

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. SAR version 1 posted on November 6, 2006.
2. SAR version 1 comment period closed on December 5, 2006.
3. SAR version 2 and comment responses for SAR version 1 posted on February 8, 2007.
4. SAR version 2 comment period closed on March 9, 2007.
5. SAR version 3 and comment responses for SAR version 2 accepted by SC and SDT appointed on April 9, 2007.

Proposed Action Plan and Description of Current Draft:

The SDT began meeting in mid-April 2007 immediately following the approval of the SAR by the SC with the goal of completing work in approximately one year's time. The current draft is the first posting of the proposed standards. Only the requirements and measures have been completed at this time. Violation risk factors, time horizons, and all compliance elements will be completed after the requirements have been reviewed. Requirements in EOP-007 and EOP-009 have been incorporated into the revised EOP-005 and EOP-006. Therefore, EOP-007 and EOP-009 will be retired when this project is approved and EOP-005-2 and EOP-006-2 go into effect.

Future Development Plan:

| Anticipated Actions | Anticipated Date |
|--|-------------------------|
| 1. Second posting of draft standard. | December 10, 2007 |
| 2. Standards posted for first ballot. | February 18, 2008 |
| 3. Standards posted for second ballot. | March 17, 2008 |
| 4. Standards sent to BOT for approval. | April 1, 2008 |

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.

None.

A. Introduction

1. **Title:** System Restoration and Blackstart – Coordination
2. **Number:** EOP-006-2
3. **Purpose:** Ensure plans, facilities, and personnel are available for 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. Reliability Coordinator.
5. **Proposed Effective Date:** TBD

B. Requirements

- R1.** The Reliability Coordinator shall have a Reliability Coordinator Area restoration plan that has been made available to its Transmission Operators, Balancing Authorities, and neighboring Reliability Coordinators to restore its area to its normal state following an event that requires the utilization of Blackstart Resources. The restoration plan shall have a priority of restoring the integrity of the Interconnection. The restoration plan shall include the following: [Violation Risk Factor = xxx] [Time Horizon = xxx]
 - R1.1.** Identification of the authority and tasks of the Reliability Coordinator’s control room personnel assigned to participate in restoration activities including the responsibility of the Reliability Coordinator to work with its neighboring Reliability Coordinator and with the Transmission Operators and generation Operators with Blackstart Resources within its area.
 - R1.2.** Documented coordination between individual Transmission Operator restoration plans.
 - R1.3.** Documented coordination of restoration plans with neighboring Reliability Coordinators.
 - R1.4.** Criteria and conditions for re-establishing interconnections between neighboring Transmission Operators and Reliability Coordinator Areas.
 - R1.5.** Identification of acceptable voltage and frequency limits during restoration.
 - R1.6.** A statement indicating that in situations where the actual conditions do not match the studied conditions, the System Operator shall use professional judgment to modify the System restoration plan.
 - R1.7.** Documentation of reporting requirements to the Reliability Coordinator during a restoration event.
- R2.** Each Reliability Coordinator shall review and approve, if acceptable, the Transmission Operator restoration plans within its Reliability Coordinator Area. [Violation Risk Factor = xxx] [Time Horizon = xxx]
 - R2.1.** The Reliability Coordinator shall determine whether the Transmission Operator’s restoration plan is compatible with the Reliability Coordinator’s

restoration plan as well as being compatible with other Transmission Operator restoration plans within its Reliability Coordinator Area.

