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I. INTRODUCTION

The North American Electric Reliability Corporation (NERC) respectfully submits this compliance filing and report in fulfillment of its commitment to an annual filing made in the above-referenced proceeding,¹ and in compliance with the Federal Energy Regulatory Commission's (FERC or Commission) June 20, 2013 Order.²

In its June 20, 2013 Order, the Commission accepted NERC's March 15, 2013 compliance filing regarding the implementation and progress of the Find, Fix, Track and Report (FFT) program. Under the FFT program, NERC and Regional Entities³ dispose of noncompliance posing a lesser risk to the reliability of the bulk power system (BPS)⁴ in an abbreviated spreadsheet format without the imposition of a monetary penalty. The Commission directed NERC to address several specific topics in this report, beyond the results of NERC's annual review of sampled FFTs.⁵ These topics, which are addressed in section IV below, are:

- the number and types of FFTs that were moderate risk Possible Violations since the date of this order;
- for each moderate risk Possible Violation treated as an FFT, a statement of the factors that the Regional Entities relied on to make the determination and why those factors supported treatment of the moderate risk Possible Violation as an FFT; and

¹ See *North American Electric Reliability Corporation*, "Petition Requesting Approval of New Enforcement Mechanisms and Submittal of Initial Informational Filing Regarding NERC's Efforts to Refocus Implementation of its Compliance Monitoring and Enforcement Program," Docket No. RC11-6-000 (September 30, 2011) (Petition).

² *North American Electric Reliability Corporation*, "Order on Compliance Filing," 143 FERC ¶ 61,253 (2013) (June 20, 2013 Order).

³ Collectively referred to herein as the "Electric Reliability Organization (ERO) enterprise."

⁴ As discussed below, the ERO enterprise classifies the risk posed by noncompliance with the Reliability Standards into three categories: "minimal," "moderate," and "serious and substantial." References to "lesser risk" relate to the minimal and moderate categories.

⁵ June 20, 2013 Order at P 34.

- a detailed explanation of the steps that NERC has taken to ensure the Regional Entities are determining risk in a consistent manner, and identify any inconsistent outcomes and the reason for them.

This filing provides an account of NERC’s annual evaluation of the FFT program in section III, provides the necessary information to support continued application of the FFT program to noncompliance that posed a moderate risk to the BPS in section IV, and proposes an improvement to the program associated with the timeframe for completion of mitigation with respect to FFT issues in section V.

II. THE FFT PROGRAM HAS SUCCESSFULLY EVOLVED SINCE ITS IMPLEMENTATION IN 2011

The FFT program is a mature processing mechanism that the Regional Entities are applying effectively to resolve lesser-risk issues in an efficient manner. Almost two thousand FFTs have been processed since the beginning of the program in September 2011.

The FFT program was the first step in implementing a risk-based approach to enforcement of Reliability Standards that recognizes not all instances of noncompliance require the same type of process and documentation. All noncompliance, regardless of the level of risk posed, is expected to be identified and mitigated. However, a review of the noncompliance processed by the ERO enterprise indicates that the vast majority of the caseload posed a minimal or moderate risk to the reliability of the BPS.⁶ Therefore, although it is very important that such matters continue to be mitigated, the data

⁶ In 2012 and 2013, respectively, 74% and 72% of the violations and issues posted or filed at FERC were handled as FFTs or in Spreadsheet Notice of Penalty filings. Both of those disposition methods are used for only minimal or moderate risk noncompliance. “NERC Compliance Violation Statistics—Fourth Quarter 2013,” at 10 (available at <http://www.nerc.com/pa/comp/CE/Pages/Compliance-Violation-Statistics.aspx>).

continues to support the utilization of streamlined processes and documentation requirements in processing most of the caseload. Significantly, the FFT program has allowed NERC, Regional Entities, and registered entities to acquire significant experience with a reduced record and simplified processes and documentation requirements while maintaining visibility and accountability. The FFT program also allowed NERC and the Regional Entities to expand their experience with assessing the risk posed by noncompliance, including identifying minimal, moderate, and serious and substantial risk issues, as discussed further herein.

The FFT program remains very successful, with high levels of utilization across the ERO enterprise.⁷ In particular, NERC reviews of the program, conducted annually, have found that, across all the Regional Entities, the quality of the FFTs submitted to NERC by the Regional Entities had improved since the FFT program began in 2011.⁸ This trend was confirmed in the review which is the subject of this filing.

The success of the FFT program has allowed for the development of additional tools and mechanisms to handle lesser-risk noncompliance. Under the Reliability Assurance Initiative (RAI), the ERO enterprise enforcement staffs have worked with registered entities on programs to streamline the disposition of lesser-risk noncompliance and reduce undue burdens on registered entities. Expansion of enforcement discretion, under a compliance exception process, will allow for the disposal of lesser-risk, mitigated

⁷ *Id.*

⁸ See *North American Electric Reliability Corporation*, “North American Electric Reliability Corporation’s Compliance Filing and Report on the Compliance Enforcement Initiative and Proposed Enhancements to the Find, Fix, Track and Report (FFT) Program,” Docket No. RC11-6-004 (March 15, 2013) (Compliance Filing).

⁹ This included 120 minimal risk issues and 5 moderate risk issues.

noncompliance without the creation of a Possible Violation and the initiation of an enforcement action. Registered entities with mature internal controls will have the opportunity to track their minimal risk noncompliance through self-logging that would be subject to periodic review by their Regional Entities. On the log, the registered entity records the facts surrounding the noncompliance, the basis for its minimal risk determination, and an explanation of how the noncompliance was mitigated.

Such minimal risk issues, provided they are mitigated and the Regional Entity agrees with the registered entity's risk determination, would presumably be treated as compliance exceptions and avoid more extensive procedures pursuant to the NERC Compliance Monitoring and Enforcement Program. Thus, the Regional Entity continues to have visibility into all compliance issues at the registered entity, but both parties avoid the administrative tasks involved with processing minimal risk issues. Because the granting of logging privileges is based on the Regional Entity's understanding and assessment of the registered entity's internal controls, the registered entity has already demonstrated its capability at detecting and correcting minimal risk issues. Therefore, one of the benefits of the public processing of the violation, encouragement of self-monitoring, is diminished.

The ERO enterprise is implementing these RAI programs on a limited basis to evaluate their effectiveness before applying them more broadly. NERC is working with the Regional Entities on identifying additional registered entities that are eligible for the self-logging privileges. NERC is also examining the compliance exceptions submitted by the Regional Entities and then sending them to FERC staff so that there is requisite visibility for the parties responsible for ensuring reliability. NERC will make an

informational filing with the Commission before the end of 2014, detailing the enforcement programs described above, as well as the improvements to compliance monitoring practices that are also part of RAI.

III. REVIEW OF ANNUAL SAMPLE OF 2013 FFTs

A. NERC Oversight of the FFT Program

NERC engages in various activities to exercise oversight over the FFT process. Regional Entities submit public and non-public versions of the FFTs to NERC, in the NERC-provided template, for posting on a monthly basis. Since July 2013, when the Commission allowed NERC to use the FFT program to dispose of noncompliance posing a moderate risk to the reliability of the BPS, NERC staff has reviewed all moderate-risk FFTs for suitability for FFT treatment. NERC staff discusses any concerns with Regional Entity staff prior to posting.

NERC also reviews a representative sample of FFTs that posed a minimal risk to the reliability of the BPS during the 60-day window following the posting of the FFT on NERC's website. Moderate risk FFTs and FFTs with ongoing mitigating activities at the time of posting are also included in this review. Following its review of the FFT samples, NERC coordinates any questions or concerns it may have with FERC staff, which conducts an independent review during the same 60-day period. In addition to sampling during this 60-day review period, NERC also conducts a separate, annual sampling of the FFTs to gather information for NERC's annual filing with FERC. The results of the review performed in connection with FFTs processed in 2013 are provided below.

NERC's oversight of the FFT program will continue to evolve along with the program itself. For the next annual review of FFTs, NERC and FERC plan to examine the same sample of FFTs, in an effort to reduce the burden on the Regional Entities and registered entities. NERC and FERC already discuss the results of the reviews conducted during the 60-day period following FFT posting, though there is no coordination regarding the FFTs to be reviewed. NERC plans to introduce more selectivity to its sampling process by examining more issues involving more complex Reliability Standards like CIP-005 and CIP-007.

