

Standard Development Roadmap

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed:

1. The Standards Committee (SC) approved the Standard Authorization Request (SAR) for posting on March 1, 2007.
2. The SAR was posted for comment from March 19 through April 17, 2007.
3. The SC sought SAR drafting team nominations April 18 through May 2, 2007.
4. The SAR drafting team posted reply comments to industry comments received on the first posting SAR on June 8, 2007
5. Standard drafting team appointed by SC Executive Committee on June 28, 2007
6. Version 1 draft of Standard posted November 2009 for Informal Comments closed January 15 2010.
7. Version 2 draft of Standard posted May 2012 for Formal Comments, Initial Ballot closed June 20 2012.
8. Version 3 draft of Standard posted August 2012 for Formal Comments, ~~Initial~~ Ballot closed September ~~2022~~, 2012.
9. Version 4 draft of Standard posted November 2012 for Formal Comments, Ballot closed December 13, 2012.

Description of Current Draft:

This is the ~~fourth~~fifth draft of a new standard requiring the use of standardized communication protocols during normal and emergency operations to improve situational awareness and shorten response time. The drafting team requests posting for a 30-day concurrent Formal Comment period and Ballot.

Future Development Plan:

Anticipated Actions	Anticipated Date
<u>1. Drafting team considers comments, makes conforming changes, and requests SC approval to proceed to pre-ballot comment period.</u>	<u>February 2013</u>
1.2. <u>Second</u> Third Successive Ballot of Standards	November 2012 <u>March 2013</u>
2.3. Recirculation ballot of standards.	January <u>April</u> 2013

<u>3.4.</u> Board adopts standards.	February <u>May</u> 2013
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Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

When using terms or phrases contained in the Reliability Standards Glossary of Terms for communications it should be cited as the source. When used in written communications, terms or phrases contained in the Reliability Standards Glossary of Terms are capitalized.

Operating Instruction —A command by a System Operator of a Reliability Coordinator, or of a Transmission Operator, or of a Balancing Authority, where the recipient of the command is expected to act, to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. Discussions of general information and of potential options or alternatives to resolve BES operating concerns are not commands and are not considered Operating Instructions.

A. Introduction

1. **Title:** Operating Personnel Communications Protocols
2. **Number:** COM-003-1
3. **Purpose:** To provide System Operators ~~uniform~~predefined communications protocols that reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of BES.
4. **Applicability:**
 - 4.1. **Functional Entities**
 - 4.1.1 Balancing Authority
 - 4.1.2 Distribution Provider
 - 4.1.3 Generator Operator
 - 4.1.4 Reliability Coordinator
 - 4.1.5 Transmission Operator
5. **(Proposed) Effective Date:** First day of first calendar quarter, twelve (12) calendar months following applicable regulatory approval; or, in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter twelve (12) calendar months from the date of Board of Trustee adoption. _____

~~6. Background:~~

~~The SDT has incorporated within this standard a recognition that these requirements should not focus on individual instances of failure as a basis for violating the standard. In particular, the SDT has incorporated an approach to empower and enable the industry to identify, assess, and correct deficiencies in the implementation of certain requirements. The intent is to change the basis of a violation in those requirements so that they are not focused on whether there is a deficiency, but on identifying, assessing, and correcting deficiencies. It is presented in those requirements by modifying “implement” as follows:~~

~~Each ... shall implement, in a manner that identifies, assesses, and corrects deficiencies, ...~~

~~The term *documented communication protocols* refers to a set of required protocols specific to the Functional Entity. This term does not imply any particular naming or approval structure beyond what is stated in the requirements. An entity should include as much as it believes necessary in their documented protocols, but they must address all of the applicable parts of the Requirement. The documented protocols themselves are not required to include the “... identifies, assesses, and corrects deficiencies, ...” elements described in the preceding paragraph, as those aspects are related to the manner of implementation of the documented protocols and could be accomplished through other controls or compliance management activities.~~

B. Requirements

R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop and implement, in a manner that identifies, assesses and corrects deficiencies, documented communication protocols for Operating Instructions between Functional Entities that include that outline the communications expectations of its System Operators. The documented communication protocols will address, where applicable, the following: ~~[~~Violation Risk Factor: Medium-Low ~~]~~ [Time Horizon: Long-term Planning]

1.1. Use of the English language when issuing or responding to an oral or written Operating Instruction or Reliability Directive, unless another language is mandated by law or regulation.

