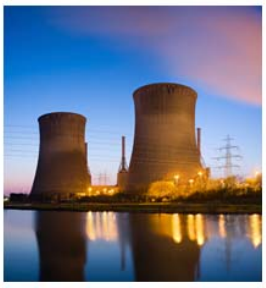
NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

2015 ERO Enterprise Compliance Monitoring and Enforcement Program Annual Report

February 10, 2016

RELIABILITY | ACCOUNTABILITY

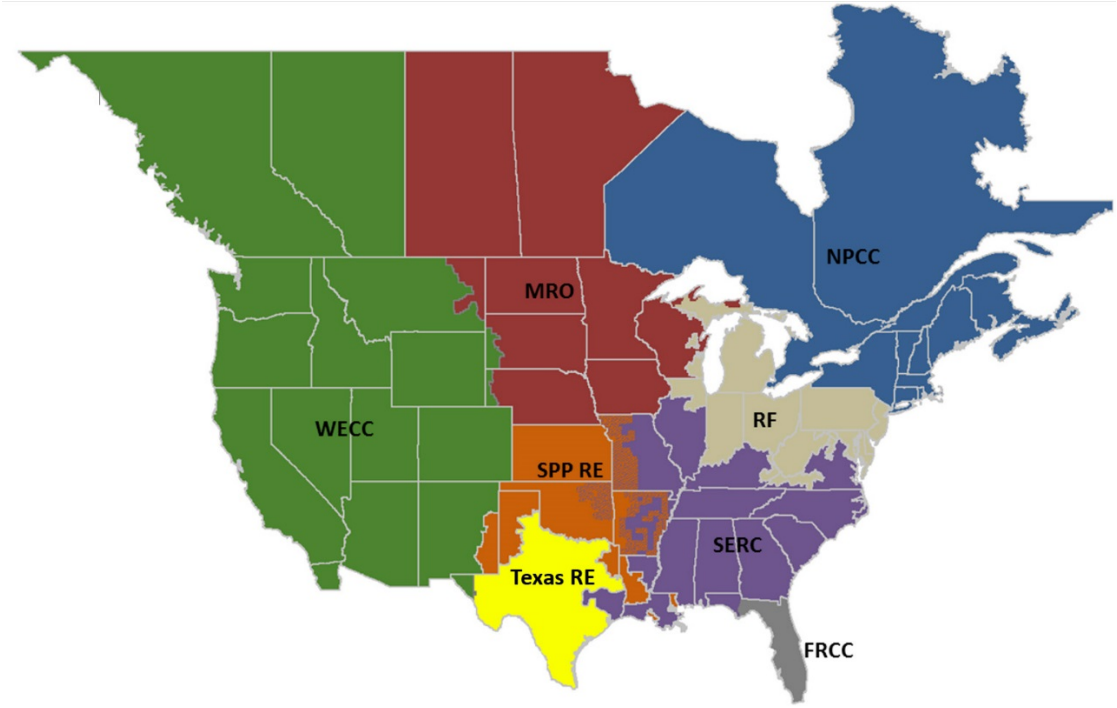
3353 Peachtree Road NE
Suite 600, North Tower
Atlanta, GA 30326
404-446-2560 | www.nerc.com

Table of Contents

Preface

The North American Electric Reliability Corporation (NERC) is a not-for-profit international regulatory authority whose mission is to assure the reliability of the bulk power system (BPS) in North America. NERC develops and enforces Reliability Standards; annually assesses seasonal and long-term reliability; monitors the BPS through system awareness; and educates, trains, and certifies industry personnel. NERC's area of responsibility spans the continental United States, Canada, and the northern portion of Baja California, Mexico. NERC is the electric reliability organization (ERO) for North America, subject to oversight by the Federal Energy Regulatory Commission (FERC) and governmental authorities in Canada. NERC's jurisdiction includes users, owners, and operators of the BPS, which serves more than 334 million people.

The North American BPS is divided into several assessment areas within the eight Regional Entity boundaries, as shown in the map and corresponding table below.



The regional boundaries in this map are approximate. The highlighted area between SPP RE and SERC denotes overlap as some load-serving entities participate in one Region while associated transmission owners/operators participate in another.

FRCC	Florida Reliability Coordinating Council
MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RF	ReliabilityFirst
SERC	SERC Reliability Corporation
SPP RE	Southwest Power Pool Regional Entity
Texas RE	Texas Reliability Entity
WECC	Western Electricity Coordinating Council

Executive Summary

This report highlights key ERO Enterprise Compliance Monitoring and Enforcement Program (CMEP) activities that occurred in 2015, provides information and statistics regarding those activities, and provides a look forward to the ERO Enterprise's 2016 CMEP priorities.[1] As discussed further below, 2015 was a demanding yet transformative and highly successful year for enhancing the efficiency and effectiveness of the ERO Enterprise's CMEP. Most significantly, after a collaborative, multi-year effort among NERC, the Regional Entities, and industry stakeholders to identify and test risk-based compliance monitoring and enforcement concepts, processes, and programs; the ERO Enterprise successfully commenced implementation of a risk-based CMEP designed to focus ERO Enterprise and industry compliance resources on higher-risk issues that matter more to reliability. The ERO Enterprise also continued its commitment to enhance other features of the CMEP and work with stakeholders to help ensure a successful and effective implementation of new Critical Infrastructure Protection (CIP) Reliability Standards. The following is a brief overview of these activities and the factors and metrics the ERO Enterprise used to measure the success of the CMEP during 2015, which are discussed in greater detail throughout this report.

Key Activities

Risk-Based Compliance Monitoring and Enforcement Implementation Activities

A primary focus of the ERO Enterprise during 2015 was fully implementing the risk-based CMEP. The risk-based CMEP involves the use of an oversight plan framework[2] focused on identifying, prioritizing, and addressing risks to the BPS to enable the ERO Enterprise to allocate resources where they are most needed and likely to be the most effective. After completing the risk-based CMEP design in early 2015, the ERO began initial implementation activities. Specifically, the ERO Enterprise (1) conducted Inherent Risk Assessments (IRAs), which is a review of inherent risks posed by an individual registered entity to BPS reliability, (2) performed Internal Control Evaluations (ICEs) to evaluate whether the registered entity has implemented effective internal controls, and (3) used various methods to process noncompliance based on risk (including the Self-Logging program and Compliance Exceptions). In addition, the ERO Enterprise continued to maintain a consolidated Implementation Plan that provides guidance and implementation information common among NERC and the eight Regional Entities, including risks to the BPS (referred to as risk elements) to focus compliance monitoring. Overall, these activities supported compliance monitoring planning, focused the oversight of registered entities, and provided greater efficiency in enforcement activities.

In 2015, the ERO Enterprise made a significant shift in how it conducts compliance monitoring activities. Previously, audit schedules primarily drove interactions with registered entities without emphasis on risk to reliability. In addition, the scope of compliance monitoring activities was driven by a relatively static list of Reliability Standards on the Actively Monitored List. The ERO Enterprise is now using the analysis of risks to drive interactions with registered entities and conduct compliance monitoring activities. Registered entities are not all similarly situated; there are numerous differences in technology, geographical location, voltages, and inter-ties that require a more risk-informed method. Recognizing the unique characteristics of registered entities and using the analysis of risks, Regional Entities tailor the monitoring activities to address the appropriate risks. The ERO Enterprise has also changed the manner in which it engages with certain registered entities. In some cases,

[1] The "ERO Enterprise" refers to the affiliation between NERC and the eight Regional Entities for the purpose of coordinating goals, objectives, metrics, methods, and practices across statutory activities. The operation of the ERO Enterprise does not conflict with obligations of each organization through statutes, regulations, and delegation agreements. The activities discussed in this report relate to compliance monitoring and enforcement performed in connection with United States registered entities. ERO Enterprise activities outside of the United States are not specifically addressed.

[2] A visual representation of the risk-based framework is available at: http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/Risk-Based%20Compliance%20Monitoring%20and%20Enforcement%20Program%20Visual%20Overview.pdf.

registered entities that historically were monitored through an audit are now being monitored through a spot check or even a self-certification because of the focused, tailored scope of risk-based monitoring.

In 2015, enforcement activities throughout the ERO Enterprise reflected the full implementation of the risk-based approach introduced in 2013 through the Reliability Assurance Initiative. The risk-based approach aligns the outcome of any noncompliance to the risk the particular noncompliance posed to the reliability of the BPS. In that sense, the outcome could range from a significant monetary penalty to a streamlined disposition outside of the enforcement process. This approach, and the high usage of streamlined methods described in this report, are predicated on a significant level of cooperation by registered entities. In this context, cooperation is evidenced in part by high levels of self-identification of noncompliance and prompt mitigation of issues. These historical trends regarding self-identification and mitigation continued in 2015, as discussed below. Maintaining trends of high self-identification and prompt mitigation is essential to the effectiveness of the risk-based program.

This report discusses the results achieved in 2015 with a focus on two streamlined programs in particular: Self-Logging and Compliance Exceptions. Included in the Appendix are processing efficiency results, which indicate how these programs have allowed the ERO Enterprise to operate more efficiently.

Regional Entity Coordination of Multi-Region Registered Entities

In June 2015, the ERO Enterprise opened the Coordinated Oversight Program of multi-region registered entities (MRREs) to all registered entities. This program is intended to make risk assessments, compliance monitoring and enforcement, and event analysis activities more efficient for the registered entities that use, own, or operate assets in areas covering more than one Regional Entity territory. Under the Coordinated Oversight Program for MRREs, Regional Entities coordinate their oversight responsibilities over MRREs by designating one or more Lead Regional Entity (LRE) to each MRRE or group of MRREs. By the end of 2015, 152 entities throughout the ERO Enterprise – by individual NERC Compliance Registry number –were participating in the program.

Regional Consistency Reporting Tool

To improve consistency among the Regional Entities and drive continuous improvement in day-to-day operations, the Regional Entities also developed the Regional Consistency Reporting Tool as an additional channel of communication for registered entities and relevant industry stakeholders. The tool allows the public to report any perceived inconsistencies among Regional Entities, including perceived inconsistencies with compliance monitoring and enforcement processes, procedures, or rules. In 2015, 20 reports of perceived inconsistencies were submitted through the Regional Consistency Reporting Tool. These 20 reports represent a diverse category of issues involving, among others, compliance monitoring, CMEP tools, event analysis, organization registration, and BES asset identification. The majority of these reports involve substantive issues—with a handful involving administrative issues, such as inconsistent data transmittal methods from registered entities to Regional Entities. Out of these 20 reports, 13 have been successfully investigated and resolved, three have been assigned to ERO staff working groups for longer-term tracking and resolution, and four cases are in-process.

Transition to Version 5 of the Critical Infrastructure Protection Standards

To support registered entities' transition to the CIP Version 5 Reliability Standards, most of which become effective in the United States on April 1, 2016, NERC focused its 2015 efforts on three key areas: written guidance and Reliability Standard Audit Worksheets completion, stakeholder outreach, and ERO Enterprise CMEP staff training. The CIP Version 5 transition program involved significant stakeholder participation and helped address several challenging issues to enable an efficient and effective transition to the CIP Version 5 standards.

Physical Security Reliability Standard

The Physical Security Reliability Standard became effective on October 1, 2015. Throughout 2015, NERC and the Regional Entities focused on implementation readiness. At the start of 2015, NERC released formal guidance on implementation requirements. By the fall of 2015, the ERO Enterprise began engaging with registered entities

through a variety of outreach activities and coordinated site visits to discuss and understand their Physical Security Reliability Standard plans. NERC will continue to monitor compliance with this Reliability Standard with emphasis on assessing and supporting effective implementation.

Success Factors and Metrics

The ERO Enterprise identified the following preliminary factors and related metrics to measure the success of initial implementation of the risk-based CMEP during 2015:

1. *ERO Enterprise Staff Competency*: ERO Enterprise staff performing key activities are trained and competent in their areas of responsibility, such as risk assessment, audit, internal controls evaluation, and enforcement, and are regarded by registered entities as being well qualified in their roles.
2. *Information and Outreach*: Registered entities have the information they need—through outreach, program transparency, and sharing of best practices—to prepare for engaging with the Regional Entities and NERC in the risk-based compliance and enforcement activities.
3. *Consistency*: The common tools, processes, and templates used by Regional Entities for risk-based compliance activities with registered entities are consistent on matters where consistency is important, and NERC has adequate oversight of that interface.
4. *Balanced Transparency*: An appropriate level of transparency has been determined for various facets of risk-based compliance and enforcement, balancing efficiency, and the confidentiality needs of a registered entity with the needs of industry as a whole to learn from others.
5. *Preliminary Metrics*: Metrics were identified for key expected results from risk-based compliance and enforcement and benchmarked for 2015.
6. *Recognized Value*: The value of risk-based compliance and enforcement of registered entities is apparent to the public and can be clearly and publicly articulated.

This report identifies, throughout, the activities that were performed in 2015 in support of each of these success factors. This report also addresses how the implementation of the risk-based CMEP compared to the criteria proposed by the Compliance and Certification Committee (CCC) for evaluating Regional Entity CMEP effectiveness (referred to as the CCC Criteria).[3]

As discussed below, while 2015 presented a number of challenges for the ERO Enterprise, a review of the ERO Enterprise's CMEP implementation in relation to these factors and metrics indicates that it was a successful year for the CMEP and the transition to a robust, risk-based approach to compliance monitoring and enforcement. This report also describes lessons learned during 2015 for all CMEP activities and, based on those lessons learned, highlights the ERO Enterprise's CMEP priorities for 2016 and expectations. Additional metrics are being developed to continue assessing the ERO Enterprise's CMEP activities in 2016.

[3] The CCC is a NERC Board-appointed stakeholder committee serving and reporting directly to the NERC Board of Trustees. In accordance with Section 402.1.2 of the NERC Rules of Procedure, the CCC is responsible for establishing criteria for NERC to use to evaluate annually the goals, tools, and procedures of each Regional Entity Compliance Monitoring and Enforcement Program to determine the effectiveness of each such program.

Risk-based Compliance Monitoring and Enforcement

Throughout 2015, the ERO Enterprise made significant progress in its evolution to a robust risk-based CMEP. Some highlights and accomplishments of the evolution to risk-based compliance monitoring and enforcement include the following: completing the design of the risk-based CMEP in early 2015, conducting IRAs of registered entities, performing ICEs, and using risk based methods to process noncompliance. These activities helped to support compliance monitoring planning, focus oversight for registered entities, and provide greater efficiency in enforcement activities.

Risk-based Compliance Monitoring

In 2015, the ERO Enterprise made a significant shift in how it conducts compliance monitoring activities. Previously, audit schedules primarily drove interactions with registered entities without emphasis on risk to reliability. In addition, the scope of compliance monitoring activities was driven by a relatively static list of Reliability Standards on the Actively Monitored List. The ERO Enterprise is now using the analysis of risks to drive interactions with registered entities and conduct compliance monitoring activities. Registered entities are not all similarly situated; there are numerous differences in technology, geographical location, voltages, and inter-ties that require a more risk-informed method. Recognizing the unique characteristics of registered entities and using the analysis of risks, Regional Entities tailor the monitoring activities to address the appropriate risks. The ERO Enterprise has also changed the manner in which it engages with certain registered entities. In some cases, registered entities that historically were monitored through an audit are now being monitored through a spot check or even a self-certification because of the focused, tailored scope of risk-based monitoring.

Risk-based compliance monitoring involves three main activities: the identification of BPS risk elements and associated areas of focus in the ERO Enterprise CMEP Implementation Plan, the assessment of a registered entity's inherent risk through an IRA, and the determination of the appropriate scope, frequency, and tools to use for specific compliance monitoring of each registered entity. In support of success factor 4 (on balanced transparency), the ERO Enterprise publicly posted information on how the ERO Enterprise carries out these activities in the 2015 ERO Enterprise Implementation Plan, the IRA and ICE Guides, and documents associated with Regional Entities' risk-based CMEP processes.[4] The following is an overview of risk-based compliance monitoring activities and the ERO Enterprise's implementation progress during 2015.

2015 ERO Enterprise CMEP Implementation Plan

The first step of the risk-based framework is identification and prioritization of continent-wide risks, which results in an annual compilation of risk elements applicable across the ERO Enterprise. Through the identification of risk elements, NERC, with input from the Regional Entities, maps a preliminary list of applicable NERC Reliability Standards and responsible registration functional categories to the risk elements, known as areas of focus. The areas of focus represent an initial list of NERC Reliability Standards on which the ERO Enterprise focuses compliance monitoring efforts.

Next, Regional Entities further consider local risks when developing region-specific risk elements. These risk elements are included in the Implementation Plan as region-specific appendices. When developing the region-specific risk elements, Regional Entities consider the CCC Criteria on risk elements.[5] In developing risk elements

[4] The 2015 ERO Enterprise Implementation Plan, IRA Guide, and ICE Guide are available at http://www.nerc.com/pa/comp/Pages/Reliability-Assurance-Initiative.aspx.

