

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

NERC's Compliance Enforcement Initiative *Find, Fix, Track and Report Implementation*

Winter 2012 ERO CEA Workshop

February 22, 2012

RELIABILITY | ACCOUNTABILITY



- Overview
- Data and Trends
- Guidelines
- Benefits
- Implementation Challenges
- Misconceptions
- Potential Improvements
- Six-month Filing with FERC
- Training Schedule

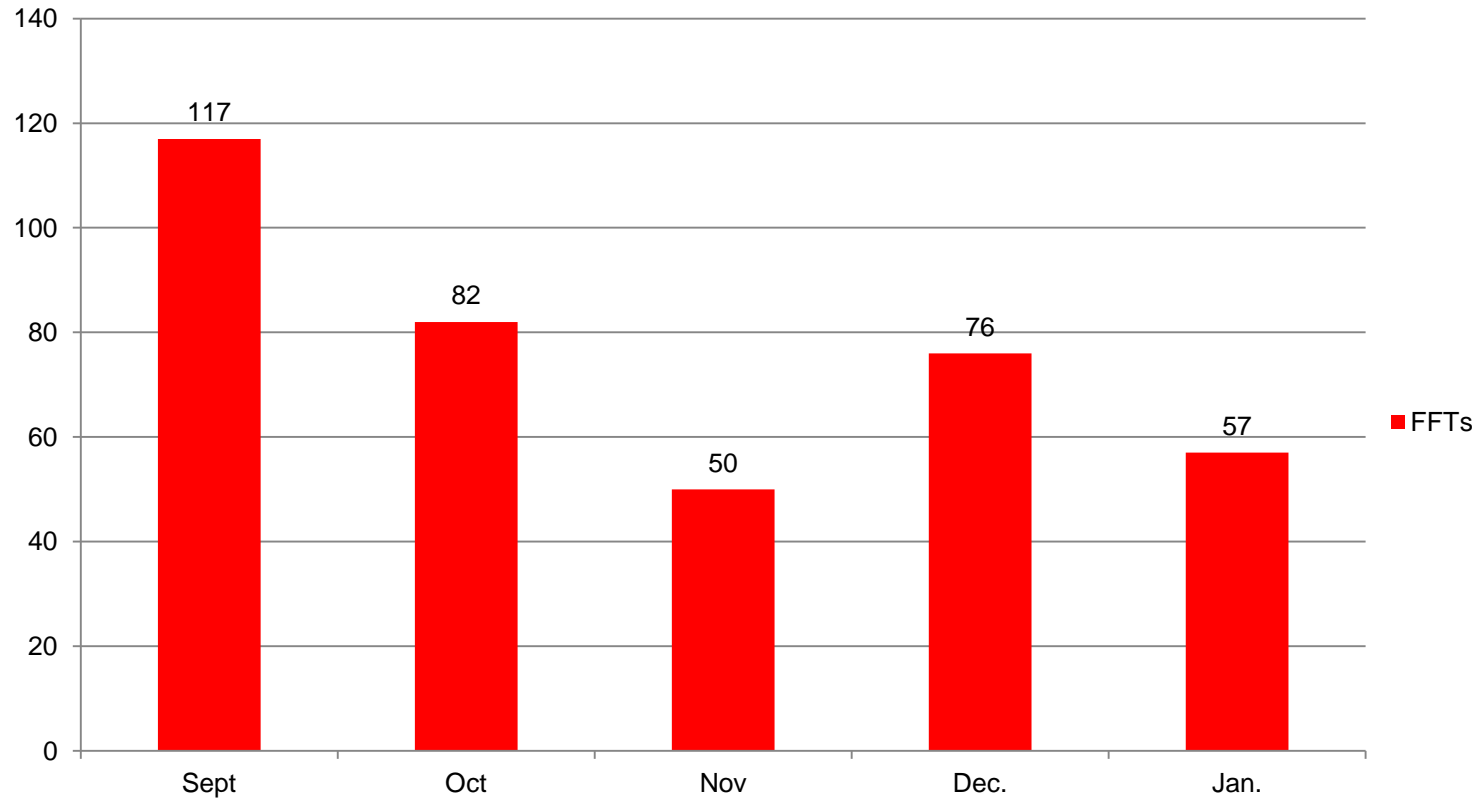
- Refocus efforts on reliability excellence
- Eliminate undue regulatory burdens
- Streamline paperwork and filing requirements
- Encourage continued timely and thorough self-reporting and mitigation
- Improve caseload processing

- Five filings submitted to FERC from September to December, 2011.
- 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.

