

**Individual or group. (94 Responses)**

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**Lead Contact (30 Responses)**

Group
Northeast Power Coordinating Council
No
<p>The proposed Operating Communication term is not markedly 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 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 instructions needed to address Adverse Reliability Impacts. 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.</p>
No
<p>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.</p>
No
<p>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.</p>
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.

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 2006-06), how will stakeholders understand what is really being excluded for the purposes of this Standard's scope? 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? 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. The proposed exception (specifically Reliability Directives used during emergencies) does not support the reason the SAR was proposed--to improve protocols during emergencies. 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 (a) any confusion with the requirement in COM-002-3, (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. 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.

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.

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 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.

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 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."

The three-part communications in COM-003-1 are expanded beyond reliability directives which unnecessarily forces 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. "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. 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. 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. 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? Also regarding R2, the Generator Operator should be included as an authority to issue an Operating Communication. 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. 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.

Guy Zito

Individual

Hertzl Shamash

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.

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.
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 '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.
Individual	
D Mason	
HHWP	
Yes	
No	Recommend that R1.1.4 incorporate use of the term Uniform Line Identifiers, in conformance with R18 of TOP-002.
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.
Group	
ACES Power Marketing Standards Collaborators	
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 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. 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 confusion. 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 employ 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. 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. 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. 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.

Yes

Yes

Yes

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.

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. 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..." 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. 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.

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 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.

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 this standard?

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.

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. 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. 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 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. 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?

Jean Nitz

Individual

Mace Hunter

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:

Yes

Yes

Yes

Yes

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 OK.

Yes

Yes

Yes

Individual	
John D. Brockhan	
CenterPoint Energy Houston Electric, LLC.	
No	<p>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".</p>
Yes	
	<p>Question 3 Comments: CenterPoint Energy believes the SDT should only use existing defined alert levels, rather than implementing new alert levels or categories.</p>
No	<p>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.</p>
No	
	<p>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.</p>
No	
	<p>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 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.</p>
No	
	<p>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.</p>
	<p>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</p>

introduce this definition for Reliability Directive with this project? 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. 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.

Individual

Michael Falvo

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. 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. Please also see our comments under Q6 on using the proposed term to support the requirements for 3-part communication.

Yes

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.

Yes

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.

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 (a) any confusion with the requirement in COM-002-3, (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. 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.

Yes

While we agree with allowing appropriate alpha numeric qualifiers other than the 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.

Yes

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.
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. 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."
Individual
Thad Ness
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. 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.
Individual
Ronnie C. Hoeinghaus
City of Garland

Requirement 1.2 should be removed from the standard. The number of directives 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. 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.
Individual
Russ Schneider
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.
Yes
No
Don't understand this change, but wonder why separate alert levels are necessary to incorporate in this set of standards.
Yes
No
Not sure this is necessary for small entities.
Yes
Yes
No
Think this requirement is duplicative of TOP-002a, R18
No
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 from the 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.
Individual
Joe O'Brien
NIPSCO
Yes
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 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.
Individual
Joe Tarantino
SMUD
Yes
Yes
Yes
No
We believe the requirement to only speak English is detrimental to reliability. Entities who have predominantly speaking Spanish personnel would be inhibited with ineffective communications mandated by the English only requirement. Further, this 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."
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.
No
Requirements R2 and R3 are over prescriptive and included as a business practice in the entities' training program.
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.
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.
No
Individual
Daniel Duff
Liberty Electric Power LLC
No
Routine market communications between entities are not a valid area of regulation under the NERC Standards.
Yes
Yes
Yes
No
No. Communications which do not involve Directives are not the proper subject of NERC standards.
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.
No
Again, this is beyond the proper scope of reliability standards.
No
This requirement is already covered under TOP-002 R18, and opens double-jeopardy for entities by including it in a second standard.
No
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.
Individual
Jennifer Wright
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."

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.

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 communication. 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 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:" SDG&E also recommends that the following language be added in a bullet to R2.2: • 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.

Individual

Stephen J. Berger

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. 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.

Yes

Yes

Yes

Yes

No	Three part communication should not be required for routine operating communications.
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.
Yes	
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.  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.
Individual	
Cristina Papuc	
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 provide 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 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.	
Group	
Imperial Irrigation District	
Yes	
Yes	
Yes	

Yes
Jesus Sammy Alcaraz
Group
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". 2. The definition should be for only actionable commands (to accomplish an actionable item). Status of does necessitate 3 part communication. 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. 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. 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.
Yes
Yes
Yes
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.
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 that there should only be one communication standard. 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. 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 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? 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. The question should be, does this hamper our system reliability or not.

