NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Consideration of Comments

Operating Personnel Communications Protocols: Project 2007-02

The Operating Personnel Communications Protocols Drafting Team thanks all commenters who submitted comments on the proposed draft COM-003-1 Operating Personnel Communications Protocols standard. These standards were posted for a 45-day public comment period from May 7, 2012 through June 20, 2012. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 94 sets of comments, including comments from approximately 292 people from approximately 166 companies representing all 10 Industry Segments as shown in the table on the following pages.

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

http://www.nerc.com/filez/standards/Op_Comm_Protocol_Project_2007-02.html

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President of Standards and Training, Herb Schrayshuen, at 404-446-2560 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.[1]

Summary Consideration:

A common theme among many entities is that the approach to COM-003-1 should be changed. Most agreed with the comments submitted by the NERC Operating Committee that applicable entities should be required to

a) develop written communication protocols that address the elements in draft 2 of COM-003-1,
b) train on those protocols, and
c) develop internal controls to find and correct deviances from those protocols.

After discussion, the SDT agreed with the commenters and modified its approach to closely align with the proposal. In addition, the SDT felt that it would be beneficial to develop the RSAW for this standard in conjunction with NERC Compliance staff, and has posted the draft RSAW for comment along with draft 3 of COM-003-1.

[1] The appeals process is in the Standard Processes Manual:
http://www.nerc.com/files/Appendix_3A_Standard_Processes_Manual_Rev%201_20110825.pdf

Another prevalent theme was questioning the necessity of the standard, specifically one that requires three part communication for routine operations.

During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.

Another theme was the concern that the work of the SDT was overreaching the scope of the SAR.

*The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "*Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors.*"*

Another theme was that the use of three part communications should be limited to Reliability Directives only.

A Reliability Directive, by definition, is limited to instances where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact. The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.

Other commenters expressed a desire to combine COM-002-3 and COM-003-1 into a single standard.

The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope for communications than that for Project 2006-06.

Another concern was that this standard addressed "how" to communicate instead of "what" to communicate.

When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.

Many commenters also questioned the purpose of the whitepaper that was posted by the SDT during draft 2.

The whitepaper was intended to assist industry stakeholders understand the rationale behind the content in the standard. For further information on communication guidelines, please refer to the paper developed by the NERC Operating Committee titled "Reliability Guideline: System Operator Verbal Communication – Current Industry Practices" located at http://www.nerc.com/filez/oc.html.

Definitions: (Question 1)

Most commenters agreed with removing all three definitions (Communications Protocol, Three-part Communication, and Interoperability Communication) in draft 1 of COM-003-1. However, most commenters also disagreed with the new proposed term Operating Communications, introduced in Draft 2 and defined as: "Communication of instruction to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System." Commenters stated:

- The proposed term Operating Communication is still confusing and the large extent of operations it applies to would create an overwhelming compliance exposure due to the large number of communications described in the definition.
- The term, Operating Communication, and its relation to the proposed term "Reliability Directive" from COM-002-3 is unclear.
- The meaning of the word "maintain" in the definition is unclear. *The OPCP SDT changed "maintain" to "preserve" to differentiate this term from maintenance activities.*

To eliminate the confusion expressed by commenters; and to clarify the scope and intent of an Operating Instruction, the SDT has revised the definition to read:

> *Operating ~~Communication~~ Instruction — ~~Communication of instruction~~ Command from a System Operator to change or ~~maintain~~ preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System.*

Requirements:

Requirement R1 *(required entities to use the English Language* (Question 4)*, 24 Hour Clock and Time Zone reference* (Question 5)*, Common interface identifiers* (Question 7)*, and alpha-numeric clarifiers* (Question 8) *during oral and written Operating Communication):*

- The majority of the commenters agreed with the SDT's decision to remove a Communications Protocol Operating Procedure (CPOP) because it would be administrative in nature and would not satisfy the criterion of enhancing the reliable operation of the BES.

  Many commenters supported the development of internal communication protocols and internal controls to correct deficiencies in lieu of a zero defect standard. (Question 2)
- The majority of commenters agreed with the SDT's decision to remove the Alert Level Guide from the standard but did not want it in another standard because it added no value to reliability. (Question 3)
- In response to Questions 4, 5, 7 and 8 dealing with the English language, 24 hour clock and time zone reference, common interface identifiers, and alpha-numeric clarifiers, a large majority of the commenters believe that all of subparts are too prescriptive and focus on the "how to" instead of the "what." *The SDT acknowledges this and has defended it as necessary for this*

standard in drafts 1 and 2. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.

- There was a lack of agreement on requiring the use of the English language as part of a communication protocol. Some commenters support requiring the use of English, and indicated that communicating in a language other than English would cause confusion, while others contested requiring English exclusively, stating in some areas the use of other languages in a localized environment may be effective. *The SDT believes that English should prevail in almost all cases and those situations where another language would be required by law would be a rare exception. Furthermore, this requirement only applies to communication initiated by a System Operator at one functional entity to another functional entity. The SDT added "*Transmission Operators and Balancing Authorities may use an alternate language for internal operations." *to provide some flexibility in areas where another language is commonly used.*
- Commenters were also divided on the use the 24 hour clock and time zone references as part of a communication protocol. Those who indicated support stated they felt it added clarity to communications. Other commenters stated that the 24 hour clock and time zone references are too prescriptive and should be eliminated. *The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications, which will enhance reliability by avoiding time mistakes that could affect the reliability of the BES.*
- Commenters were confused over the meaning of the word "accurate" to modify the phrase "alpha-numeric clarifier." Other commenters felt the NATO requirement was too restrictive, but indicated that the phrase "alpha-numeric clarifiers" was too vague. *The SDT has chosen to retain the inclusion of alpha-numeric clarifiers as an alternative to a strict requirement to include the use of the NATO alphabet, but has removed the word "accurate."*
- Many commenters stated that Requirement R1 is not necessary, stating that it is covered by standard TOP-002 R18. *The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. Project 2007-03 chose to eliminate TOP-002-2a Requirement R18 on the basis that "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. This is an administrative item, as seen in the measure, which simply requires a list of line identifiers. The true reliability issue is not the name of a line but what is happening to it, pointing out the difficulty in assigning compliance responsibility for such a requirement, as well as the near impossibility of coming up with truly unique identifiers on a nation-wide basis. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers." COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface*

Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.

Requirement R2 (required entities that send Operating Communications to use three part communication)

and

Requirement R3 (required entities that receive Operating Communications to use three part communication)

- Many commenters indicated that the scope of Operating Communications and the requirement was too broad and that the sheer numbers of Operating Communications would overwhelm the entities in terms of monitoring and evidence retention. They also are concerned that under these Requirements, operators would be distracted to focus more on complying with the specifications for three part communication rather than effectively responding to incidents, thereby reducing reliability. *The SDT believes universal communication protocols are critical to avoid mistakes that would result in reduced reliability on the BES, which is within the scope of the SDT's SAR. After consideration of comments in these questions, as well as question 10, the SDT has modified its approach in COM-003-1, draft 3 to address the concerns expressed by commenters.*
- Several stakeholders continue to identify potential conflicts between COM-003-1 and work underway on COM-002-3 by the Project 2006-06 – Reliability Coordination SDT (RCSDT), which also addresses the use of three-part communications. Some stated that the applicability of the two standards was confusing and called for one communication standard to reduce the confusion. A few commenters stress this should be limited to COM-002-3 (which has been approved by its ballot pool and is pending NERC Board approval). In COM-002-3 the proposed requirements focus on the use of three part communication when issuing and receiving "Reliability Directives." As proposed in COM-002-3, a Reliability Directive is a directive issued to address an Emergency or an Adverse Reliability Impact. *The OPCP SDT believes the scope of their SAR extends beyond communications during emergency situations, thereby necessitating a new standard such as the proposed COM-003-1. The OPCP SDT proposes use of three-part communication for all Operating Instructions, under normal and emergency conditions, and has worked with the RCSDT to ensure that COM-002-3 and COM-003-1 are complementary to achieve this objective.*
- In addition, a number of commenters pointed out that R2 and R3 of each standard dictate three part communication but the language in each standard is different, which may create confusion. *The SDT has changed the language referring to three part communication in COM-003-1 to match that of COM-002-3, R2 and R3.*

VRFs and VSLs
The SDT acknowledges there were many comments on draft 2 regarding VSLs and VRFs and we appreciate the contributions. The SDT has dramatically changed draft 3 and all of the VRFs and VSLs have been changed to reflect those changes.

Additional Issues addressed by the SDT:
Small numbers of commenters raised issues around:

- The standard's 6 calendar month implementation time frame. *The SDT has extended the implementation period to 12 calendar months to provide an adequate amount of time for training and implementation.*
- Whether the standard should address "all call" types of communications. *The SDT has added language to Requirements R1 and R2to clarify how these Requirements apply when all calls are used to communicate*,
- Re writing the Purpose Statement, – *The SDT modified the purpose statement in response to comments,*
- Adding language to identify Transmission Interface "……., unless otherwise mutually agreed,"- *The SDT added the commenters' recommended language.*
- Clarifying the time horizon of draft 2; real time applicability; - *The SDT confirmed that draft 2 was in the real time horizon.*

Outstanding Unresolved Issues:

- Whether read receipts for written Operating Communications should be addressed in the Measures. - *This is in reference to R2 and R3 which is applicable only to oral Operating Communication, so the SDT made no change,*
- Exclusion of R2 and R3 for Face to Face Operating Communication in a control room, - *The SDT clarified that COM-003-1 only applies to communication between functional entities. For example, if a TOP System Operator is issuing an Operating Instruction to an individual that is internal to that TOP, three part communication is not required by this standard. If a TOP System Operator is issuing an Operating Instruction to an individual in another TOP or another functional entity (e.g. Distribution Provider, Generator Operator), then three part communication is required by this standard. If a TOP System Operator is issuing an Operating Instruction to an individual that is not in a functional entity, then three part communication is not required by this standard.*

Index to Questions, Comments, and Responses

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The Industry Segments are:

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

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
1.	Group	Guy Zito	Northeast Power Coordinating Council										X

	Additional Member	Additional Organization	Region	Segment Selection
1.	Alan Adamson	New York State Reliability Council, LLC	NPCC	10
2.	Greg Campoli	New York Independent System Operator	NPCC	2
3.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
4.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC	1
5.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10
6.	Mike Garton	Dominion Resources Services, Inc.	NPCC	5
7.	Kathleen Goodman	ISO - New England	NPCC	2
8.	Michael Jones	National Grid	NPCC	1
9.	David Kiguel	Hydro One Networks Inc.	NPCC	1
10.	Michael Lombardi	Northeast Utilities	NPCC	1

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
			1	2	3	4	5	6	7	8	9	10

11.	Randy MacDonald	New Brunswick	NPCC	9
12.	Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
13.	Bruce Metruck	New York Power Authority	NPCC	6
14.	Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
15.	Robert Pellegrini	The United Illuminating Company	NPCC	1
16.	Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1
17.	David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5
18.	Brian Robinson	Utility Services	NPCC	8
19.	Michael Schiavone	National Grid	NPCC	1
20.	Wayne Sipperly	New York Power Authority	NPCC	5
21.	Tina Teng	Independent Electricity System Operator	NPCC	2
22.	Donald Weaver	New Brunswick System Operator	NPCC	2
23.	Ben Wu	Orange and Rockland Utilities	NPCC	1
24.	Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3

2.	Group	Jean Nitz	ACES Power Marketing Standards Collaborators	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Shari Heino	Brazos Electric Power Cooperative, Inc.	ERCOT	1
2.	Robert Thomasson	Big Rivers Electric Corporation	SERC	1
3.	Scott Brame	North Carolina Electric Membership Corporation	RFC	3, 4, 5, 1
4.	Clem Cassmeyer	Western Farmers Electric Cooperative	SPP	1, 5
5.	Mike Brytowski	Great River Energy	MRO	1, 3, 5, 6
6.	John Shaver	Arizona Electric Power Cooperative	WECC	4, 5
7.	John Shaver	Southwest Transmission Cooperative, Inc.	WECC	1
8.	Chad Wasinger	Sunflower Electric Power Corporation	SPP	1

3.	Group	Jesus Sammy Alcaraz	Imperial Irrigation District	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Alfonso Juarez	IID	WECC	1, 3, 4, 5, 6
2.	Joel Fugett	IID	WECC	1, 3, 4, 5, 6
3.	Marc Printy	IID	WECC	4, 5, 6, 1, 3
4.	Christopher Reyes	IID	WECC	1, 3, 4, 5, 6

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
4.	Group	William Smith	Midwest Reliability Organization NERC Standards Review Forum	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Mahmood Safi	OPPD	MRO	1, 3, 5, 6
2.	Chuck Lawrence	ATC	MRO	1
3.	Tom Webb	WPS	MRO	3, 4, 5, 6
4.	Jodi Jenson	WAPA	MRO	1, 6
5.	Ken Goldsmith	ALTW	MRO	4
6.	Alice Ireland	XCEL (NSP)	MRO	1, 3, 5, 6
7.	Dave Rudolph	BEPC	MRO	1, 3, 5, 6
8.	Eric Ruskamp	LES	MRO	1, 3, 5, 6
9.	Joseph DePoorter	MGE	MRO	3, 4, 5, 6
10.	Scott Nickels	RPU	MRO	4
11.	Terry Harbour	MEC	MRO	6, 1, 3, 5
12.	Marie Knox	MISO	MRO	2
13.	Lee Kittelson	OTP	MRO	1, 3, 5, 6
14.	Scott Bos	MPW	MRO	1, 3, 5, 6
15.	Tony Eddleman	NPPD	MRO	1, 3, 5
16.	Mike Brytowski	GRE	MRO	1, 3, 5, 6
17.	Dan Inman	MPC	MRO	1, 3, 5, 6

5.	Group	Kent Kujala	Detroit Edison			X	X	X					

	Additional Member	Additional Organization	Region	Segment Selection
1.	Barbara Holland	DECo	RFC	3, 4, 5
2.	Jeffrey DePriest	DECo	RFC	3, 4, 5
3.	Alexander Eizans	DECo	RFC	3, 4, 5

6.	Group	Greg Rowland	Duke Energy	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Doug Hils	Duke Energy	RFC	1
2.	Ed Ernst	Duke Energy	SERC	3
3.	Dale Goodwine	Duke Energy	SERC	5

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
			1	2	3	4	5	6	7	8	9	10
4. Greg Cecil	Duke Energy	RFC 6										
7. Group	Patricia Robertson	BC Hydro	X									

	Additional Member	Additional Organization	Region	Segment Selection
1.	Venkataramakrishnan Vinnakota	BC Hydro	WECC	2
2.	Pat G. Harrington	BC Hydro	WECC	3
3.	Clement Ma	BC Hydro	WECC	5

8. Group	Connie Lowe	Dominion	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Michael Crowley		SERC	1, 3, 5, 6
2.	Louis Slade		RFC	5, 6
3.	Mike Garton		NPCC	5, 6
4.	Lou Oberski		MRO	5, 6

9. Group	Thomas McElhinney	JEA	X		X		X					

	Additional Member	Additional Organization	Region	Segment Selection
1.	Ted Hobson	JEA	FRCC	1
2.	Garry Baker	JEA	FRCC	3
3.	John Babik	JEA	FRCC	5

10. Group	David Dockery	Associated Electric Cooperative JRO00088	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Central Electic Power Cooperative		SERC	1, 3
2.	KAMO Electric Cooperative		SERC	1, 3
3.	M & A Electric Power Cooperative		SERC	1, 3
4.	Northeast Missouri Electric Power Cooperative		SERC	1, 3
5.	N.W. Electric Power Cooperative, Inc.		SERC	1, 3
6.	Sho-Me Power Electric Cooperative		SERC	1, 3
7.	Associated Electric Cooperative, Inc.		SERC	1, 3, 5, 6

11. Group	Ron Sporseen	PNGC Small Entity Comment Group	X		X	X				X		

	Additional Member	Additional Organization	Region	Segment Selection
1.	Joe Jarvis	Blachly-Lane Electric Cooperative	WECC	3

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
			1	2	3	4	5	6	7	8	9	10

2.	Dave Markham	Central Electric Cooperative	WECC	3
3.	Dave Hagen	Clearwater Power Company	WECC	3
4.	Roman Gillen	Consumers Power Inc.	WECC	1, 3
5.	Roger Meader	Coos-Curry Electric Cooperative	WECC	3
6.	Bryan Case	Fall River Electric Cooperative	WECC	3
7.	Rick Crinklaw	Lane Electric Cooperative	WECC	3
8.	Annie Terracciano	Northern Lights Inc.	WECC	3
9.	Aleka Scott	PNGC Power	WECC	4
10.	Heber Carpenter	Raft River Electric Cooperative	WECC	3
11.	Steve Eldrige	Umatilla Electric Cooperative	WECC	1, 3
12.	Marc Farmer	West Oregon Electric Cooperative	WECC	4
13.	Margaret Ryan	PNGC Power	WECC	8
14.	Rick Paschall	PNGC Power	WECC	3

12.	Group	Brent Ingebrigtson	LG&E and KU Services	X		X		X	X				

No additional members listed.

13.	Group	David Thorne	Pepco Holdings Inc & Affiliates	X		X							

	Additional Member	Additional Organization	Region	Segment Selection
1.	Mark Jones	Pepco	RFC	3
2.	Mike Mayer	DPL	RFC	3
3.	Nicole Buckman	ACE	RFC	3
4.	David Thorne	Pepco	RFC	1

14.	Group	Ron Sporseen	PNGC Small Entity Comment Group	X		X	X				X		

	Additional Member	Additional Organization	Region	Segment Selection
1.	Joe Jarvis	Blachly-Lane Electric Cooperative	WECC	3
2.	Dave Markham	Central Electric Cooperative	WECC	3
3.	Dave Hagen	Clearwater Power Company	WECC	3
4.	Roman Gillen	Consumers Power Inc.	WECC	1, 3
5.	Roger Meader	Coos-Curry Electric Cooperative	WECC	3
6.	Bryan Case	Fall River Electric Cooperative	WECC	3
7.	Rick Crinklaw	Lane Electric Cooperative	WECC	3

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
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8.	Annie Terracciano	Northern Lights Inc.	WECC	3
9.	Aleka Scott	PNGC Power	WECC	4
10.	Heber Carpenter	Raft River Electric Cooperative	WECC	3
11.	Steve Eldrige	Umatilla Electric Cooperative	WECC	1, 3
12.	Marc Farmer	West Oregon Electric Cooperative	WECC	4
13.	Margaret Ryan	PNGC Power	WECC	8
14.	Rick Paschall	PNGC Power	WECC	3

15.	Group	Scott Miller	MEAG Power, Danny Dees, Steven Grego, Steve Jackson	X		X		X				

No additional members listed.

16.	Group	Albert DiCaprio	ISO/RTO Standards Review Committee		X							

	Additional Member	Additional Organization	Region	Segment Selection
1.	Greg Campoli	NYISO	NPCC	2
2.	Gary DeShazo	CAISO	WECC	2
3.	Matt Goldberg	ISONE	NPCC	2
4.	Ben Li	IESO	NPCC	2
5.	Stephanie Monzon	PJM	RFC	2
6.	Steve Myers	ERCOT	ERCOT	2
7.	Bill Phillips	MISO	RFC	2
8.	Mark Thompsoon	AESO	WECC	2
9.	Don Weaver	NBSO	NPCC	2
10.	Charles Yeung	SPP	SPP	2
11.	Kathleen Goodman	ISONE	NPCC	2
12.	Terry Bilke	MISO	RFC	2

17.	Group	Shaun Anders	City Water Light and Power	X		X		X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Roger Powers	CWLP	SERC	
2.	Steve Rose	CWLP	SERC	

18.	Group	Sasa Maljukan	Hydro One Networks Inc.	X								

Additional Member	Additional Organization	Region	Segment Selection

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
			1	2	3	4	5	6	7	8	9	10
1. David Kiguel	Hydro One Networks Inc.	NPCC 1										
19. Group	Robert Rhodes	SPP Standards Review Group		X								

	Additional Member	Additional Organization	Region	Segment Selection
1.	John Allen	City Utilities of Springfield	SPP	1, 4
2.	Michelle Corley	CLECO	SPP	1, 3, 5
3.	Gary Cox	Southwestern Power Adminstration	SPP	1, 5
4.	John Geil	Sunflower Electric Power Corporation	SPP	1
5.	Allan George	Sunflower Electric Power Corporation	SPP	1
6.	Ron Gunderson	Nebraska Public Power District	MRO	1, 3, 5
7.	Ed Hammons	Grand River Dam Authority	SPP	1, 3, 5
8.	Jonathan Hayes	Southwest Power Pool	SPP	2
9.	Bo Jones	Westar Energy	SPP	1, 3, 5, 6
10.	Allen Klassen	Westar Energy	SPP	1, 3, 5, 6
11.	Tiffany Lake	Westar Energy	SPP	1, 3, 5, 6
12.	Paul Lampe	City of Independence, Power & Light Department	SPP	3
13.	Tara Lightner	Sunflower Electric Power Corporation	SPP	1
14.	Julie Lux	Westar Energy	SPP	1, 3, 5, 6
15.	Greg McAuley	Oklahoma Gas & Electric	SPP	1, 3, 5
16.	Stephen McGie	City of Coffeyville	SPP	
17.	Jerry McVey	Sunflower Electric Power Corporation	SPP	1
18.	Terri Pyle	Oklahoma Gas & Electric	SPP	1, 3, 5
19.	Randy Root	Grand River Dam Authority	SPP	1, 3, 5
20.	Sean Simpson	Board of Public Utilities of Kansas City, KS	SPP	
21.	Ashley Stringer	Oklahoma Municipal Power Authority	SPP	4
22.	Jim Useldinger	Kansas City Power & Light	SPP	1, 3, 5, 4
23.	Chad Wasinger	Sunflower Electric Power Corporation	SPP	1

20. Group	Scott Kinney	Avista	X		X		X					

	Additional Member	Additional Organization	Region	Segment Selection
1.	Scott Kinney	Avista	WECC	1
2.	Ed Groce	Avista	WECC	5
3.	Bob Lafferty	Avista	WECC	3

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
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21.	Group	Frank Gaffney	Florida Municipal Power Agency	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Tim Beyrle	City of New Smyrna Beach	FRCC	4
2.	Jim Howard	Lakeland Electric	FRCC	3
3.	Greg Woessner	Kissimmee Utility Authority	FRCC	3
4.	Lynne Mila	City of Clewiston	FRCC	3
5.	Joe Stonecipher	Beaches Energy Services	FRCC	1
6.	Cairo Vanegas	Fort Pierce Utility Authority	FRCC	4
7.	Randy Hahn	Ocala Utility Services	FRCC	3

22.	Group	Sam Ciccone	FirstEnergy	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	J. Reed	FE	RFC	
2.	M. Klohanatz	FE	RFC	
3.	L. Raczkowski	FE	RFC	
4.	B. Orians	FE	RFC	
5.	J. Anderson	FE	RFC	
6.	R. Loy	FE	RFC	
7.	B. Duge	FE	RFC	

23.	Group	Gerald Beckerle	SERC OC Standards Review Group	X		X							

	Additional Member	Additional Organization	Region	Segment Selection
1.	Stuart Goza	TVA	SERC	
2.	Mike Hirst	Cogentrix	SERC	
3.	Phil Whitmer	Southern	SERC	
4.	Eugene Warnecke	Ameren	SERC	
5.	Jeff Harrison	AECI	SERC	
6.	Terry Bilke	MISO	SERC	
7.	Mike Hardy	Southern	SERC	
8.	Chris McNeil	Santee Cooper	SERC	
9.	Jake Miller	Dynegy	SERC	
10.	Jim Case	Entergy	SERC	

Group/Individual	Commenter	Organization	Registered Ballot Body Segment									
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11.	Albert DiCaprio	PJM	SERC
12.	William Berry	OMU	SERC
13.	Joel Wise	TVA	SERC
14.	Greg Stone	Duke	SERC
15.	John Rembold	SIPC	SERC
16.	Scott Brame	NCEMC	SERC
17.	Merrit Castello	Southern	SERC
18.	Chris Bolick	AECI	SERC
19.	Tom Hanzlik	SCE&G	SERC
20.	Brad Young	LGE-KU	SERC
21.	Greg Matejka	CWLP	SERC
22.	Timmy Lejeune	NRG Energy	SERC
23.	Wayne Van Liere	LGE-KU	SERC
24.	Dale Walters	CWLP	SERC
25.	Ed Davis	Entergy	SERC

24.	Group	Steve Rueckert	Western Electricity Coordinating Council										X

	Additional Member	Additional Organization	Region	Segment Selection
1.	John McGhee	WECC	WECC	10
2.	Phil O'Donnell	WECC	WECC	10

25.	Group	Chris Higgins	Bonneville Power Administration	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Jim	Burns	WECC	1
2.	Tim	Loepker	WECC	1
3.	Dick	Winters	WECC	1
4.	Rodney	Krause	WECC	1
5.	Erika	Doot	WECC	3, 5, 6
6.	Tedd	Snodgrass	WECC	1

26.	Group	Mary Jo Cooper	GP Strategies	X		X							

	Additional Member	Additional Organization	Region	Segment Selection
1.	City of Lodi		WECC	3

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
2. City of Ukiah			WECC 3										
3. Alameda Municipal Power			WECC 3										
4. Pasadena Water and Power			WECC 1, 3										
5. Salmon River Electric Co-op			WECC 1, 3										
6. California Pacific Electric Company			WECC 3										
27.	Group	Tom Bowe - OC Chair	NERC Operating Committee	X	X	X	X	X	X	X	X		X
NERC Operating Committee Members													
28.	Individual	Jim Eckelkamp	Progress Energy	X		X		X	X				
29.	Individual	Janet Smith, Regulatory Affairs Supervisor	Arizona Public Service Company	X		X		X	X				
30.	Individual	Antonio Grayson	Southern Company	X		X		X	X				
31.	Individual	Hertzel Shamash	The Dayton Power and Light Company	X		X		X					
32.	Individual	D Mason	HHWP	X				X					
33.	Individual	Mace Hunter	Lakeland Electric	X		X		X					
34.	Individual	John D. Brockhan	CenterPoint Energy Houston Electric, LLC.	X									
35.	Individual	Michael Falvo	IESO		X								
36.	Individual	Thad Ness	American Electric Power	X		X		X	X				
37.	Individual	Ronnie C. Hoeinghaus	City of Garland			X							
38.	Individual	Russ Schneider	Flathead Electric Cooperative, Inc.			X	X						
39.	Individual	Joe O'Brien	NIPSCO	X		X		X	X				
40.	Individual	Joe Tarantino	SMUD	X		X	X	X	X				
41.	Individual	Daniel Duff	Liberty Electric Power LLC					X					
42.	Individual	Jennifer Wright	San Diego Gas & Electric	X		X		X					
43.	Individual	Stephen J. Berger	PPL Generation, LLC on behalf of its Supply NERC Registered Entities					X					
44.	Individual	Cristina Papuc	TransAlta Centralia Generation LLC					X					
45.	Individual	Si Truc PHAN	Hydro-Quebec TransEnergie	X									

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
46.	Individual	Brad Chase	Orlando Utilities Commission	X		X			X				
47.	Individual	Jack Stamper	Clark Public Utilities	X									
48.	Individual	Jonathan Appelbaum	The United illuminating Company	X									
49.	Individual	Scott Berry	Indiana Municipal Power Agency				X						
50.	Individual	Michelle D'Antuono	Ingleside Cogeneration LP					X					
51.	Individual	Roger C. Zaklukiewicz	Roger Zaklukiewicz Consulting								X		
52.	Individual	Michael Moltane	ITC Holdings	X									
53.	Individual	Joe Tarantino	Sacramento Municipal Utility District	X		X	X	X	X				
54.	Individual	Ed Davis	Entergy Services	X		X		X	X				
55.	Individual	Anthony Jablonski	ReliabilityFirst										X
56.	Individual	Brian Evans-Mongeon	Utility Services, Inc.								X		
57.	Individual	Wayne Sipperly	New York Power Authority	X		X		X	X				
58.	Individual	Andrew Gallo	City of Austin dba Autin Energy	X		X	X	X	X				
59.	Individual	J. S. Stonecipher, PE	City of Jacksonville Beach dba/Beaches Energy Services	X								X	
60.	Individual	Warren Rust	Colorado Springs Utilities	X		X		X					
61.	Individual	Patrick Brown	Essential Power, LLC					X					
62.	Individual	Bob Steiger	Salt River Project	X		X		X	X				
63.	Individual	Robert L Dintelman	Utility System Efficiencies, InC.										
64.	Individual	RoLynda Shumpert	South Carolina Electric and Gas	X		X		X	X				
65.	Individual	Howard Rulf	Wisconsin Electric dba We Energies			X	X	X					
66.	Individual	Eric Scott	City of Palo Alto			X							
67.	Individual	Joe Petaski	Manitoba Hydro	X		X		X	X				
68.	Individual	John Seelke	Public Service Enterprise Group	X		X		X	X				
69.	Individual	John T. Walker	Portland General Electric - Transmission & Reliability Services	X									

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
70.	Individual	Denise Lietz	Puget Sound Energy	X		X		X					
71.	Individual	Brenda Truhe	PPL Electric Utilities	X									
72.	Individual	Bob Thomas	Illinois Municipal Electric Agency				X						
73.	Individual	Alice Ireland	Xcel Energy	X		X		X	X				
74.	Individual	John D. Martinsen	Public Utility District No. 1 of Snohomish County	X		X	X	X	X				
75.	Individual	Kirit Shah	Ameren	X		X		X	X				
76.	Individual	Greg Travis	Idaho Power Company	X		X							
77.	Individual	Andrew Z. Pusztai	American Transmission Company, LLC	X									
78.	Individual	Marie Knox	MISO		X								
79.	Individual	Eric Salsbury	Consumers Energy			X	X	X					
80.	Individual	Karen Webb	City of Tallahassee					X					
81.	Individual	Brian Murphy	NextEra Energy, Inc	X		X		X	X				
82.	Individual	Randall McCamish	City of Vero Beach	X		X							
83.	Individual	Don Jones	Texas Relibility Entity										X
84.	Individual	Kenneth A Goldsmith	Alliant Energy				X						
85.	Individual	Kathleen Goodman	ISO New England Inc		X								
86.	Individual	Steven Wallace	Seminole Electric Cooperative	X			X	X	X				
87.	Individual	Martin Bauer	U.S. Bureau of Reclamation					X					
88.	Individual	Rich Salgo	NV Energy	X		X		X					
89.	Individual	Maggy Powell	Exelon Corporation and its affiliates	X		X		X	X				
90.	Individual	Tony Kroskey	Brazos Electric Power Cooperative	X									
91.	Individual	Darryl Curtis	Oncor Electric Delivery Company LLC	X									
92.	Individual	Steve Alexanderson P.E.	Central Lincoln			X	X					X	
93.	Individual	Richard Vine	California Independent System Operator		X								

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
94.	Individual	Jennifer Flandermeyer	Kansas City Power & Light	X		X		X	X				

1. **Do you agree with the addition of "Operating Communication" as a proposed new definition for the NERC Glossary and the elimination of "Communication Protocol," "Interoperability Communication" and "Three part Communications" proposed in the first draft of COM-003-1? Operating Communication: Communication of instruction to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. If not, please explain in the comment area.**

Summary Consideration: Major Issues

The majority of commenters agreed with eliminating the three original definitions in draft 1; however the same majority had concerns about the proposed definition of Operating Communications. The concern is that the definition and the manner in which it was used in the requirements in COM-003-1 were potentially over reaching. Most commenters indicated that the evidence requirements would also strain an entity's resources and would not improve reliability. The SDT believes that the use of the protocols, many of which are now in use by industry stakeholders, should be a required part of BES operations and communication. The SDT also believes that use of these protocols enhance reliability by providing a structure for communication that clarifies intent and meaning. This in turn provides a layer of defense in the reliable operation of the BES.

Many commenters indicated that they do not agree that the term Operating Communication is needed and believe that Reliability Directive, as defined in COM-002-3 is the only term needed to clarify the type of communications that should require three part communications. Some comments indicate that the scope of communications that would be considered Operating Communications was not sufficiently clear, and could include casual control room conversations and discussion over potential alternatives. The SDT believes the scope of the SAR extends beyond communications during emergency situations, thereby necessitating a term that involves communications during all situations, both normal and emergency. To clarify the intent and scope of the term, the SDT renamed the term Operating Communications to Operating Instruction, and modified the definition to "Command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."

Commenters also stated the SDT has exceeded the scope of the SAR, the 2003 Blackout Report recommendations, and FERC Order 693. The SDT is confident that the concepts in COM-003-1 appropriately address the Blackout Report recommendations, FERC Order 693 and the SAR. The SDT also believes that the concepts in COM-003-1 address a reliability gap that exists because the vast numbers of Operating Communications that affect the state of BES Elements or BES Facilities are not currently subject to consistent protocols that clarify content and intent. This increases the risk of mistakes that could degrade the reliability of the BES.

A few commenters questioned the purpose and the standing of the White Paper the SDT drafted. The SDT responded that the Standards Committee requested that the team develop the White Paper to provide its justification for the application of Communication protocols. The White Paper was posted for information, not for industry approval.

A number of stakeholders agreed with the changes to replace the previous three defined terms with a single defined term, Operating Communication.

Organization	Yes or No	Question 1 Comment
Northeast Power Coordinating Council	No	The proposed Operating Communication term is not markedly different from the originally proposed term (Interoperability Communication). **Response: The SDT believes the term Operating Communication focuses on very specific actions that affect the reliability of the BES, making it more specific than Interoperability Communication. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** The proposal continues to expand the scope of the SAR from the concept of tightening the protocols associated with Emergencies by now applying to all communications. The text box in the draft standard indicates that Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. There is little difference between the two terms despite the SDT's assessment that Reliability Directive is a type (or a subset) of Operating Communication. If the intent is to use the proposed new term to require three-part communication (as suggested in R2 and R3), then that intent can be accomplished by using the term Reliability Directive as it covers not only the emergency state but also

Organization	Yes or No	Question 1 Comment
		instructions needed to address Adverse Reliability Impacts. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SDT does not believe that it has expanded the scope of this SAR. Reliability Directive, as defined in COM-002-3, is specifically focused on Emergencies or Adverse Reliability Impacts. The scope of COM-003-1 is to require the use of common communication protocols for all BES operations that affect the state of the BES.** Both the Blackout Report and the FERC directive deal with tightening protocols for Emergencies. The proposed requirements completely fail to address emergencies and focus solely on developing non-emergency protocols. **Response: The OPCPSDT disagrees that both the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating situations and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.**
Response: Thank you for your comments. Please see the responses above.		
ACES Power Marketing Standards	No	1. We do not agree with the need to use three-part communication for all operations on the BES. Requiring entities to employ three-part

Organization	Yes or No	Question 1 Comment
Collaborators		communication for routine operating instructions is excessive and burdensome. The 2003 Blackout Report recommended that industry, "Tighten communications protocols, especially for communications during alerts and emergencies." We strongly support using three-part communication for the execution of Reliability Directives as defined in the proposed COM-002-3 draft standard in Project 2006-06 but not for routine operating instructions. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.** 2. The COM-003-1 Operating Communications Protocols White Paper states three reliability benefits of using three-part communication as follows: a. "The removal of any doubt that communication protocols will be used and when they will be used. This will reduce the opportunity for confusion and misunderstanding among entities that may have different doctrine." We don't agree with the premise that implementing three-part communications for all operating instructions will reduce confusion. If there is a standard such as draft COM-002-3 that requires the use of three-part communication for Reliability Directives and the issuer is required to state that a Reliability Directive is being issued, then there should be no

Organization	Yes or No	Question 1 Comment
		confusion. **Response: The Blackout study cites a scenario where communication was unprofessional and confused. Communication protocols should used before, during, and after emergency conditions.** The example provided in this bullet where "one entity uses three-part for emergencies, and the other uses it for all operating conditions" is used to support the premise. However, Table 1-A of the White Paper only lists 11 entities that currently use three-part communication during both emergencies and non-emergencies. Eleven out of how many entities? The paragraph immediately following Table 1-A states, "The fact that the majority of BES entities already employs three-part (or repeat back) communications for routine...operations..." Eleven entities do not make a majority. We don't believe the actions of a few should dictate the actions of all. Much stronger evidence to support this "fact" is needed. **Response: The SDT sampled major entities that manage significant amounts of load and serve large numbers of customers to capture the magnitude of impact of the sample on the BES. The SDT is confident that it would have achieved the same results if it sampled 100 additional entities based on the overwhelming consistency in the results provided in Table 1-A.** b. "There will be no mental "transition" when operating conditions shift from normal to Emergency." Once again, if there is a standard such as COM-002-3 that requires three-part communication for Reliability Directives and the issuer is required to state that a Reliability Directive is being issued, then there should be no confusion. System Operators are trained to make mental transitions every day. It is an inherent characteristic of the job. Operators should be able to mentally "transition" when a Reliability Directive is issued. **Response: The SDT agrees that most System Operators are highly trained**

Organization	Yes or No	Question 1 Comment
		and experienced, but it is risky to discount the human factor in communications. Low frequency, high impact events such as the 2003 Blackout are of such speed and magnitude that it is only natural to anticipate a potential inaccurate mental "transition." c. "The formal requirement for three-part communication will create a heightened sense of awareness in operators that the task they are about to execute is critical..." Not all operating instructions are "critical" so this premise is flawed. This bullet makes perfect sense for Reliability Directives because the actions taken to address those would be considered critical based on the proposed definition of Reliability Directive in COM-002-3. It does not make sense for routine operating instructions. **Response: The SDT believes that every instruction for a change to the BES carries some risk. If unclear communication causes an operator to open the wrong switch on an already compromised system the results could lead to an undesirable event.** 3. Based on the above, we do not agree with the definition of Operating Communication as proposed in this draft standard since we do not support the use of three-part communication for all operations on the BES.
Response: Thank you for your comments. Please see the responses above.		
Midwest Reliability Organization NERC Standards Review Forum	No	The MRO NSRF recommends the following comments for consideration by the SDT: 1. The sentence structure of this definition is incorrect. It is unclear whether the prepositional phrase "of the Bulk Electric System" applies to both Facility and Element or only to a Facility. Recommend this be rewritten to read "... Bulk Electric System Elements and Facilities". **Response: The SDT has reworded the definition in response to your**

Organization	Yes or No	Question 1 Comment
		comment. 2. The definition should be for only actionable commands (to accomplish an actionable item). Status of does necessitate 3 part communication. **Response: The context was "maintain the status" which is an actionable command. The intent was related to commands to preserve the stability of a normally operating system. The SDT has proposed "preserve" as an alternative to "maintain" in draft 3.** 3. The inclusion of a Reliability Directive as a subset of the Operating Communication definition adds confusion as to what is a Reliability Directive. This confusion is compounded by having Reliability Directives in a different standard with different descriptions for three part communication. **Response: The SDT has adopted the language in COM-002-3, R2 and R3 for three part communication. This change to make the two standards consistent is intended to reduce any potential for confusion.** 4. The 2003 Blackout Report recommended that industry, "Tighten communications protocols, especially for communications during alerts and emergencies." We strongly support using three-part communication for the execution of Reliability Directives as defined in the proposed COM-002-3 draft standard in Project 2006-06 but not for routine operating instructions. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in*****

Organization	Yes or No	Question 1 Comment
		***communications during normal, alert and emergency conditions"*) and the SAR are very specific in that both include the term "normal" operating conditions.** 5. Table 1-A of the White Paper lists 11 entities that currently use three-part communication during both emergencies and non-emergencies. We agree that this can be an utility 'best practice', however, there is a major difference between good utility practice and a no-fault, no exception Reliability Standard. **Response: The SDT acknowledges your position and has developed an alternative form of the standard that addresses your comment.**
Response: The OPCPSDT appreciates your comments.		
Detroit Edison	No	The definition of Operating Communication is overly broad, increasing the scope of the standard. It should be limited to actionable items. Suggested rewording of the definition: "Communication of instruction to perform an action relating to a physical change or a control system data change affecting an Element or Facility of the Bulk Electric System."
Response: The OPCPSDT appreciates your comments. It was not the intent to include control system data change in the scope of Operating Communication. In response to your comment and other similar comments, the definition has been modified to "Command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Duke Energy	No	The definition of Operating Communication is vague, general and overly broad. **Response: The definition has been modified to "Command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."**

Organization	Yes or No	Question 1 Comment
		We don't believe the Blackout Report recommendations and Order 693 directives require 3-part communications for routine communications. Communications protocols can be tightened, and more effective communications can be achieved without this extreme approach. See our comments under question #2. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.**
Response: Thank you for your comments. Please see the responses above.		
BC Hydro	No	BC Hydro does not support limiting operating communications to instructions. We believe this should account for notification or reporting and that in these cases three part communication should be used to ensure understanding. For example, if an element is out of service and that is being reported to an operating entity, the receiver of that communication should show confirmation of understanding by repeating their understanding and receiving confirmation. Example: 1) TOP Call to RC: Our transmission Line XX is currently out of service and is

Organization	Yes or No	Question 1 Comment
		expected to remain out until field crews respond. 2) RC to TOP: OK, I understand that Line XX is out of service and will remain out until further notice. 3) TOP to RC: That's correct. I'll call you when I have some more information.
Response: Thank you for your comments. The SDT applauds your use of three part communication beyond our proposal and believes it adds clarity and enhances reliability. The SDT is not inclined at this point to broaden the scope of communications that would require the use of three part communications, but does not discourage entities who wish to employ three-part communication more broadly.		
Dominion	No	Dominion agrees with the elimination of Communication Protocol, Interoperability Communication and Three part Communications proposed in the first draft. Each standard requirement (R1, R2 & R3) specifically excludes Reliability Directives; further adding confusion to the issue of what is a reliability directive. **Response: COM-003-1, draft 2, R1 does apply to Reliability Directives. R2 and R3 had exclusion language to preclude potential double jeopardy with the requirements of COM-002-3, R2 and R3. The SDT has modified it approach in the latest draft, which should eliminate the confusion.** The Reliability Directive should stand on its own and if the SDT does not agree then the relationship between Reliability Directives and Operating Communications should be clarified in the Standard. When the standard is implemented, the text box (on page 2 of the clean standard) will be removed, therefore losing any tieback to a Reliability Directive as a type of operating communication. **Response: The SDT acknowledges this confusion and has been working**

Organization	Yes or No	Question 1 Comment
		with RCSDT to address it. The June 7th Webinar (Posted under Project 2007-02) addressed this issue and may provide additional clarification. http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf
Response: Thank you for your comments. Please see the responses above.		
Associated Electric Cooperative JRO00088	No	Although the intent appears to be only for oral communications of NERC Certified System Operators, and those directly aimed at affecting the altered or continued state of BES elements of Facilities, the wording is insufficiently bounded. For instance, it could include any communications between a unit or plant operator and internal plant personnel, were the net output of the plant to change, significantly or insignificantly, current or future (status), its injection to the BES. The same would be true of loads, and so communication of Distribution providers with any manufacturing plant managers would necessarily become subject to this standard (extractions from the BES - significant or insignificant). Taken to one extreme, purchasing personnel could also be responsible for whatever part their telephone conversations play in altering the future status of plant real or reactive power production or consumption. AECI agrees with the SERC OC STANDARDS REVIEW GROUP consensus comment, that COM-002 should be sufficient in addressing any industry deficiencies in this area and if not, the deficiencies addressed there.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		

Organization	Yes or No	Question 1 Comment
LG&E and KU Services	No	LG&E and KU Services do not agree with the proposed definition of Operating Communication and agree with eliminating the other three definitions. The standard appears to be focused on imposing three part communications on the industry for routine communications despite the fact that neither the blackout report nor the SAR on which these standards are based emphasize that issue. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.** The blue text box that mentions Reliability Directives seems to be a back door attempt to change COM-002 and should be clarified or eliminated. Splitting communications requirements across different standards creates unnecessary confusion **Response: The blue text box and the exclusionary language regarding Reliability Directives in COM-003-1, R2 and R3 were added to address concerns over potential double jeopardy. The SDT has modified its approach in the latest draft.**
Response: Thank you for your comments. Please see the responses above.		