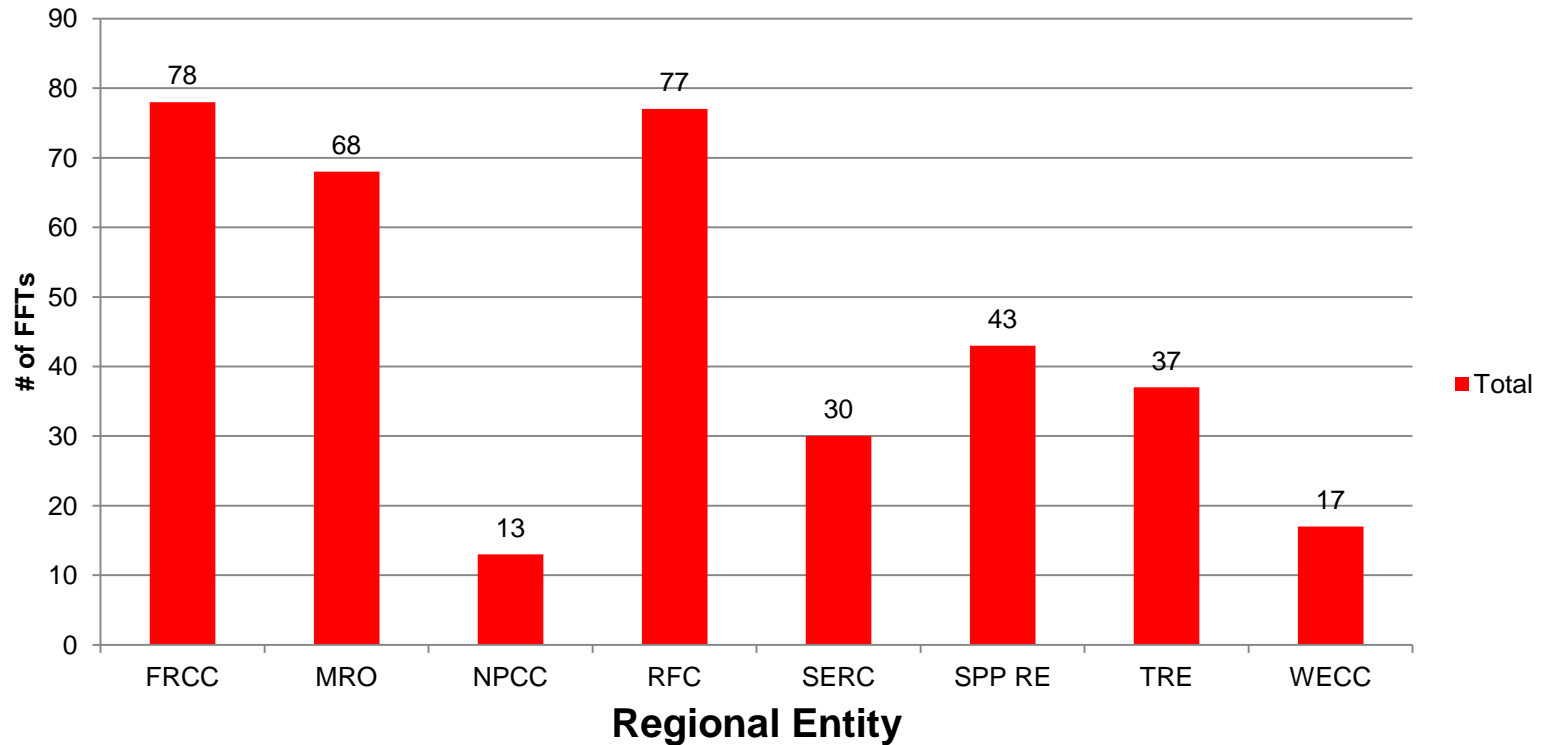
- Dismissal
- Find, Fix, Track and Report (FFT)
- Notice of Penalty (NOP)

- 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.

