

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

NERC Update

Compliance Enforcement Initiative and ERO Strategic Plan

SERC Compliance Seminar
February 28, 2012

RELIABILITY | ACCOUNTABILITY



- **ERO Enterprise Strategic Plan**
- **Compliance Enforcement Initiative Overview**
- **FFT Overview**
- **Examples of filed FFTs**

- **Reliability**
- **Assurance**
- **Learning**
- **Risk-Based Approach**

- **Standards and Compliance**
 - Effective Standards through Efficient Processes
 - Strong and Fair Enforcement
 - Promote Culture of Compliance

- **Risks to Reliability**

- Identify the most significant risks to reliability.
- Be accountable for mitigating reliability risks.
- Promote a culture of reliability excellence.

- **Coordination and Collaboration**
 - Improve transparency, consistency, quality and timeliness of results.
 - Operate as a collaborative enterprise.
 - Improve efficiencies and cost effectiveness.

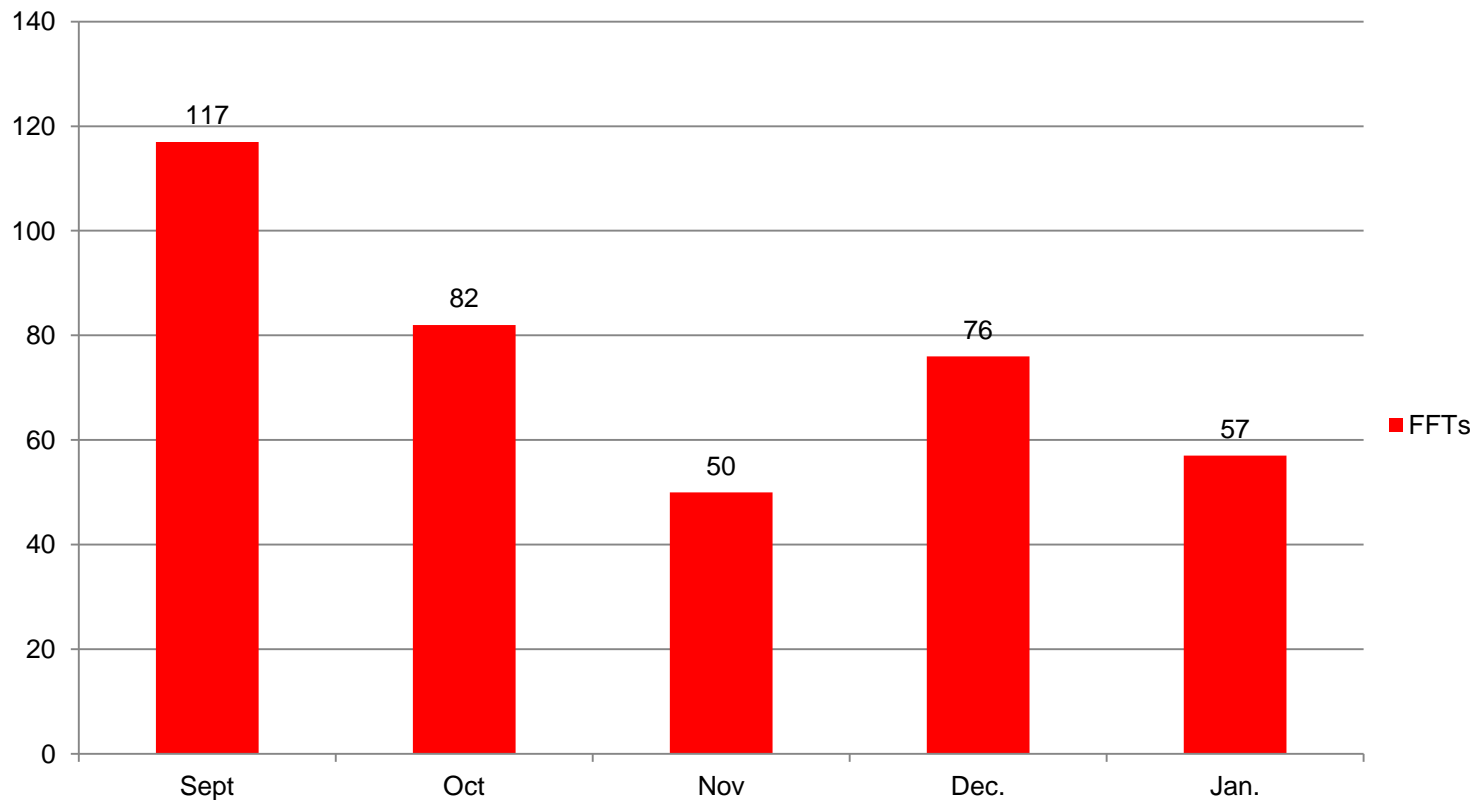
- Refocus efforts on reliability excellence.
- Eliminate undue regulatory burdens.
- Streamline paperwork and filing requirements.
- Encourage continued timely and thorough self-reporting and mitigation.
- Improve caseload processing.