Organization	Yes or No	Question 1 Comment
Pepco Holdings Inc & Affiliates	No	The distinction between Operating Communication definition and the Reliability Directive being a type of Operating Communication is confusing.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Operating communication is not necessarily three part communication. If three part communication is being required, then it should be defined as three part communication.
Response: Thank you for your comments. Operating Communication is a definition to categorize any instruction that directly orders reconfiguration of the BES. The SDT developed requirements to utilize three part communication when issuing or receiving an Operating Communication to reduce the potential for a miscommunication that could reduce BES reliability.		
ISO/RTO Standards Review Committee	No	The SRC agrees with the elimination of the three terms but not with the addition of "Operating Communication". **Thank you for your comments.** The SRC does not believe that the proposed term (Operating Communication) is sufficiently different from the originally proposed term (Interoperability Communication) to warrant adoption. **Response: The SDT believes the term Operating Communication is more distinct than Interoperability Communication because it focuses on very specific actions that affect reliability on the BES. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System**

Organization	Yes or No	Question 1 Comment
		or Facility of the Bulk Electric System." The SDT's proposal continues to expand the scope of the SAR from the concept of tightening the protocols associated with Emergencies or Adverse Reliability Impact to now applying to all communications. The text box in the draft standard indicates that Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. We see little difference between the two terms despite the SDT's assessment that Reliability Directives is a type (or a subset) of Operating Communication. If the SDT intent is to use the proposed new term to require 3-part communication (as suggested in R2 and R3), then that intent can be accomplished by using the term Reliability Directives as it covers not only emergency state but also instructions needed to address Adverse Reliability Impacts. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SDT does not believe that it has expanded the scope of this SAR. Reliability Directive, as defined in COM-002-3, is specifically focused on Emergencies or Adverse Reliability Impacts. The scope of COM-003-1 is to require the use of common communication protocols for all BES operations that affect the state of the BES.** Please also see our comments under Q6 regarding the use of the proposed term to support the requirements for 3-part communication. The SRC would note that both the Blackout Report and the FERC directive deal with tightening protocols for Emergencies, whereas the proposed SDT requirements completely fail to address emergencies and focuses solely on developing non-emergency protocols.

Organization	Yes or No	Question 1 Comment
		SRC Note: there is no mention in the Blackout Report of "operational communications breakdowns re: changing states of equipment; most of the documentation points to: *(1) emergencies/alerts; and* *(2) notification OUTSIDE of the entity experiencing the problem. The SRC requests that in the next posting the SDT provide real examples (without naming the registered entities) where reliability was jeopardized by the failure of 3-part communications under routine operational situations.* Effectiveness of Communications "Under normal conditions, parties with reliability responsibility need to communicate important and prioritized information to each other in a timely way, TO HELP PRESERVE THE INTEGRITY OF THE GRID. THIS IS ESPECIALLY IMPORTANT IN EMERGENCIES. DURING EMERGENCIES, OPERATORS SHOULD BE RELIEVED OF DUTIES UNRELATED TO PRESERVING THE GRID. A COMMON FACTOR IN SEVERAL OF THE EVENTS DESCRIBED ABOVE WAS THAT INFORMATION ABOUT OUTAGES OCCURRING IN ONE SYSTEM WAS NOT PROVIDED TO NEIGHBORING SYSTEMS." (2003 Blackout Report, page 108)26. "Tighten communications protocols, ESPECIALLY FOR COMMUNICATIONS DURING ALERTS AND EMERGENCIES. UPGRADE COMMUNICATION SYSTEM HARDWARE WHERE APPROPRIATE. NERC should work with reliability coordinators and control area operators to improve the EFFECTIVENESS OF INTERNAL AND EXTERNAL COMMUNICATIONS DURING ALERTS, EMERGENCIES, OR OTHER CRITICAL SITUATIONS, AND ENSURE THAT ALL KEY PARTIES, INCLUDING STATE AND LOCAL OFFICIALS, and RECEIVE TIMELY AND ACCURATE INFORMATION." (2003 Blackout Report, page 108)SRC note - Nowhere in the above quoted Recommendation 26 is there a reference to person-to-person communications of required actions; rather it references communication of the state of the operating system itself.

Organization	Yes or No	Question 1 Comment
		SRC Note: there is no mention in FERC Order 693 of "operational communications breakdowns re: changing states of equipment; the Order does state: 532. "While we agree with EEI that EOP-001-0, Requirement R4.1 requires communications protocols to be used during emergencies, we believe, and the ERO agrees, that the communications protocols need to be tightened to ensure Reliable Operation of the Bulk-Power System. We also believe an integral component in tightening the protocols is to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions. This is important because the Bulk-Power System is so tightly interconnected that system impacts often cross several operating entities' areas."SRC note - The above section concerns "ineffective communications" not "incorrect communications". The key to the above is "communication uniformity" not 3 part communications. The SRC believes the both the FERC Order's directives and the Blackout Report Recommendation 26 are clear in their respective requests to address general protocols; and that neither request suggests a need for mandating a specific procedure let alone 3 part communications for all operational communications. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions.** **FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the**

Organization	Yes or No	Question 1 Comment
		SAR are very specific in that both include the term "normal" operating conditions.
Response: Thank you for your comments. Please see the responses above.		
City Water Light and Power	No	Definition is overly broad and should at least be tailored to indicate the operating time frame is the relevant concern.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Hydro One Networks Inc.	No	The proposed Operating Communication term is not sufficiently different from the originally proposed term (Interoperability Communication). The proposal continues to expand the scope of the SAR from the concept of tightening the protocols associated with Emergencies to now applying to all communications. The text box in the draft standard indicates that Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. There is little difference between the two terms despite the SDT's assessment that Reliability Directive is a type (or a subset) of Operating Communication. If the intent is to use the proposed new term to require 3-part communication (as suggested in R2 and R3), then that intent can be accomplished by using the term Reliability Directive as it covers not only the emergency state but also instructions needed to address Adverse Reliability Impacts. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and**

Organization	Yes or No	Question 1 Comment
		shorten response time." The SDT does not believe that it has expanded the scope of this SAR. Reliability Directive, as defined in COM-002-3, is specifically focused on Emergencies or Adverse Reliability Impacts. The scope of COM-003-1 is to require the use of common communication protocols for all BES operations that affect the state of the BES. Both the Blackout Report and the FERC directive deal with tightening protocols for Emergencies. The proposed requirements completely fail to address emergencies and focus solely on developing non-emergency protocols. **Response: The OPCPSDT disagrees that the Blackout Report and FERC Order 693 only address the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.** **COM-003-1 applies to communications in both emergency and non-emergency situations. R2 and R3 had exclusion language to preclude potential double jeopardy with the requirements of COM-002-3, R2 and R3.**
Response: Thank you for your comments. Please see the responses above.		
SPP Standards Review Group	No	The definition is fine but it may not be necessary based on the comments provided to the remaining questions below. It's not so much what's contained in the definition; it's more about what the standard requires the

Organization	Yes or No	Question 1 Comment
		industry to do with that definition. We believe eliminating the other three definitions was a positive move by the SDT.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
SERC OC Standards Review Group	No	GENERAL COMMENT: While SERC does not agree that the mandatory procedure for three part communications will improve reliability of the BES, SERC offers the following comments: We do not agree with the proposed definition of Operating communication and agree with the elimination of the other three definitions. **Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** The SDT has not listened to the industry comments given in the previous commenting periods. It also appears to be focused on imposing three part communications on the industry for routine communications despite the fact that neither the blackout report nor the SAR on which these standards are based emphasize that issue. **Response: The OPCPSDT firmly believes it has listened to industry comment based on the sweeping changes to draft 2 compared to draft 1 (the original posting) and the new approach provided in draft 3.** **The SDT is focused on requiring three-part communication for Operating**

Organization	Yes or No	Question 1 Comment
		Instructions (Communication) because it provides a proven means of clarifying communication which prevents mistakes that impact the reliability of the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern. The blue text box that mentions Reliability Directives seems to be a back door attempt to change COM-002 and should be clarified or eliminated. Splitting communications requirements across different standards creates unnecessary confusion. **Response: The blue text box and the exclusionary language regarding Reliability Directives in COM-003-1, R2 and R3 were added to address concerns over potential double jeopardy. The SDT has modified it approach in the latest draft.**
Response: Thank you for your comments. Please see the responses above.		
NERC Operating Committee	No	See Response 10
Response: Thank you for your comments. Please see the responses for Question 10.		
Southern Company	No	Southern agrees with the elimination of "Communication Protocol," "Interoperability Communication" and "Three part Communications" proposed in the first draft of COM-003-1; however, Southern does not agree with the proposed new definition for "Operating Communication". The

Organization	Yes or No	Question 1 Comment
		definition of Operating Communications is too broad. **Response: Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** The SDT appears to be focused on imposing 3-part communication on the industry for routine communications even though the August 2003 Blackout Report and the direction in FERC Order 693 Paragraph do not require such. **Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.** The word "maintain" should be removed. Three part communication is not needed to keep things as they are in real time unless the communication is meant to be a Directive issued by the RC or TOP and identified as such. From a real time operations standpoint, only communications that are meant to initiate a change (e.g., open, close, enable, disable, increase, decrease) should require 3 part communications. **Response: The context was "maintain the status" which is an actionable command. The SDT has proposed "preserve" as an alternative to**

Organization	Yes or No	Question 1 Comment
		"maintain" in draft 3. In addition, any instruction to change or maintain the state, status, output, or input of an Element or Facility of the BES should not be considered a Reliability Directive. A more appropriate definition of Reliability Directive has been included in Project 2006-06 (Reliability Coordination) for COM-002-3. As such, the definition of Reliability Directive developed in Project 2006-06 should be used here as part of this Project 2007-02. Further, this capitalized term should have one definition and should not be defined differently in different standards. Otherwise, there will be ambiguity and unnecessary confusion. **Response: The OPCPSDT is aware of the definition of Reliability Directive and has collaborated with the RCSDT. The protocols of COM-003-1 cover all operating conditions and are in force during normal or routine operations.**
Response: Thank you for your comments. Please see the responses above.		
The Dayton Power and Light Company	No	We have concerns with the true scope and depth of this standard. How far does this standard reach? A tie line utility wants us to utilize three part communication for tie line check outs, which we assume is not part of 'operating communications'. Not sure this is the intent of the standard, but seems to be a coverall by them. One could argue the tie line data (which is up to 23 hours old by the time we check out, is an output from the BES) How do resolve this? Operating Communications is a very broad term that could be interpreted differently by the many individuals we interact with leading to 'overuse' of three part communication when in doubt. This may counteract the importance of its use for the conditions we truly need to utilize this protocol.
Response: Thank you for your comments. The SDT agrees that the tie line check out as specified is not an Operating		

Organization	Yes or No	Question 1 Comment
Communication. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Center Point Energy Houston Electric, LLC.	No	Question 1 Comments: Instead of adding the proposed new definition of "Operating Communication" to the NERC Glossary, the definition should be used to define the industry known terminology "Directive", as "an instruction to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System". Aligning this definition with Project 2006-006 Reliability Coordination and a new proposed definition of "Reliability Directive" to be "A communication initiated by a Reliability Coordinator, transmission operator or Balancing Authority to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System where action by the recipient is necessary to address an emergency or adverse Reliability Impact".
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." The SDT has specifically chosen to not define "directive," as it is used in other standards and the implications of the definitions would be far reaching.		
IESO	No	The IESO agrees with the removal of the 3 terms proposed in the previous draft. However, the IESO does not agree with the introduction of a new term Operating Communication. This term is not materially different than the originally proposed term Interoperability Communication. **Response: Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an**

Organization	Yes or No	Question 1 Comment
		Element of the Bulk Electric System or Facility of the Bulk Electric System." The text box in the draft standard indicates that Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. We see insufficient difference between the two terms despite the SDT's assessment that Reliability Directives are a type (or a subset) of Operating Communication. If the intent is to use the proposed new term to require 3-part communication (as suggested in R2 and R3), the intent can be accomplished by using the term Reliability Directives as it covers not only emergency state but also instructions needed to address Adverse Reliability Impacts. **Response: Reliability Directive, in the context of COM-002-3, is specifically for Emergency operating conditions. The intent of the OPCPSDT is to require the use of 3 part communication in COM-003-1 for all BES operations that are specified in the definition of Operating Instruction.** Please also see our comments under Q6 on using the proposed term to support the requirements for 3-part communication. **Response: Please refer to the response to your comments in Question 6.**
Response: Thank you for your comments. Please see the responses above.		
Flathead Electric Cooperative, Inc.	No	Believe the additional definition is not necessary and it is not clear what value it would have to small Distribution Providers other then additional compliance complexity.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." DPs that operate BES Facilities or BES Elements and receive Operating Instructions are subject to the		

Organization	Yes or No	Question 1 Comment
need for clear communication to avoid misunderstandings that could impact the BES.		
Liberty Electric Power LLC	No	Routine market communications between entities are not a valid area of regulation under the NERC Standards.
Response: Thank you for your comments. The standard does not address market communication. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	No	PPL Generation, LLC on behalf of its Supply NERC Registered Entities does not agree with the addition of "Operating Communication" as a proposed definition because it imposes three part communication on the industry for routine communications of changes of output in generation. Response: Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."The SDT believes that routine operations pose a risk of a communication error. Three-part communication is a proven method of reducing operating errors. Also the language as written does not specify if these changes include communication of future planning to change the status of generation in instances of future planned outages. The standard should specify if communication of real time operations is what falls under the definition of "Operation Protocol." This ensures that communication which would be considered a compliance event and require the scrutiny of an audit. Response: The SDT is not proposing a new term "Operation Protocol."

Organization	Yes or No	Question 1 Comment
Response: Thank you for your comments. Please see the responses above.		
The United illuminating Company	No	The intent of Recommendation 26 was to improve the communications around situational awareness. **Response: The Blackout Report, Recommendation 26, states *Tighten communications protocols, especially for communications during alerts and emergencies*." The SDT interprets that to mean the authors were recommending applicability of communication protocols for the total population of operating conditions and wanted to amplify the added importance of using protocols during emergency conditions.** The SAR states the purpose is to "efficiently convey and mutually understood for all operating conditions." **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time."** Paragraph 532 seeks to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions. **Response: FERC Order 693 paragraph 532 (*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions"*) is very specific. Please reference the term "normal" operating conditions.** The new definition limits the communication to taking actions during non-Emergencies, and ignores the finding that poor communication occurred in the events leading up to the 2003 Blackout. **Response: Based on comments received about the scope and intent of an**

Organization	Yes or No	Question 1 Comment
		Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." **COM-003-1 deals specifically with "tightening communications" as recommended in the 2003 Blackout Report, Recommendation 26. Please read the following excerpt from Recommendation 26:** ***"On August 14, 2003, reliability coordinator and control area communications regarding conditions in northeastern Ohio were in some cases ineffective, unprofessional, and confusing. Ineffective communications contributed to a lack of situational awareness and precluded effective actions to prevent the cascade. Consistent application of effective communications protocols, particularly during alerts and emergencies, is essential to reliability."*** **COM-003-1 is focused on developing effective communications protocols that are consistently applied.**
Response: Thank you for your comments. Please see the responses above.		
Indiana Municipal Power Agency	No	On page 2 of 10 (blue box), the SDT has a blue box that defines Reliability Directives as a "type" of Operating Communications. This gives the appearance that Reliability Directives are part of Operating Communications and this could be a double-jeopardy issue. If an entity is found with a potential non-compliance finding on the communication of a Reliability Directive (COM-002), then it is very likely that the entity could have a potential non-compliance finding on COM-003 (proper communication of an Operating Communication).
Response: Thank you for your comments. COM-003-1, draft 2, R2 and R3 contain exclusionary language exempting Reliability		

Organization	Yes or No	Question 1 Comment
Directives to preclude potential double jeopardy with the requirements of COM-002-3, R2 and R3. The SDT has modified it approach in the latest draft.		
Ingleside Cogeneration LP	No	Ingleside Cogeneration LP believes that the definition of "Operating Communication" widely expands the scope of COM-003-1 beyond entity-to-entity or multiple-entity communications. Instead, all conversations conducted by System Operators, field personnel, engineers, or vendors that may refer to the status of a BES component are applicable - even those discussed face-to-face. We believe the original intent to bound the communications to those which can be captured in control room recordings and/or logbooks is manageable; not so every side conversation or email that takes place during the natural course of the operating day. The original term, "Interoperability Communication", captured this concept. **Response: The SDT never intended to include every side conversation or email that takes place during the natural course of the operating day as an Operating Communication. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** It seems like the Draft 1 definition could be easily modified to read as follows: Interoperability Communication: Communication of instruction <between two or more entities> to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. **Response: Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating**

Organization	Yes or No	Question 1 Comment
		Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." Ingleside Cogeneration LP is in full agreement with the removal of the definitions for "Communication Protocol," and "Three part Communications". Neither term helps address an ambiguity in the body of NERC Standards that we are aware of. **Response: Thank you for your comments.**
Response: Thank you for your comments. Please see the responses above.		
Roger Zaklukiewicz Consulting	No	The proposed standard introduces a new term "Operating Communications" which in my opinion is unnecessary and which I believe will cause confusion with the term "Reliability Directives". The standard proposes to establish a three part communications for what I would describe as routing operating instructions. This aspect of the standard would require/mandate the use of an unnecessary and burdensome operating practice that in a number of cases may impede or jeopardize system reliability rather than improve the reliability of system operations.
Response: Thank you for your comments. Even routine operations pose a risk of a communication error that could impact the stability of the BES. Three-part communication is a proven method of clarifying the content of an order or directive, and is already required for Emergencies and Adverse Reliability Impacts in COM-002-3. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Entergy Services	No	Due to these extensive comments and desire for these comments to be formatted for the SDT we have also sent these comments to Monica Benson

Organization	Yes or No	Question 1 Comment
		in a Word document. While we agree with the definition, we do not agree with R1, R2 and R3. While we are not enamored of having a Requirement to have a procedure, in this instance, the exception seems to be necessary. Below is suggested language to replace all of the Requirements and sub-Requirements in COM-003:Proposed new text:" R1. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall develop a written communications procedure for Operating Communications among personnel responsible for Real-time generation control and Real-time operation of the interconnected Bulk Electric System. The procedure shall address at minimum: [Violation Risk Factor: Low][Time Horizon: Long Term Planning] 1.1 When communicating between functional entities 1.1.1. Establish the language to be used. 1.1.2. Time format to be used. 1.1.3. Establish treatment for time zones when multiple time zones are crossed. 1.1.4. Identify naming convention for Transmission interface Element or a Transmission interface Facility. 1.1.5. For oral Operating Communications, establish the treatment for the circumstances in which alpha-numeric identifiers must be used." **Response: The SDT agrees and is using a similar approach for draft 3.** The SDT has not listened to the industry comments given in previous ballots. It also appears to be focused on imposing three part communications on the industry for routine communications despite the fact that neither the blackout report nor the SAR on which these standards are based emphasize

Organization	Yes or No	Question 1 Comment
		that issue. **Response: The OPCPSDT believes it has listened to industry comment based on the sweeping changes to draft 2 compared to draft 1 (the original posting).** **The SDT is focused on requiring three-part communication for Operating Communication because it provides a proven means of clarifying communication which prevents mistakes that have the potential to impact the reliability of the BES.** **The SDT believes the 2003 Blackout Report and the SAR do focus on protocols being applied to all operating conditions.** **Please note the following excerpt from recommendation 26:** ***On August 14, 2003, reliability coordinator and control area communications regarding conditions in northeastern Ohio were in some cases ineffective, unprofessional, and confusing. Ineffective communications contributed to a lack of situational awareness and precluded effective actions to prevent the cascade. Consistent application of effective communications protocols, particularly during alerts and emergencies, is essential to reliability.*** **Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "*Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors."*** **Response: Thank you for your comments. Please see the responses above.**

Organization	Yes or No	Question 1 Comment
Utility Services, Inc.	No	Though we agree with the addition of "Operating Communication" definition and the elimination of "Communication Protocol", "Interoperability Communication" and "Three part Communications" definitions, the use of a "blue box" around the example of a Reliability Directive (Reliability Directive are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element of Facility of the Bulk Electric System.) implies this is also a definition. We suggest removing this "blue box" from COM-003-1 and leave the definition of Reliability Directive to Project 2006-06 which has been charged with developing this definition. An alternative would be a footnote to the other Project and/or the NERC Glossary of Terms if the other standard is approved prior to COM-003-1.
Response: Thank you for your comment. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." This and the new approach to the standard in draft 3 eliminate the need for the textbox.		
City of Austin dba Austin Energy	No	To clarify that Operating Communications occur in real-time, AE offers the following change to the definition: "Real-time communication of instruction to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System."
Response: Thank you for your comment. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Essential Power, LLC	No	Defining the new term 'Operating Communication', and including the approved definition of 'Reliability Directive' under this newly defined term

Organization	Yes or No	Question 1 Comment
		and then requiring the use of three part communications for all 'Operating Communications' is redundant and unnecessary. There is no reason to have two separate Standards governing the use of three-part communications.
Response: Thank you for your comments. The SDT has modified its approach in the latest draft.		
South Carolina Electric and Gas	No	SCE&G supports the comments submitted by the SERC OC standards Review Group.
Response: Thank you for your comments. Please see the responses to the SERC OC Standards Review Group.		
Manitoba Hydro	No	Manitoba Hydro disagrees with the term "Operating Communication" as we do not feel there should be a distinction between Reliability Directive and "Operating Communications". We suggest that the term "Operating Communication" be replaced with the term Reliability Directive as any instruction to change the status or function of the BES must be clear and concise and confirmed with three way communication to ensure system reliability and personnel safety.
Response: Thank you for your comment. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The definition of Reliability Directive is "A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact." The SDT does not believe that Reliability Directive captures communication during normal operations. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
PPL Electric Utilities	No	Suggest the definition be clarified to scope to 'real-time' operating instructions to eliminate discussion of future outages.

Organization	Yes or No	Question 1 Comment
Response: Thank you for your comment. It was never the SDT's intention to include side-bar conversations that might be a discussion of potential operating options in the scope of COM-003-1. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the responses to the SERC OC Standards Review Group.		
Xcel Energy	No	We do not agree that this definition should include "or maintain", and recommend that be struck. The scope should only include instructions that would require an action by the recipient.
Response: Thank you for your comments. The context was "maintain the status" which is an actionable command. The intent was related to commands to preserve the integrity of a normally operating system. The SDT has proposed "preserve" as an alternative to "maintain" in draft 3.		
Ameren	No	We recommend that the SDT eliminate the words "...or maintain..." in the definition. We believe that inclusion of these words would drastically reduce side conversations that continuously occur between different entities. These side conversations provide additional information and perspectives to real-time operators that ensure they understand the real-time status of the BES. In other words, due to fear of possible non-compliance consequences for failure to properly converse in a three-part protocol at all times, entities will drastically curtail side discussions and deprive all BES operators of this pertinent and useful real-time information.
Response: Thank you for your comment. It was never the SDT's intention to include side bar conversations that might be a		

Organization	Yes or No	Question 1 Comment
discussion of potential operating options in the scope of COM-003-1. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
MISO	No	Although the definition of "Operating Communication" is, in itself, clear, the relationship between an Operating Communication and a "directive," as used in COM-002-2, Requirement R2 is ambiguous. **Response: The SDT notes that directive is a non glossary term that would be supplanted in the COM family of standards when COM-002-3 and COM-003-1 are implemented.** In particular, although an explanatory graphic placed beneath the proposed definition for "Operating Communication" in the draft Standard states that "Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System," "Reliability Directive" does not appear to be defined and is not in the *Glossary of Terms Used in NERC Reliability Standards*. As a result, the definition of Operating Communication and splitting communications requirements across different standards could result in confusion due to the unclear relationship between COM-002-2, Requirement R2 and COM-003-1, Requirements R2 and R3. **Response: The SDT notes that Reliability Directive is not yet a NERC glossary term, but the SDT believes it is important to clarify the relationship between the proposed terms (Reliability Directives and Operating Communications) before they become effective.** MISO is aware that "Reliability Directive" has been defined in COM-002-3, which is part of Project 2006-06, but there is no reference to Project 2006-06 or to the pending definition of "Reliability Directive" in draft COM-003-1.

Organization	Yes or No	Question 1 Comment
		Response: The SDT has been collaborating with project 2006-06 and is also aware of its status in the process. The OPCPSDT supports the development of COM-002-3 and the proposed definition of Reliability Directive. COM-003-1 does refer to Reliability Directive in a text box where it states that a Reliability Directive is a type of Operating Communication; and in R2 and R3 where it excludes Reliability Directives to prevent double jeopardy. This interface between these standards is the primary subject of a Webinar presented on June 7, 2012. It is posted and may address your comments. MISO cannot, at this time, support the current version of COM-003-1.
Response: Thank you for your comments. Please see the responses above.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the responses to those comments.		
Exelon Corporation and its affiliates	No	Exelon believes it is not necessary to create a new defined term "Operating Communication." Please see response to Q10 with alternate standard language that avoids the need for a new term.
Response: Thank you for your comments. Please see the responses to Question 10.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Response: Thank you for your comments. Please see the responses to the comments of APM.		
Oncor Electric Delivery Company LLC	No	Oncor is in general agreement with the elimination of the three terms. Furthermore, Oncor takes the position that the proposed new definition for

Organization	Yes or No	Question 1 Comment
		the NERC Glossary, "Operating Communication" is not needed because "person to person" communication is not cited or listed as a contributor to the events summarized in the 2003 Blackout Report. Oncor takes the position that improvements should emphasize communicating the state of the operating system as a whole during an emergency.
Response: Thank you for your comments. The SDT believes the Blackout Report, FERC Order 693 and the SAR deal with tightening protocols. The Blackout Report uses the word "especially for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating levels and wanted to amplify the importance during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.		
Central Lincoln	No	The change from "Interoperability Communications" to "Operating Communication" greatly expands the standard to include all internal communications regarding > 100 kV equipment. Central Lincoln does not consider the extra burden to be worth the negligible benefit.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Kansas City Power & Light	No	The requirements in this standard specifically state "how" to meet the goal of this standard. This standard needs to be written such that it allows for entity flexibility. Many entities already have COM protocols that are used. The proposed standard is too prescriptive and is more effort than necessary to ensure reliability and security of the BES. Overall - this standard is going to cost the registered entities much more than the realized benefits.

Organization	Yes or No	Question 1 Comment
Response: Thank you for your comments. The SDT acknowledges your concerns and has developed an approach to COM-003-1 to address those very issues.		
JEA	No	
Public Utility District No. 1 of Snohomish County	No	
Lakeland Electric	Yes	Would modify R1 as noted below to remove the implication that a Distribution would have to provide evidence that all Distribution Provider communications used the required protocols.R1. Each Reliability Coordinator, Transmission Operator, Balancing Authority[, and] Generator Operator, and Distribution Provider [receiving a Operating Communications,] shall use the following communications protocols:
Response: Thank you for your comments. The SDT acknowledges your concerns and has developed an approach to COM-003-1 to address those very issues.		
Salt River Project	Yes	The definition of "Operating Communication" is vague and needs clarification.
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
City of Tallahassee	Yes	The City of Tallahassee Electric Utility (TAL) agrees with the addition of this proposed new definition; however, TAL is not clear on the scope of the phrase "input of an Element or Facility of the Bulk Electric System".

Organization	Yes or No	Question 1 Comment
Response: Thank you for your comments. Based on comments received about the scope and intent of an Operating Communication, the SDT has revised the term to be Operating Instruction and changed the definition to be "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
Texas Reliability Entity	Yes	We agree, in view of the additional comments we provide below.
Response: Thank you for your comments.		
Western Electricity Coordinating Council		How are facilities that might affect the operation of the BES treated? Would the changing of an LTC or the low voltage taps on a 230/92 kV transformer be subject to this standard?
Response: Thank you for your comments. If it was an oral or written command the response is yes.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the responses to the NPCC Regional Standards Committee (RSC)comments.		
Public Service Enterprise Group		See #10.
Response: Thank you for your comments. Please see the responses to the comments in Question 10.		
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None
Imperial Irrigation District	Yes	

Organization	Yes or No	Question 1 Comment
Florida Municipal Power Agency	Yes	
Bonneville Power Administration	Yes	
GP Strategies	Yes	
Progress Energy	Yes	
Arizona Public Service Company	Yes	
HHWP	Yes	
SMUD	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
Colorado Springs Utilities	Yes	
Utility System Efficiencies, InC.	Yes	
Puget Sound Energy	Yes	
Idaho Power Company	Yes	
American Transmission Company, LLC	Yes	

Organization	Yes or No	Question 1 Comment
NextEra Energy, Inc	Yes	
City of Vero Beach	Yes	
Seminole Electric Cooperative	Yes	
U.S. Bureau of Reclamation	Yes	
NV Energy	Yes	
California Independent System Operator	Yes	

2. The SDT eliminated the requirement to have a Communications Protocol Operating Procedure from the proposed standard because it is administrative in nature. Do you agree with this modification? If not, please explain in the comment area.

Summary Consideration:

Major Issues

The majority of commenters approved of the elimination of the Communication Protocol Operating Procedure (CPOP) in draft 1, indicating that it was too prescriptive and administrative in nature. *The SDT agreed the requirement was administrative and chose to remove it.*

Many commenters suggested retaining the CPOP and use it to develop the protocols internal to the entity. *The SDT has developed an alternate standard for the next posting. The SDT notes there is a significant amount of support for the core elements of the standard the SDT has developed for draft 3, which is a different approach than that defined in the Communication Protocol Operating Procedure.*

Stakeholders that agreed with the change did not offer substantive comment.

Organization	Yes or No	Question 2 Comment
Northeast Power Coordinating Council	No	An alternative approach would be to introduce communications protocols as a mandatory non-standard (e.g. as a requirement for certification) that would center on a corporate communications manual that encourages three-part communications; and that includes how monitoring would be audited internally. Such an alternative would change the requirement from monitoring personnel mistakes to a requirement monitoring corporate culture.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Duke Energy	No	We believe that having a reliability standard requirement to develop a Communications Protocol Operating Procedure, to address items similar to those under R1.1 would be an appropriate method to address the Blackout Report recommendations and Order 693 directives to tighten communications protocols. An

Organization	Yes or No	Question 2 Comment
		entity's CPOP could address the language to be used between functional entities, what clock format is to be used, how time zone/Daylight Savings Time will be addressed, and transmission equipment identifiers. The CPOP should have a required review frequency, and personnel should be trained on the CPOP. This approach, unlike the draft standard could be audited and certified. We see no way to reasonably audit or certify compliance with the draft standard in its current form. Duke suggests this approach to COM-003: Rather than specifying the solutions to achieving effective communication, COM-003 should instead focus on developing and training on an approach that is designed appropriately for each RE. For instance, another approach to COM-003 might be along the lines of: Requirement R1 could be written in a manner to require the appropriate registered entities to develop a communications protocol that is appropriate for each RE. This communications protocol should address how the RE is handling: Time Zone Designations - for both internal and external communications Language Alpha-numeric identifiers 3-part communications - when is it required, etc. Use of defined terminology Use of common transmission equipment identifiers Other items deemed important for the communications protocol to address - again, this would not define HOW these items are addressed. This approach would require the RE to specify how it is addressing these issues, without prescribing solutions. For instance, a RE could include a section in its protocol to deal with time zone designation. In this section the RE could explain that it, and its neighbors, all are in and use the same time zone. As a result, the RE has

Organization	Yes or No	Question 2 Comment
		determined that requiring the identification of time zone reference in communication is not necessary. Requirement 2 could be written in a manner to require the training of operators on the communication protocol. Requirement 3 could be written in a manner to require the RE to define its internal controls it uses to review that its protocol is being followed. The compliance approach would be to: 1) assess whether the RE has developed a written protocol and whether the protocol addresses each item - this does not mean there is an assessment of HOW each item is assessed; 2) assess whether the RE has trained its operators on the communications protocol 3) assess whether the RE is following its internal controls
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Associated Electric Cooperative JRO00088	No	AECI agrees with SERC OC STANDARDS REVIEW GROUP's comments pertaining to question 2.
Response: Thank you for your comments. Please see the response to the SERC OC Standards Review Group's comments.		
LG&E and KU Services	No	The SDT did not eliminate a communications procedure requirement. It turned the former requirement into R1 and its sub-parts, forcing a single communication procedure on the industry. This goes far too deeply into the "HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO/RTO Standards Review	No	The question is structured as an "either" "or" question about one requirement and

Organization	Yes or No	Question 2 Comment
Committee		does not include a "neither" option relating to the other requirements. The SDT has replaced one procedure with another set of procedures. Neither is an appropriate requirement. The SRC believes that this and other detailed procedural requirements on personnel are not valid applications for NERC reliability standards. The SRC believes that standards must mandate outcomes and those standards such as this one on 3 part communication procedures are better left to the registered entities. **Response: The question is focused only on the elimination of the CPOP, which does not feature an option or a choice.** If the Industry were to support the SDT's proposed requirement, the SRC would urge the SDT to turn away from the "zero defects" standard that it is proposing and to replace it with a requirement that allows for reasonable number of deviations. The proposed requirement will be prohibitively expensive to implement with little improvement in reliability (also see "whitepaper" included in response to Question 10). The requirement will require all communications channels to not just be recorded (which is done today) but will require each recording to be reviewed by a compliance person for self-reporting purposes. The proposed requirement would actually reduce reliability by taking the above required compliance personnel away from reliability related standards and placing them on these procedural requirements ; and (2) distracting operators from their core responsibility of reliability due to concerns with meeting compliance obligations. A more acceptable alternative approach would be to introduce communications protocols as a mandatory non-standard (e.g. as a requirement for certification) that would center on a corporate communications manual that encourages three-part communications; and that includes how monitoring would be audited internally. Such an alternative would change the requirement from monitoring personnel mistakes to a requirement for monitoring corporate culture. Moreover, the use of a non-standard

Organization	Yes or No	Question 2 Comment
		alternative would encourage the creation of innovative Best Practices; as opposed to a mandatory fixed procedure which would limit innovation. **Response: The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
SERC OC Standards Review Group	No	The SDT did not eliminate a communications procedure requirement! It turned the former requirement into R1 and its sub-parts, forcing a single communication procedure on the industry. This goes far too deeply into the "HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		
NERC Operating Committee	No	See Response 10
Southern Company	No	It appears as though the SDT did remove the term Communications Protocol Operating Procedure, but replaced it with very prescriptive requirements and sub requirements in R1 of this revised standard. This newly revised standard focuses on the "HOW" of communication when it should be more focused on the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		
Roger Zaklukiewicz Consulting	No	See previous comment(s) regarding the necessity for a Communications Protocol Operating Procedure.

