Individual or group. (77 Responses)
Name (51 Responses)
Organization (51 Responses)
Group Name (26 Responses)
Lead Contact (26 Responses)
IF YOU WISH TO EXPRESS SUPPORT FOR ANOTHER ENTITY'S COMMENTS WITHOUT ENTERING ANY ADDITIONAL COMMENTS, YOU MAY DO SO HERE. (11 Responses)
Comments (77 Responses)
Question 1 (50 Responses)
Question 1 Comments (66 Responses)
Question 2 (50 Responses)
Question 2 Comments (66 Responses)
Question 3 (64 Responses)
Question 3 Comments (66 Responses)

Individual
William H. Chambliss, Operating Committee
Virginia State Corporation Commission
Yes
Requirement R.1.5 obligates issuers of burst messages using "a one-way burst messaging system" to confirm receipt of that message "by at least one receiver." However, nothing in the requirements that I can find explains how such confirmation is to occur. Requirement R.1.6 obligates a receiver of a burst message to respond only "to request clarification from this issuer if the communication is not understood." There is no Requirement on any receiver to confirm receipt of an understood communication.
Group
Northeast Power Coordinating Council
Guy Zito
No
Neither Recommendation 26 in the Final Report on the August 14, 2003 Blackout In The United States and Canada or FERC Order 693 require 3-part communications protocol, or any established communication protocol for day to day operations. Both the Blackout Report Recommendation 26 and the Order 693 sections related to inter-Area communications identified one of the key factors in the Blackout being related to communications between and to RC entities as not being effective. It is not apparent if 3-part communications or the content of the other requirements in the proposed standard were in effect August 13, 2003 the problems would not have occurred. From the North American Electric Reliability Council Status of August 2003 Blackout Recommendations July 14, 2005: Recommendation 26. Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate. Status: Ongoing initiative. In response to this recommendation, NERC installed a new conference bridge and approved a new set of hotline procedures and protocols for reliability coordinator hotline calls. NERC is

working on an upgrade of the Reliability Coordinator Information System (RCIS) — an on-line, real-time, messaging system that connects all Reliability Coordinators and many control areas, which permits Reliability Coordinators to share emergency alerts. RCIS also displays information related to Area Control Error (ACE), frequency, and selected outages. Work in this area will be an ongoing activity as technologies and techniques improve. Note that NERC's own report does not mention any operator-to-operator communications. Also, from the Report to the U.S.-Canada Power System Outage Task Force The August 14, 2003 Blackout One Year Later: Actions Taken in the United States and Canada To Reduce Blackout Risk from the Natural Resources Canada, and the U.S. Department of Energy, the section Key Accomplishments—and Major Challenges Still Ahead section, there is no mention of communications issues. In light of the above, some of NPCC's participating members do not believe that the Standard is necessary and any perceived gap in communications has already been addressed through other means. We are not aware of any evidence that exists of a reliability issue existing for normal communications that needs to be addressed.

No

Not following a communications protocol when the Operating Instruction is identified as a Reliability Directive is an instance of zero tolerance. So even if a Reliability Directive is addressed and action is taken but the protocol was "missed" and a BES situation is mitigated, it is still a Severe Violation. This is extreme, and the VSLs for R4 should be reduced to address this. Regarding Requirement R4, more clarity needs to be provided on how a "consistent pattern" will be established and a set of uniform criteria needs to exist, without it there will be disparity in assessing compliance. Some of the applicable entities do not record phone conversations. The RSAW states that any instances of non-compliance will be turned over to Enforcement to determine a "consistent pattern." Again this is zero-tolerance language as each instance will be considered a potential violation. The standard implies that a zero defect assessment for Reliability Directives will be assessed in reviewing the VSL's. This does not meet the tenets of a results based standards development or any intention of the RAI process. The requirement needs to stand on its own. Only requirements that are approved by FERC are therefore enforceable. Requirement language should be provided that clearly states the intent to have a zero defect requirement for completing three part communication when Reliability Directives are issued. This is not an endorsement of this approach, simply a correct application of the SDT intent. The VSL wording is incorrect. For example, in R1, the Low VSL states the following: "The responsible entity did not specify the instances that require time identification…" when it should read "The responsible entity's protocol did not specify the instances that require time identification…" The Requirement is about specification in the protocol document explicitly. There are other places in the VSLs that similar errors occur. Suggest adding for R4 VSL Lower - The Reliability Directive was performed correctly by the receiver, but the responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive. Suggest revising R4 VSL Severe - The Reliability Directive was performed incorrectly by the receiver, because the responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive. The VSL should not add an additional layer of compliance to the proposed requirement. The requirements are structured to include:

1) document, 2) implement and 3) evaluate. The VSL should be developed from these three components of the standard and not introduce a 'zero defect' enforcement approach. NERC's recent direction was to move away from 'zero defect' standards and approach compliance from an ' identify, assess and correct' approach for controls type standards that have high frequency activity that do not immediately pose a reliability risk. The proposed requirements follow that approach. The proposed VRFs incorrectly introduce a 'zero defect' approach through a 'back door'. An entity may 'implement' a protocol, but one occurrence of not following that protocol does not warrant an entity to be non-compliant, as proposed in the standard. If the drafting team is looking for a 'zero defect' standard then the appropriate wording needs to be in the requirement. It is unnecessary as the 'zero defect' requirements for poor communication already exist in current IRO/TOP Standards.

Yes

The Requirements of COM-002-4 as written make it a zero tolerance standard. Non-emergency communications should not be zero tolerance. It can be argued that Reliability Directives be subject to zero tolerance, but even then there are realistic operational situations where having to identify a communication as a Reliability Directive, and having to repeat it back can further exacerbate a tenuous operating condition. Burst messaging should not be considered in the standard. Part 1.5 requires confirmation by at least one receiver for burst messaging. A burst message can include the issuance of multiple Reliability Directives. Getting one receipt does not guarantee that all Reliability Directives were received. There is no value in getting one back. In an emergency situation waiting for all recipients of a burst message to respond can have catastrophic reliability consequences. When a burst message is sent, the initiator can see from the system response if the message was received. FERC approved Standard TOP-001-1a Requirement R3 states that "Each Transmission Operator, Balancing Authority, and Generator Operator shall comply with reliability directives issued by the Reliability Coordinator, and each Balancing Authority and Generator Operator shall comply with reliability directives issued by the Transmission Operator, unless such actions would violate safety, equipment, regulatory or statutory requirements…" (This TOP-001 is deficient in itself as it doesn't address Transmission Operator to Transmission Operator directives). The Requirement goes on to further state that a response is only required if there is an inability to perform the directive. This introduces a double jeopardy situation with COM-002-4. If an entity does not comply with a directive and has not repeated it back to the issuer there is a violation of TOP-001-1a, and COM-002-4. TOP-001-1a Requirement R4, IRO-001-1.1 Requirement R8, and IRO-004-2 Requirement R1 also address communications. There is questionable value in having a documented communications protocol if the entity does not intend to implement it, make sure it is followed, maintained and personnel are trained in it. Suggest that requirements R3 and R4 either be added into the body of R1 and R2 respectively, or as Parts of R1 and R2 respectively. The VSLs should be modified accordingly. There was concern in the expressed in the Northeast that if no proper documented protocol is available, it also can't be implemented thus resulting in double jeopardy concerns. Combining these and requiring the protocol and also implementing it in the same requirement is preferable. In addition a problem was expressed with the term "implement". NPCC's participating members believe that implement, in the context written, could result in an auditor taking a "zero" defect approach. In this context, implement means to

have a current in effect document that is part of the mandatory policy of the entity that employees must follow if applicable to their job function. Part 1.4 reads: “Require the issuer of an oral Operating Instruction to verbally or electronically confirm receipt by at least one receiver when issuing the 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).” This removes the efficiency gains obtained through such communication. It is unrealistic and an impediment to reliability if, during an emergency situation for example, the issuer of an oral Operating Instruction has to take the time to confirm receipt, and have the receiver of the Operating Instruction interrupt the implementation of actions to mitigate the emergency to confirm receipt. In all cases the issuer of the instruction would observe changes to the system thus providing “confirmation” of receipt. Furthermore, there is no requirement for the receiver to confirm receipt. Suggest adding a bullet stating that the receiver has to acknowledge receipt of the initial message. NPCC’s participating members maintain that a Reliability Directive is a communication requiring immediate or emergency action, it should not be included in the definition of Operating Instruction, and the definition of Operating Instruction revised accordingly. R5 reads: “Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement a method to evaluate the communications protocols developed in Requirement R1 that:…” This does not require any evaluation by the DP or GOP. We would like the Standard Drafting Team to explain why a similar requirement was not considered for the DP or GOP? There is a disparity between the RSAW and VSLs as to what is considered noncompliant. The VSL states you are non-compliant for not using 3-way communications for Operating Instructions only if you show a “consistent pattern” of not following your protocols. The RSAW states that events should be sampled, and if instances of noncompliance with the protocols are found, the issue should be turned over to the Compliance Enforcement Authority who will then make a determination whether there was a pattern. First, the focus should not be on just sampling events. The entity should provide the samples that they tested internally to do their periodic reviews of the effectiveness and adherence to the protocols in place. Is Requirement R1.1 necessary? As per NERC Management’s response in the document "NERC Management Response to the Questions of the NERC BOT on Reliability Standard COM-003-1" (page 4/5), it was suggested that distinguishing between "operating instructions" and "reliability directives" would not be practical during real-time situations and that it was as important, if not more important that common protocols be used for emergency communications. Any instruction given should be treated as a reliability directive and therefore there is no need for R1.1. Furthermore, the proposed definition of Operating Instruction on page 2 of the draft standard states that a reliability directive is one type of operating instruction. This further demonstrates the redundancy of having R1.1 in the standard. The applicability of the standard should be written to exclude DPs that do not own or operate BES equipment. As per the definition of Operating Instruction “A command … 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...” Entities that do not have real-time control of Elements or Facilities of the BES should be removed from the applicability of the standard. Suggest adding the following to Section 4: 4.1.2 Distribution Provider with control of Elements or Facilities of the Bulk Electric System. M3 and M4 are

difficult to understand and suggest edits to clarify: Each Distribution Provider and Generator Operator shall provide evidence that it implemented the documented communication protocols such that the entity has reasonable assurance that protocols established in Requirement R2 are being followed by personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Evidence should show periodic, independent review of the operating personnel's adherence to protocols established in R2. Evidence may include, but is not limited to • Descriptions of the management practices in place, • spreadsheets, • memos, or • logs, R5.1 is redundant with R3 as both require assessment of adherence to protocols established in R1. If part of "Implementation" (covered in R3) includes an assessment of the communication protocols, R5 should be limited to only correcting deficiencies with the protocols and the implementation of those protocols. If not removed as redundant, Requirement 5.1 should specify that the assessment will be limited to the operating personnel of the individual entity for both issuing and receiving Operating Instructions. As it is written now it would be the responsibility of the BA, RC and TOP to assess compliance with communication protocols to all entities involved in every communication, including the receiving GOPs and DPs, and other BAs, RCs and TOPs based on the Operating Instruction as "issuer and receiver" are not defined. Suggested Rewording of R5.1: "Assesses adherence to the communications protocols to provide feedback to entity personnel". In several places, including the Implementation Plan, there is mention of retiring COM-002-3. This standard was never FERC approved, therefore suggest changing this from retiring COM-002-3 to withdrawing COM-002-3. Implementation plan period – it is in the best interest of reliability for operating and other control room personnel to be thoroughly trained on the new communications protocols proposed in COM-002-4 before the standard goes into effect for compliance. To thoroughly train the more than 6000 certified operators in North America will likely take more than a year and an implementation plan period of one year is therefore inadequate. It is recommended that the SDT consider a two year period to assure successful implementation. If the SDT decides to retain the proposed one year implementation plan, we recommend that the SDT consider adding an option for the Registered Entity to elect an additional one year implementation period, to be vetted and pre-approved on a case by case basis upon mutual agreement between the Regional Entity and the Registered Entity. Addressing preferred communication methods and procedures could be addressed in training programs that would be reviewed for universal consistency. The requirements contained within COM-002-4 and its previous versions have concepts that more appropriately belong in a procedure or guideline. One example is COM-002-4, R1.3: "Require the issuer of an oral two-party, person-to-person Operating Instruction to wait for a response from the receiver ...". If the NERC Board of Trustees decides that a standard is needed: 1) Industry must accept that there needs to be a NERC Standard that addresses both Normal and Emergency communications. 2) The standard needs to be simplified. 3) Regulators acknowledge and understand that the "zero-defect" regulatory approach is already (appropriately) applied to the result (e.g. was a Reliability Directive implemented properly), and therefore does not need to be applied to the supporting means (communications). 4) Related to 3), there are already "zero-defect" requirements associated with Reliability Directive compliance as contained in IRO-001, R8, IRO-004-2, R1, TOP-001-1a, R3 and R4. 5) Acknowledge that each entity is going to

have to ensure their communication protocols are appropriately coordinated w/ neighboring entities. 6. Burst messaging should not be included in this standard. The preceding will require compromise between the Industry and Regulatory bodies. RSAW Comments: The “Note to Auditor” related to R3 and R4 is outside of the scope of the standard. Placing the examination of Internal Control within the RSAW effectively requires entities to have Internal Controls, which expands the scope of the standard significantly.
Individual
Thomas Foltz
American Electric Power
Yes
No
R3 & R4: While there *is* the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations were performed as a result. The severe category should be reserved only for those instances in which documented communications protocols were not followed *and* which resulted in an emergency operation or reliability issue. As a result, we suggest “demoting” each existing VSL to a lower level, and editing the Severe VSL and limit it to only those instances that resulted in an emergency operation or reliability issue (suggestions provided below). Low - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R1 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving an Operating Instruction *and* resulting in an emergency operation or reliability issue. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive *and* resulting in an emergency operation or reliability issue.
Yes
R5.1: Read on its own, one might think an issuer of an operating instruction may be required to provide feedback to the receiver. We don’t believe this is the intent. We suggest removing R5.1 in its entirety, or at a minimum, change the wording to the following: “Assesses adherence to communications protocols.”
Individual
Gerald G Farringer
Consumers Energy
Yes
The addition of “Operating Instruction” is less clear than in previous versions. In the distinction of “Operating Instruction “is needed at all it needs to be distinct and separate from a “Reliability Directive”. There needs to be a distinction of requests and instruction. Typical generation dispatch could be a request and does not have the weight of a direct reliability risk

for example. Keeping a clear distinction of “Reliability Directive” lends an air of urgency to the direction. There needs to be this clear distinction to communicate the difference between routine economic dispatches and true reliability needs. Creating “Operating Instruction” will only cause this category to be used when a “Reliability Directive” would be appropriate.
Individual
Chantal Mazza
Hydro Québec TransÉnergie
Agree
NPCC
Group
Southwest Power Pool Regional Entity
Emily Pennel
Yes
R3, R4, and R5 as addressed in the draft RSAW focuses on compliance related to internal controls. Disagree that compliance assessment is primarily based on internal controls and limiting audit scope and review of evidence as reflected in the Notes to Auditor section. Also limiting review of voice recordings to last 90 days negates the value of sampling for 3 way communication during events during the entire audit period. I don’t think notes to auditor section should include audit scoping and dedicated to internal controls review for which compliance assessment findings of violations cannot be determined. R1 and R2 are focused on documentation of communication protocols, R3 and R4 the implementation of said protocols. R5 a method to evaluate protocols for R1. Unclear as to why R3 implementation cannot include the components of R5 as for same entities and both involve implementation of protocols. R5 is review.
Group
Arizona Public Service Company
Janet Smith, Regulatory Affairs Supervisor
Yes
Yes
No
Individual
Christopher Wood
Platte River Power Authority
Yes
We believe that requirement 1.9 should be removed or rewritten. If each utility is allowed to define this differently it would make communication more difficult, especially in emergency conditions.
Individual

Andrew Gallo
City of Austin dba Austin Energy
No
Neither the August 2003 Blackout Report Recommendation number 26 nor Order 693 requires three-part communications or any established communication protocol for normal operations. Additionally, EOP-001-2, R3.1 and COM-002-2, R2 already address the requirements of the Blackout Report and FERC Order 693.
No
Regarding R3 and R4: These VSLs create a “zero tolerance” situation. If an entity fails to follow the communication protocol when issuing or receiving a Reliability Directive one time, even if there is no adverse impact to the BES, it is a violation. While there is the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations occurred as a result. The severe category should be reserved for only those instances in which documented communications protocols were not followed and the failure resulted in an emergency operation or reliability issue. As a result, we suggest “demoting” each existing VSL to a lower level and limiting the Severe VSL to only those instances that resulted in an adverse impact on the BES (suggestions provided below). Low - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R1 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving an Operating Instruction and that failure resulted in an emergency operation or reliability issue. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive and that failure resulted in an emergency operation or reliability issue. Regarding the VSL for R3 and R4: Use of the term “consistent pattern” is vague and will be difficult to determine and analyze.
Yes
R2.1 currently requires, “the receiver of an oral or written Operating Instruction to respond using the English language.” We recommend re-writing the requirement to require, “the receiver of an oral or written Operating Instruction to use the English language.” (similar to R1.2) “Written Operating Instructions” must be defined (e.g. in the ERCOT Region, would an electronic, computer-generated dispatch instruction constitute a “written Operating Instruction?”) Measure 3 requires “reasonable assurance” without defining that term. Additionally, M3 also requires an “independent review.” Does that require hiring a third-party? Can a company’s compliance office serve as the “independent” reviewer? Can an operator “independently review” another operator? In several places, including the implementation plan, there is mention of retiring COM-002-3. FERC never approved that standard. The standard should not apply to DPs who do not own or operate BES equipment. As per the definition of Operating Instruction “A command … to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric

System...” The Standard should not apply to entities that do not have real-time control of BES Elements or Facilities. We suggest adding the following to Section 4: 4.1.2 Distribution Providers who control BES Elements or Facilities. In the definition of “Operating Instruction,” the word “and” in the second line and the fourth line should be “or.”
Individual
Steven Wallace
Seminole Electric Cooperative, Inc.
Yes
Yes
Yes
The RSAW for COM-002-4 seems dependent on the implementation of the Reliability Assurance Initiative (RAI) which is not expected to be implemented until 2016. It is not reasonable to utilize an internal controls approach to auditing until the criteria for such evaluation has been clearly explained to the stakeholders. Therefore, the Implementation Plan and the EFFECTIVE DATE for this standard needs to be delayed accordingly.
Individual
Chris de Graffenried
Consolidated Edison Co. of NY, Inc.
No
Modify Requirement 1 Part 1.1 to say: “Require the issuer of a Reliability Directive to identify the action as a Reliability Directive to the receiver where time permitting.” Time permitting would be defined as when taking proactive actions to mitigate or prevent an Adverse Reliability impact pre-contingency. Stating “This is a Reliability Directive” would not be required post-contingency, and at the discretion of the sender would only be used if time were permitting. Add a new sub-requirement requiring that senders (RC, BA, TOP) and receivers (GOP, DP) of Operating Instructions, including Reliability Directives, have direct communication facilities. This requirement would remove the inherent time delay and introduction of garbled messages caused by the use of communications intermediaries. The following wording is suggested: New Requirement 1.2 - Require the issuer and receiver of an oral or written Operating Instruction have direct communications facilities. The use of communications intermediaries is not acceptable. Append the following words to the end of Requirement 5.1: “to ensure there that there is a consistent pattern in the use of communications protocols.” The sub-requirement would then read as follows: 5.1. Assesses adherence to the communications protocols to provide feedback to issuers and receivers of Operating Instructions to ensure there that there is a consistent pattern in the use of communications protocols.
No
Background - The ultimate purpose of any communications standard should be to see that the correct actions affecting the BES are taken. Greater emphasis should be placed on Reliability Directives, than on non-RD Operating Instructions. Therefore, the ultimate measure of whether such communications were successful should be whether the required action was taken (and

the real-time risk to the BES reduced) or not. It should not be based on whether some documentation requirement was met or some communications protocol was followed to the letter. Recommendations - We recommend different VSL ratings for a failure to repeat-back, depending upon whether the Operating Instruction was a Reliability Directive or a non-RD Operating Instruction, and whether the action taken reduced or potentially increased the real-time risk to the BES. If the action taken by the receiver (who failed to repeat back) was still correct and in accordance with the Sender's instructions, then only an administrative requirement was violated. There was no actual risk to the BES. This fact should be recognized and the documentation failure rated lower. However, if following a failure to repeat-back a receiver takes an incorrect or inappropriate action, which potentially introduces increased risk to the reliable operation of the BES, then this failure and should receive a higher rating. As such, we recommend the following replacements for the Requirement R4 VSL's: Add R4 VSL Lower - The Reliability Directive was performed correctly by the receiver, but the responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive. Revise R4 VSL Severe - The Reliability Directive was performed incorrectly by the receiver, because the responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive.
No
Individual
RoLynda Shumpert
South Carolina Electric and Gas
Agree
SERC OC Review Group
Individual
David Burke
Orange and Rockland Utilities, Inc.
Agree
Consolidated Edison Co. of NY, Inc.
Individual
Shirley Mayadewi
Manitoba Hydro
Yes
No comment.
Yes
Although Manitoba Hydro is in general agreement with the standard, we have the following clarifying comments: (a) VSLs, R1 and R2, Moderate – the statement 'an alternate language may be used for internal operations' is not necessary. (b) VSLs, R1 and R2, High and Severe – these are not written in the same form as the lower and moderate VSLs. The latter paraphrase the requirement part that is being violated while the former only refer to the requirement part

number. (c) VSLs R3, R4 – the term ‘consistent pattern’ is subjective; unclear how this would be interpreted. (d) VSLs R5 – doesn’t address requirements in 5.1 and 5.2

