. Peter Yost		Consolidated Edison Co. of New York, Inc.	NPC	C						3						
21.	. Lee Pedowicz		Northeast Power Coordinating Council	NPC	C						10	)					
22.	. Gerry Dunbar		Northeast Power Coordinating Council	NPC	C						10	)					
2.	Group	Gerald Beckerle	OC Standards Review Group	Х			Х										
	A	Additional Member	Additional Organization				Regi	ion				5	Segm	ent S	Selec	ction	1
1.	Laura Lee		Duke								1,	3, 5	5				
2.	Al DiCaprio		PJM								2						
3.	Gene Delk		SCE&G								1,	3, 5	5				
4.	Jim Griffith		Southern								1,	3, 5	5				
5.	Mike Hardy		Southern								1,	3, 5	5				
6.	Dale Walters		CWLP								1,	3, 5	5, 9				
7.	Alvis Lanton		SIPC								3,	5					
8.	Larry Rodriquez		Union Power Partners								5						
9.	Tim Lyons		OMU								1,	3, 5	5				
10.	. Barry Hardy		OMU								1,	3, 5	5				
11.	. Dwayne Roberts		OMU								1,	3, 5	5				
12.	. Fred Krebs		Calpine								5						
13.	. Tim Hattaway		PowerSouth								3,	5, 9	)				
14.	. Jim Case		Entergy								1,	3					
15.	. Rene' Free		Santee Cooper								9,	1, 3	3, 5				
16.	. Glenn Stephens		Santee Cooper								1,	3, 5	5, 9				
17.	. Robert Thomasso	on	Big Rivers								1,	3, 5	5, 9				
18.	. John Neagle		AECI								3,	5					

		Commenter	Organization	Industry Segment									
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19.	John Troha		SERC						10				
3.	Group	Sam Ciccone	FirstEnergy	Х		Х	Х	Х	Х				
	A	dditional Member	Additional Organization			Regio	n	<u> </u>	1	Segme	ent Sel	ection	1
1. I	Dave Folk		FE	RFC		_			1, 3,	4, 5, 6			
2. I	Doug Hohlbaugh		FE	RFC					1, 3,	4, 5, 6			
3. I	kevin Querry		FES	RFC					6				
4. I	_arry Herman		FE	RFC					3				
4.	Group	Carol Gerou	NERC Standards Review Subcommittee										Х
	A	dditional Member	Additional Organization	l		Regio	n	<u> </u>	1	Segme	ent Sel	ection	1
1.	Chuck Lawrence		American Transmission Company	MRC	)				1				
2.	Tom Webb		WPS	MRO	)				3, 4,	5, 6			
3.	Terry Bilke		Midwest ISO Inc.	MRO	)				2				
4.	Jodi Jenson		Western Area Power Administration	MRO	)				1, 6				
5.	Ken Goldsmith		Alliant Energy	MRO	)				4				
6.	Dave Rudolph		Basin Electric Power Cooperative	MRO	)				1, 3,	5, 6			
7.	Eric Ruskamp		Lincoln Electric System	MRO	)				1, 3,	5, 6			
8.	Joseph Knight		Great River Energy	MRO	)				1, 3,	5, 6			
9.	Joe DePoorter		Madison Gas & Electric	MRC	)				3, 4,	5, 6			
10.	Scott Nickels		Rochester Public Utilties	MRC	)				4				
11.	Terry Harbour		MidAmerican Energy Company	MRO	)				1, 3,	5, 6			
5.	Group	Jalal babik	Electric Market Policy	Х		Х		Х	Х				
	Ad	ditional Member	Additional Organization	•		Regio	n		•	Segme	ent Sel	ectior	1
1. I	₋ouis Slade			SER	С				1, 4				
2. I	Mike Garton			NPC	С				5				
6.	Group	Brenda Lyn Truhe	PPL	Х				Х	Х				
	Ac	Iditional Member	Additional Organization			Regio	n			Segme	ent Sel	ection	1

		Commenter	Organization	Industry Segment									
				1	2	3	4	5	6	7	8	9	10
1.	Brenda Truhe		PPL Electric Utilities	RFC	•			•	1				
2.	Jon Williamson		PPL EnergyPlus	WEC	CC				6				
3.	Mark Heimbach		PPL EnergyPlus	MRC	)				6				
4.	Mark Heimbach		PPL EnergyPlus	NPC	С				6				
5.	Mark Heimbach		PPL EnergyPlus	RFC					6				
6.	Mark Heimbach		PPL EnergyPlus	SER	С				6				
7.	Mark Heimbach		PPL EnergyPlus	SPP					6				
8.	Annette Bannon		PPL Generation	RFC					5				
9.	Annette Bannon		PPL Generation	NPC	С				5				
10.	Annette Bannon		PPL Generation	WEC	CC				5				
7.	Group	Harry Tom	Operating Personnel Communications Protocols SDT	Х	Х	Х	Х	Х		Х	Х		
	Ad	ditional Member	Additional Organization			Regi	ion			Segm	ent Se	lectio	n
1.	Lloyd Snyder		GSOC	SER	С				1				
2.	Leanne Harrison		PJM	RFC					2				
3.	Laura Zotter		ERCOT	ERC	OT				2				
4.	Tom Irvine		HydroOne	NPC	С				1, 5	6, 7			
5.	Bill Ellard		CAISO	WEC	CC				2				
6.	John Stephens		City of Springfield	RFC					4, 8				
7.	Mike Brost		JEA	FRC	С				1, 3	5, 7			
8.	Mark Bradley		ITC	MRC	)				1				
9.	Fred Waites		Southern Company	SER	С				1, 3	5, 7			
10.	Wayne Mitchell		Entergy	SPP					1, 3	5, 7			
8.	Group	Howard Gugel	NERC										
Ple	•	e following information.				_				_			
		ditional Member	Additional Organization			Regi				Segm	ent Se	lectio	n
1.	Laurel Heacock		NERC			Applica							
2.	Bob Cummings		NERC	NA -	Not .	Applica	able						

		Commenter	Organization					Inc	lustry	Segn	nent			
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3.	Larry Kezele		NERC		ı	•							L	
4.	Ed Ruck		NERC											
5.	Todd Thompson		NERC											
6.	Mark Vastano		NERC											
7.	Roman Carter		NERC											
8.	Jule Tate		NERC											
9.	David Taylor		NERC											
10.	Al McMeekin		NERC											
11.	Maureen Long		NERC											
12.	Andy Rodriquez		NERC											
13.	Michael Moon		NERC											
14.	Stephanie Monzo	n	NERC											
15.	Gerry Adamski		NERC											
9.	Group	Linda Perez	Western Electricity Coordinating Council											Х
	Add	ditional Member	Additional Organization	,		F	Regio	n			Segm	ent Se	lectio	n
1. 5	Steve Rueckert		WECC	WE	СС					10				
10.	Group	Jason L. Marshall	Midwest ISO Standards Collaborators		X	(								
	Add	ditional Member	Additional Organization			F	Regio	n			Segm	ent Se	lectio	n
1. E	Bob Thomas		Illinois Municipal Electric Agency	SEF	RC					4				
2. J	lose Medina		NextEra Energy Resources, LLC	WE	CC					5				
3. J	loe O'Brien		NIPSCO	RFC						1				
4. J	loe Knight		Great River Energy	MR	0					1, 3,	5, 6			
5. k	Kirit Shah		Ameren	SEF	RC					1				
11.	Group	JT Wood	Southern Company Services	Х			Χ							
	Add	ditional Member	Additional Organization	•		F	Regio	n			Segm	ent Se	lectio	n
1. F	Hugh Frances			SEF	RC					1				

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12.	Group	Frank Gaffney	Florida Municipal Power Agency and Some Members	Х		Х	Х	Х	Х				
	Α	dditional Member	Additional Organization	Region Segi						Segm	ent Se	lection	n
1. J	im Howard		Lakeland Electric	FRC	C				1, 3,	5			
2. G	Greg Woessner		Kissimmee Utilities Authority	FRC	C				1, 3,	4, 5			
13.	Group	Kenneth D. Brown	Public Service Enterprise Group Companies	Х		Х		Х	Х				
	Α	dditional Member	Additional Organization			Regior	1	•		Segm	ent Se	lectio	า
1. J	effrey Mueller		PSE&G	RFC					1, 3				
2. D	ave Murray		PSEG Fossil	RFC					5				
3. J	im Hebson		PSEG ER&T	ERCO	Т				5, 6				
4. C	lint Bogan		PSEG Power Connecticut	NPCC					5				
14.	Group	Denise Koehn	Bonneville Power Administration	X		Х		Х	Х				
	Α	dditional Member	Additional Organization		- 1	Regior	1			Segm	ent Se	lectio	า
1. S	teve Davis		BPA, Generation Support	WECC	;				3, 5,	6			
2. T	edd Snodgrass		BPA, Transmission Dispatch	WECC	;				1				
3. T	ïm Loepker		BPA, Transmission Dispatch	WECC	;				1				
4. H	luy Ngo		BPA, Transmission Control Cntr HW Design & Maint						1				
15.	Group	Ben Li	IRC Standards Review Committee		Х								
	A	dditional Member	Additional Organization		ı	Regior	1			Segm	ent Se	lectio	ก
1. C	harles Yeung		SPP	SPP					2				
2. J	ames Castle		NYISO	NPCC					2				
3. B	ill Phillips		MISO	MRO					2				
	ourdes Estrada	Salinero	CAISO	WECC					2				
5. S	teve Myers		ERCOT	ERCO	Т				2				
6. N	latt Goldberg		ISO-NE	NPCC					2				
7. P	atrick Brown		PJM	RFC					2				

		Commenter	Organization	Industry Segment									
				1	2	3	4	5	6	7	8	9	10
8. N	lark Thompson		AESO	WECC					2				
16.	Individual	Sandra Shaffer	PacifiCorp	Х		Х		Х	Х				
17.	Individual	Brent Ingebrigtson	E.ON U.S.	Х		Х		Х	Х				
18.	Individual	Duncan Brown	Calpine Corporation					х					
19.	Individual	Ron Sporseen	PNGC Power (15 member utilities)				Х						
20.	Individual	Chris Scanlon	Exelon	Х		Х		Х	Х				
21.	Individual	Steve Alexanderson	Central Lincoln			Х							
22.	Individual	Denise Roeder	North Carolina Municipal Power Agency #1			Х	Х		Х				
23.	Individual	Jon Kapitz	Xcel Energy	Х		Х		Х	Х				
24.	Individual	Martin Bauer	US Bureau of Reclamation			Х							
25.	Individual	Kasia Mihalchuk	Manitoba Hydro	Х		Х		Х	Х				
26.	Individual	Howard Rulf	We Energies			Х	Х	Х					
27.	Individual	Michael R. Lombardi	Northeast Utilities	Х		Х		Х					
28.	Individual	CJ Ingersoll	CECD										
29.	Individual	Brandy A. Dunn	Western Area Power Administration	Х									
30.	Individual	Michael J Ayotte	ITC Holdings	Х									
31.	Individual	Kathleen Goodman	ISO New England Inc		Х								

		Commenter Organization Industry Segment					nent						
				1	2	3	4	5	6	7	8	9	10
32.	Individual	James H. Sorrels, Jr.	American Electric Power	Х		Х		Х	Х				
33.	Individual	Greg Rowland	Duke Energy	Х		Х		Х	Х				
34.	Individual	James Sharpe	South Carolina Electric and Gas	Х		Х		Х	Х				
35.	Individual	Jason Shaver	American Transmission Company	Х									
36.	Individual	Richard Kafka	Pepco Hodlings, Inc	Х		Х		Х	Х				
37.	Individual	Kirit Shah	Ameren	Х		Х		Х	Х				
38.	Individual	Charles Yeung	Southwest Power Pool		Х								
39.	Individual	Roger Champagne	Hydro-Québec TransEnergie (HQT)	Х									
40.	Individual	Dan Rochester	Independent Electricity System Operator		Х								
41.	Individual	Laura Zotter	ERCOT ISO		Х								Х
42.	Individual	Catherine Koch	Puget Sound Energy	Х									

1 Do you agree with the proposed definition of Interpersonal Communication (COM-001-2)? If not, please explain in the comment area.

Summary Consideration: Stakeholders had three general concerns with the definition of Interpersonal Communications.

1) The definition of Interpersonal Communication to be ambiguous in terms of distinguishing between verbal communications and data transfers; The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.

The RCSDT believes that data communication is covered under IRO-010, R3 which states:

Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)

- 2) The definition should also clarify that the communication is between individuals in different entities or physical locations; The SDT believes that the revised Requirements of COM-001-2 satisfy this concern.
- 3) Use of the term "method" may imply a communication style; changed "method" to "medium" in definition.

Organization	Yes or No	Question 1 Comment
Calpine Corporation		
North Carolina Municipal Power Agency #1		
Public Service Enterprise Group Companies		
We Energies		

Organization	Yes or No	Question 1 Comment						
Operating Personnel Communications Protocols SDT		No comment						
CECD	No CECD agrees that the term should be very broad and allow a registered entity to establish appropriate communication tools, devices, processes or systems to suit their operation. However, there is a need include the term "normal" interpersonal communication methods based on the definition of alternative interpersonal communication.							
		mment. RCSDT does not propose defining "Normal" Interpersonal Communications and has removed it used for day-to-day operation." Based on the consensus of stakeholders, we have revised the two						
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.						
		Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same munication used for day-to-day operation.						
ITC Holdings	No	Comments: As written, the definition could be interpreted to include data communications. Suggest modifying the definition to "Any method that allows two or more individuals to verbally interact, consult, or exchange information." Interpersonal Communication to operate the BES must be timely and non voice communication cannot be relied upon to be timely in all situations.						
Response: The RCSDT thanks y	ou for your co	mment. The intent of this definition is to exclude data, but not preclude e-mail, text, etc.						
The RCSDT believes that data con	nmunication is	covered under IRO-010, R3 which states:						
The RCSDT believes that data communication is covered under IRO-010, R3 which states:  Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)								
NERC  No  Comments: NERC staff believes the definition is unnecessary. "Interpersonal" is a common term and this definition provides no additional clarity. In addition, COM-001 should maintain the current coverage of voice and data. The requirements should address both primary and alternative/backup capabilities for voice and data. Approved standards including TOP-005-1.1 and IRO-010-1, as well as several others under development rely on the communication capabilities specified in COM-001. By limiting the focus of COM-001-								

Organization	Yes or No	Question 1 Comment								
		2 to this definition of Interpersonal Communication, there will no longer be an obligation to ensure that data telecommunication paths between entities are adequate and reliable.								
		mment. The RCSDT and the industry disagree with NERC staff's assessment. A strong industry request rpersonal communication which has been modified to:								
Interpersonal Communication: A	nterpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.									
rimary communication is inferred when reference to alternative is made. Moreover, the primary capability is used/tested on a daily basis.										
	e RCSDT contends that IRO-010 covers the requirement for data and information that includes a requirement for providing specified data when tomated Real-Time system operating data is unavailable.									
No Definition is vague and subject to interpretation. Requirement should be to have primary and backup capabilities. Disagree that a definition is required.										
Response: The RCSDT thanks y definition of interpersonal comm		mment. The RCSDT and the industry disagree. A strong industry demand to clarify "facilities" led to the the has been modified to:								
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.								
Primary communication is inferre	ed when refere	nce to alternative is made. Moreover, the primary capability is used/tested on a daily basis.								
Southern Company Services	No	If there is going to be an alternative definition, than this should be a definition for Normal Interpersonal Communication.								
Response: The RCSDT thanks y primary capability is used/tested		mment. Primary communication is inferred when reference to alternative is made. Moreover, the is.								
Ameren  No In previous postings, the drafting team confirmed that they intended for COM-001-2 to apply only to verbal communication systems and not data. However, the phrase "or exchange information." could still imply data (information). We suggest that the team should explicitly exclude data in definition.										
Midwest ISO Standards Collaborators										

Organization	Yes or No	Question 1 Comment	
Response: The RCSDT thanks you for your comment. The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving elations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.			
The RCSDT believes that	data communi	cation is covered under IRO-010, R3 which states:	
Operator, and Transmission Own	er shall provid	enerator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission le data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability ime Horizon: Operations Planning; Same-day Operations; Real-time Operations)	
NERC Standards Review Subcommittee	No	In previous postings, the drafting team confirmed that they intended for COM-001-2 to apply only to verbal communication systems. We believe this definition had inadvertently brought data back into the standard. Specifically, we are concerned about "or exchange information." Data can be considered information and thus some may now interpret SCADA and ICCP being included. To avoid this confusion, we suggest the definition would be sufficient with the "or exchange information" redacted.	
		We believe the proposed definition for the term "Interpersonal Communication" is too broad and ambiguous. We recommend the following instead: "Verbal Communication between two or more registered entities (not within the same organization) to exchange reliability-related information." The inclusion of this term "registered entities" removes the ambiguity which we believe is contained in the proposed definition. In addition, the inclusion of the phrase "not within the same organization" clarifies that the focus of definition is to address communication between different registered entities.	
	Response: The RCSDT thanks you for your comment. The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.		
The RCSDT believes that	data communi	cation is covered under IRO-010, R3 which states:	
Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)			
Also, the SDT believes that the revised Requirements of COM-001-2 satisfy your ambiguity concern.			
Southwest Power Pool	No	It appears as if the following two definitions have the same meaning: COM-001-2 Interpersonal Communication: Any method that allows two or more individuals to interact, consult, or exchange information. COM-003 -1 Interoperability Communication - Communication between two or more entities to exchange reliability-related information to be used by the entities to change the state or status of an element or facility of	

Organization	Yes or No	Question 1 Comment
		the Bulk Electric System. SPP recommends changing the word "method" to medium in Interpersonal Communication. For Alternative Interpersonal Communication, that definition uses the term "infrastructure (medium)" as in type of equipment used. These terms should use consistent words if they are referring to the same thing.
Response: The RCSDT thanks y	ou for your co	mment. We concur and have revised the two definitions to:
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.
		Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same nunication used for day-to-day operation.
Duke Energy	No	Need to revise this definition to clarify that Interpersonal Communication is the primary method of communication, and that it is limited to verbal or written communications (not data such as SCADA data), and that it is limited to real-time operations (time horizon is Real-time Operations). Suggested wording: Interpersonal Communication: The primary verbal or written method that allows two or more individuals to interact, consult, or exchange information for real-time operations.
		ment The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving n of media dedicated to Telemetering or other data exchange.
The RCSDT believes that	data communi	ication is covered under IRO-010, R3 which states:
Operator, and Transmission Own	ner shall provid	enerator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission de data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)
The RCSDT does not believe "pri	imary" is need	ed because "primary" communication is inferred when reference to "alternative" is made.
PPL	No	The definition should be clarified to state that it is interpersonal communications between functional entities and not interpersonal communications within the functional entity that the standard is addressing.
Response: The RCSDT thanks y	ou for your co	mment. The SDT believes that the revised Requirements of COM-001-2 satisfy your concern
Hydro-Québec TransEnergie (HQT)	No	The definition should be worded to be more explicit, such as: When two or more individuals interact, consult, or exchange information.

Organization	Yes or No	Question 1 Comment	
Northeast Power Coordinating Council	No	The definition should be worded to be more explicit, such as: When two or more individuals interact, consult, or exchange information.	
Response: The RCSDT thanks y	ou for your co	mment. We concur and have revised the definition to:	
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.	
Electric Market Policy	No	The SDT has proposed a definition that is meant to limit the standard to two-way person-to-person communication between functional entities. However, as written the definition can also be viewed as so openended as to apply to pens and papers used by system operators to show another system operator in the same control room some operational data. The proposed standard does further constrain the application to "real-time operation information", but may be better served to explicitly constrain the definition to functional-entity-to-functional entity. It is these media that the standard means to address.	
Response: The RCSDT thanks y	ou for your co	mment. The SDT believes that the revised Requirements of COM-001-2 satisfy your concern	
Bonneville Power Administration	No	The term, 'interpersonal communication' as defined by common usage and Webster's Dictionary is sufficient for the work at hand. To provide an additional definition via the NERC Standards Development Process unnecessarily adds to an already convoluted task and provides no further benefit to the user of this proposed standard.	
	Response: The RCSDT thanks you for your comment. The RCSDT and the industry disagree. A strong industry request to clarify "facilities" led to the definition of interpersonal communication which has been modified to:		
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.	
Northeast Utilities	No	The use of "Any method" as the start of the definition of Interpersonal Communication is too board a qualifier. In normal interpersonal communications only 5 to 10% of the total communication is verbal while 90 to 95% is non-verbal. As it is not the intent of this standard to address non-verbal communications the use of "Any method" should be eliminated from the definition and more specific terms that clearly convey the intent of the standard should be used.	

Organization	Yes or No	Question 1 Comment
Response: The RCSDT thanks y	you for your co	mment. We concur and have modified the definition to:
Interpersonal Communication: A	Any medium tha	at allows two or more individuals to interact, consult, or exchange information.
FirstEnergy	No	This definition should be revised as follows to ensure clarity of scope by excluding electronic data exchange and for consistency with the proposed requirements: "Interpersonal Communication Capability: Any method that allows two or more individuals to interact, consult, or exchange real-time Bulk Electric System operating information using verbal communication equipment."
		iment. We agree in principle; however, the SDT believes that Webster's definition of Interpersonal: (beingns) clarifies the exclusion of media dedicated to Telemetering or other data exchange.
The RCSDT believes that	t data commun	ication is covered under IRO-010, R3 which states:
Operator, and Transmission Ow	ner shall provid	enerator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission de data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability Fime Horizon: Operations Planning; Same-day Operations; Real-time Operations)
Manitoba Hydro	No	When "Interpersonal Communication" is added to the NERC Glossary without the obvious reference to COM-001-2 which is "To ensure that operating entities have adequate Interpersonal capabilities" could and does infer that the definition means "protocol or forum of speaking, interacting or exchanging" information. The suggested definition does not immediately indicate the normal medium of communications, such a land line, mobile, radio, electronic, etc. A suggested definition: Interpersonal Communication: The normal mediums that carry messages, verbal or electronic, between two or more entities, internal or external, for the operation of the Interconnected Bulk Electric System.
Response: The RCSDT thanks y	you for your co	mment. We agree in principle and have modified the definition to:
Interpersonal Communication: A	Any medium tha	at allows two or more individuals to interact, consult, or exchange information.
The SDT believes that the revise	ed Requirement	es of COM-001-2 satisfy your concern of communication between entities.