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 forwarded 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.

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.

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.

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. 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. 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 the SDT. 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." 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 emergencies." 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. 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. 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 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.

William Smith

Individual

Si Truc PHAN

Hydro-Quebec TransEnergie

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes



No	Use a phonetic alphabet only when further clarification is needed.
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.
Yes	
Individual	
Jack Stamper	
Clark Public Utilities	
Yes	
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 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.
Yes	
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.
Group	
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."
Yes	
Yes	
Yes	
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.
Yes	
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? 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.
Yes	
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.
	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.
Kent Kujala	
Individual	
Jonathan Appelbaum	
The United Illuminating Company	
No	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." 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. 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.
Yes	

Te CPOP was overly administrative.
Yes
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. 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. 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.
Individual
Scott Berry
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).
Yes
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.
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 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.

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.

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).

Individual

Michelle D'Antuono

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. 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. 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.

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.

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.

Yes

Yes

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.

Yes	
No	<p>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 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.</p>
Yes	<p>With the transition of emergency communications to other projects, it is appropriate to downgrade COM-003-1's VRFs from "High" to "Medium".</p>
	<p>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 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. 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.</p>
Individual	
Roger C. Zaklukiewicz	
Roger Zaklukiewicz Consulting	
No	<p>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.</p>
No	<p>See previous comment(s) regarding the necessity for a Communications Protocol Operating Procedure.</p>
No	
Yes	
Yes	
No	<p>See previous comment to Question 1.</p>

Not certain as I do not know the specifics of the NATO phonetic alphabet.
No
We should always use the identifier adopted by the RTO, not one developed by the Element/Facility's owner.
No
The standard should not be mandating the "HOW".
Group
Duke Energy
No
The definition of Operating Communication is vague, general and overly broad. 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.
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 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 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
Yes
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.
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.

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.

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.

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.

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.

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.

Greg Rowland

Individual

Michael Moltane

ITC Holdings

Yes

Yes

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. 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.
Group
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 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.
Yes
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 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.
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.
Yes
Patricia Robertson
Individual
Joe Tarantino
Sacramento Municipal Utility District
No
See response in #10
No
See response in #10
No
See response in #10

No
See response in #10
No
See response in #10
No
We have a problem with the standard and therefore we inherently don't agree with VRFs and VSLs.
<p>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. 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, <a href="http://avstop.com/ac/atc/2-4-1.html#2-4-1">http://avstop.com/ac/atc/2-4-1.html#2-4-1</a> 2-4-3 Pilot Acknowledgment / Readback a. When issuing clearances or instructions ensure acknowledgment by the pilot. 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 readback is correct. If incorrect or incomplete, make corrections as appropriate. 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</p>
Individual
Ed Davis
Entergy Services
No
<p>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 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." 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 that issue.</p>
No
<p>We believe that this version of COM-003 actually embeds a "CPOP" within the Requirements. This is inappropriate intrusion beyond identification of 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.</p>
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.

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 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.

No

See our response to Q1, Q2 and Q4.

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.

No

See our responses to Questions #1, 2 and 4.

No

See our responses to Questions #1, 2 and 4.

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.

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. 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 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. Any data retention requirements should be consistent with the COM-002 reliability standard. 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 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 ). 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.

Individual

Anthony Jablonski

ReliabilityFirst

No

ReliabilityFirst 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 ReliabilityFirst votes in the Affirmative standard, ReliabilityFirst 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 Operating Communication but did not wait for confirmation that the repetition was correct. (Requirement R3, first bullet)"



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. 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.
Yes
Yes
Yes
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.
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. This seems impractical, requiring organizations to document, as evidence, internal communications. Dominion suggests the language be clarified to eliminate this issue. The requirement as written could also be interpreted to mean that three-part communications are 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: "
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.
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.
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. 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. 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), what other Operating Communication would a DP receive?

Connie Lowe

Individual

Andrew Gallo

City of Austin dba Autin 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."

Yes

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.

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).

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.

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).

Yes

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 requirement.

Austin Energy (AE) respectfully disagrees with COM-003-1 because it: (1) reaches beyond the SAR and (2) requires "how" communication should take place instead of "what" and "when." 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. 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 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. 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.

Individual

J. S. Stonecipher, PE

City of Jacksonville Beach dba/Beaches Energy Services

Yes

None

Yes

Yes, it would be administrative in nature and would not add value.