B. Annual Spot Check for 2013 FFTs

During the first quarter of 2014, NERC Enforcement staff performed its annual review of the Regional Entities' FFT programs. The purpose of the review was to gather information on the implementation and effectiveness of the FFT program across all eight Regional Entities. The methodology and criteria are described in more detail in Appendix A. The review was based on four major categories: 1) clarity of the description of the issue and sufficiency of facts included; 2) alignment of the risk with the facts and circumstances of each particular FFT; 3) timeliness and appropriateness of mitigation; and 4) consideration of the registered entity's compliance history and compliance program by the Regional Entities. The findings from the 2014 review are similar to those of the 2013 review. Specifically, the quality of the FFTs submitted by the Regional Entities for posting has continued to improve from the FFTs submitted to NERC for

review in prior years. Of the 125 FFTs reviewed, NERC did not identify any FFTs that were inappropriate for FFT treatment.⁹

NERC Enforcement staff's review of the record included evaluation of the methods utilized by the Regional Entities to process Possible Violations as FFTs.¹⁰ NERC staff reviewed Regional Entity internal documents, including checklists, enforcement process diagrams, procedure manuals, step-by-step internal processes, and FFT Notice letters. The purpose of this review was to collect information to analyze the consistent application of the FFT program across the Regional Entities. Many of these documents remain similar to the Regional Entity internal documents provided during the review conducted in 2013.

Several Regional Entities utilized tools that facilitated NERC staff's understanding of the Regional Entity's FFT processing procedure. The Texas Reliability Entity, Inc. (Texas RE), Midwest Reliability Organization (MRO), and Southwest Power Pool Regional Entity (SPP RE) provided FFT processing checklists which may be constructive additions to the day-to-day enforcement processes used by all Regional Entities. Texas RE's FFT processing checklist creates a detailed record of the issue, including: monitoring method, documents reviewed, issue description, enforcement's findings, processing track (FFT, SNOP, or Full NOP), risk assessment, and mitigating actions. It also includes a section to track the dates and reviewers for each FFT evaluation step, such as registered entity notification, certification of completion receipt,

⁹ This included 120 minimal risk issues and 5 moderate risk issues.

¹⁰ Within its oversight of the Regional Entities, NERC staff also examines Spreadsheet Notice of Penalty (SNOP) violations for suitability as FFTs. NERC staff seeks clarification in cases where FFT treatment could be an appropriate option and provides guidance on possible future disposition of similar issues.

internal compliance program (ICP) consideration, and compliance history. MRO's FFT checklist was helpful to see the timeline of the FFT process from start to finish. The checklist identifies dates for FFT identification and review, when the FFT spreadsheet is reviewed by MRO and NERC, review of the FFT notice and risk assessment, and date of signature on the received affidavit. SPP RE's checklist delineates the steps that need to be taken within 60 days by its respective personnel and indicates that the final document will be attached to the record for tracking purposes.¹¹ It also outlines each step in FFT processing, including review of compliance history, determination of risk, and update of the ERO enterprise's compliance tracking database. The Western Electricity Coordinating Council (WECC) Notice of FFT Treatment was also very useful and included details on the factors WECC considers, such as the description of the issue, risk statement, and mitigating activities, when affording FFT treatment to a Possible Violation. If completed consistently, such checklists could provide valuable insight into a Regional Entity's determination of FFT treatment and facilitate future review by NERC and FERC.

In order to maintain uniform application of the FFT program, Regional Entities should continue to observe standardized practices for FFT processing, which includes continued adherence to the NERC-provided template and timely submittal for posting. There has been further improvement since NERC disseminated additional instructions and templates to all Regional Entities in March 2013. The Regional Entities' utilization of the instructions and templates has led to greater uniformity and consistency in the FFT

¹¹ For SPP RE, all of the FFTs sampled were from the period prior to the checklist being instituted.

postings. Although there has been increased consistency with the execution of the FFT program since it was first implemented in September 2011, NERC and the Regional Entities can make further improvements to enhance consistency in the program's application across the ERO. The sections below detail the findings of the review and highlight areas that may need additional attention.

1. Findings Regarding Description of the Issue and Risk Assessments

NERC staff reviewed the description of the issue as it pertained to each of the FFTs sampled and noted improvement since the last review period. In all FFTs in the sample set, the description of the issues contained information that adequately addressed the cause of the issue and described the facts as they pertained to reliability and the Reliability Standards at issue. While the Regional Entities consistently provided adequate descriptions, in some cases, there was a lack of detail and adherence to the NERC FFT template. NERC staff observed that a few of the posted FFTs could have benefited from additional information that the Regional Entities provided in the supporting documentation but did not include in the posted FFTs.¹² On occasion, the Regional Entities omit from the issue description and risk assessments relevant facts and circumstances known to them prior to posting the FFTs. Although the facts and circumstances were not always critical for risk assessment, they would have facilitated better understanding by NERC and FERC of the issue or risk to the reliability of the BPS.

¹² NERC staff provides periodic feedback to the Regional Entities following the 60-day review. This feedback has improved the quality of the initial submittals and reduced requests for additional information.

Through review of the provided documents, NERC found that the Regional Entities consistently and accurately addressed the actual risk presented by the issue through provision of mitigating factors and compensating measures in place for the duration of the issue. For the most part, the Regional Entities supported their minimal risk determinations with facts that existed at the time of the issue. The Regional Entities provided after-the-fact determinations only in conjunction with facts known at the time of the issue to reinforce the risk determinations. In addition, the Regional Entities have improved addressing the potential risk presented by each FFT. In contrast to the previous review, this time NERC found that the Regional Entities are no longer providing general information on the inherent risk related to any Possible Violation of the particular Reliability Standard at issue. Instead, they are determining potential risk as it is specifically related to the facts of the noncompliance in question.

However, there are still some instances where potential risk assessments may need some improvement. In particular, risk assessments should not focus on after-the-fact determinations to justify a finding of minimal risk. For a failure to test protection system devices, it is not enough to say that the devices tested successfully after discovery of the violation. The risk assessment should describe the compensating measures in place during the violation which reduced the risk and would have protected reliability if the devices had misoperated. It is worth knowing that there were no misoperations during the pendency of the violation and that the devices tested successfully. But, those two factors alone do not justify a finding of minimal risk for such a violation.

The WECC sample set contained several good examples where the risk statement adequately addressed the issue and the minimal risk to the reliability of the BPS. The

statement addressed potential and actual risk and was based on facts at the time of the violation. In one case, the entity minimized the potential risks associated with the issue through the application of several compensating measures.¹³ For example, the entity had an automated system for identifying and alerting staff of any necessary documentation submittal deadlines. The software functioned properly and advised the staff of its obligation to report the misoperation. Furthermore, in an effort to prevent future misoperations, the entity implemented good detective controls. Specifically, the entity utilized real-time alarming for relay operations in a control room staffed continuously by operators. Subsequent to the issue, the entity exhibited good corrective controls by performing an event analysis and determining the root cause of the misoperation and then developed and implemented a Corrective Action Plan that resolved the root cause of the misoperation within 24 hours.

The Regional Entities also provided internal procedural documents that outline factors, including risk factors, they consider when making FFT determinations. Several of the Regional Entities provided information on risk determination tools they implement to determine risk consistently and accurately. For example, ReliabilityFirst Corporation (ReliabilityFirst) implements a risk-harm assessment methodology to promote consistency in risk assessments. This assessment includes a separate measure for the risk, the possibility or likelihood of an event occurring, and evaluation of the harm, which ReliabilityFirst defined as injury or damage. The risk and harm assessment is factored into ReliabilityFirst's final determination of the level of risk an issue posed to the

¹³ Violation ID: WECC2013012898.

reliability of the BPS. MRO provided a risk assessment document that details the description of the violation, the cause of the violation, and the potential risk to the reliability of the BPS. Florida Reliability Coordinating Council, Inc. (FRCC) continues to utilize its risk determination tool that summarizes the risk factors considered and assigns a numerical value to each factor. While these risk assessment tools are beneficial in contributing to accurate risk determinations, NERC recommends including additional background information regarding the considered factors and the associated score ranges to provide more clarity for NERC and FERC review of consistency across FFTs from all Regional Entities.

NERC staff has advised the Regional Entities about the need to provide more information on the facts and circumstances and risk assessments as related to CIP-005 R2 issues. NERC determined there were several instances where the Regional Entities could have strengthened the risk statements with respect to issues of CIP-005 R2 noncompliance.¹⁴ If the Regional Entities provide this information in the spreadsheet for posting, it would facilitate greater understanding of the issue during the 60-day review. NERC will continue collaborating with the Regional Entities to improve the provision of relevant known information to ensure even more robust issue descriptions and risk assessments are included in the FFTs.

¹⁴ *See, e.g.*, Violation ID: SPP2012010959. For issues involving CIP-005 R2, it is especially important to substantiate the minimal risk determination by describing the scope of affected Critical Cyber Assets, the protections in place for those assets, and how long those assets were unprotected.

2. Findings Regarding Evaluation and Documentation of Mitigating Activities

As part of the FFT sampling, NERC determined that the Regional Entities were requiring timely mitigation of the FFTs to address both the issue and abatement of future occurrences. Most of the sampled mitigating activities explicitly included measures designed to prevent reoccurrences of noncompliance. Such measures included implementation of tracking systems, process and procedure updates, template updates, training of employees and contractors, and reclassification of assets. Pursuant to Commission orders, the Regional Entities also continued to require registered entities to submit an affidavit signed by an officer of the company stating that mitigating activities were completed.

