SPP RE 2014 Year-End Report

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Executive Summary

In 2014, the SPP RE staff achieved a high level of success when measured by our goals and metrics; staff’s weighted total metrics achievement was 121.8%. Other accomplishments include improved audit and enforcement processes, continued engagement with NERC’s Events Analysis and Facility Ratings Alert programs, timely publication of three Regional Reliability Assessments, increased attendance at webinars and workshops, improved technology, implementation of the revised Bulk Electric System Definition, positive feedback from NERC and FERC observers of SPP RE audits, and favorable ratings on the annual stakeholder survey.

Numbers at a Glance

- Audit reports issued: 54
- Audits performed: 56
- Events processed: 30
- FFTs processed: 62
- Mitigation Plans reviewed: 101
- Newsletters published: 12
- Registration changes: 25
- Reliability Assessments published: 3
- TFE actions: 271
- Videos produced: 8
- Violations processed: 188
- Violations received: 121
- Workshop & webinar attendees: 578
Compliance Monitoring

**Performed 56 audits; Issued 54 audit reports**

In 2014, SPP RE conducted 38 off-site audits and published 38 off-site audit reports. Audit teams held 18 on-site audits and published 16 on-site audit reports, including one from work completed in 2013. Three Critical Infrastructure Protection (CIP) 2014 audit reports will be published in 2015.

In 2014, the average time to issue the on-site audit reports was 39 days, compared to our goal of 70 days. The average time to issue the off-site audit reports was 31 days, compared to our goal of 50 days.

The SPP RE CIP audit team observed a Registered Entity’s risk assessment and internal controls evaluation performed by another Regional Entity.

**Improved Audit Processes**

The Operations and Planning (O&P) and CIP audit teams implemented several process and performance improvements in 2014. Overall, the average time to publish audit reports was reduced. The O&P team continued to enhance their pre-audit evidence review. The pre-audit review enables the audit team to perform its work more efficiently and effectively once the official audit period begins, and allows them to make assessments on some standards without further action during the audit. Based on the results of the pre-audit review, the audit team leaders were able to reduce the amount of time spent on-site from approximately 3.5 days to 2.5 days, and in some cases reduce the size of the on-site audit team.

The CIP audit team continued its comprehensive pre-audit evidence review for both on-site and off-site audits. Pre-audit activities include collection and review of randomly sampled evidence and a pre-audit review of follow-up evidence requests stemming from the first evidence review. The first round of CIP compliance audits for Balancing Authority/Transmission Operator-Registered Entities was completed in 2013, with an expectation that having been through the process once already, Registered Entities and their evidence would improve for subsequent audits. The audit team has not seen a significant reduction in questions and possible findings requiring follow-up during the on-site audit; therefore, they have not been able to take advantage of the pre-audit reviews to eliminate a meaningful number of on-site requirements.

Compliance staff implemented use of the NERC Auditor Handbook and associated checklist to verify consistency of audit documentation and work papers.

The CIP and O&P teams continued to emphasize outreach during the audit field work, as permitted by the GAO Generally Accepted Government Auditing Standards (GAGAS). Outreach efforts were coordinated with the audited Registered Entity’s Primary Compliance Contact throughout the audit, starting with the 90-day audit notice, to ensure the level of outreach was acceptable to and met the Registered Entity’s expectations. The O&P audit team outreach focused on reducing misoperations due to communication failures, rolling-out Risk-Based Compliance Monitoring and Enforcement (formerly known as the Reliability Assurance Initiative), and suggesting internal control activities
for specific requirements.

Many of the SPP RE compliance staff are members or observers to various NERC working groups, task forces and SPP working groups. Two compliance staff team members are actively involved with the development of the new Reliability Standard Audit Worksheet (RSAW) template, new and revised O&P RSAWs, and the CIP Version 5 RSAWs. Two compliance staff team members were actively involved in presenting the ERO Auditor Handbook training and one of the team members continued as an active member of the ongoing Handbook Task Force.

