Compliance Monitoring and Enforcement Program

SERC Reliability Corporation

2017 CMEP Implementation Plan (Appendix A5)

November 2016

NOTE:
ERO CMEP Implementation Plan is posted at:
http://www.nerc.com/pa/comp/Resources/Pages/default.aspx

Appendix A5 - SERC Reliability Corporation (SERC) 2017 CMEP Implementation Plan

This Appendix contains the CMEP Implementation Plan (IP) for SERC as required by the North American Electric Reliability Corporation (NERC) Rules of Procedure (ROP).

Compliance Monitoring and Enforcement

CMEP IP Highlights and Material Changes

NERC Compliance Monitoring Enforcement Program (CMEP) tools used by SERC in 2017 will include Compliance Audit, Spot Check, and Guided Self-Certification. SERC will focus its resources on higher risk items primarily identified through entity-specific Inherent Risk Assessments (IRA)s. SERC will continue to include an outreach component to on-site compliance audits. During the on-site week, the entity may engage SERC compliance audit staff to address approaches and ask questions in both the Operating and Planning (O&P) and Critical Infrastructure Protection (CIP) compliance areas. SERC has also improved the formality and timeliness of its Frequently Asked Questions process, where SERC Subject Matter Experts address questions asked by entities.

SERC continues to support its Industry Subject Matter Expert (ISME) program, in which SERC audit teams occasionally use volunteers employed by registered entities in the SERC Region as supplemental compliance audit team members for both O&P and CIP audits. The program approach focuses on identification, qualification, and assignment of ISMEs to match the technical resource needs of the specific compliance audits. Information about SERC's ISME program is available on the SERC website.

Other Regional Key Initiatives and Activities

SERC will continue to participate in the Multi-Regional Registered Entity (MRRE) program in 2017. As a Lead Regional Entity (LRE), SERC will lead efforts related to all aspects of the CMEP. The LRE coordinates and conducts the IRA, with input from each Affected Regional Entity (ARE), and determines the appropriate compliance monitoring approach. This coordinated oversight should eliminate unnecessary duplication of compliance monitoring and enforcement activities. In addition, as the ARE, SERC will collaborate with the LRE to ensure entity IRA, compliance monitoring, and enforcement activities include SERC regional considerations.

To help prevent unintended redundancy and gaps in responsibilities within the Transmission Operator (TOP) function, SERC will continue to give consideration to local (transmission) control centers. Because local control centers could perform some TOP tasks, SERC Compliance Monitoring will focus on certain aspects of reliability including but not limited to system restoration, protection system monitoring, operator training, and backup functionality. In 2017 SERC will perform focused CMEP activities involving certain local control centers.

The IRA and Internal Controls Evaluation (ICE) programs will continue to mature in 2017. In 2016, SERC focused on completing the IRAs on the Reliability Coordinators, Balancing Authorities, and Transmission Operators. In 2017, SERC will focus on the remaining entities with a goal of completing an IRA on all SERC registered entities by the end of the year. SERC will continue to develop a registered entity's compliance oversight plan based on the risks identified during the IRA process.

As part of the risk-based CMEP, SERC will periodically sample Compliance Exception mitigating activities. SERC will sample from the Compliance Exceptions filed with NERC, and where the mitigating activities completion date has passed. The mitigation verification may occur periodically by Entity Assessment and Mitigation staff or during scheduled Compliance Monitoring activities.

Regional Risk Assessment Process

Reliable operation of the bulk power system (BPS) is crucial. SERC recognizes that protecting the reliability of the electric grid in the SERC Region is the responsibility of its members with SERC's support. Achieving a secure and reliable grid requires registered entities to remain diligent about reliability and resiliency within their service areas. SERC is responsible for assisting registered entities in identifying regional reliability risks and coordinating reliability-related activities throughout the Region.

SERC has coordinated efforts with its stakeholders since 2012 to develop and implement a continuous program of regional assessment of potential reliability risks to the SERC Region BPS. The SERC Regional Reliability Risk Assessment program is a robust, centralized process for analyzing, prioritizing, addressing, and communicating significant risks and risk-controlled initiatives.

