

144 FERC ¶ 61,019
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony Clark.

Southwest Power Pool, Inc.

Docket No. IN13-14-000

ORDER APPROVING STIPULATION AND CONSENT AGREEMENT

(Issued July 10, 2013)

1. The Commission approves the attached Stipulation and Consent Agreement (Agreement) between the Office of Enforcement (Enforcement), staff of the North American Electric Reliability Corporation (NERC), and Southwest Power Pool, Inc. (SPP). This order is in the public interest because it resolves on fair and reasonable terms an investigation of SPP, conducted by Enforcement in coordination with the Commission's Office of Electric Reliability (OER) and NERC, into possible violations of Reliability Standards associated with SPP's reliability coordination of a portion of the Bulk Power System (BPS). SPP agrees to pay a total civil penalty of \$50,000, and to commit to measures necessary to mitigate the reliability matters described in this Agreement. SPP will also make semi-annual compliance reports to Enforcement for a period of up to two years.

I. Background

2. SPP is a Commission-approved regional transmission organization (RTO), which operates in the whole or part of the following eight states: Nebraska, Missouri, Texas, Kansas, New Mexico, Arkansas, Louisiana, and Oklahoma. The SPP regional footprint includes 31 balancing authorities and transmission operators, approximately 63,000 MW of installed generation, and over 46,000 miles of transmission lines. SPP also has served as the independent coordinator of transmission (ICT) for Entergy Services, Inc. (Entergy Services). Entergy Services and its six affiliated operating companies are public utilities that operate a significant amount of generation in the Eastern Interconnection, operate a transmission system with line voltages as high as 500 kV, and provide distribution services to customers in Louisiana, Texas, Mississippi, and Arkansas.

3. SPP has registered with NERC as performing several reliability functions in multiple regions. This investigation focused on SPP's functioning as a NERC-registered reliability coordinator (RC) both as the ICT and for the SPP RTO.

4. On March 16, 2007, in Order No. 693, the Commission approved both of the Reliability Standards at issue in this matter.¹ These standards became mandatory and enforceable within the contiguous United States on June 18, 2007.

5. This investigation followed an independence audit conducted by the Commission staff of the SPP Regional Entity (RE)², in which staff discovered a December 26, 2007 event affecting SPP's performance of its reliability coordination function and during which it temporarily lost all primary communications with and visibility of system conditions at its primary control center. Commission staff initiated a non-public, preliminary investigation into the cause and aftermath of the event. Personnel from Enforcement and OER proceeded with the investigation in coordination with a NERC Compliance Violation Investigation (CVI) initiated at the same time. SPP RE did not participate in the investigation.

II. Investigation

6. Enforcement initiated a non-public investigation, pursuant to Part 1b of the Commission's regulations,³ into whether SPP had complied with Reliability Standards applicable to the event. Relevant to the attached Agreement, the Interconnection Reliability Operation and Coordination (IRO) group of Reliability Standards detail the responsibilities and authorities of a reliability coordinator. The IRO Reliability Standards establish requirements for data, tools and wide-area view, all of which are intended to facilitate a reliability coordinator's ability to perform its responsibilities and ensure the reliable operation of the interconnected grid.⁴ The Emergency Preparedness and Operations (EOP) group of Reliability Standards includes requirements that address preparation for emergencies, necessary actions during emergencies, and system restoration and reporting following disturbances.⁵

7. On December 26, 2007, SPP performed all RC duties for both the RTO and as the ICT at its "primary control center" at Maumelle, Arkansas. On that date, SPP had a "back-up control center" at its Plaza West facility in Little Rock, Arkansas. The back-up

¹ *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

² *Southwest Power Pool, Inc.*, 126 FERC ¶ 61,045 (2009).

³ 18 C.F.R. Part 1b (2012).

⁴ Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 888.

⁵ *Id.* at P 541.

control center had the same system analysis tools and received the same system information as the primary control center, and SPP could perform its RC function at either facility.