~~1.~~ Use of the 24-hour clock format when referring to clock times Instances that require time identification when issuing an oral or written Operating Instruction.

~~1.2.~~ Use of the time, the or Reliability Directive, and the format for that time zone where the action will occur and indication of whether the time is daylight saving time or standard time identification.

~~1.2.1.3.~~ Nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction ~~that refers to clock times between Functional Entities in different time zones~~ or Reliability Directive.

~~2.~~ Use of the name specified by the owner(s) for each Transmission interface Element or Transmission interface Facility when referring to a Transmission interface Element or a Transmission interface Facility in an oral or written Operating Instruction , unless another name is mutually agreed to by the Functional Entities.

~~1.3.1.4.~~ Use of Instances where alpha-numeric clarifiers are necessary when issuing an oral Operating Instruction ~~for Facilities and Elements in instances where the nomenclature of Facilities or Elements is in alpha-numeric or Reliability Directive, and the format (~~ for example if an entity designated a circuit breaker “One two Bravo” (12B). ~~One two Bravo would need alpha-numeric~~ those clarifiers if used in an oral Operating Instruction).

~~1.4.1.5.~~ When issuing Instances where the issuer of an oral two party, person-to-person Operating Instruction, ~~require the issuer~~ 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.

Implementation means (in R1, R2 R3 and R4) incorporating the communication protocols into processes, policies, procedures, training programs and assessment programs to support setting and attaining the communication expectations of operators (R3) and System Operators (R1).

1.5.1.6. ~~When receiving~~ Require the recipient of an oral two party, person-to-person Operating Instruction, ~~require the recipient~~ to repeat, restate, rephrase, or recapitulate the Operating Instruction, if requested by the issuer.

1.6.1.7. ~~When issuing~~ Instances where the issuer of an oral Operating Instruction ~~through~~ Reliability Directive using a one-way burst messaging system ~~used~~ to communicate a common message to multiple parties in a short time period (~~for example~~ e.g. an all-call All Call system) ~~;~~ is required to verbally or electronically confirm receipt from at least one or more receiving parties party.

1.8. ~~When receiving~~ Require the receiver of an oral Operating Instruction ~~through~~ Reliability Directive using a one-way burst messaging system ~~used~~ to communicate a common message to multiple parties in a short time period (~~for example~~ e.g. an all-call All Call system) ~~;~~ to request clarification from the ~~initiator~~ issuer if the communication is not understood.

1.7.1.9. Coordination with affected Reliability Coordinators', Balancing Authorities', Transmission Operators', Distribution Providers', and Generator Operators' communication protocols.

R2. 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 R1. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Operations Assessment]

R2.R3. Each Distribution Provider and Generator Operator shall develop and implement, in a manner documented communication protocols that identifies, assesses and corrects deficiencies, outline the communications expectations of its operators. The documented communication protocols for Operating Instructions between Functional Entities that include will address, where applicable, the following: [Violation Risk Factor: MediumLow] [Time Horizon: Long-term Planning]

3.1. ~~When receiving~~ Use of the English language when responding to an oral or written Operating Instruction or Reliability Directive, unless another language is mandated by law or regulation.

3.1.3.2. Require the recipient of an oral two party, person-to-person Operating Instruction, ~~require the recipient~~ to repeat, restate, rephrase, or recapitulate the Operating Instruction, if requested by the issuer.