Although many of the samples reviewed by NERC staff had Mitigation Plans, the evidence provided by the Regional Entities indicate that the Regional Entities are cognizant that Mitigation Plans are not mandatory to process Possible Violations as FFTs. For example, SERC Reliability Corporation's (SERC) procedural documents specifically noted that Mitigation Plans were not required for Possible Violations to be treated as FFTs. The Northeast Power Coordinating Council Inc. (NPCC) procedural documents also discuss mitigating activities and do not require formal Mitigation Plans. Mitigation Plans may have been required for some of the sample FFTs because of a past software-related administrative issue, which is expected to be fully resolved by the end of 2014.

In addition, although the Regional Entities generally provide information regarding how the mitigating activities address both the issue as well as abatement of future occurrences, there were instances where the Regional Entities omitted known

information that would have facilitated NERC and FERC review of the mitigating activities. NERC will continue to communicate with the Regional Entities the importance of providing all known and relevant information related to how the mitigating activities address the cause of the noncompliance and prevent reoccurrence. All Regional Entities maintained sufficient evidence of all mitigating activities and their completion for the sampled FFTs.

3. Findings Regarding FFTs with Ongoing Mitigating Activities

NERC tracks all FFTs that are posted with ongoing mitigating activities and contacts the Regional Entities periodically to ensure completion within 90 days. In 2013, NERC tracked 25 FFTs with ongoing mitigating activities. The Regional Entities notified NERC of completion of mitigating activities for all FFTs within 90 days from the date of posting.

NERC also included 7 out of a total of 25 FFTs with ongoing mitigating activities as part of its annual sample for all Regional Entities. NERC staff observed that the Regional Entities followed up in a timely fashion with the registered entities on issues with ongoing mitigating activities. In all the FFTs reviewed as part of the sample, the Regional Entities provided an affidavit or certification, certifying completion of mitigating activities within 90 days from the date of posting. Although not required, in all these cases, the Regional Entities also verified completion of mitigating activities. Overall, the Regional Entities have successfully implemented the enhancements in the FFT Program to include issues with ongoing mitigating activities and ensure timely remediation of the issues.

4. Findings Regarding Consideration of Internal Compliance Programs and Compliance History

NERC reviewed the Regional Entities' evaluation of the registered entities' compliance histories, ICPs, and management practices in determining if FFT treatment is appropriate for Possible Violations. In general, the Regional Entities consider these factors in determining if a Possible Violation is suitable for FFT treatment. There was some inconsistency, however, in the information provided by the Regional Entities. Some Regional Entities stated that the compliance history was taken into consideration while evaluating for FFT treatment, yet either there was no supporting documentation provided or it was not clear how compliance history was considered. Other Regional Entities submitted compliance history records for the registered entity but did not indicate they reviewed the compliance history when evaluating the issue because this information was not included in the FFT posting. In other instances, the registered entity had negative compliance history regarding the same facts and circumstances as the instant issue, but the Regional Entity did not indicate in the FFT posting that it considered the compliance history.

Some Regional Entities have implemented new tools to take compliance histories and ICPs into consideration for Possible Violations. For example, SPP RE has a survey that the registered entity completes. The survey contains information about the entity, including its compliance culture and ICP. SERC utilizes a spreadsheet that contains a thorough compliance history for each entity. FRCC provided evidentiary material that indicated that it evaluated the compliance history for each sampled FFT, and where applicable, included the compliance history in the assessment of risk for the remaining

FFTs that had relevant compliance history. FRCC consistently referenced the registered entities' ICPs in its violation risk assessment tool. ReliabilityFirst also accurately and consistently reviewed the ICP for each registered entity when determining whether a Possible Violation warranted FFT treatment. In addition, ReliabilityFirst considered the applicability of corporate ICPs where several affiliated entities engaged in the same conduct and the ICP led to the discovery of the same issue for each affiliate.

NERC determined that the Regional Entities largely consider ICPs and compliance histories when determining FFT treatment. NERC and the Regional Entities recently implemented an addition to the FFT posting template, which will ensure the Regional Entities consistently provide consideration of the relevant compliance history. Specifically, the FFT posting will indicate whether this is the registered entity's first violation of the subject requirement or whether there was a prior violation, and if so, how the prior violation affected the FFT treatment.

IV. FFT TREATMENT OF MODERATE RISK NONCOMPLIANCE

In the June 20, 2013 Order, the Commission directed NERC to include the following information in this report: 1) the number and types of FFTs that were moderate risk Possible Violations since the date of the order; 2) for each moderate risk Possible Violation treated as an FFT, a statement of the factors that the Regional Entities relied on to make the determination and why those factors supported treatment of the moderate risk Possible Violation as an FFT; and 3) a detailed explanation of the steps that NERC has

taken to ensure the Regional Entities are determining risk in a consistent manner, and identify any inconsistent outcomes and the reason for them.¹⁵

Each of these topics is discussed in turn below. Since the issuance of the June 20, 2013 Order, NERC reviewed each moderate risk noncompliance which was disposed of through FFT in order to ensure consistent treatment of such issues. NERC also considered moderate risk noncompliance being processed through other means, especially SNOPs, to identify, among other things, commonalities that would help guide the processing of these types of issues.

NERC's analysis of moderate risk FFTs shows that Regional Entities appropriately used the FFT process to reward self-identification of noncompliance by registered entities and recognize mature management practices in registered entities that self-assess compliance with the NERC Reliability Standards. In all moderate risk FFTs posted since June 20, 2013, the registered entities had established and implemented internal controls to identify, report, and mitigate occurrences of noncompliance. Therefore, the Regional Entities and NERC determined that imposing a monetary penalty under these circumstances would not have been an effective enforcement method to encourage self-monitoring of compliance with the NERC Reliability Standards.

In analyzing the moderate-risk FFTs, NERC, in collaboration with the Regional Entities, developed an enhanced set of criteria to guide the treatment of moderate risk noncompliance in the FFT program. The enhanced criteria is discussed below in section IV.D. NERC intends to continue to treat moderate risk noncompliance as FFTs when

¹⁵ June 20, 2013 Order at P 34.

such criteria are met. In particular, if a registered entity has an effective compliance program and internal controls that lead to timely discovery and timely mitigation of issues, the registered entity should benefit from the FFT process for moderate risk noncompliance. NERC expects that the enhanced criteria will result in more moderate risk noncompliance being processed as FFTs in 2014. That, in turn, will help the ERO enterprise continue to evolve the processing of moderate risk issues in the future.

A. The Number and Types of FFTs that Posed a Moderate Risk

Since June 20, 2013, when the Commission approved NERC's proposal to apply the FFT process to moderate risk violations, NERC has reviewed five FFTs that presented a moderate risk to the reliability of the BPS. Two of the FFTs were submitted by NPCC, and involved noncompliance with CIP-006-3c R1 and PRC-005-1 R2. MRO and Texas RE each submitted one FFT for noncompliance with VAR-002-1.1b R2 and PRC-005-1 R2, respectively. ReliabilityFirst, SPP RE, and Texas RE jointly submitted one FFT for noncompliance with FAC-003-1 R1 occurring in all three regions. Following NERC's review, the five FFTs were posted on NERC's website.

B. Factors Supporting FFT Treatment for Moderate Risk Issues

1. PRC-005-1 R2.1 posted on August 30, 2013

The first moderate risk FFT was from Texas RE and was posted on August 30, 2013 for noncompliance with PRC-005-1 R2.1.¹⁶ The registered entity self-reported that 63 current transformers, out of its 183 Protection System devices, were not maintained

¹⁶ Violation ID: TRE2013012263.

and tested within the required three-year interval pursuant to the registered entity's Protection System Maintenance and Testing Program (Program). The devices at issue represented 34% of the registered entity's entire inventory, and 51% of the total sensing devices inventory.

The registered entity determined that the issue was caused by the embedded nature of the current transformers and the lack of a documented applicable basis in the Program to help detect, test, and maintain embedded current transformers. The registered entity's Program required a visual inspection of current transformers. The embedded current transformers could not be inspected visually, and therefore required electrical testing. Further, the current transformers at issue were not continuously monitored.

Texas RE determined that this FFT posed a moderate risk to the BPS because the embedded current transformers were not tested or maintained within the scheduled interval. Specifically, 34% of the Protection System inventory was affected by the missed testing. This omission could have compromised the reliability of the BPS if the devices had malfunctioned or proven unable to communicate with the relays due to missed maintenance and testing. The 63 current transformers were the only protective elements at issue, and the remaining devices were tested and maintained within their defined intervals. Further, the relays that rely upon these current transformers were tested and maintained within their defined interval, and did not demonstrate any operational issues. The registered entity completed testing within a five-year interval, instead of the three-year interval required by its Program. Importantly, the five-year interval was still shorter than the recommended industry testing cycle of 12 years for voltage and sensing devices that do not have monitoring attributes. The registered entity

tested the embedded current transformers within two months of discovery of this issue, and the testing results revealed no operational concerns.