8. At or about 11:17 a.m. Central Time, an SPP IT technician deployed a firewall configuration change on the SPP internal telecommunications network. Due to a mistake in the deployment process resulting in an erroneous configuration, all primary communications and visibility on the monitors on the RC desk at the Maumelle facility were lost. RC personnel in the Maumelle control center were unable to view on their monitors the live, real-time graphical data for the system footprint. Although data remained visible on RC monitors at desks at the Plaza West facility, there were no RC operators at the Plaza West facility to access or view the data at the time.

9. At 11:26 a.m., the RC senior operator on duty, after confirming that Plaza West had visibility of RC information, called for an evacuation to Plaza West. All RC personnel evacuated. The manager on duty at Maumelle, who stayed behind, subsequently determined that visibility was available using a laptop computer and secured access to RC systems even though visibility on the control room monitors and the phone systems was impaired. As of twelve minutes after the commencement of the event, at 11:29 a.m., the non-RC personnel remaining at Maumelle accessed their various system management tools, including all systems used by the RC desk, wirelessly through laptop computers.

10. SPP RC's emergency procedures in effect at the time of the event, as contained in SPP's document entitled "SPP Maumelle Operations Center: Plaza West Backup Site Operating Procedure," required notification of several entities, including RCs for four areas adjacent to the area subject to the SPP RC's control. SPP RC's emergency procedures provided that these entities should be contacted upon evacuation of the primary control center, when the RC operators recommence operations at the back-up control center, and when the RC operations resume at the primary control center. The operating procedures required the SPP RC to contact Midwest ISO, an RC adjacent to SPP RC, and "ask them to monitor the SPP system that they can see." Although certain phone calls were made, SPP failed to make the phone calls set forth in these emergency evacuation procedures.

11. RC operators who traveled from Maumelle to Plaza West arrived there between 11:50 a.m. and 12:06 p.m. SPP RC operators did not call RC personnel of other entities when the loss of visibility began and while the operators determined whether and when to transition to SPP's back-up control center. SPP RC operators initially informed no adjacent RCs of the status of the Maumelle SPP control room loss of visibility, nor did the RC operators request monitoring assistance from personnel of balancing authorities or transmission operators within the SPP footprint.

12. Approximately 45 minutes after the event began, the RC operators who had relocated to the back-up control center logged into the essential programs used by SPP to

perform the RC functions. SPP RC did not submit an Interconnection Reliability Operating Limit and Preliminary Disturbance Report form to the SPP RE or to NERC within twenty-four hours of the incident.

13. As a result of the investigation, Enforcement and NERC staff concluded that SPP violated two requirements of two Reliability Standards. SPP violated Reliability Standard IRO-015-1, Requirement R1, which requires SPP to “follow its operating procedures, processes, or plans for making notifications and exchanging reliability-related information with other reliability coordinators.” It also requires the RC to notify other RCs of “conditions in its Reliability Coordinator Area that may impact other Reliability Coordinator areas.” The purpose of this Standard is to ensure that each Reliability Coordinator’s operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.

14. Enforcement and NERC also concluded that SPP violated Reliability Standard EOP-004-1, Requirement R3, pursuant to which an entity must “provide a preliminary written report to its Regional Reliability Organization and NERC” within twenty-four hours of a reportable incident. Reportable incidents include “the loss of a bulk power transmission component that significantly affects the integrity of interconnected system operations.” In Enforcement and NERC staff’s view, an RC’s primary control center is such a component. Enforcement and NERC conclude that SPP RC did not submit the appropriate Interconnection Reliability Operating Limit and Preliminary Disturbance Report form to the SPP RE and to NERC.

III. Stipulation and Consent Agreement

15. Enforcement and SPP resolved this matter by means of the attached Agreement. SPP stipulates to the facts recited in the Agreement and agrees to pay a \$50,000 civil penalty: \$25,000 to the United States Treasury and \$25,000 to NERC. SPP neither admits nor denies that its actions constituted violations of the Reliability Standards.