The program's objective is to improve BPS reliability through a coordinated effort of a cross-functional organization that identifies, analyzes, prioritizes, and addresses reliability risks. In conformance with the ERO risk-based CMEP, the SERC process consists of the following major activities:

- Identify or nominate risks.

- Determine time horizon (i.e., immediate, next-day, operational, seasonal, and long-term).

- Assess and rank risk:

    - Determine the consequence or severity impact(s).

    - Determine the probability of occurrence.

    - Assign High, Medium, or Low from the Risk Assessment Matrix.

    - Prioritize risks.

    - Store the information in the Risk Registry.

- Develop risk control initiatives.

- Monitor and reevaluate risk impact.

SERC's Reliability Risk Team (RRT) is a major participant in the program. The RRT is responsible for identifying risks based on the probability of occurrence and severity of impact. SERC's RRT identified three different areas of risk:

- Operational Risk(s)

- Engineering Risk(s)

- Critical Infrastructure Protection (CIP)

SERC also identified risk elements within each group. These identified risk elements align with the 2017 ERO-wide risk elements:

- Critical Infrastructure Protection

- Extreme Physical Events

- Monitoring and Situational Awareness

- Planning and System Analysis

As new and emerging threats and risks are identified, system events occur, and compliance monitoring activities are performed, SERC's RRT will update the regional Reliability Risk Assessment program to include current potential issues, threats, and risks. In addition, as SERC performs IRAs of its registered entities, SERC will review potential risks to BPS reliability posed by individual registered entities.

The coordination among the SERC registered entities, SERC technical committees, SERC staff, neighboring system personnel, and other members of the ERO is vital to the understanding and analysis of potential major reliability issues. In 2015, SERC implemented its Integrated Risk Management (IRM) program. The IRM process addresses SERC's need to gather and analyze data to support risk-based techniques. SERC determined the best method to support this initiative is through uninhibited sharing of data across SERC program areas. The objective of the IRM is to support risk-based compliance monitoring and enforcement by defining and deploying sound business policies, procedures, and process tools across all SERC departments to implement a comprehensive integrated risk management program.

SERC, through its members and staff, is heavily engaged with NERC and its initiatives. SERC's risk management programs enable it to focus compliance monitoring oversight activities on those Reliability Standards which, if violated, would pose the greatest risk to the reliable operation of the SERC portion of the BPS.

1. Regional Risk Elements and Areas of Focus

The table below contains the Regional risk focus areas identified during the Regional Risk Assessment process. The table also contains areas of focus for each identified risk that may be considered in the development of the registered entity's compliance oversight plan.

Regional Risk Elements		
Regional Risk Element	**Justification**	**Associated Standard and Requirement(s)**
Cold Weather Impacts on Transmission and Generation	SERC is expanding the NERC risk element based on operational risks, such as deficient entity responses and performance, identified during cold weather events. It is important from an operational perspective to consider proper operation of the system during these events, with respect to balancing resources and demand, and necessary communication capabilities.	BAL-002-1 R1; BAL-005-0.2b R7; COM-002-4 R5, R6, R7; EOP-002-3.1 R3, R6, R7.

