



**REGIONAL ENTITY TRUSTEES MEETING**

**OCTOBER 26, 2015**

**SPP Corporate Center**

**Little Rock, Arkansas**

**A G E N D A**

**8:00 a.m. – 3:00 p.m.**

1. Call to Order/Introductions ..... John Meyer
2. Antitrust Guidelines ..... John Meyer
3. Approval of Meeting Minutes – July 27, 2015 ..... John Meyer
4. Comments from NERC Board Member ..... Jan Schori
5. Winter Reliability Assessment Overview..... Lanny Nickell  
*Action Item: Endorse the report*
6. NERC Operating Committee Report..... Jim Useldinger
7. CIP Update..... Kevin Perry
8. 2015 Stakeholder Satisfaction Survey Results .....Ron Ciesiel
9. Event Analysis/FAC/Winter Data Request..... Alan Wahlstrom
10. 2016 Implementation Plan ..... Jim Williams
11. Enforcement Report.....Joe Gertsch
12. SPP RE 2015 Trustee Self-Assessment..... John Meyer  
*Action Item: Approve for submission to SPP, Inc. Corporate Governance Committee*
13. General Manager’s Report/Compliance Report.....Ron Ciesiel
14. SPP RE Third Quarter Financial Report.....Debbie Currie
15. Staff Goals and Metrics .....Ron Ciesiel
16. Outreach Activity .....Emily Pennel
17. NERC COMMITTEE REPORTS – Comments or Questions  
17a. Planning Committee .....Noman Williams  
17b. Compliance and Certification Committee .....Jennifer Flandermeyer  
17c. System Protection and Control ..... Open  
17d. Critical Infrastructure Protection Committee..... Eric Ervin
18. Existing and New Action Items ..... Emily Pennel

*Relationship-Based • Member-Driven • Independence Through Diversity  
Evolutionary vs. Revolutionary • Reliability & Economics Inseparable*



19. Future Meetings ..... John Meyer

January 25, 2016 - Oklahoma City

April 25, 2016 - Santa Fe

July 25, 2016 - Rapid City

October 24, 2016 - Little Rock

# SPP Regional Entity Antitrust Guidelines

**It is SPP RE's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or which might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.**



Southwest Power Pool
REGIONAL ENTITY TRUSTEES MEETING MINUTES

July 27, 2015

Hilton KCI

Kansas City, Missouri

8:00 a.m. – 3:00 p.m.

Download Materials

- 1. Call to Order/Introductions ... John Meyer
2. Antitrust Guidelines ... John Meyer
3. Approval of Meeting Minutes – June 15, 2015 ... John Meyer
4. Long Term Reliability Assessment (LTRA) ... Lanny Nickell

There are 60,900 MW of Existing Certain Capacity in 2015 and 56,900 MW in 2025. We are reporting 61,120 MW Anticipated Capacity in 2015 and 59,020 MW Anticipated Capacity in 2025.

About 3,000 MW of confirmed nameplate generation is expected to be retired 2015-2025. The Clean Power Plan (CPP) was not considered as a factor in these projections because there has not been a final rule on the plan.

We are managing reliability concerns regarding the exchange of energy between MISO Central/North and MISO South. Wind will continue to cause operational challenges. During off-peak periods, there may be higher wind output with not enough transmission to handle the increased output.

Approximately 4,000 miles of 100+ kV transmission is expected to be constructed over the 10-

year assessment period. The 2015 ITP 10 study is assessing members' renewable portfolio standards and modeling the SPP Assessment Area to account for these mandates and goals.

The final SPP LTRA report is due to NERC July 31. The SPP RE Trustees accepted the LTRA for submission to NERC, pending edits that consider the comments raised by the Trustees.

**5. State of Reliability Report .....Mike Hughes**

NERC's State of Reliability report looks back and forward, and it considers both normal conditions and how the system performs under contingencies. The Severity Risk Index (SRI) considers generation, transmission, and loss of load for a given day. Most of the 2014 top SRI days were related to winter storms. There were seven Key Findings:

- a. Weather continues to stress reliability. System design is important, but there will always be outages. Industry needs to continue focusing on best practices for preparedness and restoration.
- b. There was no load loss due to cyber or physical security events. There were reportable events caused by physical security threats and damage.
- c. We have had a decline in average transmission outage severity.
- d. There has been a significant decrease in loss of load from unplanned transmission outages. This is a success story.
- e. We have seen a stable frequency response trend. In February, NERC issued an alert asking industry to review generator governor dead bands and droop settings to improve frequency response.
- f. Protection system misoperations are trending lower. SPP RE appreciates Registered Entities' focus on reducing misoperations. The SPP System Protection and Control Working Group published one paper on regional misoperations and is working on another one.
- g. The use of Energy Emergency Alert Level 3 continues to decline. This is another success story. We appreciate everyone's participation in the Event Analysis process.

**6. Standard Drafting Team Travel Reimbursement ..... Ron Ciesiel**

Last year the SPP RE Trustees approved paying travel costs for NERC Standard Drafting (SDT) team members to attend SDT meetings. We hoped this would help more stakeholders to be able to join SDTs. We did not have any new takers on this reimbursement program. This reimbursement program will continue through 2016. We will reconsider this budget item for the 2017 budget. We need to find a new SPP RE representative for the NERC System Protection and Control working group.

**7. SPP Bylaws Updates. .... Ron Ciesiel**

We want to ensure that NERC and stakeholders are confident in SPP RE's independence from the SPP RTO. We are proposing some changes to the SPP, Inc. Bylaws. We propose expanding the SPP RE Trustees from three to four members. The SPP RTO's membership elects the SPP RE Trustees and SPP, Inc. Board members. The SPP, Inc. membership has diverged from the RE footprint; there are now SPP members that are not SPP RE Registered Entities. We propose that only SPP RE Registered Entities that are members of SPP, Inc. be able to vote on the SPP RE Trustees. This issue will be further considered by the Corporate Governance Committee.

**8. 2Q Events Report and Facility Ratings Alert Update ..... Ron Ciesiel**

We have had a lot of good news about reliability across the ERO. We have had six events reported so far this year; only four reached category 1 status. There was one category 1h event this quarter, *partial loss of monitoring or control at a control center for 30 minutes*. Ron reviewed several NERC Lessons Learned. As of the second quarter, under the NERC Facility Ratings Alert program, we had 7,100 discrepancies in our region. As of 7/15/15, 100% of the high priority lines are complete, 72% of medium priority lines, and 85% of the low priority lines. We will not be

processing any compliance issues related to the FAC program. We appreciate Registered Entities' work in this area.

**9. NERC CIPC Report..... Eric Ervin**

Eric Ervin has replaced Robert McClanahan as the SPP RE's representative on the NERC Critical Infrastructure Protection (CIP) committee. The Grid Security Conference is October 13-16 in Philadelphia, and GridEx III is November 18-19. More Registered Entities are interacting through the ES-ISAC portal. NERC is creating a physical separation between the ES-ISAC and the rest of the NERC office space. We want to continue increasing the reporting of suspicious activity via the ES-ISAC portal.

In May the NERC Board of Trustees adopted update CIP-014-2 and is seeking policy input on the future of standards development, the CIP Version 5 transition program, implementation of physical security standards, and compliance guidelines. NERC is in the early stages of developing an updated CIP Version 5 Transition Guidance.

**10. CIP Update .....Shon Austin**

FERC issued a Notice of Proposed Rulemaking that generally proposes to approve the revised CIP Version 5 (also known as CIP Version 6) standards as filed and listed concerns that could result in additional revisions or development of a new standard. FERC noted gaps in CIP-006-6 technical controls, remote access protection, protection of Low Impact BES Cyber Systems, and the proposed definition for Low Impact External Routable Connectivity. FERC asked if CIP standards should provide security controls for supply chain management for industrial control systems associated with BES operations.

The SPP RE CIP compliance group does not anticipate physically inspecting Low Impact BES Cyber Systems if the Registered Entity can demonstrate compliance by other means. Registered Entities could provide evidence that shows compliance with the applicable requirement such as pictures and/or video tours of the facility physical controls and a Firewall Access Control List of the Low Impact BES Cyber System's Electronic Security Perimeter.

There are some open issues related to XML Listener and a revision of the SPP RE business rule for generation dispatch instructions. Jennifer Flandermeyer noted that the RTO and RE need to work together more on the details of the issue.

NERC has developed a "Way Forward" project to identify how to support long-term solutions and discuss concerns with the recent CIP V5 memoranda. On request, SPP RE is conducting outreach meetings at Registered Entity offices. The host Registered Entity has the option to invite other Registered Entities and SCADA/EMS vendors to participate.

**11. Enforcement Report.....Jimmy Cline**

We have had a continuing decline in violations, likely due to a maturing of compliance programs and revamped requirements. As we get away from zero tolerance, we are noting some issues as "areas of concern" in audit reports rather than bringing the issues through the enforcement process. We have had an uptick in FFTs and Compliance Exceptions. We have 84 active violations; 58 are CIP and 26 are Ops and Planning. There are seven open High Impact violations. We urge Registered Entities to voluntarily submit mitigation plans in as quickly as possible to clear them from the books. The amount of time you are out of compliance factors into the penalty determination.

**12. General Manager's & Compliance Report ..... Ron Ciesiel**

Ron recently attended the CIP V5 Way Forward meeting; we expect to see revised postings soon. NERC withdrew the memos it had posted April 21. We have had our ninth consecutive quarter with no vegetation contacts. We removed 33 Interchange Authorities and Purchasing-Selling Registered Entities from the SPP RE registry. We reduced registration for 41 others. SPP RE's events, misoperations, and violations are all trending down.



SPP RE has completed 22 Inherent Risk Assessments for Registered Entities on the 2015 audit schedule. We have had two requests for Internal Control Evaluations. Across the ERO, 14 groups of 63 Registered Entities have requested inclusion in the Multiple Regional RE program. Nine of the 14 groups included SPP RE Registered Entities.

SPP RE executed the NERC Regional Delegation Agreement in June. SPP RE was afforded the same renewal clause as other Regional Entities.

**13. Outreach Activity ..... Emily Pennel**

There were 235 in-person/webinar registrants for the CIP 2015 workshop in Kansas City; 92% of attendees rated the workshop in the top two categories of *excellent* or *good*. The Fall Workshop will be Sept. 29-30 in Dallas and via webinar.

**14. Financial Report/Year-to-Date Financial Statement ..... Debbie Currie**

We have carried open positions for several years. We hired a new CIP auditor and authorized hiring a new Ops & Planning auditor. We have eliminated two open positions. We are underrunning our budget on contractors/consultants, personnel, meetings/travel, professional services, and the SPP, Inc. overhead charge. We project a \$1.6 million budget under-run by the end of the year.

**15. Staff Goals and Metrics ..... Ron Ciesiel**

The Trustees approved 17 staff performance goals and metrics for 2015. We are on track with the metrics.

**16. NERC Committee Representative Written Reports - Comments or Questions**

There were no comments or questions.

16a. Planning Committee Report ..... Noman Williams

16b. Compliance and Certification Committee Report..... Jennifer Flandermeyer

16c. NERC Operating Committee Report ..... Jim Usledinger

16d. System Protection and Control Report ..... Open

**17. New Action Items ..... Emily Pennel**

Ron Ciesiel took an action item to report on the cost of the FAC Alert program.

**18. Future Meetings ..... John Meyer**

October 26, 2015 - Little Rock, AR

January 25, 2016 - Oklahoma City, OK

April 25, 2016 - Santa Fe, NM

July 25, 2016 - Rapid City, SD

October 24, 2016 - Little Rock, AR

The meeting was concluded at 1:59 p.m.

Respectfully,  
Emily Pennel  
SPP RE Trustees Secretary

**REGIONAL ENTITY TRUSTEE MEETING**

**JULY 27, 2015**

**ATTENDANCE LIST**

NAME	SYSTEM
Sheila Scott	SPP RE
Emily Fennel	SPP RE
Louis Oquidry	AEP (teleconference)
Fred Meyer	Empire ( " " )
<del>Chris Haley</del>	<del>Empire</del>
<del>Alan Wahlstrom</del>	<del>Empire</del>
Chris Haley	SPP RTO ( " " )
Alan Wahlstrom	SPP RE ( " " )
Joe Gertsch	SPP RE ( " " )
STUART LOWRY	SUNFLOWER
CHIP KOLOINI	GOLDEN SPREAD
TOM NESTERMANN	Sunflower
Robert IVANAUSKAS	FERC
ERIC ERVIN	WESTAR
Bo Jones	westar



NAME	SYSTEM
John D. Rhee	OG&E
Jennifer Flandermeyer	KCPL
LANNY NICKELL	SPP
Michael Yesselle	SPP
JOSHUA MARTIN	SPP
HARRY SKILTON	SPP Director
ROU CIESIEL	SPP RE
DARRELL PIATT	FERC
John Olsen	Westar
Scott Henry	SERC
TRENT CARLSON	SOUTH CENTRAL MGN
BETH EMERY	"
Paul Malone	NPPD
Ted Franks	FERC
Tim Jacoby	AEP
Jimmy Cline	SPP RE
Debbie Cui	SPP RE
SHON AUSTIN	SPP RE
Brent Baker	Empire
BARY WARREN	Empire
Mike Hughes	SPP RE

# Teleconference

Andrea Poucekk  
John Allen  
Jim Nail  
Darryl Boggess

SGE RE  
SPRM  
Westar  
WFEC

# 2015/2016 NERC Winter Assessment



# Winter Reliability Assessment

- **Projected seasonal outlook for winter 2015/2016**
  - **Focus on Reporting Area Peak (January)**
- **Primary objectives:**
  - **Identify areas of concern**
  - **Make recommendations for mitigations/actions as needed**
- **Provides high-level overview of winter reliability assessment for SPP RTO region**
  - **Demand growth**
  - **Capacity adequacy**
  - **Operational reliability**

# Assessment Area



# 2015/2016 Winter Demand & Capacity

- 41,766 MW Projected **Total** Internal Demand (non-coincident)
- 41,000 MW Projected **Net** Internal Demand (non-coincident)
  - Difference between Total and Net Internal Demand is 766 MW Demand Response
- Capacity resources represent the Net Capability
  - 67,058 MW Existing Certain Capacity Resources
    - Includes net transactions of -509 MW
  - 67,819 MW Anticipated Capacity Resources
    - Adding 761 MW Planned Generation expected to be in service during the winter timeframe

# Transactions and Reserves

- 3,748 MW Firm Imports
- 4,257 MW Firm Export
  - Net transaction is -509
- Reserve margins adequate
  - SPP members required to maintain 12% capacity margin - translates to a 13.6% reserve margin
  - Existing Certain and Net Firm Transfers forecasted reserve margin is 64% for winter 2015/2016
  - Anticipated Reserve Margin is 65% (includes projected generation)

# Reliability Concerns

- **SPP has not identified any unique or unusual operational challenges for the 2015/2016 winter assessment period**
- **Active Issues**
  - **Fuel supply**
  - **Wind Integration**



# Major Transmission Additions

- **~ 162 miles of transmission expected to be added by end of winter assessment timeframe**
  - **New 230kv line from Channing – Potter County (52 miles)**
  - **New 230kv line from Channing – XIT (70 miles)**
  - **New 230kv line from Potash Junction – Road Runner (40.4 miles)**

# **SPP Regional Trustee Update**

## **October, 2015**

**NERC Operating Committee**  
**Meeting**  
**September 2015**

Jim Useldinger  
Kansas City Power & Light  
[jim.useldinger@kcpl.com](mailto:jim.useldinger@kcpl.com)  
816-654-1212

# Eastern Interconnection Data Sharing Network (EIDSN)

- The EIDSN was formed by Eastern Interconnection RC's in January 2014 as a non-profit company
- ORS, through the Data Exchange WG, is working closely with NERC staff and the EIDSN to ensure a smooth and reliable transition from NERCnet to the new Elnet
- All companies are connected to Elnet
- NERCnet expected to be terminated on SEPT 30

# NA SynchroPhasor Initiative (NASPI)

- Update on continued deployment and use of networked phasor measurement devices, phasor data-sharing, and applications development and use
- PMU usage for diagnosis and analysis
  - Verification of generator settings
  - Wind plant performance
  - Transmission equipment performance
  - Equipment installation and protection
- NASPI Technical Report – Diagnosing Equipment Health and Mis-Operations posted at [www.naspi.org](http://www.naspi.org)

# Reliability Guideline: Primary Frequency Control

- Initiated by OC direction to RS at the June 2015 meeting
- OC approved posting the draft Guideline for a 45-day comment period
- Purpose is to provide generator operators guidance on equipment settings that support frequency response (i.e., dead bands, droop, outer loop control, etc.)
- Includes recommendations for governor testing

# Essential Reliability Services TF

## Recent Activities

- Ongoing TF work for tracking and trending ERS
- Draft Measures Framework Report, dated SEPT 2015 – long-term assessment of essential reliability services to supplement existing resource adequacy assessments
  - 6 recommended measures
  - 3 recommended industry practices
  - AUG 27 webinar explained all measures and industry practices proposed in the draft Measures Framework Report
- Draft Abstract Report – less technical document to inform, educate, and build awareness on the implications of the changing resource mix and how industry can evolve the system in a reliable manner

# Resolving Eastern Interconnection Inadvertent Interchange Balances

- Inadvertent Interchange Working Group determined that there is inadvertent interchange balance on the books
- Reconcile with BAs in Eastern Interconnection
- OC approved sending a letter to the Regional Entity Survey Contacts to determine whether the IA data in the NERC IA reporting application is correct
- When finalized, RS will propose a methodology to payback the mismatch

# Event Analysis Process

- OC approved Version 3 and its Appendices of the EA Process document proposed by the EAS
- Revisions
  - Retired Category 1.f – unplanned evacuation from a control center facility for 30 min or more (covered under 1.h)
  - Retired Category 2.b – complete loss of SCADA and monitoring capabilities for 30 min or more
  - Modified Category 2.c – clarify that reporting is based on an event that affects a number of facilities in a TOPs footprint (ex. Voltage excursions on one or two buses is not the intent)
  - Appendix A modified to clarify the timing requirements on the Brief Report (timing requirement doubled) and the Event Analysis Report reports
  - Appendix C Items modified
- EAS developing a guidance document for reporting events (e.g., a Category 1.a event, which is loss of 3 or more elements)
- EAP vs EOP-004
  - EOP-004 is a required standard for purposes of reporting events
  - EAP is voluntary for purposes of analyzing events



# Subcommittee Activities

- Operating Reliability Subcommittee (ORS)
  - Working with IDC Tools Association on the Parallel Flow Visualization project
  - Geomagnetic event reporting
  - Revising Time Monitoring Reference Document
  - Endorsed the TVA Reliability Plan
  - Finalizing draft Reliability Guideline: Reliability Coordinator – BA/TO/TOP Communications: Real-Time Reliability Tools Degradation
- Resources Subcommittee (RS)
  - Interconnection Frequency Response Initiative
  - BAL-003-1 Implementation

# Subcommittee Activities (cont)

- Event Analysis Subcommittee (EAS)
  - 3 new Lessons Learned published
    - Loss of EMS Communication Due to Lack of Validation on EMS Database RTU Configuration Parameter
    - Relay Design and Testing Practices to Prevent Scheme Failure
    - Loss of EMS due to RTU LAN UPS Failure
- Personnel Subcommittee (PS)
  - Working on Version 4.4 of the Continuing Education Manual
  - Review possible definitions of term Situational Awareness
    - OC consensus to develop a guidance document

# OC Activities

- Doug Peterchuck, OPPD, State/Municipal Sector, elected to OC Executive Cmte
  - Exec Cmte members are Chair Jim Case, Vice Chair Lloyd Linke, David Souder (ISORTO Sector), Keith Carman (Cooperative Utility Sector), Gerry Beckerle (IOU Sector) and Doug Peterchuck (State/Municipal Sector)
- Chair Case appointed Jerry Rust (RE Sector), Tom Irvine (Federal/Provincial Sector), Todd Lucas (IOU Sector), Richard Kinas (State/Municipal Sector) and Leonard Kula (ISO/RTO Sector) to serve as the OC's Nominating Cmte
- Chair Case welcomed new OC members 1) Stuart Goza (Federal/Provincial Sector), 2) Sammy Roberts (SERC RE Sector), 3) David Zwergel (ISO/RTO Sector, 4) Dan Schoenecker (MRO RE Sector), 5) John Stephens (Transmission Dependent Utility Sector)
- Chair Case noted pending retirements of Jerry Mosier (NPCC RE Sector) and Ray Phillips (Transmission Dependent Utility Sector)
- Next meeting on December 15-16, 2015 in Atlanta, GA

# CIP Update

October 26, 2015

Kevin B. Perry  
Director, Critical Infrastructure Protection  
[kperry.re@spp.org](mailto:kperry.re@spp.org)  
501.614.3251



# Agenda

- **CIP Version 5 Guidance**
- **Training and Outreach**
- **CIP Version 5 Effective Dates**
- **CIP Version 5 Revisions**
- **CIP-014 (Physical Protection)**
- **2016 Compliance Monitoring Plan**

# CIP Version 5 Guidance

- **Two Lessons learned and 27 FAQ questions posted as final on the NERC website**
  - **Generation Segmentation**
  - **Far-End Relay**
- **Two Lessons Learned and 14 FAQs approved by NERC Standards Committee and are pending posting as final**
  - **Mixed Trust EACMS**
  - **Grouping of BCS**
  - **Consolidated FAQs (41 topics) expected to be posted 10/23**

# CIP Version 5 Guidance

- **Three Lessons Learned are pending Standards Committee approval**
  - **Impact Rating Criteria 2.6**
  - **Communications Networks**
  - **Generation Interconnection**
- **Two Lessons Learned are being finalized for submission to the Standards Committee for approval**
  - **External Routable Connectivity**
  - **BES Cyber Asset**

# CIP Version 5 Guidance

- **Two Lessons Learned are posted for industry comment**
  - Vendor Management (comments due 10/23)
  - TO Control Centers (comments due 11/6)
- **One or two Lessons Learned are under development**
  - Patch Management
  - Possibly a revised Interactive Remote Access Guide
- **Plan is to be complete by the end of 2015**



# Training and Outreach

- **SPP RE Outreach**
  - **Have conducted six on-site CIP V5 outreach sessions at request of registered entities**
    - **One was a NERC SRP (Security Reliability Program, formerly known as Sufficiency Review Program) review**
    - **SCADA/EMS vendor included in one session to date**
  - **Supported six NERC Small Group Advisory Sessions**
  - **Three more on-site sessions scheduled in 2015**
  - **Nine on-site sessions scheduled in Q1 2016**

# Training and Outreach

- **Responding to numerous phone calls and email inquiries**
  - **Forwarding inquiries to NERC and other Regional Entities for information sharing and regional consensus**
- **Will shift focus of V5 outreach to Low Impact BES Cyber Systems starting Q2 2016**
  - **NERC considering Small Group Advisory Sessions, webinars, and workshops**
  - **SPP RE considering site visits, webinars, CIP Compliance workshop**

# CIP Version 5 Effective Date

- **Initial effective date for CIP Version 5 Standards is April 1, 2016**
  - **Some requirements have a delayed effective date**
- **Entities with Low Impact BES Cyber Systems**
  - **All registered entities with BES Cyber Systems must be compliant with CIP-002-5.1, Requirements R1 and R2 by April 1, 2016**
  - **This includes registered entities that only have Low Impact BES Cyber Systems**
  - **Security Controls implementation for Low Impact BES Cyber Systems not required before April 1, 2017**

# CIP Version 5 Revisions

- **FERC issued Notice of Proposed Rulemaking (NOPR) on July 16, 2015**
  - **Proposed to approve CIP Version 5 Revisions**
  - **Proposed to require additional revisions and/or sought comment on**
    - **Protection of Transient Devices used with Low Impact BES Cyber Systems**
    - **Protection of Bulk Electric System communication networks between Control Centers**
    - **Supply chain management for Industrial Control Systems**
    - **Low Impact External Routable Connectivity**

# CIP Version 5 Revisions

- **NOPR comment period ended September 21, 2015**
- **Currently awaiting FERC approval of CIP Version 5 Revisions**
  - **Currently expect that approval no later than the FERC December open meeting will result in CIP V5 Revisions becoming effective beginning April 1, 2016**
- **Anticipate additional standards development activity to address issues with**
  - **Programmable Electronic Devices**
  - **External Routable Connectivity**

