



SPP REGIONAL ENTITY TRUSTEES MEETING
APRIL 28, 2014
Skrivin Hotel
Oklahoma City, OK
A G E N D A

8:00 a.m. – 12:00 p.m.

Meeting Materials

- 1. Call to Order/Introductions ... John Meyer
2. Antitrust Guidelines ... Emily Pennel
3. Approval of Meeting Minutes – Jan. 27, 2014 ... John Meyer
4. 2014 YTD Financial Statement ... Debbie Currie
5. 2015 Preliminary Business Plan and Budget ... Debbie Currie

In 2015, we are reducing staff by one FTE. We are also reducing shared staff, primarily because we are no longer working on any regional standards.

The Trustees will approve the final budget and assessment at their June 17 meeting. NERC will post budgets for all the regions in May.

- 6. 2014 NERC Summer Reliability Assessment ... Chris Haley

We create the assessment with data submitted by reporting entities and also use in-house actual and historical data. We validate and cross-check the data in-house.

Demand projections for 2014 summer are lower than the projected 2013 demand due to the three SPP members moving to MISO. The projected 2014 peak demand is 49,614 MW. We have projected 65,863 MW Existing Capacity resources and 79,791 MW Total Capacity. The difference between Total and Existing Capacity is variable resource de-rates and scheduled outages.

SPP RTO members have not reported any significant generator uprates/de-rates for the summer season. The SPP Reliability Coordinator has identified a few load pockets that require must-run generation for voltage support. Operating guides have been put into place to provide mitigation.

In our region, Demand Response (DR) programs are voluntary and primarily targeted for summer peak load reduction use. SPP members include their own DR and Energy Efficiency (EE) programs as reductions in their load forecasts. Utilization of DR resources is not vital to meeting our region's energy and capacity obligations. SPP RTO members are continuing to expand DR and EE programs. We do not have expected any impacts from environmental regulations for 2014 summer timeframe.

Our forecasted reserve margin is 38% for summer 2014. The Operations Department does not have any ongoing identified concerns. Wind integration continues to be an active issue, though some of the balancing issues have been resolved with the CBA. RTO Board Chairman Jim Eckelberger noted that our region is not finished building new wind generation; there are incentives to continue building.

The draft assessment noted that we do not expect extreme weather to impact reliability. A stakeholder stated that we cannot say whether or not we will have major storms. By "weather" we were referring more to temperatures and drought than storms.

We do not expect any issues impacting generator availability, though coal supplies could potentially be reduced/delayed due to railroad congestion. Coal supplies are becoming a bigger issue at the NERC level. It will be interesting to see how units are dispatched under the new Integrated Marketplace. A stakeholder stated that SPP RE and staff have worked well with members on line clearance mitigations; there has been excellent cooperation on taking line outages.

SPP RTO has identified several flowgates as being constraints on the transmission system, which can be mitigated by redispatching generation. No reliability issues are anticipated SPP RTO does not anticipate project delays that will have significant reliability impacts.

In summary, the assessment area has sufficient capacity to meet forecasted demand during the 2014 summer assessment period.

7. **Recent System Events/Lessons Learned & FAC Update** Alan Wahlstrom
In the first quarter of 2014 we have had eight events. Four did not meet the NERC Event Analysis threshold. Four Category 1 Events were analyzed. Three were Category 1h Events - *Loss of monitoring or control at a control center*. There was one Category 1a Event - *An unexpected outage of three or more BPS facilities contrary to design*.

NERC has issued several "Lessons Learned" that are important for industry to review. An event occurred that caused the unintended activation of a Special Protection System (SPS). Lessons Learned were that human performance factors played a key role in the initial programming error, operators need to be familiar with switching procedures for equipment associated with SPS, periodic reviews are necessary to ensure operators are familiar with any special circumstances, and peer review procedures for relay setting changes are recommended.

Another Lesson Learned related to a generation station ground mat that led to the trip of two generating stations. Lessons Learned were to ensure grounding systems are built to specifications and meet intended performance criteria, that grounding system installation should have appropriate oversight, and to test ground grids.

A third Lesson Learned related to a turbine combustor lean blowout. Under certain frequency excursions, some large frame combustion turbines (CTs) may be prone to tripping. Lessons Learned are to check combustion control systems to improve unit stability for these conditions, and that an issue was found on a transitional piece on certain GE turbines.

The final Lesson Learned related to verification of alternating current quantities during protection system commissioning. Commissioning and testing practices were not implemented during installation of a new transformer, and current transformers had the incorrect CT ratio.

Trustee Christiano noted that many of these issues are related to relaying and asked if there is a “brain drain” on relaying, as many relay engineers are retiring. Alan Wahlstrom noted that in addition to losing knowledge due to retirements, there are issues with oversight and companies running leaner and relying on contractors. Spending time reviewing settings can save money in the long run.

