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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.

<table>
<thead>
<tr>
<th>RE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRO</td>
<td>Midwest Reliability Organization</td>
</tr>
<tr>
<td>NPCC</td>
<td>Northeast Power Coordinating Council</td>
</tr>
<tr>
<td>RF</td>
<td>ReliabilityFirst</td>
</tr>
<tr>
<td>SERC</td>
<td>SERC Reliability Corporation</td>
</tr>
<tr>
<td>Texas RE</td>
<td>Texas Reliability Entity</td>
</tr>
<tr>
<td>WECC</td>
<td>Western Electricity Coordinating Council</td>
</tr>
</tbody>
</table>
Executive Summary

This report highlights key ERO Enterprise\(^1\) Compliance Monitoring and Enforcement Program (CMEP) activities that occurred in Q2 2020 and provides information and statistics regarding those activities.

In Q2 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;
- Continued work on addressing Commission directives in its order accepting NERC’s Five-Year Performance Assessment, including posting proposed revisions to the NERC Rules of Procedure and submitting its first required compliance filing;
- 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; and
- Processed over 50 registration changes.

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\(^1\) 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. 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.

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. 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. 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.

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.

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.

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Chapter 2: CMEP Activities

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. 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 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. NERC has already posted proposed revisions to the sections of the Rules of Procedure that involve the Organization Registration and Certification Program. On May 21, 2020, NERC posted proposed revisions to the NERC Sanction Guidelines for public review and comment. 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. NERC is working on responses to the Commission order and expects to submit its second required compliance filing to the Commission in the third quarter of 2020.

Align Project and ERO Secure Evidence Locker

In Q2 2020, the Align project team continued its scheduled activities, including completing data validation testing, completing data integration and reporting efforts, and developing training materials. This work will continue throughout 2020. The Align project team conducted registered entity testing on the Align tool in July 2020. This was the first opportunity for a targeted group of registered entities to interact with the Align tool. The Align project team completed the functional design for Release 2, which will focus on Periodic Data Submittals, Self-Certifications, and Technical Feasibility Exceptions. In addition, the project team continued with design work for the ERO Enterprise Secure Evidence Locker (ERO SEL), which will be hosted at NERC, and is designed to facilitate the secure submission, review, and retention of evidence generated in connection with CMEP activities. 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 Q2, the NERC Board of Trustees approved NERC’s plans to delay Release 1 of the Align tool and the ERO Secure Evidence Locker (SEL) until Q1 2021. This delay recognizes the potential delays that could result from supply chain disruption.
due to the COVID-19 health crisis. On June 22, 2020, FERC issued a delegated letter order approving NERC’s financing request for the development of the ERO SEL.\textsuperscript{13}

**CORES Project**

The rollout of the CORES tool continued in Q2 2020. To improve the registered entity experience with the new software, and to increase the ERO Enterprise resources available to assist registered entities, the software has been released sequentially. The first release occurred in 2019 for registered entities that participated in the focus group and the pilot sessions. These entities were already familiar with the software, had already been trained on how to use it, and provided excellent feedback before, during, and after the production software was released to them. This feedback led to additional enhancements intended to dramatically improve the rollout experience for registered entities. After completing the enhancements, ERO Enterprise continued the rollout on a regional basis from November 2019 through April 2020. At this time, CORES is available for all registered entities to perform registration activities and new entities may now use CORES to register for an NERC Compliance Registry (NCR) ID.

ERO Enterprise staff, specifically CORES power users, received additional advanced training in Q2 2020. This training covered advanced features in the software and how to respond to user requests in the ERO Enterprise Help Desk. All the power users at the Regional Entities are trained in CORES and the ERO Enterprise Help Desk. Future training opportunities are being explored for the second half of 2020.

In Q1, the ERO Enterprise sent a survey to registered entity users that had been given access to CORES. Now that all registered entities have been granted access to CORES, the same survey will be sent to a broader group of registered entities in Q3 2020.

**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 relevant information is captured and documented in a way to reduce administrative and procedural burdens on all CMEP staff. The objective of this oversight activity is to ensure 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, compliance oversight plans, 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 will send 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 were 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 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 results and recommendations will be implemented for audit work papers going forward in conjunction with the new Align tool.

Chapter 2: CMEP Activities

Program Alignment
The ERO Enterprise is enhancing alignment of CMEP activities under a broader ERO Enterprise Program Alignment Process (Program Alignment).\(^{14}\) In Q2 2020, NERC staff received one new case submitted through the Reporting Tool and added a self-identified alignment issue pertaining to CMEP practice guides. Currently, there are seven CMEP Practice Guides in-progress, of which six 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 Q2 2020, the ERO Enterprise approved four additional MRREs for entry into the Coordinated Oversight Program, increasing the total count of registered entities participating to 227.\(^{15}\)

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 noncompliances, particularly minimal risk noncompliances, which represent the majority of noncompliances 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 Q2 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.