- Five filings submitted to FERC from September, 2011 to January, 2012.
- Six-month and one-year status reports due to FERC in 2012.
- All eight Regional Entities using new formats.
- NERC is continuing outreach efforts to ensure successful implementation.

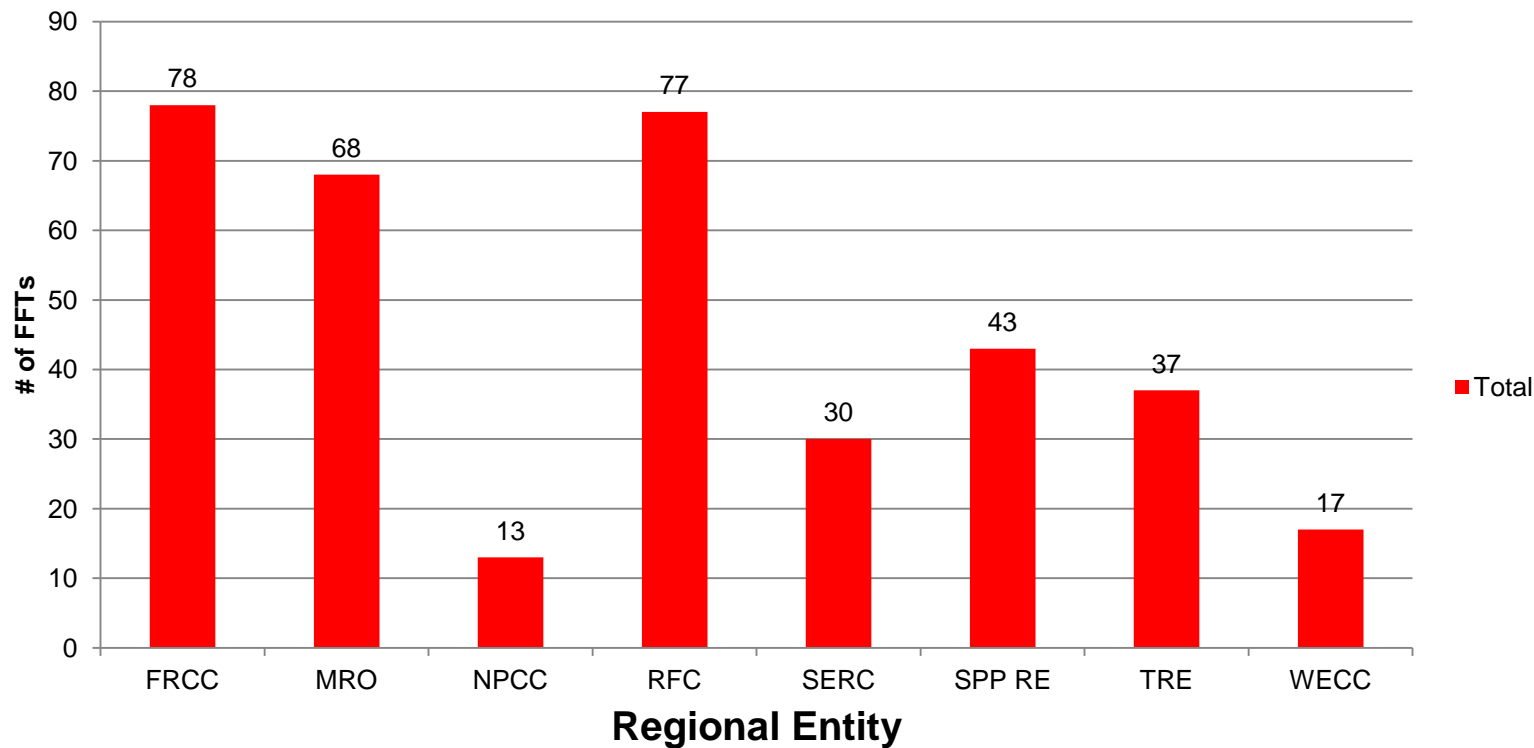
- Dismissal
- Find, Fix, Track and Report (FFT)
- Notice of Penalty (NOP)