Texas RE determined that FFT treatment was appropriate because the registered entity self-identified and self-reported the issue. In addition, Texas RE considered the registered entity's timely and adequate mitigating activities, which were completed within two months of discovery, and included measures to prevent future noncompliance with this Reliability Standard. These actions indicate the registered entity had established internal controls for self-monitoring and mitigation, and therefore a potential monetary penalty was not necessary to encourage these positive behaviors.

Finally, Texas RE considered the registered entity's violation history. An affiliated registered entity had a prior violation of this Reliability Standard, which involved similar conduct. However, the affiliate's violation did not affect Texas RE's determination to treat this issue as FFT because the two violations occurred around the same time, and therefore should not be considered repetitive conduct. Accordingly, violation history did not preclude the issue from being treated as an FFT.

2. CIP-006-3c R1.6.2 posted on September 30, 2013

The second moderate risk FFT was submitted in September 2013 by NPCC, and involved an issue with CIP-006-3c R1.6.2.¹⁷ The registered entity reported that it allowed unescorted visitor access within a Physical Security Perimeter (PSP) on three separate occasions. On one occasion, the authorized badge holder who was monitoring a construction crew did not continuously escort two crew members. The crew members

¹⁷ Violation ID: NPCC2013012541.

had propped open the door to the training room, which contained workstation Cyber Assets. On two other occasions, visitors were left unescorted in the registered entity's lobby, which was located within a PSP.

The FFT posed a moderate risk to the BPS because the two unescorted crew members had physical access to Cyber Assets that had the ability to reach production applications. Although the registered entity did not provide continuous escorted access to the two crew members, the rooms accessed by them did not contain any Critical Cyber Assets. Access to the training room Cyber Asset workstations was administered in accordance with the CIP Reliability Standards, and included password protection. In addition, prior to accessing these workstations, each user had to receive access authorization from a designated account manager. The production applications at issue could only be used for monitoring, not control, of BES elements. Video footage showed that the visitors did not attempt to access the workstations.

The other two occasions involved visitors who were unescorted while waiting in a receptionist area. The receptionist area contained a Voice over Internet Protocol telephone, which was not accessed by the visitors. The area was separated from the rest of the PSP by a dual-factor biometric physical access control, which further reduced the risk to the BPS.

NPCC reviewed the registered entity's ICP and considered it to be the main factor for awarding FFT treatment. The ICP was supported by senior management, the registered entity devoted sufficient resources to its ICP, and there was a full-time corporate compliance director who reported to the vice president and to the general

counsel. In addition, the registered entity implemented mandatory education and training on compliance responsibilities and risks presented by noncompliance.

The effectiveness of the ICP was demonstrated by the registered entity's self-identifying and reporting the issue. In addition, the mitigation actions aimed to prevent reoccurrence of noncompliance, indicating that the imposition of a monetary penalty would not improve the registered entity's compliance nor reduce the risk to the BPS. For instance, in the first occurrence of noncompliance, the registered entity required the authorized badge holder to retake a cyber security test. The individual was also required to attend a meeting with the registered entity's Information Technology manager, the physical security personnel, and the owner of the vendor construction company. The registered entity ensured that vendor personnel fully understood the importance of following the cyber security policies and procedures. The registered entity explained to the vendor personnel how properly to escort visitors, and stressed that circumventing, disabling, or overriding physical access control was not permitted.

In the other two occurrences of noncompliance, the registered entity's compliance manager sent an email to all staff to remind them that all receptionist areas were a part of the PSPs, and that all visitor control procedures apply to those areas. The individuals who allowed access to the lobby were reminded that the visitor procedures should be followed. Finally, the lobby was separated from the PSP.

NPCC also considered the registered entity's cooperation as a factor in determining that no penalty was appropriate in this case. NPCC concluded that the registered entity's willingness to cooperate serves as additional evidence of its preparedness to comply with the Reliability Standard at issue. Finally, the registered

entity did not have prior violations of the same or similar Reliability Standard. The combination of these factors gave sufficient basis to NPCC to determine that a penalty could not have incentivized the registered entity to improve its already strong compliance efforts, and could have resulted in punishing the entity for establishing the robust culture of compliance that prompted the Self-Report.

3. PRC-005-1 R2 posted on December 30, 2013

NPCC submitted a second moderate risk FFT in December 2013, which involved a Transmission Owner (TO) that self-reported noncompliance with PRC-005-1 R2.¹⁸ The registered entity was missing testing documentation, and had missed several maintenance and testing intervals on its TO Protection System devices and on a power line carrier (PLC). The registered entity reported that monthly PLC testing could not be located for one 115 kV line for the periods from June 2007 to July 2009, October 2009, July 2010, and April 2011. In addition, the entity failed to perform testing on five relays within the defined interval in accordance with its Transmission Maintenance Program Manual (Manual). The noncompliance occurred due to deficiencies in the registered entity's database program for tracking maintenance of Protection System devices.

NPCC determined that the issue posed a moderate risk because absent monthly testing, the registered entity could not know whether the PLC system would properly function. The risk was mitigated because, from June 2007 to July 2009, and during the months of October 2009, July 2010, and April 2011, the entity was performing end-to-end PLC system testing on the single 115 kV line at issue. Additionally, high-speed

¹⁸ Violation ID: NPCC2012010784.

clearing on both the primary and secondary lines of protection was in service at all times and provided proper clearing for circuit faults. No misoperations occurred on the transmission line during the period of noncompliance.

Further, three of the four relays at issue were providing a backup function operation to the protective relay systems, and primary protection was in service at all times. The remaining relay that was not tested was a breaker failure relay, which provided protection to clear adjacent equipment in the event the breaker did not open. This functionality also served as a backup to the primary Protection Systems. The entity tested all relays prior to submitting its Self-Report to NPCC. At the time, the registered entity owned 1,275 Protection System devices on the Bulk Electric System.

NPCC considered several factors in its determination to impose no monetary penalty on the registered entity and treat this noncompliance as an FFT. NPCC reviewed the registered entity's ICP and determined that the ICP provides strong management practices designed to prevent reoccurrences of noncompliance with the NERC Reliability Standards. The ICP was supported by senior management, and the registered entity's parent company employed a full-time manager of reliability compliance and had six staff members dedicated to reliability compliance.

The effectiveness of the internal controls is supported by the registered entity's identifying and self-reporting the noncompliance, and then taking several mitigation actions to prevent reoccurrences of noncompliance with this Reliability Standard. For example, the registered entity identified the root cause of the noncompliance, i.e., deficiencies in the database program that tracks protective system maintenance work. It proceeded to compare the database at issue against actual diagrams to ensure consistency,

develop a standardized naming convention for its relay packages, revise its procedure for updating the database at issue, conduct training on the revised procedure to ensure the required steps have been performed, and ensure the proper documentation of work performed would be reflected in the database. In addition, the entity revised its Manual to provide employees with detailed descriptions on performing monthly PLC tests and actions to be taken when a test failure or failure to perform tests occurred. Finally, the registered entity trained its personnel on the revised Manual.

Further, NPCC considered the entity's cooperation throughout the enforcement process as a factor supporting the FFT determination. NPCC reviewed the registered entity's violation history and determined that it had no prior violations of the NERC Reliability Standards, which served as an additional indication of strong management practices and a culture of compliance. Again, in this instance, a potential monetary penalty would not have been effective in promoting compliance because the entity had already taken important steps and expended resources on compliance.

4. VAR-002-1.1b R2 posted on December 30, 2013

In December 2013, MRO submitted for posting a moderate risk issue related to noncompliance with VAR-002-1.1b R2.¹⁹ The registered entity discovered the issue while performing a mock audit, and self-certified that, as a Generator Operator (GOP), it failed to maintain the generator voltage, as directed by the Transmission Operator (TOP). The registered entity was registered for both the GOP and TOP functions, but the GOP was not aware of the TOP's voltage schedule. The GOP did not have the ability to

¹⁹ Violation ID: MRO2012011483.

monitor the bus voltage and failed to communicate with the TOP. Consequently, the GOP could not monitor two 230 kV bus voltages. Because the GOP was not aware of the voltage schedule, it operated outside of the operating range on the two 230 kV buses.

MRO determined that the issue posed a moderate risk to the reliability of the BPS because the registered entity's plant operators were unaware of the voltage schedule, and therefore could not monitor the 230 kV bus voltage. This lack of awareness resulted in multiple failures to maintain generator voltage as directed by the TOP. Failing to maintain the generator voltage could have resulted in misoperations on the 230 kV transmission lines, which could have posed a serious risk to the reliability of the BPS. However, the registered entity's TOP was able to monitor the bus voltages from its energy management system. Finally, the registered entity reported that its failure to maintain the generator voltage occurred primarily during the off-peak hours of the day when electricity demand is lower.