Organization	Yes or No	Question 2 Comment
Response: Thank you for your comments.		
Entergy Services	No	We believe that this version of COM-003 actually embeds a "CPOP" within the Requirements. This is inappropriate intrusion beyond identification of with "what" an entity must comply into "how" that entity must comply. Our suggested R1 provides replacement language that would require a communications procedure. We see no reliability value in having a defined term for "Communications Protocol Operating Procedure", as the term "communications procedure" is completely understandable using the normally accepted meanings of the words.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Utility System Efficiencies, InC.	No	Even though this is administrative, due to the vital importance of proper operating communications a Communications Operating Procedure is necessary to ensure that the Registered Entity has established its own communications procedures in compliance with the standard to use in training its operations personnel in proper communications protocols.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the responses to the comments by the SERC OC Standards Review Group.		
MISO	Yes	
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the responses to the comments by the ISO/RTO Standards Review		

Organization	Yes or No	Question 2 Comment
Committee.		
Seminole Electric Cooperative	No	While we absolutely support the promotion and use of 3-part oral communication protocol, the failure of individual persons to use "proper" and "correct" oral operational communications should NOT constitute a Standard violation. It is reasonable to require the responsible entities to have written procedures requiring such use; to have evidence of applicable personnel training on such; and to have a program for internal monitoring and enforcement of such. As written, a subjective review of many oral operational communications will arguably be identified by Compliance Auditors as medium, high or even severe levels.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Exelon Corporation and its affiliates	No	Exelon agrees with the elimination of the requirement to have a Communications Protocol Operating Procedure and we also believe the basic approach as proposed is wrong. The burden for demonstrating compliance for non-emergency, non-directive communications, including retention and review of 180-365 days worth of evidence to be able to demonstrate 100% compliance presents significant burden potentially detracting from the work of reliability. Auditing, whether by a NERC CEA or by entities conducting internal self assessments for self-certifications, would potentially involve listening to thousands of hours of tapes to review. This is an overly prescriptive, burdensome approach. We believe that a more effective approach would be for the standard to mandate reliability based outcomes and require entities to design practices to achieve the desired outcome. See response to Q10.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Oncor Electric Delivery Company LLC	No	Oncor takes the position that elimination of the Communications Protocol Operating Procedure does not constitute the introduction of another set of procedures (i.e. 3 - Part Communication, or alpha-numeric clarifiers). Furthermore Oncor takes the

Organization	Yes or No	Question 2 Comment
		position that a more productive approach would be to encourage the creation of innovative Best Practices; as opposed to a mandatory fixed procedure which would limit innovation.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Avista	No	
South Carolina Electric and Gas	No	
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	Yes	It is best for NERC to evaluate risk and performance and prescribe methods.
Response: Thank you for your comments.		
SPP Standards Review Group	Yes	Eliminating the requirement to have the procedure (documentation) was a move in the right direction. We are glad it was eliminated because that's one less piece of paper we have to keep track of.
Response: Thank you for your comments.		
The United illuminating Company	Yes	The CPOP was overly administrative.
Response: Thank you for your comments.		
Ingleside Cogeneration LP	Yes	Ingleside Cogeneration LP agrees that a communication procedure is unnecessary for routine operations. In our view, the remaining requirements in COM-003-1 will drive entities to continually reinforce communications protocols without it.

Organization	Yes or No	Question 2 Comment
Response: Thank you for your comments.		
City of Jacksonville Beach dba/Beaches Energy Services	Yes	Yes, it would be administrative in nature and would not add value.
Response: Thank you for your comments.		
NV Energy	Yes	This was a much warranted improvement.
Response: Thank you for your comments.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Response: Thank you for your comments. Please see the responses to the comments by the NPCC Regional Standards Committee (RSC).		
Public Service Enterprise Group		See #10.
ACES Power Marketing Standards Collaborators	Yes	
Imperial Irrigation District	Yes	
Midwest Reliability Organization NERC Standards Review Forum	Yes	
Detroit Edison	Yes	

Organization	Yes or No	Question 2 Comment
BC Hydro	Yes	
Dominion	Yes	
JEA	Yes	
Pepco Holdings Inc & Affiliates	Yes	
City Water Light and Power	Yes	
Hydro One Networks Inc.	Yes	
Florida Municipal Power Agency	Yes	
Western Electricity Coordinating Council	Yes	
Bonneville Power Administration	Yes	
GP Strategies	Yes	
Progress Energy	Yes	
Arizona Public Service Company	Yes	
HHWP	Yes	

Organization	Yes or No	Question 2 Comment
Lakeland Electric	Yes	
CenterPoint Energy Houston Electric, LLC.	Yes	
IESO	Yes	
Flathead Electric Cooperative, Inc.	Yes	
NIPSCO	Yes	
SMUD	Yes	
Liberty Electric Power LLC	Yes	
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
Utility Services, Inc.	Yes	
City of Austin dba Autin Energy	Yes	

Organization	Yes or No	Question 2 Comment
Colorado Springs Utilities	Yes	
Salt River Project	Yes	
Wisconsin Electric dba We Energies	Yes	
Manitoba Hydro	Yes	
Portland General Electric - Transmission & Reliability Services	Yes	
Puget Sound Energy	Yes	
PPL Electric Utilities	Yes	
Xcel Energy	Yes	
Public Utility District No. 1 of Snohomish County	Yes	
Ameren	Yes	
Idaho Power Company	Yes	
American Transmission Company, LLC	Yes	
City of Tallahassee	Yes	

Organization	Yes or No	Question 2 Comment
NextEra Energy, Inc	Yes	
City of Vero Beach	Yes	
Texas Relibility Entity	Yes	
Alliant Energy	Yes	
U.S. Bureau of Reclamation	Yes	
Brazos Electric Power Cooperative	Yes	
Central Lincoln	Yes	
Kansas City Power & Light	Yes	

3. The SDT has proposed to transfer the requirement to use Alert Levels in Attachment 1 to another more closely aligned standard or to a separate new standard. Do you agree with this transfer? If not, please explain in the comment area.

Summary Consideration:

The majority of commenters approved of moving the Alert Level guide out of COM-003-1, draft 1; however the many commenters still addressed the question as if the ALG was still retained. Many commenters wanted the guide eliminated completely, stating it was too prescriptive and scripted. *The SDT believes the ALG did have value for creating situational awareness and believes it belongs in another standard and will recommend that the Standards Committee assign it accordingly. The OPCPSDT stated that it does not have the authority to determine the ultimate disposition of the ALG. The SDT has addressed each misunderstanding to clarify the matter where appropriate.*

Stakeholders that agreed with the change did not offer substantive comment.

Organization	Yes or No	Question 3 Comment
Associated Electric Cooperative JRO00088	No	AECI agrees with SERC OC STANDARDS REVIEW GROUP's comments pertaining to question 3.
Response: Response: Thank you for your comments. Please see the responses to the comments by the SERC OC Standards Review Group.		
LG&E and KU Services	No	LG&E and KU Services disagree. This concept more properly belongs in the NERC Rules of Procedure and should be designed to address Recommendation 26 of the NERC 2003 Blackout Report. This is an expectation of NERC and not of the industry. Also, see recent NERC Operating Reliability Subcommittee (ORS) discussions and recommendations regarding the elimination of the Transmission Alert Levels.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		

Organization	Yes or No	Question 3 Comment
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	The language, intent and purpose is not sufficiently defined. Needs better documentation and explanation.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
City Water Light and Power	No	This requirement should certainly not be a part of this standard, but should be eliminated entirely. It specifies a process, not a result - the requirement should be based on resultant functionality, not the process by which the entity achieves it.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Hydro One Networks Inc.	No	In the past there was a lot of confusion regarding the use and applicability of three-part communication. We believe that all communication protocol related requirements and information should be contained within one standard. This should include Alert Levels and their definitions.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
SERC OC Standards Review Group	No	We disagree - this concept more properly belongs in the NERC Rules of Procedure and should be designed to address Recommendation 26 of the NERC 2003 Blackout Report. This is an expectation of NERC and not of the industry. Also, see recent NERC Operating Reliability Subcommittee (ORS) discussions and recommendations regarding the elimination of the Transmission Alert Levels.

Organization	Yes or No	Question 3 Comment
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Southern Company	No	Southern suggests that this concept more properly belongs in the NERC Rules of Procedure and should be designed to address Recommendation 26 of the NERC 2003 Blackout Report. This suggestion of placing Alert Levels in the reliability standards is an expectation of NERC, but it is not an expectation of the industry. Also, see recent NERC Operating Reliability Subcommittee (ORS) discussions and recommendations regarding the elimination of the Transmission Alert Levels.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Flathead Electric Cooperative, Inc.	No	Don't understand this change, but wonder why separate alert levels are necessary to incorporate in this set of standards.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Entergy Services	No	We disagree - this concept more properly belongs in the NERC Rules of Procedure and should be designed to address Recommendation 26 of the NERC 2003 Blackout Report. This is an expectation of NERC itself, not of the industry (and NERC can't write Requirements for the ERO). Also, this team should take the time to become familiar with recent NERC Operating Reliability Subcommittee (ORS) discussions and recommendations regarding the elimination of the Transmission Alert Levels. Even the DHS has found that Alert Levels has diminished value.

Organization	Yes or No	Question 3 Comment
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
City of Austin dba Austin Energy	No	AE believes the SDT should carefully review existing alert levels (e.g. EEA levels, threat levels). AE requests that the SDT use only the Alert Levels in Attachment 1 if they enhance existing levels or fill a gap. AE's preference is for the SDT to build upon existing alert levels instead of imposing a new category.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the responses to the comments by the SERC OC Standards Review Group.		
Ameren	No	We recommend the Alert Levels be used by the SDT to define a workable time period when three-part communications is mandatory.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
MISO	No	This concept more properly belongs in the NERC Rules of Procedure and should be designed to address Recommendation 26 of the NERC 2003 Blackout Report. See recent NERC Operating Reliability Subcommittee (ORS) discussions and recommendations regarding the elimination of the Transmission Alert Levels.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a		

Organization	Yes or No	Question 3 Comment
notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
ISO New England Inc	No	These Alert Levels have been and should continue to remain a product of the NERC OC and not a Standards issue.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Exelon Corporation and its affiliates	No	While Exelon agrees with deleting the Alert Levels in Attachment 1 from COM-003-1, Exelon does not agree with transferring the requirement to use Alert Levels to any other standard or the creation of a separate new standard. As stated by many of the commenters to the previous draft, the addition of "Alert Levels" with defined colors have been used by DHS and may be misinterpreted. In response to these comments the SDT removed the requirement to Attachment 1 as falling outside the scope of a "communication protocol." Exelon reiterates that the concept of adding colored "Alert Levels" not only be deleted from COM-003-1, but also not be transferred to another SAR in the future.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
Oncor Electric Delivery Company LLC	No	Oncor takes the position that the introduction of new alert levels or categories simply introduces more complexity to what could be better addressed through a closer examination of existing alert levels. This includes EEA levels and threat levels.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine		

Organization	Yes or No	Question 3 Comment
its disposition.		
Kansas City Power & Light	No	Create one standard for all operating conditions and retire the balance of those places where levels are referenced. We support a new or separate requirement speaking to all alert levels for operating conditions but not combination with another unique standard losing the efficiencies of a combined set of operating condition alert levels.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine its disposition.		
JEA	No	
Roger Zaklukiewicz Consulting	No	
South Carolina Electric and Gas	No	
SPP Standards Review Group	Yes	We agree with the Alert Levels being removed from COM-003-1 and question the need to move them somewhere else. During its May, 2012 meeting, the Operating Reliability Subcommittee (ORS) approved a motion to '...terminate the pilot program using Alert Levels and to discontinue any efforts to include the guidelines in reliability standards projects.' This was based on the inability of the ORS to demonstrate any reliability improvements during the six years that the Alert Level pilot program had been in existence. That being the case, there is no need to create a SAR and transfer this to another SDT.
Response: Thank you for your comments. The Standards Committee has approved the removal and will determine its disposition.		

Organization	Yes or No	Question 3 Comment
Ingleside Cogeneration LP	Yes	There are already other project teams addressing the handling of incidents related to transmission, physical, and cyber security. It is appropriate in our view to separate emergency operations communications from normal ones - as done in the second draft of COM-003-1.
Response: Thank you for your comments.		
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None.
Colorado Springs Utilities	Yes	better option would be to retire the concept
Response: Thank you for your comments. The Standards Committee has approved the removal and will determine its disposition.		
Idaho Power Company	Yes	Threat Alert Levels does not seem to fit this Standard.
Response: Thank you for your comments.		
ACES Power Marketing Standards Collaborators	Yes	
Imperial Irrigation District	Yes	
Midwest Reliability Organization NERC Standards Review Forum	Yes	
Detroit Edison	Yes	
Duke Energy	Yes	

Organization	Yes or No	Question 3 Comment
BC Hydro	Yes	
Dominion	Yes	
Pepco Holdings Inc & Affiliates	Yes	
Florida Municipal Power Agency	Yes	
Western Electricity Coordinating Council	Yes	
Bonneville Power Administration	Yes	
GP Strategies	Yes	
Progress Energy	Yes	
HHWP	Yes	
Lakeland Electric	Yes	
NIPSCO	Yes	
SMUD	Yes	
Liberty Electric Power LLC	Yes	
PPL Generation, LLC on behalf of its Supply NERC Registered	Yes	

Organization	Yes or No	Question 3 Comment
Entities		
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
The United illuminating Company	Yes	
Indiana Municipal Power Agency	Yes	
Utility Services, Inc.	Yes	
Utility System Efficiencies, InC.	Yes	
Manitoba Hydro	Yes	
Public Service Enterprise Group	Yes	
Puget Sound Energy	Yes	
Xcel Energy	Yes	
Public Utility District No. 1 of Snohomish County	Yes	
American Transmission	Yes	

Organization	Yes or No	Question 3 Comment
Company, LLC		
City of Tallahassee	Yes	
NextEra Energy, Inc	Yes	
City of Vero Beach	Yes	
Texas Relibility Entity	Yes	
Alliant Energy	Yes	
U.S. Bureau of Reclamation	Yes	
NV Energy	Yes	
Brazos Electric Power Cooperative	Yes	
Central Lincoln	Yes	
NERC Operating Committee		See Response 10
Arizona Public Service Company		Intentionally left blank
CenterPoint Energy Houston Electric, LLC.		Question 3 Comments: CenterPoint Energy believes the SDT should only use existing defined alert levels, rather than implementing new alert levels or categories.
Response: Thank you for your comments. The SDT has removed the Alert Levels in Attachment 1 from COM-003-1 because it is a notification requirement, not a communication protocol. The Standards Committee has approved the removal and will determine		

Organization	Yes or No	Question 3 Comment
its disposition.		
IESO		We agree that Attachment 1 should not form part of COM-003-1 and support suppressing any requirements in this standard that stipulate the Alert Levels. We need more details on the specific proposal to re-locate Attachment 1 before we can comment on the merit of the transfer.
Response: Thank you for your comments. The Standards Committee has approved the removal and will determine its disposition.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the responses to the comments by the NPCC Regional Standards Committee (RSC).		

4. The SDT modified the standard to allow an exemption from the requirement to use English language where the use of another language is mandated by law or regulation. (See Requirement R1, Part 1.1.1) Do you agree with this modification? If not, please explain in the comment area.

Summary Consideration: Major Issues

The majority of commenters approved of the use of the English language with the exemption from the requirement to use English language where the use of another language is mandated by law or regulation.

Stakeholders that agreed with the change did not offer comment.

The commenters who disagreed cited the requirement was too prescriptive and too much of a "how to" requirement. *The SDT believes using a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT also believes standards should adhere to law and regulation where government jurisdiction exists.*

Other commenters believe a very small number functional entities have local agreements to speak a language other than English. These instances appear to be rare and isolated. The SDT added mutual agreement language similar to that found in COM-001-1.1, R4 to the standard.

Organization	Yes or No	Question 4 Comment
Northeast Power Coordinating Council	No	A general suggestion for all reliability standards that has been made is that standards' requirements be eliminated that do not address reliability problems. No available information indicates that language is causing reliability problems. In the absence of such evidence that this is a reliability problem, consideration should be given to eliminating this requirement.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication		

Organization	Yes or No	Question 4 Comment
which reduces the possibility of an event that could compromise the reliability of the BES.		
Duke Energy	No	We think mandating English is over-reaching (As currently written, the Standard erroneously focuses on "how" an entity can be compliant, rather than describing "what" an entity needs to achieve to be compliant). Let the entity that develops the CPOP and its neighbors decide on language, clock format, etc.
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES.		
Associated Electric Cooperative JRO00088	No	Although this qualification appears to now be accommodating of regional government mandates, it fails to address decorum where a non-English bounded Entity is communicating externally with entities who are unbounded by the same mandates or vice-versa. Best to let the Regional Entities work this out among themselves and document the agreements, where applicable.
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES.		
LG&E and KU Services	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		

Organization	Yes or No	Question 4 Comment
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Too prescriptive. NERC should be addressing risk and performance.
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES.		
ISO/RTO Standards Review Committee	No	FERC has made it clear that it would be amenable to eliminating requirements that are not reliability problems. A requirement regarding language comes under that category. There are no reports indicating that language is causing reliability problems. The SRC does not believe this issue rises to the level of a mandatory standard. The SRC would ask if the SDT has any evidence that language is a problem causing reliability impacts. In the absence of such evidence that it is a reliability problem, the SDT should eliminate this requirement.
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.		
Hydro One Networks Inc.	No	We believe that this requirement should be eliminated. As a general rule, standards' requirements that do not address reliability problems should be eliminated. No available information indicates that language is causing reliability problems and there. In addition to this, there are some jurisdictions where this requirement might cause decrease in reliability (i.e. Quebec)
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT added the use of an alternate language for internal operations.		

Organization	Yes or No	Question 4 Comment
During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.		
SERC OC Standards Review Group	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".
Response: The SDT appreciates your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		
Bonneville Power Administration	No	BPA believes that the existing language format should remain solely English and recognizes that this is the case with International & US air traffic controllers.
Response: Thank you for your comments.		
Southern Company	No	While Southern agrees with the concept of allowing the use of another language when mandated by law or regulation, Southern does not agree with R1 and its sub requirements as they are focused on the "HOW" of communication when they should be more focused on the "WHAT".
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		
SMUD	No	We believe the requirement to only speak English is detrimental to reliability. Entities that have predominantly speaking Spanish personnel would be inhibited with ineffective communications mandated by the English only requirement. Further, this

Organization	Yes or No	Question 4 Comment
		particular requirement is in direct conflict with COM0-001 R4 which states "...Transmission Operators and Balancing Authorities may use an alternate language for internal operations."
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT added use of an alternate language for internal operations.		
San Diego Gas & Electric	No	San Diego Gas & Electric ("SDG&E") agrees with the proposed exemption from the requirement to use English language where the use of another language is mandated by law or regulation. However, SDG&E recommends including the following language as an additional exemption: "or a formal agreement has been established between the functional entities to use an alternative language," so that R1.1.1. states: "Use the English language when communicating between functional entities, unless another language is mandated by law or regulation or a formal agreement has been established between the functional entities to use an alternative language."
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT added use of an alternate language for internal operations. Comments on prior postings of COM-003-1 rejected allowances for entities to agree upon particular protocols, feeling that the documentation of those agreements would be overly burdensome and is contrary to the purpose of the SAR, which is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time."		
Sacramento Municipal Utility District	No	See response in #10
Entergy Services	No	We disagree with all of the Requirements and sub-Requirements in this standard, due to the fact that they embody a procedure into the Requirements. There is no

Organization	Yes or No	Question 4 Comment
		reliability need being fulfilled by taking this approach. See our suggested replacement R1 in our response to Q1. This would replace R1, R2 and R3 and their associated sub-Requirements.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Essential Power, LLC	No	The use of English should be mandated for communications between entities in separate regions where the common language in one of the regions may not be English. Allowing an entity to use a language other than English when communicating with regions where English is the required language is counter to the purpose of the Standard and could in fact jeopardize reliability through miscommunication.
Response: Thank you for your comments. The SDT agrees with your comments and clarifies that is the intent of the requirement.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the responses to the comments by the SERC OC Standards Review Group.		
Public Utility District No. 1 of Snohomish County	No	SNPD takes issue with the specification of "English" only communications and the Alpha-Numeric identifiers. There is no precedence established for the use of English, Alpha-Numeric or the use of a 24-hour clock format that warrant a severe VSL and the associated penalties that could be imposed by the Compliance Enforcement Agency
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT has developed a new approach to the standard that addresses your compliance concern.		

Organization	Yes or No	Question 4 Comment
MISO	No	Fluent comprehension of and speaking ability in the English language must be uniform among all Reliability Coordinators, Transmission Operators, Balancing Authorities, Generator Operators, and Distribution Providers in order to ensure the safe and reliable operation of the Bulk Electric System. NERC must ensure that all such entities employ operators that can speak and understand English fluently, regardless of their primary or preferred language. The proposed exception, while well-intended, could lead to situations where effective communication between operators is compromised or entirely prevented due to language barriers. MISO notes that the use of English, unless otherwise agreed, is currently required for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System under COM-001-1.1, Requirement R4, but that requirement does not apply to Generator Operators or Distribution Providers. Further, COM-001-2, which is part of Project 2006-06 (see above), would no longer require English to be used in such instances. Thus, COM-003-1, Requirement 1, Part 1.1.1 should be modified to require that Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider operators can speak and understand English fluently, even if it is not the required primary language pursuant to law or regulation for oral or written Operating Communications.
Response: Thank you for your comments. The SDT believes the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT added use of an alternate language for internal operations. The exception provides for adherence to existing law.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review

Organization	Yes or No	Question 4 Comment
		Committee comments.
Response: Thank you for your comments. Please see the responses to the comments of the ISO/RTO Standards Review Committee.		
Exelon Corporation and its affiliates	No	Exelon finds it unnecessary for the standard to include a requirement that discusses specifics concerning language requirements. If discussion of language is important to clarify within a Registered Entity's protocol, then the standard could suggest it as an attribute to be included in an entity developed protocol. See alternate standard language proposal in response to Q10.
Response: Thank you for your comments. Please see the responses to the comments in Question10.		
Oncor Electric Delivery Company LLC	No	Oncor takes the position that this requirement is unnecessary in that it is not aware of any evidence supporting the notion that failure to use the English language has been a significant contributor to reduction in reliability. Furthermore, FERC has made it known that it is in favor of eliminating requirements that do not contribute to reliability. Oncor recommends that this requirement be eliminated.
Response: Thank you for your comments. The SDT believes that the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES.		
California Independent System Operator	No	While the objective of minimizing ambiguities in communications between functional entities is commendable, the standard as currently written goes too far by requiring "...English when communicating between functional entities, unless another language is mandated by law or regulation." (R1.1.1) To begin, requirement 1.1.1 is completely silent on who's law or regulation would satisfy this requirement if a functional entity wanted/needed to speak a different language. For example, it's unclear which of the following would satisfy this requirement:

Organization	Yes or No	Question 4 Comment
		Response: The SDT means any law or regulation within a jurisdiction that would mandate it. 1. A Canadian or Mexican law or regulation provided as evidence to WECC auditors? **Response: Yes** 2. An American law or regulation? **Response: Yes** 3. Perhaps both an American and a neighboring country's law/regulation would be required? **Response: Yes, if both are mandatory and enforceable.** Since the proposed standard is silent on what constitutes satisfactory evidence, both numbers 1 and 2 seem like potentially harmful unilateral moves that could be detrimental to reliability but may be allowable in COM-003-1 as currently proposed. So if functional entities would like/need to speak a different language, the requirement looks like it's attempting to set a high bar without specifying how high that bar is. **Response: The SDT believes the use of a common language contributes to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES.** I also think the requirement pre-supposes a level of English fluency by all North American citizens that simply does not exist and mandates a very high and very vague threshold for compliance while not allowing for exceptions. So ultimately, R1.1.1. Is a vague, unnecessary and inflexible requirement that would be detrimental to real-time operators in a contingent status. It would deny operators that are fluent in other languages the ability to assist non-native English speakers experiencing difficulties in communications by using a language they are fluent in to mitigate a potentially

Organization	Yes or No	Question 4 Comment
		serious issue. **Response: The SDT points out that existing Standard COM-001-1.1, Requirement R4, which is mandatory and enforceable, and stipulates use of the English language, has been in effect for years. The fluency issue and the characterization of the proposed Requirement R1.1.1 as described has not surfaced or does not appear to be at issue.** The requirement could also potentially require U.S. states, Canadian provinces and/or Mexican states to write laws and/or regulations to satisfy a requirement in a standard which seems like an unrealistic threshold. The bottom line is if an entity enters a contingent state and there is no legislation or regulation in place at the time of a contingency event, system operators may be forced to decide between two very difficult positions. Either adheres to COM-003 and run the risk of putting the grid at risk or violating COM-003 to ensure grid integrity is not compromised. **Response: The SDT notes that existing Standard COM-001-1.1, Requirement R4, has been in force and there has been no requirement for any governments to develop additional legislation or regulation for the use of a specific language. COM-003-1, R1.1.1 also does not require or warrant additional laws or regulation.** **The SDT has developed a new approach to the standard that may address your concern.**
Response: Thank you for your comments. Please see the responses above.		
South Carolina Electric and Gas	No	
SPP Standards Review Group	Yes	While we concur with the inclusion of the exemption, we question how the industry can ensure effective communications in a situation where the exemption comes into play.

Organization	Yes or No	Question 4 Comment
Response: Thank you for your comments. The SDT notes that existing Standard COM-001-1.1, Requirement R4, has been in effect for years without major issues. Non English speaking entities will speak English when communicating externally and will follow their applicable laws or regulations internally.		
Western Electricity Coordinating Council	Yes	Any thoughts given to including a provision for agreement between specific entities to use a language other than English for areas that another language may be common, but not mandated by law or regulation?
Response: Thank you for your comments. The SDT believes that the use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. The SDT added the use of an alternate language for internal operations. Comments on prior postings of COM-003-1 rejected allowances for entities to agree upon particular protocols, feeling that the documentation of those agreements would be overly burdensome and is contrary to the purpose of the SAR, which is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time."		
Colorado Springs Utilities	Yes	"Use the English language when communicating between functional entities, unless another language is mandated by law or regulation." If two or more functional entities (say BA & TOP) reside within the same utility (perhaps even co-located in the same control center) and are communicating solely with each other, mayn't they speak their native language to each other - with or without the aid of law?
Response: Thank you for your comments. The SDT believes that use of a common language eliminates confusion and misunderstandings, and expedites response. These all contribute to clarifying communication which reduces the possibility of an event that could compromise the reliability of the BES. While the SDT added use of an alternate language for internal operations, the exception does not apply to communications between functional entities.		
Central Lincoln	Yes	but please see Q 10.
City of Jacksonville Beach	Yes	None.

Organization	Yes or No	Question 4 Comment
dba/Beaches Energy Services		
ACES Power Marketing Standards Collaborators	Yes	
Imperial Irrigation District	Yes	
Midwest Reliability Organization NERC Standards Review Forum	Yes	
Detroit Edison	Yes	
BC Hydro	Yes	
Dominion	Yes	
JEA	Yes	
Pepco Holdings Inc & Affiliates	Yes	
City Water Light and Power	Yes	
Avista	Yes	
Florida Municipal Power Agency	Yes	
GP Strategies	Yes	
Progress Energy	Yes	

Organization	Yes or No	Question 4 Comment
Arizona Public Service Company	Yes	
HHWP	Yes	
Lakeland Electric	Yes	
IESO	Yes	
Flathead Electric Cooperative, Inc.	Yes	
NIPSCO	Yes	
Liberty Electric Power LLC	Yes	
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
The United illuminating Company	Yes	
Ingleside Cogeneration LP	Yes	

Organization	Yes or No	Question 4 Comment
Roger Zaklukiewicz Consulting	Yes	
ITC Holdings	Yes	
Utility Services, Inc.	Yes	
Salt River Project	Yes	
Utility System Efficiencies, InC.	Yes	
Wisconsin Electric dba We Energies	Yes	
Manitoba Hydro	Yes	
Portland General Electric - Transmission & Reliability Services	Yes	
Puget Sound Energy	Yes	
PPL Electric Utilities	Yes	
Xcel Energy	Yes	
Ameren	Yes	
Idaho Power Company	Yes	
American Transmission	Yes	

Organization	Yes or No	Question 4 Comment
Company, LLC		
City of Tallahassee	Yes	
NextEra Energy, Inc	Yes	
City of Vero Beach	Yes	
Texas Relibility Entity	Yes	
Alliant Energy	Yes	
Seminole Electric Cooperative	Yes	
U.S. Bureau of Reclamation	Yes	
NV Energy	Yes	
Brazos Electric Power Cooperative	Yes	
Kansas City Power & Light	Yes	
NERC Operating Committee		See Response 10
Response: Thank you for your comments. Please see the responses to the comments in Question 10.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the responses to those comments made by the NPCC Regional Standards		

Organization	Yes or No	Question 4 Comment
Committee (RSC).		
Public Service Enterprise Group		See #10.
Response: Thank you for your comments. Please see the responses to the comments in Question 10.		

5. The SDT modified the standard to mandate utilization of a 24 hour clock for all times and to mandate the use of a time zone and indicate whether the time is daylight saving time or standard time reference when Operating Communications occur between different time zones. (See Requirement R1, Part 1.1.3) Do you agree with this modification? If not, please explain in the comment area.

Summary Consideration:

Commenters who approved of the use the 24 hour clock and time zone references did not offer much comment except to state they felt it added clarity to communication. Those commenters who argued against the 24 hour clock and time zone references believe the requirement is too prescriptive, reaches too far and should be eliminated. *The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the stability of the BES.*

Organization	Yes or No	Question 5 Comment
Northeast Power Coordinating Council	No	This requirement is outside the scope of the approved SAR which proposes responding to the Blackout Recommendation to tighten communications protocols especially during emergencies. This proposed requirement is both procedural and does not address tightening communications of situational awareness. As an alternative a standard could require the Functional Entities to have a communications protocol that could indeed include this, but it should not be a requirement on personnel. By adopting an alternative category (i.e. not making this a standard) a Reliability Entity could adopt a progressive best practice approach without concern for violating the strictest features of the proposed best practice.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors." The SDT believes use of the 24 hour clock and		

Organization	Yes or No	Question 5 Comment
time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the stability of the BES. The SDT has developed a new approach to the standard that addresses your concern.		
ACES Power Marketing Standards Collaborators	No	1. The SDT should consider clarifying that use of relative times will not be subject to this requirement. For example, if a System Operator communicates that they will begin switching in 10 minutes, no 24 hour clock requirement is necessary.
Response: Thank you for your comments. The requirement only applies to references to clock times, not relative time.		
Midwest Reliability Organization NERC Standards Review Forum	No	There are two time zones in the eastern interconnection and two time zones in the western interconnect with Arizona not utilizing daylight savings time. The Reliability Coordinator and entities can agree on what time zone to use. The NSRF does not understand if the 'time zone" issue has caused any past performance issues? Please clarify with a basis of time zone inclusion.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES.		
Detroit Edison	No	In 1.1.3 "When the communication is between entities in different time zones..." should read "When the communication is between entities in operating in different time zones...". Two entities may be physically located in the same time zone but one may operate in standard time and the other in daylight time. When communication is between entities operating in different time zones, clarify which time zone takes precedence.
Response: Thank you for your comments. The SDT believes that two entities physically located in the same geographic time zone but one operating in standard time and the other in daylight time would constitute communication "between functional entities in different time zones."		

Organization	Yes or No	Question 5 Comment
Duke Energy	No	We think mandating the 24 hour clock is over-reaching (As currently written, the Standard erroneously focuses on "how" an entity can be compliant, rather than describing "what" an entity needs to achieve to be compliant). Let the entity that develops the CPOP and its neighbors decide on clock format, how time zone differences will be addressed, etc.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Dominion	No	Dominion currently views this requirement as being too prescriptive, the standard should be written to allow a 24 hour clock and time zone designation or 12 clock with an AM or PM and time zone designation.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Associated Electric Cooperative JRO00088	No	There are remaining issues where Entities deal with those few areas who swap time-zones dependent upon SDT, and they could be unfairly ensnared by non-compliance, in their not realizing that nuance. In addition, given the unbounded scope of this standard, it would seem best to allow operator discretion or this clause is a PV magnet.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
LG&E and KU Services	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Overly prescriptive. NERC should deal with risk and performance. This level of prescriptive standard language is not appropriate.

Organization	Yes or No	Question 5 Comment
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO/RTO Standards Review Committee	No	This requirement is outside the scope of the approved SAR which proposes responding to the Blackout Recommendation to tighten communications protocols especially during emergencies. This proposed requirement is both procedural and does not address tightening communications of situational awareness. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SDT believes use of the 24 hour clock and time zone references does in fact tighten communication because it clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES.** The SRC would suggest that as an alternative a standard could require the Functional Entities to have a communications protocol that could indeed include this suggestion, but it should not be a standard on personnel. By adopting an alternative category (i.e. not making this a standard) a Reliability Entity could adopt a progressive best practice approach without concern for violating the strictest features of the "proposed" best practice. **Response: The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
City Water Light and Power	No	Entities who have an agreed upon protocol which includes the time zone to be used for system operations should not be required to repeat the time zone for every communication. For instance, if Entity A and Entity B are in different time zones but both have an operating policy that states all communication between the two is in Eastern Standard Time and all operating personnel are trained on this policy, this

Organization	Yes or No	Question 5 Comment
		should be sufficient. This achieves the same functional goal. The requirement to restate the time zone in this case only serves to set up a situation where a simple single-instance omission would have no effect on reliability but still be noncompliant.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
SPP Standards Review Group	No	Requiring time zone notifications at times other than those around the time of the transition from standard to daylight savings and back again is excessive. For a brief period of time around this transition, ensuring the correct times are communicated would probably require including standard or daylight savings designations. Some consideration for this issue needs to be incorporated into the requirement. That said, trying to be overly prescriptive with the requirement creates an unnecessary burden on operating personnel without significantly improving BES reliability. A one-size fits all requirement may not be appropriate. Entities whose geographical area is located in multiple time zones probably have internal procedures detailing how they handle time differences within their area. Most often this entails selecting one time zone as the entity's reference. As written, the requirement overrides any internal procedures which may unnecessarily complicate internal communications. Allowances should be made for internal procedures which cover this situation. **The SDT has developed a new approach to the standard that addresses your concern. In addition, this stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones, it does not apply.** Requirement 1.1.3 requires that time and time zone, including standard or daylight savings time designations, must be communicated at all times. Yet Requirement 1.1.2 includes a provision that requires use to the 24-hour clock only when clock times are referenced. This needs to be included in Requirement 1.1.3 as shown below: When the communication is between entities in different time zones and refers to clock times, include the time and time zone and indicate whether the time is daylight

Organization	Yes or No	Question 5 Comment
		saving time or standard time. **Response: The SDT intentionally structured the parts of the requirement this way to mandate the use of the 24 hour clock (Requirement 1.1.2) for all time references and to use time zone references (Requirement 1.1.3) and indicate whether the time is daylight saving time or standard time only for those communications among entities operating in different time zones. The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
SERC OC Standards Review Group	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
NERC Operating Committee	No	Overly prescriptive
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Progress Energy	No	To prevent unintended use of "standard time" or "daylight time" Progress Energy is requesting using "prevailing time." Instructions issued at or near the time change could have individuals inadvertently use the wrong time reference further confusing the issue.
Response: Thank you for your comments. This stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones, it does not apply.		
Southern Company	No	Southern suggests that this requirement of a common time zone is overly

Organization	Yes or No	Question 5 Comment
		prescriptive. The requirement should be that entities operating in different time zones agree on how to best eliminate any confusion regarding the time difference. Entities who have an agreed upon protocol which includes the time zone to be used for system operations should not be required to repeat the time zone for every communication. For instance, if Entity A and Entity B are in different time zones but both have an operating policy that states all communication between the two is in Eastern Standard Time and all operating personnel are trained on this policy, this should be sufficient. This achieves the same functional goal. The requirement to restate the time zone in this case only serves to set up a situation where a simple single-instance omission would have no effect on reliability but still be noncompliant.
Response: Thank you for your comments. This stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones, it does not apply. Comments on prior postings of COM-003-1 rejected allowances for entities to agree upon particular protocols, feeling that the documentation of those agreements would be overly burdensome and is contrary to the purpose of the SAR, which is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time."		
Flathead Electric Cooperative, Inc.	No	Not sure this is necessary for small entities.
Response: Thank you for your comments. The SDT believes that all BES entities that send and receive operating instructions should utilize protocols to ensure orders are not miscommunicated. A Distribution Provider or Generator Operator that only receives Operating Instructions is only held accountable for receiver's requirements in the standard.		
Liberty Electric Power LLC	No	No. Communications which do not involve Directives are not the proper subject of NERC standards.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address		

Organization	Yes or No	Question 5 Comment
necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
San Diego Gas & Electric	No	SDG&E recommends removing the language, "When the communication is between entities in different time zones" in R1, Part 1.1.3, and replacing it with "Communication is to...", so that R1.1.3 states: "Communication is to include the time and time zone and indicate whether the time is daylight saving time or standard time." The proposed requirement for the communicator to determine if an entity is in a different time zone appears to be an unintended impact of the wording proposed in R1.1.3, and may prove to cause inefficiencies in complying with this requirement. Communicators SHOULD NOT NEED to determine whether or not an entity is in the same time zone as they are, but should simply state the time zone where they are calling from or the KNOWN element of their operations. Though a majority of communication will occur within the same time zones, System Operators and others affected by the requirement will be assured that the timing of ANY event will be KNOWN and never assumed.
Response: Thank you for your comments. If an entity does not know the time zone of the other entity it is communicating with, it is all the more imperative that both entities understand the time at which a certain action is to occur.		
Sacramento Municipal Utility District	No	See response in #10
Response: Thank you for your comments. Please see the response to Question 10		
Entergy Services	No	See our response to **Questions** 1, 2 and 4.
Response: Thank you for your comments. Please see the responses to Questions 1, 2 and 4.		