Organization	Yes or No	Question 1 Comment
American Electric Power	Yes	
American Transmission Company	Yes	
Central Lincoln	Yes	
E.ON U.S.	Yes	
Florida Municipal Power Agency and Some Members	Yes	
Independent Electricity System Operator	Yes	
IRC Standards Review Committee	Yes	
ISO New England Inc	Yes	
OC Standards Review Group	Yes	
PacifiCorp	Yes	
Pepco Hodlings, Inc	Yes	
PNGC Power (15 member utilities)	Yes	
Puget Sound Energy	No	The proposed definition for this term addresses a method of communication, but not the communication itself. As a result, the defined term is incomplete as proposed. Recommend the addition of the word "capability" so that the defined term is "Interpersonal Communication Capability". The addition of this word to the term is also consistent with the use of the term in the proposed standard language, where Interpersonal Communication is consistently used in conjunction with the words "capability" or "capabilities".

Organization	Yes or No	Question 1 Comment
		Response: The RCSDT thanks you for your comment. We agree in principle and have modified the definition which replaces "method" with "medium":
		Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.
		The RCSDT believes the definition itself infers "capability."
South Carolina Electric and Gas	Yes	
US Bureau of Reclamation	Yes	
Western Area Power Administration	Yes	
Western Electricity Coordinating Council	Yes	
Xcel Energy	Yes	
ERCOT ISO	No	ERCOT ISO considers the definition of Interpersonal Communication to be ambiguous in terms of distinguishing between verbal communications and data transfers; the definition should specify that it applies to verbal communication systems.
		2) The definition should also clarify that the communication is between individuals in different physical locations to mitigate any potential for application to communications between employees of the same company communicating to each other in person at the same physical location – e.g. a control center.
		3) Additionally, use of the term "method" could imply a communication style (e.g. 3-part communications) as opposed to mode. It should be clear that the Standard only applies to modes of communication. Examples should be provided (e.g. phone, email, etc.) to clarify the scope.

Response: The RCSDT thanks you for your comment.

1. The definition of Interpersonal Communication to be ambiguous in terms of distinguishing between verbal communications and data transfers; the SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.

The RCSDT believes that data communication is covered under IRO-010, R3 which states:

Organization Yes or No Question 1 Comment

Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)

- 2. The SDT believes that the revised Requirements of COM-001-2 satisfy your concern of communication in different physical locations.
- 3. The RCSDT concurs and revised the definition, Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.

2 Do you agree with the proposed definition of Alternative Interpersonal Communication (COM-001-2)? If not, please explain in the comment area.

Summary Consideration: Several stakeholders indicated that a definition of Alternative Interpersonal Communications was not needed. The RCSDT disagrees because there is an important part of the definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an alternative "Interpersonal Communications". The proposed definition contains the words: "which does not utilize the same infrastructure (medium)". Also, some stakeholders had concerns with the usage of "normal". The RCSDT does not propose defining "Normal" Interpersonal Communications and has removed it from the definition. Based on the consensus of stakeholders, we have revised the two definitions to:

Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.

Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.

Organization	Yes or No	Question 2 Comment
Calpine Corporation		
North Carolina Municipal Power Agency #1		
Public Service Enterprise Group Companies		
We Energies		
Operating Personnel Communications Protocols SDT		No Comment

Organization	Yes or No	Question 2 Comment	
Manitoba Hydro	No	"Alternative Interpersonal Communication" also when added to the NERC Glossary without the obvious reference to COM-001-2 which is "To ensure that operating entities have adequate Interpersonal capabilities" could and does infer that the definition means "other protocols or forums of speaking, interacting or exchanging" information. The suggested definition does not immediately indicate the backup or alternate mediums of communications, such a redundant land lines, Satellite phones, battery or diesel back up electronics, etc. A suggested definition: Alternative Interpersonal Communication: Backup or alternate mediums that during planned or failure of normal medium systems, that can carry messages, verbal or electronic, between two or more entities, internal or external, for the operation of the Interconnected Bulk Electric System.	
Response: The RCSDT thanks ye	ou for your co	mment. We have revised the definition to:	
		Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same nunication used for day-to-day operation.	
The RCSDT believes "medium" s	tands alone in	the definition and needs no descriptors.	
Exelon	No	Disagree that a definition is required.	
Interpersonal Communications"	Response: The RCSDT thanks you for your comment. The RCSDT disagrees because there is an important part of the definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an alternative "Interpersonal Communications". The proposed definition contains the words: "which does not utilize the same infrastructure (medium)".		
Western Electricity Coordinating Council	No	Do not need an alternate definition	
Response: The RCSDT thanks you for your comment. The RCSDT disagrees because there is an important part of the definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an alternative "Interpersonal Communications". The proposed definition contains the words: "which does not utilize the same infrastructure (medium)".			
Southern Company Services	No	Interpersonal Communication includes any method. If this includes all possibilities why is an additional definition needed?	
Response: The RCSDT thanks you for your comment. The RCSDT revised the definition as:			
Interpersonal Communication: A	Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.		
The RCSDT believes that an impo	ortant part of th	he definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an	

Organization	Yes or No	Question 2 Comment
alternative "Interpersonal Co	mmunications" are	e the words: "which does not utilize the same infrastructure (medium)".
Duke Energy	No	Need to revise this definition to clarify that Alternative Interpersonal Communication is the identified substitute method for the Interpersonal Communication method. Suggested wording: Alternative Interpersonal Communication: The identified verbal or written method that is able to serve as the substitute for and is redundant to Interpersonal Communication and does not utilize the same infrastructure (medium) as Interpersonal Communication.
Response: The RCSDT than is clear when the requiremen		mment. The RCSDT does not believe that the definition should be revised as suggested as "Altenative"
Southwest Power Pool	No	Replace Alternative Interpersonal Communication definition with: Backup Interpersonal Communication: Any method that is able to serve as a substitute for and is redundant to the primary normal Interpersonal Communication and does not utilize the same infrastructure (medium) as the primary normal Interpersonal Communications. Consistent terms should be used across standards if they are referring to the same thing.
	not believe that the	mment. The RCSDT feels that the use of "Alternative" is appropriate and provides flexibility within this definition should be revised as suggested as "Altenative" is clear when the requirements are viewed. "Alternative".
NERC	No	See response to Question 1.
Response: The RCSDT than	ks you for your co	mment. Please see response to Question 1.
E.ON U.S.	No	Suggested edit to definition: Alternative Interpersonal Communication: A Interpersonal Communication method that is able to serve as a substitute for and is functionally redundant to the normal Interpersonal Communication method but does not utilize the same infrastructure (medium) as the normal Interpersonal Communication method. The intent of the edit is to clarify that the entity must to have identified one (1) normal Interpersonal Communication and one (1) Alternative Intercommunication method.
	ary as the requiren	mment. A definition can not impose requirements that are not explicitly stated in the standard. The nents define what an entity must do to be compliant. The RCSDT has also removed the words "and is er stakeholders comments.

Organization	Yes or No	Question 2 Comment
Bonneville Power Administration	No	The proposed definition adds value for the user of this proposed standard by adding the ideas of the alternate mode of communications being both independent and redundant to normal communications. However, this having been said, the term chosen by the SDT, the term 'Alternative Interpersonal Communication' appears to focus attention on the wrong aspect of what's being discussed. Since the definition focuses on an alternative mode or 'method' of communicating, clarity would be added if the SDT changed the term to be defined to either 'Alternative Mode of Communication' or 'Alternative Method of Communication.' The use of the word 'interpersonal' would be optional, but not necessary.

Response: The RCSDT thanks you for your comment. To clarify our intent, the RCSDT changed "method" to "medium" in the definition. The proposed definition is:

Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.

Hydro-Québec TransEnergie (HQT)	No	The proposed definition of Alternative Interpersonal Communication is equally ambiguous as the aforementioned definition of Interpersonal Communication. A precise definition of Interpersonal Communication and "Normal" Interpersonal Communication is required before an agreed upon definition of Alternative Interpersonal Communication can be reached.
Northeast Power Coordinating Council	No	The proposed definition of Alternative Interpersonal Communication is equally ambiguous as the aforementioned definition of Interpersonal Communication. A precise definition of Interpersonal Communication and "Normal" Interpersonal Communication is required before an agreed upon definition of Alternative Interpersonal Communication can be reached.
Northeast Utilities	No	The proposed definition of Alternative Interpersonal Communication is equally ambiguous as the aforementioned definition of Interpersonal Communication. A precise definition of Interpersonal Communication and "Normal" Interpersonal Communication is required before an agreed upon definition of Alternative Interpersonal Communication can be reached.

Response: The RCSDT thanks you for your comment. The RCSDT does not propose defining "Normal" Interpersonal Communications and has removed it from the definition. Based on the consensus of stakeholders, we have revised the two definitions to:

Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.

Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same

Organization	Yes or No	Question 2 Comment	
infrastructure (medium) as, Inter	personal Com	nunication used for day-to-day operation.	
FirstEnergy	No	The word "normal" in the proposed definition adds some ambiguity to the definition. This definition should be revised as follows to ensure clarity of scope by excluding electronic data exchange and for consistency with the proposed requirements: Alternative Interpersonal Communication Capability: Any verbal communication equipment that is able to serve as a substitute for and is redundant to Interpersonal Communication equipment used during day-to-day operations and does not utilize the same infrastructure as the Interpersonal Communication equipment.	
		mment. The RCSDT does not propose defining "Normal" Interpersonal Communications and have onsensus of stakeholders, we have revised the two definitions to:	
Interpersonal Communication: A	ny medium tha	at allows two or more individuals to interact, consult, or exchange information.	
	Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.		
Ameren	Yes		
American Electric Power	Yes		
CECD	Yes		
Central Lincoln	Yes		
Florida Municipal Power Agency and Some Members	Yes		
Independent Electricity System Operator	Yes		
IRC Standards Review Committee	Yes		
ISO New England Inc	Yes		

Organization	Yes or No	Question 2 Comment
Midwest ISO Standards Collaborators	Yes	
OC Standards Review Group	Yes	
PacifiCorp	Yes	
Pepco Hodlings, Inc	Yes	
PNGC Power (15 member utilities)	Yes	
PPL	Yes	
Puget Sound Energy	No	As for the proposed term for "Interpersonal Communication", the proposed definition for this term addresses a method of communication, but not the communication itself. As a result, the defined term is incomplete as proposed. Recommend the addition of the word "capability" so that the defined term is "Alternative Interpersonal Communication Capability". The addition of this word to the term is also consistent with the use of the term in the proposed standard language, where Alternative Interpersonal Communication is consistently used in conjunction with the words "capability" or "capabilities".
		mment. Based on a consensus of stakeholder comments, the RCSDT has revised the proposed Any medium that allows two or more individuals to interact, consult, or exchange information.
The definition itself describes "ca	apability."	
		Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same nunication used for day-to-day operation.
South Carolina Electric and Gas	Yes	
US Bureau of Reclamation	Yes	
Western Area Power Administration	Yes	

Organization	Yes or No	Question 2 Comment
Xcel Energy	Yes	
American Transmission Company	Yes	However, clarity is needed for the word "infrastructure (medium)". ATC's interpretation is that satellite phones, cell phones, radio and land lines are all different mediums.
Response: The RCSDT thanks you could be used as a form of Altern		mment. The RCSDT agrees that the types of communication that you list are all different media which sonal Communications.
ITC Holdings	Yes	None
NERC Standards Review Subcommittee	Yes	Please clarify. We believe the proposed definition for the term "Interpersonal Communication" is too broad and ambiguous. We recommend the following instead: "Verbal Communication between two or more registered entities (not within the same organization) to exchange reliability-related information." The inclusion of this term "registered entities" removes the ambiguity which we believe is contained in the proposed definition. In addition, the inclusion of the phrase "not within the same organization" clarifies that the focus of definition is to address communication between different registered entities.
Response: The RCSDT thanks you for your comment. The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.		
The RCSDT believes that data communication is covered under IRO-010, R3 which states:		
Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)		
The SDT believes that the revised Requirements of COM-001-2 satisfy your concern of communication in different physical locations.		
Electric Market Policy	Yes	Subject to adequate resolution of comments provided for Question 1
Response: The RCSDT thanks you for your comment. Please see response to question 1 comments.		
ERCOT ISO	No	Although this definition indirectly clarifies the intent of the definition of Interpersonal Communication by noting that communication mediums/infrastructure are at issue, it does not specify verbal or data communication, and needs to be clarified accordingly; ERCOT notes clarification of Interpersonal Communication (IC) on this issue will indirectly clarify this point with respect to the Alternative IC definition.

Organization	Yes or No	Question 2 Comment
		Furthermore, ERCOT ISO considers the definition of Alternative Interpersonal Communication unnecessary.  The Standard could simply say an entity must have multiple (at least two) ICs, one if which is primary and others that serve as back-ups. This would eliminate the need for yet another defined term susceptible to conflicting interpretations.
		In additions, calling the Alternative Interpersonal Communication a substitute and redundant also seems contradictory, or at least confusing in terms of timing. Redundant implies that the entity has two means that are applied at the same time. Substitute seems to mean that the entity have a back-up that only has to be used when the primary isn't used.
		Also, if Interpersonal Communication is intended to be verbal communication, what are considered acceptable alternates (i.e.: fax, email, etc)? Examples here would be helpful. Is it sufficient to have redundant/substitute means of verbal communication (i.e.: satellite phones, cell phones, etc.). ERCOT ISO believes non-verbal proxies for verbal communications should be eligible ICs – e.g. email.
		As noted above, ERCOT ISO believes the most efficient way to approach this is to eliminate the use of Alternative Interpersonal Communication and have the standard require that entities have to have at least two means of Interpersonal Communication.

Response: The RCSDT thanks you for your comment.

. The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange.

The RCSDT believes that data communication is covered under IRO-010, R3 which states:

Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)

The RCSDT disagrees that the definition is not needed because there is an important part of the definition of "Alternative Interpersonal Communications" that distinguishes it from simply being an alternative "Interpersonal Communications". The proposed definition contains the words: "which does not utilize the same infrastructure (medium)".

We concur and have removed the "redundant" portion of the definition.

Interpersonal Communication can include voice and text; examples are satellite phones, cell phones, radio and land lines. We have revised the proposed definitions to add clarity:

Interpersonal Communication: Any medium that allows two or more individuals to interact, consult, or exchange information.

Organization	Yes or No	Question 2 Comment

Alternative Interpersonal Communication: Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.

3 Do you agree with the revisions made to Requirement 1 in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Stakeholders pointed out that R1 was a compound requirement and suggested creating separate requirements. Stakeholders also suggested revising the VRF to "Medium" as it does not meet the guidelines for a "High" VRF. The intent of R1 was three-fold.

- 4 Identify (have) an Alternative Interpersonal Communication capability
- 5 Test that capability periodically and
- 6 If the test failed, fix it or identify another Alternative Communications Capability.

Based on comments received, we have revised R1, now R9, to eliminate the compound requirement and therefore created more specific requirements to delineate Interpersonal and Alternative Interpersonal Communication, and applicable entity responsibility. The VRF is changed to "Medium."

Requirement R1 is now R9; R2 is now R10; R3 is now R11; R4 is now R7 and R8.

Organization	Yes or No	Question 3 Comment
Calpine Corporation		
North Carolina Municipal Power Agency #1		
Operating Personnel Communications Protocols SDT		No Comment
American Electric Power	No	AEP is concerned with the use of a sixty minute window without having a broadcast methodology in place to support the required notifications. As mentioned in other comments, perhaps RCIS could be modified to help support communications and the confirmation of such communications.

Response: The RCSDT thanks you for your comment. Having a failure of the Alternative Interpersonal Communications per R1 does not indicate that the Interpersonal Communications used in day-to-day operations is out of service. It is expected that the Interpersonal Communications used in day-to-day operations is indeed operational to make the notifications required in R3 regarding alternative failure.

Organization	Yes or No	Question 3 Comment
We Energies	No	An Alternative Personnel Communications (APC) is intended for use at a Primary Control Center for real-time voice communications. That needs to be clear in the definitions and standards. The time to either restore or recognize that the Alternative Communications cannot be re-established should be aligned with proposed EOP-008 which allows 2 hours. This should also apply to COM-001 R2 which would give an hour past the 2 hours that the APC is unavailable to contact impacted parties. Along with conforming changes to measures and the like
for the Interpersonal Communica	ations capabili ack-up facility.	mment. The Alternative Interpersonal Communications capability is intended for use as an alternative try, regardless of whether the normal capability continues to be available or regardless of the location, be R1, now R9, includes "If the test is unsuccessful, the entity shall initiate action to repair or designate unications within 2 hours."
ITC Holdings	No	Comments: The intent of the 60 minute requirement is unclear. As written, the 60 minute requirement could be interpreted to apply to the initiation of restoration or, alternatively, to the completion of restoration. If the latter is the intent, then effectively 3 voice communication mediums would be required to ensure compliance which we believe is not warranted. Suggest modifying the requirement to "If the test is unsuccessful, the entity shall take action within 60 minutes to initiate restoration of the identified alternative or". In addition, we would suggest separating R1 into two requirements. From an audit perspective, there are two discrete actions being identified: quarterly testing and initiating repairs.
the test is unsuccessful, the enti-	ty shall initiate	mment. We concur with your comment and have changed the requirement R1, now R9, to state "If action to repair or designate a replacement Alternative Interpersonal Communications within 2 hours." eet relationship with successful and unsuccessful tests and therefore should remain as one requirement
Public Service Enterprise Group Companies	No	Initiating actions within the hour should be specified, rather than taking action. It could take longer than an hour to take (complete) action that resolves the issue.
		mment. We concur with your comment and have changed the requirement to state "…If the test is repair or designate a replacement Alternative Interpersonal Communications within 2 hours."
Southern Company Services	No	It is quite possible for entities to interpret this requirement as not applicable if they include all of there communications as interpersonal communication.
Response: The RCSDT thanks v	ou for vour co	communications as interpersonal communication.  mment. The requirement states that an entity will "designate" an Alternative Interpersonal

Organization	Yes or No	Question 3 Comment
Communications capability. To	do so, the entit	y would not be able to declare all communications as Interpersonal Communications.
FirstEnergy	No	It should be clear that this requirement applies only to BES information. The requirement should be revised as follows to improve clarity: Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall identify and test, on a quarterly basis, its Alternative Interpersonal Communications capability used for communicating real-time Bulk Electric System operating information.
Response: The RCSDT thanks y standards apply to the BES.	ou for your co	mment. The RCSDT does not believe that adding BES to the requirement adds any clarity as NERC
Duke Energy	No	o Need to clarify who the RC, TOP and BA are required to have Interpersonal Communications and Alternative Interpersonal Communications capability with (i.e., each other and the DP and GOP). We believe that R4 is redundant to R1, and the entities in R4 could be added to R1, and R4 deleted. Also make conforming changes to the Measures, Data Retention and VSLs.
		o Need to clarify that that the requirement is to take action to restore the Alternative Interpersonal Communications capability, or take action to identify a substitute within 60 minutes, (not actually restore or identify a substitute within 60 minutes - which may not be possible). Also need to revise the Measure and the Lower VSL to conform with this clarification to the requirement
		o Need to strike the phrase "used for communicating real-time operating information", because this should be included in the definition of Interpersonal Communication, as we propose in Comment #1 above, and it would be redundant to also include it in R1.
		o The VRF for R1 should be Medium instead of High, because this is a quarterly test of the alternative capability - doesn't meet the criteria for a High VRF.
		o Need to clarify in Requirement R2 that the 60 minute clock for notifications BEGINS when you KNOW you have a failure that has lasted for 30 or more minutes.
		o Strike the word "normal" in Requirement R2, because the definition of Interpersonal Communications as proposed above already includes the word "primary".