## **CIP-014-2 (Physical Protection)**

- **Compliance with Requirement R1 required as of October 1, 2015**
- **Compliance with Requirement R2.2 no later than December 30, 2015**
- **Modification or rebuttal, if necessary, required within 60 days of completion of Requirement R2.2.**
- **Control Center notifications required within seven days of completing all of Requirement R2**
- **Physical security plan required within 120 days of completion of all of Requirement R2 with third-party review completed within 90 days thereafter**

# 2016 Compliance Monitoring Plan

- **Data Request**
  - Seeking information on CIP-002 identifications
  - Expected Q1 or Q2 2016
- **Eight CIP V5 Compliance Audits scheduled Q2-Q4 2016**
  - Focus on CIP-002-5.1, CIP-005-5, CIP-006-5, CIP-007-5, and CIP-010-1
  - Requirement Parts with delayed implementation effective dates are excluded until effective date reached
  - Additional requirements may be added based upon registered entity's Inherent Risk Assessment

# 2016 Compliance Monitoring Plan

- **CIP audits to determine if the registered entity's program is effective and to identify both successes and challenges**
  - **Auditors expected to note Areas of Concern if there is a potential BES reliability risk, even if fully compliant with the language of the CIP V5 Standards**
- **FERC expected to conduct CIP V5 and CIP-014-2 audits beginning in 2016**
  - **SPP RE will cancel planned audit activities for a registered entity if FERC steps in**
  - **Regions and NERC may observe FERC-led audits**



# Helpful Resources

- [SPP RE CIP V5 Guidance Page](#)
  - Contains links to:
    - NERC Version 5 Transition Home Page
    - FERC CIP Version 5 Filings
    - SPP RE presentations, webinars, and videos

# SPP RE CIP Team

- [Kevin Perry](#), Director of Critical Infrastructure Protection  
(501) 614-3251
- [Shon Austin](#), Lead Compliance Specialist-CIP  
(501) 614-3273
- [Steven Keller](#), Lead Compliance Specialist-CIP  
(501) 688-1633
- [Jeremy Withers](#), Senior Compliance Specialist-CIP  
(501) 688-1676
- [Robert Vaughn](#), Compliance Specialist II-CIP  
(501) 482-2301
- [Sushil Subedi](#), Compliance Specialist II-CIP  
(501) 482-2332

# 2015 RE Stakeholder Satisfaction Survey Results

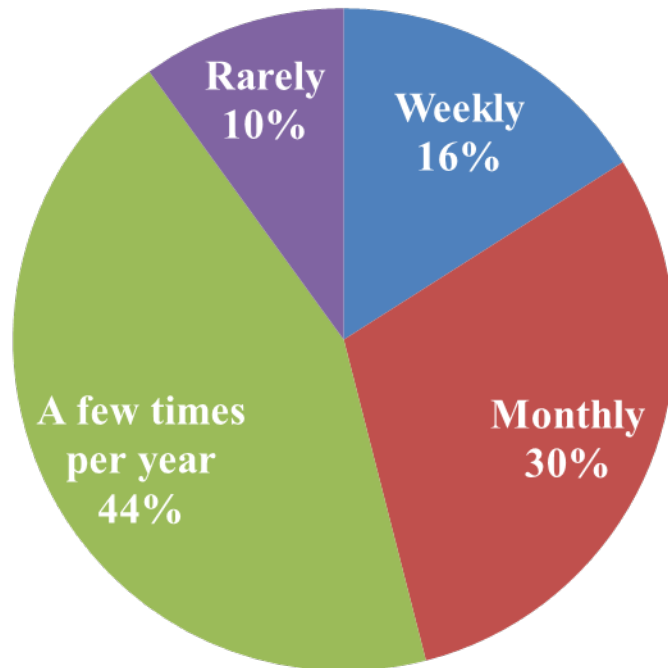
October 26, 2015

Ron Ciesiel  
SPP RE General Manager

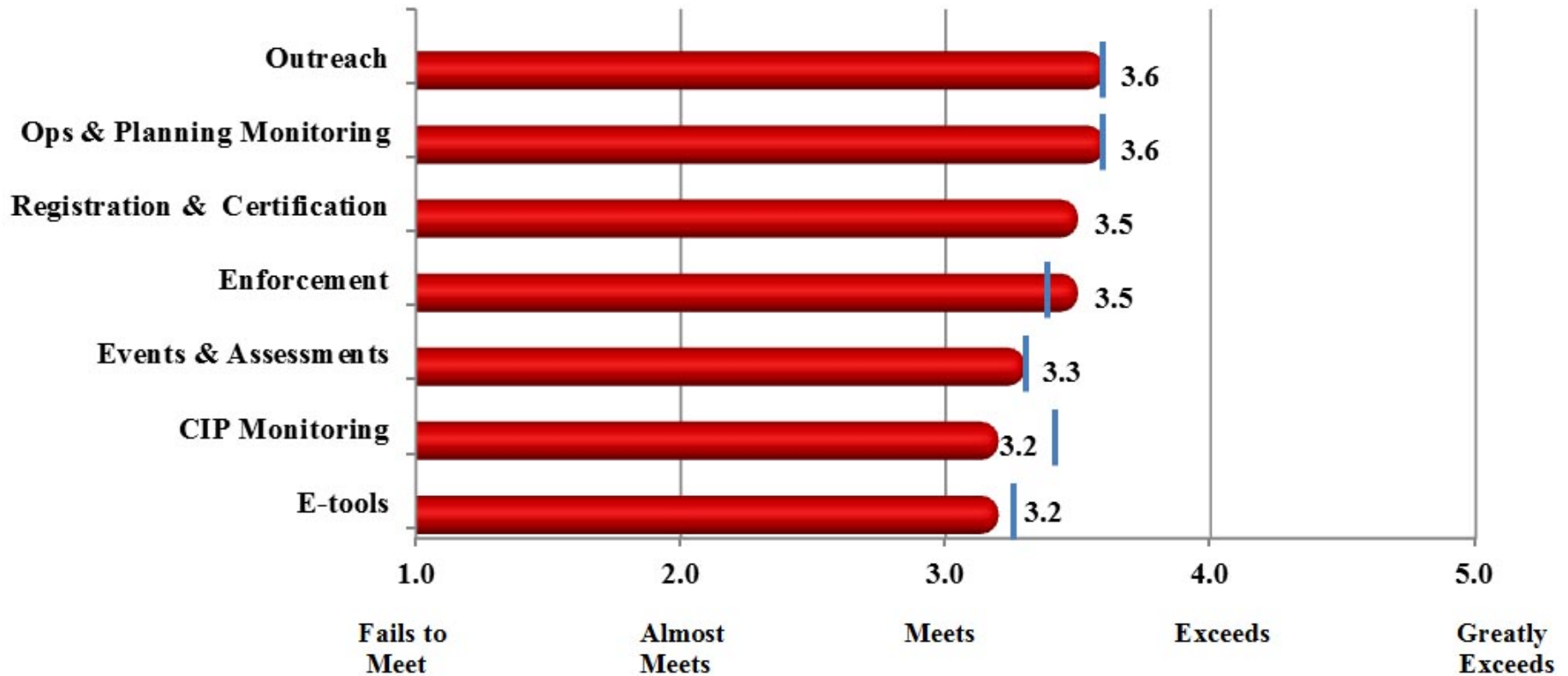


# About the respondents

- Sent to Primary Compliance Contacts
- 58 respondents
  - 12 “opted out”
- 65% response rate
  - Up from 62% in 2014
- Frequency of interaction



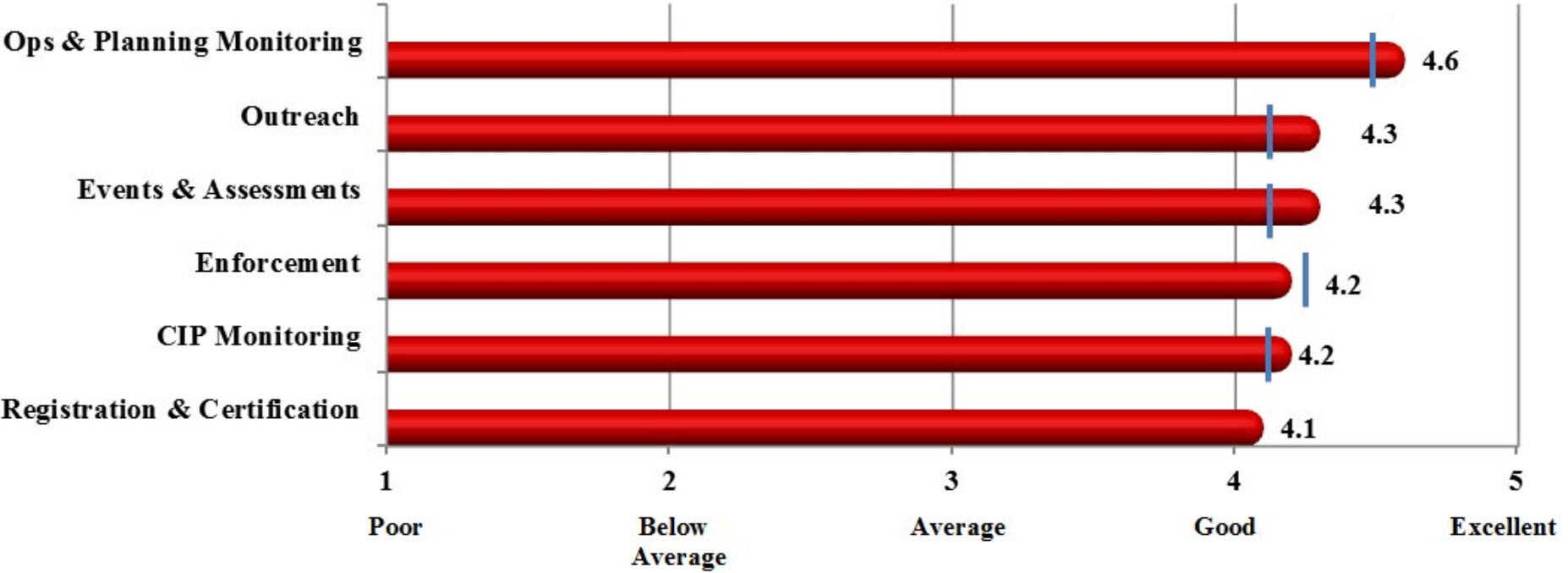
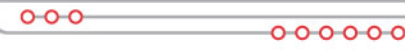
# How well program meets expectations



Denotes the 2014 rating

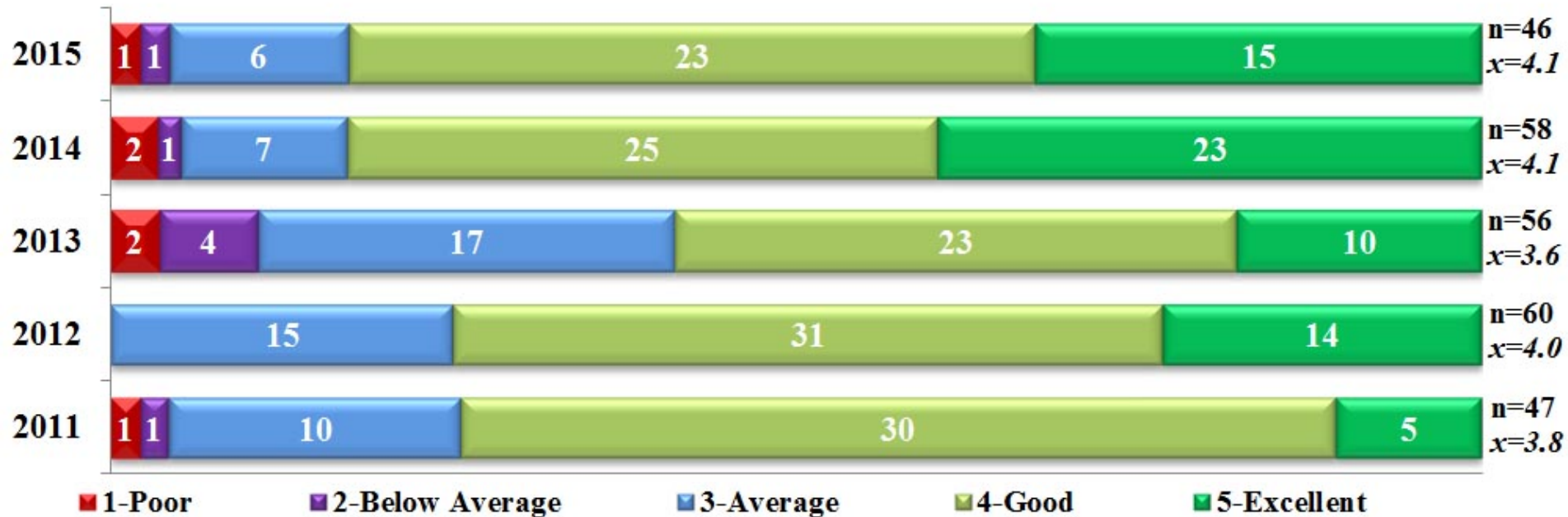
- All averages in *meets expectations* range between 3.2 and 3.6

# Customer Service/Responsiveness



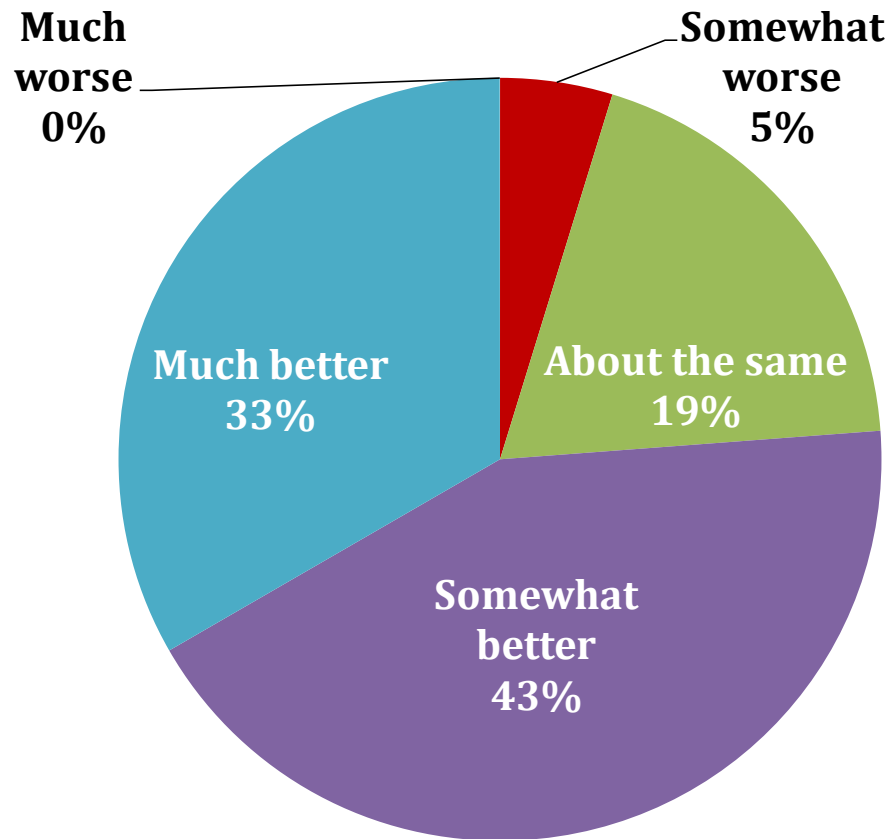
- All averages between *good* and *excellent*, from 4.1 to 4.6

# Overall Satisfaction Year-By-Year



- Overall score of 4.1 is just above *good*
- Same as 2014 score

# Interaction with other Regional Entities



n=30



# Qualitative Analysis

- **6 Dissatisfied** comments related to:
  - Enforcement staff changes
  - Slow adoption of Risk Based processes
- **11 Satisfied** comments regarding staff's:
  - Proactive outreach efforts
  - Responsiveness, professionalism, and expertise
- **6 suggestions for exceeding** expectations:
  - Improve staff availability while traveling
  - Get procedures in place before implementing programs
  - Further reduce audit burdens

# Next Steps

- **SPP RE management and staff will discuss survey results**
- **Management and staff will develop action plan to address concerns**



# 2015 SPP RE Stakeholder Satisfaction Survey Report

## Table of Contents

<b>Executive Summary .....</b>	<b>3</b>
<b>Demographics .....</b>	<b>5</b>
<b>Interaction with other Regional Entities.....</b>	<b>6</b>
<b>Operations and Planning Compliance Monitoring.....</b>	<b>7</b>
<b>Critical Infrastructure Protection (CIP) Compliance Monitoring .....</b>	<b>9</b>
<b>Enforcement .....</b>	<b>11</b>
<b>Event Analysis/Lessons Learned and Reliability Assessments.....</b>	<b>13</b>
<b>Outreach .....</b>	<b>14</b>
<b>Electronic Tools.....</b>	<b>16</b>
<b>Registration and Certification .....</b>	<b>17</b>
<b>Overall Performance 2011-2015 .....</b>	<b>18</b>
<b>Qualitative - Dissatisfaction .....</b>	<b>19</b>
<b>Qualitative - Satisfaction .....</b>	<b>20</b>
<b>Qualitative - Improvement.....</b>	<b>21</b>

## Executive Summary

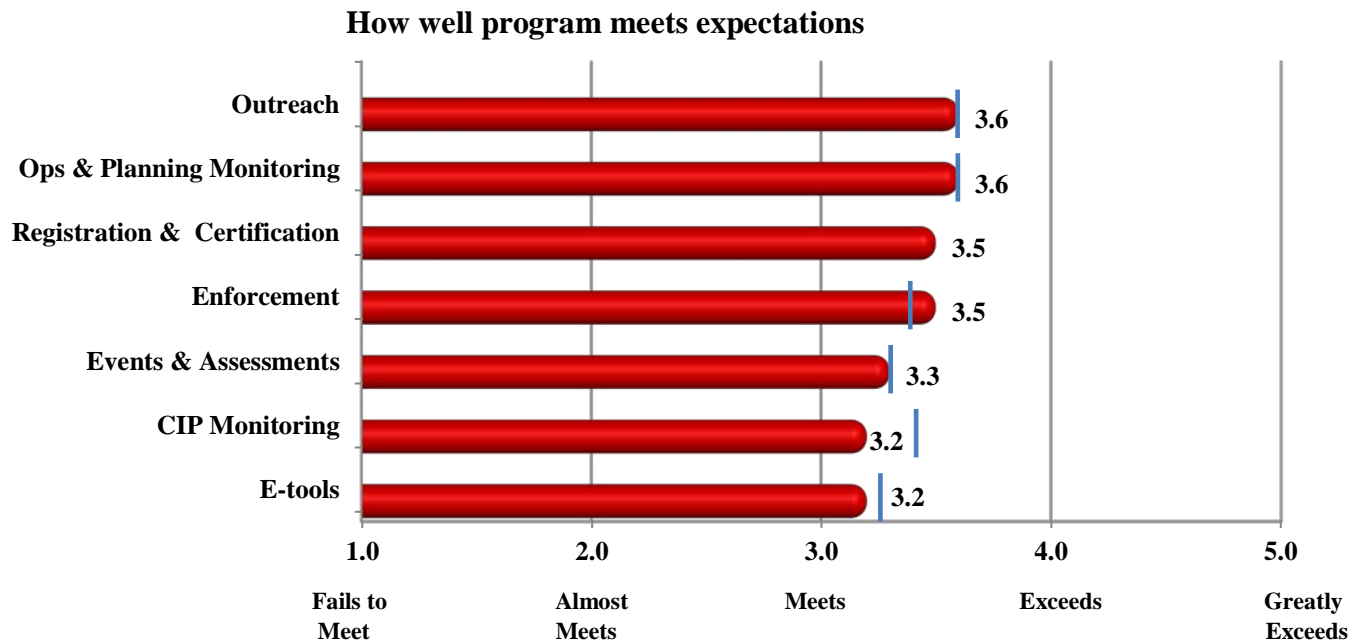
SPP RE strives to continuously improve its performance of its NERC-delegated functions. Each year SPP RE asks its Registered Entities to provide anonymous input on the organization’s programs and customer service to stakeholders.

SPP RE issued the 2015 Stakeholder Satisfaction Survey on September 15, 2015 to the 88 Primary Compliance Contacts who are registered in SPP RE’s compliance database (webCDMS). The survey had a 65% response rate (58 respondents), up from 62% in 2014. Of the 58 respondents, 12 opted out of the survey.

Respondents were asked to assess seven SPP RE programs on their importance, how well they meet expectations, and customer service/responsiveness. Stakeholders were also asked to assess SPP RE’s performance in relation to other Regional Entities, to rate overall performance, and to provide qualitative comments.

Of the 21 respondents who interact with other Regional Entities, none rated SPP much worse, 5% rated SPP RE somewhat worse, 19% rated SPP RE about the same, 43% rated SPP RE somewhat better, and 33% rated SPP RE much better.

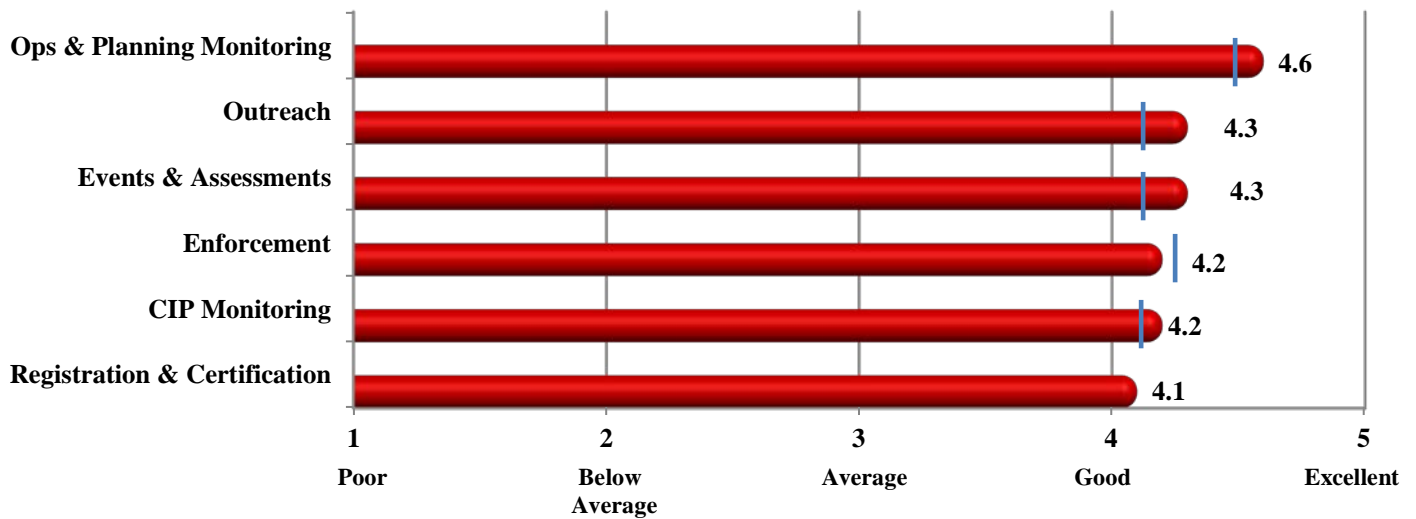
When asked how well SPP RE’s programs and services meet expectations, respondents rated all with average scores in the *meets expectations* range between 3.2 and 3.6.



Denotes the 2014 rating. *Registration & Certification* is a new category.

