

MACD - Ontario Reliability Compliance Program

2021 Reliability Standards Compliance Monitoring Plan

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Introduction

The 2021 Market Assessment and Compliance Division ("MACD") Reliability Standards Compliance Monitoring Plan ("MACD CMP") provides market participants with the reliability standards that will be the focus of MACD's 2021 compliance monitoring activities. For the purpose of this document, reliability standards are the North American Electric Reliability Corporation ("NERC") and the Northeast Power Coordinating Council ("NPCC") reliability standards, and the Ontario reliability market rules. The MACD CMP also provides insights into some of the discovery methods that MACD may use to assess market participants' compliance with these reliability standards.

Ontario's Reliability Compliance Enforcement Framework

The *Electricity Act*, 1998 ("Electricity Act") grants the Independent Electricity System Operator ("IESO") jurisdiction to maintain the reliability of the IESO-controlled grid¹ and the statutory power to create market rules "establishing and enforcing standards and criteria relating to the reliability of the electricity service or the IESO-controlled grid"². Through the *Electricity Act* and supporting regulations, the Government of Ontario has also directed the IESO to be responsible for Ontario's coordination of standards development activities with NERC and NPCC. The IESO has been assigned the statutory object "to participate in the development by any standards authority of criteria and standards relating to the reliability of the integrated power system"³.

NERC and NPCC are identified under the *Electricity Act* as standards authorities that approve standards and criteria "relating to the reliable operation of the integrated power system"⁴. The IESO created the Reliability Standards Standing Committee ("RSSC") as a means to communicate changes to these standards and criteria and to aid in market participants' understanding of their reliability obligations. The RSSC provides a forum that engages market participants in the standards development process including notifications to market participants of new and developing reliability standards.

In addition to reliability requirements identified specifically in the market rules and market manuals, the market rules incorporate NERC and NPCC reliability standards and criteria by reference. Subject to the IESO's applicability determination, these standards and criteria form part of the law in Ontario⁵. The market rules assign to the IESO various functions, powers and authorities to supervise, administer and enforce the market rules⁶. The market rules also provide the IESO with the general power to "undertake such monitoring as it considers necessary to determine whether *market participants* are complying with the *market rules*". This power necessarily extends to those provisions mandating

¹ Electricity Act, 1998, S.O. 1998, c. 15, Sched. A, s. 6.(1)(c).

² Electricity Act, s. 32.(1)(c).

³ Electricity Act, s. 6.(1)(d).

⁴ Electricity Act, s. 2.(1).

⁵ Market Rules, Chapter 5, ss. 1.2.6, 3.2.2, 3.2.5-3.2.7, 3.4.2, 3.5.3, 3.6.2, Chapter 4, s. 2.1.1.

⁶ Market Rules, Chapter 1, s. 5.3.1.

reliability standards compliance in Ontario⁷. Within the IESO, this responsibility, as well as enforcement, has been delegated to the Vice President of MACD⁸. While the IESO through a Memorandum of Understanding with NERC and NPCC has agreed to "be subject to NERC's compliance monitoring and enforcement processes" in respect of its own reliability standards obligations⁹, MACD is responsible for the design and implementation of the Ontario Reliability Compliance Program ("ORCP")¹⁰ including the Compliance Monitoring Plan that applies to market participants in Ontario.

2021 Compliance Monitoring Priority Areas

Every year, MACD prioritizes its compliance monitoring and enforcement activities in relation to the risks to the reliability of the integrated power system. In assessing these risks, MACD takes into account several factors, including:

- the applicability of reliability standards in Ontario;
- the assessed reliability risks of the standards at both the continent-wide and regional levels;
- the compliance history associated with each standard;
- power system infrastructure and demand changes; and
- emerging threats and vulnerabilities impacting the power system.

This approach allows MACD to concentrate its resources on higher-risk issues, while continuing to respond appropriately to other risks.

