

## **Implementation Plan for COM-001-2 Telecommunications**

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### **Prerequisite Approvals**

- IRO-002-2
- IRO-005-3

### **Conforming Changes to Requirements in Already Approved Standards**

- None

### **Revision Summary**

- The RC SDT revised the standard and is proposing retiring three requirements (R1, R5 and R6). Changes were made to eliminate redundancies between standards (existing and proposed), to align with the ERO Rules of Procedure and to address issues in FERC Order 693.

### **Effective Dates**

To be determined.

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**Revisions or Retirements to Already Approved Standards**

The following tables identify the sections of approved standards that shall be retired or revised when this standard is implemented. If the drafting team is recommending the retirement or revision of a requirement, that text is blue.

Already Approved Standard	Proposed Replacement Requirement(s)
<p><b>COM-001-1</b></p> <p><b>R1.</b> Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide adequate and reliable telecommunications facilities for the exchange of Interconnection and operating information: <i>[Violation Risk Factor: High]</i></p> <p><b>R1.1.</b> Internally. <i>[Violation Risk Factor: High]</i></p> <p><b>R1.2.</b> Between the Reliability Coordinator and its Transmission Operators and Balancing Authorities. <i>[Violation Risk Factor: High]</i></p> <p><b>R1.3.</b> With other Reliability Coordinators, Transmission Operators, and Balancing Authorities as necessary to maintain reliability. <i>[Violation Risk Factor: High]</i></p> <p><b>R1.4.</b> Where applicable, these facilities shall be redundant and diversely routed. <i>[Violation Risk Factor: High]</i></p>	<p>The RC SDT contends that COM-001-1, R1 and its subrequirements are low level facilitating requirements that are more appropriately and inherently monitored under various higher level performance-based reliability requirements for each entity throughout the body of standards. Examples include:</p> <p>IRO-001-1, R3 requires adequate telecommunication for the Reliability Coordinator to direct actions of multiple entities, including TOPs and BAs.</p> <p>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.</p> <p>TOP-001-1, R3 requires adequate telecommunications facilities for the TOP, BA, and GOP to be able to receive directives from the RC.</p> <p>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.</p> <p>The retirement of this requirement also facilitates one of the FERC Order 693 directives for COM-001-1 to “includes adequate flexibility for compliance with the Reliability Standard, adoption of new technologies and cost-effective solutions”.</p>
<p><b>Notes:</b> Based on the above information, the RC SDT recommends retiring R1 and its subrequirements.</p>	

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Already Approved Standard	Proposed Replacement Requirement(s)
<p><b>COM-001-1</b></p> <p><b>R2.</b> Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall <b>manage, alarm, test and/or actively monitor vital telecommunications facilities. Special attention shall be given to emergency telecommunications facilities and equipment not used for routine communications.</b> <i>[Violation Risk Factor: Medium]</i></p>	<p><b>COM-001-2:</b></p> <p><b>R1.</b> Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall operationally test, on a quarterly basis at a minimum, alternative telecommunications facilities to ensure the availability of their use when normal telecommunications facilities fail. <del>manage, alarm, test and/or actively monitor vital telecommunications facilities. Special attention shall be given to emergency telecommunications facilities and equipment not used for routine communications.</del> <i>[Violation Risk Factor: Medium][Time Horizon: Real-time Operations]</i></p>
<p><b>Notes:</b> The RC SDT contends that the first sentence of COM-001-1, R2 is a low level facilitating requirements that is more appropriately and inherently monitored under various higher level performance-based reliability requirements for each entity throughout the body of standards as described in R1 above. We propose revising R2 as shown above.</p>	

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Already Approved Standard	Proposed Replacement Requirement(s)
<p><b>COM-001-1</b>  <b>R3.</b> Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide a means to coordinate telecommunications among their respective areas. This coordination shall include the ability to investigate and recommend solutions to telecommunications problems within the area and with other areas. <i>[Violation Risk Factor: Lower]</i></p>	<p><b>COM-001-2</b>  <b>R2.</b> Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities of failure of their normal telecommunications facilities, and verify the alternate means of telecommunications are functional. <del>provide a means to coordinate telecommunications among their respective areas. This coordination shall include the ability to investigate and recommend solutions to telecommunications problems within the area and with other areas.</del> <i>[Violation Risk Factor: Medium Lower][Time Horizon: Real-time Operations]</i></p>