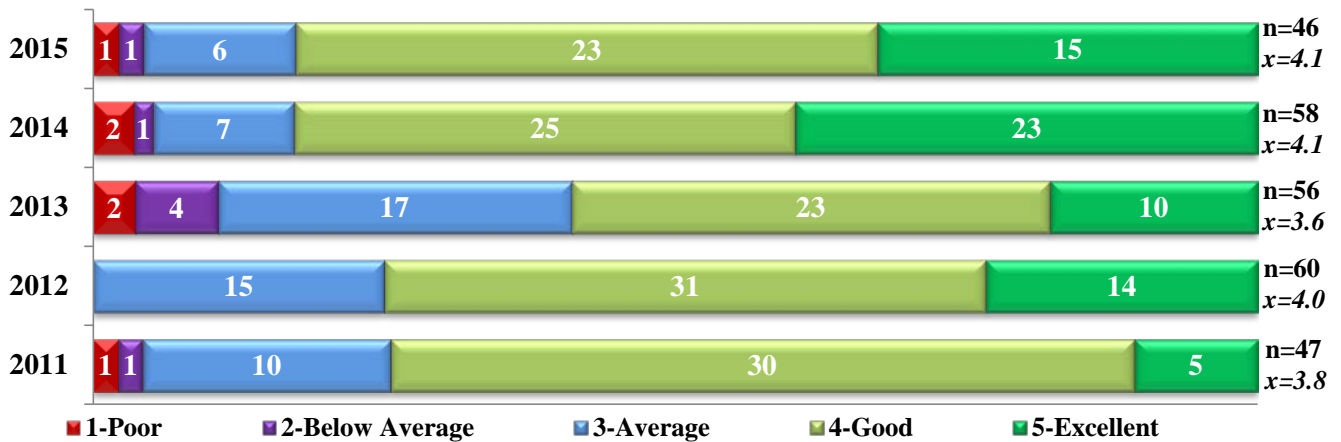
When asked to rate employees' customer service ability or programs' responsiveness to needs, respondents rated all with average scores between *good* and *excellent*, from 4.1 to 4.6.

### Customer Service/Responsiveness



The 2015 overall satisfaction rating of 4.1 is the same as last year's rating.

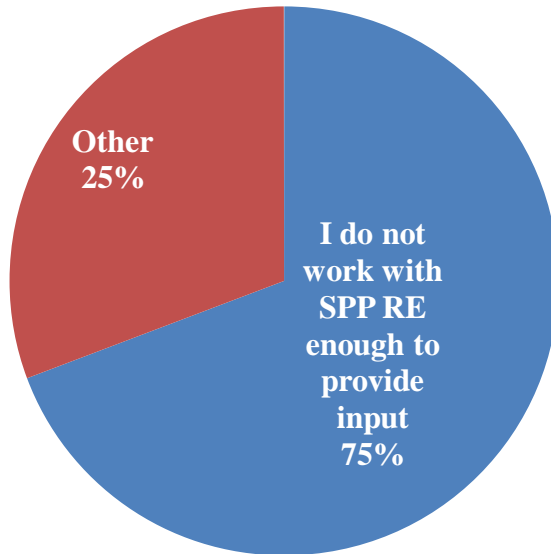
### SPP RE Overall<sup>1</sup>



<sup>1</sup> Stacked bar charts throughout this report indicate the number of respondents in each category, not the percentage. “N” represents the number of people who responded to that question, while “X” denotes the average response.

## Demographics

I choose not to take this survey because:



*Comments:*

I just joined with SPP last month and have not had any interaction yet

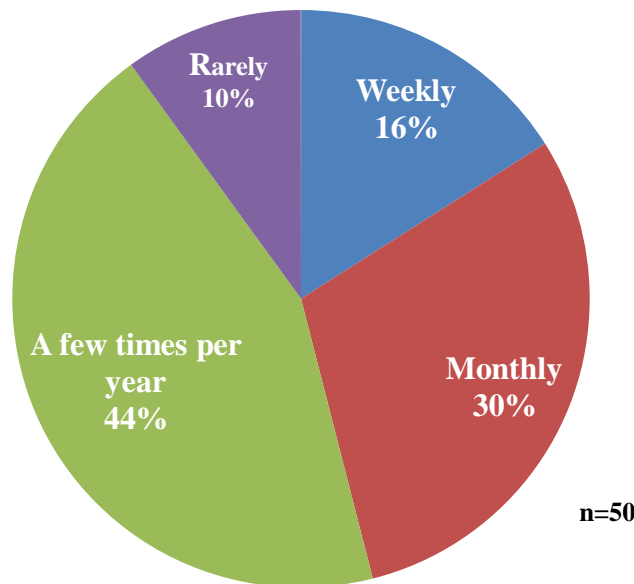
KMEA is doing most of the City of Gardner Work

I don't think the surveys do any good.

All our entities are now in a Coordinated Oversight program with TRE as the LRE, so I rarely work with SPP now.

**Number reporting (n) =12**

How often do you interact with SPP RE?

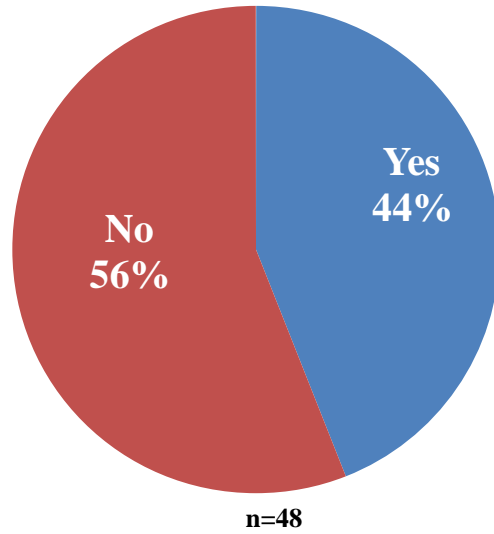


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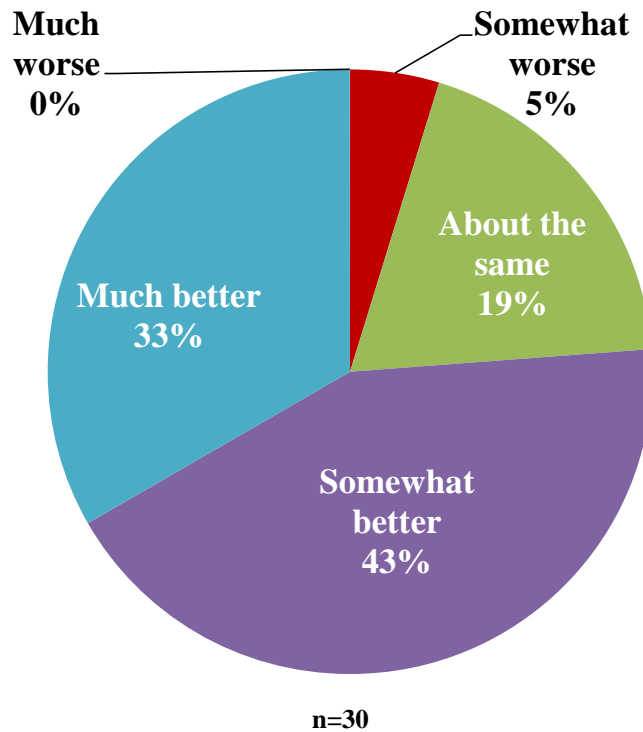
## Interaction with other Regional Entities

---

Do you interact with other Regional Entities?



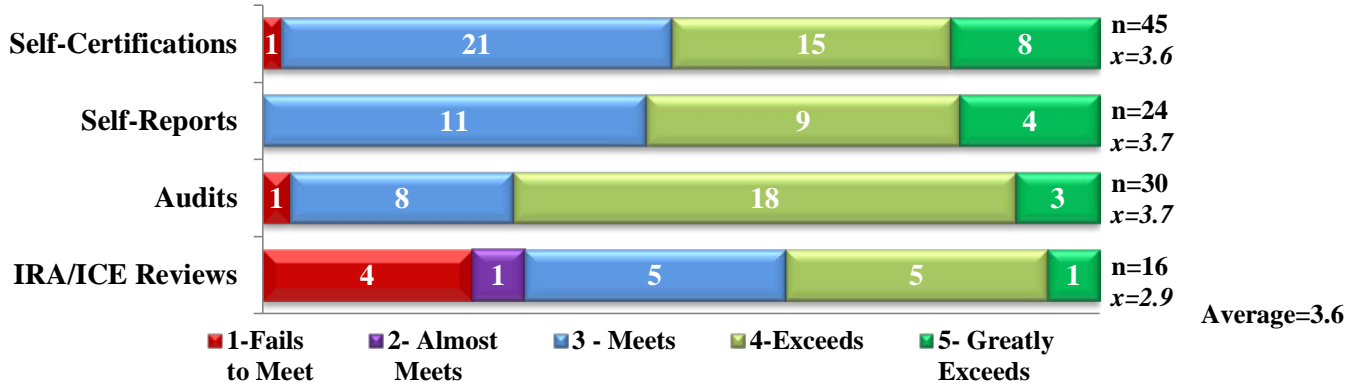
If "yes", how does SPP RE compare with the Regional Entities with which you interact most often?



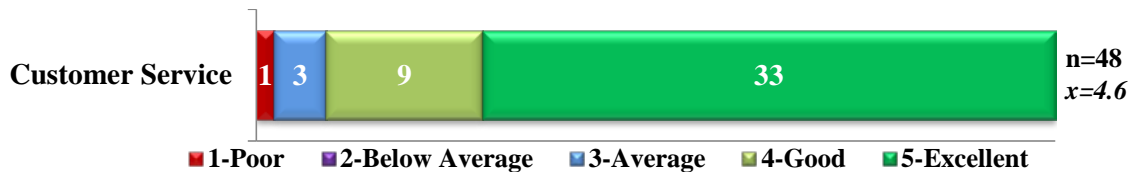


## Operations and Planning Compliance Monitoring

How well does our Operations & Planning (693) program meet your expectations?



Please rate the Operations & Planning (693) staff's customer service ability (responsiveness, professionalism, problem solving, and communication skills):



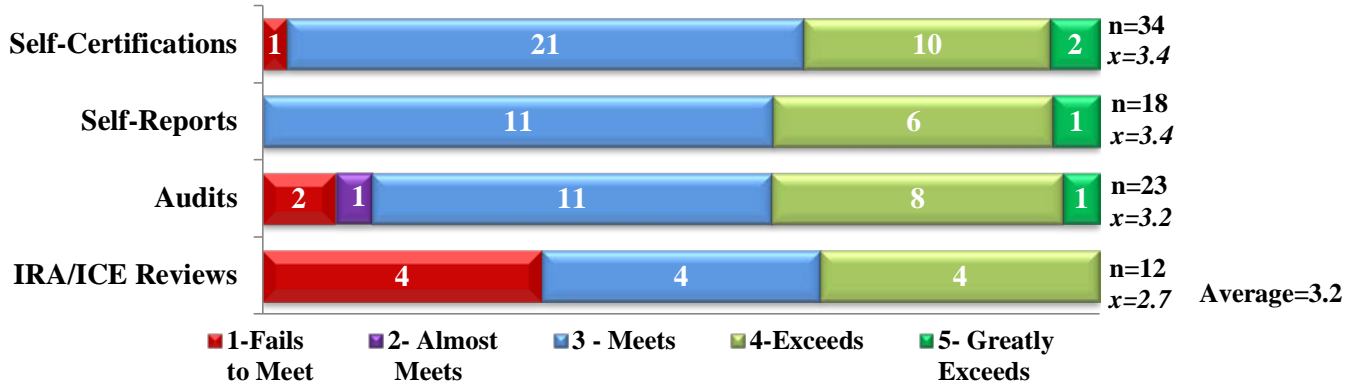
Please share your suggestions for improving our Operations and Planning (693) Compliance Monitoring program:

- I recently received a Risk Assessment Questionnaire as the initial notification phase for an Operations and Planning Audit in 2016. For the most part the Questionnaire was reasonably clear, however there were some items that were unclear with respect to what was being requested and a follow-up email did not provide complete understanding. I made a judgment call to complete the last few items. The Questionnaire was similar in nature to a previous Audit period (3 years ago) but had some differences that quite honestly did not seem to have had sufficient review before sending it out. There were no serious issues, but the few items that needed clarification were not critical and yet delayed completion of the response by 3 days.
- Join other regions in implementing RAI in a timely, organized manner.
- Mike Hughes has been a nice addition to the team!IRA/ICE reviews have been talked about but it is not really clear how SPP-RE will process/handle and communicate results with the entity. It is not clear what the thresholds of an IRA/ICE review are in terms of compliance oversight, in other words what would a successful IRA/ICE look like if there is such a desire?

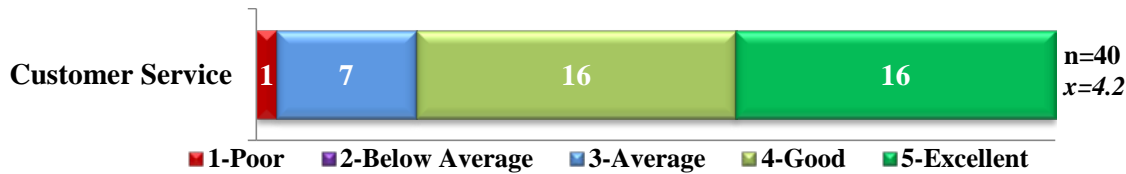
- Our main concern is technical with CDMS - manually entering the RAPA misops each quarter is a laborious process. It would be great if there was an import feature.
- If possible could you increase your online training? I have new employees with little or no utility experience and additional opportunities for training would help.
- 693 Audit team is responsive and professional.
- We would appreciate better communication in regards to changes in data submittal forms (e.g., PRC-004 Misoperations).
- Guidance given at workshops, if the RE plans to speak to the new standards coming into effect, should constitute more than reading the new standards to the registered entities. Also, when an entity requests an ICE not associated with an audit the RE should not discourage the entity from trying to participate in the programs suggesting there is no benefit outside of an audit – the entity values the RE opinion.
- The smaller entities have specific requirements that although similar, are actually different from larger entities. This is due in part to the economy of scale, and additional differences are derived from the nature of how they work.
- Would like a webEx with guidance on IRA/ICE information

## Critical Infrastructure Protection (CIP) Compliance Monitoring

How well does our CIP program meet your expectations?



Please rate the CIP staff's customer service ability (responsiveness, professionalism, problem solving, and communication skills):



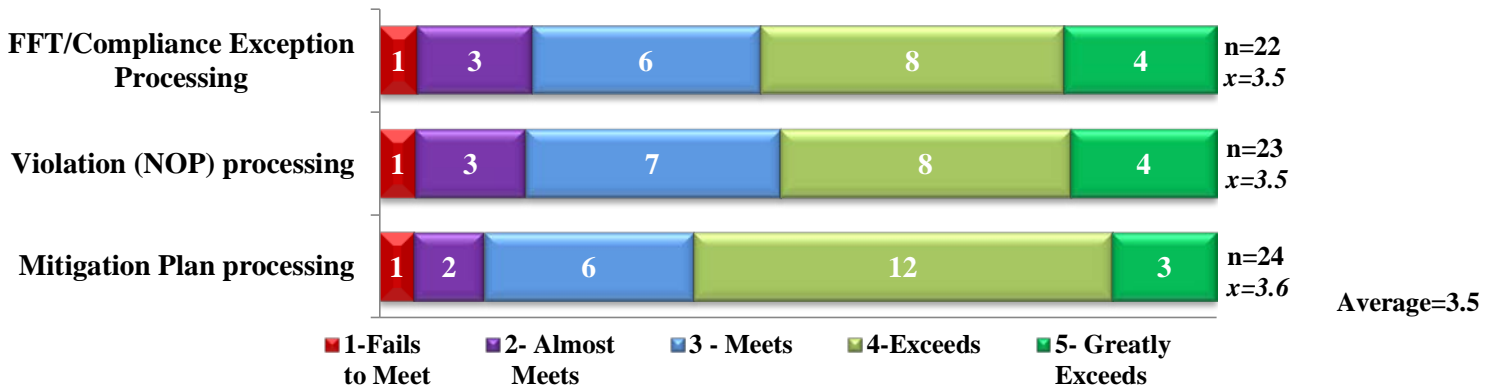
Please share your suggestions for improving our CIP program:

- The CIP Team is so busy that it is difficult to make contact by phone or email. Responses are often delayed by several days. There needs to be a more timely response time to Entity questions. Maybe a designated "on call" person could field the Entity questions and forward to other CIP Team Members as needed.
- Join other regions in implementing RAI in a timely, organized manner.
- Steven Keller has been very responsive. IRA/ICE reviews have been talked about but it is not really clear how SPP-RE will process/handle and communicate results with the entity. It is not clear what the thresholds of an IRA/ICE review are in terms of compliance oversight, in other words what would a successful IRA/ICE look like if there is such a desire?
- our utility service is so small we don't really need to be in this program at all!
- If we had a comparison (within another region or footprint) we may state "below average." CIP Compliance Monitoring staff is somewhat inconsistent with professionalism and communication.

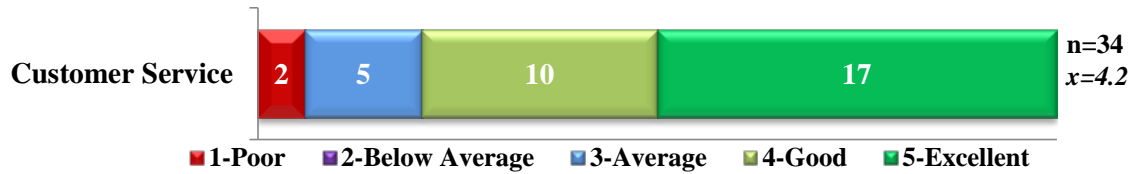
- Similar to O&P, our biggest issue is a technical one with CDMS. Although you can import assets into a TFE initially, subsequent updates require manual entry/removal and that can take a large amount of time (e.g. two full days of work) due to all the manual searching and typing necessary. It would be great if there was a mass update feature.
- Kevin Perry can be a challenge.
- Outreach efforts have been great. This will help with V5 transition. These outreach efforts should continue going forward
- I believe the team has shown great improvements in working with registered entities and trying to help each entity improve as well as understand requirements. Please continue this direction for collaboration where possible and improvements for all.
- Would like a webEx with guidance on IRA/ICE information

## Enforcement

How well does our Enforcement program meet your expectations?



Please rate the Enforcement staff's customer service ability (responsiveness, professionalism, problem solving, and communication skills):



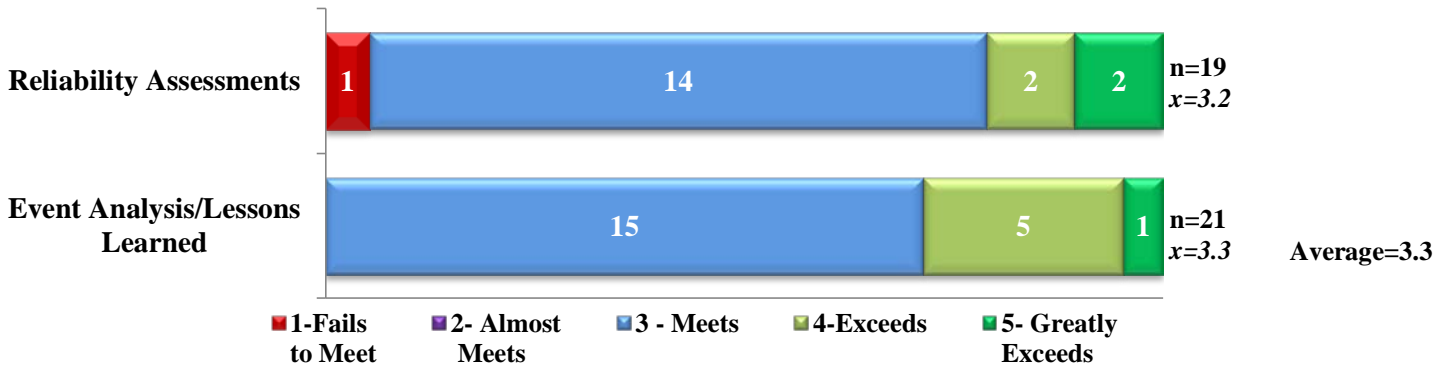
Please share your suggestions for improving our Enforcement program:

- The Enforcement Team is readily available by phone or email. We are just moving into the Mitigation Plan phase and Violation Processing so I do not have any substantial comments regarding those areas.
- The enforcement group, in particular Bob Reynolds, has been a tremendous help to our Registered Entities. We are registered in many NERC Regions, however, anytime I have a question I always feel comfortable discussing any possible issues or questions with the SPP RE team, especially Bob.
- The mitigation process is not well organized in terms of clarity of violations and timeliness in processing mitigation activities.
- Processing violations still is a slow process.
- Needs better response time for ongoing self report & settlements
- One person (SPP STAFF) in the last years audit Needs to get in the real world we don't have any cyber assets yet he wanted to nail us to the wall. He (Hint) was insulting that we needed an electrical engineer to train us. We are electrical engineers Duh! With more education than that auditor !
- None.

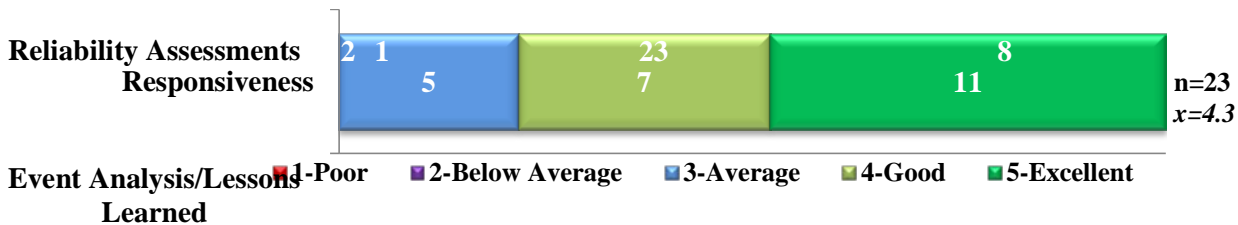
- Timely turnaround, good questions, good coordination with other regions. Greatly appreciated.
- Enforcement has been very helpful the past year.
- Determine internal procedures and how items should be handled for consistency so registered entities are clear on expectations and can support those expectations. We are interested in successful outcomes for all but need to understand to support.

## Event Analysis/Lessons Learned and Reliability Assessments

How well do our Event Analysis/Lessons Learned and Reliability Assessment programs meet your expectations?



Please rate our Event Analysis/Lessons Learned and Reliability Assessment staff's customer service ability (responsiveness, professionalism, problem solving, and communication skills):

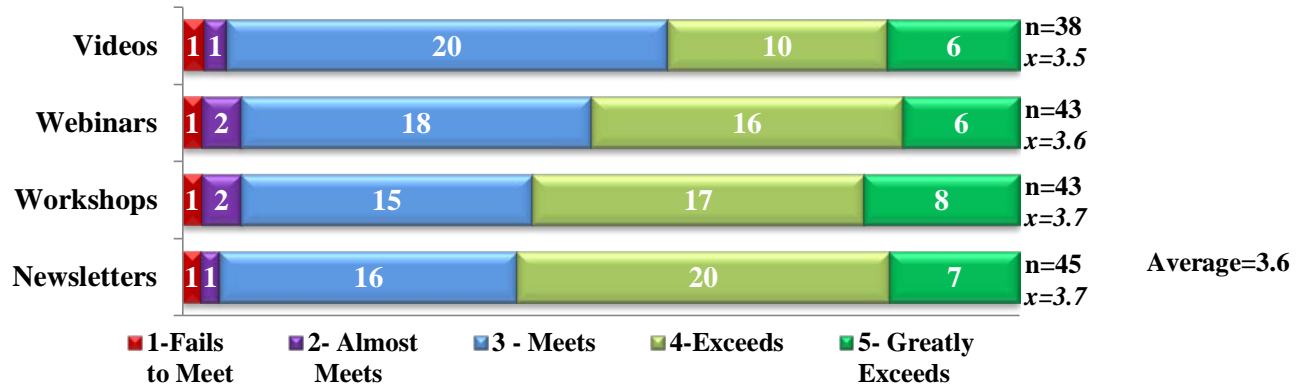


Please share your suggestions for improving our Event Analysis/Lessons Learned and Reliability Assessment programs:

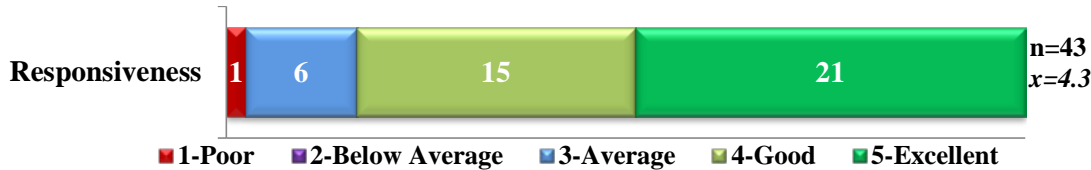
- Other than viewing WebEx presentations or Workshop presentations, BPU does not have any experience to draw from regarding this topic.
- None.
- Alan is always very responsive.

## Outreach

How well does our Outreach program meet your expectations?