- A registered entity may opt out of FFT processing.
- Upon correction and submittal of FFT filing, the Possible Violation (PV) becomes a Remediated Issue.
 - No penalty or sanction is assigned.
 - Formal Mitigation Plans will not be required.
 - Mitigating activity completion may be verified anytime.
- Remediated Issues become part of a registered entity's compliance history.
 - Remediated Issues may not be contested in subsequent enforcement actions.

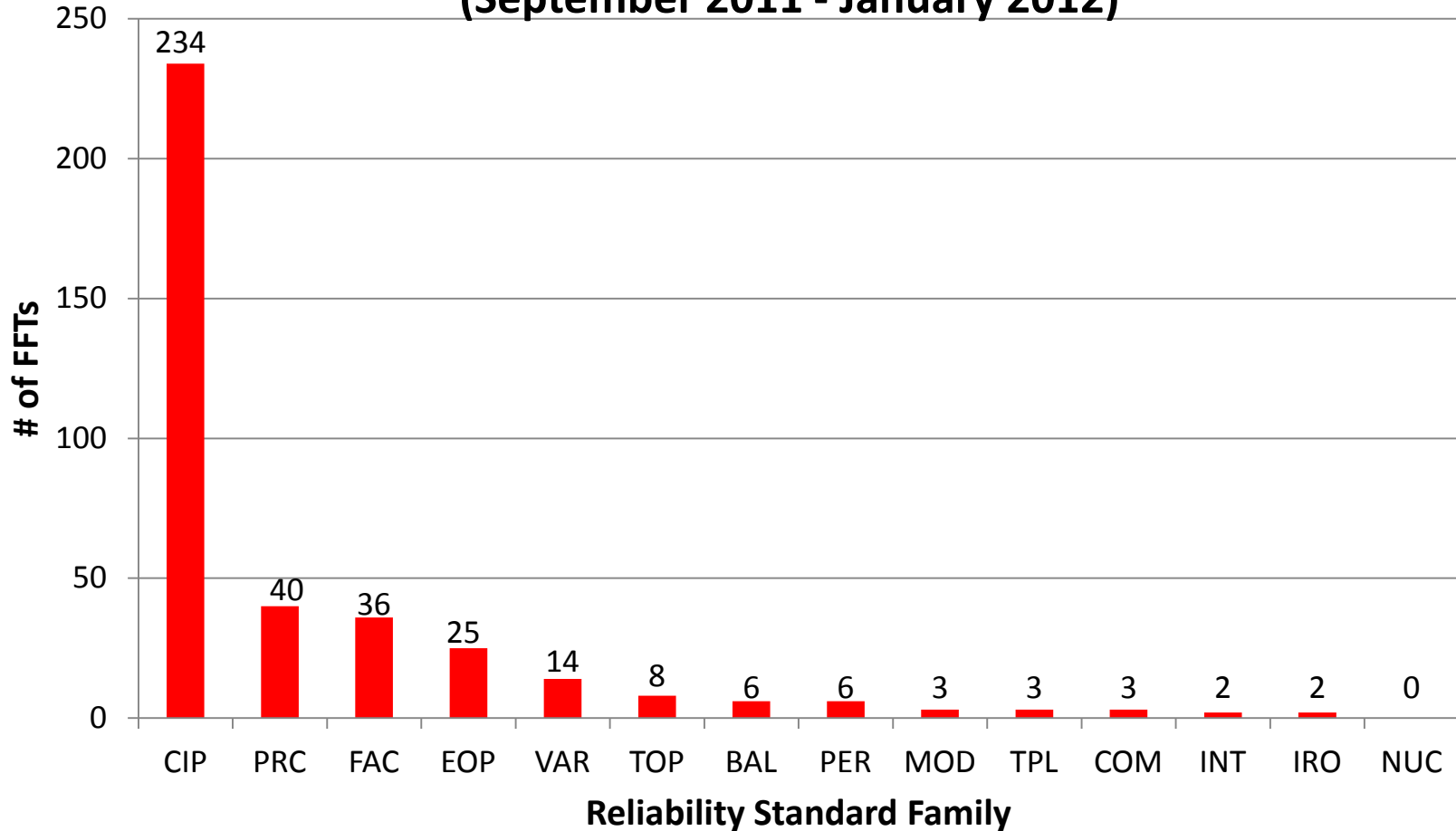
FFTs by Month (September 2011 - January 2012)