[5] CCC Criteria on Risk Elements: The Regional Entity takes into account Regional BES Risks. The Regional Entity has defined and accounted for Regional BES risks in its CMEP Implementation Plan. (1) The Regional Entity used a documented process and provided a justified basis for addition, deletion, or modification of NERC Risk Elements and Standards in Focus. (2) Identify the criteria (including, but not limited to information sources) the Regional Entity used to add/subtract from NERC's Risk Elements and Standards in Focus for developing its Regional Implementation Plan. (3) The Regional Entity has provided a rationale for the removal of a NERC risk element identified by NERC in the NERC CMEP IP as not applicable to their Region.

during 2015, Regional Entities performed a Regional Risk Assessment, identifying risks specific to the region that could potentially impact the reliability of the BPS. As part of this assessment, Regional Entities gathered and reviewed Regional Entity-specific risk reports and operational information (e.g., interconnection points and critical paths, system geography, seasonal/ambient conditions, etc.) and prioritized potential Regional Entity-specific risks. Next, after determining region-specific risks, Regional Entities also identified the related Reliability Standards and requirements associated with those risks. These Reliability Standards and requirements become inputs into a registered entity's IRA, , and ultimately the compliance oversight plan, however, these Reliability Standards and requirements are not intended to be a static list that must be examined during all compliance monitoring activities. The Implementation Plan includes further detail on the Regional Entities' risk element development process in the Regional Entity appendices.[6]

Further, in 2015, NERC and the Regional Entities collaborated to create NERC criteria for the development of 2016 Regional Entity Implementation Plans. NERC reviewed and approved the 2016 Regional Entity Implementation Plans for conformance to this established review criteria. Some example criteria considerations include the following: appropriate justification to explain the Regional risk elements and areas of focus for both expansions of ERO Enterprise risk elements and region-specific risk elements; and clarifications around 2016 compliance monitoring activities. The 2016 Regional Entity Implementation Plan reviews were the first time NERC and the Regional Entities considered the review criteria, which incorporates the CCC Criteria on risk element development. Through the review process, NERC and the Regional Entities identified opportunities for criteria improvements going into 2016 and beyond, and the ERO Enterprise will continue to improve and develop the review criteria in support of consistency and content. Ultimately, the Regional Entity Implementation Plans intend to reflect regional operations and provide insight regarding compliance monitoring to registered entities within their footprints; therefore, differences will exist within the Regional Entity Implementation Plans, and the ERO Enterprise does not intend to alleviate such differences.

The ERO Enterprise CMEP Implementation Plan (Implementation Plan) provides the foundation for the risk-based CMEP through its identification of BPS risk elements and areas of focus. The Implementation Plan includes risks to the overall BPS as well as regional risks. The 2015 Implementation Plan marks continued progress in implementing the risk-based CMEP. This Implementation Plan incorporated Regional Entity risk elements in appendices whereas before 2014, NERC and the Regional Entities had separate implementation plans. Previously, compliance monitoring, including audits, was performed in a prescriptive manner through the annual implementation plans. These annual implementation plans also included pre-set frequencies and scopes for compliance monitoring based on a global assessment of risks. The more precise risk-based approach used today is improved because, in addition to the risk elements, it considers more localized and regional risks posed to the broader interconnected system. It also provides greater flexibility in the deployment of resources allowing Regional Entities to engage with registered entities through risk-based, entity-specific compliance monitoring activities that better and more explicitly accommodate the differences in risks resulting from geography, technology, location, and other unique characteristics. Table 1 lists the 2015 continent-wide risk elements.[7]

[6] The 2015 Regional Entity Implementation Plans are appended to the ERO Implementation Plan, *available at* http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/Final_2015%20CMEP%20IP_V_1.2%20(Posted_08172015).pdf.

[7] The Risk Elements Guide for Development of the 2015 CMEP IP is available at http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/Final_RiskElementsGuide_090814.pdf.

Table 1: 2015 ERO Enterprise Risk Elements	
Infrastructure Maintenance	Uncoordinated Protection Systems
Protection System Misoperations	Workforce Capability
Monitoring and Situational Awareness	Long Term Planning and System Analysis
Threats to Cyber Systems	Human Error
Extreme Physical Events	

Inherent Risk Assessments and Internal Control Evaluations

Throughout 2015, the ERO Enterprise focused risk-based compliance monitoring implementation on refining the IRA and ICE processes and performing IRAs, and ICEs as requested, for registered entities on the 2015 audit schedule. The ERO Enterprise prioritized performing IRAs for registered entities on the audit schedule to ensure Regional Entities' most time-intensive engagements incorporated risk-based concepts. During these engagements, the ERO Enterprise also learned from initial implementation to incorporate in processes and further promote consistency in IRAs across the ERO Enterprise.

Regional Entities perform an IRA of a registered entity to identify areas of focus and the level of effort needed to monitor compliance with NERC Reliability Standards for a particular registered entity. The IRA is a review of risks posed by an individual registered entity to the reliability of the BPS. An IRA considers factors such as assets, systems, geography, interconnectivity, functions performed, prior compliance history, and culture of compliance, among other inputs, and is performed on a periodic basis. The frequency of updating an IRA may vary based on occurrence of significant changes to reliability risks or emergence of new reliability risks.

In developing more specific monitoring plans for registered entities in their footprints, the Regional Entities also take into account any information obtained through the ICE process. Registered entities have an opportunity to do the following: provide, on a voluntary basis, information to their respective Regional Entity about their internal controls that address the risks applicable to the entity and for identifying, assessing, and correcting noncompliance with Reliability Standards; and demonstrate the effectiveness of such controls. As a result of the ICE, the Regional Entity may further focus the compliance assurance activities for a given registered entity. For example, the depth of any particular area of review may be modified.[8] Registered entities may elect not to participate in an ICE. In that case, the Regional Entity would use the results of the IRA to determine the appropriate compliance oversight strategy, including frequency and tools within the scope. Regional Entities will also continue to review internal controls while conducting audits.

Registered entities are expected to maintain compliance with all requirements. The IRA and ICE processes are intended to appropriately scope compliance monitoring activities or engagements in method, range, frequency and depth. These rigorous processes may lead to either reduced or increased time on site. For example, one entity with an IRA and ICE may have 6% of the applicable requirements for its registered functions identified in its audit scope. While another entity with an IRA, but not an ICE, may have an audit scope that includes 42% of applicable requirements. In any event, the Regional Entity Audit Team Lead is authorized and obligated to expand scope if there are indications of further risk.

[8] For example, if a registered entity demonstrates effective internal controls for a given Reliability Standard during the ICE, the Regional Entity may determine that it does not need to audit the Registered Entity's compliance with that Reliability Standard as frequently, or may select a different monitoring tool.

The entity-specific IRA is a living document, which results in the longer range compliance oversight plan. It is reviewed after engagements and then used to inform future compliance monitoring efforts, such as targeted self-certifications, spot checks, or data submittals.

Regional Entities completed 230 IRAs for registered entities on the 2015 audit schedule. Of those 230 IRAs, 31 registered entities elected to have an ICE. Regional Entities have completed 101 IRAs and 20 ICEs for registered entities that are not scheduled for an audit in 2015. Ongoing ICE-related activities also continue for registered entities who opt-in for an ICE or who are interested in having an ICE performed. To begin an ICE, Regional Entities may hold initial discussions with registered entities or send internal control questionnaires to registered entities to begin the ICE process.

Table 2 summarizes the overall IRA and ICE activities related to both the annual 2015 audit schedule and overall IRA and ICE activities.

Table 2: Summary of Overall Risk-based Compliance Monitoring Activities

Risk-based Compliance Activities	Count
IRA	
IRAs Conducted for Registered Entities on 2015 Audit Schedule	230
IRAs Completed for Registered Entities not on 2015 Audit Schedule	101
Total IRAs Completed within the ERO Enterprise	**331**
IRAs Remain to be Completed for all Registered Entities within the ERO Enterprise	1,122
ICE	
ICEs Conducted for Registered Entities on 2015 Audit Schedule	31
ICEs Completed for Registered Entities not on 2015 Audit Schedule	20
Total ICEs Completed within the ERO Enterprise	**51**

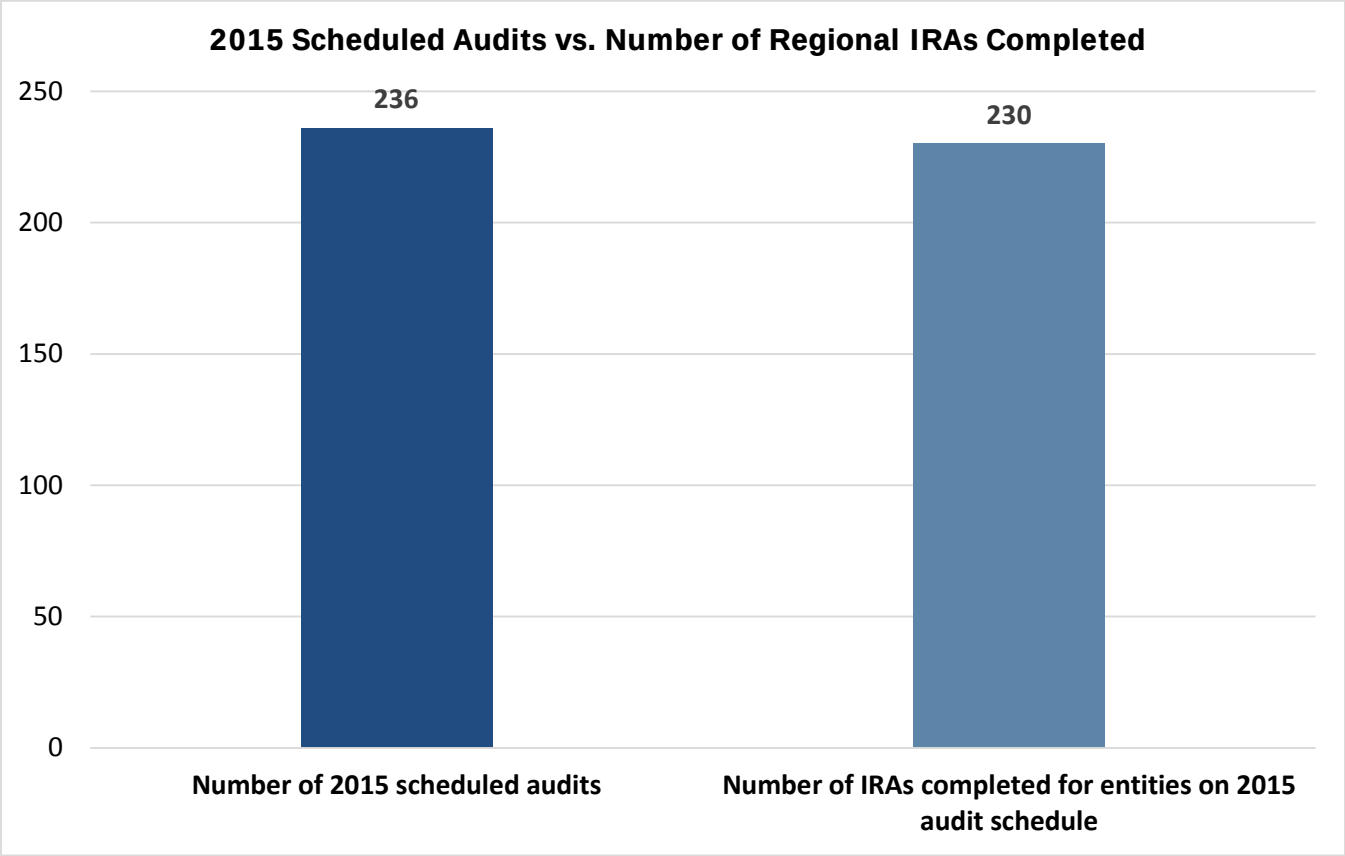


Figure 1: 2015 Scheduled Audits[9] vs. Number of IRAs Completed[10]

The above figure indicates the progress of the ERO Enterprise in support of consistency among the common tools, processes, and templates used by Regional Entities (success factor 3). Regional Entities performed IRAs on 97% of registered entities on the 2015 audit schedule. To support completion of these IRAs, the ERO Enterprise focused on collaboration, sharing of best practices, and incorporating refinements based on lessons learned during the first part of 2015.

[9] The number of scheduled audits changed from earlier reports in 2015 due to the de-registration of a registered entity on the audit schedule and the rescheduling of some audits for logistical purposes.

[10] WECC performed off-site audit activities for 21 registered entities identified on its annual audit schedule. WECC identified these off-site audits based on the regional risk assessment outlined in its 2015 CMEP Implementation Plan. Scope of the compliance monitoring activities for six out of the 21 registered entities was based on the regional risk assessment and WECC's regional risk elements and areas of focus. For the remaining 33 audits, WECC performed IRAs or preliminary IRAs for scoping the audit.

In further efforts to promote consistency, the ERO Enterprise incorporated the CCC Criteria on IRAs[11] and ICEs[12] into its review of IRA and ICE processes. During NERC's engagements with Regional Entities in Q1 of 2015, NERC and the Regional Entities reviewed the Regional Entities' use of information and risk factors in the IRA process. In addition, NERC and the Regional Entities discussed the Regional Entities' communication of IRA results to registered entities, registered entity feedback and understanding of IRA results, and the timing of the IRA development. Furthermore, NERC and the Regional Entities discussed initial activities involving internal controls and potential impacts these assessments may have on compliance monitoring activities. During these initial oversight engagements, there was very limited, if any, participation in ICE at the Regional Entities. These discussions informed NERC's conclusion that the Regional Entities were conceptually aligned on risk-based concepts. The Risk-based Compliance Monitoring Oversight section of the instant report provides further detail on the NERC and Regional Entity engagements.

For 2016, the ERO Enterprise will shift from schedules driving IRA completion to risk-driving IRA completion. To that end, the ERO Enterprise will focus on completing IRAs for all entities registered as a Reliability Coordinator, Balancing Authority, or Transmission Operator by 2016. This will represent a significant milestone in the implementation of risk-based compliance monitoring. Additionally, the ERO Enterprise will focus on ensuring certain registered entities will have completed compliance oversight plans (COP) that allocate compliance monitoring resources based on risk. Ultimately, the Regional Entity will determine the type and frequency of the compliance monitoring tools (e.g., off-site or onsite audits, spot checks, or self-certifications) that are warranted for a particular registered entity based on reliability risks. Additionally, the Regional Entity may modify the scope of NERC Reliability Standards reviewed as part of a Compliance Audit or pursue compliance assurance through any monitoring considerations. For Compliance Audits, auditors are authorized and obligated to expand scope should there be indications of failed controls or noncompliance of one Reliability Standard that may link to another Reliability Standard.

Regional Entity Compliance Monitoring

For 2015, Regional Entities performed compliance monitoring activities using various methods outlined in the CMEP and according to their 2015 Annual CMEP Implementation Plans. As the ERO Enterprise progresses in the implementation of risk-based CMEP, stakeholders can expect a greater use of other compliance monitoring tools, in addition to audits and spot checks. Additionally, the traditional methods used to conduct compliance monitoring needed to be re-evaluated. For example, in some cases, more detailed and instructive self-certifications could be used instead of more costly audits. These self-certifications, while requiring more review

[11] CCC Criteria for IRAs: The RE's Inherent Risk Assessment results in tailored approaches to monitoring compliance for similarly registered functional entities, based on differing profiles and operating characteristics. (For example, does the Regional Entity monitor all Transmission Owners within its footprint the same, or does the use of IRA criteria result in distinct monitoring plans?) (1) The Regional Entity's IRA takes into consideration the relationship of an entity's Information Attributes and Risk Factors, see IRA Program Module, in a manner that tracks regional BES risks. (2) In accordance with the IRA guide, the Regional Entity's IRA process allows for sharing of already available IRA information, discussion with the registered entity in the event of the need to clarify or correct information, and feedback provided to the registered entity so that there is an understanding of the Regional Entity's perception of the registered entity's risk. (3) Through responses to the results of post-audit questionnaires, the registered entity indicates that it understands the results of the IRA. (4) The timing of the IRA allows for adjustment to the Audit scope before sending the 90-day detail letter. (5) What is the sequencing and timing between the Regional Entity's administration of Risk-Based Compliance Monitoring and Enforcement Program Modules?

[12] CCC Criteria for ICEs: When does the Regional Entity conduct the ICE and how does the Regional Entity take into account the results to adjust the scope of the monitoring approach. (1) ICE impacts the depth and focus of the monitoring scope determined after the IRA. (2) Does the Regional Entity conduct the Internal Controls Assessment after developing the scope of Standards to audit? When the Regional Entity administers the ICE, the scope of the ICE is related to Standards and Requirements that have a relationship to regional BES risks. If the scope of the ICE does not align with these Standards and Requirements, is the deviation adequately justified, including all supporting information and data? (3) What types of guidance, process, or templates does the Regional Entity provide registered entities in its footprint about the form and manner for providing information about internal controls? (4) How far in advance of compliance monitoring engagement (e.g., audit, spot check) does Regional Entity initiate ICE and how much time is the registered entity given to respond? (5) What are the use rates for ICE engagements? (5a) For RC/BA/TOPs, the percentage that agreed/declined ICE engagement. (5b) For each other type of Registered Entity, the percentage that agreed/declined ICE engagement.

by the ERO Enterprise, do not require the cost of travel and preparation by the registered entity. As part of risk-based CMEP, Regional Entities may choose to use self-certifications in lieu of an audit, for example, depending on the risk of the registered entity. As a result, the risk-based CMEP provides for more flexibility on the methods to be used in compliance monitoring. In 2015, the ERO Enterprise conducted approximately 250 compliance audits and spot checks.

Risk-based Enforcement

Background

The ERO Enterprise's enforcement jurisdiction is drawn from the Energy Policy Act of 2005 (the Act), which added section 215 to the Federal Power Act (FPA). Section 215 made compliance with electric Reliability Standards mandatory, and authorized the creation of an ERO and Regional Entities to establish and enforce Reliability Standards. Under section 215(e)(1) of the FPA, NERC or a Regional Entity may impose a penalty on a user, owner, or operator of the BPS for a violation of a Reliability Standard approved by FERC. As the ERO, NERC has set forth Sanction Guidelines outlined in its Rules of Procedure that govern the ERO Enterprise's penalties and non-monetary sanctions for Reliability Standard violations. This document provides information on the ERO Enterprise's enforcement philosophy, i.e., the ERO Enterprise's approach for assessing and resolving noncompliance while continuing to work to bring entities into compliance with applicable Reliability Standards.

