



SERC Regional Reliability Plan

Regional Criteria

Document Information

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Purpose

1 Purpose

The purpose of this document is to define the Regional Reliability Plan for the SERC Reliability Corporation (SERC) Region, and to identify the responsible entities and roles within that plan. The goal of the Regional Reliability Plan is to maintain the reliability of the bulk power system.

1.1 Business Need

This guideline identifies the responsible entities and their roles within the SERC Regional Reliability Plan. This guideline also provides a high-level overview of each Reliability Coordinator area within the SERC Region.

2 Scope

This SERC Regional Reliability Plan only applies to registered entities in the SERC Region.

3 Responsible SERC Group(s)

The SERC Reliability Coordinator Working Group (RCWG) is responsible for issuing and maintaining this document.

4 Review and Re-approval Requirements

This document will be reviewed every three calendar years or as appropriate for possible revision. The existing or revised document will be re-certified and posted on SERC standards web site. Notice of the re-certification will be sent to SERC Reliability Coordinators (RC) and members of the SERC Operating Committee (OC).

SERC Reliability Coordinators
Midcontinent Independent System Operator (MISO)
PJM Interconnection, LLC (PJM)
Southern Company Services, Inc. – Trans (Southeastern)
Tennessee Valley Authority (TVA)
VACAR South
Florida Reliability Coordinating Council (FRCC) RC

5 Overview

The SERC Reliability Corporation's (SERC) Regional Reliability Plan (RRP) is in place to assure the proper identification and integration of all responsible entities

SERC Region RCs

within the SERC Region into the SERC RRP to maintain the reliability of the bulk power system. The Reliability Coordinator (RC) is the highest-level authority and has the authority to take the necessary action to maintain reliability in its area of responsibility. This plan identifies the six SERC RCs established to monitor reliability and respond to emergencies.

The SERC Region encompasses a 16-state area located within the central and southeastern United States. The SERC Region covers an area of approximately 630,000 square miles. Appendix A provides maps of the NERC Regions and NERC RCs.

5.1 Geographic Boundaries

SERC's geographical boundaries are determined primarily by the appropriate state regulatory commissions. The following states are completely or partially within the SERC footprint: Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. The SERC footprint also includes portions of Arkansas, Illinois, Iowa, Kentucky, Louisiana, Missouri, Oklahoma, Tennessee, Texas, and Virginia. SERC membership comprises investor-owned utilities, municipal, cooperative, state and federal systems, merchant electricity generators, marketers, and Regional Transmission Organization (RTO)/Independent System Operator (ISO) entities.

5.2 Regional Reliability Plan Objectives

The objectives of the SERC RRP are as follows:

- Identify the RCs within the SERC Region.
- Identify the applicable registered entities within the SERC Region that are users, owners, and operators of the electric grid within the SERC Region and are thus responsible for complying with the RC pertinent NERC Reliability Standards.
- Verify that each RC's reliability plan has adequate procedures and tools necessary to monitor and direct the real-time operation of the system and the ability to coordinate with their neighboring RCs.
- Coordinate the exchange of information between RCs and SERC staff when major events occur on the grid and facilitate the discussion of summer and winter seasonal operations.

6 SERC Region RCs

Below is an overview of each RC area. The current reliability plan of each SERC RC is available in the RCS folder within the SERC committee portal.

6.1 MISO RC

MISO provides RC services to various SERC Registered Entities in Louisiana, Mississippi, Arkansas, Missouri, Kentucky, and Illinois. The MISO RC serves as the

SERC Region RCs

primary RC for Balancing Authorities (BAs), Transmission Operators (TOPs), and Generator Operators (GOPs) under the entities' coordination agreements. The MISO RC has certain defined responsibilities and directs the reliable operation of the bulk power system, which includes electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment generally operating at voltages of 100 kV and higher.

6.2 PJM RC

PJM Interconnection, LLC (PJM) serves as the Reliability Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP) for its transmission-owning members. (PJM is the Transmission Operator as defined in the NERC Reliability Functional Model and takes action through its Transmission Owners, who operate local control centers.) Dominion Energy and East Kentucky Electric Cooperative (EKPC) are located physically within the SERC Region and have established PJM as their RC. PJM is responsible for regional system reliability, which includes responsibility for both the bulk power system and lower voltage facilities that have been turned over to PJM for operational control.

