

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION**

) **Docket No. RR10-1-__**
) **Docket No. RR13-3-__**

**ANNUAL REPORT
OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
ON WIDE-AREA ANALYSIS OF TECHNICAL FEASIBILITY EXCEPTIONS**

The North American Electric Reliability Corporation (“NERC”) hereby provides the 2018 Annual Report on Wide-Area Analysis of Technical Feasibility Exceptions (the “2018 Annual Report”) in compliance with Paragraphs 220 and 221 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Order No. 706¹ and Appendix 4D of the NERC Rules of Procedure (“ROP”). The 2018 Annual Report covers the period from July 1, 2017 through June 30, 2018.

I. BACKGROUND

In Order No. 706, FERC approved eight Critical Infrastructure Protection (“CIP”) Reliability Standards and, among other things, directed NERC to develop a set of conditions or criteria that a registered entity must follow to obtain a Technical Feasibility Exception (“TFE”) from specific requirements in the CIP Reliability Standards.² The Commission stated that the TFE process must include: mitigation steps, a remediation plan, a timeline for eliminating the use of the TFE unless appropriate justification is provided, regular review of the continued need for the

¹ *Mandatory Reliability Standards for Critical Infrastructure Protection*, 122 FERC ¶ 61,040 (2008) (“Order No. 706”).

² *Id.* at P 178.

TFE, internal approval by senior managers, and regional approval through the Electric Reliability Organization (“ERO”).³

Order No. 706 also required that NERC submit an annual report to the Commission that provides a wide-area analysis of the use of TFEs and their effect on Bulk-Power System reliability.

The Commission stated:

The annual report must address, at a minimum, the frequency of the use of such provisions, the circumstances or justifications that prompt their use, the interim mitigation measures used to address vulnerabilities, and efforts to eliminate future reliance on the exception . . . [T]he report should contain aggregated data with sufficient detail for the Commission to understand the frequency with which specific provisions are being invoked as well as high level data regarding mitigation and remediation plans over time and by region⁴

In October 2009, NERC filed amendments to its ROP to implement the Commission’s directive in Order No. 706, proposing Section 412 (Requests for Technical Feasibility Exceptions to NERC Critical Infrastructure Protection Reliability Standards) and Appendix 4D (Procedure for Requesting and Receiving Technical Feasibility Exceptions to NERC Critical Infrastructure Protection Reliability Standards). On January 21, 2010, the Commission approved NERC’s amended ROP.⁵

On April 8, 2013, NERC filed revisions to Appendix 4D of the ROP to streamline the TFE approval process, reflecting NERC, Regional Entity and industry experience processing TFE

3 *Id.* at P 222.

4 *Id.* at PP 220 - 21.

5 *North American Electric Reliability Corp.*, 130 FERC ¶ 61,050 (2010), *order on compliance*, 133 FERC ¶ 61,008 (2010) (“October 1 Order”), *order on reh’g*, 133 FERC ¶ 61,209 (2010), *order on compliance*, 135 FERC ¶ 61,026 (2011) (“April 12 Order”). The Commission requested further information and clarification regarding certain aspects of the TFE process. On April 21, 2010, NERC submitted its compliance filing in response to the January 21 Order. On October 1, 2010, the Commission issued an order accepting NERC’s April 2010 filing as partially compliant and directing further changes to the TFE Procedure. *See* October 1 Order. On December 23, 2010, NERC submitted a compliance filing in response to the Commission’s October 1 Order, which the Commission subsequently accepted. *See* April 12 Order.

requests since the inception of the program. On September 3, 2013, FERC approved the proposed revisions and directed limited revisions to Appendix 4D, including modifications to: (1) specify a time frame for reporting Material Changes to TFEs upon identification and discovery; and (2) require the annual TFE report to include information on Material Change Reports and TFE expiration dates.⁶ NERC submitted a compliance filing consistent with the directives from the September 2013 Order, which the Commission approved on January 30, 2014.⁷ Sections 11.2.4 and 13 of Appendix 4D set forth the requirements for the annual TFE report, as modified in accordance with the September 2013 Order.

II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to:

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III. 2018 ANNUAL REPORT

This section provides the TFE information required by Appendix 4D of the ROP. In accordance with Appendix 4D, NERC prepared the 2018 Annual Report in consultation with the Regional Entities. The Regional Entities provided regular reports to NERC regarding the types of Covered Assets for which the Regional Entities have approved TFEs.⁸ In addition, each Regional

⁶ *North American Electric Reliability Corp.*, 144 FERC ¶ 61,180 (2013) (“September 2013 Order”).

⁷ *North American Electric Reliability Corp.*, Docket No. RR13-3-001 (Jan. 30, 2014) (unpublished delegated letter order).

⁸ Appendix 2 of the ROP defines the term “Covered Asset” as “any BES Cyber Asset, BES Cyber System, Protected Cyber Asset, Electronic Access Control or Monitoring System, or Physical Access Control System that is subject to” a TFE.

Entity provided information on the elements identified in Section 13 of Appendix 4D to be included in the 2018 Annual Report. NERC compiled and analyzed the TFE data provided by the Regional Entities in preparation for the 2018 Annual Report.

The 2018 Annual Report is the last annual report that will depict TFE data for Southwest Power Pool - Regional Entity (“SPP-RE”). The dissolution of SPP-RE resulted in the transition of 122 registered entities to Midwest Reliability Organization (“MRO”) and SERC Reliability Corporation (“SERC”). Those Regional Entities are responsible for maintaining TFE information for the registered entities that have been assigned to those regions. Both Regional Entities’ annual reports incorporated the TFE information that SPP-RE had also reported, providing assurance that TFE information is complete and accurate.

The transition to the CIP cybersecurity Reliability Standards approved in Order No. 791,⁹ which are commonly referred to as the CIP version 5 standards, resulted in a significant decrease to the number of TFEs. As a result, the Regional Entities have been able to better evaluate the risk and impact of TFEs, and gain a better understanding of the value of the TFE process compared to the administrative burden it places on registered entities and Regional Entities. As discussed below, NERC is considering alternatives to the current TFE process to reduce the burden.

The following is the summary of the TFE data reported by each Regional Entity for the elements identified in Section 12.1 of Appendix 4D:¹⁰

1. Frequency of use of the TFE Request process

The frequency of use of the TFE Request process, disaggregated by Regional Entity and in the aggregate for the United States and for the jurisdictions of other Applicable Governmental Authorities, including (A) the numbers of TFE Requests

⁹ Version 5 Critical Infrastructure Protection Reliability Standards, 145 FERC ¶ 61,160 (2013) (“Order No. 791”), order on clarification and reh’g, 146 FERC ¶ 61,188 (2014).

¹⁰ Unless stated otherwise, a table or reference to “2018” refers to the reporting period for this report: July 1, 2017 – June 30, 2018.

that have been submitted and approved/disapproved during the preceding year and cumulatively since the effective date of this Appendix, (B) the numbers of unique Covered Assets for which TFEs have been approved, (C) the numbers of approved TFEs that are still in effect as of on or about the date of the Annual Report; (D) the numbers of approved TFEs that reached their TFE Expiration Dates or were terminated during the preceding year; and (E) the numbers of approved TFEs that are scheduled to reach their TFE Expiration Dates during the ensuing year.

The data from this reporting period indicates that the number of registered entities that are engaging in the TFE program continues to decline as does the number of total TFEs. Figure 1 provides data on the use of the TFE program. The first column of Figure 1 shows the number of registered entities subject to the CIP Reliability Standards. The CIP Reliability Standards apply to the registered entities designated in Applicability Section 4.1 of CIP-002-5 through CIP-011-2 (e.g., Balancing Authority, certain Distribution Providers, etc.). From an industry-wide perspective, the number of “CIP applicable” entities in the U.S. (i.e., with registrations to which the CIP Reliability Standards apply) has increased by less than three percent since last year’s report, from 1400 to 1442, as depicted in the first column of Figure 1.

The second column of Figure 1 depicts the number of CIP applicable registered entities (i.e., those listed in the first column) that report having high or medium impact BES Cyber Systems (“BCS”).¹¹ In 2017, 594 registered entities claimed to have systems that meet that criteria; in 2018, that number decreased nearly 40% to 365. Much of this decrease can be attributed to consolidation of entity registration and Multi-Regional Registered Entities.

The third column of Figure 1 shows the number of registered entities with high or medium impact BCS (i.e., those listed in the second column) that have active TFEs. Overall, that percentage decreased by nearly 50% in 2018. While the number of registered entities in column 2 of Figure 1 was significantly lower, the results show that in general, a registered entity with BCS has an

¹¹ During the reporting period, only requirements applicable to high and medium impact BCS were subject to TFEs.

approximately 20-25% likelihood of having a TFE. Prior to implementation of the CIP version 5 standards, 100% of registered entities with Critical Cyber Assets had TFEs.