Yes

None.

Yes

None.

Yes

Yes

None.

Yes

None.

Yes
None.
Yes
None.
None.
Individual
Warren Rust
Colorado Springs Utilities
Yes
Yes
Yes
better option would be to retire the concept
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?
Yes
the use of "prevailing time" should be allowed, when appropriate, along with daylight and standard.
Yes
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 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."
Yes
The possibility exists for an element/facility to be co-owned and for each owner to have a different name.
Yes
Individual
Patrick Brown
Essential Power, LLC
No
Defining the new term 'Operating Communication', and including the approved definition of 'Reliability Directive' under this newly defined term 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.
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.
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.
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.
No
If the purpose of this Standard is to improve and standardize communications, than all entities should use the same alpha numeric clarifiers.
Group
JEA
No
Yes
No
Yes
Yes
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.
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 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.
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.
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.
Combine COM002 & COM003.
Thomas McElhinney

Group
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.
No
AECI agrees with SERC OC STANDARDS REVIEW GROUP's comments pertaining to question 2.
No
AECI agrees with SERC OC STANDARDS REVIEW GROUP's comments pertaining to question 3.
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.
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.
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.
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.
No
AECI agrees with SERC OC STANDARDS REVIEW GROUP's response to Question 8.
No
AECI agrees with SERC OC STANDARDS REVIEW GROUP's response to question 9.
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, 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, 3) its citation, of 12 Entity's broadly adopting three-point communication, seems hardly a majority practice within our industry, 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, 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.

David Dockery

Individual

Bob Steiger

Salt River Project

Yes

The definition of "Operating Communication" is vague and needs clarification.

Yes

Yes

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.

No

This combination for R2 and R3 would open some vertical entities to be being fined multiple times for the same communication.

Yes

No

The interface names that should be used are the names that are registered in the TSIN.

No

Individual

Robert L Dintelman

Utility System Efficiencies, InC.

Yes

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.

Yes

Yes

Yes

Yes

Yes

Yes	
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."
	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.
Individual	
RoLynda Shumpert	
South Carolina Electric and Gas	
No	
SCE&G supports the comments submitted by the SERC OC standards Review Group.	
No	
Group	
PNGC Small Entity Comment Group	



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.
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".
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.
No
LG&E and KU Services suggest deletion of all three requirements
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." 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. LG&E and KU Services suggest removing requirements R2 and R3. These requirements do not improve reliability, but instead shift Operator focus from 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. 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. 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. 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.
Brent Ingebrigtsen
Group
Pepco Holdings Inc & Affiliates
No
The distinction between Operating Communication definition and the Reliability Directive being a type of Operating Communication is confusing.
Yes
Yes

Yes
Yes
No
This modification for use of 3 part communications for Operating Communications is confusing and should not be required for Normal conditions, non reliability communications.
Yes
However not sure if it is applicable to Reliability Directives.
Yes
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.
David Thorne
Group
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-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 multiple filings, have indicated their openness to lessening unnecessary compliance requirements for small entities.
Ron Sporseen
Individual
Howard Rulf
Wisconsin Electric dba We Energies

Yes	
Yes	
No	<p>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. 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.</p>
No	<p>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.</p>
No	<p>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 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."</p>
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"? 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 fear of violating the standard.	
Individual	
Eric Scott	
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.	

Group
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.
Yes
It is best for NERC to evaluate risk and performance and prescribe methods.
No
The language, intent and purpose is not sufficiently defined. Needs better documentation and explanation.
No
Too prescriptive. NERC should be addressing risk and performance.
No
Overly prescriptive. NERC should deal with risk and performance. This level of prescriptive standard language is not appropriate.
No
Overly prescriptive. NERC should deal with risk and performance.
No
Too perscriptive. The industry has performed for many decades, successfully. NERC should focus on risk and performance.
No
Too perscriptive.
No
VRFs and VSLs should be eliminated across the board.
Scott Miller
Group
ISO/RTO Standards Review Committee
No
The SRC agrees with the elimination of the three terms but not with the addition of "Operating Communication". The SRC does not believe that the proposed term (Operating Communication) is sufficiently different from the originally proposed term (Interoperability Communication) to warrant adoption. 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. 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. 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, 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. 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.

No

The question is structured as an "either" "or" question about one requirement and 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 that standards such as this one on 3 part communication procedures are better left to the registered entities. If the Industry were to support the SDT's proposed requirement, the SRC would urge the SDT to turn away from the "zero defect" 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 alternative would encourage the creation of innovative Best Practices; as opposed to a mandatory fixed procedure which would limit innovation.