\(^{14}\) http://www.nerc.com/pa/comp/Pages/EROEnterProAlign.aspx

\(^{15}\) Appendix B includes further information on the MRREs participating in the Coordinated Oversight Program.
**Chapter 2: RE Oversight**

**Enforcement Oversight**

**Serious Risk Violations**
In Q2 2020, NERC filed three Full NOPs with FERC resolving 37 violations of the NERC Reliability Standards, with penalties totaling $1,420,000. The Full NOPs filed in Q2 2020 addressed four serious, 12 moderate, and 21 minimal risk violations, including:

- A failure to monitor certain assets, generate alerts for security events, and review logged security events;
- Neglecting to maintain and test Protection System devices; and
- A failure to ensure vegetation did not grow into the Minimum Vegetation Clearance Distance (MVCD) of a transmission line.

**Spreadsheet NOPs**
In Q2 2020, NERC filed nine SNOPs that included 14 violations of NERC Reliability Standards and carried a total combined penalty of $559,000. Six of the violations were violations of the CIP Reliability Standards, while the remaining eight were violations 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 is performed with FERC. In Q2, NERC issued RFIs to the REs and shared the final feedback with the REs. In Q3 2020, NERC will be issuing a final report that it will file with FERC.

**Compliance Monitoring Oversight**

**NERC Oversight**
In Q2 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 Compliance Oversight Plan enhancement and alignment during 2020.

**Compliance Oversight Plans**
During Q2 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 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.

**ERO Enterprise CMEP Staff Workshop**
On April 16, 2020, NERC successfully hosted a virtual ERO Enterprise CMEP staff workshop. As the ERO Enterprise embarks on the implementation of Align, CORES, and the Secure Evidence Locker, the workshop helped staff to sharpen their view and approach for documenting CMEP activities, and more importantly, how they may assure effective and efficient reduction of risks by executing ERO Enterprise CMEP programs effectively, efficiently, and collaboratively. To assure reduction of risks, the ERO Enterprise continues to mature its risk-based model. Understanding the effectiveness of a registered entity’s practices and controls and how they mitigate risks informs both risk-based compliance monitoring and enforcement activities.
Chapter 2: RE Oversight

Certification

Q2 2020 Certification Completions

In accordance with the March 18, 2020 FERC and NERC announcement providing guidance to ensure grid reliability amid potential coronavirus impacts, there were no on-site certification visits in Q2 2020. No site visits are scheduled for the third quarter. During Q2 2020, the ERO Enterprise completed the review of Energy Management System (EMS) changes at one already certified and operational Transmission Operator and Balancing Authority and evaluated (but declined to further review) four other EMS modifications, two Control Center relocations, and one ownership change. Nine other reviews are currently in process, with two virtual on-site visits having been completed. Appendix D provides a breakdown by RE.

Registration

In Q2 2020, NERC processed 60 Registration changes, of which 32 were functional activations and 28 were functional deactivations. Of the 28 functional deactivations:

- Ten were where compliance responsibility was assumed by another registered entity,
- Six were due to facility shutdown,
- Five were determined not to meet registration criteria,
- Four were sold to another registered entity,
- Two were consolidated into a mutually-owned registered entity, and
- One was due to a BES Exception.

BES Exception Requests

In Q2 2020, NERC worked on reviewing three Exception Requests and expects to complete at least one of its reviews in Q3 2020.
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 Compliance Oversight Plans 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 Q2 2020, approximately 28 percent of the open inventory is from 2018 or earlier, compared to approximately 36 percent in Q1 2020.

![Figure A.1 ERO Enterprise's Inventory by Year Reported](image)
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 Q2 2020, the age of all open noncompliance in the ERO Enterprise inventory has not changed significantly from the figures reported for Q1 2020. Information about mitigation of the oldest noncompliance in inventory can be found in the “Mitigation of Noncompliance” discussion below.

![Age of Noncompliance in ERO Enterprise Inventory](image)

**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 Q2 2020 was 13.3 months.\textsuperscript{16} 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 average age of noncompliance appears to have leveled off during the past three quarters, with no significant changes during that period.

\textsuperscript{16} 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-Q2 2020

Figure A.4 shows the number of new noncompliance discovered in Q1-Q2 2020 compared to the total number of noncompliance discovered in prior years.

![Noncompliance Discovered by Year](image)

*Includes Dismissals

**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. 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 for the Past 4 Quarters
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>
<thead>
<tr>
<th>Time Frame</th>
<th>Required Mitigation</th>
<th>Noncompliance Without Verified Mitigation Completion Date</th>
<th>Percentage of Noncompliance with Verified Mitigation Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 and older</td>
<td>9,494</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>2015</td>
<td>718</td>
<td>6</td>
<td>99.2%</td>
</tr>
<tr>
<td>2016</td>
<td>1,136</td>
<td>32</td>
<td>97.2%</td>
</tr>
<tr>
<td>2017</td>
<td>1,874</td>
<td>142</td>
<td>92.4%</td>
</tr>
<tr>
<td>2018</td>
<td>1,648</td>
<td>313</td>
<td>81.0%</td>
</tr>
<tr>
<td>2019</td>
<td>1,665</td>
<td>821</td>
<td>50.7%</td>
</tr>
</tbody>
</table>

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. In the first half of 2020, self-logged CEs continued at a high level consistent with the last two years.