Organization	Yes or No	Question 5 Comment
City of Austin dba Austin Energy	No	There is not enough evidence to support the need for these types of specifics. Recommendation 26 encourages NERC "to ensure that all key parties ... receive timely and accurate information." COM-003-1 seems to interpret the recommendation by telling entities "how" to ensure information is accurate (e.g., use English, 24-hour clock, time zones, alpha-numeric identifiers, etc.). This standard reaches too far into the "how" instead of focusing on the "what," which is "timely and accurate information." Registered entities should decide the best methods to ensure accurate information for themselves (through three-part communication, use of the 24-hour clock or otherwise).
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.		
Essential Power, LLC	No	This provides minimal real-time benefits to the Operators, but only serves to make it easier to conduct an after the fact analysis. As such, this is an administrative requirement that should not be included in the Standard.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Salt River Project	No	In the real time environment we deal in current hour or next hour terms. Including the time zones in these conversations would further muddy the waters.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. This would provide the latitude to utilize relative time. In addition, this stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones, it does not apply.		
Manitoba Hydro	No	Manitoba Hydro agrees with R1.1.2 but disagrees with R1.1.3. R1.1.3 is unnecessary

Organization	Yes or No	Question 5 Comment
		and should be modified to "1.1.3 - When communication is between entities in different time zones, clarify the difference in time to ensure mutual understanding". Making R1.1.3 more generic gives operators the opportunity to determine the best method for them to ensure mutual understanding and clarify the time difference.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." If the protocols are not standardized, it eliminates the whole purpose behind the SAR.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the response to comments submitted by the SERC OC Standards Review Group.		
Xcel Energy	No	Is there any evidence of an actual event where there was confusion in the time zone, which led or contributed to an event? We are not aware of any. If the drafting team has no basis for mandating the use of a time zone and daylight/standard time reference, then we suggest this requirement be struck because we do not believe it would increase reliability. In fact, we think it may have the opposite effect of reducing reliability. **Response: The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES. While the SDT cannot immediately cite evidence of a time zone event we believe that time zone confusion can negatively impact BES operations.** If the SDT decides to retain the sub-requirement, please clarify which entity's time zone should be used. As written, this sub-requirement may create confusion for field personnel if they are to repeat the order back in their own time zone. We are concerned this will actually increase the likelihood of human error, and therefore

Organization	Yes or No	Question 5 Comment
		potentially reduce reliability. As a company that has field personnel in different time zones, company procedures dictate that CPT be used as that is the time zone the control center is in. Adding additional oral verification for time zones will promote human error. **Response: This stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones (e.g. the field personnel and System Operator are in the same functional entity, or the field personnel is not in a NERC functional entity), it does not apply.**
Response: Thank you for your comments. Please see the responses above.		
Public Utility District No. 1 of Snohomish County	No	SNPD takes issue with the specification of "English" only communications and the Alpha-Numeric identifiers. There is no precedence established for the use of English, Alpha-Numeric or the use of a 24-hour clock format that warrant a sever VSL and the associated penalties that could be imposed by the Compliance Enforcement Agency
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
MISO	No	The requirement to use a 24-hour clock for all times and to indicate time zone and Standard or Daylight Saving Time would result in the expenditure of significant time, resources and attention by System Operators for a minimal benefit to reliability. To date, the use of the 12-hour clock time has not been demonstrated as problematic or as having an adverse impact on reliability. The system time characteristics should inform the communication protocols regarding time. Finally, MISO notes that the use of the 24-hour clock time in communication is inconsistent with the 12-hour clock time currently utilized by most systems. Accordingly, this modification appears to place upon operators a requirement that is not justified and onerous. MISO respectfully requests that the SDT reconsider this requirement.

Organization	Yes or No	Question 5 Comment
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the stability of the BES. The SDT believes the 12 hour clock adds an element of confusion if am or pm is missing or misapplied. The SDT has developed a new approach to the standard that addresses your concern.		
City of Tallahassee	No	TAL is concerned with any unnecessary complication of communications. If more than one Time Zone is entailed in a communication, it is reasonable to require clarification of such. However, if both the sender and receiver observe the same prevailing time (e.g. Eastern Standard Time versus Eastern Daylight Time), it does not facilitate communication to require this clarification.
Response: Thank you for your comments. This stipulation only applies to communication "between functional entities in different time zones." If the communication is not between functional entities in different time zones, it does not apply.		
NextEra Energy, Inc	No	NextEra believes the current language in R 1.1.2 unnecessarily limits two other forms of clear communications on the implementation of an Operating Communication. Specifically, NextEra also believes it is appropriate to use "AM" or "PM," or "effective immediately" for the timing of implementing an Operating Communication, instead of the 24 hour clock. To add these items, NextEra requests that R 1.1.2 be revised to read as follows: Use one of the following: (a) the 24-hour clock; (b) "AM/PM" or (c) "effective immediately," when referring to the time an Operating Communication shall be implemented.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the stability of		

Organization	Yes or No	Question 5 Comment
the BES. The SDT believes the 12 hour clock adds an element of confusion if am or pm is missing or misapplied. The SDT has developed a new approach to the standard that addresses your concern.		
Alliant Energy	No	We believe that adding the mandate to use a 24 hr clock and list the time zone and Daylight Savings Time or not is going too far. We agree that it could be considered a best practice, but to require it and have a violation every time it is not used will result in multiple frivolous violations and clog the system with violations that have no impact on the reliability of the BES. With a zero-defect philosophy, which currently exists in the regulatory model, this is unworkable.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the response to the ISO/RTO Standards Review Committee comments.		
NV Energy	No	We believe that the requirement to specify "daylight" versus "standard" is unwarranted and may lead to confusion among the parties. All time is understood to be "prevailing time" without this clarification. Requiring such will only serve to confuse rather than clarify.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the stability of the BES. The SDT has developed a new approach to the standard that addresses your concern.		
Exelon Corporation and its affiliates	No	It's not clear that this addresses a reliability problem. We are not aware of instances where failure to specify the time zone and daylight saving time resulted in communication failures between entities leading to a condition that threatened an outage or a cascading outage. Further, specifically creating a requirement is overly prescriptive. If it is justified as important to reliability, then the standard could

Organization	Yes or No	Question 5 Comment
		suggest it as an attribute to be included in an entity developed protocol. See alternate standard language proposal in response to Q10.
Response: Thank you for your comments. The SDT believes the use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES. The SDT has developed a new approach to the standard that addresses your concern.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Response: Thank you for your comments. Please see the response to the APM comments.		
Oncor Electric Delivery Company LLC	No	Oncor takes the position that more productive approach would be to encourage the creation of innovative Best Practices; as opposed to a mandatory fixed procedure which would limit innovation. Oncor believes that requiring registered entities to have its own internal communication protocols would encourage the adaption of best practices that could be shared, modified and implemented as a "best fit" and could potentially enhance reliability as opposed to a mandated "procedural specific" requirement
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.		
Central Lincoln	No	We appreciate the change from requiring Central Time, but believe that 12 hour designations with AM or PM qualifiers to be just as clear as 24 hour clock time. In addition, we suggest that the DT or ST designation should only be required when deviating from the prevailing time in effect.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability		

Organization	Yes or No	Question 5 Comment
of the BES. The SDT believes the 12 hour clock adds an element of confusion if am or pm is missing or misapplied. The SDT has developed a new approach to the standard that addresses your concern..		
South Carolina Electric and Gas	No	
Colorado Springs Utilities	Yes	The use of "prevailing time" should be allowed, when appropriate, along with daylight and standard.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Imperial Irrigation District	Yes	
BC Hydro	Yes	
JEA	Yes	
Pepco Holdings Inc & Affiliates	Yes	
Hydro One Networks Inc.	Yes	
Florida Municipal Power Agency	Yes	
Western Electricity Coordinating Council	Yes	
Bonneville Power Administration	Yes	
GP Strategies	Yes	

Organization	Yes or No	Question 5 Comment
Arizona Public Service Company	Yes	
HHWP	Yes	
Lakeland Electric	Yes	
NIPSCO	Yes	
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
The United illuminating Company	Yes	
Ingleside Cogeneration LP	Yes	
Roger Zaklukiewicz Consulting	Yes	
ITC Holdings	Yes	
Utility Services, Inc.	Yes	

Organization	Yes or No	Question 5 Comment
City of Jacksonville Beach dba/Beaches Energy Services	Yes	
Utility System Efficiencies, InC.	Yes	
Portland General Electric - Transmission & Reliability Services	Yes	
Puget Sound Energy	Yes	
PPL Electric Utilities	Yes	
Ameren	Yes	
Idaho Power Company	Yes	
American Transmission Company, LLC	Yes	
Texas Reliability Entity	Yes	
Seminole Electric Cooperative	Yes	
U.S. Bureau of Reclamation	Yes	
California Independent System Operator	Yes	
Kansas City Power & Light	Yes	

Organization	Yes or No	Question 5 Comment
IESO		We have no preference one way or the other as long as the personnel understand each other. However, if the option to use daylight saving time or standard time is allowed (to be agreed by the personnel), it begs the question as to why the 24-hour clock hours must be followed, and why the 12-hour clock with am and pm specified is not allowed.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES. The SDT believes the 12 hour clock adds an element of confusion if am or pm is missing or misapplied. The SDT has developed a new approach to the standard that addresses your concern.		
SMUD		Mandating use of a 24-hour clock reference provides no improvement to reliability. This is an auditing function only, there is no reliability benefit to differentiate 0800 and 8 am.
Response: Thank you for your comments. The SDT believes use of the 24 hour clock and time zone references clarifies the time element of communications and by doing so enhances reliability by avoiding time mistakes that could compromise the reliability of the BES. The SDT believes the 12 hour clock adds an element of confusion if am or pm is missing or misapplied. The SDT has developed a new approach to the standard that addresses your concern.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the response to the comments submitted by the NPCC Regional Standards Committee (RSC).		
Public Service Enterprise Group		See #10.
Response: Thank you for your comments. Please see the response to Question #10.		

6. The SDT modified the requirement for use of three-part communications for Operating Communications to clarify that this is not applicable for Reliability Directives and split the single requirement into two requirements: one for the issuer (R2) and another for the receiver (R3). Do you agree with this modification?

Summary Consideration:

Many of the commenters who disagreed with the changes to Requirements R2 and R3 believed, while it was appropriate to separate sender from receiver in the standard, that there should only be one standard requiring 3 part communication. Many believed COM-002-3 should be the standard that requires three part communication and only during emergencies. Many also believe that COM-003-1 is too prescriptive. *The SDT believes three part communication should be used for all communications that are direct instructions to change the BES. The SDT believes three part communication is a proven protocol that improves clarity and reduces the risks to BES reliability by reducing miscommunication. Due to the change in approach, the SDT has removed the draft 2 clarification that this is not applicable for Reliability Directives.*

Organization	Yes or No	Question 6 Comment
Northeast Power Coordinating Council	No	There are a number of references appearing that state "excluding Reliability Directives". If Reliability Directive is going to be defined in a separate project (Project

Organization	Yes or No	Question 6 Comment
		2006-06), how will stakeholders understand what is really being excluded for the purposes of this Standard's scope? **Response: The SDT has developed a new approach to the standard that addresses your concern.** It also needs to be made clear when an action is a Reliability Directive. Will each entity be required to define what is to be included as a Reliability Directive? **Response: Yes, COM-002-3, R1 requires that the entity "shall identify the action as a Reliability Directive to the recipient. "** With the definition of Operating Communication, three-part communications is expanded to include communications beyond directives, communications that might not warrant governance by this Standard. **Response: As defined in draft 3 of COM-003-1, an Operating Instruction is a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** The proposed exception (specifically Reliability Directives used during emergencies) does not support the reason the SAR was proposed--to improve protocols during emergencies. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SAR is clear that normal operating state communications as well as emergency state communications are to be addressed in the standard.** The term Operating Communications is not significantly different from the term Reliability Directives (see comments to Q1). Using the term Reliability Directives to support the requirements for 3-part communication can avoid

Organization	Yes or No	Question 6 Comment
		(a) any confusion with the requirement in COM-002-3, **Response: This was a concern of the SDT also. A webinar was conducted on June 7, 2012 and was posted to NERC.com to clarify the relationship between the two standards.** **http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf** (b) potential double jeopardy of violating both COM-002 and COM-003, and (c) the need to exercise 3-part communication for routine operating instructions. **Response: See our remarks below.** Suggest consider removing the term Operating Communications. Are Requirements R2 and R3 needed if Reliability Directives already cover non-emergency conditions (instructions/actions that are needed to address potential Adverse Reliability Impact)? The requirement to exercise three-part communication to handle Reliability Directives is thus duly addressed in COM-002-3. It hasn't been shown that three-part communication is necessary for routine operating instructions. Realistically the definition of Operating Communications covers all communications. Only Reliability Directives should require three-part communications, and should be enforceable if a miscommunication results in an error on the BES. **Response: The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES communications to clarify content in order to prevent mistakes that could negatively impact the BES.**

Organization	Yes or No	Question 6 Comment
Response: Thank you for your comments. Please see the responses above.		
ACES Power Marketing Standards Collaborators	No	1. We do not agree that excluding Reliability Directives is a good idea. We would prefer to see COM-003-1 and COM-002-3 combined and have the requirements only apply to Reliability Directives. If these protocols should be used for any type of communication, we believe they should be used for Reliability Directives as we've stated in our comments in Question 1. The definition of a Reliability Directive as proposed in COM-002-3 is "where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact." There is no type of communication more important than a Reliability Directive, therefore, the protocols outlined in R2 and R3 of COM-003-1 should be applicable to them. During the webinar on June 7, 2012, it was said that the only distinctions between COM-002-3 and COM-003-1 are the VRF/VSL levels and that a Reliability Directive must be stated as such when issued. There is no reason both standards can't be combined into a single standard and simply split out the VRF/VSL levels for Reliability Directives while keeping the requirement where the RC, TOP and BA shall identify the action as a Reliability Directive when one is issued. We suggest that the SDTs consider combining their efforts in this manner. **Response: The SDT has developed a new approach to the standard that may address your concern.** 2. However, if both projects are to continue along separate paths, we'd like to see the requirements in both mirror one another so entities aren't wondering what the distinction is between the two descriptions of three-part communication. COM-003-1 is more detailed in outlining the steps that should be taken when using three-part communication than COM-002-3. COM-002-3 R2 states that the recipient "shall repeat, restate, rephrase or recapitulate..." COM-003-1 doesn't use these words. It simply states that the receiver shall "repeat" or "request the issuer reissue..." **Response: The SDT has changed the relevant language in COM-003-1, draft 3 to the**

Organization	Yes or No	Question 6 Comment
		same language as COM-002-3, R2 and R3. 3. We do agree with splitting the single requirement into two requirements: one for the issuer and one for the receiver. However, we suggest the SDT develop a flow chart that demonstrates the communication paths and the loop flow of the steps to further clarify what needs to be done and when. For example, in R2 Part 2.2, after an Operating Communication is reissued at the request of the receiver (bullet 3), the receiver should repeat the information to make sure they received it correctly (R3 bullet 1) and the issuer should confirm the receiver's response (Part 2.2 bullet 1). As the parts are written currently, the loop flow of the steps isn't clear. It may seem intuitive but a literal reading doesn't capture the loop flow as intended. R3 even has a gap in that the recipient can choose to repeat the Operating Communication or they can request it be reissued. Thus, if they request it is reissued, they don't have to repeat it back. **Response: The SDT has changed the relevant language in COM-003-1, draft 3 to the same language as COM-002-3, R2 and R3 to avoid confusion.** 4. In R3, we suggest adding the words, "before taking action" to the end of the first bullet to further emphasize the importance of receiving confirmation from the issuer. If action is taken prior to confirmation, a critical mistake could be made if the instruction was heard and repeated back incorrectly. **Response: The SDT believes this suggestion has merit, but has changed language in COM-003-1, draft 3 to the same language as COM-002-3, R2 and R3.**
Response: Thank you for your comments. Please see the remarks above.		
Midwest Reliability Organization NERC Standards Review Forum	No	The MRO NSRF recommends the following comments for consideration by the SDT: 1. The NSRF does not understand how three part communication is not applicable to Reliability Directives, when COM-002-3 states that three part communication shall be used when issuing a Reliability Directive. This adds confusion and is further evidence

Organization	Yes or No	Question 6 Comment
		that there should only be one communication standard. **Response: Three part communication is applicable to Reliability Directives. If you are referring to the exclusion of Reliability Directives from COM-003-1, R2 and R3, that was incorporated to address double jeopardy issues. When an entity declares a Reliability Directive under COM-002-3, R1; requirements COM-002-3, R2 and R3 apply. The SDT has developed a new approach to the standard that addresses your concern.** 2. How are group calls going address three part communication? Many entities use blast calls to forward system wide information in a very short period of time. The intent of a blast call is to speed up the dispersing of information from one to many. Please clarify. **Response: Both Standard drafts did not address "blast calls." The SDT has addressed "blast" or "all" calls into COM-003-1, draft 3.** 3. Currently there are 1681 entities (BA, TOP, RC, GOP, and DP) registered with NERC. Assume that each entity has one phone call every 10 minutes in a 12 hour day shift and half during a night shift (being conservative). A single entity will have 72 per day on an average. Note that both parties (sender and receiver) will need to use COM-003 requirements. There will be about 120,000 calls per day within NERC where COM-003 will need to be applied. That equates to 44,176,680 calls per year that require COM-003 requirements to be used. While all these communications will not necessarily be an Operating Communication, but the NSRF believes that at least 75% will be Operating Communications. This alone will slow down the reliability of our system. Is this the intent of the SDT? **Response: The SDT has developed a new approach to the standard that addresses your concern.** Please consider all industry comments and upon development of "consideration of comments", run the number of instances where COM-003 will need to be applied.

Organization	Yes or No	Question 6 Comment
		The question should be, does this hamper our system reliability or not. Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.
Response: Thank you for your comments. Please see the remarks above.		
Duke Energy	No	We don't believe that 3-part communications are needed for ALL routine communications, and that R2 and R3 should be deleted. Also, there should only be one standard for communications protocols. The communications efforts in Projects 2007-02, 2006-06 and 2007-03 should be combined.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Dominion	No	The current version of this standard expands the use of three-part communication to all Operating Communications, not just Reliability Directives as specified in draft standard COM-002-3, Project 2006-06. Also, given the definition of Operating Communication (i.e., communication of instruction to change...an Element or Facility...) and the use of "two-party, person-to-person" in the Requirements, communications between two members of the same organization (e.g., two Generator Operators, two Transmission Operators) would be subject to this standard.

Organization	Yes or No	Question 6 Comment
		This seems impractical, requiring organizations to document, as evidence, internal communications. Dominion suggests the language be clarified to eliminate this issue. **Response: Requirement R1 in draft 3 of COM-003-1 only applies to Operating Instructions between functional entities, not within a functional entity.** The requirement as written could also be interpreted to mean that three-part communications is not necessary for communicating Reliability Directives. If the protocol for Reliability Directives must be covered by a different standard, then that standard should be referenced in this requirement in order to clarify the intent of the exclusion and remove the implication that three-part communications do not apply to Reliability Directives. COM-003-1 R2 could be rewritten to add clarification for Reliability Directives only as "Each Reliability Coordinator, Transmission Operator and Balancing Authority that issues an oral, two-party, person-to-person Operating Communication, excluding Reliability Directive (as referenced in COM-002-3 R2 and R3) shall:" **Response: Reliability Directive from COM-002-3 was excluded from that draft of COM-003-1 to avoid double jeopardy. If we specifically referenced COM-002-3, R2 and R3 in the text of COM-003-1 and COM-002-3 was altered or eliminated in the future COM-003-1 would have an erroneous or missing reference. The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
JEA	No	The two standards (COM002&COM003) should be merged into one standard. Three part communications should be considered a best practice and only required during emergency directives.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols		

Organization	Yes or No	Question 6 Comment
concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Associated Electric Cooperative JRO00088	No	AECI appreciates the SDT's desire to add flexibility and yet clarity for what is expected, but we absolutely disagree with a split into two requirements. Such a split unnecessarily increases the industry's risk, of a single three-part communication failure, being assessed in violation of two separate requirements, yet with no added value to BES reliability. Given today's environment, PVs will be written although the intended content was accurately conveyed and the system properly operated, should these requirements exist. So AECI agrees with SERC OC STANDARDS REVIEW GROUP's assessment that R2 and R3 should be entirely removed.
Response: The SDT appreciates your comments. The SDT believes that having the COM-003-1 three-part communication requirements separate: one for the sender and one for the receiver, more appropriately separates the unique actions and accountabilities for each. This is consistent with the three-part structure and language in COM-002-3. This separation also prevents double jeopardy and prevents the sender and receiver from being cited based on the other's action or inaction. The SDT has developed a new approach to the standard that addresses your concern.		
LG&E and KU Services	No	Three part communications should not be required for routine operating communications. See the definition of Reliability Directive in COM-002, which addresses reliability issues. We suggest that R2 and R3 be eliminated, since neither one will increase reliability.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Pepco Holdings Inc & Affiliates	No	This modification for use of 3 part communications for Operating Communications is

Organization	Yes or No	Question 6 Comment
		confusing and should not be required for Normal conditions, non reliability communications.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Overly prescriptive. NERC should deal with risk and performance.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO/RTO Standards Review Committee	No	The SRC agrees that if there is a requirement for 3 part communications as proposed, then the proposed exception is needed to avoid double jeopardy, and the differentiation between issuer and receiver is needed. The SRC however does not agree with the need for the requirement itself. By introducing the proposed exception (i.e. of Reliability Directives used during emergencies) the SDT has invalidated the very reason that its SAR was proposed (i.e. to improve protocols DURING emergencies). **Response: Reliability Directive from COM-002-3 was excluded from that draft of COM-003-1 to avoid double jeopardy. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SDT believes that reliability risk exists when routine changes to the configuration of the BES are ordered. Three part communication provides additional clarity to communicating parties that helps**

Organization	Yes or No	Question 6 Comment
		prevent misunderstandings that could negatively impact the BES. The SRC disagrees with using the term Operating Communications because the term is not significantly different from the term Reliability Directives (see our comments under Q1). Using the term Reliability Directives to support the requirements for 3-part communication can avoid (a) any confusion with the requirement in COM-002-3, **Response: This was a concern of the SDT also. A webinar was conducted on June 7, 2012 and was posted to NERC.com to clarify the relationship between the two standards.** **http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf** (b) potential double jeopardy of violating both COM-002 and COM-003, and **Response: See the remarks above** (c) the need to exercise 3-part communication for routine operating instructions. **Response: See the remarks below.** If the SDT's intent is to require 3-part communication for any and all operating instructions (as the proposed term suggests), then this intent will result in unnecessary 3-part communication burdens for simple actions such as requesting the removal of a line, or switching, or raising generation, or even to "maintain" its current state. We suggest the SDT remove the term Operating Communications. With respect to Requirements R2 and R3, we question the need for having these requirements if Reliability Directives already cover non-emergency conditions (instructions/actions that are needed to address potential Adverse Reliability Impact). The requirement to exercise 3-part communication to handle Reliability Directives is thus duly addressed in COM-002-3. Other than emergency conditions and potential Adverse Reliability Impact conditions, we do not see, nor has the SDT proven a need to exercise 3-part

Organization	Yes or No	Question 6 Comment
		communication for routine operating instructions. **Response: The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. The SDT believes that reliability risk exists when routine changes to the configuration of the BES are ordered. The Communication protocols must be applicable to all BES communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.**
Response: Thank you for your comments. Please see the responses above.		
City Water Light and Power	No	Three part communications should not be required for routine operating communications. See the definition of Reliability Directive in COM-002, which addresses reliability issues.
Response: Thank you for your comments. The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. **During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.**		
Hydro One Networks Inc.	No	The term Operating Communications is not significantly different from the term Reliability Directives. Using the term Reliability Directives to support the

Organization	Yes or No	Question 6 Comment
		requirements for 3-part communication can avoid (a) any confusion with the requirement in COM-002-3, **Response: This was a concern of the SDT also. A webinar was conducted on June 7, 2012 and was posted to NERC.com to clarify the relationship between the two standards.** **http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf** (b) potential double jeopardy of violating both COM-002 and COM-003, and **Response: See the remarks above** (c) the need to exercise 3-part communication for routine operating instructions. **Response: See the remarks below.** Realistically, the definition of Operating Communications covers all communications. We believe that only Reliability Directives should require 3-part communications, and should be enforceable if a miscommunication results in an error on the BES. **Response: The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.**
Response: Thank you for your comments. Please see the response above.		

Organization	Yes or No	Question 6 Comment
SPP Standards Review Group	No	The format of the requirement is an improvement. However, we have concerns about the standard being overly prescriptive. All actions '...to change or maintain the state, status, output or input of an Element or Facility...' of the BES do not have a significant impact on the reliability of the BES. The draft standard mandates that they do. Applying 3-part communications to all Operating Communications places an overly burdensome task on the industry in monitoring and tracking compliance. Additionally, a zero-tolerance interpretation of this requirement places an unjustified risk on the industry without making an appreciable improvement in BES reliability.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
SERC OC Standards Review Group	No	Three part communications should not be required for routine operating communications. See the definition of Reliability Directive in COM-002, which addresses reliability issues. We suggest that R2 and R3 should be eliminated, since neither one will increase reliability.
Response: Thank you for your comments. The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
NERC Operating Committee	No	See Response 10 - the OC sees these differing concepts for communications as overly prescriptive and complex.
Response: Thank you for your comments. Please refer to the response to your comments in Question 10.		

Organization	Yes or No	Question 6 Comment
Southern Company	No	Southern disagrees that three part communications should be required for routine operating communications. A more appropriate definition of Reliability Directive has been included in Project 2006-06 (Reliability Coordination) for COM-002-3. As such, the definition of Reliability Directive developed in Project 2006-06 should be used here as part of this Project 2007-02. Further, this capitalized term should have one definition and should not be defined differently in different standards. Otherwise, there will be ambiguity and unnecessary confusion. Southern suggests that R2 and R3 should be eliminated, since neither one will increase reliability.
Response: Thank you for your comments. The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
The Dayton Power and Light Company	No	This standard specifically excludes "Reliability Directives" which is a term that does not currently exist in the list of definitions, rather it is proposed in a separate standard (COM-002-3) which is currently in the approval process. Not sure how you can reference a term from a pending standard.
Response: Thank you for your comments. We wanted to acknowledge the term because it has an impact on the content and intent of COM-003-1. The two SDTs have been coordinating because of the linkages between the two standards' requirements.		
Lakeland Electric	No	I do not understand why Reliability Directives would be excluded! Reliability Directives are capitalized in the box on the Development Roadmap and in this question but I cannot find the term in the February 8, 2012 NERC Glossary. So where is Reliability Directives defined? I am concerned that the exclusion will cause problems especially if the clarifying box is omitted from the final standard. The split is

Organization	Yes or No	Question 6 Comment
		OK.
Response: Thank you for your comments. Both standards, COM-003-1 and COM-002-3 are still under development so the terms in each are not yet effective. The reason Reliability Directives are excluded from COM-003-1, R2 and R3 is to prevent double jeopardy with requirements COM-002-3, R2 and R3 during Emergencies or Adverse Reliability Impacts. Both standards are going through ballot and industry should be afforded clarification of the relationship between two closely related concepts.		
CenterPoint Energy Houston Electric, LLC.	No	Question 6 Comments: The proposed language in this requirement can be omitted and incorporated in COM-002-2 R2, where language has already been written and is currently in force regarding 3-part communications. The industry is well aware and versed in the method of communicating using 3-part communications. The elaboration of performing a three part communication is a "how to" and not necessary and can be omitted altogether. The term "3-Part Communication" could be defined and added to the NERC Glossary to suffice the elaboration of the definition proposed in this requirement. The idea of requiring all communications (Operating Communications) to be made as 3-part communications is not practical and should be left up to the communicating entities. Requiring ongoing administration of "3-part" communications will impede rather than improve timely communications consequently affecting the reliability of the BES.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
IESO	No	The IESO disagrees with using the term Operating Communications as it is not much different from the term Reliability Directives (see our comments under Q1). Using the term Reliability Directives to support the requirements for 3-part communication can avoid

Organization	Yes or No	Question 6 Comment
		(a) any confusion with the requirement in COM-002-3, **Response: This was a concern of the SDT also. A webinar was conducted on June 7, 2012 and was posted to NERC.com to clarify the relationship between the two standards.** **http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf** (b) potential double jeopardy of violating both COM-002 and COM-003, and **Response: See the remarks above** (c) The need to exercise 3-part communication for routine operating instructions. **Response: See the remarks below.** However, if the SDT's intent is to require 3-part communication for any and all operating instructions (as the proposed term suggest), then this intent will result in unnecessary 3-part communication burdens for simple actions such as when requests for the removal of a line, or switching, or generation output changes are issued. We suggest the SDT to remove the term Operating Communications. With respect to Requirements R2 and R3, we question the need for having these requirements if Reliability Directives also cover non-emergency conditions (instructions/actions that are needed to address potential Adverse Reliability Impact). The requirement to exercise 3-part communication to handle Reliability Directives is thus duly addressed in COM-002-3. Other than emergency conditions and potential Adverse Reliability Impact conditions, we do not see a need to exercise 3-part communication for routine operating instructions. **Response: The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-**

Organization	Yes or No	Question 6 Comment
		002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.
Response: Thank you for your comments. Please see the response to your comments above.		
SMUD	No	Requirements R2 and R3 are over prescriptive and included as a business practice in the entities' training program.
Response: Thank you for your comments. Communication protocols must be applicable to all Operating Instructions to clarify content in order to avoid mistakes that could negatively impact the BES. The SDT does not see three part communication as a business practice.		
Liberty Electric Power LLC	No	Three part communication is a best business practice. Three part communication should be required during a declared Emergency. But there is no reason to create a standard, and the massive monitoring requirements and records obligations which go along with a standard, to cover business communications.
Response: Thank you for your comments. Communication protocols must be applicable to all Operating Instructions to clarify content in order to avoid mistakes that could negatively impact the BES. The SDT does not see three part communication as a business practice. The SDT has developed a new approach to the standard that addresses your concern.		
San Diego Gas & Electric	No	The boxed note in the draft of COM-003-1 states that "Reliability Directives are a type of Operating Communications..." and the process described in R2 and R3 is 3 way communications. Why is the SDT segregating this as if it is a "separate process" that needs to be followed by operating personnel? The two do not appear to be separate communication processes. SDG&E recommends removing the word, "excluding," and

Organization	Yes or No	Question 6 Comment
		replacing it with the word “including,” so that R2 states: ”Each Reliability Coordinator, Transmission Operator and Balancing Authority that issues an oral, two-party, person-to-person Operating Communication, including Reliability Directives shall: **Response: The exclusion was an effort to prevent double jeopardy from the applicability of two standards (COM-003-1 and COM-002-3).** ”*SDG&E also recommends that the following language be added in a bullet to R2.2:* o Request that the receiver repeat the Operating Communication if the receiver does not issue a response (not necessarily verbatim). R3 notes that the Registered Entity who receives the Operating Communication needs to repeat the Operating Communication provided. In order to promote compliance and proper communications, this bullet point should be added. **Response: The OPCPSDT has changed language in COM-003-1, draft 3 to the same language as COM-002-3, R2 and R3 to address industry comments regarding the dissimilar language in draft 2.**
Response: Thank you for your comments. Please see the response to your comments above.		
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	No	Three part communication should not be required for routine operating communications.
Response: Thank you for your comments. The OPCPSDT respectfully disagrees. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited		

Organization	Yes or No	Question 6 Comment
development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Indiana Municipal Power Agency	No	IMPA agrees with the splitting of a single requirement into two requirements. However, the blue box on page 2 of 10 makes the statement "Reliability Directives are a type of Operating Communications, to the extent they change or maintain the state, status output, or input of an Element or Facility of the Bulk Electric System" which seems to include Reliability Directives by simply referencing Operating Communications in each requirement (R2 and R3). By excluding Reliability Directives, the requirement is now very confusing and can be interpreted two different ways. Requirement 2 does not include the Generator Operator as a potential entity that could issue an Operating Communication. Within its organization or company, a Generator Operator could issue an Operating Communication, such as one location calling and telling another location to start its generating unit. IMPA believes the Generator Operator should be included in R2.
Response: The SDT appreciates your comments. This was a concern of the SDT also. A webinar was conducted on June 7, 2012 and was posted to NERC.com to clarify the relationship between the two standards. **http://www.nerc.com/docs/standards/dt/Webinar_Slides_Project_2007-02_June_7_2012_final.pdf** **Based on the revised definition of Operating Instruction, a GOP can only be a receiver of an Operating Instruction.**		
Roger Zaklukiewicz Consulting	No	See previous comment to Question 1.
Response: Thank you for your comments.		
Sacramento Municipal Utility District	No	See response in #10
Response: Thank you for your comments.		

Organization	Yes or No	Question 6 Comment
Entergy Services	No	Three part communications should not be required for routine operating communications. See the definition of Reliability Directive in COM-002, which addresses the actual reliability issues associated with communications. This team once had coordinated with the RC SDT (Project 2006-06), and the RTO SDT (Project 2007-03), with a different approach for routine communications resulting from a meeting between the chairs of the three SDTs on November 17, 2009 in the SERC offices in Charlotte, NC. Quoting from the meeting setup email: "On the basis that the SC members are the key drivers of the joint effort to finalize "Directives and Three-Part Communications", [...] and [...] indicated a preference for Tuesday 1-3PM ET November 17. Some members of the RTOSDT and RCSDT will be attending the meeting in person...." At that meeting it was agreed that RC SDT (Project 2006-06) would develop the definition for "Reliability Directives", and require 3-way communication for Reliability Directives by the RC. Conversely, it was decided that OPCP (Project 2007-02) would handle ordinary communications, but would not require 3-way communications for routine communications. RTO SDT (Project 2007-03) only agreed to this course of action (in effect, backing out of writing ordinary communications standards as part of Project 2007-03) because OPCP SDT (Project 2007-02) had committed to this approach during that meeting. It should be noted that "COM-001-1 Telecommunications" and "COM-002-2 Communications and Coordination" are included in the SAR for RTO SDT (Project 2007-02) and its coordination with RC SDT and OPCP SDT was conditioned upon RC SDT and OPCP SDT following the course of action agreed-to in the November 17, 2009 Charlotte, NC meeting. OPCD SDT (Project 2007-02) should honor the intent of that meeting in Charlotte and remove R2 and R3 from this standard. We suggest that R2 and R3 should be eliminated, since neither one will result in increased reliability.
Response: Thank you for your comments. The OPCPSDT is aware of the meeting in Charlotte in 2009. The OPCPSDT respectfully disagrees with your summarization of the meeting. The members of the OPCP SDT that were in attendance at the Charlotte meeting referenced above, while agreeing that the RCSDT was going to define "Reliability Directive," have no record that there was an agreement to eliminate three part communication from the development of COM-003-1. During its discussion of the		

Organization	Yes or No	Question 6 Comment
approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
City of Austin dba Austin Energy	No	It makes sense to separate R2 from R3; however, AE respectfully objects to mandating three-part communication for normal operating communications. The fact that most registered entities already use three-part communications for normal operating communications makes it a best practice; it does not mean a NERC Reliability Standard should require it.
Response: Thank you for your comments. The OPCPSDT respectfully disagrees. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Essential Power, LLC	No	Although I agree with the requirement making the receiver responsible for repeating the message, this should be included in COM-002. Again, having two separate Standards on this topic is redundant and unnecessary.
Response: Thank you for your comments. The SDT respectfully disagrees that COM-002 and COM-003-1 are redundant.		
Salt River Project	No	This combination for R2 and R3 would open some vertical entities to be being fined multiple times for the same communication.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		

Organization	Yes or No	Question 6 Comment
Wisconsin Electric dba We Energies	No	This is too similar to but different than what is required for a directive. Since 99.9% or more communications will not be directives, we will be conditioning operators to use this for directives also. **Response: The applicability of COM-003-1 is for instructions that change the configuration of the BES, not for casual conversation or for discussions of potential options among entities.** If I reissue an Operating communication because the other party does not respond soon enough for me for whatever reason, the other party has violated R3 of this standard. R3 in general would not apply to a DP except for loads connected at transmission voltages. **Response: The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
PPL Electric Utilities	No	Since Reliability Directives are a subset of Operating Communications, if this was done to lower the VRF for Operating Communications that are not Reliability Directives, this modification makes sense. However, having two stds/rqmts address 3-part communication (even if not in same words) is not as clear as it could be. One standard requiring 3-part comm for Real-time operating communications which includes Reliability Directives would be more straight-forward, with a higher VRF for Reliability Directives.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope for communications than that for Project 2006-06.		

Organization	Yes or No	Question 6 Comment
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the response to comments submitted by the SERC OC Standards Review Group.		
Ameren	No	From our perspective, use of such a split for all Operating Communications (not directives) would add to the confusion.
Response: Thank you for your comments. The SDT believes that a separate requirement for the sender and receiver is the only reasonable manner in which to capture applicability. The SDT is using the language of COM-002-3, R2 and R3 in draft 3 of COM 003-1.		
Idaho Power Company	No	I'm not sure I understand the separation of Directives and these Operating Instructions. They seem very similar and could be incorporated into the same standard. The split between Issuer and Receiver seems to add some clarity.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope for communications than that for Project 2006-06.		
American Transmission Company, LLC	No	The prescriptive requirements currently in R2, and R3, tell how, not what, an entity is obligated to do. To address the fact that most Operating entities engage in "Operating Communications", one requirement(combining R2 and R3) is all that is needed, and ATC recommends that Requirement 2 be restated as follows: R2 Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider that issues, or receives an Operating Communication, excluding Reliability Directives, shall use Three-part Communications.

Organization	Yes or No	Question 6 Comment
		Response: The SDT believes that a separate requirement for the sender and receiver is the only reasonable manner in which to capture applicability and to avoid possible violations that are caused by one entity to be awarded to the other. Furthermore, ATC recommends that the SDT reconsider adding the "three-part communication" as a defined term properly vetted through the appropriate process, and added to the NERC Glossary of Terms. The definition as previously noted in Draft #1 is below. Three-part Communication - A Communications Protocol where information is verbally stated by a party initiating a communication, the information is repeated back correctly 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 SDT proposed that in draft 1 and was heavily criticized by stakeholders. It was eliminated in draft 2 in response to those comments.**
Response: Thank you for your comments. Please see the comments above.		
MISO	No	Given the broad applicability of R2 and R3 as a result of the definition of Operating Communication, the split of requirements may result in entities being assessed violations for multiple requirements as a result of 1 (one) communication or operating event. While MISO appreciates the clarity in roles and responsibilities the split provides, it is concerned about the future application and feasibility thereof. Please refer to MISO's comments regarding the definition of Operating Communication for more detail on the likely adverse impact to reliability that will result from the diversion of time and resources the split will require. MISO cannot, at this time, support the addition of those requirements.
Response: Thank you for your comments. The SDT has developed a different approach to the standard that addresses your concern.		

