

MACD - Ontario Reliability Compliance Program

2017 Reliability Standards Compliance Monitoring Plan

December 2016

Document Change History

Date	Reason for Issue
December, 2016	Publication of first release

Introduction

The 2017 MACD Reliability Standards Compliance Monitoring Plan (“MACD CMP”) provides market participants with the reliability standards¹ that will be the focus of MACD’s 2017 compliance monitoring activities. The MACD-CMP will also provide insights into the discovery methods that MACD will 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 grid² 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”³. Through the *Electricity Act* the Government of Ontario has also directed the IESO to be responsible for Ontario’s coordination of standards development activities with the North American Electric Reliability Corporation (“NERC”) and the Northeast Power Coordinating Council (“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”⁴.

NERC and NPCC are identified in the *Electricity Act* as standards authorities that approve standards and criteria “relating to the reliable operation of the integrated power system”⁵. 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 Ontario⁶. The market rules assign to the IESO various functions, powers and authorities to supervise, administer and

¹ As defined by the market rules, “reliability standards” include criteria and standards set forth in the market rules or otherwise established by the IESO in accordance with the market rules.

² *Electricity Act, 1998*, S.O. 1998, c. 15, Sched. A, s. 6.(1)(c).

³ *Electricity Act*, s. 32.(1)(c).

⁴ *Electricity Act*, s. 6.(1)(d).

⁵ *Electricity Act*, s. 2.(1).

⁶ 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.

enforce the market rules⁷. 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 reliability standards compliance in Ontario⁸. Within the IESO, this responsibility, as well as compliance assessment and enforcement, has been delegated to the Director of MACD⁹. 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 obligations¹⁰, MACD is responsible for the design and implementation of the Ontario Reliability Compliance Program (ORCP) including the Compliance Monitoring Plan that applies to market participants in Ontario.

2017 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 requirements which are more explicitly monitored for compliance in a given year.

For 2017, MACD has selected the following reliability standards for monitoring:

Critical Infrastructure Protection

NERC Standards					
CIP-002-5.1	CIP-003-6	CIP-005-6	CIP-006-6	CIP-007-6	CIP-014-2

⁷ Market Rules, Chapter 1, s. 5.3.1.

⁸ Market Rules, Chapter 3, s. 6.1.2.

⁹ <http://www.ieso.ca/Documents/marketComp/Delegation-of-Compliance-20130801.pdf>

¹⁰ http://www.ieso.ca/documents/ircp/ero/ero-20061128-MOU_IESO_NERC_NPCC_CBRE_NPCC-INC.pdf

Communication

NERC Standards					
COM-001-2.1	PRC-001-1.1(ii) R2	TOP-002-2.1b R14, R16			
Market Rules and Manuals					
Chapter 5, section 12.2.3	Chapter 2 Appendix 2.2, section 1.1	Chapter 5, section 6.3	Chapter 5, sections 3.4 and 3.6		

Emergency Preparedness

NERC Standards					
EOP-005-2					
Market Rules and Manuals					
Chapter 5, section 11	Market Manual 7.8	Market Manual 7.10			

Maintenance and Management of Bulk Electric System Assets

NERC Standards					
FAC-008-3	FAC-003-4	PRC-005-6			

Response to Reliability Directives and IESO Data Requests

Relevant Standards					
IRO-001	IRO-010	MOD-025	MOD-026	MOD-027	TOP-002-2.1b R13, R15
NPCC Directories					
Directory 12 Sections 5.2 and 5.4					
Market Rules and Manuals					
Chapter 5, sections 3.4 and 3.6	Chapter 4, sections 5.1 and 5.2	Chapter 5, section 14.1.4			

Protection Systems Failures

NERC Standards					
PRC-001-1.1 (ii) R3,R4,R5	PRC-004 -4(i)	PRC-004-5(i)			

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

Discovery Methods

The 2017 MACD CMP will employ a combination of discovery methods, which include self-reports, self-certifications, audits and spot checks for monitoring Ontario's compliance with reliability standards, as described in the following sections.

SELF-REPORTS

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

If a market participant believes that they may have breached a 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.

While strongly encouraged to self-report, market participants that simply notify MACD of a potential breach may not always receive the full self-report credit from MACD. To receive this credit and the benefit of penalty mitigation, self-reports must meet certain content and timing requirements, which include:

- submitting it to MACD in writing¹² and on a timely basis;
- providing details of the activities that were potentially non-compliant;
- providing reasons for the non-compliance;

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

¹² Market participants should use the "Non-Compliance Event Report" ([IESO-FORM-1253](#)) or the IESO Reliability Compliance Tool to self-report potential breaches of reliability standards. For more information, visit the IESO website

- identifying all the reliability standards, market rules and market manuals that were potentially breached;
- providing a quantitative and qualitative assessment of the impact of the alleged breach on the IESO-controlled grid, the IESO-administered markets or on other market participants; and
- describing in detail the timeline and steps to remediate the breach and prevent similar non-compliance in the future.

MACD applies the following factors to assess the timeliness of a self-report:

- whether the market participant submitted the self-report before MACD became aware of the potential breach;
- the duration between the discovery of the potential breach by the market participant and the filing of the self-report; and
- whether the market participant exercised due diligence in the discovery of the potential breach.

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 declare 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 to IESO upon IESO's request.

In the past, market participants were requested to self-certify based on an annual schedule published in advance on the IESO's website. This schedule included a subset of all reliability standards in effect at that time and identified the market participant classes and the timetable on which these participants were required to self-certify. More importantly, the IESO did not require that evidence of compliance be submitted with these self-certifications.

Starting in 2017, MACD will implement a self-certification program that is tailored to each market participant's risk profile and that will require market participants to attach evidence of compliance to their self-certifications.

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 reliability standards 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)*¹³. 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

¹³ This manual is available on the IESO website.

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.

In 2017, MACD will conduct compliance audits, focused on one or more areas of identified in the 2017 Compliance Monitoring Priority Areas section of this plan. The audits may also include additional reliability standards that will be communicated to the selected market participants in the audit notification letter.

SPOT CHECKS

Spot checks, or unscheduled audits, 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 2017 MACD CMP will include spot checks, which may or may not be related to the reliability standards identified for monitoring in 2017. 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

Annually, the IESO requires market participants to submit certain reliability data. The schedule for the 2017 data submission is as shown below.

NERC Standard	NPCC Document	Market Rules/Manuals	Document Title	Frequency ¹⁴	Submission Date	Market Participant Class	Submission
	Directory 12 Section 5.4		Generator Underfrequency Protection Requirements		14-Sept-17	G	IESO Form 1718
	Directory 12 Section 5.2		Automatic Underfrequency Load Shedding consistent with NPCC's UFLS program requirements		14-Sept-17	T, D, W	IESO Form 1719
		Market Manual 7.10	Emergency Preparedness Planning (a)		01-Feb-17		IESO Form 1608

¹⁴ Annually unless indicated

	Market Manual 7.8	Emergency Restoration Planning (a)		01-Feb-17		IESO Form 1609
FAC- 003-3		Transmission Vegetation Management Program	Quarterly	05-May-17 04-Aug-17 03-Nov-17 02-Feb-18	T, G	IESO Form 1527
PRC-004- 2.1a		Analysis and Mitigation of Transmission and Generation Protection System Misoperations	Quarterly	05-May-17 04-Aug-17 03-Nov-17 02-Feb-18	D, G, T	By email to ORCP (orcp@ieso.ca)