ERO Enterprise Core Values and Guiding Principles

The ERO Enterprise's 2016-2019 Strategic Plan[13] promotes the ERO Enterprise's core values and guiding principles, which are based on accountability and independence, responsiveness, fairness and inclusiveness, adaption and innovation, excellence, efficiency, and integrity. These core values and guiding principles support the four pillars of the ERO Enterprise's efforts, namely, reliability, assurance, learning, and a risk-based approach.

Strategic Goals Related to Enforcement

Strategic goal 2 provides that the ERO Enterprise shall:

> Be a strong enforcement authority that is independent, without conflict of interest, objective and fair, and promote a culture of reliability excellence through risk-informed compliance monitoring and enforcement. The ERO Enterprise retains and refines its ability to use standards enforcement when warranted and imposes penalties and sanctions commensurate with risk. The ERO Enterprise retains and refines its ability to use Reliability Standards enforcement when warranted and imposes penalties and sanctions commensurate with risk.

The risk-based enforcement approach allows for the appropriate allocation of resources to the issues that pose a higher level of risk to the reliability of the BPS.

Guiding Enforcement Principles

The following principles serve as guidelines for the conduct and behavior of all involved in the ERO Enterprise enforcement program to ensure alignment with strategic goal 2 and the ERO Enterprise's core values.

Compliance Enforcement Authorities are independent, without conflict of interest, objective, and fair.

The ERO Enterprise strives to be a strong enforcement authority that is independent, without conflict of interest, objective, and fair. NERC and each of the Regional Entities has a code of conduct addressing the professional and ethical standards applicable to its personnel. Foremost among these standards is the requirement that no person work on a matter where that work may affect the person's financial interest. The ERO Enterprise also expects its personnel to conduct themselves professionally and respectfully when engaging with registered entities or other

[13] Available at http://www.nerc.com/AboutNERC/Documents/ERO%20Enterprise%20Strategic%20Plan%202016–2019.pdf.

stakeholders. Personnel who do not meet these standards are subject to discipline, up to and including termination.

Enforcement program promotes culture of reliability excellence through a risk-based approach.
The ERO Enterprise's risk-based enforcement philosophy generally advocates reserving enforcement actions under section 5.0 of the Compliance Monitoring and Enforcement Program for those issues that pose a higher risk to the reliability of the BPS. The risk of a noncompliance is determined based on specific facts and circumstances, including any controls in place at the time of the noncompliance. The ERO Enterprise works with registered entities to ensure timely remediation of potential risks to the reliability of the BPS and prevent recurrence of noncompliance. The enforcement process allows parties to address risks collaboratively and promote increased compliance and reliability through improvement of programs and controls at the registered entities.

The ERO Enterprise applies a presumption of non-enforcement treatment of minimal risk noncompliance to entities with demonstrated internal controls who are permitted to self-log such minimal risk issues. Regarding other issues posing a minimal risk, NERC and the Regional Entities may exercise appropriate judgment whether to initiate a formal enforcement action or resolve the issue outside of the formal enforcement processes. The availability of streamlined treatment of minimal risk noncompliance outside of the formal enforcement process encourages self-inspection by registered entities. When self-identified minimal risk noncompliance is more than likely not going to be subject to a financial penalty, registered entities are encouraged to establish more robust internal controls for the detection and correction of noncompliance. This approach allows the ERO Enterprise to oversee the activities of registered entities in a more efficient manner and to focus resources where they result in the greatest benefit to reliability. In this context, efficiency does not necessarily mean less time or effort. Rather, it is using the requisite time, knowledge, and skills required for each circumstance. In addition, this approach allows the ERO Enterprise to continue to provide clear signals to registered entities about identified areas of concern and risk prioritization, while maintaining existing visibility into potential noncompliance and emerging areas of risk. Outcomes for noncompliance are based on the risk of a specific noncompliance and may range from streamlined, non-enforcement processes, to significant monetary penalties.

Enforcement actions are used and penalties are imposed when warranted, commensurate with risk.
An element of a risk-based approach to enforcement is accountability of registered entities for their noncompliance. No matter the risk of the noncompliance, the registered entity still bears the responsibility of mitigating that noncompliance. Based on the risk, facts, and circumstances associated with that noncompliance, the Regional Entity decides on an appropriate disposition track, inside or outside of an enforcement action, as described above and whether a penalty is appropriate for the noncompliance.

Penalties are generally warranted for serious risk violations (e.g., uncontrolled loss of load, CIP program failures) and for when repeated noncompliance constitutes an aggravating factor. In addition to the use of significant penalties to deter undesired behavior, the ERO Enterprise also incents desired behaviors.[14] Specifically, Regional Entities may offset penalties to encourage valued behavior. Factors that may mitigate penalty amounts include registered entity cooperation, accountability (including admission of violations), culture of compliance, and self-identification of noncompliance.

Regional Entities may also grant credit in enforcement determinations for certain actions undertaken by registered entities for improvements in addition to mitigating factors. For example, Regional Entities may consider significant investments in reliability made by registered entities, beyond those otherwise planned and required,

[14] The Sanction Guidelines, Appendix 4B to the NERC Rules of Procedure, in alignment with Section 215, establish a general rule that penalties and sanctions imposed for the violation of a Reliability Standard shall bear a reasonable relation to the seriousness of the violation while also reflecting consideration of the other factors specified in the Sanction Guidelines. The Sanction Guidelines are available at http://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/Appendix_4B_SanctionGuidelines_20140701.pdf.

as an offset for proposed penalties in enforcement determinations. Regional Entities do not award credits or offsets for actions or investments undertaken by a registered entity that are required to mitigate noncompliance.

NERC engages in regular oversight of Regional Entity enforcement activities to confirm that the Regional Entities have followed the CMEP. This oversight evaluates the consistency of disposition methods, including assessment of a penalty or sanction, with previous resolutions of similar noncompliance involving similar circumstances. The NERC Board of Trustees Compliance Committee (the Compliance Committee) considers the recommendations of NERC staff regarding approval of Full Notices of Penalty and monitors the handling of noncompliance through the streamlined disposition methods of Spreadsheet NOPs, FFTs, and Compliance Exceptions.

Actions are timely and transparent.

The ERO Enterprise maintains an elevated level of transparency regarding enforcement matters. NERC's Rules of Procedure (including the CMEP and Sanction Guidelines) and program documents are available to the public.[15] NERC also posts information on enforcement actions on a monthly basis.[16] Moreover, information on the efficiency of the enforcement program is available to the public on a quarterly basis.[17]

Noncompliance information is used as an input to other processes.

When developing risk elements, NERC annually identifies and prioritizes risks to the reliability of the BPS, taking into account factors such as compliance findings, event analysis experiences, and data analysis. In addition, Regional Entities consider factors such as noncompliance information when conducting an IRA of a registered entity. The ERO Enterprise also uses noncompliance information as part of a feedback loop to the standards development process. This allows enhanced Reliability Standards through appropriate information flows from compliance monitoring and enforcement to the standards drafting process and other NERC programs. NERC regularly provides analysis and lessons learned from noncompliance information to the public.[18]

2015 Enforcement Results

In 2015, enforcement activities throughout the ERO Enterprise reflected the full implementation of the risk-based approach introduced in 2013 through the Reliability Assurance Initiative. The risk-based approach used by the ERO Enterprise aligns the outcome of any noncompliance to the risk that particular noncompliance posed to the reliability of the BPS. In that sense, the outcome could range from a significant monetary penalty to a streamlined disposition outside of the enforcement process. This approach, and the high usage of streamlined methods shown below, are predicated on a significant level of cooperation by registered entities. In this context, cooperation is evidenced in part by high levels of self-identification of noncompliance and prompt mitigation of issues. These historic trends continued in 2015, as noted in the Appendix. Maintaining these trends of high self-identification and prompt mitigation is essential to the effectiveness of the risk-based program.

This report discusses the results achieved in 2015 with respect to two streamlined programs in particular: Self-Logging and Compliance Exceptions. Included in the Appendix are processing efficiency results, which indicate how these programs have allowed the ERO Enterprise to operate more efficiently.

These two processes allowed the ERO Enterprise to consolidate the efficiency gains obtained with the introduction of the Find, Fix, Track, and Report process in 2011.[19]

---

[15] The NERC Rules of Procedure are available at http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx.

[16] Posted compliance exceptions, Spreadsheet Notices of Penalty, and Full Notices of Penalty are available at http://www.nerc.com/pa/comp/CE/Pages/Enforcement-and-Mitigation.aspx.

[17] Quarterly enforcement program information is available at http://www.nerc.com/gov/bot/BOTCC/Pages/ComplianceCommittee(BOTCC).aspx.

[18] For example, NERC posts quarterly compliance reports at http://www.nerc.com/gov/bot/BOTCC/Pages/ComplianceCommittee(BOTCC).aspx.

[19] See the Appendix for information regarding processing efficiency.

As noted below, the ERO Enterprise continues to process violations that require the imposition of monetary penalties when those are warranted. Consistent with the risk-based approach that happens when violations pose a serious or significant risk to the reliability of the BPS (either individually considered or in the aggregate). Serious risk violations generally involve uncontrolled loss of load, outages from vegetation contacts, or programmatic failures, particularly on the CIP side.

The ERO Enterprise also continues to analyze the minimal risk noncompliance that is resolved as compliance exceptions to look for trends and emerging risks.

For 2016, the ERO Enterprise expects to continue to grow both programs as well as look for opportunities for enhancement. NERC regularly reviews Regional Entity enforcement processes and samples outcomes to ensure that the implementation is consistent with the requirements of the programs. NERC will continue to do so in 2016. NERC will also continue to monitor mitigation completion, self-reports, and the level of risk posed by noncompliance with Reliability Standards.

Historically, these metrics have shown that very few instances of noncompliance pose a serious or significant risk to the reliability of the BPS, which most noncompliance is self-identified by registered entities, and that mitigation is promptly done. The continuation of these trends help demonstrate the effectiveness of the ERO Enterprise enforcement program.

Disposition of Noncompliance in 2015

Below are summaries of the four methods used to process noncompliance in 2015. Additional information regarding ERO Enterprise 2015 processing-related goals and metrics and other relevant trends are also found in the Appendix.

Compliance Exceptions

Compliance exceptions are a disposition track used for noncompliance posing a minimal risk to the reliability of the BPS that does not warrant a penalty and is not pursued through an enforcement action.[20] Compliance exceptions must be mitigated within 12 months of the time of the notification to the registered entity of compliance exception treatment. In 2015, this disposition track became available to all registered entities throughout the ERO Enterprise. Use of compliance exceptions as a disposition track in 2015 is shown in Figure 2.

In 2015, the ERO Enterprise fully implemented the compliance exception disposition track. Throughout 2015, the ERO Enterprise has been aligned with CCC Criteria regarding compliance exceptions[21] by regularly using compliance exceptions and consistently exercising appropriate judgment in treating noncompliance matters as compliance exceptions when they posed a minimal risk to the reliability of the BPS. Because compliance exceptions may come from any of the Reliability Standards, the exercise of appropriate judgment is informed by the facts and circumstances of the noncompliance, the risk posed by the noncompliance to BPS reliability, and the potentially deterrent effect of an enforcement action or penalty, among other things.

In 2015, out of 741 instances of noncompliance posing a minimal risk, the ERO Enterprise disposed of 514 (69.4%) as compliance exceptions. This allowed the Regional Entities to dispose of minimal risk noncompliance efficiently

[20] Enforcement actions are contemplated in Section 5 of the CMEP; alternative disposition methods are contemplated in Section 3A.0 of the CMEP.

[21] CCC Criteria D.3: Minimal risk violations are consistently and appropriately treated as compliance exceptions. For minimal risk issues not processed as compliance exceptions, the evaluation and determination for enforcement treatment is properly documented.

and focus resources on moderate to serious risk noncompliance.[22] Information on processing efficiencies in 2015 is found in the Appendix.

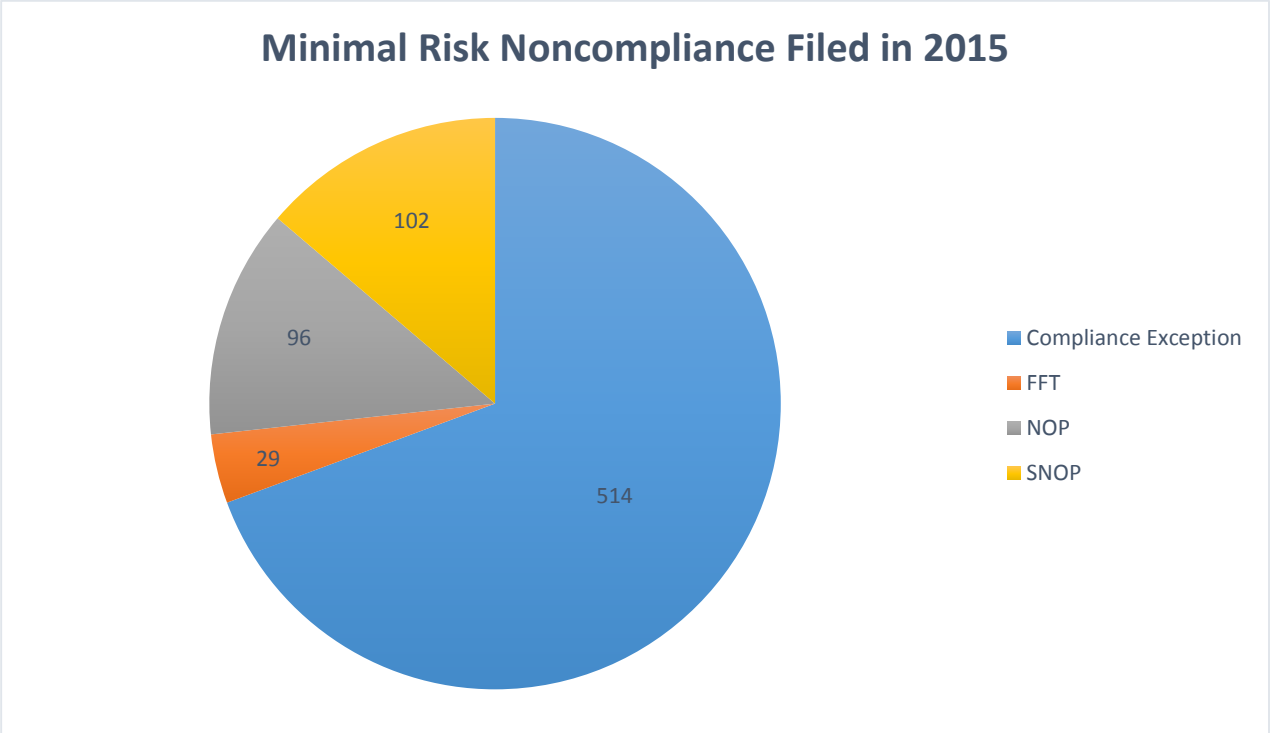


Figure 2: Minimal Risk Noncompliance Filed in 2015

Find, Fix, Track, and Report (FFT)

The FFT program—the first, significant step in implementing a risk-based approach to enforcement implemented by the ERO Enterprise in 2011—is a process that the ERO Enterprise uses primarily to resolve moderate risk issues that are suitable for streamlined treatment (as opposed to through a Notice of Penalty). Under the FFT program, moderate risk issues are fixed, tracked, and reported to Regional Entities and NERC. This noncompliance is not subject to penalties. FFTs also may be used to dispose of minimal risk noncompliance that is related to a moderate issue being resolved as an FFT. In 2015, compliance exceptions have superseded the FFT program for resolving minimal risk noncompliance.[23] In 2015, out of 980 instances of minimal or moderate risk noncompliance, the ERO Enterprise disposed of 8% as FFTs.

Spreadsheet Notice of Penalty (SNOP)

SNOPs include noncompliance posing a minimal or moderate risk to the reliability of the BPS. Once Regional Entities have entered into Settlement Agreements with, or have issued Notices of Confirmed Violations (NOCVs) to the registered entities, , that information is reported to NERC for oversight review and approval. NERC then files that information with FERC in a spreadsheet format for review and approval. The SNOP identifies the following: the Regional Entity, the registered entity, disposition as a NOCV or Settlement Agreement, the violation, Reliability Standard, Violation Risk Factor and Severity Level, total penalty or non-monetary sanction, method of discovery, mitigation activity, mitigation completion date, date Regional Entity verified mitigation completion, an admission, denial, or no contest to violation, and other factors affecting the penalty determination, such as

[22] In addition to increasing Regional Entity efficiencies, this also creates efficiencies for registered entities and allows them to focus resources on reliability and compliance.

[23] FFT treatment will only apply to minimal risk noncompliance if that noncompliance is associated with a moderate risk noncompliance receiving FFT treatment.

compliance history, internal compliance program, and compliance culture. In 2015, out of 980 instances of minimal or moderate risk noncompliance, the ERO Enterprise disposed of 18% as SNOPs.

Full Notices of Penalty (NOP)

Full NOPs generally include noncompliance that poses a serious or substantial risk to the reliability of the BPS. Full NOPs may also be appropriate for a registered entity that has a large number of minimal or moderate risk violations that could be indicative of a systemic issue, dispositions involving higher than typical penalty amounts, or those with extensive mitigation or above and beyond actions taken by the registered entity. Similar to SNOPs, once the Regional Entity has resolved the violation, NERC receives the information for oversight review and approval. NERC then files the Full NOP with FERC for review and approval. Full NOPs generally are violations resulting in the following: extended outages, uncontrolled loss of load, cascading blackouts, vegetation contacts, systemic or significant performance failures, intentional or willful acts or omissions, and gross negligence. In 2015, out of 1025 instances of noncompliance posing various levels of risk, the ERO Enterprise disposed of 256 (25%) as Full NOPs.