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<p><b>COM-001-1</b></p> <p><b>R4.</b> 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. <i>[Violation Risk Factor: Medium]</i></p>	<p><b>COM-001-2</b></p> <p><b>R3.</b> Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, <del>and</del> Balancing Authority, Generator Operator and Distribution Provider shall use English as the language for <b>all inter-entity Bulk Electric System reliability</b> 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. <i>[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]</i></p>
<p><b>Notes:</b> COM-001 Requirement R3 is being incorporated into COM-003-1 by the Operations Personnel Communications Protocols SDT (Project 2007-02). It will be retired from this standard upon approval of COM-003-1.</p>	

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<p><b>COM-001-1</b></p> <p><b>R5.</b> Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall have written operating instructions and procedures to enable continued operation of the system during the loss of telecommunications facilities. <i>[Violation Risk Factor: Lower]</i></p>	<p><b>EOP-008-0</b></p> <p><b>R1.</b> Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have a plan to continue reliability operations in the event its control center becomes inoperable. The contingency plan must meet the following requirements:</p> <p><b>R1.1.</b> The contingency plan shall not rely on data or voice communication from the primary control facility to be viable.</p> <p><b>R1.2.</b> The plan shall include procedures and responsibilities for providing basic tie line control and procedures and for maintaining the status of all inter-area schedules, such that there is an hourly accounting of all schedules.</p> <p><b>R1.3.</b> The contingency plan must address monitoring and control of critical transmission facilities, generation control, voltage control, time and frequency control, control of critical substation devices, and logging of significant power system events. The plan shall list the critical facilities.</p> <p><b>R1.4.</b> The plan shall include procedures and responsibilities for maintaining basic voice communication capabilities with other areas.</p> <p><b>R1.5.</b> The plan shall include procedures and responsibilities for conducting periodic tests, at least annually, to ensure viability of the plan.</p> <p><b>R1.6.</b> The plan shall include procedures and responsibilities for providing annual training to ensure that operating personnel are able to implement the contingency plans.</p> <p><b>R1.7.</b> The plan shall be reviewed and updated annually.</p> <p><b>R1.8.</b> Interim provisions must be included if it is expected to take more than one hour to implement the contingency plan for loss of primary control facility.</p>
<p><b>Notes:</b> The RC SDT proposes retiring COM-001-1 R5 as it is redundant with EOP-008-0 Requirement R1.</p>	

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Already Approved Standard	Proposed Replacement Requirement(s)
<p><b>COM-001-1</b></p> <p><b>R6.</b> Each NERCNet User Organization shall adhere to the requirements in Attachment 1-COM-001, "NERCNet Security Policy." <i>[Violation Risk Factor: Lower]</i></p>	<p><b>None - retire</b></p>
<p><b>Notes:</b> The RC SDT is recommending that R6 be retired. This is an ERO procedural issue and should not be in a reliability standard. It should be included in the ERO Rules of Procedure.</p>	

Already Approved Standard	Proposed Replacement Requirement(s)
	<p><b>COM-001-2</b></p> <p><b><u>R4.</u></b> <u>Each Distribution Provider and Generation Operator shall have telecommunications facilities with its Transmission Operator and Balancing Authority for the exchange of Interconnection and operating information. [Violation Risk Factor: High][Time Horizon: Real-time Operations and Operations Planning]</u></p>
<p>Notes: This is a new requirement based on the following FERC Order 693 directive:</p> <p>“expands the applicability to include generator operators and distribution providers and includes Requirements for their telecommunications facilities”</p>	

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**Functions that Must Comply with the Requirements in the Standards**

Standard	Functions that Must Comply With the Requirements							
	Reliability Coordinator	Balancing Authority	Interchange Authority	Transmission Operator	Transmission Owner	Generator Owner	Generator Operator	Distribution Provider
COM-001-2 Telecommunications	X	X		X			X	X