Yes

Although Manitoba Hydro is in general agreement with the standard, we have the following clarifying comments: (a) M3, M4, M5 – replace Bulk Electric System with BES. (b) Purpose – consider using the word ‘improve’ or ‘strengthen’ instead of ‘tighten’ in this statement. (c) R1 – Reliability Directive is not yet a FERC approved definition. What is the protocol if the definition of Reliability Direction is not approved? (d) R1 – the bulleted statements in R1, 1.3 make more sense if they came after the statements in 1.4. 1.4 discusses the requirement on the receiver to repeat information, a reference in 1.3 to ‘repeated information’ is premature. (e) R5 – 5.2 buries an additional requirement with the last few words ‘to modify the protocols as necessary’. If such a requirement is to be in place, it should be a separate requirement not tagged on to the R5 requirement to evaluate and assess. (f) There seems to be missing a further requirement that would require the Distribution Provider and Generator Operator to evaluate their communication protocols similar to that in R5. (g) M3 and M4 – the language ‘that provide the entity reasonable assurance that protocols……Bulk Electric System’ seems unnecessary here. This language does not appear anywhere else in the requirement or the standard. Wouldn’t it be sufficient to require evidence of management practices in place without going into further description? (h) M4 – the language ‘and the remediation of noted exceptions in fulfillment of Requirement R5’ doesn’t seem to belong here. R3 simply requires implementation, not remediation. (i) M5 – the language in M5 does not match the language in R5, and doesn’t address 5.1 or 5.2.

Individual

Michael Falvo

Independent Electricity System Operator

No

a. As indicated in all of our comments on the previous COM-003 postings, we believe that the COM-002-3 standard that is supported by the industry and approved by NERC Board of Trustees adequately addressed the Blackout Report recommendation. Furthermore, communication protocols are in place to require functional entities that receive Reliability Directives to perform the directive issues by the RC, BA and TOP. While we generally supports exercising tightened communication protocols for routine operating instructions, we continue to disagree with the need to develop a standard that mandate three-part communication for issuance of Operating Instructions for normal operating system conditions. Any and all instructions will either change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Unlike its COM-003-1 Draft 5 predecessor, this draft no longer allows the Responsible Entity to specify the instances where the issuer of an oral two party, person-to-person Operating Instruction is required to exercise 3-part communication. Without this provision, the standard now requires 3-part communication whenever a Responsible Entity issues an Operating Instruction. This is overly burdensome, and may in fact hurt reliability as System Operators will now place focus on implementing and completing the 3-part communication process rather than concentrating on

the actions needed to achieve a reliability outcome. Notwithstanding the above, we have the following comments on the proposed standard. b. Part 1.3 is unclear in two aspect: • To "wait" is not a 2-part action, and is not measurable. How is an entity assessed whether or not it waited or not waited? We suggest to make it more proactive by replacing it with "obtain" or "collect" a response. • In the second sentence, the phrase "or if no response is received" is open-ended. When should the issuing entity take one of the actions listed in the bullets below? We suggest the SDT to add a time frame in this sentence such as: "or if no response is received in X minutes". Without the time frame, it will not be possible for the issuing entity to know when it is supposed to follow up, and for the Compliance Enforcement Authority to assess if Part 1.3 was complied with. • The above comment also applies to Part 2.2. c. Part 1.4 places the obligation on the receivers of the Operating Instruction; it is not appropriate for inclusion in the issuer's communication protocol unless the protocol document is distributed to all potential recipients of the Operating Instructions. However, there does not exist a requirement for the BA, RC or TOP to distribute their communication protocol document hence the inclusion of Part 1.4 in their communication protocol document is inappropriate and serves no purpose. d. Part 1.5: The intent of this part is unclear or the requirement is incomplete, leading to an unnecessary or missing action mandated by the requirement, or the potential for non-compliance despite best effort. Part 1.5 requires the issuer (say, a BA) of an Operating Instruction that uses a one-way burst messaging system for communicating common messages to multiple parties to obtain confirmation from at least one recipient (say, a GOP). The intent of using the burst messaging system is to achieve efficiency by eliminating the need for one-on-one communication of the same message and the need for confirming receipt of the message. The requirement for the issuer to confirm receipt by at least one receiver of the message is not consistent with the intent of using the burst messaging system. Further, we believe that the combined standard should focus on oral two-party, person-to-person communication. The one-way burst messaging system requirement is thus not necessary (e.g., confirmation of receipt) and should be removed because this is more of an electronic verification that is a function of the operability of the one-way burst messaging system If the SDT should insist that requirement be retained, then to confirm at least one recipient receives the message, there needs to be an obligation on the receiving entities to acknowledge receipt of the Operating Instruction. However, there is no requirement in the standard to require the receiving entities (say, a GOP or a DP) to provide that confirmation. The only requirement for responding to Operating Instruction transmitted through the burst messaging system is when the communication is not understood by the recipient as stipulated in Part 1.6 and Part 2.3. If all recipients understand (or think they understand) the Operating Instruction so transmitted, the issuing party (e.g. a BA) will not receive any confirmation at all. In this case, the issuing part (e.g. the BA) will not be able to comply with Part 1.5. We suggest the SDT to review the intent of Part 1.5, and to remove this part or strengthen the other parts in this and other requirement to close the loop for confirming receipt of Operating Instructions transmitted through the burst messaging system. e. Requirement R5 requires the BA, RC and TOP to implement a method to evaluate the communications protocols developed in Requirement R1, assess adherence to the protocol, provide feedback and make adjustments as necessary. There is no such requirement for the GOP and DP who are also required to develop their communication protocol per

Requirement R2. The reason for not having such a requirement is not presented in the posted Rationale and Technical Justification document. We suggest the SDT to provide the reason for not having this requirement, or to add this requirement to close the gap.

No

Requirements R3 and R4 were mapped from Requirements R1 and R2 of in Draft 5 of the COM-003-1 standard. In that draft, both of these requirements were assigned a LOW VRF, which we concurred. In the proposed COM-002-4, the SDT proposes that these two requirements (now R3 and R4) be assigned a HIGH VRF "… because failure to use the communications protocols during an emergency could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures." We do not agree with the HIGH VRF since miscommunication alone does not and cannot cause instability. It needs to have another action or inaction combined by an event on the BES to result in any disturbance that results in instability. Even if we agree to some extent that failure to use the communication protocol during an emergency could contribute to bulk electric system instability, these two requirements also cover non-emergency situations. Under the latter conditions, we are unable to support the argument that failure to use the communications protocols could cause or contribute to bulk electric system instability. At most, we can accept a MEDIUM VRF assigned to these two requirements, but not a HIGH. We suggest the SDT to revise these VRF accordingly.

Individual

David Thorne

Pepco Holdings Inc

Yes

Take the case of a TO communicating with a TOP regarding the TOs prescheduled request to perform a BES switching activity. When field personnel are ready to begin work, the TO would contact the TOP requesting that the switching activity begin. The TOP would then authorize the TO perform the prescheduled BES switching. Technically the TOP did not "command" that the TO change the state of the BES system as described in the definition of Operating Instruction. Is "three part" communication required in this instance? If so please explain/describe how the draft standard is applied in this instance, since TOs are not included as Applicable and that no Operating Instructions were issued. In R3 and R4 in the RSAW it states under Evidence Required: "Spreadsheets, memos, or logs, evidencing periodic, independent review of operating personnel's adherence to the protocols…" What is meant by "independent review"? Is that meant to onlyexclude the personnel involved directly in the communication from "self-certifying" their adherence or does that exclude the Operations supervisor in charge of the Operating personnel and other operations personnel from review? That would imply then that review would require someone from outside operations like internal audit or a consultant.

Group

Tennessee Valley Authority

Brandy Spraker

Yes
Yes
Yes
TVA supports the SERC OC Review Group comments. We would respectfully add the comment below: As currently written, Measurements M3 and M4 establish the additional requirement of "periodic, independent review . . . of adherence to the [documented communication] protocols." This is essentially duplication of activity without additional reliability benefit over assessments performed by issuers required in R5. As such, this will create unnecessary administrative burden on applicable entities. The SDT is respectfully requested to remove this language from M3 and M4 and to add as an alternative, a requirement for documented response to feedback from the issuers' assessments that would include evidence of corrective actions taken. Suggested wording would be, " . . . reasonable assurance that protocols established in Requirement R2 are being followed by personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System, and documented responses to feedback received from assessments performed as required in R5, consisting of dated reports, or copies of electronic messages, or other evidence of appropriate corrective actions taken or technically justified explanations as to why no action is required.
Individual
John Seelke
Public Service Enterprise Group
Yes
Yes
1. Make a common NERC-wide communications protocol a separate standard attachment. We believe a single protocol that would apply across all of NERC is desirable. That protocol could be incorporated in a separate attachment with these items defining the "protocol:" a. The issuer of a Reliability Directive shall identify the action as a Reliability Directive to the receiver. b. When an oral person-to-person Operating Instruction command is issued, the command shall be repeated by the recipient and either confirmed by the issuer or reissued to resolve misunderstandings. c. For an oral Operating Instruction that uses a one-way burst messaging system to communicate a common message to multiple parties in a short time period (e.g., an all call system): i. The issuer shall electronically or verbally confirm the receipt by at least recipient. ii. The receiver shall request clarification from the issuer when the Operating Instruction is not understood. We have not included certain provisions in R1 in the COM-002-4 draft in the protocol items: • We would not require each RC, BA, and TOP to develop its own protocol to address such items as time identifiers and the use of alpha-numeric clarifiers. We believe that three-part communications will correct any misunderstandings. • We would not address written communications, which are included in subparts 1.2 and 1.8. Although addressed in COM-002-4 draft, written communications requirements are only placed the issuer and therefore should not be included. • While not impacted by 1.2 for oral Operating Instructions, we did not require the receiver of an oral Operating Instruction to reply in English, unless agreed to otherwise. We believe the language used for communicating does not need to

be addressed in a standard because it is automatically handled by the use of three-part communications. 2. Include a requirement that requires the protocol be implemented. With a protocol defined in an attachment, a requirement should simply require Operating Instruction issuers (RC, BA, and TOP) and receivers (BA, TOP, DP, and GOP) to implement the communications protocol as defined in the attachment. This requirement would replace R1 through R4 in the current COM-002-4 draft.
Individual
Roger Dufresne
Hydro-québec Production
Yes
No
VRF, VSL The violation severity level and the VRF level seems not to be at the proper level compare to the requirement.
Yes
R1 - The issuer of a reliability directive should not have to identify the action as a reliability directive to a receiver. There should be only one level of communication protocol. The operating instruction should be included in the Reliability Directive to create only one level of communication protocol. This communication protocol would then be considered the highest level in all communication situation. A single communication protocol would minimise the risk of unwanted communication delay in emergency situation. Requiring the issuer of an oral two-party, person-to-person Operating Instruction to wait for a response from the receiver and having the receiver to repeat the Operating instruction would induce unwanted communication delay in emergency situation.
Individual
Russ Schneider
Flathead Electric Cooperative, Inc.
No
FERC Order 693 P 512 may have intended Distribution Provider (DP) be made applicable, but also stipulates not all DP entities will be required to comply with the communication and coordination standard. For an entity registered as a DP to provide BES support as intended by the Standard, there must be means and trained personnel available 24/7 to control facilities in a timely fashion which will have a significant operational impact on the BES and staff available to receive Operational Instructions. Many small entities do not maintain a 24/7 distribution dispath operation, precisely because their TOP is the one with control of the BES and lower level communications are generally related to impacts of the TOP's operational decisions. If DPs are included in the applicability section, there needs to be some qualifier on DPs with BES control of assets deemed essential by the the RC or PA/PC or something similar.
No
Not with the current unqualified applicability for DPs.
No

Previous comments by other small entities on the impacts of this standard appear to remain unaddressed in the current draft. This may be an oversight by the drafting team, but it does remain a defect in the current draft. The standard as drafted will require small entities to have and implement protocols to deal with Operating Instructions that they currently don't get or may never get from their TOP or BA, because of their lower voltage and impact position on the outskirts of the BES. Additional staffing will be required to deal with one-way bursts that might occur after hours, even though none of the possible issuers of these have indicated any plans to implement such a system, or have suggested that these entities must be available around the clock for reliability. DPs not designated by the RC or PA/PC be excluded.
Individual
Keith Morisette
Tacoma Power
No
Tacoma Power does not agree with the result, COM-002-4 standard. Reason One: -R1 and R2 of the proposed standard both address the issuance and receipt of an “oral, two-party, person-to-person Operating Instruction.” -R1 applies to BA, TC, and TO -R2 applies to DP and GO -The requirements in R1 are different from R2, in that R1 contains several sub-requirements that R2 does not. One of these additional requirements is confirming the accuracy of the repeat-back of the Operating Instruction. This is a cornerstone of three-part communication, and its omission from R2 is a move in the wrong direction. -This sets a “compliance trap” for the System Operator and could delay critical communications. Alternately, it would require utilities that perform TO, BA, GO, and DP functions out of the same control room, often from the same Operator, to over-apply R1 to ensure compliance. Reason Two: -R5 (R5.1) will require implementation of a method to evaluate the communication protocols developed in R1 that assesses the adherence to the communication protocols and provide feedback to the issuers and receivers of Operating Instructions. -R5.1 does not specify a periodicity for this evaluation: annually, semi-annually, monthly? The data retention period is 90 days, so arguably we would need to perform these evaluations every 90 days on all operators. -This has the potential to create a large burden to administer this program.
No
Tacoma Power does not agree to the standard as proposed, for the reasons stated above. Therefore applications of VRFs and VSLs cannot be determined and supported for the proposed standard.
No
Group
Western Small Entity Comment Group
Steve Alexanderson
No
FERC Order 693 P 512 mandates Distribution Providers (DP) be made applicable, but also stipulates that DP entities that do not use, own, or operate BES facilities need not be required to comply with the communication and coordination standard. This implies there is room for

exclusion language in the Standard to remove compliance obligations for DP entities that are unable to provide any BES reliability support the Standard is designed to cover. However, the current draft has no such language. This standard assumes each applicable entity has the means to control BES facilities in a timely fashion, and has staff continuously available to receive Operational Instructions (OIs). Many DP entities do not have continuously staffed dispatch, nor own supervisory control and data acquisition (SCADA) equipment enabling remote control from a central location and may own limited BES facilities, if any at all. Therefore, the applicability section should allow exclusion for such entities. We suggest the applicability for Distribution Providers be further focused: Distribution Providers having a continuously staffed (24-7) dispatch desk with the ability to remotely control BES facilities with an aggregate impact of 75 MW or greater; or as identified in written agreement by the RC, BA, or TOP as required for specific prearranged operational actions. We also urge consideration be given to small non-24/7 GOPs. Small generation projects often are only manned for a single 8-hour shift each day.
No
In light of the comments submitted for questions one and three, the VRFs and VSLs cannot be aligned until the Standard is modified to remove applicability on entities that cannot provide the Reliability support it is designed to cover. Further, the high VRF for Requirement R4 is obviously inappropriate for small DPs and GOPs.
Yes
The comment group emphasizes its past comments submitted during COM-003-1 development and believes that smaller entities and non-24/7 staffed-entities, including small GOPs, were not considered during the drafting of this standard. The standard as drafted will require these entities to have and implement protocols to deal with OIs that have never occurred in the memories of numerous 30 year employees. Additional staffing will be required to deal with one-way burst OIs that might occur after hours, even though none of the possible issuers of these OIs have indicated any plans to implement such a system, or have suggested that these entities must be available around the clock for reliability. We suggest that non-24/7 DPs/GOPs and/or those not designated by the RC or PA/PC be excluded from the Applicability section of COM-002-4. The comment group also believes that the abbreviated 15-day comment period is an unreasonably short period for stakeholders to analyze and reach consensus on modifications to the standard that would address our concerns.
Group
Associated Electric Cooperative, Inc. - JRO00088
David Dockery
No
AECI firmly believes COM-002-3 adequately addressed SWBO recommendation 26 and FERC Order 693, with a reasonable balance of BES benefit, risk, and scope of governance, and should have been submitted to FERC upon NERC BOT approval per standard development procedure.
No
The scope of Operating Instructions is too broad for the assessed Severity, due to capturing

within its scope communications that would not significantly affect BES reliability, based solely upon mild possibilities.
Yes
AECI does not approve of this draft for the following reasons: 1) Expectations that once a Directive or even Instruction is issued then the issuer is legally obligated to wait upon a response, although adverse conditions could make such response impossible. 2) Including Distribution Providers, where redundant communication lines are not and in most all cases should not be required, by failing to reduce their Applicability scope to only communications affecting load reduction or shedding to protect the BES. 3) This draft introduces a hidden compliance-risk to responsible entities who improperly categorize Directives. 4) COM-002-3 addressed the risks to the industry.
Individual
Tracy Goble
Consumer Energy Co
Agree
Jerry Farringer - Consumers Energy Company
Individual
Andrew Z. Pusztai
American Transmission Company
Yes
1. However, ATC does not believe that the following text taken from the SAR was adequately addressed: “Requirements will ensure that communications include essential elements such that information is efficiently conveyed and mutually understood for communicating changes to real-time operating conditions and responding to operating directives.” NERC Glossary of Terms Definition of a “Reliability Directive”: (Approved by FERC) A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact. The draft COM-002-4 Standard in R1.1 requires the “issuer” to identify a “Reliability Directive”, however, does not specifically call out the requirement that the “receiver” repeat back that it is considered a “Reliability Directive”. ATC recommends this be added to R1.1. The Standard should close the loop on this subject as it is considered an Emergency or Adverse Reliability Impact. 2. Draft COM-002-4 Standard R1.4 requires the receiver to wait for “confirmation” from the issuer that the repeat back was correct. ATC recommends that the SDT include language which states confirmation consists of stating “that is correct” or “that is incorrect” followed by a re-issuing of the instruction.
No
ATC believes there should be more than just a “Severe VSL” for R5. Implementing a method of evaluating communication protocols could be accomplished at various levels of adequacy. With that said, additional levels should be considered.
Yes
The following are recommendations to improve the quality of the draft Standard: 1. After

reviewing the Measures in this draft Standard , ATC has the following comments: • M3, as written, is awkward and not grammatically correct and should be revised to clearly state the intent of the Measure. • Also, M3 and M5 may be duplicative when referring to R5. Furthermore, ATC recommends that in the last sentence in M3 be shortened by deleting the phase "….. and the remediation of noted exceptions in fulfillment of Requirement 5." Finally, this phrase uses the term "remediation" that does not make sense after researching the definition of the term to meet the intent of R5. 2. After reviewing Section D 1.2 Data Retention of the draft Standard, ATC is concerned that the guidance provided to the CEA is confusing and contradictory. In the first paragraph, the Standard states " where the evidence retention period (for the Standard) is shorter than the time since the last audit, the CEA may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit." (What does this mean?) In the second paragraph, the Standard requires the entity to "keep data or evidence for each applicable Requirement for the current year and one previous calendar year, with the exception of voice recordings which shall be retained for 90 calendar days….." Bottom line is the required retention period in the second paragraph is much shorter than the 3-year audit period that would apply to Transmission Operators and it is not reasonable to meet the expectations of both time periods and comply. 3. ATC suggests R5.2 be re-worded as follows: R5.2 Provides for a periodic review of the communication protocols and modifies them based on lessons-learned during the adherence of the communication protocols. Evidence would be documenting this periodic review, whether changes were warranted, and subsequently implemented.

