

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Compliance Monitoring and Enforcement Program Quarterly Report

Q3 2020

November 4, 2020

RELIABILITY | RESILIENCE | SECURITY



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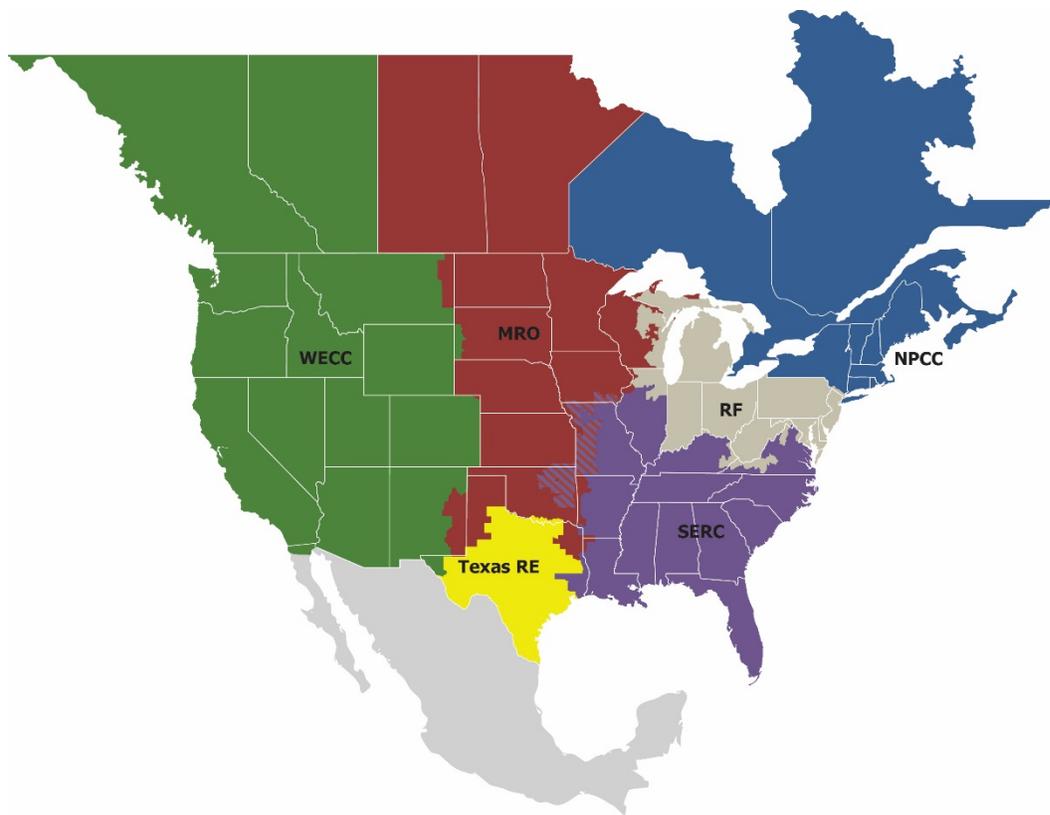
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Preface

Electricity is a key component of the fabric of modern society, and the Electric Reliability Organization (ERO) Enterprise serves to strengthen that fabric. The vision for the ERO Enterprise, which is comprised of the North American Electric Reliability Corporation (NERC) and the six Regional Entities (REs), is a highly reliable and secure North American bulk power system (BPS). Our mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid.

Reliability | Resilience | Security
Because nearly 400 million North Americans are counting on us

The North American BPS is divided into six RE boundaries as shown in the map and corresponding table below. The multicolored area denotes overlap as some load-serving entities participate in one RE while associated Transmission Owners/Operators participate in another.



MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RF	ReliabilityFirst
SERC	SERC Reliability Corporation
Texas RE	Texas Reliability Entity
WECC	Western Electricity Coordinating Council

Executive Summary

This report highlights key ERO Enterprise¹ Compliance Monitoring and Enforcement Program (CMEP) activities that occurred in Q3 2020 and provides information and statistics regarding those activities.

In Q3 2020, CMEP activities throughout the ERO Enterprise reflected continued implementation of a risk-based approach and program alignment. The ERO Enterprise:

- Worked with the Federal Energy Regulatory Commission (FERC or Commission) and Canadian provincial authorities to provide guidance to the industry regarding regulatory discretion during the novel coronavirus (COVID-19) pandemic, posted frequently asked questions from industry regarding such guidance, and temporarily expanded the Self-Logging Program to address minimal and moderate risk potential noncompliance related to registered entities' coronavirus response efforts to allow them to focus on maintaining the reliability of the bulk power system;
- Began implementation of a new process for filing and submittal of CIP noncompliance information to the Commission in which NERC requests that FERC treat the entire filing or submittal as Critical Energy/Electric Infrastructure Information (CEII) and does not publicly post redacted CIP noncompliance information;
- Addressed Commission directives in its order accepting NERC's Five-Year Performance Assessment through proposed revisions to the NERC Rules of Procedure and required compliance filings;
- Continued development of the Align tool and supporting documentation and training materials;
- Continued the rollout of the Centralized Organization Registration ERO System (CORES) tool;
- Filed three Full Notices of Penalty (Full NOPs) and four Spreadsheet Notices of Penalty (SNOPs);
- Monitored RE implementation of Compliance Oversight Plans (COPs) for their registered entities;
- Conducted five remote site-visits to evaluate changed conditions related to organization certification; and
- Processed over 40 registration changes.

¹ The "ERO Enterprise" refers to the affiliation between NERC and the six REs 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.

Chapter 1: CMEP Activities

Coordination between FERC, NERC, and Regional Entities on Potential Coronavirus Impacts

On March 18, 2020, FERC and NERC announced steps to ensure that operators of the bulk electric system could focus their resources on keeping people safe and the lights on during the unprecedented public health emergency posed by the COVID-19 pandemic.² The announcement stated that FERC and NERC were using regulatory discretion to advise all registered entities that they would consider the impact of the coronavirus outbreak in complying with certain Reliability Standards, that REs would postpone on-site audits, certifications, and other on-site activities until at least July 31, 2020, and that FERC and NERC would continue to evaluate the situation. On April 24, 2020, the ERO Enterprise extended its postponement of on-site audits and other on-site activities through September 7, 2020.³

On April 2, 2020, NERC began posting frequently asked questions that NERC and the REs have received from industry regarding the joint NERC-FERC guidance for COVID-19.⁴ On April 17, 2020, the Commission approved NERC's April 6, 2020 motion to defer the implementation of several Commission-approved Reliability Standards that have effective dates or phased-in implementation dates in the second half of 2020 to help ensure grid reliability amid the impacts posed by the COVID-19 pandemic.⁵ On April 24, 2020, NERC informed applicable governmental authorities in Canada of its motion to FERC and FERC's approval of the motion. NERC has offered its assistance to the applicable Canadian governmental authorities in the event they would like to consider a similar or other appropriate delay in the implementation of Reliability Standards scheduled to become effective in each province in whole or in part in the second half of 2020.⁶

On May 28, 2020, the ERO Enterprise released new guidance temporarily expanding the Self-Logging Program to allow all registered entities to self-log instances of potential noncompliance with minimal or moderate risk related to their coronavirus response. While registered entities remain responsible for maintaining compliance with NERC Reliability Standards, this expansion allows them to focus their immediate efforts and resources on maintaining the safety of their workforce and communities to ensure the reliability of the bulk power system during this public health emergency. Under this temporary expansion of the Self-Logging Program, potential noncompliance related to coronavirus impacts logged consistently with this guidance is expected to be resolved without further action.⁷ On August 13, 2020, the ERO Enterprise extended the expiration date of the temporary expansion of the Self-Logging Program to December 31, 2020.⁸

NERC and the REs continue to monitor the COVID-19 pandemic and will work with registered entities, the Commission, applicable governmental authorities in Canada, and other partners to ensure the reliability and security of the grid.

² Joint FERC and NERC Press Release, *FERC, NERC Provide Industry Guidance to Ensure Grid Reliability Amid Potential Coronavirus Impacts*, available at <https://www.nerc.com/news/Headlines%20DL/FERC%20NERC%20031820%20final.pdf>.

³ NERC Press Release, *ERO Enterprise Opts to Extend On-Site Activity Deferral*, available at <https://www.nerc.com/news/Pages/ERO-Enterprise-Opts-to-Extend-On-Site-Activity-Deferral.aspx>.

⁴ *COVID-19 ORC and CMEP Frequently Asked Questions*, available at https://www.nerc.com/pa/comp/CAOneStopShop/COVID19_ORC_CMEP%20FAQs_Posted.xlsx.

⁵ Order Granting Deferred Implementation of Certain NERC Reliability Standards (April 17, 2020), available at <https://www.nerc.com/FilingsOrders/us/FERCOrdersRules/order%20granting%20motion%20to%20defer%20the%20implementation%20date.pdf>.

⁶ NERC Canadian Filings, available at <https://www.nerc.com/FilingsOrders/ca/Pages/default.aspx>.

⁷ *ERO Enterprise Guidance: Potential Noncompliance Related to Coronavirus Impacts*, available at <https://www.nerc.com/pa/comp/CAOneStopShop/ERO%20Enterprise%20Guidance%20Potential%20Noncompliance%20Related%20to%20Coronavirus%20Impacts.pdf>.

⁸ *Id.*

Compliance Monitoring During Pandemic Conditions

The ERO Enterprise continues to perform compliance monitoring engagements off-site using video and audio conference technologies. The ERO Enterprise scopes the compliance monitoring engagements using a risk-based framework and conducts operator interviews via web conferences and/or telephone communications. For cases where the ERO Enterprise typically conducts walk-through assessments, compliance monitoring staff are determining whether further analysis is required when the pandemic conditions no longer exist or if the registered entity provided sufficient evidence during the off-site review for reasonable assurance of compliance. For instances where the ERO Enterprise identifies high-risk areas that cannot be sufficiently reviewed off-site, the ERO Enterprise will schedule additional compliance monitoring engagements for the registered entity in 2021 or 2022, as conditions permit.

Certification Engagements During Pandemic Conditions

The ERO Enterprise continues to perform certification engagements (certifications and certification reviews) off-site, or “virtually on-site,” using video and audio conference technologies. The ERO Enterprise scopes the certification engagements to evaluate an entity’s Reliability Coordinator, Balancing Authority, and Transmission Operator capabilities using a risk-based approach. Engagements include tours (walk-through assessments) of control center facilities, Energy Management System (EMS) functionality demonstrations, and interviews with key entity O&P and CIP personnel. The ERO Enterprise has employed secure web-based applications and ‘live’ camera feeds, as appropriate; to establish a ‘virtual’ environment to accomplish what normally would have required a physical presence at the entity’s facilities. The successful use of the available technology has prompted consideration for continued use of this approach, when pandemic conditions no longer exist, for engagements with entities that pose a lower risk or are located in remote areas where travel constraints may be an issue.

Joint Staff White Paper on Notices of Penalty Pertaining to CIP Violations

On September 23, 2020, FERC and NERC released a Second Joint Staff White Paper on Notices of Penalty Pertaining to Violations of Critical Infrastructure Protection Reliability Standards (Second Joint Staff White Paper) regarding the disclosure of information related to violations of the CIP Reliability Standards.⁹ In the Second Joint Staff White Paper, FERC and NERC determined that their initial proposal in the August 27, 2019 First Joint Staff White Paper was insufficient to protect the security of the BPS. NERC and the Regional Entities share FERC’s and industry’s goal of protecting the security of the BPS. Going forward, NERC will file or submit CIP noncompliance information with a request that the entire filing or submittal be treated as CEII and Commission staff will maintain the confidentiality of such filings of submittals by designating them as CEII in their entirety. In addition, NERC will no longer publicly post redacted versions of CIP noncompliance filings and submittals because of the risk associated with the disclosure of CIP noncompliance information. NERC will continue to report CIP noncompliance statistics to the public in its quarterly and annual CMEP reports, which are available on NERC’s website. In order to share lessons learned and help assure the effective and efficient reduction of risks to the reliability and security of the BPS, NERC will also provide information on CIP noncompliance to registered entities via a secure website.

FERC Order on Five-Year Performance Assessment

On July 22, 2019, NERC filed its Five-Year Electric Reliability Organization Performance Assessment (Performance Assessment). On January 23, 2020, the Commission issued an order accepting the NERC Performance Assessment, finding that NERC and the REs continue to satisfy their applicable statutory and regulatory criteria.¹⁰ In its order, the Commission directed NERC to submit two compliance filings to provide additional information and address specific matters discussed in the order, including several areas of improvement related to the CMEP. Specifically, the Commission sought clarification or improvements in the areas of: 1) periodic audits of REs’ compliance with the

⁹ *Second Joint Staff White Paper on Notices of Penalty Pertaining to Violations of Critical Infrastructure Protection Reliability Standards*, Docket No. AD19-18-000 (September 23, 2020, available at https://www.ferc.gov/sites/default/files/2020-09/Second%20Joint%20White%20Paper_CIP%20NOP%20Confidentiality_09.23.2020_AD19_18_000_0.pdf).

¹⁰ Order on Five-Year Performance Assessment (January 23, 2020), available at <https://www.nerc.com/FilingsOrders/us/FERCOrdersRules/Order%20on%20Five-Year%20Performance%20Assessment.pdf>.

CMEP; 2) NERC’s reliability and security guidance document process; 3) the NERC Sanction Guidelines used to develop penalties for noncompliance with the Reliability Standards; and 4) the NERC certification process.

On April 2, 2020, the Commission issued a notice stating that, due to the emergency conditions related to COVID-19, NERC would be granted an extension to comply with the Commission’s directives in the January 23 Order, extending the deadline for the first compliance filing to June 1, 2020 and the second compliance filing to September 28, 2020.¹¹ On June 1, 2020, NERC submitted its first compliance filing in response to the Commission order, addressing NERC oversight of Regional Entities and the NERC guidance development process, among other topics, and provided an update regarding revisions to the NERC Rules of Procedure.¹² On September 28, 2020, NERC submitted its second compliance filing with the Commission, addressing proposed revisions to the registration and certification processes and Sanction Guidelines, among other topics.¹³

Align Project and ERO Secure Evidence Locker

In Q3 2020, the Align project team continued its scheduled activities, including the first round of data validation testing, data integration and reporting efforts, and developing training materials. This work will continue throughout 2020. The Align project team conducted outreach with NERC and Regional Entities to discuss the rollout strategy, training, and readiness for Release 1 and prepare for business process changes that NERC and the REs will need to implement in advance of Release 1 going live. The Align project team is finalizing the materials for use in training in Q4 2020 with NERC and Regional Entity staff.