3.2.3.3. ~~When receiving~~ Require the receiver of an oral Operating Instruction ~~through~~ Reliability Directive using 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~~ All Call system) ~~;~~ to request clarification from the ~~initiator~~ issuer if the communication is not understood, ~~if required by the issuer.~~

R4. 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 R3. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning /Operations Assessment]

C. Measures

- M1.** ~~Evidence must include each applicable entity's~~Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide its documented communications protocols developed for Requirement R1 ~~and must demonstrate.~~ Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide evidence that ~~the protocols have been~~it implemented in a manner its documented communication protocols that identifies, assesses and corrects deficiencies. it developed for Requirement R1 which may include, but is not limited to, its policies, procedures, and or operator training.
- M2.** ~~Evidence must include each applicable entity's~~Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide the results of its periodic assessment and of any corrective actions (if any corrective actions were implemented) developed for Requirement R2.
- M3.** Each Distribution Provider and Generator Operator shall provide its documented communications protocols developed for Requirement ~~R2 and must demonstrate~~R3. Each Distribution Provider, and Generator Operator shall provide evidence that ~~the it implemented its documented communication~~ protocols have been implemented in a manner that identifies, assesses and corrects deficienciesit developed for Requirement R3 which may include, but is not limited to, its policies, procedures, and or operator training.
- ~~M2.~~**M4.** Each Distribution Provider and Generator Operator shall provide the results of its periodic assessment and of any corrective actions (if any corrective actions were implemented) developed for Requirement R4.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

~~The Regional Entity shall serve as~~As defined in the NERC Rules of Procedure, "Compliance Enforcement Authority-(CEA) unless" means NERC or the ~~applicable entity is owned, operated, or controlled by~~Regional Entity in their respective roles of monitoring and enforcing compliance with the Regional Entity. In such cases the ERO or a Regional Entity approved by FERC or other applicable governmental authority shall serve as the CEA.

NERC Reliability Standards.

1.2. Data Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, 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.

Each Transmission Operator, Balancing Authority, Reliability Coordinator, Generator Operator, and Distribution Provider shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall retain evidence ~~of its manner that identifies, assesses and corrects deficiencies~~ for Requirement R1 Measure M1 for the most recent 90 days.

Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall retain evidence for Requirement R2 Measure M2 for the most recent 180 days.

Each Distribution Provider and Generator Operator shall retain evidence ~~of its manner that identifies, assesses and corrects deficiencies~~ for Requirement ~~R2~~R3 Measure ~~M2~~M3 for the most recent 90 days.

Each Distribution Provider and Generator Operator shall retain evidence for Requirement R4 Measure M4 for the most recent 180 days.

If a Transmission Operator, Balancing Authority, Reliability Coordinator, Generator Operator or Distribution Provider is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved or for the time period specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Compliance Monitoring and Assessment Processes

Compliance Audit

Self-Certification

Spot Checking

Compliance Investigation

Self-Reporting

Complaint

1.3. Additional Compliance Information

None

R #	Time Horizon		VRF	Violation Severity Levels			
				Lower VSL	Moderate VSL	High VSL	Severe VSL

COM-003-1 Operating Personnel Communications Protocols

<p>R1</p>	<p>Long Term Planning</p>	<p>Low</p>	<p>The Responsible Entity did not include<u>address</u> one (1) of the nine (9) parts of Requirement R1, Parts 1.1 to 1.9 in R1 in their documented communication protocols <u>as required in Requirement R1</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement one (1) of the nine (9) parts of Requirement R1 in their documented communication protocols as required in Requirement R1</u></p>	<p>The Responsible Entity did not include<u>address</u> two (2) of the <u>nine (9)</u> parts of Requirement R1, Parts 1.1 to 1.9 in their documented communication protocols <u>as required in Requirement R1</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement two (2) of the nine (9) parts of Requirement R1 in their documented communication protocols as required in Requirement R1</u></p>	<p>The Responsible Entity <u>did not</u> include<u>address</u> three (3) of the <u>nine (9)</u> parts of <u>Requirement R1, Parts 1.1 to 1.9</u> in their documented communication protocols <u>as required in Requirement R1</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement three (3) of the nine (9) parts of Requirement R1 in their documented communication protocols as required in Requirement R1</u></p>	<p>The Responsible Entity did not include<u>address</u> four (4) or more of the <u>nine (9)</u> parts of <u>Requirement R1, Parts 1.1 to 1.9</u> in their documented communication protocols <u>as required in Requirement R1</u></p> <p><u>OR</u></p> <p>The Responsible Entity did not have <u>any</u> documented communication protocols as required in Requirement R1</p> <p><u>OR</u></p> <p>The Responsible Entity did not implement, in a manner that identifies, assesses and corrects deficiencies, their <u>any</u> documented communication protocols as required in Requirement R1</p>
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COM-003-1 Operating Personnel Communications Protocols