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.

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. 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.
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). 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, (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. 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 communication for routine operating instructions.
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. 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.
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.
	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 three part communications procedures 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. 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. \*\*\*\*\* FERC Order 693 510. "The Commission proposed... (4) requires tightened communications protocols, especially for communications during alerts and emergencies. " 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. 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. 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". 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. 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. 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 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:

- 30% of human failures impacting the BPS are due to front line workers.
- Front line errors were generally evenly split into 3 groups o Dispatchers o Field Personnel o Maintenance and Relaying Technicians
- 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 ¼ this amount for GOP and DP, you get the totals below. Each of these are an auditable and sanctionable event. The 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 Entities
19008	26064	3168	28620	19836	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:

- Support continued development of a standard on personnel discussions during non-emergency conditions?
- Support withdrawal of the standard?
- Support the creation of an alternative non-standard (e.g. certification) that addresses the corporate protocols on communications?

Albert DiCaprio

Group

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.

Yes

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.

Yes

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 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.

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.
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.
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 shoudl be left to the entities.
No
These requirements should be eliminated entirely
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.
Shaun Anders
Individual
Joe Petaski
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.
Yes
Yes
Yes
No
Manitoba Hydro agrees with R1.1.2 but disagrees with R1.1.3. R1.1.3 is unnecessary 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.
Yes
Manitoba Hydro agrees with splitting the single requirement into (R2) issuer and (R3) receiver, but as stated in our response to Question 1, we do not agree with the term "Operating Communications".
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
Yes
See question 7 comments
Yes
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.
Individual
John Seelke
Public Service Enterprise Group

See #10.
See #10.
Yes
See #10.
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.
Individual
John T. Walker
Portland General Electric - Transmission & Reliability Services
Yes
Yes
Yes
Yes
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.
Group
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. 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.

Yes

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.

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)

Yes

No

The term Operating Communications is not significantly different from the term Reliability Directives. 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, (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. 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.

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.

Yes

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 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."

- 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 increase the reliability of the BES. - While we don't agree with inclusion of the three part communication for Operating Communication (as stated above), we believe that the communication protocol related requirements from both existing COM standards should be merged into COM-003 to improve clarity. In the current draft, COM-003 does this only partially by including COM-001 R4. In addition to already mentioned Alert Levels and their definitions (already mentioned in our reply to Q3), we believe that COM-002 R2 should be moved into this standard as well for clarity purposes.

Sasa Maljukan

Individual
Denise Lietz
Puget Sound Energy
Yes
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 is 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.
Yes
Group
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 industry to do with that definition. We believe eliminating the other three definitions was a positive move by the SDT.
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.
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.
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.
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. 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 saving time or standard time.

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.

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.<sup>1</sup>

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, 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.

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.

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.'

Robert Rhodes

Group

Avista

No

Yes

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 communication plan, and implement an adequate communication training program.

Scott Kinney

Individual

Brenda Truhe

PPL Electric Utilities

No

Suggest the definition be clarified to scope to 'real-time' operating instructions to eliminate discussion of future outages.

Yes

Yes

Yes

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.

Yes

No

This requirement seems duplicative of TOP-002-2 R18.

Regarding R1.1.3: I request the SDT consider allowing for the Applicable Functional Entity to develop an Operating Procedure such that if all parties in the communication are in the same time zone that the time zone does NOT need to be used in the Operating Instruction. 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 techniques. 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.

Individual

Bob Thomas

Illinois Municipal Electric Agency

No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

No

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No

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No

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No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

No

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

IMEA agrees with comments submitted by the SERC OC Standards Review Group.

Group

Arizona Public Service Company

Yes

Yes

Intentionally left blank

Yes

Yes

Yes

Yes

Yes
Yes
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.
Janet Smith, Regulatory Affairs Supervisor
Individual
Alice Ireland
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.
Yes
Yes
Yes
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. 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 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.
Yes
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? Or, is it an expectation that the entity/operator adopts an existing list of alpha-numeric identifiers, which is published publicly? 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 sense 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.
Yes
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.

(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. (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.

Individual

John D. Martinsen

Public Utility District No. 1 of Snohomish County

No

Yes

Yes

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

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

Individual

Kirit Shah

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.

Yes

No

We recommend the Alert Levels be used by the SDT to define a workable time period when three-part communications is mandatory.