### Response: The RCSDT thanks you for your comment.

- o To provide better clarity the SDT created more specific requirements to delineate Interpersonal and Alternative Interpersonal Communication, and applicable entity responsibility.
- The RCSDT has revised the requirement R1, now R9, to state "...If the test is unsuccessful, the entity shall initiate action to repair or designate
  a replacement Alternative Interpersonal Communications within 2 hours." The Measure and VSL for R1, now R9, reflect the revision

Organization	Yes or No	Question 3 Comment
<ul> <li>The definition was not revised to include the phrase "used for communicating real-time operating information" since the Time Horizon is designated as Real-time Operations.</li> </ul>		
<ul> <li>VRF: The RCSDT agrees</li> </ul>	and has revise	ed the VRF to "Medium."
o R2 now R10: The RCSDT	believes the r	equirement as written satisfies your request. The "detection" of failure is the beginning.
o "Normal": The RCSDT re	vised R2, now	R10, and deleted "normal."
Exelon	R1. It is not possible to test without identifying, "identify and" is not required. Suggest the requirement say The applicable entities shall have primary and backup communication capabilities used for communicating real-time operating information. The entities shall test and demonstrate system capabilities on a quarterly basis. Telling someone to "take action" if they identify a failure in their systems is unnecessary. It must be presumed that an entity will "take action"; otherwise they will be non-compliant with the standard. Allowing entity to "identify a substitute" in lieu of taking action to restore within 60 minutes points to the difficulties inherent in writing prescriptive requirements. The drafting team recognizes all entities may not be able to restore their capabilities within 60 minutes and therefore provides an alternative. The 60 minute requirement becomes a guideline, not a requirement under these conditions it is left to auditors to evaluate the technic and business case that an entity makes for why they can not make the 60 minute deadline.	
Response: The RCSDT thanks you for your comment. The RCSDT has revised requirements of COM-001, R1 is now R9, to require an entity to "designate" an Alternative Interpersonal Communication capability rather than to "identify". The RCSDT agrees with you that an entity must identify something in order to be able to designate it or to test it. An Alternative Interpersonal Communication capability is an alternative regardless of whether one is considering the primary location or a back-up facility. Back-up tends to indicate that it would only be used in the case of the loss of some other primary capability; that is not the intent. The intent is that an alternative is to be designated and periodically tested to verify its continued availability and functionality. The alternative capability may or may not be used in normal operations activities. The SDT changed "take action" to "initiate action" in the requirement and believes the verbiage is needed to identify the start of timing to satisfy "repair or designate a replacement Alternative Interpersonal Communications within 2 hours.		
Manitoba Hydro	No	R1. Removal of "develop a mitigation plan" and replacing with "take action within 60 minutes" has been done, this improves the Requirement.
		R2. As suggested in a previous SAR, the time line should be delineated further, "if the ICC will not be in service within 30 minutes, the impacted entities shall be notified within 60 minutes of the detection of the failure".
		R3. The addition of "dictated by law or otherwise" disclaimers defogs the requirement for Canadian entities that have varying laws, mandates and obligations: Canada's basic definition of "Official bilingualism" was

Organization	Yes or No	Question 3 Comment
		found as follows: o The federal government must conduct its business and provide services in both official languages English and French. o The law encourages or mandates lower tiers of government such as provinces, territories and municipalities to provide services in both official languages. o The law places obligations on private sectors to provide access to services in both official languages, including that products be labeled in both English and French. o The government provides support to sectors to encourage and promote the use of one or the other of the two official languages, for instance English speaking minorities in Quebec and French Speaking minorities in other provinces. o New Brunswick is the only official bilingual province and Quebec is officially unilingual (French only).
		mment. Thank you for your affirmations with respect to R1 and R3. With respect to R2 (now R10)., it is erformed for outages of 30 minutes or longer within 60 minutes
E.ON U.S.	No	Requiring a 60 minute response to a problem with the Alternative Interpersonal Communication method which is only tested quarterly doesn't seem reasonable. One (or more) entities may need to involve IT/telecom personnel or order parts or material to resolve the problem or agree to the substitute Alternative Interpersonal Communication method. A 48 hour response requirement would be more appropriate.
		mment. Requirement R1, now R9, has been revised to clarify the intent for the entity to "initiate actions e Interpersonal Communications within 2 hours."
Puget Sound Energy	Yes	
CECD	No	The requirement to identify an alternative interpersonal communication method within 60 minutes should only apply if the registered entity only has a single alternative interpersonal communication method in place.
		mment. Requirement R1, now R9, has been revised to clarify the intent for the entity to "initiate actions e Interpersonal Communications within 2 hours."
NERC	No	There is a disparity in the timing requirements listed in COM-001. If it is important that a known communication path interruption be restored in 60 minutes, why would it be necessary to check a path quarterly only? The drafting team should consider proposing that no concurrent outage of primary and alternative/backup paths can exceed 5 minutes for voice paths. Additionally, NERC staff believes that data path concerns still need to be addressed. As written, there is no requirement coverage for ensuring that data

Organization	Yes or No	Question 3 Comment
that it is not feasible to propose	that concurren	designate a replacement Alternative Interpersonal Communication within 2 hours." The SDT believes to outages of a primary or backup communication cannot exceed 5 minutes. The SDT believes that IRO-opted by the NERC BOT, address your concerns regarding data paths.
Southwest Power Pool	No	This standard does want the RC, TOP, and BA to report in R2 if Interpersonal Communication goes down within 60mins to report it. However, we cannot find a specific requirement that subjects the RC, TOP, and BA to have Interpersonal Communication in the first place.
		your comment. To provide better clarity the SDT created more specific requirements to delineate onal Communication, and applicable entity responsibility.
Hydro-Québec TransEnergie (HQT)	No	We agree with the revisions made to R1 to remove the requirement for developing a mitigation plan but have a concern with "shall take action within 60 minutes to restore the identified alternative or identify a substitute Alternative Interpersonal Communication Capability". This can be interpreted to mean completing the repair within 60 minutes, and hence can present a difficulty for the responsible entity if the spare parts to facilitate a repair or if a new piece of equipment cannot be obtained within that time frame. More time is needed to fully repair or replace the lost capability. A suggested rewording is "shall initiate action within 60 minutes to restore" Alternatively, the requirement can be revised to require the identification of a substitute Alternative Interpersonal Communication means within the 60 minute time frame.
Independent Electricity System Operator	No	We agree with the revisions made to R1 to remove the requirement for developing a mitigation plan but have a concern with "shall take action within 60 minutes to restore the identified alternative or identify a substitute Alternative Interpersonal Communication Capability". This can be interpreted to mean completing the repair within 60 minutes, and hence can present a difficulty for the responsible entity if the spare parts to facilitate a repair or if a new piece of equipment cannot be obtained within that time frame. More time is needed to fully repair or replace the lost capability. We suggest the wording be revised to "shall initiate action within 60 minutes to restore" Alternatively, the requirement can be revised to require the identification of a substitute Alternative Interpersonal Communication means within the 60 minute time frame.
Northeast Power Coordinating Council	No	We agree with the revisions made to R1 to remove the requirement for developing a mitigation plan but have a concern with "shall take action within 60 minutes to restore the identified alternative or identify a substitute Alternative Interpersonal Communication Capability". This can be interpreted to mean completing the repair within 60 minutes, and hence can present a difficulty for the responsible entity if the spare parts to facilitate a repair or if a new piece of equipment cannot be obtained within that time frame. More time is needed to fully repair or replace the lost capability. A suggested rewording is "shall initiate action within 60 minutes to

Organization	Yes or No	Question 3 Comment
		restore" Alternatively, the requirement can be revised to require the identification of a substitute Alternative Interpersonal Communication means within the 60 minute time frame.
		mment. The RCSDT agrees and has revised R1, now R9, to clarify the intent for the entity to "intiate ternative Interpersonal Communications within 2 hours."
Western Electricity Coordinating Council	No	We do not need the definition for alternate, when the definition for interpersonal communication states all methods of communications. What we think the drafting team is getting at is that we need to test our back up communication systems.
Interpersonal Communication ca should the capability normally us actions within 60 minutes. The F	pability be des sed be lost. If RCSDT has inte	mment. The RCSDT has revised R1, now R9, and R2, now R10, to clarify that an Alternative signated and that alternative capability to be tested at least monthly to verify an alternative is available the test of the Alternative Interpersonal Communication capability is failed, then the entity must initiate entionally avoided the concept of back-up because back-up could be mistakenly believed to apply only me unnecessarily designated primary capability.
Midwest ISO Standards Collaborators	No	We mostly agree with the revisions and thank the drafting team for modifying the requirement to remove the need for a mitigation plan per our comments from the last posting. However, we do believe that introduction of a requirement to fix the Alternate Interpersonal Communication within 60 minutes could be a compliance problem. Our issue is with the time requirement. For example, our stakeholders have experienced situations with certain communications systems in which a part had to be shipped overnight to fix the communication system. While we still don't believe a mitigation plan is necessary in this case, we are concerned that ordering the part may not be viewed as taking action. Please confirm that SDT believes that the 60 minutes applies to beginning to repair the Alternative Interpersonal Communication and not to full restoration of the Alternative Interpersonal Communication. Further, please confirm that identification of a substitute Alternative Interpersonal Communication could simply mean relying on an already existing and identified secondary or tertiary Alternative Interpersonal Communication? Similar to our concern identified in Q1, we are concerned about the clause "used for communicating real-time operating information." We believe data could be drawn into the requirement with this clause. Redacting the clause from the requirement will clarify that the requirement applies to only verbal communications.
NERC Standards Review Subcommittee	No	We mostly agree with the revisions and thank the drafting team for modifying the requirement to remove the need for a mitigation plan per our comments from the last posting. However, we do believe that introduction of a requirement to fix the Alternate Interpersonal Communication within 60 minutes could be a compliance problem. Our issue is with the time requirement. For example, our stakeholders have experienced situations with certain communications systems in which a part had to be shipped overnight to fix the communication system. While we still don't believe a mitigation plan is necessary in this case, we are concerned that

Organization	Yes or No	Question 3 Comment
		ordering the part may not be viewed as taking action. Please confirm that SDT believes that the 60 minutes applies to beginning to repair the Alternative Interpersonal Communication and not to full restoration of the Alternative Interpersonal Communication. Further, please confirm that identification of a substitute Alternative Interpersonal Communication could simply mean relying on an already existing and identified secondary or tertiary Alternative Interpersonal Communication. Similar to our concern identified in Q1, we are concerned about the clause "used for communicating real-time operating information." We believe data could be drawn into the requirement with this clause. Redacting the clause from the requirement will clarify that the requirement applies to only verbal communications.
designate a replacement Alterna	tive Interperso	mment. R1, now R9, has been revised to clarify the intent for the entity to "intiate actions to repair or nal Communications within 2 hours." The verbiage, "used for communicating real-time operating DT believes that Alternative Interpersonal Communication is clearly defined.
Ameren	No	We mostly agree with the revisions. However, we believe that introduction of a requirement to fix the Alternate Interpersonal Communication (AIC) within 60 minutes could be a compliance problem. The issue is with the time requirement. It seems illogical to only test the AIC every 90 days but have to replace the capability in 60 minutes when the IC means is working, It seems more reasonable to have the 60 minutes apply when both are out.
		Similar to our concern expressed in response to Q1 above, we are concerned about the phrase "used for communicating real-time operating information.", which could also imply data. We suggest that the team should remove this phrase from the requirement to clarify that the requirement applies to only verbal communications.
		mment. R1, now R9, has been revised to clarify the intent for the entity to "intiate actions to repair or nal Communications within 2 hours." Verbiage "used for communicating real-time operating
OC Standards Review Group	No	We suggest changing "its" in the first sentence to "their respective" such that the sentence will read, "Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall identify and test, on a quarterly basis, "their respective"" We also suggest that the risk factor should be "Medium"
Response: The RCSDT thanks y factor is revised to "Medium" as		mment. The SDT believes that "its" shows appropriate ownership for each respective entity. The risk
IRC Standards Review	No	We thank the drafting team for modifying the requirement to remove the need for a mitigation plan per our comments from the last posting. However, we do believe that introduction of a requirement to fix the

Organization	Yes or No	Question 3 Comment
Committee		Alternate Interpersonal Communication within 60 minutes could be a compliance problem. Our issue is with the time requirement. It is possible that a communications system may require a part that is currently not available. The requirement should be simply to initiate action to repair the system or to have another Alternate Interpersonal Communication system available. Further, please confirm that identification of a substitute Alternative Interpersonal Communication could simply mean relying on an already existing and identified secondary or tertiary Alternative Interpersonal Communication? To resolve these issues, we suggest the wording be revised to "shall initiate action within 60 minutes to restore" Alternatively, the requirement can be revised to require the identification of a substitute Alternative Interpersonal Communication means within the 60 minute time frame.
ISO New England Inc	No	We thank the drafting team for modifying the requirement to remove the need for a mitigation plan per our comments from the last posting. However, we do believe that introduction of a requirement to fix the Alternate Interpersonal Communication within 60 minutes could be a compliance problem. Our issue is with the time requirement. It is possible that a communications system may require a part that is currently not available. The requirement should be simply to initiate action to repair the system or to have another Alternate Interpersonal Communication system available. Further, please confirm that identification of a substitute Alternative Interpersonal Communication could simply mean relying on an already existing and identified secondary or tertiary Alternative Interpersonal Communication? To resolve these issues, we suggest the wording be revised to "shall initiate action within 60 minutes to restore" Alternatively, the requirement can be revised to require the identification of a substitute Alternative Interpersonal Communication means within the 60 minute time frame.
		mment. R1, now R9, has been revised to clarify the intent for the entity to "initiate actions to repair or nal Communications within 2 hours." The SDT believes that Alternative Interpersonal Communication is
Pepco Holdings, Inc	No	Why is a requirement for alternate communications given a VRF of High while a requirement (R2) for normal communications given a VRF of Medium?
Response: The RCSDT thanks y	ou for your co	mment. The VRF for R1, now R9, has been revised to "Medium."
Bonneville Power Administration	Yes	
Central Lincoln	Yes	

Organization	Yes or No	Question 3 Comment
Florida Municipal Power Agency and Some Members	Yes	
Northeast Utilities	Yes	
PacifiCorp	Yes	
PNGC Power (15 member utilities)	Yes	
PPL	Yes	
South Carolina Electric and Gas	Yes	
US Bureau of Reclamation	Yes	
Western Area Power Administration	Yes	
Xcel Energy	Yes	
American Transmission Company	Yes	If the "infrastructure" is defined as we have noted in question 2, then we support the revisions to this Requirement.
Response: The RCSDT thanks y	ou for your co	mment.
Electric Market Policy	Yes	Subject to adequate resolution of comments provided for Question 1
Response: The RCSDT thanks you for your comment. Please see response to question1.		
ERCOT ISO	No	To follow on the concern noted in Question 1, ERCOT ISO requests that the scope of Interpersonal Communication be clarified. Without specifically limiting Alternative Interpersonal Communication to verbal communications, ERCOT ISO considers this requirement to be too broad in that it could potentially encompass all types of data exchanges and the means for such exchanges.

Organization	Yes or No	Question 3 Comment
		ERCOT ISO also has concerns regarding the intent of the 60 minute requirement. Is noting the failure and identified remedy within 60 minutes sufficient? If not, it may take significantly longer to acquire new equipment or parts to address a problem thereby making compliance with the 60-minute timeframe practically impossible. ERCOT ISO recommends that the 60 minute requirement be replaced with "as soon as practical/possible" to provide the flexibility necessary to cover those types of situations. ERCOT recognizes that the requirement gives the entity the option of restoring the means within 60-minutes or identifying another alternative, but to the extent an entity only has two options available and/or identified, the 60-minute restoration option would practically be the only option. With respect to the third option (i.e. the option if the first "alternative" fails), the requirement does not state any need to test that communication option. It only requires the entity to identify the additional alternative. If the intent is that the second alternative needs to be tested, that should be clarified. If the intent is merely to identify it and then test it on the next quarterly schedule, that should also be clarified./
		Also, the need to "identify" the Alternative ICs for the quarterly test seems pointless. The Alternative ICs would already be identified; presumably the entity would have established these means in advance of having to test them. It seems like a pointless exercise to "identify" means already identified. The requirement should impose an obligation to establish ICs and Alternative ICs, and the testing of those should be an independent requirement.
		With respect to R2, ERCOT recommends clarifying the scope of "impacted entities". ERCOT ISO believes that the scope should be left to the discretion of the RC/TOP/BA, or that it should be expressly limited to the entities that were the subject of the failed communication.
		For R3, ERCOT ISO recommends deleting the pre-condition language related to "inter entity" BES "reliability communications". This introduces confusion as to the scope and timing of communications under this requirement, especially where other standards are subject to Reliability Directives. For example, is a reliability communication a Reliability Directive? If not, what constitutes a reliability communication? The requirement should simply state that English is required for communications from the relevant functional entities.
Posnonso: The PCSDT thanks you	u for your com	Finally, the risk factor seems inappropriate for the requirement. This is a testing requirement, not real time. The entity has 60 minutes to correct any issues or have a third option already identified and ready to deploy. This requirement does not seem to indicate the need for a high risk factor.

Response: The RCSDT thanks you for your comment. R1 is now R9; R2 is now R10; R3 is now R11; R4 is now R7 and R8.

The SDT believes that Webster's definition of Interpersonal: (being, relating to, or involving relations between persons) clarifies the exclusion of media dedicated to Telemetering or other data exchange and, SDT believes that data communication is covered under IRO-010, R3 which states:

Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission

Organization	Vac av Na	Overtion 2 Comment
Organization	Yes or No	Question 3 Comment

Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)

The SDT believes that the revised Requirements of COM-001-2 now satisfy your concern regarding R1, R2 and R3.

4 Do you agree with the definition of Reliability Directive (COM-002-2)? If not, please explain in the comment area.

## **Summary Consideration:**

The comments received regarding the definition of Reliability Directive ranged from the being "to open-ended" (PPL) to not "flexible" enough (Public Service Enterprise Group Companies). The SDT expected and viewed these as attempting to reach middle ground.

There were also value added comments such as removing the unnecessary and redundant terms "actual or expected" from the definition, which the SDT agrees with.

A number of commenter's expressed a concern about the definition not including three-part communication, clearly identifying a Reliability Directive at the time of issue, and applying to verbal communications. While valid concerns, the SDT believes responsibilities should not be imbedded in a definition and, as drafted, the requirements of COM-002 fully address the identification and verbal concerns.

While outside of the scope of question four, one commenter suggested assigning the COM standard project to either the OPCPRC or RCSDT projects. The SDT explained the close coordination and collaboration between the two projects.

Organization	Yes or No	Question 4 Comment
Calpine Corporation		
North Carolina Municipal Power Agency #1		
Operating Personnel Communications Protocols SDT		The OPCP SDT received NERC staff comments to our proposed draft of COM-003-1. In those comments NERC staff proposed the term "Operating Communication", defined as "communication with the intent to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System." The OPCP SDT is accepting this proposed term in the next version of COM-003-1 for posting. Per agreement reached during the November 17, 2009 joint meeting of the OPCP, RC and RTO SDTs in Charlotte, NC,

Organization	Yes or No	Question 4 Comment
		pending the outcome of the industry evaluation of your proposed "Reliability Directive" term, the OPCP SDT will incorporate the term into COM-003-1 Requirement R?. The OPCP SDT recommends adding the Transmission Owner to the entities that may issue a Reliability Directive because in many cases (e.g., PJM) Transmission Owners "operate" the transmission system from local control centers.
		The OPCP SDT points out however that the RC SDT have not adhered to scope coordination efforts between our projects. At the outset of both SDT's work, the OPCP project would focus upon Requirement R2 of COM-002-2 and the RC SDT would focus on Requirement R1 of COM-002-2.
		mment. The RCSDT does not believe that the Transmission Owner should be added to the definition as Model and the registration process.
Regarding the scope issue: The began making these revisions in		ed strong consensus comments on our first posting to make revisions to the original R2. The RCSDT takeholder comments.
American Electric Power	No	AEP would recommend that the words "actual or expected" be removed from the definition as unnecessary and redundant. Since, 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, then an "expected emergency" is by definition the same as an emergency. If you already have an 'expected' emergency that causes intervention of some sort, then you are already in and "emergency." Therefore, you are either in an emergency condition or not in an emergency condition.
Response: The RCSDT thanks y proposed definition.	ou for your co	mment. The RCSDT agrees with your comment and we have struck "actual or expected" from the
Southwest Power Pool	No	By NERC's Functional Model the RC, BA, TOP, and DP issues directives. (DP to LSE)Reliability Directive - A communication initiated by a RC, TOP, BA or DP where action by the recipient is necessary to address an actual or expected Emergency.
Response: The RCSDT thanks y requests for voluntary load curta		mment. The RCSDT notes that, per the Functional Model, a DP may "direct" an LSE to communicate treliability situations:
Item 9 on page 47 of version 5 of	the Functiona	I Model: "Directs Load-Serving Entities to communicate requests for voluntary load curtailment."
The RCSDT will forward this com	nment to the FI	MWG for their consideration in revising the language.
Public Service Enterprise Group	No	It is reasonable to require the directing entity to identify which of its communications is a Reliability Directive

Organization	Yes or No	Question 4 Comment			
Companies		either when first communicated or if questioned by the recipient. Flexibility is the key.			
definitions.					
a Reliability Directive, the Reliability (	Coordinator, Tra	When a Reliability Coordinator, Transmission Operator or Balancing Authority requires actions to be executed as ansmission Operator or Balancing Authority shall identify the action as a Reliability Directive to the recipient.) If need for the recipient to question if it is Reliability Directive.			
NERC	No	NERC staff proposed the term "Operating Communication" in our comments to Project 2007-02 Operating Personnel Communications Protocols. Operating Communication would be defined as "communication with the intent to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System." This captures all communication that affects BES reliability, not just communication between function entities and Reliability Coordinators. If the proposed COM-003 is adopted with the definition of "Operating Communication" and the corresponding three-part communication requirements, this term "Reliability Directive" is not needed in the COM standard family. However because we cannot pre-judge the outcome of the changes proposed in Project 2007-02, we must view the proposal here on its own merits. The proposal herein limits the scope of coverage to emergency situations, a regression from the current coverage in FERC-approved COM-002 and eliminates a key component of the defense in depth strategy the standards as a body attempt to provide.			
		Furthermore, we believe that COM-002 is outside the scope of Project 2006-06 Reliability Coordination and should properly be addressed by Project 2007-02 Operating Personnel Communications Protocols. The fact that two teams are addressing aspects of the same standard and requirements is confusing and because the projects are not linked, there is a real potential to be disjointed if one or the other project modifies its approach. This could create a gap in reliability coverage. One team should be the primary "owner" of this issue. Analysis of past Bulk Electric System reliability events has shown that the lack of three-part communication has been a contributing factor to adverse reliability issues. We believe it is absolutely imperative that standards concerning all verbal instructions to change or maintain the state of a BES element must involve three-part communication in order to provide defense-in-depth and reduce human error in these events.			

Response: The RCSDT thanks you for your comment. The RCSDT believes that we are addressing the Blackout Recommendation #26 regarding "tighten communications protocols, especially during alert and emergency situations". Our contention is that we have made a good faith effort at addressing the scope of our SAR and feel that this current position has been validated by stakeholder comments and the NERC Standards Committee (see November 17, 2009 meeting of RCSDT, OPCPSDT and RTOSDT concerning this issue). We understand the concerns expressed above and fully support proceeding with the efforts of the OPCP SDT at improving all communications protocols.