R2	Long-Term Planning	Low	N/A	N/A	The Responsible Entity did not include one (1) of the two (2) parts of Requirement R2, Parts 2.1 to 2.2 in their documented communication protocols	The Responsible Entity did not include Parts 2.1 to 2.2 of Requirement R2, in their documented communication protocols OR The responsible entity did not have documented communication protocols as required in Requirement R2 OR The Responsible Entity did not implement, in a manner that identifies, assesses and corrects deficiencies, their documented communication protocols as required in Requirement R2
<u>R #</u>	<u>Time Horizon</u>	<u>VRF</u>	<u>Violation Severity Levels</u>			
			<u>Lower VSL</u>	<u>Moderate VSL</u>	<u>High VSL</u>	<u>Severe VSL</u>

COM-003-1 Operating Personnel Communications Protocols

<u>R2</u>	<u>Operations Planning</u> <u>Operations Assessment</u>	<u>Medium</u>	<u>The Responsible Entity performed periodic assessments of its System Operators' communication practices and implemented 50 % or more but not all corrective action identified in Requirement R2 necessary to meet the expectations in its documented communication protocols developed for Requirement R1.</u>	<u>The Responsible Entity performed periodic assessments of its System Operators' communication practices and implemented less than 50 % of the corrective actions identified in Requirement R2 necessary to meet the expectations in its documented communication protocols developed for Requirement R1.</u>	<u>The Responsible Entity performed periodic assessments of its System Operators' communication practices but did not implement any corrective actions identified in Requirement R2 necessary to meet the expectations in its documented communication protocols developed for Requirement R1.</u>	<u>The Responsible Entity did not perform periodic assessments of its System Operators' communication practices identified in Requirement R2 necessary to meet the expectations in its documented communication protocols developed for Requirement R1.</u>
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COM-003-1 Operating Personnel Communications Protocols

<p><u>R3</u></p>	<p><u>Long Term Planning</u></p>	<p><u>Low</u></p>		<p><u>The Responsible Entity did not address one (1) of the three(3) parts of Requirement R3 in their documented communication protocols as required in Requirement R3</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement one (1) of the three(3) parts of Requirement R3 in their documented communication protocols as required in Requirement R3</u></p>	<p><u>The Responsible Entity did not address two (2) of the three(3) parts of Requirement R3 in their documented communication protocols as required in Requirement R3</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement two (2) of the three(3) parts of Requirement R3 in their documented communication protocols as required in Requirement R3</u></p>	<p><u>The Responsible Entity did not address three (3) of the three(3) parts of Requirement R3 in their documented communication protocols as required in Requirement R3</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not develop any documented communication protocols as required in Requirement R3</u></p> <p><u>OR</u></p> <p><u>The Responsible Entity did not implement any documented communication protocols as required in Requirement R3</u></p>
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COM-003-1 Operating Personnel Communications Protocols

R4	<u>Operations Planning</u> <u>Operations Assessment</u>	<u>Medium</u>	<u>The Responsible Entity performed periodic assessments of its operators' communication practices and implemented 50 % or more but not all corrective action identified in Requirement R4 necessary to meet the expectations in its documented communication protocols developed for Requirement R3.</u>	<u>The Responsible Entity performed periodic assessments of its operators' communication practices and implemented less than 50 % of the corrective actions identified in Requirement R4 necessary to meet the expectations in its documented communication protocols developed for Requirement R3.</u>	<u>The Responsible Entity performed periodic assessments of its operators' communication practices but did not implement any corrective actions identified in Requirement R4 necessary to meet the expectations in its documented communication protocols developed for Requirement R3</u>	<u>The Responsible Entity did not perform assessments of its operators' communication practices and did not meet the expectations in its documented communication protocols developed for Requirement R3.</u>
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E. Regional Variances

None.

Version History

Version	Date	Action	Change Tracking