

Operating Personnel Communications Protocols Project 2007-02

Unofficial Comment Form for Standard COM-003-1 —Operating Personnel Communications Protocols

Please **DO NOT** use this form. Please use the [electronic comment form](#) located at the link below to submit comments on the proposed draft COM-003-1 Operating Personnel Communications Protocols standard. Comments must be submitted by **September 20, 2012**. If you have questions please contact Joseph Kriasiak at Joseph.Kriasiak@nerc.net or by telephone at 609-651-0903.

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

Background Information

Effective communication is critical for real-time operations. Failure to successfully communicate clearly can create misunderstandings resulting in improper operations increasing the potential for failure of the BES.

The Standard Authorization Request (SAR) for this project was initiated on March 1, 2007 and approved by the Standards Committee on June 8, 2007. It established the scope of work to be done for Project 2007-02 Operating Personnel Communications Protocols (OPCP SDT). The scope described in the SAR is to establish essential elements of communications protocols and communications paths, such that operators and users of the North American Bulk Electric System will efficiently convey information and ensure mutual understanding. The August 2003 Blackout Report, Recommendation Number 26, calls for a tightening of communications protocols. FERC Order 693 paragraph 532 amplifies this need and applies it to all Operating Instructions. This proposed standard's goal is to ensure that effective communication is practiced and delivered in clear language and standardized format via pre-established communications paths among pre-identified operating entities.

The SAR indicated that references to communication protocols in other NERC Reliability Standards may be moved to this new standard. The SAR instructed the standard drafting team to consider incorporating the use of Alert Level Guidelines and three-part communications in developing this new standard to achieve high level consistency across regions. The SDT believes the Alert Level Guidelines, while valuable, belong in a separate standard and has petitioned the Standards Committee to approve the transfer to another standard or to start a separate project.

The upgrade of communication system hardware where appropriate is not included in this project (it is included in NERC Project 2007-08 Emergency Operations).

The standard will be applicable to Transmission Operators, Transmission Owners, Balancing Authorities, Reliability Coordinators, Generator Operators, and Distribution Providers. These requirements 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 directives, notifications, directions, instructions, orders, or other reliability related operating information.

The purpose statement of COM 003-1 states: "To provide system operators uniform communications protocols that reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of BES."

- 1) **New NERC Glossary terms:** The SDT has changed the definition Operating Communications proposed in the Standard version 2 and added *Operating Instructions*. *Operating Instructions* more accurately define the broad class of communications that deal with changing or altering the state of the BES. Changes to the BES operating state with unclear communications create increased opportunities for events that could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.

This term is proposed for addition to the NERC Glossary to establish meaning and usage within the electricity industry.

- 2) **Documented Communication Protocols:** The OPCP SDT has incorporated a requirement for an applicable entity to have documented communication protocols that incorporate the following elements:
 - a) **English language:** Use of the English language when issuing an oral or written Operating Instruction between functional entities, unless another language is mandated by law or regulation. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.
 - b) **24-hour clock R1 Part 1.2 and time zone reference R1 Part 1.3:**

Use the 24-hour clock format when referring to clock times when issuing an oral or written Operating Instruction.

When issuing an oral or written Operating Instruction between functional entities in different time zones, include the time, time zone and indicate whether the time is daylight saving time or standard time. (Example: 1500 EST or Eastern Standard Time)

The OPCP SDT proposed this change to address comments by industry while adhering to the recommendations of the August 14, 2003 task force report.
 - c) **Line and equipment identifiers:** When referring to a Transmission interface Element or a Transmission interface Facility in an oral or written Operating Instruction between functional entities, use the name specified by the owner(s) for that Transmission interface Element or Transmission interface Facility unless another name is mutually agreed to by the functional entities.
 - d) **Alpha-numeric clarifiers:** Use of alpha-numeric clarifiers when issuing an oral Operating Instruction for Facilities and Elements in instances where the nomenclature of Facilities or Elements are in alpha-numeric format (e.g. if an entity designated a circuit breaker "12B" 12B would need alpha-numeric clarifiers if used in an oral Operating Instruction).