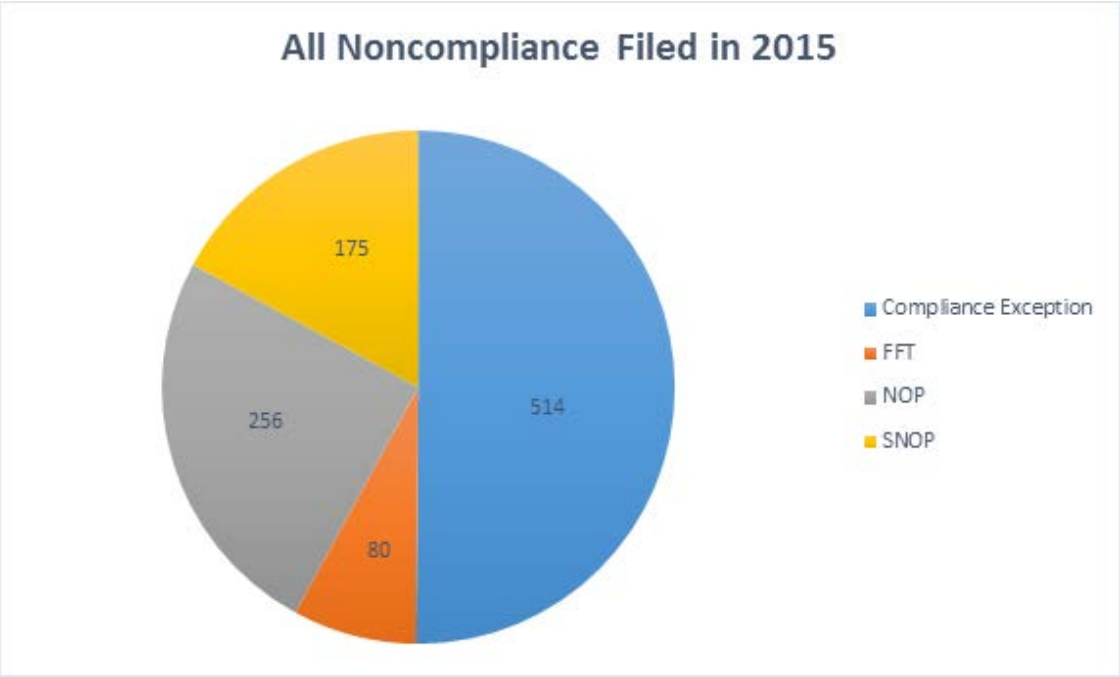


Figure 3: All Noncompliance Filed in 2015

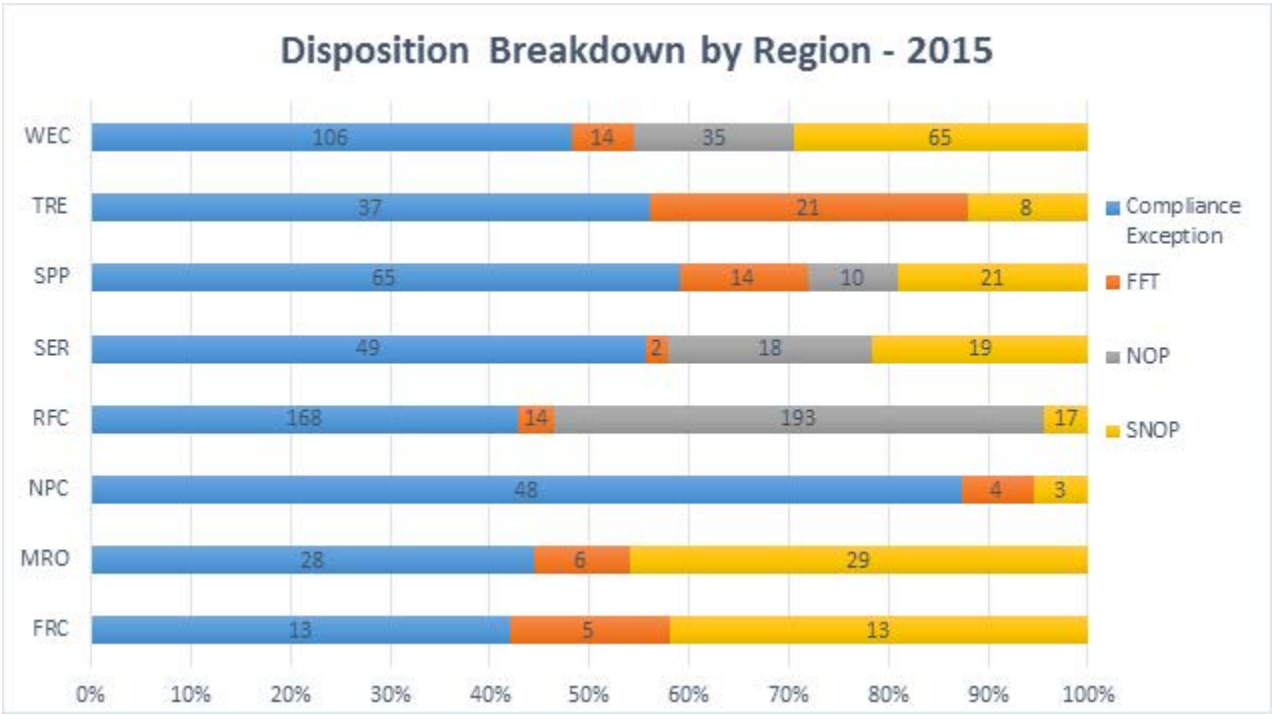


Figure 4: Disposition Breakdown by Region - 2015

Self-Logging Use

In 2013, the ERO Enterprise selected certain registered entities to self-log minimal risk noncompliance. At the start of 2015, self-logging became open to all registered entities that met the program qualifications based on Regional Entity evaluation and approval. Through the self-logging program, the ERO Enterprise seeks to encourage registered entities to detect, accurately assess the risk of, and adequately mitigate minimal risk noncompliance with the Reliability Standards. Specifically, in evaluating whether a registered entity is eligible for the program, the Regional Entities will conduct a formal evaluation of the registered entity's controls associated with the registered entity's ability to identify, assess, and correct noncompliance.[24]

Once a registered entity is approved to self-log, that log is periodically reviewed by the Regional Entity. Properly logged items are entitled to the presumption of being resolved as compliance exceptions unless there are additional risks involved. This is consistent with the notion that noncompliance that is self-identified through internal controls, corrected through a strong compliance culture, and documented by the entity, should not be resolved through the enforcement process or incur a penalty, absent a higher risk to the reliability of the BPS.

Since self-logging became available to all registered entities that met the program qualifications at the start of 2015, 42 registered entities have been approved by Regional Entities to self-log as of December 31, 2015. These registered entities represent nearly all of the reliability functions. To help benchmark the effectiveness of the self-logging program, the CCC proposed that the ERO Enterprise monitor the percentage of registered entities within a Functional Model category authorized to self-log minimal risk violations. Figures 5 and 6, respectively, represent the registered entities by reliability function that are self-logging and the Regional Entities use of the self-logging program.[25]

[24] In November 2015, FERC approved the ERO Enterprise Self-Logging Program document, which includes the method to evaluate eligibility. The program document is available at http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/ERO%20Enterprise%20Self-Logging%20Program.pdf.

[25] Currently, no registered entities are self-logging at FRCC, and FRCC has no formal requests from entities to date.

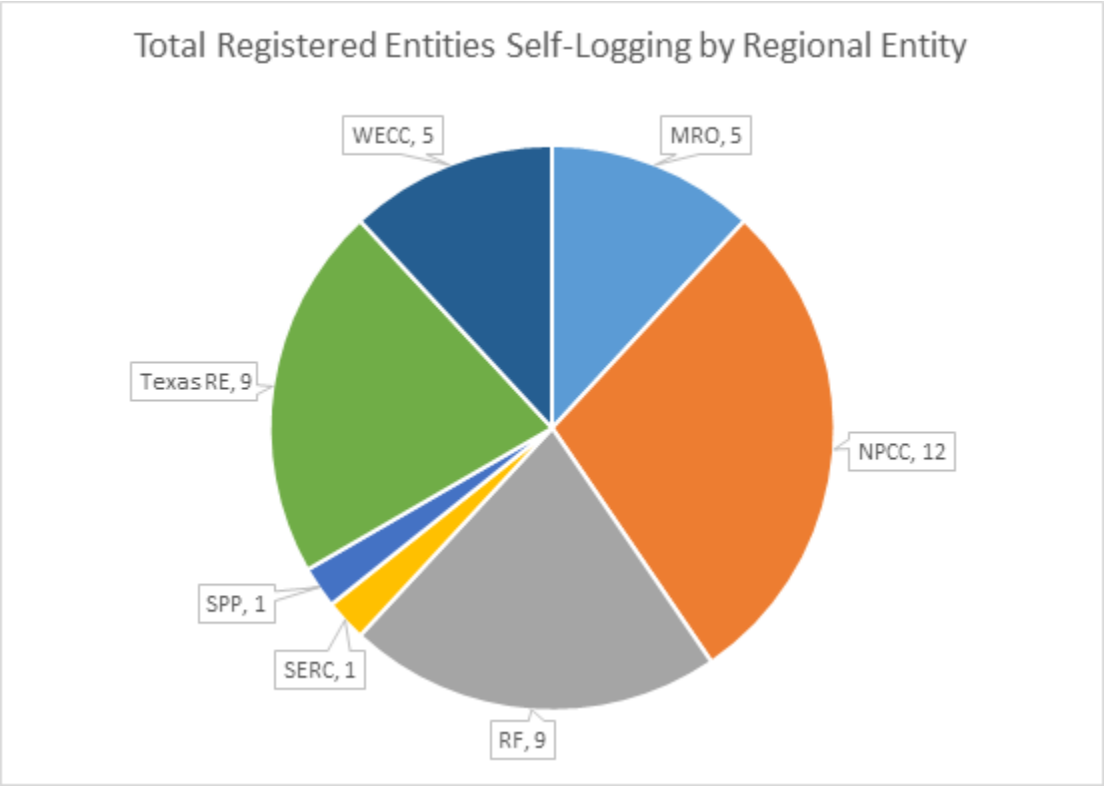


Figure 5: Total Registered Entities Self-Logging by Regional Entity

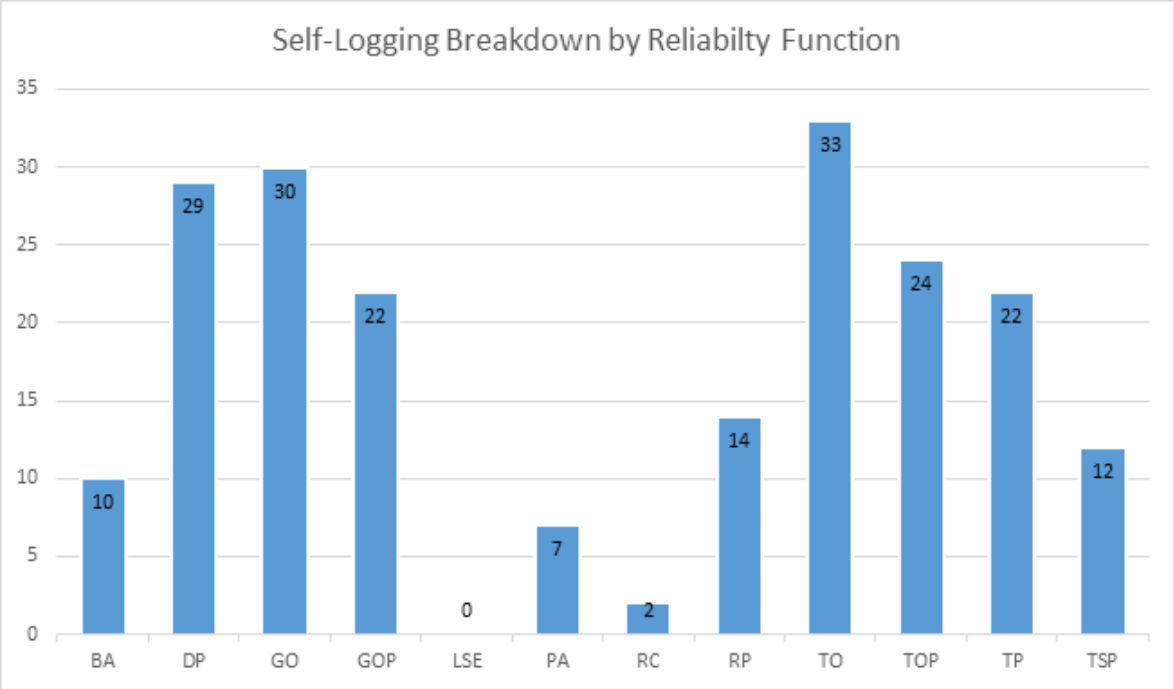


Figure 6: Self-Logging Breakdown by Reliability Function

ERO Enterprise CMEP Training, Education, and Outreach

ERO Enterprise Staff Training and Education

To address success factor 1 on ERO Enterprise staff competency during 2015, NERC Compliance Assurance and Compliance Enforcement departments, supported by the Regional Entities, developed and provided ongoing education and training on the transformation of compliance monitoring and enforcement for the ERO Enterprise staff. In particular, the training focused heavily on continuing education for implementing the IRA and ICE components of the risk-based CMEP to support successful implementation and consistency. In addition, NERC hosted one workshop for all CMEP staff in March 2015, which included education on Regional Entity IRA and ICE processes and another workshop in October 2015 specifically for enforcement staff.

During the initial risk-based CMEP implementation stage, the ERO Enterprise conducted training on the foundational IRA and ICE concepts using real-life scenarios and examples. Current training provides further depth and incorporates lessons learned from examples obtained throughout actual application of risk-based CMEP. For example, in July 2015, NERC sponsored an instructor-led training for scoping and performing audits and assessing internal controls. Over 30 ERO Enterprise staff responsible for conducting audits and performing ICE activities attended one or both of the 16-hour courses offered. Additionally, NERC recommended online training available through the ERO Enterprise learning management system, including Auditing for Internal Control and Risk Assessment for staff responsible for IRA and ICE activities. NERC continues to identify relevant and available online courses to include as part of the overall ERO Enterprise risk-based training curriculum within the learning management system. Figure 7 below identifies the number of hours of training by competency area.

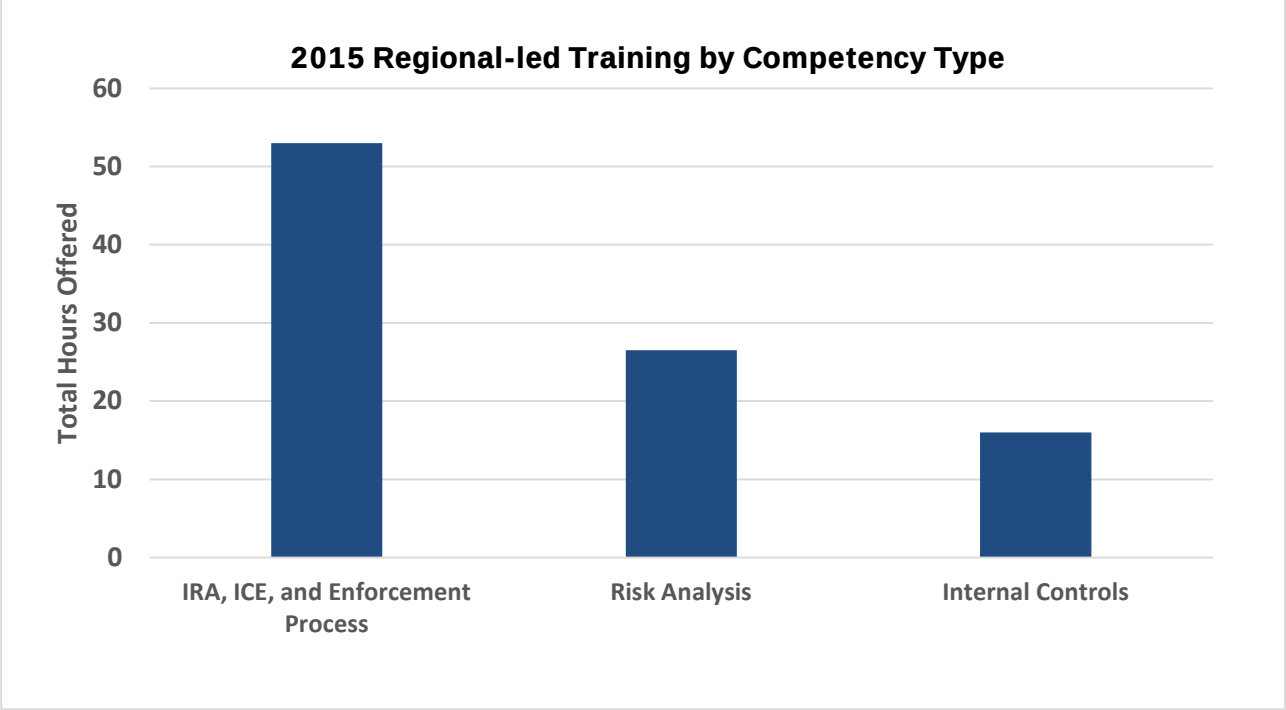


Figure 7: 2015 Regional Entity-led Training Hours of by Competency Type

Following each of the training and education events, a survey was distributed to obtain information on the general satisfaction, delivery method, content, and overall value participants felt they gained from the sessions. ERO Enterprise staff used this input for future training activities.

