Individual or group. (64 Responses)
Name (45 Responses)
Organization (45 Responses)
Group Name (19 Responses)
Lead Contact (19 Responses)
IF YOU WISH TO EXPRESS SUPPORT FOR ANOTHER ENTITY'S COMMENTS WITHOUT ENTERING ANY ADDITIONAL COMMENTS, YOU MAY DO SO HERE. (10 Responses)
Comments (64 Responses)
Question 1 (46 Responses)
Question 1 Comments (54 Responses)
Question 2 (47 Responses)
Question 2 Comments (54 Responses)
Question 3 (40 Responses)
Question 3 Comments (54 Responses)
Question 4 (0 Responses)
Question 4 Comments (54 Responses)

Group
Southern Company
Antonio Grayson
No
The proposed definition can be improved by clarifying some of the language. First, a command is given in order to direct a recipient to take one of two actions - to either change or preserve the state, status, output or input of an Element or Facility. However, as drafted, it appears that there may be three responses: (i) to act; (ii) to change; or (iii) to preserve. Therefore, in order to avoid any ambiguity or confusion, Southern suggests the following change to the first sentence: "A command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is expected to act, in order to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System." In addition, the last sentence is helpful to clarify that certain activities are not considered "commands" under this definition. However, this sentence may create ambiguity beyond this definition by stating that certain actions are not "commands". In fact, these actions may be "commands" in other contexts. Therefore, in order to not create ambiguity between definitions or standards, Southern suggests that this sentence should be re-worded to avoid any future ambiguity or confusion. "For purposes of this definition, the term "command" shall not include discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions." Lastly, the Operating Instruction definition does not place an eminent time frame on the action. A communication could take place with the action expected to take place days or weeks later. Three part communication in this instance should not be required.
No
Southern believes that the requirements should clearly list which Functional Entities may issue and receive Operating Instructions (See COM-002-3). As currently drafted, it is not clear what happens when one of the five Functional Entities listed in these two requirements give an Operating Instruction to an entity not listed. The 9 requirements in R1 remain too prescriptive. A more acceptable solution would be for R1 to require "a plan" and for that plan to either address those 9 requirements or to refer to the guideline document that was developed at NERC's direction. Furthermore, we continue to believe a prescriptive use of the word "include" should be removed. We would suggest using the word "consider" or "address." Southern suggests that R2 is not necessary because the issuer of an Operating Instruction is required per sub part 1.6 to confirm that the response from the recipient of the Operating Instruction was accurate, or reissue the Operating Instruction to resolve a misunderstanding. As such this standard should not be applicable to a DP or GOP. From a compliance perspective, the new language proposed for R1 and R2 is consistent with the manner in which internal

controls have been incorporated into Version 5 of the CIP Standards. While Southern believes that internal controls are an integral element of an effective internal compliance program, we are generally not in favor of incorporating internal controls into the NERC Reliability Standards on a requirement-by-requirement basis. Southern believes a more effective way to ensure that Registered Entities develop and implement effective internal controls is to address the issue holistically and provide guidance to the industry. This guidance may very well provide examples of internal controls on a requirement-by-requirement basis, but ultimately the make-up and implementation of internal controls should be decided by the Registered Entity. Note that the question incorrectly references R2 which includes the DP and GOP.
No
Southern disagrees with the explanation of why the VRF for both R1 and R2 were changed from "Low" to "Medium" and believes that these continue to be administrative requirements justifying a "Low" VRF.
Southern agrees with the SDT that each area should have a protocol that is uniform and clear and that increases reliability. Moreover, Southern agrees with the SDT that when a Balancing Authority, Reliability Coordinator or Transmission Operator operates in two different time zones it should establish in its documented communications protocol the applicable time zone (see, e.g., SDT Consideration of Comments dated November 2, 2012, pp 60-61). However, with regard to Requirement R1, subpart 1.3, Southern believes that the standard is too prescriptive when it requires the use of "the time zone where the action will occur". Southern operates across multiple time zones utilizing a common EMS system. This provides for a uniform and clear understanding for all functional entities. However, to require the use of the time zone in which the functional entity resides could require the use of instructions that require the use of different time zones. This would not increase reliability, but would increase the risk to reliability. Further, if the time zone (including whether daylight savings time or standard time is used) is defined in the communications protocol, the BA, RC or TOP should not be required to expressly state the time zone and indicate whether the time is daylight savings time or standard time when issuing an Operating Instruction. Southern utilizes a common EMS system and "Operating Time" (which addresses the applicable time zone and whether daylight savings time or standard time is used) for operational communications. This "Operating Time" is understood by the entities within the Southeastern RC area. Thus, this established protocol provides for a uniform and clear understanding for all functional entities. As such, Southern suggest that if entities have mutually agreed upon a protocol (e.g., an "Operating Time") and this operating time is defined in the documented communications protocols, the BA, RC or TOP should not be required to expressly state the time zone when issuing an Operating Instruction. Therefore, in order to remove any ambiguity, an unnecessary risk to reliability and to insure that the standard is consistent with the SDT's statements, we suggest the following language: "Use of a mutually agreed upon operating time, or in the absence of a mutually agreed upon operating time, use of the time, the time zone and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times between Functional Entities in different time zones." In addition, Southern believes that the requirements under Requirement R1, subpart 1.5 are too prescriptive and may create an unnecessary burden on Balancing Authorities, Reliability Coordinators and Transmission Operators. Instead, it would be more appropriate to require that the protocol clearly address the format to be used when communicating oral Operating Instructions. In the event the issuer must reissue the Operating Instruction under subpart 1.6, at that point, if the Facility or Element is in alpha-numeric format as set forth in subpart 1.5 (i.e., "12B"), the issuer would then be obligated to say "one-two Bravo".
Individual
David Jendras
Ameren
No
(1) We request for the SDT to clarify the portion of the definition of Operating Instruction which reads "Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions". (2) We believe that an Operating Instruction should serve a reliability need. For example, instructions given that are based on economics, should not be included. To be absolutely clear, each Operating Instruction should

always be identified, by BA, RC, or TOP, that, "this is an Operating Instruction" when issuing such an instruction.

No

(1) We request that this be re-written to clarify what "implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols" means? What is required of an entity? Does the SDT mean the communication protocols or the manner that identifies assesses and corrects deficiencies? Can this be broken into two sentences? We would also note that implementing in a manner that identifies assesses and corrects deficiencies implies two requirements; implementation and deficiency correction. If that is required of entities for compliance in an RSAW or audit, the SDT should separate these two requirements in order to explicitly define what is necessary. (2) In addition we believe that the nine subsections in R1 are too prescriptive. The wording "that includes the following" should be changed to say ", that address the following".

No

(1)We believe that the VSLs for the requirement are too severe. We request that the VSL table for VRF #2, the Violation Severity Levels should read as follows: (a) Lower VSL - The Responsible Entity documentation protocol does not include one of the following in R2: a manner that identifies or assesses or corrects deficiencies for R2.1 and/or R2.2. (b) Moderate VSL - The Responsible Entity documentation protocol does not include two or more of the following in R2: a manner that identifies or assesses or corrects deficiencies for R2.1 and/or R2.2. (c) High VSL - The Responsible Entity documentation protocol does not include R2.1 or R2.2. (d) Severe VSL - The Responsible Entity does not have a documented communication protocol. (2) In addition, we disagree with the explanation of why the VRF for both R1 and R2 were changed from "Low" to "Medium" and believe that these continue to be administrative requirements justifying a "Low" VRF.

(1) The Responsible Entities addressed in R1 should be directed to state when giving an Operating Instruction (OI) to a GOP or DP in R2 whether or not a requested action would be deemed an OI. (a) The reason for this is that GOPs receiving OIs are not able to see the BES and therefore would not know if a call by the TOP, RC or BA would be considered an Operating Instruction. (b) If this is not stated a GOP or DP could consider all communications received from the RC, BA and TOP as Operating Instructions and this would create an undue burden on both RE's in R1 and R2. We do not believe this was the intent of the SDT or of this standard. (2) It is not clear from the proposed RSAW what will be audited and how it relates to the actual requirements; the RSAW states: "Review a sample of the entity's Operating Instructions to verify whether the entity is implementing its documented communication protocols". Are the Operating Instructions actually being audited? We are under the impression that the entities "identifying, assessing and correcting", was the requirement. We believe what is being audited is not clear between the Standard and the RSAW and the requirement should be re-written for clarity of intent.

Group

Northeast Power Coordinating Council

Guy Zito

No

The proposed definition as worded can be misconstrued to mean a command made by System Operator to a Reliability Coordinator, or to a Transmission Operator, or to a Balancing Authority. Propose to change the wording to the following: Operating Instruction —A command by a Reliability Coordinator System Operator, a Transmission Operator System Operator, or a Balancing Authority System Operator, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions.

Yes

Yes

Functional entity is capitalized throughout the Standard, yet functional entity is not a defined term in the NERC Glossary. Propose changing the wording in Requirement R1 to the following: R1. Each

Balancing Authority, Reliability Coordinator, and Transmission Operator shall have documented communication protocols that include identification, assessment, and correction of deficiencies for Operating Instructions between functional entities that include the following: [Violation Risk Factor: Medium [Time Horizon: Long-term Planning] The Sub-requirements introduce too much detail into the Standard. This detail dictates "how" something is to be done, rather than "what" is to be done. Following are comments to be considered on the sub-requirements should they remain in the Standard. Propose changing the wording in Sub-requirement 1.1 to the following: 1.1. Use of the English language when issuing or responding to an oral or written Operating Instruction, unless another language is mandated by law or regulation or agreement. Propose changing the wording in Sub-requirement 1.3 to the following: 1.3. Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times between functional entities in different time zones, unless time protocols are defined in written agreements between the functional entities. Regarding Sub-requirement 1.5, the use of alpha-numeric clarifiers should be no more than a best practice. In case of uncertainty, 3 part communication as specified in Sub-requirement 1.6 would catch any ambiguities. Propose changing the wording in Sub-requirement 1.8 to the following: 1.8. When issuing an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (for example an all call system), verbally or electronically confirm receipt or that communications paths were established to receive the message from one or more receiving parties. Regarding the Time Horizons for Requirements R1 and R2, they should be Real-time Operations since the communications are occurring in real time, and the implementation of the protocol is the intent of R1 and R2. Suggest that the Standard be further clarified so that the intended purpose is to ensure that an entity has implemented a communications protocol with various core attributes, such as three part communication. We believe that it is not the SDT's intent that an entity will be found out of compliance for instances when an operating instruction was given which did not conform to its implemented protocol. Compliance will only be assessed if the Protocol procedure itself was not formally implemented and not to individual violations of such procedure which will be handled by internal controls to track and address any deficiency. In the context of implementation, sufficient implementation as used in this Standard could be demonstrated by management approved protocol procedures issued to the appropriate individuals in the organization and documented training. The Standard is not envisioned to be a zero-defect Standard however, and unless entities and audit staff have clear understandings of what "implement" means there may be instances when an auditor may find non-compliance beyond the intent of the Standard's Purpose and the Reliability Assurance Initiative concept being brought forward with this Standard. Suggest clarification to the word implement as it is used in the Standard and what activities in the compliance area will ensure proper audit expectations are set.
Individual
Thad Ness
American Electric Power
No
While AEP would not argue against the definition of "Operating Instruction" as proposed, we object to its inclusion as we disagree with the concept of requiring three part communications for more routine operations. 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 emphasizes the manner of communications rather than the operations themselves. In addition, requiring three part communication in such a broader scope could actually diminish the perceived urgency during more urgent situations where such communications are more appropriate. In any event, requiring three part communications for Reliability Directives will likely result in more widespread usage for more routine operating communications, without making it a requirement.
No
AEP disagrees with the concept of requiring three part communications for more routine operations, and as a result, also disagrees with requiring both that entities have documented communication

protocols, as well as implement a process for identifying deficiencies with adherence to the documented communication protocols specified.
No
AEP disagrees with the concept of requiring three part communications for more routine operations, and as a result, has no comment at this time on the proposed VRF's and VLS's.
AEP does not agree with the perceived necessity of this standard, but does support the overall concept of the drafting team's building controls into the standards as well as proposing RSAWs during the comment that perpetuate the ideas and concepts of the drafting team. As stated in the previous comment period, 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
Greg Froehling
Rayburn Country Electric Cooperative
No
I feel that an additional term is unnecessary. The defined term "Reliability Directive" should be sufficent to accomplish the goal.
No
I feel that this could lead to very inconsistent auditing on not only this standard but CIP version 5 as well. My thoughts on identification, assessment and correction of deficiencies may certainly not be that of the auditors thus leading to the potential for a NOPV. I suggest language to the affect "shall implement communication protocols in accordance with NERC guidelines for internal controls....."
No
The Responsible Entity did not implement, in a manner that identifies, assesses and corrects deficiencies, their documented communication protocols as required in Requirement R2 Suggest to allow for a less subjective audit envitronment. The Responsible Entity did not include methods for, identifying, assessing and correcting deficiencies, in their documented communication protocols as required in Requirement R2
Combine with COM-002 ASAP Really take a close look at how R2.2 is worded. State clearly the recipient is to call the sender back after the call if they did not understand. Require the sender of the blast call to issue contact information if questions arise. Blast calls do not fit Mcdonalds three part communication model so often used.. Blast calls are very efficient just that not a precision communication tool by any means..
Group
pacificorp
ryan millard
Yes
Yes
No
It is not clear to PacifiCorp why the VSLs are so much higher for R2 when R1 applies to Balancing Authorities, Reliability Coordinators, and Transmission Operators, and thus has a potentially broader application than R2. R2 applies to Distribution Providers and Generator Operators.
PacifiCorp does not feel that the requirements listed in R1.5 regarding the use of alpha-numeric clarifiers when issuing an oral Operating Instruction is warranted. The requirements listed in R1.6,