The Align project team also completed the functional design for Release 2, which will focus on Periodic Data Submittals, Self-Certifications, and Technical Feasibility Exceptions and conducted a demo of the functionality of the Self-Certification design. In addition, the project team continued with design work for the ERO Secure Evidence Locker (SEL), which is designed to facilitate the secure submission, review, and retention of evidence generated in connection with CMEP activities and will be hosted by NERC. The project team continues to work on the ERO Enterprise CMEP policy for the audit process and has identified initial use cases for the ERO SEL.

In addition, the project team began work on the final business process harmonization effort for compliance planning. No enterprise-wide tool supports this business process today. This functionality will be part of Release 3 in Q4 2021, which will encompass the entire audit function in Align.

In Q3 2020, the Align project team conducted extensive outreach to keep industry apprised of the status of the Align project. This outreach included updates in the NERC News¹⁴ and Align newsletters.¹⁵ The ERO Enterprise conducted

¹¹ Notice of Extension of Time (April 2, 2020), available at https://www.nerc.com/FilingsOrders/us/FERCOOrdersRules/20200402_Notice%20of%20Extension%20of%20Time_RR19-7-000.pdf.

¹² Compliance Filing of the North American Electric Reliability Corporation in Response to the Order on the Five-Year Performance Assessment, available at https://www.nerc.com/FilingsOrders/us/NERC%20Filings%20to%20FERC%20DL/Performance%20Assessment%20Compliance%20Filing_PUBLIC.pdf.

¹³ Second Compliance Filing of the North American Electric Reliability Corporation in Response to the Order on the Five-Year Performance Assessment, available at <https://www.nerc.com/FilingsOrders/us/NERC%20Filings%20to%20FERC%20DL/Second%20Compliance%20Filing%20on%20Five-Year%20Order.pdf>.

¹⁴ June 2020 NERC News (posted July 1, 2020) at p. 6, available at <https://www.nerc.com/news/newsletters/Newsletters/NERCNews-2020-06%20NEW.pdf>; July 2020 NERC News at p. 6 (posted August 3, 2020), available at <https://www.nerc.com/news/newsletters/Newsletters/NERCNews-2020-07.pdf>; August 2020 NERC News (posted September 1, 2020) at pp. 6-7, available at <https://www.nerc.com/news/newsletters/Newsletters/NERCNews-2020-08.pdf>.

¹⁵ Align: Registered Entity Newsletter (August 2020), available at https://www.nerc.com/ResourceCenter/Align%20Documents/Align%20Registered%20Entity%20Newsletter_August%202020.pdf; Regional Entity Newsletter (August 2020), available at https://www.nerc.com/ResourceCenter/Align%20Documents/Align%20Regional%20Entity%20Newsletter_August%202020.pdf.

a registered entity testing exercise with 44 testers from 20 different registered entities in July 2020, in which registered entity representatives were able to execute business scenarios related to self-reporting, mitigation, and enforcement-related workflows and business rules, and registered entity dashboards and notifications, and previewed various Align training materials.¹⁶ NERC has also set up a training site for Align and other tools that provide training for NERC, Regional Entity, and registered entity staffs on a variety of topics related to the use of Align.¹⁷ Finally, on October 29, 2020, the Align project team will host a public 30-minute stakeholder webinar to answer questions regarding registered entity self-built SELs.¹⁸

Harmonization of ERO Enterprise Practices Around Internal Controls

The ERO Enterprise continues harmonization efforts around internal controls to further align ERO Enterprise practices related to evaluating internal controls of as part of compliance monitoring activities. The harmonization efforts focus on the following topics:

- Approaches for testing, design, and implementation of internal controls during compliance monitoring activities;
- Documenting results of internal control evaluations and providing feedback to registered entities; and
- Incorporating internal control evaluations from compliance monitoring activities into revised COPs.

In 2019, the ERO Enterprise revised the COP process, which tailors compliance monitoring activities based on entity-specific factors such as compliance history and events, with an emphasis on understanding an entity's internal controls and other performance factors. REs have implemented the revised COP process throughout 2020. As discussed above, the ERO Enterprise has focused, in part, the internal control harmonization efforts on knowledge transfer between internal control evaluations performed during compliance monitoring activities and the COP.

CORES Project

CORES is now available for all registered entities to perform registration activities and new entities may use CORES to register for an NERC Compliance Registry (NCR) ID. In Q3 2020, ERO Enterprise staff, specifically CORES power users, reviewed the xRM software application and worked to identify areas that could improve the ERO Enterprise user experience related to reporting, notifications and processing requests.

In Q1, the ERO Enterprise sent a survey to a small group of registered entity users that had been given access to CORES. Now that all registered entities have been granted access to CORES, NERC will send the same survey to a broader group of registered entities in Q4 2020. NERC notified registered entities in Q3 that the survey would be coming via the Compliance Bulletin. The results of the survey, along with the power user review, will guide future CORES software updates, including updates in xRM and the ERO Portal.

On October 1, 2020, NERC released updates to the ERO Portal and CORES that will assist NERC in collecting Geomagnetic Disturbance (GMD) data within the ERO Portal in 2021. In particular, the Entity Administrator role has been deployed in order to allow individuals with this access level to assign roles within CORES and Align, as well as GMD and MIDAS. This update will improve the user experience with permissions, notifications and user web roles.

Upcoming Compliance Assurance and Enforcement Oversight Activities

In 2020, NERC will perform a review to identify areas of improvement and opportunities to document audit findings and recommendations consistently to ensure that the REs capture and document relevant information in a way to reduce administrative and procedural burdens on all CMEP staff. The objective of this oversight activity is to ensure

¹⁶ Align: Registered Entity Newsletter (August 2020) at pp. 2-3, available at https://www.nerc.com/ResourceCenter/Align%20Documents/Align%20Registered%20Entity%20Newsletter_August%202020.pdf.

¹⁷ NERC Systems Training, available at <https://training.nerc.net/>.

¹⁸ Information regarding the October 29, 2020 webinar is available at <https://www.nerc.com/ResourceCenter/Pages/CMEPTechnologyProject.aspx>.

that compliance monitoring staff are capturing details consistently across the REs and that relevant information that is identified in the engagements is also provided to the Risk Assessment and Mitigation (RAM) and Enforcement groups to be used for other CMEP activities (i.e. Enforcement proceedings, COPs, etc.). The outputs of compliance monitoring engagements should be comprehensive enough to be useful for subsequent activities in the CMEP areas.

NERC has selected specific entities in each RE from its 2019 observed compliance monitoring engagements that had potential noncompliances (PNCs) identified. In Q3 2020, NERC sent notification letters to the REs to request auditor work papers, related evidence, and enforcement documentation for the review. NERC groups will conduct an internal assessment and review the work papers and evidence to ensure that the documentation supports the PNCs that the RE identified during the observed audits and is consistent with the observation. NERC will also identify areas for enhanced alignment across the REs in documentation of PNCs. The review will also identify possible gaps in the documentation, which will help reduce the administrative burden of sending requests for information (RFIs) to create a more comprehensive work product. NERC will complete this review and conduct a webinar in Q4 to share the results with the REs. The REs will implement the results and recommendations in audit work papers going forward in conjunction with the new Align tool.

Program Alignment

The ERO Enterprise is enhancing alignment of CMEP activities under a broader ERO Enterprise Program Alignment Process (Program Alignment).¹⁹ In Q3 2020, NERC staff closed four alignment issues pertaining to CMEP practice guides. Currently, there are three CMEP Practice Guides in-progress, of which two are scheduled to be completed by the end of 2020, and one is scheduled to be completed in 2021.

Coordinated Oversight Program

The purpose of the Coordinated Oversight Program is to increase efficiency and eliminate unnecessary duplication of compliance monitoring and enforcement activities for Multi-Region Registered Entities (MRREs). A registered entity operating in or owning assets in two or more REs' jurisdictions with one or more NERC Compliance Registry (NCR) identification number is a potential candidate for inclusion in the voluntary Coordinated Oversight Program. In connection with the program, the ERO Enterprise takes into account reliability considerations such as, but not limited to, a registered entity's registered functions, load and generation capacity, transmission assets, and transmission and generation control centers.

In Q3 2020, the ERO Enterprise approved four additional MRREs for entry into the Coordinated Oversight Program, increasing the total count of registered entities participating to 229.²⁰

Enforcement Streamlining Project

NERC and the REs have been working on a Risk Alignment and Streamlining Project to create a more streamlined method for processing noncompliance, particularly minimal risk noncompliance, which represent the majority of noncompliance across the ERO Enterprise. One key aspect of the project is to find ways to reduce the time it takes to make a risk determination and then use existing risk-based processes to process the noncompliance appropriately. In Q3 2020, the project team worked on documenting consistent criteria and processes for risk assessment and related topics for use across the ERO Enterprise. Ultimately, the ERO Enterprise intends to share many of the lessons learned from this effort with industry to allow registered entities to provide relevant and useful information to the REs in a timely manner.

¹⁹ <http://www.nerc.com/pa/comp/Pages/EROEnterProAlign.aspx>

²⁰ Appendix B includes further information on the MRREs participating in the Coordinated Oversight Program.

Chapter 2: RE Oversight

Enforcement Oversight

Serious Risk Violations

In Q3, NERC filed three Full NOPs with FERC resolving more than nine violations of the NERC Reliability Standards, with penalties totaling more than \$430,000. The Full NOPs filed in Q3 2020 addressed six serious and three moderate risk violations, including:

- A failure to properly authenticate and protect certain Cyber Assets from Interactive Remote Access;
- A failure to implement a security patch management process;
- A failure to establish an Operating Plan in which the entity would continue to meet its functional obligations in the event that one of its primary control centers lost functionality and to have backup functionality sufficient to maintain compliance with all Reliability Standards applicable to a primary control center functionality;
- A failure to have Facility Ratings consistent with associated Facility Ratings Methodology; and
- A failure to staff Real-time operating positions performing TOP reliability-related tasks and implement training programs for System Operators.

Spreadsheet NOPs

In Q3 2020, NERC filed four SNOPs that included seven violations of NERC Reliability Standards and carried a total combined penalty of \$36,500. Six of the violations were violations of the CIP Reliability Standards, while the remaining one was a violation of Operations and Planning (O&P) Reliability Standards.

Annual Find, Fix, Track, and Report and Compliance Exception Programs Review

In Q1 2020, NERC completed its review of the documentation provided by the REs for the FY2019 Annual Find, Fix, Track, and Report and CE Survey that NERC jointly conducts with FERC. In Q2, NERC issued RFIs to the REs and shared the final feedback with the REs. In Q4 2020, NERC will be issuing a final report that it will file with FERC.

Compliance Monitoring Oversight

NERC Oversight

In Q3 2020, NERC executed monitoring oversight activities planned for 2020. These activities include the following:

- RE-specific follow-up related to prior oversight recommendations,
- Planned audit observation activities, and
- Recurring oversight coordination specific to ERO Enterprise efforts around COP enhancement and alignment during 2020.

Compliance Oversight Plans

During Q3 2020, REs continue to develop COPs using results of the Inherent Risk Assessment (IRA) and performance considerations such as internal controls, mitigation plans, compliance history, event analysis trends, or other regional considerations to identify key risks. COPs include the NERC Reliability Standards and Requirements associated with identified risks, the targeted interval of monitoring activities, and the type of CMEP tools (such as Compliance Audit, Spot Check, or Self-Certification). NERC will continue to monitor development of COPs throughout the remainder of 2020 to ensure ERO Enterprise alignment.

Certification

Q3 2020 Certification Completions

In accordance with the March 18, 2020 FERC and NERC announcement providing guidance to ensure grid reliability amid potential coronavirus impacts, the ERO Enterprise conducted no in-person, certification site visits in Q3 2020 and has no in-person certification site visits scheduled for the fourth quarter, though virtual certification reviews are scheduled for Q4 2020. During Q3 2020, the ERO Enterprise completed the review of two EMS changes and four Control Center relocations, and evaluated (but declined to further review) one EMS modification and one Control Center relocation. The ERO Enterprise initiated eight other reviews. The ERO Enterprise is processing for certification one new Transmission Operator and one new Reliability Coordinator (registered as responsible for certain standard requirements in coordinated functional registration with an existing RC). Appendix D provides a breakdown by RE.

Registration

In Q3 2020, NERC processed 43 Registration changes, of which 23 were functional activations and 20 were functional deactivations. Of the 20 functional deactivations:

- Five were where compliance responsibility was assumed by another registered entity,
- Two were sold to another registered entity,
- Four were determined not to meet registration criteria, and
- Nine were consolidated into a mutually owned registered entity.

BES Exception Requests

In Q3 2020, NERC completed one Exception Request and expects to complete two other Exception Requests currently under review in Q4 2020.

Chapter 3: ERO Enterprise Performance Objectives

Priorities for 2020

To guide CMEP Activities throughout 2020, NERC identified the following key objectives in support of the ERO Enterprise Operating Plan goal of risk-informed Entity Registration, Compliance Monitoring, Mitigation, and Enforcement:

- Provide training and education to RE CMEP staff to enhance the ERO Enterprise work products (e.g., work papers);
- Continue to focus on program alignment, including consistency efforts on non-monetary penalties, mitigation, coordinated oversight for MRREs, training exercises, technical training, documentation, and risk assessments;
- Monitor the progress of the ERO Enterprise's enforcement streamlining efforts by examining the balancing of efficient resolution of minimal risk noncompliance with timely, comprehensive resolution of higher risk violations;
- Begin rollout of new COPs for engagements in 2020;
- Continue to focus on how registered entities have mitigated reliability and security risks while achieving compliance with the Reliability Standards, including applicable internal controls; and
- File proposed revisions to the NERC ROP, specifically around the CMEP and ORCP, with FERC for approval.

Appendix A: Enforcement

Information regarding the ERO Enterprise’s Enforcement activities and metrics is provided below, focusing on noncompliance inventory; identification, mitigation, disposition, and risk of noncompliance; and vegetation management.