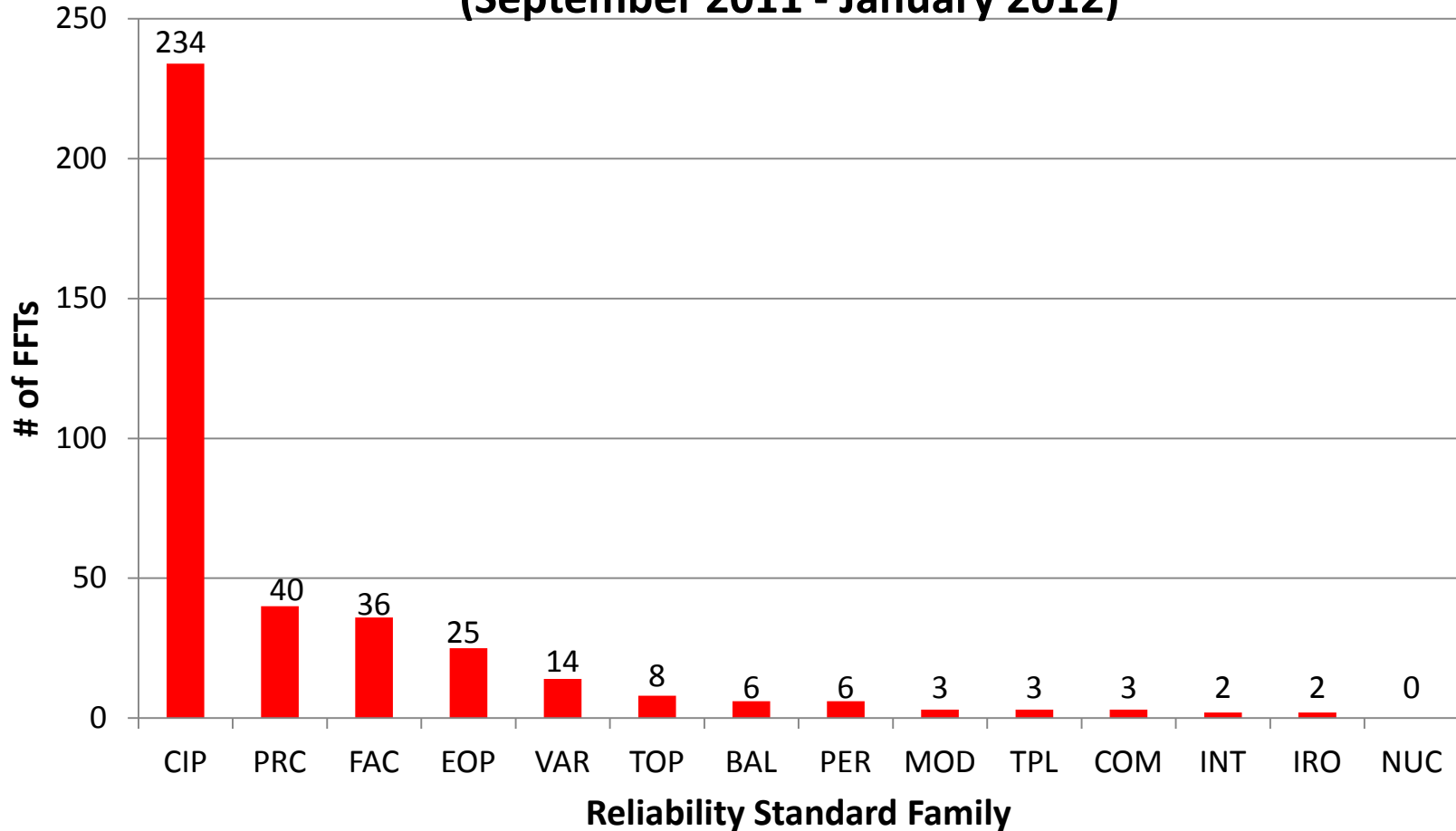
FFTs by Month (September 2011 - January 2012)