Organization	Yes or No	Question 6 Comment
NextEra Energy, Inc	No	NextEra does not agree with R2 or R3, as drafted. COM-002-2, which applies to three-way communications for Reliability Directives, is not mirrored by the proposed COM-003-1, thus creating two different three-way communication protocols. This disconnect between the two three-way communication Standards is counterproductive for System Operators, who we want focused on the reliable operation of the system, rather than memorizing multiple three-way communication protocols. As a member of the Standards Committee, NextEra has expressed its concern that Standard Drafting Teams (SDTs) are not sufficiently communicating and coordinating in a manner that promotes clear and effective Reliability Standards. It appears that the COM-002 and COM-003 SDTs have not coordinated their efforts, because COM-003-1 proposes to implement a more restrictive three-way communication protocol via R1, R2 and R3 than proposed for COM-002-3. NextEra believes that the easiest way to make COM-003-1 consistent with COM-002-3 is to implement the same three-part communication language contained in COM-002-3. Specifically, COM-003-1 R1, R2 and R3 would be replaced with the following language that mirrors COM-002-3: "R1. When a Reliability Coordinator, Transmission Operator or Balancing Authority requires actions to be executed as an Operating Communication, the Reliability Coordinator, Transmission Operator or Balancing Authority shall identify the action as an Operating Communication to the recipient. R2. Each Balancing Authority, Transmission Operator, Generator Operator, and Distribution Provider that is the recipient of an Operating Communication shall repeat, restate, rephrase or recapitulate the Reliability Directive. R3. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues an Operating Communication shall either: o Confirm that the response from the recipient of the Operating Communication (in accordance with Requirement R2) was accurate, or

Organization	Yes or No	Question 6 Comment
		o Reissue the Operating Communication to resolve any misunderstandings." Although NextEra prefers that the SDT use the above language, in the event the SDT chooses not to mirror COM-002-3, NextEra requests the SDT implement the proposed modifications to R1 and R2 as set forth in response to questions 5, 7 and 10.
Response: Thank you for your comments. The OPCPSDT agrees and has changed the language in COM-003-1 in draft 3 to be the same language as stated in COM-002-3, R2 and R3.		
Alliant Energy	No	We do not believe there is a need for COM-003 at all and recommend it be deleted. COM-002 covers Reliability Directives very well. For three-part communications in a non-Reliability Directive situation we believe it should be considered an industry best-practice. By requiring three-part communications as dictated in this standard, there will be requests for interpretations, CAN's produced for the CEA, and numerous violations written for what the industry considers a non-problem. In our opinion this standards goes against the concept of risk-based standard making and reinforces a zero-defect operation, which opposite of how the industry works.
Response: Thank you for your comments. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the response to the ISO/RTO Standards Review Committee comments.		
Seminole Electric Cooperative	No	Splitting the requirement is okay but the exclusion of reliability directives and the

Organization	Yes or No	Question 6 Comment
		structure of R2 and R3 to take one of the following actions based on the other party's action is ambiguous.
Response: Thank you for your comments. The exclusion of Reliability Directives from COM-003-1 was incorporated to preclude double jeopardy.		
NV Energy	No	I have not seen the parallel requirement that pertains to Reliability Directives, but I can imagine no reason why the communication protocols for Operating Communications would ever differ from those for Reliability Directives. Making the distinction here in this requirement adds unnecessary confusion.
Response: Thank you for your comments. The OPCPSDT agrees and has changed the language in COM-003-1 in draft 3 to be the same language as stated in COM-002-3, R2 and R3.		
Exelon Corporation and its affiliates	No	Please see response to Q10.
Response: Thank you for your comments. Please see the response to Question 10.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Response Thank you for your comments. Please see the response to the comments provided by APM.		
Oncor Electric Delivery Company LLC	No	Oncor believes that the application of three part communication as prescribed in the proposed reliability standard COM-002-3 is appropriate as prescribed for emergencies. Any additional requirements, including those for routine operations go well beyond what is called for in the 2003 Blackout Report which focused on emergencies. As such, Oncor also takes the position that the term Operating Communications should also be removed.

Organization	Yes or No	Question 6 Comment
Response: Thank you for your comments. The term "Reliability Directive" in the current draft of COM-002-3 covers a very narrow band of low frequency, high impact events. Communication protocols must be applicable to all BES Operating Communications to clarify content in order to avoid mistakes that could negatively impact the BES. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.		
Kansas City Power & Light	No	Do we lose the "speciality" of only using 3-part communication during times of issuing directives/emergencies?
Response: Thank you for your comments. The SDT believes we have not lost a unique feature of emergency communication by requiring three part communication for routine operations. The SDT believes we are creating a higher level of communication discipline designed to avoid miscommunication and prevent mistakes that would harm the stability of the BES.		
South Carolina Electric and Gas	No	
Ingleside Cogeneration LP	Yes	Ingleside Cogeneration LP agrees that Reliability Directives must be handled in a more prescriptive manner. Since Reliability Directives are also an important piece of Project 2006-06, it makes sense to move the developmental responsibility to them - and avoid unnecessary overlap between the two projects.
Response: Thank you for your comments.		
Manitoba Hydro	Yes	Manitoba Hydro agrees with splitting the single requirement into (R2) issuer and (R3) receiver, but as stated in our response, we do not agree with the term "Operating Communications".
Response: Thank you for your comments. Please see the response to your comments to Question 1.		

Organization	Yes or No	Question 6 Comment
City of Tallahassee	Yes	TAL agrees with this split into two requirements for the protection of each party in the event of non-compliance by the opposing party. TAL seeks clarification on the application of this requirement in an instance where a receiver never acknowledges the issuer.
Response: Thank you for your comments. The OPCPSDT would expect the issuer to continue to establish communication with the receiver through multiple attempts and multiple media. If voice communication is not achieved the issuer must assume lost communication and contemplate other alternatives.		
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None.
Imperial Irrigation District	Yes	
Detroit Edison	Yes	
BC Hydro	Yes	
Florida Municipal Power Agency	Yes	
Bonneville Power Administration	Yes	
GP Strategies	Yes	
Arizona Public Service Company	Yes	

Organization	Yes or No	Question 6 Comment
HHWP	Yes	
Flathead Electric Cooperative, Inc.	Yes	
NIPSCO	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
Clark Public Utilities	Yes	
The United illuminating Company	Yes	
Utility Services, Inc.	Yes	
Colorado Springs Utilities	Yes	
Utility System Efficiencies, InC.	Yes	
Portland General Electric - Transmission & Reliability Services	Yes	
Puget Sound Energy	Yes	
Xcel Energy	Yes	

Organization	Yes or No	Question 6 Comment
City of Vero Beach	Yes	
Texas Relibility Entity	Yes	
U.S. Bureau of Reclamation	Yes	
Central Lincoln	Yes	but please see Q 10.
Response: Thank you for your comments. Please see the response to your comments in Question 10.		
Western Electricity Coordinating Council		Is the exclusion of Reliability Directives because they are covered under COM-002? Since all COM-002 covers is Reliability Directives, why not include it in this standard? Operators should use the same protocol for all Operating Communications. We agree with the split for the issuer and the receiver.
Response: Thank you for your comments. Yes, the SDT wanted to avoid a double jeopardy situation.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the response to the comments submitted by the NPCC Regional Standards Committee (RSC).		
Public Service Enterprise Group		See #10.
Response: Thank you for your comments. Please see the response to the comments in Question 10.		

7. The SDT modified the requirement for use of the NATO phonetic alphabet to allow use of another correct alpha numeric clarifier. (See Requirement R1, Part 1.2.) Do you agree with this modification?

Summary Consideration:

Commenters were confused over the meaning of "accurate" alpha-numeric clarifier. The SDT stated these alpha-numeric clarifiers were offered as alternatives to the NATO alphabet required in draft 1. *The SDT noted other commenters who felt the NATO specification was too restrictive but felt alpha-numeric clarifiers were vague. The SDT will sustain the requirement for the use of alpha-numeric clarifier but has removed the word "accurate."*

Commenters who disagreed felt this requirement is still overly prescriptive and did not improve reliability. *The SDT has developed an alternate approach to COM-003-1 that will allow an entity to establish internal processes to identify, assess, and correct communication deficiencies.*

Organization	Yes or No	Question 7 Comment
Northeast Power Coordinating Council	No	What determines whether a clarifier used is an "accurate alpha-numeric clarifier"? What dictates non-compliance? This is a procedural issue. The Standard should require the Functional Entities to have a communications protocol that could include this, but it should not be a standard on personnel. Complexity is being added to communications, not improvement. There are equipment designations that are commonly used and understood, and to force the use of clarifiers will disrupt operating communications.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ACES Power Marketing Standards Collaborators	No	1. First the requirement uses the word "accurate" instead of "correct" as stated in this question. 2. What is meant by the term "accurate alpha-numeric clarifiers?" Can someone make up their own alpha-numeric clarifiers in the heat of the moment and expect the other party to mentally "transition" and understand what they mean? Or does it

Organization	Yes or No	Question 7 Comment
		have to be another established and recognized alpha-numeric clarifier? A made up alpha-numeric clarifier could be confusing to someone who isn't familiar with the clarifiers being used. This is more of a mental "transition" than determining the difference between an Emergency (which will be stated up front as a Reliability Directive as proposed in draft COM-002-3) and a normal operating instruction. We suggest that only established alpha-numeric clarifiers be used.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Midwest Reliability Organization NERC Standards Review Forum	No	The MRO NSRF recommends the following comments for consideration by the SDT: As written, if an operator simply states "open switch c138", they would be found non compliant. The SDT has not given any justification (reference to a FERC Directive) to why they are mandating the use of alpha-numeric clarifiers within this requirement. It is not needed to be written within this (or any other standard). It is agreed that it may be a good practice in some cases, but when written within a standard, it is driving for a zero tolerance. Entities will make a mistake and this non compliance issue will be forward via the CEA as an FFT. Section 81 of the Commission's March 15th, 2012 order questions if a violation is forwarded in an FFT format, is it really needed for reliability. This requirement needs to be deleted. If an entity wishes to use an alpha-numeric format, they can as part of their internal controls to reduce their risk of violating a different standard or for safety reasons. The requirement of using alpha-numeric as a standard will be administratively burdensome and punitive. For example: An operator states, "open switch fifteen twenty six" instead of "open switch one, five, two, six" is now subject to a potentially significant fine for no reliability benefit. Suggest dropping the Alpha Numeric clarifier requirement from the standard.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		

Organization	Yes or No	Question 7 Comment
Detroit Edison	No	"use accurate alpha-numeric clarifiers" is vague. Suggest re-wording and adding verbiage: "use defined (or standard or specified) alpha-numeric clarifiers as specified in Registered Entities communication protocols."Concern with requirement 1.2-alpha-numeric clarifiers. Would like clarification if any alpha clarifier can be used or must the phonetic alphabet listed in the white paper (military Communication protocol)be used. example: for "R", is it required to use "Romeo" or can "Robert" be used? **Response: The word "accurate" has been removed.** Concern with VSL table for R1. Current format shows that an entity must be 100% compliant. The break down from medium to severe is based on how many elements of R1 was not followed. Suggest changing the format to how many times it was not followed rather than the number of elements. **Response: The SDT has developed a different approach to the standard that addresses your concern.**
Response: Thank you for your comments. See the response above.		
Duke Energy	No	We think that this is over-reaching (As currently written, the Standard erroneously focuses on "how" an entity can be compliant, rather than describing "what" an entity needs to achieve to be compliant), and creating a requirement that can't reasonably be audited or certified.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
BC Hydro	No	BC Hydro does not support the full time use of alpha numeric clarifiers for all Operating Communication. In some cases we believe it detracts from the instruction being delivered. In our system, devices are identified by a combination of alpha and numeric. For example, to call transmission line 5L98, '5-Line-98' or a circuit breaker 5CB11, '5-circuit breaker-11' does not add value. This may help in some areas

Organization	Yes or No	Question 7 Comment
		depending on their naming conventions. BC Hydro does not think the use of the term 'accurate' effectively describes what is permissible to be used as an alpha numeric clarifier.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Dominion	No	Dominion suggests that Requirement R1, Part 1.2 is ambiguous in that the use of alpha-numeric identifiers appears optional (but if they are used, they must be accurate). If the purpose of Part 1.2 is to USE alpha-numeric identifiers, then this statement needs to be modified to state that more directly and to give that clarity.
Response: Thank you for your comments. Some Operating Instructions may not involve alpha-numeric qualifiers.		
Associated Electric Cooperative JRO00088	No	AECI appreciates the SDT's desire to afford flexibility to the industry, and yet we still view this level of prescription as unnecessarily burdensome, given the current broad scope of this particular standard.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
LG&E and KU Services	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Too prescriptive. The industry has performed for many decades, successfully. NERC should focus on risk and performance.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO/RTO Standards Review	No	This requirement is a procedural issue and is outside the scope of the approved SAR

Organization	Yes or No	Question 7 Comment
Committee		which proposes responding to the Blackout Recommendation to tighten communications protocols especially during emergencies. This proposed requirement is both procedural and does not address tightening communications of situational awareness. The SRC would suggest that the standard should require the Functional Entities to have a communications protocol that could indeed include this suggestion, but it should not be a standard on personnel.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 and the SAR are very specific in that both include references to "normal" operating conditions. **The SDT has developed a new approach to the standard that addresses your concern.**		
City Water Light and Power	No	Again, this requirement attempts to dictate process as opposed to being a standard. The standard should only dictate the result, not how it is achieved.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Hydro One Networks Inc.	No	This requirement adds added complexity to communications, not improvement. There are equipment designations that are commonly used and understood, and to force the use of clarifiers will disrupt operating communications.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
SERC OC Standards Review Group	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT".

Organization	Yes or No	Question 7 Comment
Response: The SDT has developed a new approach to the standard that addresses your concern.		
Bonneville Power Administration	No	BPA disagrees with both clarifiers (NATO phonetic alphabet and alpha numeric) and believes the communication should be left to the discretion of each utility. This modification causes an undue burden when relaying communication; especially in a time of an emergency and dramatically increases the risk of human error. BPA recommends that the drafting team remove any and all language of NATO phonetic and alpha numeric identification of any device, (Alpha and especially numeric phonetic requirements). R2 and R3 clearly ensure that all parties are already properly communicating clearly and concisely. Should the drafting team remove the NATO phonetic and alpha numeric language, BPA would change its negative position to affirmative.
Response: Thank you for your comments. The SDT respectfully disagrees with your assertion that the use of alpha numeric clarifiers will "dramatically increase the risk of human error". Use of phonetic clarifiers is a Human Performance tool designed to reduce the rate of human error and communication problems. **The SDT has developed a new approach to the standard that addresses your concern.**		
Southern Company	No	Southern does not agree with R1 and its sub-requirements as they appear to force a single communications procedure on the industry and are focused on the "HOW" of communication when they should be more focused on the "WHAT". Also, the word "accurate" should be removed from R1.2, as it is not needed.
Response: The SDT has developed a new approach to the standard that addresses your concern.		
The Dayton Power and Light Company	No	This requires using a 'correct' alpha numeric clarifier, while the proposed standard is written as 'accurate'. It would be great if there were consistency between the proposed standard and the comment form. Not sure how one can define accurate or correct. The standard indicates that NATO has one, but there are others as well. The moniker for "A" in the LAPD definition is ADAM, while NATO is ALPHA. Both are

Organization	Yes or No	Question 7 Comment
		'accurate and/or correct' but if I use one version and the person I'm talking to uses another, is this a violation of the standard? The language in this proposed version is better than the last (where they required the use of the NATO language) but I'm still not comfortable this proposal fixes the problem.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
CenterPoint Energy Houston Electric, LLC.	No	Question 7 Comments: The use of correct alpha numeric clarifiers represents a "how to" and although it may be an example of a good utility practice, it should not be a requirement to the extent of not only just having to use the alpha numeric clarifiers, but required to use them correctly or "accurate" as it is currently worded in the language of proposed COM-003-1 R 1.2 draft 2. The requirement is unclear as to whether the accurate use of alpha -numeric clarifiers is required only when the clarifiers are used, or whether accurate use of alpha-numeric clarifiers are required for all oral Operating Communications. The use of any alpha- numeric clarifiers should be left up to the discretion of the communicating entities during their exchange, acknowledgement, and agreement of information of any such communication.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
SMUD	No	Communication should not be restricted to only use of the phonetic alphabet. Referencing a "103-C" switch versus a "103-Charley" does not enhance reliability and has the potential of hindering reliable operation of the BPS by forcing the Operator Communications personnel to focus on being compliant with the correct phonetics rather than the actual instruction.
Response: Thank you for your comments. The SDT respectfully disagrees with your thought that the use of alpha numeric		

Organization	Yes or No	Question 7 Comment
clarifiers has the potential to "hinder reliable operation". Use of phonetic clarifiers is a Human Performance tool designed to reduce the rate of human error and communication problems. The SDT has developed a new approach to the standard that addresses your concern.		
Liberty Electric Power LLC	No	Again, this is beyond the proper scope of reliability standards.
Response: Thank you for your comments. The SDT respectfully disagrees and has developed a new approach to the standard that addresses your concern.		
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	No	PPL Generation, LLC on behalf of its Supply NERC Registered Entities does not believe that this sub requirement is appropriate when applied with the new definition "Operating Communication." Common operating communications should not be considered a compliance event that requires the use of correct alpha numeric clarifiers. Under the current language, it could be interpreted that according to "Operating Communication" that every change in generation output must be stated in alpha numeric clarifiers in every instance of communication. This requirement shifts operators focus from communicating proper information to a focus on communicating using the specified terms in all instances of communication, where in everyday normal business activities and operation should not require such scrutiny.
Response: The SDT has developed a new approach to the standard that addresses your concern.		
Orlando Utilities Commission	No	Use a phonetic alphabet only when further clarification is needed.
Response: Thank you for your comments. Use of phonetic alphabet only when further clarification is needed could be subjective. The receiver of the communication may have thought that they clearly heard "Open breaker 13D" when what was really said was to "Open breaker 13B". Use of the phonetic alphabet would correct this potential error.		
Clark Public Utilities	No	This requirement is still overly prescriptive. Practically all switches, breakers, and transformers have alpha-numeric identifiers and the proposed Requirement R1.2 will require the use of some form of alpha-numeric clarifier (either NATO or some other

Organization	Yes or No	Question 7 Comment
		accurate clarifier). However, many alpha-numeric identities need no clarifier to be accurately understood. Additionally, any such mis-understandings would become obvious during the three-way communication process. The SDT needs to modify this requirement to allow the judgment of the system operator to be used in the determination of whether an alpha-numeric clarifier is needed. This judgment would be based on (1) common sense in understanding that some letters or numbers may sound similar when broadcast over communications equipment, (2) past experience with certain letters or numbers requiring clarification, (3) an understanding by each individual system operator (as supplemented by managerial oversight) of that system operator's ability to correctly pronounce letters and numbers (in the English language, unless another language is mandated by law or regulation), and (4) confidence derived from the accurate and understandable repetition of the alpha-numeric identifiers in the three way communication process. Clark believes that Requirement R1.2 needs to rely on the determination by the system operator as to whether the use of an alpha-numeric clarifier is needed or not. These system operators are required to obtain certifications and ongoing training and the operating process needs to defer to the judgment of trained and certified system operators to resolve this potential communication issue.
Response: Thank you for your comments. The SDT believes that it would be more consistent and less confusing for the operators to utilize alpha numeric clarifiers at all times instead of having to go through a determination if it is needed in each operating situation.		
Indiana Municipal Power Agency	No	The question uses the word "correct" and the requirement uses the word "accurate". The use of either word adds ambiguity to the requirement, and an entity being found compliant or non-compliant depends on how the entity and the auditor interprets

Organization	Yes or No	Question 7 Comment
		the meaning of “use of an accurate alpha-numeric clarifier”. The SDT should allow the entity to pick the alpha-numeric clarifier that its company wants to use or the same clarifier that was used when the Operating Communication was given, and not give an auditor the chance to say it is not an “accurate” alpha-numeric clarifier.
Response: Thank you for your comments. The word “accurate” has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Sacramento Municipal Utility District	No	See response in #10
Entergy Services	No	See our responses to Questions #1, 2 and 4.
Response: Thank you for your comments. See responses to these questions.		
City of Austin dba Austin Energy	No	There is not enough evidence to support the need for these types of specifics. Recommendation 26 encourages NERC “to ensure that all key parties … receive timely and accurate information.” COM-003-1 seems to interpret the recommendation by telling entities “how” to ensure information is accurate (e.g., use English, 24-hour clock, time zones, alpha-numeric identifiers, etc.). This standard reaches too far into the “how” instead of focusing on the “what,” which is accurate information. Registered entities should decide the best methods to ensure accurate information for themselves (through three-part communication, use of the 24-hour clock or otherwise).
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Colorado Springs Utilities	No	the term "correct alpha-numeric clarifier" is itself unclear. Searching on Google, I can find no other use of this term outside of this Standard. Therefore, this does not appear to be a standard term or concept. Did the SDT mean to require the use of a phonetic alphabet (NATO's or any other)? If so, please just state so. If the intent was

Organization	Yes or No	Question 7 Comment
		to permit means other than phonetic alphabets to ensure clear communication of alpha-numeric identifiers, then I suggest clarifying the Standard's language. Perhaps, "When participating in oral Operating Communications and using alpha-numeric identifiers, use a phonetic alphabet or similar means to ensure clear understanding."
Response: Thank you for your comments. The SDT used the term "alpha numeric clarifier" as a substitute for the NATO alphabet, which generated many comments from draft 1. It gives entities freedom to use their own clarifier that conveys the correct number or letter of equipment nomenclature they are referring to. The word "accurate" has been removed.		
Essential Power, LLC	No	If the purpose of this Standard is to improve and standardize communications, than all entities should use the same alpha numeric clarifiers.
Response: Thank you for your comments. Previous versions of this Standard required the use of the NATO phonetic alphabet. This was seen as too prescriptive by industry. While there is nothing to prevent entities from using standardized alpha numeric clarifiers, it is not a requirement in this version of the standard.		
Wisconsin Electric dba We Energies	No	Use of "accurate" accurate alpha-numeric clarifiers is subjective. What are they? Who decides what is "accurate"? An auditor? The NATO phonetic alphabet is really still being mandated. What if I use the NATO version and another entity uses a different one. Can we talk to each other? We will now also have to specify what phonetic alphabet we are using before any communication.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Manitoba Hydro	No	Manitoba Hydro agrees with the use 'accurate alpha-numeric identifiers' and feels that they should also be required when referring to a Transmission interface Element or a Transmission interface Facility in R1.1.4
Response: Thank you for your comments.		

Organization	Yes or No	Question 7 Comment
Portland General Electric - Transmission & Reliability Services	No	Requirement 1.2 requiring the use of alpha-numeric clarifiers would unnecessarily complicate operator communications, especially inter-company communications where transmission facilities have historically and are commonly identified by alpha-numeric characters. The use of three-way communications ensures accurate communications without the complications of alpha-numeric clarifiers.
Response: Thank you for your comments. Use of phonetic clarifiers is a Human Performance tool designed to reduce the rate of human error and communication problems. The SDT has developed a new approach to the standard that addresses your concern.		
Puget Sound Energy	No	No. The current language addressing alpha-numeric clarifiers is a significant improvement over the formulation addressing the same issue in the previous draft. However, this requirement remains overly-prescriptive, especially with respect to numeric clarifiers. Even with the NATO clarifiers, not all numbers have clarifiers. As a result, it not clear when a numeric clarifier would be required and when it is acceptable not to use such a clarifier. The requirement to use alpha-numeric clarifiers should be removed from the proposed standard entirely. If the requirement is not removed in its entirety, the requirement should be modified to exclude numeric clarification.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see the response for the SERC OC Standards Review Group.		
Xcel Energy	No	1) "Accurate alpha-numeric identifier" needs to be clarified. Could each entity (or even each operator) create their own alpha-numeric identifiers? Further would it be a violation if an operator used "Charlie" in one conversation and "chalk" in another?

Organization	Yes or No	Question 7 Comment
		Or, is it an expectation that the entity/operator adopts an existing list of alpha-numeric identifiers, which is published publicly? **Response: The standard does not mandate any one clarifier over another. The word "accurate" has been removed.** 2) We recommend that device names be excluded from the requirement to use alpha-numeric identifiers when both parties are working off of written instructions. We do not feel requiring this would improve reliability. Instead, it could actually slow down the recovery of the system. For example, we have devices in the field that may be labeled 12B34-W gang switches and it makes no senses to say, "Open and tag the one, two, B as in Bravo, three, four W as in Whiskey gang switch, when both parties have "12B34-W" written in the instructions they are both working from. Three-way communications are occurring and if there is any question as to the device name, it can be caught and clarified during that process. **Response: Thank you for your comments. The SDT disagrees with exempting equipment names even when written down. This is another check that the correct equipment is being operated. The SDT disagrees that use of alpha numeric clarifiers would slow down recovery.**
Response: Thank you for your comments. Please see the responses above.		
Ameren	No	We recommend to the SDT that one industry-wide alpha-numeric clarifying system should be used. Multiple systems may add confusion by use of clarifying words that some Operators may not be familiar with. We agree with use of the NATO Spelling Alphabet.
Response: Thank you for your comments. Previous versions of this Standard required the use of the NATO phonetic alphabet. This was seen as too prescriptive by industry. While there is nothing to prevent entities from using standardized alpha numeric clarifiers, it is not a requirement.		

Organization	Yes or No	Question 7 Comment
Idaho Power Company	No	They should specify the alphabet to use for consistency.
Response: Thank you for your comments. Previous versions of this Standard required the use of the NATO phonetic alphabet. This was seen as too prescriptive by industry. While there is nothing to prevent entities from using standardized alpha numeric clarifiers, it is not a requirement.		
MISO	No	MISO is concerned that the phrase "accurate alpha-numeric clarifiers" is ambiguous and could lead to unintended compliance burdens. Further, MISO notes that this provision will have, at most, a minimally beneficial impact on reliability while requiring Registered Entities to expend substantial additional resources and will increase the likelihood of adverse impacts to reliability resulting from confusion caused by non-standard alpha-numeric clarifiers.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Consumers Energy	No	As there is no definition of what alpha - numeric clarifiers must be used, this leaves too much room for interpretation for audit staff.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
NextEra Energy, Inc	No	Similar to the 24 clock, it appears that R1.2 does not fully consider how communications and naming conventions are used in the industry. Specifically, alpha-numeric identifiers are used when there is an uncommon naming convention. Examples of common naming conventions include AM/PM, breaker names such as (8W15), etc. As written, the requirement could be interpreted to require alpha-numeric identifiers for all alpha applications even though the industry has never had a need to use such identifiers. This will likely lead to unnecessary confusion, and, therefore, will likely not promote reliability. Moreover, the R1.2 and COM-003-1 technical paper suggest there is only one set of alpha-numeric clarifiers that are "accurate." NextEra does not agree with this perspective, and believes it is

Organization	Yes or No	Question 7 Comment
		counterproductive to narrowing a System Operator's discretion on which alpha-numeric clarifiers he or she may use. To address these matters, NextEra recommends that R1.2 be revised to read: "When an oral Operating Communication does not use a common naming convention, alpha-numeric identifiers shall be used."
Response: Thank you for your comments. The standard does not mandate any one clarifier over another. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the response to ISO/RTO Standards Review Committee.		
U.S. Bureau of Reclamation	No	By using the term "correct" alpha numeric clarifier, it implies that an incorrect alpha numeric clarifier can exist. In reality as long as an alpha numeric clarifier is used to verify the letters or numbers are conveyed the intent is made. The standard language should be revised to state that "When participating in oral Operating Communications and using alpha-numeric identifiers, use alpha-numeric clarifiers for the letters and numbers to convey the correct numbers and letters in the Operating Communication."
Response: Thank you for your comments. An example of an incorrect alpha numeric clarifier would be "k as in known". The word "accurate" has been removed.		
Exelon Corporation and its affiliates	No	While Exelon agrees with the modification to allow the use of another alpha numeric clarifier, Exelon does not agree with the designation of "correct" related to alpha numeric communication. Requiring "accurate" alpha-numeric clarifiers is overly prescriptive and unclear. An entity should not be held accountable for 100% adherence to a set phonetic alphabet. For example, if a communicator and receiver use the phonetic nomenclature "motor operated disconnect one foxtrot" but in a later communication the equipment is referenced as "motor operated disconnect

Organization	Yes or No	Question 7 Comment
		one fox" by the Standard as written this could be considered a violation. It should be an expectation but not a requirement as long as the transmitter and receiver use three way communications effectively. Again, the standard should emphasis entity practice for effective communication not impose an overly prescriptive set of requirements that pose compliance challenges.
Response: Thank you for your comments. The word "accurate" has been removed. The SDT has developed a new approach to the standard that addresses your concern.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Response: Thank you for your comments. Please see response to APM.		
Oncor Electric Delivery Company LLC	No	Oncor take the position that this requirement is far too much detail and goes well beyond the 2003 Blackout recommendations. Furthermore, Oncor take the position that a more appropriate approach would be to require internal procedures that address internal communication protocols.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
South Carolina Electric and Gas	No	
Imperial Irrigation District	Yes	
JEA	Yes	R1.2 is unclear. The term "alpha-numeric identifiers" is not defined. We believe examples would help. For example we assume that if we say the Northside 1, this would not be alpha-numeric but what if we used logical letters such as NS1 in internal communications. Is it all alpha-numeric communications or just illogical meaningless letters and numbers. We believe we should be able to use logical alpha numeric

Organization	Yes or No	Question 7 Comment
		things like MS for motor-switch and not have to use alpha-numeric clarifiers. Also please specify if this is for both internal and external communications. Again we believe that this should be for external communications using illogical meaningless letters and numbers not for internal normal nomenclature.
Response: Thank you for your comments. Alpha numeric clarifiers are not required for common terms like CB or MS or names like "Northside". They would be required for Element or Facility alpha-numeric identifiers. In addition, the definition of Operating Instruction has been modified to provide clarity around when alpha-numeric identifiers are required.		
Pepco Holdings Inc & Affiliates	Yes	However not sure if it is applicable to Reliability Directives.
Response: Thank you for your comments. Alpha numeric clarifiers are required for an Operating Instruction, which is a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."		
SPP Standards Review Group	Yes	We concur with the elimination of the NATO phonetic alphabet and thank the SDT for making this change. This is an excellent example of backing away from being overly prescriptive by requiring the NATO alphabet and allowing the industry to use any of several other options to ensure effective communications. We do have concerns with the use of 'correct' or 'accurate', depending on which document you refer to. What is correct? What is accurate? How does one measure compliance with these terms? We would propose to delete the word 'accurate' altogether. The requirement would then read: When participating in oral Operating Communications and using alpha-numeric identifiers, use alpha-numeric clarifiers.1
Response: Thank you for your comments. An example of an incorrect alpha numeric clarifier would be "k as in known". The word "accurate" has been removed.		
IESO	Yes	While we agree with allowing appropriate alpha numeric qualifiers other than the

Organization	Yes or No	Question 7 Comment
		NATO phonetic alphabet, we do not support the mandatory use of these qualifiers for each and every instruction. They should only be required when clarification by either party is requested.
Response: Thank you for your comments. Use of phonetic alphabet only when further clarification is needed could be subjective. The receiver of the communication may have thought that they clearly heard "Open breaker 13D" when what was really said was to "Open breaker 13B". Use of the phonetic alphabet would correct this potential error.		
Texas Relibility Entity	Yes	Consider removing the word "accurate" from part 1.2. We do not believe it adds anything to the requirement, and it may cause confusion.
Response: Thank you for your comments. The word "accurate" has been removed.		
NV Energy	Yes	Agree that it ought not to be restricted to NATO only, but we are confused about what "correct" means. Perhaps it means any spoken word that begins with the subject alpha character?
Response: Thank you for your comments. An example of an incorrect alpha numeric clarifier would be "k as in known". The word "accurate" has been removed.		
Central Lincoln	Yes	but please see Q 10.
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None.
Florida Municipal Power Agency	Yes	
GP Strategies	Yes	
Progress Energy	Yes	

Organization	Yes or No	Question 7 Comment
Arizona Public Service Company	Yes	
HHWP	Yes	
Lakeland Electric	Yes	
Flathead Electric Cooperative, Inc.	Yes	
NIPSCO	Yes	
Hydro-Quebec TransEnergie	Yes	
The United illuminating Company	Yes	
Ingleside Cogeneration LP	Yes	
Utility Services, Inc.	Yes	
Salt River Project	Yes	
Utility System Efficiencies, InC.	Yes	
PPL Electric Utilities	Yes	
American Transmission Company, LLC	Yes	

Organization	Yes or No	Question 7 Comment
City of Tallahassee	Yes	
City of Vero Beach	Yes	
Seminole Electric Cooperative	Yes	
California Independent System Operator	Yes	
Kansas City Power & Light	Yes	
Western Electricity Coordinating Council		From an enforcement perspective, this could be problematic. As drafted this will allow virtually any alpha numeric clarifier. Who is to determine if the identifies is "correct?" This will put the auditor in the position of determining whether or not a clarifier was correct or accurate. For auditing purposes there should be clear direction on what is acceptable.
Response: Thank you for your comments. An example of an incorrect alpha numeric clarifier would be "k as in known". The word "accurate" has been removed.		
NERC Operating Committee		See Response 10
Roger Zaklukiewicz Consulting		Not certain as I do not know the specifics of the NATO phonetic alphabet.
Response: Thank you for your comments.		
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Public Service Enterprise		See #10.

Organization	Yes or No	Question 7 Comment
Group		

8. The SDT modified the requirement for use of identifiers to limit the applicability to operating communications involving Transmission interface Elements/Facilities and to require use of the name for that Element/Facilities specified by the Element/Facility's owner(s). Do you agree with this modification?

Summary Consideration:

Many commenters believe this requirement is not necessary, stating that it is covered by Standard TOP-002.2a R18. *The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. Project 2007-03 chose to eliminate TOP-002-2a Requirement R18 on the basis that "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. This is an administrative item, as seen in the measure, which simply requires a list of line identifiers. The true reliability issue is not the name of a line but what is happening to it, pointing out the difficulty in assigning compliance responsibility for such a requirement, as well as the near impossibility of coming up with truly unique identifiers on a nation-wide basis. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers." COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.*

Other commenters believe the requirement is too prescriptive and focuses on how instead of what. *When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.*

A few commenters cited uncertainty over what Elements and Facilities are in scope of Requirement. *The SDT intends that interface BES Elements and BES Facilities are in the scope of this requirement. The benefit is that neighboring entities can quickly and knowledgeably react to changing operating conditions on the BES without getting confused over which Element or Facility they are referring to.*

Organization	Yes or No	Question 8 Comment
Northeast Power Coordinating Council	No	The applicability of this Standard is unclear in the case of Distribution Providers. The definition of Operating Communication includes "Elements" that could impact the BES. The NERC Glossary definition for Elements includes non-BES devices and

Organization	Yes or No	Question 8 Comment
		equipment. Additionally, the Purpose section of the Standard states "harmful to the reliability of the BES." Since non-BES Elements could affect the BES this Standard could be deemed applicable to non-BES devices. If it is the intent of the SDT to apply this Standard to All Operating Communications concerning both BES and non-BES Facilities this should be explicitly stated in the applicability section for transparency. Otherwise clarifying language should be added to exclude non-BES Facilities. This is a procedural issue. Suggest that the Standard should require the Functional Entities to have a communications protocol that could indeed include this suggestion, but it should not be a standard on personnel.
Response: Thank you for your comments. This requirement refers to Transmission interface Elements and Facilities. The SDT has developed a different approach to the standard that addresses your concern.		
ACES Power Marketing Standards Collaborators	No	1. We don't believe this requirement is necessary. A similar requirement was removed from TOP-002-2 Project 2007-03. From the Project 2007-03 mapping document:"R18. Neighboring Balancing Authorities, Transmission Operators, Generator Operators, Transmission Service Providers and Load Serving Entities shall use uniform line identifiers when referring to transmission facilities of an interconnected network."Project 2007-03 SDT's reason for deletion of R18 from TOP-002-2:"This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers."We agree with these reasons and believe they should apply to R1 Part 1.1.4 in COM-003-1. 2. Another issue we have with the requirement is that this draft standard is not applicable to TOs or GOs yet the requirement calls for the use of "the name specified by the owner(s) for that Transmission interface Element or Transmission interface Facility." Are the auditors going to ask the TOs and GOs for their list of named Elements or Facilities when they audit the applicable entities in

Organization	Yes or No	Question 8 Comment
		this standard?
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Midwest Reliability Organization NERC Standards Review Forum	No	The MRO NSRF recommends the following comments for consideration by the SDT: 1. This requirement is too closely associated with TOP-002-2b, R18. As written, a BA, TOP, and GOP will be in double jeopardy of non compliance if either TOP-002-2b, R18 or COM-003, R1.1.4 is violated. 2. A similar requirement was removed from TOP-002-2 Project 2007-03. From the Project 2007-03 mapping document: "R18. Neighboring Balancing Authorities, Transmission Operators, Generator Operators, Transmission Service Providers and Load Serving Entities shall use uniform line identifiers when referring to transmission facilities of an interconnected network." Project 2007-03 SDT's reason for deletion of R18 from TOP-002-2: "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers." The standard is not applicable to TOs or GOs yet the requirement calls for the use of "the name specified by the owner(s) for that Transmission interface Element or Transmission interface Facility." Suggest deleting this requirement.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the		

Organization	Yes or No	Question 8 Comment
same equipment for the Operating Instruction.		
Duke Energy	No	We don't believe that this requirement is consistent with the TOP requirement to use common line identifiers. This is more restrictive, in that it mandates the use of a name specified by the asset owner, while TOP simply requires the development of common identifiers without dictating what party defines the names. We understand the issue of identifying common terms for equipment, but believe the development and use of "common identifiers" is already covered in the TOP Standard and should be eliminated altogether from COM-003.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
BC Hydro	No	BC Hydro supports this in most cases, especially when dealing with the RC, but in many cases there may be lack of clarity around ownership. We believe this needs to be reworded to account for designation that is agreed to by the parties that are communicating.
Response: Thank you for your comments. The SDT has developed a different approach to the standard that addresses your concern.		
Dominion	No	The requirement as written is superior to Requirement R18 of TOP-002b which requires the use of ". . . uniform line identifiers when referring to transmission facilities of an interconnected network." However, the industry can't have two different standards with different requirements for identifying transmission facilities.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the		

Organization	Yes or No	Question 8 Comment
same equipment for the Operating Instruction.		
Associated Electric Cooperative JRO00088	No	AECI agrees with SERC OC STANDARDS REVIEW GROUP's response to Question 8.
Response: Please see response to SERC OC Standards Review Group.		
LG&E and KU Services	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT". Requirement 1.1.4 does not need to be in this standard as the requirement for unique line identifiers is stipulated in TOP-002-2 R18.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	Too prescriptive.
Response: Thank you for your comments. The SDT has developed a different approach to the standard that addresses your concern.		
ISO/RTO Standards Review Committee	No	This requirement is a procedural issue and is outside the scope of the approved SAR which proposes responding to the Blackout Recommendation to tighten communications protocols especially during emergencies. This proposed requirement is both procedural and does not address tightening communications of situational awareness.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten		

Organization	Yes or No	Question 8 Comment
response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors."		
City Water Light and Power	No	This is already addressed in TOP-002 R18. Even if moved, the requirement should be focused on agreed upon identifiers and the process for coordination should be left to the entities.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. The SDT has developed a different approach to the standard that addresses your concern.		
FirstEnergy	No	The requirement for line identifiers should not be included and is unnecessary. This type of requirement was also removed from standard TOP-002 in recently board approved project 2007-03. The drafting team position for the removal was the following: "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. This is an administrative item, as seen in the measure, which simply requires a list of line identifiers. The true reliability issue is not the name of a line but what is happening to it, pointing out the difficulty in assigning compliance responsibility for such a requirement, as well as the near impossibility of coming up with truly unique identifiers on a nation-wide basis. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers." Therefore we suggest the removal of R1.1.4 for the same reason.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		

Organization	Yes or No	Question 8 Comment
SERC OC Standards Review Group	No	This sub-part is part of the SDT forcing a single communication procedure on the industry. This goes far too deeply into the HOW" of communication as opposed to the "WHAT". Requirement 1.1.4 does not need to be in this standard as the requirement for unique line identifiers is stipulated in TOP-002-2 R18.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Western Electricity Coordinating Council	No	We question the need for this part of the requirement based on the fact that it appears to be redundant with TOP-002-2b, R18.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Bonneville Power Administration	No	BPA believes that the uniform line identifiers between utilities should be identified by mutual consent and suggests the drafting team use the language from COM-003-1 R7, "Each Reliability Coordinator, Balancing Authority, Transmission Owner, Transmission Operator, Generator Operator, Transmission Service Provider, Load Serving Entity and Distribution Provider shall use pre-determined, mutually agreed upon line and equipment identifiers for verbal and written Interoperability Communications". BPA also recognizes that uniform line identifiers are already addressed in TOP-002-2b.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the		