Please rate our Outreach program's responsiveness to your needs:



Please share your suggestions for improving our Outreach program:

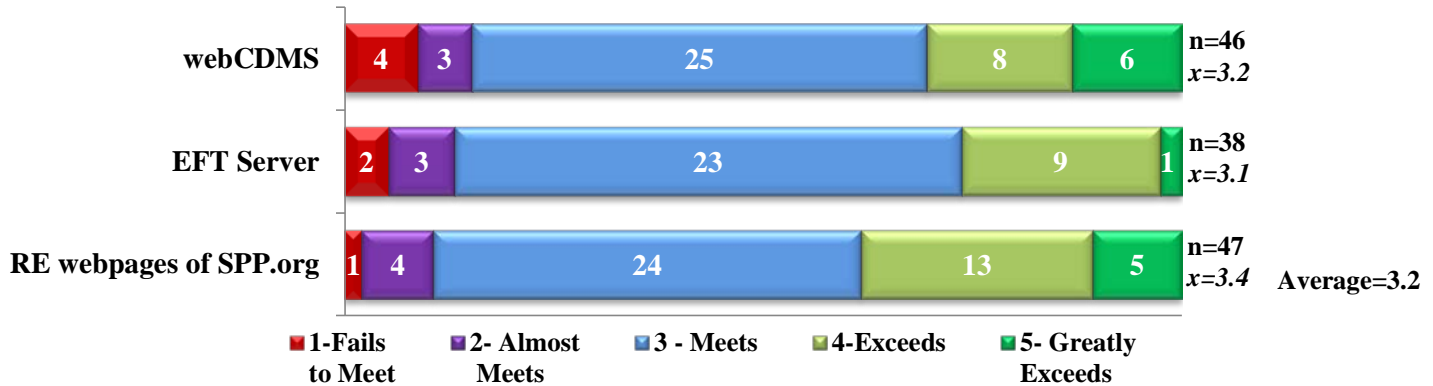
- Outreach is the "shining star" of the SPPRE Compliance effort. The training videos provide a wealth of education regarding NERC Compliance activities. Newsletters are timely and full of helpful information. The Workshops provide informative presentations and the opportunity for valuable face-to-face discussions. BPU has also found the Outreach events to be very beneficial.
- Greatly improved from the past
- Don't Need it way to many emails how does one unsubscribe ???
- Outreach does a good job providing "mock audit" services. A lot more could be done, but what is done is effective.
- None.
- we are very pleased, it is great to get a straight answer when looking for interpretation. Other regions are not nearly as helpful or concise.
- Emily does a great job with the Workshops.
- I believe SPP RE has the best outreach of all of the RE's. The videos are extremely helpful and Emily does a great job coordinating and structuring the workshops and newsletters.



- This one would be ranked higher due to the CIP team efforts for outreach as I believe the team has done an outstanding job in trying to communicate proactively and the team has clearly educated themselves in relationship to the documentation available on the new CIP standard. As mentioned earlier, the 693 team should spend some time focusing on the outreach efforts and providing useful guidance.

## Electronic Tools

How well do our electronic tools meet your expectations?

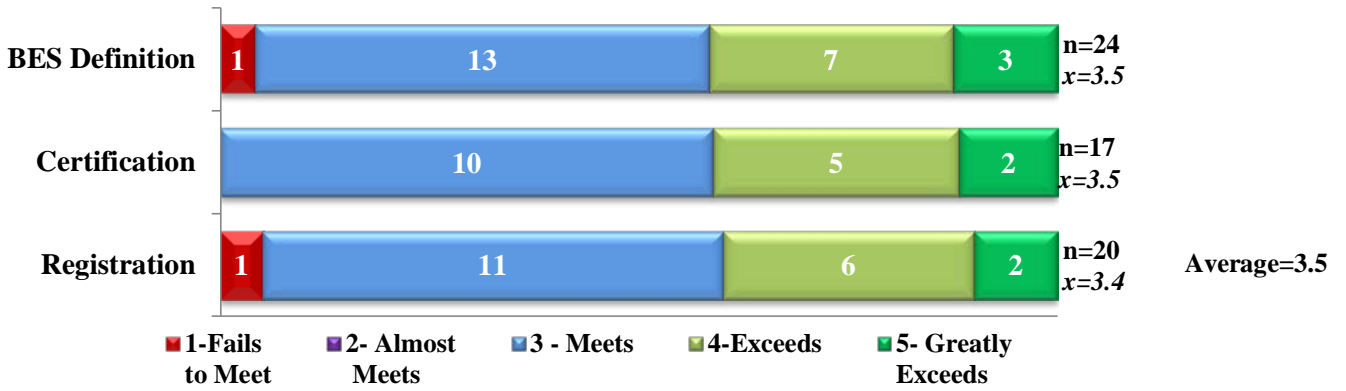


Please share your suggestions for improving our electronic tools:

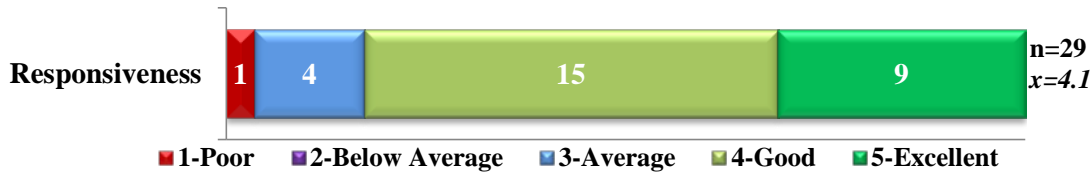
- webCDMS is a bit "clunky" at times. As a new user (1 year +), I have had to fumble my way through the system without any user guide or internal (BPU) guidance.
- Entities should be able to look at (Read Only) docs uploaded to EFT Server.
- OATI CDMS does not support the latest versions of Internet Explorer. This is a problem which needs to be resolved by SPP RE. If OATI doesn't update than SPP RE should look at another vendor.
- to many changes
- Sometimes there are "technical issues" trying to upload to the EFT server. The EFT server has difficulty accepting larger files sizes that were specifically requested by the RE/auditors. It appears the auditors for 693 have an easier time opening and viewing certain files that the CIP auditors had a difficult time with.
- See comments above on RAPA and TFEs.
- We are a participant in MRRE would like to see some progress on portal and reporting criteria. Seems to be all talk up to this point.
- SPP RE web pages are difficult to navigate. The EFT Server only permits single document upload, which creates a cumbersome and time consuming process.

## Registration and Certification

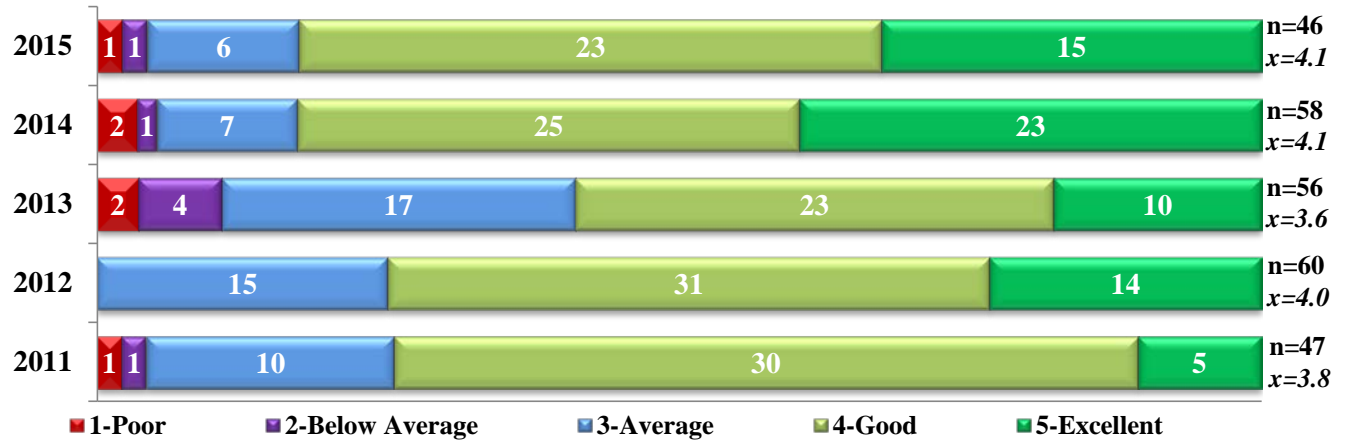
How well did SPP RE's processes meet your expectations??



Please rate the Registration & Certification staff's customer service ability (responsiveness, timeliness, technical expertise):



## Overall Performance 2011-2015



The 2015 overall satisfaction rating of 4.1 was the same as in 2014.

---

## Qualitative - Dissatisfaction

---

Please share other comments regarding your dissatisfaction with SPP RE

- There have not been a lot of changes in staffing in the past year, however the recent changes in staffing in the Enforcement group has not clearly identified who is leading the effort (at least to our understanding). A clearer definition of the Enforcement group and responsibilities would help us improve our efforts in meeting compliance/enforcement goals.
- Enforcement is understaffed resulting in lengthy mitigation.
- None
- See previous surveys. Nothing has changed.
- Seems to be some turnover in the enforcement side, this makes things difficult when you are working an open violation and it gets passed on from one worker to the next. Lost Tyler and Tasha within 1 year. Before that Clay and Monty.
- PV and self report response time needs to be improved because of the backlog. Staffing seems to change a lot with this group. Enforcement needs more independence from the audit team.
- None
- None.
- Overall the RE has done a good job. However, transition and adoption of the Risk Based Compliance Approach has been painfully slow. Resources have not been allocated sufficiently to this important effort. Behind the other Regions in implementation and adoption. Self Logging needs to be more widely offered.

---

## Qualitative - Satisfaction

---

Please share other comments regarding your satisfaction with SPP RE:

- Well done Audit. Reasonable expectations.
- My first experience leading BPU into a CIP Audit was to say the least "educational". I found the CIP Audit Team to be very genuine and helpful and did not find them to be confrontational.
- All RE employees seem to be genuinely concerned with entity issues, and with doing their best with each situation.
- None
- Recently completed a spot-check audit for GOP. Audit team was courteous and professional, willing to answer any questions and address any concerns we had.
- Mike Hughes and Steven Keller have been prompt and accurate to work with.
- In all areas of interaction with SPPRE, the staff does a great job of communicating what they're looking for while also being flexible to our situation.
- I just know that when I need to deal with the SPP RE, things will be done professionally.
- My staff attends RE training sessions, which are very good. Technical questions are addressed in a thorough and timely manner.
- Outreach and willingness to discuss issues openly has been great. I am hopeful that some of this continues even after V5 effective date.
- Greg Sorenson and Kevin Perry are our primary contacts at SPP. We have been very impressed with their customer service. They respond to short requests quickly and thoroughly. We know we are getting industry expertise when we discuss or meet with them. For example, Kevin met with us to discuss CIP v5 and gave us the answers we needed to further develop our program on short notice. Likewise, Greg was able to make arrangements to meet with us and gave us answers that we were able to use to further develop our program.
- Staff has always been more than willing to assist in any area registered entities are seeking guidance for.

---

## Qualitative - Improvement

---

What specific things could we do to EXCEED expectations?

- The biggest concern I have is getting in touch with the Audit team (primarily CIP) on a timely basis. Between audits, training, conferences and other travel, their availability can be very limited. Usually the questions I have are not lengthy but also are usually of a time-sensitive nature.
- Think through each new "program" possible problems and have procedures in place prior to issuing to entities.
- none
- Adequate Enforcement staffing level and expertise to allow for independence and reasonable turn around time.
- Perhaps provide a bit more information around the status of new standards and provide a synopsis of industry comments. I realize this is above and beyond but it would be a great service to stakeholders.
- IC evaluations on specific Standards as requested by the Entity. Eliminate periodic reporting requirements as appropriate. Reduce Audit 'burden' as much as possible. I think this is underway with the off site reviews.
- I think the effort put forth for all areas of interaction with registered entities is stellar. Good people!

# 2015 Event Report

**Alan Wahlstrom**  
**Lead Engineer**

**October 26, 2015**





# 2015 SPP RE Events YTD

- **11 total events**
- **One category 2 and five category 1 events analyzed via NERC's Event Analysis process**

# SPP RE Events 3Q

- One category 2b. *Complete loss of monitoring or control, at a control center for 30 minutes*
- One category 1a. *Loss of three or more elements*
  - (late submittal of 2014 event)

# Loss of SCADA

- EMS system alarm display screen goes blank and alarm processing subsystem fails due to error in locking/unlocking database tables
- Displays went blank and SCADA control lost
- Total loss of visibility for 43 minutes



# Multiple Breaker Tripped

- Electrician bumped an electromechanical differential relay cabinet
- Four breakers tripped due to the bump
- Electrician bumped the cabinet again
- Three more breakers tripped



# NERC LESSONS LEARNED

# Loss of EMS Communications Due to Lack of Validation on EMS Database RTU Configuration Parameter

- One point on a new RTU was incorrectly configured in the EMS database
- When automatic failover occurred, Remote Communication Server (RCS) failed, causing loss of communication with all RTUs

# Lesson Learned

- Evaluate parameters being checked by the database editor to determine if there are any gaps in the parameter validation. If so, establish procedures for manual validation.
- SCADA software should be designed to generate error messages and avoid termination upon an incorrect parameter.
- As a normal practice, recovery strategy and procedures should be developed to facilitate quick recovery from failed updates.

# Relay Design and Testing Practices to Prevent Scheme Failures

- **Single Phase line-to-ground fault occurred on 230 KV line**
- **Auxiliary relay failed to operate due to loose connection**
- **Loose connection prevented terminal breaker from tripping and prevented breaker back-up scheme from operating**
- **Fault occurred for 58 seconds before back-up ground relays operated on a 500 KV line**



# Lesson Learned

- **Key element to this event was the breaker failure initiate (BFI) signal originating from the auxiliary trip relays**
- **Three options for a more reliable design are:**
  1. **Use a separate contact from the protective relay to provide the BFI signal**
  2. **Use a dedicated auxiliary relay for BFI if a separate contact is not available on the protective relay**
  3. **Connect the protective relay trip contact directly to a breaker failure relay input, if the breaker failure relay will accommodate a voltage input**

# FAC Alert NERC Summary

- Registered Entities in all eight REs have completed high priority lines
- Four of the eight REs have completed medium priority lines
- All REs are in process of remediating low priority discrepancies



# Winter Event Data Request

- **FERC asked four REs to submit responses to questions concerning winter performance for Jan 7-9 and Feb 15-20, 2015**
  - Responses were due 9/29/15
- **SPP did not have any hour exceeding 1,710 MW of outages**
- **Median MW outages of both time periods did not exceed 918 MW per hour**
- **Majority of outages due to natural gas curtailment**
- **Only two units experienced outages that previously experienced outages during the 2014 polar vortex**

# Links

- SPP RE Event Analysis Webpage

<http://www.spp.org/section.asp?pageID=142>

- Event Analysis Process Documents

[http://www.nerc.com/comm/OC/Pages/Event-Analysis-Subcommittee-\(EAS\)-2013.aspx](http://www.nerc.com/comm/OC/Pages/Event-Analysis-Subcommittee-(EAS)-2013.aspx)

- SPP Lessons Learned

<http://www.spp.org/section.asp?group=2243&pageID=27>

- NERC Lessons Learned

<http://www.nerc.com/pa/rrm/ea/Pages/Lessons-Learned.aspx>

# 2016 SPP RE Implementation Plan

October 26, 2015

Jim Williams, Lead  
Compliance Specialist  
[jwilliams.re@spp.org](mailto:jwilliams.re@spp.org)

501.614.3261



# **CMEP IMPLEMENTATION PLAN HIGHLIGHTS**

# CMEP Implementation Plan

- **Electric Reliability Organization (ERO) Compliance Monitoring and Enforcement Program Implementation Plan (IP) is the annual operating plan**
- **In 2014, NERC began to consolidate the IP with the Regional Entities as Appendices**
- **SPP RE is Appendix A6**

# ERO Implementation Plan

- **NERC provided the Regions with the criteria for developing the IP**
- **NERC is responsible for collecting and reviewing the RE's IPs**
- **During the implementation year, NERC or an RE may update the IP**



# Appendix A6 – SPP RE 2016 Highlights

- **Staffing - Two open positions, reduced enforcement staff, filled CIP Compliance Specialist position in 2015**
- **Inherent Risk Assessments (IRA) schedule**
  - **SPP RE completed 24 IRAs for Registered Entities on 2015 audit schedule**
  - **By the end of 2015, SPP RE will complete IRAs for Registered Entities on 2016 schedule**
  - **By the end of 2016, SPP RE will complete IRAs for remaining Registered Entities**

# Appendix A6 – SPP RE 2016 Highlights

- CIP monitoring will focus on Registered Entities with high and medium impact BES Cyber Systems
- SPP RE CIP staff will continue CIP V5 outreach
- Security Reliability Program will transition from NERC to REs
- Periodic data submittals still required
- SPP RE has identified Self-Certification requirements on either a quarterly or annual basis

# Appendix A6 – SPP RE 2016 Highlights

- **SPP RE will continue to engage Registered Entities that request:**
  - **Internal Control Evaluations (ICE)**
    - In conjunction with a monitoring activity
    - Outside a scheduled monitoring activity
  - **Self-Logging**
    - A Registered Entity assessment will be performed before granting the ability to self-log

# Coordinated Oversight

- **Registered Entities that are registered in multiple regions are called Multi-Region Registered Entities (MRREs)**
  - **MRREs may not have the same NCR number but could be under the same parent company**
- **MRREs may request to be in the Coordinated Oversight Program**
- **The “affected” or associated REs will select a Lead RE to implement the MRRE’s compliance program**
- **SPP RE is the Lead RE for three MRREs**
- **SPP RE is the Affected RE for 10 other MRREs**

**ERO Reliability  
Assessment**

**Regional  
Reliability  
Assessment**

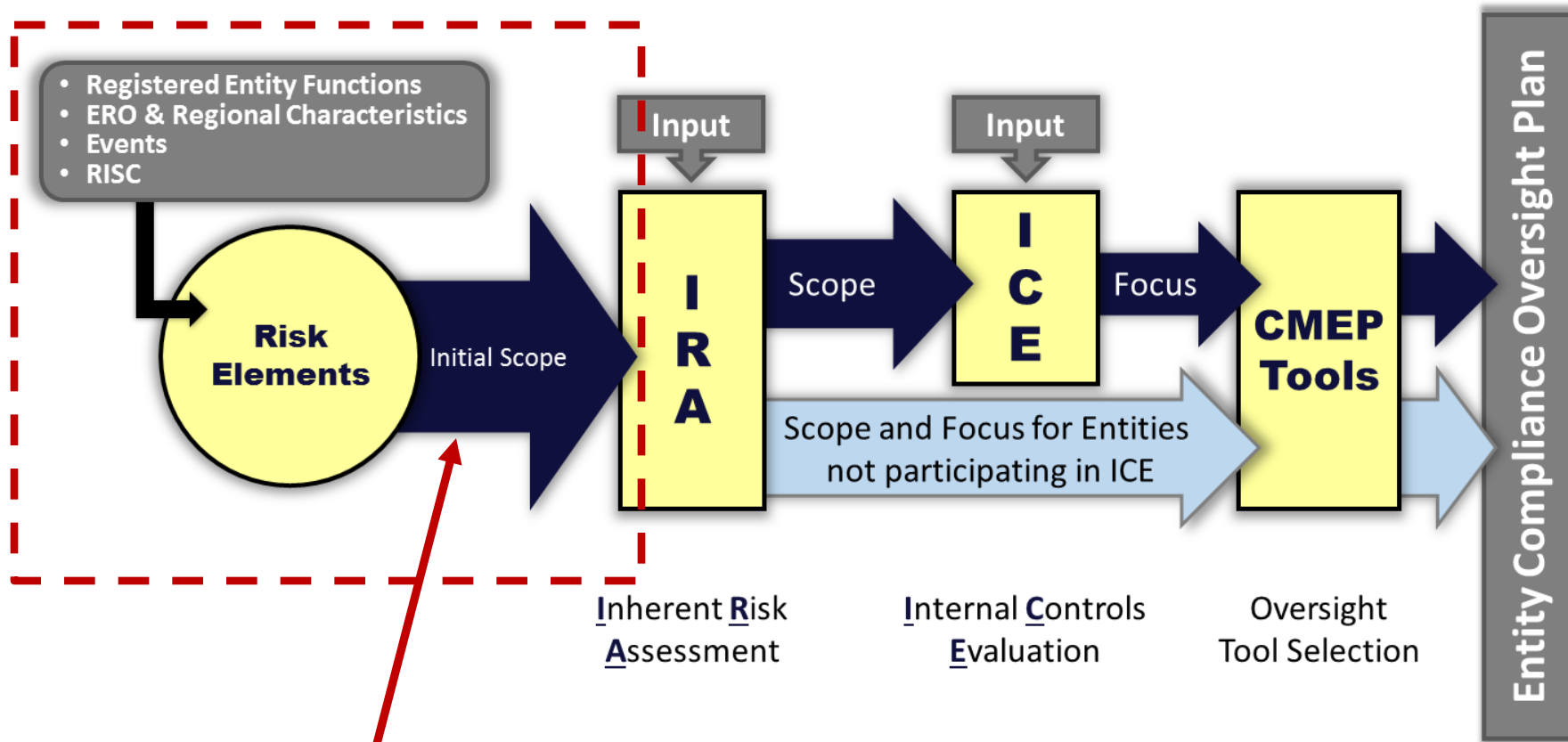
**Registered Entity  
Assessment/  
Monitoring  
Scope**

# **ERO RELIABILITY ASSESSMENT**

# Risk-Based Compliance Oversight

- In 2016, risk-based compliance oversight framework will continue
- Focuses on identifying, prioritizing, and addressing BPS risks
- SPP RE is responsible for assessing Registered Entities' risks through IRA and tailoring monitoring activities:
  - Monitoring method (Audit, Spot-Check or Self-Certifications)
  - Frequency
  - Scope

# Risk-Based Compliance Oversight Framework



Identify the Risk Elements that are applicable to the Registered Entity to determine the initial monitoring scope

# Development of Risk Elements

- **NERC identified risk elements by using data including but not limited to:**
  - Compliance findings
  - Event analysis
  - Data analysis
  - Expert judgement of NERC, RE staff, and committees
- **SPP RE developed RE-specific risk elements by using:**
  - Compliance findings in SPP RE footprint
  - Regional system events
  - SPP RE staff's professional judgement



## Critical Comparison of 2015 and 2016 ERO Risk Elements

2015 Risk Elements	2016 Risk Elements
<b>Cyber Security</b>	<b>Critical Infrastructure Protection</b>
<b>Extreme Physical Events</b>	<b>Extreme Physical Events</b>
<b>Infrastructure Maintenance</b>	<b>Maintenance and Management of BPS Assets</b>
<b>Monitoring and Situational Awareness</b>	<b>Monitoring and Situational Awareness</b>
<b>Protection System Misoperations</b>	<b>Protection System Failures</b>
<b>Uncoordinated Protection Systems</b>	
<b>Long Term Planning and System Analysis</b>	<b>Event Response/Recovery</b>
	<b>Planning and System Analysis</b>
<b>Human Error</b>	<b>Human Performance</b>
<b>Workforce Capability</b>	<b>(N/A for 2016)</b>

**2015 – 47 Standards/75 Requirements**

**2016 – 19 Standards/46 Requirements**

# 2016 ERO Risk Elements

## Critical Infrastructure Protection

Standard	Requirements	Functions	Asset Type
CIP-002-5.1	R1, R2	BA, GOP, GO, RC, TOP, TO	Control Centers, Backup Control Centers, Data Centers, Substations, Generation Facilities
CIP-005-5	R1, R2	BA, GOP, GO, RC, TOP, TO	Control Centers, Backup Control Centers, Data Centers, Substations, Generation Facilities
CIP-006-5	R1, R2, R3	BA, RC, TOP, TO	Control Centers, Backup Control Centers, Data Centers, Substations
CIP-007-5	R1,R2, R3, R5	BA, RC, TOP, TO	Control Centers, Backup Control Centers, Data Centers

# 2016 ERO Risk Elements



<b>Extreme Physical Events</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>EOP-010-1</b>	<b>R1, R3</b>	<b>RC, TOP</b>
<b>CIP-014-2</b>	<b>R1, R2</b>	<b>TO</b>

<b>Maintenance and Management of BPS Assets</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>FAC-008-3</b>	<b>R6</b>	<b>GO, TO</b>
<b>PRC-005-2(i)</b>	<b>R3, R4, R5</b>	<b>DP, GO, TO</b>