Individual

Scott Berry

Indiana Municipal Power Agency

No

For requirement R3 (and other requirements) VSL, how many non-conforming communications or types of non-conforming communications demonstrate a consistent pattern of not using the documented communications protocols? Would it be two or three or does it just depend on the volume of communications the entity performs? This VSL is very open to interpretation and may lead to much inconsistency in the Enforcement area.

Yes

The definition of an Operating Instruction has changed since the last posting of COM-003-1. In COM-003-1, an Operating Instruction was "a command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where…" and now it has changed to "a command by operating personnel responsible for the Real-time generation control and operation of the interconnected Bulk Electric System to change…". The current definition in COM-002-4 of Operating Instruction seems to now include communications between an entity's Market Operations Center (not a control center) and its generation facility. Previously, this did not seem to be the intent of the SDT and IMPA would recommend that the SDT uses the words "a command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where…" so as not to include communications between the entity's Market Operations and its generation facilities. IMPA has

concerns with the RSAW. First, the GOP requirements do not say or require the GOP to have management practices in place. The RSAW should be written to audit an entity to what is in the requirements and nothing more. Second, the RSAW is written in a way that makes an entity's management practices fall under the audit, and it allows the auditor great latitude in determining if an entity's management practice designs are effective. IMPA does not believe that management practices should be reviewed by an auditor during an audit. Even the RAI is looking at reviewing management practices outside of an audit in an assessment style only before an audit is performed. If a management practice must be included in the audit, there must be consistency among the auditors and not so much discretion of the auditor allowed which may lead to inconsistent audits. Maybe benchmarking or a model of internal controls can be used by both the entities and auditors (one that also allows for different sizes of entities - scalability and tailor-able). Third, an entity may believe that its internal controls are effective but if the auditor deems they are not effective then the auditor can pull samples of communications which may be ones that were not reviewed by the entity during its review check. So, does this mean the entity will have to review every communication just in case the auditor pulls a sample of communications? Under this scenario, if the auditor finds instances of noncompliance they are to turn them over to Enforcement. This is very problematic and does not remove the "zero defects" issue.
Individual
asd
asdf
Agree
Individual
Brett Holland
Kansas City Power & Light
Agree
Southwest Power Pool - Robert Rhodes
Group
ISO / RTO Standards Review Committee
Greg Campoli
No
General a. The SRC disagrees with the need for standards to repeat and confirm Operating Instructions for normal operating system conditions. Any and all instructions will either change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Unlike its COM-003-1 Draft 5 predecessor, this draft no longer allows the Responsible Entity to specify the instances where the issuer of an oral two party, person-to-person Operating Instruction is required to exercise 3-part communication. Without this provision, the standard now requires 3-part communication whenever a Responsible Entity issues an Operating Instruction. To track every Operating instruction is overly burdensome, and may in fact hurt reliability as System Operators will now place focus on implementing and completing the 3-part communication process rather than concentrating

on the actions needed to achieve a reliability outcome. The SRC supports relying on the OC's Reliability Guidance that supports 3-part communication for all oral two party, person-to-person communications. The SRC proposes that this approach be used for a two year trial period. During that trial period NERC should collect information on the number of reliability events caused by communications errors. The ERO could then use the data to justify added requirements if the data justified the need. b. R3 in conjunction with R1 is a zero tolerance standard. All parties (Industry as well as the SDT) have stated that a zero tolerance standard for Operating Instructions during normal conditions is inappropriate. The SRC recommends that R3 be deleted. c. There is no rationale given for the omission of Load-Serving Entity (LSE) as an Applicable entity. The TOP-001-2 standard, as referenced in the Rationale and Technical Justification document, holds the LSE responsible for complying with Reliability Directives from its TOP. If, as the standard implies, tightened communication is required for any and all Reliability Directives and Operating Instructions, then there is no reason that LSE is not included in this standard. We would like to understand the rationale/technical basis for excluding the LSE and determine whether that same rationale should be applied to other parts or to the entire standard. Absent a rationale/technical reason for omission of LSE, we ask that this entity also be subject to the requirement. The SRC recommends that LSE be added to the standard Requirements d. R1.3 is unclear in two aspects: • To "wait" is not a 2-part action, and is not measurable. The SRC questions how an entity would be assessed regarding whether or not it waited or not waited? The SRC recommends that the word "wait" be replaced with "obtain" or "collect" a response. • In the second sentence, the phrase "or if no response is received" is open-ended. The SRC asks "When should the issuing entity take one of the bulleted actions listed? The SC proposes that the SDT to add a time frame in this sentence such as: "or if no response is received in X minutes". Without the time frame, it will not be possible for the issuing entity to know when it is supposed to follow up, and for the Compliance Enforcement Authority to assess if Part 1.3 was complied with. The above comment also applies to Part 2.2. e. Requirement 1 is a mandate to document the applicable (issuing) entity's protocols for communications. And lists the requirements that must be in those protocols. Part 1.4 however, is an obligation on the receivers of the Operating Instruction. Such an obligation on the receiver is not appropriate for inclusion in the issuer's communication protocol unless of course the issuer's protocol document is distributed to all potential recipients of the Operating Instructions. However, there is no requirement for the BA, RC or TOP to distribute their communication protocol document hence the inclusion of Part 1.4 in their communication protocol document is inappropriate and serves no purpose. f. Part 1.5: The intent of this part is unclear or the requirement is incomplete, leading to an unnecessary or missing action mandated by the requirement, or the potential for non-compliance despite best effort. Part 1.5 requires the issuer (e.g. a BA) of an Operating Instruction that uses a one-way burst messaging system for communicating common messages to multiple parties to obtain confirmation from at least one recipient (e.g. a GOP). The intent of using the burst messaging system is to achieve efficiency by eliminating the need for one-on-one communication of the same message and the need for confirming receipt of the message. The requirement for the issuer to confirm receipt by at least one receiver of the message thus mitigating the reason for using the burst messaging system. On the other hand, to be effective, a requirement to confirm at least one

recipient receives the message requires a complementary obligation on the receiving entities to acknowledge receipt of the Operating Instruction. However, there is no requirement in the standard to require the receiving entities (say, a GOP or a DP) to provide that confirmation. The only requirement for responding to Operating Instruction transmitted through the burst messaging system is when the communication is not understood by the recipient as stipulated in Part 1.6 and Part 2.3. If all recipients understand (or think they understand) the Operating Instruction so transmitted, the issuing party (e.g. a BA) will not receive any confirmation at all. In this case, the issuing party (e.g. the BA) will not be able to comply with Part 1.5. We suggest the SDT to delete requirement 1.5. g. Requirement R5 requires the BA, RC and TOP to implement a method to: evaluate the communications protocols developed in Requirement R1; assess adherence to the protocol; provide feedback; and make adjustments as necessary. There is no such requirement for the GOP and DP who are also required to develop their communication protocol per Requirement R2. The reason for not having such a requirement is not presented in the posted Rationale and Technical Justification document. The SRC recommends the SDT add this requirement to close the gap. h. The Industry-approved COM-002 states “When a Reliability Coordinator, Transmission Operator, or Balancing Authority requires actions to be executed as a Reliability Directive, the Reliability Coordinator, Transmission Operator, or Balancing Authority shall identify the action as a Reliability Directive to the recipient.” However, the current draft reads “Require the issuer of a Reliability Directive to identify the action as a Reliability Directive to the receiver.” The previous version allowed the RC, TOP or BA to pre-define what system conditions constitute a Reliability Directive in an operating procedure instead of during pressing oral communications, in effect, developing a standing definition, the new draft appears to eliminate that needed flexibility The SRC recommends the SDT to retain the previously approved text.
No
Requirements R3 and R4 were mapped from Requirements R1 and R2 of in Draft 5 of the COM-003-1 standard. In that draft, both of these requirements were assigned a LOW VRF, with which we concurred. In the proposed COM-002-4, the SDT proposes that these two requirements (now R3 and R4) be assigned a HIGH VRF “… because failure to use the communications protocols during an emergency could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.” We do not agree with the HIGH VRF since miscommunication alone does not and cannot cause instability. There needs to be another action or inaction combined with an event on the BES to result in any disturbance that results in instability. Even if we agree to some extent that failure to use the communication protocol during an emergency could contribute to bulk electric system instability, these two requirements also cover non-emergency situations. Under the latter conditions, we are unable to support the argument that failure to use the communications protocols could cause or contribute to bulk electric system instability. At most, we can accept a MEDIUM VRF assigned to these two requirements, but not a HIGH. The SRC recommends the SDT to revise these VRFs accordingly.
Yes
The SDT tries to avoid making this standard a zero tolerance by using explanations in the

Measures, VSLs and RSAWs. However it is our understanding that the words of the requirement form the basis for compliance (the other venues are not part of the standard they are part of the compliance program that is not subject to Industry or regulatory approval). The SRC recommends all text that is meant to mitigate the impact of the words in the requirement be placed in that requirement. Please note that CAISO and PJM abstained from these comments and will submit their own comments independently.
Individual
Matthew Beilfuss
Wisconsin Electric (WEPCO)
Yes
Yes
Yes
R1.4 / R2: It should be clear that it is the issuer's responsibility to ensure three-way conversation occurs. Situations where an issuer fails to prompt the receiver to partake in a 3-way conversation during issuance of an Operating Instruction should not be a violation on the part of the receiver. R1.7: The protocol should include a format for time identification, identifying specific instances for using the protocol becomes more problematic. An instance could mean a number of things, including: (1) when issuing Operating Instructions to a receiver in a different time zone; (2) when issuing specific types of Operating Instructions, or when a time component would materially impact an Operating Instruction. Alternate language for R1.7, "Specify the time format to use when issuing an oral or written Operating Instruction." The R5 requirement to implement a method to evaluate the communications protocols provides a more flexible method for evaluating "instances." R1.9: Comments similar to R1.7, alternate language for R1.9, "Specify the alpha-numeric clarifiers to use when issuing an oral Operating Instruction." The R5 requirement to implement a method to evaluate the communications protocols provides a more flexible method for evaluating "instances." R2 / R4: These requirements should also be made applicable to Load Serving Entities, Balancing Authorities, and Transmission Operators. All are potential "receivers" of Operating Instructions. The following Standards (mandatory or in process) establish RC and TOP authority for issuing Operating Instructions. • Mandatory Standards Subject to Enforcement: o IRO-001-1.1 R3. The Reliability Coordinator shall have clear decision-making authority to act and to direct actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities within its Reliability Coordinator Area to preserve the integrity and reliability of the Bulk Electric System. These actions shall be taken without delay, but no longer than 30 minutes. o TOP-001-1a R3. Each Transmission Operator, Balancing Authority, and Generator Operator shall comply with reliability directives issued by the Reliability Coordinator, and each Balancing Authority and Generator Operator shall comply with reliability directives issued by the Transmission Operator, unless such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances the Transmission Operator, Balancing Authority or Generator Operator shall immediately inform the Reliability Coordinator or Transmission Operator of the inability to perform the directive so that the Reliability Coordinator or

Transmission Operator can implement alternate remedial actions. • Filed and Pending Regulatory Approval o IRO-001-3 R2: Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall comply with its Reliability Coordinator's direction unless compliance with the direction cannot be physically implemented or unless such actions would violate safety, equipment, regulatory, or statutory requirements. o TOP-001-2 R1. Each Balancing Authority, Generator Operator, Distribution Provider, and Load-Serving Entity shall comply with each Reliability Directive issued and identified as such by its Transmission Operator(s), unless such action would violate safety, equipment, regulatory, or statutory requirements. R2 / R4 / R5: The standard as drafted requires the DP and GOP to document and implement their protocols in the role as a receiver. However, R5 or similar language establishing an evaluation program is identified only for the Balancing Authority, Reliability Coordinator, and Transmission Operator. As a result, compliance for the DP and GOP will be in a zero defect environment with no opportunity to internally set-up a program to evaluate and assess effectiveness. We highly recommend making R5 applicable to all receivers of Operating Instructions. Alternate language for R5, "Each Balancing Authority, Reliability Coordinator, Transmission Operator, Generation Operator, and Distribution Provider shall implement a method to evaluate the communication protocols developed in Requirements R1 or R2"

Individual

Michelle D'Antuono

Ingleside Cogeneration LP (Occidental Chemical Corporation)

No

Ingleside Cogeneration agrees in general with the Operating Instruction concept proposed by the project team. It correctly distinguishes between entities who issue and receive Operating Instructions and those who only receive them. In addition, protocols can be developed which vary by the criticality of the communication – allowing much more flexibility in the delivery of a routine Operating Instruction as compared to a Reliability Directive. However, we do not believe that Requirements R3 and R4, which state that entities "shall implement the documented communications protocols", can be consistently enforced. Although we understand the intent to leverage the Measures, VSLs, and auditor guidance in the RSAW to determine when a violation takes place, is not clear that they would prevail in a finding of violation. In addition, the intent which seems to be reasonable now, could change over time to be more restrictive if an RE, NERC, or FERC should so choose. FERC has consistently ruled that reliability violation outcomes must be consistent, deterministic, and repeatable. Ingleside believes that mandatory bright-line criteria can be developed to assure such an outcome – but COM-002-4 as written relies too heavily on CEA opinion. There is a place for subjectivity in any risk-based evaluation, but that balance has not been struck in our view.

No

The enforcement of COM-002-4 relies heavily on the "High" VSL for requirements R3 and R4 which call for a violation to be assessed on a responsible entity who "demonstrates a consistent pattern of not using the documented communications protocols" for routine Operating Instructions. There is no definition of "pattern" given in the standard or NERC

glossary. It is possible that some CEAs would consider a pattern to be 10% or more of all Operating Instructions – others could assess a violation when two or more errors occur. Also, there is no differentiation between situations where documentation is inadequate as compared to those where Operating Instructions are inadequately performed. If "undocumented" equates to a "miss", Ingleside Cogeneration believes the chances of a "pattern" being detected go up significantly. In our view, the criteria that Enforcement will use to determine a violation must be vetted as part of this project. In addition; we would like to see language added to the VSL allowing to consideration of the outcomes of miss-executed Operating Instructions. Those that led to a BES threat or even an outage must weigh heavily in an assessment – those that do not should be less of a factor. This was the primary criteria in COM-003-1 Draft 6, but has disappeared completely in COM-002-4. Even though there were concerns that a causal tie cannot be made under every circumstance, we believe that a reasonable solution can be found through the development of specific Compliance criteria. The VSLs for R3 and R4 seem to determine what constitutes a violation, which is not the purview of the VSLs. The language "demonstrates a consistent pattern of not using the documented communications protocols" is determinative of a violation. Perhaps some modified form of this wording could be included in the Requirements themselves. The VSLs for R3 and R4 are also "stacked" on the High and Severe level. Obviously, the communications are important, but without the emphasis on outcomes, there can't be High and Severe VSLs. See AEP's comments.
Yes
1. The SDT should consider having the issuer of an oral, two-party, person-to-person Operating Instruction identify the communication as such much like a Reliability Directive. Since the issuer will have to use three part communications in both cases, this will avoid any confusion on the receiver's part concerning whether the communication is a Reliability Directive, Operating Instruction, or other type of communication. 2. In M3 and M4, there needs to be clarity on what constitutes an "independent review." The same comment is applicable to "degree of independence" in the proposed RSAW. 3. Clarification is also needed for R5.1 "feedback to issuers and receivers." We understand this to mean internal feedback from the internal review to the issuers and receivers. However, it could be construed as BA to GOP, etc. 4. In R1.2, the words "or written" should be deleted. This standard doesn't seem to pertain to written or electronic communications. The term "written" could be construed as an electronic dispatch instruction.
Individual
Kathleen Goodman
ISO New England, Inc.
Agree
IRC SRC
Individual
Denise M. Lietz
Puget Sound Energy
Yes

No
The severe VSLs for requirements R3 and R4 effectively add a requirement to the standard by requiring a responsible entity to use its communications protocols when issuing or receiving a Reliability Directive. This is inconsistent with the measurements for those requirements, which address only management controls for the implementation of the protocols. It is also inconsistent with the draft RSAW language for these requirements, which do not address this issue either. For clarity, this additional requirement should be included in the standard's requirement and measurement language, not just in the VSL language. It is preferable to include it as a separate requirement, since the related measure will be much different that those addressing the implementation of the communciations protocols.
No
Individual
Molly Devine
Idaho Power Co.
Yes
Yes
Yes
I don't believe the terms "Transmission interface Elements" and "Transmission Interface Facilities" in Requirement 1.8 the terms are defined anywhere. In discussions internally, there have been differeing opinions on what the scope of these.
Individual
Oliver Burke
Entergy Services, Inc.
Agree
Entergy support comments provided by SERC OC Review Group.
Group
Duke Energy
Michael Lowman
Yes
Duke Energy would like to commend the SDT’s efforts on developing a Communications Standard that is on the right path. We agree, in general, that this standard is intended to be a risk/process based standard and not a zero defect standard. Duke Energy’s balloting position is predicated on the assurances from the ERO and RRO that the standard’s enforcement will be from a process/risk based approach as opposed to a zero defect approach.
No
Duke Energy would like for the SDT to clarify the meaning of “consistent pattern” in the VSLs for R3 and R4. We are concerned with how an auditor determines what constitutes a “consistent pattern” of non-compliance. Once the SDT has clarified the meaning of “consistent pattern”, Duke Energy recommends adding similar language to the Severe VSLs for

Requirements 3 and 4 for a Reliability Directive. If the industry is going to be measured on the effectiveness of their internal controls process, as outlined in the Measures and in the RSAW, a zero-defect VSL should not be the answer.
Yes
Duke Energy suggests rewording, for clarity, the definition of Operating Instruction as follows: "Operating Instruction — A command by operating personnel responsible for the Real-time generation control and operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element or Facility of the Bulk Electric System. A Reliability Directive is one type of an Operating Instruction. A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction." Duke Energy seeks clarification on the absence of a provision requiring the GOP and DP from implementing a method to evaluate the communications protocols developed in R2. Also, FERC has not approved Reliability Directive as an official definition in the NERC Glossary of Terms. Duke Energy recommends adding this definition to the new COM-002-4 standard for consistency and to provide clarification to this standard.
Group
Midwest Reliability Organization NERC Standards Review Forum (MRO NSRF)
Russ Mountjoy
No
The MRO NSRF agrees with the Independent Expert Review Panel and NERC Management on the recommendation of combining COM-002-3 and COM-003-1 into one Operating Personnel Communications Reliability Standard. The NSRF disagrees with the decision to waive the standards development procedures. For such a substantial change, a 15 day review and comment period does not allow sufficient time for consideration of the proposed changes and comment coordination Recommendation 26 states, "…ensure that all key parties, including state and local officials, receive timely and accurate information." This draft does not address communicating to entities outside of the identified functional entities. Each of the cited scenarios for Recommendation 26 (p. 56, 65 & 67) were categorized under "Cause 2 – Inadequate Situational Awareness" this draft standard does not address System Operator situational awareness, only how to communicate instructions.
No
The MRO NSRF recommends that the drafting team should clarify what is a "consistent pattern of not using the documented communication protocols." The NSRF also believes that R3 and R4 should include lower and moderate VSLs for errors in the use of communication protocols that do not rise to the level of a "consistent pattern of not using the documented communication protocols." The Violation Severity Levels imply you are only non-compliant for operating instructions if you show a pattern of not following your protocols. The problem is the RSAW states that system events should be sampled, and if instances of nonconformance with the protocols are found, the issue should be turned over to the Compliance Enforcement Authority, who will then make a determination whether there was a pattern. Are two data points a pattern? Is this considered a trend, too? The NSRF recommends the development of

clear numerical thresholds for the VSLs. “In circumstances where voice recordings are reviewed, auditors should consider requesting recordings commensurate with known events in the entity’s footprint during the audit period, as Operating Instructions may be more likely to occur during, and related to, such events…”. This goes against the NERC process of random sampling. Auditors are trained and should be industry experts. They do not need auditor notes that explicitly guide them on how to audit a requirement. Auditors need to read each Requirement and understand what the intent is, just like every applicable entity is required to do. Recommend that if “Note to Auditors” needs to be present within the RSAW that R3 and R4 wording be deleted and replaced with R5’s Note to Auditor wording; “Auditor should assess whether evidence related to the management practices providing reasonable assurance of implementation of communication protocols provided by entity for Requirement…”. If the RSAW SDT will not provide this change then a foot note with a disclaimer needs to be added.