Figure 1 – Frequency of Use (7/1/2017 to 6/30/2018)

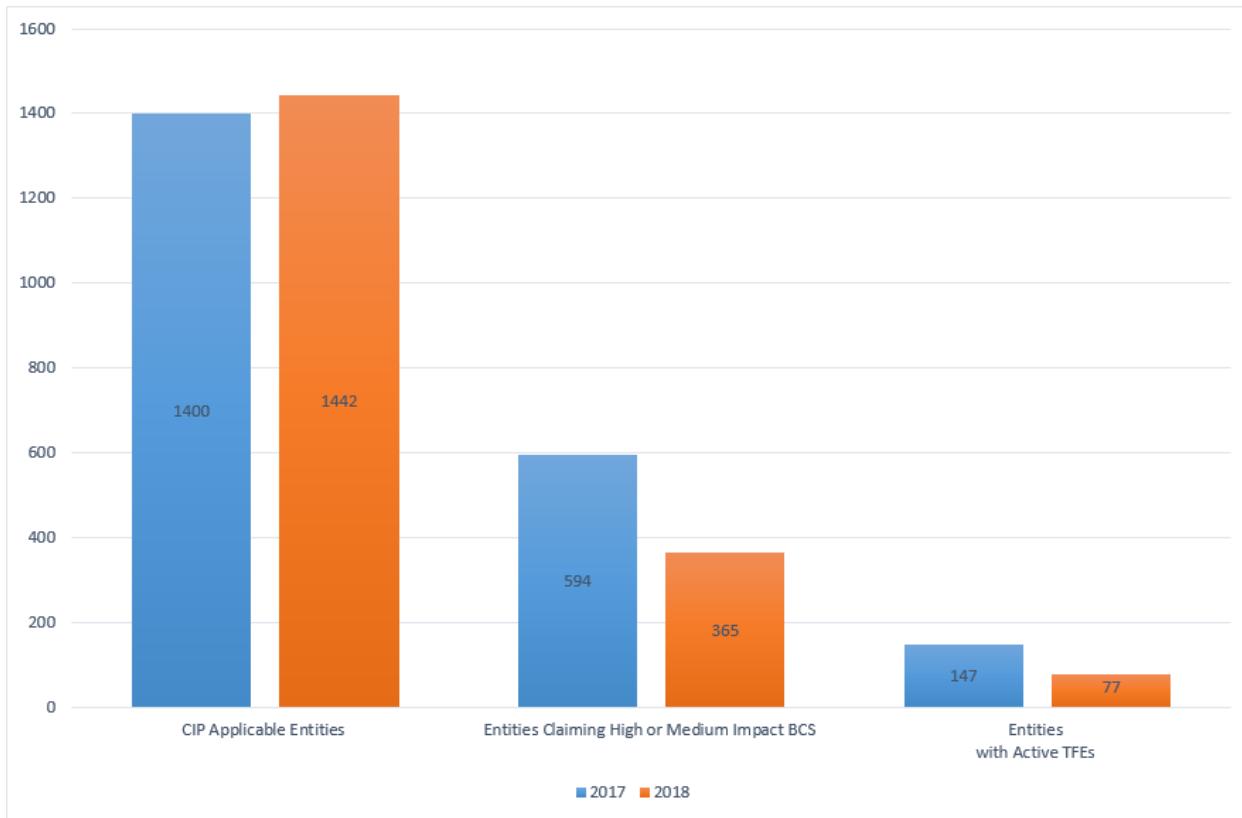


Figure 2 depicts the number of registered entities, by Regional Entity, with TFEs from 2016 through 2018. Each Regional Entity shows a significant reduction in the number of registered entities with TFEs from 2016 to 2017 (i.e., as the CIP version 5 standards were implemented). This trend moderated in 2018 in most regions, although the Western Electricity Coordinating Council (“WECC”) saw a slight increase in the number of registered entities with TFEs in 2017 followed by a drastic decline in 2018. WECC is currently examining the reasons for the sharp decline.

As noted, because SPP-RE’s compliance responsibilities ended on July 1, 2018, the TFE data for its transitioning registered entities was included in the 2018 annual report data submittals

from MRO and SERC. A total of 122 registered entities transitioned to MRO or SERC from SPP-RE. NERC estimated the number of these registered entities with TFEs. The transition did not impact data pertinent to other TFE activity addressed in this report.

Figure 2 – Number of Registered Entities with TFEs

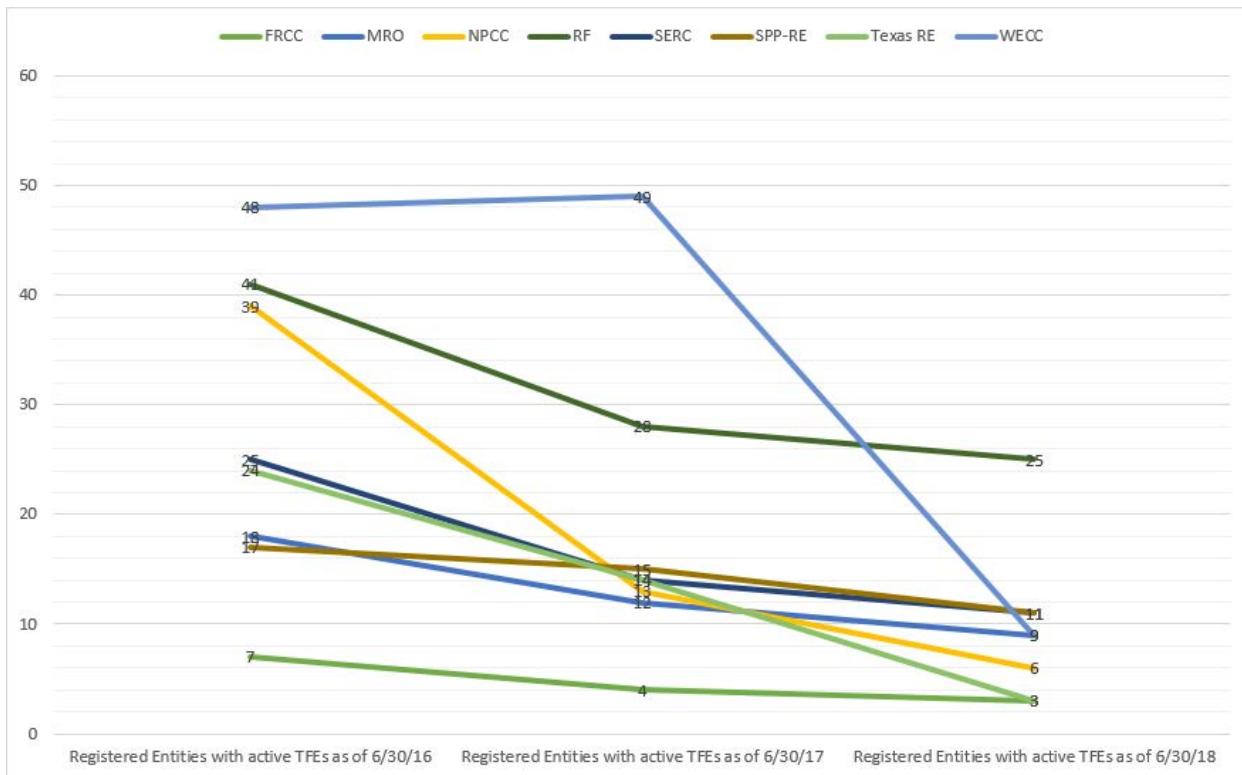


Figure 3 depicts the percentage of registered entities with TFE activity (e.g., submissions of new requests or amendments, terminations, etc.) in 2018 as compared to 2017. This percentage has been fairly consistent since July 1, 2016. Last year the average across the ERO Enterprise was 7.36% whereas this year's average is 7.49%.

Figure 3 – TFE Activities, per Number of Applicable Registered Entities

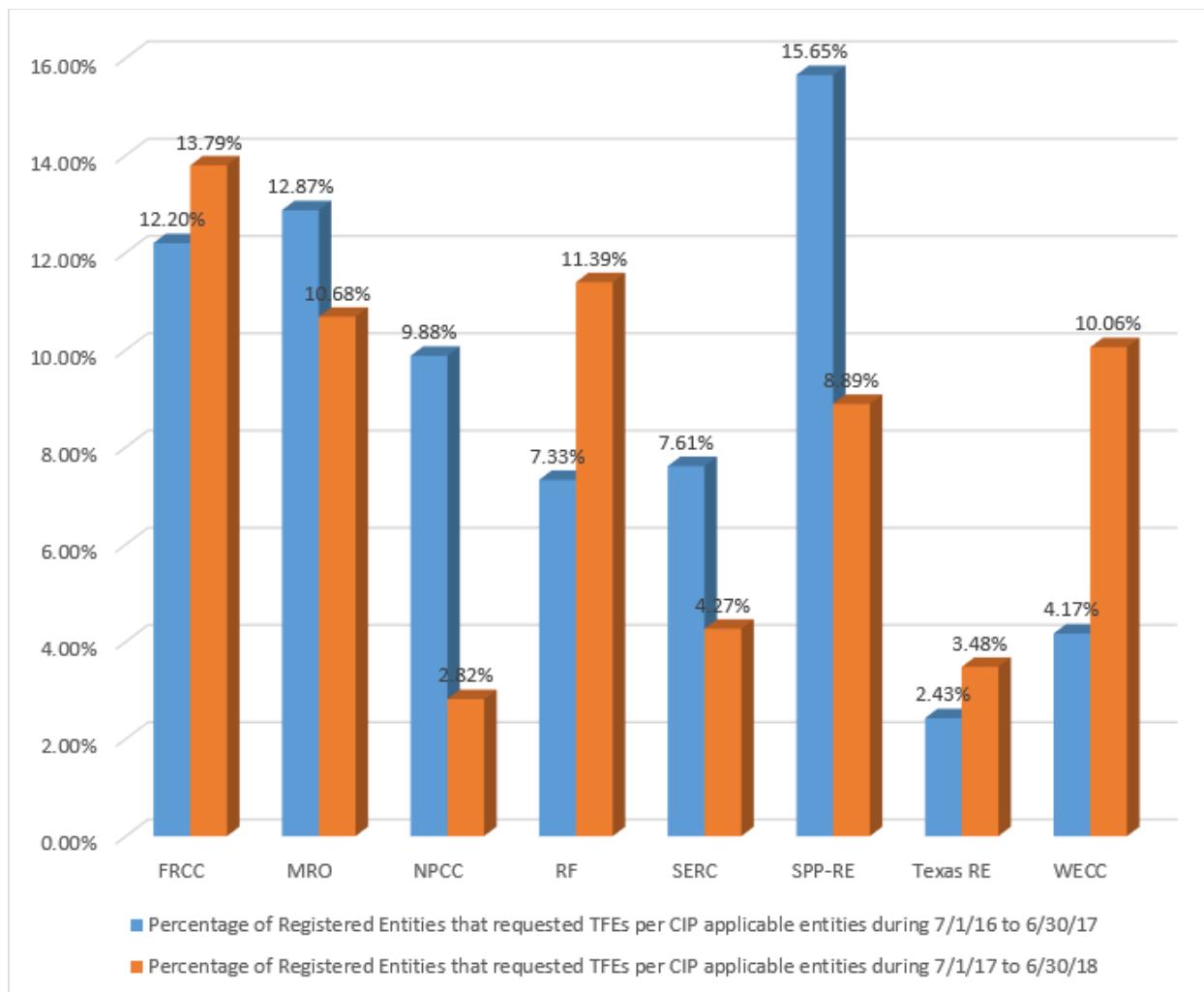


Figure 4 depicts TFE activity by comparing the number of TFE “transactions” (submittals, modifications, terminations, etc.) to the number of active TFEs from registered entities with high or medium impact BES Cyber Systems. The 2017 TFE report showed that, overall, there were 17.5% more TFE transactions than active TFEs during the period. That number, however, is the average across the ERO Enterprise. Three Regional Entities had disproportionate levels of TFE activity: The Florida Reliability Coordinating Council (“FRCC”) reported TFE activity that

exceeded 80% of the active TFEs in 2017, while MRO and SPP-RE both reported more transactions than the total number of active TFEs.