Noncompliance Inventory

Open Noncompliance in the ERO Enterprise Inventory

The ERO Enterprise’s open noncompliance inventory consists of noncompliance reported to or identified by the REs or NERC that has not yet been processed by filing with FERC (Full NOPs and SNOPs), public posting on the NERC website (FFTs and CEs), or being dismissed. As of Q3 2020, approximately 22 percent of the open inventory is from 2018 or earlier, compared to approximately 28 percent in Q2 2020 and 36 percent in Q1 2020.

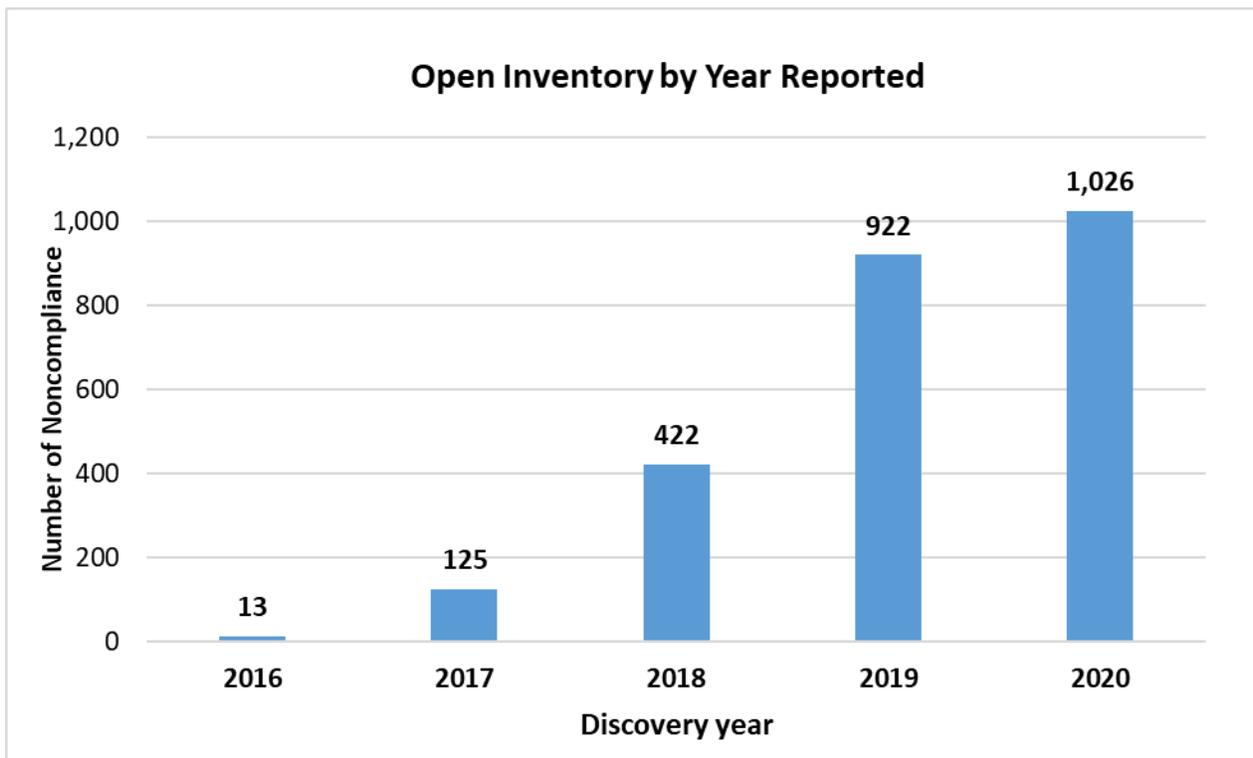


Figure A.1 ERO Enterprise’s Inventory by Year Reported

Reported Age of Noncompliance in ERO Enterprise Inventory

Figure A.2 shows the age of all open noncompliance in the ERO Enterprise inventory. As of Q3 2020, the age of all open noncompliance in the ERO Enterprise inventory has seen a slight decrease in the percentage of open noncompliance under one year old, and a corresponding increase in the percentage of open noncompliance between one and two years old, and over two years old as compared to the figures reported for Q1 2020. The percentage of noncompliance in inventory that was less than one year old dropped from 55% in Q1 to 50% in Q3. The percentage of noncompliance in inventory between one and two years old increased from 29% in Q1 to 31% in Q3 and the percentage of noncompliance in inventory over two years old increased from 16% in Q1 to 19% in Q3. Information about mitigation of the oldest noncompliance in inventory can be found in the “Mitigation of Noncompliance” discussion below.

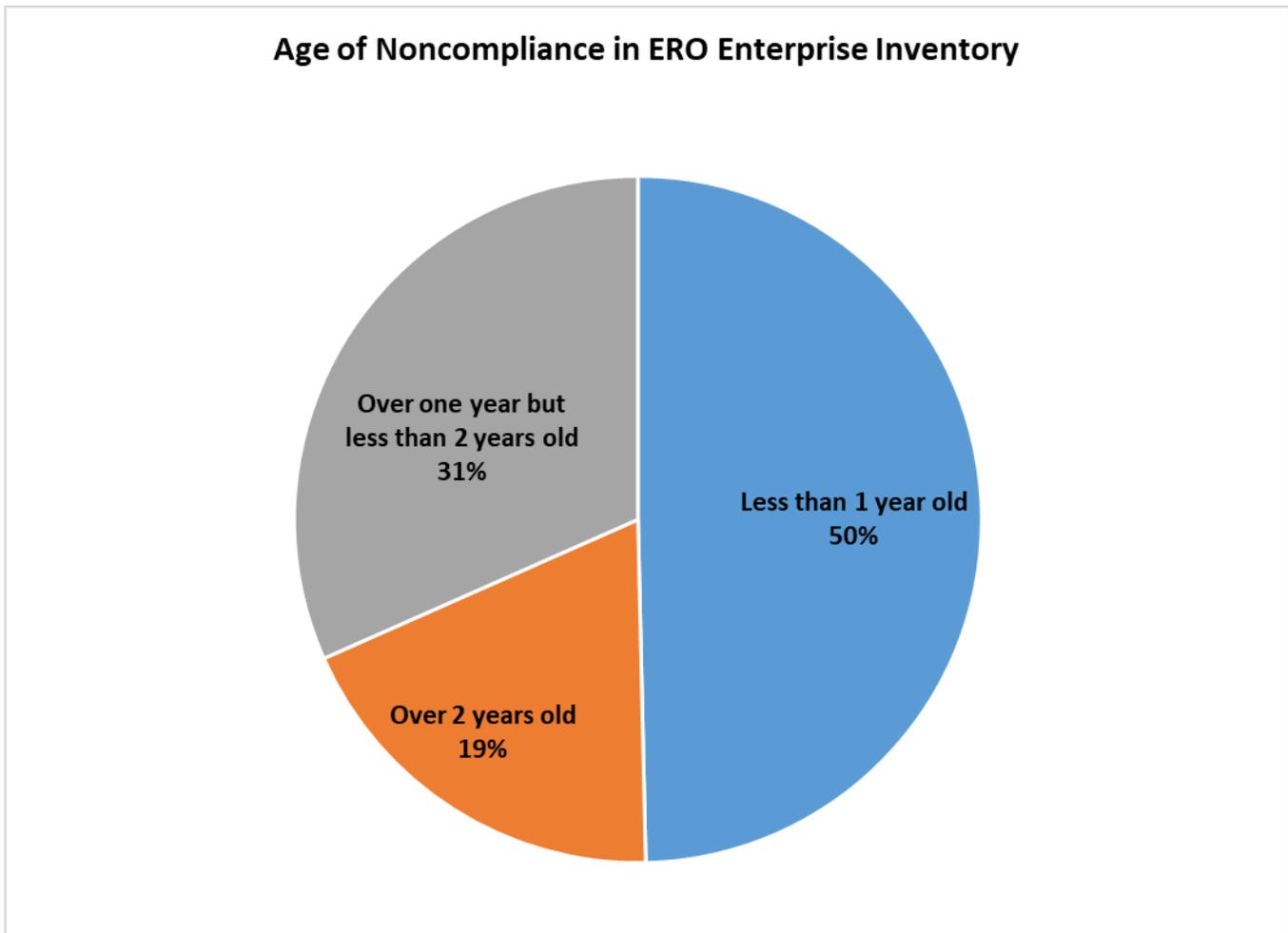


Figure A.2: Age of Noncompliance in ERO Enterprise’s Inventory

Average Age of Noncompliance in the ERO Enterprise Inventory

Figure A.3 shows that the average age of noncompliance in the ERO Enterprise’s inventory at the end of Q3 2020 was 14.1 months.²¹ The increase in the average age of noncompliance in the ERO Enterprise inventory over the last few years has been driven, in large part, by new Reliability Standards with phased implementation plans becoming effective and more registered entities having to comply with Versions 5 and 6 of the CIP Standards, along with the increased technical analysis needed to process noncompliance involving these newer Reliability Standards. The ERO Enterprise’s efforts to streamline its noncompliance processing, particularly for minimal risk noncompliance, should help reduce the average age of noncompliance in the ERO Enterprise inventory when fully implemented.

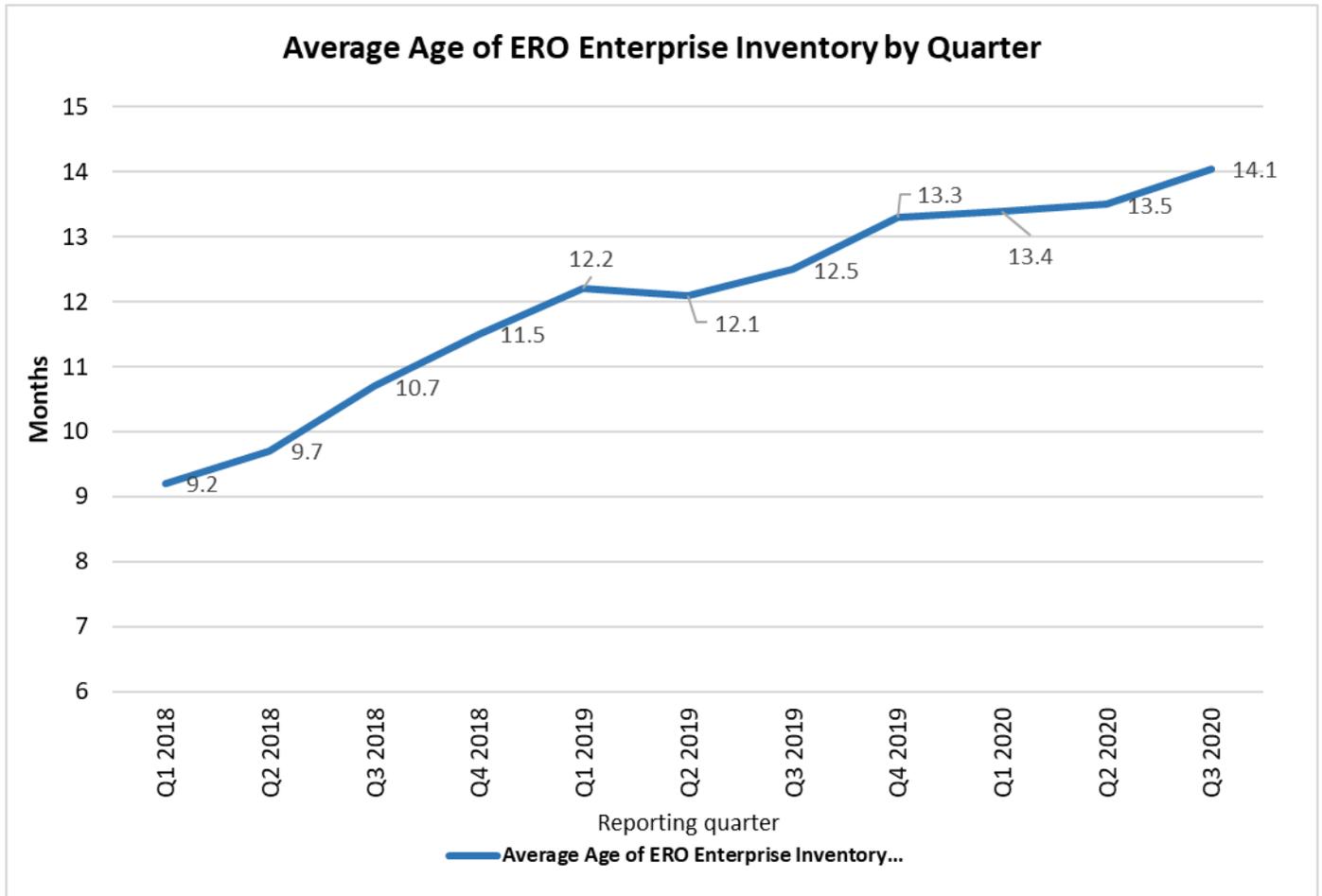


Figure A.3: Average Age of Noncompliance in the ERO Enterprise Inventory

²¹ The age of noncompliance runs from the time the noncompliance is identified to the time it is resolved (e.g., through CE, FFT, SNOP, or Full NOP processing).

Identification of Noncompliance

Number of New Noncompliance Discovered in Q1-Q3 2020

Figure A.4 shows the number of new noncompliance discovered in Q1-Q3 2020 compared to the total number of noncompliance discovered in prior years.

