



PROCEDURE

Market Manual 11: Reliability Compliance

Part 11.2: Ontario Reliability Compliance Program

Issue 4.0

This *market manual* describes the Ontario Reliability Compliance Program and the associated processes and procedures, along with the associated roles and responsibilities to assess, monitor and report *reliability* compliance to *reliability standards*.

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Issue	Reason for Issue	Date
1.0	This document is new, superseding M.M. 7.9 Ontario Reliability Compliance Program (IMO_PRO_0033). Changed Table 2.1, Section 2.1	March 6, 2013
2.0	Issue released in advance of Baseline 33.1 to update IESO logo.	March 31, 2015
3.0	Issue released for Baseline 36.0 to reflect changes to the new Reliability Compliance Tool processes	September 14, 2016
4.0	The entire document has been re-written and updated to reflect that the ORCP is a risk-based program designed and implemented by MACD to monitor compliance with reliability standards.	December 4, 2019

Related Documents

Document ID	Document Title
MAN-103	Market Manual 11: Reliability Compliance Part 11.0 Reliability Compliance Monitoring and Enforcement Overview
IESO_GDE_0364	Market Manual 11: Reliability Compliance, Part 11.1 Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria
IESO_CAT_0011	Market Manual 11: Reliability Compliance, Part 11.3 Reliability Information Catalogue
IESO_PRO_0875	Market Manual 11: Reliability Compliance, Part 11.4 Ontario Bulk Electric System (BES) Exception
IESO_PRO_0876	Market Manual 11: Reliability Compliance, Part 11.5 Generation Verification
IESO_PRO_0803	Market Manual 2: Market Administration, Part 2.17 Compliance Auditing of Reliability Standards for Ontario Market Participants
IESO_PRO_0680	Market Manual 2: Market Administration, Part 2.16 Ontario Technical Feasibility Exception
MDP_PRO_0022	Market Manual 2: Market Administration, Part 2.6 Treatment of Compliance Issues
N/A	Reliability Standards Compliance Monitoring Plan

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Table of Changes

Reference (Section and Paragraph)	Description of Change
Throughout the document	The content in this document is new and supersedes most of the content in the previous version.

Archive

Market Manuals

The *market manuals* consolidate the market procedures and associated forms, standards, and policies that define certain elements relating to the operation of the *IESO-administered markets*. Market procedures provide more detailed descriptions of the requirements for various activities than is specified in the *market rules*. Where there is a discrepancy between the requirements in a document within a *market manual* and the *market rules*, the *market rules* shall prevail.

Market Procedures

The “Reliability Compliance” Manual is Series 11 of the *market manuals*, where this document forms Part 11.2: Ontario Reliability Compliance Program.

Conventions

The standard conventions followed in this *market manual* are as follows:

- Names of roles and systems are capitalized;
- The word ‘shall’ denotes a mandatory requirement;
- Terms and acronyms in this *market manual* including all parts thereto that are italicized have the meanings ascribed thereto in Chapter 11 of the *market rules*; and
- Double quotation marks are used to indicate titles of legislation, publications, forms and other documents.

– End of Section –

1. Introduction

1.1 Purpose

This document describes the Ontario Reliability Compliance Program (ORCP), which encompasses all activities undertaken by the Market Assessment and Compliance Division (MACD) of the *IESO* to monitor compliance with *reliability standards* in Ontario. The ORCP is part of MACD's larger Compliance Monitoring and Enforcement Program (CMEP) designed and executed in accordance with MACD's delegated authority to monitor and enforce compliance with *market rules*, including *reliability standards*¹.

This document describes the procedures for identifying and prioritizing the risks to the *reliability* of the *IESO-controlled grid*, and using this information to design *market participant*²-specific compliance oversight plans to monitor compliance with *reliability standards*. This document also outlines some of the techniques used by MACD to monitor compliance with *reliability standards* and reflect the authority granted to the *IESO* under Chapter 3, section 6.1.2, of the *market rules*.

1.2 Scope

This procedure is intended to offer guidance to *market participants* by providing a summary of the steps and interfaces involved in monitoring compliance with *reliability standards* using a risk-based framework.

Although this procedure makes reference to specific online tools and applications, it does not provide detailed instructions on how to use these tools and applications.

1.3 Overview

In addition to the *reliability* requirements identified in the *market rules* and *market manuals*, the *market rules* incorporate the North American Electric Reliability Corporation (*NERC*) and the Northeast Power Coordinating Council (*NPCC*) *reliability standards* by reference. Subject to the *IESO's* applicability determination, these standards and criteria form part of the law in Ontario³. *Market participant* compliance with *reliability standards* is monitored and enforced under the *market rules*. A violation of an applicable *reliability standard* is a breach of the *market rules* and may be subject to financial penalties and other sanctions. The key objective of MACD's monitoring and enforcement processes is to strengthen the *reliability* of the *IESO-controlled grid* by promoting compliance with *reliability standards*.