In 2018, the overall average jumped to nearly 30%. The differences between the Regional Entities are less pronounced in 2018. The flattening of the differences between the Regional Entities is due, in part, to the significant decrease in the number of registered entities to which the CIP Reliability Standards apply, as discussed above. Figure 4 illustrates that despite the decrease in the number of active TFEs and the apparent leveling of TFE activity among Regional Entities, the level of effort needed to maintain a TFE continues to increase. TFE record-keeping, as currently required in Appendix 4D of the NERC ROP, is burdensome for the Regional Entities and registered entities alike, creating work efforts that may outweigh any perceived benefit to reliability.

Figure 4 – TFE Activity Compared to the Number of Active TFEs

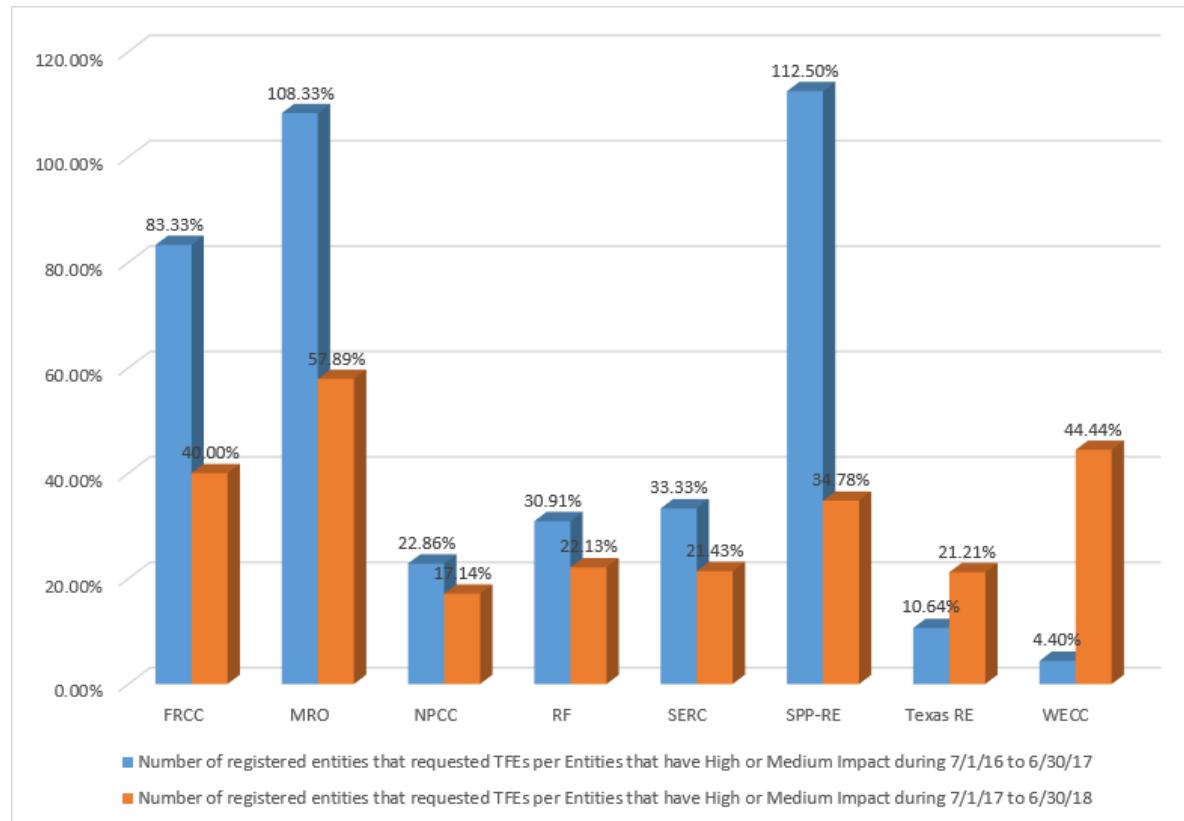


Figure 5 depicts the percentage of registered entities with TFE program activity, compared to the number of registered entities with active TFEs. This statistic stayed roughly the same between the 2017 and 2018 reporting periods. In 2017 and 2018, over 140% of registered entities with active TFEs had to take administrative action during the reporting period, which indicates that the administrative burden for maintenance of TFEs, to both registered entities and Regional Entities, has continued at very high levels.

Figure 5 – Percentage of TFE Interaction per Active TFEs

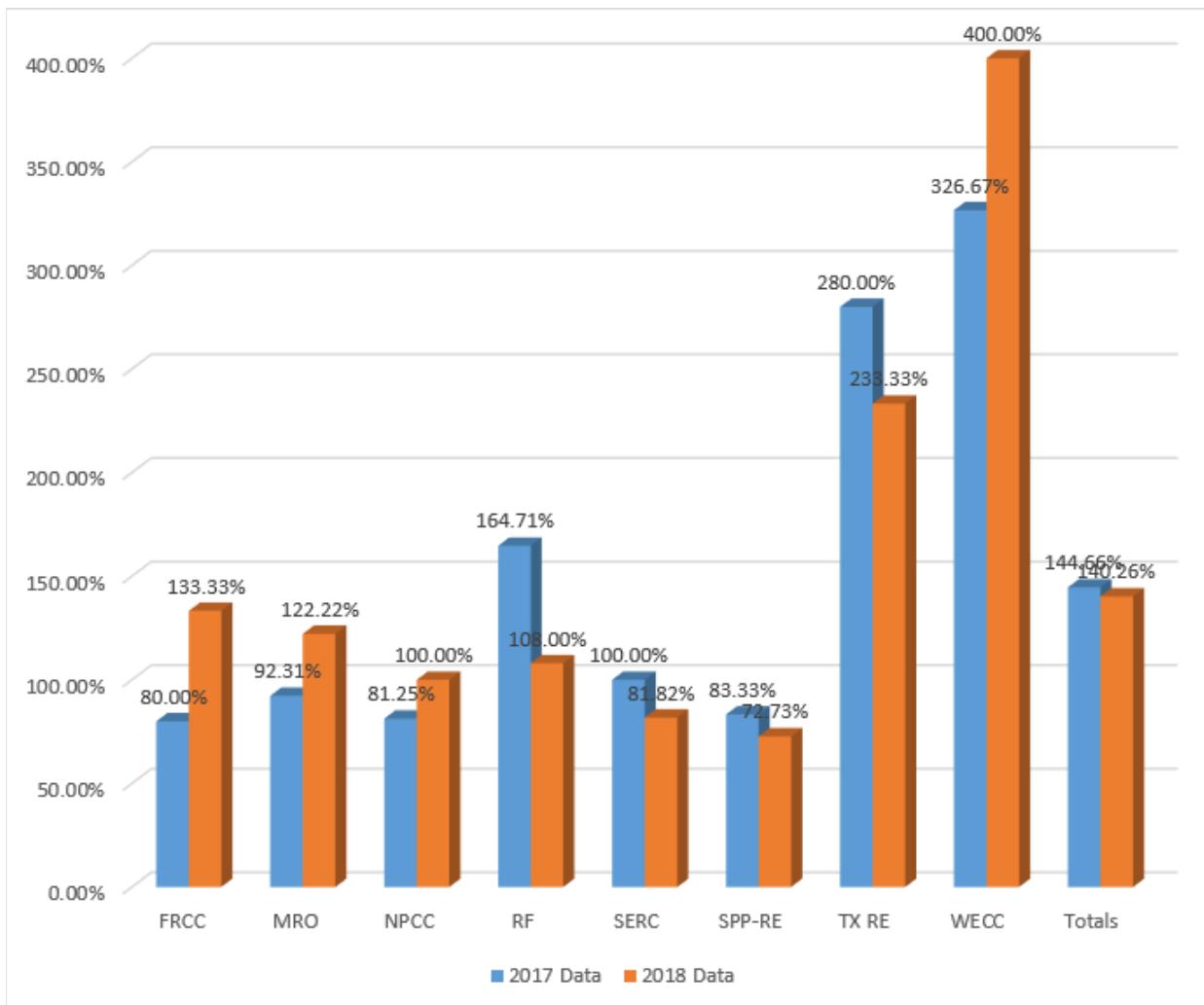


Figure 6 depicts the percentage of registered entities with TFE program activity, compared to the number of total active TFEs. This percentage shows that the number of administrative

actions needed to maintain the program exceeded the number of active TFEs. For 2018, this percentage decreased significantly from 2017 levels, although the percentages in 2017 were unusually high as the CIP version 5 standards went into effect during that reporting period causing registered entities to submit an amendment to either terminate the TFE or to update the TFE for material changes.