6.3 Southeastern RC

Southern Company Services (SOCO) serves as the RC for the Southern Company Balancing Authority and the Southeastern Power Administration (SEPA) Balancing Authority as well as the following transmission owners: Dalton Utilities (DU), Georgia Transmission Corporation (GTC), Municipal Electric Authority of Georgia (MEAG), Power South (PSEC), Southeastern Power Administration (SEPA), Alabama Power (APC), Mississippi Power (MPC) and Georgia Power (GPC). The Southeastern RC area consists of the transmission and generation facilities within the metered boundaries of the Balancing Authorities listed in the NERC registry and referenced in the Southeastern Reliability Coordinator Reliability Plan. The Southeastern RC has implemented agreements with neighboring RCs in order to facilitate coordination and communications required to fulfil the NERC requirements of a Reliability Coordinator.

6.4 TVA RC

The Tennessee Valley Authority (TVA) serves as the RC for the TVA Balancing Authority, Associated Electric Cooperative Inc. (AECI) Balancing Authority, Louisville Gas and Electric Company and Kentucky Utilities Company (LG&E/KU) Balancing Authority. TVA also serves as the RC for six member companies: AECI, Brookfield Smoky Mountain Hydro, LG&E/KU, Memphis Light, Gas, and Water (MLGW), Owensboro Municipal Utilities (OMU) and TVA. The TVA RC area consists of the transmission and generation facilities within the metered boundaries of the Balancing Authorities listed in the NERC registry and referenced in the TVA Reliability Coordinator Reliability Plan.

SERC Registrations for Functional Entities

6.5 VACAR-South RC

The VACAR South Reliability Plan includes the territories of the participating companies as listed in Appendix A of the VACAR South-Reliability Plan. The VACAR South RC was established through a contractual arrangement between the participating companies. “VACAR South” is registered with SERC as the RC for the territories of the participating companies.

6.6 FRCC RC- Florida Reliability Coordinating Council

FRCC is the Reliability Coordinator serving the FRCC Reliability Area. The entire FRCC RC area is within the Eastern Interconnection and is under the direction of the FRCC RC. The FRCC RC’s Reliability Plan (Reliability Plan) describes the responsibilities and authorities of the FRCC Reliability Coordinator (RC), including the FRCC RC System Operator (RCSO) function responsible for performing the real-time operations role and the RC Next-Day Planner (RCNDP) function responsible for performing the Operations Planning Analysis role for the FRCC RC area. In addition, this Reliability Plan also highlights the Operations Planning Coordinator’s (OPC) role and the State Capacity Emergency Coordinator’s (SCEC) role within the FRCC RC area.

7 SERC Registrations for Functional Entities

Effective April 1, 2005, NERC introduced a new set of Reliability Standards. Each Regional Reliability Organization (RRO) was directed to initiate a process for implementing the NERC Reliability Standards. This required the identification of functional entities within the SERC Region and the registration of those entities in order to comply with the requirements set forth in the Reliability Standards.

The NERC Compliance Registry (see References) provides a matrix identifying the entities that have registered with NERC in accordance with the NERC Reliability Functional Model.

8 RC Reliability Plan Attributes

Each reliability plan within SERC should clearly identify reliability plan objectives and the delegation of any reliability coordinator tasks. To maintain the operational reliability of the SERC Region, RCs within SERC are required to:

- Produce an Operating Plan for next-day operations, which includes reliability analyses such as evaluation of potential System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs), monitoring of each BA’s forecasted Contingency and Operating Reserves, TOP reactive reserves, voltage limits, stability, etc., that may identify operating conditions for which special procedures may be needed.
- Perform Operational Planning Analysis, Real-time monitoring, and Real-time Assessments.

Review and Approve Proposed Changes to Reliability Coordinator Plans

- Implement Operating Processes, Procedures, or Plans to mitigate SOL and IROL exceedances on the transmission system. Regardless of the process, the RC is required to ensure that the transmission system is returned to within Interconnection Reliability Operating Limits within the applicable T_v.
- Monitor the RC's Wide Area and assist other Reliability Coordinators during a declared emergency.

9 Review and Approve Proposed Changes to Reliability Coordinator Plans

Each RC within SERC is expected to have a reliability plan accepted by the SERC Operating Committee and the NERC Operating Reliability Subcommittee. In addition, the SERC Reliability Coordinator Subcommittee must review proposed changes to an RC's reliability plan. Any changes to an RC's Reliability Plan will be provided to the SERC Operating Committee and NERC Operating Reliability Subcommittee for approval.