However, the RCSDT recognizes that the scope of our proposed revisions to COM-002 is limited to Emergency situations only. The RCSDT feels that

Organization	Yes or No	Question 4 Comment	
the directives in FERC Order 693 and still provide a "defense in de	. The work of to the pth strategy". irements that t	rtant tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with parts of the RCSDT along with the OPCPSDT, as currently recognized, will cover the original intent of COM-002 Stakeholder requests and consensus appears to have been achieved with respect to the definition of he RCSDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving irements in COM-003.	
Western Electricity Coordinating Council	No	No, we think IRO 001 R3 covers this more effectively and may be expanded to include transmission operators and balancing authorities. "The Reliability Coordinator shall have clear decision-making authority to act and to direct actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities within its Reliability Coordinator Area to preserve the integrity and reliability of the Bulk Electric System. These actions shall be taken without delay, but no longer than 30 minutes."	
Directives. It does not identify th	Response: The RCSDT thanks you for your comment. The revised IRO-001, R3 is to establish the authority of the RC to act or issue Reliability Directives. It does not identify the protocols under which a Reliability Directive needs to be issued, acknowledged and carried out. This is handled through the proposed definition as well as the requirements of COM-002.		
Manitoba Hydro	No	Reliability Directive is more clearly defined in the FRCC website: "Reliability Directives are used during times of emergency or in situations where reliability may be an issue. A Reliability Directive is usually issued to control or prevent emergency situations. "Extrapolated from proposed and FRCC: Reliability Directive: An instruction initiated by a Reliability Coordinator, Transmission Operator or Balancing Authority that is used during emergencies or reliability issue which will be used to prevent, control or resolve the situation. This definition makes it clear that it is for reliability issues (Thus Reliability Directive) and clarifies better that this is to be used to control or prevent emergency situations. The existing proposed definition doesn't fully infer this. With the addition of this glossary term, so should the addition of a definition for Operational Directive (though not used in this requirement). The new items would further compliment and assist each other in the understanding of the two new Glossary terms. From the FRCC website: "Operational Directives are issued by System Operators when it is necessary to perform a critical function on the BPS, i.e., to manipulate or change the status of a BES element such as a circuit breaker or substation disconnects. For example, Balancing Authorities often issue Operational Directives to Generator Operators to raise or lower the MW or MVAR output of generators during the course of balancing load and generation on the BPS. Transmission Operators often issue Operational Directives to substation operators to change the status of voltage control devices or clearing BPS substation equipment or transmission lines for routine maintenance, etc". Extrapolated from proposed and FRCC: Operational Directive: An instruction initiated by a Transmission Operator or Balancing Authority that is used to perform planned or routine critical functions on the Bulk Power System.	
Response: The RCSDT thanks you for your comment. The RCSDT believes that our proposed definition of Reliability Directive along with the existing			

Organization	Yes or No	Question 4 Comment
definition of Emergency addre	ess all of the conc	epts that you suggest.
The comments regarding Ope will forward your comment to		are more suited to the work of the OPCP SDT as they are developing requirements along this line. We r consideration.
Midwest ISO Standards Collaborators	No	The combination of the COM-002-3 standard and the definition of Reliability directive do not clearly specify that the communication is verbal and between only two responsible entities. Otherwise, the communication could be considered a blast call, written correspondence or conversation between operators within the same responsible entity. We believe that the Reliability Directive definition should be: "A verbal communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority to another responsible entity where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
NERC Standards Review Subcommittee	No	The combination of the COM-002-3 standard and the definition of Reliability directive do not clearly specify that the communication is verbal and between only two responsible entities. Otherwise, the communication could be considered a blast call, written correspondence or conversation between operators within the same responsible entity. We believe that the Reliability Directive definition should be: "A verbal communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority to another registered entity where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
		mment. First issue: verbal communication: The intent of the definition is to not preclude text or other Directives. However, entities are still obligated to comply with the requirements of COM-002.
Second issue: "to another refunctions. Adding this verbia		The way that COM-002 is crafted, it focuses on functional entity communication between and among late.
		e communication that this is a Reliability Directive", we would have added a requirement to the ements rather than the definition.
We Energies	No	The measures of COM-002-3 imply verbal one-to one communication which needs to be clear within the definition. Recommend replacing "A communication" with the draft defined term "Interpersonal Communication" assuming it gets approved.
	liability Directives	mment. The intent of the definition and requirements of COM-002 is to not preclude text or other forms s. However, entities are still obligated to comply with the requirements of COM-002. Interpersonal tocol or message.

Organization	Yes or No	Question 4 Comment
PPL	No	The proposed definition is too open-ended especially since this definition will be used in other standards.  Limiting the application of the standard to announced Reliability Directives in the definition itself will ensure only announced Reliability Directives are covered by this standard and other standards.
		mment. Including the language that you suggest would impose a requirement within the definition. ents would have to be reconciled with COM-002 requirements through the standard development
E.ON U.S.	No	The term "Interoperability Communication" has been proposed and defined in COM-003 (Project 2007-02), but, the term and definition have not been finalized. Is a "Reliability Directive" communication different from, a subset of, or related to Interoperability Communication? The definition of Reliability Directive should recognize and clarify the linkage to Interoperability Communication.
"tighten communications protoc RCSDT feels that the concept of	cols, especially a Reliability Di 002 are consis	mment. The RCSDT believes that we are addressing the Blackout Recommendation #26 regarding during alert and emergency situations" in our proposed definition and requirements for COM-002. The rective is unique and an important tool for the RC, BA and TOP to maintain reliability. The proposed tent with parts of the directives in FERC Order 693. The work of the RCSDT and the OPCPSDT (Project ordinated.
Southern Company Services	No	This definition is not needed with the way that the requirements of the standard are written. This definition used with the definition of Emergency could be interpreted to include such routine operations as turning on capacitor banks and next day planning. Reliability Directive: A communication initiated by a Reliability Coordinator, Transmission Operator or Balancing Authority to an entity inside their Reliability, Transmission, or Balancing Areas where action outside of normal operating practices by the recipient is necessary to address an actual or expected Emergency or when an action is identified as a reliability directive.
		mment. The RCSDT believes that the proposed definition of Reliability Directive, along with the existing ed awareness that is the goal of the standard and it comports with the directives of Order 693.
Ameren	No	We believe that a reference in the question is to COM-002-3 and not -2. The definition of Reliability directive is not clear to indicate that it only applies to verbal communications. We suggest the definition should be: "A verbal communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority to another responsible entity where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."

## Organization Yes or No Question 4 Comment Response: The RCSDT thanks you for your comment. The question does reference COM-002-3 as suggested. First issue: verbal communication: The intent of the definition is to not preclude text or other forms of communication for issuing Reliability Directives. However, entities are still obligated to comply with the requirements of COM-002. Second issue: "to another registered entity": The way that COM-002 is crafted, it focuses on functional entity communication between and among functions. Adding this verbiage is not appropriate.

Third issue: By adding "clearly identifies in the communication that this is a Reliability Directive", we would have added a requirement to the definition. This is better included in the requirements rather than the definition.

Hydro-Québec TransEnergie (HQT)	No	We believe that the Reliability Directive definition as defined in COM-002-3 should be: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
Northeast Power Coordinating Council	No	We believe that the Reliability Directive definition as defined in COM-002-3 should be: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
IRC Standards Review Committee	No	We believe that the Reliability Directive definition should be: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
ISO New England Inc	No	We believe that the Reliability Directive definition should be: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."

Response: The RCSDT thanks you for your comment. First issue: verbal communication: The intent of the definition is to not preclude text or other forms of communication for issuing Reliability Directives. However, entities are still obligated to comply with the requirements of COM-002.

Second issue: "to another registered entity": The way that COM-002 is crafted, it focuses on functional entity communication between and among functions. Adding this verbiage is not appropriate.

Third issue: By adding "clearly identifies in the communication that this is a Reliability Directive", we would have added a requirement to the

Organization	Yes or No	Question 4 Comment
definition. This is better included	d in the require	ements rather than the definition.
FirstEnergy	No	We believe that this standard should be either handed to the OPCPSDT (Project 2007-02) or the OPCPSDT should hand over the COM-003-1 standard to this RCSDT (Project 2006-06); and then COM-003 should be merged. For further explanation of our suggestions, see our comments in Question #8.
Response: The RCSDT thanks you for your comment. The RCSDT feels that the concept of a Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with parts of the directives in FERC Order 693. The work of the RCSDT along with the OPCPSDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by the NERC comment. Stakeholder requests and consensus appears to have been achieved with respect to the definition of Reliability Directive and the requirements that the RCSDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their proposed requirements in COM-003. Merging of the two standards is a work in progress and will ultimately be decided by stakeholder consensus.		
Independent Electricity System Operator	No	We suggest the Reliability Directive definition be modified as follows to further clarify the communication protocol: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority and made clear by the initiating entity that this is a Reliability Directive which requires action by the recipient to address an actual or expected Emergency."
Response: The RCSDT thanks y definition.	ou for your co	mment. The RCSDT believes that your suggested revision would impose a requirement within the
Duke Energy	No	We think that Requirement R1 should be folded into the definition, and R1 deleted. Also delete the Measure and VSL. Suggested rewording of the definition: Reliability Directive: A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority, and identified as a Reliability Directive to the recipient, where action by the recipient is necessary to address an actual or expected Emergency.
Response: The RCSDT thanks y definition.	ou for your co	mment. The RCSDT believes that your suggested revision would impose a requirement within the
Bonneville Power Administration	Yes	
CECD	Yes	
Central Lincoln	Yes	

Organization	Yes or No	Question 4 Comment	
Exelon	Yes		
Florida Municipal Power Agency and Some Members	Yes		
Northeast Utilities	Yes		
OC Standards Review Group	Yes		
PacifiCorp	Yes		
Pepco Hodlings, Inc	Yes		
PNGC Power (15 member utilities)	Yes		
Puget Sound Energy	Yes		
South Carolina Electric and Gas	Yes		
US Bureau of Reclamation	Yes		
Xcel Energy	Yes		
American Transmission Company	Yes	Errata comment: It is COM-002-3.	
Response: The RCSDT thanks y	Response: The RCSDT thanks you for your comment. It is COM-002-3.		
ITC Holdings	Yes	None	
Response: The RCSDT thanks you for your comment.			
Western Area Power	Yes	Suggested wording to add clarity: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority requiring action by the recipient to address an actual or expected	

Organization	Yes or No	Question 4 Comment
Administration		Emergency."
		mment. The RCSDT believes that your proposed revision does not materially add clarity to the oncur with our proposed definition.
Electric Market Policy	Yes	While I technically agree with the definition, I think it should be expanded to state that a directive that meets this definition must be clearly identified as such by the issuing BA, RC or TOP. In other words, action is mandatory on the recipient's part only if the issuing party clearly states "this is a Reliability Directive". In many organized markets, participants (particularly LSE, GOP and PSE) are required to follow instructions only if an Emergency is declared. This concept has historically been used throughout this industry although such use may have been implicit.
Response: The RCSDT than	nks you for your co	mment. Your concerns are covered by the requirement R1 of COM-002 which states:
		on Operator or Balancing Authority requires actions to be executed as a Reliability Directive, the Reliability Authority shall identify the action as a Reliability Directive to the recipient.
A requirement can not be in	nposed by a definiti	on.
ERCOT ISO	No	ERCOT ISO is concerned about defining Reliability Directive in terms of "expected" emergencies. Obviously all relevant entities will operate to avoid emergency situations. However, the term "expected" is vague and ambiguous, and, as such, is open to subjective interpretation thereby creating uncertainty for regulated entities. The definition should put entities on clear notice as to when they have to comply with the relevant requirements. The only way to provide that certainty is to establish a clear, identifiable trigger. To accomplish this, the definition should be limited to actual emergencies. Actual emergencies are specifically defined, not subjective, and lend themselves to demonstration of compliance in an audit. The definition of Emergency lends itself to alignment with specific circumstances that clearly indicate to a regulated entity that it must use Reliability Directives and follow the rules that apply to such directives — "expected emergencies" do not.
		The requirement should also be revised to clarify that Reliability Directives only apply to communications

Response: The RCSDT thanks you for your comment. We have removed the words "actual or expected" from the definition. The way that COM-002 is crafted, it focuses on functional entity communication between and among functions. Face-to-face communication of Reliability Directives are subject to the requirements of COM-002 and can be measured for COM-002 by allowing Operator Logs as possible evidence to support compliance.

communicating in person in the same location – e.g. a control center.

between separate entities in distinct locations and do not apply to employees of the same company

5 Do you agree with the revisions to the Requirements in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The bulk of the comments were about the VSL. The SDT agreed and has deleted the Severe VSL and moved the High VSL to Severe. We believe that there are two possible actions within the requirement and failure to perform either warrants a Severe VSL

Several commenters's expressed concern about three-part communication. The SDT believes that as drafted with the issue, repeat back, and acknowledgement three-part communication is covered.

There was one commenter suggesting the addition of the DP to the applicability The RCSDT notes that, per the Functional Model, a DP may "direct" an LSE to communicate requests for voluntary load curtailment and not reliability situations: Item 9 on page 47 of version 5 of the Functional Model: "Directs Load-Serving Entities to communicate requests for voluntary load curtailment." Furthermore, The RCSDT will forward this comment to the FMWG for their consideration in revising the language.

While outside of the scope of question five, one commenter suggested assigning the COM standard project to either the OPCPRC or RCSDT projects. The SDT explained the close coordination and collaboration between the two projects.

Organization	Yes or No	Question 5 Comment
Calpine Corporation		
North Carolina Municipal Power Agency #1		
Public Service Enterprise Group Companies		
We Energies		
Xcel Energy		

Organization	Yes or No	Question 5 Comment	
Operating Personnel Communications Protocols SDT		The OPCP SDT offers the following Requirements language that addresses a Three-Part Communication Protocol. (It is comprised of two primary Requirements and contains a footnote):	
		R Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner that issues a Reliability Directive during verbal Operating Communications shall employ three-part Communication Protocol to ensure that the receiving party has repeated the communication, and shall verbally confirm the communication to be correct or reinitiate the communication until a correct response is given by the recipient. An exception is allowed for Reliability Directives that are issued via "All-Call", during which the initiator shall ensure that all the receiving parties have positively acknowledged receipt of message rather than verbally repeating the message. [Violation Risk Factor: High][Time Horizon: Real-time Operations]	
		R Each Reliability Coordinator, Balancing Authority, Transmission Owner, Transmission Operator, Generator Operator, Transmission Service Provider, Load Serving Entity, Distribution Provider and Purchasing-Selling Entity that receives a Reliability Directive during verbal Operating Communications shall employ three-part communication protocol [footnote 1] to repeat the communication back to the initiator and await verbal confirmation from the initiator. An exception is allowed for the recipient of an "All-Call" Reliability Directive to acknowledge receipt of the message and is responsible to contact initiator if message is not understood rather than verbally repeating the message. [Violation Risk Factor: High][Time Horizon: Real time]	
		Footnote 1: A Communication Protocol where information is verbally stated by a party initiating a communication, the information is repeated back correctly (not necessarily verbatim) to the party that initiated the communication by the second party that received the communication, and the same information is verbally confirmed to be correct by the party who initiated the communication.	
Response: The RCSDT thanks you for your comment. The RCSDT believes that we are addressing the Blackout Recommendation #26 regarding "tighten communications protocols, especially during alert and emergency situations" in our proposed definition and requirements for COM-002. We have not precluded issuance of Reliability Directives by non-verbal means and the requirements of proposed COM-002 would apply. Respecting the importance of Reliability Directives during Emergency situations, the RCSDT does not believe that exceptions to the clear, concise three part communications indicated in COM-002 are appropriate regardless of the medium used to communicate. In addition, the current format of the requirements provides more effective way to measure compliance.			
Ameren	No	(1) As stated in #4 above, the definition of Reliability Directive is not clear. (2) The VSLs for R3 appear to have some redundancy. (3) Also in R3, the phrase regarding R2 should be changed to "(as described in R2, above)"	
Response: The RCSDT thanks y	Response: The RCSDT thanks you for your comment.		
1) Please see response to quest	1) Please see response to question 4.		

Organization	Yes or No	Question 5 Comment
2) The RCSDT concurs. We I	nave deleted the S	Severe VSL and moved the High VSL to the Severe category.
3) We have revised the phras described".	e to be consistent	t with the verbiage in R2 as follows: "per Requirement R2" which meets the intent of your comment "as
Southwest Power Pool	No	1) By NERC's Functional Model the RC, BA, TOP, and DP issues directives. (DP to LSE)COM-002-3 R2 the recipient of a Reliability Directive issued per Requirement R1, shall repeat the intent of the Reliability Directive back to the issuer of the Reliability Directive.
		2) COM-003-1 R5 shall use Three-part Communications when issuing a directive during verbal Interoperability Communications. Implementation Plan for COM-002-3 states R2 will stay, for COM-003-1 states that COM_002-3 R2 will go away. The two requirements don't agree with each other, COM-002-3 R2 wants the Intent repeated back, where COM-003-1 R5 per the Three-part Communication definition "the information is repeated back correctly to the party that initiated the communication".
Response: The RCSDT thank requests for voluntary load co		mment. 1) The RCSDT notes that, per the Functional Model, a DP may "direct" an LSE to communicate reliability situations:
Item 9 on page 47 of version 5	of the Functiona	I Model: "Directs Load-Serving Entities to communicate requests for voluntary load curtailment."
The RCSDT will forward this of	comment to the FM	MWG for their consideration in revising the language.
alert and emergency situation is an important tool for RC, B work of the RCSDT along with strategy" as suggested by the Reliability Directive and the re	is" in our propose A and TOP to mail the OPCPSDT, as NERC comment. equirements that t	the Blackout Recommendation #26 regarding "tighten communications protocols, especially during ed definition and requirements for COM-002. The RCSDT feels that the concept of a Reliability Directive ntain reliability and that the revisions are consistent with parts of the directives in FERC Order 693. The s currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth. Stakeholder requests and consensus appears to have been achieved with respect to the definition of the RCSDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving lirements in COM-003. Merging of the two standards is a work in progress and will ultimately be decided
Central Lincoln	No	Consider the following example. Director calls Directee. Telephone is answered by the Directee's receptionist. Director states that he has a Reliability Directive, and proceeds to deliver it. Receptionist manages to parrot the directive, but has no clue what is being asked. Director confirms receptionist has parroted the directive accurately. Both parties have met the requirements (avoiding a high risk, severe violation), but the three way conversation only wasted the time of both parties and delayed the performance of the directive. The Director should be required to attempt to reach someone with the authority and understanding needed to carry out the

Organization	Yes or No	Question 5 Comment	
		directive.	
is achieved. This is covered in the	Response: The RCSDT thanks you for your comment. The requirements of the standard do not consider how staffing at a particular functional entity is achieved. This is covered in the PER standards. It is incumbent on the registered entity to comply with the requirements of the COM-002 standard as well as all other requirements, some of which will likely be violated in the example above.		
CECD	No	For R3, the drafting team should clarify that if a directive is reissued due to a misunderstanding the receiving party should repeat the reissued directive so that the RC, BA or TOP can verify that the directive is understood correctly.	
Response: The RCSDT thanks yo	ou for your co	mment. The RCSDT believes that this situation is covered by R2.	
Duke Energy	No	o It is not clear whether Requirements R2 and R3 are intended to apply to other than verbal Reliability Directives. We have difficulty envisioning how "repeat back" and "acknowledge the response" would be expected to work with electronic communications.	
		o Delete the phrase "issued per Requirement R1" from R2, since R1 should be deleted per our Comment #4 above.	
		o Revise R3 as follows, to conform to our proposed revised definition in Comment #4 above: "Each Reliability Coordinator, Transmission Operator, and Balancing Authority that initiates a Reliability Directive shall acknowledge the response from the recipient as correct, or reissue the Reliability Directive to resolve any misunderstandings."	
		o We believe that only 2 VSLs are appropriate for R3. o Lower - The responsible entity issued a Reliability Directive, but did not acknowledge that the recipient repeated the intent of the Reliability Directive correctly.	
		o Severe - The responsible entity issued a Reliability Directive and failed to reissue the Reliability Directive to resolve any misunderstandings when the intent of the Reliability Directive was not repeated correctly by the recipient.	

Response: The RCSDT thanks you for your comment. The requirements of COM-002 do not preclude non-verbal issuance of directives. It is incumbent on the entity to ensure compliance with the requirements

R2: We have not retired R1 (see response to Q4) and therefore do not feel this is an appropriate revision.

R3: See response to question 4. The RCSDT believes that R3 is appropriate as written.

VSL: The RCSDT has deleted the Severe VSL and moved the High VSL to Severe. We believe that there are two possible actions within the

Organization	Yes or No	Question 5 Comment
requirement and failure to perfor	m either warra	ants a Severe VSL.
Exelon	No	Please clarify R2 to 'repeat back' a Directive; the definition of Directive does not distinguish between verbal and other methods of communication. Is an electronic response to a verbal or non-verbal Directive allowed?
Response: The RCSDT thanks y incumbent on the entity to ensur		omment. The requirements of COM-002 do not preclude non-verbal issuance of directives. It is with the requirements.
Manitoba Hydro	No	R2 requires "recipient to repeat back" and R3 requires "RC, TOP, BA to acknowledge". This procedure is NOT identified as Three Part Communication which in fact is. Three Part Communication should be a common theme for all entities, including RC's. So why not use the same or similar Requirement as used in COM-002-2 R2 Three-Part Communication.
term is being proposed by the O TOP to maintain reliability that is parts of the directives in FERC O Reliability Directive and the requ	PCP SDT. The separate from Order 693. Stall irements that	emment. The concept of three part communication is in existing COM-002-2, R2 and a definition for the RCSDT feels that the concept of a Reliability Directive is a unique and important tool for RC, BA and a that effort. The requirements of COM-002 are explicit for Reliability Directives and are consistent with keholder requests and consensus appears to have been achieved with respect to the definition of the RCSDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving uirements in COM-003. Merging of the two standards is a work in progress and will ultimately be decided
E.ON U.S.	No	See comment to question 8.
Response: The RCSDT thanks y	ou for your co	mment. Please see response to question 8.
NERC	No	See response to Question 4.
Response: The RCSDT thanks y	ou for your co	mment. Please see response to question 4.
PPL	No	Suggest removing Purchasing-Selling Entity from the standard as a PSE does not receive Reliability Directives from a BA, RC, or TOP.
Response: The RCSDT thanks y should be an applicable entity.	ou for your co	mment. Prior stakeholder comments (during previous postings of this standard) indicated that PSE

Organization	Yes or No	Question 5 Comment
Independent Electricity System Operator	No	The High and Severe VSLs for R3 appear to be the same. We suggest to remove the High VSL and change the Severe VSL to: "The responsible entity issued a Reliability Directive, but did not acknowledge that the recipient in R2 repeated the intent of the Reliability Directive correctly OR resolve any misunderstandings when the intent of the Reliability Directive was not repeated correctly by the recipient."
Response: The RCSDT thanks y this meets the intent of your com		mment. We have deleted the Severe VSL and moved the High VSL to the Severe category. We believe
South Carolina Electric and Gas	No	The SDT needs to evaluate the redundancy associated with COM-003-1 Req 5 and COM-002-3 Req 2&3.
		mment. The RSDT does not believe that there is redundancy between the standards. COM-002 relates als with other forms of communication.
Hydro-Québec TransEnergie (HQT)	No	The VSLs for R3 appear to have some redundancy. The Severe VSL and the second condition in the High VSL appear to be similar or the same. We suggest remove the High VSL, and revise the Severe VSL to:"The responsible entity issued a Reliability Directive, but did not acknowledge that the recipient in R2 repeated the intent of the Reliability Directive correctly OR resolve any misunderstandings when the intent of the Reliability Directive was not repeated correctly by the recipient."
Northeast Power Coordinating Council	No	The VSLs for R3 appear to have some redundancy. The Severe VSL and the second condition in the High VSL appear to be similar or the same. Suggest removing the High VSL, and revise the Severe VSL to:"The responsible entity issued a Reliability Directive, but did not acknowledge that the recipient in R2 repeated the intent of the Reliability Directive correctly OR resolve any misunderstandings when the intent of the Reliability Directive was not repeated correctly by the recipient."
Response: The RCSDT thanks yethis meets the intent of your com		mment. We have deleted the Severe VSL and moved the High VSL to the Severe category. We believe
PNGC Power (15 member utilities)	No	There is a chance that a reliability directive given to a smaller entity will be taken by a receptionist or answering service. Requirement R2 should be more specific about contacting an operational authority directly to relay reliability directives.