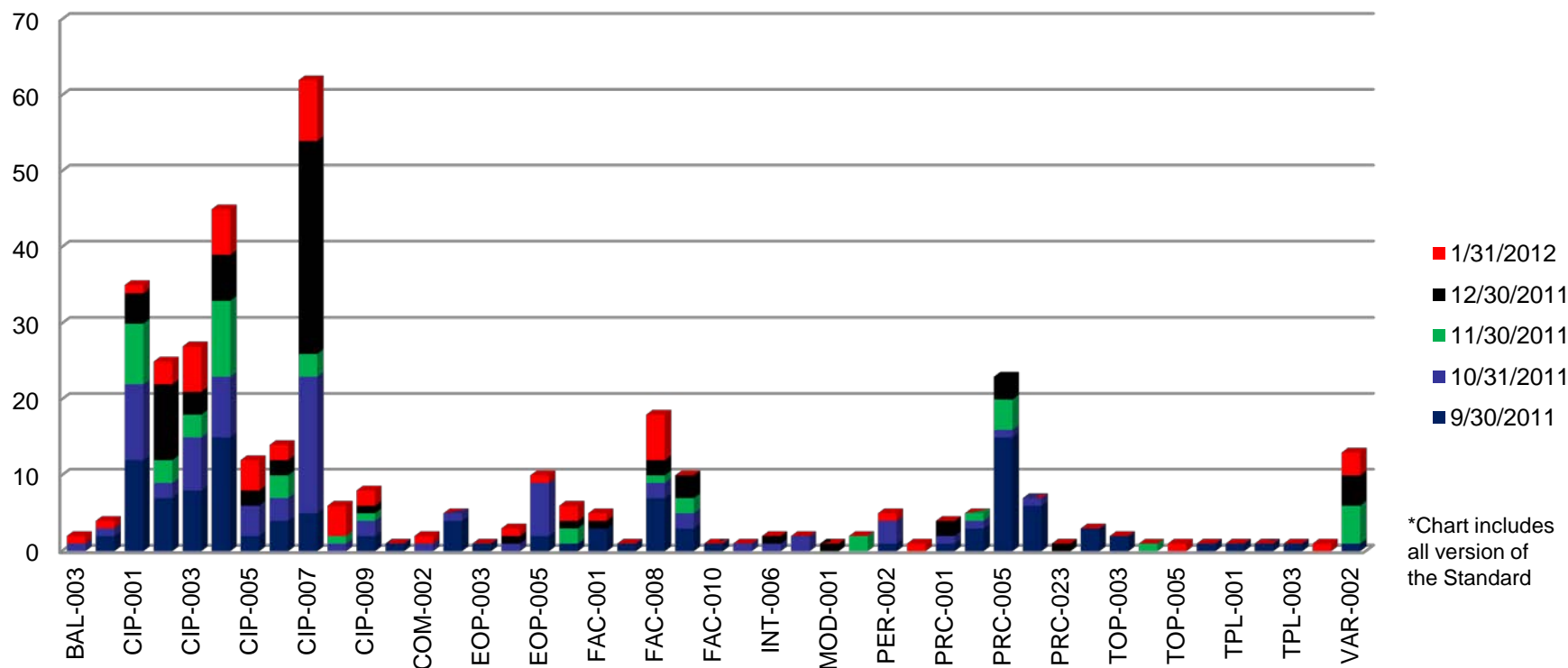
Number of FFTs filed at FERC by Regional Entity (September 2011 - January 2012)



