

## A. Introduction

1. **Title:** System Restoration Coordination
2. **Number:** EOP-006-3
3. **Purpose:** Ensure plans are established and personnel are prepared to enable effective coordination of the System restoration process to ensure reliability is maintained during restoration and priority is placed on restoring the Interconnection.
4. **Applicability:**
  - 4.1. **Functional Entities:**
    - 4.1.1. Reliability Coordinators
5. **Proposed Effective Date:** See the Implementation Plan for EOP-006-3.
6. **Standard-Only Definition:** None

## B. Requirements and Measures

- R1. Each Reliability Coordinator shall develop and implement a Reliability Coordinator Area restoration plan. The scope of the Reliability Coordinator's restoration plan starts when Blackstart Resources are utilized to re-energize a shutdown area of the Bulk Electric System (BES), or separation has occurred between neighboring Reliability Coordinators, or an energized island has been formed on the BES within the Reliability Coordinator Area. The scope of the Reliability Coordinator's restoration plan ends when all of its Transmission Operators are interconnected and its Reliability Coordinator Area is connected to all of its neighboring Reliability Coordinator Areas. The restoration plan shall include: *[Violation Risk Factor = High] [Time Horizon = Operations Planning, Real-time Operations]*
  - 1.1. A description of the high-level strategy to be employed during restoration events for restoring the Interconnection, including minimum criteria for meeting the objectives of the Reliability Coordinator's restoration plan.
  - 1.2. Criteria and conditions for re-establishing interconnections with other Transmission Operators within its Reliability Coordinator Area, with Transmission Operators in other Reliability Coordinator Areas, and with other Reliability Coordinators.
  - 1.3. Reporting requirements for the entities within the Reliability Coordinator Area during a restoration event.
  - 1.4. Criteria for sharing information regarding restoration with neighboring Reliability Coordinators and with Transmission Operators and Balancing Authorities within its Reliability Coordinator Area.
  - 1.5. Identification of the Reliability Coordinator as the primary contact for disseminating information regarding restoration to neighboring Reliability

Coordinators, and to Transmission Operators, and Balancing Authorities within its Reliability Coordinator Area.

- 1.6.** Criteria for transferring operations and authority back to the Balancing Authority.
  - M1.** Each Reliability Coordinator shall have available a dated copy of its restoration plan and will have evidence, such as operator logs or other operating documentation, voice recordings, or other communication documentation to show that its restoration plan was implemented in accordance with Requirement R1.
  - R2.** The Reliability Coordinator shall distribute its most recent Reliability Coordinator Area restoration plan to each of its Transmission Operators and neighboring Reliability Coordinators within 30 calendar days of creation or revision. *[Violation Risk Factor = Lower] [Time Horizon = Operations Planning]*
  - M2.** Each Reliability Coordinator shall provide evidence such as electronic receipts, posting to a secure website with notification to affected entities, or registered mail receipts, that its most recent restoration plan has been distributed in accordance with Requirement R2.
  - R3.** Each Reliability Coordinator shall review its restoration plan within 13 calendar months of the last review. *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*
  - M3.** Each Reliability Coordinator shall provide evidence such as a review signature sheet, or revision histories, that it has reviewed its restoration plan within 13 calendar months of the last review in accordance with Requirement R3.
  - R4.** Each Reliability Coordinator shall review its neighboring Reliability Coordinator's restoration plans and provide written notification of any conflicts discovered during that review within 60 calendar days of receipt. *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*
    - 4.1.** If a Reliability Coordinator finds conflicts between its restoration plans and any of its neighbors, the conflicts shall be resolved within 30 calendar days of receipt of written notification.
  - M4.** Each Reliability Coordinator shall provide evidence such as dated review signature sheets or electronic receipt that it has reviewed its neighboring Reliability Coordinator's restoration plans and resolved any conflicts within the timing requirements of Requirement R4 and Requirement R4, Part 4.1.
  - R5.** Each Reliability Coordinator shall review the restoration plans required by EOP-005 of the Transmission Operators within its Reliability Coordinator Area. *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*
    - 5.1.** The Reliability Coordinator shall determine whether the Transmission Operator's restoration plan is coordinated and compatible with the Reliability Coordinator's restoration plan and other Transmission Operators' restoration plans within its

Reliability Coordinator Area. The Reliability Coordinator shall provide notification to the Transmission Operator of approval or disapproval, with stated reasons, of the Transmission Operator's submitted restoration plan within 30 calendar days following the receipt of the restoration plan from the Transmission Operator.