and R1.7 requiring the strict use of three-way communication should alleviate any possibility of miscommunication, which PacifiCorp understands to be the drafting team's intent in the development of separate Requirement R1.5. Also, implementing the use of alpha-numeric clarifiers poses additional risk due to the introduction of ambiguous language.
Group
Tennessee Valley Authority
DeWayne Scott
Agree
SERC OC Standards Review Group
Individual
Russ
Flathead Electric Cooperative, Inc.
Agree
Support previous comments submitted by Central Lincoln, do not believe the comments were adequately addressed as the SDT refused to incorporate language suggested for DPs with few BES assets.
Group
Associated Electric Cooperative, Inc. - JRO00088
David Dockery - NERC Reliability Compliance Coordinator
No
While AECI deeply appreciates and has carefully considered this SDT's latest effort to contain scope of this definition, we feel it still fails to appropriately balance the risk to the BES, against anticipated Industry compliance assurance costs as well as non-compliance risks. This is primarily due to an anticipated high-volume of very low BES impact Operating Instructions within our own operating environment.
Yes
AECI appreciates the SDT's willingness to move away from zero-defect language.
No
So long as DPs, GOs, small TOs and small BAs are within the scope of this Standard, and the scope of Operating Instruction does not necessarily impact BES reliability, any Severity or Risk assessment greater than Low, forces an Entity's risk of non-compliance with documentation far above actual risk to the Bulk Electric System. AECI cannot agree with such inequity.
AECI remains resolute that COM-002 provides a more appropriate balance between BES reliability risks associated with human-to-human communications within our industry, and industry costs to monitor for compliance with required communication practices.
Group
ACES Standards Collaborators
Ben Engelby
No
(1) We appreciate all of the efforts the drafting team has expended in developing this proposed standard The drafting team has done an excellent job in balancing the various diverse opinions and interests. We believe the standard is moving in the right direction; however, we still believe there are additional needed improvements. Another round of commenting and balloting may be necessary to capture all stakeholder viewpoints. (2) The current definition of Operating Instruction, particularly "command from a System Operator" is too similar to a Reliability Directive. (3) We recommend the standard drafting team revise the SAR of COM-003-1 to retire the definition of Reliability Directive and COM-002-3. There is no better time to rewrite the standards than when they are in development. (4) There is no delineation between when COM-003-1 and COM-002-3 would apply, which could potentially subject registered entities to double jeopardy. Assume a switching order is an Operating Instruction; would those communications become a Reliability Directive if the switching order resulted

in an emergency or was part of a standing operating guide to resolve the emergency, or would it still be an Operating Instruction? There is still gray area in this standard that needs to be clarified. We appreciate the slides that were shared during the recent webinar; however, the words in the current definitions do not clearly state when an Operating Instruction ends and a Reliability Directive begins. (5) A "command" is a synonym of a directive, not an instruction. We recommend revising the definition to capture the proper intent of the standard. (6) We find the use of input of an Element odd in the Operating Instruction definition. We understand the output of an Element such as the MW output of a generator? However, we are not sure what is intended by the input of an Element? What would the input be on Element? For a generation unit, does the fuel supply constitute input? It would be unusual for a TOP, BA, or RC to issue an operating instruction regarding fuel. For what would be the input on a transformer, transmission line, circuit break, bus section, etc. that a TOP, RC or BA would issue an operating instruction? (7) The "expected to act" and "preserve the state, status, …" parts of the definition conflict with one another. If an entity is preserving the state or status, action often is not required. For example, would an operating instruction ever be issued to maintain a circuit breaker in the closed position? No action is required in such a situation? When would the drafting team anticipate action to be required to maintain the state, status, output or input? Are these parts intended to cover anticipation by the BA, TOP or RC that the state, status, output or input may move? For instance, if a generator is expected to ramp up based on the unit commitment and dispatch plan but the BA, TOP, or RC determines that the units needs to maintain its current output. We think some explanation and/or examples in a guideline section would be helpful.

No

(1) We agree with the drafting team's decision to remove Requirements R3 and R4, as they were unnecessary. However, we still have concerns with the standard as our comments explain below. (2) We recommend that the SDT consider removing or revising the sub-parts of R1 and R2 to allow registered entities flexibility to define their own communications protocols based on internal policies and procedures. The registered entity should have the freedom to decide what elements are to be included in its communication protocols based on its system, location and configurations. A large entity may have more elements in their communication protocol than the 9 sub-parts, while a small cooperative may need less because of their impact on the BES. We would like the SDT to reconsider each sub-part and revise the requirements in such a way that allows more flexibility for smaller entities, while possibly requiring other registered functions, such as an RC to have more elements in their communication protocols. There is more discussion on each sub-part below. (3) R1, part 1.1, use of the English language. This Part either needs to be eliminated or restructured to place the burden only on those entities that are from areas of North America where English is not the predominant language. The amount of resources expended documenting compliance with this requirement simply is not commensurate with the reliability benefit. There have been audits conducted in which every piece of evidence was presented in English, all audit participants used English exclusively, and control room conversations witnessed by auditors were in English. Yet, when the time came to sign off on compliance with this requirement, auditors expected to find inclusion of a statement in procedures that the English language was not used. Please eliminate this unnecessary expenditure of resources by eliminating the requirement or only requiring those areas where English is not the predominant language to include this in their communication protocols. (4) R1, part 1.3, Use of time zone and Daylight Savings or Standard Time. Contrary to the statements in the response to comments this sub-part prevents the use of relative time, such as "perform an action in 5 minutes" or at the very least complicates it with superfluous information. Specifically, this requirement compels the use of the time zone and daylight savings times in all Operating Instructions. While its does not specifically exclude that RC, BA or TOP from stating that an action must be performed in 5 minutes, it would require the RC to include the time zone and whether it is Daylight Savings or Standard time. For example, the TOP would have to say, "Open breaker one in five minutes in the CST time zone." This does not make sense. (5) R1, part 1.4, Transmission interface Element or Facility. The language used in this sub-part is overly complex. Specifically, the statement "unless another name is mutually agreed by the Functional Entities" is problematic. If that is the case, the mutually-agreed upon name obviates the need for having the sub-part. Also, Project 2007-03 eliminated TOP-002 R18 which referred to the same concept as part 1.4, "uniform line identifiers when referring to transmission facilities." The reason the Real-time TOP SDT removed the language from the new standard was because the "requirement adds no reliability benefit. There has never been a documented case of the lack of uniform line identifiers contributing to a System reliability issue." To be consistent with other approved standards, we recommend striking this sub-part in its entirety. (6) R1, part 1.8 and 1.9,

One-way Burst Messaging. The drafting team should revise this sub-part to state that compliance with this sub-part is optional, depending on whether the entity utilizes burst messages. These sub-parts need additional information for clarity. Same comment for DP/GOP below.
No
(1) We disagree with the VRF classifications being medium. We ask the drafting team to clarify why they decided to raise the risk factor when the requirement still addresses the same activity. Further, with internal controls, this requirement should be low because the majority of deficiencies would not have an adverse impact on the reliability of the BES and would not result in a violation. It appears that the VRF was raised to medium because R3 and R4 were medium and now are incorporated into R1 and R2. We disagree with the justification that correcting deficiencies warrants a medium risk factor. This is illogical and argues that every requirement that includes the "assess, correct, identify" language should be medium. Further, it does not seem consistent with the next paragraph. (2) We disagree with the Time Horizons for R1 and R2. Implementing communications protocols are not long term planning, these activities are operations planning. The requirement is no longer a documentation requirement, this is an operations planning requirement. Furthermore, the communications that are governed by the document occur in the real-time operations time frame. Using the logic that is applied to identify long-term planning as the time frame means that every requirement that will be monitored via internal controls and subject to the "identifies, assesses and corrects" language will be long term planning. This makes no sense and is inconsistent with the approach of the CIP SDT. CIP standards have requirements that did not have the long-term planning horizon. CIP-003-5 R2 is one example. (3) There was a lot of discussion in the recent drafting team webinar about Regional auditors not finding a violation, but there needs to be clear guidelines describing when an auditor will find a PV. The VSLs currently describe a violation when a procedure is deficient, but does not clearly explain when a communication deficiency is not remediated. A deficient communication could result in no finding at all, depending on how the individual auditor interprets the situation. This level of subjectivity is too high; the SDT needs to revise the VSL table to reflect a more reasonable approach, perhaps by including more information and examples of situations that might be viewed as non-compliance (communication breakdown) but because of internal controls, there should be no finding of non-compliance. In the alternative, the SDT could develop a guidance document outlining when an auditor is to find a PV and include examples to ensure consistency. The RSAW does not provide any additional clarity. (4) In the webinar, there were several references to "systemic or chronic" communication deficiencies. The VSLs do not reference any types of trends, but that seems to be the focus of compliance. We suggest revising the VSLs to focus on broader issues, such as systemic deficiencies that remain unresolved. Furthermore, this would make the VSLs more consistent with the data retention section which focuses on retaining "evidence of its manner that identifies, assesses, and correct deficiencies."
(1) In the Background section of the standard, we would like the standard drafting team to provide more details on what "compliance management activities" include as stated in the last sentence of the section. We would like the team to provide examples of these activities for clarity. (2) We support the concept of internal controls that the SDT has proposed. We agree that finding a violation for each instance of deviation from the requirement is burdensome and unreasonable and evaluating internal controls is a more efficient use of resources. However, we are concerned about the consistent evaluation of internal controls. How is NERC planning to ensure that all Regional auditors consistently evaluate internal controls during compliance audits? Currently, there is too much room for auditor subjectivity, especially when evaluating whether a single communication was deficient. There are so many communications that could occur on a daily basis and there is no clear guidance when the Regional Entities will find or not find a possible violation in an audit. (3) In the webinar, SDT chair stated that a registered entity that catches a high percentage of deficiencies, then their process is working, but if the entity is only catching 50% then the entity needs to correct the process. There is currently no percentage or other guideline or metric to determine if an entity's process is sufficient. If this is the SDT's intent, please provide further detail. (4) We recommend the SDT provide additional information in the Rationale and Technical Justification document or in an application guidelines section of the standard to include a guideline to show how the Regional auditors would assess compliance with a control-based standard. It seems that the trend in both COM-003-1 and CIP v5 is to find the errors and fix them without the need to self-report. How are the Regions going to determine when a PV is to be issued? The Technical Justification and the RSAW do not provide enough information when a communication deficiency crosses the threshold of becoming a violation. How

does a registered entity know when to self-report? (5) We recommend adding more detail, perhaps including an application guidelines section as other risk-based standards, for acceptable remediation of deficient communications. What evidence is necessary that the registered entity identified, assessed, and corrected a deficiency with the communications protocol? The data retention section only requires the manner in which the entity identifies, assesses, and corrects to be documented. It does not require retention of any actual instances. We believe this is appropriate and that a few examples of corrections as supporting evidence may be warranted. However, there is no explanation in the standard that makes this clear. An application guideline would be useful in providing an explanation. Without these explanations, the internal controls used to remedy deficiencies could turn into another documentation exercise instead of focusing on effective communication. We recommend the SDT consider ways of satisfying remediation without creating an unnecessary administrative burden for maintaining evidence of compliance. (6) If the Regional auditor is to make recommendations to registered entities on how to improve the COM-003-1 internal controls, would the Regions allow an initial safe harbor to assess the entity's program? If Regional auditors find PVs on the initial audit, that practice would go against the spirit of self-correcting and would stifle the entity's actions to monitor, assess, and correct deficiencies. The SDT should consider this sort of initial assessment in the implementation plan. (7) The response to comments regarding combining COM-002 and COM-003 beyond the scope of the SAR. The comments also cited that the Standards Committee considered combining them. It is our understanding that the Standards Committee rejected SARs to consider combining the standard projects because they were not driven from within the standards drafting team. Scopes can be adjusted by submitting new SARs and SDTs have authority to submit new SARs. If the SDT agrees that combining the standards makes the most sense for reliability, please submit a SAR to combine the standards. (8) Thank you for the opportunity to comment.
Group
Arizona Public Service Company
Janet Smith, Regulatory Affairs Supervisor
Yes
Yes
Yes
AZPS has no other comments.
Individual
Randi Nyholm
Minnesota Power
No
Minnesota Power supports moving away from zero-defect Requirements, but as currently written the language "in a manner that identifies, assesses and corrects deficiencies" does not allow for the identification of deficiencies without the assessment of a severe severity level within the VSLs. We recommend that, at a minimum, the VSLs be modified to allow for this flexibility similar to what was done in the CIP Version 5 Standards.
No
The Standard does not state that switching is only required when issuing instructions for interconnected systems and not for the day to day switching on our system as was stated during the recent COM-003 webinar. Additionally, we do not support the use alpha numeric identifiers to solve a perceived problem that does not exist on our system.
Individual

andrew Z. Pusztai
American Transmission Company, LLC
Yes
Yes
Yes
ATC respectfully submits the following comment for SDT's consideration regarding Draft #4 of COM-003-1: (Ref. Redline for Requirement 1.3 below) 1.3. Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time wWhen issuing an oral or written Operating Instruction that refers to clock times between functional Functional entities Entities in different time zones, when referring to clock times include the time, the time zone where the action will occur and indicate whether the time is daylight saving time or standard time. ATC recommends Requirement 1.3 above be revised and/or rewritten as follows: 1.3. "Use of a mutually agreed, prevailing system time zone when issuing an oral or written Operating Instruction between Functional Entities in different time zones." Basis for the comment • The need for time conversion when Operating the BES, injects an opportunity for an error that could potentially cause unintended System configuration, or even an Adverse Reliability Impact. Protocols should be set to eliminate those negative opportunities.
Individual
Larry Watt
City of Lakeland
Agree
Florida Municipal Power Agency (FMPA)
Individual
Jim Cyrulewski
JDRJC Associates
Agree
Midwest ISO
Group
Imperial Irrigation District (IID)
Jesus Sammy Alcaraz
Yes
Yes
Yes
Revise the following sub-requirement. 1.4. Delete "name" and include...Uniform Line Identifier(s) specified by the owner(s) for each Transmission interface Element or Transmission interface Facility when referring to a Transmission interface Element or a Transmission interface Facility-in an oral or written Operating Instruction , unless another name is mutually agreed to by the Functional Entities.
Individual
Patrick Brown
Essential Power, LLC