When determining whether FFT treatment was appropriate in this case, MRO considered the fact that the registered entity self-identified the noncompliance. The issue was discovered during the registered entity's internal self-monitoring process – a mock audit – which shows that the entity has implemented management practices to ensure compliance with the NERC Reliability Standards. Also, the registered entity mitigated the issue after it was discovered, and included preventive measures in its mitigation activities. For instance, the registered entity updated its voltage and volt-ampere reactive control policy to include new definitions and spell out personnel responsibilities. It then trained plant system operators and plant operators on the revised policy. Finally, the

registered entity did not have prior violations of the same or similar Reliability Standard, which further highlights the effectiveness of its culture of compliance.

Based on these factors, MRO determined that a monetary penalty would not have improved the reliability of the BPS or ensured compliance with the Reliability Standards. The registered entity had voluntarily implemented internal controls for self-monitoring, identification, and mitigation of Possible Violations and was therefore awarded FFT treatment for this issue.

5. FAC-003-1 R1 posted on December 30, 2013

In December 2013, ReliabilityFirst, SPP RE, and Texas RE, submitted to NERC a moderate risk issue of noncompliance with FAC-003-1 R1.²⁰ The registered entity self-reported that in order to identify transmission lines subject to its vegetation management plan, it created patrol lists based on its geographical information system. The registered entity did not include bus ties²¹ in the geographical information system list because the bus ties existed at major substation sites, which usually have little or no vegetation. As a result, the registered entity previously classified bus ties as station assets, and did not include them in its vegetation management plan. The station managers or power plant managers were responsible for maintenance or inspection of the bus ties. While conducting training on its enhanced work management system, the entity discovered that some 200+ kV bus ties with spans outside of station fences were not included in the

²⁰ Violation IDs: RFC2013012301, SPP2013012222, and TRE2013012250.

²¹ Bus ties are electrical connections of a bus system to another piece of equipment in the existing switchyard or in a different switchyard, and usually connect different station facilities on a common site. Bus ties are of varying voltage classes and may be located underground or overhead.

vegetation management plan patrol list. The registered entity determined that it should patrol the bus ties and added them to its transmission vegetation management program.

This issue posed a moderate risk to the BPS because the registered entity's failure to include the bus ties in its vegetation management plan could have resulted in a vegetation contact with the 200+ kV bus ties. The issue existed for an extended period, thus elevating the risk to the BPS to moderate. However, the risk was mitigated because the 200+ kV bus ties exist at major substation sites that are developed with buildings and other structures, and therefore have almost no vegetation. As a result, the registered entity could have discovered any vegetation issues during the normal course of its inspections of the bus ties. There were 11 bus ties at issue, totaling 2.52 miles, which is a negligible percentage of the registered entity's total transmission lines. In addition, none of the bus ties were associated with Interconnection Reliability Operating Limits. Finally, none of the bus ties had experienced vegetation contact during the issue period.

The three Regional Entities determined that effective oversight of the reliability of the BPS depends on robust and timely self-reporting by registered entities. The Regional Entities considered the fact that the registered entity identified and timely reported the issue due to the effective execution of its ICP and the installation of management practices that yielded identification of the issues prior to the occurrence of any harm.

The Regional Entities also considered the registered entity's previous violation of FAC-003-1 R2 in the SPP RE region. The violation involved a failure to perform aerial inspections of a 345 kV transmission line, which resulted in a vegetation-related outage of that line. Because the prior violation concerned a deficiency in the registered entity's

aerial patrol, while the instant issue concerned an asset management issue, the Regional Entities did not consider the issue to be a repeat violation.

Based on these factors, the Regional Entities determined that a monetary penalty would not have encouraged compliance with NERC Reliability Standards. The registered entity had a functional ICP and effective compliance culture, as proven by its actions, and was therefore awarded FFT treatment for this issue.

C. Consistency of Risk Assessments

The ERO enterprise has made significant progress in aligning the assessment of risk of specific instances of noncompliance. In the Petition describing the FFT program, NERC outlined the factors that distinguished serious and substantial noncompliance from moderate and minimal risk noncompliance.²² The ERO enterprise considers noncompliance to pose a serious and substantial risk to the reliability of the BPS when it involves or results in a) extended outages, b) loss of load, c) cascading blackouts, d) vegetation contacts, or e) systemic or significant performance failures. Also included is noncompliance that involves a) intentional or willful acts or omissions, b) gross negligence, or c) other misconduct.²³

The Commission's March 15, 2012 Order regarding that filing provided additional guidance regarding risk assessment.²⁴ Since the beginning of the FFT program, and in particular after the Commission's Order requiring NERC and the

²² Petition at p. 21.

²³ *Id.*

²⁴ *North American Electric Reliability Corporation*, "Order Accepting with Conditions the Electric Reliability Organization's Petition Requesting Approval of New Enforcement Mechanisms and Requiring Compliance Filing," 138 FERC ¶ 61,193 (2012) (March 15, 2012 Order).

Regional Entities to limit the use of the FFT track to noncompliance posing a minimal risk, NERC and the Regional Entities have had significant experience in assessing risk and differentiating minimal and moderate risk noncompliance.

NERC and the Regional Entities have also taken steps to add transparency to the process of assessing the risk of specific instances of noncompliance. In January 2014, NERC and the Regional Entities, in collaboration with a focus group of volunteer registered entities, drafted a Self-Report User Guide (User Guide), which, among other things, outlines the common methodology used by the ERO enterprise to assess risk of specific instances of noncompliance.²⁵ The User Guide will continue to promote accurate and consistent risk assessments. It will also facilitate the understanding by registered entities of ERO enterprise risk assessments. The guidance on risk assessment included in the User Guide served as the core for the training provided to ERO compliance monitoring personnel in March 2014 and to registered entities in April 2014. NERC will continue to work with Regional Entities and registered entities to ensure consistency in risk assessments. In addition, NERC continues to incorporate feedback from the Commission and other interested parties to ensure accurate risk determinations.

As discussed in the User Guide, NERC and the Regional Entities assess the risk of a specific instance of noncompliance from the perspective of the potential risk arising out of a failure to comply with any individual Requirement and the actual risk posed to

²⁵ The Self-Report User Guide is available at [http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/ERO%20Self-Report%20User%20Guide%20\(April%202014\).pdf](http://www.nerc.com/pa/comp/Reliability%20Assurance%20Initiative/ERO%20Self-Report%20User%20Guide%20(April%202014).pdf).

the reliability of the BPS.²⁶ Actual risk takes into account those factors that existed during the pendency of a Possible Violation and the actual impact of the Possible Violation. This is consistent with the guidance provided by the Commission in the March 15, 2012 Order.²⁷ In accordance with that guidance, a risk assessment is not based solely on the lack of adverse impact on the BPS without considering what other actions or processes mitigated the risk. Rather, NERC and the Regional Entities consider “whether a registered entity used processes or took actions that made the actual risk of a possible violation less than its potential risk.”²⁸

A constant principle in the evaluation of risk is the consideration of different factors that make up the totality of the circumstances. These factors, which were first described in the NERC original September 2011 FFT Petition, include: 1) the underlying facts and circumstances, including what happened, why, where, and when; 2) the Reliability Standard at issue; 3) the applicable Violation Risk Factor (VRF) and Violation Severity Level (VSL); 4) the potential and actual level of risk to reliability, including mitigating factors during the pendency of the Possible Violation; 5) the registered entity’s ICP, including preventive and corrective processes and procedures, internal controls, and culture of compliance; and 6) the registered entity’s compliance history.²⁹

²⁶ User Guide at pp. 12-15.

²⁷ March 15, 2012 Order at PP 51-56.

²⁸ *Id.* at P 56. In addition, risk assessments are based on facts at the time of the Possible Violation and not assumptions or facts that develop later. Moreover, Possible Violations that reveal a serious shortcoming in a registered entity’s reliability-related processes are not considered to pose a minimal risk.

²⁹ Petition at pp. 1 and 20.

1. Minimal vs. Moderate Risk

As indicated above, the ERO enterprise uses three different levels of risk for noncompliance: “serious and substantial,” “moderate,” and “minimal.” As described in the Petition, the following matters are examples of serious and substantial risk issues: i) those involving or resulting in a) extended outages, b) loss of load, c) cascading blackouts, d) vegetation contacts, or e) systemic or significant performance failures; and ii) those involving a) intentional or willful acts or omissions, b) gross negligence, or c) other misconduct. The ERO enterprise concentrates its efforts on such serious and substantial issues when they infrequently arise. Serious and substantial matters are typically filed with the Commission in a Full Notice of Penalty.

For lesser-risk issues, focusing on differentiating minimal and moderate levels of risk has led to an overall improvement in the quality of moderate and minimal risk identification. The VRF and VSL continue to be used as starting points for risk assessment. In circumstances where the risk determination is not immediately clear from the facts of the case, the VRF and VSL may serve as a guide for a higher risk determination. When the Possible Violation has a Medium to High VRF and a Moderate to Severe VSL, there is a more stringent evaluation of the Possible Violation’s qualification for FFT treatment. If a Medium to High VRF and a Moderate to Severe VSL are involved in the Possible Violation, NERC evaluates whether the Possible Violation may pose a moderate to serious and substantial risk to the reliability of the BPS.