Further, NERC engaged a vendor to perform a compliance monitoring personnel competency analysis to assist with long-term curriculum development for the risk-based compliance monitoring portion of the CMEP. The product deliverables for this effort will include a well-defined task listing by role and a recommended training and education plan to inform the qualification program for the risk-based CMEP. The ERO Enterprise will use these deliverables to refine and update the exiting ERO Enterprise competency guide, which outlines role and competency expectations for compliance monitoring staff. Similarly, the ERO Enforcement Group is developing a competency guide that will identify the combination of skills, attributes, and behaviors that are directly related to successful performance of enforcement positions. This guide will also inform the training needs of ERO Enterprise enforcement staff.

Industry Stakeholder Information and Outreach

During the broad implementation of risk-based design, NERC and the Regional Entities have taken advantage of several outreach opportunities to identify lessons learned and gather input into how to best implement the risk-based design. The ERO Enterprise continues to collaborate to identify common processes and opportunities to improve consistency in implementation through industry advisory groups, discussion with various trade organizations, and ongoing webinars and workshops. In addition, NERC and the Regional Entities performed outreach on the CIP Version 5 transition to support industry stakeholder readiness.

NERC focused on success factor 2 (relating to industry stakeholder information and outreach for risk-based CMEP) through various events, such as workshops and webinars. During Q4 of 2014 and Q1 of 2015, the ERO Enterprise hosted a series of three outreach events. The three outreach events included ERO Enterprise staff and industry panelists presenting on risk-based topics. The outreach events provided continued communication and education to industry stakeholders on the ERO Enterprise's transformation to risk-based compliance monitoring and enforcement activities. During these events, presentations were given by panels of industry stakeholders and ERO Enterprise staff. In support of success factor 6 (regarding recognized value), the ERO Enterprise solicited feedback from participants in these events. Based on this feedback, participants noted that the events provided an opportunity for industry stakeholders to share examples, tips, and techniques for how registered entities can prepare for future interactions with risk-based CMEP activities. Stakeholders also found that the industry panels addressed some areas of concern regarding expectations for participating in IRA and ICE processes and allowed industry to hear different viewpoints from various involvement in on-going risk-based CMEP activities. NERC staff also presented at the spring and fall Standards and Compliance Workshops in Atlanta, GA, and San Diego, CA, respectively. The Spring Standards and Compliance Workshop featured a joint industry and Regional Entity session on risk-based CMEP to facilitate further mutual understanding of risk-based concepts.

Additionally, the ERO Enterprise hosted a series of webinars on each risk element outlined in the 2015 CMEP Implementation Plan. Each monthly webinar focused on one risk element and included guidance and discussion on the areas of focus identified in the 2015 CMEP Implementation Plan. Figure 8 demonstrates the number of participants on the webinars and the level of satisfaction.

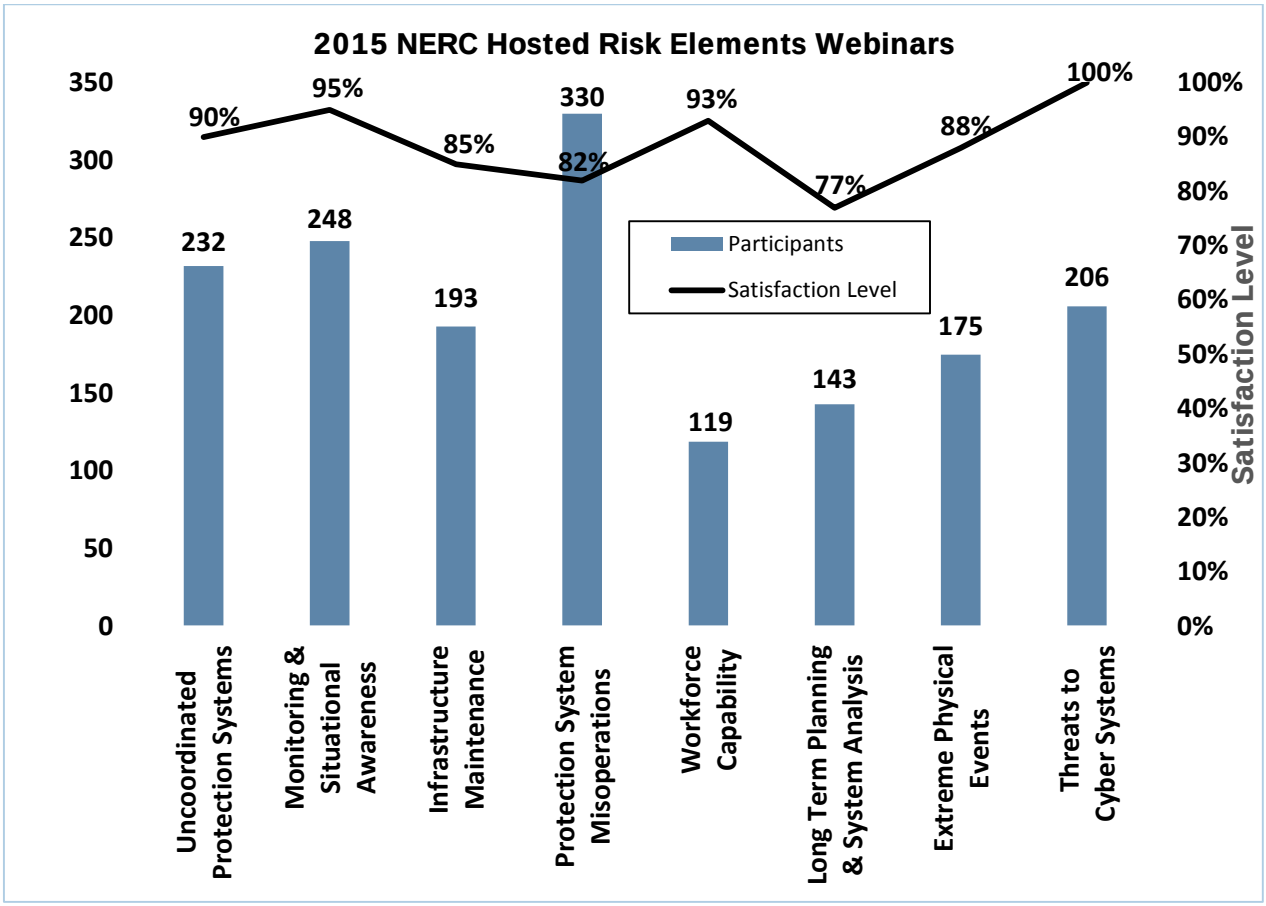


Figure 8: Risk Elements Webinars Participants and Satisfaction

Each Regional Entity also conducted meetings, conference calls, webinars, and workshops to address the industry's questions and concerns over risk-based CMEP. All key elements and region-specific subjects of compliance monitoring and enforcement were discussed during a risk-based CMEP workshop in early 2015 and at the semi-annual Standards & Compliance workshops, with attendance ranging from 80 to 200 participants. The workshops provided a platform to discuss specific risk-based subjects such as self-logging, the IRA and ICE processes, and other components of the risk-based CMEP.

Although there was a continued focus of outreach activities on the risk-based CMEP approach, Regional Entities also conducted outreach for other areas such as new Reliability Standards and the CIP Version 5 transition through face-to-face meetings and conferences with industry. In addition, NERC and the Regional Entities coordinated with a group of industry stakeholders for an educational exercise in February 2015. The purpose of that exercise was to discuss how the ERO Enterprise scales ICE processes for smaller, low-risk registered entities, and to help NERC and the Regional Entities obtain a better understanding of how small entities identify, evaluate, and document internal controls. During the exercise, NERC and the Regional Entities explained that they appropriately scale the internal control evaluation to take into account entity size and risk characteristics. This exercise supported success factor 6 in demonstrating recognized value of the risk-based CMEP for entities of all sized. Figure 9 illustrates the total number of industry outreach events and Figure 10 illustrates stakeholder participation in Regional Entity 2015 industry outreach events, which included topics on risk-based CMEP and CIP.

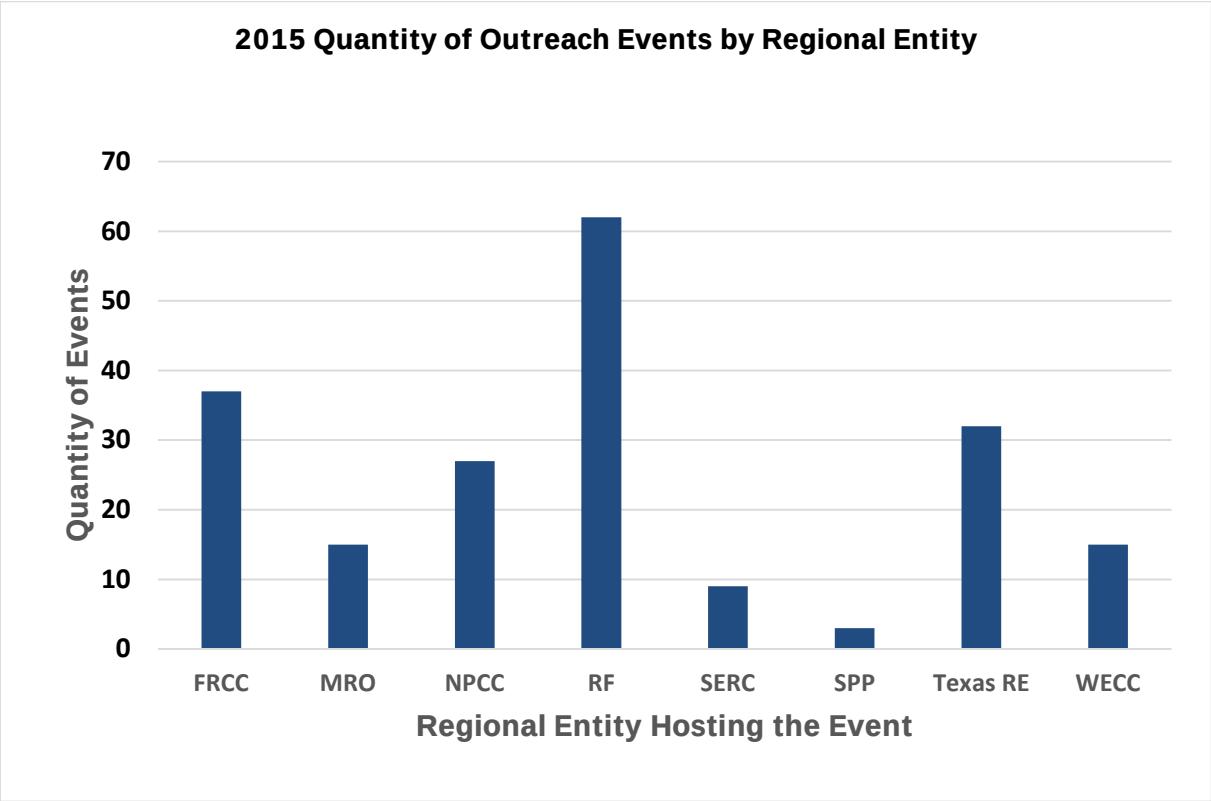


Figure 9: Regional Entity 2015 Industry Outreach Events

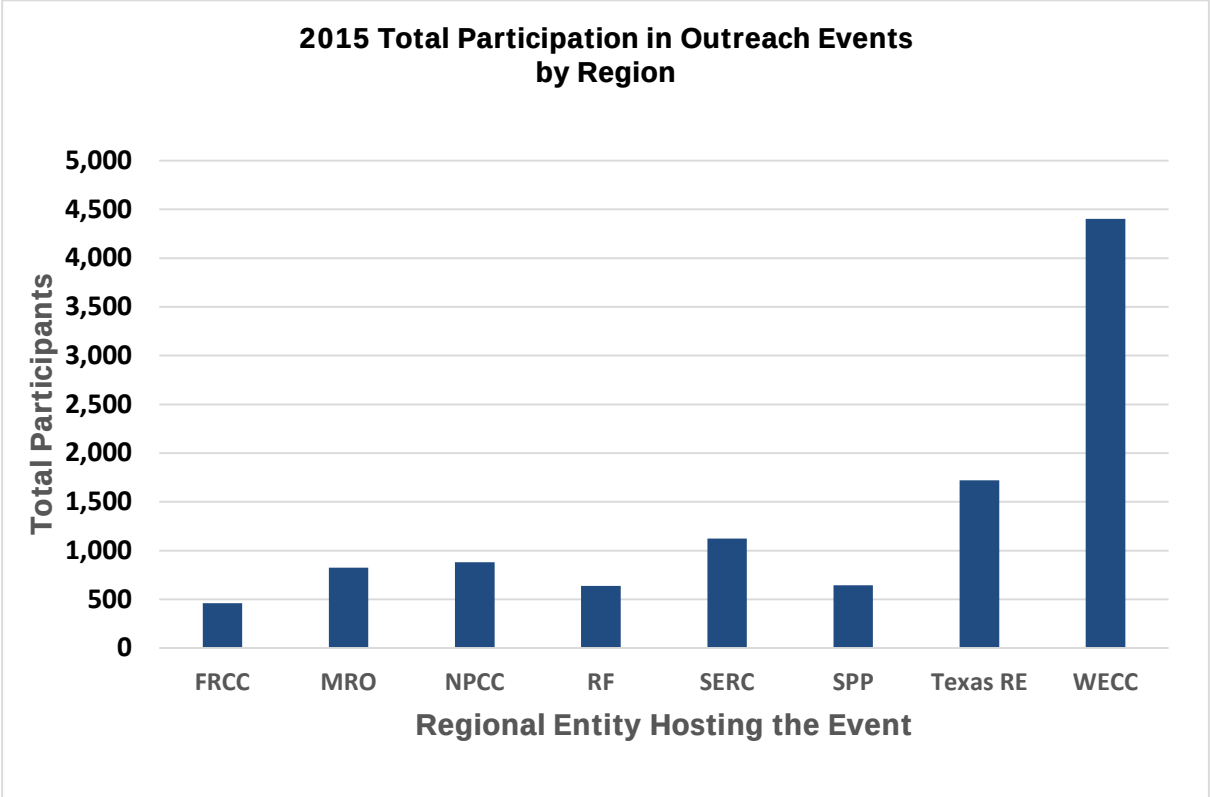


Figure 10: Regional Entity 2015 Industry Participation in Outreach Events

In 2016, NERC and the Regional Entities will continue to conduct outreach activities that focus on self-logging, compliance exceptions, risk elements, frequently asked questions, and examples of completed IRAs and ICEs. NERC plans to use existing industry events, like the Standards and Compliance workshops, to provide information on risk-based activities.

NERC Oversight of the Regional Entities

Risk-based Compliance Monitoring Oversight

At the end of 2014, the ERO Enterprise finalized IRA and ICE Guides in support of success factors 3 and 4 on consistency and balanced transparency. During the first half of 2015, NERC Compliance Assurance staff assessed each Region's processes and degree of alignment with the criteria from these guides. This review established conceptual consistency in the application of risk-based compliance monitoring among all eight Regional Entities. At the end of these reviews, NERC provided reports that included feedback and recommendations to the Regional Entities on their processes. Overall, NERC concluded that Regional Entities were conceptually aligned on the major components of the risk-based compliance monitoring framework.

During the remainder of 2015, NERC oversight focused on further refinement of the risk-based CMEP in support of implementation. Such oversight included frequent engagements with Regional Entities and development of an IRA analysis team to ensure consistency across Regional Entities in areas where consistency is most important. In addition, NERC engaged in observations of audits of registered entities conducted by Regional Entities, collected IRA results, and reviewed Regional Entities' post-audit feedback surveys. The following sections describe these oversight activities in more detail. Going forward in 2016, NERC will review lessons learned from implementation in 2015 to inform its risk-based approach to oversight of the Regional Entities.

Oversight of Initial Implementation of Risk-based Compliance Monitoring

Although all Regional Entities were conceptually aligned on the major components, there were cases, due to timing and the initial implementation status of IRA and ICE, the Regional Entity's IRA or ICE processes as documented and described may not have yet been fully implemented. Accordingly, some Regional Entities were assessed on conceptual alignment as documented or described and not on whether such practices were actually fully implemented or documented. In addition to assessing alignment with the IRA and ICE Guides, oversight activities revealed other opportunities for IRA and ICE process improvements, enhanced IRA and ICE tools, guidance, and training across the ERO Enterprise.

Recognizing that 2015 was an implementation year, initial oversight activities revealed that Regional Entities made meaningful strides in transitioning to risk-based compliance activities. Overall, all eight Regional Entities were generally aligned with the IRA and ICE alignment criteria reviewed. As part of these oversight activities, NERC and Regional Entity staff also identified some general improvement opportunities to assist in successful implementation throughout 2015.

After closing out initial implementation oversight activities in June 2015, NERC and the Regional Entities continued to collaborate to identify program opportunities and refinement needs. Further, NERC continued conducting risk-based compliance monitoring oversight through a variety of methods described in the sections below.

Registered Entity Audit Observations and Reviews

NERC samples a selection of Regional Entity audits of registered entities to observe and review. Through audit observations, NERC monitors both the audit process, including audit-scoping determinations, and assesses the Regional Entities' evaluations of registered entity compliance with NERC Reliability Standards. Further, audit observations help NERC to assess the overall implementation of ERO Enterprise activities, such as risk-based compliance monitoring, CIP Version 5 transition, Physical Security Reliability Standard implementation, and the Coordinated Oversight Program of MRREs, and to identify program development needs, training, and outreach. In 2015, NERC observed a total of seven audits with audit scopes including both CIP and Operations and Planning and with registered entities within the Coordinated Oversight Program for MRREs. NERC did not identify any concerns relating to any Regional Entity evaluation of a registered entity's compliance with the NERC Reliability Standards.