Ron Ciesiel noted that the 1Q regional events are in the low categories of 0 and 1, but it is still important to review them. We appreciate companies following the Event Analysis program and their willingness to work with SPP RE staff on answering questions on the issues.

The majority of the open events NERC relate to EMS/SCADA systems and back-up control centers. We can expect to see more of a focus in this area.

We recently surveyed our Registered Entities to determine if they are using NERC’s published documents on winterization. Of the 33 companies that responded, 42% said they are using the *February 2011 Winter Weather Event Report Recommendations*, 42% are using the *2011 Winter Weather Lessons Learned*, and 40% are using the *Generator Winter Weather Readiness Reliability Guide*. When asked if their companies’ generation units experienced forced outages or de-rates due to the extreme cold temperatures during the Polar Vortex event, 24% said they experienced a generation loss or de-rate.

Facility Ratings Alert Update:

	SPP	National
High Priority 345 kV+	~420 discrepancies 99% remediated	7,966 discrepancies 88% remediated
Medium Priority 230 kV – 345 kV	~1,980 discrepancies 38% remediated	21,612 discrepancies 88% remediated
Low Priority Below 230 kV	~3,630 discrepancies 24% remediated	21,249 discrepancies 34% remediated

There is still a lot of work to do, particularly on the low priority lines. When entities request an FAC extension, we would like the Reliability Coordinator to have had some input on the plan and a coordinated effort.

8. **Travel Compensation for SDT Travel Expenses**.....Ron Ciesiel
SPP RE Registered Entities’ Standard Drafting Team (SDT) membership has been very low relative to the size and influence of the SPP RE footprint. A number of outreach efforts have been undertaken to increase this participation, resulting in more registered voters but has not necessarily more SDT members. Two reasons are generally quoted for the lack of SDT participation: time commitment required to be a SDT member and the added cost of travel expenses. Several Registered Entities have asked SPP RE to consider funding travel expenses for SDT members to remove this barrier and hopefully increase participation.

SPP RE requested that the Trustees approve an annual amount of travel expenditures of \$50,000 per annum to be budgeted as part of the 2015 SPP RE budget to fund this program. If this program increases SDT participation, we can continue it in future years.

There would be some expectations for anyone that wishes to participate in this activity. Travel expenses must be 'reasonable' and must meet their own company's and SPP RE's travel policies. The SDT member would be required to occasionally report progress back through the SPP RTO technical groups, SPP RE staff and Trustees, and SPP RE workshops or webinars.

The SPP RE Trustees approved adding a budget line item to reimburse travel expenses for SPP RE Registered Entities to represent the SPP RE footprint on NERC Standard Drafting Teams in the total annual amount of \$50,000.

9. **CIP Update** Kevin Perry
CIP Version 4 will not come into effect this year. We will transition directly from V3 to V5, with V5 effective 4-1-16.

FERC issued an Order requiring NERC to create within 90 days a Physical Security Standard. Owners or operators of the Bulk Power System are to perform a risk assessment to identify "critical facilities", evaluate potential threats and vulnerabilities to identified facilities, and develop and implement a security plan to protect against attacks based on assessed threats and vulnerabilities. The draft standard was approved by the ballot body. We expect another five-day ballot in May and a FERC filing by June 5. Ron Ciesiel thanked Robert Rhodes and John Breckenridge for serving on the new standard's drafting team.

The new standard is applicable to Transmission Owners and Transmission Operators. It uses similar applicability criteria as CIP-002-5 Impact Rating Criteria 2.4, 2.5, 2.6, 2.7, and 2.12. The standard requires a third-party review of your risk assessment. Could the SPP RE or RTO conduct the third party assessment? Stacy Duckett noted that we need to see the final version of standard to determine if SPP qualifies as an unaffiliated third party.

Kevin Perry shared some take-aways from a DOE briefing he attended. The Office of Security Assistance shared protective measures that could be taken to addresses threats, vulnerabilities, and consequences. Low/no cost ideas include: random patrol by local law enforcement, especially during times where the substation is unmanned; moving attractive theft targets out of line of sight; and performance testing security systems already in place to have a better understanding of where improvements (hardware, response tactics, administrative) may be necessary.

Low-mid level costs include illuminating the perimeter fence (LED lights have worked well for DOE applications) and adjusting existing cameras or installing new ones to cover avenues of concern. Keep in mind that if providing camera coverage around a large perimeter isn't feasible, it still makes sense to provide coverage on the most valuable assets (transformers, control building, etc.).

Mid-high costs include replacing standard chain link fencing with options that provide more delay. DOE has had success with tighter weave fencing that is anti-cut/anti-climb. Other options include placing barriers (rocks, bollards, etc.) around facilities requiring protection from unauthorized vehicles, considering explosive screening for vehicle search, and hiring guards (may not need 24-7).

Copper theft may be more than just theft; it may be a way to measure response times. If you are seeing theft, you may want to look at the targeted facility not just as a theft target but also to ensure the intruders didn't do something else.