1. The expression, "repeat, restate, rephrase, or recapitulate," in R. 1.7 and R2.1 would be clearer if shortened to, "repeat or summarize." 2. The revised standard is much improved by focusing on continuous improvement instead of making each communication imperfection a violation, but no guidance is provided as to how rigorous the improvement program must be to be deemed sufficient. M1 and M2 should have added at the end the statement, "Acceptable means of identifying, assessing and correcting deficiencies include the following: • Review of voice logs, for at least one hour per year for each person issuing commands or responses (as applicable) • Personal monitoring of communications, for at least one hour per year for each person issuing commands or responses (as applicable) • Annual refresher training, including a quiz on proper commands or responses, for each person issuing commands or responses (as applicable) (as applicable) 3. Failures of GO and DP operators to repeat or summarize Operating Instructions are easily detectable (R2.1); but it would not ordinarily be possible for a person monitoring COM-003 compliance to detect a lack of understanding accompanied by failure to request a clarification (R2.2), since the resultant silence on the part of the operator is the same reaction associated with clearly understanding the Operating Instruction. M2 should be shortened to, "Evidence must include each applicable entity's documented communications protocols, which must include a provision requiring the recipient of an operating instruction to seek clarification from the initiator in the event of an unclear instruction." 4. From the RSAW: "If the CEA finds in subsequent audits or other compliance monitoring activities that the same or similar deficiencies continue to occur after the entity was provided the feedback by the CEA, the CEA will seek to understand what changes the entity made based on prior recommendations. If the entity did not implement changes to identify, assess and correct deficiencies, the CEA may make a determination of possible non-compliance" The issue here is potential for disagreement on "deficiencies". There are some conversations between GOPs and TOPs which are market driven, but could be read by an auditor as an "operating instruction". Some adjustment to the definition of "operating instruction", or some adjustment to the requirement that an entity address the "recommendation" from the region, may be in order here.
Individual
John Falsey
Inevenergy LLC
Yes
Yes
Yes
Individual
Daniel Duff
Liberty Electric Power
No
This needs further work. As written, there is still potential for a TO to call a GOP to address a market concern, and trigger the standard. Discussions which are purely for market concerns are not properly part of the standards, but an auditor could read such conversations as "Operating Instructions". Suggest that there be a specific clause excluding such discussions from the definitions.
No
The revisions proposed are a significant positive step, and I thank the SDT for their work. However, there are still some issues with the proposed requirements. Requirement 2.2 states "When receiving an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (e.g. an all call system), request clarification from the initiator if the communication is not understood.". This requirement cannot be audited as written, as there is no way to determine if a communication is understood by a particular

operator. Further, the concept of three-part is to allow the initiator to determine if the instruction is understood. Instructions disseminated across an All-Call are understood to be crafted in such a way as to avoid such misunderstandings. Suggest elimination of R 2.2, and suggest adding language to the RSAW that considers protocols for resolving misunderstandings as a mitigating factor in determining the sample size pulled for audit purposes. R1.8 as written would only require the issuing entity to confirm receipt from one entity. Receipt confirmation is not needed in a standard written to cover understanding communications, and the requirement should be eliminated.
No
A BA who excludes three-part communication requirements from their communication protocols is assessed a lower VSL. A GOP who does exactly the same thing is assessed a High VSL.
The need for this standard still has not been demonstrated, and will merely add paperwork and confusion due to the existence of COM-002, and the questions which will inevitably arise over which standard, or if any standard, covers any particular conversation. The SAR should be withdrawn and a new SAR requiring a communications protocol designed to "mitigate the possibility of misunderstandings during communications between entities" should be added.
Individual
Michael Falvo
Independent Electricity System Operator
No
The IESO does not have an opinion on whether or not the definition is proper; the IESO is opposed to having this term defined and added to the NERC Glossary. As indicated in our previous comments, the term does not need to be defined. For years, system operators deal with operating instructions on a daily if not minute basis. Having a defined term, and calling such communication as "Command" is unnecessary, and can confuse operators from what they understand to be the meaning of operating instructions. We appreciate the SDT's response to our previous comments, and its effort to add clarifying language by adding the second, qualifying sentence. In fact, the additional clarifying language may cause more confusion to the operators than the purpose it is intended to serve. We therefore continue to respectfully disagree with the need for this definition and the standard as a whole, in particularly the requirement on 3-part communication for operating instructions. We continue to disagree with the need for this standard on the basis that the industry-approved COM-002 together with the NERC OC's operating guide on operator communication already provide the necessary requirements and guideline to fill any potential reliability gaps that may arise due to operator communication. Requiring 3-part communication for routine operating instructions, despite the additional wording in R1 ("in a manner that identifies, assesses and corrects deficiencies") and provisions made in the RSAW, is still a zero defect requirement that would add undue burden to the operators, which is a potential cause of unreliable operations. We therefore continue to disagree with the need for this standard as it adds little to reliability over what COM-002 and the operating guide have already accomplished.
No
Notwithstanding our disagreement with the need for this standard, the phrase "in a manner that identifies, assesses and corrects deficiencies" is vague, not measurable and inconsistent with the results-based standard concept which emphasizes the inclusion of a performance or reliability outcome in the requirement. A more direct and clear requirement would be to simple require "implement documented communication protocol….". We appreciate the SDT's intent for adding this phrase, but it does little to ease the concerns of the commenters. Instead, the addition introduces an immeasurable phrase that may in fact make the requirement more ambiguous and unclear.
No
As expressed previously, we continue to respectfully disagree with this standard and therefore we continue to disagree with the VRFs and VSLs.
a) We appreciate the SDT's hard work and dedication to develop this standard in response to the SAR and the recent BoT directives. Unfortunately, the need for this standard has been overtaken by event (the definition of Reliability Directives and COM-002-3, and the OC's operating guide on operator communication). The BoT, unfortunately, is still under the perception that COM-003 is the answer to the potential reliability gap that was discussed when it approved the COM-002 R2 interpretation. The

two balloting results and the two sets of industry comments suggest that many in the industry share our view. Hence, we believe the industry should attempt to convince the BoT that the potential reliability gap has been duly addressed and therefore COM-003 is no longer needed. We understand the SDT has little to no option, we therefore suggest that the SDT present the results of this round of ballot, if it still fails to make the 2/3 approval rate, to the Standards Committee and ask for its permission to put a hold on further work until the BoT has heard the industry's concern and makes a policy decision on the way forward. Further revision to this standard and posting for industry commenting and balloting will only waist the SDT's effort and industry resource, without a fruitful outcome. b) Notwithstanding the above, 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 (P. 2 of the Implementation Plan) and in Section A5 of the standard, to the following effect: ", or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities."
Group
Duke Energy
Greg Rowland
No
The revised definition still lacks clarity needed to distinguish Operating Instructions from Reliability Directives. The SDT revised definition of Operating Instruction is too wordy and adds significance by using the word "command" versus "communication" as is used in the definition of Reliability Directive. Including the phrase "preserve the state" also adds significance and could be interpreted as an Emergency and take on the meaning of a Reliability Directive. The definition should not include the second part regarding what is not considered an Operating Instruction. The definition of Operating Instruction should be patterned after the BOT approved definition of Reliability Directive, with the only difference being that Operating Instructions address normal system conditions and Reliability Directives address an Emergency or Adverse Reliability Impact. Suggested wording: "Operating Instruction — A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority, where the recipient responds to a request to take action by changing the status, output, or input of an Element or Facility of the Bulk Electric System under normal system conditions."
No
In Requirements R1 and R2, the word "include" should be changed to "address". This change will align the language of the requirements with the language of the RSAW, providing flexibility to entities in how their communications protocols will be structured. For example, on page 3 of the Comments Report, in reference to use of the 24-hour clock, the SDT states: "The SDT points out in this response that these protocols are to be used only when a specific clock time is cited. The SDT accepts relative time such as: " in the next 10 minutes, on the hour or half hour" as clear and unambiguous and not requiring the use of the 24 hour clock and time zone references." However it's not clear to us that R1.2 and R1.3 allow that flexibility.
No
Consistent with our comment to Question 2 above regarding changing the word "include" to "address" in Requirements R1 and R2, this change should also be made in the VSLs for R1 and R2, changing the word "include" to "address".
Individual
RoLynda Shumpert
South Carolina Electric and Gas
No
SCE&G's supports the SERC OC in the following response "We believe that the definition should indicate the timeframe in which the entity "is expected to act." We believe that this language is too wide and can be interpreted in many ways. Furthermore, we continue to believe that prescriptive

communications protocols are unnecessary for routine Operating Instructions. Many Operating Instructions, such as economic loading of resources, do not have a reliability impact to the BES and the entities should not be held accountable to the requirements of this standard."
No
SCE&G support the SERC OC in the following response" We believe that the requirements should clearly list which Functional Entities when the communications protocols should be utilized, for example, what happens when one of the five Functional Entities listed in these two requirements give an Operating Instruction to an entity not listed. Note that the question incorrectly references R2 which include the DP and GOP. Furthermore, while we agree with the concept of identifying, assessing, and correcting deficiencies, we continue to believe a prescriptive use of the word "include" should be removed. We would suggest using the word "consider" or "address."
No
SCE&G supports the SERC OC in the following response "We disagree with the explanation of why the VRF for both R1 and R2 were changed from "Low" to "Medium" and believe that these continue to be administrative requirements justifying a "Low" VRF."
SCE&G is concerned with similarities between Operating Instructions and Reliability Directives. It also appears that the language in the RSAWs would require an entity to keep a log of all Operating Instruction. This would be overly burdensome to the industry and is not included in the requirements.
Individual
Patricia Metro
National Rural Electric Cooperative Association (NRECA)
No
NRECA is concerned that the proposed definition of an "Operating Instruction" is too similar to the definition of a "Reliability Directive" specifically with the inclusion of "command from a System Operator".
No
NRECA agrees with the decision to remove R3 and R4 from COM-003 draft 4, but is concerned with the incorporation of the internal controls language in R1 and R2. These changes don't resolve the concerns provided in comments to the previous draft of the standard. Although internal controls are important, NRECA believes that before such language is added to standards guidance/criteria needs to be developed on how Regional Entities will consistently review internal controls during compliance audits. NRECA suggest removing the language "implement, in a manner that identifies, assesses and corrects deficiencies" until the Reliability Assurance Initiative (RAI) effort to change the compliance/enforcement process to be more focused on a risk-based model and the effectiveness of a registered entity's internal controls/compliance program is implemented.
Individual
Wryan Feil
Northeast Utilities
Agree
Northeast Power Coordinating Council Inc. (NPCC) 1040 Avenue of the Americas 10th Floor New York, NY 10018
Group
Dominion
Connie Lowe
Yes
Yes

Individual
Anthony Jablonski
ReliabiltiyFirst
Yes
Yes
a. ReliabilityFirst generally agrees with the language in R1 and R2, but believes the intent would be clarified if the structure of the words were shifted around. ReliabilityFirst recommends the following language for R1 for consideration (R2 would be similar): "Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement its documented communication protocols for Operating Instructions, in a manner that identifies, assesses, and corrects deficiencies, between Functional Entities that include the following:"
Yes
ReliabilityFirst abstains and offers the following addtional comments for consideration: 1. Requirement R1 and R2 Time Horizons a. ReliabilityFirst believes the Time Horizons (Long-term Planning) for Requirement R1 and R2 are incorrect. Requirement R1 and R2 deal with implementing communication protocols for Operating Instructions which is more of a real time activity. Thus ReliabilityFirst recommends changing the Time Horizons to "Real-time Operations" or at a minimum "Same-day Operations" or "Operations Planning". 2. The term Functional Entity a. Since the term "Functional Entity" is used throughout the standard, ReliabilityFirst recommends adding the word "applicable" in front of it to help clarify that it is referring to the Functional Entities as outlined in the Applicability Section. Without this distinction, individuals my think this term is referring to all Functional Entities as outlined in the NERC Function Model.
Individual
Michelle R. D'Antuono
Occidental Energy Ventures Corp (OEVC)
Yes
OEVC believes that the clarifications that the drafting team has added to the definition of Operating Instruction are helpful. First they have eliminated ambiguity concerning which entities would issue such instructions – in a manner consistent with their function. In addition, we agree with the addition of the statement excluding those conversations which would not be considered an Operating Instruction. This allows us to differentiate between those communications which require action from those which are less consequential; improving the chances that the proper care is applied when reliability information is exchanged.
Yes
OEVC agrees that reliability is not best served by Compliance focus on the execution of every Operating Instruction in 100% accordance with the communications protocol documents. The attainment of perfection is always the ideal, but not realistic in any operating environment. Conversely, the establishment of high, but attainable, internal controls effectiveness goals is a proven method used in other industries to drive down process defects.
Yes
Since the execution of the internal controls process is part of COM-003-1's intent, OEVC believes it is appropriate that R1 and R2 be assigned a Medium VRF.
Although we believe that the latest version of COM-003-1 is ready for adoption by the NERC BOT, OEVC cannot approve the standard until the RSAW is also completed. In our view, the addition of the new risk-based language is the only reason that COM-003-1 is acceptable – but is incomplete without a fully vetted RSAW. There are still too many questions that remain about the audit process – and the success of the entire program hinges on its implementation.

Individual
Melissa Kurtz
US Army Corps of Engineers
Agree
MRO NSRF
Group
seattle city light
paul haase
Yes
No
Seattle City Light commends the Standard Drafting Team on the changes to draft Standard COM-003-1, in particular the use of non-zero defect language that is the same as used in the CIP v5 Standards. Use of common language will help entities apply the new "identify, assess, and correct" approach consistently across Standards. Common language also will help ensure that regulators audit the new approach consistently. Seattle City Light is concerned, however, with the Standard Drafting Team's use of the term "Functional Entity" as establishing the bodies among which communications must meet the requirements of COM-003-1. Seattle has several objections. First, although "Functional Entity" is capitalized in the draft Standard, this term is not defined in the NERC Glossary of Terms. It appears the Standards Drafting Team may have used the term in error, because they were not aware it was not a Glossary-defined term during the COM-003-1 webinar held November 27, 2012. A second objection is that "Functional Entity" in this role does not add clarity to the Standard. "Functional Entity" is defined in the NERC Reliability Functional Model as "the term used in the Functional Model which applies to a class of entity that carries out the Tasks within a Function." This definition refers to other terms defined only with the Functional Model document ("Task," "Function"). It is not illuminating as to defining the bodies among which communications must meet COM-003-1. The third and strongest objection is that use of the term "Functional Entity" in requirements of the draft Standard is incorrect and inconsistent with the NERC Functional Model, and as such creates confusion about Standard obligations for entities registered for more than one function. The NERC Functional Mode Version 5 (November 30, 2009) explicitly does not require any particular organization or assignment of functional Tasks for any multi-function entity. Functional tasks exist undifferentiated across an entity as a whole, and the NERC Functional Model document states clearly that no further differentiation is expected, required, or implied. (See, for example, p. 7 "The Functional Model describes a functional entity envisioned to ensure that all of the Tasks related to its Function are performed. The Model, while using the term 'functional entity', is a guideline and cannot prescribe responsibility" and p.8 "The Model is independent of any particular organization or market structure.") Seattle City Light, for example, is a vertically integrated municipal utility registered for 11 functions: BA, DP, GO, GOP, LSE, PC, PSE, RP, TO, TOP, and TP. Registration is made without differentiation: no particular sub-organization within Seattle City Light is identified as performing BA tasks, as performing TOP tasks, and so on. The Model is simply that Seattle City Light or any other multi-function entity performs these Tasks as a unit. By contrast the draft Standard relies upon differentiation of Functions within an entity, so that it can be determined if a communication occurs between the Functional Entities covered by COM-003-1 or not. Such differentiation is outside the Model and introduces complexities and unintended consequences not envisioned by the Functional Model and the term "Functional Entity." The suggestion made by a member of the Standard Drafting Team during the November 27, 2012, webinar, that the nature of the communications would indicate if COM-003-1 applies or not (i.e., that an Operating Instruction from a System Operator to a Field Operator both working within the same vertically integrated entity could be presumed to be a communication from a TOP to a TO), is neither a sound nor clear basis to resolve the confusion introduced by the incorrect use of "Functional Entity" in the draft. Under such an approach an Operator of a multi-function entity has the extra burden of having to parse with limited or no guidance each communication as to applicability to COM-003-1. Such a burden does not promote timely communications nor reliable, consistent operations. Auditors and regulators assessing compliance with COM-003-1 will face the same confusion, and there is no assurance that different auditors and regulators from different regions will interpret communications the same way, even from

