

Project 2007-02: Operating Personnel Communication Protocols

Mapping Document

COM-001-1.1 to COM-002-4

Board Approved Standard	Proposed Replacement Requirement(s)
<p>COM-001-1.1</p> <p>R4. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, and Balancing Authority shall use English as the language for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.</p>	<p>COM-002-4</p> <p>R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall have documented communications protocols. The protocols shall, at a minimum: <i>[Violation Risk Factor: Low][Time Horizon: Long-term Planning]</i></p> <p>1.1. Require the issuer and receiver of an oral or written Operating Instruction to use the English language, unless agreed to otherwise. An alternate language may be used for internal operations</p>
<p>Notes: Moved COM-001-1 R4 into COM-002-4 Requirement R1 Part 1.1 and modified language to include the defined term "Operating Instruction."</p>	

COM-002-2 to COM-002-3

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<p>COM-002-2</p> <p>R1. Each Transmission Operator, Balancing Authority, and Generator Operator shall have communications (voice and data links) with appropriate Reliability Coordinators, Balancing Authorities, and Transmission Operators. Such communications shall be staffed and available for addressing a real-time emergency condition. <i>[Violation Risk Factor: High]</i></p> <p>R1.1 Each Balancing Authority and Transmission Operator shall notify its Reliability Coordinator, and all other potentially affected Balancing Authorities and Transmission Operators through predetermined communication paths of any condition that could threaten the reliability of its area or when firm load shedding is anticipated. <i>[Violation Risk Factor: High]</i></p>	<p>The Project 2006-06 SDT retired COM-002-2, R1 and R1.1. The following rationale was provided by that drafting team in Implementation Plan for Draft 6 of Project 2006-06:</p> <p>“The communications requirements of R1 are addressed in existing COM-001-1.1 as well as the proposed COM-001-2 requirements. Additionally, IRO-010-1a addresses data provisions.</p> <p>The Project 2006-06 SDT contends that COM-002-2, R1.1 is a low level facilitating requirement that is more appropriately and inherently monitored under various higher level performance-based reliability requirements for each entity throughout the body of standards. Examples include:</p> <ul style="list-style-type: none"> • EOP-002-1, R3 – outlines BA to RC communications. IRO-001-1, R3 requires adequate telecommunication for the Reliability Coordinator to direct actions of multiple entities, including TOPs and BAs. • TOP-001-1, R3 requires adequate telecommunications facilities for the TOP, BA, and GOP to be able to receive directives from the RC. • TOP-001-1, R5 requires communications between TOPs and RCs for emergency situations. • TOP-005-1, R1 and R3 require adequate telecommunications for BAs and TOPs to provide each other with operating data as well as providing data to the RC.

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	<ul style="list-style-type: none"> TOP-006-1, R1 requires adequate telecommunications for the GOP to inform the BA and TOP of resources. The BA and TOP will then inform the RC, other TOP and BAs of all transmission and generation available for use. PER-001-1, R1 and PER-004-1, R1 set forth the staffing requirements.”
<p>Notes: None. The rationale provided above is available at the following hyperlink: Project 2006-06 Draft 6 Implementation Plan</p>	
<p>COM-002-2</p> <p>R2. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall issue directives in a clear, concise, and definitive manner; shall ensure the recipient of the directive repeats the information back correctly; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings. <i>[Violation Risk Factor: Medium]</i></p>	<p>COM-002-3</p> <p>The Project 2006-06 expanded COM-002-2 R2 into three requirements in COM-002-3:</p> <p>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. <i>[Violation Risk Factor: High][Time Horizon: Real-Time]</i></p> <p>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. <i>[Violation Risk Factor: High][Time Horizon: Real-Time]</i></p> <p>R3. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a Reliability Directive shall either: <i>[Violation Risk Factor: High] [Time Horizon: Real-Time]</i></p> <ul style="list-style-type: none"> Confirm that the response from the recipient of the

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	Reliability Directive (in accordance with Requirement R2) was accurate, or <ul style="list-style-type: none"> • Reissue the Reliability Directive to resolve any misunderstandings.
Notes: The Project 2006-06 expanded the list of responsible entities to include the DP and GOP and subdivided the requirement to improve clarity.	