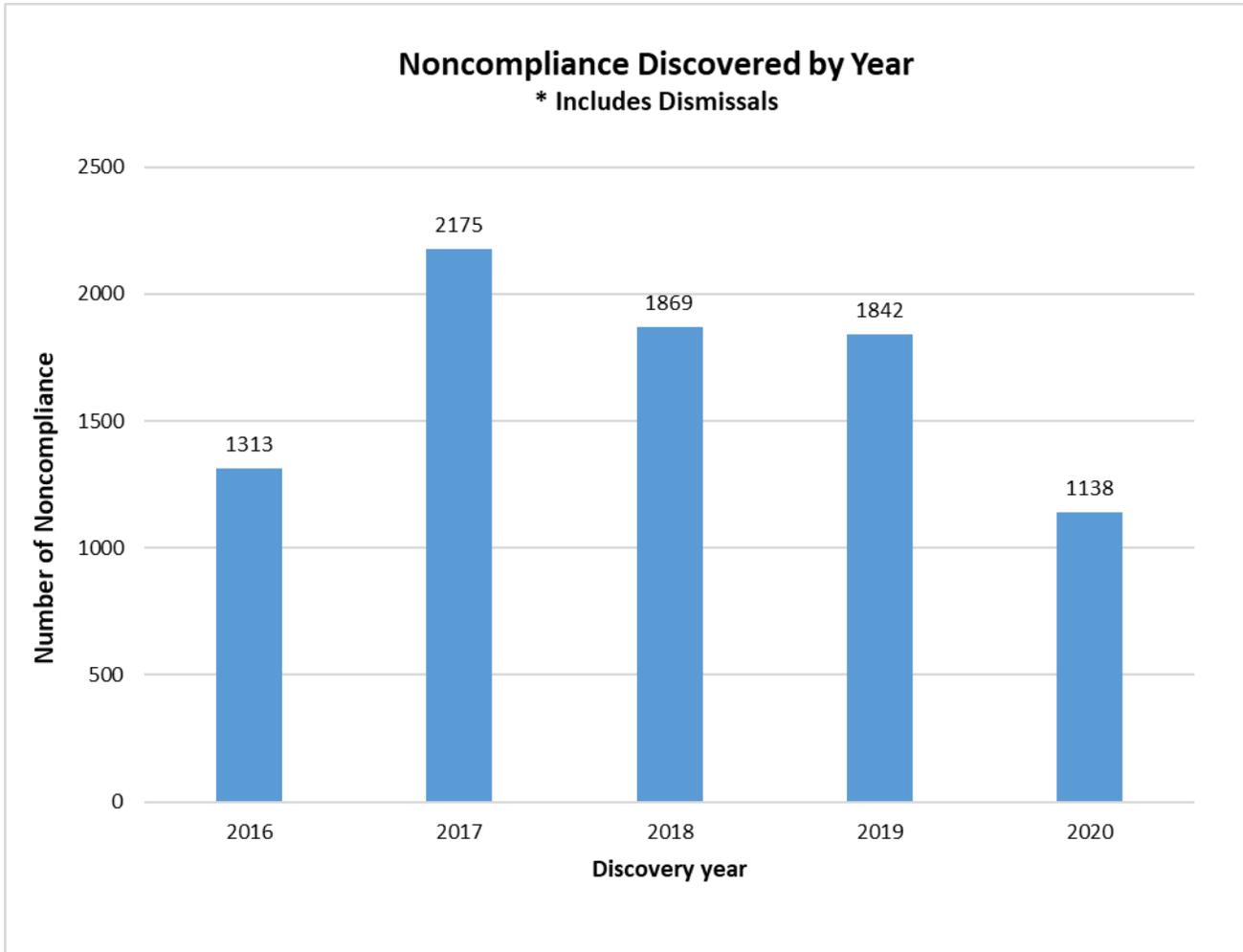


Figure A.4: Noncompliance Discovered by Year

Self-Assessment and Self-Identification of Noncompliance

Figure A.5 illustrates registered entities' internal and external identification of noncompliance by year. Self-Reports and Self-Certifications are treated as internal identification of noncompliance, while Compliance Audits, Spot Checks, and all other methods of discovery are treated as external identification of noncompliance. Figure A.6 shows the percentage of noncompliance by discovery method over the last four quarters.

A comparison of Figures A.5 and A.6 shows that despite quarterly variations, the overall split between internal and external discoveries remains in line with past annual trends.

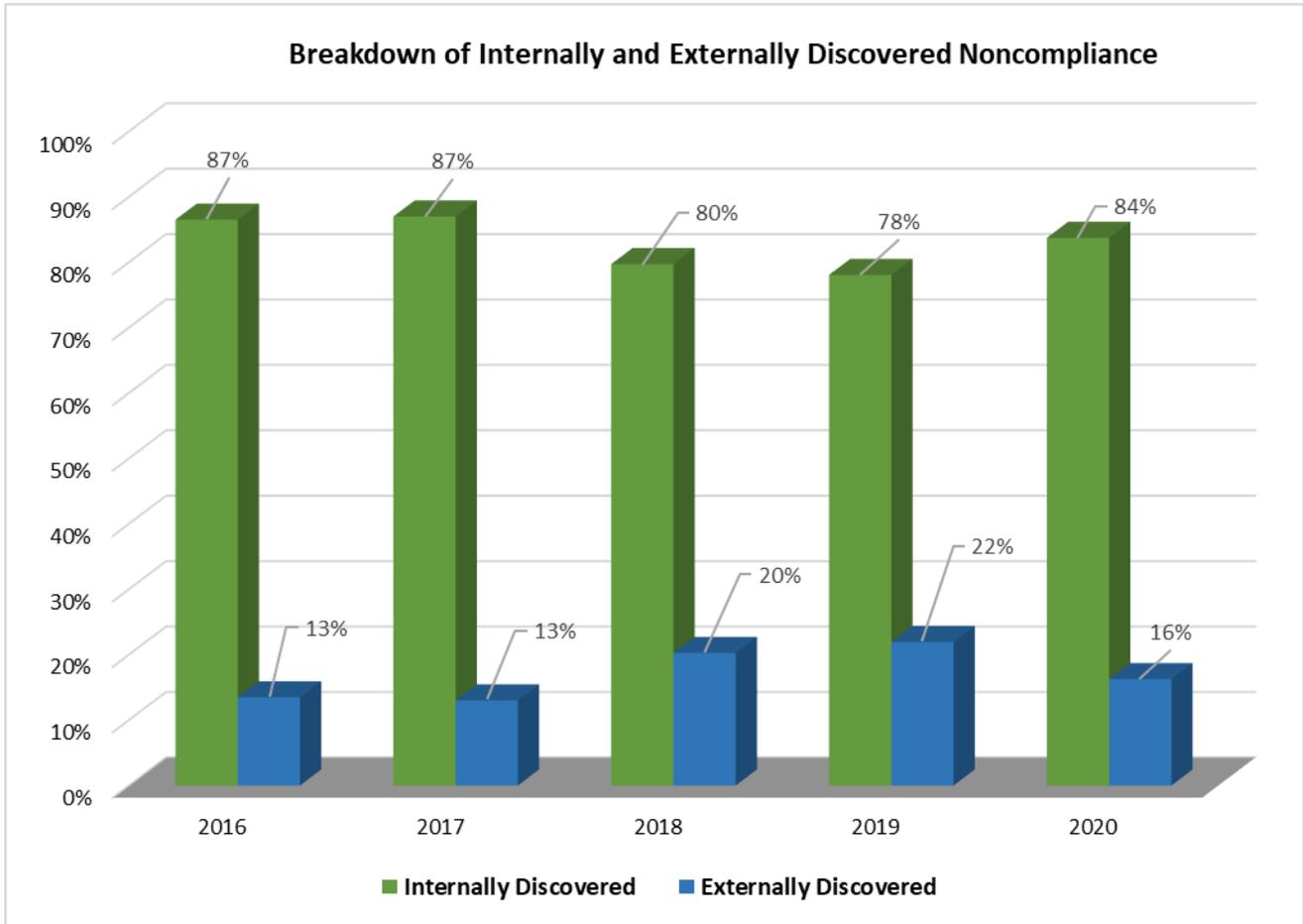


Figure A.5: Breakdown of Internally and Externally Discovered Noncompliance by Year

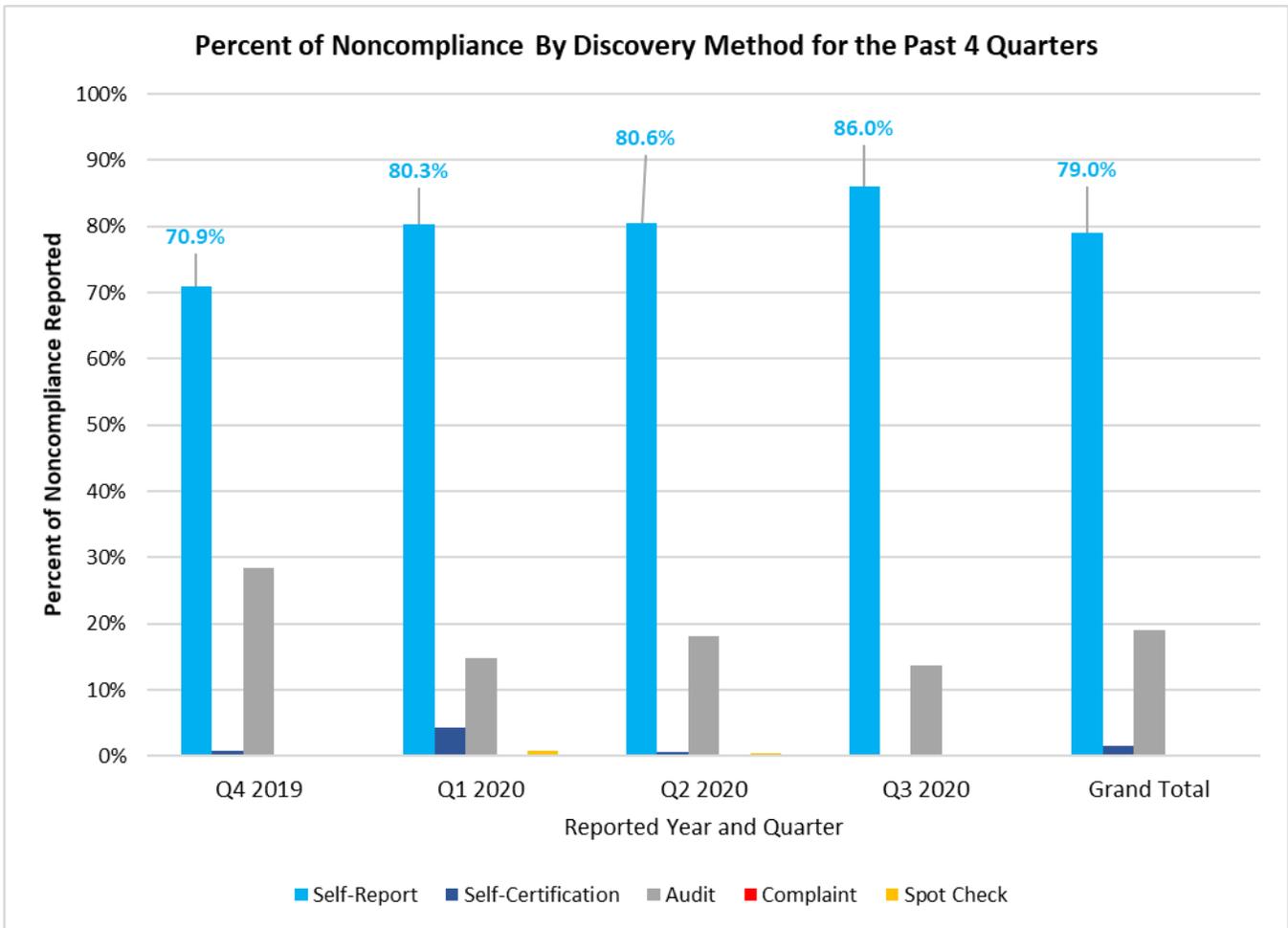


Figure A.6: Breakdown of Noncompliance by Discovery Method

Mitigation of Noncompliance

Mitigation Completion Status

Registered entities continue to make progress in mitigating the older noncompliance they have reported, as shown in Table A.7. Mitigation of the oldest noncompliance, dating from 2017 and earlier, is largely complete. The noncompliance without verified mitigation completion dates involves noncompliance that: 1) has mitigating activities that have been certified as complete but have not yet been verified complete by the RE, 2) has mitigation activities that have passed the expected completion date (and presumably have been completed), or 3) has mitigation activities with a future completion date, ensuring risk to the BPS is being addressed via ongoing mitigation efforts. A small percentage of pre-2018 noncompliance do not yet have verified mitigation completion dates, but are part of ongoing discussions between REs and registered entities regarding appropriate mitigation activities. NERC continues to monitor these noncompliances as priorities for mitigation completion.

Table A.7: Mitigation Completion Status of Noncompliance by Year Reported

Time Frame	Required Mitigation	Noncompliance Without Verified Mitigation Completion Date	Percentage of Noncompliance with Verified Mitigation Completion Date
2014 and older	9,494	0	100%
2015	718	6	99.2%
2016	1,135	32	97.2%
2017	1,854	123	93.4%
2018	1,628	246	84.9%
2019	1,672	660	60.5%

Disposition of Noncompliance

Number and Percentage of Self-Logged CEs

Table A.8 shows both the number and percentage of self-logged CEs filed since the start of the self-logging program in 2014. Through Q3 2020, self-logged CEs continued at a high level consistent with the last two years.

Table A.8: Number and Percentage of Self-Logged CEs

Filing Year	Self-Logged CEs	Total CEs	Percentage of Self-Logged CEs
2014	14	116	12.1%
2015	83	514	16.1%
2016	42	479	8.8%
2017	86	940	9.1%
2018	159	770	20.6%
2019	220	1,157	19.0%
Q1-Q3 2020	145	792	18.3%

Disposition of Noncompliance

Figure A.9 shows the percentage of all noncompliance processed by disposition type through the end of Q3 2020. The ERO Enterprise processed a majority of noncompliance in 2020 as CEs, with approximately nine percent of noncompliance processed by the SNOP or Full NOP disposition methods, both of which can involve a monetary penalty or sanction. Figure A.10 shows the number of noncompliance processed by disposition type over the last five years. Figure A.11 shows the number of noncompliance processed by assessed risk level over the last five years. Consistent with data from recent years, of the noncompliance processed in 2020 to date, the ERO Enterprise processed more than 75% of the noncompliance as a Compliance Exception and assessed approximately 80% of the noncompliance as a minimal risk to the reliability of the BPS.