16. SPP also agrees to additional mitigation measures, as specified in the Agreement, and to submit to compliance monitoring.

17. In consideration of the appropriate sanction, staff considered that SPP has made significant efforts to date to address reliability concerns identified in the investigation. These measures include, among others, improvements to SPP’s primary, secondary, and tertiary telecommunications and network services to make them more robust, redundant, and diverse. SPP has also improved communications related to its Change Management Process that applies to changes in the configuration of the SPP Network. In addition, SPP enhanced its Emergency Evacuation Procedure to clarify procedures for providing notice, in certain situations and circumstances, to neighboring RCs and also to SPP members. Finally, SPP has also improved its back-up control center testing procedures.

IV. Determination of the Appropriate Sanctions

18. The civil penalty amount is consistent with the Penalty Guidelines.⁶ Enforcement considered that SPP's violations posed a risk that no RC had the immediate visibility and situational awareness necessary to respond to an emergency condition in time to perform the RC functions required to prevent, contain, or control a disturbance. The civil penalty amount also reflects a credit for avoiding a trial-type hearing.

19. The Commission concludes that the penalties and other sanctions set forth in the Agreement are a fair and equitable resolution of this matter and are in the public interest. The Commission also concludes that the prospective measures set forth in the Agreement will enhance the reliability of the BPS and are therefore also fair and in the public interest.

The Commission orders:

The attached Stipulation and Consent Agreement is hereby approved without modification.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

⁶ *Enforcement of Statutes, Orders, Rules and Regulations*, 132 FERC ¶ 61,216 (2010).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Southwest Power Pool, Inc.) Docket No. IN13-14-000

STIPULATION AND CONSENT AGREEMENT

I. INTRODUCTION

1. Staff of the Office of Enforcement (Enforcement) of the Federal Energy Regulatory Commission (Commission), staff of the North American Electric Reliability Corporation (NERC staff), and Southwest Power Pool, Inc. (SPP) enter into this Stipulation and Consent Agreement (Agreement) to resolve a non-public investigation conducted by Commission staff pursuant to Part 1b of the Commission's regulations, 18 C.F.R. Part 1b (2012), and by NERC staff pursuant to the NERC Compliance Monitoring and Enforcement Program. The investigation examined possible violations of NERC reliability standards by SPP related to its performance of its reliability coordination function on December 26, 2007, when it temporarily lost all primary communications and visibility of system conditions at its primary control center.

II. Stipulated Facts

2. Enforcement, NERC staff and SPP stipulate to the following facts.

A. Background

3. SPP is a Commission-approved regional transmission organization (RTO), which operates in the whole or part of the following eight states: Nebraska, Missouri, Texas, Kansas, New Mexico, Arkansas, Louisiana, and Oklahoma. The SPP regional footprint includes 31 balancing authorities and transmission operators, approximately 63,000 MW of installed generation, and over 46,000 miles of transmission lines. SPP also has served as the independent coordinator of transmission (ICT) for Entergy Services. Entergy Services and its six affiliated operating companies are public utilities that operate a significant amount of generation in the eastern interconnection, operate a transmission system with line voltages as high as 500 kV, and provide distribution services to customers in Louisiana, Texas, Mississippi, and Arkansas.

4. SPP is responsible for market operations for the RTO, and regional scheduling, tariff administration and reliability coordination for the RTO and, until recently, as the ICT. As necessary, SPP has registered with NERC as performing several reliability functions in multiple regions. This investigation focused on SPP's functioning as a NERC-registered reliability coordinator (RC) both as the ICT and for the SPP RTO. SPP separately functions as a regional entity (RE); SPP RE has not been involved in this matter.