10 Exchange of Information between Reliability Coordinators and SERC Staff

Agreements exist between SERC Situation Awareness and Events Analysis and the SERC Region RCs to facilitate the exchange of information when required or needed by either party. These agreements facilitate the sharing of information per SERC's situational awareness delegated function from NERC.

11 References

- NERC Compliance Registry

Appendix A NERC and SERC Regional Maps

NERC Regions

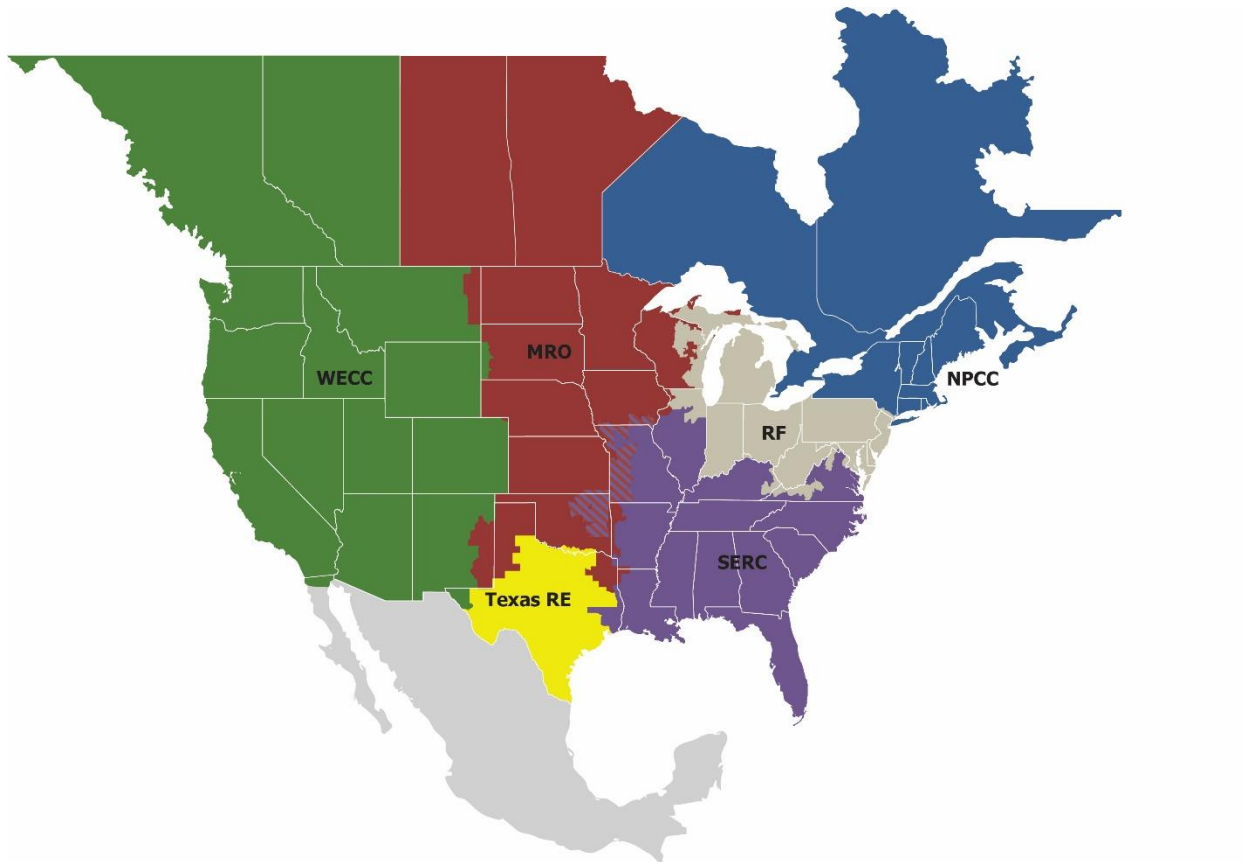
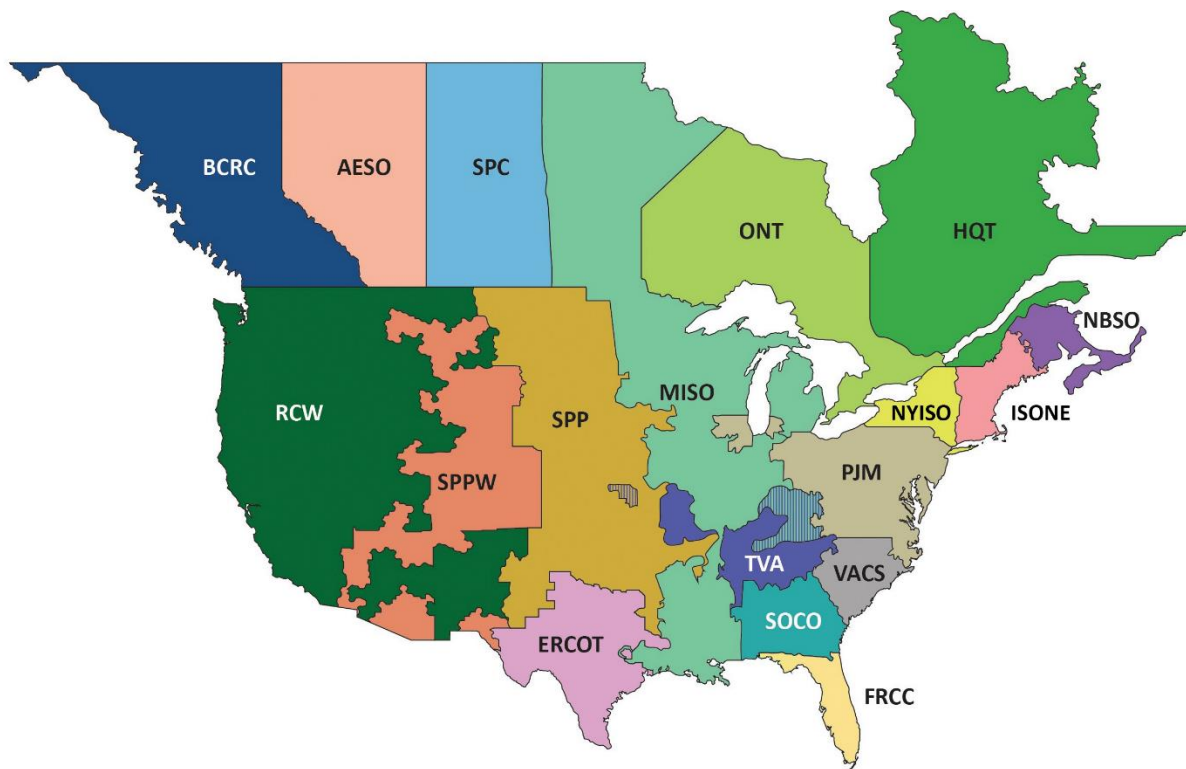