- e) **Three-part Communication:**
When issuing an oral two-party, person-to-person Operating Instruction, require the issuer to:
- Confirm that the response from the recipient of the Operating Instruction was accurate, or
 - Reissue the Operating Instruction to resolve a misunderstanding.
- When receiving** an oral two-party, person-to-person Operating Instruction, require the recipient to repeat, restate, rephrase, or recapitulate the Operating Instruction.
- f) **One-way burst messaging system to multiple parties (all call):** When receiving an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (e.g. an all call system), request clarification from the initiator if the communication is not understood.
- g) **Three-part Communication: For Distribution Providers (DP) and Generator Operators (GOP):** When receiving an oral two-party, person-to-person Operating Instruction, require the recipient to repeat, restate, rephrase, or recapitulate the Operating Instruction.
- h) **One-way burst messaging system to multiple parties (all call): For Distribution Providers (DP) and Generator Operators (GOP):** When receiving an oral Operating Instruction through a one-way burst messaging system used to communicate a common message to multiple parties in a short time period (e.g. an all call system), request clarification from the initiator if the communication is not understood.
- 3) **Implement a process for identifying deficiencies:** (COM-003-1, R3 and R4) The SDT proposes a process to identify, assess and correct deficiencies with adherence to the documented communication protocols. The process is evaluated to determine and improve its effectiveness. Deficiencies that are identified, assessed and corrected will not be determined as non-compliant.
- 4) **VSL and VRF Changes from version two:** The OPCP SDT reviewed the VRFs and VSLs associated with R1, R2, R3 and R4 and made changes to more closely conform to NERC and FERC guidelines.

The SDT is proposing to retire Requirement R4 from COM-001 and incorporate it into Requirement R2 of this draft COM-003-1. Since Requirement R4 from COM-001-1 carries over essentially unchanged there is no specific question related to it in this comment form.

The choice of VRFs was made on the basis of the potential impact on the Bulk Electric System of a miscommunication during Operating Instructions. Requirements R1 and R2 are assigned a Low Violation Risk Factor due to their potential direct impact on BES reliability. Requirements R3 and R4 are assigned a Medium Violation Risk due to their potential direct impact on BES reliability.

Time Horizons were selected to reflect the period within which the requirements applied. Requirements R1 and R2 must be implemented in long term planning operations and therefore

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were assigned a Time Horizon of Long Term Planning. Requirements R3 and R4 must be implemented during operations planning and therefore were assigned a Time Horizon of Operations Planning. The drafting team is posting the standard for industry comment for a 30-day comment period.

The Operating Personnel Communications Protocols Drafting Team would like to receive industry comments on this draft standard. Accordingly, we request that you include your comments on this form by **September 20, 2012**.

Comment Form

***Please use the [electronic comment form](#) to submit your final comments to NERC.**

1. Do you agree with the changes made to the proposed definition "Operating Instruction" (now proposed as a "*Command from a System Operator to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System?*") to be added as a term for the NERC Glossary? If not, please explain in the comment area.

Yes

No

2. The SDT has proposed that the applicable entities have documented communication protocols that incorporate elements listed in COM-003-1, R1 and R2. Do you agree with these proposed requirements? If not, please explain in the comment area.

Yes

No

3. The SDT has proposed requirements (COM-003-1, R3 and R4) for applicable entities to implement a process to identify, assess and correct deficiencies related to the entity's documented communication protocols; and to evaluate that process based on deficiencies found externally from the process. Do you agree with the proposed requirements? If not, please explain in the comment area.

Yes

No

4. Do you agree with the VRFs and VSLs for Requirements R1, R2, R3 and R4?

Yes

No

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

Comments:

Question 1:

We suggest changing 'command' to 'order'. The definition would then read 'An order from a System Operator...'

Question 2:

The wording in R2.1 is awkward, we suggest the following:

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When receiving an oral two party, person-to-person Operating Instruction, the recipient is required to repeat, restate, rephrase, or recapitulate the Operating Instruction.

The one-way burst messaging in R1.9 and R2.2 is confusing to us in that we don't understand how you request clarification over a one-way messaging system.

As written there is no 'out' for an entity that cannot perform the Operating Instruction as given. An entity has the option of not performing a Reliability Directive if that directive violates regulatory, safety, equipment, or statutory requirements (TOP-001, R3). A similar exemption needs to be incorporated in COM-003.

Question 3:

Delete 'potential' in R3.1 and R4.1.

Question 4:

The Severe VSL for R2 contains a typo and should be reworded to read: 'The responsible entity did not include Parts 2.1 to 2.2 of Requirement 2...'

We would suggest that the VRFs for R3 and R4 be reduced to Low. The VRFs for R1 and R2 are Low. R3 and R4 are processes that monitor R1 and R2; therefore, they should not be treated more severely than R1 and R2.

Generic comments:

The processes outlined in R3 and R4 would be sufficient in themselves but with the requirements of PER-005 regarding identifying gaps and training to eliminate those gaps, it would appear that R3 and R4 add unnecessary duplication. Why do we need to have the same requirements in two different standards? Do some of the issues that are being addressed in the Paragraph 81 project come into play here?

Given the approval of COM-002-3 which places requirements on the DP and GOP when receiving a Reliability Directive, there appears to be the possibility of confusion regarding specific requirements on the DP and GOP in COM-003. During the COM-003 webinar, the comment was made that if COM-003 is approved, there may be a new project that would attempt to more efficiently coordinate the two standards. We would be supportive of that effort.

The papers referenced in the Rationale and Technical Justification document supporting the need for this standard should be made available for review if the drafting team is using them as support for the justification for COM-003.