one Operating Instruction to another. It is simply a misreading, tempting as it may be, to presume that Functional Entity Tasks are assigned with greater granularity than to an organization as a whole. To resolve the matter, Seattle City Light recommends simply that the term "Functional Entity" be deleted from within the Requirements of COM-003-1, with the end result that Operating Instructions will apply to BES Facilities and Elements regardless of entity involvement. The term "Functional Entity" is superfluous to the Standard. This suggestion involves changes to R1, R1.3, R1.4, and R2, as follows: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions ... that include the following 1.3. Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times ... in different time zones. 1.4. Use of the name specified by the owner(s) for each Transmission interface Element or Transmission interface Facility when referring to a Transmission interface Element or a Transmission interface Facility-in an oral or written Operating Instruction , unless another name is mutually agreed to ... . R2. Each Distribution Provider and Generator Operator shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions ... that include the following… (where ... indicates removal of "between Functional Entities" language)
No
The term "Responsible Entity" is not defined within the NERC Glossary and should not be capitalized in the VSLs. It is a leftover term from earlier versions of the NERC Functional Model (see discussion in Version 5, footnote pp.7-8 regarding use of Functional Entity and Responsible Entity).
Group
Midwest Reliability Organization NERC Standards Review Forum
Joseph DePoorter
No
See last question for comments.
Yes
The NSRF agrees with the language "…shall implement, in a manner that identifies, assesses and corrects deficiencies,…" However, the NSRF has concerns on how CEA's will audit to this requirement. The NSRF requests the SDT to provide information or a guideline that would demonstrate how a Regional Entity would assess and the type of evidence a registered entity would be required to show to demonstrate compliance. Please provide guidance on this topic.
No
For the VSLs, the NSRF is seeking clarification how an auditor will assess the "…identifies, assess and corrects deficiencies…" The VSL is severe if any one of the elements is missing and the NSRF believes that further guidance is needed to understand how a CEA will assess compliance on the control elements of this standard. For example, when would a CEA find a PV for a process that identifies, assess and corrects, however a System Operator does not follow their operating communication protocols on given Operating Instruction. The time horizon – Long-term Planning is incorrect, suggest Real-time Operations or Same-Day Operations. System Operator instructions will pertain to Real-Time or near Real-Time operations.
The NSRF understands that the SDT has discussed the combining of COM-002-3 and COM-003-1 issue (and still unresolved) in the past however the NSRF recommends the standard drafting team amend the SAR of COM-003-1 to combine or withdraw Reliability Standard COM-002-3 protocols. Having two standards covering System Operator communications can lead to confusion and have the unintended consequence of reducing clarity of System Operator communications thus, not supporting the reliability of the BES. For example, when does an Operating Instruction end and a Reliability Directive begin? The registered entity is now faced with possibility of double jeopardy. COM-003-1 has the language "…shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions." However, COM-002-3 does not have the same language. This presents a conflict when managing compliance for each of these standards. For example, a mistake with one of COM-003-1, R1 protocols does not automatically result

in a possible violation, however, in COM-002-3 each and every error would result in a possible violation. As COM-002-3 is written, when a Reliability directive is given, it does not need to follow any of the protocols established in COM-003-1. Again, the NSRF urges the drafting team to combine COM-002-3 and COM-003-1 into one standard. Issue: Defined term of Operating Instruction: "planning instructions verse orders in real-time" concerning issuing a start and stop times of a generation unit. In the draft 3 comments, the NSRF requested that the words "Real-time" be added to the definition of "Operating Instruction" and the OPCPSDT stated on page 186 of the Consideration of Comments that "The SDT believes some Operating Instructions can be issued outside as well as in the Real Time horizon". Please clarify the difference between a planning instruction and a real-time Operating Instruction. Without the proper wording within this Standard, all CEA's may interpret this however they see fit. Recommend that "real-time" be added top the definition of Operating Instruction. R1.3: As written, R1.3 does not allow for any entities to have a documented communication protocol to address the issuing of an Operating Instruction between Functional Entities in different time zones without stating the time and time zone where the action is to occur. The NSRF recommends that R1.3 be worded parallel to R1.4 by adding the wording of; "unless there has been an established time and time zone protocol between Functional Entities in different time zones" or "unless a pre-defined approach is used for communicating time and time zones is within an established communication protocol". The above addition would allow different Functional Entities to agree beforehand of what timing system will be used. The NSRF believes that the intent of R1.3 is to have two separate Functional Entities (in two different time zones) in synch with each other so that there can be no misunderstanding of when an Operating Instruction is to occur. There are many Entities who already have these protocols established. Further, R1.3 states, "Use of the time, the time zone where the action will occur…" An RC operating across several time zones will need to know which time zone the entity is in that is receiving the Operating Instruction. Switching from an entity in one time-zone to another entity in another time-zone opens the door for more confusion than using an already established and documented protocol. R1.4 The NSRF recommends removal of sub-requirement 1.4. It has been establish over several commenting periods that Project 2007-03 eliminated TOP-002 R18 which referred to common names and line identifiers, The TOP SDT removed the language from the new standard was because the "This requirement adds no reliability benefit. Entities have existing processes that handle this issue." R1.5 The Alpha-numeric requirement is a one-size fits all solution and is not needed in all situations. The NSFR recommends removing the sub requirement or as an alternative,R1.5 should be reworded to state, "require alpha-numeric clarifiers when reissuing an Operating Instruction to resolve a misunderstanding". The risk of unclear communication is addressed by R1.6 and R1.7. Currently there is not a definition for "…is in alpha-numeric format". The NSRF requests clarification on where and how to apply alpha-numeric clarifiers. For example: Current System Operator communication: RC to GOP – Move generation from 500MW on Big Lake to 350MW at 1200 - time zone understood to be EST from established and documented protocol. Under COM-003-1. Move generation from five, zero, zero on Big Lake to three, five, zero at one, two, hundred hour central daylight time or Move generation from Big Lake to three, five, zero at one, two o'clock, charlie, delta, tango. GOP – is that two o'clock? Again, the purpose is to "reduce the possibility of miscommunication" Is ok to say twelve hundred (1200) ? Or only ok to be used for time? Is ok to say three hundred and fifty (350) MW? Is 350MW and alpha-numeric number? The NSRF agrees with the language "…shall implement, in a manner that identifies, assesses and corrects deficiencies,…" However, the NSRF has concerns on how CEA's will audit to this requirement. The NSRF requests the SDT to provide information or a guideline that would demonstrate how a Regional Entity would assess and the type of evidence a registered entity would be required to show to demonstrate compliance.
Individual
Catherine Wesley
PJM Interconnection
No
PJM supports revising the VRFs and VSLs for both requirements back to a Low Violation Risk. We view these requirements as administrative.

Individual
Nazra Gladu
Manitoba Hydro
No
Some clarity in the definition of Operating Instruction is necessary. The definition suggests that only a System Operator, Reliability Coordinator, Transmission Operation or a Balancing Authority could issue an Operating Instruction. Are Distribution Providers and Generator Operations only recipients? Also, is an Operating Instruction limited to communications between Functional Entities? The requirements state this, but the definition does not.
No
Use of the phrase "implement in a manner that detects, assesses and corrects deficiencies…" is difficult to interpret and therefore creates uncertainty as to what is required. The Background section of the standard indicates that the SDT intended the phrase to be aimed at "deficiencies in the implementation of certain requirements". However, it is inconsistent to require "implementation" in a manner that does not require implementation, leaving the interpretation of this standard unclear. It appears also that the SDT did not want implementation failures to constitute violations. However, as drafted, the standard can still be interpreted to require an entity to implement its policies. It simply places an additional obligation on a Responsible Entity to detect and correct implementation failures. If the SDT wishes to eliminate violations for failure to implement a policy, then there should be a requirement to simply adopt a policy (covering specific subject matter) and a separate requirement to detect, assess and correct deficiencies in implementation.
Yes
No comment.
(1) R1 1.3 – The word 'and' should replace the comma between 'time, the time zone'. (2) R1, 1.8 – We believe that confirmation of receipt should be required from ALL receiving parties, not 'one or more'. (3) R1, 1.9 – The word 'issuer' could replace 'initiator' to be more consistent with the wording of the other requirements. (4) Measures – Both M1 and M2 are awkwardly worded. We suggest that they be rephrased to read 'Each Functional Entity, as applicable, must provide evidence of….' (5) Measures – Further to the comment in (4), we would be concerned about how an entity would be able to demonstrate that the protocols have been implemented in a manner that identifies, assesses and corrects. How exactly could it be demonstrated that a deficiency has been corrected through the manner in which the protocol was implemented? (6) Compliance, Data Retention – The statements that entities should retain evidence 'of its manner that identifies, assesses and corrects deficiencies' does not seem complete. The statements should line up with the language of the requirement/measure. For example, that the entities shall retain evidence that the documented communications protocols were implemented in a manner that…..
Individual
Bob Thomas
Illinois Municipal Electric Agency
Agree
Florida Municipal Power Agency, and SERC Operating Committee Standards Review Group
Individual
Chris Mattson
Tacoma Power
Yes
Yes
Yes

Individual
Eric Salsbury
Consumers Energy
No
We believe this is a standard that requires procedures or documents but has nothing to do with performance. These types of standards lead to auditors making a wide range of interpretations.
This is an attempt to make a requirement for 3 way communication for all operating communications. Not all operating conversations avail themselves to that format. The concept is good but allowances must be made for other situations.
Individual
Scott McGough
Georgia System Operations Corporation
Yes
No
Although GSOC supports the revisions and clarifications made in R1 & R2 sub requirements, GSOC continues to have concerns with the revised language applied to internal controls. Fundamentally, GSOC believes internal controls should be part of the compliance monitoring process. Although internal controls are important, GSOC believes that before such language is added to standards guidance/criteria need to be developed on how Regional Entities will consistently review internal controls during compliance audits. GSOC suggests removing the language "implement, in a manner that identifies, assesses and corrects deficiencies" until the Reliability Assurance Initiative (RAI) effort to change the compliance/enforcement process to be more focused on a risk-based model and the effectiveness of a registered entity's internal controls/compliance program is implemented. GSOC supports many of the comments made by both NRECA and Georgia Transmission Corporation.
Yes
Although GSOC supports the revisions and clarifications made in R1 & R2 sub requirements, GSOC continues to have concerns with the revised language applied to internal controls. Fundamentally, GSOC believes internal controls should be part of the compliance monitoring process. Although internal controls are important, GSOC believes that before such language is added to standards guidance/criteria need to be developed on how Regional Entities will consistently review internal controls during compliance audits. GSOC suggests removing the language "implement, in a manner that identifies, assesses and corrects deficiencies" until the Reliability Assurance Initiative (RAI) effort to change the compliance/enforcement process to be more focused on a risk-based model and the effectiveness of a registered entity's internal controls/compliance program is implemented. GSOC supports many of the comments made by both NRECA and Georgia Transmission Corporation.
Individual
Donald Weaver
New Brunswick System Operator
No
Technically the definition is an improvement. The issue is with the need for this definition. The NBSO is opposed to having this term defined and added to the NERC Glossary. The term operating instruction does not need to be defined. System operators deal with operating instructions on a daily if not minute basis. Having a defined term, and calling such communication as "Command" is unnecessary, and can confuse operators from what they understand to be the meaning of operating instructions. The NBSO prefers that the objectives of the SAR (communications protocols) be handled through means other than a Standard (e.g. the Operating Committee's Reliability Guidelines on

Communications). Industry, NERC and the Regional Entities should focus on more productive reliability issues.

No

The requirement still includes the verb "implement". That phrase, as part of a mandatory standard, will require a zero-defect environment. The phrase "in a manner that identifies, assesses and corrects deficiencies" is vague, not measurable and inconsistent with the results-based standard concept which emphasizes the inclusion of a performance or reliability outcome in the requirement. A more direct and clear requirement would be to simple require "implement documented communication protocol….".

The SDT has been effective in responding to the Industry's concerns on the issue of "one-way" messaging. Communications Protocols are not documents that are suitable as "Standards" for a mandatory reliability standard. The zero-defect, self-reporting nature of such standards conflicts with the nature and impact of the violations that get reported. Protocols are internal controls that an entity imposes on itself. Protocols allow an entity to self-regulate itself and to decide if the monitored deviations from their own protocols warrant further action. To mandate such protocols are implemented removes the allowance for "impact to reliability". To mandate that an entity have protocols is a better approach. To create a new category for Protocols that do not carry the same level of monitoring and reporting as standards is an even better approach.

Individual

Barbara Kedrowski

Wisconsin Electric Power Company

No

NO do not support the revised definition. Although the addition of the last sentence helps, the drafting team has yet to differentiate an Operating Instruction command, from the already approved standards that refer to "directive, direct, direction" which may not be a "Reliability Directive" and will fall under, for instance IRO-001 R1 & R2. There needs to be a clear bright line between command and direct, direction…. The expression, "repeat, restate, rephrase, or recapitulate," in R. 1.7 and R2.1 would be clearer if shortened to, "repeat or summarize."