One SPP RE Registered Entity participated in the NERC CIP Version 5 Transition Study (one of six participants) and continues as an active participant in the CIP Version 5 Transition Advisory Group. One member of the CIP compliance team is the project coordinator/primary contact for the Registered Entity and represents SPP RE on the NERC-led core study team. Experiences and lessons learned from the transition study will be used to develop Registered Entity and staff training and will influence development of the Risk-Based Compliance Monitoring and Enforcement program within SPP RE.

We enhanced audit staff training through several mechanisms. In conjunction with NERC and the other REs, SPP RE audit staff and a number of SPP RE contractors participated in two NERC-sponsored auditor workshops. The CIP audit team participated in the 2014 NERC Grid Security Conference. Several staff also attended a NERC-led performance auditing training workshop. One O&P auditor has attained the Certified Internal Auditor certification. Several CIP and O&P auditors are enrolled in training that will result in Certified Internal Auditor certifications.

FERC observers attended five SPP RE audits in 2014. While there is always room for improvement, the general tone of the feedback sessions from observers was very positive.

**Managed TFE Caseload**

The Technical Feasibility Exception (TFE) Program related to CIP standards completed its fifth year in 2014. We have processed 810 new or amended TFE requests since the program’s inception, including 44 TFEs newly submitted in 2014. In 2014 we accepted 91 new or amended TFEs prior to eliminating that processing step from the compliance management application (webCDMS). Staff approved 172 TFEs, disapproved one, and terminated seven. The active TFE caseload at the end of 2014 was 235, an increase of 36 over 2013.

FERC approved a significantly revised TFE process (Appendix 4D to the NERC Rules of Procedure) in 2013. The webCDMS portal was modified in late 2014 to conform to the revised TFE process. In the interim, our Registered Entities continued to manage their TFEs under the pre-modification webCDMS-supported process. With the webCDMS update, SPP RE is no longer required to accept submitted TFEs as a prerequisite step to TFE approval.
Processed 30 Bulk Power System Events

In 2014, SPP RE’s Event Analysis staff engaged with the national NERC Event Analysis program and handled 30 reportable events, including 13 events that qualified for a category of one or higher. This is more events than we had in 2013; the increase may be due to the new EOP-004-2 standard, which requires Registered Entities to report events listed in the Event Analysis Process document. NERC published a Lesson Learned from the SPP RE Region, Improved Contractor Oversight Needed. The NERC Event Analysis Subcommittee believed this was an excellent Lesson Learned and asked Westar Energy to present it to the NERC Operating Subcommittee.

In November 2014, SPP RE Event Analysis staff responded to a FERC inquiry regarding follow-up actions in response to the FERC-NERC Staff Report on the 2011 Southwest Cold Event and the 2014 Polar Vortex and winter storm events. FERC sent a data request to all three Regional Entities involved in the Polar Vortex event; the questions related to reasons for unit outages, actions taken by the Regional Entity to resolve specific generator issues, policy and procedural changes made by the Registered Entities, and outreach activities.

SPP RE reported that almost half of all of the unit outages during the Polar Vortex event were caused by frozen lines, valves, and switches. SPP RE surveyed the Registered Entities to determine if the cold weather generator outage causes have been resolved. The Registered Entities indicated that the following repairs/procedures changes had been made following the January 2104 events:

- Repaired a generator linkage
- Combustion unit tuning
- Replacement of heat trace
- Replaced feed water pump heater
- Installed heated enclosures over controls
- Installed wind breaks
- Procedural change to start a fire in the boiler any time weather is forecasted to below 25°F
- Monitor ambient temperatures more frequently in critical areas

Our response to FERC described SPP’s winter preparedness outreach, including the SPP Regional Transmission Organization’s (RTO) operator training that included numerous weather-related scenarios. SPP RTO formed the Gas Electric Coordination Task force to respond to any gas and electric coordination issues that impact the SPP region. SPP RTO also conducted a Winter Reliability Assessment meeting with its members to discuss procedures and policies concerning winter preparedness.