<table>
<thead>
<tr>
<th>Filing Year</th>
<th>Self-Logged CEs</th>
<th>Total CEs</th>
<th>Percentage of Self-Logged CEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>14</td>
<td>116</td>
<td>12.1%</td>
</tr>
<tr>
<td>2015</td>
<td>83</td>
<td>514</td>
<td>16.1%</td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
<td>479</td>
<td>8.8%</td>
</tr>
<tr>
<td>2017</td>
<td>86</td>
<td>940</td>
<td>9.1%</td>
</tr>
<tr>
<td>2018</td>
<td>159</td>
<td>770</td>
<td>20.6%</td>
</tr>
<tr>
<td>2019</td>
<td>220</td>
<td>1,157</td>
<td>19.0%</td>
</tr>
<tr>
<td>Q1-Q2 2020</td>
<td>87</td>
<td>511</td>
<td>17.0%</td>
</tr>
</tbody>
</table>
Disposition of Noncompliance
Figure A.9 shows the percentage of all noncompliance processed by disposition type through the end of Q2 2020. The ERO Enterprise processed a majority of noncompliance in 2020 as CEs, with approximately 12 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.
Figure A.11: Assessed Risk of Filed Noncompliance by Filing Year
**Risk of Noncompliance**

**Most Violated Standards by Risk in 2019–Q2 2020**

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

![Top 10 Most Violated Standards by Assessed Risk Filed in 2019-2020](image)

### Figure A.12: Most Violated Reliability Standards by Risk Level in 2019–Q1 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-Q2 2020, the ERO Enterprise has filed 46 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, and baselines. The serious risk O&P violations involved Facility Ratings, vegetation management, and Protection System maintenance and testing.
Figure A.13: Reliability Standards with Serious Risk Violations

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.

17 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.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 were four Category 3 outages in Q1 2020.18 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 2018.19

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18 Vegetation-related outage information is consolidated on a delayed quarterly basis. Information related to Q2 2020 will be available in Q3 2020.

Figure A.18: FAC-003 Violations

Number of FAC-003 Violations Involving Vegetation Encroachments

- 2015: 3
- 2016: 1
- 2017: 5
- 2018: 3
- 2019: 0
- 2020: 0
Appendix B: Compliance Assurance

Coordinated Oversight Program for MRREs
Figure B.1 represents the distribution of the 53 MRRE groups (comprising 227 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 Function

20 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 Q2 2020 registration change activity by RE. Figure C.2 and Table C.2 depict Q2 2020 registration change activity by function.

![Q2 2020 Functional Registration Changes by Regional Entity](image)

**Figure C.1: Q2 2020 Functional Registration Change Activity by RE**

<table>
<thead>
<tr>
<th></th>
<th>MRO</th>
<th>NPCC</th>
<th>RF</th>
<th>SERC</th>
<th>Texas RE</th>
<th>WECC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deactivations</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Additions</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>32</td>
</tr>
</tbody>
</table>

**Table C.1: Q2 2020 Functional Registration Change Activity by RE**
Table C.2: Q2 2020 Registration Change Activity by Function

<table>
<thead>
<tr>
<th></th>
<th>BA</th>
<th>DP</th>
<th>GO</th>
<th>GOP</th>
<th>TO</th>
<th>TP</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deactivations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Additions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

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

Table C.3: Q2 2020 Registration Change Basis

<table>
<thead>
<tr>
<th>Change Basis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance responsibility assumed by another</td>
<td>10</td>
</tr>
<tr>
<td>Registered Entity</td>
<td></td>
</tr>
<tr>
<td>Facility Shutdown</td>
<td>6</td>
</tr>
<tr>
<td>Determined to not meet registration criteria</td>
<td>5</td>
</tr>
<tr>
<td>Sold to another Registered Entity</td>
<td>4</td>
</tr>
<tr>
<td>Consolidated to another mutually-owned registered</td>
<td>2</td>
</tr>
<tr>
<td>entity</td>
<td></td>
</tr>
<tr>
<td>BES Exception</td>
<td>1</td>
</tr>
</tbody>
</table>
**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 Q2 2020 and the number of new entity certifications where an onsite visit has been performed but the certification activity has not yet been concluded (in process). There was a lull in certifications in Q2 2020, with no applications for new entity certifications. Figure D.2 identifies the number of reviews of changes to already-certified and operational entities completed by each RE during Q2 2020 and the number of certification reviews in process at the end of Q2 2020.

![Figure D.1: Q2 2020 New Entity Certifications by RE](image)

**Table D.1: Q2 2020 Organization Certifications**

<table>
<thead>
<tr>
<th>Function</th>
<th>Completed</th>
<th>In Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability Coordinator</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transmission Operator</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Balancing Authority</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure D.2: Q2 2020 Certification Review Activity by RE

Table D.2: Q2 2020 Certification Review*

<table>
<thead>
<tr>
<th>Change Basis</th>
<th>Completed</th>
<th>In Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to a Registered Entity’s Footprint</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Relocation of the Control Center</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Changes to Supervisory Control and Data Acquisition (SCADA)/Energy Management System (EMS) System</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

*some entities have multiple triggering events