



## **I. Procedural History**

On May 14, 2014, NERC submitted a petition for approval of proposed Reliability Standards COM-001-2 and COM-002-4. Proposed COM-001-2 establishes a clear set of requirements for what communication capabilities various functional entities must maintain for reliable communications. Proposed COM-002-4 requires entities to have or create a set of documented communications protocols that include certain minimum mandatory protocols.

On September 18, 2014, the Commission issued its NOPR. Specifically related to these supplemental comments, the Commission's NOPR sought clarification regarding the scope and meaning of the proposed definitions of "Interpersonal Communication" and "Alternative Interpersonal Communication." The Commission explained that the definitions do not provide a minimum expectation of communication performance, and noted that it is unclear whether the definition of "Interpersonal Communication" includes mediums used directly to exchange or transfer data.

NERC's Comments clarified that the standard drafting team did not include mediums used to exchange data within proposed COM-001-2. The standard drafting team answered comments during the standard development process on the same question and responded that data exchange is addressed by the currently enforceable Reliability Standards IRO-010-1a and IRO-014-1. NERC's Comments included discussion of the coverage within these two Reliability Standards. The standard drafting team determined that the Requirements in these two IRO Reliability Standards provided the necessary mandatory Requirements to ensure proper data exchange.

NERC also explained in its Comments that Project 2014-03: Revisions to TOP and IRO Standards included coverage of mediums and data in its proposed changes to certain TOP and

IRO Reliability Standards. Data exchange capabilities are directly addressed in proposed TOP-001-3, as well as in proposed IRO-002-4, Requirement R1. The data itself is covered in proposed IRO-010-2 and proposed TOP-003-3. NERC noted that, at the time of the submission of NERC's Comments, these proposed Reliability Standards were Board-adopted with the exception of TOP-001-3. On November 13, 2014, the NERC Board adopted proposed Reliability Standard TOP-001-3.

## **II. Supplemental Comments**

NERC will submit the proposed TOP and IRO Reliability Standards for approval in a separate petition, but provides additional information in this proceeding because the Commission raised a concern in the NOPR regarding the coverage of mediums used directly to exchange or transfer data in proposed COM-001-2.<sup>2</sup> At the time NERC submitted its Comments, the proposed TOP and IRO Reliability Standards were still in formal development. Four of the proposed Reliability Standards include specific coverage related to data exchange. Collectively, these proposed Requirements complement COM-001-2 by requiring data exchange capabilities for Reliability Coordinators, Transmission Operators, Balancing Authorities, Generator Operators, and Distribution Providers.

### **A. TOP-001-3**

The purpose of TOP-001-3 is to prevent instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Interconnection by ensuring prompt action to prevent or mitigate such occurrences. Proposed TOP-001-3 includes two Requirements specifically related to data exchange and specifically call for having a capability to exchange data. Proposed Requirement R19 provides that “[e]ach Transmission Operator shall have data

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<sup>2</sup> NERC will also include this information in the future petition for approval of the below proposed Reliability Standards.

exchange capabilities with the entities that it has identified that it needs data from in order to maintain reliability in its Transmission Operator Area.” Requirement R20 provides that “[e]ach Balancing Authority shall have data exchange capabilities with the entities that it has identified that it needs data from in order to maintain reliability in its Balancing Authority Area.”

**B. IRO-010-2**

The purpose of proposed Reliability Standard IRO-010-2 is to prevent instability, uncontrolled separation, or Cascading outages that adversely impact reliability, by ensuring that the Reliability Coordinator has the data it needs to monitor and assess the operation of its Reliability Coordinator Area. Requirements R1 and R2 of proposed Reliability Standard IRO-010-2 address the maintenance and distribution of the data specification, and Requirement R1 describes specific data to be included within the data specification. Requirement R1 provides that “[t]he Reliability Coordinator shall maintain a documented specification for the data necessary to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.” Requirement R2 provides that “[t]he Reliability Coordinator shall distribute its data specification to entities that have data required by the Reliability Coordinator’s Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.” Requirement R3 addresses concerns about data exchange through secured networks by requiring that each entity satisfy the obligations of the documented specifications by using a mutually agreeable format, mutually agreeable process for resolving data conflicts, and mutually agreeable security protocol.