Response: The RCSDT thanks you for your comment. The requirements of the standard do not consider how staffing at a particular functional entity is achieved. This is covered in the PER standards. It is incumbent on the registered entity to comply with the requirements of the COM-002 standard as well as all other requirements, some of which will likely be violated in the example above.

Organization	Yes or No	Question 5 Comment
Midwest ISO Standards Collaborators	No	We agree with most of this standard and the apparent intent. However, there are some specific issues. For instance, measurement of compliance to R1 could be challenging. As the VSL is written, it would appear the compliance auditor could judge if a Reliability Directive should have been issued. The VSL language that is problematic is "The responsible entity that required actions to be executed". Who determines that actions were required? One could argue that failure to identify a communication as a Reliability Directive means that actions weren't required but it is doubtful the compliance authorities would take this approach. Thus, there would appear to be great judgment left to the compliance auditor in determining if a Reliability Directive should have been issued. The combination of the COM-002-3 standard and the definition of Reliability directive do not clearly specify that the communication is verbal and between only two responsible entities. Otherwise, the communication could be considered a blast call, written correspondence or conversation between operators within the same responsible entity. We have offered proposed modifications to the definition of Reliability Directive in Q5 to solve this issue. Alternatively, the issue could be addressed by modifying the requirements. The VSLs for R3 appear to have some redundancy. The Severe VSL and the second condition in the High VSL appear to be similar or the same.
NERC Standards Review Subcommittee	No	We agree with most of this standard and the apparent intent. However, there are some specific issues. For instance, measurement of compliance to R1 could be challenging. As the VSL is written, it would appear the compliance auditor could judge if a Reliability Directive should have been issued. The VSL language that is problematic is "The responsible entity that required actions to be executed". Who determines that actions were required? One could argue that failure to identify a communication as a Reliability Directive means that actions weren't required but it is doubtful the compliance authorities would take this approach. Thus, there would appear to be great judgment left to the compliance auditor in determining if a Reliability Directive should have been issued.
		The combination of the COM-002-3 standard and the definition of Reliability directive do not clearly specify that the communication is verbal and between only two responsible entities. Otherwise, the communication could be considered a blast call, written correspondence or conversation between operators within the same responsible entity. We have offered proposed modifications to the definition of Reliability Directive in Q5 to solve this issue. Alternatively, the issue could be addressed by modifying the requirements.
		The VSLs for R3 appear to have some redundancy. The Severe VSL and the second condition in the High VSL appear to be similar or the same.

Response: The RCSDT thanks you for your comment.

R1: The VSL is a compliance tool that is ONLY used after a violation of the requirement has been determined. COM-002 does not provide guidance on when to issue a Reliability Directive, only that, when they issue Reliability Directives, they comply with the requirements of COM-002. Proposed IRO-

Organization	Yes or No	Question 5 Comment
001-2, R1 covers the issue of cor	nditions that m	erit issuing a Reliability Directive.
Blast Call: The intent of the definition still obligated to comply with the		preclude text or other forms of communication for issuing Reliability Directives. However, entities are of COM-002.
VSL: We have deleted the Sever	e VSL and mov	ved the High VSL to the Severe category. We believe this meets the intent of your comment.
FirstEnergy	No	We believe that this standard should be either handed to the OPCPSDT (Project 2007-02) or the OPCPSDT should hand over the COM-003-1 standard to this RCSDT (Project 2006-06); and then COM-003 should be merged. For further explanation of our suggestions, see our comments in Question #8.
TOP to maintain reliability and the OPCPSDT, as currently recognized comment. Stakeholder requests requirements that the RCSDT has	nat the revision ed, will cover t and consensu ve developed f	mment. The RCSDT feels that the concept of a Reliability Directive is an important tool for RC, BA and is are consistent with parts of the directives in FERC Order 693. The work of the RCSDT along with the he original intent of COM-002 and still provide a "defense in depth strategy" as suggested by the NERC is appears to have been achieved with respect to the definition of Reliability Directive and the for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their of the two standards is a work in progress and will ultimately be decided by stakeholder consensus.
American Transmission Company	Yes	
Bonneville Power Administration	Yes	
Electric Market Policy	Yes	
Florida Municipal Power Agency and Some Members	Yes	
IRC Standards Review Committee	Yes	
ISO New England Inc	Yes	
OC Standards Review Group	Yes	
PacifiCorp	Yes	

Organization	Yes or No	Question 5 Comment
Pepco Hodlings, Inc	Yes	
Southern Company Services	Yes	
US Bureau of Reclamation	Yes	
Western Area Power Administration	Yes	
Western Electricity Coordinating Council	Yes	
Puget Sound Energy	No	Under the current proposed language of R2, it appears possible that a recipient of a Reliability Directive not identified as such may still be held responsible for failing to comply with R2, because the word "per" has several meanings. While those meanings do include "in accordance with", it would be clearer to simply use that phrase. As a result, recommend the replacement of the phrase "issued per" with "identified as such in accordance with".
Response: The RCSDT thanks your requirements.	ou for your co	mment. The RCSDT believes that the suggested revision does not provide additional clarity to the
ITC Holdings	Yes	None
Northeast Utilities	Yes	Support the intent of the changes. However, it is unclear if the mechanics of R1 require the initiator to actually state "This is a Reliability Directive".
		mment. The RCSDT intends for such a statement to be made. Using that exact verbiage in a se exact language up to the issuer as long as they identify it as a Reliability Directive.
American Electric Power	Yes	Why is the term "three part communications" not used in this set of requirements?
		mment. While the requirements embody three part communications, the RCSDT believes it is clearer to process that requires a specific action.
ERCOT ISO	No	R1: ERCOT ISO recommends that the requirement be revised to simply state that the entity has to identify

Organization	Yes or No	Question 5 Comment
		when it is a reliability directive, such that it reads as follows:
		<b>R1.</b> When applicable, the Reliability Coordinator, Transmission Operator or Balancing Authority shall identify the action as a Reliability Directive to the recipient. [Violation Risk Factor: High][Time Horizon: Real-Time]
		The deleted language introduces subjectivity and is unnecessary. The use of the defined term implicitly determines when Reliability Directives are issued and it is unnecessary to impose the condition precedent of identifying an action as Reliability Directive. This is unnecessary and just creates confusion.
		R2: ERCOT ISO recommends removal of "the intent" such that it reads as follows:
		R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator
		Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and
		Purchasing-Selling Entity that is the recipient of a Reliability Directive issued per Requirement R1, shall repeat the Reliability Directive back to the issuer of the Reliability Directive. [Violation Risk Factor: High][Time Horizon: Real-Time]
		ERCOT ISO believes using "intent" in this requirement was intended to mitigate the practical fact that it is difficult to repeat, verbatim, a directive. However, use of the word intent could introduce confusion. A directive will require certain actions to accomplish a specific purpose or to solve a specific problem. Thus, the intent of a directive has two components to the intent; the first is the specific actions to be taken and the second is the underlying reason for those actions. The recipient will obviously be privy to the former, but perhaps not the latter. To remove any ambiguity as to whether intent means the actions or the issue to be solved by such actions, the word should be removed. ERCOT believes there is little risk that an auditor will issue a violation if a repeated directive is not verbatim, but reflects the actions to be taken pursuant to the directive.
		Further, ERCOT ISO recommends working closely with the Operating Personnel Communication Protocol SDT to address all-calls as exceptions. It is practically unreasonable to require multiple recipients on the same communication to repeat the directive back. In fact, it is counterproductive because the time it takes to do that would delay the recipients from taking the needed reliability action(s). ERCOT recommends the following language to address "all-calls":
		<b>(COM-003) R2.</b> Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a Reliability Directive shall repeat the Reliability Directive back to the issuer of the Reliability Directive. An exception is allowed for Reliability Directives that are issued via "All-Call" communications. For All-Calls, the entity issuing the directive shall require recipients to acknowledge receipt of message.

Organization	Yes or No	Question 5 Comment
		R3: ERCOT ISO recommends that R3 be combined with R2. Regardless of whether it is combined with R2, the identification precondition should be removed such that the requirement reads as follows:
		<b>R3.</b> Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a Reliability Directive shall acknowledge the response from the recipient of the Reliability Directive in R2 as correct or reissue the Reliability Directive to resolve any misunderstandings. [Violation Risk Factor: High][Time Horizon: Real-Time]
		The identification pre-condition is unnecessary – again, the defined term is self-executing in terms of situational application. Imposition of this superfluous language merely creates the potential for confusion.
		M1: ERCOT ISO recommends removing "required actions to be taken" language for the same reason this pre-condition does not make sense in the requirement, as described above.
		M3: ERCOT ISO recommends that "Directive" be replaced with "Reliability Directive" because Directive is not the full defined term.

Response: The RCSDT thanks you for your comment.

R1: The RCSDT believes that the requirement, as written is clear and disagrees that it introduces subjectivity. COM-002 does not provide guidance on when to issue a Reliability Directive, only that, when they issue Reliability Directives, they comply with the requirements of COM-002. We feel that adding the phrase "When applicable" adds subjectivity to the requirement.

R2: Without the words "the intent", the requirement could be interpreted to mean a verbatim repeat of the Reliability Directive. The RCSDT does not intend for this to be the case and believes that the requirement, as written, is clear and provides sufficient flexibility to meet the requirement. The requirements of COM-002 do not preclude non-verbal (e.g. "all calls") issuance of directives regardless of the medium. It is incumbent on the entity to ensure compliance with the requirements. The RCSDT feels that the concept of a Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with parts of the directives in FERC Order 693. The work of the RCSDT along with the OPCPSDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by the NERC comment.

R3: The RCSDT believes that the steps in R2 and R3 are separate and distinct actions that require separate requirements. Otherwise, we would have compound requirements. We concur with your suggested edit to R3.

M1; We did not make the revision to R1 and therefore M1 is sufficient as written.

M3: We have revised M3 as suggested and to conform to revised R3.

6 Do you agree with the use of the defined term "Reliability Directive" in revisions to the Requirements in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The comments regarding question six ranged from small entities being excluded to if regulatory or statutory requirements covers NERC standards. The SDT addressed these by noting registration is not in the SDT scope and NERC's general council should be contacted for regulatory issues.

A few commenter's expressed concern with the VSL for R2 and one suggested the words "per Requirement 2," should be added. The SDT believes the phrase "per Requirement 2" is not necessary as a VSL is only applied AFTER a compliance violation is determined.

Value added comments such as a concern of the use of the word "threat" as it can be defined as cyber-related and suggested replacing "Operating Personnel" with "System Operator" were also made. The SDT concurred and removed the word "threat" and replaced it with "condition" and also made the revision to System Operator.

There were numerous comments regarding the definition of Reliability Directive with multiple wording suggestions. While slightly out of scope for question six, the SDT expected and viewed these as attempting to reach middle ground.

Some commenter's expressed concern over clarify that the RC has three separate actions. The RC can act, direct others to act, or issue Reliability Directives. The SDT modified R1 to read: " Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts."

Note: Based on discussions with FERC staff, the SDT agreed to make the following changes:

IRO-001-2 Requirements R4, R5 and associated Measures and VSLs are moved to IRO-005-4

IRO-001-2 Requirements R6, R7 and associated Measures and VSLs are moved to IRO-002-2

Organization	Yes or No	Question 6 Comment
Calpine Corporation		

Organization	Yes or No	Question 6 Comment
Public Service Enterprise Group Companies		
Operating Personnel Communications Protocols SDT		No Comment
FirstEnergy	No	Although we agree that a clear definition of Reliability Directive should be included in IRO-001-2, the definition should be revised per our comments in Question #8.
Response: The RCSDT thanks yo	ou for your co	mment. Please see response to question 8.
North Carolina Municipal Power Agency #1	No	For IRO-001-2, the VSL for R2 should retain the words "per Requirement 2," because the requirement itself provides for exceptions to when it is permissible for a directive not to be followed. Requirement 3 then addresses the required action an entity must take in a case where these exceptions apply. Without these words, it appears that a VSL of "Severe" may be assigned if a directive isn't followed under any circumstances.
		mment. The phrase "per Requirement 2" is not necessary as a VSL is only applied AFTER a compliance des the exceptions and compliance will be judged based on this.
NERC	No	In principle, NERC staff disagrees with the necessity of defining a term "Reliability Directive." However, the principle involved in the standard is valid. The standard needs to ensure that if the Reliability Coordinator directs an entity to take action that results in an adverse reliability impact, that entity has a chance to raise valid objection to that action.
		Additional clarification is needed to determine if regulatory or statutory requirements covers NERC standards. One possible solution would be to modify R3 from "its inability to perform" to "its inability or concern to perform."
		Furthermore, in R4 and R5 the RC is expected to identify "threats" and notify all impacted parties. We have concerns that "threat" can be defined as cyber-related. Was the standard intended to cover all anticipated threats, or just transmission/operating issues?
		R6 Since Operating Personnel is not a NERC defined term, we suggest replacing "Operating Personnel" with

Organization	Yes or No	Question 6 Comment	
"Concern": We believe that your o	Concern": We believe that your concern is covered by the "unless such actions would violate safety, equipment, or regulatory or statutory requirements" atement in R2.		
Regulatory: The RCSDT suggest	s that NERC s	taff seek input from NERC's General Counsel in regards to this issue.	
		o be cyber related. The CIP standards cover cyber "threats". To that end, we have removed the word 5 and associated Measures and VSLs are moved to IRO-005-4.	
R6: We concur and have made the	nis revision.		
OC Standards Review Group	No	In R1, we suggest adding "direct" in the sentence to read: "Each Reliability Coordinator shall act, "direct" or issue Reliability Directives" During adverse reliability impact events, system operators should not be bound by a cumbersome three part communications regime that could prevent prompt responses to the event. The suggested change would allow for non reliability directives to be issued to correct adverse reliability impacts.	
requirements of COM-002 should shall take actions or direct action Operators, Interchange Coordina magnitude or duration of actual of Purpose Statement to: To establish Impacts to the Bulk Electric Systems	be complied was, which could ators and Districtions that results that results the capabilities.	mment. The RCSDT agrees in principle with adding "direct" to the requirement. In addition, the with, especially in such situations. We have revised R1 to state: Each Each Reliability Coordinator directives, of Transmission Operators, Balancing Authorities, Generator ibution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the alt in Adverse Reliability Impacts. To address comments received on R1, we have also revised the lity and authority of Reliability Coordinators to direct other entities to prevent Adverse Reliability	
Conforming revisions to M1 and the VSLs for R1 were also made.			
Southern Company Services	No	Including the requirement of issuing directives every time an action is required by an entity assumes that entities cannot work in a spirit of cooperation to maintain the reliability of the Bulk Electric System.	
Response: The RCSDT thanks you for your comment. To address your concern, we have revised R1 to state: "Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator			

Response: The RCSDT thanks you for your comment. To address your concern, we have revised R1 to state: "Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts.

To address comments received on R1, we have also revised the Purpose Statement to: To establish the capability and authority of Reliability Coordinators to direct other entities to prevent Adverse Reliability Impacts to the Bulk Electric System

Organization	Yes or No	Question 6 Comment
We Energies	No	IRO-001-2 R1 opens the door for determining if the RC should have issued a Reliability Directive to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts which goes beyond the intention of Emergency. The RC should have any and all options to achieve the required actions, one of which is a Reliability Directive. Agreed if the RC issues a Reliability Directive it needs to be followed or notified why it can't be followed. In IRO-009"the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take (up to and including load shedding) to mitigate the magnitude and duration of" Recommend "Each Reliability Coordinator, in it's sole discretion, shall take action independently or by others or issue Reliability Directives for actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. "In addition the measures assume the RC only works through others, and others only act under Directive from the RC and do not allow for operational data to be used to show action was taken like SCADA logs, or system parameter records for any entity.  The Data Retention is excessive, RC, BA, TOP are on a 3 yr audit cycle, others on a 6yr cycle this is way too long, recommend one full calendar year plus the current year.

Response: The RCSDT thanks you for your comment. To address your concern, we have revised R1 to state: Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts.

To address comments received on R1, we have also revised the Purpose Statement to: To establish the capability and authority of Reliability Coordinators to direct other entities to prevent Adverse Reliability Impacts to the Bulk Electric System

- We have revised the data retention section to: The Reliability Coordinator shall retain its evidence for 90 days for Requirements R1 and Measures M1.
- The Transmission Operator, Balancing Authority, Generator Operator, Distribution Provider, Transmission Service Provider, Purchasing-Selling Entity or Load Serving Entity shall retain its evidence for 90 days for Requirements R2 and R3, Measures M2 and M3.

Organization	Yes or No	Question 6 Comment	
American Electric Power	No	Please refer to our response to question #4.	
Hydro-Québec TransEnergie (HQT)	No	Please see our proposed wording change under Q4.	
Independent Electricity System Operator	No	Please see our proposed wording change under Q4.	
IRC Standards Review Committee	No	Please see our proposed wording change under Q4.	
Northeast Power Coordinating Council	No	Please see our proposed wording change under Question 4.	
Response: The RCSDT thanks yo	ou for your co	mment. Please see response to Question 4.	
E.ON U.S.	No	See comments to question 4 and question 8.	
Response: The RCSDT thanks yo	Response: The RCSDT thanks you for your comment. Please see response to Question 4 and Question 8.		
Ameren	No	See response to #4.	
Electric Market Policy	No	See response to Q4	
Response: The RCSDT thanks yo	ou for your co	mment. Please see response to Question 4.	
PNGC Power (15 member utilities)	No	Small non 24/7 entities in WECC should be excluded from these requirements. Not doing so will create a financial burden for little discernable effect.	
Response: The RCSDT thanks yo	Response: The RCSDT thanks you for your comment. It is beyond the scope of the RCSDT to determine registration or compliance issues.		
Manitoba Hydro	No	The use of this definition in this requirement appears appropriate at this time, but the definition of Reliability Directive issue remain the same as identified on Question 4 of this document.	

Organization	Yes or No	Question 6 Comment
Response: The RCSDT thanks y	ou for your co	mment. Please see response to question 4.
Central Lincoln	No	These requirements should be waived in the WECC region, where the RC has stated they will not be interacting with most of the registered entities.  http://www.bpa.gov/corporate/business/reliability/Docs/2007/PNSC_RE_Data_Letter_2_070723.pdf
Response: The RCSDT thanks y	ou for your co	mment. It is beyond the scope of the RCSDT to determine registration or compliance issues.
US Bureau of Reclamation	No	This change is problematic in that any automatic protective element operation that trips a BES element could be construed to be an Adverse Reliability Impact. The modification eliminated the phrase "that affects a widespread area of the Interconnection" which clarified the scope of "uncontrolled separation". We would need the definition to be adjusted to delete "uncontrolled separation" as it is included in the definition of Cascading.
Response: The RCSDT thanks y proposed definition revision.	ou for your co	mment. We concur with your comment and have removed "uncontrolled separation" from the
ISO New England Inc	No	We believe that the Reliability Directive definition should be: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an actual or expected emergency and the RC, TOP or BA operator clearly identifies in the communication that this is a Reliability Directive."
Response: The RCSDT thanks y definition.	ou for your co	mment. The RCSDT believes that your suggested revision would impose a requirement within the
Western Electricity Coordinating Council	No	We do not agree with the definition (see above question 4) but it does clear up when a directive is required.
Response: The RCSDT thanks y	ou for your co	mment. Please see response to question 4.
Midwest ISO Standards Collaborators	No	We largely agree with the use of the Reliability Directive term but have some suggested some refinements in the previous questions to the definition and requirements.
NERC Standards Review Subcommittee	No	We largely agree with the use of the Reliability Directive term but have some suggested some refinements in the previous questions to the definition and requirements.

Organization	Yes or No	Question 6 Comment
Response: The RCSDT thanks you for your comment. Please see responses to questions 4 and 5.		
Duke Energy	No	We propose a revised definition of the term "Reliability Directive" in our Comment #4 above.  Requirement R1 should be reworded to clarify that the RC has three separate actions. The RC can act, direct others to act, or issue Reliability Directives.
		Requirements R2 and R3 should be revised to include the fact that the listed entities must comply with RC directions as well as Reliability Directives, or inform the RC of their inability to comply.  Measures and VSLs should also be revised accordingly.

Response: The RCSDT thanks you for your comment.

Definition: Please see response to question 4 with respect to the definition.

R1: To address your comment as well as the comments of other stakeholders, we have revised R1 to state: Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts..

We have also revised the Purpose Statement to: To establish the capability and authority of Reliability Coordinators to direct other entities to prevent Adverse Reliability Impacts to the Bulk Electric System

Conforming revisions to M1 and the VSLs for R1 were also made.

R2 and R3: The RCSDT believes that revised R2 and R3 now satisfy your requested revision.

American Transmission Company	Yes	
Bonneville Power Administration	Yes	
CECD	Yes	
Exelon	Yes	
Florida Municipal Power Agency	Yes	

Conforming revisions to M1 and the VSLs for R1 were also made.

No

Question 4.

**ERCOT ISO** 

Organization	Yes or No	Question 6 Comment
and Some Members		
Northeast Utilities	Yes	
PacifiCorp	Yes	
PPL	Yes	
Puget Sound Energy	Yes	
South Carolina Electric and Gas	Yes	
Southwest Power Pool	Yes	
Western Area Power Administration	Yes	
Xcel Energy	Yes	
ITC Holdings	Yes	None
Pepco Hodlings, Inc	Yes	Requirement R1 should recognize the RC's option to "direct others to act"
R1 to state: Each Reliability Co Operators, Balancing Authoritie	ordinator shall s, Generator C	mment. R1: To address your comment as well as the comments of other stakeholders, we have revised lake actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area gnitude or duration of actual events that result in Adverse Reliability Impacts.
We have also revised the Purpos Adverse Reliability Impacts to the		o: To establish the capability and authority of Reliability Coordinators to direct other entities to prevent ic System

As an initial matter, ERCOT ISO disagrees with the definition of Reliability Directive - See response to

Organization	Yes or No	Question 6 Comment
		With respect to the use of Reliability Directive in IRO-001-2, ERCOT ISO does not necessarily take issue with using the term in this context. However, by doing so, the Drafting Team should consider whether doing so effectively defines Emergency in terms of the specific conditions that define Adverse Reliability Impact (i.e. instability, uncontrolled separation or cascading), because Reliability Directives, by definition, are only issued during emergencies, and pursuant to R1 of IRO-001-2, the relevant entities issue a Reliability Directive for instances that result in Adverse Reliability Impacts. Accordingly, use of Reliability Directive in this Standard may effectively revise the definition of Emergency (although it is arguable that the relevant specific conditions are clearly Emergency conditions), and ERCOT ISO questions whether this is appropriate. It may be advisable to not use the term here or to revise the definition to explicitly include these conditions.
		In addition, ERCOT ISO recommends the following non-substantive revisions to R1, R2 and R3.
		<u>R1</u>
		SDT PROPOSED LANGUAGE
		R1. Each Reliability Coordinator shall act or issue Reliability Directives for actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. [Violation Risk Factor: High][Time Horizon: Real-time Operations and Same Day Operations]
		ERCOT PROPOSED LANGUAGE
		R1. Each Reliability Coordinator shall act to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. RC actions pursuant to this requirement may include the issuance of Reliability Directives to Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area. [Violation Risk Factor: High][Time Horizon: Real-time Operations and Same Day Operations]
		<u>R2</u>
		SDT PROPOSED LANGUAGE
		<b>R2.</b> Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity shall comply with its Reliability Coordinator's Reliability Directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations]

Organization	Yes or No	Question 6 Comment
		ERCOT PROPOSED LANGUAGE
		<b>R2.</b> Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity shall comply with Reliability Directives issued pursuant to R1 unless such actions would violate safety, equipment, or regulatory or statutory requirements. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations]
		<u>R3</u>
		SDT PROPOSED LANGUAGE
		<b>R3.</b> Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity shall inform its Reliability Coordinator upon recognition of its inability to perform an issued Reliability Directive. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations]
		ERCOT PROPOSED LANGUAGE
		<b>R3.</b> Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity shall inform its Reliability Coordinator if it cannot perform a Reliability Directive because it would violate safety, equipment, or regulatory or statutory requirements. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations]

Response: The RCSDT thanks you for your comment. Please see responses to your comments on questions 4 and 5.