Yes

Yes

No	From our perspective, use of such a split for all Operating Communications (not directives) would add to the confusion.
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.
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 uncertainty for both Auditors and Functional Entities.
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.
Individual	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.
Greg Travis	
Idaho Power Company	
Yes	
Yes	
Yes	
Yes	Threat Alert Levels does not seem to fit this Standard.
Yes	
Yes	
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.
No	
They should specify the alphabet to use for consistency.	
Yes	
Yes	
At least I don't have a good reason not to agree.	
I believe the requirements for Directive should be included in this standard and removed from COM-002.	
Individual	

Andrew Z. Pusztai
American Transmission Company, LLC
Yes
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. 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.
Yes
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.
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.
When a situation necessitating alpha-numeric clarifiers in an Operational Communication arises, per the standard requirement, it becomes mandatory. There 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. 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.
Individual
Marie Knox
MISO
No
We do not agree with the proposed definition of Operating communication and agree with the elimination of the other three definitions. The SDT does not appear to respond positively to the

majority of industry comments submitted along with 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 that issue. 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.

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".

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.

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".

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".

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.

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".

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.

No

We suggest deletion of all three requirements.

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 EPRI and others shows that dispatcher communications cause on the order of 1-2% of human failure impacting the BPS. It is well less than 1% of all failures of the BPS. We also estimate there are millions of conversations annually that self-inspecting entities would need to review. Recommendation 26 of the Blackout Report, on which the SAR for this standard is based, was not focused on operator communications. Rather it suggested a mechanism by the Regions to keep regulators and government officials informed during emergencies. We would not be opposed to a requirement for entities to have a procedure for communication expectations of operators and that the entities have a process for periodic (no less than quarterly) sampling of operator communication for use in training and counseling. The requirement would need to be framed such that it does not become a "fill in the blank" standard, such that an investigator can ask for tapes of hundreds of conversations looking to find any kinks in communications. 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. The standard also fails to acknowledge that SCADA forms part of the feedback process in communications. For example, ACE recovery and generation movement during a DCS event are better confirmation that the message was received and understood than just parroting back a phone call.

Individual

Eric Salsbury
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.
We believe this standard attempts to redefine "Reliability Directive" and should not do so. Specifics of communication for this standard should be centered on emergency operations and not a blanket protocol for almost all operations communications.
Individual
Karen Webb
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".
Yes
Yes
Yes
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.
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.
Yes
Yes
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.
Group
Florida Municipal Power Agency

Yes
Frank Gaffney
Individual
Brian Murphy
NextEra Energy, Inc
Yes
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.
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:

- Confirm that the response from the recipient of the Operating Communication (in accordance with Requirement R2) was accurate, or
- 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.

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 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."

No

See comments in response to question 7.

NextEra 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 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." 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:

- Confirm the receiver's response is correct (not necessarily verbatim).
- Reissue the Operating Communication if the repeated information is incorrect or if the receiver does not issue a response.
- Reissue the Operating Communication, if requested by the receiver.

R2.3 If no response is received, do one of the following:

- 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.
- 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 NextEra's response to question 6 is adopted, or (b) if NextEra's response to question 6 is not adopted.

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.

Individual

Randall McCamish

City of Vero Beach

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

NONE

Individual

Don Jones

Texas Reliability Entity

Yes

We agree, in view of the additional comments we provide below.

Yes

Yes

Yes

Yes

Yes

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.

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 "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."

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, 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. 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? 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 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.

Group

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.

Although we believe the team made significant improvements to the standard, and would support a 3-part communication standard, we believe the introduction of both COM-002-2 which utilizes Reliability Directives and COM-003-1 which utilizes Operating Communications cause confusion for system operators and may in fact be detrimental to reliability. We do not support two standards on three-part communication. We suggest, as we have in the past, that the subject of three-part communication be addressed in a single standard, and that the requirements be developed for simplicity. The industry is, and has been, using three-part communication for decades and although we agree it should be more consistently practiced and standardized, the required communications protocols should be simple while meeting the goal of BES reliability. Introducing complicated requirements and standards that have different definitions such as Reliability Directive and Operating Communication may cause the operator to hesitate when issuing directives in real-time and every second counts when a potential system emergency must be mitigated. Therefore, FE does not support the creation of both COM-003-1 nor 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.

Sam Ciccone

Individual

Kenneth A Goldsmith

Alliant Energy

Yes

Yes

Yes

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.

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 standard goes against the concept of risk-based standard making and reinforces a zero-defect operation, which opposite of how the industry works.

Individual

Kathleen Goodman

ISO New England Inc

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".

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.