Yes

1. The Purpose seems to be wordy and loosely written. Recommend the Purpose to read, “To reduce the possibility of miscommunications that could lead to action or inaction harmful to the reliability of the Bulk Electric System (BES) by establishing Operating Instructions with predefined communication protocols”. 2. R1.2 and R2.1, remove “An alternate language may be used for internal operations” as this will not be used between two different operating personal and the first sentence already allows for other languages to be used, if agreed upon. 3. The proposed definition of Operating Instruction defines a Reliability Directive as a subset or one type of Operating Instruction. However, the current definition of Reliability Directive refers to a broader set of “communications” than “commands” referred to in the proposed definition of Operating Instruction. The drafting team should reconcile the use of the broader term “communication” with the narrower term “command,” 4. R1.7, R1.8 and R1.9, all speak of “specifying” time identification, nomenclature and instances of alpha-numeric clarifiers, respectfully. Recommend that a statement similar to CIP-002-5.1, R3.1 be added that reads “a discrete list of all Operating Instructions is not required”. This statement has been vetted within the CIP version 5 Standard, CIP-002 and would allow entities to determine (specify) what R1.7, R1.8 and R1.9 need to refer too. 5. R3. Add at the end of Requirement 3 (after the words Requirement 1) “and remediate noted exceptions identified as provided in R5”. (This aligns with Measurement 3 (M3).) M4 (Measurement 4) calls for an “…independent review of operating personnel’s adherence to the protocols established in Requirement 2”. M4 in effect is expanding R4. This independent review should be removed from M4 and we suggests the following for M4: after the words “Bulk Electric System, spreadsheets, memos or logs[.}” place a period. 6. R5.2, please change “modifies” to “modify”. 7. The NSRF recommends that the drafting team update R1 and R2 to allow entities to inform the RC, BA, or TOP of the inability to comply with an Operating Instruction or Reliability Directive if doing so would violate safety, equipment, regulatory, or statutory requirements. 8. The NSRF suggests that the Implementation Plan be updated to reflect necessary conforming changes to other standards. The NSRF notes that proposed revisions to IRO-001-3 and TOP-001-2 would refer to “Reliability Directives.” The NSRF believes that other standards that incorporate terms with a meaning similar to Operating Instruction or Reliability Directive should be updated to include defined terms. BAL-STD-002-0 refers to “any instruction, directive, order or suggested action.” CIP-002-

5 refers to “operational directives.” INT-010-1 refers to Interchange schedules “directed” by the Reliability Coordinator. IRO-004-2 R1 refers to “directives.” VAR-001-2 R6 refers to “direct[ing] the Generator Operator to maintain or change its voltage schedule or its Reactive Power schedule.” VAR-001-3 M3 refers to evidence of “issued directives.” VAR-002-1.1.B R2.1 refers to actions “directed by the Transmission Operator,” and M3 refers to responses to “Transmission Operator’s directives.” The NSRF recommends that these standards be updated to incorporate the term Operating Instruction or Reliability Directive to avoid industry confusion about which types of communications these standards are intended to describe. COM-002-4 Proposed RSAW, comments: The MRO NSRF does not agree with the contents of the COM-002-4 RSAW. Per the SPM, footnote 19 of the SPM says “While RSAWs are not part of the Reliability Standard; they are developed through collaboration of the SDT and NERC Compliance Staff. A non-binding poll, similar to what is done for VRFs and VSLs may be conducted for the RSAW developed through this process to gauge industry support for the companion RSAW to be provided for informational purposes to the NERC Board of Trustees.” (Emphasis added). Please note the following items expand the scope of the applicable Requirement(s). Under Note to Auditor; The RSAW drafting team starts to add additional compliance actions and there are no foot notes associated, either. Note that footnote 1 states, “While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard.” And foot notes 3, 4 and 5 all state that “These items are not mandatory and other forms and types of evidence may be submitted at the entity’s discretion”. R1, well written and no additional wording was interjected that expands the Requirement. R2, well written and no additional wording was interjected that expands the Requirement. Per the RSAW; R3 and R4, do not relate to the actionable words of the Requirement. As stated in R3, protocols are to be “implemented” per R1. But under Compliance assessment Approach for R3 the first sentence states for the auditor to review management practices to assure that R3 is “effective”. This statement needs to be deleted as it does not support Requirement 3. For both R3 and R4 these types of statements should be deleted.
Group
SERC OC Review Group
Stuart Goza
Yes
Yes
Yes
The SDT is respectfully requested to rearrange the sentences in the Operating Instruction definition to differentiate between what the command is and what it is not. The recommendation follows: A command by operating personnel responsible for the Real-time generation control and operation of the interconnected Bulk Electric System to change or

preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. A Reliability Directive is one type of an Operating Instruction. A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction. The SDT is requested to clarify the applicability of COM-002-4 for the Distribution Provider (DP) with language that limits DP applicability to load reduction or load shedding. The Violation Severity Levels imply you are only non-compliant for operating instructions if you show a pattern of not following your protocols. The problem is the RSAW says that system events should be reviewed, and if instances of nonconformance with the protocols are found, the issue will be turned over to the Compliance Enforcement Authority, who will then make a determination whether there was a pattern. Are two data points a pattern? The standard should not focus on sampling events. The standard should let the entity provide the samples used as part of the periodic reviews of their operators' communications. The RSAW should be changed and the standard should be clear that if the entity has a protocol document that lays out its expectations of its operators, periodically checks for conformance with the protocols, and implements corrective actions when deficiencies are found, the entity is compliant. In several places, including the implementation plan, there is mention of retiring COM-002-3. This standard was approved by the NERC BoT but not submitted to FERC. Therefore, we suggest that the SDT review the language and modify as necessary to capture the anticipated NERC BoT future action regarding COM-002-3. The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Review Group only and should not be construed as the position of the SERC Reliability Corporation, or its board or its officers.

Group

Florida Municipal Power Agency

Frank Gaffney

No

In regards to Order 693, P 532: "… We also believe an integral component in tightening the protocols is to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions …" FMPA believes that only the RC needs to have protocols that everyone else follows. Everyone within an RC talks with each other; therefore, everyone's protocols ought to be similar if not the same within an RC area, e.g., entities within an RC ought to use similar time stamps, similar nomenclature, etc. There are a couple of ways that this could be done: i) the RC could be the only one to develop protocols that everyone else follows within their area; or ii) the RC develops "pro forma" protocols that everyone else uses to develop their protocols (similar to FERC developing the Pro Forma OATT and each TSP using that Pro Forma to develop their OATTs, with the associated need to justify deviations).

Yes

Yes

FMPA appreciates the efforts of the SDT. We believe it is the best effort to date in developing the standard. However, FMPA is voting "Negative" primarily due to regulatory uncertainty concerning monitoring and enforcement, and we also have concerns regarding the standard

itself. OTHER ISSUES WITH THE STANDARD The SDT incorporated two approaches to the standard: 1. Performance Measurement: Zero defect requirements with RAI type enforcement in R3 and R4 2. Internal Controls Measurement where we measure the internal controls themselves in R1, R2 and R5 The standard should not include both of these types of measurements, and it would be better if only one of these two methods were contained in the standard. R3 and R4 as written are "zero defect" requirements for all Operating Instructions. The SDT tries to mitigate the "zero defect" problem through the VSLs and the RSAW, which depend on internal controls. This creates a double jeopardy with R5. There are two ways to resolve this: a) Measure performance for only Reliability Directives by replacing "Operating Instruction" within R3 and R4 with "Reliability Directives" (FMPA's preferred alternative as further described below). b) Remove R5. If R3 and R4 are retained as is, R5 is not necessary and should be deleted. With the audit methodology proposed for R3 and R4 of evaluating management practices / internal controls, which would include the protocols themselves, the assessment described in R5 would happen naturally to avoid a "pattern" of failure to follow the protocols. DPs are a special case within the standard. FMPA believes that DPs will not receive any Operating Instructions with the exception of Reliability Directives to shed load, or Operating Instructions associated with a cranking path, since they do not own or operate "an Element of the Bulk Electric System or Facility of the Bulk Electric System. As such, DPs should only be measured against performance and not internal controls, e.g., R3 and R4, not R5, due to the very rare occurrence of an Operating Instruction being given to a DP. As such, the expectation for audit is that DPs will not have the same level of internal controls as other registered functions since there will be no statistical significance to rely on in sampling. As such, if R5 is retained, DPs should not be included as an applicable entity to that requirement. ISSUES WITH THE RSAW The RSAW gives the auditor complete subjective discretion and decision making as to what constitutes an effective management practice / internal control. Such unfettered discretion is a recipe for: i) inconsistent treatment, not only between regions, but between different auditors within a region; and ii) conflict between entities and auditors as to what is and is not an effective internal control. FMPA supports moving towards RAI; but in order to do so, expectations must be set to avoid unnecessary conflict and inconsistency. As such, the SDT ought to develop benchmarks or criteria for what would constitute effective management practices/internal controls in the next version of the RSAW if R3 and R4 are retained as written. In addition, FMPA is especially concerned about the auditor having the experience and wisdom necessary to properly scale their subjective judgments to the entity. For instance, as discussed above concerning a DP that will receive very, very few Operating Instructions, internal controls that require statistical sampling of voice recordings makes no sense. As such, we suggest that the next draft of the RSAW include "benchmark" internal controls or other criteria for at least three different size entities(large, medium and small) so that the auditor has guidance as to how to scale their expectations. Another source of ambiguity that will give rise to unnecessary inconsistency and conflict is the ambiguous phrase "consistent pattern". The SDT is also encouraged to set expectations regarding what "consistent pattern" is intended to mean. The standard, as written, depends on the successful implementation of RAI; yet, we are not confident in that successful implementation. So far, we have heard a great short story; but, the story does not have nearly enough depth to make for a

good novel. And, we have a lot of concern over the details around RAI. If not implemented correctly, RAI could make our lives much worse than they already are, not better. As such, if we are going to depend on RAI to audit R3 and R4, we need more meat on the bone of what that RAI process would look like for this standard. WHEN SHOULD AN ENTITY SELF REPORT? R3 and R4 are written as zero-defect requirements. However, the expectation is that there would not be a violation as long as the entity has effective internal controls. Such internal controls may reveal instances where the communication protocols were not followed. Is an entity expected to self-report those instances, or only self-report if the entity identifies a pattern of failing to follow those protocols? CONCLUSION FMPA recommends that either: 1) The SDT made R3 and R4 only applicable to Reliability Directives and retain R5 for other Operating Instructions (FMPA's preferred method since it does not depend on successful implementation of RAI while allowing RAI to mature, and addresses the "self-report" issue). 2) The SDT put much more meat on the bone of how RAI would be used for COM-002-4 by setting expectations of both the auditors and the entities concerning mutual agreement about what constitutes effective internal controls for various size entities and various registrations.

Individual

Silvia Parada Mitchell

NextEra Energy

Yes

NextEra Energy (NextEra) appreciates the work of the SDT. NextEra has a number of recommended changes based on its experience as RC agent, large DP, TOP and BA and GOP, as well as TOP and GOP in multiple regions. Definition of Operating Instruction. NextEra is concerned that the definition of Operating Instruction is overly board, subject to multiple interpretations and goes well beyond communications that could impact the reliability of the Bulk Electric System. To clarify Operating Instruction and have it pertain to communications that can impact reliability, NextEra recommends that Operating Instruction be amended to read as follows: "A Reliability Directive; or, a non-emergency command by operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System to: (i) switch in or out a Bulk Electric System Element or Facility or (ii) mitigate a SOL or IROL. Any discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction. A Reliability Directive is a type of an Operating Instruction." Applicability of DPs and GOPs. NextEra is concerned that without qualification on the applicability of DPs and GOPs the Standard is vague and will have unintended consequences. Thus, NextEra recommends that GOPs be qualified in the same manner that the PER-005 SDT is qualifying GOPs. To NextEra, such a qualification and syncing up of PER-005's section "4.1.5 Generator Operators" is needed because PER-005 is related to the training associated with communications, and, thus, is targeting the personnel who need to be trained to effectively communicate and receive Operating Instructions and Reliability Directives. Hence, the population of applicable GOPs should be the same in both Standards. With respect to DPs, NextEra only sees DPs being applicable when they are required to curtail load via a Reliability Directive or conduct switching of BES facility – both of which rarely occur. To fail to limit the

applicability to DPs to personnel who receive Reliability Directives to curtail load or Operating Instructions/Reliability Directives to switch a BES facility will lead to confusion and over application of the Standard to DPs for no reliability reason. Thus, NextEra recommends that both GOPs and DPs applicability sections be revised pursuant to these comments. R1. NextEra is concerned with the lack of coordination between an RC, TOP and BA in one RC region as well as across the Interconnections. Reliability will not likely be served by having multiple protocols in one RC region and across RC regions. One approach that NextEra supports is to recommend in the implementation plan that RCs, TOPs and BAs coordinate their protocols, and that NERC facilitate the coordination of these protocols. R1.1 NextEra favors retaining R1.1 so that the RC, TOP or BA must state it is issuing a Reliability Directive. Without this requirement, receiving parties will not understand the importance of a Reliability Directive during an Emergency or leading up to a possible Emergency versus an Operating Instruction issued during a non-Emergency state. At the same time that NextEra favors retaining, R1.1, it is concerned that application of a strict zero tolerance approach will not consider the facts and circumstances of the situation. For example, during an emergency, an operating person may forget to state "Reliability Directive" but otherwise indicate that the situation is an Emergency, and he or she requires action from the receiver. Thus, for purposes of self-reporting, during an audit or spot check, there should be discretion not to find a violation simply because the word Reliability Directive was not used. NextEra will address this issue below in the context of the draft RSAW. R2 and subrequirements. NextEra does not see the value of documented protocols for receivers only – i.e., DPs and GOPs. DPs and GOPs need to use three-way communication when provided a Reliability Directive or Operating Instruction; this is performance of a task, a documented protocol for this task is unnecessary, administrative in nature and problematic. For example, what if a GOP or DP implemented a different written protocol than a RC, TOP or BA – the issuer; such a situation will not help reliability, but only add to confusion and possible mistakes. As NERC Standards are to be drafted to be results-based, this is a perfect situation in which the DPs and GOPs are more appropriately required to perform, than to have a documented protocol. Therefore, NextEra, recommends that R2 and its subrequirements read as follows: "R2. Each Distribution Provider and Generator Operator that receives an Operating Instruction shall: [Violation Risk Factor: Low][Time Horizon: Long-term Planning] 2.1. Respond using the English language, unless agreed to otherwise. An alternate language may be used for internal operations. 2.2. Take one of the following actions for an oral two-party, person-to-person Operating Instruction: • Repeat the Operating Instruction and wait for confirmation from the issuer that the repetition was correct. • Request that the issuer reissue the Operating Instruction. 2.3. Request clarification from the issuer if the communication is not understood when receiving the 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)." This performance-based approach also nullifies the need for R4, thus, that requirement should be deleted. R5. NextEra supports R5; however, it is not clear how R5 is or is not connected to moving away from a zero tolerance environment. To clarify this connection, NextEra will recommend, below, specific changes to the RSAW. Implementation Plan. Moving the implementation plan to 18 months would facilitate the industry considering that operators work on multiple shifts and multiple training will be required as well as provide time to conduct

the recommendation coordination of protocols among RCs, TOPs and BAs. Also, the 18 month implementation would provide time for a robust pilot program, as offered by some regions, along with an assessment and the follow-up to ensure success of the implementation of non-zero defect compliance and enforcement program. Measures and RSAW overall. NextEra thanks NERC for providing a draft RSAW. The RSAW, however, needs to be significantly re-written in order to sync up with COM-004-2 and set forth a reasonably understood and predictable compliance and enforcement approach. For example, the measures and RSAW both introduce management practices, which are not required by the Standard's requirements. The term "management practices" should be deleted from both the Measures and RSAW, and replaced with more directly applicable language, such as "implemented the communication protocols." To facilitate the re-writing of the RSAW, NextEra recommends that the following language be used in R3. RSAW R3. Evidence Requested. That the communication protocols set for in R1 and its subrequirements have been implemented and are followed by the applicable operating personnel, with the understanding that zero tolerance implementation is not required, given that under certain circumstances an operating personnel may not have followed the communication protocols, yet sufficiently communicated the need for the receiver to follow the Operating Instruction, and, thus the reliability of the Bulk Electric System was served. For example, the operating personnel may not have identified a Reliability Directive, as required by R1.1, but did communicated that there was an Emergency and that the receiver needed to follow the instructions. In these instances, the auditor shall work with the entity to understand the circumstances and determine whether a violation is warranted. Evidence may include spreadsheets, memos, or logs and any noted exceptions to following the communication protocols set forth in R1 and its subrequirements. RSAW Compliance Assessment Approach Specific to COM-002-4, R3. Review the evidence provided to gain reasonable assurance that R1 and its subrequirements have been implemented, with the understanding that zero tolerance implementation is not required, given that under certain circumstances an operating personnel may not have followed the communication protocols yet sufficiently communicated the need for the receiver to follow the Operating Instruction, and, thus the reliability of the Bulk Electric System was served. Only if above implementation of R1 and its subrequirements are deemed insufficient to provide reasonable assurance, apply other audit procedures as necessary to gain confidence regarding the implementation of the communication protocols. See 'Note to Auditor' section for additional details. RSAW Auditors Note R3. The auditor may interview SMEs and pull a statistically randomly valid sample of the entity's communications from their available voice recordings (limited to the prior 90 calendar days) and if instances of noncompliance with the protocols are found (without a reasonable exception due to the facts and circumstances), the possible non-compliance will be submitted to Enforcement, which will make the determination whether the entity demonstrates a consistent pattern of not using their documented communications protocols and, if applicable, the severity of the violation. For purposes of a statistcally random sample, auditors may not request more than 15 days of recordings. Also, findings of possible non-compliance during the review of the statistically random sample, may not lead to additional review of voice recordings, unless necessary by Enforcement to determine the severity of the violation, and even in those cases the review of voice recordings shall be limited to sampling of additional

days (no more than 15 days) to determine a pattern. RSAW existing R4 (if not deleted as recommended above). Evidence Requested. That the communication protocols set for in R2 and its subrequirements have been implemented and are followed by the applicable operating personnel receiving an Operating Instruction, with the understanding that zero tolerance implementation is not required, given that under certain circumstances an operating personnel may not have followed the communication protocols, yet sufficiently received and communicated back the Operating Instruction, and, thus, the reliability of the Bulk Electric System was served. For example, the operating personnel receiving a Reliability Directive may not repeat that it heard the term Reliability Directive used, but sufficiently communicated that it would implement the instruction given. In these instances, the auditor shall work with the entity to understand the circumstances and determine whether a violation is warranted. Evidence may include spreadsheets, memos, or logs and any noted exceptions to following the communication protocols set forth in R2 and its subrequirements. RSAW Compliance Assessment Approach Specific to COM-002-4, R4. Review the evidence provided to gain reasonable assurance that R2 and its subrequirements have been implemented, with the understanding that zero tolerance implementation is not required, given that under certain circumstances an operating personnel may not have followed the communication protocols, yet sufficiently communicated that it would follow the Operating Instruction, and, thus, the reliability of the Bulk Electric System was served. Only if above implementation of R2 and its subrequirements are deemed insufficient to provide reasonable assurance, apply other audit procedures as necessary to gain confidence regarding the implementation of the communication protocols. See 'Note to Auditor' section for additional details. RSAW Auditors Note R4. The auditor may interview SMEs and pull a statistically randomly valid sample of the entity's communications from their available voice recordings (limited to the prior 90 calendar days) – provided the DP or GOP have voice recordings. If instances of noncompliance with the protocols are found (without a reasonable exception due to the facts and circumstances), the possible non-compliance will be submitted to Enforcement, which will make the determination whether the entity demonstrates a consistent pattern of not using their documented communications protocols, and, if applicable, the severity of the violation. For purposes of a statistcally random sample, auditors may not request more than 15 days of recordings, provided the DP or GOP have voice recordings. Also, findings of possible non-compliance during the review of the statistically random sample may not lead to additional review of voice recordings, unless deemed necessary by Enforcement to determine the severity of the violation, and even in those cases the review of voice recordings shall be limited to sampling of additional days (no more than 15 days) to determine a pattern. NextEra also recommends that the following language be used in the RSAW if the newly NextEra drafted R2 and its subrequirements, above is adopted: RSAW new NextEra R2 set forth above. Evidence Requested. That R2 and its subrequirements have been executed by the applicable operating personnel receiving an Operating Instruction, with the understanding that zero tolerance execution is not required, given that under certain circumstances an operating personnel may not have strictly executed R2, yet sufficiently received and communicated back the Operating Instruction, and, thus, the reliability of the Bulk Electric System was served. For example, the operating personnel receiving a Reliability Directive may not repeat that it heard the term