NERC's involvement in the audit observations provided a better understanding of the ERO Enterprise audit process applied in a risk-based environment. NERC will also use lessons learned to help shape the compliance monitoring observation program for 2016. For example, starting in 2016, NERC staff will participate in other aspects of compliance monitoring activities in addition to audit observations. As recommended and noted by Regional Entity staff, NERC observations of Regional Entity IRA and ICE processes, as well as off-site, pre-audit evidence reviews, will provide NERC staff more line of sight to how Regional Entities are implementing risk-based compliance monitoring. Further, the 2016 audit observation approach will include a NERC staff development opportunity that invites NERC staff outside of Compliance Assurance to participate as observers in the Regional Entity audits of registered entities.

From the observations of these seven audits, NERC identified some positive observations, as well as lessons learned and opportunities for consistency and overall improvements to compliance monitoring. For example, NERC noted that Regional Entity staff continue to provide registered entities updates on the audit status to keep the entities informed and hold open and timely discussions around possible areas of noncompliance. Further, registered entities stated that they felt the audit(s) were focused on high-risk areas and were tailored specifically to their entity characteristics. Improvement opportunities exist in the areas of the Coordinated Oversight Program for MRREs to help ensure that consistent and efficient processes are occurring, as well as the identification, documentation, and feedback of new or refined risk areas identified during compliance monitoring activities. This feedback can help refine or impact initial IRAs. This feedback loop is an important component of understanding a registered entity and properly assessing its risks to tailor monitoring activities.

IRA Results Summary Collection

During Q4 of 2015, NERC began collecting IRA summary reports to do the following: (1) monitor Regional Entity progress toward completing initial IRAs for registered entities; (2) gather data on risks being identified and associated NERC Reliability Standards and requirements monitored; and (3) understand how significant BPS reliability risks are being monitored. Going forward, and on a periodic basis, NERC will sample IRA summary reports and request supporting documentation of IRA activities. The purpose of sampling and reviewing supporting IRA documentation is to help further understand, on a total ERO Enterprise basis, Regional Entity processes and procedures being used to complete implementation of risk-based compliance monitoring and drive toward oversight that is monitoring the necessary risks for each entity. Through this monitoring activity, NERC can assist in identifying good practices, lessons learned, and other opportunities for program consistency and improvement.

Being an implementation year, NERC's primary focus of review in Q4 of 2015 has been on establishing a repeatable process for collection of IRA results summaries, creating mechanisms to maintain and track information contained within the IRA results summaries, and identifying registered entities involved in initial IRAs. As the monitoring program evolves in 2016, NERC will gather and analyze data to further understand how significant BPS reliability risks are being monitored across the ERO Enterprise.

Review of Registered Entity Post-Audit Feedback Surveys

Following every audit, registered entities have an opportunity to complete post-audit feedback surveys. Since transitioning to risk-based compliance monitoring, the feedback survey now includes questions relating to all steps within the risk-based compliance monitoring framework. During 2015, NERC and the Regional Entities updated the post-audit feedback survey to reflect risk-based activities, which is now electronically available to the registered entities.

Both NERC and the Regional Entities review the surveys to help gauge industry stakeholder perception, as well as to enhance understanding of risk-based compliance monitoring activities. Post-audit feedback surveys aim to provide a feedback loop to NERC and the Regional Entities by identifying successes and opportunities of program development, as well as possible education and training opportunities for ERO Enterprise staff. In 2015, NERC and the Regional Entities collected 70 post-audit feedback surveys, which is a response rate of about 35% of the total

number of audits conducted in 2015. Overall, survey responses indicated continued support by registered entities of the risk-based compliance monitoring approach, noting that most audits had a clear focus of monitoring efforts on reliability risk. Further, registered entities noted their appreciation for the CIP Version 5 outreach provided by the audit teams, as well as the audit team's flexibility to audit scheduling, clear and transparent communication during the audit, and the professional demeanor of the audit team. Registered entities also commended the audit teams' review of large volumes of work during the off-site pre-audit portion. In addition, feedback surveys indicated an opportunity for the ERO Enterprise to improve communication regarding the IRA and ICE results and impact on compliance oversight plans.

Risk-based Enforcement Oversight

NERC oversight of the Regional Entity enforcement processes is performed, among other activities, through the review of the supporting evidence, and other information provided by the Regional Entities over the course of focused engagements scheduled throughout the year. NERC communicates the recommendations and findings to the Regional Entities to help the ERO Enterprise develop responsive strategies and solutions to potential issues and ensure consistent implementation of the risk-based CMEP. Such recommendations and findings also helped to identify priority areas for training of ERO Enterprise staff throughout 2015.

These reviews complement the analysis by NERC of enforcement data and calculation of metrics[26] and provides input to the development of feedback, guidance, and training.[27]

Annual Reviews Conducted in 2015

NERC reviews specific enforcement-related processes throughout the year. Subjects that have been reviewed include mitigation plans, dismissals, settlement practices, and FFTs. As a result of the reviews, NERC provides feedback to the Regional Entities on areas and activities to enhance consistency and effectiveness of processes.

In September 2015, NERC filed its annual report of the FFT program. During Q1 of 2015, NERC and FERC jointly performed the annual sampling and process review of the Regional Entities' FFT programs. The purpose of the review was to gather information on the implementation and effectiveness of the FFT program across all eight Regional Entities. NERC and FERC's 2015 review involved a coordinated sample of 100 processed FFTs for the period of October 2013 through September 2014. NERC's and FERC's review of the record included evaluation of the methods used by the Regional Entities to process Possible Violations as FFTs. NERC and FERC reviewed Regional Entity internal documents, including enforcement process diagrams, procedure manuals, step-by-step internal processes, checklists, and FFT Notice Letters.

Of the 100 FFTs reviewed, NERC and FERC did not identify any noncompliance that was inappropriate for FFT treatment. The results of the review indicate that the program remains successful and continues to be properly implemented.

A combined review of Compliance Exceptions and FFTs began, in coordination with FERC, in Q4 of 2015. NERC will also conduct a review of the self-logging program in 2016 to encompass 2015 activities.

[26] NERC analyzes enforcement data to calculate the rates of use of enforcement processes and to help identify trends that may affect BPS reliability. Performance indices are also computed on a regular basis to quantify the performance of the Regional Entities and NERC in processing violations and mitigation, as well as to provide insight in determining the effectiveness of Regional Entity programs and adequacy of Regional Entity and NERC resources.

[27] NERC provides feedback, guidance, and training to the Regional Entities. In 2015, the ERO Enterprise provided training to Regional Entity staff and the industry on areas such as compliance exceptions and the self-logging program. NERC developed this training based on early experience with implementing the programs, in addition to observations from the various reviews.

Other Significant 2015 Activities

Managing the Transition to Version 5 of the CIP Standards

The ERO Enterprise recognized 2015 as a critical year in ensuring registered entity preparation for the April 1, 2016, effective date of certain CIP Version 5 Reliability Standards requirements. To support implementation readiness during 2015, NERC focused its efforts in three key areas: written guidance and Reliability Standard Audit Worksheets (RSAWs) completion, stakeholder outreach, and ERO Enterprise staff workshops.

NERC worked with the Regional Entities and industry stakeholders through the transition advisory group[28] to finalize and issue documents that provide guidance to the industry on the implementation of various CIP Version 5 requirements. The ERO Enterprise and the transition advisory group have finalized eight lessons learned documents and 40 Frequently Asked Questions (FAQs). Table 3 below lists the completed lessons learned and FAQs.

Table 3: Completed CIP Version 5 Transition Lessons Learned and FAQs

Standard/Requirement	Topic
CIP-002-5.1 Requirement R1	FAQ #36: Considering misuse
CIP-002-5.1 Requirement R1 Attachment 1	FAQ #45: Generation and calculating 1500MW
	FAQ #49: Shared Systems
	FAQ #52: 15-minute impact
	FAQ #58: Addressing redundancy of systems
	FAQ #77: Tie line metering and dialup access
	FAQ #89: PACS and facility locations
	FAQ #53: Transmission scheduling systems
	FAQ #61: Controlling groups of generation
	FAQ #3-2014: Scoping UPS, HVAC and building control systems*
	Lesson Learned: Generation segmentation
	Lesson Learned: Far-end relay
	Lesson Learned: Generation interconnection
CIP-002-5.1	Lesson Learned: Mixed-trust EACMS
	Lesson Learned: Grouping of BES Cyber Systems
	Lesson Learned: Communications networking
CIP-003-6 Requirement R2	FAQ #23: IEC 61850 a routable protocol
CIP-004-6 Requirement R4 Part 4.1	FAQ #62: Applying "CIP Exceptional Circumstances" clause
CIP-004-6	FAQ #63: Granularity of training
	FAQ #64: Revoking access
	Lesson Learned: Managing vendor access
CIP-005-5 Requirement R1	FAQ #80: Applying dial-up connectivity controls
	FAQ #21: PCAs and non-routable communications
	FAQ #81: ESPs and stand-alone networks
	FAQ #76: Firewalls and Electronic Security Perimeters
	Lesson Learned: External Routable Connectivity

[28] Roster for the transition advisory group is available at http://www.nerc.com/pa/CI/Documents/V5TAG_Roster_070815.pdf.

Table 3: Completed CIP Version 5 Transition Lessons Learned and FAQs	
Standard/Requirement	**Topic**
CIP-005-5 Requirement R2	FAQ #73: Intermediate Systems
CIP-006-6 Requirement R1	FAQ #83: Protecting cables between ESPs
	FAQ #86: Using different physical security controls
	FAQ #91: Monitoring access to physical access controls
CIP-006-6 Requirement R3	FAQ #90: Testing physical access controls
CIP-007-6 Requirement R1	FAQ #94: Signage for physical port protection
CIP-007-6 Requirement R3	FAQ #1-2014: Malicious code and detective controls*
	FAQ #98: Malicious code controls
CIP-007-6 Requirement R5	FAQ #92: Identifying default or generic accounts
	FAQ #93: Password safe
	FAQ #101: Password only access
CIP-010-2 Requirement R1	FAQ #107: Baseline testing
	FAQ #114: New requirements for testing of BCAs
CIP-010-2 Requirement R3	FAQ #108: Vulnerability Scanning
	FAQ #68: ICS vulnerabilities
	FAQ #111: Penetration testing
	FAQ #112: Sampling methods for vulnerability assessments
CIP-010-2	FAQ #113: Test environments
	FAQ #2-2014: Verifying vendor testing adequacy*
CIP-011-2	FAQ #128: Protecting BCS information
	FAQ #129: Redeployment or reuse of devices
	FAQ #130: Destruction of data practices

*The FAQ numbering convention changed after these FAQs were identified by date.

On March 13, 2015, NERC issued revised RSAWs for CIP Version 5 and incorporated any new revisions to the standards as a result of standards development completed in 2015. ERO Enterprise CIP compliance monitoring staff and the standards drafting team for the CIP V5 revisions project regularly met during Q1 of 2015 to comprehensively review and update the CIP RSAWs to increase clarity and improve the industry's understanding of compliance expectations for both newly modified requirements and previously approved language.

In addition to developing written guidance for registered entities during the transition period, NERC and the Regional Entities focused heavily on information outreach and training during 2015. Specifically, 2015 events included Regional Entity workshops for registered entities, more individualized outreach through Small Group Advisory Sessions, and visits through the Security Reliability Program, in addition to several CIP-focused CMEP training activities for Regional Entity staff. Figure 9, in the previous section "Industry Stakeholder Information and Outreach" includes Regional Entity outreach events on the CIP Version 5 transition.

While NERC has continued its efforts to accomplish the goals of the CIP Version 5 Transition Program and entered its final stage of completing remaining guidance for outstanding topics in 2015, a focused effort has been underway to design an ERO Enterprise-wide oversight plan for 2016. NERC understands that the implementation of CIP Version 5 represents a significant shift in addressing cybersecurity. As the industry gains implementation experience with this new set of Reliability Standards, NERC's oversight of CIP Version 5 will rely on risk-based compliance monitoring and enforcement concepts. In particular, focus in 2016 will be on key areas to determine how well security risk is being managed, with emphasis on effective collaboration across the ERO Enterprise and

industry to address security and compliance. NERC and the Regional Entities will incorporate that focus in phased approaches based on function and risk throughout 2016 and beyond. NERC's oversight plan for CIP Version 5 in 2016 includes three primary components.

The first component includes on-site audit engagements in each Region at certain registered entities that could have a significant impact on the reliable operation of the Bulk Electric System (BES), identified through risk assessment and as otherwise required to occur on a three-year cycle under the NERC Rules of Procedure. Second, through the risk-informed application of risk-based compliance monitoring tools (e.g., spot checks and guided self-certifications), NERC and the Regional Entities will seek to understand from applicable registered entities the quantities of facilities that possess high- and medium-impact BES Cyber Systems in CIP-002. The third component of the CIP Oversight Program may involve oversight of certain responsible entities' CIP programs by NERC in conjunction with staff from Applicable Governmental Authorities.

Physical Security Reliability Standard Implementation

The ERO Enterprise and industry have always made the reliability and security of the BPS a key priority. Industry stakeholders have decades of experience working to protect our shared infrastructure and are constantly reevaluating threats and taking steps to protect the system. Standards are one piece of this complex, dynamic endeavor of providing a comprehensive approach to reliability.

With CIP-014-2 becoming effective on October 1, 2015, NERC and the Regional Entities focused on implementation readiness for applicable registered entities during 2015. NERC released a guidance communication to the Regional Entities and industry in February 2015 on implementation of Requirements R1 and R2.[29] That communication included a link to a guidance document developed by the North American Transmission Forum (NATF) for Requirement R1.[30] Importantly, NERC recognizes that there may be more than one approach to achieving compliance with CIP-014-2's requirements, so NERC is neither "adopting" nor "endorsing" a specific approach as the only way to comply with the standard. Initially, NERC provided guidance for each requirement. In response to suggestions received in response to the NERC Board of Trustees request for policy input on CIP-014-1 for the May 7, 2015, NERC recognized the importance of limiting and coordinating any additional guidance. NERC thus limited its initiation of formal guidance communication though it will continue to coordinate with other industry groups, such as the NATF, on their efforts.

ERO Enterprise staff began in 2015 to engage with registered entities through a variety of outreach activities and coordinated site visits to discuss and understand their implementation of CIP-014-2. Based on initial observations from both NERC and Regional Entity staff, the industry made significant progress towards effective CIP-014-2 implementation and compliance. Physical security plans appeared to be focused on mitigating risk from specific threats to the critical stations or substations, and NERC was encouraged by the industry's initial progress and continued focus on a successful CIP-014-2 implementation.

The ERO Enterprise will monitor compliance to the standard in a manner that emphasizes assessing and supporting effective implementation.[31] The focus areas through the end of 2015 and during early 2016 relate to CIP-014-2's requirements to identify critical stations and substations and ensuring that such identifications are appropriate and risk-informed. NERC, in collaboration with the Regional Entities, plans to confirm who the Reliability Standard applies to, whether each of those applicable registered entities performed a required risk assessment to

[29] http://www.nerc.com/pa/CI/PhysicalSecurityStandardImplementationDL/CIP-014%20Memo%20to%20the%20ERO%20021015.pdf
[30] http://www.natf.net/wp-content/uploads/NATF-CIP-014-1-R1-Guideline-V1-Open.pdf.
[31] Prior guidance from February 9, 2015, related to the risk assessment and third party verifications required by the Reliability Standard also emphasized that compliance assurance activities will expect registered entities to be able to demonstrate that they implemented the requirement effectively. That guidance is available at http://www.nerc.com/pa/CI/PhysicalSecurityStandardImplementationDL/CIP-014%20Memo%20to%20the%20ERO%20021015.pdf.

determine whether they have critical facilities, and whether that required risk assessment resulted in the identification of critical facilities.[32]

In Q2 of 2016, NERC and the Regional Entities will prioritize understanding of effective application of the first three requirements related to critical facility identification.[33] This approach is described in the 2016 ERO Enterprise CMEP Implementation Plan with formal notices to applicable registered entities expected to be provided by Regional Entities in Q1 of 2016.

Regional Entity Coordinated Oversight of Multi-region Registered Entities

In 2014, the ERO Enterprise developed a comprehensive coordinated oversight program. The program is designed to streamline risk assessment, compliance monitoring, and enforcement for the registered entities that use, own, or operate assets in areas covering more than one Regional Entity's territory.

Under the program, Regional Entities coordinate their oversight responsibilities over MRREs by designating one or more LREs to each MRRE or a group of MRREs. The LRE is selected based on reliability considerations and the registered entity's operational characteristics. The selected LRE works collaboratively with the remaining Regional Entities, known as AREs, and informs NERC of activities as appropriate.

The program was implemented in phases to facilitate learning and process development by the ERO Enterprise. During Q2 of 2014, notice was provided to select MRREs of the opportunity to request coordinated oversight. This initial phase resulted in approximately 74 registered entities (24 MRRE groups) participating in coordinated oversight. In Q2 of 2015 a full implementation phase of the program began with a broad notice to registered entities that any MRRE could request to participate in coordinated oversight. In response, registered entities demonstrated significant interest in the efficiency and consistency benefits of the program. In Q3 of 2015, the participation level increased to 152 registered entities (39 MRRE groups), over twofold from the initial phase of the program. The ERO Enterprise has selected the LREs for each participating MRRE group, and the LREs and AREs have already signed memoranda of understanding outlining their respective responsibilities. Figure 11 represents the distribution, including number and percentage of the total, of 152 MRREs by LRE, and Figure 12 represents the distribution of MRREs by registered function. The registered entities that opted to join the program are registered for various reliability functions in multiple regions.