No

The revised standard is much improved by focusing on continuous improvement instead of making each communication imperfection a violation, but no guidance is provided as to how rigorous the improvement program must be to be deemed sufficient. M1 and M2 should have added at the end the statement, "Acceptable means of identifying, assessing and correcting deficiencies include the following: • Review of voice logs, for at least one hour per year for each person issuing commands or responses (as applicable) • Personal monitoring of communications, for at least one hour per year for each person issuing commands or responses (as applicable) • Annual refresher training, including a quiz on proper commands or responses, for each person issuing commands or responses (as applicable) (as applicable)

The revised standard, an improvement, yet falls short by opening the door for compliance enforcement to have a mechanism to apply communications and performance from other standards to commands issued under COM-003. Failures of GO and DP operators to repeat or summarize Operating Instructions are easily detectable (R2.1); but it would not ordinarily be possible for a person monitoring COM-003 compliance to detect a lack of understanding accompanied by failure to request a clarification (R2.2), since the resultant silence on the part of the operator is the same reaction associated with clearly understanding the Operating Instruction. M2 should be shortened to, "Evidence must include each applicable entity's documented communications protocols, which must include a provision requiring the recipient of an operating instruction to seek clarification from the initiator in the event of an unclear instruction." From the RSAW: "If the CEA finds in subsequent audits or other compliance monitoring activities that the same or similar deficiencies continue to occur after the entity was provided the feedback by the CEA, the CEA will seek to understand what changes the entity made based on prior recommendations. If the entity did not implement changes to identify, assess and correct deficiencies, the CEA may make a determination of possible non-compliance" The

issue here is potential for disagreement on "deficiencies". There are some conversations between GOPs and TOPs which are market driven, but could be read by an auditor as an "operating instruction". Some adjustment to the definition of "operating instruction", or some adjustment to the requirement that an entity address the "recommendation" from the region, may be in order here.
Individual
Don Schmit
Nebraska Public Power District
Agree
MRO NSRF [Midwest Reliability Organization - NERC Standards Review Forum]
Individual
Richard Bachmeier
Gainesville Regional Utilities
Yes
Yes
Yes
The problem is that Reliability Directives will have two inconsistent standards applicable to them, i.e., all Reliability Directives (COM-002) are Operating Instructions (COM-003), so, Reliability Directives will need to comply with both COM-002 and COM-003. COM-003's implementation plan should retire COM-002. FMPA is voting negative because two inconsistent standards applying to the same action, especially one as important as a Reliability Directive, is bad for reliability. The most glaring inconsistency for Reliability Directives are one-way burst communications (e.g., Party lines, or All Call), where COM-002 and COM-003 would treat the communications differently. If a Reliability Directive is given to all BAs in the region something like "due to capacity energy emergency, we need X MW shed within Y minutes in accordance with our previously approved allocations in procedure Z", COM-002 seems to say that each BA in the region would need to separately perform 3-part communication with the RC, whereas COM-003 would only require 3 part communication if the message was not understood. It would seem that during an Emergency, speed is of the essence, so, should the RC and BAs (who then need to spend time directing the DPs) spend the time doing separate 3 part communication with each BA, or should a one-way burst messaging occur with clarification only for those who do not understand? If there are dozens of BAs within an RC, COM-002 mode of communication could consume all the time of the Emergency and bad things can happen. FMPA recommends that COM-003 address Reliability Directives, which are a subset of Operating Instructions in a similar fashion to IROLs being a subset of SOLs and how they are treated throughout the standards. BY doing so, COM-003 can retire COM-002 such that only one standard applies to Reliability Directives.
Individual
Ken Gardner
AESO
The AESO maintains that "alpha-numeric clarifiers" may be part of good operating practices, but the AESO does not support mandating the use of these identifiers as included in requirement R1.5 to be a mandatory obligation enforceable by law.
Individual
Michael Moltane
ITC

Agree
MRO NSRF
Individual
Jonathan Appelbaum
The United Illuminating Company
Agree
Northeast Power Coordinating Council - NPCC
Group
PPL NERC Registered Affiliates
Brent Ingebrigtson
The proposed definition of an "Operating Instruction" continues to require clarification. First, the focus of COM-003 is on operations, and therefore the communications subject to the COM-003 requirement should be those requiring action in the Real-time operations time horizon — i.e., actions required within one hour or less. (See definition provided in a NERC document at: http://www.nerc.com/files/Time_Horizons.pdf). During the Q/A portion of the November 27th conference call hosted by the SDT, the SDT stated that they intended to narrow the focus of the timeframe of an Operating Instruction to the real time operating horizon. Nevertheless, the definition has not been so revised. Second, a "Reliability Directive" under COM-002 will necessarily fall within the definition of an "Operating Instruction" under COM-003. Because of this overlap, entities subject to the standard would be subject to two Reliability Standard violations – one under COM-002 and another under COM-003 – should the entity deviate from required protocols when either issuing or responding to a Reliability Directive. To avoid this overlap, the SDT should exclude a COM-002 Reliability Directive from the definition of an Operating Instruction under COM-003. Accordingly, PPL Companies suggest the following definition to address the above issues: "Operating Instruction" – Command, other than a Reliability Directive, from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System in which action must be taken within one hour. Alternatively, the SDT could recommend retirement of COM-002 upon the effectiveness of COM-003. If COM-002 is retired then the need to exclude "Reliability Directives" from the definition of an "Operating Instruction" would be unnecessary.
Group
Hydro One Networks Inc.
Sasa Maljukan
No
Hydro One continues to disagree with the need for this standard on the basis that the industry-approved COM-002 together with the NERC OC's operating guide on operator communication already provide the necessary requirements and guideline to fill any potential reliability gaps that may arise due to operator communication (see our response to Question #4 for more details). Notwithstanding above, we'd like to submit following comment in relation to this question. We believe that the proposed definition as worded can be misconstrued to mean a command made by System Operator to a Reliability Coordinator, or to a Transmission Operator, or to a Balancing Authority. Hydro One proposes the following wording: Operating Instruction —A command by a Reliability Coordinator System Operator, a Transmission Operator System Operator, or a Balancing Authority System Operator, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions.
No

Hydro One appreciates the SDT's introduction of additional language in order to effectively make this standard not zero-defect. Unfortunately, since our issues are with the core need for this standard rather than its details we feel that the above mentioned change is not sufficient for us to reconsider our position.
Yes
- Hydro One continues to disagree with the need for this standard on the basis that the industry-approved COM-002 together with the NERC OC's operating guide on operator communication already provide the necessary requirements and guideline to fill any potential reliability gaps that may arise due to operator communication. Requiring 3-part communication for routine operating instructions, despite the additional wording in R1 ("in a manner that identifies, assesses and corrects deficiencies") and provisions made in the RSAW, is still a zero defect requirement that would add undue burden to the operators, which is a potential cause of unreliable operations. We therefore continue to disagree with the need for this standard as it adds little to reliability over what COM-002 and the operating guide have already accomplished. - We appreciate the SDT's hard work and dedication to develop this standard in response to the SAR and the recent BoT directives. Unfortunately, the need for this standard has been overtaken by event (the definition of Reliability Directives and COM-002-3, and the OC's operating guide on operator communication). The BoT, unfortunately, is still under the perception that COM-003 is the answer to the potential reliability gap that was discussed when it approved the COM-002 R2 interpretation. The two balloting results and the two sets of industry comments suggest that many in the industry share our view. Hence, we believe the industry should attempt to convince the BoT that the potential reliability gap has been duly addressed and therefore COM-003 is no longer needed. We understand the SDT has little to no option, we therefore suggest that the SDT present the results of this round of ballot, if it still fails to make the 2/3 approval rate, to the Standards Committee and ask for its permission to put a hold on further work until the BoT has heard the industry's concern and makes a policy decision on the way forward. Further revision to this standard and posting for industry commenting and balloting will only waist the SDT's effort and industry resource, without a fruitful outcome. - Notwithstanding the above, 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 (P. 2 of the Implementation Plan) and in Section A5 of the standard, to the following effect: ", or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities." - Functional entity is capitalized throughout the Standard, yet functional entity is not a defined term in the NERC Glossary. - Propose changing the wording in Requirement R1 to the following: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement, have documented communication protocols that include identification, assessment, and correction of deficiencies in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between functional entities that include the following: [Violation Risk Factor: Medium [Time Horizon: Long-term Planning] - The Sub-requirements introduce too much detail into the Standard. This detail dictates "how" something is to be done, rather than "what" is to be done. Following are comments to be considered on the sub-requirements should they remain in the Standard. - Propose changing the wording in Sub-requirement 1.1 to the following: 1.1. Use of the English language when issuing or responding to an oral or written Operating Instruction, unless another language is mandated by law or regulation or agreement. - Propose changing the wording in Sub-requirement 1.3 to the following: 1.3. Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times between functional entities in different time zones., unless time protocols are defined in written agreements between the functional entities. - Regarding Sub-requirement 1.5, the use of alpha-numeric clarifiers should be no more than a best practice. In case of uncertainty, 3 part communication as specified in Sub-requirement 1.6 would catch any ambiguities. - Propose changing the wording in Sub-requirement 1.8 to the following: 1.8. When issuing an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (for example an all call system), verbally or electronically confirm receipt or that communications paths were established to receive the message from one or more receiving parties. - Regarding the Time Horizons for Requirements R1 and R2, they should be Real-time Operations since the communications are

occurring in real time, and the implementation of the protocol is the intent of R1 and R2.
Individual
John D. Brockhan
CenterPoint Energy Houston Electric, LLC
Yes
Yes
No
CenterPoint Energy appreciates the revisions made to the current draft of COM-003 based on stakeholder feedback and has voted AFFIRMATIVE. However we remain concerned over the final manner in which this standard will be audited. The determination of the appropriate identification, assessment, and correction of deficiencies necessary to meet compliance can be subjective. Additionally, if an entity does not identify any deficiencies during its review process, there's the concern that an auditor may interpret that as insufficient Internal Controls rather than exemplary entity performance.
Group
Florida Municipal Power Agency
Frank Gaffney
Yes
Yes
Yes
The problem is that Reliability Directives will have two inconsistent standards applicable to them, i.e., all Reliability Directives (COM-002) are Operating Instructions (COM-003), so, Reliability Directives will need to comply with both COM-002 and COM-003. COM-003's implementation plan should retire COM-002. FMPA is voting negative because two inconsistent standards applying to the same action, especially one as important as a Reliability Directive, is bad for reliability. The most glaring inconsistency for Reliability Directives are one-way burst communications (e.g., Party lines, or All Call), where COM-002 and COM-003 would treat the communications differently. If a Reliability Directive is given to all BAs in the region something like "due to capacity energy emergency, we need X MW shed within Y minutes in accordance with our previously approved allocations in procedure Z", COM-002 seems to say that each BA in the region would need to separately perform 3-part communication with the RC, whereas COM-003 would only require 3 part communication if the message was not understood. It would seem that during an Emergency, speed is of the essence, so, should the RC and BAs (who then need to spend time directing the DPs) spend the time doing separate 3 part communication with each BA, or should a one-way burst messaging occur with clarification only for those who do not understand? If there are dozens of BAs within an RC, COM-002 mode of communication could consume all the time of the Emergency and bad things can happen. FMPA recommends that COM-003 address Reliability Directives, which are a subset of Operating Instructions in a similar fashion to IROLs being a subset of SOLs and how they are treated throughout the standards. BY doing so, COM-003 can retire COM-002 such that only one standard applies to Reliability Directives.
Individual
Don Jones
Texas Reliability Entity

No
1. We voted against this draft because the relationship between Reliability Directive in COM-002-3 and Operating Instruction remains a serious problem and needs to be clarified. Is a Reliability Directive also an Operating Instruction, or is it a distinct type of communication? Do the provisions of COM-003-1 apply to Reliability Directives, or are they subject only to COM-002? 2. The added sentence added to the end of the definition is unnecessary, it is potentially ambiguous, and it provides no enhancement to reliability. The sentence will open the door for disputes about whether communications are Operating Instructions or something else.
Group
SERC OC Standards Review Group
Gerry Beckerle
No
We believe that the definition should indicate the timeframe in which the entity "is expected to act." We believe that this language is too wide and can be interpreted in many ways. Furthermore, we continue to believe that prescriptive communications protocols are unnecessary for routine Operating Instructions. Many Operating Instructions, such as economic loading of resources, do not have a reliability impact to the BES and the entities should not be held accountable to the requirements of this standard.
No
We believe that the requirements should clearly list which Functional Entities when the communications protocols should be utilized, for example, what happens when one of the five Functional Entities listed in these two requirements give an Operating Instruction to an entity not listed. Note that the question incorrectly references R2 which include the DP and GOP. Furthermore, while we agree with the concept of identifying, assessing, and correcting deficiencies, we continue to believe a prescriptive use of the word "include" should be removed. We would suggest using the word "consider" or "address."
No
We disagree with the explanation of why the VRF for both R1 and R2 were changed from "Low" to "Medium" and believe that these continue to be administrative requirements justifying a "Low" VRF.
We continue to believe that this standard is too prescriptive as noted in question #2 above and in its current draft appears to us to be not much different than when issuing Reliability Directives. We have discussed in our group that if this standard is implemented as proposed that there would no longer be a need for COM-002-3. In addition, in the proposed standard Background section it states "that these requirements should not focus on individual instances of failure as a basis for violating the standard." But, the draft RSAW states that the CEA: "Review a sample of the entity's Operating Instructions to verify whether the entity is implementing its documented communication protocols," which appears to be contradicting the language in the Background section. It also appears that the language in the RSAWs would require an entity to keep a log of all Operating Instruction. This would be overly burdensome to the industry and is not included in the requirements. The reference in R1 Part 1.3 to specify different time zones is indicative of the overly prescriptive nature of all nine parts of the requirement. Entities that already have protocols of handling different time zones may have negative reliability impacts when required to use a different convention. For example, entities operating across different time zones may rely on their EMS time and requiring the use of a different time zone convention would be confusing. Entities should be able to determine what works best.
Group
National Grid / Niagara Mohawk (A National Grid Company)
Michael Jones