# 2016 ERO Risk Elements

<b>Monitoring and Situational Awareness</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>IRO-005-3.1a</b>	<b>R1, R2</b>	<b>RC</b>
<b>TOP-006-2</b>	<b>R1, R2, R7</b>	<b>BA, RC, TOP</b>

<b>Protection System Failures</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>PRC-001-1.1(ii)</b>	<b>R3, R4, R5</b>	<b>GOP, TOP</b>
<b>PRC-004-2.1(i)</b>	<b>R1, R2</b>	<b>DP, GO, TO</b>

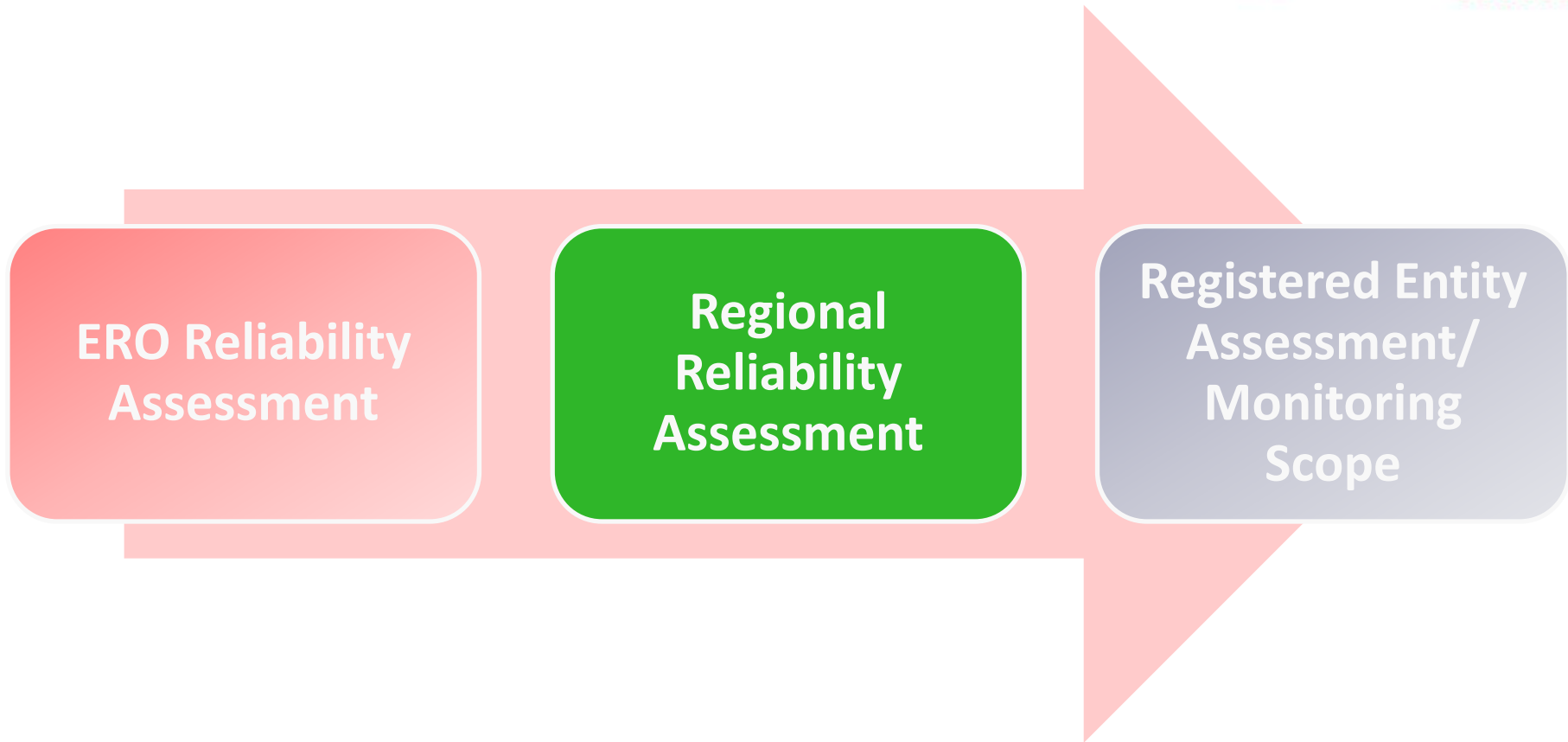
# 2016 ERO Risk Elements

<b>Event Response/Recovery</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>EOP-001-2.1b</b>	<b>R1, R2, R3</b>	<b>BA, TOP</b>
<b>TOP-007-0</b>	<b>R1, R2, R3, R4</b>	<b>RC, TOP</b>

<b>Human Performance</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>COM-002-2</b>	<b>R2</b>	<b>RC, TOP, BA</b>
<b>PER-005-1</b>	<b>R2, R3</b>	<b>RC, TOP, BA</b>

# 2016 ERO Risk Elements

<b>Planning and System Analysis</b>		
<b>Standard</b>	<b>Requirements</b>	<b>Functions</b>
<b>EOP-002-3.1</b>	<b>R4</b>	<b>BA</b>
<b>TPL-001-4</b>	<b>R1, R2, R3, R4</b>	<b>PC, TP</b>
<b>FAC-014-2</b>	<b>R1, R5</b>	<b>RC, TOP</b>



# SPP RE ASSESSMENT

# SPP RE Regional Monitoring Scope Plan

- **SPP RE developed a 2016 Monitoring Scope Plan that identifies risk elements in SPP RE footprint**
  1. **Restoration**
  2. **Frequency Response**
  3. **Voltage Support**
  4. **Critical Infrastructure Protection**
- **SPP RE Expanded ERO Risk Elements**
  1. **Human Performance**
  2. **Maintenance and Management of BPS Assets**



## Expanded ERO Risk Elements

Standards	Requirement	Functions	ERO Risk Elements
COM-002-4	R1	BA, RC, TOP	Human Performance
COM-002-4	R5	BA, RC, TOP	Human Performance
COM-002-4	R6	BA, DP, TOP, GOP	Human Performance
PER-005-2	R3	RC, BA, TOP, TO	Human Performance
PER-005-2	R4	RC, BA, TOP, TO	Human Performance
FAC-008-3	R1	GO	Maintenance and Management of BPS Assets
FAC-008-3	R2	GO	Maintenance and Management of BPS Assets
FAC-008-3	R3	TO	Maintenance and Management of BPS Assets
PRC-004-4	R1	TO, GO, DP	Maintenance and Management of BPS Assets
PRC-004-4	R2	TO, GO, DP	Maintenance and Management of BPS Assets
PRC-005-1.1b	R1	DP, GO, TO	Maintenance and Management of BPS Assets
PRC-005-1.1b	R2	DP, GO, TO	Maintenance and Management of BPS Assets
PRC-005-3	R1	TO, GO, DP	Maintenance and Management of BPS Assets
PRC-005-3	R3	TO, GO, DP	Maintenance and Management of BPS Assets
PRC-005-3	R4	TO, GO, DP	Maintenance and Management of BPS Assets
PRC-005-3	R5	TO, GO, DP	Maintenance and Management of BPS Assets

# SPP RE Ops & Planning Risk Elements

Standards	Requirements	Applicable Functions	SPP RE Risk Element	Justification
BAL-003-1	R1	BA	Frequency Response	To ensure sufficient Frequency Response is maintained.
COM-001-2	R3, R9	TOP	Restoration	Establishment of Interpersonal Communication capabilities necessary to maintain reliability
EOP-005-2	R6, R10	TOP	Restoration	To ensure restoration plan accomplishes its intended function. System Operators can properly execute its restoration plan.
EOP-008-1	R4	BA, TOP	Restoration	Backup site functionality
PRC-006-2	R8, R9	TO, DP	Frequency Response	UFLS program supports the PC database.
TOP-002-2.1b	R6, R11, R19	TOP	Restoration	Prepared to meet unscheduled system changes.
VAR-001-4	R2	TOP	Restoration	Sufficient reactive resources
VAR-002-4	R1, R2	GOP	Voltage Support	Automatic voltage regulator and voltage schedules

**2015 – 5 Standards/12 Requirements**

**2016 – 8 Standards/14 Requirements**

# SPP RE CIP Risk Elements Standards and Requirements

Standard	Requirements	Applicable Functions	SPP RE Risk Element	Justification
CIP-007-5	R4	BA, DP, GOP, GO, RC, TOP, TO	Critical Infrastructure Protection	Essential to detecting and mitigating a possible compromise of a High or Medium Impact BES Cyber Asset/System
CIP-010-1	R2	BA, DP, GOP, GO, RC, TOP, TO	Critical Infrastructure Protection	Essential to detecting and responding to a Cyber Security Incident involving a High or Medium Impact BES Cyber System
CIP-008-5	R1	BA, DP, GOP, GO, RC, TOP, TO	Critical Infrastructure Protection	Essential to detecting and mitigating a possible compromise of a High Impact BES Cyber Asset/System

2015 – 3 Standards/7 Requirements

2016 – 3 Standards/3 Requirements

# Comparison of 2015 to 2016

	2015		2016	
	Standards	Requirements	Standards	Requirements
<b>ERO Risk Elements</b>	<b>47</b>	<b>75</b>	<b>19</b>	<b>46</b>
<b>ERO Expanded Risk Elements</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>16</b>
<b>SPP RE Risk Elements</b>	<b>8</b>	<b>19</b>	<b>17</b>	<b>17</b>
	<b>55</b>	<b>94</b>	<b>42</b>	<b>79</b>

# 2016 SPP RE Monitoring Method and Frequency

- **Monitoring methods will be determined by the Inherent Risk Assessment**
  - **On-site audits for Transmission Operators (TOPs) and Balancing Authorities (BAs) on 3-year cycle**
  - **Ops & Planning will conduct off-site audits or Spot Checks for non-BA/TOP entities**
  - **Non-BA/TOP Registered Entities that had an audit in 2010 or registered within the last two years**
- **CIP will not conduct audits for Registered Entities with low Impact BES Cyber Systems**

# 2016 SPP RE Monitoring Tools

- **Self-Certification**
  - SPP RE will continue to require Registered Entities to perform a Self-Certification to ensure compliance with Reliability Standards
  - 2016 NERC IP has not identified Reliability Standards and requirements that require Self-Certification
  - SPP RE has identified requirements based on the Scope Plan
  - Self-Certification will be conducted using webCDMS
  - Coordinated Oversight Registered Entities will follow the Lead Region's IP

# 2016 SPP RE Monitoring Tools

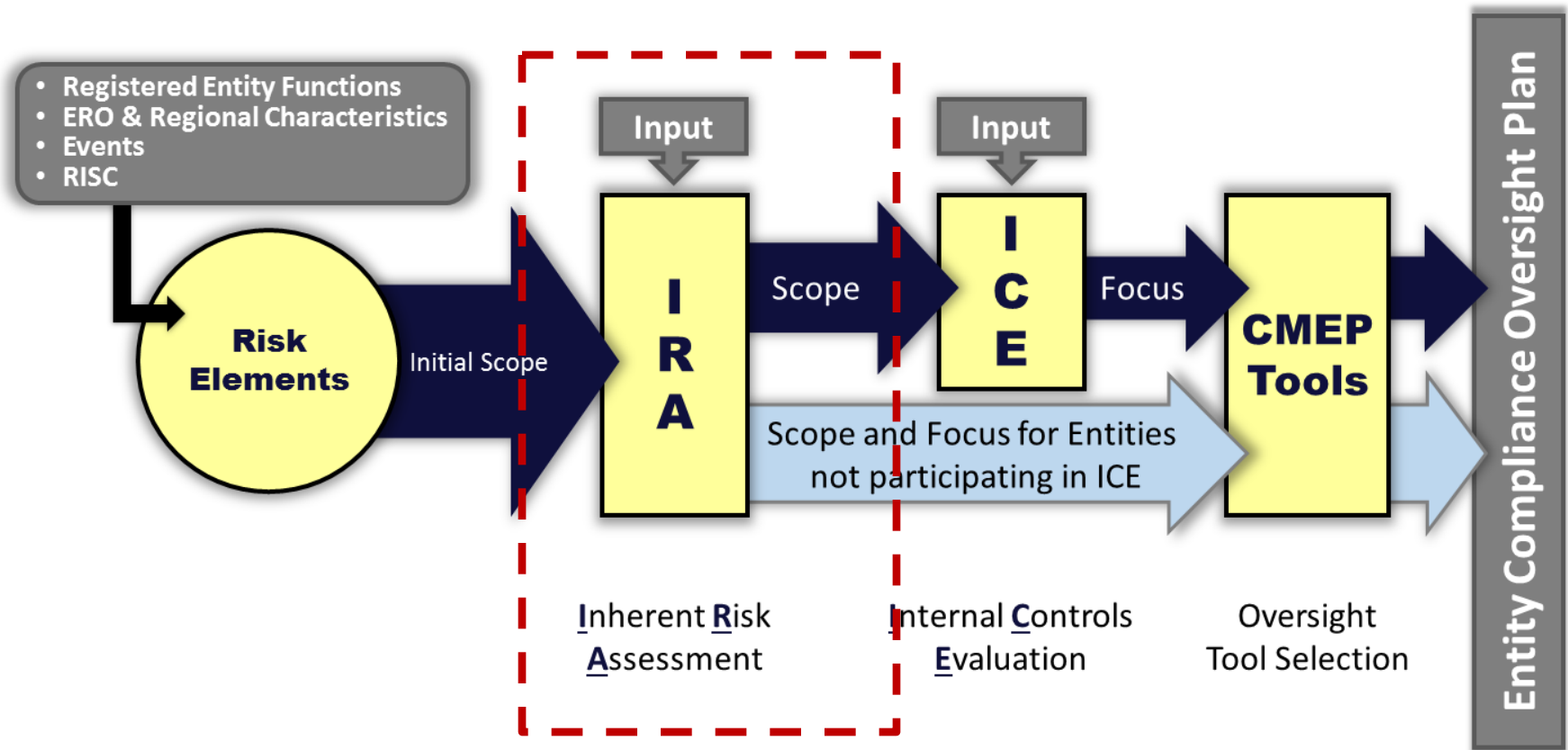
- **Periodic data submittal**
  - 2016 NERC IP does not identify requirements that require periodic data submittals
  - SPP RE does identify requirements that require periodic data submittal requirements
  - SPP RE, SPP RTO, Lead Region, and MISO will collect them on a monthly, quarterly, or annual basis



# REGISTERED ENTITY ASSESSMENT & MONITORING SCOPE



# Inherent Risk Assessment



NERC developed Inherent Risk Assessment (IRA) Guide and Internal Control Evaluation (ICE) Guide

# SPP RE Inherent Risk Assessment

- To develop the monitoring scope, SPP RE will perform IRAs for Registered Entities scheduled for 2016 monitoring
- The assessment criteria will review 35 Risk Factor Attributes to determine the Registered Entity's Risk:

Risk Factors	Risk Factor Attributes
Registration	Registered Functions
Geography/ Climate	Terrain
Vegetation Management	Applicable facilities
Load and Generation	Peak Load, Total Generation, Control Centers, Customers ....
Transmission	Voltage, Length over 100kV, Interconnections, Flowgates, SPS, UFLS....
History (Audit period)	Previous Violations
Events	EEA's, Events Reported...
Blackstart	General System Restoration, Blackstart Generation, Cranking Path...
SCADA Environment	SCADA/EMS, ICCP Association, PSP and ESP Access...

# Inherent Risk Assessment

## Compliance Oversight Plan

The entity assessment of **Acme Power Company** was performed to identify the monitoring and scope of the compliance engagement for 2016. The assessment of the attributes identified the levels of risk for the entity to the BES and the Regional Entity's footprint. SPP RE determined that an on-site audit of **Acme Power Company** will be conducted on **May 9 – 12, 2016** in accordance with NERC Rules of Procedure, 403.11. The engagement scope is based on the Risk Elements from the NERC 2015 Implementation Plan and the 2015 SPP RE Audit Scope Document applicable to the entity's registered functions.

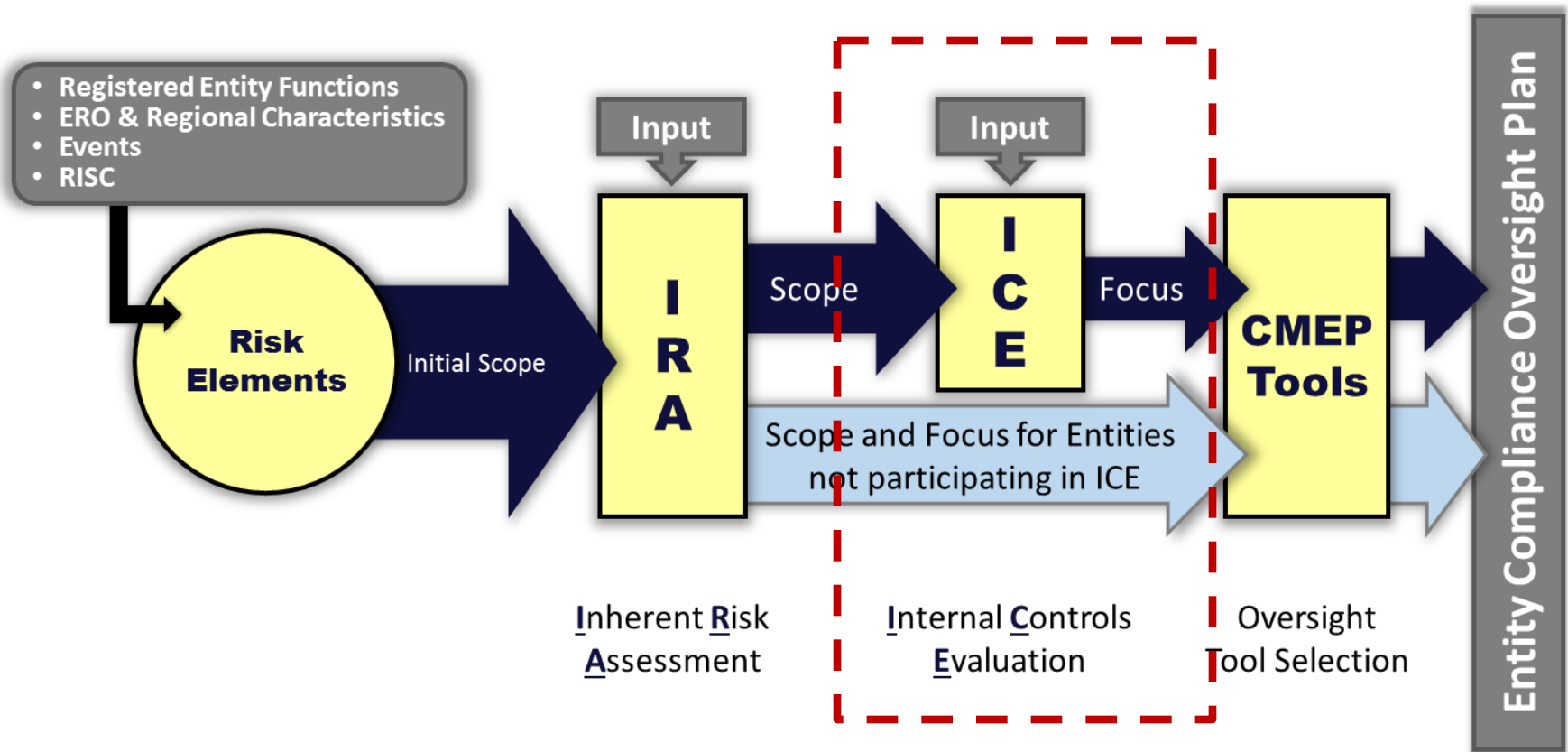
SPP RE evaluated 35 risk attributes from the ERO Enterprise Inherent Risk Assessment Guide. The results were nine (9) high risk, eleven (11) moderate risk, twelve (12) low risks, and three (3) not applicable. The monitoring scope includes 30 standards with 70 requirements, see Attachment 1.

Monitoring Method	Date	Frequency of IRA	Next Monitoring
O&P/CIP Audit	May 9, 2016	Audit 3 year cycle	May 2019

# Inherent Risk Assessment

- Registration – Registered functions, identify the entity’s RC, BA, TOP...
- JRO/CFRs – What function, requirements and responsible entity
- Compliance History – Previous violations, discovery method, mitigated
- Technical Assessment – Risk factors, transmission and generation
- CIP Data – SCADA, workstations
- Technical Feasibility Exceptions – Requirements, current status, devices
- Internal Control Evaluation Performed - Std/Req, date, control implementation
- Monitoring Scope – Attachment 1
- Reference Documents – Risk Assessment Questionnaire, previous audit reports, self-certifications
- Event Review – summary of event
- Enforcement Mitigation Assessment – Mitigation milestones
- Registered Entity Assessment Revision History

# Internal Controls Evaluation



# Internal Control Evaluation (ICE)

- **NERC has posted an ICE Guide**
- **ICE is a voluntary program**
- **Registered Entities may elect to have their internal controls evaluated**
- **If a Registered Entity elects not to participate in ICE or doesn't have internal controls, SPP RE will monitor per usual**
- **If an ICE is performed, the ICE will not change the audit scope but could impact audit fieldwork**

# Key Points for 2016

- **Monitoring scope will continue to include a review of all mitigation plans open during audit period**
- **SPP RE will determine Registered Entity's scope based on:**
  - **ERO-wide Risk Elements**
  - **SPP RE Risk Elements**
  - **SPP RE Registered Entity IRA**
  - **SPP RE staff's professional judgment**

# Audit Scope Expansion

- **Compliance team may expand scope during monitoring activities based on:**
  - **Team’s professional judgment**
  - **Discovery of non-compliance during evidence review**
- **Will notify Registered Entity of an expansion in scope as soon as possible**



**Registered Entities are responsible for compliance with all enforceable Reliability Standards and Requirements in effect per their registered function at all times, regardless of what a Registered Entity's risk profile may indicate.**

# 2016 Monitoring Schedule – O & P

NCR Number	Entity Name	Type of Audit
NCR01061	Board Of Public Utilities (Kansas City KS) (BPU)	On-Site
NCR11407	Buffalo Dunes Wind Project, LLC (BDWP)	Off-Site
NCR11354	Canadian Hills Wind, LLC (CHW)	Off-Site
NCR01067	Carthage Water & Electric Plant (CAWEP)	Off-Site
NCR06033	City Of Abbeville (ABBEVLA)	Off-Site
NCR01071	City Of Clarksdale, Mississippi (CCM)	Off-Site
NCR06034	City Of Minden (MINDENLA)	Off-Site
NCR01083	Cleco Corporation (CLECO)	On-Site
NCR01092	Eastman Cogeneration Limited Partnership (EASTMAN)	Off-Site
NCR11314	Flat Ridge 2 Wind Energy LLC	Off-Site
NCR01072	Independence Power & Light (Independence, Missouri) (INDN)	On-Site
NCR11329	KODE Novus Wind I, LLC	Off-Site
NCR06050	Mississippi Delta Energy Agency (MISSDEA)	Off-Site
NCR11264	Post Rock Wind Power Project, LLC	Off-Site
NCR01139	Public Service Commission Of Yazoo City (YAZO)	Off-Site
NCR06010	Rayburn Country Electric Cooperative, Inc. (RCEC)	Off-Site
NCR11322	Spearville 3, LLC (SPEAR3)	Off-Site
NCR11323	Spinning Spur Wind, LLC (SPINSPUR)	Off-Site
NCR00658	Westar Energy, Inc. (WR)	On-Site

# 2016 Monitoring Schedule - CIP

NCR Number	Entity Name	Type of Audit
NCR00658	Westar Energy, Inc. (WR)	On-Site
NCR01114	Lafayette Utilities System (LAFA)	On-Site
NCR01116	Louisiana Energy & Power Authority (LEPA)	On-Site
NCR06048	Lubbock Power And Light (LPLTX)	On-Site
NCR01148	Sunflower Electric Power Corporation (SECI)	On-Site
NCR01155	The Empire District Electric Company (EDE)	On-Site
NCR01083	Cleco Corporation (CLECO)	On-Site
NCR01118	Midwest Energy, Inc. (MIDW)	On-Site

# SPP RE Documents

- [SPP.org>Regional Entity>Compliance & Enforcement>2016 Compliance Program folder](#) will be populated with relevant documents:
  - Monitoring schedules
  - 2016 Reporting Requirements
  - 2016 Monitoring Scope Plan
  - Registered Entity Risk Assessment Questionnaire

# Reference Documents

- [NERC.com Compliance Resources page](#)
- [SPP.org > Regional Entity > Risk Based Compliance Monitoring and Enforcement](#) for more info on ICE, IRA, Self-Logging, etc.