If the noncompliance is related to a serious event, then the risk would likely be serious and substantial. Examples of serious harm generally include loss of customer

load, cascading outages, and malicious actions that affect Critical Assets. If something serious could have occurred during the noncompliance and no protections were in place, then the risk would likely be serious and substantial.

The lack of harm is not sufficient justification, by itself, for a minimal or moderate risk assessment. To illustrate, in one case, a large registered entity had violations of PRC-005-1 R1 and R2 for not including bases or intervals for maintenance and testing and leaving significant portions of equipment out of its Protection System maintenance and testing program.³⁰ Further, the registered entity failed to test and maintain hundreds of devices under the program. In this case, the registered entity's system did not have redundancy or periodic monitoring as compensating protections. Even though the violations did not cause misoperations, they posed a serious and substantial risk to the reliability of the BPS based on the registered entity's importance to the reliable operations within its footprint, the widespread nature of the missed devices, and the registered entity's disregard for its maintenance and testing responsibilities.

The facts and circumstances leading to a moderate risk determination are necessarily different. If something serious could have occurred during a noncompliance and there were only some protections in place to reduce the risk, then the risk assessment would likely be moderate. For example, a registered entity violated EOP-008-0 R1³¹ by relying on data links from its primary control center (PCC) to support its backup control center (BCC).³² The availability of voice communication capabilities at the BCC served

³⁰ Violation IDs: SERC200900298, SERC201000637, SERC200900275, and SERC201000636.

³¹ Replaced by EOP-008-1 R6.

³² Violation ID: TRE201000171.

as partial protection in the event of loss of the PCC's data capabilities. This violation posed a moderate risk to the reliability of the BPS based on the possibility of losing data functions during an emergency that required the BCC to operate in place of the PCC.

As with higher-risk noncompliance, issues are determined to pose a minimal risk to reliability based on the combination of the subject Reliability Standard requirement and the attendant facts and circumstances. If nothing serious could have occurred and there were complete or significant protections in place to reduce the risk, then the risk would likely be minimal. In a violation of FAC-001-1 R1, the registered entity failed to publish its facility connection requirements.³³ The significant protections in this case were that the registered entity's transmission facilities were not available for connection by generation, transmission, or end-user facilities. Even if the facilities were available for connection, parties seeking such connection could receive the requirements directly from the TO or through some other means without the need for publishing, reducing the potential risk. Based on all of these factors, the issue was deemed to pose a minimal risk to the reliability of the BPS.

After a Regional Entity determines the risk of a Possible Violation, it can choose to dispose of minimal and moderate risk Possible Violations using the FFT track. For moderate risk FFTs, the Regional Entity should apply the six factors included in the NERC September 2011 FFT filing.³⁴ In addition, the Regional Entity could apply the enhancements described below to determine whether the Possible Violation is eligible for the FFT track.

³³ Violation ID: TRE2013012118.

³⁴ Petition at pp. 1 and 20.

2. NERC's Oversight of Risk Assessments

NERC staff reviews the risk assessments conducted by the Regional Entities to ensure they follow the guidelines described above. Where the information initially provided by the Regional Entity is insufficient to describe what factors mitigated the risk during the pendency of the issue, or is limited to information obtained after the fact or based solely on the lack of actual harm, NERC requests additional or clarifying information from the Regional Entity. This interaction serves as individualized training for the Regional Entities in developing risk assessments that include all of the information necessary to make an accurate determination of minimal, moderate, or serious and substantial risk.

From the beginning of the FFT program, NERC has been providing guidance to Regional Entities and registered entities through outreach activities, such as training, workshops, and meetings. For instance, NERC and the Regional Entities collaboratively engage in instructive activities, such as reviewing and discussing risk assessment case studies. The quality of the information contained in the FFT spreadsheets, and in particular in the risk assessment, has improved consistently, and, over time, NERC has sought more targeted information from the Regional Entities to substantiate risk findings.

To continue the success of the FFT program, all interested parties, including registered entities, need to be aligned and knowledgeable about the FFT process, including the factors considered in the determination of risk. To that end, NERC has provided training to several groups. NERC offered training in September 2013 and March 2014 to ERO compliance monitoring personnel. The training included sample FFT fact patterns to develop the audience's ability to determine the appropriate

processing track for potential noncompliance. In September 2013, NERC provided training to registered entities. This training informed industry members about streamlined enforcement activities under the Reliability Assurance Initiative (RAI), emphasizing well-supported risk assessments.

D. Additional Guidance for FFT Treatment for Moderate Risk Possible Violations

In order to maximize the use of the FFT track in connection with moderate risk noncompliance, NERC and the Regional Entities have refined the criteria used to determine which moderate risk noncompliance would be eligible for FFT treatment. The criteria would facilitate acknowledgment by the ERO enterprise of registered entities with strong management practices that self-report noncompliance. It would also provide a clear incentive for other registered entities to self-report and strengthen their management practices.

To assist in the consideration of the criteria, NERC analyzed a sample consisting of the five posted moderate risk FFT issues referenced above and 122 moderate risk SNOP violations with an associated penalty of ten thousand dollars (\$10,000) or less.³⁵ NERC examined the SNOP violations because the low penalty is an indicator that these items potentially could have been considered as moderate risk FFT candidates, if FFT treatment had been available for such issues at the time.³⁶ The SNOP penalties in the

³⁵ The FFT sample consisted of FFTs posted in 2013 (TRE2013012263, NPCC2013012541, NPCC2012010784, MRO2012011483, and RFC2013012301).

³⁶ FERC states that "...if the Regional Entity determined the event would merit not more than a low penalty and the entity had good internal controls, NERC would explain why the low penalty supports FFT treatment and how the strength of the entity's internal controls justify FFT treatment of the event." June 20, 2013 Order at P 34 n.46.

cases considered were under \$10,000 because NERC and the Regional Entities applied credit to the penalty for factors including the registered entity's level of cooperation, the registered entity's ICP, or the registered entity discovering the violation on its own. NERC analyzed the characteristics of the issues and violations in the sample in relation to the NERC-established six factors used to determine what characteristics have been and should be applied when deciding FFT treatment.

This analysis indicated that moderate risk noncompliance eligible for FFT treatment should consist primarily of those items that were internally discovered and self-reported. Registered entities internally discovered 72% of the sample of moderate risk noncompliance reviewed by NERC, and 100% of the FFT portion of the sample. For CIP-related issues, the registered entities internally discovered 87% of the SNOP items and 100% of the FFTs in the sample. For non-CIP Possible Violations, the registered entities internally discovered 57% of the SNOP items, and 100% of the FFTs in the sample.

In addition, there should be underlying facts and circumstances that mitigate the risk during the pendency of the noncompliance. The registered entity's ICP, management practices, and commitment to compliance also should be considered. A robust ICP and management practices that lead to timely discovery and timely mitigation of noncompliance would create a strong argument in favor of FFT treatment in the case of noncompliance posing a moderate risk.

1. Evaluation of Facts and Circumstances

In determining whether noncompliance is eligible for FFT treatment, NERC and the Regional Entities focus on the underlying facts and circumstances of the noncompliance, including what happened, why, where, and when. The FFT portion of the sample of moderate risk noncompliance shows that the Regional Entities and NERC have used FFT treatment for moderate risk issues if there were other factors that helped justify the FFT treatment.

For example, as noted above, one issue involved a registered entity that was included on the NERC Compliance Registry as both a GOP and a TOP. The GOP function was deficient in regard to VAR-002-1.1b for its failure to maintain the generator voltage schedule, but the TOP function was able to monitor the bus voltages involved in the issue. The FFT treatment was appropriate because the compensating measure in place — the TOP function's ability to monitor the bus voltages — helped mitigate the risk to the reliability of the BPS. Another compensating measure was that the issue occurred mostly during off-peak hours.³⁷

In another example, also discussed above, the registered entity had an issue with CIP-006-3c R1 due to three events when it allowed unescorted access within its PSP. The risk was moderate because the unescorted visitors had physical access to Cyber Assets and had the ability to reach production applications. NERC and the Regional Entity considered as a compensating measure the fact that the rooms accessible to the unauthorized visitors did not contain any Critical Cyber Assets. In addition, equipment

³⁷ For a description of the issue, see section IV.B.4 above.

that was accessible was protected by other CIP Standards and management practices, which were also considered compensating measures. These compensating measures helped justify FFT treatment.³⁸

Moderate risk issues that involve partial noncompliance with Standards that apply strict testing intervals and documentation requirements to numerous devices also have been treated as FFTs if the registered entity has a program in place to comply with the Standard. PRC-005 requires that the registered entity establish a prescriptive maintenance and testing program that sets testing intervals and requires documentation of the program's execution. The prescriptive testing intervals, set by the registered entity, do not always take into account operational realities. For example, as discussed above, a registered entity self-reported a PRC-005 R2 issue because it was missing some testing documentation for a single device and it missed maintenance and testing intervals for five relays. The missing documentation was related to a 115 kV line which lacked testing documentation for the periods when the line was under end-to-end testing. The relays that were not tested within the required interval were providing a backup function, and the registered entity's error occurred due to deficiencies in its database program.³⁹ In a separate PRC-005 issue, the registered entity set a testing interval that was stricter than the industry standard. In this issue, the registered entity tested the equipment 24 months later than its self-prescribed testing interval, but still seven years earlier than the industry-recommended standard. In both instances, the registered entities had maintenance and

³⁸ For a description of the issue, see section IV.B.2 above.