- M5.** Each Reliability Coordinator shall provide evidence such as a dated review signature sheet or electronic receipt that it has reviewed, approved or disapproved, and notified its Transmission Operators within 30 calendar days following the receipt of the restoration plan from the Transmission Operator in accordance with Requirement R5.
- R6.** Each Reliability Coordinator shall have a copy of its latest restoration plan and copies of the latest approved restoration plan of each Transmission Operator in its Reliability Coordinator Area within its primary and backup control rooms so that it is available to all of its System Operators prior to the effective date. *[Violation Risk Factor = Lower]* *[Time Horizon = Operations Planning]*
- M6.** Each Reliability Coordinator shall have documentation such as electronic receipts that it has made the latest copy of its restoration plan and copies of the latest approved restoration plan of each Transmission Operator in its Reliability Coordinator Area available in its primary and backup control rooms and to each of its System Operators prior to the effective date in accordance with Requirement R6.
- R7.** Each Reliability Coordinator shall include within its operations training program, annual System restoration training for its System Operators. This training program shall address the following: *[Violation Risk Factor = Medium]* *[Time Horizon = Operations Planning]*
  - 7.1.** The coordination role of the Reliability Coordinator; and
  - 7.2.** Re-establishing the Interconnection.
- M7.** Each Reliability Coordinator shall have an electronic copy or hard copy of its training records available showing that it has provided training in accordance with Requirement R7.
- R8.** Each Reliability Coordinator shall conduct two System restoration drills, exercises, or simulations per calendar year, which shall include the Transmission Operators and Generator Operators as dictated by the particular scope of the drill, exercise, or simulation that is being conducted. *[Violation Risk Factor = Medium]* *[Time Horizon = Operations Planning]*
  - 8.1.** Each Reliability Coordinator shall request each Transmission Operator identified in its restoration plan and each Generator Operator identified in the Transmission Operators' restoration plans to participate in a drill, exercise, or simulation at least once every two calendar years.
- M8.** Each Reliability Coordinator shall have evidence, such as dated electronic documents, that it conducted two System restoration drills, exercises, or simulations per calendar year in accordance with Requirement R8. And each Reliability Coordinator shall have

evidence that the Reliability Coordinator requested each applicable Transmission Operator and Generator Operator to participate per Requirement R8 and Requirement R8, Part 8.1.

## C. Compliance

### 1. Compliance Monitoring Process

#### 1.1. Compliance Enforcement Authority:

“Compliance Enforcement Authority” means NERC or the Regional Entity, or any entity as otherwise designated by an Applicable Governmental Authority, in their respective roles of monitoring and/or enforcing compliance with mandatory and enforceable Reliability Standards in their respective jurisdictions.

#### 1.2. Evidence Retention:

The following evidence retention period(s) 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.

The applicable entity 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.

- The current restoration plan and any restoration plans in effect since the last compliance audit for Requirement R1, Measure M1.
- Distribution of its most recent restoration plan and any restoration plans in effect for the current calendar year and three prior calendar years for Requirement R2, Measure M2.
- It’s reviewed restoration plan for the current review period and the last three prior review periods for Requirement R3, Measure M3.
- Reviewed copies of neighboring Reliability Coordinator restoration plans for the current calendar year and the three prior calendar years for Requirement R4, Measure M4.
- The reviewed restoration plans for the current calendar year and the last three prior calendar years for Requirement R5, Measure M5.
- The current, approved restoration plan and any restoration plans in effect for the last three calendar years was made available in its control rooms for Requirement R6, Measure M6.
- Actual training program materials or descriptions for three calendar years for Requirements R7, Measure M7.

- Records of all Reliability Coordinator restoration drills, exercises, or simulations since its last compliance audit, as well as one previous compliance audit period for Requirement R8, Measure M8.

If a Reliability Coordinator 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.

**1.3. Compliance Monitoring and Enforcement Program**

As defined in the NERC Rules of Procedure, “Compliance Monitoring and Enforcement Program” refers to the identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated Reliability Standard.

## Violation Severity Levels

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
<b>R1.</b>	The Reliability Coordinator failed to include one requirement part of Requirement R1 within its restoration plan.	The Reliability Coordinator failed to include two requirement parts of Requirement R1 within its restoration plan.	The Reliability Coordinator failed to include three of the requirements parts of Requirement R1 within its restoration plan.	The Reliability Coordinator failed to include four or more of the requirement parts within its restoration plan.  OR The Reliability Coordinator had a restoration plan, but failed to implement it.
<b>R2.</b>	The Reliability Coordinator distributed the most recent Reliability Coordinator Area restoration plan to the entities identified in Requirement R2 but was more than 30 calendar days late but less than 60 calendar days late.	The Reliability Coordinator distributed the most recent Reliability Coordinator Area restoration plan to the entities identified in Requirement R2 but was 60 calendar days or more late, but less than 90 calendar days late.	The Reliability Coordinator distributed the most recent Reliability Coordinator Area restoration plan to the entities identified in Requirement R2 but was 90 or more calendar days late but less than 120 calendar days late.	The Reliability Coordinator distributed the most recent Reliability Coordinator Area restoration plan to entities identified in Requirement R2 but was 120 calendar days or more late.
<b>R3.</b>	N/A	N/A	N/A	The Reliability Coordinator did not review its restoration plan within 13 calendar months of the last review.