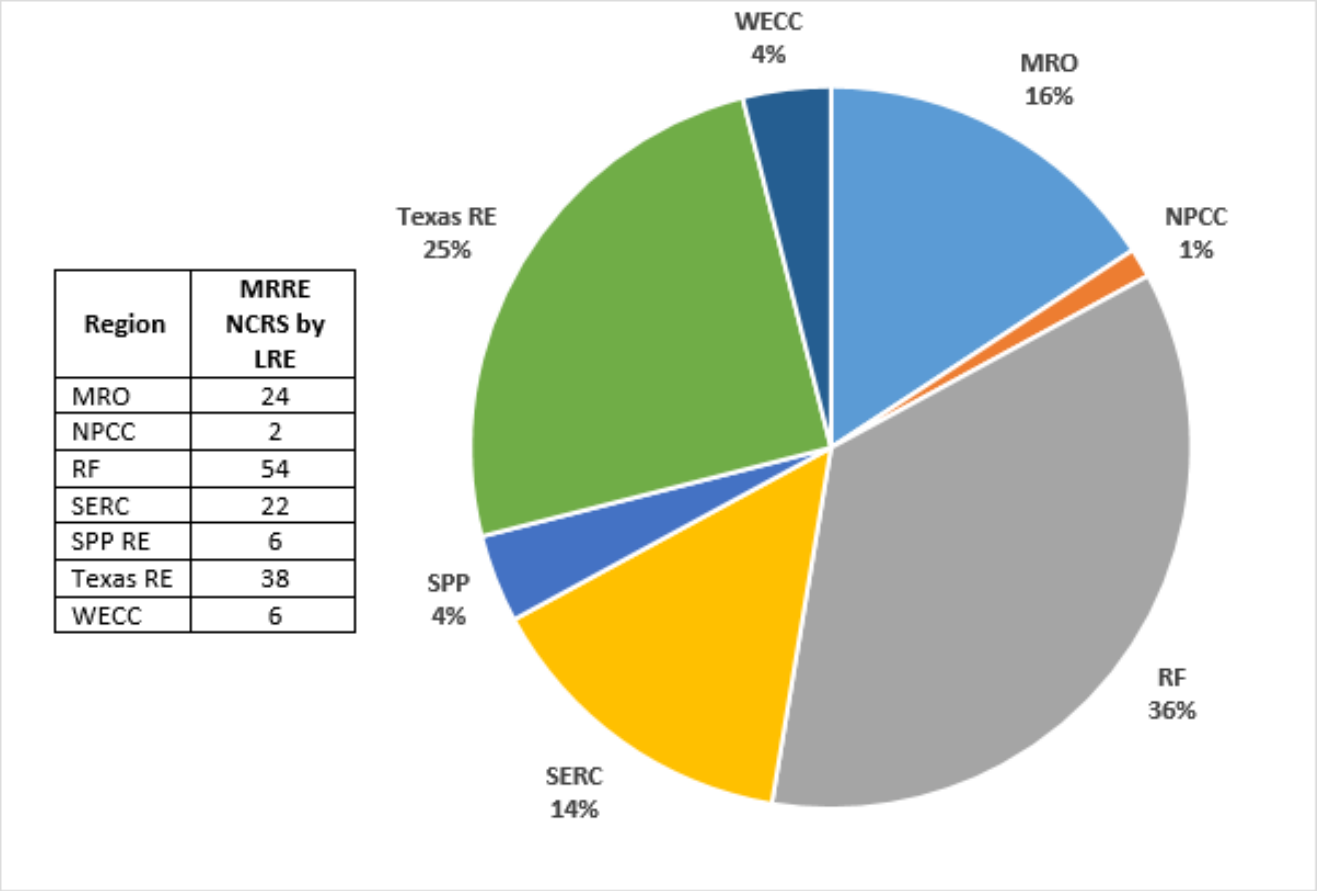
NERC and the Regional Entities held several outreach events on coordinated oversight before and during the full implementation period including an industry webinar in Q2 of 2015. Additional outreach to non-participating MRREs was also provided. Finally, Program overview, contact information, and other documents are posted on NERC's website and updated regularly.[34] This program requires ongoing and timely communication, full sharing of information, and opportunity for ARE input and involvement concerning implementation of the CMEP for those MRREs involved in the program. Detailed procedures between LREs and AREs for implementing the program are key to the success of the program.

[32] These confirmations are also intended to address quarterly reporting expectations to the Board of Trustees in support of its monitoring of the standard's implementation. NERC management, per the Board of Trustee's instruction when adopting the Physical Security Reliability Standard, will monitor and assess implementation of CIP-014-2. This monitoring includes the general number and characteristics of assets identified as critical and the scope of security plans developed to meet the requirements in CIP-014-2, including the timelines provided for implementation of the various security and resiliency measures included in the plan.

[33] The obligations of those requirements become effective through staggered enforcement dates beginning on October 1, 2015, through Q1 of 2016.

[34] Information on the Coordinated Oversight of MRREs Program is available at http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/MRRE%20FAQ%20with%20Notice%201-12-15.pdf.

In support of CCC Criteria, during 2016, the ERO Enterprise will continue to consider opportunities to refine the coordinated oversight program and to improve associated efficiency and consistency while also fulfilling obligations for implementation of the CMEP. Also, there will be organized efforts to continue to provide outreach on the coordinated oversight program and in particular to seek feedback from registered entities involved in the coordinated oversight program concerning any process improvements.



Region	MRRE NCRS by LRE
MRO	24
NPCC	2
RF	54
SERC	22
SPP RE	6
Texas RE	38
WECC	6

Figure 11: Number of MRRE NCRs by LRE and Regional Percentage of Total MRRE NCRs

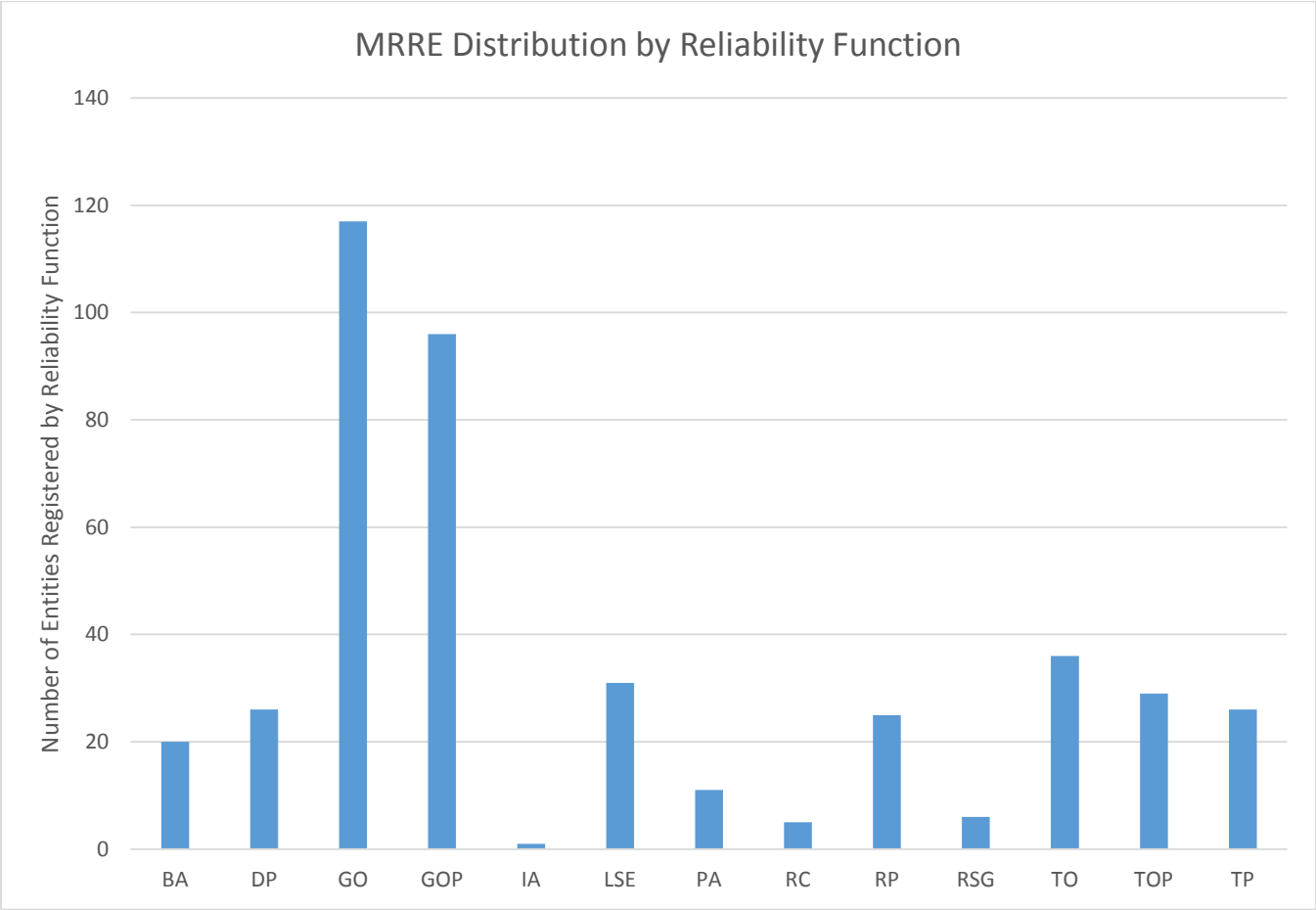


Figure 12: MRRE Distribution by Reliability Function

Regional Consistency Tool

The ERO Enterprise is committed to ensuring and promoting consistency among the Regional Entities and with applicable published processes, procedures, and rules. To assist the ERO Enterprise in its efforts to improve consistency among the Regional Entities and drive continuous improvement in day-to-day operations, the Regional Entities created the Regional Consistency Reporting Tool. This reporting tool allows registered entities or other relevant industry stakeholders to report any perceived inconsistency in the methods, practices, or tools of two or more Regional Entities.

The Regional Consistency Reporting Tool does not function as an appeal of a Regional Entity action or decision, and it does not replace the NERC or Regional Entity Compliance Hotlines for complaint reporting.

The Regional Consistency Reporting Tool is hosted on a secure, third-party server. Reports are submitted only to those personnel at each Regional Entity who have specific permissions and training based on the issue.

Once a report is received, the Regional Entity will assess and evaluate the report. The evaluation reports will then be incorporated into a public findings spreadsheet. The identity of the reporter, if provided, will always remain protected. The reporter has the option to remain anonymous when making the report.

To improve consistency among the Regional Entities and drive continuous improvement in day-to-day operations, the Regional Entities also developed the Regional Consistency Reporting Tool as an additional channel of communication for registered entities and relevant industry stakeholders. The tool allows the public to report any

perceived inconsistencies among Regional Entities, including perceived inconsistencies with compliance monitoring and enforcement processes, procedures or rules. In 2015, 20 reports of perceived inconsistencies were submitted through the Regional Consistency Reporting Tool.[35] These 20 reports represent a diverse category of issues involving, among others, compliance monitoring, CMEP tools, event analysis, organization registration and BES asset identification. The majority of these reports involve substantive issues—with a handful involving administrative issues, such as inconsistent data transmittal methods from registered entities to Regional Entities. Out of these 20 reports, 13 have been successfully investigated and resolved; 3 have been assigned to ERO staff working groups for longer-term tracking and resolution; and 4 cases are in-process.

[35] Detailed information on the reported issues and findings is located on the NERC website, available at https://secure.ethicspoint.com/domain/media/en/gui/38901/index.html. In addition, this information is also posted on the Regional Entities websites.

Looking Ahead to 2016

To refine and align risk-based CMEP with the lessons learned from the implementation year, the ERO Enterprise identified three areas of focus going forward. The ERO Enterprise will focus on the following: (1) collaborating through NERC and Regional Entity working groups to share best practices to achieve successful implementation; (2) sharing best practices for risk assessments of registered entities to enhance consistency and common approaches; and (3) continuing emphasis on stakeholder understanding and perceptions.

To guide compliance monitoring and enforcement 2016 activities, NERC has identified the following priorities for the ERO Enterprise:

- Regional entity completion of initial IRAs for all BAs, TOPs, and RCs during 2016;
- ERO Enterprise completion of a plan for conducting initial IRA activities of all remaining registered entities by Q2 of 2016;
- Continued NERC and Regional Entity coordination on risk-based compliance monitoring, specifically:
    - Refining of risk elements and risk factor considerations to better prioritize risks and identify registered entity specific risks;
    - Evaluating ERO Enterprise IRA and ICE business rules;
    - Promoting consistency in ERO Enterprise IRA and ICE tools and processes; and
    - Improving training on IRA and ICE performance for ERO Enterprise staff.
- ERO Enterprise support of CIP Version 5 transition and Physical Security implementation through an ERO Enterprise monitoring approach, as outlined in the 2016 ERO Enterprise CMEP Implementation Plan;
- NERC coordinated review of compliance exceptions and FFTs with FERC; and
- ERO Enterprise review of self-logging program.

Appendix

This appendix includes an update on the ERO Enterprise processing-related goals and metrics in 2015 and other relevant trends.

Mitigation Completion Status

The ERO Enterprise actively tracks mitigation of noncompliance through Mitigation Plans and mitigation activities. NERC also conducts oversight of the Mitigation Plan processes and procedures to identify deficiencies and establish best practices.

During Q4 of 2014, NERC conducted a review of 120 Mitigation Plans submitted to FERC in 2013. The purpose of the Mitigation Plan review was to evaluate the Regional Entities' internal procedures and practices related to Mitigation Plan review and acceptance, certification, and verification. The review was a supplement to NERC's ongoing review of all Mitigation Plans, which are accepted by the Regional Entities and submitted to NERC for approval before they are submitted to FERC.

Based on its analysis of the review results, NERC concluded that the Regional Entities follow the procedural and content requirements of the CMEP as they relate to mitigation activities associated with noncompliance with the NERC Reliability Standards. During 2015, NERC observed improvement across the ERO Enterprise related to the description of interim risk mitigation and cause analysis in Mitigation Plans.

NERC is closely monitoring noncompliance for which mitigation has not been completed. The ERO Enterprise encourages all registered entities to submit timely and detailed certifications of completion of Mitigation Plans or mitigation activities.

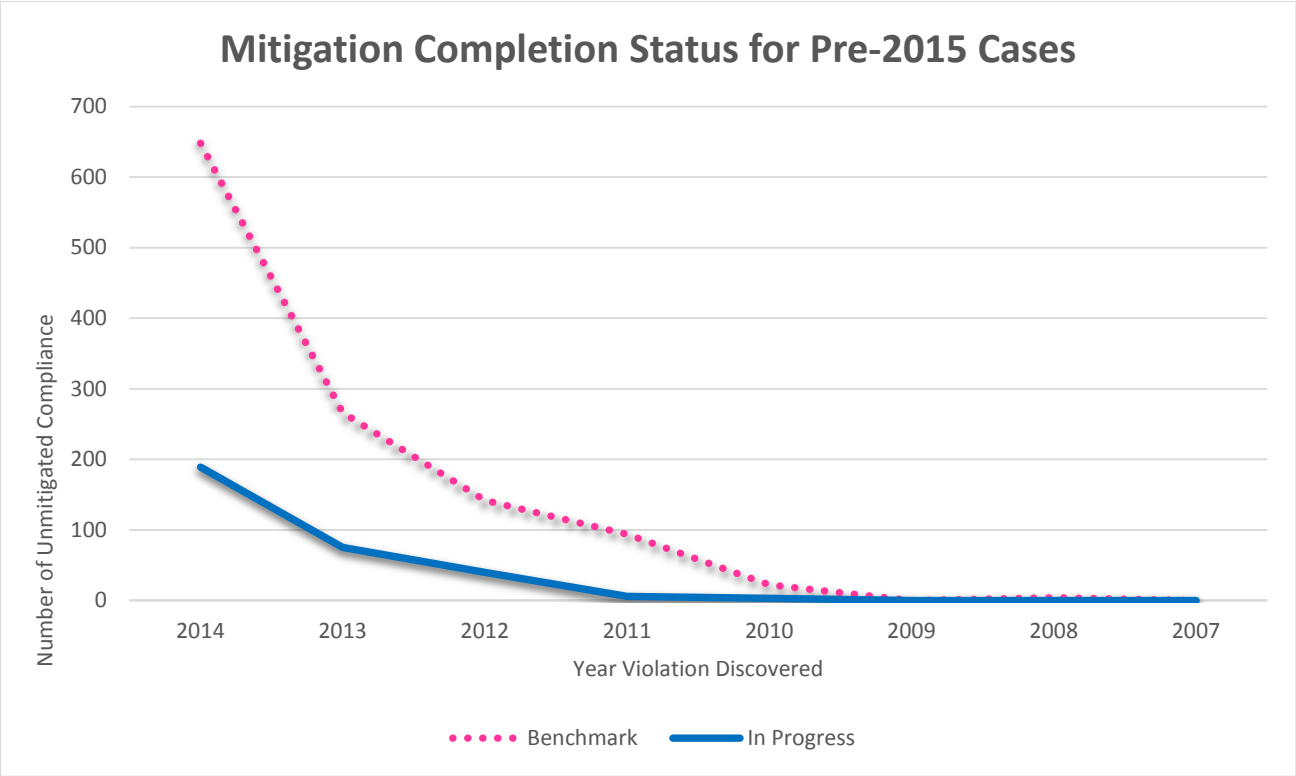


Figure 13: Mitigation Completion Status by Discovery Year

The outstanding mitigation activities from 2010 and before largely involve federal entities that have had limited interaction with their Regional Entities during the pendency of federal litigation related to NERC's ability to assess financial penalties against federal entities. Since the litigation has been resolved in 2014, the Regional Entities have made significant progress in working with the federal registered entities to resolve their noncompliance and associated mitigation.

As of Q4 of 2015, mitigation has been completed for 80.39% of the instances of noncompliance discovered in 2014, which is an increase from 67.90% in Q3 of 2015. NERC met its target of 80% completion of noncompliance discovered in 2014.

The table below shows the ERO Enterprise's targets and thresholds for mitigation activity completion by discovery year of the noncompliance.