Suggested improvement: We recommend separate requirements for: 1. Documentation and implementation of communication protocols. 2. Documentation and implementation of control processes for the identification, assessment, and correction of deficiencies. In addition, we recommend adding the following to the draft standard: 1. It should be noted that individual failures to use the documented communication protocols should not be considered violations of the implementation of communication protocols. 2. It should be noted that individual failures of control processes for the identification, assessment, and correction of deficiencies should not be considered violations of the implementation of the control processes for the identification, assessment, and correction of deficiencies.
Individual
Cheryl Moseley
Electric Reliability Council of Texas, ,Inc.
No
ERCOT supports the SRC comments and has additional comments. For this question, see the comments in the comment area of question 4.
No
ERCOT supports the SRC comments and has additional comments. For this question, see the comments in the comment area of question 4.
No
The VSL's do not match up with CIP v5 standards. Listing "The Responsible Entity did not implement, in a manner that identifies, assesses and corrects deficiencies, their documented communication protocols as required in Requirement R1" as a severe VSL distinguishes the activities as a singular and separate activity which is inappropriate. CIP v5 more appropriately incorporates it at each VSL level as a part of each VSL which reflects the language in the requirement "in a manner that". If the standard passes, VSLs should be modified like those in CIP v5. Example: The Responsible Entity did not include one (1) of the nine (9) parts of Requirement R1, Parts 1.1 to 1.9 in their documented communication protocols and did not identify, assess, or correct the deficiencies.
1.) While the proposed definition of "Operating Instruction" reflects improvement in that it helps to clarify exclusion of particular communications not intended to be regulated by the standard, the definition still should not be included because it is unnecessary to address the SAR. This definition supports this standard which is solely focused on reducing miscommunication (incorrect communications) and does not, in ERCOT's opinion, address the Blackout Recommendation and FERC Order which this project is intended to address, as identified in the SAR. As proposed, the term "Operating Instruction" could include communications that have nothing to do with reliability - e.g. communications that are market related and have no impact on system reliability. That outcome is inconsistent with FERC's direction in Order No.693. FERC's discussion of this issue in Order 693 focuses on alerts and emergencies as follows- "We adopt our proposal to require the ERO to establish tightened communication protocols, especially for communications during alerts and emergencies..." (693 at P 531) "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." (693 at P 535) In addition, the scope of FERC's concerns is limited to communications that impact the reliability of the BPS - "We note that the ERO's response to the Staff Preliminary Assessment supports the need to develop additional Reliability Standards addressing consistent communications protocols among personnel responsible for the reliability of the Bulk-Power System." (693 at P 531) "...we believe, and the ERO agrees, that the communications protocols need to be tightened to ensure Reliable Operation of the Bulk-Power System." (693 at P 532) During the recent webinar, it was evident that confusion still exists and that this proposed standard does not resolve the confusion. In fact, the proposed standard and definition contribute to the confusion. Primarily, the definition should not be made applicable to system operators within the same company and control room who are registered as multiple functions. ERCOT ISO does not have separate desks or operating personnel that perform a single function but performs its functions simultaneously by multiple system operators. The functional entity is not an individual but the entity registered for that function. 2.) ERCOT fully supports the concept that functional entities' internal controls should be used to monitor the effectiveness of their own protocols. However, these matters are not suitable for

reliability standards. Imposition of mandatory controls applicable to all functional entities is inappropriate because of the wide variety of organizational structures that necessarily requires flexibility with respect to developing appropriate controls for each entity's specific circumstances. Furthermore, entities' internal controls are beyond the scope of the Section 215 reliability purview generally, and they are inconsistent with the risk-based initiative being pursued by NERC because they do not impact/are not related to actual reliability impacts. Furthermore, the deficiency review process is ambiguous and, accordingly, lends itself to inefficient and ineffective CMEP results. As an initial matter, what constitutes a deficiency will be an issue that is vulnerable to subjective disagreements. Even assuming there is agreement on that issue, what constitutes an appropriate remedy for a deficiency in terms of assessment and correction will similarly be susceptible to subjective disagreements. Finally, with respect to the obligation to evaluate the deficiency identification process itself, again, the potential for the introduction of subjective compliance review will be problematic in practice in terms of reviewing the decision whether to implement a modification or not to implement a modification; and, if a modification is implemented, whether the revision is adequate. ERCOT is encouraged to see NERC's willingness to explore new ways to move away from a zero defect mentality, but does not understand nor agree with the approach of including such provisions in the standards. The reliability standards should be left as performance-based, not be administrative or prescriptive, and have clear measures. This standard is administrative, prescriptive, and solely focused on miscommunications (incorrect communications) which is a subset, if that, of the "communication protocols" intended by the FERC Order 693 and subsequent Blackout Recommendation. This disconnect is specifically why it has been difficult to garner industry support on this proposed standard. 3.) If the standard were based on effective communication protocols and not specifically miscommunication (incorrect communication) protocols, it would be clearer and more supported than what has been presented to industry for comment and each of the ballots. The SDT, while being very responsive to certain comments that keep its focus on miscommunications, has not been responsive to the industry comments supporting that the proposed requirements are unnecessary and a call for requirements directly responsive to FERC Order 693 and the subsequent Blackout Recommendation related to this project which are related to "effective" communications. The SDT has repeatedly focused on miscommunications rather than on "effective" communications protocols. Effective protocols would constitute communications protocols related to what information needs to be communicated, who needs the information, when they need it particularly during alerts and emergencies. Common phrases, terms, means, etc. can be employed to produce uniformity. As the Blackout Recommendation stated "Ineffective communications contributed to a lack of situational awareness and precluded effective actions to prevent the cascade. Consistent application of effective communications protocols, particularly during alerts and emergencies, is essential to reliability." When the Blackout report is read it is evident, this had no stated relationship to miscommunications, but instead to the reliability content of the communications, responsibilities, and speed at which communications occurred. This proposed standard also gives no emphasis to Alerts and Emergencies which is another indicator that it has missed the intended objective of the FERC Order and subsequent Blackout Recommendation. ERCOT respectfully recommends a renewed focus on communication protocol requirements related to promoting "effective" communications and not solely focused on miscommunications. Recent event investigations have only continued to support this concept as recommendations have been made to improve communication protocols that do not have any relation to preventing miscommunications. Examples below: Feb 2, 2008 Cold Weather Event Report Recommendations: 21.) Balancing Authorities should improve communications during extreme cold weather events with Transmission Owner/Operators, Distribution Providers, and other market participants. (page 218) 22.) ERCOT should review and modify its Protocols as needed to give Transmission Service Providers and Distribution Service Providers in Texas access to information about loads on their systems that could be curtailed by ERCOT as Load Resources or as Emergency Interruptible Load Service. (page 218) 23. WECC should review its Reliability Coordinator procedures for providing notice to Transmission Operators and Balancing Authorities when another Transmission Operator or Balancing Authority within WECC is experiencing a system emergency (or likely will experience a system emergency), and consider whether modification of those procedures is needed to expedite the notice process. (page 219) 24. All Transmission Operators and Balancing Authorities should examine their emergency communications protocols or procedures to ensure that not too much responsibility is placed on a single system operator or on other key personnel during an emergency, and should consider developing single points of contact (persons who are not otherwise responsible for emergency operations) for communications during an emergency or likely emergency.

(page 219) Arizona San Diego Outage Report Recommendations 15. On September 8, 2011, at least one affected TOP lost the ability to conduct RTCA more than 30 minutes prior to and throughout the course of the event due to the failure of its State Estimator to converge. The entity did not notify WECC RC or any of its neighboring TOPs, preventing this entity from regaining situational awareness.

Individual

Mike Hirst

Cogentrix Energy Power Management, LLC

1. The expression, "repeat, restate, rephrase, or recapitulate," in R. 1.7 and R2.1 would be clearer if shortened to, "repeat or summarize." 2. The revised standard is much improved by focusing on continuous improvement instead of making each communication imperfection a violation, but no guidance is provided as to how rigorous the improvement program must be to be deemed sufficient. M1 and M2 should have added at the end the statement, "Acceptable means of identifying, assessing and correcting deficiencies include the following: • Review of voice logs, for at least one hour per year for each person issuing commands or responses (as applicable) • Personal monitoring of communications, for at least one hour per year for each person issuing commands or responses (as applicable) • Annual refresher training, including a quiz on proper commands or responses, for each person issuing commands or responses (as applicable) (as applicable) 3. Failures of GO and DP operators to repeat or summarize Operating Instructions are easily detectable (R2.1); but it would not ordinarily be possible for a person monitoring COM-003 compliance to detect a lack of understanding accompanied by failure to request a clarification (R2.2), since the resultant silence on the part of the operator is the same reaction associated with clearly understanding the Operating Instruction. M2 should be shortened to, "Evidence must include each applicable entity's documented communications protocols, which must include a provision requiring the recipient of an operating instruction to seek clarification from the initiator in the event of an unclear instruction." 4. From the RSAW: "If the CEA finds in subsequent audits or other compliance monitoring activities that the same or similar deficiencies continue to occur after the entity was provided the feedback by the CEA, the CEA will seek to understand what changes the entity made based on prior recommendations. If the entity did not implement changes to identify, assess and correct deficiencies, the CEA may make a determination of possible non-compliance" The issue here is potential for disagreement on "deficiencies". There are some conversations between GOPs and TOPs which are market driven, but could be read by an auditor as an "operating instruction". Some adjustment to the definition of "operating instruction", or some adjustment to the requirement that an entity address the "recommendation" from the region, may be in order here.

Individual

Andrew Gallo

City of Austin dba Austin Energy

Yes

Yes

Austin Energy is pleased the SDT changed the internal control language to be consistent with CIP v5 language.

Yes

(1) The SDT requested industry comment on the reference to "Operating Instructions between Functional Entities." Industry discussions indicate that entities interpret this phrase in different ways. Austin Energy (AE) agrees the use of the term "Functional Entity" is confusing. As noted during the 11/27/12 webinar, Functional Entity is not defined in the NERC Glossary but, instead, only in the functional model. As described by the speakers at the webinar, this language requires protocols for communication between RC and TOP entities or TOP and TO entities, but does not require the same

protocols for TOP-to-TOP communications. This implies that vertically integrated companies should designate certain employees as part of one Functional Entity and other employees as part of another Functional Entity. In the case of AE, this would show up as some employees being "TOP" and others being "TO" and still others as "DP" or "GOP." In reality, all employees are AE employees and it is impractical and confusing to designate them any other way. AE holds one registration with NERC for five different functions (TO, TP, DP, LSE and TOP) and a second registration for the GO and GOP functions. This is due to Regional Entity requirements at the time of registration. AE, as a municipal utility, performs all of those functions but is not organized in a way as to label each employee as fitting under a particular function. The confusion continues when considering communications between companies. In the ERCOT Region, approximately 15 local control centers and ERCOT are all registered as "TOP." One might interpret the webinar discussion to require that communications between neighboring TOPs or ERCOT and one of the local control centers are not subject to the requirements of COM-003-1 because these are TOP-to-TOP communications. AE suggests the SDT greatly simplify COM-003-1 and require entities to "implement, in a manner…, protocols that include three-part communication for Operating Instructions." In other words, omit the reference to Functional Entity. Alternatively, if the SDT wants to limit the protocols to communications between companies (another common interpretation), simply state the requirement that way. (2) AE believes the specificity in the subparts of R1 is unnecessary. Three-part communication is the preferred method for ensuring that both parties understand an Operating Instruction. It provides a sufficient mechanism for clear, concise and accurate communication. AE believes that creating a protocol requiring System Operators to essentially re-learn how to speak (specifically using alpha-numeric identifiers) will only create confusion as operators try to follow protocol and catch/correct themselves.

Individual

Marie Knox

MISO

No

The definition of "Operating Instruction" as proposed in this draft standard is overly broad and ambiguous and will result in everyday operations communications being subject to each entity's "documented communications protocols" unnecessarily, diverting real-time operations resources from monitoring BES reliability and ensuring that changes necessary for reliability are properly understood and implemented. In particular, based on the definition, it is unclear as to whether a discussion regarding implementation of an operating guide would be an "Operating Instruction". More specifically, an operating guide is a common, known, and agreed upon operational action that an entity will take in response to identified system conditions. However, such guide is not normally implemented until the condition manifests itself. Accordingly, based on the definition of "Operating Instruction", it is unclear as to whether a discussion between entities regarding implementation of such an operating guide once the associated condition manifests itself would be considered a "command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System". This uncertainty can only result in affected entities being overly conservative and applying the requirements of COM-003 to a vast majority of communications, resulting in a significant divergence of resources as described above. MISO cannot support the proposed draft standard given the current level of ambiguity, the potential impact upon real-time operations, and the potential for such impact to detract from BES reliability.

No

It is unclear what is meant by "shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between Functional Entities". In particular, there is no established criteria regarding what constitutes "a manner that identifies, assesses and corrects deficiencies". Further, there is no documentation nor rationale provided to support the assignment of a severe VSL to the failure of a Registered Entity to implement its docuemnted communication protocols in "a manner that identifies, assesses and corrects deficiencies". Without a clear criteria, the potential for subjective interpretation of this portion of the requirement is significant and such subjectivity would be associated the most severe VSL possible without justification. Accordingly, MISO cannot support this portion of R1 within this draft proposed

standard.
No
Requirement 1 and 2 do not have a direct effect on the reliability of the BES. Requirement 1 provides clarity for Operating Instructions and Requirement 2 ensures implemented communication protocols are documented. Because R1 and R2 are administrative in nature, we recommend the "Lower" instead of "Medium.
MISO appreciates the time and effort expended by the SDT in revising the proposed draft standard in response to prior comments. However, the ambiguity and absence of justification still present within and associated with this draft, proposed standard prevent MISO from providing its support for COM-003. Additional comments regarding specific sub-requirements are provided below: R1.1 provides that English shall be used "unless another language is mandated by law or regulation. This requirement should be modified to require that operators use English for oral Operating Instructions, even if it is not the required primary language pursuant to law or regulation. R1.2 requires the use of a 24-hour clock for all times. This requirement would result in the expenditure of significant time, resources and attention by System Operators for a minimal benefit to reliability. To date, the use of the 12-hour clock time has not been demonstrated as problematic or as having an adverse impact on reliability. MISO notes that the use of the 24-hour clock time in communication is inconsistent with the 12-hour clock time currently utilized by most systems. The system time characteristics, which are primarily based on 12-hour clock time, should inform the communication protocols regarding time. Accordingly, this requirement appears to place upon operators a requirement that is not justified and onerous. MISO respectfully requests that the SDT consider removal of this requirement. R1.3 states: Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times between Functional Entities in different time zones. We recommend this be clarified. The requirement should say that the time zone be specified when communicating across zones "unless a pre-defined approach is used for communicating time in the protocols". R1.4 requires the use of the name specified by the owner(s) for each Transmission interface Element or Transmission Interface Facility in an oral or written Operating Instruction. MISO respectfully submits that this requirement is already addressed in TOP-002-2b, R18. Further, MISO respectfully comments that, to date, System Operators have identified equipment by to/from station and voltage level. Such identification has been sufficient to ensure the accurate identification of Transmission interface Elements and Facilities. Additionally, MISO notes that internal identifiers utilized by owners may result from internal coding or naming conventions that would not be known by or comprehensible to external entities. Hence, MISO cannot support this requirement based on the potential adverse impacts to reliability that could result. R1.5: MISO reiterates it comments in Round 2 and 3 that the requirement to use alpha-numeric clarifiers format is ambiguous and could lead to unintended compliance burdens. For instance, it is ambiguous whether alpha-numeric clarifiers would be necessary when referring to commonly-accepted voltage levels, such as 138kv (alpha-numerically as follows: "One-tree-eight-kilo-victor"). MISO argues that in this case that the communication would be less clear and more likely to be misunderstood or misconstrued. MISO also respectfully points out that there is an extra period and space at the beginning of the parenthetical in the draft version of the R1.5. R1.6 and R1.7: Given the broad applicability of R1.6 and R1.7 as a result of the definition of Operating Instruction, the split of compliance obligations into multiple sub-requirements may result in entities being assessed violations for multiple requirements as a result of 1 (one) communication or operating event. While MISO appreciates the clarity in roles and responsibilities the split provides, it is concerned about the future application and feasibility thereof. Please refer to MISO's comments regarding the definition of Operating Communication for more detail on the likely adverse impact to reliability that will result from the diversion of time and resources the split will require. Overall, MISO supports the need to ensure good communications among users, owners, and operators of the grid, but believe the standard, as drafted is misdirected. 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 definition of Operating Instruction could be construed and is sufficiently ambiguous to results in the applicability of COM-003 to common operational communications including non-requests / non-directives diverting time and attention away from ensuring that changes necessary for reliability are properly understood and implemented. MISO cannot support the current version of COM-003-1. Though MISO is voting negative this round, we would respectfully request that the SDT add the following language for the next round of comment