COM-002-3 to COM-002-4

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COM-002-3 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. <i>[Violation Risk Factor: High][Time Horizon: Real-Time]</i>	COM-002-4 None
Notes: The Project 2007-02 SDT removed the term “Reliability Directive” in order to avoid complications that may result from the Notice of Proposed Rulemaking issued by the Federal Energy Regulatory Commission on November 21, 2014 proposing to remand the definition of “Reliability Directive”. COM-002-4 uses the defined term Operating Instruction to define the circumstances when documented communications protocols must be used, and uses the phrase “Operating Instruction during an Emergency” to designate Operating Instructions that would have qualified as Reliability Directives. The Project 2007-02 SDT coordinated with the Project 2009-02 Real time Operations team and Project 2006-06 SDT and all parties agreed that requirement for an issuer to identify a command as a	

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Reliability Directive is not a communication protocol, and will be considered by each team for future modifications.	
<p>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. <i>[Violation Risk Factor: High][Time Horizon: Real-Time]</i></p> <p>R3. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a Reliability Directive shall either: <i>[Violation Risk Factor: High] [Time Horizon: Real-Time]</i></p> <ul style="list-style-type: none"> • Confirm that the response from the recipient of the Reliability Directive (in accordance with Requirement R2) was accurate, or <p>Reissue the Reliability Directive to resolve any misunderstandings.</p>	<p>R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop documented communications protocols for its operating personnel that issue and receive Operating Instructions. The protocols shall, at a minimum: <i>[Violation Risk Factor: Low][Time Horizon: Long-term Planning]</i></p> <p>1.1 Require its operating personnel that issue and receive an oral or written Operating Instruction to use the English language, unless agreed to otherwise. An alternate language may be used for internal operations.</p> <p>1.2. Require the issuer of an oral two-party, person-to-person Operating Instruction to wait for a response from the receiver. Once a response is received, or if no response is received, require the issuer to take one of the following actions:</p> <ul style="list-style-type: none"> • Confirm the receiver’s response if the repeated information is correct. • Reissue the Operating Instruction if the repeated information is incorrect or if requested by the receiver. • Take an alternative action if a response is not received or if the Operating Instruction was not understood by the receiver. <p>1.3 Require its operating personnel that receive an oral two party, person-to-person Operating Instruction to take</p>

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	<p>one of the following actions:</p> <ul style="list-style-type: none"> • Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct. • Request that the issuer reissue the Operating Instruction. <p>1.4 Require its operating personnel that issue a written or oral single-party to multiple-party burst Operating Instruction to confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction.</p> <p>1.5 Specify the instances that require time identification when issuing an oral or written Operating Instruction and the format for that time identification.</p> <p>1.6 Specify the nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction.</p> <p>R2. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall conduct initial training for each of its operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System on the documented communications protocols developed in Requirement R1 prior to that individual operator issuing an Operating Instruction. <i>[Violation Risk Factor: Low][Time Horizon: Long-term Planning]</i></p> <p>R3. Each Distribution Provider and Generator Operator shall conduct initial training for each of its operating personnel</p>

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	<p>who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction to either: <i>[Violation Risk Factor: Low][Time Horizon: Long-term Planning]</i></p> <ul style="list-style-type: none"> • Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct, or • Request that the issuer reissue the Operating Instruction. <p>R4. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall at least once every twelve (12) calendar months: <i>[Violation Risk Factor: Medium][Time Horizon: Operations Planning]</i></p> <ol style="list-style-type: none"> 4.1. Assess adherence to the documented communications protocols in Requirement R1 by its operating personnel that issue and receive Operating Instructions, provide feedback to those operating personnel and take corrective action, as appropriate to address deviations from the documented protocols. 4.2. Assess the effectiveness of its documented communications protocols in Requirement R1 for its operating personnel that issue and receive Operating Instructions and modify its documented communication protocols, as necessary.

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	<p>R5. Each Balancing Authority, Reliability Coordinator, and Transmission Operator that issues an oral two-party, person-to-person Operating Instruction during an Emergency, excluding written or oral single-party to multiple-party burst Operating Instructions, shall either: <i>[Violation Risk Factor: High][Time Horizon: Real-time Operations]</i></p> <ul style="list-style-type: none"> • Confirm the receiver’s response if the repeated information is correct (in accordance with Requirement R6). • Reissue the Operating Instruction if the repeated information is incorrect or if requested by the receiver, or • Take an alternative action if a response is not received or if the Operating Instruction was not understood by the receiver. <p>R6. Each Balancing Authority, Distribution Provider, Generator Operator, and Transmission Operator that receives an oral two-party, person-to-person Operating Instruction during an Emergency, excluding written or oral single-party to multiple-party burst Operating Instructions, shall either: <i>[Violation Risk Factor: High][Time Horizon: Real-time Operations]</i></p> <ul style="list-style-type: none"> • Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct, or

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	<ul style="list-style-type: none"> • Request that the issuer reissue the Operating Instruction. <p>R7. Each Balancing Authority, Reliability Coordinator, and Transmission Operator that issues a written or oral single-party to multiple-party burst Operating Instruction during an Emergency shall confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction. [Violation Risk Factor: High][Time Horizon: Real-time Operations]</p>
<p>Notes: COM-002-3 Requirements R2 and R3 were moved into COM-002-4. The Project 2007-02 SDT has developed COM-002-4 to provide more stringent communication requirements during Emergencies and Alerts as well as establish communication protocols for non-Emergency/non-alert communications that occur between entities.</p>	