Reliability Directive used, but sufficiently communicated that it would execute the instruction given. In these instances, the auditor shall work with the entity to understand the circumstances and determine whether a violation is warranted. Evidence may include spreadsheets, memos, or logs and any noted exceptions to following the communication protocols set forth in R2 and its subrequirements. RSAW Compliance Assessment Approach Specific to COM-002-4, new NextEra R2. Review the evidence provided to gain reasonable assurance that R2 and its subrequirements have been executed, with the understanding that zero tolerance execution is not required, given that under certain circumstances an operating personnel may not have followed the communication protocols, yet sufficiently communicated that it would follow the Operating Instruction, and, thus, the reliability of the Bulk Electric System was served. Only if above execution of R2 and its subrequirements are deemed insufficient to provide reasonable assurance, apply other audit procedures as necessary to gain confidence regarding the execution R2. See 'Note to Auditor' section for additional details. RSAW Auditors Note new NextEra R2. The auditor may interview SMEs and pull a statistically randomly valid sample of the entity's communications from their available voice recordings (limited to the prior 90 calendar days) – provided the DP or GOP has voice recordings. If instances of noncompliance with R2 are found (without a reasonable exception due to the facts and circumstances), the possible non-compliance will be submitted to Enforcement, which will make the determination whether the entity demonstrates a consistent pattern of not using their documented communications protocols and, if applicable, the severity of the violation. For purposes of a statistcally random sample, auditors may not request more than 15 days of recordings, provided the DP or GOP has voice recordings. Also, findings of possible non-compliance during the review of the statistically random sample, may not lead to additional review of voice recordings, unless deemed necessary by Enforcement to determine the severity of the violation, and even in those cases the review of voice recordings shall be limited to sampling of additional days (no more than 15 days) to determine a pattern.
Group
DTE Electric
Kathleen Black
Yes
Yes
Yes
R2 Section 2.1 requires a response in English to an oral or written Operating Instruction. Section 2.3 only requires the receiver to respond if the Operating Instruction is not understood implying a response may not be required. Suggest adding "When a response is required" to R2 Section 2.1: 2.1 When a response is required, require the receiver of an oral or written Operating Instruction respond using the English language, unless agreed to otherwise. An alternative language may be used for internal operations.
Group
Exelon Registerd Entities
Chris Scanlon

Segment 1 BGE,Segment 3 ComEd, Segment 4 CECD, Segment 5 Exelon Nuclear, Segment 6 CEG; all submit the following comments in support of their negative vote.
No
2003 Blackout Report Recommendation No. 26 reads: “Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate. (footnote omitted) NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations, and ensure that all key parties, including state and local officials, receive timely and accurate information. NERC should task the regional councils to work together to develop communications protocols by December 31, 2004, and to assess and report on the adequacy of emergency communications systems within their regions against the protocols by that date.” • While Exelon believes that COM-002-4 goes beyond the Recommendation and includes the requirement to implement communication protocols for operating BES elements in non-emergency and other non-critical situations, Exelon also recognizes that the NERC Board believes that the words “especially for” in the recommendation are the reason to include a standard for normal communications. We also understand that in paragraph 540 of Order No. 693, FERC directed the ERO to expand the applicability of the communication standard to distribution providers (DP’s) but that directive tied back to communications protocols “especially for communications during alerts and emergencies.” However, although Recommendation 26 addresses “key parties” and FERC directive addresses DP’s in the context of Blackout Recommendation No. 26, we don’t believe that either was intended to include DP’s and GOP’s for non-emergency /Operating Instructions communications. There is no evidence that failure by DP’s and GOP’s to follow Operating Instructions has caused a reliability gap in the BES.
No
• VSL for R4 introduces the concept of “consistent pattern” of behavior. This is undefined and subjective. Entities operating in multiple regions may be subject to varying interpretations of this language.
No
The Exelon companies have voted affirmatively for previous versions of the COM standards including COM-002-3 (pending filing) and COM-003-1 (predecessor to COM-002-4 recently defeated at ballot). We do however have concerns with the process used to arrive at COM-002-4 and some of the content of the standard and have therfore cast a negative ballot for this rev. • COM-002-4 represents more than a revision in response to comments of the previously balloted standard. Several other approved standards are proposed to be modified as part of this Project. Additionally, the change from COM-003-1 to COM-002-4 regarding Operating Instructions is significant. In the time allotted, Exelon has not been able to conduct a sufficient review of the impacts to all of its business units. • M4 says that“independent review” of the entity’s evidence should be done to demonstrate adherence to the protocols. What is an “independent review”? Is it a second operator, an operations supervisor, a management person from a separate business area, a contractor? More clarity on this issue is required. • M4 and the RSAW “Notes to Auditor” for R4 and Data Retention make it clear that an entity (DP

and GOP) will need to be able to produce two years of evidence and 90 days of voice recordings. As noted above, this is a significant change from COM-003-1 and Exelon has not had sufficient time to assess the potential impact of the increased compliance burden to the DP and GOP because of the changes requiring these entities to have evidence of compliance for all Operating Instructions, not just Operating Instructions that were not followed and led to a Directive. (COM-003-1 R3) In the technical document, the SDT points to a potential "reliability gap" if DPs and GOPs are not included. More information is needed on the nature of this potential gap in order to determine whether this extension is technically supported. • Several Regions are currently conducting pilots to develop the RAI/Internal Control initiative. Repeated references to and instructions to the auditors in the RSAW to review internal controls are premature. • Exelon agrees with the recommendation made by EEI and others that COM-002-3 be filed with FERC. Exelon feels that other COM Projects have been responsive to the Order No. 693 directives. Related Projects already approved by FERC and/or the NERC BOT include: COM-001-1.1 (FERC effective date 5/13/2009), COM-001-2, (NERC BOT approved, 11/7/2012), COM-002-2 (FERC effective date 6/18/2007), COM-002-3 (NERC BOT approved 11/7/2012). • The definition of Operating Instruction may be misinterpreted to mean that an OI is a command applicable to personnel responsible for "Real-time generation control and operation of the interconnected Bulk Electric System" as opposed to "Real-time generation control and/or operation of the interconnected Bulk Electric System". Please consider this clarification.

Individual

Terri Pyle

Oklahoma Gas & Electric Company

No

Recommendation 26 says "Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate." It is difficult to see how including or forcing a communications protocol for non-emergency operations fulfills this recommendation. Furthermore, the 2003 Blackout report suggested a lack of situational awareness was a key causal component and yet no link between three part communication and identified lack of situational awareness has been made. We therefore believe that the significant and unreasonably burdensome compliance obligations associated with this broad expanse is unjustified.

No

Given our belief that establishing a communications protocol for non-emergency communications is overly burdensome, we fail to see the need for VRFs any greater than low.

Yes

• The use of terms such as "reasonable assurance" in the measures and "reasonably designed" in the RSAW leaves us little guidance on how an auditor might interpret those terms. • OG&E finds significant parallels in the proposed revision to the COM-002-3 standard and those standards called out for retirement in the Paragraph 81 project. OG&E believes that requiring a standard for three-part communication for non-emergency communication fits several of the criteria in Paragraph 81 such as: o Criterion A: Little, if any benefit or protection to the reliable operation of the BES ♣ Because there are no instances of any significance in which the lack of

three-part communication contributed to a reduction in reliable operation of the BES, requiring three-part communication for non-emergency conditions, complete with implementation/documentation/assessment/remediation requirements seems unwarranted, especially given the significant effort required to demonstrate compliance. ♣ In the "NERC Management Response to the Questions of the NERC Board of Trustees on Reliability Standard COM-003-1" dated September 6, 2013, an attempt is made to tie the lack of three-part communication during non-emergency conditions to a lack of situational awareness, thus implicating it in FERC's Recommendation 26 of the 2003 Blackout Report. There is little, if any evidence to suggest that the lack of the use of three-part communication had any impact on the 2003 blackout, or any other significant reliability failure in North America. In its response, NERC Management uses the term "could" several times. For example, on page 1, they state, "… miscommunication by operating personnel could result in switching errors during routine switching of Bulk Electric System Elements, which could jeopardize the reliable operation of the Bulk Electric System" (emphasis added). We believe that the amount of additional compliance and operational burdens that will be imposed by this standard should be due to a situation that would jeopardize the reliable operation of the BES, rather than anything that could do so. o Criteria B: ♣ B1: Administrative –B2: Data Collection/Data Retention – The activities required in the proposed standard would involve a significant amount of data collection and data retention to prove compliance. In its response to the NERC BOT, NERC Management states (on page 7), "Second, concerns over creating an operational and compliance environment that requires mining of hundreds, thousands or millions of routine/normal communications to prove compliance or make a finding of reasonable assurance of compliance was consistently cited in comments to all drafts of COM-003-1. NERC plans to address this issue in the compliance section of the standard and in development of the RSAW concurrently with development of the standard." Nowhere in the proposed standard can we find any meaningful attempt to address this issue. That leaves entities to the interpretations of various auditors to find "reasonable assurance of compliance", which would increase their compliance risk, and therefore their compliance effort, beyond what we believe to be reasonable, especially given the minimal benefit to the reliable operation of the BES. ♣ B3. Documentation – As stated our comments above, the amount of documentation that will be required to prove compliance with COM-002-4 will be significant. In order to demonstrate compliance with the proposed standard, entities will be required to create additional documentation, audit period to audit period, in order to demonstrate compliance. Protocols will have to be developed, maintained, and distributed, on a regular basis. They will have to be reviewed, and that review documented. For a single standard, this may not seem like much, but when combined with the significant efforts already required of us today for standards that we do believe have a positive impact on reliability, we find the continual additions to our workload unsustainable, especially given the lack of empirical data to support such an increase. • Finally, every Transmission Operator that OG&E is aware of uses three-part communication, in some form, when performing routine switching and as well as some other operations. We train our operators in three-part communication and we assess their performance. In fact, the use of three-part communication is a part of their performance assessments throughout the year and their annual performance appraisals reflect their performance in that regard. In short, OG&E finds

little value in an additional NERC Reliability Standard that addresses a “best practice” that has never been implicated in any significant reliability failure; at least as far as has been published in North America and we believe that our collective effort should be spent focusing on those issues that have been a problem and that continue to be a challenge for the industry. Three-part communication for non-emergency conditions is not one of those.
Individual
Daniel Duff
Liberty Electric Power, LLC
No
The blackout report, in Recommendation 26, states "NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations, and ensure that all key parties, including state and local officials, receive timely and accurate information." Operating instructions in non-emergency situations are, by definition, not "communications during alerts, emergencies, or other critical situations". Order 693 similarly states "(4) requires tightened communications protocols, especially for communications during alerts and emergencies. With respect to this final issue, the Commission proposed alternatively to direct NERC to develop a new Reliability Standard that responds to Blackout Report Recommendation No. 26, which deals with the need for tightened communications protocols." Again, the focus of the order is on "alerts and emergencies". The error of stating 693 requires non-emergency communications protocols is repeated in the SAR, which was developed prior to the enforcement date of the standards. Not surprisingly, there was little attention paid to the error by industry, as most were scrambling to confirm their programs were in compliance prior to June 8th 2007. As there is not a specific directive from FERC or the Blackout Report mandating the development of communications protocols for routine interactions between RE's, the SAR should be remanded.
No
VRF/VSL for R4 penalizes a "consistent pattern of not using the protocols". This would trigger a violation even if the pattern was discovered by implementing a review of evidence under M4. The VRF/VSL should be for not implementing the review, instead of for discovery of the issue.
Yes
M4 requires an "independent review of operating personnel’s adherence to the protocols established in Requirement R2.". The word "independent" should be removed, as small entities may only have staff in the supervisory chain trained and capable of performing an accurate review of the implementation of the communications program.
Individual
Jen Fiegel
Oncor Electric Delivery Company LLC
No
COM-002-4 goes beyond the August 2003 Blackout Report Recommendation number 26, FERC Order 693 for neither identify requirements for normal operations. Oncor concurs with Austin Energy’s comment that EOP-001-2, R3.1 and COM-002-2, R2 already address the requirements

of the Blackout Report and FERC Order 693. In addition, the COM Standards were evaluated by the NERC Operating Committee (OC) who recommended guidelines on normal operations protocols not mandatory standards.
No
The VSLs proposed for all Requirements are designed as prescriptive zero-tolerance and appear to step backward from the global objective of transitioning to results, risk based standards which support the reliability of the BES. Oncor recommends the requirements be defined and the VRF/VSL be developed based on the risk to the reliability of the BES. For example, in normal or emergency operations, not following the letter of the law is not indicative of a severe reliability risk to the BES. Additionally, Oncor concurs with Austin Energy's comments: Regarding R3 and R4: These VSLs create a "zero tolerance" situation. If an entity fails to follow the communication protocol when issuing or receiving a Reliability Directive one time, even if there is no adverse impact to the BES, it is a violation. While there is the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations occurred as a result. The severe category should be reserved for only those instances in which documented communications protocols were not followed and the failure resulted in an emergency operation or reliability issue. As a result, we suggest "demoting" each existing VSL to a lower level and limiting the Severe VSL to only those instances that resulted in an adverse impact on the BES (suggestions provided below). Low - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R1 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving an Operating Instruction and that failure resulted in an emergency operation or reliability issue. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive and that failure resulted in an emergency operation or reliability issue. Regarding the VSL for R3 and R4: Use of the term "consistent pattern" is vague and will be difficult to determine and analyze.
Yes
Oncor recommends Requirement 5 be removed and the Measurements be re-evaluated to remove the internal controls additives. Reliability Standards must be revised to focus on strategic and critical reliability objectives incorporating requirements for meeting and sustaining reliability of the BES. The current state of Standards must transition from a prescriptive zero tolerance approach to results-based requirements which assure the reliability and security of the critical infrastructure. A reliability results-based approach should not be an additive to the Reliability Standards; hence, controls requirements should not be incorporated within the Standards, rather controls should be considered at the Program level. Reliability Standards should define the results ("what") Entities are mandated to meet and maintain and the "how" should be handled by each Entity for there is not a "one size fits all". Incorporating internal controls as requirements and prescriptive measurements can lead to unintended consequences and again, an additive versus a process that helps provide a registered entity

with reasonable assurance they comply with the Standard(s) or the operating function(s) and processes that the Standard(s) require.
Individual
David Jendras
Ameren
Agree
We generally support the SERC OC comments. We believe that combining the two standards is the right approach.
Group
US Bureau of Reclamation
Erika Doot
Yes
The Bureau of Reclamation (Reclamation) agrees with NERC's decision to combine COM-002 and COM-003 into one standard. However, Reclamation disagrees with the decision to waive the standards development procedures. For such a substantial change, a 15 day review and comment period does not allow sufficient time for consideration of the proposed changes and comment coordination.
No
Reclamation recommends that the drafting team clarify what is a "consistent pattern of not using the documented communication protocols." Reclamation also believes that R3 and R4 should include lower and moderate VSLs for errors in the use of communication protocols that do not rise to the level of a "consistent pattern of not using the documented communication protocols." Reclamation recommends the development of clear numerical thresholds for the VSLs.
1. Reclamation recommends that the drafting team revise the definitions of Operating Instruction and Reliability Directives to make sure they are clear and consistent. First, Reclamation suggests that the drafting clarify the term "command" because most day-to-day communications between Transmission Operators or Balancing Authorities are phrased as requests rather than commands. The definition of Operating Instruction exempts "discussions of general information and of potential options or alternatives," without recognizing that these discussions generally result in mutually agreed upon decisions of how to operate the Bulk Electric System (rather than resulting in commands). Reclamation suggests that the drafting team choose another term or define the term command to reflect this operational reality. Second, the proposed definition of Operating Instruction defines a Reliability Directive as a subset or one type of Operating Instruction. However, the current definition of Reliability Directive refers to a broader set of "communications" than "commands" referred to in the proposed definition of Operating Instruction. The drafting team should reconcile the use of the broader term "communication" with the narrower term "command," and preferably revise the term command as explained above. Third, under the proposed definition, Operating Instructions that can be issued by a seemingly broader array of "operating personnel" than Reliability Directives, which can only be issued by Reliability Coordinators, Balancing

Authorities, and Transmission Operators. Reclamation suggests that the definition of Operating Instruction should be updated to refer to instructions “from a Reliability Coordinator, Transmission Operator, or Balancing Authority” to clarify that Generator Operators and Distribution Providers do not issue internal Operating Instructions. 2. Reclamation recommends that the drafting team update R1 and R2 to allow entities to inform the RC, BA, or TOP of the inability to comply with an Operating Instruction or Reliability Directive if doing so would violate safety, equipment, regulatory, or statutory requirements. Reclamation recommends that the drafting team incorporate language similar to IRO-001.1a and TOP-001-1a, for example the drafting team could add an R2.4 which states “Each Transmission Operator, Balancing Authority, and Generator Operator shall comply with Operating Instructions issued by the Reliability Coordinator, and each Balancing Authority and Generator Operator shall comply with Operating Instructions issued by the Transmission Operator, unless such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances the Transmission Operator, Balancing Authority or Generator Operator shall immediately inform the Reliability Coordinator or Transmission Operator of the inability to perform the Operating Instruction so that the Reliability Coordinator or Transmission Operator can implement alternate remedial actions.” 3. Finally, Reclamation suggests that the Implementation Plan be updated to reflect necessary conforming changes to other standards. Reclamation notes that proposed revisions to IRO-001-3 and TOP-001-2 would refer to “Reliability Directives.” Reclamation believes that other standards that incorporate terms with a meaning similar to Operating Instruction or Reliability Directive should be updated to include defined terms. BAL-STD-002-0 refers to “any instruction, directive, order or suggested action.” CIP-002-5 refers to “operational directives.” INT-010-1 refers to Interchange schedules “directed” by the Reliability Coordinator. IRO-004-2 R1 refers to “directives.” VAR-001-2 R6 refers to “direct[ing] the Generator Operator to maintain or change its voltage schedule or its Reactive Power schedule.” VAR-001-3 M3 refers to evidence of “issued directives.” VAR-002-1.1.B R2.1 refers to actions “directed by the Transmission Operator,” and M3 refers to responses to “Transmission Operator’s directives.” Reclamation recommends that these standards be updated to incorporate the term Operating Instruction or Reliability Directive to avoid industry confusion about which types of communications these standards are intended to describe.
Individual
Texas Reliability Entity
Texas Reliability Entity
Yes
Texas RE generally supports the approach taken in this draft: combining COM-002 and COM-003 into one comprehensive communications standard. However, we feel that the current draft is seriously defective because the REQUIREMENTS do not clearly and completely set forth criteria by which compliance can be assessed (R3 and R4).
No
See comments below under Question 3.
Yes