Organization	Yes or No	Question 8 Comment
same equipment for the Operating Instruction. The SDT has developed a different approach to the standard that addresses your concern.		
NERC Operating Committee	No	See Response 10
Southern Company	No	Southern does not agree with R1 and its sub requirements as they appear to force a single communications procedure on the industry and are focused on the "HOW" of communication when they should be more focused on the "WHAT". Furthermore, requirement 1.1.4 does not need to be in this standard as the requirement for unique line identifiers is stipulated in TOP-002-2 R18.Also, is it certain that both parties in the communication will know the name for the element/facility that is specified by the element/facility's owner(s)?
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
HHWP	No	Recommend that R1.1.4 incorporate use of the term Uniform Line Identifiers, in conformance with R18 of TOP-002.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
CenterPoint Energy Houston Electric, LLC.	No	Question 8 Comments: The language in requirement 1.1.4 will require the limitation to a single identifier for an interface element or facility between neighboring entities which will require the neighboring entities to agree upon a specified single identifier. This may possibly require entities to make changes to their EMS system and their model and incur a cost to complete such tasks. Similar language is currently enforced

Organization	Yes or No	Question 8 Comment
		in TOP-002-2 R18, where Entities are required to use uniform line identifiers when referring to transmission facilities of an interconnected network, making this requirement language redundant.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction. The SDT has developed a different approach to the standard that addresses your concern.		
Flathead Electric Cooperative, Inc.	No	Think this requirement is duplicative of TOP-002a, R18
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
SMUD	No	First, this requirement is redundant to Requirement R18 in the TOP-002 standard. It also put an administrative burden on the RC to know each “correct” name specified by the respective entity’s line segment causing a hindering timely operation of BPS elements.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction. The SDT has developed a different approach to the standard that addresses your concern.		
Liberty Electric Power LLC	No	This requirement is already covered under TOP-002 R18, and opens double-jeopardy

Organization	Yes or No	Question 8 Comment
		for entities by including it in a second standard.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Orlando Utilities Commission	No	For example, the (OUC)Indian River to (FPL)Cape Canaveral #1 230kv line is equivalent to the (FPL)Cape Canaveral to (OUC)Indian River #1 230kv line. Either description is accurate and acceptable.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Indiana Municipal Power Agency	No	The requirement that requires entities to use uniform line identifiers when referring to transmission facilities of an interconnected network is in the TOP-002-2b standard (R18). Requirement R1.1.4 of COM-003-1 draft is not needed and should be deleted.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Ingleside Cogeneration LP	No	Ingleside Cogeneration LP agrees with restricting the applicability of COM-003-1 R1.2 to Transmission interface Elements/Facilities. These are the most likely to carry more than one identifier, as each entity may use different numbering conventions. However, we see two separate types of identifiers which may need to be addressed separately. First, those provided on control room monitors often come from a centrally managed Regional database. It is not reasonable to expect System Operators to refer to a Facility owner's one-line diagram to reference these interconnections - and may reduce reliability. Conversely, field personnel and engineers may rely on the one-line for their identifiers. The use of the owner's

Organization	Yes or No	Question 8 Comment
		documentation is more appropriate in these cases. We will further point out that COM-003-1 does not apply to Facility owners, so it seems as though they could decline to provide identifiers if they so choose.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Roger Zaklukiewicz Consulting	No	We should always use the identifier adopted by the RTO, not one developed by the Element/Facility's owner.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. Not all entities are included in an RTO.		
Sacramento Municipal Utility District	No	See response in #10
Entergy Services	No	See our responses to Questions #1, 2 and 4.
Salt River Project	No	The interface names that should be used are the names that are registered in the TSIN.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
South Carolina Electric and Gas	No	
Wisconsin Electric dba We Energies	No	See the Mapping Document for Project 2007-03 Real-time Operations, TOP-002 R18: "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. This is an administrative item, as seen in the measure, which simply requires a list of line identifiers. The true reliability issue is not the name of a line but what is happening to it, pointing out the difficulty

Organization	Yes or No	Question 8 Comment
		in assigning compliance responsibility for such a requirement, as well as the near impossibility of coming up with truly unique identifiers on a nation-wide basis. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers."
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
PPL Electric Utilities	No	This requirement seems duplicative of TOP-002-2 R18.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see our response to comments from SERC OC Standards Review Group		
Ameren	No	We suggest the SDT to provide clarification and guidance on precisely what Elements and Facilities are included in these terms. Since the word "interface" is not capitalized or defined in the NERC Glossary or this Standard, it will be difficult for TO, TOP, GO, GOP and DP entities to precisely identify the equipment associated with these terms. We also recommend that the SDT consider use of the term "Interconnected Facilities" as defined by Project 2007-06 System Protection Coordination for use in the new Standard PRC-027-1. Multiple definitions in multiple Standards for the same BES Elements and Facilities create unnecessary risk and

Organization	Yes or No	Question 8 Comment
		uncertainty for both Auditors and Functional Entities.
Response: Thank you for your comments. The term "interface" is used in other places without confusion. In addition, not all interface Facilities are "electrically joined by one or more Element(s) and are owned by different functional, operating, or corporate entities." The SDT has developed a new approach to the standard that addresses your concern.		
American Transmission Company, LLC	No	Entities will face double jeopardy with existing Reliability Standard TOP-002-2b R18. Requirement 18 of TOP-002-2b is proposed to be removed from NERC Standards by the respective SDT because it adds no reliability benefit.
Response: Thank you for your comments. The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction.		
MISO	No	To date, System Operators have identified equipment by to/from station and voltage level. Such identification has been sufficient to ensure the accurate identification of Transmission interface Elements and Facilities. Additionally, MISO notes that internal identifiers utilized by owners may result from internal coding or naming conventions that would not be known by or comprehensible to external entities. Hence, MISO cannot support this requirement based on the potential adverse impacts to reliability that could result.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
NextEra Energy, Inc	No	See comments in response to question 7.
Texas Reliability Entity	No	The name specified by the operators of the equipment should be used, rather than the name given by the owner, and it should be jointly agreed to as the identifier for the equipment. For example, an owner name could be the "Lyndon Baines Johnson East Johnson City Substation Line 3" but the Transmission Operator refers to it as

Organization	Yes or No	Question 8 Comment
		"East Johnson City 3" or "EJC3" or "Johnson 3". The Planning Authority/Coordinator may dictate a naming convention to be used in Operations systems that are used by the System Operators (i.e. RTCA, outage scheduler, etc.). The name to be used should be clearly identifiable, concise, and easily understood by all parties involved in the Operating Communication. We suggest re-wording R1.1.4 to "When referring to a Transmission interface Element or a Transmission interface Facility, each responsible entity shall use a pre-determined, uniform identifier for each Element or Facility."
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
ISO New England Inc	No	We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments.
Response: Thank you for your comments. Please see the response to the ISO/RTO Standard Review Committee comments.		
Exelon Corporation and its affiliates	No	Exelon is concerned with the requirement to use "the name" for the Element/Facility specified by the Element/Facility's owner(s). By dictating "the name" this requirement may become overly prescriptive. An entity should not be held accountable for 100% adherence to a set "specified name" for an Element/Facility. It is reasonable for entities to fully understand what Element/Facility is communicated; however, verbatim use of a "specified name" should not in itself be a requirement. For instance, if the formal name of a generating unit is "ABC Fossil Generating Station Unit 1" and an entity communicates "ABC Station Unit 1" or "ABC Generating Station 1" by the Standard as written this could be considered a violation even though it can effectively communicate the needed information. As in other sub-requirements to R1, the use of "specified name" should be an expectation but not a requirement as long as the transmitter and receiver use three way communications effectively. Further, this appears as an internal inconsistency in the standard between R1 and R2. For example, an entity owner specifies a unique name for an interface element.

Organization	Yes or No	Question 8 Comment
		R1.1.4 requires the use of that unique identifier but R2 does not require verbatim response. It is not clear which part of the repeated information three part response in R2 is allowed to be non-verbatim.
Response: Thank you for your comments. The SDT is not suggesting that this requirement need be as complex as you indicate. We think it is fairly easy to follow the owner's naming convention. The SDT has developed a different approach to the standard that addresses your concern.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Oncor Electric Delivery Company LLC	No	Again, Oncor take the position that this requirement contains far too much detail and goes well beyond the 2003 Blackout recommendations. Furthermore, Oncor take the position that a more appropriate approach would be to require internal procedures that address internal communication protocols.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
JEA	Yes	R1.1.4 is unclear. Does this apply to both internal and external communications? JEA believes that this should only apply to external communications only. Many entities have internal numbering systems that have been in place without incident for decades and should be able to continue to use these internal systems when performing internal communications.
Response: Thank you for your comments. It applies when issuing Operating Instruction between functional entities. The SDT has developed a new approach to the standard that addresses your concern.		
SPP Standards Review Group	Yes	While the industry probably understands what is meant by 'Transmission interface Element or Facility', the terms are somewhat cumbersome. Additionally, for situations where there may be an agreement between owners designating multiple names for an Element or Facility, we propose adding an '(s)' to 'name'. For example,

Organization	Yes or No	Question 8 Comment
		if one owner calls a line A-B and the other owner calls the line B-A and they agree to use both names interchangeably, then either would be correct. Requirement 1.1.4 would then read: When referring to an Element or Facility that is part of an interconnection between entities, use the name(s) specified by the owner(s) for that Element or Facility.
Response: Thank you for your comments. The SDT has developed a different approach to the standard that addresses your concern.		
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None.
Colorado Springs Utilities	Yes	The possibility exists for an element/facility to be co-owned and for each owner to have a different name.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Manitoba Hydro	Yes	See question 7 comments
NV Energy	Yes	Agree, however, we suggest that there be more clarity provided about what constitutes a Transmission interface Element/Facility. Is it a connection between BA's or between TOP's within a BA?
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Central Lincoln	Yes	but please see Q 10.
Imperial Irrigation District	Yes	
Detroit Edison	Yes	

Organization	Yes or No	Question 8 Comment
Pepco Holdings Inc & Affiliates	Yes	
Hydro One Networks Inc.	Yes	
Florida Municipal Power Agency	Yes	
GP Strategies	Yes	
Progress Energy	Yes	
Arizona Public Service Company	Yes	
Lakeland Electric	Yes	
IESO	Yes	
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	Yes	
Hydro-Quebec TransEnergie	Yes	
Clark Public Utilities	Yes	
The United illuminating Company	Yes	
Utility Services, Inc.	Yes	

Organization	Yes or No	Question 8 Comment
City of Austin dba Autin Energy	Yes	
Utility System Efficiencies, InC.	Yes	
Puget Sound Energy	Yes	
Xcel Energy	Yes	
Idaho Power Company	Yes	
City of Tallahassee	Yes	
City of Vero Beach	Yes	
Seminole Electric Cooperative	Yes	
U.S. Bureau of Reclamation	Yes	
Kansas City Power & Light	Yes	
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Public Service Enterprise Group		See #10.

9. Do you agree with the VRFs and VSLs for Requirements R1, R2 and R3?

Summary Consideration:

The major comment issues covered:

Commenters proposed the deletion of some or all of the requirements altogether. The commenters disagreed with the requirements and thus disagreed with the associated VRFs and VSLs. Many other commenters called for reduction of all VRF levels to low. Some believe there not be a severe VSL for R1 and that there is no justification for why some parts of R1 have higher VSL impact than others. Other commenters believe there should not be a zero tolerance VSL. *The SDT response is that due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and had to be consistent with FERC and NERC guidelines.*

Some minor comment issues are:

Commenters believe the VSL should provide for a Lower Violation Severity Level for first occurrences of the violation and additional clarity could be added in the VSLs. *The SDT response is that due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and had to be consistent with FERC and NERC guidelines.*

Organization	Yes or No	Question 9 Comment
Northeast Power Coordinating Council	No	The white paper discusses many non-utility industries use of the three-part communication. However, they are not out of compliance if they fail to use three-part communications. Only the Reliability Directives should require three-part communications (and dictate compliance). This should be enforceable only if the miscommunication results in an error on the BES. We support the use of three-part communications with limitations. There is concern over the potential for being out of compliance when there is no BES impact. Failure to meet Requirement R2, part 2.2 bullets 1 or 3 is either a Moderate or High. Failure to meet bullet 2 is a Severe VSL. It is not clear why this differentiation was adopted. The White Paper reflects on Human

Organization	Yes or No	Question 9 Comment
		Performance, and how miscommunications can cause a BES error resulting in an outage, or possible cascading effects. Then the Standard (and the associated out of compliance) should apply when, and to the extent that communications lapse (e.g., when there is an impactful violation of bullets 1, 2 and/or 3) results in an impactful error on the BES. Otherwise, an out of compliance is inappropriate. Non-impactful violations should be rated "Lower VSL."
Response: The SDT thanks the commenter for the comments provided. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
ACES Power Marketing Standards Collaborators	No	1. The first Severe VSL listed for R1 says, "...did not correctly implement any of the parts..." What is the definition of the word "any" in this VSL? We've interpreted the VSL to mean that none of the parts of R1 were implemented. If this is the intent of the SDT, then we suggest removing this VSL since the next Severe VSL listed says, "...did not correctly implement three (3) or more of the four (4) parts..." Three or more would include all of the parts (4 of 4) not being implemented correctly. Not implementing 1 of the 4 parts is a Moderate VSL while not implementing 2 of the 4 parts is a High VSL. So, not implementing 3 or more of the parts would be a Severe VSL.2. The second Moderate VSL for R1 says, "The responsible entity did not correctly implement Part 1.2 of the requirement." Corresponding with our comments in Question 7 above, we don't know how this requirement will be measured since the term "accurate" in the requirement is not defined. If an entity can make up their own clarifiers, who determines if they were "accurate" and whether they were correctly implemented? Measure M1 doesn't specify a measurement for Part 1.2 of R1.3. The High VSL for R3 should be clarified to align with our suggestion of adding the words, "before taking action" in Question 6 above.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC		

Organization	Yes or No	Question 9 Comment
and NERC guidelines.		
Midwest Reliability Organization NERC Standards Review Forum	No	The MRO NSRF recommends the following comments for consideration by the SDT: System Operators receive and issue many Operating Communications a day. The VSL for one Operating Communication is Moderate. That is too high. While improving communications is a laudable goal, the zero tolerance VSL is unacceptable and will lead to a preponderance of self-reports and compliance and administrative overhead. Also overlooked is the added stress that every time a System Operator speaks they may be in violation.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Detroit Edison	No	VSL table for R1. Current format shows that an entity must be 100% compliant. The break down from medium to severe is based on how many elements of R1 was not followed. Suggest changing the format to how many times it was not followed rather than the number of elements.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Duke Energy	No	The VRF's should all be "Low". For example, there will be thousands of routine communications per year, and each instance of missing one alpha numeric identifier (ex. "balloon" versus "baker") would be a violation. As written, this standard would drive allocation of resources for little reliability benefit.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC		

Organization	Yes or No	Question 9 Comment
and NERC guidelines.		
JEA	No	R2 & R3 should be removed from the standard. They are a best practice and do not substantially affect reliability when a simple command such as increase load by 100MW for a new purchase agreement.
Response: Thank you for your comments.		
Associated Electric Cooperative JRO00088	No	AECI agrees with SERC OC STANDARDS REVIEW GROUP's response to question 9.
LG&E and KU Services	No	LG&E and KU Services suggest deletion of all three requirements
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
MEAG Power, Danny Dees, Steven Grego, Steve Jackson	No	VRFs and VSLs should be eliminated across the board.
Response: Thank you for your comments. The SDT notes your comments.		
City Water Light and Power	No	These requirements should be eliminated entirely
Response: Thank you for your comments.		
Hydro One Networks Inc.	No	The white paper discusses many non-utility industries use of the three-part communication. However, they are not out of compliance if they fail to use three-point communications. Only the Reliability Directives should require three-part communications (and dictate compliance). This should be enforceable only if the miscommunication results in an error on the BES. We support the use of three-part

Organization	Yes or No	Question 9 Comment
		communications. There is concern over the potential for being out of compliance when there is no BES impact. Failure to meet Requirement R2, part 2.2 bullets 1 or 3 is either a Moderate or High. Failure to meet bullet 2 is a Severe VSL. It is not clear why this differentiation was adopted. The White Paper reflects on Human Performance, and how miscommunications can cause a BES error resulting in an outage, or possible cascading effects. Then the Standard (and the associated out of compliance) should apply when, and to the extent that communications lapse (e.g., when there is an impactful violation of bullets 1, 2 and/or 3) results in an impactful error on the BES. Otherwise, an out of compliance is inappropriate. Non-impactful violations should be rated "Lower VSL."
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
SPP Standards Review Group	No	With the additional burden of monitoring and tracking compliance and the increased risk of the zero-tolerance VSLs without a subsequent improvement in reliability of the BES, the VRFs should be changed to Low. The VSLs should be reduced to Lower. We suggest modifying the second part of the existing Moderate VSL for Requirement 1 to include specific reference to Requirement 1 as is done in the first part of that VSL. The VSL would then read: The responsible entity did not correctly implement Requirement R1, Part 1.2.Likewise, we also suggest modifying the second part of the existing High VSL for Requirement 1 to include specific reference to Requirement 1. The VSL would then read: The responsible entity did not correctly implement one (1) of the four (4) parts of Requirement R1 when it was appropriate to use three of the four parts.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		

Organization	Yes or No	Question 9 Comment
SERC OC Standards Review Group	No	We suggest deletion of all three requirements.
Response: Thank you for your comments. The SDT notes your comments.		
Bonneville Power Administration	No	BPA believes the VSLs for R3 are too extreme as written. The SDT needs to add emphasis and clarity to the second *AND*. The requirement only asks for one of the two bullets; the VSL could be incorrectly interpreted by and auditor that both bullets are needed. Compliance is met if: (a) the receiver repeats back the Operating Communication and waits for confirmation, or (b) requests it to be repeated because it may not have been heard correctly. Compliance is not met if neither is done. So if the entity received a communication but did not repeat it AND did not request it to be repeated, that violation would be severe. For severity levels add impact to the Bulk Electric System as a qualifier. IF Cascading outage or 1000 MW of load is lost due to failure to repeat information back *AND* wait for confirmation (equals SEVERE). If equipment is damaged as a result (equals Moderate). If fails to repeat *AND* fails to wait for confirmation (equals LOW). BPA would change its position if categorizing a level of impact to the BES beginning with an equivalent to the severity of the violation.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
NERC Operating Committee	No	See Response 10
Progress Energy	No	Progress Energy does not agree with having "Severe VSL" for all of R1
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC		

Organization	Yes or No	Question 9 Comment
and NERC guidelines.		
Southern Company	No	As mentioned in the previous comments, Southern does not agree with R1 as it is imposing a single communications procedure on the industry and is focused on the "HOW" as opposed to the "WHAT", and does not agree with R2 and R3 as they imply that that 3-part communications are needed for all communications, not just during Reliability Directives, emergencies, or alerts. As such, Southern disagrees with the VRFs and VSLs.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
HHWP	No	VSL should provide for a Lower Violation Severity Level for first occurrences of the violation. For the most part violation of this standard should be addressable through FFT process.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with the guidelines.		
CenterPoint Energy Houston Electric, LLC.	No	Question 9 Comments: No. VRFs and VSLs for requirements R1, R2, and R3 should not be high or severe unless Adverse Reliability Impact has occurred.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with the guidelines.		
IESO	No	We do not agree with Requirements R2 and R3 to begin with. We therefore do not agree with the VRFs and VSLs for these two requirements.

Organization	Yes or No	Question 9 Comment
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
PPL Generation, LLC on behalf of its Supply NERC Registered Entities	No	PPL Generation, LLC on behalf of its Supply NERC Registered Entities does believe that this sub requirement R1.2 should be considered a moderate violation when alpha numeric clarifiers are not used in general communication.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Clark Public Utilities	No	Failure to implement R1.2 is not necessarily a reliability problem. As stated in our previous comments, not all alpha-numeric identifiers need clarification. However, the current proposed standard would deem a failure to use a clarifier in any Operating Communication that uses alpha-numeric identifiers as a violation.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Roger Zaklukiewicz Consulting	No	The standard should not be mandating the "HOW".
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Sacramento Municipal Utility District	No	We have a problem with the standard and therefore we inherently don't agree with VRFs and VSLs.

Organization	Yes or No	Question 9 Comment
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Entergy Services	No	We disagree only in the sense that we disagree with the requirements, therefore, the VRFs and VSLs are not relevant. We suggest deletion of all three requirements, and the insertion of one new requirement. See Response to Questions 1, 2 and 4.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Reliability First	No	Reliability First votes in the Affirmative for this standard because the standard further enhances reliability by providing communication protocols when participating in Operating Communications (specifically three way communication). Clear, formal and universally-applied communication protocols will help reduce the possibility of miscommunication which could lead to action or inaction harmful to the reliability of BES. Even though Reliability First votes in the Affirmative standard, Reliability First votes in the negative for the VSLS and offer the following comments for consideration: 1. VSL for Requirement R2 a. When referencing "Part" numbers within the VSL, a consistent format (e.g. Requirement R2, Part 2.2 first bullet) should be used. 2. VSL for Requirement R3 a. The VSLs should state "oral ... Operating Communication" rather than "verbal ... Operating Communication" to be consistent with the language in the requirement. b. For consistency with the first part of the first bullet in Requirement R3, RFC recommends the following language be considered for the "High" VSL: "The responsible entity received and repeated an oral two-party, person-to-person

Organization	Yes or No	Question 9 Comment
		Operating Communication but did not wait for confirmation that the repetition was correct. (Requirement R3, first bullet)"
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with the guidelines.		
City of Austin dba Austin Energy	No	AE respectfully objects to the contents of COM-003-1 as described in these comments. If, however, AE were to assume agreement with the requirements, we offer the following comments regarding the VSLs: AE does not believe the R1 VSLs provide for a fair application in practice. Risk to the BES is not increased when fewer communication protocols apply to an entity. As proposed, missing 1 of 4 parts when 4 parts are required is a Moderate VSL. Missing 1 of 4 when 3 are required is a High VSL (and it never has an opportunity for a lower severity level because Moderate VSL applies only when 4 parts are required). Similarly, if an entity misses 1 of 4 when 2 are required, it should not be penalized with a Severe VSL. AE suggests the solution to this issue is to assign Moderate VSL to missing 1 of 4, High VSL to missing 2 of 4 and Severe VSL to missing 3 or more of 4, in all instances regardless of how many parts are required. If the structure suggested above is not adopted, AE offers the following comments for consideration: Within the Severe VSL column for R1, the first paragraph (missing all of the parts when four are required) duplicates the second paragraph (missing three or more when four are required.)Within the Severe VSL column for R1, the third and final paragraphs should say "two (2) or more" and "one (1) or more," respectively, to account for all possible situations. Doing so aligns with the second paragraph which already says "three (3) or more." Finally, with respect to the VSLs for R2 and R3, all instances of "verbal" should be changed to "oral" to match the language of the

Organization	Yes or No	Question 9 Comment
		requirement.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Utility System Efficiencies, InC.	No	We agree with the classification of VRF as medium for Requirements R1, R2, and R3; however, hopefully this will not detract from the vital importance of using three-part communications in ALL operations communications relevant to the Bulk Electric System (BES). We disagree with the VSLs for Requirements R1, R2, and R3. For R1 we don't believe it is valid to claim that various combinations of not using the 24-hour clock, or alphanumeric definitions, etc. will make any difference in the outcome of poor communications. We recommend the following approach: For R1, failure to use any of the required elements of this requirement should be documented for each incident during the audit period. Greater than three failures but less than or equal to 5 would be considered "moderate;" greater than 5 but less than or equal to 8 would be considered "high;" greater than 8 would be considered "severe." Any failure to use the required elements of this Requirement R1 which results in a reportable incident on the BES should be considered "severe." For Requirements R2 and R3, all failures to use the required three-part communications should be documented by the Registered Entity for the audit period. Greater than three failures but less than or equal to 5 would be considered "moderate;" greater than 5 but less than or equal to 8 would be considered "high;" greater than 8 would be considered "severe." Any failure to use three-part communication which results in a reportable incident on the BES should be considered "severe."
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		

Organization	Yes or No	Question 9 Comment
Illinois Municipal Electric Agency	No	IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Xcel Energy	No	The Moderate VSL for missing one part of the sub-requirements in R1.1.1 thru R1.1.4 is too harsh with a six month effective date. We suggest a phased in VSL or a twelve month effective date, as further explained under question 10.
Response: Thank you for your comments. We have extended the implementation time period to twelve calendar months. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Ameren	No	We believe that the VSLs in this draft Standard create the potential for a violation or self-report for almost every single individual conversation about the BES by real-time operators. In this regard, we are concerned that the Functional Entities will greatly decrease their oral communications to minimize the risk of a self-report or violation which ultimately would undermine necessary discussions between operating entities.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
American Transmission Company, LLC	No	System Operators receive and issue many Operating Communications each day. The VSL for "one" Operating Communication is Moderate, which is considered too high. While improving communications is a laudable goal, the zero tolerance VSL is unacceptable and will lead to a preponderance of self-reports and compliance and administrative overhead. Also overlooked is the added stress that every time a System Operator speaks, they may be in violation.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC		

Organization	Yes or No	Question 9 Comment
and NERC guidelines.		
MISO	No	MISO respectfully submits that no justification has been provided regarding the VRF and VSLs assigned to COM-003-0. Additionally, MISO suggests that the proposed VRFs and VSLs may be disproportionate to the actual impacts of non-compliance with the proposed standard and its requirements. For example, the proposed Standard suggests that a failure to implement one of the four parts of Requirement R1, Part 1.1 when all four parts are required is less harmful than a failure to implement one of the four parts when only two parts are required but fails to justify why the former presents a lesser risk to reliability than the latter or why a more substantial penalty would be appropriate in the latter instance. MISO respectfully suggests that the SDT revisit the proposed VRF and VSLs and revise them to ensure the consistency with the likely actual impacts on reliability.
Response: Thank you for your comments. The VRF and VSL justification was posted with the standard. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Seminole Electric Cooperative	No	See previous comments
Exelon Corporation and its affiliates	No	Exelon does not agree with the VRFs and VSLs for Requirements R1, R2 and R3. Requirement R1 - The Violation Severity Levels imply that if the responsible entity did not correctly implement any one (1) of the four (4) parts of R1 at any time that that entity would be non-compliant. It is not reasonable to hold an entity responsible to verify that every communication be in accordance with R1 at all times. It should be an expectation, but not a requirement. Requirements R2 and R3 - Similar to R1 it is not reasonable to hold an entity responsible to verify that every communication meet the requirement of R2 or R3 in all instances. Exelon suggests that this requirement be revised to address those instances where an actual event occurred due to improper communication or be limited to communication of a stated Reliability Directive. In general, the current VSLs for the current draft of COM-003-1

Organization	Yes or No	Question 9 Comment
		do not seem commensurate to the risk to the BES. See the response to Q10 for a reasonable approach to implementation of the intent of this requirement.
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.		
Brazos Electric Power Cooperative	No	Please see formal comments provided by APM.
Kansas City Power & Light	No	VRFs and VSLs should be low.
Flathead Electric Cooperative, Inc.	No	
SMUD	No	
Liberty Electric Power LLC	No	
Salt River Project	No	
South Carolina Electric and Gas	No	
Ingleside Cogeneration LP	Yes	With the transition of emergency communications to other projects, it is appropriate to downgrade COM-003-1's VRFs from "High" to "Medium".
Response: Thank you for your comments. Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with the guidelines.		

Organization	Yes or No	Question 9 Comment
Idaho Power Company	Yes	At least I don't have a good reason not to agree.
City of Jacksonville Beach dba/Beaches Energy Services	Yes	None.
Imperial Irrigation District	Yes	
BC Hydro	Yes	
Florida Municipal Power Agency	Yes	
GP Strategies	Yes	
Arizona Public Service Company	Yes	
Lakeland Electric	Yes	
Hydro-Quebec TransEnergie	Yes	
Orlando Utilities Commission	Yes	
The United illuminating Company	Yes	
Utility Services, Inc.	Yes	
Colorado Springs Utilities	Yes	

Organization	Yes or No	Question 9 Comment
Manitoba Hydro	Yes	
City of Vero Beach	Yes	
U.S. Bureau of Reclamation	Yes	
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Public Service Enterprise Group		See #10.

10. If you have any other comments or suggestions to improve the draft standard that you have not already provided in response to the previous questions please provide them here.

Summary Consideration:

A common theme among many entities is that the approach to COM-003-1 should be changed. Most agreed with the comments submitted by the NERC Operating Committee that applicable entities should be required to

1. develop written communication protocols that address the elements in draft 2 of COM-003-1,
2. train on those protocols, and
3. develop internal controls to find and correct deviances from those protocols.

After discussion, the SDT agreed with the commenters and modified its approach to closely align with the proposal. In addition, the SDT felt that it would be beneficial to develop the RSAW for this standard in conjunction with NERC Compliance staff, and has posted it for comment along with draft 3 of COM-003-1.

Another prevalent theme was questioning the necessity of the standard, specifically one that requires three part communication for routine operations.

During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.

Another theme was the concern that the work of the SDT was overreaching the scope of the SAR.

The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors."

Another theme was that the use of three part communications should be limited to Reliability Directives only.

A Reliability Directive, by definition, is limited to instances where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact. The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.

Still others express a desire to combine COM-002-3 and COM-003-1 into a single standard.

The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope for communications than that for Project 2006-06.

Another concern was that this standard addressed "how" to communicate instead of "what" to communicate.

When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated.

Many commenters also questioned the purpose of the whitepaper that was posted by the SDT during draft 2.

The whitepaper was intended to assist industry stakeholders understand the rationale behind the content in the standard. For further information on communication guidelines, please refer to the paper developed by the NERC Operating Committee titled "Reliability Guideline: System Operator Verbal Communication – Current Industry Practices" located at http://www.nerc.com/filez/oc.html.

Several commenters expressed the desire that the language pertaining to three part communication in COM-003-1 match that in COM-002-3.

The SDT agrees and is using the language of COM-002-3, R2 and R3 in draft 3 of COM 003-1.

Organization	Yes or No	Question 10 Comment
Hydro One Networks Inc.		- Hydro One strongly believes that three-part communication should be limited to Reliability Directives only. Its application to virtually all communications will prove to be an additional burden for operators, burden that is not justified and would not in

Organization	Yes or No	Question 10 Comment
Response: Thank you for your comments. A Reliability Directive, by definition, is limited to instances where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact. The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.		
Xcel Energy		(1) Requirement R1.1 refers to both written and oral Operating Communications. It was our understanding that COM-003-1 was to be focused solely on oral communications. If that was the SDT's intent, then we suggest striking the word "written" from this sub-requirement. **Response: The scope of the SAR for Project 2007-02 is not limited to oral communications.** (2) Six month Effective Date is not likely to be enough time to develop, implement, and test a new communication program. We need enough time to train the field personnel, plant control room operators and system operators to use alpha-numeric identifiers, 24-hr clock, time zone, etc. before the standard becomes effective. A twelve month implementation period would be more appropriate. **Response: The SDT agrees and has made the suggested change.**
Response: Thank you for your comments. Please see the response above.		
Central Lincoln		1) Central Lincoln supports the comments provided by PNGC. We have a similar situation, and believe the redirection of resources needed for compliance can only have a negative effect on our local level of service. **Response: Please see our response to PNGC.** 2) Central Lincoln is greatly concerned regarding how this standard will be audited. We expect the Compliance Enforcement Authority, in order to avoid a data dump in the form of a six year audit period's worth of radio recordings consisting of mainly distribution related instructions, will request searchable transcripts with pointers to

Organization	Yes or No	Question 10 Comment
		the relevant >100 kV parts. This will represent a huge amount of time to transcribe the recordings and provide the pointers. This administrative burden in proving compliance after the fact will not result in any improvement in reliability. **Response: The SDT understands your concerns and has developed a new approach to the standard that addresses your concern.**
Response Thank you for your comments. Please see the response above.		
IESO		1. This standard is over-reaching into routine operations as it requires 3-part communication for all instructions that change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. This type of instructions occurs every hour, if not every minute. Requiring operating personnel to apply a 3-part communication procedure for each and all of these instructions is absolutely unnecessary and overburdening, and can in fact adversely affect reliability. We strongly suggest that any requirement for 3-part communication for routine operating instructions be removed. **Response: The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.** 2. The proposed implementation plan conflicts with Ontario regulatory practice respecting the effective date of the standard. It is suggested that this conflict be removed by appending to the implementation plan wording, after "applicable regulatory approval" in the Effective Dates Section A5 on P. 4 of the draft standard COM-001, COM-002 and IRO-001, and on P. 2 of COM-001's Implementation Plan and P. 1 of COM-002's and IRO-001's Implementation Plans, to the following effect:", or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities."

Organization	Yes or No	Question 10 Comment
		Response: The SDT modified the section in response to your comments.
Response: Thank you for your comments. Please see the response above.		
ACES Power Marketing Standards Collaborators		1. It is not clear that COM-003-1 R1 applies to COM-002-3. The latest draft of COM-002-3 doesn't reference the communications protocols listed in COM-003-1 R1 and the definition of Reliability Directive does not state that it is a type of Operating Communication. The only place that describes the relationship between a Reliability Directive and Operating Communications is the text box under the definition of Operating Communication in COM-003-1. There should be a better connection between the two standards to emphasize this fact. We recommend the SDTs work together to bridge this gap. **Response: COM-003-1, R1 applies to all communications that involve a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** 2. Bullet 2 of the Implementation Plan Effective Dates is missing a word or words (section in question in parentheses): "If the version of COM-001-2 revised under Project 2006-06 is not approved before COM-003-1 is approved, then COM-001-1.1 shall expire midnight of the day (immediately the) version of COM-001-2 developed under Project 2007-02 ..." In addition, this bullet is simply too wordy and difficult to comprehend. We suggest re-wording or splitting into separate sentences for easier comprehension. **Response: The SDT agrees and has corrected the bullet.** 3. Because all three Measures include voice recordings as evidence, the Data Retention section inappropriately and without justification raises the bar on retention of voice recordings. The section requires 365 days of voice recordings for R1 and 180 days for R2 and R3. Many registered entities keep no more than 90 days of voice recordings. Keeping more than 90 days would require unnecessary

Organization	Yes or No	Question 10 Comment
		additional storage. Furthermore, it is not consistent with any other NERC standard (including COM-002) that compels, at most, 90 days. Thus, many registered entities probably have evidence retention policies that actually require destruction of such recordings after 90 days. **Response: The SDT has developed a new approach to the standard that addresses your concern.** 4. While we do not agree with all parts of the Whitepaper, we believe one major point of clarification is needed. On page 3, in the first bullet regarding a general description of how three-part communications is conducted, the face-to-face communication needs to be clarified or removed. Including face-to-face communications is not necessary for two primary reasons. First, the major reason that three-part is necessary for telephonic communications is because you cannot see the receiver and really tell if they comprehend the message. Second, this could draw in communications between operators within the control center. Since these conversations are not easily recordable, how does a registered entity prove compliance? **Response: The SDT believes that Operating Communication on a face to face basis is subject to the same risk of mistakes and misunderstanding. The OPCPSDT has participated in the development of the RSAW for COM-003-1 and considered your comments.**
Response: Thank you for your comments. Please see the response above.		
Texas Reliability Entity		1. The use of exploder or hotline calls, where a single oral communication is used to alert a multitude of entities simultaneously to issues and directions affecting the BES, should be addressed by this Standard. The use of these types of calls is economic, efficient, and should be recognized for the purpose of providing Operating Communications, including Reliability Directives. Not addressing this issue will have a serious impact on System Operators during times, normal or emergency, when clear,

Organization	Yes or No	Question 10 Comment
		concise, and effective communications are needed. The 2003 Blackout Recommendation #26 includes the following text: "Standing hotline networks, or a functional equivalent, should be established for use in alerts and emergencies (as opposed to one-on-one phone calls) to ensure that all key parties are able to give and receive timely and accurate information." This proposed Standard should address the issue of what communication protocols should be applied to exploder or hotline calls. **Response: The SDT has addressed all calls in draft 3.** 2. There is a disconnect between COM-003-1 and COM-002-3 that will create confusion within the industry regarding communications. COM-002-3 has limited applicability, restricted to use of Reliability Directives ONLY in an Emergency or Adverse Reliability Impact. COM-003-1 is limited to oral two party communications, but it applies outside of Emergency situations. With proposed IRO-001-3 contained in Project 2006-06, a Reliability Coordinator or other entity may not be certain of whether to give a directive, a Reliability Directive, or an Operating Communication, and a recipient may dispute whether the correct communication type was used. What is the intended compliance impact of using the wrong type of communication, for both the initiating entity and the receiving entity? **Response: Only a Reliability Directive must be identified as such. If a "directive" is a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System," it is an Operating Instruction and must use the protocols identified in COM-003-1.** 3. COM-003-1 and COM-002-3 will cause substantial confusion as drafted because they both require three-part communication, but they use different language to describe it. That suggests that the communication protocols that are required must be different, and as an entity moves from non-Emergency into Emergency operations, its communication protocol will be expected to change. We strongly

Organization	Yes or No	Question 10 Comment
		suggest that a single three-part-communication protocol be set forth in one place only, and that any differences between Emergency and non-Emergency communication requirements be clearly identified. **Response: The SDT agrees and is using the language of COM-002-3, R2 and R3 in draft 3 of COM 003-1.**
Response: Thank you for your comments. Please see the response above.		
Hydro-Quebec TransEnergie		1. Inconsistency between the sentences in R2 of COM-003 "that issues an oral, two-party, person-to-person Operating Communications" and R3 "that receives an oral two-party, person-to-person Operating Communication". The sentence in R2 has a comma after the word oral, the sentence in R3 does not. Furthermore, what is the difference between two-party and person-to-person communication? **Response: The SDT will remove the comma in R2. "Two party" was added based on concerns that the requirement would be applicable to multi addressee or burst communication. Person to person was added to address concerns of the requirements applying to "machine" messages that some entities utilize.** 2. For R2 of COM-003, should the Generator Operator be involved in this requirement as an authority able to issue an oral Operating Communication? **Response: Based on the revised definition of Operating Instruction, a GOP can only be a receiver of an Operating Instruction.** 3. It's not clear when an action is defined as a Reliability Directive. Does each utility define the instruction to be included in the Reliability Directive? Our current practice is that 3 ways communication is always directive. We still don't see the need to separate the COM-002 (emergency) and COM-003 (normal operating). **Response: The Reliability Coordinator, Transmission Operator, or Balancing**

Organization	Yes or No	Question 10 Comment
		Authority will issue a Reliability Directive during Emergency and Adverse Reliability Impacts in accordance with COM-002-3. 4. The requirement R1 of COM-003 should also be reflected in the COM-002 standard. Especially during the Emergency situation, the Operation Communication should be followed. **Response: The SDT thanks you for your comment.**
Response: Thank you for your comments. Please see the response above.		
Associated Electric Cooperative JRO00088		AECI remains unconvinced that COM-003-1 adds sufficient value to our industry reliability, for the degree of non-compliance risk it imposes. There are several issues with the supporting white paper: 1) this paper appears void of citations supporting its assertions, **Response: The SDT disagrees. There are many citations especially those dealing with human behaviors applicable to communication.** 2) It also fails to differentiate cited industry failures in communication, between; situations where somebody failed to communicate a field-change that significantly affected BES situational awareness, situations where the change was clearly understood and yet its situational impact was not, and situations where the affected objects were misunderstood. All of these failures are critical to our industry's assessing true value in introducing and enforcing broad-scope three-part communication, because COM-003-1 can only improve the last of those three miscommunications, **Response: The SDT did not go into that detail because of ongoing discussion of violations.** 3) its citation, of 12 Entity's broadly adopting three-point communication, seems hardly a majority practice within our industry,

