

Quarterly CMEP Summary Report

Midwest Reliability Organization December 31, 2022

This document was prepared to provide a quarterly summary of areas addressing key issues, trends, and significant events in the MRO region related to its delegated authorities set forth in the Compliance Monitoring and Enforcement Program (CMEP). Starting in 2023, the publishing schedule will be changing from quarterly to bi-annual (after Quarter 2 and Quarter 4).

Key Issues in Compliance, Risk Assessment and Mitigation, and Enforcement

Compliance Oversight Plans (COPs)

A Compliance Oversight Plan (COP) is an entity-specific oversight strategy that begins with an assessment of the entity's inherent risk, existing controls, and prior performance. This process includes a detailed review of the entity's registration, compliance history, system performance and event history, and other risk factors. The resulting COP identifies what reliability standards are the focus for future compliance monitoring activities based on the entity's risk. The COP also identifies the appropriate interval for MRO's monitoring activities and the type of tools that should be expected during oversight. MRO has completed 12 of the 15 COPs scheduled to be developed in 2022. MRO continues to innovate the COP process and is working on a streamlined process for low-inherent risk entities and is also developing tools for analyzing COPs across multiple organizations to identify trends and develop outreach opportunities, which will be utilized annually.

2022 Compliance Audit Status

MRO completes periodic Compliance Audits to assess registered entities' compliance with the NERC Reliability Standards. MRO staff completed 13 of the 13 scheduled Compliance Audits for 2022. MRO has provided resources for four coordinated oversight audits led by another region and will provide resources for an additional one coordinated oversight audits. MRO also participated in two coordinated oversight Spot-Check led by another region. Coordinated oversight is a joint engagement with other regions for ERO approved multi-regional registered entities. Coordinated oversight Compliance Audits allow for more efficient monitoring activities for the affected registered entities. MRO also leverages these engagements to identify and share best practices with the other Regional Entities.

Self-Certifications

In between scheduled Compliance Audits, registered entities complete Self-Certifications of NERC Reliability Standards. MRO has revised the Self-Certification scoping process and implemented a guided Self-Certification process. The risks identified in the MRO Regional Risk Assessment and the ERO Enterprise CMEP Implementation Plan are the two primary considerations for guided Self-Certification scoping. The advantage of using Self-Certifications is that it allows MRO to address continent-wide risks and region-wide risks throughout MRO's footprint through a single process at a faster interval than Compliance Audits. MRO's Self-Certification schedule is available on its website.





Highly Effective Reliability Organizations® (HEROs) Update

The MRO Risk Assessment and Mitigation (RAM) department continues to monitor and respond to questions submitted to Heros@mro.net. This feedback tool is widely used by MRO registered entities and serves as a great mechanism for fielding compliance related questions. This email address has received more than 400 questions since implementation in November of 2016. Over the last quarter, MRO has received 9 HEROs questions with an average response time of 19 days. This average is significantly better than the 30-day response goal.

WebCDMS Transition to ALIGN

The transition to ALIGN from webCDMS as our primary CMEP tracking/communication tool continues to be a significant effort in 2022. The final migration of open cases and integration of Canadian entities into the ALIGN system is scheduled to be completed in the 2nd quarter of 2023.

Risk Determinations Associated with Self-Logged Issues of Noncompliance (Figure 1 and Figure 2)

Figure 1: Total Registered Entities Self-Logging by Regional Entity, shows that as of December 31, 2022, there are 31 MRO entities participating in the Self-Logging program which accounts for 30 percent of all ERO Self-Logging participants. Self-Logged instances of noncompliance submitted by these participants are monitored separately as the program is designed to quickly resolve minimal risk issues that are self-identified by entities. These issues are presumed minimal risk Compliance Exceptions (CE), however, MRO has the discretion to elevate the disposition based on the RAM risk determination analysis. MRO is continually evaluating its process and outreach to improve processing efficiencies and validation of minimal risk noncompliance.

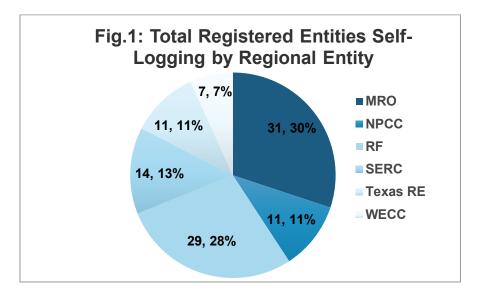
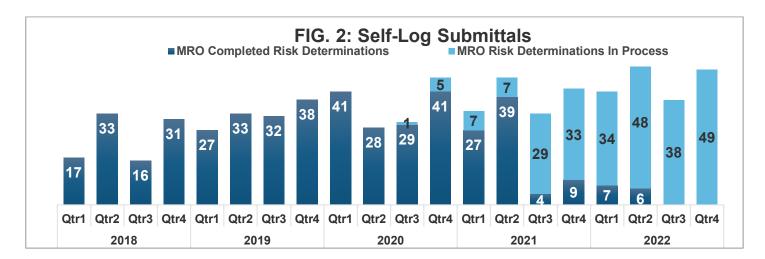


Figure 2: Self-Log Submittals, illustrates Self-Logged instances of noncompliance by submittal dates. Please note submittal dates are not the start of potential noncompliance or when MRO completed its risk determination analysis.