5. The RC is the entity that is the highest level of authority which is responsible for the reliable operation of the bulk power system within its footprint, has the wide area view of the bulk power system, and has the operating tools, processes and procedures, including the authority to direct actions to prevent or mitigate emergency operating situations identified in both next-day analysis and real-time operations. Bulk transmission reliability functions include assessment of real-time, current day and next-day operating conditions, implementation of transmission loading relief procedures, re-dispatch of generation, coordination of transmission and generation outages, ordering curtailment of transactions and/or load and developing and monitoring Interconnection Reliability Operating Limits (to protect from instability and cascading). Power supply reliability entails monitoring balancing authority area performance and directing the balancing authorities to take actions, including load curtailment and increasing/decreasing generation in situations where an imbalance between generation and load places the system in jeopardy.

6. SPP performs the RC function by using a number of computer systems at each of its control centers to monitor system conditions in its area. SPP's Energy Management System (EMS) comprises a suite of high-level analysis tools that includes the Interchange Distribution Calculator (IDC), State Estimator, Real-time Contingency Analysis and Real-time Line Outage Distribution Factors Calculator. Its Inter Control Center Communications Protocol (ICCP) system interacts with the ICCP systems of SPP members and neighbors to generate real-time data reflecting the state of the transmission system, including breakers and switches, transmission lines, substation busses, generators and transformers, and contingencies, i.e., unexpected failures or outages of these components. The SPP Supervisory Control and Data Acquisition (SCADA) system has alarms that are activated if the system conditions change or if data are outside of the normal operating range. This SCADA information is displayed on map boards and monitors within the control centers. There, operators interact with the tools through WebFG. These systems combine to provide estimations of transmission system conditions, real-time analysis of the transmission system, and values necessary to calculate the post-contingency loading of pre-defined flowgates as monitored by the RC operators. In addition to these computer systems, which provide primary visibility of the bulk power system, SPP also utilizes a pager system to provide complementary visibility. SPP's pager system provides system operating limit pre-exceedence threshold alerts but does not provide all of the data typically utilized by RC personnel in a fully functioning control center. As the RC, SPP also monitors and posts to the Reliability Coordinator Information System (RCIS) regarding updates on RC areas. All of these systems work together to bring information into the SPP RC control center and allow the operators to analyze this information for potential reliability problems.

7. On December 26, 2007, SPP performed all RC duties for both the RTO and as the ICT at its "primary control center" at Maumelle, Arkansas. On that date, SPP had a "back-up control center" at its Plaza West facility in Little Rock, Arkansas. The back-up

control center had the same system analysis tools and received the same system information as the primary control center, and SPP could perform its RC function at either facility. SPP also performed at its Maumelle control center the RTO scheduling, RTO tariff administration, SPP shift engineering, and SPP market operations. The Plaza West Center was also the primary site for SPP-ICT tariff administration at the time of the event discussed below. Generally, except for training purposes, there were no RC operators on duty at Plaza West unless an emergency or another atypical circumstance compelled them to temporarily relocate from the Maumelle facility to the Plaza West facility.

B. Event on December 26, 2007

8. On December 26, 2007, at or about 11:17 a.m. Central Time, an SPP IT technician deployed a firewall configuration change on the SPP network. Due to a mistake in the deployment process resulting in an erroneous configuration, all primary communications and visibility on the monitors on the RC desk at the Maumelle facility were lost. RC personnel in the Maumelle control center – the only on-duty RC operators at the time – were unable to view on their monitors the live, real-time graphical data for the system footprint. Data remained visible on RC monitors only at desks at the Plaza West facility. There were no RC operators at the Plaza West facility to access or view the data at the time.

9. At 11:26 a.m., the RC senior operator on duty, after confirming that Plaza West had visibility of RC information, called for an evacuation of the RC desk at Maumelle to Plaza West. All RC personnel evacuated. The manager on duty at Maumelle, who stayed behind, subsequently determined that visibility was available using a laptop computer and secure access to the systems even though visibility on the control room monitors and the phone systems were impaired. As of twelve minutes after the commencement of the event, at 11:29 a.m., the personnel remaining at Maumelle accessed NERC IDC, SPP EMS and SPP market systems, and had access to all other systems used by the RC desk, wirelessly through laptop computers.