Managed Entity Registrations and BES Revisions

In 2014, SPP RE added four new Registered Entities, de-activated seven, reduced the number of registered functions for 14, and reviewed but did not change the registration of four. The revised Bulk Electric System (BES) definition went into effect on July 1, 2014. SPP RE processed 143 self-determined notifications for 154 elements and two local networks. The average processing time was 8.4 business days. We are processing three Exception Requests and have met the associated timelines outlined in the NERC Rules of Procedure. An SPP RE team member became chair of the NERC ERO Registration and Certification Functional Group this year.
**Participated in Facility Ratings Alert Program**

NERC launched a Facility Ratings alert program at the end of 2010, with a goal of having all BES lines checked for clearances and ratings by the end of 2013 and remediation of discrepancies complete by the end of 2014. The SPP RE Events Analysis group is coordinating this activity for the SPP RE footprint. All lines under the Facilities Ratings Alert in the SPP RE region have been assessed: 420 discrepancies were found on the high priority lines, 1,980 on the medium priority lines, and 4,050 on low priority lines. All discrepancies on the high priority lines have been remediated, 68% of the medium priority lines have been remediated, and 67% of the low priority lines have been remediated. Final results from the 2014 activities are expected in February 2015. Eight companies have asked for and been granted extensions due to LIDAR contractor availability, outage scheduling conflicts, and retaining resources. One of the Registered Entities that received an extension has completed remediation of all of its lines.

**Published Three Reliability Assessments**

SPP RE is responsible for developing annual winter, summer, and long-term reliability assessments. The 2014 long-term reliability assessment shows adequate reserve margins for the SPP RTO footprint over the next ten years. SPP’s planning processes have identified a number of transmission projects needed for reliability purposes, and it is expected that those projects will be completed as scheduled or mitigation plans will be developed.

The most significant transmission challenges facing portions of the SPP footprint are related to an increase in oil and gas drilling. New oil and gas drilling facilities are built faster than they can be captured in SPP’s planning processes and models. SPP also continues to have an influx of variable generation resources, leading to operational challenges. SPP is enhancing its planning processes to better capture the impacts of the oil and gas projects and variable generation. Given the region’s generation capacity, transmission infrastructure, and enhancements being made to processes and models, SPP is expected to be able to meet any challenges—including environmental regulations—that may arise during the next decade. Registered Entities are experiencing low coal inventories due to congested rail lines; some coal inventories have gone as low as a ten-day supply.
Enforcement

Processed 188 violations; Received 121

In 2014, the SPP RE Enforcement group received the lowest number of incoming violations it has received since 2009 (121). Of the 121 incoming violations, 66 or 55% were self-identified, i.e., Self-Reports or Self-Certifications submitted by the Registered Entity. CIP violations (87) continue to represent the overwhelming majority of new violations, outnumbering O&P violations by more than two to one.

The SPP RE Enforcement group processed 188 violations in 2014, including 35 of the 36 pre-2013 violations. Even with the loss of an Enforcement Attorney mid-year, SPP RE Enforcement was able to exceed its violation processing goal for 2014 and maintain a caseload index of less than nine months throughout the year. For the third year in a row, the number of violations processed via the Find, Fix, Track and Report (FFTR) disposition method (62) represented the largest number of violations processed. An increase in the number of violations processed utilizing the Full Notice of Penalty process (22) occurred in 2014, primarily due to the processing of multi-region violations. Fifteen of 17 multi-region violations processed in 2014 were processed with the Full Notice of Penalty process. The remaining 104 violations processed in 2014 were either dismissed (44), processed utilizing the Spreadsheet Notice of Penalty process (59), or treated as a Compliance Exception (1).

Due to the reduced number of incoming violations and efficiency gains in the processing of minor risk violations, the Enforcement caseload at year’s end is down to 119, from 186 in 2013. The number of violations older than one year (39) is up slightly from 2014 (36), due principally to the addition of violations that were previously on administrative hold pending resolution of the sovereign immunity issue. It is also noteworthy that the Enforcement caseload at year’s end includes 26 multi-region violations, up from 16 at the end of 2013.