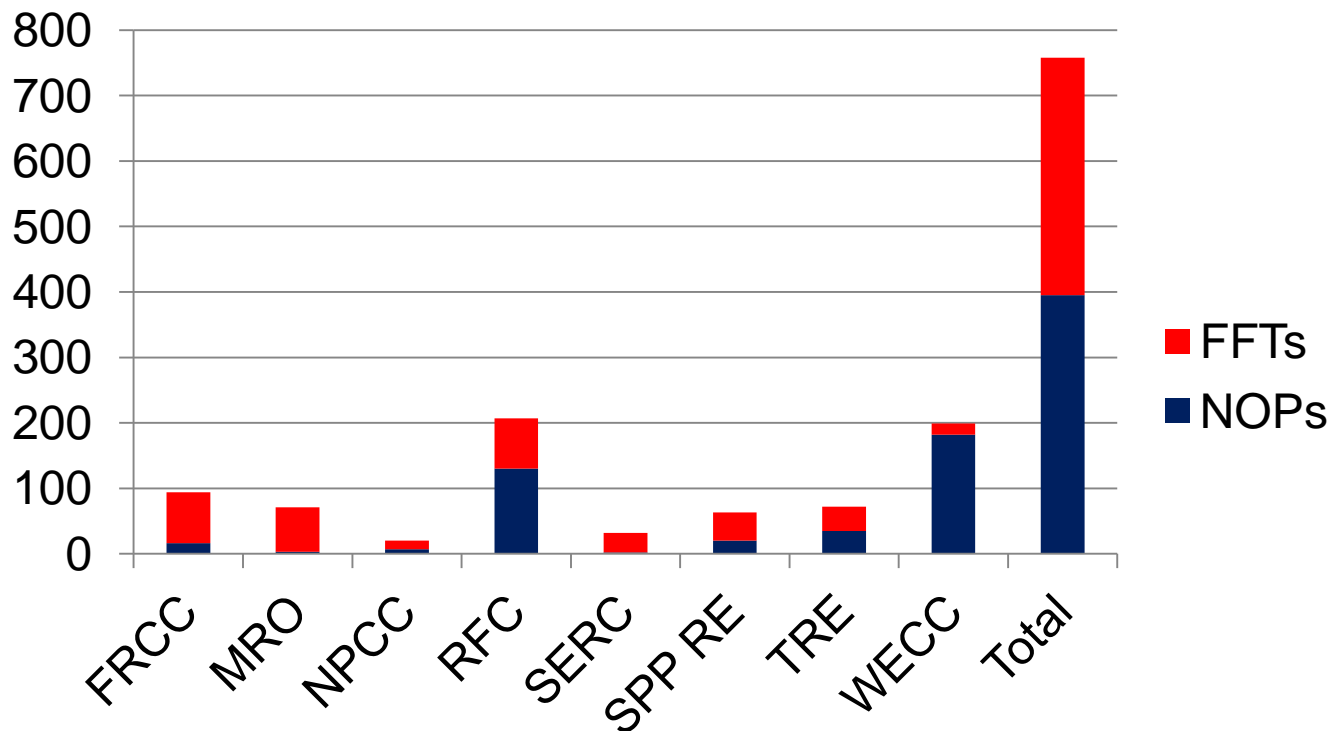
Number of FFTs by Reliability Standard Family (September 2011 - January 2012)



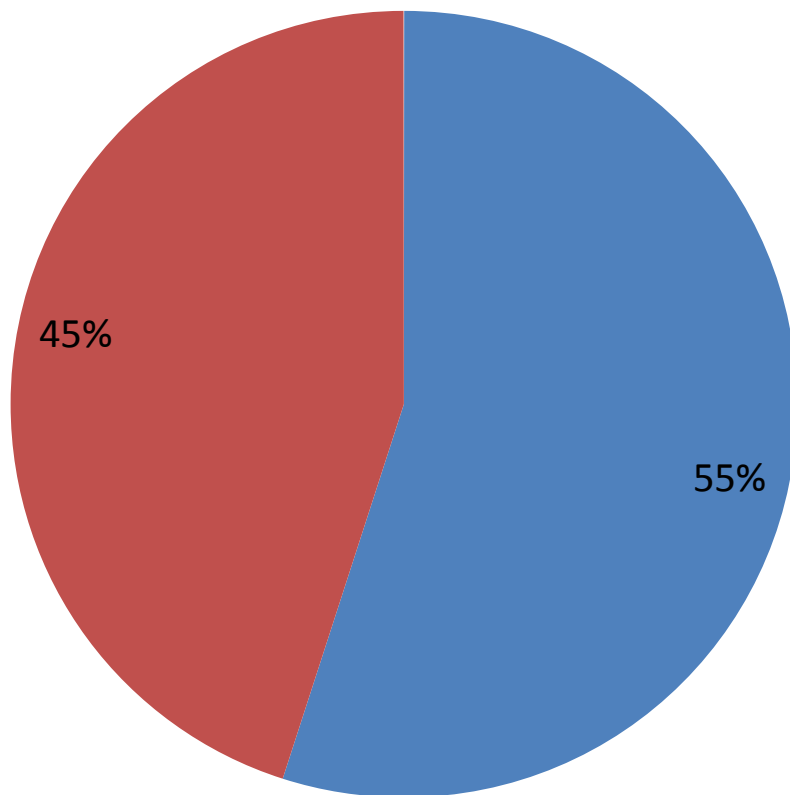
FFT Standard Breakdown (September 2011 - January 2012)