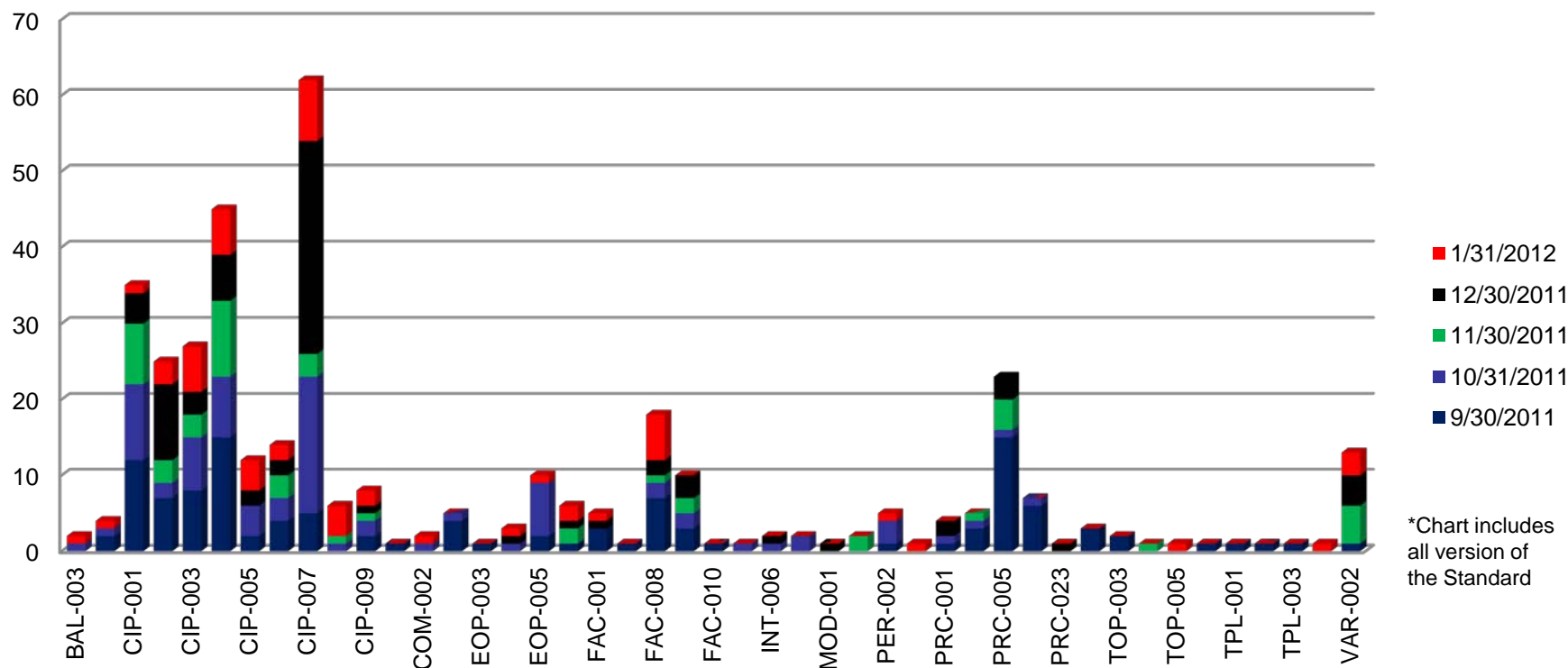
Number of FFTs filed at FERC by Regional Entity (September 2011 - January 2012)