No

We suggest deletion of all three requirements.

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? 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 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. Any data retention requirements should be consistent with the COM-002 reliability standard. 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? Does the industry agree that we need a standard on three part communications for normal operations? Yes or No? Has a lack of a standard on three part communications for normal operations created any reliability issues? If so, what are they? "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."

Gerald Beckerle

Individual

Steven Wallace

Seminole Electric Cooperative

Yes

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.

Yes

Yes

No

Splitting the requirement is okay but the exclusion of reliability directives and the structure of R2 and R3 to take one of the following actions based on the other party's action is ambiguous.

Yes

Yes

No

See previous comments

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 written, a subjective review of many oral operational communications will arguably be identified by Compliance Auditors as medium, high or even severe levels.

Group

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?

Yes

Yes

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?

Yes

Is the exclusion of Reliability Directives because they are covered under COM-002? Since all COM-002 covers 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.

From an enforcement perspective, this could be problematic. As drafted this will allow virtually any alpha numeric clarifier. Who is to determine if the identifier 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.

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.

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 misuse of one protocol in place of another for the two standards.

Steve Rueckert
Individual
Martin Bauer
U.S. Bureau of Reclamation
Yes
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."
Yes
Yes
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 an alternative evidence when such a means is not present.
Group
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 definition of Operating Communications is too broad. 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. 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. 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.

No	<p>It appears as though the SDT did remove the term Communications Protocol Operating Procedure, but replaced it with very prescriptive requirements and subrequirements 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".</p>
No	<p>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.</p>
No	<p>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 subrequirements as they are focused on the "HOW" of communication when they should be more focused on the "WHAT".</p>
No	<p>Southern suggests that this requirement of a common time zone is overly 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.</p>
No	<p>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.</p>
No	<p>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.</p>
No	<p>Southern does not agree with R1 and its subrequirements 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)?</p>
No	<p>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.</p>
	<p>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? Have communications, especially during periods of normal operations, been shown to be the root cause of many, if any, events?</p>

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.

Antonio Grayson

Individual

Rich Salgo

NV Energy

Yes

Yes

This was a much warranted improvement.

Yes

Yes

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.

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.

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?

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?

Individual

Maggy Powell

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.

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.

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.

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.

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 suggest it as an attribute to be included in an entity developed protocol. See alternate standard language proposal in response to Q10.

No

Please see response to Q10.

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 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 emphasize entity practice for effective communication not impose an overly prescriptive set of requirements that pose compliance challenges.

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. 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.

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 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.

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. 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.

Individual

Tony Kroskey

Brazos Electric Power Cooperative

No

Please see formal comments provided by APM.

Yes

Yes

Yes

No

Please see formal comments provided by APM.

Please see formal comments provided by APM.

Individual

Darryl Curtis

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 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.
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 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.
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.
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.
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
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 goes 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.
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.
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.
Group
Bonneville Power Administration
Yes
Yes

Yes	
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.
Yes	
Yes	
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.
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.
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 an 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.
Chris Higgins	
Individual	
Steve Alexanderson P.E.	
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.
Yes	
Yes	
Yes	
but please see Q 10.	

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.
Yes	but please see Q 10.
Yes	but please see Q 10.
Yes	but please see Q 10.
	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. 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 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.
Group	
GP Strategies	
Yes	
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.	
Mary Jo Cooper	
Individual	
Richard Vine	

California Independent System Operator
Yes
No
<p>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: 1. A Canadian or Mexican law or regulation provided as evidence to WECC auditors? 2. An American law or regulation? 3. Perhaps both an American and a neighboring country's law/regulation would be required? 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. 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 serious 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 adhere to COM-003 and run the risk of putting the grid at risk or violating COM-003 to ensure grid integrity is not compromised.</p>
Yes
Yes
Individual
Jennifer Flandermeyer
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.
Yes
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.

Yes

Yes

No

Do we lose the "speciality" of only using 3-part communication during times of issuing directives/emergencies?

Yes

Yes

No

VRFs and VSLs should be low.

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 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.

Group

NERC Operating Committee

No

See Response 10

No

See Response 10

See Response 10

See Response 10

No

Overly prescriptive

No

See Response 10 - the OC sees these differing concepts for communications as overly prescriptive and complex.

See Response 10

No

See Response 10

No

See Response 10

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: • Protocols • Training and education • Internal controls (Preventive, Detective and Corrective) that demonstrates a process that will find, fix, track, trend.

analyze and continuously improve 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. 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. 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.

Tom Bowe - OC Chair