- R2.2.** The Reliability Coordinator shall respond to the Transmission Operator's submitted restoration plan within thirty days.
- R2.3.** The Reliability Coordinator shall provide written reasons for disapproving a Transmission Operator's restoration plan.
- R3.** Each Reliability Coordinator shall have a copy of the approved restoration plan of each Transmission Operator in its Reliability Coordinator Area within each of its control centers. [Violation Risk Factor = xxx] [Time Horizon = xxx]
- R4.** Each Reliability Coordinator shall work in conjunction with affected Balancing Authorities, Generator Operators, and Transmission Operators as well as neighboring Reliability Coordinators to monitor restoration progress, coordinate restoration, and take actions to restore the Bulk Electric System frequency to normal. Such actions would consider but not be limited to: adjusting generation, placing additional generators on line, or shedding Load. [Violation Risk Factor = xxx] [Time Horizon = xxx]
- R5.** The Reliability Coordinator shall authorize and coordinate re-synchronizing isolated areas. [Violation Risk Factor = xxx] [Time Horizon = xxx]
- R6.** The Reliability Coordinator shall serve as the primary contact for disseminating information regarding restoration to neighboring Reliability Coordinators and Transmission Operators or Balancing Authorities within its Reliability Coordinator Area. [Violation Risk Factor = xxx] [Time Horizon = xxx]
- R7.** Each Reliability Coordinator shall provide training within its existing emergency operations training program to its control room personnel identified in its restoration plan to ensure the proper execution of its restoration plan. This training program shall include the following: [Violation Risk Factor = xxx] [Time Horizon = xxx]
 - R7.1.** System restoration philosophy including the coordination role of the Reliability Coordinator.
 - R7.2.** Re-establishing the Interconnection.
- R8.** Each Reliability Coordinator shall conduct two System restoration drills, exercises, or simulations per year which include the Transmission Operators and Generator Operators with Blackstart Resources in their area of responsibility as dictated by the particular scope of the drill, exercise, or simulation that is being conducted. Each Transmission Operator and Generator Operator with Blackstart Resources shall be included in a drill, exercise, or simulation at least every two years. [Violation Risk Factor = xxx] [Time Horizon = xxx]

C. Measures

- M1.** Each Reliability Coordinator shall have available a copy of its restoration plan in accordance with Requirement R1.
- M2.** Each Reliability Coordinator shall provide evidence that its restoration plan has been distributed in accordance with R1.

- M3.** Each Reliability Coordinator shall provide evidence that it has reviewed its Transmission Operator's submitted restoration plan(s) in accordance with Requirement R2.
- M4.** Each Reliability Coordinator shall have present in its control centers, a current copy of the approved restoration plan of each Transmission Operator in its Reliability Coordinator Area in accordance with Requirement R3.
- M5.** If there has been a Disturbance, each Reliability Coordinator involved shall have evidence, that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or computer printouts, that will be used to determine if the Reliability Coordinator monitored and coordinated restoration progress in accordance with Requirement R4.
- M6.** If there has been a re-synchronizing of an isolated area, each Reliability Coordinator involved shall have evidence, that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or computer printouts, that will be used to determine if it authorized re-synchronizing in accordance with Requirement R5.
- M7.** If there has been a Disturbance, each Reliability Coordinator involved shall have evidence, that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or computer printouts, that will be used to determine if it served as the primary contact to disseminate information to neighboring Reliability Coordinators and Transmission Operators and Balancing Authorities within its Reliability Coordinator Area in accordance with Requirement R6.
- M8.** Each Reliability Coordinator shall have a copy of its training records available showing that it provided training in accordance with Requirement R7.
- M9.** Each Reliability Coordinator shall have evidence that it conducted two System restoration drills, exercises, or simulations per year that included Transmission Operators and Generator Operators with Blackstart Resources in accordance with Requirement R8.

D. Compliance

- 1. Compliance Monitoring Process**
 - 1.1. Compliance Monitoring Responsibility**
 - 1.2. Compliance Monitoring Period and Reset**
 - 1.3. Data Retention**
 - 1.4. Additional Compliance Information**
- 2. Violation Severity Levels**
 - 2.1. Lower:**
 - 2.2. Moderate:**
 - 2.3. High:**

2.4. Severe:

E. Regional Variances

None.

F. Associated Documents

None.

| Version | Date | Action | Change Tracking |
|----------------|------------------|--|---|
| 0 | April 1, 2005 | Effective Date | New |
| 0 | August 8, 2005 | Removed “Proposed” from Effective Date | Errata |
| 1 | November 1, 2006 | Adopted by Board of Trustees | Revised |
| 2 | TBD | Revisions pursuant to Project 2006-03 | Updated Measures and Compliance to match new Requirements Added Associated Standards |