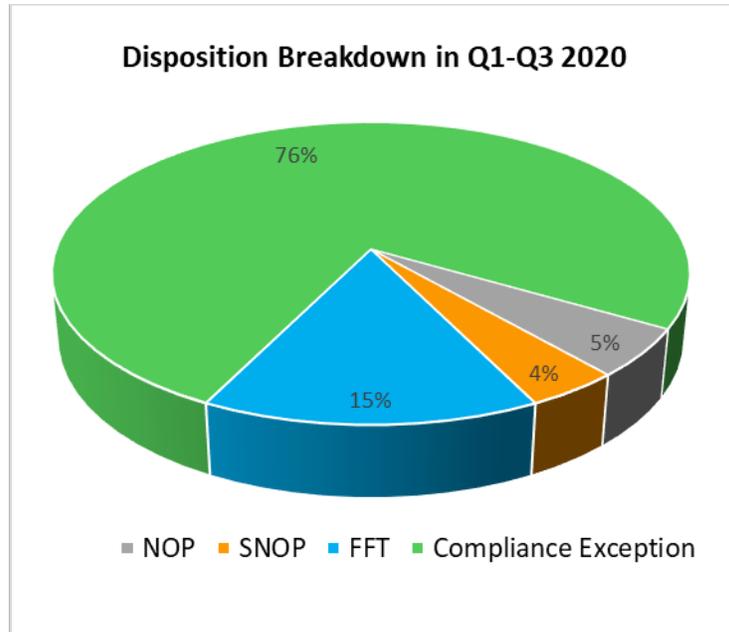


Figure A.9: Disposition Type of Noncompliance Processed in Q1-Q2 2020

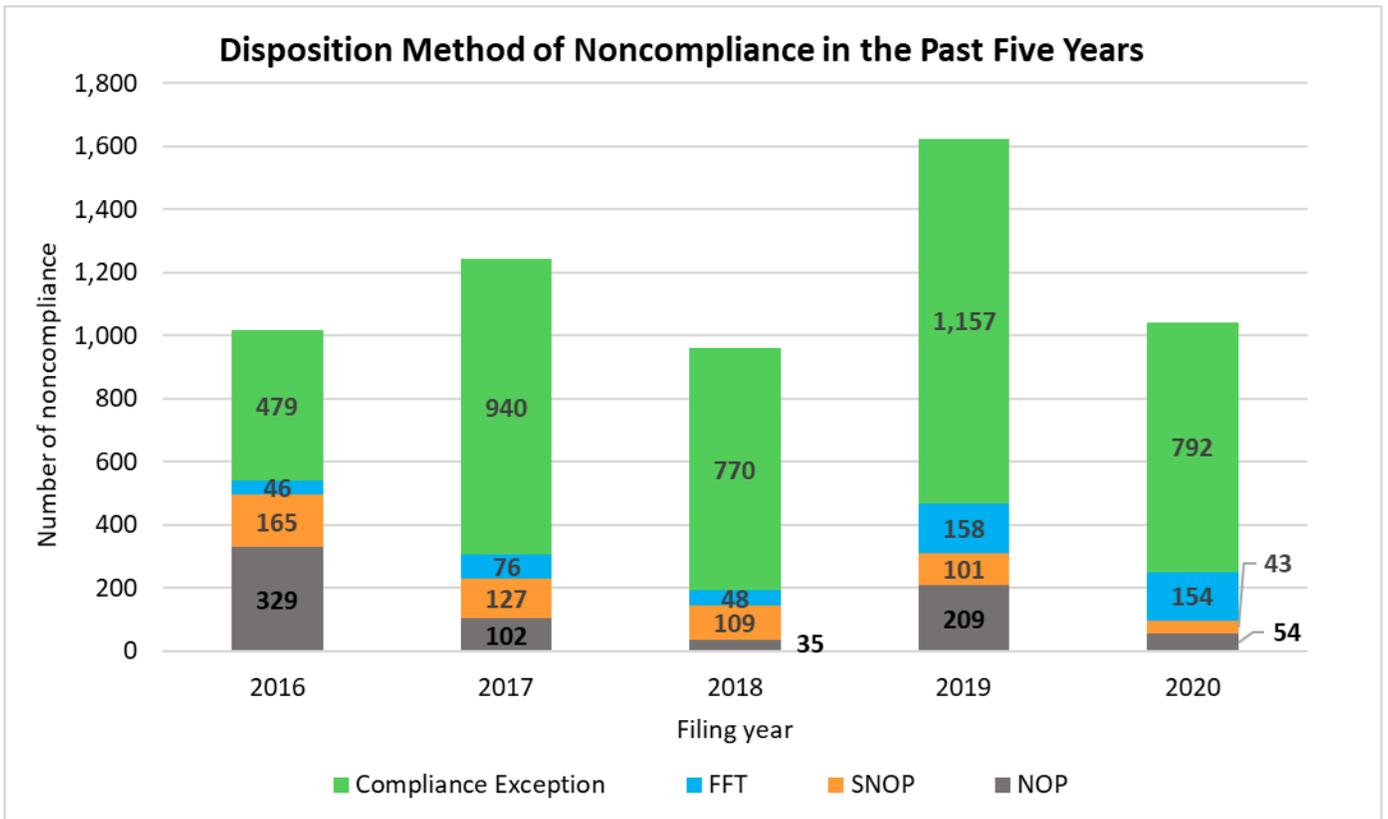


Figure A.10: Disposition Method of Noncompliance by Filing Year

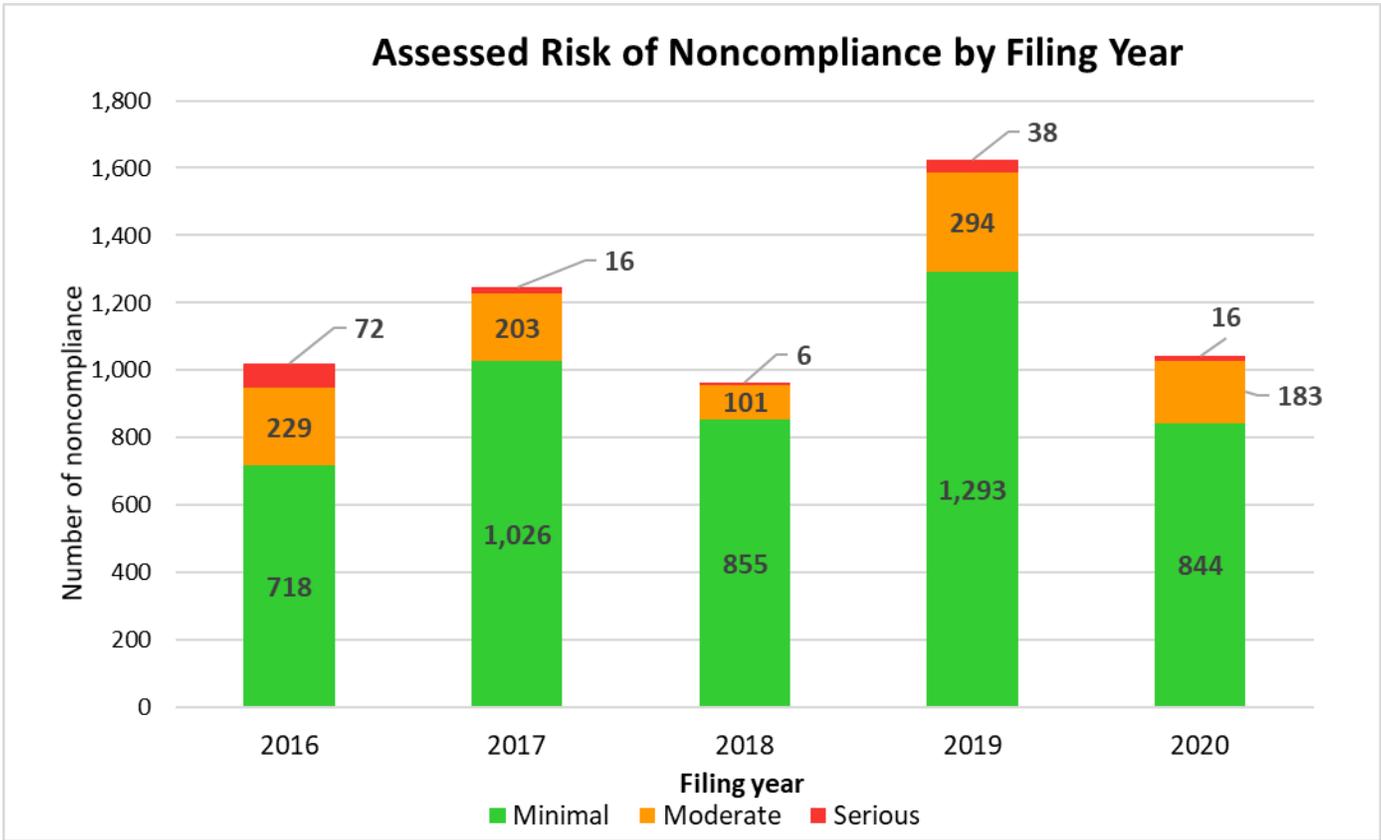


Figure A.11: Assessed Risk of Filed Noncompliance by Filing Year

Risk of Noncompliance

Most Violated Standards by Risk in 2019–Q3 2020

CIP-007 remains the most frequently violated Reliability Standard followed by CIP-004 and CIP-010. The majority of these noncompliances were disposed of as CEs. CIP-007 was the most frequently violated Reliability Standard for minimal, moderate, and serious risk violations, as shown in Figure A.12.

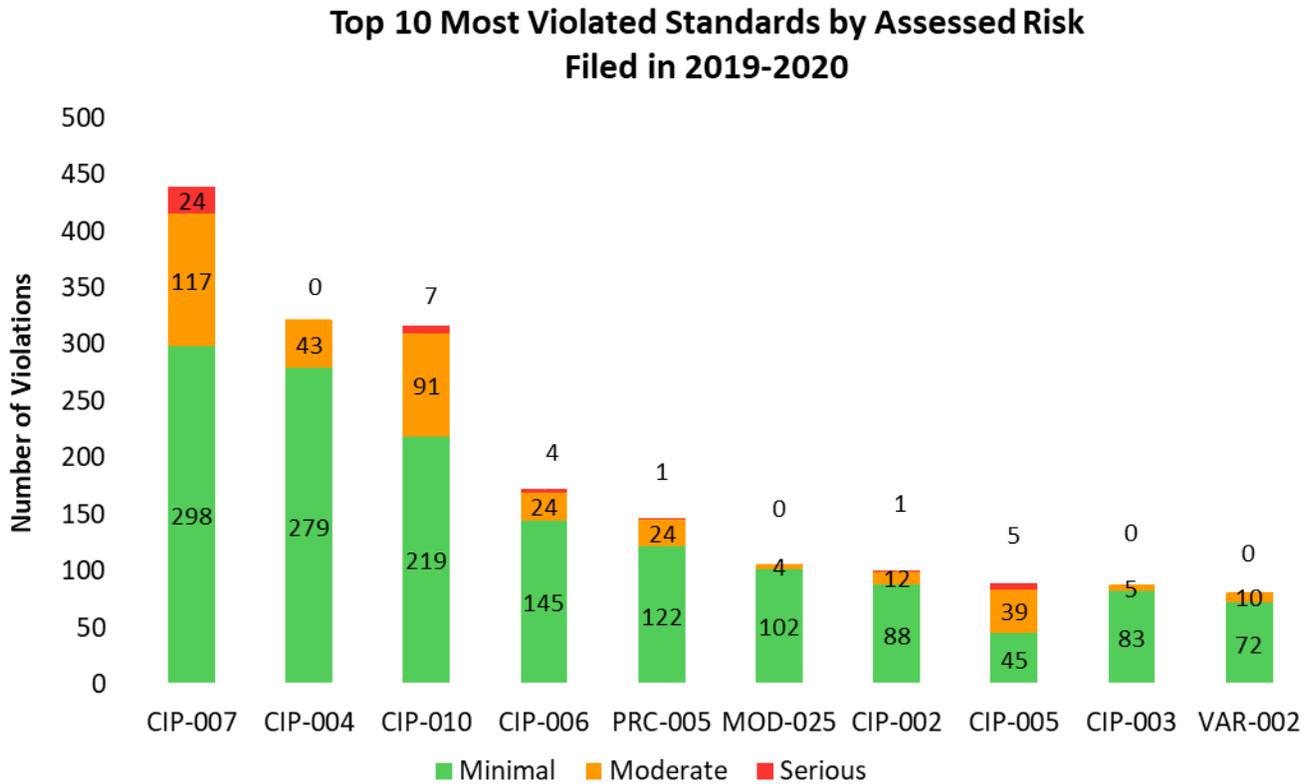


Figure A.12: Most Violated Reliability Standards by Risk Level in 2019–Q3 2020

Violations Posing a Serious Risk

NERC has gathered data and regularly monitored violations posing serious risk to the reliability of the BPS. In the period from 2019-Q3 2020, the ERO Enterprise has filed 54 serious risk violations with FERC, which represented approximately two percent of all filed noncompliance during that period. As shown in Figure A.13, the majority of these serious risk violations were in CIP Standards, particularly those relating to Electronic Security Perimeters and interactive remote access, ports and services, security patches, account management, baselines, and Physical Security Perimeters. The serious risk O&P violations involved Facility Ratings, vegetation management, loss of control center functionality, training of system operators, and Protection System maintenance and testing.