James Williams, Lead Compliance Specialist

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501.614.3261

# Enforcement Update

October 26, 2015

Joe Gertsch  
Manager of Enforcement  
[jgertsch.re@spp.org](mailto:jgertsch.re@spp.org)  
501-688-1672

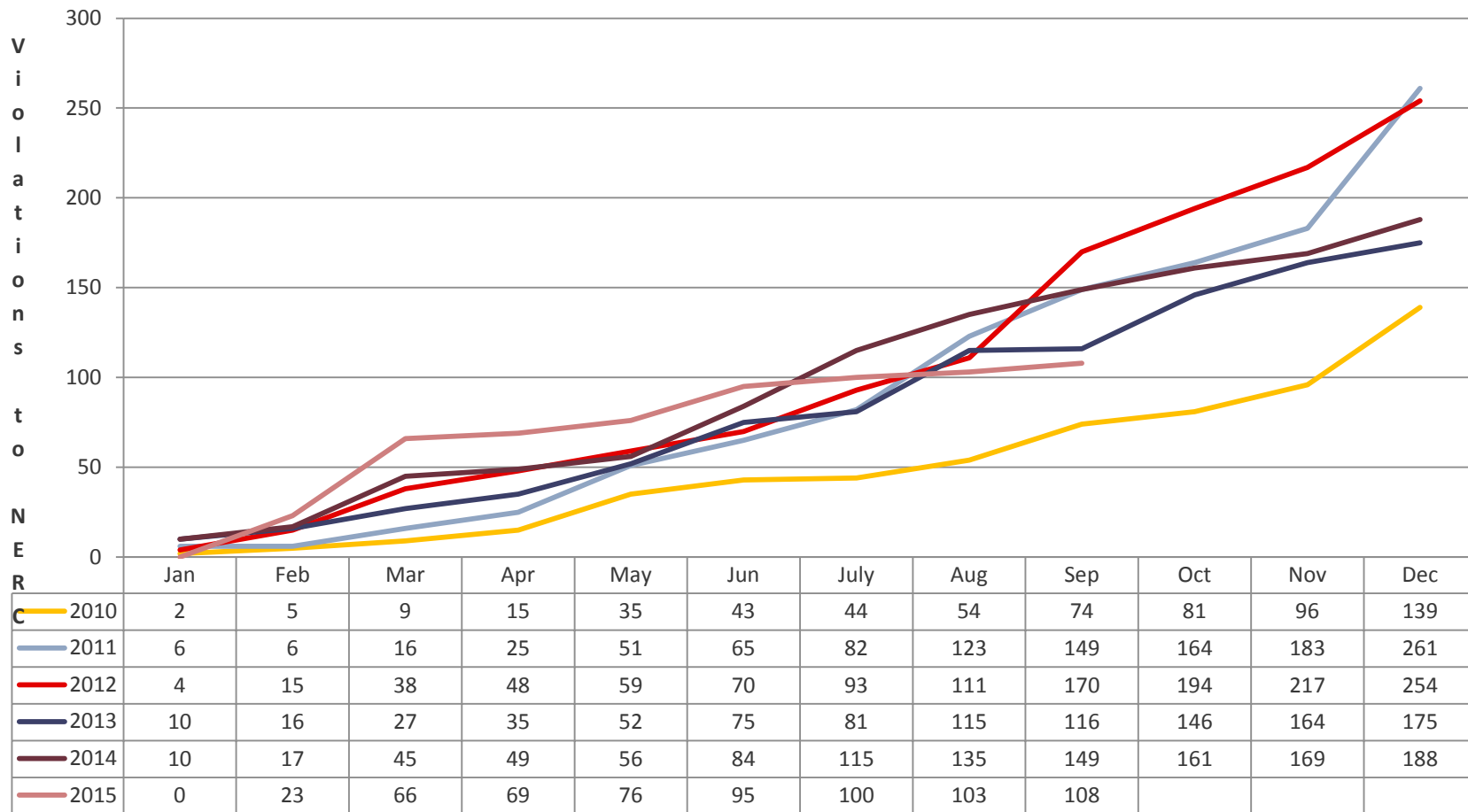


<b>SPP RE Enforcement Activities September 30, 2015</b>	2007	2008	2009	2010	2011	2012	2013	2014	First Quarter	Second Quarter	July	August	September	Total 2015
<b>Notice of Preliminary Screen Issued</b>	-	-	-	-	-	-	-	121	36	17	3	1	20	77
<b>Notice of Possible Violations Issued</b>	6	56	132	254	239	173	189	107	29	14	5	1	1	50
<b>Notice of Alleged Violation (NAVAPS)</b>														
NAVAPS Issued	6	45	10	7	0	2	1	6	0	0	0	0	0	0
<b>Notice of Confirmed Violation (NOCV)</b>														
NOCV Sent to Entity/NERC	0	8	25	15	4	1	0	1	0	0	0	0	0	0
NOCV BOTCC Approved	0	7	11	29	4	1	0	1	0	0	0	0	0	0
<b>Settlements / Full Notice of Penalty</b>														
To NERC for Approval	0	0	0	89	118	52	5	15	0	0	0	0	0	0
BOTCC Approved	0	0	0	50	81	103	14	30	0	0	0	0	0	0
<b>Settlements / Spreadsheet NOP</b>														
To NERC for Approval	0	0	0	16	22	49	43	59	0	0	0	0	2	2
BOTCC Approved	0	0	0	0	38	49	65	46	13	0	0	0	0	13
<b>Find, Fix, Track</b>														
To NERC for Approval	-	-	-	-	43	78	86	62	3	6	0	1	0	10
BOTCC Approval	-	-	-	-	36	74	95	61	2	4	2	1	1	10
<b>Compliance Exception</b>	-	-	-	-	-	-	-	1	31	18	4	1	1	55
<b>Dismissals</b>														
To NERC/SPP RE SRT for Approval	0	0	1	16	75	43	41	44	1	5	1	1	2	10
NERC/SPP RE SRT Approved		0	1	16	75	43	41	44	1	5	1	1	2	10
<b>Notice of Penalty</b>														
Approved by FERC	0	5	13	57	180	184	141	118	13	0	0	0	0	13
<b>Violations Awaiting NERC Approval</b>													3	
<b>Active Violations - Caseload</b>													95	
<b>Caseload Index (months)*</b>													7.6	

\* Based on previous 12 months processing (147)

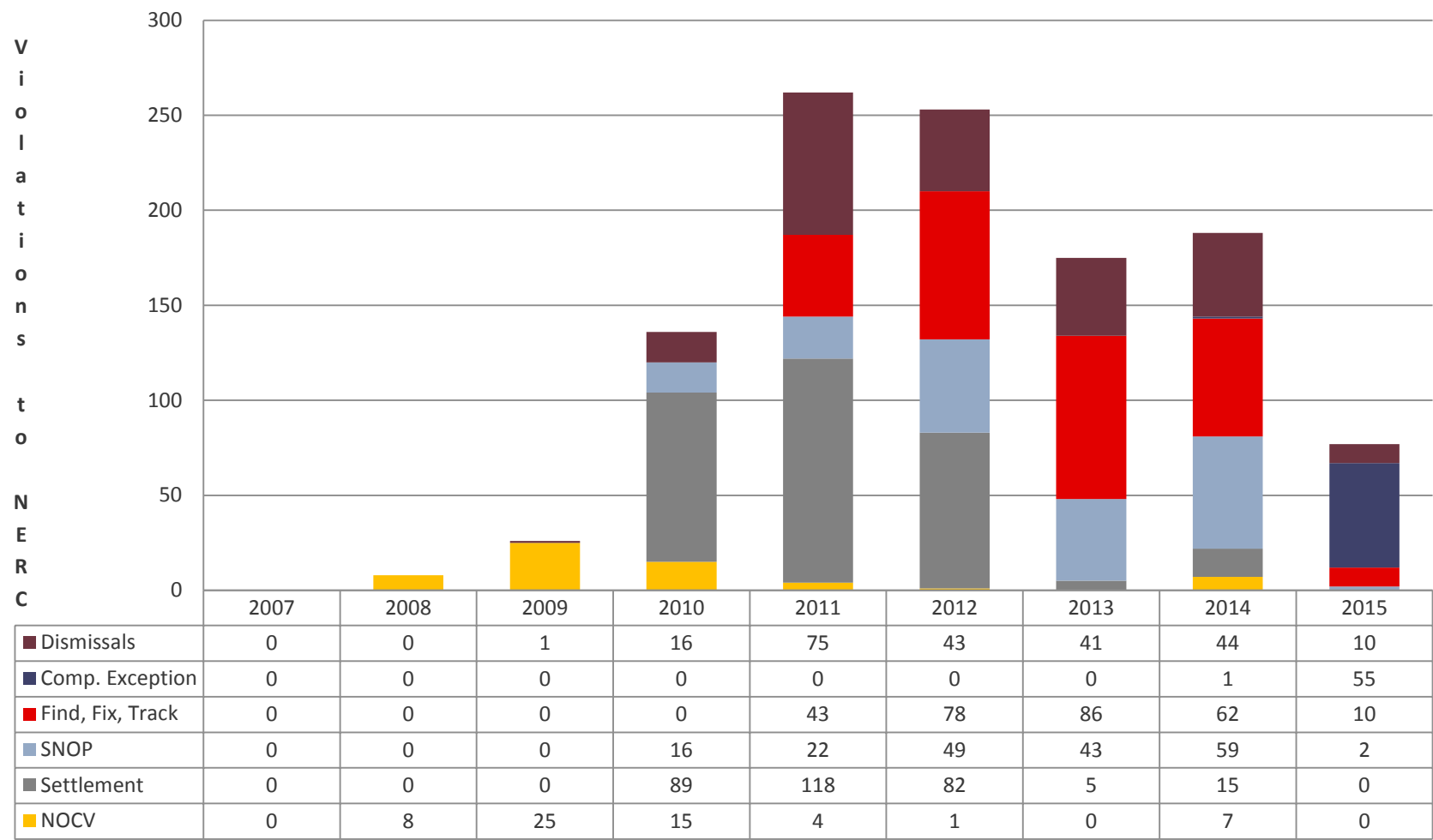


# Enforcement Monthly Violation Processing



Running Total Violations

# Enforcement Processing Methods



# Enforcement Caseload – September 30, 2015

- **95 - Active SPP RE Violations**
  - 19 - Settlement
  - 76 - Settlement Not Requested (NAVAPS/NOCV)
- **22 - MRRE Violations (15 Transferred , 2 Self-Log, 2 Self-Report, 2 SPP)**
- **33 - 693 Violations**
- **62 - CIP Violations**
- **7 - High Impact Violations**
- **Discovery Method**
  - 47 - Audit
  - 38 - Self Report
  - 6 - Self Certification
  - 4 – Investigation

# Caseload Aging

- **SPP RE – 95 violations, average age - 361 days**

<u>Age (days)</u>	<u>Violations</u>
> 300	42
201 – 300	16
101 – 200	16
51 – 100	1
1 - 50	20

- **Pre-2014 violations - 25**
- **MRRE – 19 violations, average age - 391 days**

# High Impact Violation Summary

- **7 – Open High Impact Violations**
  - 5 - Settlement
  - 2 - Disposition Undetermined
- **Open High Impact Violations Mitigation Status**
  - 6 - Mitigation Plan Complete
  - 1 - Mitigation Plan Accepted

# SPP RE 2015 Violation Dismissals

Consolidation with another violation .....	5
NERC V3 – V5 Guidance (approach 2) .....	2
Self-Report wrong standard and/or requirement.....	0
Provided exculpatory evidence .....	2
Incorrect Interpretation of Standard .....	<u>1</u>
<b>Total</b>	<b>10</b>

# September Mitigation Plan Summary

- **Mitigation Plan Status (month/year)**

Submitted	2/56
Accepted	0/54
Certified Complete	17/64
Completion Verified	7/53
Mitigating Activity Completed	0/1

- **Active Violations with no Mitigation Plans**

Initiated	59
-----------	----



**SPP** *Southwest  
Power Pool  
Regional Entity*

Joe Gertsch  
Manager of Enforcement  
[jgertsch.re@spp.org](mailto:jgertsch.re@spp.org)  
501-688-1672



SPP Organizational Group Self-Evaluation/Assessment  
(August 1, 2014 – August 1, 2015)

**GROUP NAME:** SPP Regional Entity Trustees

**CHARTER/SCOPE UPDATE:** Attached Charter/Scope has been reviewed: N/A

**MEMBER ROSTER/ATTENDANCE PUBLIC :**

Member	Company	Sector	# Present	# Absent
John Meyer	RE Trustee, Chairman	N/A	6	-
Gerry Burrows	RE Trustee	N/A	6	-
Dave Christiano	RE Trustee	N/A	6	-
Emily Pennel	RE Trustee Secretary	N/A	5	1

Please list the number of members represented in the following areas:

Trans/Owners	Trans/Users	Directors
N/A	N/A	N/A

Sectors							
IOU	Coop	Muni	State/Fed	IPP/Marketer	Alt Power/Public Interest	Lg Retail	Sm Retail
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**AVERAGE OVERALL ATTENDANCE (INCLUDING NON-GROUP MEMBERS): 38**

**MEETINGS HELD TO DATE: Face-to-face: 4 Teleconference: 2**

**AVERAGE LENGTH OF MEETINGS: 4.6 HOURS**

**NUMBER OF VOTES TAKEN: 13**

**\*MEETING COST(S): \$74,730**

**MAJOR ACCOMPLISHMENTS/ISSUES ADDRESSED BY THE GROUP:**

1. Overall 2014 staff performance goals and metrics achievement was 121.8%
2. Processed Bulk Electric System Definition exceptions and registration changes
3. Implemented Risk Based Compliance Monitoring and Enforcement Program (CMEP) processes including Inherent Risk Assessments, Internal Control Evaluations, and Self-Logging of Minimal Risk Issues
4. Reviewed/accepted three regional reliability assessments
5. Continued outreach program of webinars, workshops, newsletters, and videos, including targeted outreach on CIP V5 at stakeholder companies
6. Maintained favorable stakeholder satisfaction score on the SPP RE annual survey, up from the previous reporting year
7. Maintained <12 month enforcement caseload
8. Operated RE within approved budget limits

MAJOR PENDING ISSUES BEFORE THE GROUP:

1. Continue working with Registered Entities on CIP version 3 to version 5 transition
2. Continue working with NERC and other Regional Entities to streamline and standardize CMEP processes through tools and initiatives such as the Risk-Based CMEP, auditor training/certification, added on-site audit efficiencies, and risk-based audit scope
3. Monitor Registered Entities' remediation of Facility Ratings discrepancies (FAC Alert)
4. Continue focusing on and monitoring relay misoperations and the Event Analysis program
5. Continue targeting outreach to improve Registered Entity compliance programs to reduce violations and achieve greater BES reliability
6. Consider the emerging issue of the diverging SPP RE and RTO footprints

*\* Meeting costs include hotel expenses (room rental, A/V, food and beverage) and Trustee fees for attendance at quarterly and special meetings.*

# SPP RE General Manager's Report to the SPP RE Trustees

October 26, 2015

SPP Corporate Center

Ron Ciesiel

SPP RE General Manager



# SPP RE STAFFING

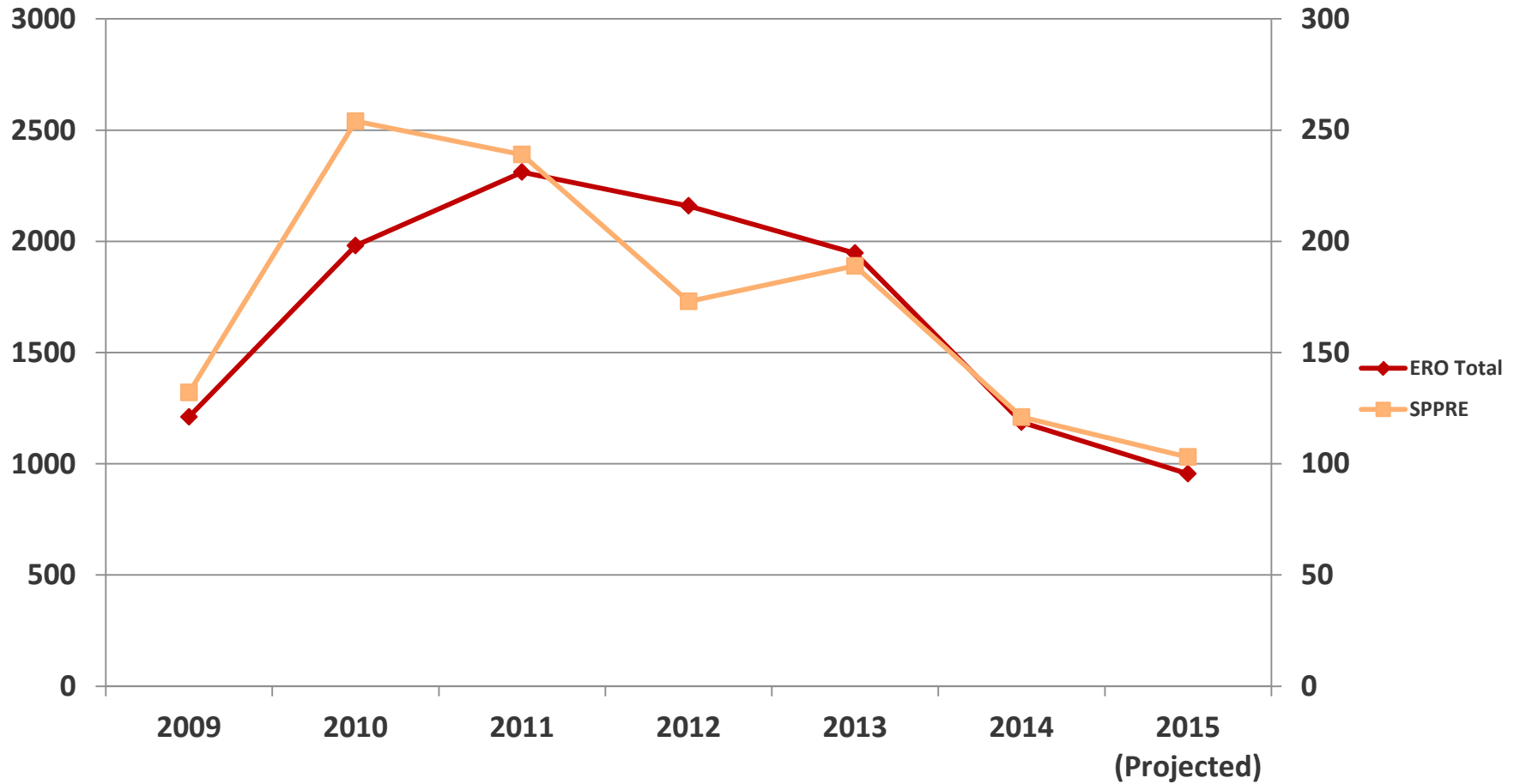
- Presently the SPP RE has 26 full time employees
  - One employee is off for an extended period of time on maternity leave
- SPP RE is presently running 2 employees below the expected staffing levels
  - Workload and performance is continuously monitored to determine needs of future staff replacements or additions

# RECENT FERC DECISION

- On October 15, 2015, FERC approved the petition to remove the Load-Serving Entity [LSE] from the NERC Registry
  - SPP RE will begin this process ~ November 15<sup>th</sup>, after FERC passes 30 day Re-Hearing timeline
  - There are 458 LSEs on the NERC Registry , as of 10-2-15
    - There are 50 LSEs on the SPP RE Registry as of 10-2-15
      - There are only 3 LSEs on the SPP RE Registry that will completely drop out of the Registry
  - SPP RE will not evaluate LSE compliance obligations going forward
  - Reminder: LSE have obligations other than compliance obligations, such as paying SPP RE and NERC Assessments

# SPP RE Violations By Year

## SPP RE Incoming Violations By Year



# VEGETATION CONTACTS

	Last Reportable	Last Actionable
<b>NERC</b> (2Q-2015 Last Report)	2Q-2015	2Q-2015
<b>SPP RE</b> (3Q-2015 Last Report)	1Q-2013	3Q-2010

# Most Violated Standards

Based on rolling 12 months through 9/30/15 [Represents ~ 85% of total violations]

SPP RE Rank	NERC 12 Month Rank *	Standard	Description	Number of Violations	Risk Factor
1	7	CIP-002	Critical Cyber Asset Identification	22	High/Lower
2	1	CIP-007	Systems Security Management	16	Med./Lower
3	3	CIP-005	Electronic Security Perimeters	12	Med./Lower
4	2	CIP-006	Physical Security - Critical Cyber Assets	9	Med./Lower
5	8	VAR-002	Network Voltage Schedules	6	Med./Lower
6	5	PRC-005	Protection System Maintenance	5	High/Lower
7	4	CIP-004	Personnel & Training	4	Med./Lower
8	10	FAC-008	Facility Ratings (includes FAC-009)	4	Med./Lower
9	6	CIP-003	Security Management Controls	3	Med./Lower
10	**	PRC-008	UFLS Relay Maintenance	3	Medium