On August 22, 2014, the District of Columbia Court of Appeals ruled in favor of the Southwestern Power Administration (SWPA) in *Southwestern Power Administration, ET AL. v. Federal Energy Regulatory Commission*. The Court found that federal entities were not subject to monetary penalties under the Energy Policy Act of 2005. The ruling settled an ongoing enforcement action between SPP RE and SWPA regarding four violations and provided a path forward for 36 other federal entity violations.

Mitigation Plans; High Impact Violations

In keeping with the lower number of incoming violations, mitigation activities were also down significantly in 2014. There were 99 mitigation plans submitted in 2014 as compared to 200 in 2013. Similarly, Enforcement completed the review of 101 completed mitigation plans in 2014 as compared to 180 in 2013. At the end of 2014, the number of violations without mitigation plans was not down as significantly. There were 69 violations without mitigation plans at the end of 2014, as compared with 89 at the end of 2013. In part, the difference can be attributed to multi-region violations wherein SPP RE is not the lead Region. Of the 26 multi-region violations in the SPP RE caseload at year’s end, SPP RE is the lead for only one of the multi-region violations and that violation has been mitigated. Twenty of the 25 remaining multi-region violations did not have mitigation plans submitted at year’s end.
Enforcement continues to focus its mitigation plan efforts on “High Impact” (HI) violations to ensure that violations that represent a substantive risk to the Bulk Electric System are mitigated as soon as possible. At the end of 2013, there were 61 open HI violations, 26 of which did not have accepted mitigation plans. At the end of 2014, there were 12 open HI violations; all had accepted mitigation plans and five were complete.
## 2014 Metrics Performance

<table>
<thead>
<tr>
<th>Metric</th>
<th>Actual Performance</th>
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<tbody>
<tr>
<td>1. Expedite processing and mitigation of High Impact (HI) violations</td>
<td>104.88%</td>
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<tr>
<td>3. Accept or reject Mitigation Plans within 30 days of submission by Registered Entity</td>
<td>150%</td>
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<tr>
<td>4. Complete Mitigation Plan completion reviews within 30 days of Registered Entity notification of completion</td>
<td>150%</td>
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<tr>
<td>5. Process pre-2013 violations and send to NERC by 11/20/14</td>
<td>100%</td>
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<tr>
<td>6. Complete incoming violation triage within 60 days of Compliance staff sending the possible violations to Enforcement</td>
<td>150%</td>
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<tr>
<td>7. Complete documentation close-out of all closed violations within 60 days of issuance of the NCEA</td>
<td>85.57%</td>
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<tr>
<td>8. Publish non-public off-site audit report to NERC (55 days)</td>
<td>120%</td>
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<tr>
<td>9. Publish non-public on-site audit report to NERC (75 days)</td>
<td>120%</td>
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<tr>
<td>10. Review and issue determination for BES registration and deactivation requests</td>
<td>107.286%</td>
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<tr>
<td>11. Publish internally completed assessment of Self-Certification/exception reporting/periodic data submittals</td>
<td>100%</td>
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<tr>
<td>12. Process incoming Possible Violations to NERC through webCDMS in 5 business days or less</td>
<td>119.6%</td>
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<td>13. Reduce estimated cash costs</td>
<td>150%</td>
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<td>14. Increase outreach/oversight of relay misoperations data to reduce reported misoperations for 4Q 2013-3Q 2014</td>
<td>142.5%</td>
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<td>15. Assure proper Event Analysis cause codes can be verified from Event Analysis Reports issued by SPP RE Registered Entities</td>
<td>150%</td>
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<tr>
<td>16. Complete 100% of outreach production goals with a stakeholder satisfaction rating ≥ 3</td>
<td>130%</td>
</tr>
<tr>
<td><strong>ACTUAL WEIGHTED TOTAL</strong></td>
<td><strong>121.84%</strong></td>
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Outreach

SPP RE holds three compliance workshops annually. Members, Registered Entities, and other interested parties are invited to attend in-person or via webinar to learn more about SPP RE and NERC processes, emerging issues, compliance best practices, and more. In addition to presentations by SPP RE staff, guests from FERC, NERC, and Registered Entities are invited to speak on topics of interest. In 2014, SPP RE held three workshops with 578 participants, a 16% increase over 2013.