While market participants are required to comply with and be able to demonstrate compliance with all applicable reliability standards at all times, MACD puts a more significant focus on a subset of these market rules and reliability standards that are more explicitly monitored for compliance in a given year.

For 2021, MACD has selected the following market rules and reliability standards for monitoring:

Critical Infrastructure Protection – Remote Connectivity and Supply Chain

NERC Standards			
CIP-003-7	CIP-004-6	CIP-005-6	CIP-006-6
CIP-007-6	CIP-010-3	CIP-013-1	

http://www.ieso.ca/Corporate-IESO/Leadership/Executive-Team/Glenn-McDonald

⁷ Market Rules, Chapter 3, s. 6.1.2.

https://www.ieso.ca/en/sector-participants/market-oversight/compliance-enforcement/compliance-overview#:~:text=The%20IESO%27s%20powers%20with%20respect%20to%20monitoring%2C%20investigation,delegation%20has%20been%20in%20place%20since%20market%20opening

⁹ https://www.ieso.ca/en/sector-participants/system-reliability/reliability-standards-framework

¹⁰ The ORCP is described in Market Manual 11.2, "Ontario Reliability Compliance Program", issue 4.0

Inadequate Models Impacting Planning and Operations

Relevant Standar	Relevant Standards				
MOD-025-2	OD-025-2 MOD-026-1 MOD-027-1 MOD-032-1		PRC-019-2	PRC-024-2 Chapter 4.	
Market Rules and	Market Rules and Manuals				
Chapter 4, Appendix 4.2	Market Manual 11.5, section 3	Market Manual 1.6 and associated workbooks	Market Manual 2.8	Market Manual 2.11	Chapter 4, sections 5.1 and 5.2

Gaps in Program Execution

NERC Standards					
FAC-003-4	FAC-008-3	PRC-005-6			
NPCC Directories					
Directory 4					

Determination and Prevention of Misoperations

NERC Standards			
PRC-004-5(i)	PRC-001-1.1 (ii)	PRC-027-1	PRC-002-2
NPCC Directories			
Directory 11			

Outage Coordination

Market Rules and Manuals	
Chapter 5, sections 6.2 and 6.3	Market Manual 7.3, sections 2, 4, and Appendix B

Automatic Underfrequency Load Shedding (UFLS)

Relevant Standards		
PRC-006-NPCC-1		
Market Rules and Manuals		
Chapter 5, section 10.4	Market Manual 7.4, section 4.4	Market Manual 7.1, section 11.3
NPCC Directories		
Directory 12		

To assess compliance with these requirements, MACD will use at least one of the discovery methods described in the following section.

Discovery Methods

The 2021 MACD CMP will employ a combination of discovery methods, which include self-reports, self-certifications and scheduled and unscheduled audits for monitoring Ontario's compliance with reliability standards, as described in the following sections.

Self-Reports

Unlike other discovery methods that are typically initiated by MACD, self-reporting relies on the monitoring mechanisms of the market participant's internal compliance program¹¹ to review their compliance with market rules and reliability standards, and to detect potential breaches.

If a market participant believes that they may have breached a market rule or reliability standard, they are strongly encouraged to take all reasonable steps to mitigate the impact that the breach may have caused on reliability and self-report the breach to MACD in a timely manner. Such actions may help mitigate the severity of the penalties and other sanctions that could be applied in the event that MACD determines that the market participant was in breach of the market rules.

Self-Certifications

The self-certification process requires the market participant to self-determine its compliance status with monitored applicable reliability standards. Self-certifications require market participants to demonstrate their compliance status with specific reliability standards at a particular point in time or over a period of time. Unlike self-reports, whose submission to MACD is initiated by market participants, self-certifications are submitted upon IESO's request.

MACD will notify the market participants required to self-certify 45 calendar days in advance of the due date for self-certification. This notice will include the list of market rules, reliability standards and requirements for which compliance status needs to be demonstrated, the reporting period, instructions about the format for the requested information, and instructions about submitting the requested information.