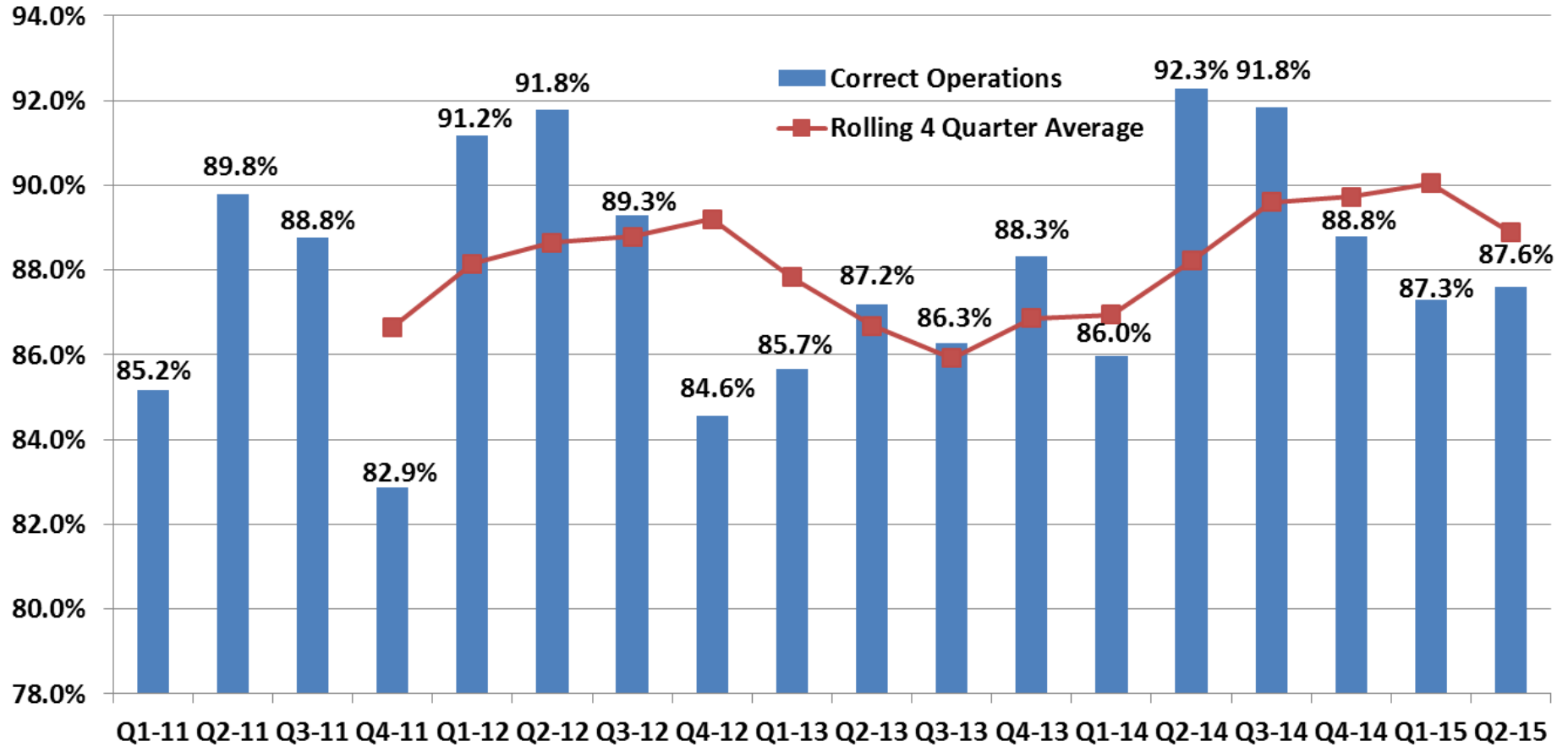
\* NERC as of June 30, 2014

\*\* Not in NERC Rolling 12 month Top Ten



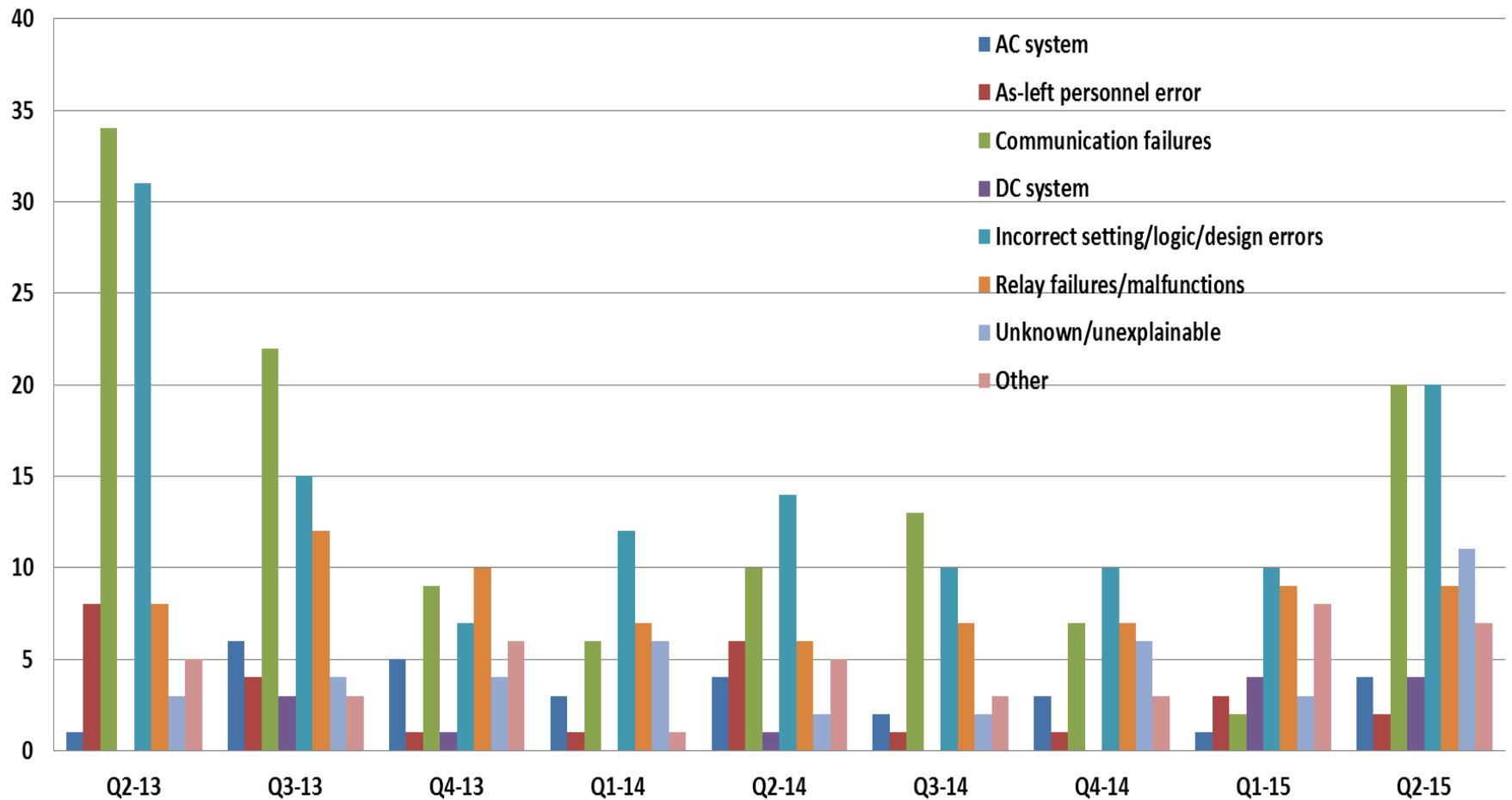
# SPP RE Misoperation Report as of Q2-15

## Relay Operational Performance- Success Rate



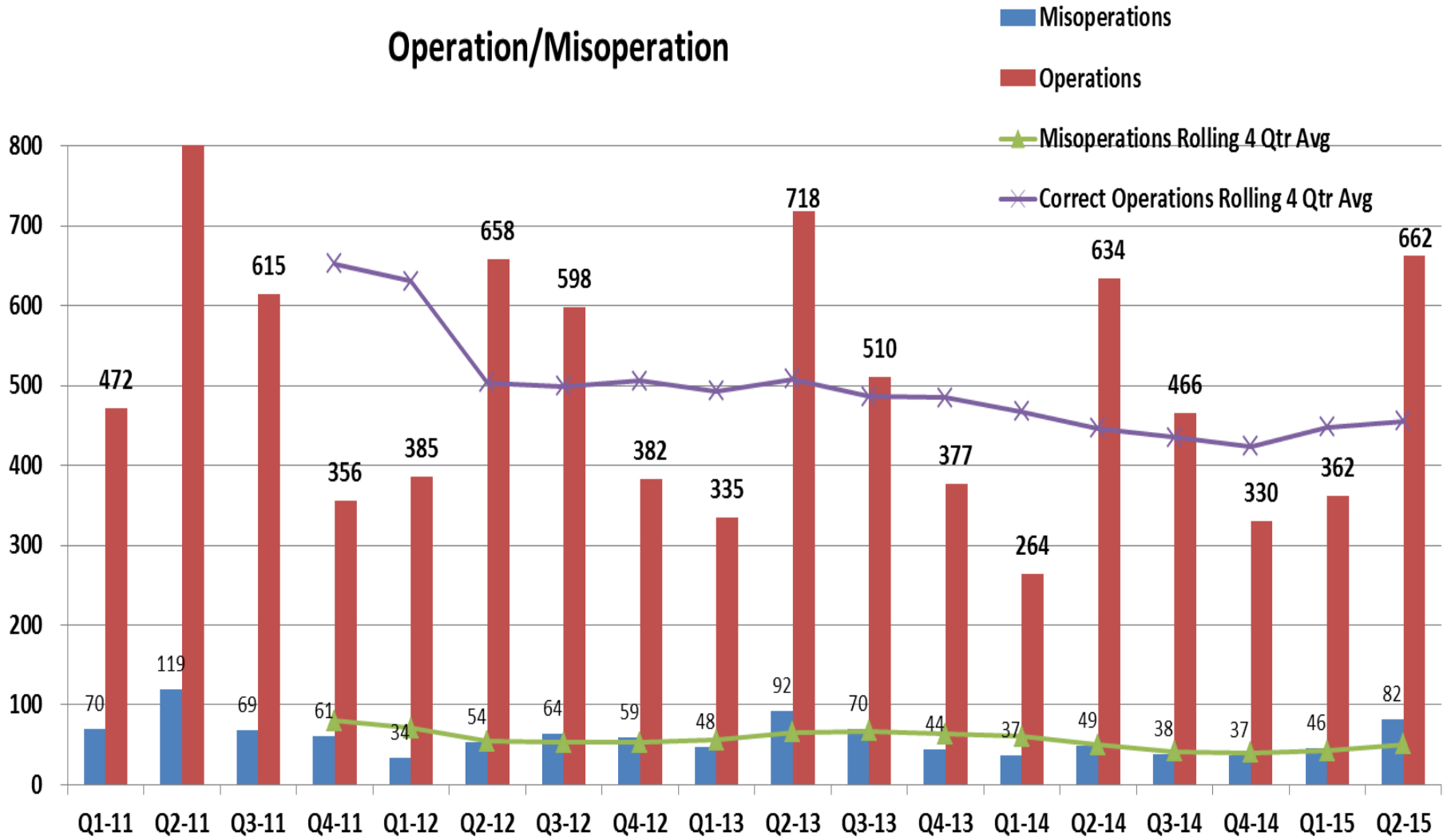
# Causes of Misoperations Q2-13 to Q2-15

Cause(s) of Misoperations



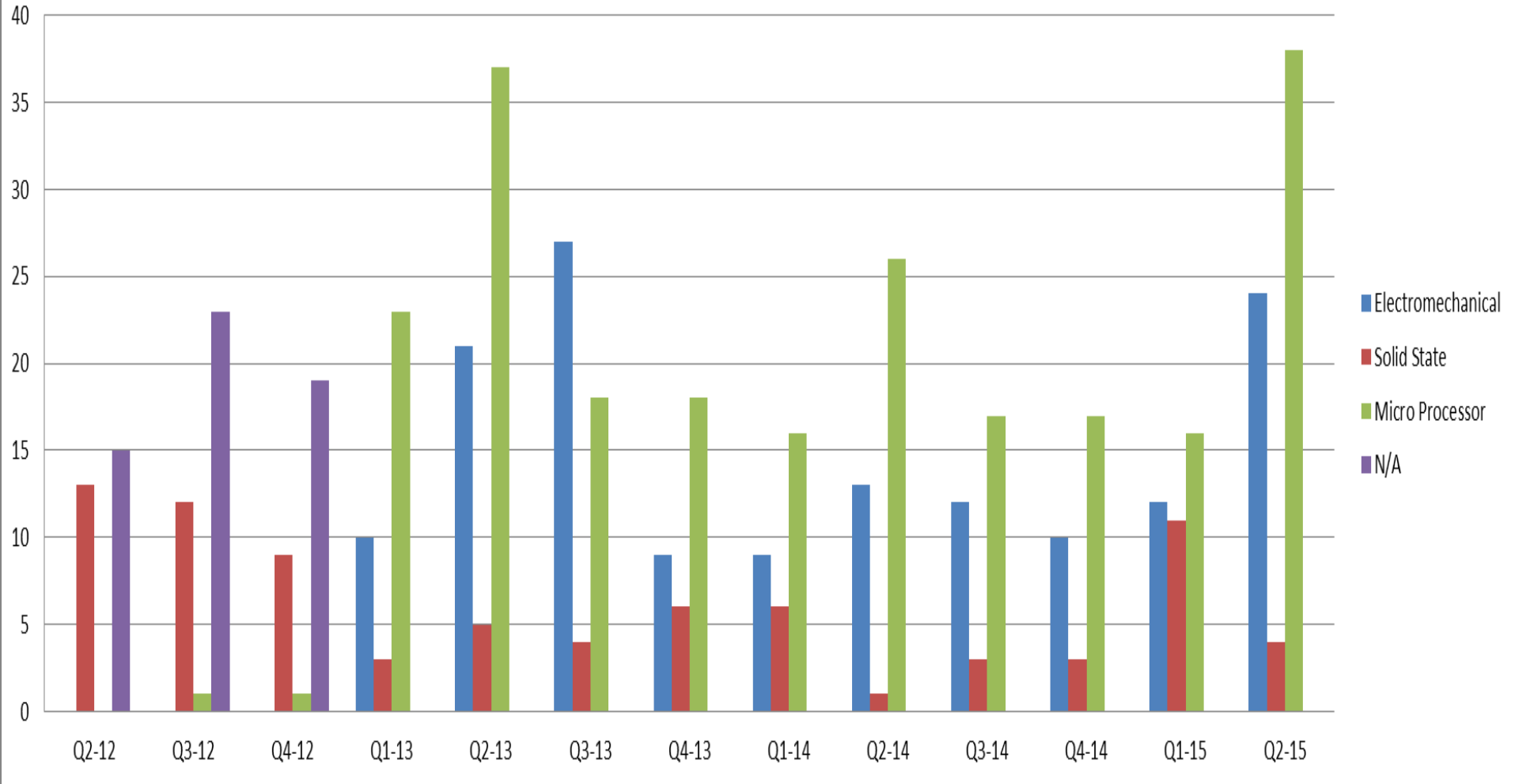
# Operation/Misoperation Comparison

Operation/Misoperation



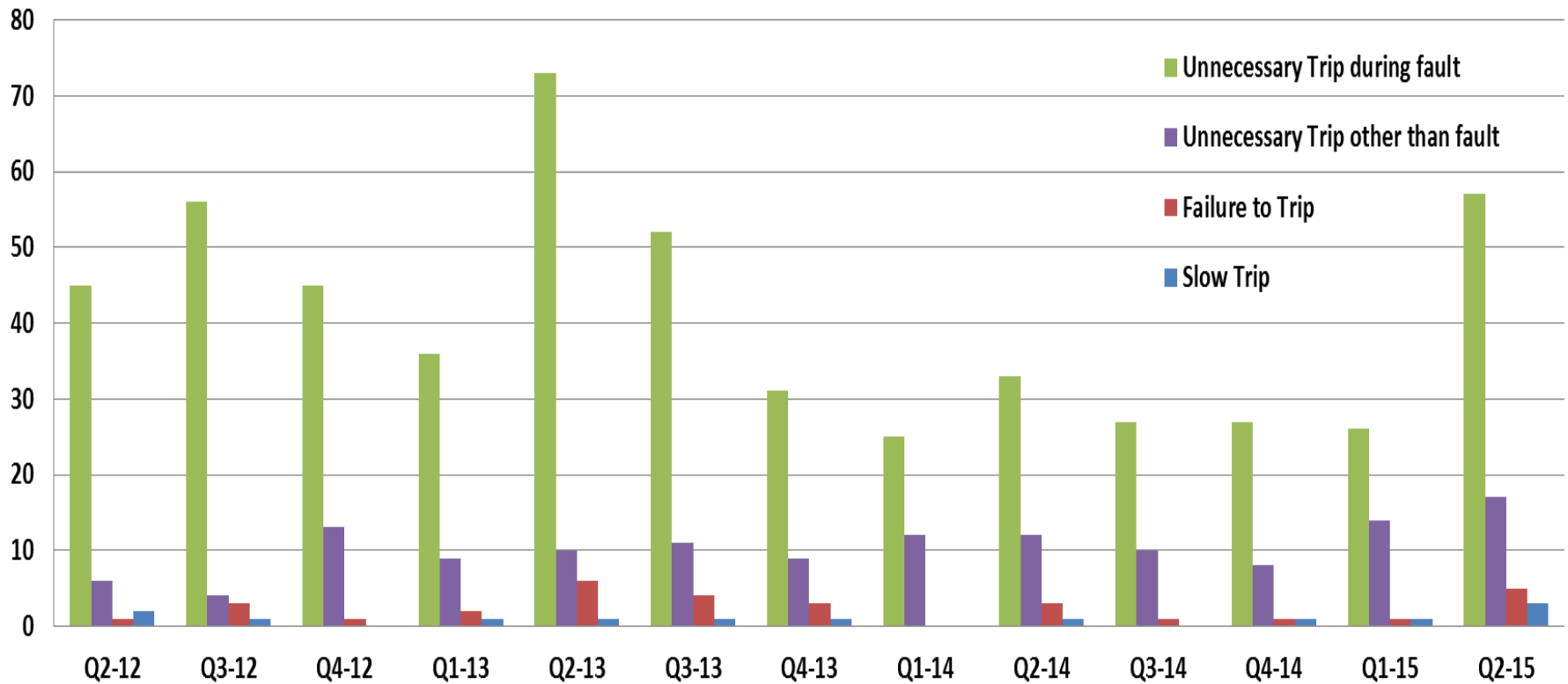
# Misoperations by Relay Type

Relay System Type



# Misoperations by Type

Misoperation Category



# New Standards: October 1, 2015

- [COM-001-2 Communications](#)
- [CIP-014-1 — Physical Security \(NEW\)](#)
- [PRC-006-2 -Automatic Underfrequency Load Shedding](#)

## New Standards: January 1, 2016

- [FAC-001-2 — Facility Interconnection Requirements](#)
- [FAC-002-2 — Facility Interconnection Studies](#)
- [NUC-001-3— Nuclear Plant Interface Coordination](#)

## New Standards: April 1, 2016

- [CIP Version 5 Standards](#)
- [PRC-005-3 — Protection System and Automatic Reclosing Maintenance](#)

# New Standards: July 1, 2016

- COM-002-4--Operating Personnel Communications Protocols
- MOD-025-2--Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability
- MOD-031-1—Demand and Energy Data
- PER-005-2 Operations Personnel Training
- PRC-004-4 Protection System Misoperation Identification and Correction



## New Standards: July 1, 2016 (Cont.)

- PRC-019-2 Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection
- PRC-024-2 Generator Frequency and Voltage Protective Relay Settings
- BAL-001-2 Real Power Balancing Control Performance

# SPP RE Third Quarter Financial Report

October 26, 2015

Debbie Currie  
Manager, Regulatory Interface and  
Process Improvement  
[dcurrie.re@spp.org](mailto:dcurrie.re@spp.org)  
501.688.8228



# Overview

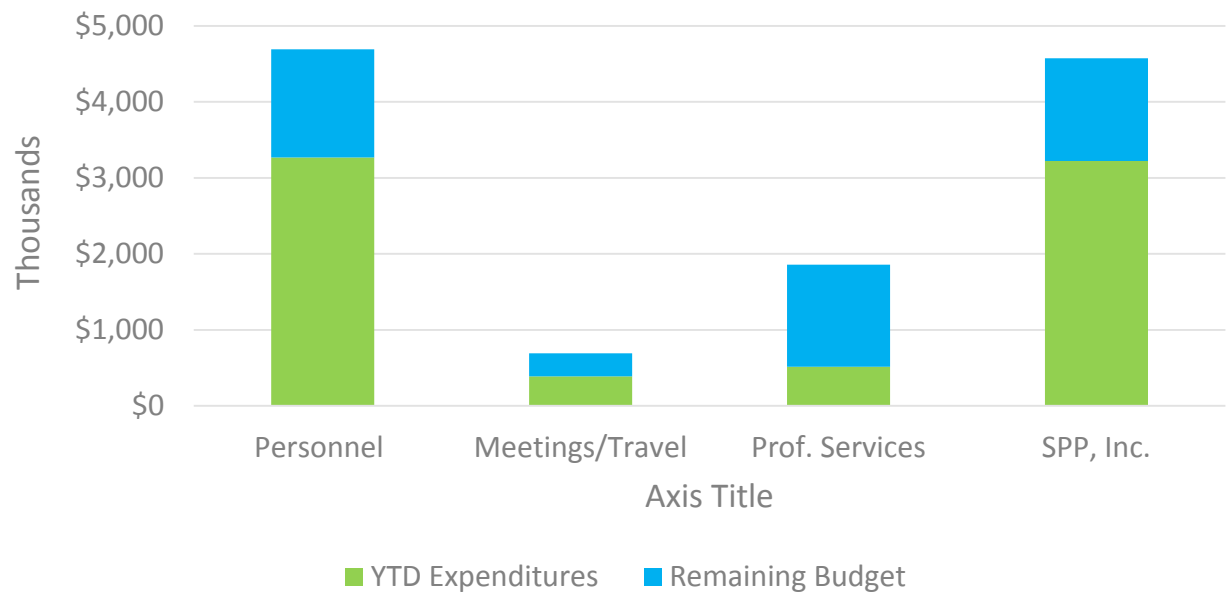
- **SPP RE began the year with 4 open staff positions**
  - CIP Auditor position filled
  - Authorized the hiring of an Ops Auditor
  - Two open positions eliminated in 2016 budget
  - An Enforcement Attorney resigned; position to be held open
- **Open positions drive a large percentage of actual to budget variance**
  - Impacts Personnel Expenses, Travel Expenses and SPP, Inc. Overhead Charge

# Overview, cont.

- **Contractor/Consultant/Professional Service costs below budget**
  - **Audit Performance Improvement by Registered Entities**
    - **Reduction in violations**
  - **Increase in staff experience**
    - **Pre-audit work leading to reduced time onsite or a reduction in audit team size**
  - **No hearings**
  - **Engineering Data Validation Tool**
    - **Work behind schedule, consultant hired in September**

# 2015 YTD Actuals vs. Budget

- Total expenses ~\$1,458k under budget
  - Personnel Expenses ~\$248k under budget
  - Meeting/Travel Expenses ~\$128k under budget
  - Professional Services ~\$876k under budget
  - SPP, Inc. Overhead Charge ~\$206k under budget

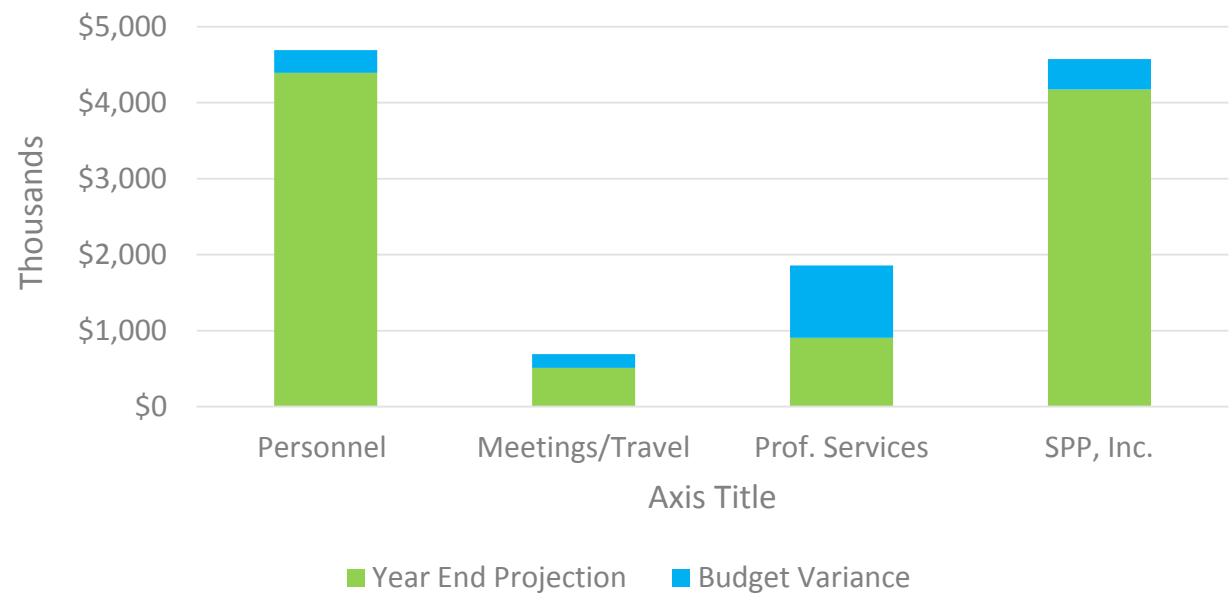


# Year-End Projection

- Open positions will continue to drive budget variance
- At the end of the 3rd Quarter SPP RE projects a year-end budget under-run of ~\$1.83 Million
  - Personnel Expenses projected to be ~\$300K under budget
  - Meeting/Travel Expenses ~\$180k under budget
  - Professional Services ~\$950k under budget
  - SPP, Inc. Overhead Charge ~\$400k under budget