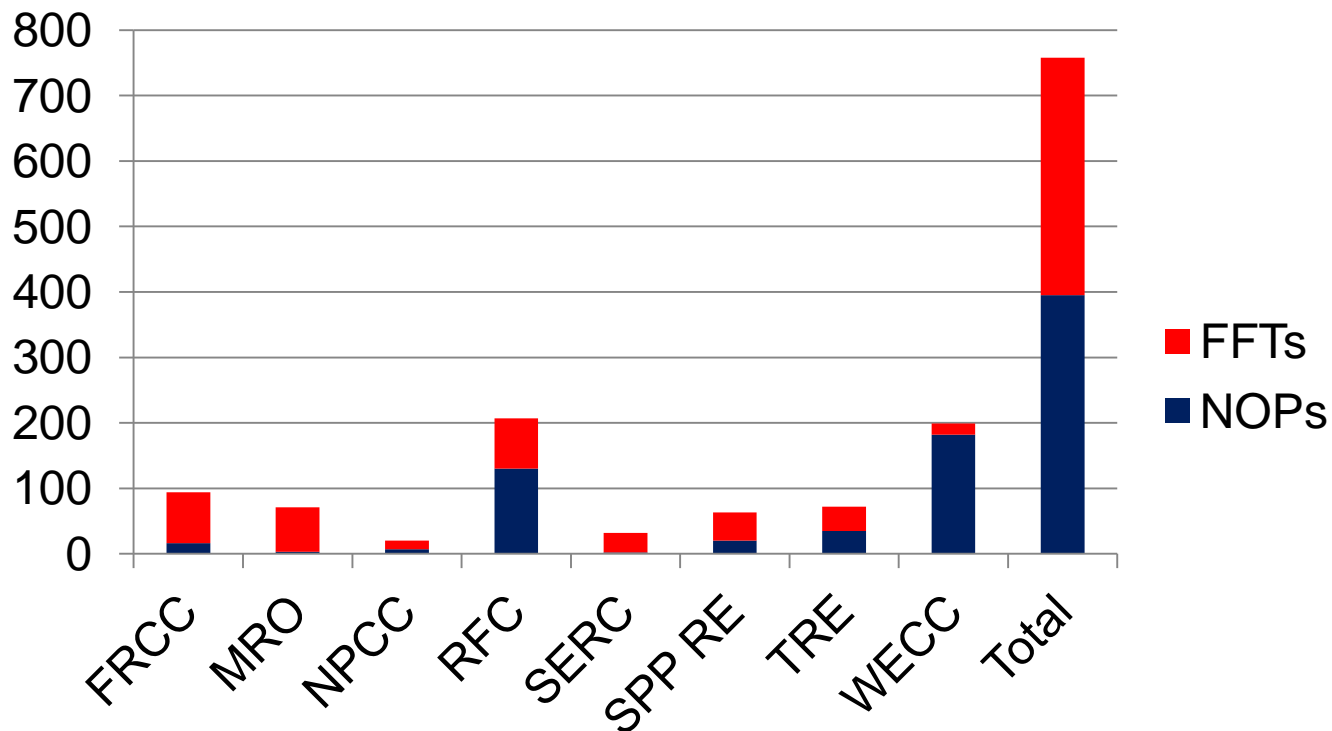
Number of FFTs by Reliability Standard Family (September 2011 - January 2012)



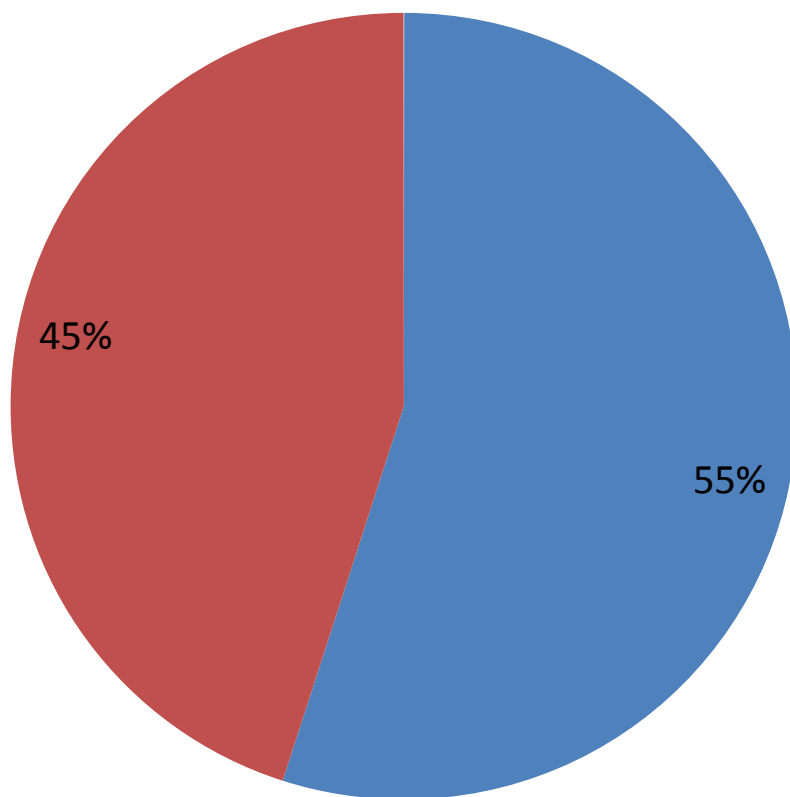
FFT Standard Breakdown (September 2011 - January 2012)