Organization	Yes or No	Question 10 Comment
		Response: The SDT would ask you to look at the load and customer impacts that sample covered. The SDT could have added another 20 entities and believes the results would not differ. 4) while Entities may internally adopt similar policies, that does not mean we should risk being subject to Federal law in support of conceptual theories, **Response: The formalization of communication protocols enhances reliability by reducing errors on the BES.** 5) Citations of similar adoptions by other industries or cultures, fail to provide useful differentiation between their critical and casual operational communications, except in the case of military, where COM-003's proposed broad scope of communication appears to be inconsistent, while COM-002's narrowed scope appears in alignment with the military's adopted practices as described. **Response: The OPCPSDT has military expertise that would suggest otherwise.**
Response: Thank you for your comments. Please see the response above.		
FirstEnergy		Although we believe the team made significant improvements to the standard, and would support a 3-part communication standard, we believe the introduction of both COM-002-2 which utilizes Reliability Directives and COM-003-1 which utilizes Operating Communications cause confusion for system operators and may in fact be detrimental to reliability. We do not support two standards on three-part communication. We suggest, as we have in the past, that the subject of three-part communication be addressed in a single standard, and that the requirements be developed for simplicity. The industry is, and has been, using three-part communication for decades and although we agree it should be more consistently practiced and standardized, the required communications protocols should be simple while meeting the goal of BES reliability. Introducing complicated requirements and standards that have different definitions such as Reliability Directive and Operating

Organization	Yes or No	Question 10 Comment
		Communication may cause the operator to hesitate when issuing directives in real-time and every second counts when a potential system emergency must be mitigated. Therefore, FE does not support the creation of neither COM-003-1 nor COM-002-2 (see project 2006-06 vote and comments) and ask NERC to reevaluate the need to have two separate standards for three-part communication.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope than that for Project 2006-06.		
Western Electricity Coordinating Council		As noted in our response to question 6, there is still a concern about having two standards for communications on changes to elements of the BES. Bifurcations may lead to the misuses of one protocol in place of another for the two standards.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope than that for Project 2006-06.		
City of Austin dba Austin Energy		Austin Energy (AE) respectfully disagrees with COM-003-1 because it: (1) reaches beyond the SAR and **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "*Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors.*"** (2) Requires "how" communication should take place instead of "what" and "when." **Response: When defining common communication protocols to be used for**

Organization	Yes or No	Question 10 Comment
		communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated. The scope of COM-003-1 reaches beyond the SAR by imposing protocols on normal communications when the focus of the 2003 Blackout Report, Recommendation 26 and Order 693, Paragraph 532 is on timely and accurate EMERGENCY communication. Recommendation 26 does not recommend tightened communication protocols under normal operating conditions. It recommends that NERC "work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations...." AE believes Project 2006-06 (COM-002-3) sufficiently addresses this recommendation by requiring three-part communication for Reliability Directives. If used correctly, the say-repeat-confirm method improves effectiveness of communications during alerts, emergencies and other critical time periods. **Response: Response: The OPCPSDT disagrees that the Blackout Report (and FERC Order 693 and the SAR) only addresses the need to tighten protocols for Emergencies. The Blackout Report uses the phrase "*especially* for emergencies" which the SDT interprets to mean the authors were recommending applicability of communication protocols for the total population of operating communication and used this language to amplify the importance of such protocols during emergency conditions. FERC Order 693 paragraph 532 ("*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions*") and the SAR are very specific in that both include the term "normal" operating conditions.** The other source for COM-003-1 (Paragraph 532) references communications during normal conditions, but only in response to an EEI comment. The actual directive is in paragraph 535, where FERC states, "Accordingly, we direct the ERO to either modify COM-002-2 or develop a new Reliability Standard that requires tightened communications protocols, especially for communications during alerts and emergencies." AE notes that the directive focuses on communications during alerts and emergencies, similar to Recommendation 26. AE recognizes that the SDT reads

Organization	Yes or No	Question 10 Comment
		Paragraph 532 to indicate a need for communication protocols even under normal operating conditions. However, AE believes that a NERC Reliability Standard is not the appropriate place to address the "how" of communication protocols under normal conditions. **Response: FERC Order 693 paragraph 532 (*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions"*) and the SAR are very specific in that both include the term "normal" operating conditions.** Industry stakeholders are justifiably concerned that deviations from the requirements during normal operating conditions will inevitably occur (human performance factor) without a risk to reliability. The potential number of self-reports industry-wide carries an overly burdensome cost without an associated benefit to the BES. AE believes that efforts at the regional level (e.g., training, guidelines, etc.) would be more effective and relevant. In summary, AE believes the focus of COM-003-1 should be on achieving accurate and timely information (the "what" and "when"), not prescribing exactly "how" registered entities achieve it. As written, COM-003-1 goes too far into the realm of mandating best practices and claiming it is necessary for reliability. **Response The SDT understands your concerns and has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see our response above.		
Pepco Holdings Inc & Affiliates		COM-002 and COM-003 must be combined into one standard. COM-002 dealing with emergency, reliability situations requires 3 part communication as specified. COM-003 dealing with normal conditions, non reliability issues should not require 3 part communications.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten		

Organization	Yes or No	Question 10 Comment
response time." This is a broader scope than that for Project 2006-06.		
ITC Holdings		COM-003-1 and COM-002-3 cannot be processed separately since they are inextricably inter-related. In fact, they are so inter-related that there is no compelling reason provided that suggests they should be separate standards. The comment form for COM-003-1 even indicates that Reliability Directives are a subset of Operational Communication which further indicates that all of the requirements surrounding how communication is performed regardless of the nature of the content should be addressed in one standard. **Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope than that for Project 2006-06.** Further, 3 part communication is being cited as ensuring reliable operation of the BES. It is not the act of 3 part communication that ensures reliable operation. Rather, it is the effective transfer of information that does. Requiring 3 part communication for all communication will reduce the effectiveness of the communication as the novelty factor wears off and individuals only go through the motions. Active listening and truly understanding the communication is what accomplishes the intent. Use of 3 part communication for situations that the initiator determines it is warranted based on their knowledge and training is the most appropriate approach to ensure reliable operation of the BES. **Response: The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.**

Organization	Yes or No	Question 10 Comment
Response: Response: Thank you for your comments. Please see the responses above.		
JEA		Combine COM002 & COM003.
Response: Thank you for your comments. The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope than that for Project 2006-06.		
City Water Light and Power		CWLP generally echoes the SERC Operating Committee comments. Additional comments have been provided to suggest better functionality if the standard moves forward in its current form.
Response: Thank you for your comments. Please refer to the response to the SERC Operating Committee comments.		
LG&E and KU Services		Does the industry agree that we need a standard on three part communications for normal operations? Has a lack of a standard on three part communications for normal operations created any reliability issues? If so, what are they? LG&E and KU Services believes that the concerns expressed by the Blackout Report and cited as the reason for creating this NERC Project are already addressed through EOP and TOP Standards that specify what information is to be communicated, instead of how information is to be communicated. "Lack of situational awareness" (2003 Blackout Report, Recommendation 26) cannot be overcome by dictating "how" communication takes place, but instead, can be overcome by responsible individuals (NERC certified operators) ensuring that proper information is communicated. LG&E and KU Services believes that the concerns expressed by the Blackout Report and FERC Order 693, Paragraph 532 are not (and need not be) addressed by this or any other NERC RS Project. First, the recommendation for "tightened communication protocols" (FERC Order 693, Paragraph 531) is within the context of "alerts and emergencies."

Organization	Yes or No	Question 10 Comment
		Second, FERC's Order 693, Paragraph 532 calls for "communication uniformity as much as practical on a continent-wide basis." This is calling for uniformity in emergency communications, which was the context within which FERC was speaking, as evidenced by the previous sentence ("during emergencies"). By establishing emergency communication uniformity, "ambiguities in communications during normal, alert and emergency conditions" will be eliminated. Nothing in the Commission's Determination was calling for establishing communication uniformity for all communications. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.** **The OPCPSDT disagrees that both the Blackout Report and the FERC directive deal with tightening protocols for Emergencies only. The Blackout Report uses the language "Tighten communications protocols, especially for communications during alerts and emergencies." The SDT believes the authors are recommending applicability of communication protocols for the total population of operating levels and wanted to amplify the importance of it "especially" during emergency conditions. FERC Order 693, paragraph 532 (*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions"*) and the SAR are very specific in that both include the term "normal" operating conditions. Additionally the excerpts from the text you cite** *("Paragraph 532 calls for "communication uniformity as much as practical on a continent-wide basis")* **are very clear in their intent and meaning and support the standard as drafted.** LG&E and KU Services suggest removing requirements R2 and R3. These requirements do not improve reliability, but instead shift Operator focus from

Organization	Yes or No	Question 10 Comment
		communicating proper information ("what") to communicating in a compliant manner ("how"). System Operator need to be wholly concerned with the information they are communicating, not making sure they "say things the right way" so they will not be non-compliant. Every communication should not be a compliance event. **Response: The SDT believes that it is necessary to specify 3 part communication as a necessary communications protocol for all Operating Instructions, not just emergency situations. The OPCPSDT believes that the potential for risk to the reliability of the BES exists for all Operating Instructions.** While LG&E and KU Services supports the addition of using the 24-hour clock format, subpart 1.1.4 is already addressed in TOP-002-2b R18. Including such a similar requirement here simply provides entities with a double jeopardy opportunity to be non-compliant. We suggest subpart 1.1.4 be removed, along with subpart 1.2, which again goes too far in dictating "how" and simply creates another compliance event. **Response: The SDT is aware that Requirement R18 is being eliminated by the RTOSDT as part of project 2007-03. Project 2007-03 chose to eliminate TOP-002-2a Requirement R18 on the basis that "This requirement adds no reliability benefit. Entities have existing processes that handle this issue. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue. This is an administrative item, as seen in the measure, which simply requires a list of line identifiers. The true reliability issue is not the name of a line but what is happening to it, pointing out the difficulty in assigning compliance responsibility for such a requirement, as well as the near impossibility of coming up with truly unique identifiers on a nation-wide basis. The bottom line is that this situation is handled by the operators as part of their normal responsibilities, and no one is aware of a switching error caused by confusion over line identifiers." COM-003-1, while reintroducing the concept of line identifiers, limits the scope to only**

Organization	Yes or No	Question 10 Comment
		Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations). This ensures that both parties are referring to the same equipment for the Operating Instruction. We suggest subpart 1.1.3 be rewritten to explicitly allow for entities to agree upon using a particular format for communicating time. With these suggestions in mind, it would be more appropriate to put the remaining requirements into COM-001. We also suggest removing the definition for Operating Communication since this also unnecessarily creates opportunities for non-compliance. **Response: When defining common communication protocols to be used for communication between entities, it is necessary to be specific on what must be communicated and how it must be communicated. Comments on prior postings of COM-003-1 rejected allowances for entities to agree upon particular protocols, feeling that the documentation of those agreements would be overly burdensome and is contrary to the purpose of the SAR, which is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." The SDT is using the term "Operating Instruction" to limit the communications that are subject to COM-003-1.** LG&E and KU Services have concerns about the white paper posted on the project page. Some assertions made in the white paper are not defensible, and some are not technically sound. This should not be used as support for the existing draft of COM-003. **Response: The SDT believes its assertions are defensible, technically sound, and carefully researched. The White Paper is intended to assist industry stakeholders understand the rationale behind the content in the standard. For further information on communication guidelines, please refer to the paper developed by the NERC Operating Committee titled "Reliability Guideline: System Operator Verbal Communication – Current Industry Practices" located at**

Organization	Yes or No	Question 10 Comment
		http://www.nerc.com/filez/oc.html.
Response: Thank you for your comments. Please see the response above.		
Dominion		Dominion acknowledges the term Reliability Directive is proposed for inclusion in the draft of COM-002-3, but we also prefer a notation be added, to clarify this is not an existing term in the current version of the NERC Glossary of Terms. As mentioned in response to Question #1; When the standard is implemented, the text box (on page 2 of the clean standard) will be removed, therefore losing any tieback to a Reliability Directive as a type of operating communication. **Response: After filing with FERC and receiving FERC approval the definition will be added to the NERC Glossary of Terms. The OPCPSDT and the RCSDT were attempting to explain the relationship between the two standards to help stakeholders understand. The textbox was an attempt to explain that relationship. Draft 3 of the standard no longer contains the reference.** The data retention period for this standard for normal operating communications is extensively longer than the COM-002-3 standard for emergency communications as discussed in Project 2006-06. Dominion suggests the same data retention period as COM-002-3 for Requirements 1, 2 and 3 of this standard, which is for the most recent 3 months. **Response: The SDT has developed a new approach to the standard that addresses your concern.** Dominion also questions why the proposed standard is applicable to Distribution Providers since changing the state of BES elements is not what they do. Therefore, they would never receive an Operating Communication instructing them to do anything to a BES element, so it would not be practical or useful for a DP to include this standard in its compliance program. DP is included as an applicable Registered Entity in COM-002. Other than a load shed Reliability Directive (during emergencies),

Organization	Yes or No	Question 10 Comment
		what other Operating Communication would a DP receive? **Response: The SDT is aware of some DPs that operate and own BES assets. Load shedding communications are the main reason they are applicable. Load shedding can be requested during non emergency conditions.**
Response: Thank you for your comments. Please see the response above.		
Arizona Public Service Company		Equipment identifiers at individual locations (generating stations as an example) have the same alpha preceding the unique device numeric. It is unnecessary, redundant and confusing to the operator to repeat the station location with an alpha clarifier.
Response: Thank you for your comments. The SDT is has developed an alternate approach to COM-003-1. Using the approach in draft 3, an entity could define in their communication protocols that the equipment identifier does not include the preceding alpha that designates the location.		
Exelon Corporation and its affiliates		Exelon believes that the proposed COM-003-1 exceeds what is necessary for reliability and creates other problems such that the proposed standard may in fact result in a decrease in reliability. In particular the language is overly prescriptive and presents significant compliance questions both in terms of creating a credible compliance measure and a reasonable way for entities to demonstrate compliance or conduct internal self-assessment. Exelon believes that an alternative approach to COM-003 is needed. The standard should set desired outcomes and leave the specific implementation of communication protocols to registered entities. Standards should not impede use of best practices and should encourage effective innovation. An alternate approach is worth consideration: Requirements: 1. Entities must have a protocol addressing communications for operating personnel.

Organization	Yes or No	Question 10 Comment
		1.1. The protocol should address; three part communication, English language usage (include footnote for requirement to use legislatively prescribed language), time zone, entity unique identifiers, 24 hour clock and alpha numeric identifiers. 1.2. All control center operating personnel should be trained on the use of the protocol. Measure: In an audit, a company would be expected to demonstrate that they had such a protocol and that they trained their operators on its use. This proposal would satisfy the Directives and Blackout Recommendation #26 which were to "tighten communication protocols, especially for... emergencies". Stakeholders and the NERC BOT approved COM-002-2 which addressed communications capabilities being staffed and available for addressing a real-time emergency condition. An associated interpretation of COM-002 clarified whether routine operating instructions are "directives" or whether "directives" are limited to actual and anticipated emergency operating conditions. Our proposed changes to COM-003 are responsive to the FERC recommendation to tighten operating protocols. Other possible responses to this recommendation would be to conduct an assessment of NERC certification requirements and if found lacking in this area, strengthen them. For the reasons stated above, we urge NERC to change the focus of COM-003 from a prescriptive what to do approach and allow entities to develop and implement protocols in keeping with NERC and ISO/RTO operator certification requirements and best practices within the industry. Thank you for the opportunity to comment.
Response: Thank you for your comments. The SDT has developed a similar approach in draft 3.		
Idaho Power Company		I believe the requirements for Directive should be included in this standard and

Organization	Yes or No	Question 10 Comment
		removed from COM-002.
Response: Thank you for your comments.		
Illinois Municipal Electric Agency		IMEA agrees with comments submitted by the SERC OC Standards Review Group.
Response: Thank you for your comments. Please see our response to SERC Operating Committee comments.		
Indiana Municipal Power Agency		IMPA believes that each organization should follow its internal communication protocol up to the point where a Reliability Directive is issued. IMPA does not see why NERC is stating the "how" in this standard (sub-requirements 1.1, 1.1.1 thru 1.1.4) when its common practice has been to stay away from telling the entities "how" to do a standard requirement. Therefore, IMPA believes that COM-003 should just state that an entity needs to have a communication protocol in place for issuing and receiving instructions. In addition, an entity should only have to do training on its communication protocol in order to prove compliance that it is following or using it. The record keeping or data retention of phone recordings will become very burdensome on entities, especially if they have to keep five or six years worth (back to its last audit date).
Response: Thank you for your comments. The SDT has developed a similar approach in draft 3.		
Ingleside Cogeneration LP		Ingleside Cogeneration LP agrees in principle with the need for Operators and Field Personnel to express and validate their intent before taking actions that may pose a risk to the BES. However, we have serious reservations with the use of the audit methodology to drive consistent behavior. Perhaps most significant is the assessment of violations for a single instance where an operator does not use alphanumeric identifiers or a 24 hour clock during the course of an Operating Communication. We believe that even in an extremely well managed organization that 100% adherence is statistically impossible. In our view, this flies in the face of

Organization	Yes or No	Question 10 Comment
		fairness - and raises serious questions about the "public/private partnership" that is supposed to be the foundation of NERC standards. This points to the "bean counting" type of Standards that NERC is trying to get away from, rather than focusing on reliability of the BES. Furthermore, entities will be assessed violations if they cannot prove that every side conversation did not take place in accordance with COM-003-1. In order to comply, we estimate it will take two or three times the time to document a non-recorded communication than it will be to actually conduct one. This is not an appropriate use of our front-line resources available time - nor does the documentation serve a reliability purpose in our view. **Response: The SDT has developed a new approach in draft 3 that addresses your concerns.** In addition, COM-003-1 is silent as to multiparty calls that are typical in some regions, where an entity at random is elected for the three part response for the group on conference calls, and not all parties are required to respond, but rather only participate on the call. **Response: The SDT is incorporating protocols for multiparty calls in draft 3.**
Response: Thank you for your comments. Please see the comments above.		
Manitoba Hydro		Manitoba Hydro is voting negative on COM-003-1 based on our comments in the previous questions in addition to the following:(M1/M2/M3)- it is unclear what specifically is meant by 'on site observations' or how 'on site observations' can be an effective measure of compliance with the standard's requirements.
Response: Thank you for your comments. The measures have been modified in response to changes in the requirement language.		
PNGC Small Entity Comment Group		Modified PNGC Small Entity Group Comments: The PNGC comment group believes there should be a distinction in the "Applicability" section of the standard between "Scheduling Distribution Provider" and "Non-

Organization	Yes or No	Question 10 Comment
		scheduling Distribution Provider". PNGC members are small rural cooperatives that are "Full service BPA customers." This means that BPA is our power supplier and scheduling agent and therefore handles all reliability directives, scheduling, tagging, dispatching of resources and curtailments of load from breakers on BPA's system for PNGC members. According to a letter from the WECC Reliability Coordinator (VRCC and LRCC) none of PNGC's members will ever receive a "Reliability Directive". Such a Directive would be sent to either a Balancing Authority (BA), or a Transmission Operator (TOP). We estimate there are over 100 entities that are BPA Full Service customers that are in a similar position and making this standard applicable to them does nothing to enhance reliability. A simple declarative statement in the Applicability section of the standard could focus the intent of the SDT on those entities that need it while lessening the compliance risk and clerical burden for other entities that the standard should not apply to. We suggest: 4. Applicability: 4.1. Functional Entities 4.1.1 Reliability Coordinator 4.1.2 Transmission Operator 4.1.3 Balancing Authority 4.1.4 Generator Operator 4.1.5 Distribution Provider: With Real-time Operations and Scheduling desk the PNGC comment group believes the above change will lessen the compliance burden on small, non-scheduling entities while still meeting the SDT's intent with regard to Operating Personnel Communications. We also note that FERC and NERC, on multiple occasions and in

Organization	Yes or No	Question 10 Comment
		multiple filings, have indicated their openness to lessening unnecessary compliance requirements for small entities.
Response: Thank you for your comments. The SDT notes that COM-002-3, draft 6 states that in addition to Reliability Coordinators, Balancing Authorities and Transmission Operators can also issue Reliability Directives. Draft 3 of COM-003-1 also limits protocols for Distribution Providers to those that apply to receiving Operating Instructions.		
NERC Operating Committee		NERC Operating Committee (OC) comments on COM-003 (Operating Personnel Communications Protocols) The current draft of COM-003 is prescriptive and is in fact a procedure or rather a set of discrete tasks / actions that are not focused to support the reliability intent. The NERC OC recommends that the SDT develop a purpose that speaks to operators and their responsibility to maintain reliability not a process or set of protocols that cannot account for every nuance and variable in the realm of communications and human interaction. Restated Purpose: To provide system operators a holistic communications program that reduces the possibility of miscommunication that could lead to action or inaction harmful to the reliability of BES. The OC just approved a guideline for System Operator Verbal Communications. The OC feels this could be used as a basis for a new approach for COM-003-1. The OC proposes that the SDT changes the draft of COM-003 to the following three requirements: R1: Each RC, TOP, GOP, BA, DP shall develop a written communications procedure to address the following: o Protocols o Training and education o Internal controls (Preventive, Detective and Corrective) that demonstrates a process that will find, fix, track, trend, analyze and continuously improve

Organization	Yes or No	Question 10 Comment
		R2: Each RC, TOP, GOP, BA, DP shall train applicable personnel on the communication procedure developed for R1 R3: Each RC, TOP, GOP, BA, DP shall take appropriate actions to address deficiencies revealed by internal controls. **Response: The SDT has developed a similar approach in draft 3.** Data retention must be rethought to focus less on significant data and evidence archiving (backwards looking) and more on the internal program to continuously improve (forward looking). Individual instances of not following the company's procedure should not be the basis of violation but instead - a demonstration of internal assessment and refinement. **Response: The SDT has modified its approach to data and evidence retention.** The VRF/VSL should be based on an entity either not having a program, not demonstrating their assessment and corrective action process or egregious / systemic problems with the implementation of their program. **Response: The SDT has modified the VRFs and VSLs accordingly.**
Response: Thank you for your comments. Please see the responses above.		
Entergy Services		NERC standards are not procedures and this standard attempts to impose a single procedure on the industry. Tightening of communications protocols between entities does not equate to a procedural requirement to use 3-part communications between personnel at various registered entities. The actual impact to reliability of routine communications between entities is minimal and further diminished by the Reliability Directive construct espoused by RC SDT (Project 2006-06), which fully addresses the reliability implications of communications. **Response: The SDT is aware of draft 6 of COM-002-3 from project 2006-06 and**

Organization	Yes or No	Question 10 Comment
		believes that while COM-002-3 addresses the risks to reliability during Emergencies and Adverse Reliability Impacts it does not address the risks to reliability that exist due to communication mistakes that occur during normal operating conditions. The events that generate a Reliability Directive are high impact and low frequency events. Most of the time the BES is operated in a normal state sustained by large numbers of Element and Facility changes that require Operating Communications. **The communication protocols the SDT is proposing have been proven effective for clarifying critical content in commands or orders. Reducing the potential for mistakes on the BES enhances reliability.** While most of the industry practices three-way communications routinely, this is not necessary to assure reliable operations. Rather, in many cases, entities are viewing this as a "best practice", that helps to formalize communications so that Operators will develop good communications habits. The work by the RC SDT (Project 2006-06) on Reliability Directives is all that is necessary to assure BES reliability, and the approach currently espoused by OPCP SDT (Project 2007-02) in this COM-003 standard is massively redundant to that effort while not helping reliability. We agree with SERC in suggesting another approach to COM-003. Rather than to specify the solutions to achieving effective communication, COM-003 should instead focus on developing and training on an approach that is designed appropriately for each RE. For instance, another approach to COM-003 might be along the lines of: Requirement 1 (See our suggested alternate language in our response to Question 1) could be written in a manner to require the appropriate registered entities to develop a communication protocol that is appropriate for each RE. This communications protocol should address how the RE is handling: Time Zone Designations - for both internal and external communications Language

Organization	Yes or No	Question 10 Comment
		Alpha-numeric identifiers Three - part communications - circumstances in which is it required, etc Use of defined terminology. This approach would require the RE to address how it is addressing these issues, without prescribing solutions. For instance, a RE could include in its protocol a section dealing with time zone designation. In this section the RE could explain that it, and its neighbors, all are in and use the same time zone. As a result, the RE has determined that requiring the identification of time zone reference in communication is not necessary. Procedures should address the training of operators on the communication protocol Procedures should address the internal controls that the RE uses to review that its protocol is being followed. The compliance approach would be to: Assess whether the RE has developed a written protocol and whether the protocol addresses each item - this does not mean there is an assessment of HOW each item is assessed; assess whether the RE has trained its operators on the communications protocol and assess whether the RE is following its internal controls. Compliance with this requirement should not require 100% accuracy in compliance with the entities communication procedure by real-time operations staff. That would cause misdirection of resources and training time from issues more important to BES reliability. **Response: The SDT has developed a similar approach in draft 3.** Any data retention requirements should be consistent with the COM-002 reliability standard. **Response: The SDT has modified its approach to data and evidence retention.** What is the role of the Operating Communications Protocols White paper? Is it a position of the STD? Was there a minority opinion? Why was it not vetted with a

Organization	Yes or No	Question 10 Comment
		wide spectrum of industry stakeholders (we are unaware of any effort to circulate this white paper even as far as to the standing Technical Committees of NERC). **Response: The White Paper is intended to assist industry stakeholders understand the rationale behind the content in the standard. For further information on communication guidelines, please refer to the paper developed by the NERC Operating Committee titled "Reliability Guideline: System Operator Verbal Communication – Current Industry Practices" located at http://www.nerc.com/filez/oc.html.** **The White Paper was requested by members of the Standards Committee to provide a foundation for the team's position on communication protocols for normal operations.** Does the industry agree that we need a standard on three part communications for normal operations? We have seen no evidence to support this contention. This revision to COM-003 seems to have sprung into existence without any substantive industry comments indicating that the industry would benefit from having a procedure memorialized as a set of Requirements. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.**
Response: Thank you for your comments. Please see the responses above.		
Southern Company		NERC standards are not procedures and this standard attempts to impose a single procedure on the industry. Where is the demonstrated need for such a standard?

Organization	Yes or No	Question 10 Comment
		Have communications, especially during periods of normal operations, been shown to be the root cause of many, if any, events? Registered Entities agree that there is a need of clear and concise communication between entities; however, we must avoid creating a system that is unmanageable and quite possibly results in less reliability. FERC Order 693 directs the ERO to ‘‘and (3) requires tightened communications protocols, especially for communications during alerts and emergencies”, in paragraph 532. The proposed standard goes too far, especially for communications outside of alerts and emergencies.
Response: Thank you for your comments. The purpose of the SAR for this project is “Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time.” Additionally, the SAR is very specific in that it also includes the term “normal” operating conditions under Applicability: “Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors.” The SDT has developed a new approach to the standard that addresses your concern.		
NextEra Energy, Inc		Next Era has the following additional recommended changes to increase the clarity of COM-003-1: 1. A new provision on written Operating Communications that requires that the sender to receive a notification that the recipient has received and read the communication. As currently written, there is no read receipt requirement for written Operating Communications. This appears to create a possible reliability gap, given that the sender will not know that its instructions were received and read, which leaves the system in a state of limbo as to what actions will or will not be taken. Accordingly, NextEra recommends that a requirement be added that reads as follows:” When a Reliability Coordinator, Transmission Operator and Balancing Authority sends a written Operating Communication it shall include a “read receipt” requirement or

Organization	Yes or No	Question 10 Comment
		similar mechanism to ensure the sender has received and read the Operating Communication. If a "read receipt" is not received by the sender, the sender shall call the intended recipient or rescind the Operating Communication." **Response: The SDT has limited three part communication to oral communication. In the alternative approach to COM003-1 an entity could address that concern in its communication protocols.** 2. R2.1 is confusing because it attempts to mix what occurs when a response is received and when no response is received during a oral communication. To ensure no confusion occurs, as well as providing for additional practical discretion when a response is not received, NextEra recommends that R2.1 be separated into two distinct sections and be rewritten to read as follows: R2.2. After the response is received, do the following: o Confirm the receiver's response is correct (not necessarily verbatim). o Reissue the Operating Communication if the repeated information is incorrect or if the receiver does not issue a response. o Reissue the Operating Communication, if requested by the receiver. R2.3 If no response is received, do one of the following: o Ask the receiver if the Operating Communication was received. If receiver confirms receipt of the Operating Communication, then proceed through R2.2. If the receiver, however, does not confirm receipt or no response is received, the sender of the Operating Communication shall either reissue or rescind the Operating Communication. **Response: The SDT has changed the language to the same language contained in COM-002-3, R2 and R3 to be consistent and to reduce confusion.**

Organization	Yes or No	Question 10 Comment
		3. Unlike language on Reliability Directives in IRO-001-3 - “unless compliance with the direction cannot be physically implemented or unless such actions would violate safety, equipment, regulatory or statutory requirements” - there is no similar qualifier for Operating Communications. To provide the recipient of an Operating Communication the same rights as a Reliability Directive, NextEra requests that a new section be added: ”The recipient of an Operating Communication is required to implement the instruction, unless compliance with the instruction cannot be physically implemented or unless such actions would violate safety, equipment, regulatory or statutory requirements. In the event the recipient is unable to carry out the instruction, it shall communicate this situation to the sender of the Operating Communication.”This last recommended addition should be added in both cases: (a) if Next Era’s response to question 6 is adopted, or (b) if NextEra’s response to question 6 is not adopted. **Response: The SDT has developed a new approach in draft 3.** .4. To provide clarity to COM-003-1, NextEra recommends that the purpose stated in the white paper be transferred to the purpose statement of COM-003-1. The white paper states that “[t]he purpose of the proposed standard is to: ‘Require that real time System Operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time.’” NextEra recommends that this purpose statement replace the draft purpose statement in COM-003-1, so COM-003-1 is not misinterpreted to require three way communications outside of real-time system operations. **Response: The SDT has modified the purpose statement in draft 3.**
Response: Thank you for your comments. Please see the responses above.		

Organization	Yes or No	Question 10 Comment
New York Power Authority		NYPA supports the comments submitted by the NPCC Regional Standards Committee (RSC).
Response: Thank you for your comments. Please see the response to the comments submitted by the NPCC Regional Standards Committee (RSC).		
American Electric Power		Our efforts in this regard should first be focused solely on Reliability Directives before expanding this work, and creating similar requirements for all other Operating Communications. Requiring three part communications for every scenario might be considered a best practice by some, but making it a mandatory practice for routine operations seems to emphasize the manner of communications rather than the operations themselves. In addition, requiring three part communications for Reliability Directives will likely result in more widespread usage for more routine operating communications, without making it a requirement. **Response: The SDT has developed a different approach to the standard that addresses your concern.** AEP believes that there should not be multiple project teams proposing concurrent changes to COM-001, COM-002, and COM-003. Unless there are overwhelming reasons for not doing so, these efforts should be consolidated and managed by a single project team. In addition, current efforts on COM-003 need to be co-located with the proposed changes to COM-002 within a single standard. Having multiple project teams proposing concurrent changes results in problems such as this, where a) changes are proposed to the same standard or b) similar changes are proposed to separate standards. AEP cannot support revisions on these matters until they are managed by a single project team. **Response: Thank you for your comments.**
Response: Thank you for your comments. Please see the responses above.		

Organization	Yes or No	Question 10 Comment
City of Palo Alto		Palo Alto supports the comments submitted by PNGC Power regarding limiting the applicability of the standard to a certain subset of Distribution Providers. Palo Alto is similarly situated as PNGC.
Response: Thank you for your comments. Please see the response to the comments submitted by PNGC Power.		
Brazos Electric Power Cooperative		Please see formal comments provided by APM.
Response: Thank you for your comments. Please see the response to the comments submitted by APM.		
Center Point Energy Houston Electric, LLC.		Question 10 Comments: It appears that the SDT is using an undefined definition of Reliability Directive to propose the new definition of Operating Communication. Is the intent of the SDT to also introduce this definition for Reliability Directive with this project? **Response: No. The OPCPSDT included it in COM-003-1 as a means to demonstrate the relationship between the two terms. Both standards were posted for stakeholder review at close to the same time. After filing with FERC and receiving FERC approval the definition will be added to the NERC Glossary of Terms. The OPCPSDT and the RCSDT were attempting to explain the relationship between the two standards to help stakeholders understand. The textbox was an attempt to explain that relationship. Draft 3 of the standard no longer contains the reference.** The purpose is not consistent with language in other currently enforced standards. The words "could" and "possibility" needs to be removed from the language. The purpose needs to be concrete. An alternative purpose would be "To specify clear, formal, and universally-applied communication protocols for the operation of BES facilities that reduce miscommunication, which will have a negative influence on the reliability of the Bulk Electric System.

Organization	Yes or No	Question 10 Comment
		Response: The SDT has modified the purpose statement. The six month effective date following approval is too short and should be extended to 12 months to allow adequate time for training and implementation. **Response: The SDT has changed the effective date to 12 months in draft 3.**
Response: Thank you for your comments. Please see the responses above.		
Sacramento Municipal Utility District		Recommendation: Not-Approve We feel that the direction for this communications standard is grossly in error. Focus should be on ensuring proper training programs are in place that emphasize and best prepare the System Operator for effective communication. The idea that effective communication can be scripted is entirely mis-guided and that a regulatory body might subject an entity to financial penalties for communication standards that attempt to script the language spoken, how time is referenced, naming conventions and alpha-numeric clarifiers has no precedence in industry that we are aware of. **Response: The SDT has developed a new approach to the standard that addresses your concern.** The United States' Air Traffic Control protocols for communications between controllers and commercial airline pilots are very tested, well trained and effective. Controllers and pilots are trained in effective communication and the situations and pronunciation types that may lead to confusion. But they are not fined for any instance of not following them. From the Air Traffic Controllers Handbook, http://avstop.com/ac/atc/2-4-1.html#2-4-12-4-3 Pilot Acknowledgment / Read back a. When issuing clearances or instructions ensure acknowledgment by the pilot.

Organization	Yes or No	Question 10 Comment
		NOTE - Pilots may acknowledge clearances, instructions, or other information by using "Wilco," "Roger," "Affirmative," or other words or remarks. REFERENCE - AIM, Contact Procedures, paragraph 4-2-3. b. If altitude, heading, or other items are read back by the pilot, ensure the read back is correct. If incorrect or incomplete, make corrections as appropriate. **Response: The protocols above are analogous to the level of communication discipline that is desired when operating the BES.** Mandating the use of the English language in all communications is not in the best interest of reliability. We are not aware of any issue that has been raised of significance with the current requirement contained within COM-001-1.1, R4 **Response: Referencing the example you cited above, the English language is mandated worldwide in the aviation industry. The SDT believes the aviation industry utilizes strong protocols.** **COM-003-1, R1 will replace COM-001-1.1, R4 when COM-003-1 is filed and approved.**
Response: Thank you for your comments. Please see the responses above.		
Utility System Efficiencies, InC.		Regarding Measure 1, the "on-site observation" aspect should be expanded upon and clarified. This concept would be very important to identify and document "failures" to properly follow Requirements R1, R2, and R3, during the audit period. Registered Entities should be encouraged to use such observations to coach employees and reinforce their following proper communications protocols/procedures and complying with this standard.
Response: Thank you for your comments. The measures have been modified in response to changes in the requirement language.		
PPL Electric Utilities		Regarding R1.1.3: I request the SDT consider allowing for the Applicable Functional

Organization	Yes or No	Question 10 Comment
		Entity to develop an Operating Procedure such that if all parties in the communications are in the same time zone that the time zone does NOT need to be used in the Operating Instruction. **Response: The use of a time zone reference is mandated only if one or more of the parties are in different time zones.** Regarding the VSL/VRF: I request the SDT consider adjusting the std or VSLs to allow for compliance with a 95% confidence. Such that 1 incomplete 3-part Operating Communication could be considered low or not a PV. If sampling of voice recordings provides a 95% confidence, this should be sufficient. E.g. If one sample of 30 voice recordings results in 1 incomplete 3 part and a second Sample of 30 finds no issues, the audit result should be no PV. This is a standard sampling technique. **Response: Due to changes made to the current draft of the standard as a result of comments, the requirements have been significantly modified and the VRFs and VSLs had to be modified accordingly and are consistent with FERC and NERC guidelines.** We thank the SDT for their efforts. PPL EU supports the value added by using 3-part communications and a phonetic alphabet as both are included in our current communications operating instructions. Even with the many Human Performance tools we use, our concern with the standard is being found non-compliant if one of hundreds/thousands of operating communications in a year is not perfect 3-part comm. **Response: The SDT applauds your use of 3-part communications and a phonetic alphabet. The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
City of Garland		Requirement 1.2 should be removed from the standard. The number of directives

Organization	Yes or No	Question 10 Comment
		and switching orders that have been issued in North America over time probably number in the billions. If one could determine the percentage of issues caused by miscommunications out of that large number, it would be extremely small. The reason that miscommunication issues exist is because the communication is between two human beings and where people are involved, issues will happen. A requirement for three part communications is more than sufficient to address the issue of miscommunications. **Response: The SDT has developed a new approach to the standard that addresses your concern.** Adding a requirement to use alpha-numeric clarifiers such as the NATO Spelling Alphabet is not going to prevent miscommunications. The only thing that adding this requirement will accomplish is to require auditors to listen to recorded conversations trying to verify that operators used alpha-numeric clarifiers and then penalizing a company if an operator does not; even though the directive or switching order was followed correctly. **Response: The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
City of Tallahassee		TAL is concerned that the proposed standard focuses too heavily on the communications method without consideration of a successful result. While the administrative approach/focus of this proposed language appears to be crafted with the intent of standardizing communications and thereby improving communications, it does not appear to place sufficient value on results-based performance. Should an entity take proper action on a communication that is not delivered precisely in accordance with this language, consideration of such at the Enforcement level would be warranted.