Regional Risk Elements		
Regional Risk Element	**Justification**	**Associated Standard and Requirement(s)**
Major Storm Events	The SERC Region historically has experienced severe weather events, such as hurricanes and tornados. These events usually create system contingencies beyond existing planning criteria. However, emergency procedures and other operating standards still apply. Over the years, the Region has identified this risk and emphasized system preparedness through the 2012 Assessment of SERC Performance Information for Identifying Potential Reliability Risk, as well as through the NERC Reliability Assessment reporting process.	COM-002-4 R1, R2, R5, R6, R7; EOP-006-2 R1, R7, R8; EOP-008-1 R1, R2, R4, R7
Power System Coordination and Modeling	The following can introduce risk to the reliable operation of the BPS in the SERC Region: • Increased use of the BPS in a manner for which the system was not originally designed • Inadequate operating experience • Insufficient coordinated studies • Insufficient coordinated operations SERC's unique Planning Coordinator structure necessitates coordination throughout the SERC Region. There are a large number of Planning Coordinators in the SERC Region who coordinate with multiple entities. Performing modeling without appropriate coordination would risk the validity of SERC study performance. In addition, the NERC Arizona-Southern California Outages Report highlighted potential areas of vulnerability. Significant changes in generation dispatch, particularly if such changes are unstudied, increase reliability risks. Such risks warrant additional focus on registered entities impacted by these issues with respect to these Standards. References to neighboring system coordination and recommendations can be found in the NERC Arizona-Southern California Outages Report.	MOD-001-1a R6; FAC-008-3 R6; FAC-014-2 R1, R2, R3, R4; IRO-003-2 R1, R2; IRO-004-2 R1; VAR-001-4.1 R1, R2; VAR-002-4 R1, R2, R3
Underfrequency Load Shedding (UFLS) Schemes	The SERC UFLS Regional Standard is to establish consistent and coordinated requirements for the design, implementation, and analysis of UFLS programs among applicable SERC registered entities. The Regional Standard adds specificity not contained in the NERC Standard for development and implementation of the UFLS scheme in the SERC Region that effectively mitigates the consequences of an under-frequency event.	PRC-006-SERC-01 R1, R2, R3, R4, R5, R6

Regional Risk Elements		
Regional Risk Element	**Justification**	**Associated Standard and Requirement(s)**
Maintenance and Management of BPS Assets	The SERC footprint is in a geographic area that has dense vegetation. Right-of-way inspections are important to identify potential vegetation issues that could pose a risk to the reliability of the transmission system.	FAC-003-4 R3, R6, R7

Regional Compliance Monitoring Plan
This section includes regional risk-based CMEP activities. Following is an overview of the year's currently known IRA, audit, spot check, periodic data submittals, and self-certifications. The audit schedule is also located on the SERC's website here: Compliance Monitoring

Inherent Risk Assessments
In 2017, SERC is on schedule to complete an IRA for each of its registered entities. However, the schedule may be revised based on emerging risks, a registered entity's performance, or any other significant changes to a registered entity that may impact a registered entity's risk to the BPS. SERC completes the IRA, then establishes a registered entity compliance oversight plan, which includes the compliance monitoring scope, frequency, and the CMEP tool(s) (e.g., audit, spot check, or self-certification) that may be used to monitor the registered entity. Based on the IRA, a registered entity's monitoring frequency or CMEP tool may be adjusted, and as such adjustments are made, SERC will update the compliance monitoring schedule.

Compliance Audits
In accordance with NERC ROP, SERC will conduct on-site compliance audits at least every three years on those registered entities registered as a Reliability Coordinator, Balancing Authority, or TOP. This audit scope will be based on the results of each entity's IRA. The specific Standards and Requirements that compose the scope of the audit will be defined in the entity's Audit Detail Letter that is sent to the entity 90 days prior to the on-site week.

For a registered entity that is not scheduled for a three-year audit, SERC may perform an IRA and determine that a registered entity's inherent risk is large enough to justify additional compliance monitoring activity. Certain triggers could generate a targeted Compliance Audit or Spot Check. These triggers include but are not limited to events, misoperations, significant organizational changes, asset acquisitions, and so forth.

Spot Checks
Spot Checks in 2017 will be determined by the results of an entity's IRA, Mitigation Plan verification, events, or performance trends.

Guided Self-Certifications
The need for Guided Self-Certifications will be determined by the results of an entity's IRA. Usually, low-risk Standards and Requirements are the focus of the Guided Self-Certification monitoring method. Guided Self-Certification forms require the inclusion of supporting evidence to provide reasonable assurance of compliance, and could also include questions and data requests.

Periodic Data Submittals
Some Standards and Requirements require data submittal, which could be on a monthly, quarterly, or annual basis. An ERO-wide 2017 data submittal schedule will be posted on the SERC web site.

2017 Compliance Audit Plan
SERC registered entities listed in the 2017 Compliance Audit Plan include on-site and off-site audits.