³⁹ For a description of the issue, see section IV.B.3 above.

testing programs in place and were only partially non-compliant with the Standard. These considerations weigh in favor of FFT treatment for the underlying noncompliance.

2. Consideration of Mitigating Factors during the Pendency of the Noncompliance

Another factor NERC and the Regional Entities use to determine whether a Possible Violation should be eligible for FFT treatment is the potential and actual level of risk to reliability, including mitigating factors during the pendency of the Possible Violation. FERC has outlined several factors to consider related to risk when determining if a moderate risk Possible Violation should be afforded FFT treatment. NERC and the Regional Entity must consider actual and potential risk to the BPS. In addition, NERC and the Regional Entity must consider the facts at the time of the Possible Violation, not the facts that develop later or after the fact. The Regional Entities considered these factors, as evidenced by the FFT sample review.

The sample shows that Regional Entities often have used FFT or the low-penalty SNOP track for Possible Violations when mitigating factors are apparent. The data shows that while the registered entity may not have strictly met the requirements of the Reliability Standards, it always had other protections in place, which indicated that the registered entity operated in a manner consistent with the purpose of the NERC Reliability Standards. The fact that the sample's SNOP violations showed that many of the registered entities had other protections in place advances the argument that the Regional Entities could have considered those violations for FFT treatment if FFT

treatment had been an option when NERC filed them with the Commission.⁴⁰ For example, a registered entity self-reported a violation of PRC-005-1 R2.1. The entity failed to locate records stating that it performed maintenance and testing on 8 of 80 relays at a generating station within the five-year interval specified in its Protection System maintenance and testing program.⁴¹ While the facility was a peaking unit, the relays at issue were protected by a backup protection system and a redundant Protection System.

3. The Registered Entity's Internal Compliance Program and Compliance Culture Matter

NERC and the Regional Entities consider the registered entity's ICP, including preventative and corrective processes and procedures, management practices, and culture of compliance as factors to help determine whether a Possible Violation should receive FFT treatment. In the sample, all of the SNOP violations cited the registered entity's ICP as a mitigating factor. The most common ICP factors listed in the sample were:

- NERC compliance or NERC compliance training were apparent in the registered entity's ICP;
- the ICP was widely available or distributed;
- the registered entity updated policies and procedures on a periodic basis to comply with the NERC Reliability Standards;
- the registered entity updated the ICP on a periodic basis;
- senior management oversaw the ICP; and
- the team that administered the ICP was independent and had access to the chief executive officer.

Regional Entities also listed other mitigating factors in addition to the ICP for some violations and issues. For example, the Regional Entities considered mitigating

⁴⁰ 85 of the 122 moderate SNOP violations in the sample were filed prior to July 2013 and were therefore not eligible for the FFT track.

⁴¹ Violation ID: RFC2011001122.

factors such as the fact that the registered entity was cooperative, the entity performed “above and beyond” mitigating measures, and the registered entity demonstrated a commitment to compliance. In one case, a registered entity self-reported a violation of PRC-005-1 R2.1 because it determined that the monthly signal adequacy test for the power line carrier (PLC) communication system associated with a line was not performed as required by its Protection System maintenance and testing program.⁴² The registered entity mis-categorized the PLC as having an automatic check-back function, which is utilized for continuous monitoring, and excluded the communication channel from the monthly testing program. As a result, testing was missed for 4.2% of the registered entity’s communication systems.

The Regional Entity levied a zero-dollar penalty and cited the registered entity’s ICP, which was supported and engaged by senior management, as a mitigating factor. The ICP reflected that the senior vice president – operations has a weekly meeting with the chief executive officer, and the vice president – information systems has meetings at least monthly with the chief executive officer. These meetings ensure independent access to senior management for issues involving compliance with NERC Reliability Standards. The registered entity also had a training program for compliance staff and a program for employees to report possible compliance issues confidentially without fear of retaliation.

⁴² Violation ID: NPCC2012010580.

4. The Registered Entity's Compliance History Should not be a Disqualifier

Another factor that NERC uses in order to determine whether a Possible Violation should be considered for FFT treatment is the registered entity's compliance history. Pursuant to NERC's Sanction Guidelines, the Regional Entity considers the registered entity's compliance history for all Possible Violations. The Regional Entity must consider prior violations of same or similar Reliability Standards for the registered entity at issue, prior filed violations of the same or similar Standard for affiliates when there is a commonality of compliance responsibility, or compliance history indicating broader programmatic failures.

In evaluating a registered entity's compliance history as a factor in determining whether to treat a Possible Violation as an FFT, NERC and the Regional Entities must exercise caution. An issue may be eligible for FFT treatment even if there are past violations. This ensures that NERC and the Regional Entities do not discourage the registered entities from robustly self-reporting noncompliance. However, repeat violations should lead to a deeper look into root causes of mitigation plan failure and an examination of the connection between the registered entity's ICP and its day-to-day adherence to Reliability Standards in operations.

NERC and the Regional Entities have used the FFT track for moderate risk issues despite the registered entity's history of noncompliance with the same Reliability Standard and requirement if the issue involved an affiliate or the facts and circumstances of the Possible Violations, especially the underlying conduct, were different. In one issue, the FFT track was used because the previous violation was at an affiliate and it

occurred in a similar time frame as the present issue and therefore should not be considered a repeat issue.⁴³ In another example, the Regional Entity did not consider the issue as repetitive because the previous issue involved a deficiency in a patrol and the present issue related to asset management.⁴⁴ Repeat violations, when they do not involve repetitive conduct, should be appropriate FFTs in most circumstances. Regional Entities should strongly consider FFT treatment even for repetitive conduct when the registered entity has identified and reported the issue as a result of its internal controls. Such consideration would encourage registered entities to continue their self-monitoring and reporting.

E. Increased Use of FFT to Resolve Moderate Risk Issues

Pursuant to the criteria discussed above, NERC and the Regional Entities will continue to evaluate additional moderate risk issues as candidates for FFT treatment. NERC believes that FFT treatment of moderate risk noncompliance, particularly noncompliance that is self-identified by registered entities through internal controls, encourages registered entities continuously to self-monitor their compliance with Reliability Standards and self-report Possible Violations. FFT is a streamlined disposition method that rewards this behavior.

⁴³ For a description of the issue, see section IV.B.1 above.

⁴⁴ For a description of the issue, see section IV.B.5 above.

V. CONTINUED DEVELOPMENT OF THE FFT PROGRAM

A. Additional Flexibility Regarding Timing of Mitigation of FFTs is Warranted

Additional enhancements to the FFT program could expand its application and effectiveness. One feature of the program that limits its use is the requirement that mitigating activities be complete within 90 days of the posting of the remediated issue. The experience of the ERO enterprise is that the timing of completing mitigating activities is not always associated with the risk posed by the noncompliance. Some issues, despite their posing a lower risk, may still require mitigating steps that could extend beyond 90 days. Moreover, moderate risk noncompliance resolved through the FFT process often requires additional time for completion of mitigation.

As an example of mitigation requiring additional flexibility, many registered entities include training as a mitigating activity to prevent recurrence of the underlying noncompliance. Often, especially in larger organizations, completing that training can be a prolonged exercise taking more than three months. Mitigation Plans tied to outage schedules also may require more than 90 days to complete. For example, an entity submitted a Mitigation Plan in March 2014 for a violation of PRC-005-1 R2, but the plan cannot be completed until the end of August 2014, as it involves the testing of control circuits, documentation of the testing results, and an audit of those results to ensure all required testing is complete. The Regional Entity is holding the FFT because the mitigation requires more than 90 days to complete.

Another FFT involving noncompliance with VAR-002-2b R3 for a large registered entity presented a similar issue. The registered entity promptly submitted a

Mitigation Plan that included an activity that required a certain generating unit to be off-line. Specifically, the registered entity planned to correct the alarm point that is received by the digital control system to ensure that the point used provides accurate indication of the status of the automatic voltage regulator. The registered entity cannot complete this milestone until July 1, 2014, which is more than 90 days from the date the Regional Entity was prepared to issue the Notice of FFT treatment.