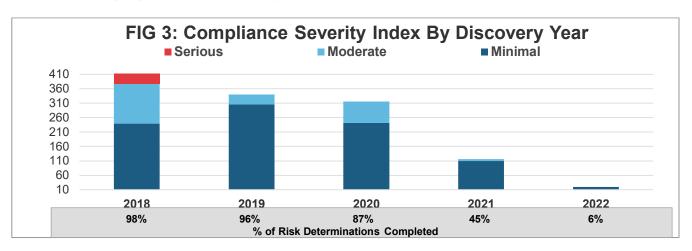


Risk Assessment and Mitigation Trends

In the following charts and statistics, the numbers reflect all historic issues of noncompliance in the expanded MRO region.

Compliance Severity Index (Figure 3)

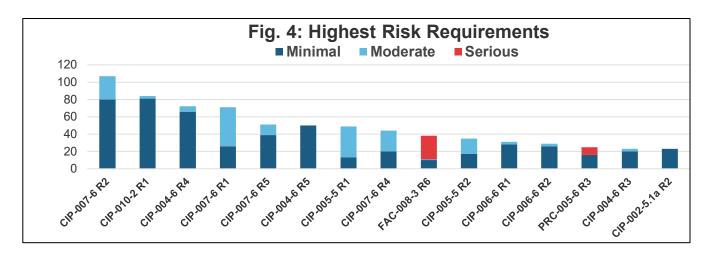
MRO staff use the Compliance Severity Index (CSI), shown in Figure 3, to evaluate progress toward a key reliability goal of less severe violations. The CSI represents the total risk that instances of noncompliance bring to the reliability or security of the bulk power system in the MRO region. The CSI is calculated using the risk determination and Discovery Method for each noncompliance. MRO has seen a notable decrease in the risk of issues of noncompliance over the past decade due to an overall improvement in the culture of compliance. Registered entities are self-identifying issues of noncompliance in a timely manner prior to issues presenting a greater risk to reliability.



Highest Risk Issues of Noncompliance (Figure 4)

Figure 4 provides the 15 highest risk requirements, from January 1, 2018 to December 31, 2022, that have a history of issues of noncompliance, based on the CSI. Higher risk violations are associated with cyber and physical security standards, accurate facility ratings, and timely maintenance of protection systems.



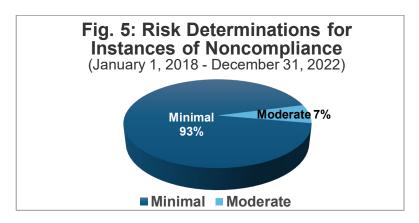


Description of the Top Five Highest Risk Requirements (Figure 4)

- CIP-007-6 R2: Requires a patch management process for tracking, evaluating, and installing cyber security patches for applicable Cyber Assets. A high volume monthly requirement in which even the most mature security programs will have an occasional non-compliance.
- CIP-010-2 R1: Requires current baseline configurations for applicable Cyber Assets.
- CIP-004-6 R4: Implement access management programs which authorize access to applicable BES Cyber Systems.
- CIP-007-6 R1: Intended to minimize the attack surface of BES Cyber Systems through disabling or limiting access to unnecessary network accessible logical ports and services and physical I/O ports.
- CIP-007-6 R5: Has a method(s) to enforce authentication of interactive user access to applicable Cyber Assets

Risk Determinations for Issues of Noncompliance (Figure 5)

Ninety percent of all instances of noncompliance from January 1, 2018 to December 31, 2022, were determined to be minimal risk. There is a correlation between the increasing percentage of issues of noncompliance being minimal risk (Figure 5) and the increasing percentage of self-reported issues of noncompliance (Figure 7). Entities are identifying noncompliance earlier before the issues become more impactful to the reliability and security of the bulk power system.

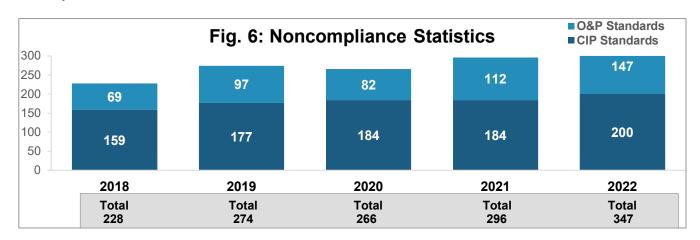




Noncompliance Trends and Statistics

Breakdown of Critical Infrastructure Protection (CIP) vs. Non-CIP Possible Issues of Noncompliance (Figure 6)

The noncompliance statistics and trends in Figure 6 are annually discovered and reported to NERC from January 1, 2018 to December 31, 2022.



