

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

NERC Reliability Coordinator (RC) Certification of Southwest Power Pool (SPP)

Site Visit Conducted

April 9, 2009

Southwest Power Pool

Little Rock, AR

to ensure
the reliability of the
bulk power system

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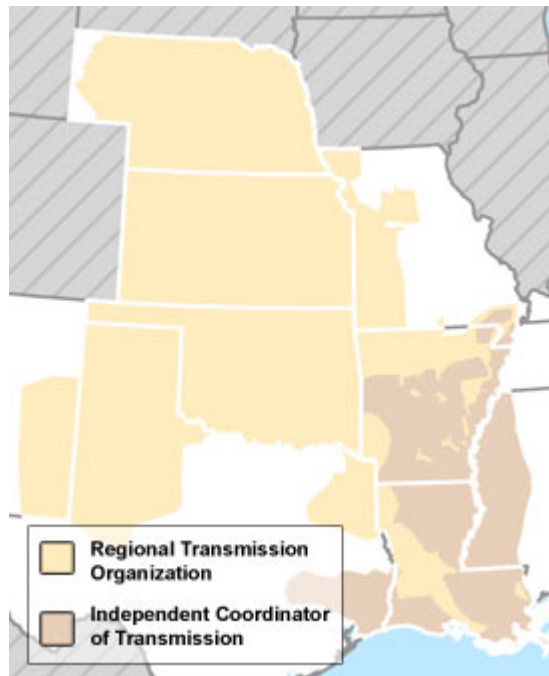
Introduction

This report presents the results of the NERC Reliability Coordinator (RC) Certification Review of Southwest Power Pool (SPP) Independent Coordinator of Transmission operators (ICT) (NCR01323) taking on RC oversight of 11 existing Balancing Authorities as discussed in the *Company Details* section below.

RCs have a primary responsibility for the real-time operating reliability of their RC areas in coordination with neighboring RCs' wide area views; operation with good operating practices and compliance with the NERC Standards without regard to economic consideration, and avoidance of burdening neighboring systems.

ICT **has provided** Reliability Coordinator Services under NERC policies **since Nov. 1, 2006**

SPP footprint
(With the non continuous ICT areas designated)



Certification Team

Through discussions with the NERC management, NERC Operating Committee coordinator, and SERC, NERC determined that due to the magnitude of changes the SPP ICT operators are taking on, that is reassigned oversight of 11 existing Balancing Authorities, a NERC RC certification was warranted. This decision began the process for certification that is outlined in the NERC Rules of Procedure (RoP) Section 500 and RoP Appendix 5. Following the decision by NERC to have the SPP ICT complete the certification process for the expanded RC footprint, a Certification Team was formed. The team rosters for members of both the RC Certification Team and key SPP RC staff involved are listed in Attachment 1.

Objective and Scope

The objective of this review was to assess SPP's implementation of their processes, procedures, training, and tools which will allow the SPP ICT operators to reliably perform the function of an RC for the addition of the 11 Balancing Authorities identified in the *Company Details* section below.

The scope of the review included, but was not limited to: (1) Interviewing SPP's management and reviewing pertinent documentation for verification of basic requirements for RC operation at the primary and backup control centers; (2) Reviewing procedures and other documentation developed by SPP to ensure reliable operation of the 11 BAs; and (3) Interviewing ICT system operations personnel; and (4) Interviewing SPP EMS and Planning staff.

One site visit was conducted on April 9, 2009.

Overall Conclusion

The certification review process was completed in reasonable accordance with the NERC Rules of Procedure Section 500 and Appendix 5 to determine if the applicant has the necessary tools, processes, training, and procedures to perform the function as a NERC certified RC for the addition of 11 BAs to the SPP ICT operators. SPP presented the necessary evidence to the Certification Team for its review, as it relates to the applicable NERC Standards/requirements and good industry practices for sustained reliable RC operation of the additional 11 BAs. Because of this review, the Certification Team has reasonable assurance the SPP does have the tools, processes, training, and procedures in place to reliably perform the RC function. Therefore, the RC Certification Team recommends that SPP be granted approval as a NERC certified RC on a conditional basis (see *Certification Team Findings* below for details regarding these conditions).

Certification Team Findings

While the team recommends that the SPP ICT operations be granted certification, the following work-in-process items must be completed prior to the ICT RC going operational with the expanded duties. ICT will need to certify in writing that these work-in-progress items have been completed and present adequate evidence of completion to the Certification Team as a condition of certification. The work-in-progress items are:

- RC to RC agreement to clearly identify Command and Control
 - Regarding conflict resolution, identify who is ultimately responsible for providing directives to the 11 BAs
- Documentation of all OJT performed in conjunction with this additional responsibility
- Continuous display availability of BAs' ACE indications by eliminating the monitor screen saver
- Update and post the RC authority letter

Positive Observations

Throughout the certification process the Certification Team made a number of positive observations:

- The CT noted that SPP RC Business Analyst and Sr. Coordinators are very knowledgeable regarding the addition of the 11 new BAs to their RC control desk and are well versed in presenting the tools
- Thorough transition plan that is well communicated throughout the SPP staff and the ICT operators
- The tools are well defined that reduces the potential for human errors
- Well designed, clean, and acoustically sound control facility

Certification Team Focus Areas

To enable the Certification Team to complete a thorough review of the ICT operator processes, procedures, training, and tools and to leverage the expertise of the Certification Team, two focus areas were identified and Certification Team resources assigned, namely, *RC Preparedness* and *Backup facility capabilities*.