Table 4: Mitigation Completion Status Table

Time frame	Required Mitigation	On going	Progress toward the goal	Threshold	Target
2010 and older	4182	3	**99.93%**	**98%**	**100%**
2011	1742	6	**99.66%**	**95%**	**98%**
2012	1461	40	**97.26%**	**90%**	**95%**
2013	1157	75	**93.52%**	**75%**	**80%**
2014	964	189	**80.39%**	**75%**	**80%**

Self-Assessment and Identification of Noncompliance

The ERO Enterprise monitors noncompliance discovery trends and promotes self-identification of noncompliance. The ERO Enterprise has set a target that the registered entities should discover 75% of noncompliance in 2015 through internal discovery methods. In 2015, registered entities self-identified 84% of the instances of noncompliance, resulting in an 8% increase over 2014. Typically, registered entities identify a higher percentage of noncompliance in the first quarter of each year when they conduct internal compliance evaluations and submit self-certification forms to the Regional Entities. In all quarters of 2015, the percentage of internally discovered instances of noncompliance was higher compared to the same periods in 2014. In Q4 of 2015, the registered entities self-identified 86.8% of noncompliance internally, compared to less than 72% in Q4 of 2014. All four quarters of 2015 identified more internally discovered noncompliance than any other compared year.[36]

Registered entities' ability to self-identify noncompliance allows for timely mitigation of such noncompliance, which results in a more timely reduction of risk to the BPS. The ERO Enterprise continues to encourage all registered entities to develop internal processes that would allow them to promptly self-identify and mitigate instances of noncompliance.

[36] Consistent with a decline in the overall number of instances of noncompliance, self-identified or not, the number of reported instances of noncompliance has been on the decline since 2011. In 2011, there were 2,618 total violations discovered; in 2014, there were 1,190; and in 2015, there were 840 violations discovered.

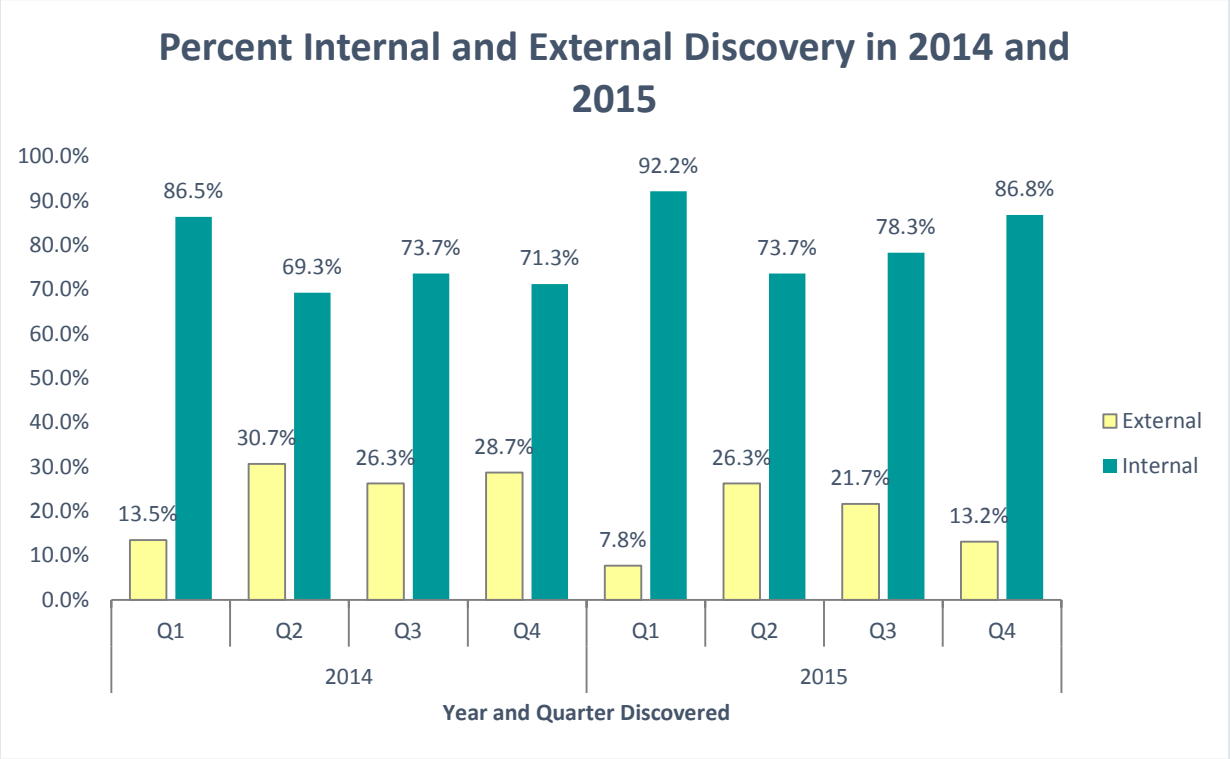


Figure 14: Internal Discovery Increased in 2015 Compared With the Prior Year

Noncompliance Processing Metrics

ERO Enterprise's Pre-2014 Caseload

The ERO Enterprise monitors several measures that relate to the processing of open violations from prior years. Older pre-2014 violations have been a priority for both the Regions and NERC. In 2015, this increased focus continued to be successful as the non-federal entity pre-2014 noncompliance inventory continued to decline, dropping to 44, which is less than the threshold of 65 that was set for 2015.

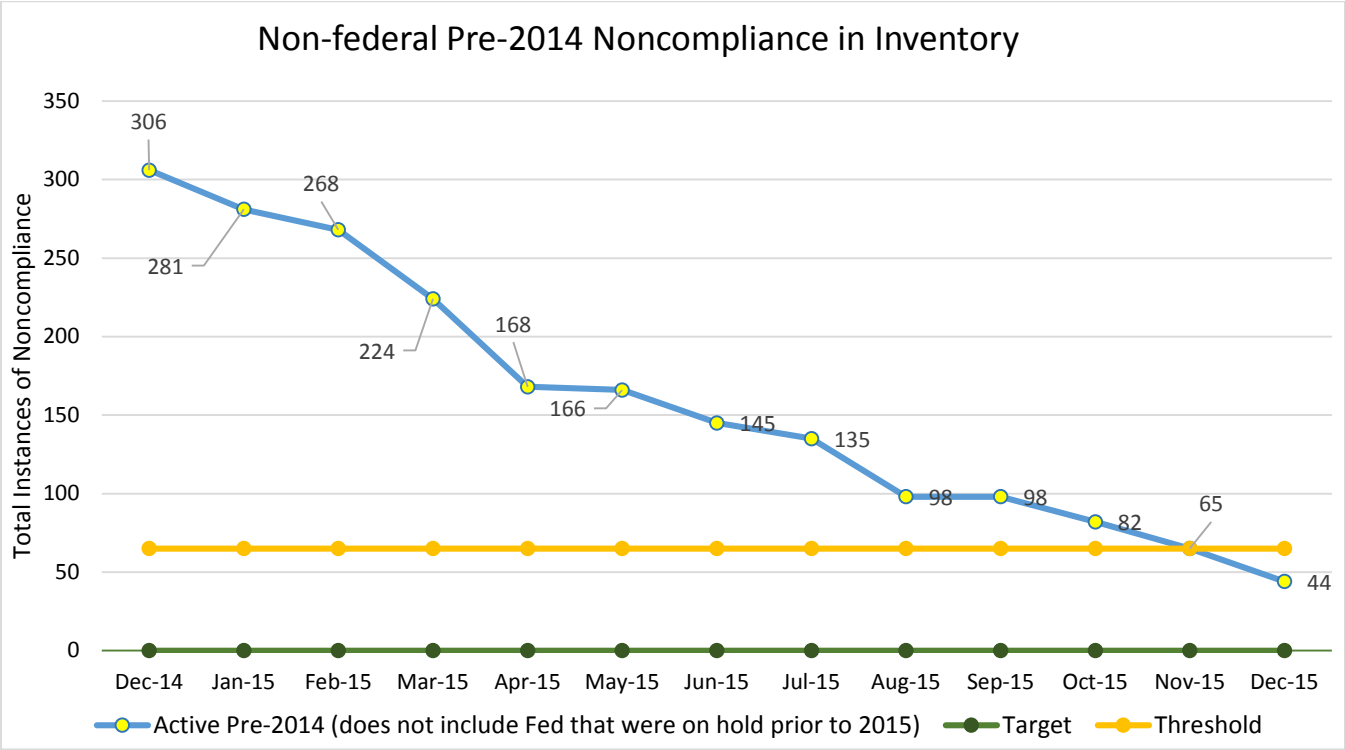


Figure 15: Non-federal Pre-2014 Noncompliance in Inventory Continues to Decline

The inventory for instances of noncompliance related to federal entities is also declining mainly because Regional Entities are currently processing these cases, which were on hold for several years. In Q4 2015, there were no federal entity noncompliance processed but this number is expected decline dramatically in 2016, starting with a high number of violations scheduled for Q1 2016. The majority of federal entity noncompliance relates to large agreement that should be resolved in Q1 2016. Once completed, NERC anticipates a more substantial decrease in the federal entity inventory.

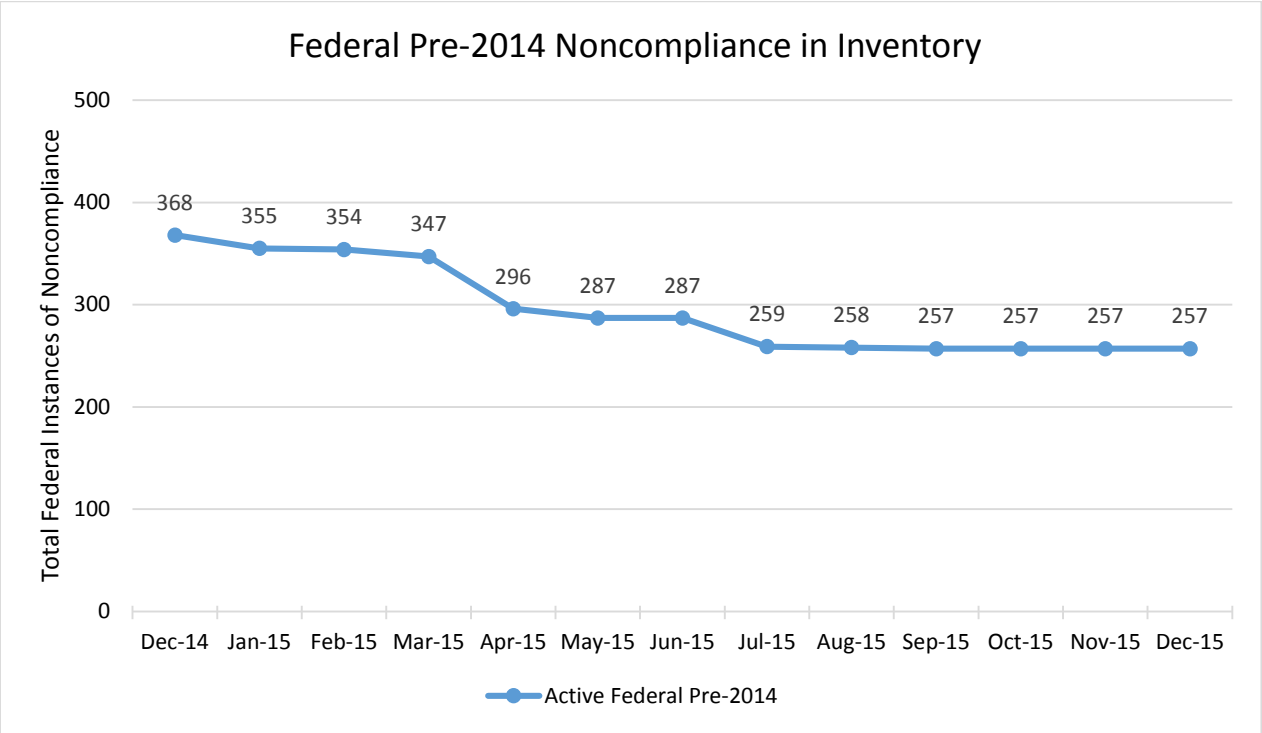


Figure 16: Federal Pre-2014 Noncompliance in Inventory Started Declining in 2015

Average Age of Noncompliance in the ERO Enterprise by Month

The average age of noncompliance continues to fluctuate but remains well below the threshold.

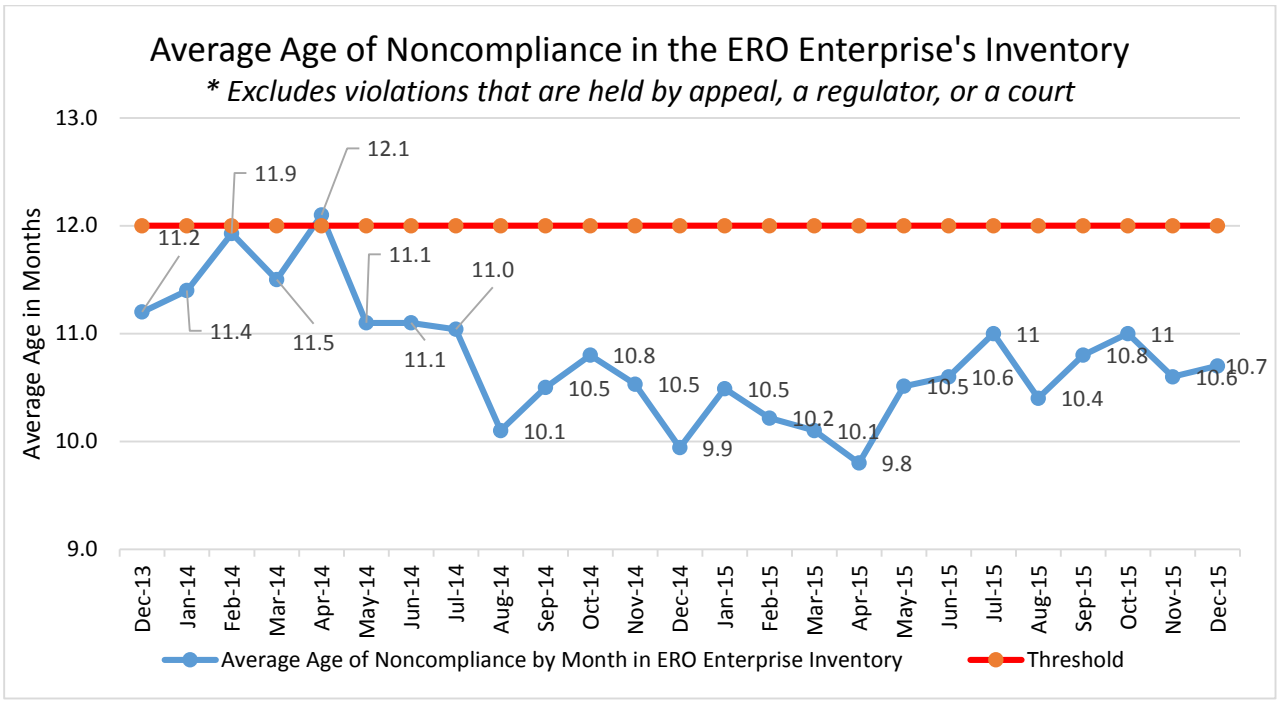


Figure 17: Average Age of Noncompliance in ERO Enterprise's Inventory

Since all Regional Entities began applying the Compliance Exception and FFT disposition tracks to qualifying minimal and moderate risk violations, the average processing time has declined. As shown in Figure 19 below, more than 60% of the inventory of noncompliance for the ERO Enterprise is less than one year old, and only 6% is over two years old.

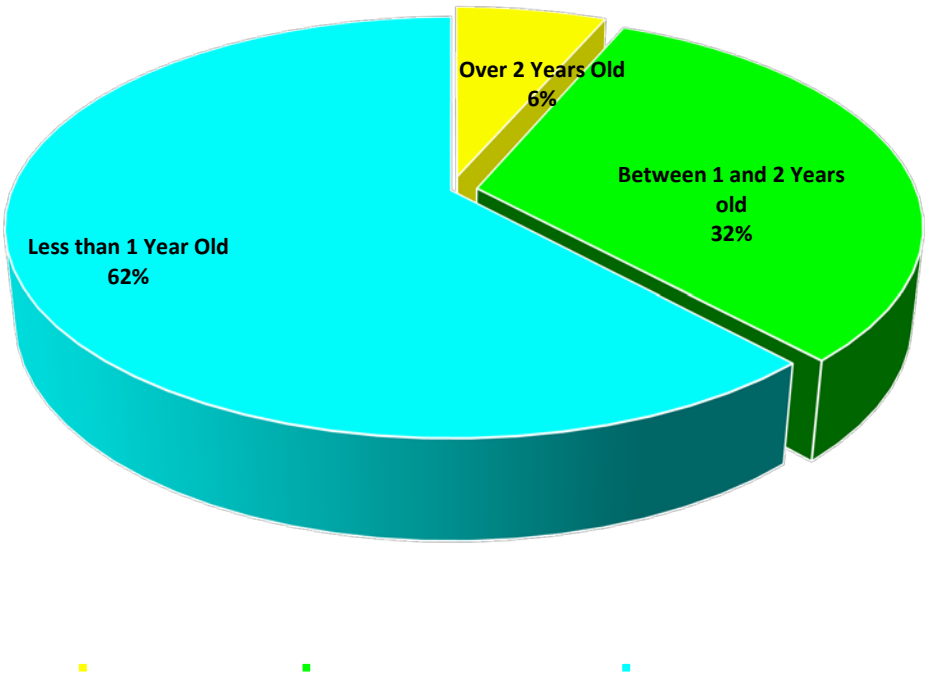


Figure 18: Age of Noncompliance in ERO Enterprise's Inventory