2017 Compliance Audit Plan			
		Type of Monitoring	
NCR ID	Registered Entity	Operations & Planning (O&P)	Critical Infrastructure Protection (CIP)
NCR10248	Ameren Missouri	O&P	CIP
NCR01175	Ameren Services Company	O&P	CIP
NCR11399	Electric Energy, Inc.	O&P	CIP
NCR01248	Georgia System Operations Corporation	O&P	CIP
NCR00915	South Carolina Electric & Gas Company	O&P	CIP
NCR01143	Southwest Power Pool		CIP
NCR01365	VACAR South	O&P	CIP
NCR01191	Central Electric Power Cooperative Inc	O&P	
NCR01192	Citizens Electric Corporation	O&P	
NCR01225	East Kentucky Power Cooperative	O&P	
NCR01249	Georgia Transmission Corporation	O&P	CIP
NCR01278	Municipal Electric Authority of Georgia	O&P	
NCR11077	Nashville Electric Service	O&P	
NCR09035	Prairie Power, Inc.	O&P	
NCR01214	Virginia Electric and Power Company (DP, TO)	O&P	
NCR01273	Mississippi Power Company	O&P	
NCR01252	Gulf Power Company	O&P	
NCR01320	Southern Company Services, Inc. - Trans	O&P	
NCR01321	Southern Illinois Power Cooperative		CIP
NCR01177	Associated Electric Cooperative, Inc.		CIP

2. Compliance Outreach

Compliance Outreach Activities	
Outreach Activity	**Anticipated Date**
Outreach Events SERC outreach events occur throughout the year to accommodate the training and education needs of registered entities. Planned events, listed here, with specific themes will also feature compliance and reliability topics of importance at the time of the event. SERC staff post event details on the Upcoming Events page of the SERC website, which can be accessed through the Event Calendar on the home page or under Outreach > Events Calendar. Outreach events are promoted in the monthly *SERC Transmission* newsletter, and email notifications; and reminders are sent to primary and alternate compliance contacts for all registered entities within the SERC Region footprint.	
• Open Forum (WebEx)	Jan 30, 2017
• Open Forum (WebEx): SERC 101	Feb 6, 2017
• Spring Compliance Seminar (Charlotte, NC and WebEx)	Mar 28-29, 2017
• Small Entity Seminar	Mar 29, 2017
• Open Forum (WebEx)	May 22, 2017
• Open Forum (WebEx)	Jul 31, 2017
• Fall Compliance Seminar (Charlotte, NC and WebEx)	Sep 19-20, 2017
• CIP Compliance Seminar	Oct 31-Nov 1, 2017
Focused Workshops and Webinars Supplemental focused events scheduled on an as-needed basis provide outreach and training for new or revised Reliability Standards, targeted groups of registered entities based on functional registration, and ERO initiatives.	As needed throughout the year
FAQ & Lessons Learned SERC staff subject matter experts address technical questions received from registered entities, then post them on the website, along with lessons learned to share information and best practices. Items are listed by topical categories and posted on the SERC website under Outreach / FAQ & Lessons Learned.	As available throughout the year
Compliance Outreach Assistance Upon receipt of a New Registration Application, SERC sends a document containing links to "Compliance 101" files on the FERC, NERC, and SERC websites to the applicant to provide basic compliance information in one convenient location. A sample of the links includes information such as the Energy Policy Act (EPA) of 2005 on the FERC site, ROP and Reliability Standards on the NERC site, and Acronym Reference Index and SERC Filing Due Dates on the SERC site. SERC distributes the *SERC Transmission* newsletter to registered entities within the SERC Region each month and posts it on the SERC website. Articles contain links to scheduled outreach information for both SERC and NERC events, along with other topics helpful to maintaining BPS reliability.	Updated as needed throughout the year

Compliance Outreach Activities	
Outreach Activity	**Anticipated Date**
SERC Compliance Portal SERC registered entities submit Self-Certifications, Self-Reports, Mitigation Plans, and Data Submittals via the SERC Portal. Feedback from targeted surveys allow SERC to incorporate enhancements based on the needs of the users, and outreach events include training on upgrades and enhancements.	As needed throughout the year
Dedicated Email In-Boxes Appropriate SERC staff monitor dedicated email in-boxes established for questions from stakeholders. The Contact Us link is accessible from any page of the SERC website, and features a list of topics along with the email address link to submit questions. A sampling of the topics include CIP V5 transition, compliance issues, and situational awareness/events analysis.	Monitored throughout the year