Compliance Audits

MACD conducts compliance audits in accordance with *Market Manual 2: Market Administration, Part 2.17: Compliance Auditing of Reliability Standards for Ontario Market Participants (IESO_PRO_0803)*¹². In accordance with the process outlined in this manual, MACD identifies the market participants and reliability requirements to be audited using a risk-based approach, which evaluates a market participant's compliance with reliability standards and the potential impact that continued non-compliance may have on reliability. MACD will notify market participants selected for audit in a given year at least 90 days in advance of the scheduled audit start date.

¹¹ For more information on MACD's view on market participant's internal compliance programs, see the Internal Compliance Programs web page on the IESO website.

http://www.ieso.ca/-/media/files/ieso/document-library/market-rules-and-manuals-library/market-manuals/market-administration/macompauditing.pdf?la=en.

https://www.ieso.ca/-/media/Files/IESO/Document-Library/Market-Rules-and-Manuals-Library/market-manuals/market-administration/ma-CompAuditing.ashx

MACD continues to monitor the impacts of the COVID-19 pandemic on market participants's efforts to maintain the reliability of the power system, including the security of the critical electricity infrastructure. Acknowledging that the industry is still faced with unprecedented challenges, MACD has postponed all on-site audits until at least Q2 2021 and will regularly re-evaluate its decision as the circumstances related to the pandemic change.

Any MACD compliance audits in 2021 will focus on one or more areas identified in the 2021 Compliance Monitoring Priority Areas section of this plan. The audits may also include additional market rules and/or reliability standards that will be communicated to the selected market participants in the audit notification letter.

Unscheduled Audits

Unscheduled audits, or spot checks, are similar to compliance audits in that they provide a comparable level of compliance assurance. However, they usually target a more limited number of requirements from the entire set of applicable reliability standards. MACD may conduct spot checks at any time during the year, potentially with very little notice provided to market participants.

The 2021 MACD CMP may include spot checks, which may or may not be related to the market rules and/or reliability standards identified for monitoring in 2021. MACD will notify the market participants selected for a spot check up to 30 business days in advance, indicating the reliability requirements in scope and the timetable and manner in which a response should be provided.

Data Submissions

The IESO requires market participants to submit certain reliability data on a frequency set out in the following table. The schedule for the 2021 data submission is as shown below.

NERC Standard	NPCC Document	Market Rules/	Document	Frequency	Submission Date	Market Participant	Submission
o turidar a	Boodinion	Manuals	Title		Julio	Class ¹³	
	Directory 12 Section 5.4		Generator Underfrequency Protection	Annually	17-Sept-21	G	IESO Form 1718
	Discortonic		Requirements	A	17 C 21	T.D.W	JECO E
	Directory 12 Section		Automatic Underfrequency	Annually	17-Sept-21	T, D, W	IESO Form 1719
	5.2		Load Shedding consistent with NPCC's UFLS program				
			requirements				

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¹³ G-Generator, T-Transmitter, D- Distributor, W-Wholesale Customer; as per market rules definitions

NERC Standard	NPCC Document	Market Rules/ Manuals	Document Title	Frequency	Submission Date	Market Participant Class ¹³	Submission
		Market Manual 7.10	Emergency Preparedness Planning	Annually	12-Feb-21		IESO Form 1608
		Market Manual 7.8	Emergency Restoration Planning	Annually	12-Feb-21		IESO Form 1609
FAC-003-4			Transmission Vegetation Management Program	Quarterly	05-Feb-21 07-May-21 04-Aug-21 05-Nov-21	T, G	IESO Form 1527
PRC-004-5(i)			Analysis and Mitigation of Transmission and Generation Protection System Misoperations	Quarterly	05-Feb-21 07-May-21 04-Aug-21 05-Nov-21	D, G, T	By email to ORCP (orcp@ieso.ca)

Document Revision History

Date	Reason for Issue
December 21, 2020	2021 CMP document initial publication
March 15, 2021	Updated 'Data Submissions' section, to include quarterly reporting dates for Q2, Q3 and Q4.

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