Image is from the NERC website
(<https://www.nerc.com/AboutNERC/keyplayers/Pages/default.aspx>)

NERC Reliability Coordinators as of July 2022



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|---|--|
| Alberta Electric System Operator | SPP West |
| British Columbia Hydro | PJM Interconnection |
| Electric Reliability Council of Texas | Reliability Coordinator West |
| Florida Reliability Coordinating Council | Saskatchewan Power Corporation |
| Hydro-Quebec TransEnergie | Southern Company Services, Inc. |
| ISO New England, Inc. | Southwest Power Pool |
| Midcontinent ISO | BAs receive RC Services from SPP or TVA |
| New Brunswick Power Corporation | Tennessee Valley Authority |
| New York Independent System Operator | BAs receive RC services from TVA or MISO |
| Ontario Independent Electricity System Operator | VACAR South |

Document Revision Information

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0.0	May 1998		Document origination
1.0	December 15, 2009 March 12, 2010		Update to the SERC Regional Reliability Plan dated May 1998. Approved by the SERC Operating Committee.
2.0	February 10, 2014		Three-year review cycle revision; reformatted to new SERC template standards and updated contents.
3.0	October 3, 2017		Updated per periodic review. Reclassified to a SERC Guideline, removed references to SERC subregions to focus on RCs, retired SERC Hotline, and transferred to the latest SERC technical committee document template.
4.0	September 29, 2019		Addition of Florida Reliability Coordinating Council (FRCC) RC
5.0	March 24, 2021		Minor updates and edits to Florida Reliability Coordinating Council (FRCC) and TVA Regions
5.1	December 20, 2023	Shan Fox	Moved to new template
6.0	April 23, 2024 May 13, 2024	Martin Sas	Minor updates and edits per periodic review. Appendix A updated. Approved by the SERC Operating Committee.