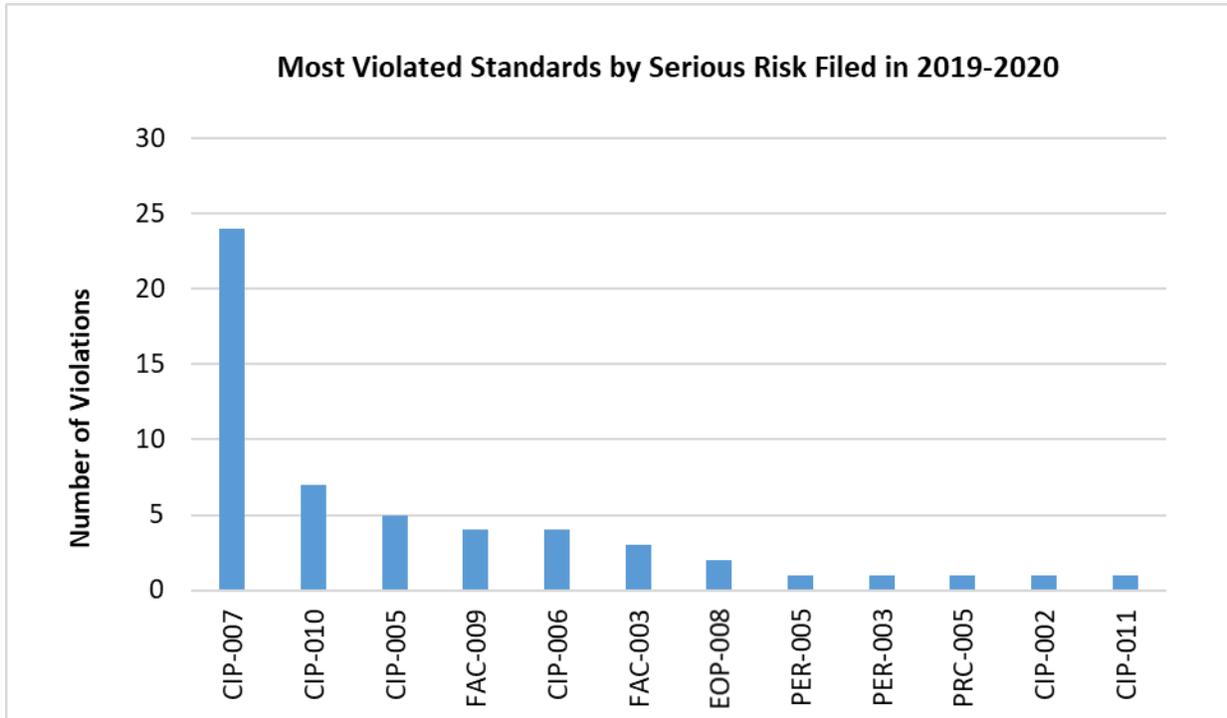


Figure A.13: Reliability Standards with Serious Risk Violations²²

Serious Risk Averages

Figure A.14 shows the percentage of serious risk violations, both CIP and O&P, over a rolling three-year average. The percentages are determined based on the number of serious risk violations compared to the total number of noncompliance filed in a given three-year period. In prior years, NERC Enforcement has had a target of keeping the percentage of serious risk violations for each period below five percent. Figure A.14 shows that the percentage of serious risk violations remained well below the five percent ceiling in the 2018-Q2 2020 period.

²² Although the currently effective version of the Reliability Standard addressing Facility Ratings is FAC-008-3, some violations involving Facility Ratings extend back in time to FAC-009-1, as seen in Figure A.13.

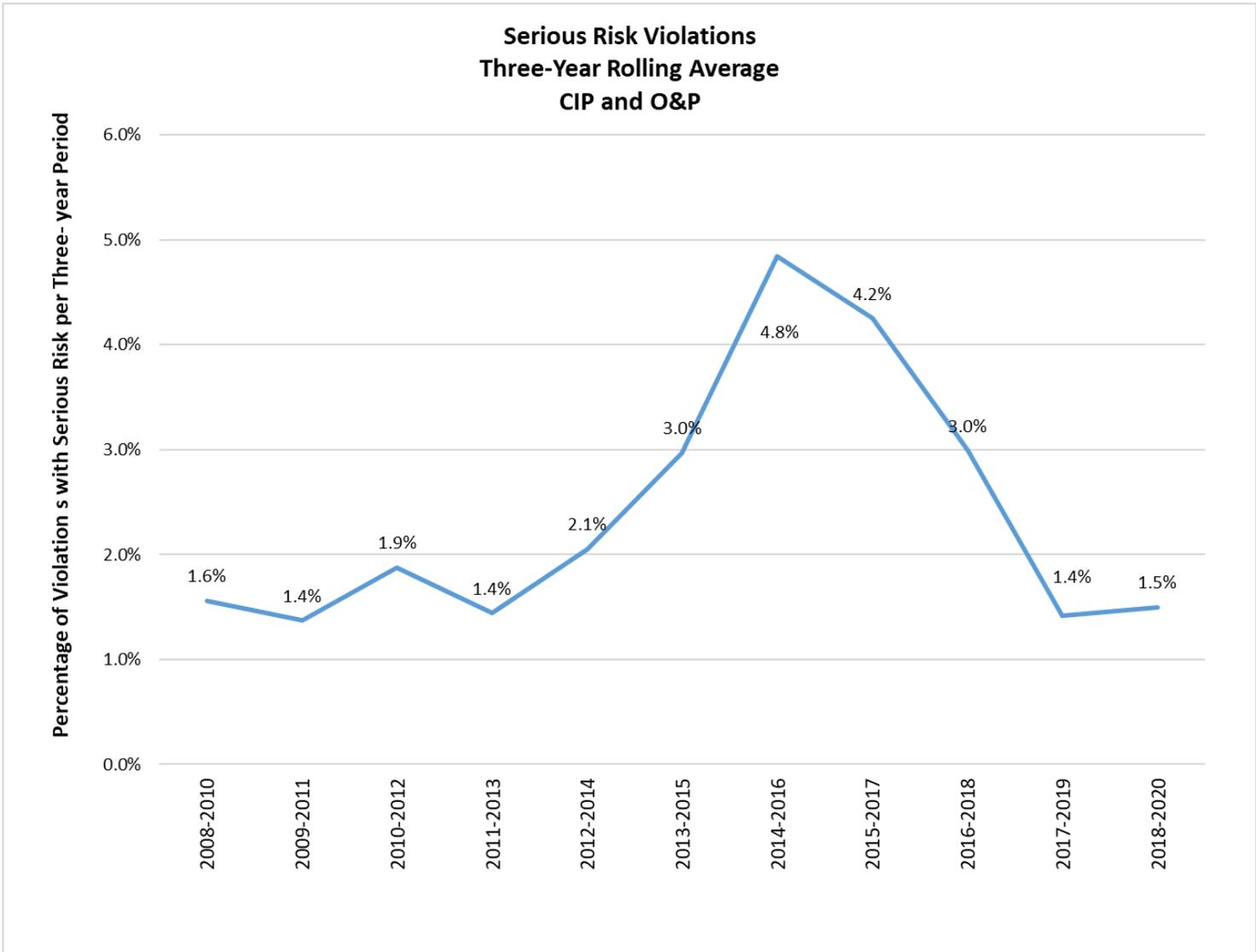


Figure A.14: Rolling Average of Serious Risk Violations (CIP and O&P)

Repeat Moderate and Serious Risk Violations

The ERO Enterprise monitors compliance history (defined as a prior violation of the same Reliability Standard and requirement) and repeat noncompliance with similar conduct (defined as a prior violation that stemmed from similar actions or conduct) to further explore the relationship of prior mitigation to repeat noncompliance and to identify any additional areas of focus and future actions.

Figure A.15 compares three categories of moderate and serious risk noncompliance: noncompliance with compliance history (blue columns), noncompliance with compliance history involving similar conduct (orange line), and all filed moderate and serious risk noncompliance (gray line). Noncompliance with similar conduct is a subset of the wider group of repeat noncompliance, in which the entity’s current noncompliance involves similar conduct or a similar cause as prior violations of the same or similar Standard and Requirement. Such situations could result in aggravation of the disposition method or aggravation of a penalty for the current noncompliance. The total moderate and serious noncompliance, shown by the gray line, includes both “new” noncompliance and repeat noncompliance.

Figure A.16 shows the same information as in Figure A.15, but averaged over a three-year period. The ERO Enterprise will continue to analyze the information as the year progresses and highlight any notable trends in future quarterly reports.

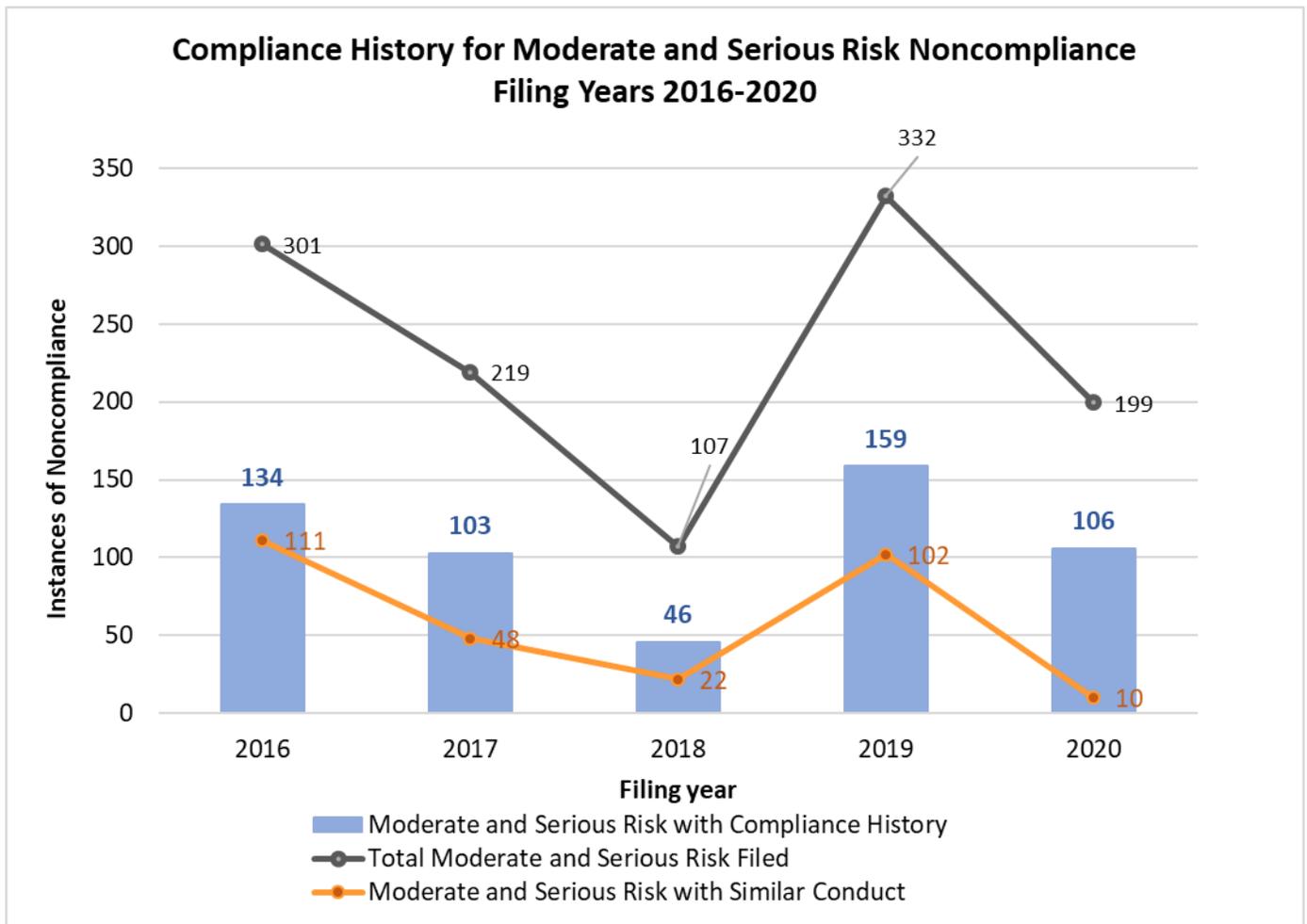


Figure A.15: Compliance History and Similar Conduct for Moderate and Serious Risk Violations

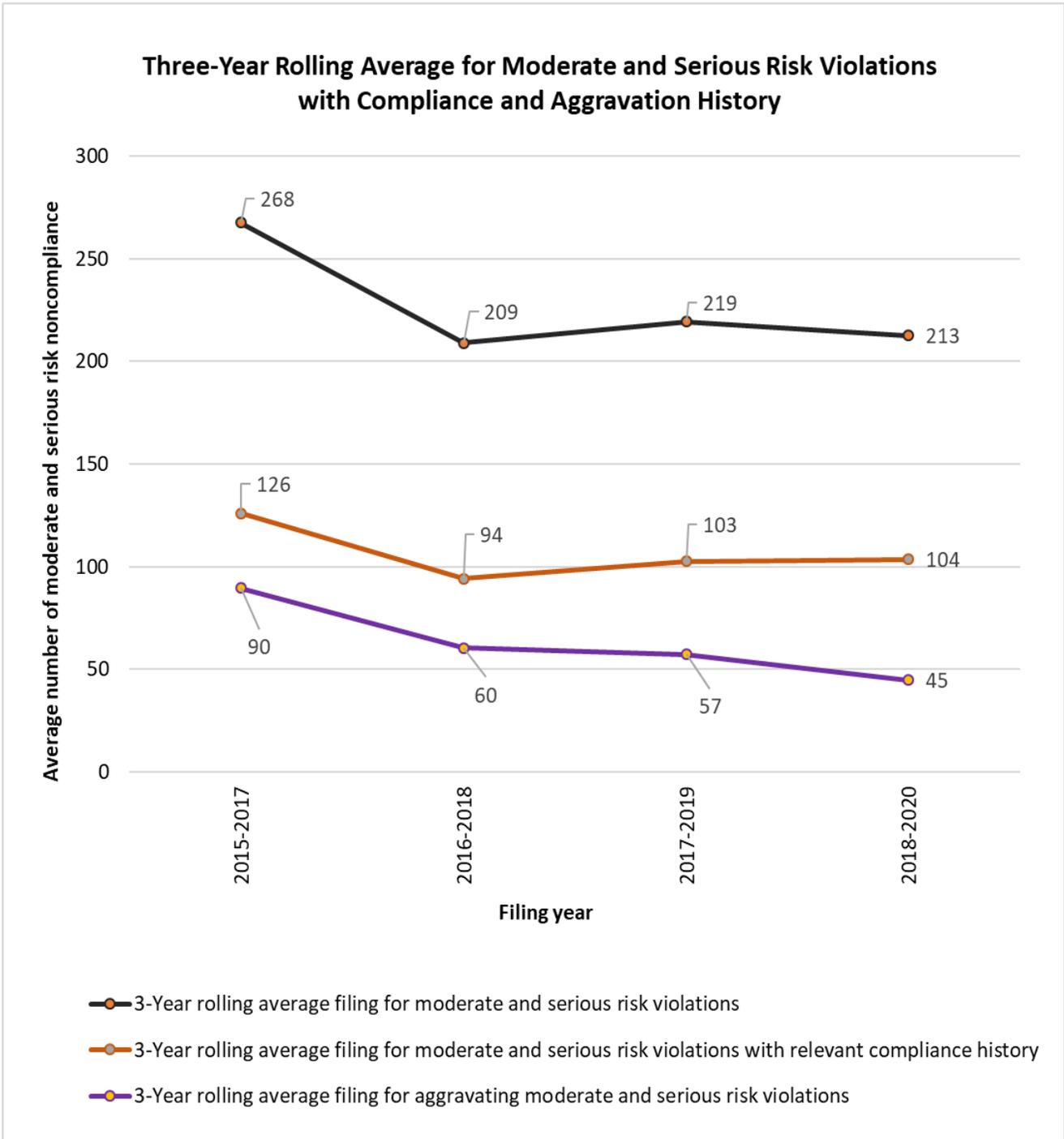


Figure A.16: Compliance History and Similar Conduct for Moderate and Serious Risk Violations (3-Year Rolling Average)

Vegetation Management

NERC regularly reports on two items related to vegetation management. First, NERC tracks all sustained outages caused by vegetation contacts submitted to REs on a quarterly basis, as displayed in Figure A.17 below. Second, NERC tracks transmission outages resulting from possible violations of FAC-003, as displayed in Figure A.18 below. These are usually submitted to REs through Self-Reports. Not all sustained outages caused by vegetation contacts are possible violations of FAC-003; however, some outages may fall into both tracking items.