**Total FFTS/NOPs by Region
(September 2011- January 2012)**



FFTs by Discovery Method as of 1/31/2012



- Internally Identified (Self reports, Self certifications, Data Submittal, Exception reporting)
- Externally Identified (Audits, Spot checks, Investigations)

- Lesser risk (minimal to moderate) to the reliability of the bulk power system (BPS).
- Does not include serious risk issues.
- Existing caseload and new PVs eligible.
- Mitigation completed before filing.
- Repeat violations eligible for consideration depending on circumstances.

BAL-003

Issue: For six hours, the Automatic Generation Control was operated in Constant Frequency mode rather than Tie Line Bias mode; discovered through Self-Report.

Risk: The improper mode did not result in undue deviation in the system frequency, which was being monitored by the entity's EMS operators.

Mitigation: Revised procedures for displaying ACE and controlling ACE during AGC switching.

CIP-001

Issue: Emergency Response Plan did not explicitly provide for sabotage response guidelines; found at audit.

Risk: Informal procedures existed, and entity does not own any BES elements.

Mitigation: Updated current procedure and retrained all personnel.

CIP-002

Issue: The entity's risk-based assessment methodology (RBAM) was not in effect by the compliance date; discovered through Self-Report.

Risk: Entity used its own RBAM and determined it owned no Critical Assets that could impact BPS reliability.

Mitigation: Created an RBAM and Critical Assets list.

CIP-003

Issue: Did not properly document an exception to the Cyber Security Policy; discovered through Self-Report after notice of an Audit.

Risk: The entity's policy required more frequent checks than required by the Standard, and monthly checks were completed before the annual check would have been due.

Mitigation: Exception document completed and approved, additional awareness education, and revised process documents for exceptions.

CIP-004

Issue: Personnel Risk Assessment (PRAs) not completed within 30 days of granting access to CCAs; found at spot check.

Risk: Delays only ranged from one to five days; affected individuals were long-standing employees who had received background checks on hiring.

Mitigation: Entity completed the PRAs and addressed gaps in its PRA program.

CIP-005

Issue: Failure to identify certain devices as access points to the Electronic Sector Perimeter (ESP); found at audit.

Risk: Despite not being labeled as an access point, the device was afforded the required protections.

Mitigation: Entity revised its topology diagrams during the audit to include the device as an access point to the ESP.

CIP-006

Issue: Entity failed to include all Critical Assets located within an ESP within the six-wall border of a Physical Security Perimeter (PSP); found at Spot Check.

Risk: Multiple layers of physical security protected access to the PSP.

Mitigation: Entity secured the six-wall border of the PSP before conclusion of the spot check.

CIP-007

Issue: Entity did not have a patch management procedure in place and updates were not documented; discovered through Self-Report.

Risk: Patches *were* performed informally using an application to identify vulnerabilities in third-party applications.

Mitigation: Ticket tracking system put in place and documented; all devices and updates now tracked and documented.

EOP-008

Issue: No evidence that it had updated or reviewed its transmission system's Emergency Operation Plans; discovered from Self-Report.

Risk: Entity had a document that acted as its plan for a loss of control center functionality; no substantial changes were made.

Mitigation: Entity implemented a mechanism to remind personnel of update cycle; developed and implemented new document review procedure.

FAC-008

Issue: Entity did not consider relay protective devices or instrument transformers in Facilities Rating Methodology; found at Audit.