Definitions: An Emergency is a system condition or event. Adverse Reliability Impact is the result of an Emergency or some other condition or event.

To address your comment as well as the comments of other stakeholders, we have revised R1 to state: Each Reliability Coordinator shall take actions or direct actions, which could include issuing Reliability Directives, of Transmission Operators, Balancing Authorities, Generator Operators, Interchange Coordinators and Distribution Providers within its Reliability Coordinator Area to prevent identified events or mitigate the magnitude or duration of actual events that result in Adverse Reliability Impacts.

We have also revised the Purpose Statement to: To establish the capability and authority of Reliability Coordinators to direct other entities to prevent Adverse Reliability Impacts to the Bulk Electric System

Conforming revisions to M1 and the VSLs for R1 were also made.

R1, R2, R3: The RCSDT thanks you for your suggested revisions to R1, R2 and R3. Revised wording best reflects stakeholder consensus. The RCSDT developed wording of the requirements provides clear direction for actions of applicable entities and to provide clarity regarding compliance.

Do you agree with the revisions to the Requirements in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Several commenters made suggestions regarding R2. The original requirement was designed to accomplish in one requirement what is proposed by the commenters as three procedural requirements. R2 is worded to focus on defining what a "compliant plan" is. In the current requirement a "proposed plan" is not the same as a "compliant plan".

The SDT viewed what the commenters are suggesting as follows:

- The initiating RC would submit its "proposed plan" to the other RCs
- The receiving RCs would provide the initiating RC with their responses indicating whether or not they agree
  with the proposed roles/actions offered by the initiating RC
- If one or more RCs do not agree with the roles/actions, then the initiating RC would be required to offer an alternative proposal (and go back to the first bullet)
- When all RCs acknowledge that the proposed roles/actions in the revised "proposed plan" are acceptable, then and only then would the "proposed plan" become a "compliant plan"

A closer reading of the current R2 would show the current R2 accomplishes the exact same result but does so without interjecting the need for documenting the intervening processes. The SDT does not see the need to document why each proposal was or was not accepted; nor does the SDT see the need for document the negotiations that are involved in getting to "an agreed to plan". For example the comments' subrequirement to show the RC submitted its plan would require a paper trail for the request; followed by a paper trail for the responses, followed by more paperwork if the RCs are not in agreement. In the end, the only action that matters (in both the SDT version and in the commenters alternative version) is a plan that works, and a plan that if others are involved must have their concurrence that those others will participate.

R2 does not impose a requirement to get agreements; what R2 does is to require that a "compliant plan" be developed. A proposed plan does not solve problems. That proposed plan is NOT compliant with R2 if it only assumes that other RC will effect the actions in the proposal; neither is it compliant if the proposed actions are not acceptable to the other RCs who are required to act. To be compliant the initiating RC must either have the concurrence (i.e. agreement) of the other RCs for their respective part(s) in the proposed plans OR the plan must not include those RCs.

R2 says to be compliant the other RC must agree with the "proposed plan" before that "proposed plan" is acceptable as a "compliant plan". Having a plan that requires someone else to do an action, but that other entity will not effect that action, will not resolve the problem at hand. Further having documentation that someone refuses to participate in the proposed plan does nothing to solve the problem at hand.

Organization	Yes or No	Question 7 Comment
Ameren		
American Transmission Company		
Calpine Corporation		
CECD		
E.ON U.S.		
Exelon		
North Carolina Municipal Power Agency #1		
Northeast Utilities		
Public Service Enterprise Group Companies		
Puget Sound Energy	Yes	
We Energies		
Operating Personnel Communications Protocols SDT		No Comment
PacifiCorp		No comment
Manitoba Hydro	No	

Organization	Yes or No	Question 7 Comment
Hydro-Québec TransEnergie (HQT)	No	R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, Subrequirement R2.1 places a burden to the initiating RC for actions over which it may not have any control, viz. agreeing to the procedures, process or plan by the receiving RCs that are required to take actions. We believe there should be requirements for:a. The initiating RC to seek agreements by the other RCs that are required to take actions;b. The receiving RCs to indicate agreement, or otherwise with a reason; and;c. The initiating RC to revise the procedures, process or plan. These requirements would place the needed responsibilities to the appropriate entities. If the SDT agrees with revising R2 as suggested, then other requirements that may be affected by this change may need to be revised accordingly.  (ii) There is an extra "or" in the R8 clause: "unless such actions would violate safety, equipment, or regulatory or statutory requirements".
IRC Standards Review Committee	No	(i) R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, Subrequirements R2.1 places a burden to the initiating RC for actions over which it may not have any control, viz. agreeing to the procedures, process or plan by the receiving RCs that are required to take actions. We believe there should be requirements for:a. The initiating RC to seek agreements by the other RCs that are required to take actions;b. The receiving RCs to indicate agreement, or otherwise with a reason; and;c. The initiating RC to revise the procedures, process or planThese requirements would place the needed responsibilities to the appropriate entities. If the SDT agrees with revising R2 as suggested, then other requirements that may be affected by this change may need to be revised accordingly.  (ii) There is an extra "or" in the R8 clause: "unless such actions would violate safety, equipment, or regulatory or statutory requirements".
Northeast Power Coordinating Council	No	(i) R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, Subrequirement R2.1 places a burden on the initiating RC for actions over which it may not have any control, namely agreeing to the procedures, processes or plans by the receiving RCs that are required to take actions. There should be requirements for:a. The initiating RC to seek agreements by the other RCs that are required to take actions;b. The receiving RCs to indicate agreement, or otherwise with a reason; and;c. The initiating RC to revise the procedures, processes or plansThese requirements would place the needed responsibilities on the appropriate entities. If the SDT agrees with revising R2 as suggested, then other requirements may be affected by this change, and may need to be revised accordingly.(ii) There is an extra "or" in the R8 clause preceding "regulatory": "unless such actions would violate safety, equipment, or regulatory or statutory requirements".

Organization	Yes or No	Question 7 Comment
ISO New England Inc	No	R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, Subrequirements R2.1 places a burden to the initiating RC for actions over which it may not have any control, viz. agreeing to the procedures, process or plan by the receiving RCs that are required to take actions. We believe there should be requirements for:a. The initiating RC to seek agreements by the other RCs that are required to take actions;b. The receiving RCs to indicate agreement, or otherwise with a reason; and;c. The initiating RC to revise the procedures, process or planThese requirements would place the needed responsibilities to the appropriate entities. If the SDT agrees with revising R2 as suggested, then other requirements that may be affected by this change may need to be revised accordingly.

Response: The RCSDT thanks you for your comment. The original requirement was designed to accomplish in one requirement what is proposed by the commenters as three procedural requirements. R2 is worded to focus on defining what a "compliant plan" is. In the current requirement a "proposed plan" is not the same as a "compliant plan".

The SDT viewed what the commenters are suggesting as follows:

- The initiating RC would submit its "proposed plan" to the other RCs
- The receiving RCs would provide the initiating RC with their responses indicating whether or not they agree with the proposed roles/actions offered by the initiating RC
- If one or more RCs do not agree with the roles/actions, then the initiating RC would be required to offer an alternative proposal (and go back to the first bullet)
- When all RCs acknowledge that the proposed roles/actions in the revised "proposed plan" are acceptable, then and only then would the "proposed plan" become a "compliant plan"

A closer reading of the current R2 would show the current R2 accomplishes the exact same result but does so without interjecting the need for documenting the intervening processes. The SDT does not see the need to document why each proposal was or was not accepted; nor does the SDT see the need for document the negotiations that are involved in getting to "an agreed to plan". For example the comments' subrequirement to show the RC submitted its plan would require a paper trail for the request; followed by a paper trail for the responses, followed by more paperwork if the RCs are not in agreement. In the end, the only action that matters (in both the SDT version and in the commenters alternative version) is a plan that works, and a plan that if others are involved must have their concurrence that those others will participate.

R2 does not impose a requirement to get agreements; what R2 does is to require that a "compliant plan" be developed. A proposed plan does not solve problems. That proposed plan is NOT compliant with R2 if it only assumes that other RC will effect the actions in the proposal; neither is it compliant if the proposed actions are not acceptable to the other RCs who are required to act. To be compliant the initiating RC must either have the concurrence (i.e. agreement) of the other RCs for their respective part(s) in the proposed plans OR the plan must not include those RCs.

R2 says to be compliant the other RC must agree with the "proposed plan" before that "proposed plan" is acceptable as a "compliant plan". Having a plan that requires someone else to do an action, but that other entity will not effect that action, will not resolve the problem at hand. Further having

Organization	Yes or No	Question 7 Comment
documentation that someone	refuses to participa	ate in the proposed plan does nothing to solve the problem at hand.
Midwest ISO Standards Collaborators	No	R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, it inappropriately places the burden on the same RC to obtain the agreement of impacted RCs. No RC can be forced to agree. Rather R2 should remove the bullet to require agreement from the impacted RC and a new requirement should be written to require the impacted RC to acknowledge the Operating Procedure, Process or Plan with agreement or disagreement. In the event of disagreement, a reliability or legal reason or failure to implement comparable actions should be given as the reason for not agreeing with the Operating Process, Procedure or Plan. This contributes to reliability by forcing the impacted RC to take action if the action is reasonable. There is an extra "or" in the R8 clause: "unless such actions would violate safety, equipment, or regulatory or statutory requirements".
		IRO-014-2 R2 VSLs differentiate violations based on whether the plans, processes, and procedures were distributed or agreed to. How can another RC agree to them if it has not received them? Because it is unlikely that an RC will make notifications without exchanging reliability information or vice versa for IRO-014-2 R3, we suggest a more appropriate delineation for the VSLs would be based on the number of other impacted RCs that were not informed.IRO-014-2 R4 VSLs should be defined based upon the number of conference calls the RC does not participate in. R4 requires each RC to participate in "agreed upon conference calls". Because the statement "conference calls" is plural, VSLs need to be set based on the aggregate of calls not participated in. Failure to assign VSLs in this way is equivalent to setting the requirement to "agreed upon conference call" and causes the VSLs to be in violation guideline 3 that the Commission established in their June 2008 Order on VSLs. Guideline 3 states that the VSL must be consistent with the requirement and cannot "redefine or undermine the requirement". Clearly, these VSLs do.R5's Severe VSL is redundant with the Moderate VSL. Failure to notify one RC meets both VSLs since Severe uses the word any. Based on the SDT's response to our comment from the last time, we believe instead of any they mean "no impacted". Unfortunately, "any impacted" could be one or two or higher. If it is one, it matches the Moderate VSL.The VSL for R8 needs to include the "unless such actions would violate safety, equipment, regulatory or statutory requirement" clause.
		or Operating Procedures, Processes, or Plans' be Operating Procedures, Operating Processes, or Operating Plans' to comport with the definitions in the NERC Glossary of Terms. We believe "Operating" is implied on "Processes" and "Plans" but believe it is more appropriate to make the meaning explicit with this modification since we are dealing with formal definitions.

Organization	Yes or No	Question 7 Comment
NERC Standards Review Subcommittee  No	R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, it inappropriately places the burden on the same RC to obtain the agreement of impacted RCs. No RC can be forced to agree. Rather R2 should remove the bullet to require agreement from the impacted RC and a new requirement should be written to require the impacted RC to acknowledge the Operating Procedure, Process or Plan with agreement or disagreement. In the event of disagreement, a reliability or legal reason or failure to implement comparable actions should be given as the reason for not agreeing with the Operating Process, Procedure or Plan. This contributes to reliability by forcing the impacted RC to take action if the action is reasonable. There is an extra "or" in the R8 clause: "unless such actions would violate safety, equipment, or regulatory or statutory requirements".	
		IRO-014-2 R2 VSLs differentiate violations based on whether the plans, processes, and procedures were distributed or agreed to. How can another RC agree to them if it has not received them? Because it is unlikely that an RC will make notifications without exchanging reliability information or vice versa for IRO-014-2 R3, we suggest a more appropriate delineation for the VSLs would be based on the number of other impacted RCs that were not informed.IRO-014-2 R4 VSLs should be defined based upon the number of conference calls the RC does not participate in. R4 requires each RC to participate in "agreed upon conference calls". Because the statement "conference calls" is plural, VSLs need to be set based on the aggregate of calls not participated in. Failure to assign VSLs in this way is equivalent to setting the requirement to "agreed upon conference call" and causes the VSLs to be in violation guideline 3 that the Commission established in their June 2008 Order on VSLs. Guideline 3 states that the VSL must be consistent with the requirement and cannot "redefine or undermine the requirement". Clearly, these VSLs do.R5's Severe VSL is redundant with the Moderate VSL. Failure to notify one RC meets both VSLs since Severe uses the word any. Based on the SDT's response to our comment from the last time, we believe instead of any they mean "no impacted". Unfortunately, "any impacted" could be one or two or higher. If it is one, it matches the Moderate VSL. The VSL for R8 needs to include the "unless such actions would violate safety, equipment, regulatory or statutory requirement" clause.
Independent Electricity System Operator	No	R2 appropriately requires the RC experiencing the Adverse Reliability Impact to distribute its Operating Procedure, Process or Plan to other RCs required to take action. However, Subrequirements R2.1 places a burden to the initiating RC for actions over which it may not have any control, viz. agreeing to the procedures, process or plan by the receiving RCs that are required to take actions. We believe there should be requirements for:a. The initiating RC to seek agreements by the other RCs that are required to take actions;b. The receiving RCs to indicate agreement, or otherwise with a reason; and;c. The initiating RC to revise the procedures, process or plan. These requirements would place the needed responsibilities to the appropriate entities. If the SDT agrees with revising R2 as suggested, then other requirements that may be affected by this change may need to be revised accordingly. There is an extra "or" in the R8 clause: "unless such

Organization	Yes or No	Question 7 Comment
		actions would violate safety, equipment, or regulatory or statutory requirements".
		IRO-014-2 R2 VSLs differentiate violations based on whether the plans, processes, and procedures were distributed or agreed to. If an intended RC never received the plans, processes and procedures, it would not be aware of the need to agree to them. Hence, if the plans, etc. were not distributed, then the initiating RC will be assigned a Moderate VSL but never any higher VSLs even if no agreements were received (since no other RCs had received the plans to begin with). We suggest the SDT to consider rearranging the VSLs and in accordance with any changes to R2 reflecting our suggested changes summarized under Q7. Because it is unlikely that an RC will make notifications without exchanging reliability information or vice versa for IRO-014-2
		R3, we suggest a more appropriate delineation for the VSLs would be based on the number of other impacted RCs that were not informed.
		IRO-014-2 R4 VSLs should be defined based upon the number of conference calls the RC does not participate in. R4 requires each RC to participate in "agreed upon conference calls". Because the statement "conference calls" is plural, VSLs need to be set based on the aggregate of calls not participated in. Failure to assign VSLs in this way is equivalent to setting the requirement to "agreed upon conference call" and causes the VSLs to be in violation guideline 3 that the Commission established in their June 2008 Order on VSLs. Guideline 3 states that the VSL must be consistent with the requirement and cannot "redefine or undermine the requirement". Clearly, these VSLs do.
T. DOODT !!		The VSL for R8 needs to include the "unless such actions would violate safety, equipment, regulatory or statutory requirement" clause.

Response: The RCSDT thanks you for your comment. The original requirement was designed to accomplish in one requirement what is proposed by the commenters as three procedural requirements. R2 is worded to focus on defining what a "compliant plan" is. In the current requirement a "proposed plan" is not the same as a "compliant plan".

The SDT viewed what the commenters are suggesting as follows:

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- When all RCs acknowledge that the proposed roles/actions in the revised "proposed plan" are acceptable, then and only then would the "proposed plan" become a "compliant plan"

A closer reading of the current R2 would show the the current R2 accomplish the exact same result but does so without interjecting the need for

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plan that requires someone else to	do an action,	with the "proposed plan" before that "proposed plan" is acceptable as a "compliant plan". Having a but that other entity will not effect that action, will not resolve the problem at hand. Further having ate in the proposed plan does nothing to solve the problem at hand.
IRO-014 VSLs: R2: The VSLs are o	differentiated a	as you suggest.
R3: The RCSDT does not believe to one and there was no notification?	hat is the corre	ect delineation of the requirement which requires notification of each impacted RC. What if there is only
R4: The RCSDT contends that the the requirement.	requirement s	pecifies participation in all agreed upon calls. If the RC misses an agreed upon call, it has failed to meet
R5: The RCSDT disagrees. If there	e is only one ir	mpacted RC and no notification is made, it should be a Severe violation.
R8: The phrase does not need to b would not be considered.	e in the VSL.	If a plan was not implemented due to safety reasons, then the requirement was not violated and the VSL
R1: We have revised the requirement	ent per your si	uggestion to R1, R2 and R3.
Electric Market Policy	No	Agree with most. However, the language proposed for use in IRO-014-2 @ R5 and R6 needs clarity. There needs to be a way to determine who is required to do what depending upon whether the party is a) Reliability Coordinator who has the identified Adverse Reliability Impact) An impacted affected Reliability Coordinator. Suggest revising so that these read similar to R7 and R8.

Response: The RCSDT thanks you for your comment. The RCSDT does not understand your comment. We believe that the requirements are clear as written as to what each entity must do.

Organization	Yes or No	Question 7 Comment	
Western Area Power Administration	No	Comments: In R1 & R2, the first sentence is redundant. The phrase which was added "For conditions or activities that impact other RC Areas" should be removed.	
Response: The RCSDT thanks yo	ou for your co	mment. The SDT agrees and has made the suggested revision.	
OC Standards Review Group	No	In R1.6, we suggest adding "BES" before "conditions" such that the sentence reads: "Authority to act to prevent and mitigate "BES" conditions"	
Response: The RCSDT thanks you	ı for your com	ment. The SDT disagrees. Adverse Reliability Impact is defined as follows:	
The impact of an event that results in Interconnection.	n frequency-related	l instability; unplanned tripping of load or generation; or uncontrolled separation or cascading outages that affects a widespread area of the	
If a condition will cause interconnection	on "cascading,	instability," the RC should be mandated to act whether or not the initiating condition is part of the BES.	
Florida Municipal Power Agency and Some Members	No	In requirements R7 and R8, the term mitigation plan is used. Since mitigation plan has another specific meaning (e.g., a mitigation plan for non-compliance with a standard), FMPA suggests using a different term with the same meaning, e.g., ameliorative plan, alleviation plan, abatement plan, to help avoid confusion.	
Response: The RCSDT thanks yo	Response: The RCSDT thanks you for your comment. The SDT disagrees. Lower case "mitigation" is a proper English word		
NERC	No	NERC staff believes that the original language in IRO-016-1 was clearer than the proposed requirements R5 through R8. Additionally, we believe that this standard is already covered in the certification process. We recommend that this standard, with the exception of R4, be retired and the certification process be revisited to ensure that IRO-016-1 R1 is covered. Furthermore, operating guidelines should be developed to address the content of R5 through R8.	
mitigations plans belong in the crequirements in IRO-014 as supp	ertification pro orted through revised to elim	mment. The RCSDT is not clear how requirements to make notifications, develop and implement ocess. We are also unclear what constitutes an operating guideline. Based on this, we will retain the the stakeholder process. Requirements R5 through R8 were brought into IRO-014 from IRO-016 as you inate compound requirements. The RCSDT feels that requirements are clear as written and stakeholder yed.	
Duke Energy	No	R1.6 - We believe that the word "system" should be added before the word "conditions" to provide additional	

Organization	Yes or No	Question 7 Comment	
		clarity.	
Response: The RCSDT thanks yo	ou for your co	mment. We agree and have made the suggested edit.	
US Bureau of Reclamation	No	We would suggest that the language should indicate the plans need to address "neighboring RC areas" to limit the scope of the plans for "other RC areas" and not try to cover the whole NERC footprint.	
extent that one RC expects anoth	Response: The RCSDT thanks you for your comment. The requirements deal with those RC that are seen to have an impact on a problem. To the extent that one RC expects another RC to be part of a solution, the requirement allows the initiating RC to "propose" a plan of actions and to seek help. If the other RC disagrees with the proposal, the latter RC would not give agreement.		
Bonneville Power Administration	Yes		
Central Lincoln	Yes		
FirstEnergy	Yes		
Pepco Hodlings, Inc	Yes		
PNGC Power (15 member utilities)	Yes		
PPL	Yes		
South Carolina Electric and Gas	Yes		
Southern Company Services	Yes		
Southwest Power Pool	Yes		
Western Electricity Coordinating Council	Yes		
Xcel Energy	Yes		

Organization	Yes or No	Question 7 Comment
ITC Holdings	Yes	None
American Electric Power	Yes	The use of " act and/or issue" may be more descriptive in Requirement 1 rather than " act or issue"
Response: The RCSDT thanks yo	ou for your co	mment.
ERCOT ISO	No	ERCOT ISO would like to add clarification to the Purpose statement and the following requirements (1-4) to alleviate potential interpretation issues. The remaining requirements in IRO-014 are adequately addressed with respect to "within the Interconnection" if the Adverse Reliability Impact term is modified as identified above in response to Question All the recommendations tie together.
		<b>Purpose:</b> To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas "within its Interconnection" and to preserve the reliability benefits of interconnected operations.
		<b>R1.</b> For conditions or activities that impact other Reliability Coordinator Areas "within its Interconnection", each Reliability Coordinator shall have Operating Procedures, Processes, or Plans for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability. These Operating Procedures, Processes, or Plans shall collectively address the following:
		<b>R2.</b> Each Reliability Coordinator's Operating Procedure, Process, or Plan that requires one or more other Reliability Coordinators "within its Interconnection" to take action (e.g., make notifications, exchange information, or coordinate actions) shall be:
		<b>R3.</b> For conditions or activities that impact other Reliability Coordinator Areas " <u>within its Interconnection</u> ", each Reliability Coordinator shall make notifications and exchange reliability—related information with impacted Reliability Coordinators using its predefined Operating Procedures, Processes, or Plans for conditions that may impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability-related information.
		<b>R4.</b> Each Reliability Coordinator shall participate in agreed upon conference calls, at least weekly, and other communication forums with impacted Reliability Coordinators "within its Interconnection".
		Additionally, ERCOT ISO recommends that the weekly minimum be eliminated and such meeting should be pursuant to an "agreed upon schedule" at the discretion of the Reliability Coordinators. The language notes "impacted" Reliability Coordinators. The "impacted" implies that it is relative to a discrete incident or time period, which is consistent with the purpose of the standard. Accordingly, it is unclear on the need for and

Organization	Yes or No	Question 7 Comment
		unbounded ongoing meeting obligation.
		ERCOT ISO also suggests changing the R4 VSL to allow lower VSL for missing an occasional meeting. The VSL can be elevated based on the number of missed calls or meetings. Severe would seem to be more appropriate if the entity refused to participate or calls were not initiated at all.
		Furthermore, with respect to R4, It is not clear what value this requirement adds generally. The requirement is related to "impacted" RCs. This implies that the meetings are relative to discrete incidents/time periods, which is consistent with the purpose of the standard. Accordingly, given the apparent temporary, incident specific nature of an "impacted" entity, it doesn't make sense to impose an unbounded ongoing meeting obligation. Furthermore, the establishment of the general procedures governs the objective actions impacted RCs will take for all situations. If there is an incident where an RC is "impacted", it will manage the situation by application of the established objective procedures – that is the intent of having those procedures in place under the standard. Accordingly, it is questionable whether the weekly meeting obligation is necessary or serves any purpose. At a minimum, the weekly meeting obligation should be eliminated and such meeting should be pursuant to an "agreed upon schedule" to give discretion to the RCs.
		Finally, with respect to $R1 - 1.6$ , in order to provide certainty to the regulated community, ERCOT ISO does not support the change to the condition precedent for action under the requirement from actual to potential Adverse Reliability Impacts. Defining an obligation in terms of "potential" situations is vague and ambiguous. This should generally be avoided because it creates ambiguity and uncertainty for both the regulated entity and regulator.