The majority of vegetation-related sustained outages result from vegetation falling into transmission lines from outside the right-of-way. Fall-ins are shown as Category 3 outages below. There have been 15 Category 3 outages reported in Q1 and Q2 2020.²³ There have been no Category 1B outages reported to date in 2020. Category 1B outages occur when vegetation grows into transmission lines from within the right-of-way, resulting in a sustained outage. Registered entities reported these outages through periodic data submittals on a quarterly basis.

In Q2 2020, NERC filed one Full NOP resolving a violation of FAC-003-4 R2 that was initially reported in 2018.²⁴

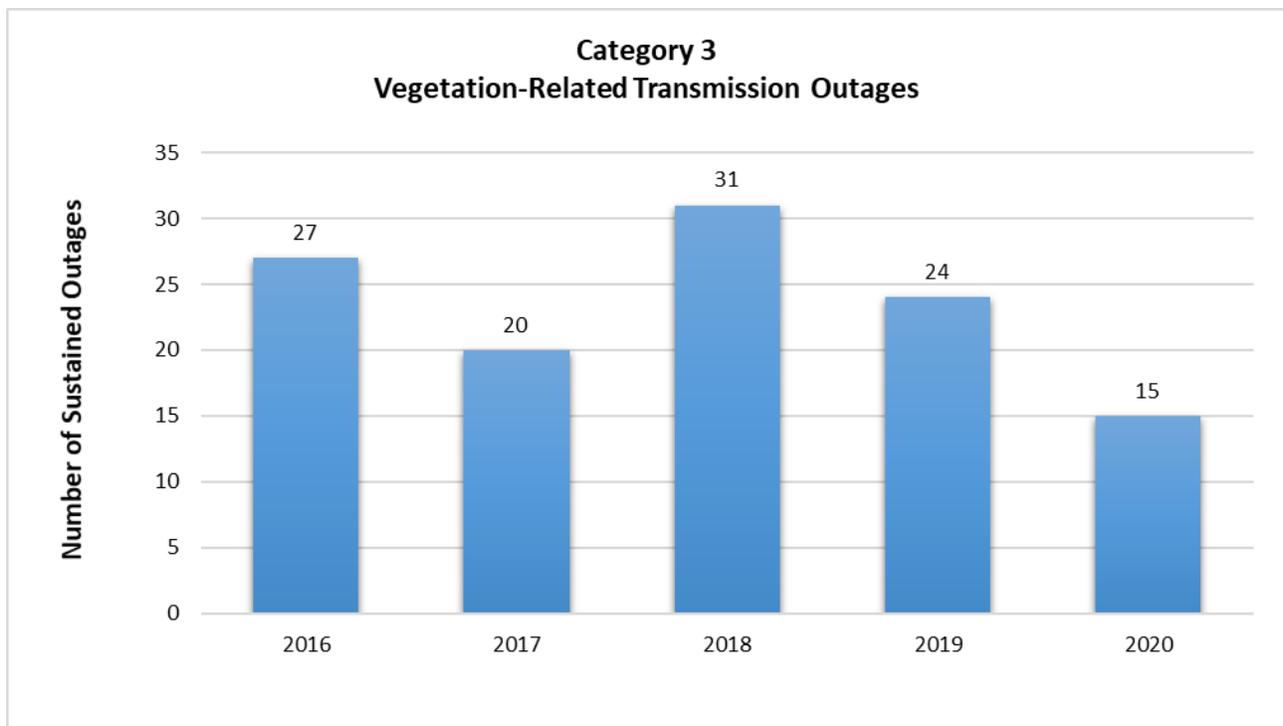


Figure A.17: Category 3 Transmission Outages

²³ Vegetation-related outage information is consolidated on a delayed quarterly basis. Information related to Q3 2020 will be available in Q4 2020.

²⁴ See Notice of Penalty, FERC Docket No. NP20-16, available at https://www.nerc.com/pa/comp/CE/Enforcement%20Actions%20DL/Public_FinalFiled_NOP_NOC-2668.pdf.

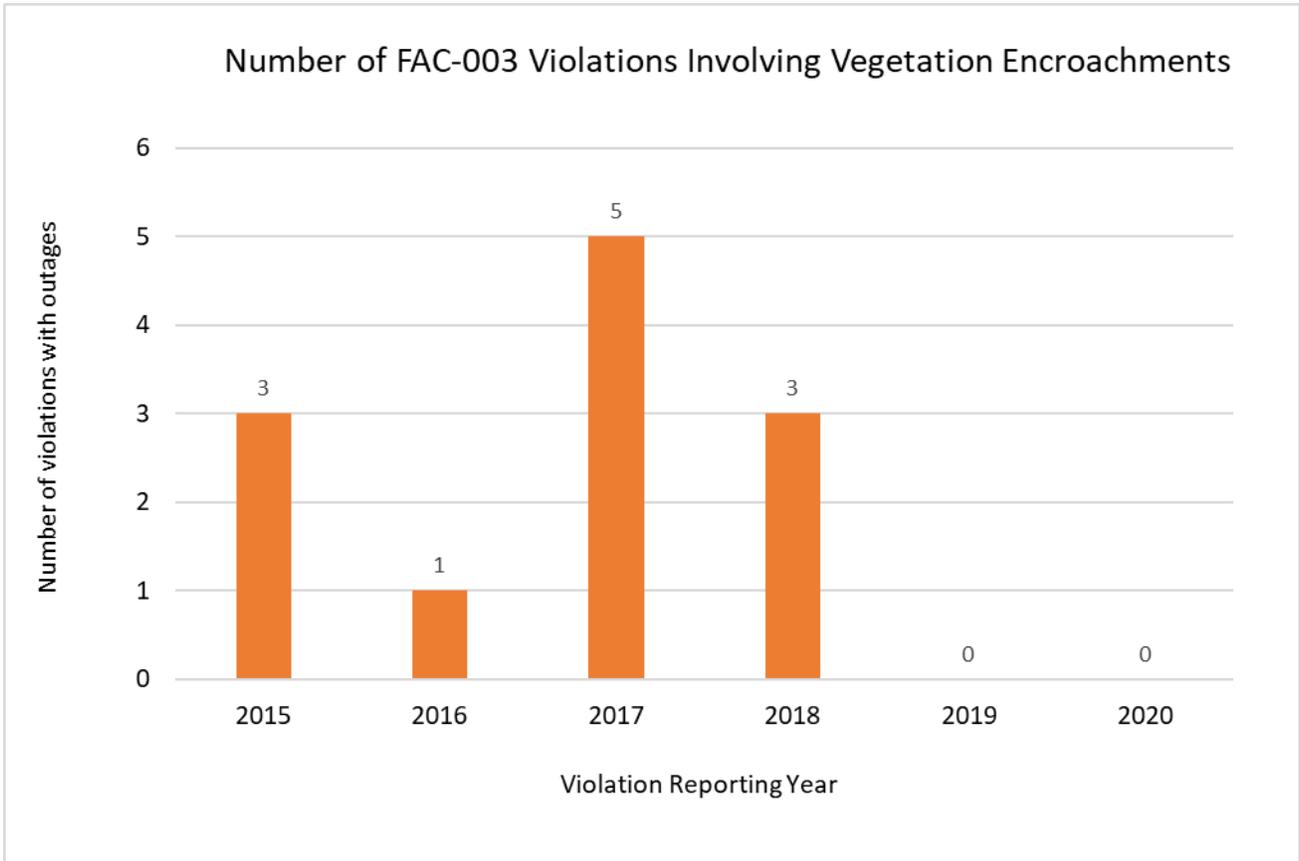


Figure A.18: FAC-003 Violations

Appendix B: Compliance Assurance

Coordinated Oversight Program for MRREs

Figure B.1 represents the distribution of the 53 MRRE groups (comprising 229 separate registered entities) by Lead RE, and Figure B.2 represents the distribution of MRREs by registered function. The registered entities that opted to join the program include various reliability functions in multiple REs.

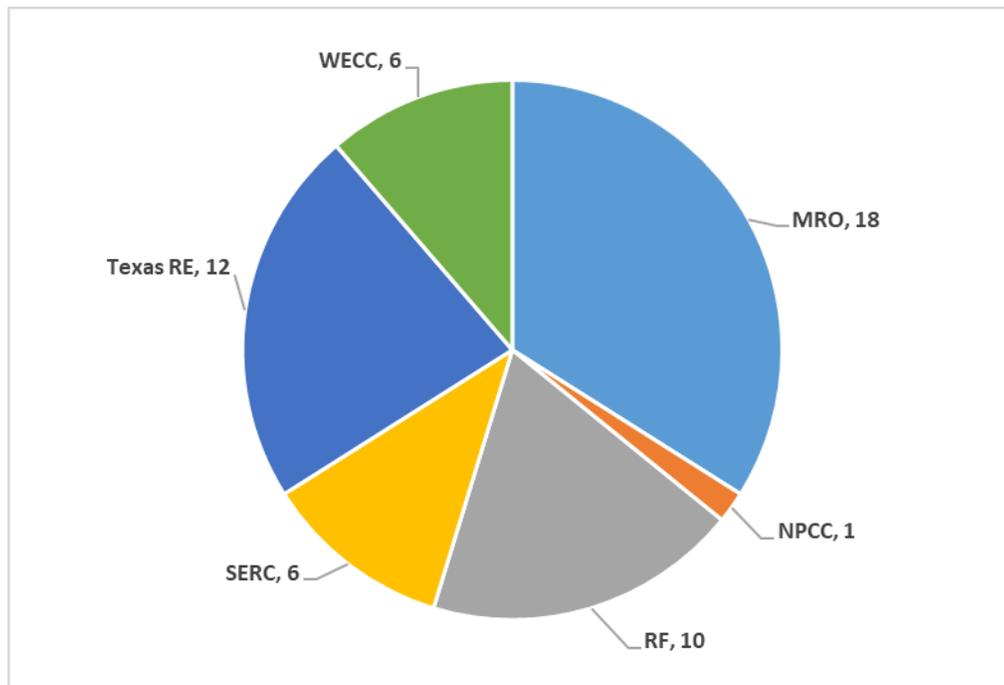


Figure B.1: Distribution of MRREs under Coordinated Oversight by Lead RE

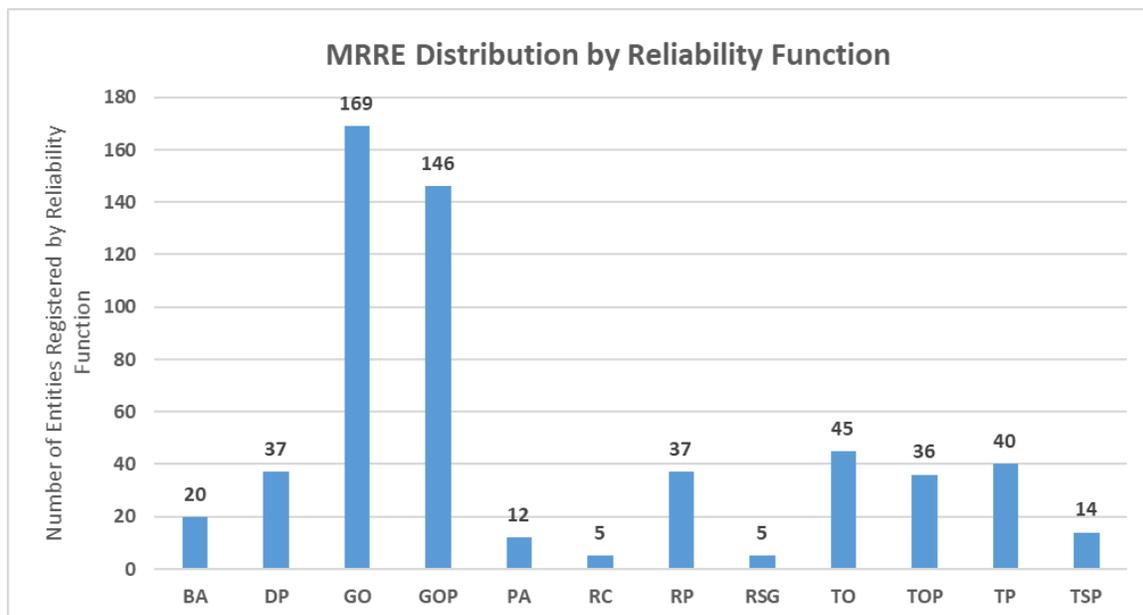


Figure B.2: Coordinated Oversight Distribution by Registered Function²⁵

²⁵ Each bar represents the number of registered entities by function in the Coordinated Oversight Program for MRREs.

Appendix C: Registration

Registration Change Activity by Function

Figure C.1 and Table C.1 depict Q3 2020 registration change activity by RE. Figure C.2 and Table C.2 depict Q3 2020 registration change activity by function.