10. SPP RC's emergency procedures in effect at the time of the event, as contained in SPP's document entitled "SPP Maumelle Operations Center: Plaza West Backup Site Operating Procedure," required notification of several entities, including RCs for four areas adjacent to the area subject to the SPP RC's control: the Midwest ISO, Tennessee Valley Authority, Southern Company Services, Inc., and ERCOT ISO. SPP RC's emergency procedures provided that these entities should be contacted upon the occurrence of three events: when Maumelle is evacuated, again when the RC operators recommence operations at Plaza West, and a third time when the RC operations resume at Maumelle. The operating procedures required the SPP RC to contact Midwest ISO and "ask them to monitor the SPP system that they can see. Although certain phone calls were made SPP failed to make the phone calls set forth in these emergency

evacuation procedures.

11. RC operators who traveled from Maumelle to Plaza West arrived there between 11:50 a.m. and 12:06 p.m. SPP RC operators did not call RC personnel of other entities when the loss of visibility began and while the operators determined whether and when to transition to SPP's back-up control center. They initially informed no adjacent RCs of the status of the Maumelle SPP control room loss of visibility, nor did the RC operators request monitoring assistance from personnel of balancing authorities or transmission operators within the SPP footprint.

12. Between 12:05 and 12:10 p.m., approximately 45 minutes after the event began, the RC operators who had relocated to Plaza West logged into the essential programs used by SPP to perform the RC functions.

13. RC operators remained at Plaza West until approximately 12:30 p.m. when they were advised that Maumelle was fully operational and they could return. At 12:40 p.m., RC staff completed the shutdown of consoles at Plaza West and departed for Maumelle.

14. SPP RC did not submit an Interconnection Reliability Operating Limit and Preliminary Disturbance Report form to the SPP RE and to NERC within twenty-four hours of the incident.

15. Commission staff learned of the event from information discovered in an independence audit of SPP Regional Entity. Commission staff initiated a non-public, preliminary investigation into the cause and aftermath of the event. The Commission staff investigation conducted by personnel from Enforcement and the Office of Electric Reliability proceeded in coordination with a NERC Compliance Violation Investigation (CVI) initiated at the same time.

III. VIOLATIONS

16. As a result of the investigation, Enforcement and NERC staff conclude that SPP violated two requirements of two Reliability Standards.

17. Enforcement and NERC find that the Maumelle control center event represented a serious circumstance in which SPP, as the regional RC, did not have complete visibility of its footprint. The event was most serious during its initial twelve minutes, and before certain personnel established capabilities using wireless connections, when SPP personnel could not assess through the means of computer monitors the conditions of the system and could not perform certain aspects of the RC function.

18. Enforcement and NERC staff conclude that SPP violated a Requirement of the Interconnection Reliability Operations and Coordination (IRO) Reliability Standards, approved by the Commission, that requires SPP to ensure that each Reliability

Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations. Reliability Standard IRO-015-1, Requirement R1 requires SPP to "follow its operating procedures, processes, or plans for making notifications and exchanging reliability-related information with other reliability coordinators." An RC is required to notify other RCs of "conditions in its Reliability Coordinator Area that may impact other Reliability Coordinator areas."

19. SPP operating personnel did not request that Reliability Coordinator personnel of other entities with visibility of all or a part of the SPP footprint assist with the monitoring of the system for disturbances or developing issues. Therefore, Enforcement and NERC conclude that SPP did not make the required notifications regarding the loss of primary communications and system visibility at the control center. During the initial twelve minutes of the loss of primary communications and system visibility at the control center, no SPP RC personnel initiated neighboring RC notification or requests for assistance with maintaining situational awareness. The importance of this communication is confirmed by the fact that it is contained in SPP's Emergency Evacuation Procedures, a procedure that SPP did not follow in this instance.