consideration and balloting: "Electronic means of communication can be used in lieu of oral when the clarity of the electronic communication is sufficient to reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of BES."
Individual
Greg Travis
Idaho Power Company
Yes
Yes
Yes
Individual
Richard Vine
California Independent System Operator
No
Comments already provided through the ISO/RTO Standards Review Committee
No
Comments already provided through the ISO/RTO Standards Review Committee
It is not clear why the Time Horizon is identified as "Long-term Planning" for requirements R1 and R2, since this seems to be a "Real-Time" communication standard.
Group
ISO RTO Standards Review Committee Group
Albert DiCaprio
No
Technically the definition is an improvement and the SRC would agree with the proposed changes, if the definition were needed. The issue is with the need for this definition, and the continuing debate this definition is generating. The SRC is opposed to having this term defined and added to the NERC Glossary. The term operating instruction does not need to be defined. For years, system operators deal with operating instructions on a daily if not minute basis. Having a defined term, and calling such communication as "Command" is unnecessary, and can confuse operators from what they understand to be the meaning of operating instructions. While the SDT has found that their previous definitions were not appropriate for a NERC standard, and subsequent incremental changes are useful, the debate itself does not seem to be a productive use of the SDT's or the Industry's time. The SRC would prefer that the objectives of the SAR (communications protocols) be handled through means other than a Standard (e.g. the Operating Committee's Reliability Guidelines on Communications). The reason being, a standard requires zero-defect compliance, data retention, self-reporting, and requires these debates over the proposed terms such as "Operating instruction" which diverts the Industry, NERC and the Regional Entities from focusing on more productive reliability issues.
No
The SRC appreciates the SDT's initiative but points out that the requirement still includes the verb "implement". That phrase, as part of a mandatory standard, will require a zero-defect environment. The phrase "in a manner that identifies, assesses and corrects deficiencies" is vague, not measurable and inconsistent with the results-based standard concept which emphasizes the inclusion of a performance or reliability outcome in the requirement. A more direct and clear requirement would be to simple require "implement documented communication protocol….". We appreciate the SDT's intent for adding this phrase, but it does little to ease the concerns of the commenters. Instead, the addition

introduces an immeasurable phrase that may in fact make the requirement more ambiguous and unclear. The SRC realizes the SDT is trying to mandate a Communications Protocol, and would therefore suggest if the SDT still believes a Standard is necessary, then the SDT need only require each entity "have communications protocols, that include periodic monitoring, assessments, and procedures for mitigating violations of those protocols."
The SDT has been effective in responding to the Industry's concerns on the issue of "one-way" messaging. Communications Protocols are not documents that are suitable as "Standards" for a mandatory reliability standard. The zero-defect, self-reporting nature of such standards conflicts with the nature and impact of the violations that get reported. Protocols are internal controls that an entity imposes on itself. Protocols allow an entity to self-regulate itself and to decide if the monitored deviations from their own protocols warrant further action. To mandate such protocols are implemented removes the allowance for "impact to reliability". To mandate that an entity have protocols is a better approach. To create a new category for Protocols that do not carry the same level of monitoring and reporting as standards is an even better approach. The SRC recognizes that the SDT has submitted an RSAW that is designed to mitigate the zero-defect impacts. However, as is stressed by NERC, RSAWs are not requirements. The only requirements are those in the approved standard itself.
Individual
Gregory Campoli
New York Independent System Operator
NPCC RSC
No
We support the comment submitted by the NPCC RSC. It is unclear if a definition of operating instruction is necessary as many entities may use this term and apply it for each unique organizaation. However NPCC has proposed an alternate definition that should be considered.
Yes
We agree with the proposal to remove R3 and R4. The revisions to R1 and R2 are an improvement. However, it remains unclear whether a communication protocal should be a standard or a guideline. We continue to look for evidence that this type of requirement would have directly provented a previous event, as there is no published reports today.
We support the set of comments provided by the NPCC RSC and are repeated below: Functional entity is capitalized throughout the Standard, yet functional entity is not a defined term in the NERC Glossary. Propose changing the wording in Requirement R1 to the following: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall have documented communication protocols that include identification, assessment, and correction of deficiencies for Operating Instructions between functional entities that include the following: [Violation Risk Factor: Medium [Time Horizon: Long-term Planning] The Sub-requirements introduce too much detail into the Standard. This detail dictates "how" something is to be done, rather than "what" is to be done. Following are comments to be considered on the sub-requirements should they remain in the Standard. Propose changing the wording in Sub-requirement 1.1 to the following: 1.1. Use of the English language when issuing or responding to an oral or written Operating Instruction, unless another language is mandated by law or regulation or agreement. Propose changing the wording in Sub-requirement 1.3 to the following: 1.3. Use of the time, the time zone where the action will occur and indication of whether the time is daylight saving time or standard time when issuing an oral or written Operating Instruction that refers to clock times between functional entities in different time zones, unless time protocols are defined in written agreements between the functional entities. Regarding Sub-requirement 1.5, the use of alpha-numeric clarifiers should be no more than a best practice. In case of uncertainty, 3 part communication as specified in Sub-requirement 1.6 would catch any ambiguities. Propose changing the wording in Sub-requirement 1.8 to the following: 1.8. When issuing an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (for example an all call system), verbally or electronically confirm receipt or that communications paths were established to receive the message from one or more receiving parties. Regarding the Time Horizons for Requirements R1 and R2, they should be Real-time Operations since the communications are

occurring in real time, and the implementation of the protocol is the intent of R1 and R2. Suggest that the Standard be further clarified so that the intended purpose is to ensure that an entity has implemented a communications protocol with various core attributes, such as three part communication. We believe that it is not the SDT's intent that an entity will be found out of compliance for instances when an operating instruction was given which did not conform to its implemented protocol. Compliance will only be assessed if the Protocol procedure itself was not formally implemented and not to individual violations of such procedure which will be handled by internal controls to track and address any deficiency. In the context of implementation, sufficient implementation as used in this Standard could be demonstrated by management approved protocol procedures issued to the appropriate individuals in the organization and documented training. The Standard is not envisioned to be a zero-defect Standard however, and unless entities and audit staff have clear understandings of what "implement" means there may be instances when an auditor may find non-compliance beyond the intent of the Standard's Purpose and the Reliability Assurance Initiative concept being brought forward with this Standard. Suggest clarification to the word implement as it is used in the Standard and what activities in the compliance area will ensure proper audit expectations are set.
Individual
Michiko Sell
Public Utility District No. 2 of Grant County, WA
Yes
No
The term Functional Entities is not a defined term within the NERC glossary nor is it a newly defined term in the proposed Standard language. Grant echos Seattle City Lights concern with the use of this term.
No
Grant only has concern with the use of "Responsible Entity" within the VSL language since it also is not a recognized defined term.
Grant recognizes the tremendous effort set forth by the Standards Drafting Team in response to comments received on this Standard. Grant is also appreciative of the inclusion of non-zero defect language promoting entities to identify, assess and correct deficiencies in support of reliability improvement.
Individual
Alice Ireland
Xcel Energy
Yes
Yes
Yes
Xcel Energy is voting negative, again, because we continue to believe that some of the individual protocols are too prescriptive. We strongly believe that some of these protocols would be more effective if used in certain circumstances, instead of at all times. In particular, we do not agree with 1.5 being required on all Operating Instructions. Here are some specific perspectives: 1) If field personnel are working from a written copy of a switching request, and they confirm the switching request number, revision, etc., we believe there should be an exception from the use of alpha-numeric clarifiers when the operator and field person are confirming the steps. Do they consider this "oral" communication and thus meeting compliance of 1.5? 2) The use of alpha-numeric clarifiers does not always make a communication more clear. The intent of the standard is to improve a misunderstanding, not create misunderstanding when giving the instruction. As stated previously, we

feel that the use of alpha-numeric clarifiers should be a tool available to the operator when the original communication was not correctly understood. We recommend that R1.5 be reworded to something like this: 1.5 Circumstances where personnel should use alpha-numeric clarifiers, when issuing an oral Operating Instruction for Facilities and Elements in instances where the nomenclature of Facilities or Elements is in alpha-numeric format.

Individual

Jason Snodgrass

Georgia Transmission Corporation

No

GTC is concerned that the proposed definition of an "Operating Instruction" is too similar to the definition of a "Reliability Directive" specifically with the inclusion of "command from a System Operator". GTC recommends an additional statement such as "The term does not include commands specified as Reliability Directives".

No

GTC agrees with the decision to remove R3 and R4 from COM-003 draft 4, but is concerned with the incorporation of the internal controls language in R1and R2. These changes don't resolve the concerns submitted on the previous draft of the standard. GTC believes that internal controls should be implemented based on a registered entities' assessment of risk and should not be subject to fines and penalties if a regional entity does not agree with a registered entity's control design or control effectiveness. We also question whether the current set of auditors have the appropriate skill set to assess internal control. We believe an assessment of internal controls is appropriate in determining the depth and breadth of audit testing, but strongly disagree that regional entity's should have the authority to, in effect, dictate internal control design. Furthermore, if this language is incorporated, GTC believes that there is too much uncertainty on how Regional Entities will audit internal controls during compliance audits and what a violation will look like. For example, suppose a Registered Entity confirmed that its Operating Instructions between Functional Entities were implemented correctly 100% of the time during a specified reporting period. Would this entity then be designated as non-compliant since zero deficiencies were identified via the control method and thus there wasn't a need to correct? As such, GTC strongly encourages that the internal controls language "in a manner that identifies, assesses and corrects deficiencies" be removed from COM-003 in order to allow the Reliability Assurance Initiative (RAI) effort to be fully developed and implemented with industry involvement to define how a risk-based model will work and how a registered entity's internal controls will be assessed.

No

See example above identifying the possibility that an entity could perform Operating Instructions 100% correctly, yet could be designated as a Severe VSL since the control manner didn't identify any deficiencies.

Group

Boneville Power Administration

Jamison Dye

Yes

No

BPA does not agree with the use of the phrase "between Functional Entities" in R1 and R2 because one organization can have multiple Functional Entities within it. BPA believes that an organization should be able to establish its own internal communication protocols. In consideration of comments, the drafting team stated "The SDT agrees that these communication protocols apply only to external communications between system operators for the TOP, GOP, and BA. It would only make sense to have them apply internally but that is the entity's option. Most entities use all or some of these communication protocols already." However, the language of the standard and the November 27 webinar indicate otherwise. During the webinar an industry representative asked, "Consider a

vertically integrated utility performing functional roles of a BA, TOP, and GOP. Is it required to have communication protocols for operating instructions between the different system operator desks." Both presenters answered "Yes," and explained that separate functional entities within a company would need to comply with this requirement. (11/27 Webinar recording at 1:04/1:30) BPA suggests that the term "external" be added before "functional entities" or another phasing change be incorporated into the standard to eliminate this potential interpretation.

Yes

Individual

Warren Rust

Colorado Springs Utilities (CSU)

No

CSU appreciates the difficulty the SDT faces in drafting and pursuing approval of this Standard and its Requirements and the hard work of the members. "Operating Order" is a better term than "Operating Instruction" as "instruction" has the connotation of advice or guidance, where I believe the SDT means to convey a sense of "being told to do something … as in, this is an 'order'." System Operator is already defined in the NERC glossary as, "An individual at a control center <<sic*>> (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time." Therefore, the first sentence of the definition is redundant. If the point is to exclude Generator Operators at Control Centers (not sure why that should be), then it would seem easier to simply state that. Facility is also already defined in the NERC glossary as, "A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)" and, so, should already be covered by the phrase, "of an Element of the Bulk Electric System," in that, by operating an Element, one would, of necessity, be operating one or more of any Facilities comprising that Element. Also, it is possible that the recipient may not be the person actually taking the action, but may need to pass the Operating Order on for action. Suggest that a more concise definition might be along the lines, "Operating Order – A command by a System Operator with the expectation that the recipient is to take or ensure action is taken to change or preserve the state, status, output, or input of an Element of the Bulk Electric System. Discussions of general information and of potential operations or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions." *Control Center is a defined term.

Yes

Specifically, agree with the removal of R3 & R4.

No

Having and implementing a "communications protocol" are administrative in nature and the mere fact of not having or implementing such a protocol is not sufficient to "directly affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system." The VRFs for these two requirements should be LOW. The VSLs, as drafted, focus specifically on the contents of the "communications protocol," but they should address implementation, since that is the active verb in both of the requirements; "shall implement."