To provide more information regarding the CIP Version transition, SPP RE presented two detailed webinars and a half-day, hands-on training exercise at the Spring and CIP Workshops. SPP RE also presented these materials at the ERO Auditor Training Workshops and the North American Generator Forum.

SPP RE posts training videos to capture basic compliance education presented at webinars and workshops. In 2014 we posted eight new videos on topics including Misoperations, CIP-010, TOP-004, and Port Scans.

SPP RE regularly hosts webinars to inform Registered Entities about compliance matters and emerging issues. In 2014, SPP RE hosted six webinars with 800 registrants. The average number of registrants per webinar increased 60% over 2013, from an average of 80 per webinar to an average of 133.

SPP RE issued 12 monthly e-newsletters that included feature articles, workshop and webinar invitations, and updates on SPP RE and NERC activities.

In 2014, SPP RE staff continued to participate in the RE Trustees, MOPC and the following SPP working groups: Operating Reliability, Transmission, System Protection and Control, Operations Training, Critical Infrastructure Protection, Generation, Model Development, Event Analysis, Consolidated Balancing Authority, and Operations Model Development. The RE General Manager also participates in Board of Directors meetings.

Improved Technology

In 2014, SPP RE worked with all Regional Entities and NERC to develop, test, and implement new functionality for NERC’s Risk-Based Compliance Monitoring and Enforcement program. This enhancement includes functionality for processing issues of non-compliance such as Compliance Exceptions and Self-Logging. SPP RE staff worked with OATI and other regions to test and implement other webCDMS enhancements, including the addition of a document repository and improvements to the TFE and RAPA modules.

SPP RE worked with the other REs and NERC to implement a Regional Consistency Reporting Tool to improve consistency across the ERO. This online tool allows stakeholders to anonymously report perceived inconsistencies among Regional Entities.
Southwest Power Pool Regional Entity

**Stakeholder Survey**

SPP RE strives to continuously improve its performance of its NERC-delegated functions. Each year we ask Registered Entities to provide anonymous input on programs and customer service. The 2014 SPP RE survey had a 62% response rate (76 respondents), up from 57% in 2014. On a 1-5 scale in which 5 represents the most favorable score, average ratings throughout the survey were between 3.3 and 4.5. Of the 30 respondents who interact with other Regional Entities, none rated SPP much worse or somewhat worse, 38% rated SPP RE about the same, 31% rated SPP RE somewhat better, and 31% rated SPP RE much better.

When asked how well SPP RE’s programs and services meet expectations, respondents rated all with average scores in the *meets expectations* range between 3.3 and 3.6. When asked to rate employees’ customer service ability or programs’ responsiveness to needs, respondents rated all with average scores between *good* and *excellent*, from 4.1 to 4.5. The 2014 overall satisfaction rating of 4.1 is the highest rating in four years.

**2014 Budget Performance**

SPP RE’s 2014 actual expenses were $9.4 million compared to the 2014 budget of $11.8 million. The budget variance of ~$2.4 million was driven primarily by four open staff positions, as over 85% of the budget is personnel-based (salaries, travel expenses, and the SPP, Inc. overhead charge). The remaining budget variance of ~$640,000 resulted from a decrease in the use of consultants and contractors arising from the smooth roll-out of the new BES definition, improved audit performance of the Registered Entities, and the absence of any hearings. Although SPP RE was under budget for 2014, all of its required activities were completed as a result of SPP RE staff’s increased experience; a declining number of incoming violations due to a higher level of compliance, particularly in the Operations and Planning area; and enhanced efficiencies in internal SPP RE processes.