Risk: Missing elements were not most limiting elements in design of entity's generating facility.

Mitigation: Entity revised FRM to include missing elements and assigned them ratings according to original equipment manufacturer ratings.

PRC-001

Issue: Substation tech disabled primary and backup relaying on a 345 kV line in the adjacent panel when drilling without notifying its TOP; discovered through Self-Report.

Risk: Relaying was disabled four minutes prior to notifying the registered TOP, but high-speed clearing of the fault still would have occurred.

Mitigation: Operating personnel were retrained on proper notification procedures.

PRC-005

Issue: Entity could not provide basis for maintenance and testing intervals for Protection System devices; found at Audit.

Risk: Entity did have intervals in the program, but only failed to document the basis; performed testing in accordance with the intervals.

Mitigation: Entity added the basis for its maintenance and testing intervals to its program.

PRC-005

Issue: Entity missed quarterly interval for battery testing on one battery by 12 days because of broken equipment; found at audit.

Risk: Affected 1 of 251 batteries; met monthly and annual testing intervals, as well as quarterly intervals for all other batteries.

Mitigation: Entity tested the missing battery, trained on importance of scheduled testing, and modified testing program to include flexibility for short delays caused by extenuating circumstances.

PRC-008

Issue: Of 68 total UFLS devices, 10 devices, approximately 15%, did not have evidence of testing; discovered through Self-Report.

Risk: The entity's identified UFLS equipment only had a possible 80 MW impact for load shed. Upon completing the maintenance and testing, the entity's UFLS equipment performed as expected.

Mitigation: Performed inventory and identified deficiencies, developed a "catch-up" maintenance and testing plan and schedule, trained technicians on the procedures, and completed the required "catch-up."

VAR-002

Issue: Operator mistakenly placed a voltage regulator into automatic VAR mode rather than automatic voltage control mode (unclear control panel); discovered through Self-Report.

Risk: Corrected promptly, all voltage schedules met; voltage support to BPS continued (to a lesser degree); capacity of fewer than 100 MW and interconnects at lower voltage; and generator not called on to support transmission system voltage.

Mitigation: Control panel screen modified; retrained operators on requirements for automatic voltage regulation and operation of the generator control panel.

- Self-identified issues
- Lesser risk to Bulk Electric System (BES) Elements
- Informal/automatic procedures existed
- Very few devices excluded
- Operated within good utility practice
- Short duration/promptly corrected
- Backup protection/process in place
- Trusted/experienced employee
- No event occurred during violation period

- Provides incentive to find and fix issues more quickly.
- Focuses resources on more serious risks to reliability of the BPS.
- Improves alignment of time, resources and record development with the risk posed to reliability.

- Achieves efficiency gains.
- Reduces information dissemination delays.
- Focuses more time on ensuring reliable operations.

- Not just older cases
- Not just documentation-only violations
- Not just the *least* risk PVs
- All PVs of a given standard do not qualify for FFT.
- There will be consistency in due process, even if outcomes are not identical.

- Ensuring consistency in evaluation and disposition.
- Addressing pre-existing and repeat violations.
- Determining risk posed to BPS reliability.
- Considering registered entities' request for FFT treatment.
- Developing information technology (IT) solutions and revised Self-Report Form.

- Uncertainty discourages some entities from participating.
- Training compliance staff to make decisions in the field will be a significant focus in 2012.
- Phase II implementation is currently targeted in 2013.

- In Phase II:
 - Continue to alleviate extensive record development burden for lesser risk violations.
 - Provide guidance through FFT candidate examples.
 - Enable compliance staff to identify FFTs.
 - Reap benefits for all.
- Beyond Phase II
 - Aggregated reporting of Remediated Issues.

- Report to be submitted on March 30, 2012.
- Opportunities provided for input by Registered Entities and Regional Entities.
- Experience over first six months to be evaluated.

- **Tools and training available to Registered Entities and to Regional Entities**
 - Compliance Workshops
 - Compliance Open Webinars
 - Certification Programs

- **Conveying lessons and changing behavior from Enforcement**
 - Notices of Penalty
 - FFTs
 - Best Practices
 - Lessons Learned
 - Dismissal Analysis
 - Case Notes

- Focused strategy
- Outreach on all fronts

**We are all accountable for ensuring
reliability.**