**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 PV's eligible.
- Mitigation completed before filing.
- Repeat violations eligible for consideration depending on circumstances.

BAL-003

Issue: Bias setting used single most severe disturbance rather than averaging several; found at audit.

Risk: By using most severe disturbance, the fixed Frequency Bias was set greater than or equal to its average Frequency Response.

Mitigation: Revised procedure to include several disturbances to establish the bias setting.

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: Failed to consider all assets when applying Risk Based Assessment Methodology (RBAM); found at audit.

Risk: Entity owns no critical assets and does not have a documented RBAM.

Mitigation: Modified procedure to include all assets in application of RBAM to identify Critical Assets (CAS) and Critical Cyber Assets (CCAs).

CIP-003

Issue: Failed to designate senior manager with overall responsibility for compliance with CIP-002 through CIP-009; found at audit.

Risk: The policy was being implemented and was signed by the senior manager.

Mitigation: Entity designated a senior manager with responsibility for CIP compliance.

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 Security 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 a 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 change EMS shared operator account following personnel changes; found at audit.

Risk: Physical access to the EMS facilities had been revoked, and the facilities were subject to around-the-clock monitoring.

Mitigation: Revised procedures for managing shared accounts and trained responsible personnel.

EOP-008

Issue: Contingency plans missing elements; found at audit.

Risk: Entity had partial plan in place and conducted drills and tests for loss of control center functionality.

Mitigation: Entity revised plan to include missing elements.

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: Entity could not demonstrate that it coordinated new protective system changes with neighboring Transmission Operators (TOPs) and Balancing Authorities (BAs); found at audit.

Risk: Entity reviewed protective system changes and determine they applied only to the entity's own system.

Mitigation: Reported and coordinated protective system changes with neighboring TOPs and BAs; developed new procedure for coordination of changes.

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, and entity 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 its 169 UFLS devices, no evidence of maintenance and testing for five station batteries; found at audit.

Risk: Entity continuously monitors DC power supply of the UFLS devices on SCADA; tests indicated no damage or out of tolerance settings.

Mitigation: Tested all devices that lacked testing evidence; sent program materials to responsible personnel and received acknowledgements committing to perform required tasks.

VAR-002

Issue: Operator mistakenly placed a voltage regulator into automatic VAR mode rather than automatic voltage control mode (unclear manufacturer control labeling).

Risk: Corrected promptly, all voltage schedules met; not called upon to support transmission system voltage; small entity connected at 138 kV.

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

- 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.
- Focus resources on more serious risks to reliability of the BPS.
- Improve alignment of time, resources and record development with the risk posed to reliability.

- Achieve efficiency gains.
- Reduce information dissemination delays.
- Focus more time on ensuring reliable operations.

- Not just older cases
- Not just documentation-only violations
- Not just the *least* risk PV's
- All PV's 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 decision 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 Regional Entities and registered entities.
- Experience over first six months to be evaluated

- April – half-day webinar for CEA Staff.
- Third Quarter – begin online course for CEA staff.
- September – CEA Staff workshop agenda item.
- October – one year feedback information webinar.
- Fourth Quarter – all CEA staff complete required training and training course updated dependent on Phase II changes.

- NERC is continuing to work with Regional Entities and to engage in outreach efforts to ensure successful implementation.
- Upcoming training activities will continue to focus on specific case studies.