**2014 Goals and Achieved Performance**

The following goals were outlined in the 2013 year-end report. Each of these is listed below with its status.

1. Coordinate with NERC and Registered Entities on implementing BES definition exception process

   In 2014, SPP RE staff participated in testing the BESnet tool and developing procedures to evaluate Exception Requests. According to BESnet statistics, SPP RE’s average processing time was 8.4 business days, which is in line with our 10 business day metric on other registration matters. SPP RE discussed the BES definition changes during our Spring workshop.

2. Continue working with NERC and other Regional Entities to streamline and standardize CMEP processes through tools and initiatives such as the Reliability Assurance Initiative,
Auditor Handbook, auditor training/certification, added on-site audit efficiencies, and reduced audit scope

SPP RE implemented the Auditor Checklist for audits conducted during 2014, developed an Entity Risk Assessment template for assessing Registered Entities’ impacts to the BES for use in audit scoping, participated in development of the ERO Sampling Handbook, and participated in and presented at the ERO Auditor Workshops.

3. Monitor Registered Entities’ remediation of Facility Ratings discrepancies (FAC Alert)

At the end of 2014, all Registered Entities completed assessments on all priority lines. All high priority line discrepancies have been mitigated, 67% discrepancies of medium priority lines have been mitigated, and 68% of low priority lines have been mitigated. Eight companies have requested extensions, and one of the companies completed its remediation ahead of schedule. In 2015, SPP RE staff will continue to monitor Registered Entities’ progress on mitigating lines.

4. Work with Registered Entities on CIP version transition

In 2014, SPP RE conducted two webinars and two training exercises for SPP RE Registered Entities. The webinars addressed the identification of BES Cyber Systems and NERC’s CIP V5 Transition Guidance. The training, conducted at the Spring and CIP workshops, consisted of a half-day, hands-on exercise to identify BES Cyber Systems in a fictional entity.

In addition to these formal trainings, SPP RE has conducted numerous outreach activities in conjunction with on-site CIP compliance audits, presented CIP V5 transition updates to the SPP RE Board of Trustees, and responded to numerous emails and phone calls.

An SPP RE staff member is a representative on the NERC CIP V5 Transition Advisory Group and the NERC CIP V5 Transition Steering Committee. An SPP RE Registered Entity was a participant in the CIP V5 Transition Study and is also a member of the Advisory Group. Information from the Advisory Group is being taken back to the SPP membership through the SPP RTO-sponsored CIP Working Group.

5. Meet specific performance metrics and goals

The SPP RE met or exceeded 15 of the 16 performance goals established in the 2014 Staff Goals and Metrics. Most notable was processing 100% of the pre-2013 compliance violations and attaining all outreach production goals with an SPP RE Stakeholder Satisfaction Survey rating of 3.6.
2015 Goals

1. Work with the SPP RTO Compliance Department to develop a coordinated outreach effort for CIP Version 5 transition. The 2015 CIP Compliance Workshop will be mostly dedicated to CIP Version 5 requirements. Additional webinars and a practical exercise are in the early planning stages. SPP RE and the SPP RE Registered Entity will continue their involvement in the CIP Version 5 Transition Advisory Group and continue to keep the SPP membership up to date through the SPP CIP Working Group.

2. Continue working with NERC and other Regional Entities to streamline and standardize CMEP processes through tools and initiatives such as the Risk Based Compliance Monitoring and Enforcement program, Auditor Handbook, auditor training/certification, added on-site audit efficiencies, and reduced audit scope.

3. Develop internal controls to track and monitor CMEP activities.

4. Achieve a favorable rating on all NERC and FERC spot checks.

5. Develop “how-to” guides for Compliance and Enforcement webCDMS process and procedures.

6. Meet specific performance metrics and goals.

7. Monitor Registered Entities’ remediation of Facility Ratings discrepancies (FAC Alert), which draws to completion at the end of 2014.