Organization	Yes or No	Question 10 Comment
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Utility Services, Inc.		The applicability of this standard is unclear in the case of Distribution Providers. **Response: The SDT believes Distribution Providers can be receivers of Operating Communications and are applicable entities for requirements that govern protocols for receiver. Load shedding is the most common Operating Communication a Distribution Provider would receive.** The definition of Operating Communication includes “Elements” that could impact the BES. The NERC Glossary definition for Elements includes non-BES devices and equipment. Additionally, the Purpose section of the standard states "harmful to the reliability of the BES." Since non-BES Elements could affect the BES this standard could be deemed applicable to non-BES devices. If it is the intent of the SDT to apply this standard to All Operating Communications concerning both BES and non-BES Facilities this should be explicitly stated in the applicability section for transparency. Otherwise clarifying language should be added to exclude non-BES Facilities. **Response: The SDT intended Operating Communication to apply to the BES and has modified the definition accordingly.**
Response: Thank you for your comments. Please see the responses above.		
TransAlta Centralia Generation LLC		The current effective date only gives the registered entities 6 calendar months to be compliant with the requirements. We do not think this will be achievable. A longer implementation time is required, such as 12 months. In order to comply with standard requirements, the registered entities need to develop the internal controls, such as the procedures/operator training documents, and then provides the training to the operators. The 6 calendar months are not long enough to complete these tasks. In the white paper, Table 1-A shows only the three-part communication are currently

Organization	Yes or No	Question 10 Comment
		used in the registered entities. However, for all other requirements, such as using alpha-numeric clarifiers, the white paper does not show that these are currently used in the registered entities. Thus, there is no base to justify that 6 months is reasonable to achieve the compliance.
Response: Thank you for your comments. The SDT agrees and has made the suggested change.		
Midwest Reliability Organization NERC Standards Review Forum		The MRO NSRF recommends the following comments for consideration by the SDT: 1. Concerning the "Purpose": Recommend rewrite to state: "To specify universally-applied communication protocols that reduce the possibility of miscommunication which could impact the reliability of BES". This shorter and to the point purpose clearly defines the intent of the Standard. **Response: The SDT modified the purpose statement based on comments provided.** 2. R1.1.3, An entity will be found non compliant if it merely has a written BES switching order that does not contain a time, time zone or whether it is daylight savings time or standard time. The Requirement states nothing about implementing the written communication, just that it is written. The NSRF does not believe that this is the intent of the SDT. **Response: The SDT has developed a new approach to the standard that addresses your concern.** 3. This also applies to oral communications. If two operators are communicating between each other while in different time zones and executing a BES switching order, they would need to establish what time it is in both time zones, indicate whether it is daylight saving time or standard time. So, since a Reliability Directive is a component of an Operating Communication, prior to receiving an oral Reliability Directive senders and receivers would need to establish what time it is in both time zones, indicate whether it is daylight saving time or standard time and then give and receive the Reliability Directive. The NSRF does not believe that this is the intent of

Organization	Yes or No	Question 10 Comment
		the SDT. **Response: The SDT appreciates your comments and clarifies that the statement above is the intent of the SDT, if the communication is occurring between functional entities (not internal to a specific functional entity).** 4. The SAR for this standard incorrectly addresses the blackout recommendation number 26. Recommendation 26 states: ”26. Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate”. “NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations, and ensure that all key parties, including state and local officials, receive timely and accurate information.” “NERC should task the regional councils to work together to develop communications protocols by December 31, 2004, and to assess and report on the adequacy of emergency communications systems within their regions against the protocols by that date.” **Response: The SAR is an industry vetted document and believes it does support Blackout Recommendation 26. The SDT believes the Blackout report itself supports the protocols established by COM- 003-1 based on the excerpts you provided.** 5. Order No. 693 clearly says that the tightened protocols are primarily intended for actions during alerts and emergencies. This was partially addressed in the interpretation on COM-002 and is being addressed in Project 2006-06. Below is the summary determination in the Order on this issue."535, Accordingly, we direct the ERO to either modify COM-002 or develop a new Reliability Standard that requires tightened communication protocols, especially for communications during alerts and

Organization	Yes or No	Question 10 Comment
		emergencies." **Response: FERC Order 693, paragraph 532 (*This will eliminate possible ambiguities in communications during normal, alert and emergency conditions"*) and the SAR are very specific in that both include the term "normal" operating conditions.** 6. It is not clear that COM-003-1 R1 applies to COM-002-3. The latest draft of COM-002-3 doesn't reference the communications protocols listed in COM-003-1 R1 and the definition of Reliability Directive does not state that it is a type of Operating Communication. Suggest combining the two standards into a single communication standard. **Response: COM-003-1, R1 applies to any communication that involves a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** 7. The white paper states "Significant events have occurred on the BES when unclear communication created or exacerbated misunderstandings that led to instability and separation." However, no specific examples were identified. During the June 7 webinar when this question was brought up, it was stated that three part communication was used during these events. This begs the question as to why this standard is needed for normal operations. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.** 8. In order to assign the same level of responsibility as COM-002-2, R2, the RC, TOP, and BA should be the only applicable entities since a Reliability Directive is a sub component of Operating Communications. The RC, TOP, and BA clearly understand clear, concise and definitive communications. They are the only required entities to be NERC Certified and should be held to the highest standards. They can establish

Organization	Yes or No	Question 10 Comment
		other controls to mitigate their risk by training and informing DPs and GOPs that are within their control. DPs and GOPs do not need to be included in R3. **Response: DPs and GOPs receive Operating Communications and must be able to execute the requirements of a receiver, so they must be included as applicable entities in COM-003-1.**
Response: Thank you for your comments. Please see the responses above.		
PNGC Small Entity Comment Group		The PNGC comment group believes there should be a distinction in the "Applicability" section of the standard between "Scheduling Distribution Provider" and "Non-scheduling Distribution Provider". PNGC members are small rural cooperatives that are "Full service BPA customers." This means that BPA is our power supplier and scheduling agent and therefore handles all reliability directives, scheduling, tagging, dispatching of resources and curtailments of load from breakers on BPA's system for PNGC members. According to a letter from the WECC Reliability Coordinator (VRCC and LRCC) none of PNGC's members will ever receive a "Reliability Directive". Such a Directive would be sent to either a Balancing Authority (BA), or a Transmission Operator (TOP). We estimate there are over 100 entities that are BPA Full Service customers that are in a similar position and making this standard applicable to them does nothing to enhance reliability. A simple declarative statement in the Applicability section of the standard could focus the intent of the SDT on those entities that need it while lessening the compliance risk and clerical burden for other entities that the standard should not apply to. We suggest: 4. Applicability: 4.1. Functional Entities 4.1.1 Reliability Coordinator

Organization	Yes or No	Question 10 Comment
		4.1.2 Transmission Operator 4.1.3 Balancing Authority 4.1.4 Generator Operator 4.1.5 Distribution Provider: With Real-time Operations desk The PNGC comment group believes the above change will lessen the compliance burden on small, non-scheduling entities while still meeting the SDT's intent with regard to Operating Personnel Communications. We also note that FERC and NERC, on multiple occasions and in multiple filings, have indicated their openness to lessening unnecessary compliance requirements for small entities.
Response: The SDT appreciates your comments. The SDT notes that COM-002-3, draft 6 states that in addition to Reliability Coordinators, Balancing Authorities and Transmission Operators can also issue Reliability Directives. Draft 3 of COM-003-1 also limits protocols for Distribution Providers to those that apply to receiving Operating Instructions.		
ISO/RTO Standards Review Committee		The SDT's proposals do not conform to the Standards Process because those proposals do not reflect the public comments that were submitted. The Process requires the SDT to use the Industry's comments to drive the requirements and as such the requirements should not be mandating a three part communications procedure for all "changes in status" much less the maintaining of such status. Such a request was not made by any of the commenters let alone a majority of the commenters. It would be more appropriate if the SDT asked who favored the approach being used, as opposed to asking if an "adjustment" to the requirement were acceptable. Many of the adjustments are better than if they were not there, but that ignores the fact that the requirement itself is not supported by the majority of commenters. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary**

Organization	Yes or No	Question 10 Comment
		communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern. The SDT has developed a new approach to the standard based on industry feedback that addresses your concern. The SDT's proposals expand the scope of the SAR by totally ignoring communications protocols used during emergencies and simply focusing on procedures imposed on personnel during normal situations. This standard over-reaches into routine operations by requiring 3-part communication for all instructions that change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. This type of instructions occurs every hour, if not minute. Requiring operating personnel to apply a 3-part communication procedure for these instructions is absolutely unnecessary and overburdening, and can in fact adversely affect reliability. *We strongly suggest that any requirement for 3-part communication for routine operating instructions be removed.* **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "Clear and mutually established communications protocols used during real time operations under normal and emergency conditions ensure universal understanding of terms and reduce errors."** ****FERC Order 693 510. "The Commission proposed... (4) requires tightened communications protocols, especially for communications during alerts and emergencies.

Organization	Yes or No	Question 10 Comment
		"SRC Note - The above language while allowing for a requirement to go beyond emergencies, it states that the primary intent is "during alerts and emergencies". The SDT has no requirement for "alerts and emergencies" and focuses solely on normal operations. **Response: The specified communication protocols are applicable to normal and emergency operations.** 532. While we agree with EEI that EOP-001-0, Requirement R4.1 requires communications protocols to be used during emergencies, we believe, and the ERO agrees, that the communications protocols need to be tightened to ensure Reliable Operation of the Bulk-Power System. We also believe an integral component in tightening the protocols is to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions. This is important because the Bulk-Power System is so tightly interconnected that system impacts often cross several operating entities' areas. 230 EOP-001-0, Requirement R4 provides, in relevant part, that: "[e]ach Transmission Operator and Balancing Authority shall have emergency plans that will enable it to mitigate operating emergencies. At a minimum, Transmission Operator and Balancing Authority emergency plan shall include [c]ommunication protocols to be used during emergencies. *"SRC Note - the communications ambiguities noted above do not refer to issues with interpersonal communications but rather refer to situational ambiguities.* **Response: The SDT respectfully disagrees. The wording in paragraph 532 says "This will eliminate possible ambiguities in communications during normal, alert and emergency conditions." There is no reference to *situational* ambiguities. The SDT interprets ambiguities in communications to mean "unclear" communication.** **With regard to EOP-001-0, Requirement R4, the SDT believes this to be an**

Organization	Yes or No	Question 10 Comment
		emergency planning requirement which only states "*emergency plan shall include communication protocols to be used during emergencies*." The requirement does not address the development of those protocols. 540. "While the Commission identified concerns regarding COM-002-2, the proposed Reliability Standard serves an important purpose by requiring users, owners and operators to implement the necessary communications and coordination among ENTITIES. *SRC Note - the above does not say "among OPERATING PERSONNEL" it says "among ENTITIES".* **Response: The SDT respectfully points out that paragraph 540 also includes "the proposed Reliability Standard serves an important purpose by requiring users, owners and operators to implement the necessary communications and coordination among entities. " The SDT believes this is another statement that sanctions the protocols the team has developed.** 540. (Continued)ALTERNATIVELY, with respect to this final issue, the ERO may develop a new Reliability Standard that responds to Blackout Report Recommendation No. 26 in the manner described above. *"SRC note - The above is a key directive. It states tightened communications protocols [it does not say three part communications for normal actions]'Also note that the Blackout report recommendation is "an alternative" solution and not necessarily a part of the FERC proposed solution.* **Response: The SDT believes it has responded to Blackout Report Recommendation No. 26 properly and effectively. The implementation of three part communication during normal operation of the BES is tightening communications. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication**

Organization	Yes or No	Question 10 Comment
		protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern. The SDT is also asked to identify the role of the posted White Paper. Is the White paper to be retained as part of the support documentation? If so, then the paper must be vetted by the Industry. The SDT did not afford the opportunity to respond to the paper. There was no indication if the paper was a unanimous SDT position or if there were any minority opinions. **Response: The Operating Communications Protocols White paper is the position of the SDT.** **The White Paper was requested by the Standards Committee to support the team's position on communication protocols for normal operations. Since the standard did not reference the White Paper there was no requirement for vetting. The SDT posted it for industry stakeholders to share the rationale for the team's position.** The SRC would offer the following "whitepaper" to help in deciding whether or not a requirement for 3 part communications for all operational communications rises to the level of requiring a mandatory standard. The "whitepaper" frames the communications issues generically providing an alternative to a zero defects standard. ********The strides NERC is making in the areas of Events Analysis and Human Factors will likely lead to useful practices and value-added standards. A fact-based approach to standards will lead to improved reliability. This paper attempts to quantify the problem that COM-003 is trying to address. While human error is often the first theory to explain major accidents, the follow-on investigation typically finds many factors beyond the front-line operator's control. There is an axiom in the field

Organization	Yes or No	Question 10 Comment
		of quality control that attributes 80% of manufacturing defects are controllable by management rather than the cause of the front-line workers .Many people make errors that contribute to outages. Manufacturers have equipment defects, planners make incorrect design decisions, technicians draw maps incorrectly, managers cut budgets (plant maintenance, vegetation management), etc. A study of errors at nuclear power plants sheds light on the causes behind the scenes. Although 92% of all root causes were man-made, only a small number of these were initiated by front-line operators. Most originated in either maintenance-related activities or in bad decisions within the organization. In another study, a review of summaries of three major industrial events (Three Mile Island, Bhopal, and Chernobyl) identified operators as committing less than 10% of the missteps that led to the disasters. Table 1 Contributors to Major Accidents To be conservative, this paper assumes that 30% of all major human errors that impact the BPS are attributed to front-line workers (dispatchers, field operators, technicians and maintenance personnel).With regard to which front-line workers commit errors, a study of electrical system incidents at nuclear plants were generally evenly distributed between operators, maintenance personnel and technicians. As to communications problems causing trouble, an EPRI study reviewed nearly 400 switching mishaps by electric utilities and found that roughly 19% of errors (generally classified as loss of load, breach of safety, or equipment damage) were due to communication failures. This was nearly identical to another study of dispatchers from 18 utilities representing nearly 2000 years of operating experience that found that 18% of the operators' errors were due to communication problems. Figure 1 EPRI Study Results on Operating Errors. Bringing the pieces of this discussion together, the following assumptions are used to estimate the percent of human errors on the BPS caused by operator communication breakdowns: o 30% of human failures impacting the BPS are due to front line workers o Front line errors were generally evenly split into 3 groups

Organization	Yes or No	Question 10 Comment
		o Dispatchers o Field Personnel o Maintenance and Relaying Technicians o 18% of dispatcher errors are due to communication problems. The net result is that using estimates of existing research shows that dispatcher communications represent roughly 2% of the human failure on the BPS. Figure 2 Summary Human Failure Estimate. While it has been stated that communication problems are found during the review of all system events, this is similar to saying that gravity is involved in all trips and falls. The statements are true, but the solutions to the problems are multidimensional. During a system event, there are hundreds, if not thousands of communications among different operators, often on situations never seen by the participants. Many of the communications are troubleshooting and information sharing that requires give and take and must be done quickly. If every communication during a disturbance needed to be 3-way, system restoration times for those disturbances would increase. NERC has built a solid foundation to make informed decisions in the future. The Events Analysis process, GADS, and TADS should yield data on the impacts and contributors to BPS failures. NERC's Human Factors efforts can be used to develop good practices for all front line personnel. NERC should build on the research similar to that outlined in this paper via industry-wide surveys of operators to collect additional data, lessons-learned and tips for improvement. **********A quick estimate of the workload associated with COM-003, for the number of registered entities under the standard's applicability list. If we assume 1 call each 10 minutes for a BA, TOP and RC and Â¼ this amount for GOP and DP, you get the totals below. Each of these is an auditable and sanctionable event. The

Organization	Yes or No	Question 10 Comment
		review and self report on all of these is incompatible with the reliability impacts realized? BA TOP RC GOP DP Total 132 181 22 795 551 # of Entities19008 26064 3168 28620 19836 96,696 Calls per Day 35,294,040 Calls per year **********Lastly, the SRC requests that in the next posting that the SDT include the question: Does the Industry: o Support continued development of a standard on personnel discussions during non-emergency conditions? o Support withdrawal of the standard? o Support the creation of an alternative non-standard (e.g. certification) that addresses the corporate protocols on communications? **Response: The SDT has read the attached white paper and a file copy that had more content and found some aspects of it very supportive of the OPCPSDT efforts and decisions. It is especially noteworthy that "18% of dispatcher errors are due to communication problems." That is what this standard is addressing.** **With regard to your last request:** **During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. Including the proposed question would be counterproductive to the Board's direction and will not be entertained by the SDT.**

Organization	Yes or No	Question 10 Comment
Response: Thank you for your comments. Please see the responses above.		
U.S. Bureau of Reclamation		The standard should clarify what is evidence is considered acceptable to demonstrate compliance with R 1.2. The requirement 3 appears to require the use of voice recording to demonstrate compliance with repeating the operating communication requirement. Not all facilities in which operating instruction may be received have voice recording capability. The requirement/measure should clarify alternative evidence when such a means is not present.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern. Also please refer to the RSAW posted with COM-003-1 draft 3.		
PPL Generation, LLC on behalf of its Supply NERC Registered Entities		The statement, "Evidence may include, but is not limited to, voice recordings, transcripts of voice recordings, on-site observations, or other equivalent evidence," in the Measures section of COM-003 is impractical. Any comprehensive body of evidence would be unreasonably voluminous as well as requiring far more effort to compile than could be justified. The only evidence required for Generation Owners should be a procedure on the subject and a record showing that all applicable personnel have been trained.
Response: The SDT appreciates your comments. The SDT has developed a new approach to the standard that addresses your concern. Also please refer to the RSAW posted with COM-003-1 draft 3.		
Northeast Power Coordinating Council		The three-part communications in COM-003-1 are expanded beyond reliability directives which unnecessarily force the inclusion of conversations which may be impractical or unnecessary. Good practice dictates that three part communication be used as a tool, but it should not be a requirement. The Standard is specifying how to accomplish, not just what is required." **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a**

Organization	Yes or No	Question 10 Comment
		comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern. 1.1.4 When referring to a Transmission interface Element or a Transmission interface Facility, use the name specified by the owner(s) for that Transmission interface Element or Transmission interface Facility" may create a detriment to reliability. Oftentimes, for switching, TOs have very detailed names for individual elements, devices, equipment which may not translate into the TOP/RC systems. However, it is known what equipment is being talked about. The requirement is unnecessary, unreasonable and burdensome. **Response: The revised wording in draft 3 states:** **"When referring to a Transmission interface Element or a Transmission interface Facility, use the name specified by the owner(s) for that Transmission interface Element or Transmission interface Facility *unless another name is mutually agreed to by the functional entities .*"** The communications protocol to be followed in the event that there is a situation that requires the removal of BES (or any other power system equipment for that matter) from service on an immediate and emergency basis to protect the health and safety of the public and/or an employee/s needs to be addressed. The instructions issued to meet this condition fall under the definition of Operating Communication, but in an emergency situation the time taken for the required repetition could be catastrophic. This also applies to BES (or any other power system) equipment that is in imminent danger of failure, phase angle regulator or transformer tap changer runaway, or other emergency conditions.

Organization	Yes or No	Question 10 Comment
		This is also true of situations where the BES response to a disturbance results in a facility or facilities being overloaded real time over their STE and LTE ratings, and those facility loadings have to be reduced below their STE and LTE ratings within five and fifteen minutes respectively. The time spent for the necessary three part communication could mean the difference between maintaining continuity of service, or having to shed load. Suggest that wording be added to address the emergency situations described by recognizing the possibility that an operator might have to respond to a situation by issuing a "one way" order, then have a requirement for after the fact communications which would be informational as to what emergency actions were taken, and then resume normal communications protocols for subsequent actions. **Response: The SDT understands the gravity of the situations you describe. While speed in response to an emergency involving life and property is critical, so is the accuracy of the command to operate the Facility and the Element that will alleviate the threat.** **The SDT has developed a new approach to the standard the team believes will mitigate your underlying concern by providing an entity the flexibility to assess its own performance with respect to following its protocols.** Regarding the wording for the issuer in R2 "...that issues an oral, two-party, person-to-person Operating Communication", and the wording for the receiver in R3 "...that receives an oral two-party, person-to-person Operating Communication", what is the significance of the use of the comma after "oral" in R2? What is the difference between two-party and person-to-person communication? **Response: The comma was an error and is removed in draft 3. Two party was added to preclude all call or multiple addressee communication. Person to person was added to denote human to human rather than human to machine.** Also regarding R2, the Generator Operator should be included as an authority to

Organization	Yes or No	Question 10 Comment
		issue an Operating Communication. **Response: The SDT discussed this and determined that a GOP would only be a receiver of an Operating Instruction.** It is not necessary to separate normal and emergency communications into two standards (COM-003, COM-002). One standard should encompass both. But having two Standards, the communication protocols in COM-003 R1 should be incorporated in COM-002. **Response: COM-003-1 R1 applies to all communications that involve a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." The SDT has changed the language in COM-003-1 concerning protocols to the same language contained in COM-002-3, R2 and R3 to be consistent and to reduce confusion.** The proposals expand the scope of the SAR by ignoring communications protocols used during emergencies and focusing on procedures imposed on personnel during normal situations. This standard overreaches into routine operations by requiring three-part communication for all instructions that change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System. Because of the real-time frequency of use these instructions, requiring operating personnel to apply a three-part communication procedure for these instructions is unnecessary and can in fact adversely affect reliability. Any requirement for three-part communication for routine operating instructions should be removed. **Response: The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." Additionally, the SAR is very specific in that it also includes the term "normal" operating conditions under Applicability: "Clear and mutually established communications protocols used during real time operations under normal and**

Organization	Yes or No	Question 10 Comment
		emergency conditions ensure universal understanding of terms and reduce errors." **During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.**
Response: Thank you for your comments. Please see the responses above.		
Detroit Edison		There is a significant amount of redundancy between COM-002-3 and COM-003-1. These two standards should be combined and one of them eliminated. COM-002 purpose states "To ensure communications by operating personnel are effective." COM-003 could be sub-requirements under R2 of COM-002.The blue box on page 2 does not clarify Reliability Directives. Suggest using the same language as the proposed definition of Reliability Directive from COM-002-3.
Response: The SDT appreciates your comments. COM-003-1, R1 applies to all communications that involve a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." The purpose of the SAR for this project is "Require that real time system operators use standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time." This is a broader scope than that for Project 2006-06. **The blue text box and the exclusionary language regarding Reliability Directives in COM-003-1, R2 and R3 were added to address concerns over potential double jeopardy. The text box has been removed from this draft of COM-003-1.**		
NIPSCO		There was a COM-002 NOP issued in January 2011, a COM-002 interpretation recently approved by NERC, and presently there is a draft of both a COM-002 and a COM-003 out for vote. These projects appear to address 3 part communication requirements in a non-consistent manner. Why not combine these efforts into a

Organization	Yes or No	Question 10 Comment
		single project that the industry can review and understand? The VRF/VSL difference between routine and emergency does not warrant having two standards. A suggested plan of attack could be to withdraw the NERC approved COM-002 interpretation from FERC and combine the COM002-COM003 drafting efforts into one project resulting in a new version of COM-002; we already have enough standards. The content of the two new drafts is good, the webinar was informative, and the work of the SDTs is appreciated.
Response: Thank you for your comments and your support. The SDT has changed the language to the same language contained in COM-002-3, R2 and R3 to be consistent and to reduce confusion.		
Public Service Enterprise Group		This standard (COM-003-1) should be combined with COM-002-3 and issued as one standard to require ONE 3-part communications protocol for both Reliability Directives and non-Reliability Directives. Both require 3-part communications; however, COM-003-1 sets ADDITIONAL communications protocols and introduces a new definition (Operating Communication) that is not contained in COM-002-3. In addition, the text box on page 2 appears to redefine "Reliability Directive" inappropriately. While the sentence confusion is the text box may be unintended, its needs to be clarified.
Response: Thank you for your comments. The SDT has changed the language to the same language contained in COM-002-3, R2 and R3 to be consistent and to reduce confusion. The blue text box and the exclusionary language regarding Reliability Directives in COM-003-1, R2 and R3 were added to address concerns over potential double jeopardy. The text box has been removed from this draft of COM-003-1.		
Avista		This standard as drafted is very prescriptive and will not ensure improved reliability. A better approach would be to require applicable entities to; develop and implement an internal communication plan that takes into consideration recommendations discussed in the proposed NERC OC System Operator Verbal Communications Guideline, implement internal controls and monitoring to ensure adherence to the

Organization	Yes or No	Question 10 Comment
		communication plan, and implement an adequate communication training program.
Response: The SDT appreciates your comments. The SDT has developed a new approach to the standard that adopts many of your suggestions.		
Kansas City Power & Light		This standard needs to be written such that it allows for entity flexibility. Many entities already have COM protocols that are used. To prove compliance in an audit, entities will we need to provide 3 years worth of voice recordings to the auditors? It would take a full-time position to review the daily voice recordings for submission and what value does this add to the reliability or security of the BES. This standard is "overkill" from what is existing standard already dictates. Overall - this standard is going to cost the registered entities way more than the realized benefits.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
The United illuminating Company		UI disagrees with the necessity for this Standard. The intent of Recommendation 26 was to improve the communications around situational awareness. The SAR states the purpose is to "efficiently convey and mutually understood for all operating conditions." This Draft does not address the concern and a Reliability Standard will not resolve the problem. It will create a compliance burden. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT has developed a new approach to the standard and believes that it may address your concern.** The White Paper does not provide justification for imposing a compliance burden of recording, reviewing and tagging every conversation in a control center for the applicability of COM-003. There is no correlation between non-emergency communication and BES reliability. **Response: The OPCPSDT White Paper does provide ample justification for**

Organization	Yes or No	Question 10 Comment
		establishing a higher level of communication discipline in an industry that serves one of the most critical needs in North America. The SDT believes the correlation between any operating communication and BES reliability is high. There is no study to demonstrate that the cause of awkwardness when transitioning from non-emergency to emergency communication will be resolved by any of the requirements in this Standard. Awkwardness has been resolved by Com-002 Requirement to explicitly identify an action as a Directive. **Response: The Blackout Report provides instances where the reaction of operators is described as confused and the communications are cited as unprofessional, contributing to the lack of situational awareness.**
Response: Response: Thank you for your comments. Please see the responses above.		
Wisconsin Electric dba We Energies		We agree that accurate communication is necessary and we must strive to eliminate mistakes due to miscommunications. In the White Paper, other industries are cited that use three-part communication. Which of these industries also imposes sanctions and penalties on a company if an operator says “for” instead of “fow-er”? **Response: The SDT responded to this in the previous draft 1 and also made provisions in draft 2 to allow for the use of alpha-numeric identifiers in lieu of the strict NATO Alphabet.** In order to verify compliance with this standard, there will be entities that will need to listen to thousands of hours of voice recordings (8760 hours in a year, and multiple operators). Listening to 10% of the voice recordings will be a full time job for one or more persons. What is the reliability benefit of this cost? Unless it is tempered with some reasonableness, this standard as written will be detrimental to reliability because it will slow down communications considerably with innumerable repeats because of

Organization	Yes or No	Question 10 Comment
		fear of violating the standard. **Response: The SDT has developed a new approach to the standard that addresses your concern.**
Response: Thank you for your comments. Please see the responses above.		
ISO New England Inc		We agree with, support and have signed onto the ISO/RTO Standards Review Committee comments. Lastly, we do not believe this rises to the level of a Standard.
Response: Thank you for your comments. Please see the responses to the ISO/RTO Standards Review Committee comments		
Duke Energy		We believe that having effective communications is an important goal; and there are instances where the use of 3-part communication is appropriate. We also believe that the industry is maturing, and the use of 3-part communication as a tool to achieve effective communication has grown (as evidenced by Table 1-A in the May 2012 COM-003-1 Whitepaper. This maturity and expanded use of 3-part communication has occurred without a Standard in place; and that we do not believe a Standard is needed that focuses on one way of establishing effective communication.
Response: Thank you for your comments. The SDT has modified its approach into a standard that focuses on an entity's communication protocols and the controls they have in place to evaluate and minimize deficiencies.		
Ameren		We believe that multiple communication standards (COM-002, COM-003) are not necessary and suggest that SDT work with the NERC Operating Committee members to appropriately address what requirements are necessary from operating/reliability perspective as well as any related FERC directives.

Organization	Yes or No	Question 10 Comment
Response: Thank you for your comments. Please refer to the response to the NERC Operating Committee comments.		
SPP Standards Review Group		We believe the standard is too prescriptive as written. The purpose of the standard is to ensure effective communications. The standard has given us a very specific listing of items that must be done in a specific manner in order to accomplish this goal. What the industry needs is flexibility in how it achieves the goal of effective communications. The standard does not recognize that flexibility. The Measures for Requirements 1, 2 and 3 do not contain specific references to the requirements they are associated with. There is a parenthetical following the measure that does include that reference but including the reference specifically in the measure is a stronger statement and eliminates any possibility for confusion. The section of M1 to be modified would then read:'...that the communication protocols specified by Requirement 1 were implemented...' The section of M2 to be modified would then read:'...that the communication protocol specified by Requirement 2 was implemented.' The section of M3 to be modified would then read:'...that the communication protocol specified by Requirement 3 was implemented.'
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Flathead Electric Cooperative, Inc.		We believe there should be a distinction in the "Applicability" section of the standard between "Scheduling Distribution Provider" and "Non-scheduling Distribution Provider". Many small WECC entities re small rural cooperatives and PUDs are Full service customers. This means that the TO/TOP is the power supplier and scheduling agent and therefore handles all reliability directives, scheduling, tagging, dispatching of resources and curtailments of load from breakers on the BES system. According to a letter from the WECC Reliability Coordinator (VRCC and LRCC) none of the smaller entities in the Pacific Northwest will ever receive a "Reliability Directive" directly

Organization	Yes or No	Question 10 Comment
		from teh RC. Such a Directive would be sent to either a Balancing Authority (BA), or a Transmission Operator (TOP). We estimate there are over 100 entities that are BPA Full Service customers that are in a similar position and making this standard applicable to them does nothing to enhance reliability. A simple declarative statement in the Applicability section of the standard could focus the intent of the SDT on those entities that need it while lessening the compliance risk and clerical burden for other entities that the standard should not apply to. We suggest: 4. Applicability: 4.1. Functional Entities 4.1.1 Reliability Coordinator 4.1.2 Transmission Operator 4.1.3 Balancing Authority 4.1.4 Generator Operator 4.1.5 Distribution Provider: With Real-time Operations and Scheduling desk We believe the above change will lessen the compliance burden on small, non-scheduling entities while still meeting the SDT's intent with regard to Operating Personnel Communications. We also note that FERC and NERC, on multiple occasions and in multiple filings, have indicated their openness to lessening unnecessary compliance requirements for small entities.
Response: Thank you for your comments. The SDT notes that COM-002-3, draft 6 states that in addition to Reliability Coordinators, Balancing Authorities and Transmission Operators can also issue Reliability Directives. Draft 3 of COM-003-1 also limits protocols for Distribution Providers to those that apply to receiving Operating Instructions.		
Consumers Energy		We believe this standard attempts to redefine "Reliability Directive" and should not

Organization	Yes or No	Question 10 Comment
		do so. Specifics of communication for this standard should be centered on emergency operations and not a blanket protocol for almost all operations communications.
Response: The SDT appreciates your comments. The OPCPSDT did not redefine the term Reliability Directive. The SDT supports the term. The SDT believes the two standards will work together to improve reliability and desires to demonstrate that to industry stakeholders. During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.		
GP Strategies		We disagree that all DP's should be subject to this Standard. For many small entities, it is the TOP who will control the equipment to shed load. These DP's do not operate a 24x7 control center for receiving such instructions. During non-business hours calls are forwarded to an answering service or an on-call technician. We recommend the drafting team modify the applicability as follows: Applicability: 4.1. Functional Entities 4.1.1 Reliability Coordinator 4.1.2 Transmission Operator 4.1.3 Balancing Authority 4.1.4 Generator Operator 4.1.5 Distribution Provider who is the 24 x 7 entity that operates their load shedding equipment when instructed by the RC, TOP, or BA. The TOP should be the responsible entity unless the Distribution Provider has agreed on the responsibility for taking the action.
Response: Thank you for your comments. The SDT notes that COM-002-3, draft 6 states that in addition to Reliability Coordinators, Balancing Authorities and Transmission Operators can also issue Reliability Directives. Draft 3 of COM-003-1 also		

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limits protocols for Distribution Providers to those that apply to receiving Operating Instructions.		
MISO		We support the need to strive for good communications among users, owners, and operators of the grid, but believe the standard, as drafted is misdirected. Review of research done by Electrical Power Research Institute (EPRI) and others show that dispatcher communications cause approximately 1-2% of human failure impacting the Bulk Power System (BPS) and less than 1% of all BPS failures. **Response: The SDT has read the study and believes it supports the need for COM-003-1.** ***"As to communications problems causing trouble, an EPRI study[2] reviewed nearly 400 switching mishaps by electric utilities and found that roughly 19% of errors (generally classified as loss of load, breach of safety, or equipment damage) were due to communication failures. This was nearly identical to another study of dispatchers from 18 utilities representing nearly 2000 years of operating experience that found that 18% of the operators' errors were due to communication problems.[3] "*** **We believe the more relevant and significant conclusion to be that, of 400 switching mishaps, 19% were caused communication failures.** As drafted, this standard can actually impede reliability as there are at times better ways to communicate when group action is needed and there are times when speed or "give and take" are needed. More specifically, the proposed Reliability Standard clearly and significantly expands the requirement to utilize 3-way communication, to the obvious detriment of reliability. The definition of Operating Communication results in the applicability of 3-

[2] Beare, A., Taylor, J. *Field Operation Power Switching Safety*, WO2944-10, Electric Power Research Institute.

[3] Bilke, T., *Cause and prevention of human error in electric utility operations*, Colorado State University, 1998.

Organization	Yes or No	Question 10 Comment
		way communication to non-requests / non-directives. As a result, COM-003-1 would result in the additional expenditure of time and resources to ensure that 3-way communication is utilized even when an entity is maintaining the *status quo*. This expenditure may divert time and attention away from ensuring that changes necessary for reliability are properly understood and implemented. **Response: The SDT has modified definition of Operating Communication (now Operating Instruction) to be a "command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System."** The standard also fails to acknowledge that Supervisory Control and Data Acquisition (SCADA) and other forms of data exchange also can form part of the feedback process in communications. For example, observation of Area Control Error (ACE) recovery and generation movement during a Disturbance Control Standard (DCS) event are better confirmation that the message was received and understood than just parroting back a phone call. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. COM-003-1 concerns human to human communications.** Therefore, MISO cannot at this time support the current version of COM-003-1.
Response: Thank you for your comments. Please see the responses above.		
American Transmission Company, LLC		When a situation necessitating alpha-numeric clarifiers in an Operational Communication arises, per the standard requirement, it becomes mandatory. There

Organization	Yes or No	Question 10 Comment
		are many instances when marginally defined elements such as a carrier grounding switch, may need to be operated or changed state. If these devices can't be clearly defined as an element or facility, yet have alpha-numeric identifiers, the use of clarifiers should be discretionary. **Response: The SDT's intent is to focus on those BES Elements or BES Facilities that are capable of changing the operating state of the BES.** FERC Orders and recommendations point to "Tightening communications protocols, especially for communications during alerts and emergencies." The NERC standards addressing this issue are not approved yet. When they are approved by FERC, subsequently implemented, and allowed to mature, the concept of tighter protocols for normal operations may be developed. **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System.**
Response: Thank you for your comments. Please see our responses above.		
SERC OC Standards Review Group		Where is the demonstrated need for such a Standard? Has communications, especially during periods of normal operations, been shown to be the root cause of many, if any, events? **Response: From a recently published paper "Estimating the Magnitude of the Operator Communications Problem" by Terry Bilke, the following excerpt points out the results of an EPRI study.** ***"As to communications problems causing trouble, an EPRI study[4] reviewed nearly 400 switching mishaps by electric utilities and found that roughly 19% of errors***

[4] Beare, A., Taylor, J. *Field Operation Power Switching Safety*, WO2944-10, Electric Power Research

Organization	Yes or No	Question 10 Comment
		(generally classified as loss of load, breach of safety, or equipment damage) were due to communication failures. **We believe the more relevant and significant conclusion to be that, of 400 switching mishaps, 19% were caused communication failures.** While there is easy agreement for the need of clear and concise communication between entities, we must avoid creating a system that is unmanageable and quite possibly results in less reliability. FERC Order 693 directs the ERO to ‘‘and (3) requires tightened communications protocols, especially for communications during alerts and emergencies.” in paragraph 532. The proposed standard goes too far, especially for communications outside of alerts and emergencies. NERC standards are not procedures and this standard attempts to impose a single procedure on the industry. SERC suggests another approach to COM-003. Rather than to specify the solutions to achieving effective communication, COM-003 should instead focus on developing and training on an approach that is designed appropriately for each RE. For instance, another approach to COM-003 might be along the lines of: Requirement 1 could be written in a manner to require the appropriate registered entities to develop a communication protocol that is appropriate for each RE. This communications protocol should address how the RE is handling the following: Time Zone Designations - for both internal and external communications language comm Alpha-numeric identifiers Three - part communications - when is it required, etc. Use of defined terminology

Institute.

Organization	Yes or No	Question 10 Comment
		Other items deemed important for the communications protocol to address - again, this would not define HOW these items are addressed This approach would require the RE to address how it is addressing these issues, without prescribing solutions. For instance, a RE could include in its protocol a section dealing with time zone designation. In this section the RE could explain that it, and its neighbors, all are in and use the same time zone. As a result, the RE has determined that requiring the identification of time zone reference in communication is not necessary Procedures should address the training of operators on the communication protocol Procedures should address the internal controls that the RE uses to review that its protocol is being followed. The compliance approach would be to: Assess whether the RE has developed a written protocol and whether the protocol addresses each item - this does not mean there is an assessment of HOW each item is assessed; assess whether the RE has trained its operators on the communications protocol and assess whether the RE is following its internal controls. **Response: The SDT has developed a new approach to the standard that addresses your concern.** Any data retention requirements should be consistent with the COM-002 reliability standard. **Response: The data retention requirements have been modified based on the new approach.** What is the role of the Operating Communications Protocols White paper? Is it a position of the STD? If not, was there a minority opinion? Will it be part of the standard? **Response: The leadership of the Standards Committee asked the OPCPSDT to develop the White Paper as a means of explaining the rationale for the team's decisions. The team reached consensus on content based on deep and thoughtful**

Organization	Yes or No	Question 10 Comment
		discussion. It will not be part of the standard, nor is it referenced by the standard. Does the industry agree that we need a standard on three part communications for normal operations? Yes or No? **Response: During its discussion of the approval of the Interpretation of COM-002-2 R2, the NERC BOT stipulated in its approval the expedited development of a comprehensive communications program, which would address necessary communication protocols for use in the operation of the Bulk Electric System. The SDT determined that protocols concerning three part communication (when it is necessary and what is required) during normal operations was a necessary step in addressing the BOT's concern.** Has a lack of a standard on three part communications for normal operations created any reliability issues? If so, what are they? **Response: In the paper cited in our response above, 19% of errors (generally classified as loss of load, breach of safety, or equipment damage) were due to communication failures. Three part communication is one essential step in addressing this reliability issue.** "The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review group only and should not be construed as the position of SERC Reliability Corporation, its board or its officers."
Response: Thank you for your comments. Please see the responses above.		
Seminole Electric Cooperative		While we absolutely support the promotion and use of 3-part oral communication protocol and the other features identified, the failure of individual persons to use "proper" and "correct" oral operational communications should NOT constitute a Standard violation. It is reasonable to require the responsible entity to have written procedures requiring such use; to have evidence of applicable personnel training on such; and to have a program for internal monitoring and enforcement of such. As

Organization	Yes or No	Question 10 Comment
		written, a subjective review of many oral operational communications will arguably be identified by Compliance Auditors as medium, high or even severe levels.
Response: Thank you for your comments. The SDT has developed a new approach to the standard that addresses your concern.		
Liberty Electric Power LLC		Yes. The regulation of market communications between entities is not the proper subject for NERC standards. The STD proposes placing entities into the realm of zero tolerance for thousands of routine communications. This assures failure. Further, this will force entities to reallocate precious resources away from more critical reliability functions to assure compliance and allow for self-certification. As such, the proposed standard weakens the reliability of the BES. The proposed standard should be withdrawn and the SAR closed.
Response: Thank you for your comments. Draft 3 of the standard does not include market communications. The SDT has developed a new approach to the standard that addresses your concern about the number of communications.		
City of Vero Beach		NONE
City of Jacksonville Beach dba/Beaches Energy Services		None.

END OF REPORT