In addition to demonstrating the limitations of the current 90-day period, these issues have highlighted the fact that while an extended mitigation timeframe can guide FFT decision making, it should not be a barrier to the appropriate use of the FFT mechanism. Therefore, NERC proposes to expand the timeframe for completion of mitigation of FFT issues to twelve months but allow further extension in cases where more time is warranted. Based on the facts of the particular noncompliance and mitigation, additional time could be allowed on a case-by-case basis. In the event Regional Entities determine that FFT treatment should be afforded to matters with mitigation timeframes beyond twelve months, Regional Entities would be required to obtain NERC approval of the extended timeframe prior to posting the FFT. Regional Entities would be required to explain the need for additional time and how the extended mitigation timeframe affected the Regional Entity's risk assessment of that particular issue.

The experience with the FFT program supports this improvement. The availability of the 90-day timeframe did not discourage prompt mitigation. Eighty-three percent of the FFTs posted since July 2013 had mitigation completed as of the time of the posting. The additional time is used only as needed.

Any open mitigation would continue to be tracked and required as it is today. The availability of additional time upfront, at the time of the determination of the processing track and posting of the FFT, would not affect the conditions imposed by the Commission with respect to FFTs with open mitigation. The Commission stated: “if a possible violation is treated as an FFT with ongoing mitigation, that violation will not be ‘closed’ until the mitigation is complete.”⁴⁵ Similarly, if the mitigation is not completed by the timeframe allowed by the Regional Entity at the time of the posting of the FFT, or is later found to be inadequate, as the Commission required previously, FFT eligibility would be rescinded and the entity’s failure to mitigate should be treated as a continuing Possible Violation that is no longer eligible for FFT treatment.⁴⁶

Finally, NERC and FERC already have mechanisms in place to monitor the implementation of this improvement as part of the regular oversight processes associated with the FFT program. Regional Entities would continue to monitor the registered entities’ completion of the mitigating activities in order to notify NERC of the status as they do today. Upon completion, NERC would then notify FERC, also as occurs today. This monitoring and tracking has worked well thus far, making the expansion described herein a reasonable improvement.

In sum, the existing safeguards, in the form of the conditions imposed by the Commission referenced above and the oversight of the program, will continue to ensure that mitigation is completed in a timeframe that is appropriate in light of the facts of the particular issue. The proposed improvement will enhance the program by ensuring that

⁴⁵ June 20, 2013 Order at P 36.

⁴⁶ *Id.* at P 37.

processing determinations are made on the basis of the risk posed by the noncompliance and not by the deadline for completion of mitigation.

VI. CONCLUSION

NERC respectfully requests that the Commission accept this report and issue an order continuing the application of the FFT program to moderate risk Possible Violations and modifying the timeframe requirements for completion of mitigating activities, as discussed herein.

Respectfully submitted,

/s/ _____

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Dated: June 20, 2014

Appendix A

Methodology and Criteria Applied in FFT Sampling

NERC's review for the FFT report filed in 2013 considered the same pool of issues, for the period of September 2011 through September 2012, used by FERC for its independent annual FFT review. NERC's 2014 review involved an independent sample of filed and posted FFTs for the period of October 2012 through December 2013. Using an independent sample enabled NERC to evaluate FFTs from a full calendar year and to examine more FFTs subject to the posting/no review procedure that began in July 2013. NERC's sample consisted of 120 FFTs.⁴⁷ NERC included 7 out of a total of 25 FFTs with ongoing mitigation as part of its annual sample for all Regional Entities.

Using the RATS-STATS⁴⁸ sampling methodology employed ERO enterprise-wide, NERC selected FFTs from each Regional Entity for its sampling pool. According to RATS-STATS, out of 961 filed/posted FFTs, NERC could use an ERO enterprise-wide sample size of 201 FFTs. NERC elected to reduce the selection from 201 FFTs to 120 FFTs to make the sample size more comparable to FERC's review of 100 FFTs. The percentage selection for each Regional Entity was representative of the number of FFTs filed/posted by that Regional Entity during the applicable period, as demonstrated in Table 1 below. FRCC and MRO had the smallest number of FFTs, and their sample sizes were smaller than those of the other Regional Entities. In contrast, ReliabilityFirst and

⁴⁷ The selected 120 FFTs included minimal risk issues and issues with ongoing mitigating activities. All moderate risk issues were reviewed separately and are discussed in section IV.

⁴⁸ RATS-STATS is a statistical audit tool used by the U.S. Department of Health and Human Services, Office of Inspector General, Office of Audit Services and developed by the Regional Advanced Techniques Staff (RATS).

WECC filed/posted a greater number of FFTs than the other Regional Entities, leading to larger sample sizes for those two Regional Entities.

Table 1: Sample size for all Regional Entities

	Total Posted/Filed	Selected⁴⁹	Percent representation of total posted	Percent representation of selected
Total	961	120	% of 961	% of 120
FRCC	43	5	4%	4%
MRO	39	5	4%	4%
NPCC	119	15	12%	13%
RFC	222	28	23%	23%
SERC	86	11	9%	9%
SPP	123	15	13%	13%
TRE	149	19	16%	16%
WECC	180	22	19%	18%

NERC requested the Regional Entities to provide all FFT-related documents for the items included in the sample set, including but not limited to: FFT procedural documents; follow-up or sampling program procedures; source documents; notices of FFT eligibility; documents describing mitigating activities; certifications; affidavits; verification documents, if applicable; and evidence demonstrating the issue was successfully remediated. NERC examined the selected FFTs and the documents received using a nine-point criteria described in NERC’s FFT Process Review Checklist.⁵⁰ The criteria were based on four major categories: 1) description of the issue was clear, and

⁴⁹ The selection included one multi-regional FFT each for ReliabilityFirst and Texas RE. Both FFTs had three issue tracking IDs associated with ReliabilityFirst, Texas RE, and SPP RE. For the purpose of selection, these were counted as one issue each for the lead Regional Entity, which were ReliabilityFirst and Texas RE.

⁵⁰ NERC’s FFT Process Review Checklist is included as Attachment 1.

sufficient facts were included; 2) the risk was aligned with the facts and circumstances of each particular FFT and was in fact minimal; 3) closed FFTs were mitigated timely and appropriately and open FFTs were mitigated within 90 days of posting; and 4) the registered entities' compliance history and ICP were considered by the Regional Entities.

In addition to the above criteria, NERC staff reviewed the documents provided by the Regional Entities to assess their internal processes when determining whether FFT treatment is appropriate for Possible Violations, and to ensure consistency and accuracy in the application of the program across the Regional Entities. The detailed record, starting from identification of a Possible Violation in a source document and ending with an affidavit or verification of completion of mitigating activities, facilitated an understanding of the Regional Entities' processes for FFT treatment.

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 20th day of June, 2014.

/s/

Edwin G. Kichline
*Attorney for North American
Electric Reliability
Corporation*

Attachment 1

2014 FFT Process Review Checklist

2014 FFT Process Review Checklist

Regional Entity:

FFT Sampling performed by:

Issue tracking ID	Standard	Requirement	Mitigating activities complete at the time of posting – Open/Closed FFT
Issue Tracking ID 1			
Issue Tracking ID 2			

General

Item	Requirement	Documents Reviewed	Comments/Conclusion
A	Any procedural documents, training documents that are used for the FFT process.	<i>Include document title and revision, if applicable.</i>	<i>Summary of the process that the documents address and if they discuss how the FFT program functions.</i>
B	Follow-up or Sampling Program, e.g., audit or spot-check documents, related to closed FFTs. The RE has a sampling process for random checking of completion or a spot check or audit process, to the extent it does not verify completion of mitigating activities.		

2014 FFT Process Review Checklist

Evaluation:

Issue Tracking ID 1:

No.	Requirement	Status	Comments/Conclusion
1	The description of the issue was adequate.	S	
2	Risk Statement adequately addresses the issue. a) The issue posed a minimal risk to the BPS and does not warrant a monetary penalty. b) Risk statement based on potential and actual risk, not just after-the-fact determinations. c) Risk statement based on facts at the time of the issue.	S	
3	The registered entity provided a statement of completion certified by an officer of the company.	S	
4	The mitigating activities address both the current issue and abatement of future occurrences. Or For issues with open mitigation activities at the time of posting – Complete checklist section 9 below.	S	
5	While not required, completion of mitigating activities verified.	S	
6	Consideration, if any, of the registered entity's internal compliance program. a) The registered entity's compliance program includes preventive and corrective processes and procedures, internal controls and culture of compliance.	S	
7	The RE considered the compliance history when evaluating this issue. a) There have not been any re-occurrences since the mitigation activities were completed.	S	

S – Satisfactory, U – Unsatisfactory, NA – Not Applicable

2014 FFT Process Review Checklist

8	The RE provided the requested dates throughout the evaluation. 1) Date of discovery 2) Date FFT posted/determination 3) Date of completion of mitigation	S	
9	Mitigating activities were completed within 90 days from the date of posting. The activities include both actions taken to remediate the issue and to prevent recurrence. The RE provided a copy of an affidavit, signed by an officer with knowledge of remediation, certifying that the statement is true and correct.	S	

NERC Enforcement comments:

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Lessons Learned / recommendations from process review:

[Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Text Box Tools tab to change the formatting of the pull quote text box.]