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
<b>R4.</b>	The Reliability Coordinator reviewed the submitted restoration plans from its neighboring Reliability Coordinators within 60 calendar days of receipt, and resolved conflicts between 31 and 60 calendar days following written notification.	The Reliability Coordinator reviewed the submitted restoration plans from its neighboring Reliability Coordinators within 60 calendar days of receipt and resolved conflicts between 61 and 90 calendar days following written notification.	The Reliability Coordinator reviewed the submitted restoration plans from its neighboring Reliability Coordinators within 60 calendar days of receipt and resolved conflicts 91 or more calendar days following written notification.	The Reliability Coordinator did not review the submitted restoration plans from its neighboring Reliability Coordinators within 60 calendar days of receipt.
<b>R5.</b>	The Reliability Coordinator did not review and approve/disapprove the submitted restoration plans, with stated reasons for disapproval, from its Transmission Operators and neighboring Reliability Coordinators within 30 calendar days of receipt but did review and approve/disapprove the plans within 45 calendar days of receipt.  OR	The Reliability Coordinator did not review and approve/disapprove the submitted restoration plans, with stated reasons for disapproval, from its Transmission Operators and neighboring Reliability Coordinators within 30 calendar days of receipt but did review and approve/disapprove the plans within 60 calendar days of receipt.  OR	The Reliability Coordinator did not review and approve/disapprove the submitted restoration plans, with stated reasons for disapproval, from its Transmission Operators and neighboring Reliability Coordinators within 30 calendar days of receipt but did review and approve/disapprove the plans within 90 calendar days of receipt.  OR	The Reliability Coordinator did not review and approve/disapprove the submitted restoration plans, with stated reasons for disapproval, from its Transmission Operators and neighboring Reliability Coordinators for more than 90 calendar days of receipt.  OR  The Reliability Coordinator failed to notify the Transmission Operator of its

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
	The Reliability Coordinator failed to notify the Transmission Operator of its approval or disapproval with stated reasons for disapproval within 30 calendar days of receipt but did notify the Transmission Operator of its approval or disapproval with reasons within 45 calendar days of receipt.	The Reliability Coordinator failed to notify the Transmission Operator of its approval or disapproval with stated reasons for disapproval within 30 calendar days of receipt, but did notify the Transmission Operator of its approval or disapproval with reasons within 60 calendar days of receipt	The Reliability Coordinator failed to notify the Transmission Operator of its approval or disapproval with stated reasons for disapproval within 30 calendar days of receipt but did notify the Transmission Operator of its approval or disapproval with reasons within 90 calendar days of receipt.	approval or disapproval with stated reasons for disapproval for more than 90 calendar days of receipt.
<b>R6.</b>	N/A	N/A	The Reliability Coordinator did not have a copy of the latest approved restoration plan of all Transmission Operators in its Reliability Coordinator Area within its primary and backup control rooms prior to the effective date.	The Reliability Coordinator did not have a copy of its latest restoration plan within its primary and backup control rooms prior to the effective date.
<b>R7.</b>	N/A	N/A	The Reliability Coordinator included the annual System restoration training within its operations training program,	The Reliability Coordinator did not include the annual System restoration training



R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
			but did not address both of the requirement parts.	within its operations training program.
<b>R8.</b>	N/A	<p>The Reliability Coordinator only held one restoration drill, exercise, or simulation during the calendar year.</p> <p>OR</p> <p>The Reliability Coordinator did not request each applicable Transmission Operator or Generator Operator identified in its restoration plan to participate in a drill, exercise, or simulation at least once every two calendar years.</p>	N/A	The Reliability Coordinator did not hold a restoration drill, exercise, or simulation during the calendar year.

**D. Regional Variances**

None.

**E. Associated Documents**

[Link](#) to the Implementation Plan and other important associated documents.

## Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
0	August 8, 2005	Removed "Proposed" from Effective Date	Errata
1	Nov. 1, 2006	Adopted by Board of Trustees	Revised
2		Revisions pursuant to Project 2006-03	Updated Measures and Compliance to match new Requirements
2	August 5, 2009	Adopted by Board of Trustees	Revised
2	March 17, 2011	Order issued by FERC approving EOP-006-2 (approval effective 5/23/11)	
2	July 1, 2013	Updated VRFs and VSLs based on June 24, 2013 approval.	
3	February 9, 2017	Adopted by the NERC Board of Trustees	Revised