Figure 6 – Percentage of TFE Program Activity Correlated with Total Active TFEs

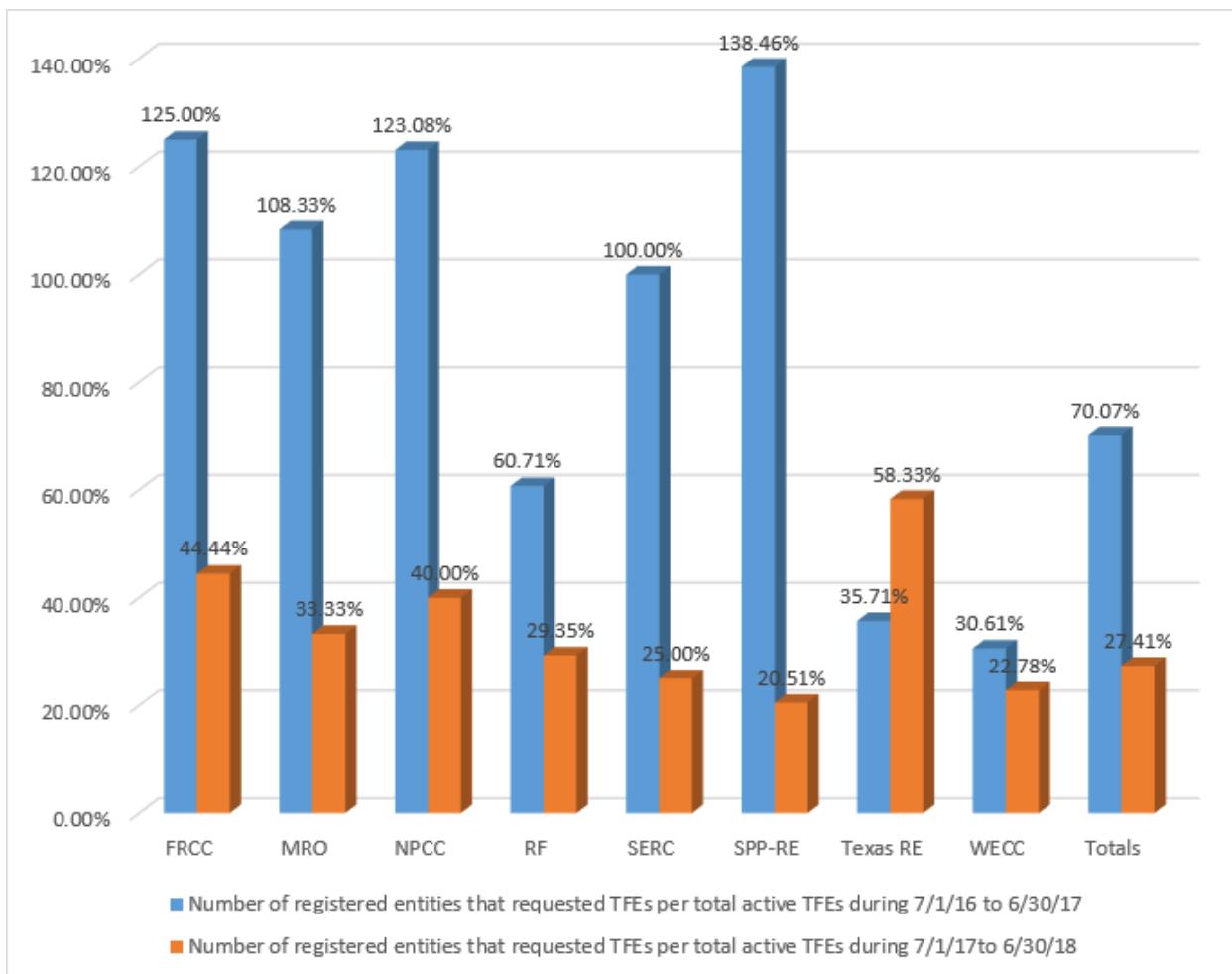
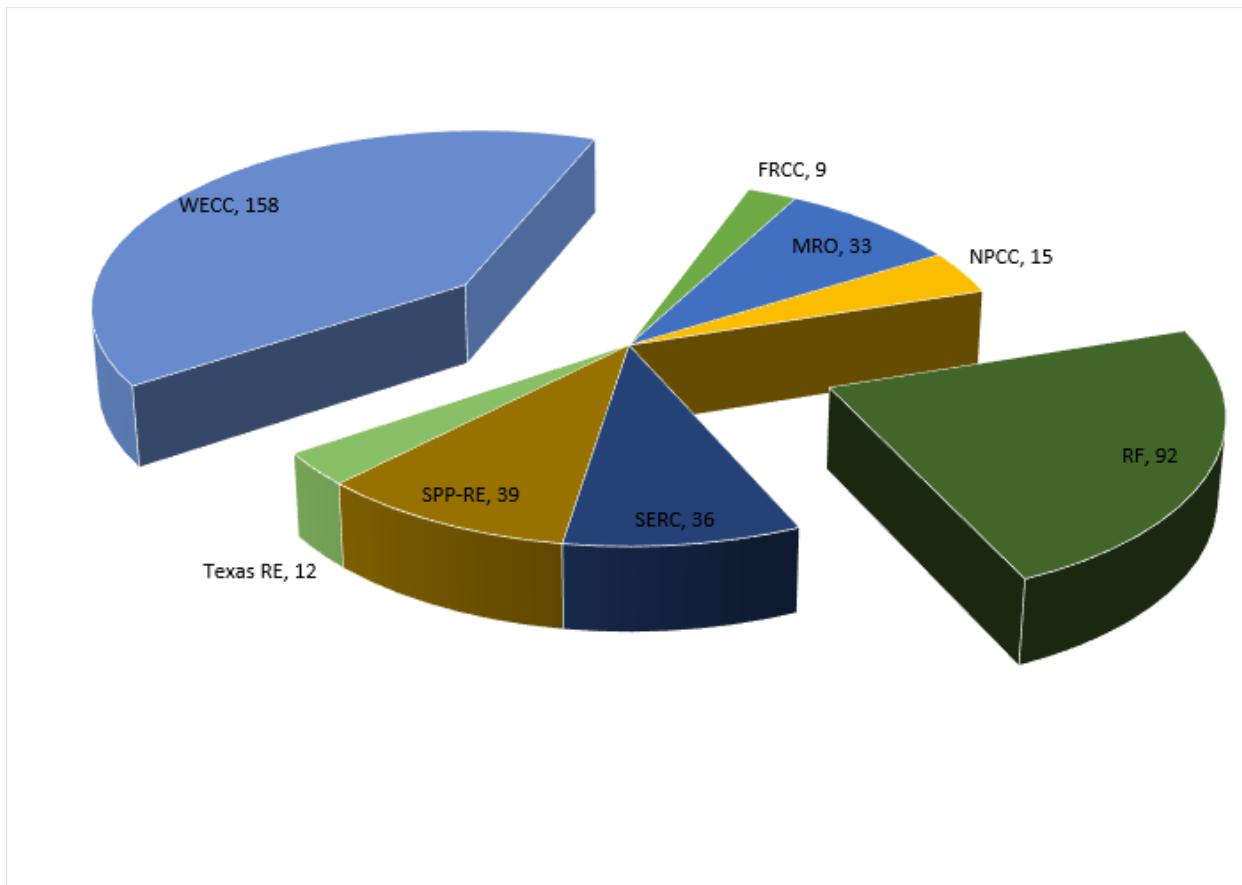


Figure 7 depicts the breakout, per Regional Entity, of the 394 active TFEs. Registered entities in WECC and the ReliabilityFirst (“RF”) continue to maintain the majority of the active TFEs, while FRCC processes the least.

Figure 7 – Total number of Active TFEs



A total of 63 TFE amendments were submitted during the reporting period. Figure 8 provides a breakdown of that activity by Regional Entity. As shown below, the majority of the amendments submitted were approved. Of the 63 amendments that were submitted, four (or 6.35%) were not approved. This equates to a 0.006% amendment disapproval percentage across the ERO Enterprise. WECC is the only region that rejected amendments. As of June 30, 2018, WECC, SERC, and MRO had a number of amendments still under review.

Figure 8 – Submitted TFE Amendment Activity

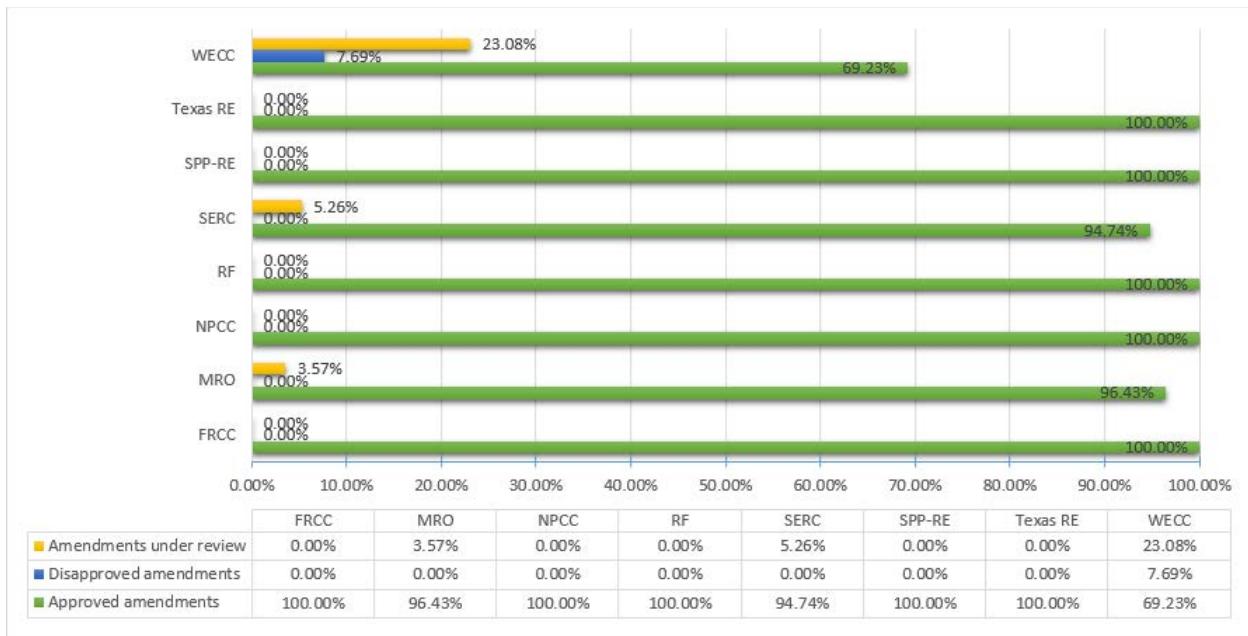


Figure 9 depicts the average quantity of TFEs for each registered entity. As shown below, the ERO Enterprise average is five TFEs per registered entity. This ERO-wide number is skewed by WECC's average of 17.56, which is higher due to a single registered entity with 32 active TFEs. In addition, two other registered entities in WECC's footprint have more than 12 TFEs each. NERC is collaborating with WECC to determine if each of these TFEs are needed or could be consolidated.