20. Cooperation among neighboring RCs is an important element of the operation of the interconnected grid. Where RC emergency procedures require calls to neighboring entities, Enforcement and NERC staff conclude that it is important that RCs follow their operating procedures. In this instance, these calls would have provided notice to neighboring entities that SPP RC operators might not be immediately aware of certain emerging conditions. With this notice, neighboring RCs and entities internal to SPP's footprint would have been in a position to appreciate the potential need to initiate dialogue with SPP as necessary regarding any emerging conditions of which one or more of them might become aware.

21. Enforcement and NERC conclude that SPP also violated one of the Emergency Preparedness and Operations (EOP) Reliability Standards approved by the Commission. Reliability Standard EOP-004-1, Requirement R3, requires an entity to "provide a preliminary written report to its Regional Reliability Organization and NERC" within twenty-four hours of a reportable incident. Reportable incidents include "the loss of a bulk power transmission component that significantly affects the integrity of interconnected system operations." In Enforcement and NERC's view, the primary control center is such a component. Enforcement and NERC conclude that SPP RC did not submit the appropriate Interconnection Reliability Operating Limit and Preliminary Disturbance Report form to each of the SPP RE Entity and to NERC.

IV. MITIGATION TO DATE

22. SPP has made efforts to address certain reliability-related concerns identified by

staff during the course of this investigation and the preceding audit. Through these efforts, SPP has already completely or partially mitigated some of the findings of violation in this matter.

23. SPP has improved the resilience of its control centers during outages of communications systems, and improved disaster recovery processes. Although telecommunications capabilities remained available throughout the event through secondary and tertiary telecommunications means, SPP has enhanced its primary telecommunications and network capabilities. Improved multi-tier ring technologies, alternative direct-path circuits between facilities, and enhanced remote management of network and telecommunications equipment have been implemented as new technologies have become available. As a result, SPP's primary, secondary, and tertiary telecommunications and network services are more robust, redundant, and diverse.

24. SPP has expanded Operations involvement in proposed IT changes. SPP's Change Management Process has been improved and now provides several opportunities for input and communication with the Operations Department. There are Operations representatives on the Change Approval Board (CAB), Operations personnel serve as the Business Owner Approver for many changes which are performed by the IT Department, and Operations personnel are included in both the daily Change Review conference call as well as the daily IT Status conference call. If a proposed Change causes a conflict or concern for any party, approvals are not given and the item must be rescheduled or modified as appropriate. In addition, stakeholder communication is provided via email when Changes have been approved through the Change Management Process. Work notifications are sent for all EMS and ICCP changes. ICCP changes also involve phone calls to the Reliability Coordination and Engineering desks. Conference bridges are provided for EMS changes to allow the engineers to provide assistance and facilitate failover activities as needed.

25. SPP enhanced its Emergency Evacuation Procedure to clarify that it is the SPP RC that calls the MISO RC to notify them of the evacuation of the primary site to the back-up site; requests an RCIS posting; and requests monitoring of as much of the SPP footprint as possible. Upon successful start-up of the back-up site, the procedure requires that the SPP RC again contact the MISO RC to notify them that the SPP RC desk is fully operational from the back-up site. Partial evacuation conditions have also been considered and incorporated into the procedure. In a situation where one or more desks are unable to perform properly, each is responsible for making its own evacuation determination. The enhanced Procedure also includes using a notification service in which a contact group consisting of SPP members, internal TOPs and BAs, and neighboring Reliability Coordinators, which have been predetermined, will be contacted during an evacuation through auto-generated phone calls and text messages.

26. SPP has improved its backup testing procedures. The SPP RC desks now perform

back-up site operational testing at least once a month. The purpose of the testing is to assure that the equipment is maintained in a functional state, and that any anomalies are identified and corrected in a timely manner. The primary and back-up Operations Centers are equipped to provide fully redundant operating systems and equipment. The following actions are taken during the testing: coordinate back-up site testing with primary site operations; travel to back-up site; establish concurrent operations; note any login/activation and workstation anomalies; operate concurrently with the primary site for a period of at least 60 minutes; verify dedicated printer functionality; verify appropriate telecommunications functionality; notify primary site of intent to shut down back-up site and return to primary site.