1. Texas RE generally supports the approach taken in this draft: combining COM-002 and COM-003 into one comprehensive communications standard. However, we feel that the current draft is seriously defective because the REQUIREMENTS do not clearly and completely set forth criteria by which compliance can be assessed (R3 and R4). 2. The existence of a violation should be determinable by applying the REQUIREMENTS to the evidence, without reference to the VSLs. However, in this draft, the VSLs for R3 and R4 appear to be intended to define what constitutes a violation, rather than the Requirements. Texas RE urges the drafting team to clearly state what is required for compliance in the REQUIREMENTS only. VSLs are intended to indicate the severity of a violation, not the existence of a violation. 3. The apparent intent of this draft is that an entity is to be deemed compliant in a non-emergency situation unless there is a "consistent pattern of not using the documented communications protocols." That is an extremely vague threshold that will be very difficult to enforce. How are we supposed to consistently determine whether a "consistent pattern" exists? What if an entity fails to follow its protocols 25% of the time, but there is no "consistent pattern" to the failures? 4. Texas RE opposes the zero-defect application of this standard in connection with Reliability Directives. The circumstances of a violation, including system impact, are taken into account in the enforcement process when determining a penalty. The standard requirements should focus on an entity's conduct and performance, which are under its control, not on system occurrences, which may be out of the entity's control. Furthermore, having different requirements for different situations will be disruptive in the control room and can adversely affect reliability. 5. Consider whether this standard should apply to Load Serving Entities (LSE) as recipients of Operating Instructions. Note that TOP-001-01a Requirement R4 contemplates that LSEs will receive "reliability directives" from TOPs. TOP-001-2 (pending regulatory approval) also includes LSEs as recipients of "Reliability Directives." 6. RSAW: On page 9 and page 12, the draft RSAW states "Sampling is not a part of the audit process unless the auditor determines that the internal control is not properly designed or is ineffective. If the auditor cannot rely on the entity's controls to gain reasonable assurance of compliance, then the auditor can pull a sample of the entity's communications from their available voice recordings (limited to the prior 90 calendar days) . . .." (6A) This is written in a manner that leads a reader (e.g. Auditor or Registered Entity) to believe the CEA cannot review actual performance (e.g. voice recordings) unless the CEA first finds that the entity's controls are deficient or defective. In order to assess the internal controls by listening to a voice recording the Regional Entity will have to put the Registered Entity in a defensive posture. Is that the expectation of the RSAW drafters? We hope not, as Texas RE would expect to be able to review voice recordings as part of any assessment engagement, even if the controls appear to be in order. [The NERC Sampling Methodology specifically lists voice recordings in the discussion of statistical sampling: "Statistical sampling helps ensure a high confidence level of compliance for the larger population of documents when a smaller population is statistically sampled. The confidence level for the Sampling Methodology is set at 95%. Statistical sampling should be employed when auditing all processes, procedures and any documentation-related evidence (documents, logs, voice recordings, etc.) when a sample is required because the entire population cannot be audited. The use of RAT-STATS in tandem with the Sampling Methodology lends itself nicely to support this approach."] (6B) The 90-day retention period is too short. The CEA could easily

need to review recordings for a longer period, particularly if it becomes concerned about the entity's performance or needs to determine whether a "consistent pattern" exists. Advancing technology has mitigated many earlier limitations with respect to retention of data, including voice recordings. (6C) Recordings associated with Reliability Directives should be retained until the next audit, or else the CEA will need to conduct spot checks after each "Emergency or Adverse Reliability Impact" occurs. 7. RSAW: On page 10 and page 12, the draft RSAW states: ". . . if instances of noncompliance with the protocols are found, they will be turned over to Enforcement, which will make the determination whether the entity demonstrates a consistent pattern of not using their documented communications protocols and, if applicable, the severity of the violation." (7A) This provision reflects the inappropriate failure to clearly state what constitutes compliance in the REQUIREMENTS. If a "consistent pattern" of errors is required to constitute a violation, that needs to be stated in the REQUIREMENT, not in the VSL, and it should be addressed by Compliance, not by Enforcement, in the first instance. (7B) This language should not even be in the RSAW – it appears to forbid the auditor from making a compliance determination and it turns the auditor into a mere collector of evidence for Enforcement. We are not aware of any justification or precedent for this allocation of responsibility.

Group

EPSA

Jack Cashin

Yes

Companies have strongly responded to the 2003 Blackout Report with strengthened communications protocols. Since 2003 companies have responded by reinforcing their reliability regimes with a host of management, training, communications, and technology tools. Therefore, much of what addresses the substance of the standard has taken place in the intervening 10 years since the event. EPSA believes that NERC management and staff have not clearly described the reliability gap that takes place between what the Board has already approved, and the Order No. 693 directive. Reliability would be better served if questions around the perceptions of a reliability gap were responded to in detail. The seven year old directive is both dated and vague in light of the steps taken by registered entities since the Blackout.

No

Comments: It is not clear from the draft standard what language would prevail in a finding of violation – the Requirement, Measure, VSL, or RSAW. Without better definition in the Standard over which language prevails makes consensus agreement with the measures difficult. While some requirements would seem eligible for Find, Fix and Track (FFT) treatment due to a high measurement designation would not qualify for FFT . In addition, while the intent seems reasonable at this time, this could change over time should an RE, NERC or FERC choose to make it more restrictive.

Yes

EPSA supports the development and approval of a single, combined communication protocols Reliability Standard that covers emergency, alert and normal operating conditions for the BES,

while recognizing that performance expectations for applicable registered entities and NERC's approach to compliance and enforcement should differentiate between emergency and nonemergency conditions. The proposed draft standard COM-002-4 strikes an appropriate balance between these considerations, and responds to the NERC Board's and Standards Oversight and Technology Committee's Resolutions. Competitive suppliers however are concerned that the severely shortened, 15-day comment and ballot period directed by the Standards Committee for COM-002-4 will foreclose resolution of major technical objections to the proposed standard. The proposed draft relies heavily on the as-yet untested application of the NERC Reliability Assurance Initiative (RAI). Small changes to the Compliance Elements of the proposed standard – the Measures, Violation Risk Factors, Violation Severity Levels and Reliability Standard Audit Worksheets – would undermine the balance of what EPSA supports. Consequently, delays in the development and implementation of RAI will certainly jeopardize successful implementation of COM-002-4. Control Room operators will find it difficult to capture every oral Operating Instruction that must be transacted using the proper protocol. COM-002-4 offers a solution where the Compliance Enforcement Authorities (CEAs) look for a situation where a "pattern" of lapses occurs in the transaction of routine Operating Instructions. However, there is no definition of "pattern" given in the standard or NERC glossary. It is possible that some CEAs would consider a pattern to be 10 percent or more of all Operating Instructions – others could assess a violation when two or more errors occur. Also, there is no differentiation between situations where documentation is inadequate as compared to those where Operating Instructions are inadequately performed. If "undocumented" equates to a "miss," your chances of a "pattern" being detected go up significantly.

Individual

Don Schmit

Nebraska Public Power District

No

NPPD agrees with combining COM-002-3 and COM-003-1 into one Standard. We do not agree that COM-002-4 addresses the August 2003 Blackout Report Recommendation number 26. The recommendation addressed effectiveness of alerts, emergencies, or other critical situations and not normal operating communications.

No

Suggest the following changes: For R1; Severe- No documented communication protocols, High- documented protocols missing from 5 to 8 sub-requirements in R1. Medium-missing 3 or 4 sub-requirements, Low-missing one or two sub-requirements. R2; Severe- no communication protocols, High- missing 2 of 3 sub-requirements of R2, Moderate: missing 1 of 3 sub-requirements of R2. R3 and R4; See changes in Question 3 below. R5: as is, but re-classify to Moderate or High.

Yes

Revise the Purpose Statement to read: "Minimum communication protocols for the issuance of Operating Instructions with the intended affect to reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of the BES". The former purpose

statement says to “tighten communications” which makes it sound as though communications need to be prescriptive. Within the definition of “Operating Instruction” provided it states “...A discussion of general information and of potential options or alternatives to resolve BES operating concerns…”. NPPD believes that it is imperative to BES reliability for operators to be able to discuss possible options or actions to help system reliability. A Reliability Directive or Operating Instruction may result from that discussion or may change the Reliability Directive or Operating Instruction based upon the discussion. The purpose should not be to “tighten” communicatons, but to broaden and provide for “effective” communications. The purpose of the Standard appears to be to provide “minimum communication” protocols for the industry. R3. Add at the end (after the words Requirement 1) “and remediate noted exceptions identified in R5”. This aligns with the Measurement 3 (M3). The VSL for R3 needs to change to correlate to R3: for the High VSL after “Requirement R1” add “or remediating noted exceptions identified in R5” for Operating Instructions that are not Reliability Directives. The Severe VSL should read read the same way as the High VSL, except for the issuing or receiving of a Reliability Directive. R4. Add at the end (after the words Requirement 2) “and remediate noted exceptions identified in R5”. This aligns with the Measurement 4 (M4); however M4 does need to change to reference back to Requirement R5 in a similar way that M3 does. The VSL for R4 needs to change to correlate to R4: for the High VSL after “Requirement R2” add “or remediating noted exceptions identified in R5” for Operating Instructions that are not Reliability Directives. The Severe VSL should read read the same way as the High VSL, except for the receiving of a Reliability Directive. R5. NPPD suggests that that sub-requirement 5.1 and 5.2 be removed. R5 adequatly covers the requirement to evaluate communications protocols. Sub-requirements 5.1 and 5.2 are ambiguous and lead to auditors to interject their own “standards” for adherence and effectiveness. NPPD appreciates the considerations and changes made by the drafting team and with the additional changes identified above we will change our vote in support of this proposed Standard.

Group

PPL NERC Registered Affiliates

Brent Ingebrigtson

Yes

These comments are submitted on behalf of the following PPL NERC Registered Affiliates: Louisville Gas and Electric Company and Kentucky Utilities Company; PPL EnergyPlus, LLC; and PPL Generation, LLC, on behalf of its NERC registered entities. The PPL NERC Registered Affiliates are registered in six regions (MRO, NPCC, RFC, SERC, SPP, and WECC) for one or more of the following NERC functions: BA, DP, GO, GOP, IA, LSE, PA, PSE, RP, TO, TOP, TP, and TSP. PPL NERC Registered Affiliates recognize the need for industry standards applicable to certain communications. However, the current draft version of COM-002-4 requires change. We have the following questions that we would like the SDT to consider and respond to as part of the next draft: 1) There is no lesser VSL for R3 and R4 other than for a “consistent pattern of not using the communication protocols” developed in accordance with R1 or R2 for Operating Instructions that are not Reliability Directives. Does this mean that the SDT intends that there would be no violation unless there is a “consistent pattern” of not using such documented

protocols? 2) What would constitute a “consistent pattern” of not following the communication protocols? 3) If, for example, a BA, RC or TOP develops and implements a communications protocol which addresses the requirements and performs periodic sampling of communications among the issuers and recipients of the Operating Instructions to determine adherence to the protocols (e.g., 95% confidence), would identification of any issues with appropriate corrective action by the affected parties meet the compliance requirement? Along with a significant majority of the industry, we supported COM-002-3 (Version 3) developed under NERC project 2006-06 and approved by the NERC Board of Trustees. We support NERC filing COM-002-3 with the Applicable Governmental Authorities for approval and ending Project 2007-02. In the event that NERC moves the current draft of COM-002-4 forward the draft should be revised as follows. This current draft does not include the “Reliability Directive” definition that industry and the NERC BOT approved in COM-002-3. Likewise, the implementation plan that is posted with this first draft of COM-002-4 indicates that there are “Prerequisite Approvals” needed “of the definition of ‘Reliability Directive’”. The current definition of Reliability Directive is now unclear as the term had been defined in the Board approved COM-002-3 but is not included in this draft. Therefore, we suggest adding the definition of Reliability Directive into Definitions of Terms Used in Standard as follows: Reliability Directive: A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact. Similarly, we had previously proposed in comments to COM-003-1 drafts a clear definition of Operating Instruction and suggests the following: Operating Instruction: A Real-time Operations command, other than a Reliability Directive, by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the Real-time Operations 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. A discussion of general information, potential options and/or alternatives to resolve Bulk Electric System operating concerns is not a command and is not an Operating Instruction. An Operating Instruction is exclusive and distinct from a Reliability Directive. There is no overlap between an Operating Instruction and Reliability Directive. Only in concert with these two definitions, we propose only the following Requirements as part of COM-002-4: [R1 through R3 are for Reliability Directives and are identical to those in approved COM-002-3 with clarification for burst messages in R2.1 through R2.2] R1.When a Reliability Coordinator, Transmission Operator, or Balancing Authority requires actions to be executed as a Reliability Directive, the Reliability Coordinator, Transmission Operator, or Balancing Authority shall identify the action as a Reliability Directive to the recipient. [Violation Risk Factor: High][Time Horizon: Real-Time] R2. Each Balancing Authority, Transmission Operator, Generator Operator, and Distribution Provider that is the recipient of a Reliability Directive shall repeat, restate, rephrase, or recapitulate the Reliability Directive. [Violation Risk Factor: High][Time Horizon: Real-Time] R2.1 The issuer of an oral Reliability Directive using a one-way burst messaging system to communicate a common message to multiple parties in a short time period (e.g. an All Call system) is required to verbally or electronically confirm receipt from at least one receiving party. R2.2 The receiver of an oral Reliability Directive receiving a one-way burst messaging system to communicate a

common message to multiple parties in a short time period (e.g. an All Call system) shall request clarification from the issuer if the communication is not understood. R3.Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a Reliability Directive shall either: [Violation Risk Factor: High][Time Horizon: Real-Time] Confirm that the response from the recipient of the Reliability Directive (in accordance with Requirement R2) was accurate, or Reissue the Reliability Directive to resolve a misunderstanding. [R4 through R7 are for those instances where an entity determines Operating Instructions are necessary in their protocol and are based upon the comments provided by PPL NERC Registered Affiliates in COM-003-1 draft 5] R4. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop and implement documented communication protocols that outline the communications expectations of its System Operators. The documented communication protocols will address, where applicable, the following:[Violation Risk Factor: Low] [Time Horizon: Long-term Planning] 4.1. 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. 4.2. Instances that require time identification when issuing an oral or written Operating Instruction, and the format for that time identification. 4.3. Nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction. 4.4. Instances where alpha-numeric clarifiers are necessary when issuing an oral Operating Instruction, and the format for those clarifiers. 4.5. Instances where the issuer of an oral two party, person-to-person Operating Instruction is required to: Confirm that the response from the recipient of the Operating Instruction was accurate, or Reissue the Operating Instruction to resolve a misunderstanding. 4.6. Require the recipient of an oral two party, person-to-person Operating Instruction to repeat, restate, rephrase, or recapitulate the Operating Instruction, if requested by the issuer. 4.7. Instances where the issuer of an oral Operating Instruction using a one-way burst messaging system to communicate a common message to multiple parties in a short time period (e.g. an All Call system) is required to verbally or electronically confirm receipt from at least one receiving party. 4.8. Require the receiver of an oral Operating Instruction using a one-way burst messaging system to communicate a common message to multiple parties in a short time period (e.g. an All Call system) to request clarification from the issuer if the communication is not understood. 4.9. Coordination with affected Reliability Coordinators', Balancing Authorities', Transmission Operators', Distribution Providers', and Generator Operators' communication protocols. R5. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop method(s) to assess System Operators' communication practices and implement corrective actions necessary to meet the expectations in its documented communication protocols developed for Requirement R4. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Operations Assessment] R6. Each Distribution Provider and Generator Operator shall develop and implement documented communication protocols that outline the communications expectations of its operators. The documented communication protocols will address, where applicable, the following: [Violation Risk Factor: Low] [Time Horizon: Long-term Planning] 6.1. Use of the English language when responding to an oral or written Operating Instruction, unless another language is mandated by law or regulation. 6.2. Require the recipient of an oral two party, person-to-person Operating

Instruction to repeat, restate, rephrase, or recapitulate the Operating Instruction, if requested by the issuer. 6.3. Require the receiver of an oral Operating Instruction using a one-way burst messaging system to communicate a common message to multiple parties in a short time period (e.g. an All Call system) to request clarification from the issuer if the communication is not understood. R7. Each Distribution Provider and Generator Operator shall develop method(s) to assess operators' communication practices and implement corrective actions necessary to meet the expectations in its documented communication protocols developed for Requirement R6. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning /Operations Assessment] In summary, we do not agree with imposing three-part communications on the industry for all normal / routine operating instructions.

Group

Hydro One Networks inc.

Sasa Maljukan

Yes

Hydro One fully supports combining two standards into one. From the early drafts we believed that in order to make it easier for entities to comply single communication standard is the right way to go. However, on one occasion, drafting team rejected requests for combining two standards on the ground that COM-002 SAR doesn't give enough room for this to be done and that brand new standard must be developed. How is the SDT planning to address possible challenges from the industry? Would margining two standards into COM-003 which has broader scope relieve this notion?

Yes

Yes

Hydro One agrees with the comments submitted by the NPCC RSC and would like to offer following additional comments: Hydro One believes that the issue of three part communication is major stumbling block in passing this standard. Hydro One understands the reasons behind it and generally is not opposed to tightened communication for both Operating and Reliability directives. However, our issue and consequently the negative vote on this draft is primarily due to lack of coordination between the entities. Additionally, we don't agree with the general direction this standard is taking when it comes to compliance with this standard. We feel that violation of three part communication should constitute non-compliance with the standard ONLY if it played a part in the event. Otherwise it should be treated as non-violation and be handled through identify, asses and correct approach. We see these two issues as important enough to cast a negative vote. If corrected, we'd be open to supporting this standard in the future. In addition to above we'd like to offer following comments: 1. General Comment: We feel that the current draft is lacking coordination of communication protocols. We recommend that the SDT reassesses the need and assigns clear accountabilities to RC or others as appropriate. We believe that this component is essential in ensuring clear and reliable communication between entities. 2. In R1.2 the alternate language can be used for internal operation and if agree otherwise. For clarity purposes we'd like to see the standard address following questions: - Who can agree otherwise? - What is the meaning of internal operation? Is this operation internal to one entity? What if this is a vertically integrated utility? We believe

that these two instances are vague and must be further defined to avoid future interpretations. 3. R2.2 – see the comment above Section 1.2 Data Retention states "…the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit." This statement is vague and unenforceable. Hydro One recommends the SDT removes this sentence and provide clear, measurable direction regarding the retention period. 4. We understand that due to the rush for this standard to be developed SDT and NERC staff didn't have time to develop the RSAW and post it together with the standard (RSAW was posted sometimes at a later date). We hope that this is exception rather than the rule and that in the future RSAWs are going to be developed in time to be posted together with the standard.
Individual
Alice Ireland
Xcel Energy
Yes
Yes
Yes
While we think this draft standard is superior to the previous drafts, we have some issues that should be addressed first. Suggest changing language in the purpose section from "to tighten communications" to "to strengthen communications" The "Real-time generation control and operation" language in the definition for Operating Instruction is confusing. As written the definition seems to limit Operating Instructions being issued only by personnel that control and operate generation. Suggest changing the language to "A command by operating personnel responsible for the Real-time generation control or operation of the interconnected Bulk Electric System…" In R1.8, what is the definition for "Transmission interface"? This seems to be alluding to interconnection facilities, but is not definitive. If the intent was for Transmission interconnections, suggest the language be "Specify the nomenclature for Transmission interconnecting Elements and Transmission interconnecting Facilities between two parties when issuing an oral or written Operating Instruction."
Individual
Gregory Campoli
New York Independent System Operator
No
It remains unclear that additional work is needed to address recommendations from the August 2003 Black out Report or to address concerns raised in FERC Order 693. Much work has been completed to date that should address issues raised in those comments. We agree with the SRC in relying on the OC's Reliability Guidance that supports 3-part communication for all oral two party, person-to-person communications. The SRC proposes that this approach be used for a two year trial period. During that trial period NERC should collect information on the number of reliability events caused by communications errors. The ERO could then use the data to justify added requirements if the data justified the need. To date it does not appear that data exists to support that need for and additional communication standards.