Response: The RCSDT thanks you for your comment.

R1-R3: The SDT disagrees. If an RC does not have any other impacted RCs, then no operating processes, procedures or plans would be necessary. This would mean the R1-R3 would not apply to that RC.

R4 and VSL- The RCSDT has revised R4 to add the words "within the same Interconnection" to the end of R4. We have revised the VSL accordingly. The RCSDT contends that the requirement specifies participation in all agreed upon calls. If the RC misses an agreed upon call, it has failed to meet the requirement.

R1.6 – This refers to studying various system conditions and developing operating processes, plans or procedures to address them. If an entity has run a study and determined that there is an impact on another RC, then a process/plan/procedure should be developed and agree to in order to address the issue.

## 7 Do you have any other comment, not expressed in questions above, for the RC SDT?

Summary Consideration: The RC SDT thanks all commenters for their review of these proposed revisions and has incorporated many of the comments in the next revision of these requirements. In general, the RC SDT feels that the concept of a Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with the applicable parts of the directives in FERC Order 693. The work of the RC SDT along with the OPCP SDT and the RTO SDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by commenters. Consensus appears to have been achieved with respect to the definition of Reliability Directive and the requirements that the RC SDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their proposed requirements in COM-003. The intent of this DT is to preserve a method for RCs, BAs and TOPs to make the determination of "what actions are required" and clearly communicate the importance to the receiver at a heightened method to normal day-to-day operational communications. The trigger of "Reliability Directive" by the issuer highlights these actions as needed to maintain BES reliability and shall be carried out as directed (unless such actions would violate safety, equipment, regulatory or statutory requirement per the language of the requirement) and all parties to the conversation need to be very cognizant of the system conditions that are requiring actions. The DT has attempted to craft clear and specific language that support BES reliability and hopes that this work can support and enhance the development of the OPCP SDT. The DT has also attempted to eliminate redundancy and ambiguity while not creating any reliability gaps. Several comments were received on the RC's ability to "act". The RC must "act" (ie. do something, "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts". This may include analysis, coordination of cooperative actions or the issuance of "Reliability Directives". "Act" does not imply solely the manipulation of BES elements.

Several comments on VSL language were received. We have attempted to clarify intent and have revised some in response to comments.

Several comments were received that reference a "performance based initiative" endorsed by the NERC BOT. The DT appreciates this new initiative, and to the extent possible, requirements proposed by this DT reflect that desire. [We have had no official instruction nor direction regarding this initiative in relation to this project.]

RC control of "analysis tools" is critical to maintaining the wide area view. Control by the RC over the tools is imperative and beyond administrative, since it is intended to prevent planned reliability tool outages without the consent or knowledge of operating personnel. Although the DT agrees with the premise that many other requirements may be violated by ineffective communications, the intent of the requirement is to ensure there are effective communications methods in place for communicating BES activity across entities. Effective communication are a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more significant performance type standard requirements due to ineffective communications before they

impact the BES. Failure of the RC to control outages of analysis tools was mentioned as a contributing factor in the 2003 blackout.

Overall, it is the intent of the DT to make the requirements flexible and adaptive to new technologies and methods as directed in order 693 and ensure that no matter how many forms of interpersonal communications are available. An entity can select a functional alternative to meet the intent of the requirement. The 60 minute timeframe appears reasonable based on industry comments. The term Interconnection is appropriate as it is.

Effective communications rely on an effective hierarchy. It is crucial for a host TOP or BA to have effective communications with GOs attached to their systems so that BES operations can be coordinated. Much like RCs must be able to communicate effectively with the systems within its footprint, effective communications allows BAs/TOPs to disseminate Interconnection information to DPs/GOPs that are impacted by system conditions outside of their operating visibility. The RCS DT has relied on the authority hierarchy (RC/BA/TOP/DP) to ensure accountability with the current performance type requirements, while not over-burdening the standards with prescriptive administrative-type requirements.

Organization	Question 8 Comment
American Transmission Company	
ISO New England Inc	
North Carolina Municipal Power Agency #1	
Pepco Hodlings, Inc	
Puget Sound Energy	None additional.
South Carolina Electric and Gas	
US Bureau of Reclamation	
We Energies	

Organization	Question 8 Comment
Western Area Power Administration	
Western Electricity Coordinating Council	
CECD	(1). The 60 minute timeframe should be lengthened if normal interpersonal communication paths are in service. Furthermore, the requirement to take corrective action or identify an alternative interpersonal communication method within 60 minutes should only apply if the registered entity only has a single alternative interpersonal communication method in place.
	(2). For COM-001 Requirement 4: The use of the term "Interconnection" seems inappropriate when describing communications between the DP/GOP and its BA/TOP and should be deleted. The NERC glossary of terms defines this as any one of the three major electric system networks in North America: Eastern, Western, and ERCOT. The requirement to be able to exchange operating information should be subject to the limitation as requested by the BA or TOP.
and methods as directed in order	ou for your comment. 1) It is the intent of the DT to make the requirement flexible and adaptive to new technologies 693 and ensure that no matter how many forms of interpersonal communications are available. An entity can select be intent of the requirement. The timeframe has been revised to 2 hours. 2) We concur and have removed rement.
	(i) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives per the functional model.
	(ii) The NERC BOT recently approved pursuing the Results/Performance Based standards development activity. Based on this recent decision, the BOT has signaled their intent to remove administrative types of requirements from all standards. The IRO-001-2 R6 for the RC to have the authority to veto outages of their analysis tools and the COM-001-2 R3 requirement to use the English language are clearly not results or performance based, but rather administrative. If an operator used non-English, where it has not been agreed to or subject to law, to issue a Reliability Directive they will not be able to satisfy three-part communications in COM-002-3 in addition to many other standards and requirements they could not comply with. Even if an RC has veto authority over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would not be able to meet other requirements and standards such as operating within IROL because they would not be able to assess the system appropriately.
Response: The RCSDT thanks	you for your comments.
	ct" (ie. do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability may include analysis, coordinate cooperative actions or issue "Reliability Directives".

Organization	Question 8 Comment	
persor the int entitie	I administrative; it is intended to prevent planned reliability tool outages with the consent or knowledge of Although the DT agrees with the premise that many other requirements may be violated by ineffective communications methods in place for communicating BES ective communication is a cornerstone of BES reliability and the intent of the requirement is to prevent the ignificant performance type standard requirements due to ineffective communications before they impact	munications, activity across violation of
Midwest ISO Standards Collaborators	1) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives per model.	the functional
	2) IRO-001-2 R4 and R5 Severe VSLs need to have "any or" removed. The VSL should only apply for three of "any or" conflicts with this.COM-001-2 R2 Severe VSL conflicts with other VSLs. Specifically, the use of the with the Severe VSL is problematic. Notifying one entity at 65 minutes fits both the Lower VSL and Severe VSL as suggest deleting the first portion of the Severe VSL that reads, "The responsible entity failed to notify any improof the failure of its normal Interpersonal Communications capabilities within 60 minutes."	vord "any" in well. We
	3) The NERC BOT recently approved the pursuing the Results/Performance Based standards development at on this recent decision, we believe the BOT has signaled their intent to remove administrative types of require standards. The IRO-001-2 R6 for the RC to have the authority to veto outages of their analysis tools and the R3 requirement to use the English language are clearly not result or performance based but rather administrated operator used Portuguese to issue a Reliability Directive they will not be able to satisfy three-part communicated 002-3 in addition to many other standards and requirements they could not comply with. Even if an RC has we over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would meet a host of other requirements and standards such as operating within IROL because they would not be at the system appropriately.	ements from all COM-001-2 tive. If an tions in COM-eto authority not be able to

Response: The RCSDT thanks you for your comments.

- 1) The RC must "act" (ie. do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts". This may include analysis, coordinate cooperative actions or issue "Reliability Directives".
- 2) The VSL language is intended to accommodate scenarios where only one entity is impacted or several entities are impacted. "The Reliability Coordinator failed to notify any or more than three impacted Transmission Operators, Balancing Authorities..." and provide the same measurability level.
- 3) R6 is beyond administrative; it is intended to prevent planned reliability tool outages without the consent or knowledge of operating personnel. Although the DT agrees with the premise that many other requirements may be violated by ineffective communications, the intent of the requirement is to ensure there are effective communications methods in place for communicating BES activity across entities. Effective communication is a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more significant performance type standard

Organization	Question 8 Comment		
requirements due to ineffective communications before they impact the BES.			
Northeast Power Coordinating Council	(i) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives as per the functional model.		
	(ii) The NERC BOT recently approved pursuing the Results/Performance Based standards development activity. Based on this recent decision, the BOT has signaled their intent to remove administrative types of requirements from all standards. The IRO-001-2 R6 requirement for the RC to have the authority to veto outages of their analysis tools and the COM-001-2 R3 requirement to use the English language are clearly not results or performance based, but rather administrative. If an operator used non-English to issue a Reliability Directive they will not be able to satisfy three-part communications in COM-002-3, in addition to many other standards and requirements they could not comply with. Even if an RC has veto authority over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would not be able to meet other requirements and standards such as operating within an IROL because they would not be able to assess the system appropriately.		
Response: The RCSDT thanks y	ou for your comments.		
	act" (ie. do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability may include analysis, coordinate cooperative actions or issue "Reliability Directives".		
personnel. Alth the intent of the Effective comm	dministrative; it is intended to prevent planned reliability tool outages without the consent or knowledge of operating nough the DT agrees with the premise that many other requirements may be violated by ineffective communications, a requirement is to ensure there are effective communications methods in place for communicating BES activity. Indication is a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more formance type standard requirements due to ineffective communications before they impact the BES.		
Independent Electricity System Operator	(i) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives per the functional model.		
	(ii) The NERC BOT recently approved pursuing the Results/Performance Based standards development activity. Based on this recent decision, the BOT has signaled their intent to remove administrative types of requirements from all standards. The IRO-001-2 R6 for the RC to have the authority to veto outages of their analysis tools and the COM-001-2 R3 requirement to use the English language are clearly not results or performance based, but rather administrative. If an operator used non-English to issue a Reliability Directive they will not be able to satisfy three-part communications in COM-002-3 in addition to many other standards and requirements they could not comply with. Even if an RC has veto authority over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would not be able to meet other requirements and standards such as operating within IROL because they would not be able to assess the system appropriately.		

Organization		Question 8 Comment	
		(iii) COM-001-2 R2 Severe VSL conflicts with other VSLs. Specifically, the condition of failing to notify any impacted entities within 60 minutes means that no entities received a notification within 60 minutes. But how about they all received this in 65 minutes? Would this be the same condition as the Low VSL? And if they all received this in 75 minutes, the condition would be the same as the Moderate VSL. We suggest the SDT to review and revise these VSLs to eliminate the duplication/ambiguity.	
Response: The	RCSDT thanks y	ou for your comments.	
1)		act" (ie. do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability may include analysis, coordinate cooperative actions or issue "Reliability Directives".	
II)	personnel. Alth the intent of the Effective comm	is beyond administrative; it is intended to prevent planned reliability tool outages without the consent or knowledge of operating ersonnel. Although the DT agrees with the premise that many other requirements may be violated by ineffective communications, e intent of the requirement is to ensure there are effective communications methods in place for communicating BES activity. fective communication is a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more gnificant performance type standard requirements due to ineffective communications before they impact the BES.	
III)	VSLs for R1 and	id not consider R1 and R2 to be parallel requirements, and consequently did not attempt to force parallelism between the R1 and R2. The only failure that is severe in this context is the failure to test the Alternative Interpersonal Communications on at least a quarterly basis.	
IRC Standards F Committee	Review	(i) IRO-001-2 R4 and R5 Severe VSLs need to have "any or" removed. The VSL should only apply for three or more and "any or" conflicts with this.	
		(ii) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives per the functional model.	
		(iii) COM-001-2 R2 Severe VSL conflicts with other VSLs. Specifically, the condition of failing to notify any impacted entities within 60 minutes means that no entities received a notification within 60 minutes. But how about they all received this in 65 minutes? Would this be the same condition as the Low VSL? And if they all received this in 75 minutes, the condition would be the same as the Moderate VSL. We suggest the SDT to review and revise these VSLs to eliminate the duplication/ambiguity.	
		(iv) The NERC BOT recently approved the pursuing the Results/Performance Based standards development activity. Based on this recent decision, we believe the BOT has signaled their intent to remove administrative types of requirements from all standards. The IRO-001-2 R6 for the RC to have the authority to veto outages of their analysis tools and the COM-001-2 R3 requirement to use the English language are clearly not result or performance based but rather administrative. If an operator used Portuguese to issue a Reliability Directive they will not be able to satisfy three-part communications in COM-002-3 in addition to many other standards and requirements they could not comply with. Even if an RC has veto authority over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would not	

Organization	Question 8 Comment
	be able to meet a host of other requirements and standards such as operating within IROL because they would not be able to assess the system appropriately.
	(v) The VSLs for COM-002-3 R3 appear to have some redundancy. The Severe VSL and the second condition in the High VSL appear to be similar or the same.
	(vi) Measurement of compliance to COM-002-3 R1 could be challenging. As the VSL is written, it would appear the compliance auditor could judge if a Reliability Directive should have been issued. The VSL language that is problematic is "The responsible entity that required actions to be executed". Please remove: "required actions to be executed as". Who determines that actions were required? One could argue that failure to identify a communication as a Reliability Directive means that actions weren't required but it is doubtful the compliance authorities would take this approach. Thus, there would appear to be great judgment left to the compliance auditor in determining if a Reliability Directive should have been issued.
	(vii) IRO-014-2 R2 VSLs differentiate violations based on whether the plans, processes, and procedures were distributed or agreed to. If an intended RC never received the plans, processes and procedures, it would be aware of the need to agree to them. Hence, if the plans, etc. were not distributed, then the initiating RC will be assigned a Moderate VSL but never any higher VSLs even if no agreements were received (since no other RCs had received the plans to begin with). We suggest the SDT to consider rearranging the VSLs and in accordance with any changes to R2 reflecting our suggested changes summarized under Q7.
	(viii) Because it is unlikely that an RC will make notifications without exchanging reliability information or vice versa for IRO-014-2 R3, we suggest a more appropriate delineation for the VSLs would be based on the number of other impacted RCs that were not informed.
	(ix) IRO-014-2 R4 VSLs should be defined based upon the number of conference calls the RC does not participate in. R4 requires each RC to participate in "agreed upon conference calls". Because the statement "conference calls" is plural, VSLs need to be set based on the aggregate of calls not participated in. Failure to assign VSLs in this way is equivalent to setting the requirement to "agreed upon conference call" and causes the VSLs to be in violation guideline 3 that the Commission established in their June 2008 Order on VSLs. Guideline 3 states that the VSL must be consistent with the requirement and cannot "redefine or undermine the requirement". Clearly, these VSLs do.
	(x) IRO-014-2 R5's Severe VSL is redundant with the Moderate VSL. Failure to notify one RC meets both VSLs since Severe uses the word any. Based on the SDT's response to our comment from the last time, we believe instead of any they mean "no impacted". Unfortunately, "any impacted" could be one or two or higher. If it is one, it matches the Moderate VSL.
	(xi) The VSL for IRO-014-2 R8 needs to include the "unless such actions would violate safety, equipment, regulatory or statutory requirement" clause.

Organization		Question 8 Comment			
Respoi	Response: The RCSDT thanks you for your comments.				
I)		tended to accommodate scenarios where only one entity is impacted or several entities are impacted. "The Reliability of tify any or more than three impacted Transmission Operators, Balancing Authorities" and provide the same			
II)	The RC must "act" (ie. o	do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts". sis, coordinate cooperative actions or issue "Reliability Directives".			
III)	The DT does not agree.	The Severe VSL has "any impacted entities", meaning that no entity was notified within 60 minutes. This is Moderate and High VSLs address individual entities that may not have met the standard of 60 minutes.			
IV)	R6 is beyond administration personnel. Although the of the requirement is to Effective communication.	ative, it is intended to prevent planned reliability tool outages without the consent or knowledge of operating ne DT agrees with the premise that many other requirements may be violated by ineffective communications, the intent of ensure there are effective communications methods in place for communicating BES activity across entities. On are a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more stype standard requirements due to ineffective communications before they impact the BES.			
V)	The VSLs were set to be	e flexible in measuring cases where an 1) acknowledgement is not made at all to a correctly repeated directive and 2) is not made at all AND a directive repeated incorrectly was not corrected.			
VI)	The intent of the DT is to importance to the receivement. In other words, to should be carried out as parties to the conversal and specific language to	to allow the issuing entity to make the determination of "what actions are required" to clearly communicate the ver. The word "required actions to be executed" are integral to the requirement and cannot be removed to meet the the trigger of "Reliability Directive" by the issuer highlights these actions as needed to maintain BES reliability and s directed (unless such actions would violate safety, equipment, regulatory or statutory requirement etc ) and all tion need to be very cognizant of the system conditions that are requiring actions. The DT has attempted to craft clear hat support BES reliability and cannot pre-judge the behaviors of compliance auditors.			
VIIÍ)					
IX)	The DT feels this is a core RC responsibility and therefore treated this requirement as binary. RCs must be responsive to other RCs that nee to discuss BES reliability. However, we agree to change "calls" to "call(s)" in R4, to read as follows:				
	•	shall participate in agreed upon conference calls, at least weekly (per Requirement 1, Part 1.7) with other Reliability reconnection. [Violation Risk Factor: Lower][Time Horizon: Real-time Operations]			
X)					
XI)		not be implemented for such instances, then there would be no violation of the requirement and the VSL would not			
OC Stan	dards Review Group	"The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review group only and should not be construed as the position of SERC Reliability Corporation, its board or			

Organization	Question 8 Comment
	its officers."
Response: The RCSDT thanks y	ou for your comments.
FirstEnergy	1. We believe that this standard should be either handed to the OPCPSDT (Project 2007-02) or the OPCPSDT should hand over the COM-003-1 standard to this RCSDT (Project 2006-06); and then COM-002 and COM-003 should be merged. Per our comments in Draft 1 of COM-003-1 (OPCPSDT Project 2007-02) we believe that the Reliability Directive definition should be broadened to include communications associated with BES related information (similar to the proposed definition of Interoperability Communication from the OPCPSDT). The following are specifics: a. For better project coordination, since the plan of the OPCPSDT (2007-02) is to eventually incorporate the COM-002-3 requirements into the new COM-003-1 standard, we believe this should be done now by one SDT. b. The definition of Reliability Directive should be broadened to include any actions that affect the BES reliability. We suggest the following change to the term Reliability Directive: "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where the recipient is directed to change the state or report the status of an Element or Facility of the Bulk Electric System." c. Per our suggestion to broaden the definition of Reliability Directive in "b" above, the proposed definition of Interoperability Communication proposed by the OPCPSDT can be eliminated. d. With respect to the proposed R2 and R3 of COM-002-3 and requirement R5 of COM-003-1 which all which essentially discuss three-part communication, could be combined and covered by COM-002-3. e. R1 of COM-003-1 that requires communication protocols procedures can be covered in COM-002-3.2. Implementation Plan - The proposed timeline for implementing these standards changes is the 1st day of the 1st quarter after applicable regulatory approvals. We believe that since there are numerous changes to and retirement of requirements, this will place a significant compliance burden on industry and warrants more time to adjust compliance evidence and tracking. Furthermore, stand

Response: The RC SDT thanks you for your comment. The RC SDT feels that the Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with parts of the directives in FERC Order 693. The work of the RC SDT along with the OPCP SDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by the NERC comment. Consensus appears to have been achieved with respect to the definition of Reliability Directive and the requirements that the RC SDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their proposed requirements in COM-003. The intent of the DT is to preserve a method for RCs, BAs and TOP to make the determination of "what actions are required" and clearly communicate the importance to the receiver above normal day-to-day operational communications. The trigger of "Reliability Directive" by the issuer highlights these actions as needed to maintain BES reliability and should be carried out as directed (unless such actions would violate safety, equipment, regulatory or statutory requirement per the language of the requirement) and all parties to the conversation need to be very cognizant of the system conditions that are requiring actions. The DT has attempted to craft clear and specific language that support BES reliability and hopes that this work can support and enhance the development of the OPCP SDT.