The *RC Preparedness* team interviewed SPP staff (ICT operators, support, and management) and reviewed pertinent documentation and witnessed the operator's use of the processes, tools, and procedures for verification of basic requirements to gain reasonable assurance that ICT operator is able to reliably operate the addition of 11 BAs in accordance with good industry operating practice and the NERC Standards.

The *Backup facility capabilities* team interviewed ICT operators and SPP support staff regarding the process and tools associated with the operator's ability to reliably operate the addition of 11 BAs at the backup control facility. The operator and SPP support staff were able to demonstrate familiarity with the various EMS screens, communication protocols, procedures, and specialty tools at the Backup control center.

Company History

In North America, Southwest Power Pool is one of nine Independent System Operators/Regional Transmission Organizations (ISOs/RTOs) and one of eight NERC Regional Entities. ICT is mandated by the Federal Energy Regulatory Commission to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. ISOs/RTOs are the "air traffic controllers" of the electric power grid. ISOs/RTOs do not own the power grid; they independently operate the grid minute-by-minute to ensure that power gets to customers and to eliminate power shortages.

SPP provides the following primary services to their members and customers:

Tariff Administration: In 1998, FERC approved SPP to independently administer the Open Access Transmission Tariff. SPP provides one-stop shopping for regional transmission service with consistent rates and terms. Eligible users can access SPP's transmission system to transport electricity to wholesale customers. SPP ensures fair and open access to the transmission system for all customers. SPP processes an average of 17,000 transmission requests per month.

Reliability Coordination: SPP monitors power flow throughout our footprint. SPP anticipates problems and takes preemptive action to mitigate operating limit violations. SPP coordinates regional response in emergency situations or blackouts.

Regional Scheduling: SPP ensures that the amount of power sent is coordinated and matched with power received. SPP's regional scheduling service reduces the number of entities with which SPP members and customers have to coordinate.

Market Operations: SPP's Energy Imbalance Service market monitors resource/load balance to ensure that less expensive power is used to serve load before expensive power, as long as system reliability is met.

Expansion Planning: SPP's planning process seeks to identify system limitations and develop transmission upgrades for increased capacity.

Contract Services: SPP provides reliability, tariff administration, and scheduling for non-members on a contract basis.

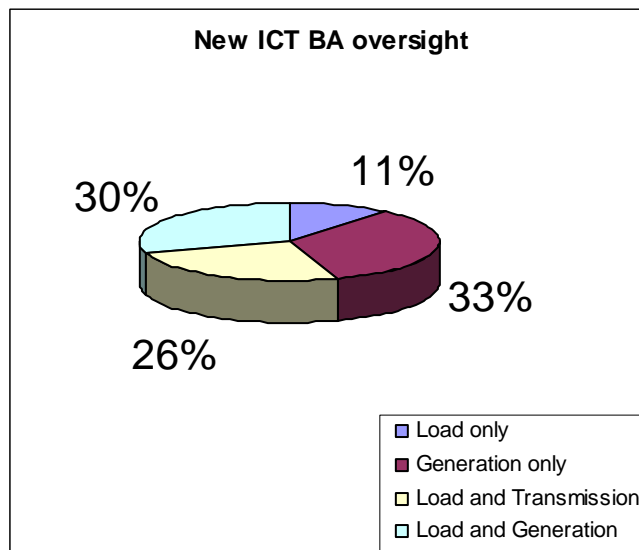
Company Details

SPP plans to redistribute job tasks associated with its performance of the requirements contained in the RTO RC Reliability Plan, ICT Reliability Plan, and NERC Reliability Standards. SPP currently has 14 operator positions split equally across two desks with one desk expected to perform requirements in the RTO Reliability Plan and the other desk expected to perform requirements in the ICT Reliability Plan. The desks are adjacent to each other in the same facility. With the incorporation of the Nebraska entities under the RTO RC Reliability Plan, SPP recognized that it could better perform its expanded RTO and existing ICT RC responsibilities by redistributing certain job tasks from the desk that currently performs RTO RC tasks to the desk that currently performs ICT RC tasks. For internal purposes, the desks would be renamed as Reliability Coordination North (the desk that formerly performed RTO RC tasks only) and Reliability Coordination South (the desk that formerly performed ICT RC tasks only). The tasks that are being redistributed to the “South” desk are those associated with monitoring and taking RC actions on behalf of the 11 BAs that are closely connected to or within the Entergy transmission system. This will result in a better balance of the required work load of the two RC functions between SPP’s NERC Certified operators. The redistribution of work load will allow the SPP operators that perform RC tasks to maintain the high level of reliability accustomed to within the RTO RC and ICT RC areas.