No
The NERC Compliance Monitoring and Enforcement Program is based on FERC approved requirements and registered entities are obligated to demonstrate compliance with Reliability Standard requirements. The proposed VSL introduce an additional layer of compliance without being clearly defined in the proposed requirement. The proposed requirements are structured to include: 1) document, 2) implement and 3) evaluate communication protocols. The VSL should be developed from these three components of the standard and not introduce a 'zero defect' enforcement approach as is proposed in VSL R3 and others. NERC's recent direction was to move away from 'zero defect' standards and approach compliance from an ' identify, assess and correct' approach for controls type standards that have high frequency activity that do not immediately pose a reliability risk. The proposed requirements follow that approach. The proposed VRF's incorrectly introduce a 'zero defect' approach through a 'back door'. An entity may 'implement' a protocol, but one occurrence of not following that protocol does not warrant an entity to be non compliant, as proposed in the standard. If the drafting team is looking for a 'zero defect' standard, then the words need to be in the requirement. However we continue to believe that this is unnecessary, since a 'zero defect' requirement for poor communication already exist in current IRO/TOP Standards for not following directives.
Yes
We have specific questions to individual requirements below: R1.1 Require the issuer of a Reliability Directive to identify the action as a Reliability Directive to the receiver. The NYISO request confirmation from the SDT that identification of Reliability Directives can be made in policies or procedures agreed to by all parties. This will allow an entity to ensure consistent communications for all conditions without having to add additional information into the dialogue for emergency conditions that could complicate the interaction. 1.5. Require the issuer of an oral Operating Instruction to verbally or electronically confirm receipt by at least one receiver when issuing the 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). This requirement appears to require a confirmation that the all call was completed. The NYISO is requesting confirmation from the SDT that an electronic confirmation that the one-way communication was completed to the intended parties. For the following: 1.7. Specify the instances that require time identification when issuing an oral or written Operating Instruction and the format for that time identification. 1.8. Specify the nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction. 1.9. Specify the instances where alpha-numeric clarifiers are required when issuing an oral Operating Instruction and the format for those clarifiers. The NYISO is requesting confirmation from the SDT that in some cases an entity may have no instances where time identification, nomenclature or alpha-numeric's will be required and that the SDT did not intend this to be a case of non-compliance. The NYISO would also like to ask the drafting team what jurisdiction or authority the initiator of the communication has over the receiver of the communication. Some requirements require the entities communication protocol to have an obligation on the receiver to take action with no apparent authority to enforce that requirement. The NYISO would also like the SDT to consider the relationship between R1, 'have a protocol' and R3 'implement a protocol'. We believe that to

have a protocol is simply an administrative requirement that could be incorporated into a single requirement. One requirement could exist to 'implement a protocol that shall at a minimum…'. To have a protocol has no impact on reliability. We believe this would be a recommendation based on the paragraph 81 work.
Individual
Lee Layton
Blue Ridge Electric
Yes
The draft expands the scope of COM-002 to include DP's, however, I don't see any rational offered for including DP's who have no impact to the BES.
Individual
Brian Evans-Mongeon
Utility Services, Inc
No
Not following a communications protocol when the Operating Instruction is a Reliability Directive is a zero tolerance instance. So even if directive is followed and any BES situation is mitigated, it is still a Severe Violation. This is extreme, and the VSLs for R4 should be reduced. If a Reliability Directive is not followed there are violations of other standards, which are severe, so a lowering of this VSL will not affect the reliability of the BES. VSLs for all Operating Instructions should be graduated within the VSL table as opposed to being passed onto Enforcement to make a determination of a "Consistent Pattern." This will provide clearer guidance to industry on Violation Severities. For example, they could range from Low to High, with failures in less than 1/3 as Low VSL, less than 2/3 as Medium, and failure in more than 2/3 as High. R4: More clarity needs to be provided on how a "consistent pattern" will be established. Most of the applicable entities do not record phone conversations. The RSAW states that any instances of non-compliance will be turned over to Enforcement to determine a "consistent pattern." This is zero-defect language as each instance will be considered a PV.
No
The applicability of the standard should be written to exclude DPs that do not own or operate BES equipment. As per the definition of Operating Instruction "A command … 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..." Entities that do not have real-time control of Elements or Facilities of the BES should be removed from the applicability of the standard. It is excessive to mandate that DPs in this situation, that never receive Operating Instructions, have a Communications Protocol, and implement that protocol. Suggest adding the following to Section 4: 4.1.2 Distribution Provider with control of Elements or Facilities of the Bulk Electric System. M3 and M4 are difficult to understand and suggest edits to clarify: Each Distribution Provider and Generator Operator shall provide evidence that it implemented the documented communication protocols such that the entity has reasonable assurance that protocols established in Requirement R2 are being followed by personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Evidence should

show periodic, independent review of the operating personnel's adherence to protocols established in R2. Evidence may include, but is not limited to • Descriptions of the management practices in place, • spreadsheets, • memos, or • logs, R5.1 is redundant with R3 as both require assessment of adherence to protocols established in R1. If part of "Implementation" (covered in R3) includes an assessment of the communication protocols, R5 should be limited to only correcting discovered and correcting deficiencies with the protocols and the implementation of those protocols. If not removed as redundant, Requirement 5.1 should specify that the assessment will be limited to the operating personnel of the individual entity for both issuing and receiving Operating Instructions. As it is written now it would be the responsibility of the BA, RC and TOP to assess compliance with communication protocols to all entities involved in every communication, including the receiving GOPs and DPs, and other BAs, RCs and TOPs based on the Operating Instruction as "issuer and receiver" are not defined. Suggested Rewording of R5.1: "Assesses adherence to the communications protocols to provide feedback to entity personnel" R2 requires DPs and GOPs to call the issuer in an all call situation if the Operating Instruction is not understood. If the Operating Instruction is misunderstood, and the entity believes it has taken the appropriate action, but was incorrect creates a potential violation scenario. This needs to be clearly addressed as a Potential Violation in this instance could be severe (if the OI is a Reliability Directive) and could be a Potential Violation of several other standards as well (not following a Reliability Directive). RSAW Comments: The "Note to Auditor" related to R3 and R4 is outside of the scope of the standard. Placing the examination of Internal Control within the RSAW effectively requires entities to have Internal Controls, which expands the scope of the standard significantly.
Group
Dominion
Connie Lowe
Yes
Yes
Yes
It does not appear that there are any requirements to coordinate communication protocols established in R1 with those established in R2. For instance, R1 contains 9 sub-requirements whereas R2 only contains 3 sub-requirements. Does the SDT maintain that coordination is not necessary expecting that the recipient will be instructed by the issuer to either repeat or confirm any information that is included in parts 1.5, 1.6, 1.7, 1.8, or 1.9 that is vital to understanding the Reliability Directive or Operating Instruction? There is no value in having a documented communications protocol if the entity does not intend to implement it. We therefore suggest that requirements 3 & 4 either be added into the body of R1 and R2 respectively, or as sub-requirements of R1 and R2 respectively. The VSLs and RSAW should be modified accordingly. The Violation Severity Levels imply an entity is non-compliant for operating instructions only if a pattern of not following its protocols is demonstrated. However, the RSAW says that system events should be reviewed, and if instances of nonconformance with the protocols are found, the issue will be turned over to the Compliance Enforcement Authority, who will then make a determination whether there was a pattern. We suggest that

the RSAW be changed to explicitly indicate that if the entity has a documented protocol that defines the expectations of its operators, requires periodic checks to validate conformance with the protocols, and implements corrective actions when deficiencies are found, the entity will be determined to be compliant In several places, including the implementation plan, there is mention of retiring COM-002-3. This standard was never FERC approved, therefore Dominion suggests changing this from retiring COM-002-3 to withdrawing COM-002-3.
Group
Southern Company: Southern CompanyServices, Inc.; Alabama Power Company; Georgia Power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation; Southern Company Generation and Energy Marketing
Marcus Pelt
Yes
No
R3 & R4 - While there is the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations were performed as a result. The severe category should be reserved only for those instances in which documented communications protocols were not followed *and* which resulted in an emergency operation or reliability issue. As a result, we suggest “demoting” each existing VSL to a lower level, and editing the Severe VSL and limit it to only those instances that resulted in an emergency operation or reliability issue (suggestions provided below). Low - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R1 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving an Operating Instruction *and* resulting in an emergency operation or reliability issue. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive *and* resulting in an emergency operation or reliability issue. Southern also suggests (per comments below in section 3 on R5) that the VRF’s and VSL’s should be deleted for R5.
Yes
Standard Comments: R2 - We disagree with the DP and GOP being required to have a documented communications protocol. The requirement should simply require these two entities to use 3-part communication (i.e. repeat back) for Operating Instructions. Requiring a document is a purely administrative requirement and certainly meets the Paragraph 81 criteria. R5 - In NERC’s own Q&A document for RAI prepared by the Risk-Based Reliability Compliance Working Group (RBRCWG), the following statements are made: “An entity can voluntarily establish internal controls designed to reduce its control risk, which could have a positive influence on the scoping of compliance monitoring by the Regional Entity. Conversely, the entity can voluntarily elect to not establish internal controls or share them with the Regional Entity.” This is inconsistent with the direction of the proposed Standard COM-002-4, R5. This

not only requires an internal control, but also requires that the control be shared with the Regional Entity (during audits). Also, consider that an entity can develop and implement a robust communication protocol consistent with COM-002-4 requirements and flawlessly follow its communication protocol, yet be found in violation of COM-002-4 by failing to demonstrate that it has adequate (subjective) management (internal) controls in place. This is inconsistent with the RAI guidance provided by NERC regarding the voluntary nature of internal controls. So, in principle, internal controls should not be dictated in a reliability standard. This goes against the principle of "Results-Based" standards. The intended result is effective communications. This can be attained with Requirements 1 through 4. No one will argue that internal controls won't help ensure that the desired results are achieved. However, Requirement 5 is not absolutely necessary for the results to be achieved, and therefore, should not be included in the standard and should be removed. R5.1 – We understand the thought that the BA, RC, and TOP will be assessing both the issuer's and receiver's adherence to the communications protocols; however, there needs to be some obligation on the receiver's end to incorporate the feedback in their management practices. M3 and M4 – It is not clear what is meant by "independent review of operating personnel's adherence to the protocols". We recommend clarifying that this independent review only implies that the operator cannot assess their own communications. This assessment can be conducted by the operator's management that is responsible for developing and training on the protocols or other groups within the entity's organization that the operator's management deems appropriate to provide an independent assessment. This same comment applies to the RSAW for R3 and R4. RSAW Comments: It appears that the intent of the revised COM-002-4 standard and the RSAW is to eliminate the "zero defect" concern expressed by the industry. Southern appreciates the SDT and NERC's move in this direction; however we recommend modifying the RSAW to make it clear that as long as registered entities have a protocol document that lays out its expectations of its operators, periodically checks for conformance with the protocols, and implements corrective actions when deficiencies are found, the entities are compliant. Specifically, the Compliance Assessment Approach specific to COM-002-4, R3 as drafted provides the CEAs too much subjectivity. There needs to be more defined rule set and objective criteria that are used to determine if an entity's internal controls around operating personnel adherence to the documented communications are insufficient. For example, CEAs should not have the flexibility to determine if the design frequency, volume of communications reviewed, and independence of the review party are sufficient. These parameters should be left up to the entity. The compliance approach should simply provide for the auditors to review the entity's management practices related to assessing operators' communications and actual evidence of such review to ensure these management practices are occurring. The RSAW should be modified to state that entity's management practices should only be allowed to be deemed insufficient if: a) there is no evidence that management practices exist to assess operating personnel's adherence to communications protocols or b) evidence demonstrates a pattern of not following the documented communications protocols.

Individual

John Brockhan

CenterPoint Energy Houston Electric

Yes
CenterPoint Energy agrees that the proposed COM-002-4 Standard addresses the August 2003 Blackout Report Recommendation number 26, FERC Order 693, and the COM-003-1 SAR however, the Company believes it goes beyond what is necessary to address the recommendations and ensure reliable communications. In addition CenterPoint Energy is concerned the proposed Standard may actually have the unintended opposite impact and impair reliable communication. See response to Q3 below.
No
CenterPoint Energy strongly disagrees with any Moderate or higher VSL for failure to document part of a procedure. See proposed VSL's for R1 and R2. The focus should remain on reliable operation of the system. If an entity is consistently using the required elements in its normal and emergency communications, failure to document a portion of that procedure should result in no more than a Lower VSL.
Yes
CenterPoint Energy strongly believes the stakeholder and NERC BOT approved COM-002-3 adequately addresses the FERC directive and no other Standard is necessary. CenterPoint Energy is very concerned regarding certain aspects of the proposed COM-002-4. The Company firmly believes R1.1 has great potential to detract from reliable operation of the Bulk Electric System (BES). By definition, a Reliability Directive is issued when an entity is in an Emergency situation or an unplanned system event has occurred that is causing an Adverse Reliability Impact on the BES. In these situations System Operators are analyzing multiple screens of data, reviewing various options of possible actions to take, and determining the other entities and personnel that need to be notified of the event. To inject a requirement to identify a command as a Reliability Directive into this environment has a high probability of negatively impacting the System Operator's response by causing the System Operator to hesitate in issuing the appropriate command thereby delaying the needed action. In addition this introduces the possibility of confusion on the part of the issuer and the receiver. At what point during an unplanned system event does it become an Emergency and therefore an Operating Instruction becomes a Reliability Directive requiring a special identification? In this highly stressful situation the System Operator does not need to be considering anything else other than what actions need to be taken in order to stabilize the BES and to protect life and property. CenterPoint Energy does not believe this requirement enhances reliable operation of the BES and in fact could impair that reliability at a crucial time. In addition CenterPoint Energy believes R1.8 is unnecessary since it is redundant with current TOP-002-2.1b requirement R18 which requires the use of common line identifiers when referring to transmission facilities of an interconnected network. CenterPoint Energy strongly recommends deletion of R1.1. While the Company believes R1.8 is unnecessary, redundant, and offers no enhancement to reliable communication CenterPoint Energy would be able to support COM-002-4 if R1.1 was deleted.
Individual
Patricia Robertson
BC Hydro

Yes
1. Purpose: The word "tighten" implies what the revisions to the standard are expected to do and doesn't reflect what the standard purpose is. BC Hydro recommends revising. 2. R1.5: Why is the requirement to confirm receipt for only one receiver and not all receivers for the multiple party message?
Group
SPP Standards Review Group
Robert Rhodes
Yes
We can support the combination of the two standards although we still have reservations regarding the need to introduce Operating Instructions in order to address Recommendation 26 which we see as strictly for emergency situations. We provide Recommendation 26 to support our position. “NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations, and ensure that all key parties, including state and local officials, receive timely and accurate information. NERC should task the regional councils to work together to develop communications protocols by December 31, 2004, and to assess and report on the adequacy of emergency communications systems within their regions against the protocols by that date.”
No
The VSLs need to be modified to reflect the changes we propose in response to Question 3.
Yes
In order to more closely link the internal control process in R5 to the implementation of the protocols as required in R3 and R4, we propose revised language for R3 and R4. Additionally, we believe it was the intent of the SDT to provide the flexibility contained in R5 to the DP and GOP in addition to the BA, RC and TOP. Therefore, the DP and GOP should be included in R5. With that linkage established to R3 and R4, we propose that Parts 5.1 and 5.2 be deleted. Associated Measures and VSLs will need to be modified to reflect these changes. For example, the High VSL for R3 should now incorporate the remediation concept since without it the VSL implies zero-tolerance even though consistent pattern language is provided. To be non-compliant the responsible entity would have to demonstrate a consistent pattern of non-adherence to its protocols and a lack of remediation for the given situation. R3 - Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement the documented communications protocols developed in Requirement R1 and remediate noted exceptions for Operating Instructions which are not Reliability Directives in fulfillment of Requirement R5. Exceptions are not allowed for Reliability Directives. R4 - Each Distribution Provider and Generator Operator shall implement the documented communications protocols developed in Requirement R2 and remediate noted exceptions for Operating Instructions which are not Reliability Directives in fulfillment of Requirement R5. Exceptions are not allowed for Reliability Directives. Furthermore, this process should not be an audit of our internal controls. It should be an audit of the implementation of our communications protocols and our efforts to correct exceptions to the non-use of those protocols. This being the case, language such as ‘reasonable

assurance' and 'reasonably designed' which is in both the standard (M3 and M4) and the RSAW (pages 9 and 15) needs to be eliminated. R1.5 and R1.6 cover one-way burst messaging systems which create unique operating situations when it comes to issuing Operating Instructions. In previous versions of COM-003-1 the SDT deleted this requirement. We suggest deleting it in this draft. It is a difficult situation to handle and does not present itself to cleanly handling 3-part communication. Having only one party confirm receipt of a Reliability Directive which has been sent to potentially tens of entities, does not provide a secure mode of operation nor does it address Recommendation 26. To eliminate the possibility of confusion over the use of 'internal operations' we suggest pulling the language in its entirety from COM-001-1.1, R4 into COM-002-4, R1.2. Replace 'real-time' with 'Real-time' in M3, M4 and M5.

Individual

Jason Snodgrass

Georgia Transmission Corporation

No

Both Reliability Directives and Operating Instructions have a HIGH VRF which appears inconsistent with previous drafts of the definitions and use of the two terms. R3 & R4 - While there is the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations were performed as a result. The severe category should be reserved only for those instances in which documented communications protocols were not followed *and* which resulted in an emergency operation or reliability issue. As a result, we suggest "demoting" each existing VSL to a lower level, and editing the Severe VSL and limit it to only those instances that resulted in an emergency operation or reliability issue (suggestions for R4 provided below). Lower - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R2 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving an Operating Instruction *and* resulting in an emergency operation or reliability issue. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R2 when receiving a Reliability Directive *and* resulting in an emergency operation or reliability issue. These aforementioned suggestions could also be duplicated for R3 with respect to issuers.

Yes

R2 - GTC disagrees with the DP and GOP being required to have a documented communications protocol. The requirement should simply require these two entities to use 3-part communication (i.e. repeat back) for Operating Instructions. Requiring a document is a purely administrative requirement and certainly meets the Paragraph 81 criteria. The following is suggested: R2 Each Distribution Provider and Generator Operator that receives an Operating Instruction shall: 2.1 Respond using the English language unless agreed to otherwise. An alternate language may be used for internal operations. 2.1.1 Oral Operating Instructions shall be responded to orally. 2.1.2 Written Operating Instructions shall be responded to in writing.