Figure 9 – Average TFE Quantity per Registered Entity

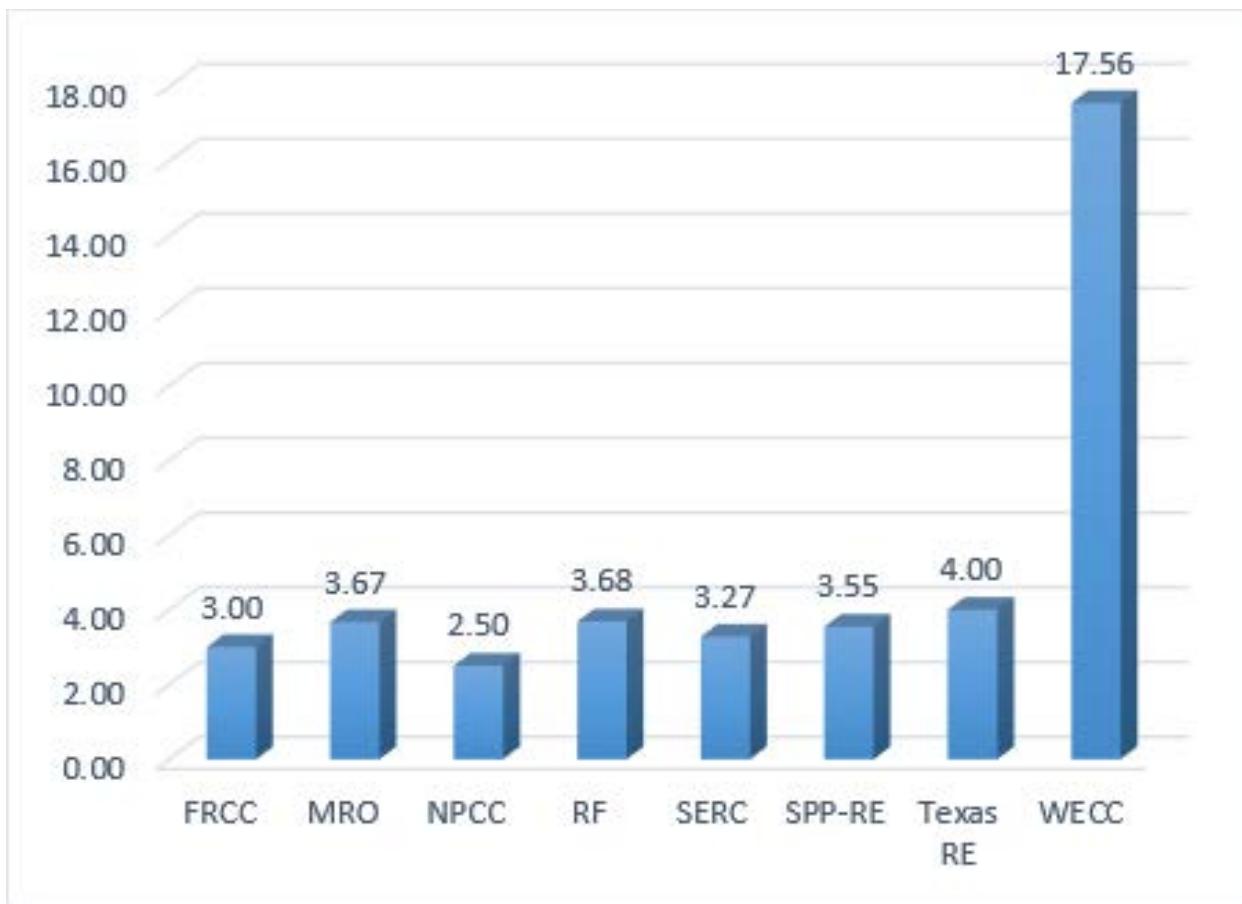
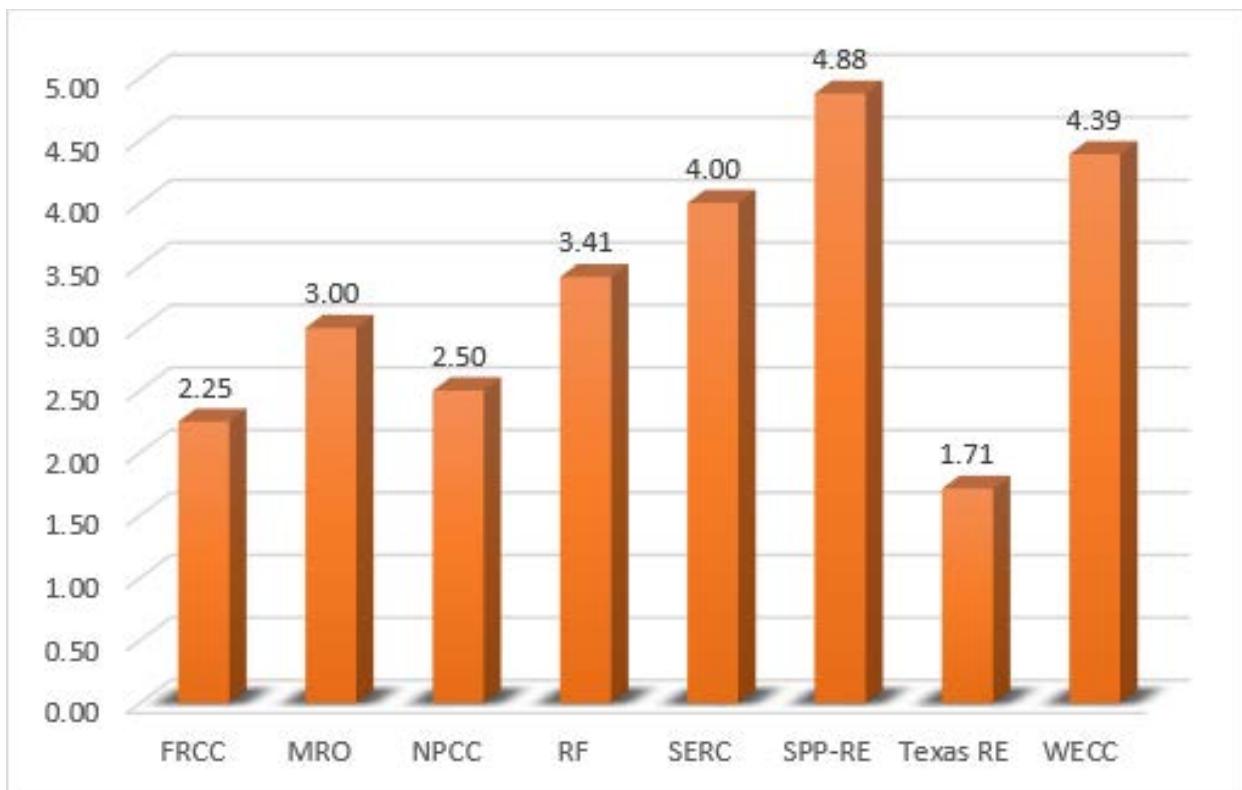


Figure 10 depicts the average percentage of transactions per TFE during the report period. The overall average for the period shows a registered entity had 3.65 transactions for each active TFE.

Figure 10 – Average TFE Percentage per Registered Entities with TFE Activity



2. Categorization of the submitted and approved TFE Requests

Categorization of the submitted and approved TFE Requests to date by broad categories such as the general nature of the TFE Request, the Applicable Requirements covered by submitted and approved TFE Requests, and the types of Covered Assets that are the subject of submitted and approved TFE Requests.

The total number of unique assets subject to TFEs is also decreasing. The decrease is likely due to the system focus of the CIP version 5 standards and the replacement of legacy equipment with more advanced technology with additional capabilities. Currently, TFEs cover 16,704 unique assets across the ERO Enterprise. This number, however, is not necessarily representative as there are two TFEs approved by WECC that account for 7,608 assets, which is almost half the number of total ERO Enterprise assets, and covers nearly 71% of WECC's total covered assets. During its next compliance monitoring engagement with the relevant registered entity, WECC plans to assess

the accuracy of the TFEs in question. In addition, NERC identified a TFE in the Texas RE region with 480 assets, which is over half of the total covered assets for Texas RE. Texas RE plans to review that TFE during its next CIP compliance monitoring engagement with that registered entity where the applicable Standard and requirement are within the audit scope.

Due to these three outlying TFEs, this report will first discuss the data as submitted, then review the trend without these outliers, which is a more accurate depiction of TFE asset status. Further, as in the past, some Regional Entities had difficulty providing data on the category of asset data. As a result, to provide a reasonable view of the data for this report, NERC has averaged the asset categories. In addition, NERC has assigned the number of possible assets per region based on the total number of assets and the ERO Enterprise average for that asset category.

Figure 11 shows the data as submitted, breaking out the asset categories by Regional Entity. There is no consistency across Regional Entities with respect to the largest asset category. For instance, FRCC's major asset category is Network Data Communication devices which covers nearly 80% of the TFE assets, while MRO has nearly 63% of the assets categorized as "Other".

Figure 11 – Percentage of Different Asset Categories within Each Regional Entity

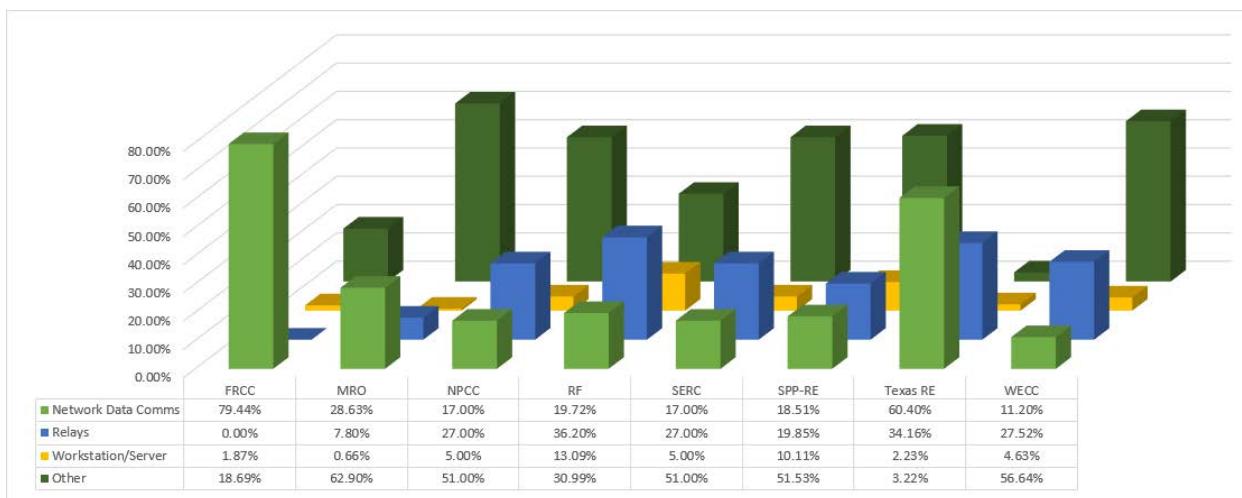


Figure 12 shows the percentage of categories of assets across the ERO Enterprise. Due to the two abnormally large TFEs in WECC, the majority of the asset categories outside of WECC are averaging five percent or less.