# Year-End Projection

**\$11.8 M Budget, ~\$10.0 M Spent, ~\$1.8 M Variance**



**SOUTHWEST POWER POOL REGIONAL ENTITY**  
STATEMENT OF ACTIVITIES  
2015 SEPTEMBER YTD DRAFT (UNAUDITED)

<i>(In Whole Dollars)</i>	2015 SEPT YTD ACTUAL	2015 SEPT YTD BUDGET	VARIANCE	2015 FULL YEAR PROJECTION	2015 FULL YEAR BUDGET	VARIANCE
<b>Funding</b>						
ERO Funding	7,260,486	7,260,486	-	9,680,648	9,680,648	-
Penalty Sanctions	348,375	348,375	-	464,500	464,500	-
<b>Total SPP RE Funding</b>	<b>7,608,861</b>	<b>7,608,861</b>	-	<b>10,145,148</b>	<b>10,145,148</b>	-
Testing Fees	-	-	-	-	-	-
Workshops	-	-	-	-	-	-
Interest	2,014	-	2,014	-	-	-
Miscellaneous	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>7,610,875</b>	<b>7,608,861</b>	<b>2,014</b>	<b>10,145,148</b>	<b>10,145,148</b>	-
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	2,659,798	2,917,562	(257,763)	3,578,330	3,890,082	(311,752)
Payroll Taxes	179,662	223,193	(43,531)	244,942	297,591	(52,649)
Benefits	323,155	260,175	62,980	423,071	346,900	76,171
Retirement Costs	106,970	116,702	(9,732)	143,833	155,603	(11,770)
<b>Total Personnel Expenses</b>	<b>3,269,586</b>	<b>3,517,632</b>	<b>(248,046)</b>	<b>4,390,177</b>	<b>4,690,177</b>	<b>(300,000)</b>
<b>Meeting Expenses</b>						
Meetings	94,064	64,875	29,189	127,589	86,500	41,089
Travel	295,193	452,250	(157,057)	381,911	603,000	(221,089)
Conference Calls	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>389,257</b>	<b>517,125</b>	<b>(127,868)</b>	<b>509,500</b>	<b>689,500</b>	<b>(180,000)</b>
<b>Operating Expenses</b>						
Contracts & Consultants	385,957	1,027,950	(641,993)	674,403	1,370,600	(696,197)
Office Rent	-	-	-	-	-	-
Office Costs	9,600	6,000	3,600	11,904	8,000	3,904
Administrative Costs	-	-	-	-	-	-
Professional Services	120,591	358,234	(237,642)	219,938	477,645	(257,707)
Computer Purchase & Maint.	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-
Miscellaneous/ Contingency	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>516,148</b>	<b>1,392,184</b>	<b>(876,035)</b>	<b>906,245</b>	<b>1,856,245</b>	<b>(950,000)</b>
<b>Total Direct Expenses</b>	<b>4,174,991</b>	<b>5,426,941</b>	<b>(1,251,950)</b>	<b>5,805,922</b>	<b>7,235,922</b>	<b>(1,430,000)</b>
SPP Inc. Indirect Expenses	3,223,252	3,429,141	(205,889)	4,172,188	4,572,188	(400,000)
SPP RE Indirect Expenses	-	-	-	-	-	-
<b>Total Indirect Costs</b>	<b>3,223,252</b>	<b>3,429,141</b>	<b>(205,889)</b>	<b>4,172,188</b>	<b>4,572,188</b>	<b>(400,000)</b>
<b>Total Expenses (B)</b>	<b>7,398,243</b>	<b>8,856,082</b>	<b>(1,457,839)</b>	<b>9,978,110</b>	<b>11,808,110</b>	<b>(1,830,000)</b>
<b>Net Change in Assets (A-B)</b>	<b>212,632</b>	<b>(1,247,221)</b>	<b>1,459,853</b>	<b>167,038</b>	<b>(1,662,962)</b>	<b>1,830,000</b>
<b>Fixed Assets</b>						
Depreciation	-	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-
<b>Increase/(Decrease) in Fixed Assets (C)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Budget (Expenses plus Incr (Dec) in Fixed Assets (B+C))</b>	<b>7,398,243</b>	<b>8,856,082</b>	<b>(1,457,839)</b>	<b>9,978,110</b>	<b>11,808,110</b>	<b>(1,830,000)</b>
<b>Change in Working Capital (Total Funding less Total Budget) (A-B-C)</b>	<b>212,632</b>	<b>(1,247,221)</b>	<b>1,459,853</b>	<b>167,038</b>	<b>(1,662,962)</b>	<b>1,830,000</b>
<b>FTEs*</b>	<b>31.3</b>	<b>32.8</b>	<b>(1)</b>	<b>32.8</b>	<b>32.8</b>	<b>-</b>
Beginning WC - 01/01/2015	3,571,778	1,662,962	1,908,816	3,571,778	1,662,962	1,908,816
Change to WC - 2015 YTD	212,632	(1,247,221)	1,459,853	167,038	(1,662,962)	1,830,000
<b>Working Capital as of 9/30/15</b>	<b>3,784,410</b>	<b>415,741</b>	<b>3,368,669</b>	<b>3,738,816</b>	<b>-</b>	<b>3,738,816</b>

\*Headcount (RE direct staff count as of 9/30/2015 and shared staff YTD billed hours/1880).



# SPP RE Metrics Reporting as of September 30, 2015

w/in Target    Outside Target but w/in Allotted Range    Outside Allotted Range

1. High Impact	2. Maintain Caseload		3. Mit. Accept/Reject		4. Mit. Plan Completion	5. Process Pre-2014 Violations
Accept MP or issue NAVAPS at avg. of <= 100 days	Maintain a one year caseload		Accept/Reject Mit Plans w/in 30 days	Accept/Reject Resubmitted Mit Plans w/in 10 days	Complete Mitigation reviews <= 20 days	Process 100% of Pre-2014 Caseload
Current Avg. Days : <b>0.00</b>	FFT 11    Settle 2    Dismiss 41    NOCV 0    Comp. Ex 54    Total: 108	Yr. Passed 75% Caseload Complete <b>90.76%</b>	Current Avg. Days : <b>9.11</b> Metric Eligibility : 100.00%	Current Avg. Days : <b>2.62</b> Metric Eligibility : 100.00%	Current Avg. Days : <b>16.37</b>	% Processed: <b>44.90%</b> % Metric Period Passed: 75.00%
6. 60 Day Triage	7. Records Close Out	8. Publish Off-Site Audit	9. Publish On-Site Audit	10. BES Request Review	11. Publish: Excep., PDS, Self-cert	12. Incoming Processing
Complete Incoming Compliance Issue Triage in <= 60 days	Average Days to Close Out Violation Record	Publish Off-site w/in 45 days	Publish On-site w/in 65 days	Review requests w/in 10 days	Publish reports w/in allotted timeframe 100% of time or greater	Notify NERC of new violations w/in 5 business days
Current Triage Avg. : <b>41.58</b>	# of Violations closed out <b>119</b>	# Published YTD: <b>8</b>	# Published YTD: <b>7</b>	Current Avg. Days: <b>3.10</b>	% Published w/in Allotted Time	Current Average Days : <b>2.01</b>
		# of Reports Published in more than 45 Days: <b>0</b> Average Publishing Time <=45 Days (green) Average Publishing Time 45-50 Days (yellow) Average Publishing Time >=50 Days (red)	# of Reports Published in more than 65 Days: <b>0</b> Average Publishing Time <=65 Days (green) Average Publishing Time 65-75 Days (yellow) Average Publishing Time >=75 Days (red)			
<b>100%</b>	<b>100%</b>	% Published Reports <45 Days	% Published Reports <65 Days			
13. Cost Control	14. Maintain/Increase Misop Success	15. Cause Code Success Rate	16. Outreach	17. Continuous Improvement Project Goals		
Maintain Costs at or below 2014 projections	90 % success rate or greater over rolling 4 quarter avg.	Achieve 100% success rate in Cause Coding Events	Conduct 3 Workshops, 6 webinars, and 12 newsletter in '15	Milestone Completion to Date		
Current Success Rate: <b>88.88%</b>	Current Success Rate: <b>75.00%</b>	Current Success Rate: <b>75.00%</b>	12	RAI Imp. 5 Outstanding, 7 Completed Comp. Workbook 2 Outstanding, 10 Completed Enforcement Wbk 3 Outstanding, 9 Completed Budget Wkb 0 Outstanding, 12 Completed MRRE Process 1 Outstanding, 11 Completed CMEP Controls 5 Outstanding, 7 Completed		

# Outreach Update

**Emily Pennel**

**Outreach Coordinator and  
RE Trustees Secretary**

**October 26, 2015**



# Outreach

- **2015 Fall Workshop**
  - 209 registrants, in-person and webinar. Attendees rated it:
    - 22% “Excellent”
    - 74% “Good”
    - 4% “Average”
- **2016 Workshops**
  - March 15-16, Little Rock
  - June 8-9, Little Rock
  - Sept. 20-21, Oklahoma City
- **2016 Trustee Meetings**
  - January 25, 2016 - Oklahoma City
  - April 25, 2016 - Santa Fe
  - July 25, 2016 - Rapid City
  - October 24, 2016 - Little Rock

### **Essential Reliability Services Task Force (ERSTF)**

- The PC reviewed the ERSTF Framework Report that identifies potential measures and insights into trends and impacts of a changing resource mix. The report expands on recommended Interconnection and industry practices, including:
  - Monitoring synchronous inertial trends
  - Analyzing frequency response and deviations following large system impacts
  - Monitoring system reactive capabilities and voltage performance
  - Addressing net load ramping variability
  - Modeling real-time inertial and short circuit characteristics.
- The PC have until October 1<sup>st</sup> to comment on the report and will vote for approval later in the month. The report will be presented at the December NERC BOT Meeting. An abstract of the report will be published by the ERSTF later this year with the target audience of federal and state regulators and policy makers.

### **Reliability Assessment Subcommittee (RAS)**

- The RAS summarized proposed changes to their charter. Current plans are to dissolve the Reliability Assessment Data Working Group and move their responsibilities to the RAS. The goal for RAS membership it to increase OC representation and limit leadership to Regional Representatives. The RAS is also looking for new members with fresh perspectives to join.
- The PC approved a statement of work presented by the RAS and the Probabilistic Assessment Improvement Group Task Force (PAIGTF) regarding the generation of a Probabilistic Assessment Improvement Plan for improvement opportunities to enhance probabilistic assessment approaches in support of NERC's Long-Term Reliability Assessment, starting 2016.
  - PC approved statement of work, formally recognize the group as a task force, and task force will report to RAS.

### **2015 Long Term Reliability Assessment (LTRA)**

- NERC Staff summarized the 2015 Long Term Reliability Assessment currently under review by PC representatives. The assessment incorporates several reliability issues, including:
  - Declining reserve margins in some areas
  - Ongoing changes in the North American resource mix
  - High levels of Distributed Energy Resources and the lack of control by system operators
  - Uncertainty with environmental regulations

- Early retirements of nuclear plants
  - Energy storage
  - Load forecasting uncertainties
  - Workforce transformation
  - Aging infrastructure
- NERC Staff also introduced new data validation checks to analyze interchange flows, generator unit data, and Interconnection-wide planning cases. One issue presented by NERC Staff is the inconsistency in wind generation availability between assessment regions.
- The Chair has directed the RAS to develop a set of guidelines for future assessments to incorporate availability of wind generation for future assessments. The 2015 assessment is due for comments by September 25<sup>th</sup> and will be published later this year.

### **2015/2016 Winter Reliability Assessment (WRA)**

- NERC Staff will continue to assess operational risks based on extreme load and generation outage conditions. However, NERC will abandon the seasonal assessment approach and replace it with the **Short-Term Reliability Assessment (STRA)**, which will benefit both planning and operational horizons, starting in 2016.
- The plan incorporates both summer and winter extreme operating conditions and an analysis over shoulder periods, where demand is at its lowest with limited generation availability due to outages. During shoulder periods, the primary concern is over generation and high system voltages.
- Identified BPS reliability challenges will be communicated to state, federal, and provincial regulators, industry leaders, and NERC Board of Trustees, in a timely fashion so informed decisions can be made.

### **MOD-032 Model Building Designee Selection Process**

- NERC Staff reviewed its MOD-032 Model Building Designee Selection Process, as several gaps in coverage have been identified.
- The designee in the Western Interconnection has been identified, and NERC is working with ERCOT and TRE to identify the ERCOT Interconnection designee.
- NERC and Regional Entities face challenges in the Eastern Interconnection, with its numerous Planning Coordinators and Transmission Planners. It is believed the identification process can be completed by the end of 2015.
- NERC is particularly looking for entities that have adjacent BA and TOP areas around RC boundaries. Once a designee has been identified, they then need to develop processes for module submission, validations, and model correction.

### Modeling and Quality Metrics

- To assist the NERC modeling standards, Staff have developed some Modeling and Quality Metrics. NERC's proposed definition for Modeling is "generalized overarching term for mathematical representation of the BES.
- NERC is updating its model validation and testing procedure, which will be presented at the December PC Meeting. The update will identify power flow and dynamic data quality limit, transportability of cases between platforms, programs for base case overloads and documented bus voltages.
- NERC believes power flow cases should periodically benchmarked to actual system conditions, and in preparation for MOD-033-1, NERC will extract a power flow system snapshot for each Interconnection for a good model building practice of building and a validation case for system events.
  - The case selected will be of a significant event for each Interconnection and use data from RCs' State Estimators, SCADA and PMU data, and assembled composite forensic power flow and dynamic data cases.

#### **Synchronized Measurement Subcommittee (SMS)**

- This recently created **Subcommittee (SMS)** is to identify best practices with PMU data collection and usage. The first set of initiatives the SMS will address include:
  - Develop guidelines and best practices on PMU placement
  - Develop technical report identifying angular separation best practices to address Southwest Outage Recommendation 27
  - Identify how PMUs can be used to meet current NERC reliability requirements
  - Develop practices and guidelines around PMU modeling and data verification
  - Organize NERC technical workshop to raise industry awareness on PMU technology.
- The SMS is currently looking for volunteers to serve and support the subcommittee.

#### **System Analysis and Modeling Subcommittee (SAMS)**

- The SAMS is creating the Plant-level Control and Protection Modeling Task Force (PCPMTF) to focus on turbine-boiler controls, plant-level distributed control systems, and auxiliary protection systems.
- SAMS is looking for volunteers to pilot the new node-breaker functionality available in Siemens PSSE Rev 34 and GE PSLF 19.
- SAMS is reissuing the [NERC Procedures for Validating Power flow and Dynamics Cases](#), possibly as attachment to a future NERC Modeling Standard or as a Reliability Guideline.
- SAMS and the System Protection and Control Subcommittee (SPCS) also presented an assessment on **Protection System Single Points of Failure**, which was generated at the direction of FERC Order 754 and approved by the PC.

**Generator Availability Data System Working Group**

- The PC approved a request to initiate a NERC Rules of Procedure 1600 Data Request for entities to begin providing wind generation data. NERC believes this information is crucial for accurate projections in short-term and long-term power system reliability assessments.
  - Wind generation facilities commissioned after January 1, 2015, and greater than 75 MW will be required to provide data,
  - A Generation Operator not meeting this criteria can voluntarily provide data.
- Plant component and performance data will be required quarterly. A phased approach will start January 1, 2017.
  - Reporting will be voluntary the first year,
  - Plants greater than 200 MW required to begin reporting the second year
  - Plants greater than 100 MW required to begin reporting the third year
  - Plants greater than 75 MW required to begin reporting in the fourth year.

**Transmission Availability Data System Working Group**

- The PC also approved to end tracking of unplanned outages by the TADWG as part of its NERC Rules of Procedure 1600 Data Request.

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NERC Compliance and Certification Committee Meeting Notes  
September 16 - 17, 2015  
Submitted by Jennifer Flandermeyer, SPP RRO Representative  
Senior Manager, Reliability Strategy, Kansas City Power & Light

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The North American Electric Reliability Corporation (NERC) Compliance and Certification Committee (CCC) convened their quarterly meetings on September 16 and 17, 2015. The following are the most significant highlights from those meetings. Minutes and background materials are posted as follows:

[http://www.nerc.com/comm/CCC/Agenda%20Highlights%20and%20Minutes%202013/CCC\\_Sept\\_AgendaPackage.pdf](http://www.nerc.com/comm/CCC/Agenda%20Highlights%20and%20Minutes%202013/CCC_Sept_AgendaPackage.pdf)

Minutes and additional background materials should be posted in the next few weeks.

#### **Independent Audit of NERC CMEP and ORCP**

Background materials were provided on the upcoming audit of NERC's Compliance Monitoring and Enforcement Program (CMEP) and Organization Registration and Certification Program (ORCP). CCC members participating in the audit as observers and help define the criteria for the independent auditors.

#### **Guidance Updates – Policy White Paper and CIP v5 Technical Application**

NERC Management described the Compliance Guidance Policy team and its activities noting that the team developed a proposal posted for comment. The proposal's two-pronged approach to providing compliance guidance was outlined for the Committee. There was discussion on the involvement of the CCC and other standing committees in developing the guidance. There was also discussion on whether development of guidance would preclude other approaches that could meet the Reliability Standard. An update on next steps will be given at the December CCC meeting.

An update was provided on the CIP Technical Guidance development meeting regarding the way forward for CIP version 5 transition topics. The discussion covered the memoranda topics that had been withdrawn and an update on the issuance of recent and upcoming lessons learned. The team composition for the Advisory Group as well as the Guidance meetings was discussed and CCC members were encouraged to comment on the papers issued by V5TAG.

#### **RISC Metrics Report**

An update on the RISC activities and the recent 2015 Leadership Summit was provided. It was noted that a RISC report would be submitted to the Board of Trustees Compliance Committee (BOTCC) in November as information only. The link to last year's report is located [here](#). In addition, the proposed metrics were presented with background materials.



### **NERC CCC 2016 Work Plan**

An overview of the 2016 CCC Work Plan was provided with twelve proposed projects. The discussion highlighted project 12 which allows the CCC to revise its work plan in Q1 based on the revised timeline ERO Strategic Planning process.

### **NERC Staff Updates**

Risk Based Compliance Monitoring and Enforcement Program update was provided with background materials included in the agenda package. There was a presentation on the 2016 CMEP Implementation Plan. NERC Management encouraged CCC members to review NERC's quarterly reports to the Board on metrics supporting the success factors to implement risk-based compliance monitoring. The August report is located [here](#). In addition, NERC Management provided an update on an upcoming filing describing implementation of risk-based enforcement.

### **NERC Outreach**

Ms. Hecht provided an update on the upcoming Standards and Compliance workshop in San Diego, which will cover risk-based CMEP updates. She also noted that the small entity internal controls evaluation exercise will not occur in the fall.

- Fall Industry Outreach event
- Fall 2015 Standards and Compliance Workshop update
- Small Entity Internal Controls Evaluation Exercise

### **Future Meetings**

- December 2-3, 2015: Atlanta, GA (NERC)
- March 1-2, 2016: Atlanta, GA (NERC)
- June 15-16, 2016: Folsom, CA (CAISO)
- September 13-14, 2016: TBD – located with other standing committees
- November 29-30, 2016: Arlington, VA (NRECA)

# NERC Critical Infrastructure Protection Committee (CIPC) Report to Southwest Power Pool Regional Entity Trustees

Submitted by Eric Ervin, Chair, SPP CIPWG  
September 15<sup>th</sup>, 2015

## NERC CIPC Meeting

- The NERC CIPC held its quarterly meeting in New Orleans, LA September 15-16, 2015
  - Agenda, Presentations, and Minutes:
    - <http://www.nerc.com/comm/CIPC/Pages/AgendasHighlightsandMinutes.aspx>
- NERC hosted two workshops on the morning of the first day:
  - Physical Track - Surveillance Detection and Countermeasures
  - Cyber Track - CIP Version 5 Vulnerability Assessment
- Opening Remarks were provided Mr. Zeeshan Sheikh, VP, Chief Information Officer of Entergy
  - Rigorous Corrective Action Program/Human Performance Programs, Operational Experience, and Information Sharing are essential for evolving utilities as is a strong Security Awareness Program (ie, phishing campaigns, blogs, posting, etc.).
- Chuck Abell, CIPC Chair, provided opening comments and an overview of the February NERC Board of Trustees Meeting
  - NERC Events - GridSecCon Oct 13-16 – Philadelphia, PA and GridEx III – Nov 18-19.
  - CIPC Leadership changes will be coming -three current roles have terms that are ending at the end of the year.
  - CIPC Executive Committee Annual Planning scheduled for this fall.
- Mr. Marc Sachs, Senior Vice President and Chief Security Officer, NERC/E-ISAC, provided an E-ISAC Update (Renamed Electricity ISAC – (dropped sector))
  - NERC's role is to make sure the Grid is reliable and resilient. E-ISAC's role is to make sure all asset owners are aware through coordination and facilitation of resources to the electricity sector.
  - Capabilities
    - Real-time monitoring of the Grid
    - Contracted with commercial providers to monitor the external IP ranges and domain names of all registered BPS entities
    - Cyber Risk Information Sharing Program (CRISP)
    - Physical threat awareness program
    - Cyber and physical threat analysis
    - TLP Green/Amber/Red notifications via the E-ISAC portal
  - Design Basis Threat (DBT)
    - E-ISAC developing a DBT document outlining risks and vulnerabilities to the physical security of the Grid. E-ISAC considering a similar document for cyber-related risks.
  - E-ISAC maintains a presence at the National Cybersecurity and Communications Integrations Center (NCCIC), a DHS operated 24/7 watch floor near DC.
- Mr. Shamai Elstein, NERC/Legal and Regulatory, provided a FERC Supply Chain Notice of Proposed Rulemaking Update

- NOPR states NERC CIP Standards do not address supply chain risks (as opposed to NIST and DOE Guidelines).
- Looking for a forward looking, objective driven standard. Set goals about what to do while allowing flexibility for how an entity achieves those goals. Allow for exceptions given the diversity of acquisition processes. Be specific enough so that compliance obligations are clear and enforceable.
- Comments due 9/21/15. FERC committed in NOPR to engage in outreach efforts after receipt and consideration of comments. No set timeline for FERC.
- Nathan Mitchell, CIPC Vice Chair, provided a Reliability Issues Steering Committee (RISC) Update
  - Three Categories of Risk:
    - Those easily identified and measurable through the EROs existing processes and procedures.
    - Those evolving risks that are accelerating due in part to regulation and shifting economics, and result in part from the integration of new technology.
    - Reliability risks with large potential impact from extreme events.
  - Top Five Areas for Strategic Focus for the Strategic Plan
    - Address Regulatory Uncertainty, Enhance reliability assessments, Address changing resource adequacy, Effective resiliency approach, and Enhance cybersecurity posture.
- Nathan Mitchell, CIPC Vice Chair, provided an Electricity Subsector Coordinating Council Update
  - Principle liaison between Electricity Sector and the Federal Government led by 30 industry CEOs.
  - ESCC Leadership
    - Conduct a supply chain briefing
    - Establish a dissemination process for DHS bulletins from the National Protection and Programs Directorate (NPPD)
    - Outreach to CEO peers across Strategic Infrastructure sectors: Transportation, Communication, Downstream Natural Gas, and Water (new to ESCC)
    - Ensure GridEx III is supported by ESCC Leadership
- Mr. Jim Brenton, CIPC Vice Chair and Subcommittee Chair, ERCOT, provided a GridEx III Update
  - Goals and Objectives
    - Exercise crisis response and recovery
    - Improve communication
    - Identify lessons learned
    - Engage senior leadership
  - Local Objectives
    - Each organization may choose to create and work towards local objectives through the exercise.
  - 1173 registered participants, 226 registered organization.
- CIPC meeting dates for 2015 are as follows:
  - December 15-16, 2015 (Atlanta, GA)

**Group Name Action Items**

<b>Item</b>	<b>Date Originated</b>	<b>Action Item</b>	<b>Updates</b>	<b>Status</b> (Not Started, In Progress, Closure Pending, On Hold, Closed)	<b>Owner</b>	<b>Notes/Comments</b>
1	06/15/15	The SPP RE General Manager and SPP RE staff will develop a white paper that addresses some of the known concerns with the Regional Delegation Agreement. Among other items, the white paper should address cost-savings to the Regional Entity for using SPP shared staff/facilities.	Responded to inquiry from NERC concerning governance issues on Aug. 6  Gerry Cauley visit to SPP RE scheduled for Oct. 29	In progress	Ron Ciesiel	Additional notes or comments to support/explain progress.
2	6/15/2015	The SPP RE General Manager will work with other RE Regional Managers in future budget cycles to define the phrase "shared staff". Definition is needed because some REs attach a different meaning to the term.		Not started	Ron Ciesiel	
3	6/15/2015	SPP Bylaws (Regional Entity Trustee Nomination, Election and Compensation). The SPP bylaws allow SPP members to nominate and vote for Regional Entity Trustees. SPP's bylaws also allow SPP members to approve Regional Entity Trustee compensation. This topic should be discussed because the SPP RTO footprint is becoming even more divergent from the SPP RE footprint; this might implicate "independence" issues.		Completed	Ron Ciesiel	
4	6/15/2015	Expansion of Regional Entity Trustees. SPP's bylaws currently only allow for three persons.		Completed	Ron Ciesiel	
5	6/15/2015	John Meyer will hire an attorney to be available to the SPP RE Trustees in case a legal opinion is needed.		Completed	John Meyer	
6	07/27/15	Report on the cost of the FAC program		In progress	Ron Ciesiel	