V. REMEDIES AND SANCTIONS

27. For purposes of settling any and all civil and administrative disputes arising from Enforcement's and NERC's investigation, SPP stipulates to the facts set forth in Section II of this Agreement, but neither admits nor denies Enforcement and NERC's determinations that the facts set forth herein constitute violations by SPP of the Federal Power Act, Commission rules or regulations, or the Reliability Standards. Nevertheless, in view of the costs and risks of litigation and in the interest of resolving these matters without further proceedings, SPP agrees to undertake the following obligations.

A. Civil Penalty

28. SPP shall pay a civil penalty in the amount of \$50,000, to be divided equally between the United States Treasury and NERC. SPP shall pay the penalty within 10 days of the Commission's issuance of an order, if the Commission has approved this Agreement without modification or condition.

B. Reliability Enhancement Measures

29. SPP agrees to the following measures to improve and/or maintain reliability of its operations.

30. SPP shall continue to develop and implement its mandatory formal training and certification program for RC operators and all other control center personnel, and provide to staff copies of training modules designed to cover emergency evacuation procedures. The training shall include an evacuation drill that occurs without prior notice to operators as to date and time (but may permit prior notice to management personnel). Such training shall include emphasis on notification to appropriate entities regarding status of the RC operators and their ability to perform all of their functions – whether they remain on site or evacuate to the back up control center – and how the RC maintains its monitoring capabilities in the event that normal RC monitoring tools becomes unavailable to the operators and/or the operators must relocate to the alternate control center. SPP shall report its progress on these items in its compliance monitoring reports.

SPP shall provide evidence demonstrating that it has completed, by the date of the submission of its first compliance monitoring report, training of all currently employed operators on emergency evacuation and alternative monitoring procedures, and that it trains subsequently-employed operators reasonably promptly after hire.

31. SPP RCs shall continue to perform annual back-up site training with the following objectives: identify the principles upon which a decision to evacuate should be made; identify specific operating personnel responsibilities during a drill or evacuation; identify the frequency of back-up site training for operating personnel; identify who makes the decision to evacuate in a non-life threatening or full evacuation; and use the back-up site testing procedure to start the back-up site systems. In order to successfully complete the training, each RC must make a passing grade on the Assessment.

32. SPP shall continue measures currently being performed to ensure continuous monitoring of the system in the event of an emergency. Such measures include at least once a month back-up site operational testing.

33. SPP shall review procedures involving communications with other RCs to ensure that the appropriate procedure(s) include the protocol that loss of RC monitoring capability at SPP's control center then in use is communicated as promptly as practicable to neighboring RCs and internal TOPs and BAs after confirming such loss and ensuring personnel safety.

34. SPP shall continue to maintain procedures to ensure that its SPP RC operators are notified in advance of any activity by IT technicians that has the potential to disrupt communications and system visibility.

35. SPP shall update procedures as necessary to ensure that it reports events causing loss of RC monitoring capability to NERC and SERC.

C. Compliance Monitoring

36. SPP shall make semi-annual reports to Enforcement and NERC staff for one year following the Effective Date of this Agreement. The first semi-annual report shall be submitted no later than ten days after the end of the second calendar quarter after the quarter in which the Effective Date of this Agreement falls. The second report shall be submitted six months after the due date for the first report. SPP's reports shall advise Enforcement and NERC staff whether violations of the Reliability Standards by SPP have occurred during the reporting period and whether they have been reported to the appropriate Regional Entity; report on compliance measures instituted or training administered or implemented during the reporting period; provide a detailed update of the status of completing the reliability enhancement measures set forth in section V.B of this Agreement; and include an affidavit executed by an officer of SPP that the compliance reports are true and accurate.