**C. TOP-003-3**

The purpose of proposed Reliability Standard TOP-003-3 is to ensure that Transmission Operators and Balancing Authorities have the data needed to fulfill their operational and planning responsibilities. The proposed standard consists of five Requirements, including

requirements for Balancing Authorities and Transmission Operators to maintain, and distribute to relevant entities, data specifications for the data necessary to perform various analyses and assessments. The proposed standard also requires entities receiving data specifications to respond according to mutually-agreed parameters.

Proposed Requirement R1 requires each Transmission Operator to maintain a documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. The data specification shall include, but not be limited to: (i) a list of data and information needed to support these analyses, monitoring, and assessments; (ii) provisions for the notification of current Protection System and Special Protection System status or degradation that impacts System reliability; (iii) a periodicity for providing data; and (iv) the deadline by which the respondent (i.e. recipient) is to provide the indicated data. Similarly, proposed Requirement R2 requires each Balancing Authority to maintain a documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring. Proposed Requirements R3 and R4 require each Transmission Operator (R3) and Balancing Authority (R4) to distribute its data specification to the entities that have the necessary data.

Proposed Requirement R5 provides that each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Load-Serving Entity, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R3 or R4 shall satisfy the obligations of the documented data specification using: (i) a mutually agreeable format; (ii) a mutually agreeable process for resolving data conflicts; and (iii) a mutually agreeable security protocol.

#### **D. IRO-002-4**

The purpose of proposed Reliability Standard IRO-002-4 is to provide System Operators with the capabilities necessary to monitor and analyze data needed to perform their reliability functions. Proposed Requirement R1 requires each Reliability Coordinator to have data exchange capabilities with its Balancing Authorities and Transmission Operators, and with other entities as it deems necessary, for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. This would include maintaining data exchange capabilities with another Reliability Coordinator or another functional entity not specifically listed, if “deemed necessary” by the Reliability Coordinator to obtain necessary data.

Requirements R3<sup>3</sup> and R4<sup>4</sup> include monitoring requirements for each Reliability Coordinator within its Reliability Coordinator Area and neighboring Reliability Coordinator Areas. Requirement R4 also mandates that each Reliability Coordinator “shall have monitoring systems that provide information utilized by the Reliability Coordinator’s operating personnel...over a redundant infrastructure.”

#### **III. Conclusion**

For the reasons set forth above, NERC respectfully requests that the Commission accept these supplemental comments for consideration.

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<sup>3</sup> Requirement R3 provides that “[e]ach Reliability Coordinator shall monitor Facilities, the Status of Special Protection Systems, and non-BES facilities identified as necessary by the Reliability Coordinator, within its Reliability Coordinator Area and neighboring Reliability Coordinator Areas to identify any System Operating Limit exceedances and to determine any Interconnection Reliability Operating Limit exceedances with its Reliability Coordinating area.”

<sup>4</sup> Requirement R4 provides that “[e]ach Reliability Coordinator shall have monitoring systems that provide information utilized by the Reliability Coordinator’s operating personnel, giving particular emphasis to alarm management and awareness systems, automated data transfers, and synchronized information systems, over a redundant infrastructure.”

Respectfully submitted,

/s/ William H. Edwards

Charles A. Berardesco  
Senior Vice President and General Counsel  
Holly A. Hawkins  
Associate General Counsel  
William H. Edwards  
Senior Counsel  
North American Electric Reliability  
Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099 – facsimile  
charles.berardesco@nerc.net  
holly.hawkins@nerc.net  
william.edwards@nerc.net

*Counsel for the North American Electric  
Reliability Corporation*

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**CERTIFICATE OF SERVICE**

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding. Dated at Washington, D.C. this 6th day of March, 2015.

*/s/ William H. Edwards*

William H. Edwards

*Counsel for the North American Electric  
Reliability Corporation*