Figure 12 – Percentage of Different Asset Categories Across the ERO

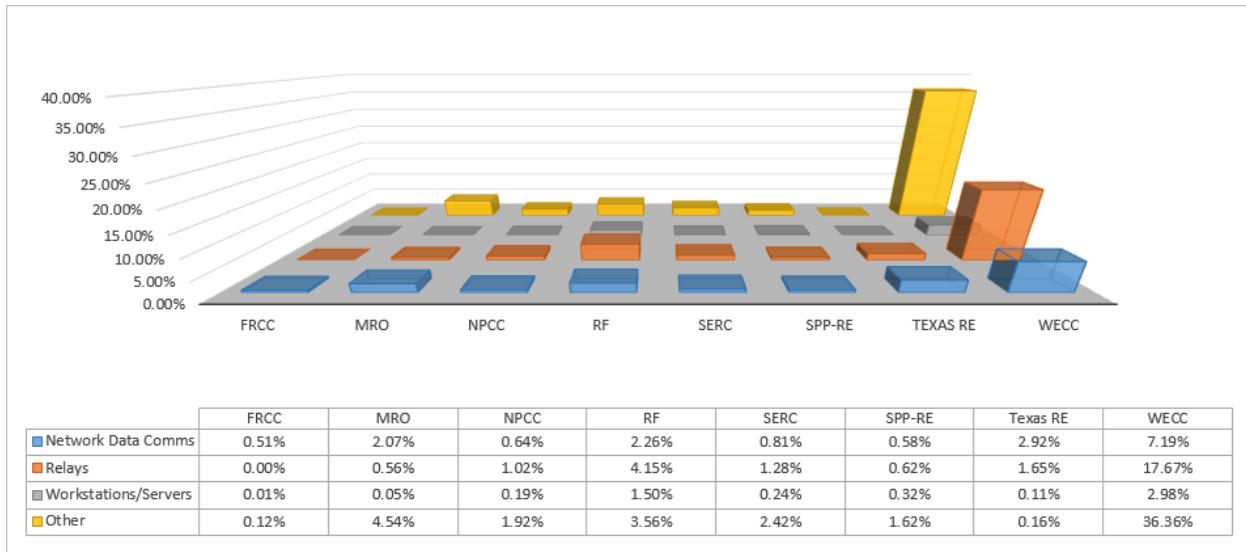
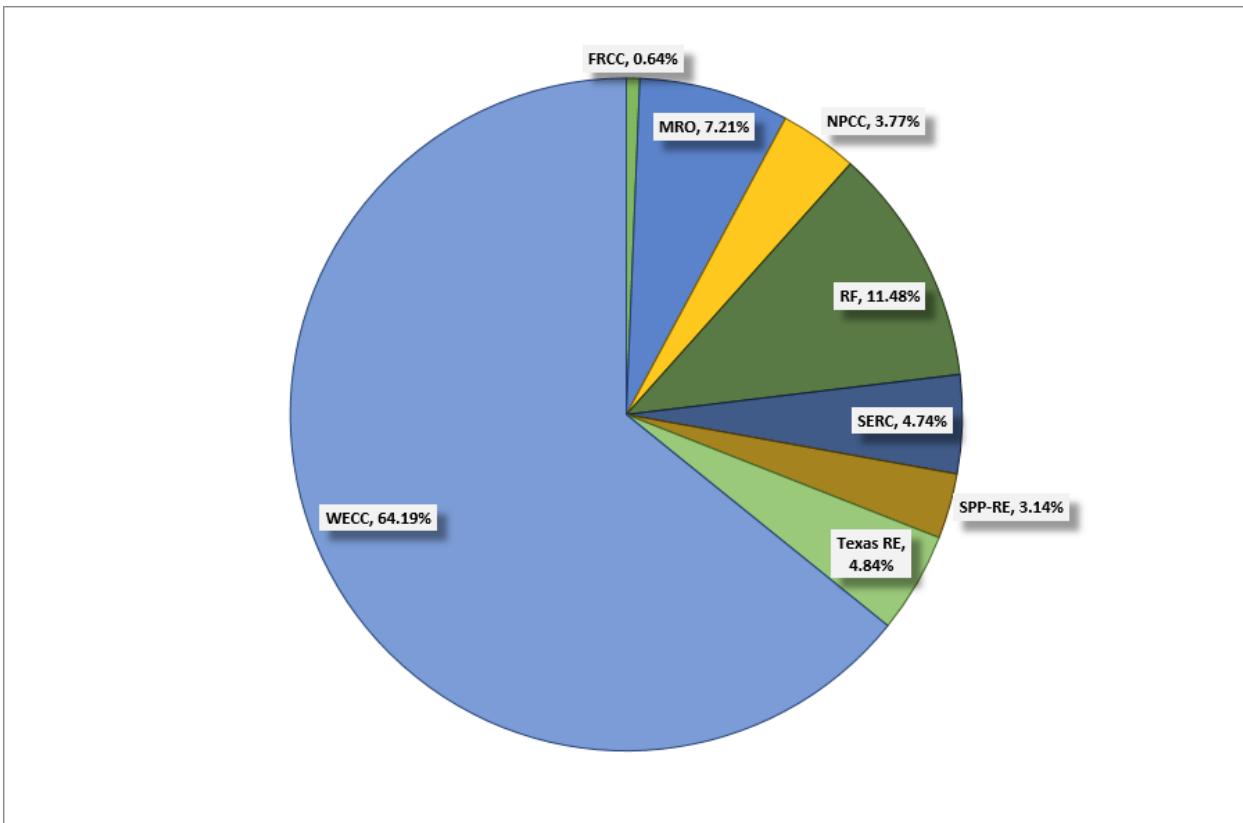


Figure 13 shows the total asset allocation broken out by Regional Entity. The majority of assets covered by TFEs are located within the WECC region due to the two TFEs that account for almost half of the total amount of covered assets. As discussed further below, the report will show the results after eliminating the TFEs with abnormally large assets. The analysis from the data without those three TFEs provides a more accurate analysis of the TFE program.

Figure 13 – Percentage of Assets Covered by TFEs per Regional Entity



The trend changes dramatically when the three abnormally large TFEs are removed from the analysis. The total number of assets being discussed without the three large TFEs is 8,616, which is roughly 52% of the total reported assets. Figure 14 shows the percentage of asset categories by Regional Entity, without the three abnormally large TFEs in the analysis. As shown below, the dynamic of allocation per categories drastically changes compared to Figure 11.

Figure 14 – Percentage of Different Asset Categories within Each Regional Entity Excluding Outliers

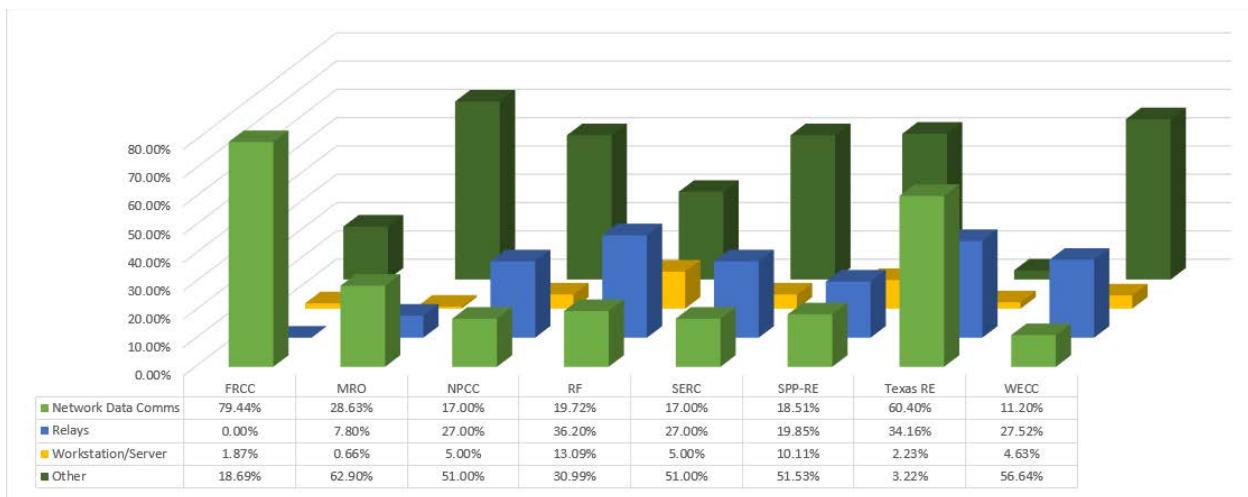


Figure 15 shows the breakout of asset categories across the ERO Enterprise, excluding the three outliers. This figure better illustrates where certain issues may lie within the TFE program and, in particular, identify other outlying issues that need further analysis. Compared to Figure 12, Figure 15 shows more breadth of asset categories, consistent with NERC's expectation. There are more assets in the Relay and Workstations/Servers categories. As expected, the category of "Other" contains the majority of assets for most of the Regional Entities.