2.2 Take one of the following actions: • Repeat the Operating Instruction and wait for confirmation from the issuer that the repetition was correct. • Request that the issuer reissue the Operating Instruction. 2.3 Request clarification from the issuer if the communication is not understood when receiving the 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). R5 - GTC believes internal controls type language is not appropriate within Reliability Standards Requirements and recommends deletion of R5. Specifically, since R3 and R4 are requirements to implement the communication protocols of R1 and R2 and must be adhered to (zero tolerance), it seems R5 is unnecessary to meet the objective of this Standard identified in the purpose statement and would seem to be more closely aligned with Paragraph 81 principles as administrative. Additionally, in NERC's own Q&A document for RAI prepared by the Risk-Based Reliability Compliance Working Group (RBRCWG), the following statements are made: "An entity can voluntarily establish internal controls designed to reduce its control risk, which could have a positive influence on the scoping of compliance monitoring by the Regional Entity. Conversely, the entity can voluntarily elect to not establish internal controls or share them with the Regional Entity." This is inconsistent with the direction of the proposed Standard COM-002-4, R5. This not only requires an internal control, but also requires that the control be shared with the Regional Entity (during audits). In summary, internal controls should not be listed as a requirement in a Reliability Standard. This goes against the principle of "Results-Based". The intended result is effective communications. This can be attained with Requirements 1 through 4. However, Requirement 5 is not absolutely necessary for the results to be achieved, and therefore, should not be included in the standard and should be removed. While GTC firmly supports moving away from zero-tolerance standard requirements, the RAI-related compliance elements of the proposed COM-002-4 appear to be premature as the RAI remains under development. Until the RAI program is more fully developed it's unclear how COM-002-4 would be audited. RAI and related changes to the Compliance Monitoring and Enforcement Program (CMEP) must be fully developed to ensure all parties (NERC, Regional Entities and Registered Entities) understand the rules of the road before being asked to approve a standard that relies on information and processes not yet finalized. Additionally, the RSAW for COM-002-4 depends on the implementation of the Reliability Assurance Initiative (RAI) which is not expected to be implemented until 2016. It seems unreasonable to utilize an internal controls approach to auditing until the criteria for such evaluation has been clearly explained to the stakeholders. -Both the terms Operating Instruction and Reliability Directive are used in this standard with little guidance on when to use a Reliability Directive which is described as a type of Operating Instruction.
Individual
Allen Mosher - APPA Staff
American Public Power Association
Yes
APPA staff supports the development and approval of a single, combined communication protocols Reliability Standard that covers emergency, alert and normal operating conditions for the BES, while recognizing that performance expectations for applicable registered entities and

NERC's approach to compliance and enforcement should differentiate between emergency and non-emergency conditions. Our initial review indicates the recently proposed draft standard COM-002-4 strikes an appropriate balance between these considerations, while fully responding to the NERC Board's and Standards Oversight and Technology Committee's Resolutions. We commend the SDT for its efforts. However, additional work is necessary to address technical concerns with the draft standard. See below.

No

No. APPA has concerns with several Compliance Elements, including the VRFs and VSLs in proposed COM-002-4. (1) The VRFs for DPs under R3 and R4 should be lowered, since non-compliance by these functions (within vertically integrated entities) or by these functional entities (if structurally separate) will pose minimal risk to the BES because they do not own or operate BES facilities. BES protective devices such as UFLS and UVLS relays operate automatically. (2) The Severe VSL for R3 and R4 requires specific zero defect performance when a Reliability Directive is issued or received. This is conceptually sound reliability performance objective, but it should be stated in the Requirements, as is the case in COM-002-3, with appropriate limitations to Reliability Directives, rather than burying the Requirement in the VSLs or in other Compliance Elements. (3) More fundamentally, the proposed draft relies heavily on the as-yet untested application of the NERC Reliability Assurance Initiative. Even modest changes to the Compliance Elements of the proposed standard – the Measures, Violation Risk Factors, Violation Severity Levels and Reliability Standard Audit Worksheets – would undermine the balance outlined above. Further delays in the development and implementation of RAI will certainly jeopardize successful implementation of COM-002-4.

Yes

(1) Project Plan: APPA staff supports the development and approval of a single, combined communication protocols Reliability Standard that covers emergency, alert and normal operating conditions for the BES, while recognizing that performance expectations for applicable registered entities and NERC's approach to compliance and enforcement should differentiate between emergency and non-emergency conditions. Our initial review indicates the recently proposed draft standard COM-002-4 strikes an appropriate balance between these considerations, while fully responding to the NERC Board's and Standards Oversight and Technology Committee's Resolutions. We are nonetheless concerned that the severely shortened, 15-day comment and ballot period directed by the Standards Committee for COM-002-4 will foreclose resolution of major technical objections to the proposed standard. (2) Reliability Objectives and Approach to Compliance Assurance: APPA Staff believes a strict, zero defect performance expectation for use of three-part communications by operating personnel is appropriate for the issuance of and response to Reliability Directives during emergencies and other adverse operating conditions on the BES. In marked contrast, the emphasis for Operating Instructions issued during normal conditions should be on behavioral, management and compliance assurance. First, each BES system operator should be trained in three-part communications (and other communication protocols) such that his or her use of such practices during normal operations is equally routine during emergency conditions. Second, each registered entity's management team should be confident that its operating personnel will follow the protocols on a consistent basis and that management practices and controls will

detect both departures from these communication protocols, as well as opportunities for improved performance. Third, NERC and regional compliance and enforcement staff should have reasonable assurance that the evidence proffered by each registered entity demonstrates it meets these performance expectations. (3) Applicability of the Standard: For a number of very practical considerations, APPA Staff urges the SDT, NERC staff and the NERC Board of Trustees to be cautious and measured in their efforts to bring this project to conclusion. The combined communication standard is unusual if not unique among NERC standards in that it touches on the day-to-day activities of thousands of industry employees engaged in real time operations and that its application as drafted will apply to many thousands of routine communications every day. APPA Staff urges the SDT to clarify which operation personnel are subject to the proposed standard, including whether Operating Instructions include oral communications issued and received within a single functional entity. The standard does not clarify such applicability beyond referring to "issuers" and "receivers" of Operating Instructions. Is the standard's applicability limited to NERC certified operators? Control center operating personnel for all functions, even for individuals that do not operate or supervise operation of BES elements? Does the standard include training for field personnel? APPA Staff believes that operators and field personnel should use three-part communications to ensure safety, equipment protection and quality of retail service. However, the proposed open-ended Applicability to potentially ALL operating and field personnel of all BAs, DPs, RCs, TOPs and GOPs is overly broad for a NERC reliability standard. The training burdens and the documentation that each entity has implemented a systematic approach to such training is clearly burdensome. APPA Staff also recommends that the SDT clarify the Applicability of the draft standard, to eliminate applicability to small DPs under either a size threshold such as a peak load of less than 100 MW or that do not operate and staff a 24/7 distribution control center. (4) Compliance Assurance, Implementation Plan and Regulatory Certainty: APPA Staff believes the immature, untested nature of RAI takes the proposed standard beyond "in flight maintenance" into the world of simultaneous program design and operation. A poorly designed or implemented standard could actually increase the risk of BES performance errors, by diverting the focus of operators and management from what is being communicated to how the communication takes place. For these reasons, it is imperative that NERC and the industry have a clear, common understanding of the communication protocols and management controls that will be required at least one year prior to the effective date of the proposed standard. We support a balanced approach that focuses on education and training during a 12-month trial period to allow the industry to implement training programs and test its processes. Any failures identified in an audit or an events analysis during the trial period would not trigger any penalties, but would be noted for further evaluation. After the trial period, any failures would trigger an automatic re-training or coaching of the individual(s) in question, as well as improvements to the registered entity's management controls. Finally, APPA Staff seeks assurance that NERC will not seek to modify the Compliance Elements of proposed COM-002-4 after it has been approved by the registered ballot body, without due process that protects the balance now present in the standard. Even modest changes to the Measures, VSLs, or RSAWs, such as changing "Reliability Directive" to "Operating Instruction" in the Severe VSL for Requirement R3, would transform COM-002-4 into a zero defect standard and drown the

industry and NERC in compliance administrivia.
Individual
Ronald L Donahey
Tampa Electric Company
No
Yes
The issue of zero defect in operating Instructions requiring three way communications is unacceptable. The Notes to the Auditorgiving the auditor unlimited power to determine that the internal controls are not properly designed or is ineffective is not acceptible
Group
National Grid
Michael Jones
Yes
National Grid appreciates the opportunity to provide the following comments. National Grid believes that clear communication is important for the reliable operation of the system in both normal and emergency conditions. To ensure that communication protocols are followed in both normal and emergency conditions, National Grid includes proper communication protocols in continuing operating training. In addition, National Grid has internal controls to assess adherence to communication protocols in both normal and emergency conditions. National Grid's concern regarding COM-002-4 is the additional, open-ended, compliance burden that will be added if communication protocols under normal conditions are added to the scope of the COM standard. National Grid appreciates the information provided in the draft Reliability Standard Audit Worksheet (RSAW) regarding the audit and enforcement approach. It should be clearly described, within the reliability standard, that the reliability standard is not a "zero-defect" standard for every communication. As written, the draft COM-002-4 standard requirements could be interpreted to be "zero-defect" requirements. National Grid provides the following recommended solution for the COM-002-4 standard: Requirements: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall document communications protocols that specify the use of repeat-back and acknowledgements (three-way communication) of Operating Instructions and Reliability Directives for Normal and Emergency communications. 1.1. The communication protocol shall require the issuer and receiver of an oral Operating Instruction to use the English language, unless agreed to otherwise. An alternate language may be used for internal operations. Violation Risk Factor: Low - Time Horizon: Long-term Planning R2. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall implement a method to evaluate the communications protocols developed in requirement R1 that: 2.1. Assesses adherence to the communications protocols to provide feedback to issuers and receivers of Operating Instructions and Reliability Directives. 2.2. Assesses the effectiveness of the communications protocols and modifies those protocols, as necessary. Violation Risk Factor: Low - Time Horizon: Operations Planning

Individual
D Mason
Hetch Hetchy Water and Power
Yes
The Independent Industry Experts Panel provided a "point-on" review of the COM-003 draft standard. That review included recommended some simple and clear language to define the reliability objectives of a combined COM-002/COM-003 Standard. Instead, the drafting team has opted to draft more complex and unintuitive language without any obvious need for the for the additional requirements, despite the availability a simpler, more intuitive solution.
Individual
Ryan Walter
Tri-State Generation and Transmission Association, Inc.
No
Tri-State believes that this proposal goes beyond what was contemplated in the Blackout Recommendation as well as FERC Order 693 directives 1 and 3 of paragraph 540. Additionally, Tri-State feels that a new term to define “Operating Instruction” is not warranted or required to fulfill either the FERC directive or Blackout Recommendations and is creating confusion where it is not needed. While the Final Blackout Report Recommendation 26 recommended tightening communications protocols, it emphasized communications during alerts and emergencies. This draft has pulled Reliability Directives and Operating Instructions into one definition and the draft does little to differentiate between the two. They appear to both be held to the same expectations and standards with minimal differentiation. Further work needs to be done on the definition and differentiation between the expectations and risk for communicating during alerts and emergencies and during normal operating instructions. The additional administrative burden added here for normal Operating Instructions does not add value to BES reliability and substantially increases the compliance burden. Tri-State requests further clarity of the Operations Instructions definition with clear expectations between emergencies, alerts and normal communication. Also, Tri-State requests feedback as to how standards for normal communication will address actual events that occurred during the Blackout and how this standard is providing a foundation for BES risk assessments and prioritization, which the RAI is working towards. R3 and R4 are written in a zero tolerance fashion: “implement the documented communications protocols”. This opens up industry to have to document, review and monitor all communications for emergencies, alerts and normal communications to effectively complete audits with no findings. Having the normal Operating Instructions included with the emergency and alert communications does not allow the industry to maximize their limited resources for the issues that are of higher risk. The added burden of assessing and evaluation the programs for identifying, assessing and correcting (R3-R4 RSAW) are also premature. The industry has not developed and vetted these practices to have a strong and regionally consistent foundation to be audited from. Tri-State requests feedback for what exactly R5 is seeking. R5.1 appears to be a reiteration of R3 and R4 (“implement” versus “assess adherence”). Who or what determines “effectiveness of the

communication protocols” in 5.2? What are the expectations for documentation of this? It is the communication programs and the final results of that program that impact the BES reliability. The internal control programs will support the industry to achieve these goals with more consistency, but should not be included within the standards. Tri-State recommends eliminating R5. Language more specific to the communication as opposed to the control programs should be considered, if needed.
No
In order to develop appropriate VRFs and VSLs, it will be imperative to differentiate between Reliability Directives and Operating Instructions. It must be clear which Operating Instructions will be monitored and audited and the expectations for each type of communication. There is a difference between the risk and impact to the BES under these various conditions and the VSLs should reflect that. Tri-State does not find that evaluating, auditing and administratively following normal Operating Instructions to this degree of specificity provides the BES reliability value that the Blackout recommendations were seeking.
Yes
For the reasons listed in response to Questions 1 and 2, Tri-State cannot support expanding COM-002 as it is shown in this draft. It adds a tremendous amount of administrative burden and does not enhance the BES reliability.
Group
Colorado Springs Utilities
Kaleb Brimhall
SPP Standards Review Group
Yes
Requirement 1.8 should not be included, it is proposed to be removed under Paragraph 81.
Group
Luminant
Brenda Hampton
Yes
While neither the August 2003 Blackout Report Recommendation number 26 nor Order 693 requires three-part communications or any established communication protocol for normal operations, EOP-001-2, R3.1 and COM-002-2, R2 already address the requirements of the Blackout Report and FERC Order 693. Therefore, in keeping the requirements from COM-002-2 as part of the COM-002-4 standard, we can reasonably argue that the Standard addresses the recommendation.
No
We do not agree with VSLs for R3 & R4. While there is the potential of risk if documented communications protocols are not followed, this should not somehow imply that incorrect operations were performed as a result. The severe category should be reserved only for those instances in which documented communications protocols were not followed *and* the Operating Instructions were not implemented correctly which resulted in an Emergency or

Adverse Reliability Impact. As a result, we suggest the following Violation Severity Levels which results in limiting the High and Severe levels to only those instances that resulted in an Emergency or Adverse Reliability Impact: Low - The responsible entity demonstrates a consistent pattern of not using the documented communications protocols developed in Requirement R1 for Operating Instructions that are not Reliability Directives. Moderate – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive. High – The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving an Operating Instruction *and* the Operating Instruction was not implemented correctly resulting in an Emergency or Adverse Reliability Impact. Severe - The responsible entity did not use the documented communications protocols developed in Requirement R1 when issuing or receiving a Reliability Directive *and* the Reliability Directive was not implemented correctly which make the Emergency or Adverse Reliability Impact worse.
Yes
While, under the circumstances, we fully support combining COM-002-3 and COM-003-1 into one communication protocol and appreciate the efforts of the Standards Drafting Team to draft this combined standard in such a short time frame, we do not believe this standard contains clear requirements at this point. Requirements R3 and R4 simply requires the communication protocols to be implemented. The Measure for those requirements requires evidence which may include descriptions of management practices that provide the entity reasonable assurance that protocols are being followed. The RSAW requires the auditor to consider the frequency and volume of communications reviewed as part of the audit process even though communication review is not required by R3 & R4 nor M3 & M4. Additionally we do not believe that this "communication review" should be a requirement to reasonably assure compliance with the communication protocol. Not only is it not necessary to reasonably assure compliance as ongoing periodic training can suffice but due to the fact that we have hundreds of communications with the RC, BA and TOP on a monthly basis and very few if any of those communications result in an Operating Instructions it will be very burdensome to find calls to review. So to reasonably assure compliance with the communication protocol and to not create an undue compliance burden we suggest that R3 & R4 implementation requirement be changed to require periodic communication protocol reviews and ongoing operator training on the communication protocol. In addition, Requirements 1.2 and 2.1 introduce the idea of written Operating Instructions while the other requirements covering the issuance of clear concise instructions and the requirements covering the receipt and understanding of the instruction do not cover written Operating Instructions at all. To ensure that communications are tightened as required by Recommendation #26 and the SAR then the reference to a written instruction should be removed from the requirements and the definition of the Operating Instruction should be refined as follows: “An oral command by operating personnel responsible….”
Individual
Cheryl Moseley

Electric Reliability Council of Texas, Inc.
Yes
ERCOT respectfully submits these comments on COM-002-4 in conjunction with the IRC's input to the NERC BoT, and the IRC SRC comments. ERCOT does not believe that COM-002-4, or COM-003 if it is developed furth.er, should be a zero tolerance standard.
Group
Bonneville Power Administration
Jamison Dye
Yes
Yes
Yes
BPA generally supports the proposed standard and suggests that a note be included for R1.5 and R1.6 stating that one-way burst communications for operating instructions is not recommended as it would limit the ability to receive a response from all entities involved.
Group
PacifiCorp
Ryan Millard
Yes
Yes
Yes
PacifiCorp appreciates the diligence and dedication of the Standard Drafting Team and recognizes the improvements that were made in response to industry comments from the previous draft. There are a few additions, however, that PacifiCorp would like the drafting team to clarify: Firstly, in light of the fact that NERC has not finalized or implemented the RAI project, PacifiCorp would like to know why the drafting team included internal control language in the COM-002-4 RSAW? This language seems to anticipate what the end-state of the RAI Initiative is going to be (see "Note to Auditor" on pages 9-15 of the RSAW). In the absence of a final auditor handbook (which is supposed to be consistent across regions), PacifiCorp would like to know how an auditor can determine whether an internal control is "properly designed" or "effective"? Secondly, in M3 and M4 of the proposed COM-002-4 standard the drafting team has added language that includes, "Evidencing periodic, independent review of operating personnel's adherence to the protocols established in R2 and R5." It does not seem clear to PacifiCorp what the periodicity is expected to be or what constitutes an "independent" review? Although these points do not influence our support of the COM-002-4 standard, PacifiCorp strongly recommends that the drafting reconsider including internal control review language in the RSAW until the RAI initiative has been fully implemented and auditor guidance has been formally developed and distributed across all regions.
Individual

Russell A. Noble
Cowlitz County PUD
No
Please see comment submitted by the Western Small Entity Comment Group, Steve Alexanderson.
Yes
Cowlitz voted affirmative only to avoid the possibility of the BOD circumventing the Standard Development process. Please consider carefully comment by the Western Small Entity Comment Group submitted by Steve Alexanderson. We strongly suggest the standard be further amended as suggested before submittal to FERC.
Group
ACES Standards Collaborators
Ben Engelby
No
(1) This standard does not address the directive to “tighten communications.” This draft is a reproduction of prior COM-003-1 drafts, with unnecessary protocols that do not improve reliability of the BES. For example, it is unnecessary to include a requirement to use the English language in all but a small handful of areas of the Eastern, Western and ERCOT interconnections. This will result in unnecessary compliance burdens that do not support reliability contrary to the RAI. (2) We appreciate the SDT combining COM-002-3 and COM-003-1. (3) Broad applicability to DPs is inappropriate. DPs do not operate or own Elements of the BES. Thus, they cannot "change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System" as defined in the definition of Operating Instruction. Thus, they will never receive an operating instruction and should not be put in the position of having to demonstrate compliance with a requirement that can never impact them. This approach is contrary to the RAI initiative to refocus compliance efforts on higher risk requirements that actually impact reliability. While a DP may be required to reduce load, this is essentially a reliability directive and not an operating instruction. What other actions would a BA, TOP or RC require of a DP besides to reduce load? We can think of none and cannot fathom applicability for operating instructions to DPs.
No
We disagree with the content of COM-003-1, as there should not be detailed protocols. Since we disagree with the content of the standard, we also disagree with the VSLs. Further, both Reliability Directives and Operating Instructions have a HIGH VRF which appears inconsistent with previous drafts of the definitions and use of the two terms.
Yes
We do not understand the urgency to request a waiver to the SPM for this project. The NERC BOT resolution did not require a new standard to be developed by the November BOT meeting. Due to the shortened time frame, industry does not have enough time to fully vet the issues with SMEs. This standard lacks technical justification to justify the reduced comment and ballot period. There are serious compliance impacts from the proposed requirements and not enough

guidance on when to self-report instances of miscommunication. This will only further serve to perpetuate the current compliance approaches that place too much emphasis on minor details that do not support reliability.
Individual
RoLynda Shumpert
South Carolina Electric and Gas
Agree
SERC OC Review Group
Individual
Kenn Backholm
Public Utility District No.1 of Snohomish County
Agree
American Public Power Association ("APPA")
Individual
John Tolo
Tucson Electric Power
Yes
Yes
Yes
While I agree with the combining of COM standards, I have a disagreement with the definition of operating instruction. I would whole-heartedly agree that this protocol be adhered to during emergency or abnormal conditions, but not during normal conditions. The mere fact that a System Operator calls a remote generation plant to raise 25-30-50 MW should not necessitate a three-point communication. There are times when those instructions are given to another System Operator who then calls the plant, therefore doubling up on three-point communications.