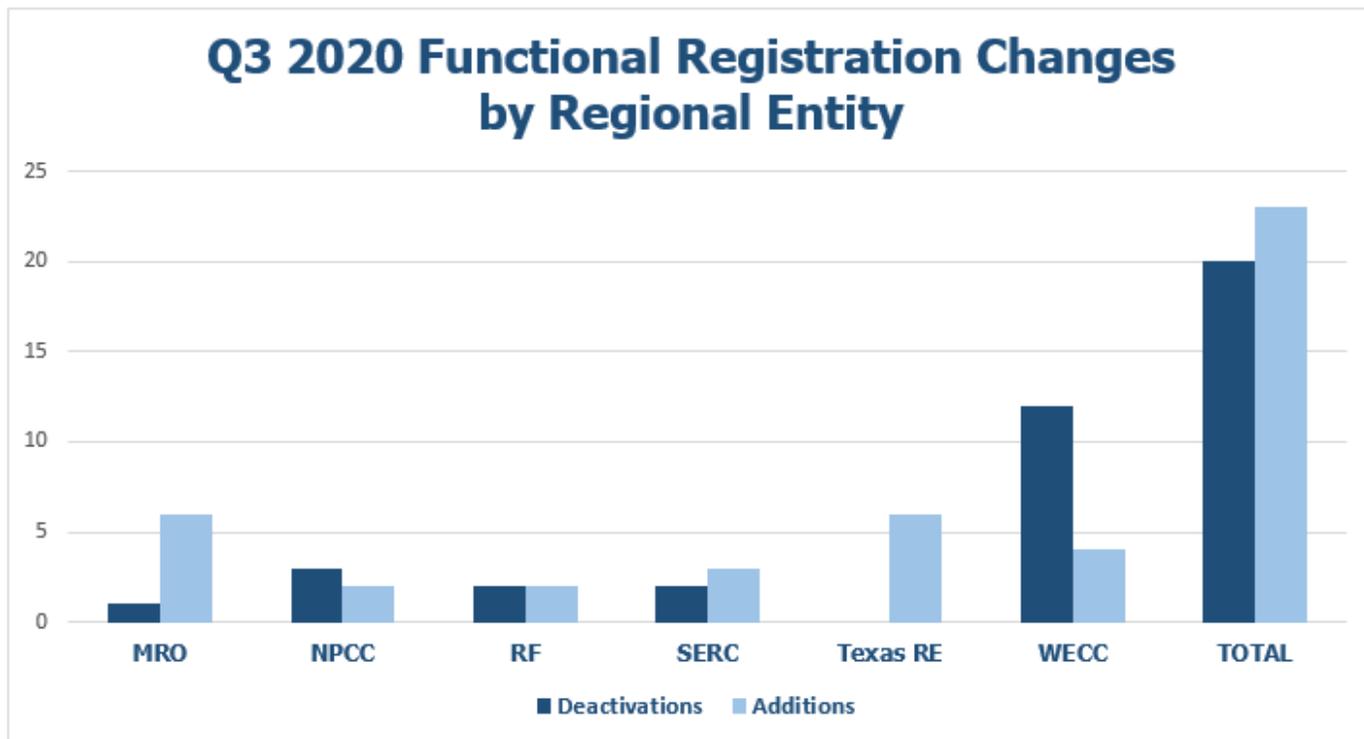


Figure C.1: Q3 2020 Functional Registration Change Activity by RE

Table C.1: Q3 2020 Functional Registration Change Activity by RE							
	MRO	NPCC	RF	SERC	Texas RE	WECC	TOTAL
Deactivations	1	3	2	2	0	12	20
Additions	6	2	2	3	6	4	23

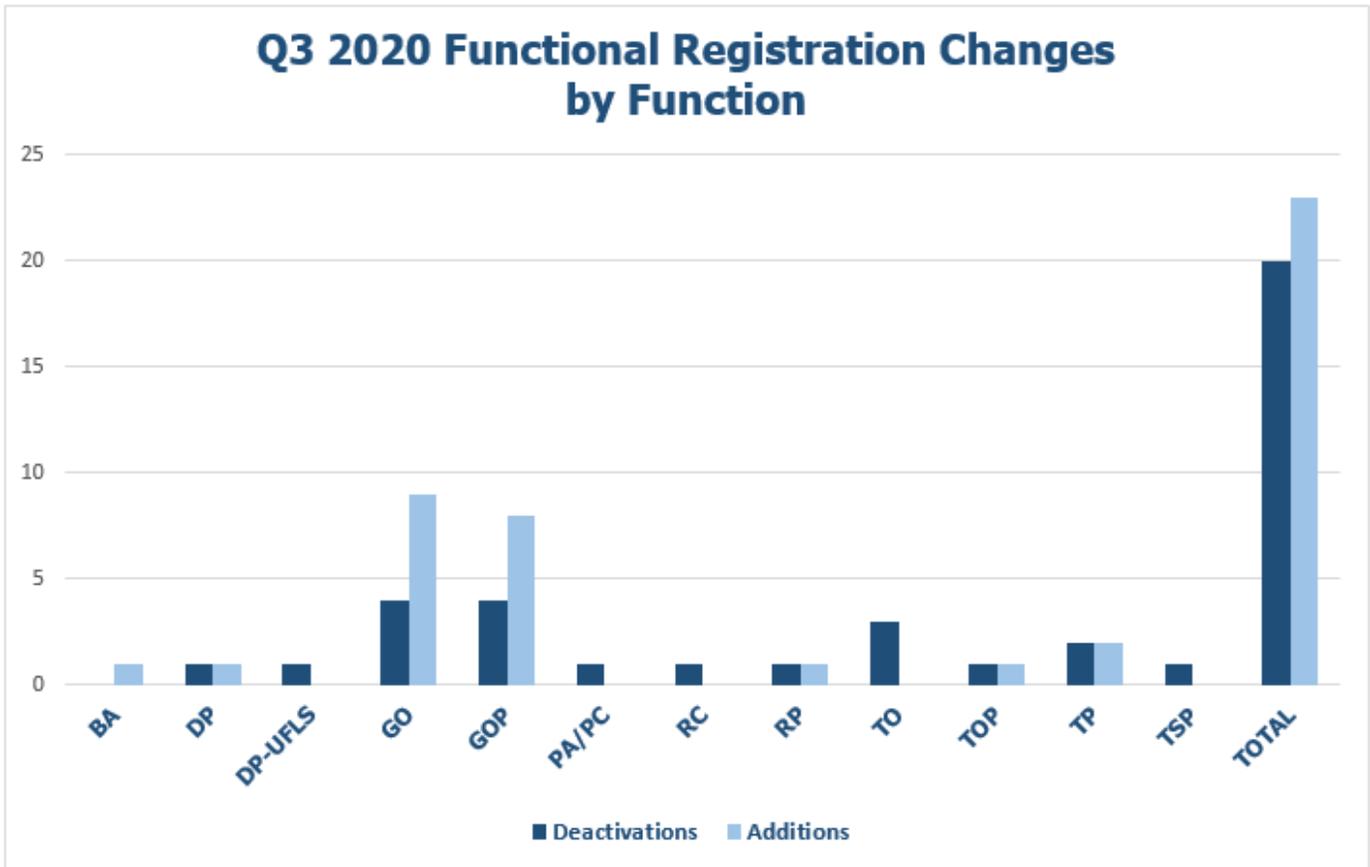


Figure C.2: Q3 2020 Registration Change Activity by Function

	BA	DP	DP-UFLS	GO	GOP	PA/PC	RC	RP	TO	TOP	TP	TSP	TOTAL
Deactivations	0	1	1	4	4	1	1	1	3	1	2	1	20
Additions	1	1	0	9	8	0	0	1	0	1	2	0	23

Table C.3 shows the basis for Q2 2020 registration changes. NERC seeks justification from each RE when approving registration change activity.

Compliance responsibility assumed by another Registered Entity	5
Consolidated into a mutually owned registered entity.	9
Determined to no longer meet registration criteria.	4
Sold to another registered entity.	2

Appendix D: Certification and Bulk Electric System

ERO Enterprise Organization Certification Utilization

Certification activities are responsive to the number of new entities requiring certification and the types of changes implemented to already-certified and operational entities. Program utilization metrics help to plan resource needs, including staff, travel, and training.

Figure D.1 identifies the number of new entity certifications completed by each RE during Q3 2020 and the number of new entity certifications where activity has been initiated but not yet concluded (in process). Figure D.2 identifies the number of reviews of changes to already-certified and operational entities completed by each RE during Q3 2020 and the number of certification reviews in process at the end of Q3 2020.

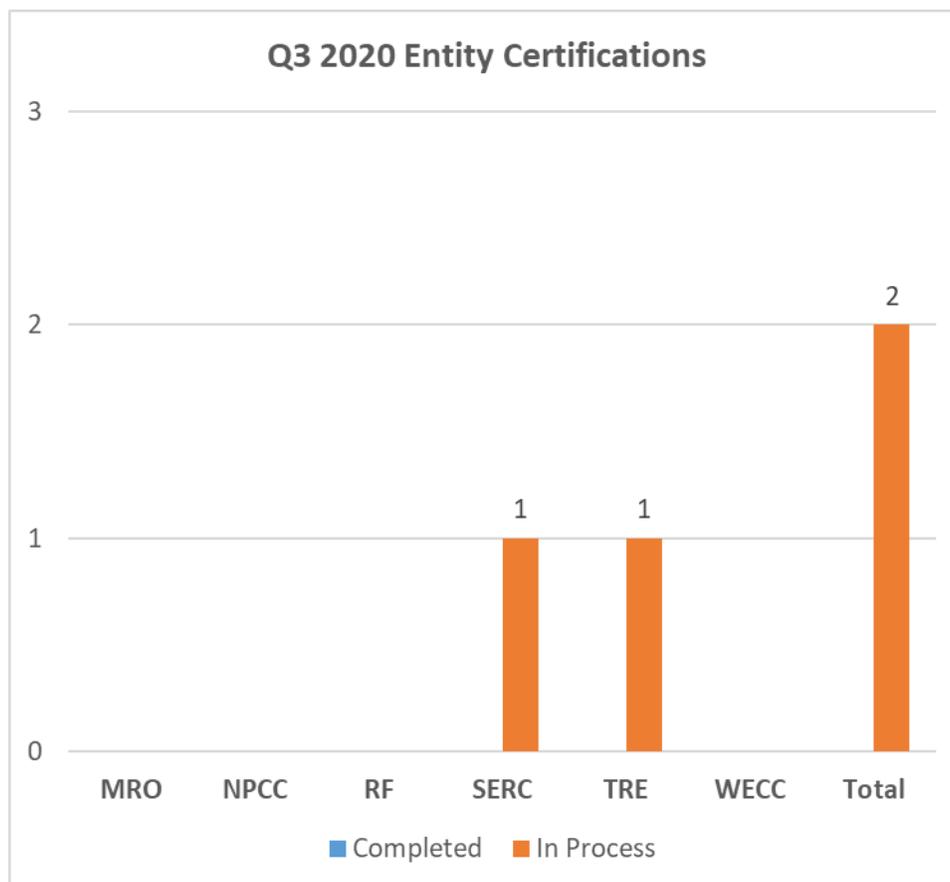


Figure D.1: Q3 2020 New Entity Certifications by RE

Table D.1: Q3 2020 Organization Certifications		
Function	Completed	In Process
Reliability Coordinator	0	1*
Transmission Operator	0	1*
Balancing Authority	0	0

*In coordinated functional registration with others

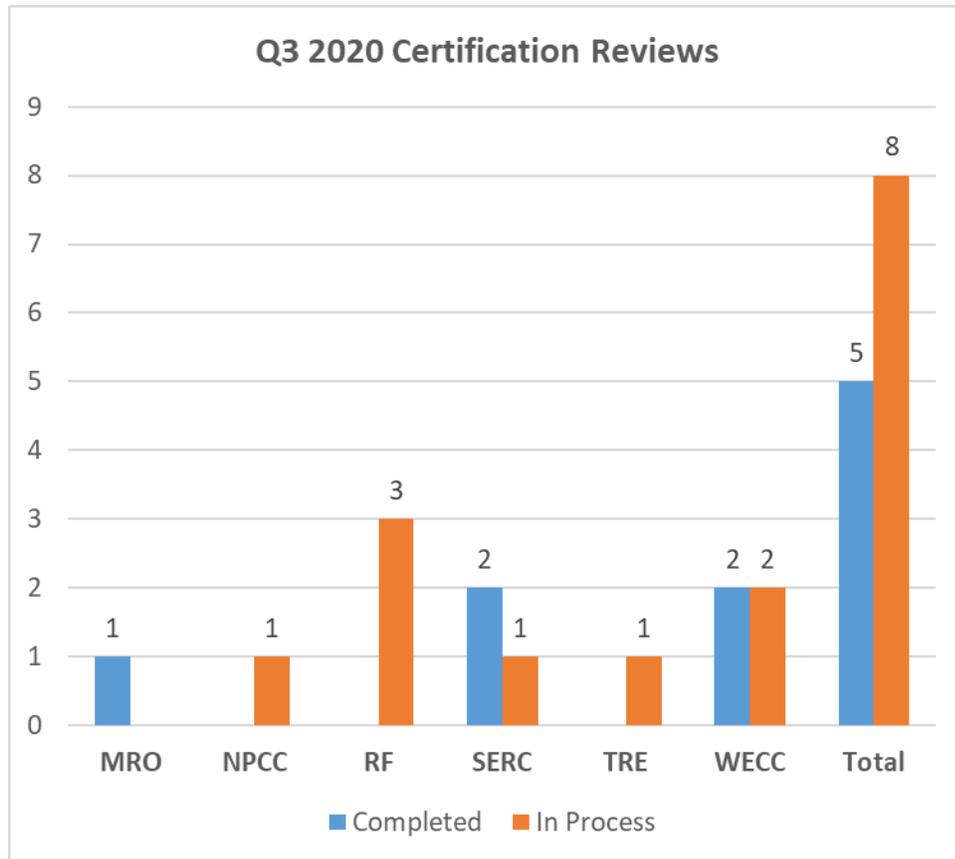


Figure D.2: Q3 2020 Certification Review Activity by RE

Table D.2: Q3 2020 Certification Review ²⁶		
Change Basis	Completed	In Process
Changes to a Registered Entity's Footprint	0	0
Relocation of the Control Center	4	2
Changes to Supervisory Control and Data Acquisition (SCADA)/Energy Management System (EMS) System	2	8

²⁶ Some entities have multiple triggering events for certification reviews. One certification review completed in Q3 2020 involved both a control center relocation and changes to SCADA/EMS, resulting in five completed certification reviews in Figure D.2 but a total of six completed certification reviewed in Table D.2.