It is important to note that neither RC reliability plan nor function is being modified. The two RC functions and reliability plans are not changing because 1) no RC tools, data or systems are changing, 2) the relationships between the SPP Regional Entity and SERC Regional Entity, the RE members, and the RC functions are not changing, and 3) no responsibilities necessary to perform either plan/function are expected to change. SPP is not changing its EMS models – it will continue to use the RTO network model and real-time data for RTO RC responsibilities and the ICT model and real-time data for ICT RC responsibilities. Neither the 29 entities in the RTO RC Reliability Plan nor Entergy in the ICT RC Reliability Plan will change their RE registration as a result of this effort. All entities will be governed by existing contracts, legal arrangements, and criteria. The changes are seven SPP “South” desk operators will perform RC tasks for the ICT footprint and 11 BAs in the RTO RC footprint. To accomplish this, SPP added an additional EMS monitoring screen on the ICT operator’s “South” desk that only has the applicable information regarding the 11 BAs. The other seven SPP “North” desk operators will perform the RC tasks for the remaining 16 BAs in the RTO RC footprint. All RTO RC tasks will be performed in accordance with current RTO RC procedures. This redistribution of tasks is basically transparent to the entities under the two RC plans. However, certain entities will use a different phone number and will be talking to different operators than they are used to talking with. This change has been well managed and tested by SPP and the affected entities.

The 11 BA systems are a combination of Load-only, Load with-transmission, Generation-only and combined load-generation Balancing areas. The table and graph below specify the makeup and characteristics of these BAs. The change representing nearly 8,300 MW of resources and or load, roughly ~ 20% of the SPP footprint non-coincident peak loads.

Entity	Name	RC ICT new BA oversight	Load only	Generation only	Load and Transmission	Load and Generation	Total
BCA	Batesville Generating Station	*		574			
BUBA	City of Benton, Arkansas	*	75				
CNWX	City of Conway	*	203				
DENL	City of North Little Rock	*	263				
DERS	City of Ruston	*	66				
CLEC	CLECO Power	*			2113		
Lafa	City of Lafayette, Louisiana	*				451	
LEPA	Louisiana Energy & Power Authority	*	221				
LAGN	Louisiana Generating LLC	*					
WMUC	City of West Memphis, AR	*	92			2023	
PUPP	Union Generating Station	*		2200			
		*	920	2774	2113	2474	8281



Documentation List

Copies of all of the supporting SPP documents were collected as evidence of the ICT operators' preparedness and this evidence will be kept as a record to support the Certification Team's recommendation and findings. These documents will be retained at the NERC office in Princeton, New Jersey for a period of six years.

None of the documents listed below are included with the distribution of this final report. Per the NERC Rules of Procedure and due to the confidential nature of this material, these documents are available for review at the NERC offices after proper authorization is obtained.

- ICT's RC evidence file(s)
- Miscellaneous documentation such as:
 - Pertinent emails
 - Agendas
 - Site evolution presentations

Critical Infrastructure Protection [CIP] Requirements

The scope of this certification does not require the review of CIP information.

Attachment 1: Certification Team

The RC Certification Team

- Jim Hughes – NERC (Team Lead)
- Brian Hamilton – NERC
- Bob Goss – SERC
- Steve Thompson – WECC RC
- Donald Hargrove – Oklahoma Gas & Electric

The SPP Staff that Participated in the On-site Visit

- David Hodges – Director, Compliance
- Lanny Nickell – Vice President, Operations
- Kathy Jones – Business Analyst III
- Ron Losh – Lead Compliance Analyst
- Michael Desselle – Vice President, Process Integrity
- Heath Martin – Senior Reliability Coordinator
- Brian Strickland – Senior Reliability Coordinator
- Monte Grist – Senior Reliability Coordinator
- Don Shipley – Manager, ICT Reliability Coordination

Attachment 2: Certification Process Steps

Documentation Review

The Certification Team reviewed appropriate documentation/evidence that provided reasonable assurance that the ICT operators have the tools, processes, procedures, and training to operate as a NERC certified RC for the expanded tasks.

Applications Review

The April 9, 2009 site visit in Little Rock, AR focused on documentation reviews, interviews of certified RC operators, SPP support staff and management, review of the capabilities of the back-up control center, and evaluation of the RC applications and toolset that are available to the ICT operator. The Certification Team reviewed SPP's online applications that are being used and will be used to perform the RC function for the expanded ICT operational tasks. The SPP RC provided application and tool set functionality demonstrations as evidence of operator readiness to assume the additional duties of the SPP newly added 11 BAs.

Operational Testing

SPP has conducted a series of operational and communication tests between the SPP facility and the additional 11 BAs. Operational testing is primarily focused with testing the necessary displays are filtered to the ICT desk in order to facilitate the EMS, operating process, and planned outage scheduling tools. This was tested per SPP's transition plan.

Personnel interviews: Questions and discussion about the BA responsibility change, focusing on the tools available to assess overall system reliability, required actions in the event reliability were to be challenged, and the communication method and time critical nature of information exchanged.