Some Lessons Learned are already posted from the CIP V5 study. The study will close-out at the beginning of June and a summary report will be published. Ron Ciesiel thanked Westar for participating in the CIP V5 study

Target's breach is biggest to date with 110 million impacted customers. Though Target is a retail store, we can still learn from the fact that they had many warning signals. The attack could have been prevented or diminished if Target had paid attention to malware detection alarms and security monitoring contractor warnings (Incident Response). Of course, the CIP standards require electronic and physical alerting and monitoring.

There have been several Wall Street Journal articles citing a FERC Power Flow analysis that predicted a nation-wide blackout if nine of 30 critical substations were taken out by a coordinated physical attack. Could someone possibly see this article as a "carrot", encouraging them to test/threaten our systems?

There was an incident at a significant substation in Arizona that was not widely published. Intruders entered a control house but nothing was taken and there was no indication of malware. It may have been a reconnaissance probe, possibly to gauge response. The Arizona Joint Terrorism Task Force has correlated this incident with other attacks. We need to be sure law enforcement understands the criticality of industry assets.

Kevin Perry is presenting at a FERC Technical Conference on CIP V5 issues; opening statements and transcripts will be posted.

10. **NERC System Protection and Control Subcommittee (SPCS) Update** ... Lynn Schroeder
Lynn Schroeder confirmed that the "brain drain" on relaying expertise is a real issue. It takes a long time to understand relaying, and often new staff want to be up and running very quickly. We need to get young engineers interested in and excited about system protection.

The SPCS has some of the best minds in the relaying field. The group writes technical papers and lessons learned. The group also owns the misoperations spreadsheet. The SPCS is working to better understand misoperations to identify trends, common factors, and root causes. Communications is the highest cause of misoperations in our region. Please send any feedback to Ms. Schroeder on these issues so our region will be well-represented.

A drafting team is working on a new standard on power swings. The SPCS wrote a white paper that NERC has published. We need to take a close look at places that are most susceptible to swings.

There is also a drafting team working on Special Protection Schemes. The SPCS heard a presentation from each region on their SPSs. The standard strives to bring all definitions into one.

In response to a FERC Order, NERC made the *Order 754 Data Request* to determine if there is a reliability risk due to the lack of redundancy in protection systems. Rather than writing a standard, the data request was made. The SPCS is interpreting the data and taking great care to understand what the data is telling us.

11. **Enforcement Report**.....Joe Gertsch
Through March 31 SPP RE has had 26 incoming violations, which is 50% below what we received by this time last year. Other regions are also reporting reductions in incoming violations. There is an ever-increasing number of FFTs (Find, Fix, Track) being filed at NERC. As of March 31 we had a caseload of 167 open violations; 25 are high impact. Most violation dismissals come when two or more violations are consolidated. There are 79 violations with no mitigation plans. We like sending violations through FFT and spreadsheet Notice Of Penalty. If we don't receive a mitigation plan from the entity, we can't use FFT.
12. **General Manager's & Compliance Report**Ron Ciesiel
The SPP RE online training video library received an award from the International Association of Business Communicators Arkansas Chapter. Mr. Ciesiel reviewed the progress of NERC's Reliability Assurance Initiative projects; we expect full implementation by 2015. There is a new concept called "compliance exceptions", which is an off ramp for minor items that today have to

go through FFT. FERC audited SPP RE's 2013 FFT performance and had no findings requiring reconsideration. The streamlined TFE process seems to be working well. After several quarters of decline, our operations success rate has improved.

Mr. Ciesiel recommended that Registered Entities use the SPP RTO's services for pre-audit review and assistance.

13. **Outreach Activity**Emily Pennel
SPP, Inc. is hosting "CIP Week" in the first week of June including a CIP V5 Training, the CIPWG meeting, the RE Workshop, and the RTO Forum.
14. **YTD Staff Performance Goals & Metrics** Ron Ciesiel
SPP RE is in overall good shape on our YTD staff goals and metrics.
15. **NERC Committee Representative Written Reports – Comments or Questions**
There were no questions or comments on the NERC reports.
 - 10a. Compliance and Certification CommitteeJennifer Flandermeyer
 - 10b. System Protection and Control Lynn Schroeder
 - 10c. Interchange SubcommitteeJason Smith
No meetings to report
 - 10d. Operating Committee Report..... Jim Useldinger
 - 10e. Critical Infrastructure Protection CommitteeRobert McClanahan
16. **New Action Items** Emily Pennel
Staff will give a FAC report at the July meeting on remediation of medium priority lines.
17. **Future Meetings** John Meyer
June 17, 2014 – Little Rock (budget meeting)
July 28, 2014 – Omaha
October 27, 2014 – Little Rock

The meeting was adjourned at 12:20 p.m.

Emily Pennel
SPP RE Trustees Secretary