Organization	Question 8 Comment	
Ameren	1.In COM-001 R2, this "impacted entities' language is unworkable. Some entities might be impacted because they get information from the RC, i.e indirectly from the entity with the loss. Team should address direct relationships somehow.2.In COM-001,R4, does the team consider the need for this for the AIC?3.The team should note that there is no requirement to even have AIC. Thus R1 would only apply if you have one.	
	you for your comment. The DT feels that impacted adds clarity to the requirement by limiting the obligation is usual support that "impacted" is a reasonable clarification.	
NERC	As stated in the response to Question 1, the scope of COM-001-2 is unclear as to whether it applies to both verbal and data communication. We believe that it should.	
Each Balancing Authority, Gene Operator, and Transmission Ov	you for your comment. The RCSDT believes that data communication is covered under IRO-010, R3 which states: erator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission wher shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability ctor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)	
Central Lincoln	COM-001 M3, M4, COM-002 M2, and IRO-001 M1, and M2 all require evidence of DPs and/or LSEs "which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent documentation." While we appreciate the inclusion of "equivalent documentation", we are unsure what might qualify and who determines what qualifies as equivalent. We still believe COM-001 should not apply to DPs and LSEs, since these entities do not own or operate BES assets. Please consider this stakeholder input as well. While CIP-001 M4 can show that documented communication proves capability for R4, an entity has no way of proving capability if such communications did not take place during the audit period. We are unsure if the SDT realizes that not all of the entities subject to these standards maintain 24/7 dispatch desks. Much effort will go into complying with standards dealing with afterhour's directives that will never come, because the issuing entity will realize any action requested will not be timely enough and plan accordingly.	
documentation is included to p	you for your comment. DP and LSE were included in this standard per FERC Order 693 Directive. "Equivalent" rovide potential alternatives for entities to provide to prove compliance with the requirement. Compliance audit entation to determine compliance with a requirement.	
Exelon	COM-001-2 R2. Please consider in place of "impacted entities", substitute "all applicable entities".	

Organization	Question 8 Comment		
therefore no change was made.	therefore no change was made.		
ITC Holdings	Comments: IRO-001-2 R4 has an errant comma after the first occurrence of the word "Impacts". IRO-014-2 R8 should have the first occurrence of the word "or" removed. Also, a new R9 (and associated M9) should be added requiring the RC who cannot agree on the mitigation plan due to safety, equipment, regulatory, or statutory requirements to notify the RC experiencing the Adverse Reliability Impact of the reason for the inability to implement the mitigation plan.		
Response: The RCSDT thanks you for your comment. The comma in IRO-001-2 R4 has been removed.			
The first "or" in IRO-014-2 R8 has I	been removed.		
The suggested R9/M9 are unneces would have to document that as page 1	sary. Any RC that claims that a mitigation plan would violate safety, equipment, regulatory or statutory requirements art of complying with R8.		
Northeast Utilities	For IRO-001-2, the VSL language for R1, R4, and R5 is not clear. Specifically, for the R1 VSL the text appears to be reversed between High and Severe; and for R4 and R5, please clarify what is meant by "any or more than three".		
	Response: The RCSDT thanks you for your comment. The High VSL and Severe VSL language is not reversed. The failure to act to mitigate existing Adverse Reliability Impacts is more negatively-impactful to BES reliability than the failure to prevent future Adverse Reliability Impacts.		
"Any or more than three" means that if no TOPs or BAs were notified or, in the case of an RC having four or more TOPs and BAs in its area, more than 3 of them were not notified.			
Bonneville Power Administration	In most proposed NERC standards, it seems the tried and true method of writing a requirement is to list the entities required to implement the action, list the required action, and then list any exceptions to the required action. In proposed standard COM-001-2, Requirement R3, the SDT lists the exceptions before the rule. In proposed standard COM-001-2, Measure M1, when it is discussing quarterly testing, it uses the term, "alternative Interpersonal Communications." The word "alternative" should be capitalized. (Please see our comment on question #2 regarding the overall use of the term 'Alternative Interpersonal Communications.') we agree and made the change		
	In proposed standard COM-001-2, Measure M1, after the word, "substitute," the word "Alternative" should be added in order to use similar language in both Requirement R1 and in Measure M1. (Again, please see my comment on question #2 regarding the overall use of the term 'Alternative Interpersonal Communications.') we agree and made the change		
	In proposed standard COM-001-2, Measure M2, it uses the wording "normal communications capabilities." If our comment on question #1 is acceptable in its entirety, and the SDT decides not to use the term, 'Interpersonal Communication,' then the wording of Measure M2 is also acceptable. However, if the SDT decides to continue with their use of that term, then this phrase should be replaced with "normal Interpersonal Communications capabilities" in order to use similar language in both		

Organization	Question 8 Comment	
	Requirement R2 and in Measure M2. we agree and made the change	
	In proposed standard COM-001-2, VSL for R2, the Lower VSL uses the word "failed" to describe notifying the impacted entities within the tight bounds of a time frame, in this case, "more than 60 minutes but less than or equal to 70 minutes". According to the given wording, every entity that is fully compliant with this standard would have "failed" to notify the impacted entities within the narrow bounds of the Lower VSL's time constraint! A similar comment could be made for the Moderate, High and Severe VSL descriptions also. The wording "failed to notify" needs to be taken out and replaced with "notified." Related to this, in the Moderate VSL, the description of a responsible entity notifying at least one, but not all impacted entities within 60-minutes would tend to negate the Lower VSL. If the SDT were trying to force a responsible entity into making at least one phone call of notification to one of the impacted entities within 60-minutes, the Severe VSL's description accomplishes this feat all by itself. However, if the SDT were insistent on all impacted entities being notified within 60-minutes or a Moderate VSL will result, then that action makes the Lower VSL rather useless. VSLs are only applied when there is a violation. The time bounds are appropriate for a violation of the requirement	
	In proposed standard COM-002-3, Measure M3, it uses the term "Directive" by itself. It seems appropriate for what is being discussed that the term "Reliability Directive" should have been used. <b>We added Reliability</b>	
	In proposed standard COM-002-3, VSL for R3, the High VSL describes the responsible entity failing to respond appropriately, either by acknowledging the recipient when they repeated the intent correctly or by failing to reissue when the recipient did not repeat the intent correctly. This would seem to take care of the optionseither the recipient was correct or they were incorrect, but not both. However, the Severe VSL, by using the word "AND" connects the two thoughts and provides for the recipient to be both correct and incorrect at the same time. Therefore, the Severe VSL seems to contradict itself, while the spirit of the VSL seems to be handled quite nicely by the High VSL by itself. It is therefore suggested that the SDT consider replacing the Severe VSL with the High VSL. The resdt believes that the VSLs are appropriate as written	
	In proposed standard IRO-001-2, Measure M3, on the second to the last line, the measure repeats the wording "that it," making it redundant. <b>We have made the edit</b>	
	In proposed standard IRO-001-2, Data Retention (Part D, Section 1.3), on the first bullet, the word "operator" (following "Generator") should be capitalized. <b>We have made the edit</b>	
	In proposed standard IRO-001-2, High and Severe VSLs for Requirement R1, we don't really see the utility of separating the parts of failing to prevent Adverse Reliability Impacts and failing to mitigate the magnitude or duration of such impacts. Maybe the SDT could give some examples, because we would be just as fine combining the two into one VSL and therefore simplifying the VSL part of the standard. VSL drafting guidelines indicate that multiple VSLs should be written for a requirement when feasible. It is feasible for this requirement.	
	In proposed standard IRO-001-2, Severe VSL for Requirement R2, the VSL should include wording to indicate that an	

No additional comments.

No Comment

PPL

Operating Personnel Communications Protocols SDT

Organization	Question 8 Comment
	exception can be granted to the responsible entity failing to comply with the given Reliability Directive due to safety, equipment, or regulatory or statutory requirements. Otherwise, the responsible entity will be given a Severe VSL every time one of these exceptions comes up. If an entity did not comply with a directive for a safety issue, then the entity did not violate the requirement. The VSL only applies when a requirement is violated.
	In proposed standard IRO-001-2, Severe VSL for Requirement R4, we are not entirely sure what the SDT was trying to say but the spirit of the VSL would seem to be captured if the SDT removed the wording "any or" and left the VSL to say in part, "failed to issue an alert to more than three" In a related way, for the Severe VSL for Requirement R5, the spirit of the VS would seem to be captured if the SDT removed the wording "any or" and left the VSL to say in part "failed to notify more than three" The intent of the wording is to allow multiple VSLs for the requirement. The word "any" indicates that there were no notifications made when there were less than three notifications to be made.
Response: The RCSDT thanks	you for your comment. See responses above.
Florida Municipal Power Agency and Some Members	IRO-001-2, R5 refers to only transmission problems being mitigated and not to other types of issues that could result in a threat of an Adverse Reliability Impacts, such as a large supply / demand imbalance (capacity or energy Emergency). IRO-001-2, R6 FMPA does not quite understand the requirement, is the intent to allow Operating Personnel the authority to veto planned outages "in" its own analysis tools, rather than "to"?
Response: The RCSDT thanks yo	ou for your comment. We have removed the word "transmission" from the requirement.
Reliability Impacts, within its Relia Fransmission Operators and Balanc	nat identifies an expected or actual threat with Adverse bility Coordinator Area shall notify all impacted ing Authorities in its Reliability Coordinator Area when the tion Risk Factor: Medium] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]
Regarding IRO-001-2, R6, the pla No changes made.	nned outages mentioned are actual outages of the analysis tools themselves, not planned outages of transmission elements.

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PacifiCorp	No comment.		
American Electric Power	Nothing additional at this time.		
PNGC Power (15 member utilities)	PNGC (15 members) would like to associate itself with Steve Alexanderson's (Central Lincoln PUD) comments re 2006-06:"COM-001 M3, M4, COM-002 M2, and IRO-001 M1, and M2 all require evidence of DPs and/or LSEs "which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent documentation." While we appreciate the inclusion of "equivalent documentation", we are unsure what might qualify and who determines what qualifies as equivalent. We still believe COM-001 should not apply to DPs and LSEs, since these entities do not own or operate BES assets. Please consider this stakeholder input as well. While CIP-001 M4 can show that documented communication proves capability for R4, an entity has no way of proving capability if such communications did not take place during the audit period. We are unsure if the SDT realizes that not all of the entities subject to these standards maintain 24/7 dispatch desks. Much effort will go into complying with standards dealing with afterhour's directives that will never come, because the issuing entity will realize any action requested will not be timely enough and plan accordingly."		
Response: The RCSDT thanks ye	Response: The RCSDT thanks you for your comment. The DT included DPs and LSEs per FERC Order 693.		
The DT believes your comment regarding "CIP-001 M4" is actually in reference to COM-001-2 M4". While the DT is concerned that any proposed requirements must be clear and reasonably simple for which to document compliance, in this instance, a simple test phone call at a reqular interval would prove capability (assuming it were recorded.)			
Manitoba Hydro	R2 2.1 If these actions are required as real time action, "Agreed to" should be opened up to "Acknowledged by". "Agreed to" in this requirement would be acceptable when there is time for impacted RC to study the other RC plans to determine impact on their system. To further justify this suggestion, R3 says "make notifications with impacted RC". This statement indicates no commitment to the notifications and therefore presumes "acknowledgement".R7. Move this requirement to R2 and label as R2.3. R2 is "Agreed to" and R7 is "Not Agreed to". R8 covers the action required when "Not agreed to"R8. The only suggested addition to this is "When an RC with the identified Adverse Reliability Impact has created and implemented a plan with other affected RC", there should be an R8.1 stating "No RC shall place a burden on other RC's" and or/and an R8.2 stating, that "Reliability will override economics". The addition of these two sub requirements would also enhance R7 by removing all other reasoning that an impacted RC may dwell on to "not agree to".		
	Response: The RCSDT thanks you for your comment. We assume that this comment is in reference to IRO-014-2. The RCSDT does not agree with your proposed revision. The intent of the requirements is to have the parties agree to the course of action required to maintain reliability.		
Calpine Corporation	Regarding COM-001-2 R4. Many PURPA Qualifying Facilities and tolled Facilities communicate only with a scheduling		

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	coordinator or similar entity, not necessarily directly with the Transmission Operator and/or Host Balancing Authority. The standard should be rewritten to clarify that direct communications between these Generator Operators and their Transmission Operator and/or Host Balancing Authority is either not required or that communications through their established paths of communication meets the requirement.		
Response: The RCSDT thanks you for your comments. Effective communications rely on an effective hierarchy. It is crucial for a host TOP or BA to have effective communications with GOs attached to their systems so that BES operations can be coordinated, much like RCs must be able to communicate effectively with the system within its footprint. PURPA qualifying facilities can impact BES reliability, and, as such, are included here.			
Duke Energy	Requirement R6 of IRO-001-2 contains the capitalized term "Operating Personnel". This is not a NERC-defined term and should not be capitalized. As a general comment on new and revised NERC-defined terms, we believe that when such terms are introduced in a project with multiple standards, the terms should be included in the "Definitions of Terms Used in Standard" section of each standard. For example, in this project the term "Adverse Reliability Impact" is revised in IRO-001-2, but while it is also used in IRO-014-2, it no longer appears in the "Definitions of Terms Used in Standard" section of IRO-014-2.		
Response: The RCSDT thanks yo	ou for your comment and has changed "Operating Personnel" to "System Operator".		
Southwest Power Pool	SPP has also worked collaboratively with the IRC SRC on the comments submitted by that group on this standard and we fully support those. However, SPP found additional concerns at the last minute which could not be included in the SRC set due to the submittal deadline and has chosen to submit these separately. There are 10 other standards where the word "Directive" is used. Will the term Reliability Directive replace them, or will we get a different definition for Directive, or will both terms be the same?		
The RC SDT believes that "directive" is lowercase in the other instances in NERC standards. The RTO SDT, OPCP SDT and RC SDT have attempted to move toward "Reliability Directive" in concert so as to remove the remaining ambiguity from NERC standards.			
The intent of the DT is to preserve a method for RCs, BAs and TOP to make the determination of "what actions are required" and clearly communicate the importance to the receiver above normal day-to-day operational communications. The trigger of "Reliability Directive" by the issuer highlights these actions as needed to maintain BES reliability and should be carried out as directed (unless such actions would violate safety, equipment, regulatory or statutory requirement per the language of the requirement) and all parties to the conversation need to be very cognizant of the system conditions that are requiring actions. The DT has attempted to craft clear and specific language that support BES reliability and hopes that this work can support and enhance the development of the OPCP SDT and subsequent expansion of the term "Reliability Directive".			
E.ON U.S.	The definition of Reliability Directive should be incorporated into COM-003-1 with an associated single requirement that requires the use of Three-part Communication during the communication of a Reliability Directive.		

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Response: The RCSDT thanks you for your comment. The DT has attempted to craft clear and specific language that support BES reliability and hopes that this work can support and enhance the development of the OPCPSDT and subsequent expansion of the term "Reliability Directive".COM-003 is outside the scope of the RCSDT project.		
Public Service Enterprise Group Companies	he PSEG Companies are generally in agreement with the proposal.	
Response: The RCSDT thanks you for your comment.		
Southern Company Services	These standards are more restrictive and prescriptive each time that a revision is issued for comments. It appears that the SDT does not believe that entities operating the Bulk Electric System cannot operate the system in a reliable manner using cooperation between parties.	
Response: The RCSDT thanks you for your comment. The DT feels that these standard requirements have been improved to benefit reliability and act as a "backstop" to prevent the breakdown of cooperation between parties and incent effective communications between operators of the BES.		
NERC Standards Review Subcommittee	This standard could be boiled down to one requirement and that is to maintain the continuous ability to communicate with other appropriate registered entities regardless of the need for a backup system.	
	2) For IRO-001-2 R1, "act" should be removed. The RC can't act but can only issue Reliability Directives per the functional model.	
	3) IRO-001-2 R4 and R5 Severe VSLs need to have "any or" removed. The VSL should only apply for three or more and "any or" conflicts with this.COM-001-2 R2 Severe VSL conflicts with other VSLs. Specifically, the use of the word "any" in the Severe VSL is problematic. Notifying one entity at 65 minutes fits both the Lower VSL and Severe VSL as well. We suggest deleting the first portion of the Severe VSL that reads, "The responsible entity failed to notify any impacted entities of the failure of its normal Interpersonal Communications capabilities within 60 minutes."	
	4) COM-001-2 R2 needs to be coordinated with EOP-008-1 since EOP-008-1 R1.5 is requiring 2 hours. COM-001-2 R1 should be clarified to remove 60 minutes. Perhaps the specific time frame is too administrative and too dependent on the circumstances and doesn't purport to directly impact reliability of the backup functionality. If a time frame is desired perhaps the registered entity which knows their backup functionality capabilities and their plan to actuate these capabilities could be the best entity to define a reasonable immediate time frame.	
	5) The NERC BOT recently approved the pursuing the Results/Performance Based standards development activity. Based on this recent decision, we believe the BOT has signaled their intent to remove administrative types of requirements from all standards. The IRO-001-2 R6 for the RC to have the authority to veto outages of their analysis tools and the COM-001-2 R3 requirement to use the English language are clearly not result or performance based but	

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	rather administrative. If an operator used Portuguese to issue a Reliability Directive they will not be able to satisfy three-part communications in COM-002-3 in addition to many other standards and requirements they could not comply with. Even if an RC has veto authority over analysis tools, failure to exercise it would render the authority meaningless. Furthermore, the RC would not be able to meet a host of other requirements and standards such as operating within IROL because they would not be able to assess the system appropriately.	

## Response: The RCSDT thanks you for your comments.

- 1. The DT has attempted to eliminate redundancy and ambiguity while not creating any reliability gaps. As written, the requirements are geared to incent folks to have effective communications in-place at all times while flexible enough to accommodate technology changes and process improvements by the industry.
- 2. The RC must "act" (ie. do something "to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts". This may include analysis, coordinate cooperative actions or issue "Reliability Directives". "Act" does not imply solely the manipulation of BES elements.
- 3. The VSL language is intended to accommodate scenarios where only one entity is impacted or several entities are impacted. "The Reliability Coordinator failed to notify any or more than three impacted Transmission Operators, Balancing Authorities..." and provide the same measurability level.
- 4. The RCSDT notes that EOP-008-1 is a proposed standard that has not been approved for enforcement. Also, EOP-008-1 deals with an entire control center where COM-001 deals with Interpersonal Communications capability with another entity. We will retain the original 60 minute timeframe.
- 5. R6 is beyond administrative, it is intended to prevent planned reliability tool outages without the consent or knowledge of operating personnel. Although the DT agrees with the premise that many other requirements may be violated by ineffective communications, the intent of the requirement is to ensure there are effective communications methods in place for communicating BES activity across entities. Effective communication are a cornerstone of BES reliability and the intent of the requirement is to prevent the violation of other more significant performance type standard requirements due to ineffective communications before they impact the BES.

Xcel Energy	We would like to restate our belief that the Standard should explicitly state the requirement for RCs, TOPs and BAs to have both primary and alternate means of communication. To "imply" a required element within a Standard is inconsistent with the NERC Reliability Standards Development Procedure, which states "All mandatory requirements of a reliability standard shall be within an element of the standard." We would suggest a requirement language that simply states "Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall maintain a means for both primary Interpersonal Communication as well as Alternative Interpersonal Communication used to communication real-time operating information."

Response: The RCSDT thanks you for your comment. The RCSDT has crafted the latest versions (as supported by stakeholder comments) to support reliable communications by better describing how industry communicates and providing flexibility for the adoption of alternative communication media. The RCSDT also tried to minimize over-prescriptive requirements that result in no value to reliability and impose an

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administrative burden.			
Electric Market Policy	We would like to thank, AND highly commend this SDT for their effort. This is the type of effort that every SDT should strive for. Elimination of requirements that are either redundant or unnecessary, and therefore distract entities, is every bit as important to the standards process as is the creation of new standards where reliability gaps are found. The proliferation of new and revised standards is becoming a concern for many in this industry and many of us feel the effort going into the review and compliance documentation is reducing the focus on monitoring and otherwise insuring that reliable operations can be maintained.		
Response: The RCSDT thanks y therefore reliability of the BES.	Response: The RCSDT thanks you for your comments and agrees reducing redundancy and ambiguity in the standards improves industry focus and therefore reliability of the BES.		
ERCOT ISO	ERCOT ISO offers the following additional comments:		
	COM-001-2		
	1) The SDT should consider coordinating their efforts with the OPCP drafting team efforts (COM-003) to ensure consistency across the standards.		
	2) For R4 – ERCOT ISO recommends considering adding Load-Serving Entity to the applicability due to their role in capacity and energy emergencies.		
	3) With respect to the Measures, "alternative" needs to be capitalized in M1. Also, if the intent is to include items such as regular phones or data links that are daily use items then Measures should reflect this.		
	4) ERCOT ISO suggests the following change to the terms Adverse Reliability Impact and Emergency. We think these simple changes will tie all the terms together.		

Response: The RC SDT thanks you for your comments.

1) The RC SDT feels that the concept of a Reliability Directive is an important tool for RC, BA and TOP to maintain reliability and that the revisions are consistent with parts of the directives in FERC Order 693. The work of the RC SDT along with the OPCP SDT, as currently recognized, will cover the original intent of COM-002 and still provide a "defense in depth strategy" as suggested by the NERC comment. Stakeholder requests and consensus appears to have been achieved with respect to the definition of Reliability Directive and the requirements that the RC SDT have developed for COM-002. This will further the efforts of the OCPC SDT in achieving stakeholder consensus for their proposed requirements in COM-003. 2) The RCSDT has relied on the authority hierarchy (RC/ BA/ TOP / DP) to ensure accountability with the current FM, while not over-prescribing requirements. The RC SDT notes that, per the Functional Model, a DP may "direct" an LSE to communicate requests for voluntary load curtailment and not reliability situations:

Item 9 on page 47 of version 5 of the Functional Model: "Directs Load-Serving Entities to communicate requests for voluntary load curtailment."

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The RCSDT will forward this comment to the FMWG for their consideration in revising the language.

3) & 4) Please see previous responses to your comments assuming those are the referenced comments.