37. Upon request by Enforcement and NERC staff, SPP shall provide all documentation supporting its reports, including the reports and recommendations of any external consultants. After the receipt of the second semi-annual report, Enforcement and NERC may, at their sole discretion, require SPP to submit semi-annual reports for one additional year.

VI. TERMS OF CONSENT AGREEMENT

38. The Effective Date of this Agreement shall be the date on which the Commission issues an order approving this Agreement without modification or condition.

39. Unless the Commission issues an order approving the Agreement in its entirety and without modification or condition, the Agreement shall be null and void and of no effect whatsoever, and neither Enforcement, NERC, nor SPP shall be bound by any provision or term of the Agreement, unless otherwise agreed in writing by Enforcement, NERC and SPP.

40. The Agreement binds SPP and its agents, successors and assigns. The Agreement does not create or impose any additional or independent obligations on SPP, or any affiliated entity, its agents, officers, directors or employees, other than the obligations identified in Section V of this Agreement.

41. In connection with the payment of the civil penalty provided for herein, SPP agrees that the Commission's order approving the Agreement without modification or condition shall be a final order assessing a civil penalty under the Federal Power Act, 16 U.S.C. § 792, *et seq.*, as amended. SPP further waives rehearing of any Commission order approving the Agreement without modification or condition, and judicial review by any court of any Commission order approving the Agreement without modification or condition. SPP also waives any rights of appeals provided by the NERC Rules of Procedure if the Commission approves the Agreement without modification or condition.

42. Commission approval of this Agreement without modification or condition shall fully, irrevocably, and unconditionally release SPP, its agents, officers, directors and employees, both past and present, and any successor in interest to SPP from, and forever bar the Commission and NERC from bringing against SPP and its agents, officers, directors and employees, both past and present, and any successor in interest to SPP, any and all direct and/or indirect administrative, civil, criminal or other claims or liability (whether or not known) arising out of, related to, or connected with the event or the investigation. In further consideration for this release, SPP represents that it is not aware of any material facts concerning the event that were not disclosed to Enforcement and NERC during the investigation and which might reasonably be considered to be a violation of any Reliability Standard.

43. Failure to make a timely payment or to comply with any other provision of this Agreement shall be deemed a violation of a final order of the Commission issued pursuant to the Federal Power Act and may subject SPP to additional action under the enforcement and penalty provisions of the Federal Power Act.

44. If SPP does not make the payment required above at or before the time agreed by the parties, interest on the portion payable to the United States Treasury will begin to accrue and be payable to the United States Treasury, pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii), from the date that payment is due. Similarly, interest on the portion payable to NERC will begin to accrue at the rate set forth in the same regulations from the date payment is due.

45. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Enforcement, NERC, or SPP has been made to induce the signatories or any other party to enter into the Agreement.

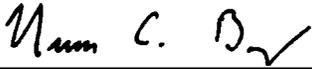
46. Each of the undersigned warrants that he or she is an authorized representative of the entity designated and is authorized to bind such entity on the entity's behalf.

47. The undersigned representative of SPP affirms that he or she read the Agreement, that all of the matters set forth in Section II of the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Agreement is entered into by Enforcement and NERC in express reliance on those representations.

48. The Agreement may be signed in counterparts.

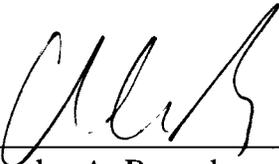
49. This Agreement is executed in triplicate, each of which so executed will be deemed an original.

Agreed to and accepted:



Norman C. Bay
Director, Office of Enforcement
Federal Energy Regulatory Commission

Date: 6-7-13



Charles A. Berardesco
Senior Vice President and General Counsel
North American Electric Reliability Corporation

Date: 6/7/13



Stacy L. Duckett
Vice President, Chief Compliance Officer, and Corporate Secretary
Southwest Power Pool, Inc.

Date: 6/3/13