Again, I appreciate the hard work required of the members of this SDT to formulate these drafts in the midst of wildly differing expectations and also appreciate the opportunity to express my opinions in this comment. 1) In Consideration of Comments to Draft 3, the SDT stated"… COM-003-1 only applies to communication between functional entities. For example, if a TOP System Operator is issuing an Operating Instruction to an individual that is internal to that TOP, three part communication is not required by this standard. If a TOP System Operator is issuing an Operating Instruction to an individual in another TOP or another functional entity (e.g. Distribution Provider, Generator Operator), then three part communication is required by this standard. If a TOP System Operator is issuing an Operating Instruction to an individual that is not in a functional entity, then three part communication is not required by this standard." and; In response to Bonneville Power Authority comment, "In R1.5, BPA disagrees with the mandatory use of alpha numeric communication protocols for internal communications ..." Response: The SDT agrees that these communication

protocols apply only to external communications between system operators for the TOP, GOP, and BA …" [Comment] It is not clear in the language of the standard that the requirements apply only to external communications. The standard should explicitly state so. The requirement should apply only to communications between separate Registered Entities, vice Functional Entities. Within a single control room (same room) there may be Transmission System Operators, Distribution System Operators, and Generator Operators. If the CEA considers that those individuals represent different Functional Entities (even though all work for the same Registered Entity), and takes into consideration the above guidance, one "TSO" could issue an instruction to another "TSO" or to an individual in the field (ostensibly not a Functional Entity) without needing to show compliance with any of the minimum Communication Protocol requirements, but would have to show compliance when giving an order to the "DSO" or "GSO" at the next desk over. And, does the SDT have a suggestion for how the various "Communications Protocol" requirements be evidenced for compliance when communication between "in-house" Functional Entities is face-to-face? 2) From the Consideration of Comments, Summary p.4, "Commenters in draft 3 argued that "alpha-numeric clarifiers" are of no value and could only lead to confusion and delays by System Operators. The SDT has chosen to retain the inclusion of alpha-numeric clarifiers as a means of clarifying Operating Instructions. The use of such clarifiers, which an entity can develop to suit their preferences, eliminates the ambiguity of similar sounding letters and numbers. Their use, based on the experience of other organizations that use them, becomes a natural part of communication language." [Comment] There are situations where the use of such clarifiers would exacerbate ambiguity or unnecessarily complicate or burden the communication leading to just as much risk of misunderstanding. Does "develop to suit their preferences" give room for an entity to state in its Communications Protocol that the use of "clarifiers" is required in Operating Instructions only when it is obvious they are necessary to ensure clarity? From the Consideration of Comments, in response to ACES Power Marketing Standards Collaborators comment; "Response: The requirement does allow an entity to develop its own protocol around alpha numeric clarifiers. The protocol should be uniform, clear and must increase reliability. " [Comment] It appears, from the language in the draft, that the only flexibility might be in deciding what "clarifiers" are to be used (Alpha vs Adam, etc.). Is it the SDT's intention that an Entity could address alpha-numeric clarifiers in its Protocol by stating they do not need to be used, or only as necessary to ensure clarity? Also, in my opinion, it is not sufficiently clear that such clarifiers are necessary to increase BES reliability in the first place. CSU agrees with the numerous commentators on the previous draft as well as any on the current one that the use of "alpha-numeric identifiers," while appropriate in certain, if not many, circumstances; may not be appropriate in all and may, indeed, be counter to productive and clear communication in some, if not many, circumstances. 3) And, in response to PPL Corporation NERC Registered Affiliates' comment in regards to the use of the EPRI study, "Response: The OPCPSDT thanks you for your comments. The OPCPSDT cited those figures from a commenter who appended an Industry white paper (by the same author) to the draft comment form. The SDT responded after reading it. Even if the mishap rate for communication issues is 14.5% that is a significant impact on BES reliability that will be addressed by COM-003-1." The SDT continues, in their consideration of comments to Draft 3, to rely on an EPRI study which does not support the conclusions they wish to draw from it. "Failure to use 'alpha-numeric clarifiers'" was not one of the identified communications deficiencies in the EPRI study and therefore it is misguided to cite this study in defense of requiring the use of such 'clarifiers' in Operating Instructions. Indeed, none of the proposed requirements can be found as cited deficiencies in that report. The study depended on voluntary reporting by only a portion of EPRI members, and was not designed to be scientifically valid study. The introduction to the study itself acknowledged that the sample was self-selected and not random, so, therefore, "not representative of the industry as a whole, or even the membership of EPRI." The report also goes on to state there may be reporting bias in the data submitted (e.g, utilities may have been motivated to participate by their own high error rates, while those with low rates may have chosen not to participate). Also, the data submitted were a result of each utility's internal investigations – not necessarily consistently performed even within the same utility, and most probably not between different utilities. The SDT is relying on the contribution of communications deficiencies in 14.5% of the reported events (which, by the way, is not an error RATE, much less an "impact to BES" rate) to justify communications protocols that will not address the majority of the communications error types which made up that contribution in that report. 4) The OPCPSDT, in my opinion, has not adequately justified retaining R1.4 in the face of the elimination of the exact same requirement in TOP-002 R18.

Individual

Jen Fiegel
Oncor Electric Delivery
Yes
No
Oncor supports the shift in compliance to the internal controls approach and we looks forward to NERC providing a programmatic/principles framework in a collaborative approach with the industry. In the absence of this framework, it is unknown how the concept of "identify, assess and correct" will evolve. As the framework is developed including the "identify, assess and correct" concept, Oncor requests that continuous focus be placed on implementing principles including this concept and not requiring or specifying internal controls which would place additional compliance burden on entities. The internal controls principles/framework should enable entities to establish internal controls model utilizing deficiency correction approach but should not mandate the approach at the Standard/Requirement level. Internal Controls Program needs to be defined by an Entity, it is not a "One Size Fits All". The standards/RSAWs should reflect this understanding.
Yes
The SDT requested industry comment on the reference to "Operating Instructions between Functional Entities." Industry discussions show that entities interpret this in different ways, and Oncor agrees that the use of the term "Functional Entity" is confusing. Functional Entity is not defined in the NERC Glossary. The NERC Webinar 11/27/12 stated this language requires protocols for communication between RC and TOP entities or TOP and TO entities, but it does not require the same protocols for TOP to TOP communications. This would require entities with multiple registration functions to designate personnel by functional entity and in turn, personnel would have to identify which functional entity each person they interface with. It is impractical and inefficient to require Entities to re-organize all personnel which would foster an inefficient structure and could potentially lead teams to not communicate effectively. In addition, this could have a negative impact on communications between companies. For example, in the ERCOT region, there are approximately 15 local control centers and ERCOT who are all registered as TOPs. One might interpret the webinar discussion to say that communications between neighboring TOPs or ERCOT and one of the local control centers are not subject to the requirements of COM-003-1 since these are TOP to TOP communications. We strongly recommend the SDT review this to greatly simplify COM-003-1. Potential alternative to the current language would be "require entities to implement, in a manner …, protocols that include three-part communication for Operating Instructions" and eliminate the reference to Functional Entity. Alternatively, if the SDT is trying to limit the protocols to communications between companies (another common interpretation), simply state it as such. In addition, Oncor believes the specificity in the subparts of R1 is unnecessary. Three-part communication is the preferred method for ensuring that both parties understand an Operating Instruction and it provides a sufficient mechanism for clear, concise and accurate communication. In creating a protocol that requires System Operators to essentially relearn the way to speak (specifically using alpha-numeric identifiers) will only create confusion and inefficiency as operators try to follow protocol and catch/correct themselves.

Additional Comments Received:

Brett Holland
KCPL – Operations Compliance

1. Do you agree with the changes made to the proposed definition "Operating Instruction" (now proposed as a "A command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the

Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions. ") to be added as a term for the NERC Glossary? If not, please explain in the comment area of the last question.

Yes
No

Comments: Would suggest the language read as follows: "An order by a System Operator of a Reliability Coordinator, Transmission Operator, or of a Balancing Authority, where the recipient of the order is expected…" for clarity. Operating Instructions, this term should not be added to the NERC Glossary to bring all Operating Instructions into scope.

2. The SDT has proposed new language in COM-003-1, R1 and R2: "Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between Functional Entities that include the following:" R3 and R4 from draft 3 are eliminated. Do you agree with these proposed requirement changes? If not, please explain in the comment area of the last question.

Yes
No

Comments:
R1.8, R1.9, and R2.2 need further clarification. The specific vehicle for information delivery in these 3 particular requirements is via "one-way burst messaging" systems, which obviously do not allow for 2 way communication. Acceptable means of verbal and/or electronic confirmations and clarification requests need more definition.

R1.8 addresses confirmation requirements when utilizing one-way burst messaging systems for communication with multiple parties. We are not sure why we would only request one or more confirmations in this case as it is possible that one or more parties, but not all, would receive the intended message. This leaves the possibility open for potential mis-understanding or lacks of information for one or more of the potential multiple parties receiving the message.

This language (identifies, assesses and corrects deficiencies) should not be added to the standard as it introduces internal controls into the requirements. Internal controls are a strengthening of a compliance program and support a strong culture of compliance, however, are not mandatory and enforceable. This will introduce a precedent that we are not prepared as an industry to deal with or respond to in order to satisfy compliance and enforcement.

Albert DiCaprio
PJM
IRC Standards Review Committee Group

Ben Li	**IESO**	**NPCC**	**segment 2**
Ali Miremadi	**CAISO**	**WECC**	**segment 2**
Steve Myers	**ERCOT**	**ERCOT**	**segment 2**
Charles Yeung	**SPP**	**SPP**	**segment 2**

1. **Do you agree with the changes made to the proposed definition "Operating Instruction" (now proposed as a *"A command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions. "*) to be added as a term for the NERC Glossary? If not, please explain in the comment area of the last question.**

   ☐ Yes

   ☒ No

   Comments:

   Technically the definition is an improvement and the SRC would agree with the proposed changes, if the definition were needed. The issue is with the need for this definition, and the continuing debate this definition is generating. The SRC is opposed to having this term defined and added to the NERC Glossary. The term operating instruction does not need to be defined. For years, system operators deal with operating instructions on a daily if not minute basis. Having a defined term, and calling such communication as "Command" is unnecessary, and can confuse operators from what they understand to be the meaning of operating instructions. While the SDT has found that their previous definitions were not appropriate for a NERC standard, and subsequent incremental changes are useful, the debate itself does not seem to be a productive use of the SDT's or the Industry's time.

   The SRC would prefer that the objectives of the SAR (communications protocols) be handled through means other than a Standard (e.g. the Operating Committee's Reliability Guidelines on Communications). The reason being, a standard requires zero-defect compliance, data retention, self-reporting, and requires these debates over the proposed terms such as "Operating instruction" which diverts the Industry, NERC and the Regional Entities from focusing on more productive reliability issues.

2. **The SDT has proposed new language in COM-003-1, R1 and R2: "*Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between Functional Entities that include the following:*" R3 and R4 from draft 3 are eliminated. Do you agree with these proposed requirement changes? If not, please explain in the comment area of the last question.**

☐ Yes

☒ No

Comments:

The SRC appreciates the SDT's initiative but points out that the requirement still includes the verb "implement". That phrase, as part of a mandatory standard, will require a zero-defect environment.

The phrase "in a manner that identifies, assesses and corrects deficiencies" is vague, not measurable and inconsistent with the results-based standard concept which emphasizes the inclusion of a performance or reliability outcome in the requirement. A more direct and clear requirement would be to simple require "implement documented communication protocol….". We appreciate the SDT's intent for adding this phrase, but it does little to ease the concerns of the commenters. Instead, the addition introduces an immeasurable phrase that may in fact make the requirement more ambiguous and unclear.

The SRC realizes the SDT is trying to mandate a Communications Protocol, and would therefore suggest if the SDT still believes a Standard is necessary, then the SDT need only require each entity "have communications protocols, that include periodic monitoring, assessments, and procedures for mitigating violations of those protocols."

3. **Do you agree with the VRFs and VSLs for Requirements R1 and R2?**

☐ Yes

☐ No

Comments:

4. **Do you have any other comments or suggestions to improve the draft standard?**

Comments:
The SDT has been effective in responding to the Industry's concerns on the issue of "one-way" messaging.

Communications Protocols are not documents that are suitable as "Standards" for a mandatory reliability standard. The zero-defect, self-reporting nature of such standards conflicts with the nature and impact of the violations that get reported.

Protocols are internal controls that an entity imposes on itself. Protocols allow an entity to self-regulate itself and to decide if the monitored deviations from their own protocols warrant further action. To mandate such protocols are implemented removes the allowance for "impact to reliability". To mandate that an entity have protocols is a better approach. To create a new category for Protocols that do not carry the same level of monitoring and reporting as standards is an even better approach.

The SRC recognizes that the SDT has submitted an RSAW that is designed to mitigate the zero-defect impacts. However, as is stressed by NERC, RSAWs are not requirements. The only requirements are those in the approved standard itself.

Group Name SPP Standards Review Group
Lead Contact Robert Rhodes
Contact Organization Southwest Power Pool
Segment 2

Additional Member	Additional Organization	Region	Segment
Leo Bernier	AES Shady Point LLC	SPP	5
Doug Callison	Grand River Dam Authority	SPP	1,3,5
Albert Campbell	Grand River Dam Authority	SPP	1,3,5
Michelle Corley	Cleco Power LLC	SPP	1,3,5
Greg Froehling	Rayburn Country Electric Cooperative	SPP	3
Jonathan Hayes	Southwest Power Pool	SPP	2
Bo Jones	Westar Energy	SPP	1,3,5,6
Allen Klassen	Westar Energy	SPP	1,3,5,6
Tiffany Lake	Westar Energy	SPP	1,3,5,6

1. **Do you agree with the changes made to the proposed definition "Operating Instruction" (now proposed as a "*A command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions.* ") to be added as a term for the NERC Glossary? If not, please explain in the comment area of the last question.**

   ☒ Yes

   ☐ No

   Comments:

2. **The SDT has proposed new language in COM-003-1, R1 and R2: "*Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between Functional Entities that include the following:*" R3 and R4 from draft 3 are eliminated. Do you agree with these proposed requirement changes? If not, please explain in the comment area of the last question.**

☐ Yes

☒ No

Comments:
While we are glad to see an effort on the part of the drafting team and NERC to move away from 'zero tolerance' requirements and move toward internal controls to address deficiencies, we are concerned as to how this process will be implemented if it is approved. For example, if our process calls for a 2% sampling size and the sample is presented to the CEA, what prevents the CEA from saying that the sample size is too small and finds us in violation because of it. Also, if our process does not uncover any discrepancies is it because there are no discrepancies or is it because our process is flawed and we missed something? We are concerned about how a CEA will respond to such a situation. Perhaps we need a more descriptive methodology of how this process will actually work in the field.

3. **Do you agree with the VRFs and VSLs for Requirements R1 and R2?**

☐ Yes

☒ No

Comments:

The third component of the Severe VSLs of R1 and R2 should read:

"The Responsible Entity did not implement documented communication protocols in a manner that identifies, assesses and corrects deficiencies in those protocols as required in Requirement 1."

"The Responsible Entity did not implement documented communications protocols in a manner that identifies, assesses and corrects deficiencies in those protocols as required in Requirement 2."

4. **Do you have any other comments or suggestions to improve the draft standard?**

Comments:

- We are not sure which time zone is required in R1.3. For example, if two facilities are physically located side-by-side in the Mountain Time Zone but are controlled by

different GOPs, one in the Central Time Zone and the other in the Eastern Time Zone, which time zone should be used in the Operating Instruction?

- Delete the extra space following 'Instruction' in the 4th line of R1.4.
- R1.5 should be read:

"Use of alpha-numeric clarifiers when issuing an oral Operating Instruction for Facilities and Elements in instances where the nomenclature of Facilities or Elements is in alpha-numeric format. (For example, if an entity designated a circuit breaker "One two Bravo" (12B), one two Bravo would need alpha-numeric clarifiers if used in an oral Operating Instruction.)"

- Delete the ". " in the parentheticals in the 3rd lines of both R1.8 and R1.9
- R1.9 and R2.2 should be expanded to clarify what the recipient should do in the event the communication via a burst messaging system is not understood. We propose the following for both R1.9 and R2.2.

"When receiving an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (e.g. an all call system), if the communication received is not understood, subsequent to the call, the recipient is to call the initiator and request clarification."