Figure 15 – Percentage of Different Asset Categories Across the ERO Excluding Outliers

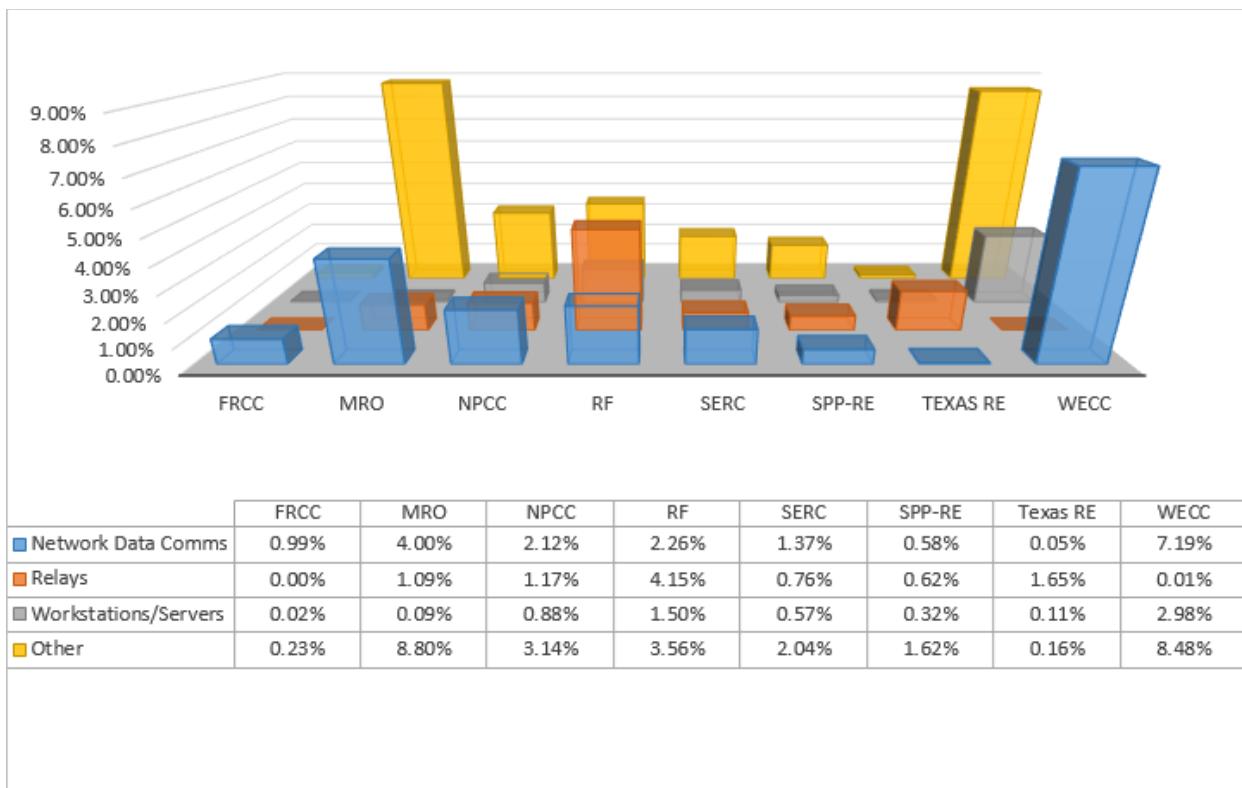
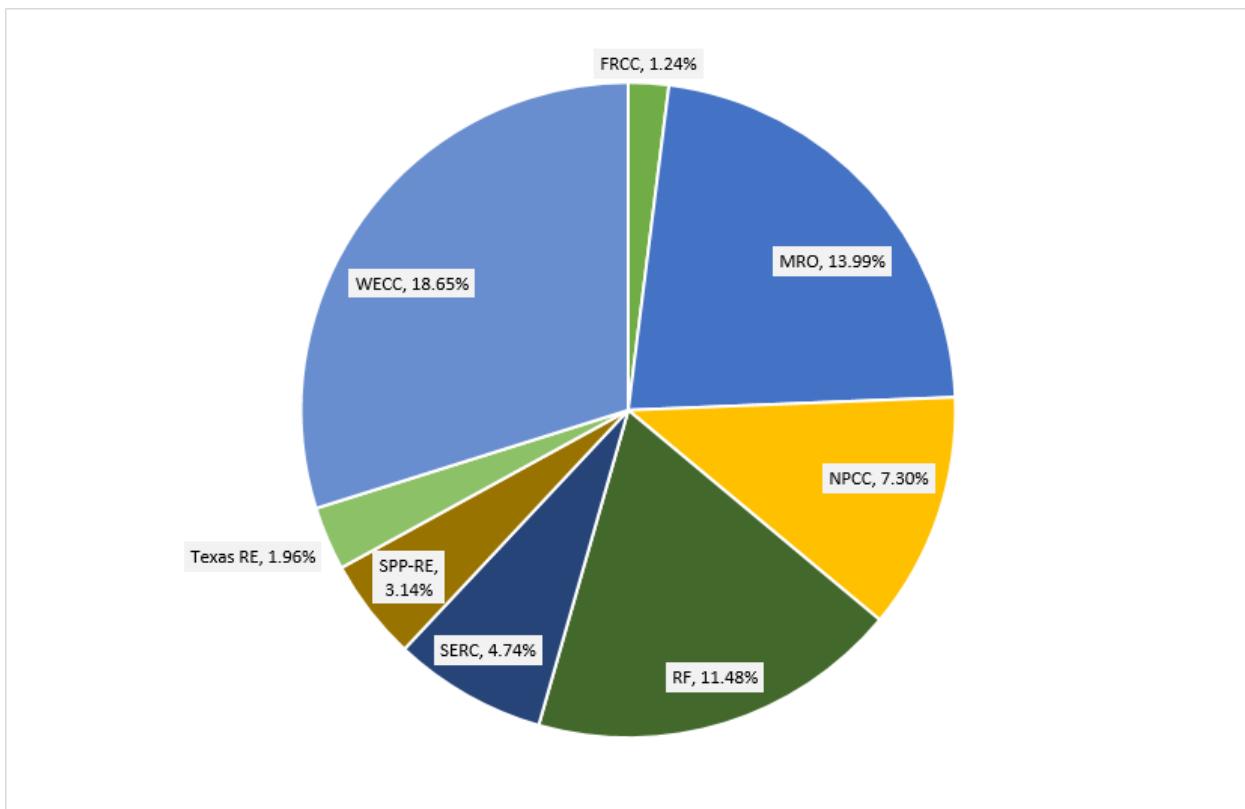


Figure 16 depicts the allocation of assets per Regional Entity, which is drastically different than Figure 13. Figure 16 shows a more equal distribution of assets throughout the ERO Enterprise rather than the majority within WECC. This depiction shows a few abnormalities that were not expected, such as the amount of MRO and SERC's assets. SERC has more registered entities within its region compared to MRO but SERC is showing less than 5% of the assets are covered by TFEs, whereas MRO is showing almost 14%. MRO's percentage is also larger than RF for covered assets. MRO has two TFEs that cover a significant number of assets in their regional footprint and, upon investigation, one registered entity was responsible for both of the TFEs. The registered entity had several applicable transmission substations which increased the amount of assets being covered by TFEs.

Figure 16 – Percentage of Assets covered by TFEs per Regional Entity Excluding Outliers



3. Categorization of the circumstances or justification

Categorization of the circumstances or justifications on which the approved TFEs to date were submitted and approved, by broad categories such as the need to avoid replacing existing equipment with significant remaining useful lives, unavailability of suitable equipment to achieve Strict Compliance in a timely manner, or conflicts with other statutes and regulations applicable to the Registered Entity.

As in the past years, a TFE request tends to be based on one of the first three criteria mentioned below. That pattern remains unchanged for this reporting period. To date, there have been no reports of TFEs that were approved based on the last three criteria:

- Not technically possible
- Operationally infeasible
- Precluded by technical limitations
- Adverse effect on bulk electric system reliability
- Cannot achieve by compliance date

- Excessive cost that exceeds reliability benefit
- Conflicts with other statutory or regulatory requirement
- Unacceptable safety risks

4. Categorization of the compensating measures and mitigating measures implemented and maintained

Categorization of the compensating measures and mitigating measures implemented and maintained by registered entities pursuant to approved TFEs, by broad categories of compensating measures and mitigating measures and by types of Covered Assets.

The ERO continues to evaluate the extent and effectiveness of compensating measures that are described in TFE requests. The majority of compensating and/or mitigating measures are accomplished by compliance with requirements in related CIP Standards. As most TFEs relate to the same types of assets, the registered entities are applying the same mitigation measures for each of the TFEs to address the known risks.

5. TFE rejection or disapproval

For each TFE Request that was rejected or disapproved, and for each TFE that was terminated, but for which, due to exceptional circumstances as determined by the Regional Entity, the TFE Termination Date was later than the latest date specified in Section 5.2.6, or 9.3, as applicable, a statement of the number of days the Registered Entity was not subject to imposition of findings of violations of the Applicable Requirement or imposition of Penalties or sanctions pursuant to Section 5.3.

During the reporting period, WECC did not approve four new TFE requests and one TE modification. No other Regional Entity disapproved a new TFE request or a modification. WECC disapproved the requests because the assets covered by the requested TFE were not applicable to the requirement. For instance, in one of the disapproved TFEs, the assets were a part of a medium impact BES Cyber System without External Routable Connectivity and, therefore, the relevant requirement, CIP-007-6 Requirement R5 Part 5.6, was not applicable. During the 2018 reporting period, there were no TFE termination requests that caused the effective date to be extended beyond the latest date specified in Section 5.2.6 or Section 9.3 of Appendix 4D, as applicable.

6. Compliance Audit results and findings concerning the implementation and maintenance of compensating measures and mitigating measures

A discussion, on an aggregated basis, of Compliance Audit results and findings concerning the implementation and maintenance of compensating measures and mitigating measures, and the implementation of steps and the conduct of research and analyses to achieve Strict Compliance with the Applicable Requirements, by registered entities in accordance with approved TFEs.

Appendix 4D of NERC's ROP is part of the Compliance Monitoring and Enforcement Program (“CMEP”) that forms the framework for Regional Entities to review and audit TFE requests. During a compliance audit, a registered entity with a TFE for a particular requirement is *not* evaluated against the applicable Reliability Standard for which a TFE was accepted and approved, but instead evaluated against the alternative compliance obligations assumed by the registered entity (*i.e.*, compensating and mitigation measures).

All Regional Entities conduct compliance audits where approved or terminated TFEs are in scope. Typically, an audit of a registered entity with TFEs will be managed according to the TFEs that need to be reviewed (*i.e.*, based on factors such as quantity, locations, etc.). Reviews include interviewing subject matter experts specifically about TFEs, and sampling evidence pertaining to a TFE’s mitigating and compensating measures, among other things. As was indicated in previous annual TFE reports, Regional Entities continue to report that registered entities are managing and maintaining their TFEs within the procedural requirements of Appendix 4D. Regional Entities have also issued audit findings that identify TFEs to be processed consistent with the CMEP.