Registered Entity Responsibility (Figures 7 and 8)

MRO staff analyzes how often registered entities self-identify and accept responsibility for noncompliance. These trends are indicators of the commitment among registered entities in the region to perform self-assessments of their compliance with the reliability standards. The high percentages, reflected in Figure 7 and Figure 8, demonstrate a strong governance and compliance culture of registered entities in the MRO region, as well as registered entities' willingness to accept, and learn from, discovered issues of noncompliance in order to prevent future noncompliance with NERC Reliability Standards.

Figure 7 reflects issues of self-identified noncompliance that MRO processed from January 1, 2018 to December 31, 2022.

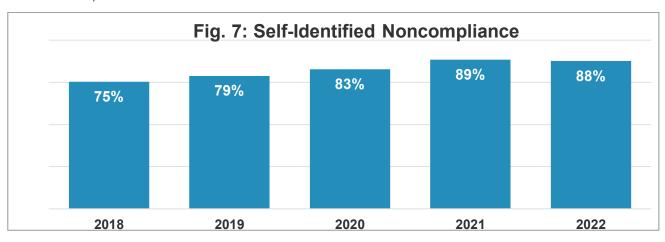
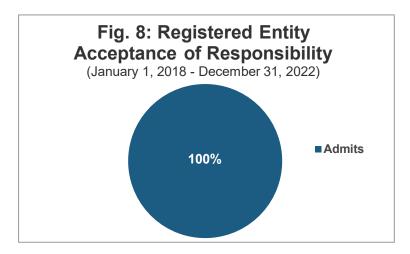




Figure 8 shows the percentage of time that registered entities have accepted responsibility for noncompliance submitted to NERC or other applicable Regulatory Authority from January 1, 2018 through December 31, 2022.



Discovery Method Detail (January 1, 2018 through December 31, 2022) (Figure 9)

In Figure 9, the numbers reflect all noncompliances in the MRO region that were reported to NERC or other applicable Regulatory Authority.

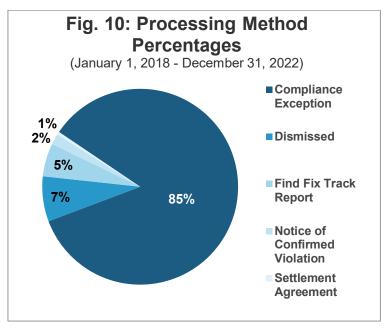
Figure 9: Discovery Method								
Discovery Method Detail	2018	2019	2020	2021	2022	Sub Total	(-less) Dismisse d	Total
Compliance Audit	33	47	40	18	18	156	19	137
Compliance Investigation	0	0	0	0	0	0	0	0
Data Submittal	0	0	0	0	0	0	0	0
Self-Certification	23	11	6	16	24	80	11	69
Self-Log	97	130	145	155	182	709	7	702
Self-Report	75	86	75	107	123	466	26	440
Spot Check	0	0	0	0	0	0	0	0
Totals	228	274	266	296	347	1411	63	1348

Noncompliance Processing (Figure 10)

MRO staff analyzes trends in the status of noncompliance processing by compiling all available processing methods, the average age of open noncompliances, and the closure percentage of noncompliances for each year. This analysis indicates progress towards simpler, more expedited processing due to the increased use of CEs to process minimal risk noncompliance.



Figure 10 includes issues of noncompliance for entities that were registered in the MRO region during the specified time period.



Noncompliance Processing Time (Figures 11 and 12)

Figure 11 illustrates the trend of the average age for open noncompliances in MRO's inventory. The average processing for these open noncompliances is calculated by using the date reported to MRO until the last day of the noted quarter or specific date indicated and taking the average of the calculated days.

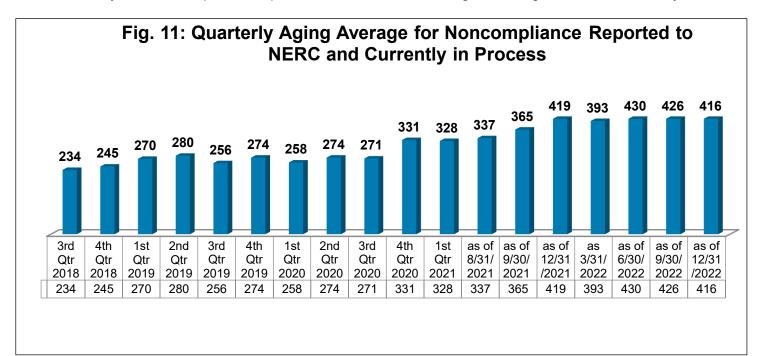
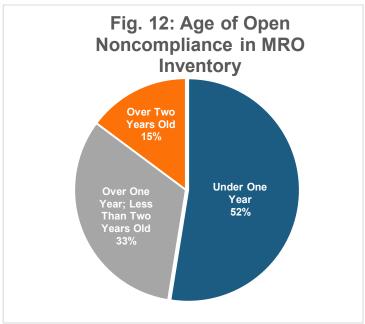




Figure 12 illustrates the aging time for all open instances of noncompliance reported to MRO and applicable government authority.



For questions on this report, please contact the following individuals:

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