7. Assessments of impacts on the reliability of the BES

Assessments, by Regional Entity (and for more discrete areas within a Regional Entity, if appropriate) and in the aggregate for the United States and for the jurisdictions of other Applicable Governmental Authorities, of the Wide-Area impacts on the reliability of the Bulk Electric System of approved TFEs in the aggregate, including the compensating measures and mitigating measures that have been implemented.

The TFE Task Force (“TFETF”), comprised of subject matter experts from each Regional Entity and NERC, reviews TFE requests to verify sufficiency and consistency of the requests. In addition, the TFETF verifies the availability and use of TFEs in lieu of strict compliance. The TFETF reports that the use of TFEs has not had an adverse impact on BES reliability. Regional Entities reported similar experiences with the execution and management of the TFE process and the manner in which it impacted BES reliability. Regional Entities reported that a large majority of registered entities have implemented multiple compensating and mitigating measures for Covered Assets. In general, the mitigating and compensating measures of approved TFEs that were implemented in lieu of strict compliance with applicable CIP Reliability Standards accomplished the stated alternate compliance objective. As a result, the level of BES security achieved through the TFE process is comparable to strict compliance with the applicable Reliability Standards.

8. Efforts to eliminate future reliance on TFEs

Discussion of efforts to eliminate future reliance on TFEs.

In the past, the value of a TFE was the safe harbor it provides to a registered entity when strict compliance to certain Reliability Standards could not be achieved. As referenced in Order No. 706, TFEs are rooted in the problem of legacy equipment and the economic considerations involved in the replacement of such equipment before the end of its useful life.¹² As registered entities increasingly move away from legacy equipment, the value of the TFE program, as currently constructed, is diminishing in comparison to the program’s administrative burden. Despite the decrease in the number of active TFEs and the total assets covered by a TFE, the level of effort by the registered entity and Regional Entity necessary to maintain and administer a TFE continues to increase. TFE record-keeping, as currently required by Appendix 4D of the NERC

¹² *Mandatory Reliability Standards for Critical Infrastructure Protection*, 122 FERC ¶ 61,040 (2008) (“Order No. 706”).

ROP, is burdensome for the Regional Entities and registered entities alike, creating work efforts that may outweigh any perceived benefit. In addition, CMEP processes that are used to assess general compliance with the CIP Reliability Standards are equally effective in evaluating the compensating and mitigation measures when strict compliance is “technically infeasible.”

To that end, NERC and the Regional Entities are considering alternatives to the current TFE program to alleviate the administrative burden on registered entities and the ERO Enterprise. During quarterly meetings, the TFETF has focused on TFE management, administrative processes, and approaches to making the processes more effective and efficient for the Regional Entities and registered entities. The TFETF members concluded that the existing TFE processes are labor intensive and do not mitigate significant risks apart from the application of existing CMEP tools such as Compliance Audits, Spot Checks, Self-Certifications, and Self-Reports. The TFETF has stated that the ERO Enterprise may retain the same awareness and risk mitigation of the TFE program without the administrative burden if the NERC allows the registered entity to maintain the exception without prior approval, provided that the registered entity could demonstrate upon the next compliance monitoring engagement that the exception is reasonable and appropriate mitigation measures are in place to address any residual risk. As NERC considers alternatives to the TFE program, it will consult with Commission staff and request Commission approval for any changes to the NERC ROP.

9. Material Change Reports

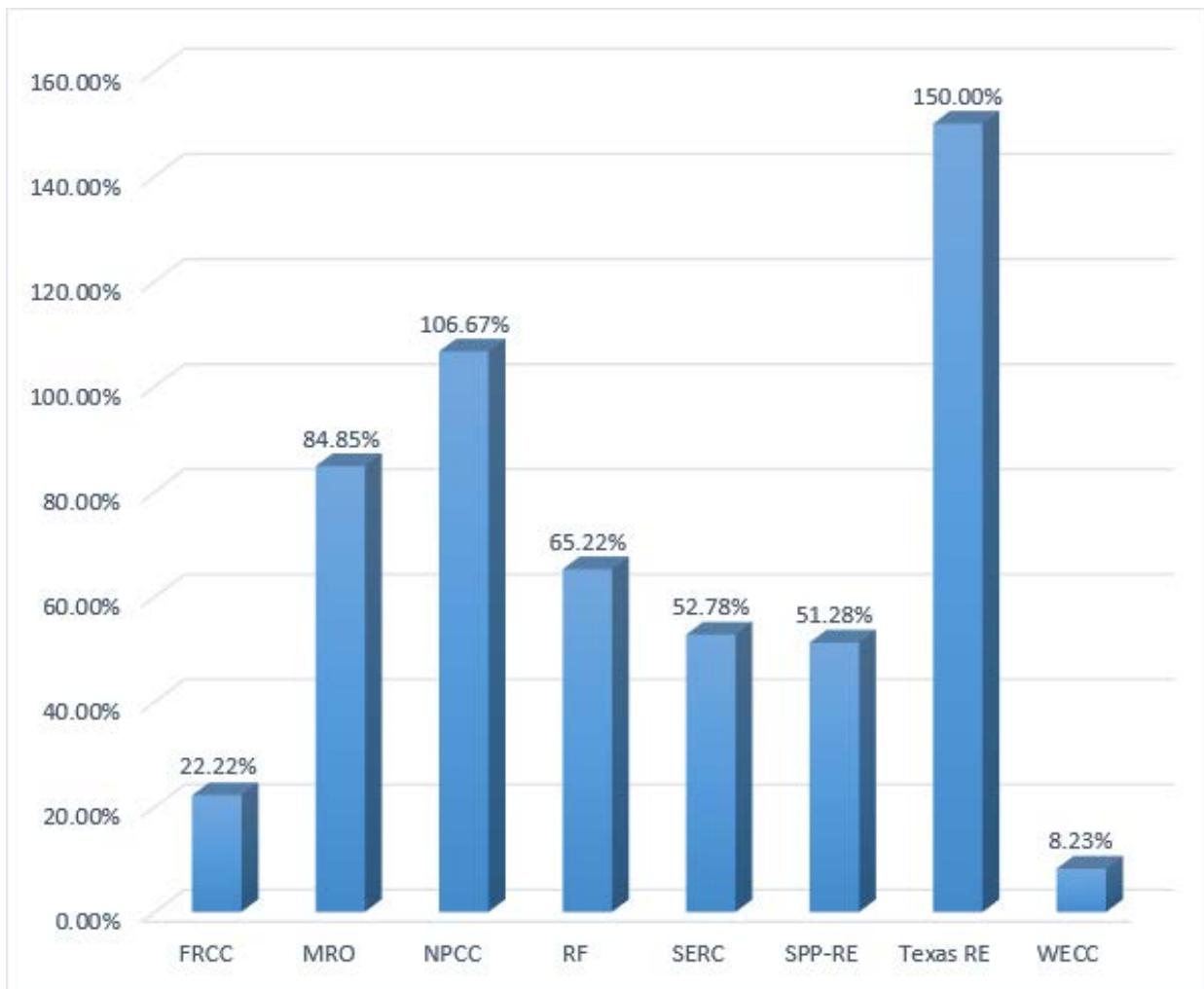
Data and information regarding Material Change Reports, including the number of Material Change Reports filed annually and information regarding the types of circumstances or events that led to Material Changes, as well as any additional information NERC believes would be useful.

When registered entities modify the information associated with approved TFEs, updates are submitted to the relevant Regional Entity via a “Material Change Report” (“MCR”). An MCR

requires approval by the Regional Entity, which can then refer to current data when undertaking compliance monitoring activities (e.g., Compliance Audits, Spot Checks, Self-Certifications, etc.).

Figure 17 below shows the percentage of amendments per active TFEs within each Regional Entity. Most changes are needed for asset count changes and administrative updates. Some Regional Entities have percentages over 100% which means that every approved TFE had more than one MCR.

Figure 17 – TFE Amendments to Active TFEs per Regional Entity



10. Additional information about TFEs and their TFE Expiration Dates

Additional information about TFEs and their TFE Expiration Dates, including the number of TFEs by expiration year and CIP Standard requirement, the percentage of currently

approved TFEs without TFE Expiration Dates, and the number of new TFEs approved without expiration dates annually.

In its September 2013 Order, the Commission directed NERC to provide additional information in the annual TFE reports related to TFEs with and without expiration dates. As reported previously, most TFEs do not have expiration dates.¹³ For the next TFE reporting period, July 1, 2018 to June 30, 2019, there are seven TFEs scheduled to be expired. Of these seven, one is applied to CIP-007-6 Requirement R1 Part 1.1, two are applied to CIP-007-6 Requirement R5 Part 5.1, and the other four are applied to CIP-007-6 Requirement R5 Part 5.7. There is one TFE that is scheduled to expire after the next TFE reporting period; it is applied to CIP-005-5 Requirement R2 Part 2.3.

11. Consistency in Review, Approval and Disapproval of TFE Requests

Appendix 4D, Section 11.1 of the NERC ROP requires that NERC and the Regional Entities collaborate to assure “consistency in the review, approval and disapproval of TFE Requests. . . .” Also, as noted above, Section 11.2.4 of the NERC ROP requires that NERC submit with each Annual TFE Report certain information concerning the manner in which Regional Entities have made determinations to approve or disapprove TFE requests. The scope document for the TFETF describes activities and deliverables that support this effort:

- Review Regional Entities’ processes and performance in administering TFE Requests and Material Change Reports
- Evaluate whether the administration of TFE activities among the Regional Entities yields consistent results
- Assess compensating and mitigating measures described in TFEs for quality and sufficiency
- Review approved and disapproved TFE Requests or Material Change Reports for consistency

¹³ September 2013 Order at P 15.

- Monitor active TFEs throughout their life cycle to determine whether they remain necessary and effective

IV. CONCLUSION

For the foregoing reasons, NERC respectfully requests that the Commission accept the 2018 Annual Report.

Respectfully submitted,

/s/ Shamai Elstein

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September 28, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 28th day of September, 2018.

/s/ Shamai Elstein

Shamai Elstein
Attorney for the North American Electric Reliability Corporation