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 A reference to "market participant" or "market participants" in this document includes the *IESO*, unless otherwise specified.

³ *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.

MACD monitors compliance with *reliability standards* by applying a continuous, proactive and systematic risk-based process designed to aid in understanding, managing and communicating *reliability* risks. This approach allows MACD to focus on key risks to *reliability* and enables *market participants* to strengthen their compliance with *reliability standards*, which ultimately contributes to a more reliable *IESO-controlled grid*.

MACD's risk-based approach in monitoring compliance with *reliability standards* follows similar practices used by *NERC* and *NPCC* in implementing the Electric Reliability Organization's (ERO)⁴ Enterprise Compliance Monitoring and Enforcement Program. The key components of MACD's risk-based compliance monitoring framework are presented in Figure 1.



Figure 1: The key components of MACD's risk-based compliance monitoring framework

1.4 Roles and Responsibilities

Market Participants

All *market participants* are required to comply with the *market rules*. *Market participants* that meet the applicability criteria established by the *IESO*⁵ are also required to comply with all applicable *NERC* and *NPCC reliability standards*.

The IESO

The *Electricity Act, 1998* grants the *IESO* jurisdiction to maintain the *reliability*⁶ of the *IESO-controlled grid* and the statutory power to create *market rules*, including rules “establishing and enforcing standards and criteria relating to the reliability of the electricity service or the *IESO-controlled grid*”⁷.

The *market rules* assign the *IESO* various functions, powers and authorities to supervise, administer and enforce the *market rules*⁸. The *market rules* also provide the *IESO* with the general power to “undertake

⁴ ERO Enterprise is comprised of NERC and the Regional Entities (e.g. NPCC, WECC, etc.)

⁵ See “Market Manual 11: Reliability Compliance Part 11.1: Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria”.

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

⁷ *Electricity Act, 1998*, S.O. 1998, c. 15, Sched. A, s. 32.(1)(c).

⁸ *Market Rules*, Chapter 1, s. 5.3.1.

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* in Ontario.⁹

MACD

MACD is a ring-fenced business unit within the *IESO* responsible for monitoring and enforcing compliance with *market rules* and *reliability standards*, which includes the design and implementation of the ORCP.

1.5 Contact Information

As part of the market registration process¹⁰, *market participants* are required to identify a Market Participant Compliance Contact (MPCC) and a Market Participant Escalation Contact (MPEC). The roles of the MPCC and MPEC are as follows:

- **MPCC** is the authorized representative of the *market participant* designated as the main point of contact for exchanging information with MACD and responding to MACD’s requests. For example, the MPCC is responsible for preparing and submitting self-reports, self-certifications, exception reporting and periodic data submittals.
- **MPEC** is the authorized representative of the *market participant*, preferably of higher authority than the MPCC, designated to ensure that the *market participant* responds to MACD’s requests in a manner and within the timelines specified by MACD.

For inquiries about the ORCP, *market participants* should contact MACD at MACD@ieso.ca. For any other matters, *market participants* may contact the *IESO* Customer Relations via e-mail to customer.relations@ieso.ca or via telephone, mail or courier to the numbers and addresses given on the *IESO*’s website (www.ieso.ca).

– End of Section –

⁹ *Market Rules*, Chapter 3, s. 6.1.2.

¹⁰ See “Market Manual 1: Market Entry, Maintenance and Exit, Part 1.1: Participant Authorization, Maintenance & Exit”

2. Identify Reliability Risk Drivers

This section outlines the process MACD uses to identify and update the key risk drivers¹¹ that may affect the *reliability* of the *IESO-controlled grid*. This process takes into account both continent-wide and regional risk elements identified by *NERC* and *NPCC*, and identifies the *reliability standards* and *market participant* classes associated with these identified risk drivers. This information will be used in formulating the priority areas of the ORCP published in the annual “MACD Reliability Standards Compliance Monitoring Plan” (MACD CMP) and developing *market participant*-specific compliance oversight plans.

2.1 NERC and NPCC Risk Elements

NERC annually identifies and prioritizes risks to the *reliability* of the Bulk Electric System (BES)¹², taking into account compliance findings and event analysis experiences, data analysis provided in several *NERC* publications and reports, and the expert judgment of ERO Enterprise staff, committees and subcommittees. As part of this process, *NERC* compliance assurance staff, with input from other departments at *NERC* and the Regional Entities, identifies risk elements and selects specific *reliability standards* requirements for increased focus. The results of this process are reflected in the annual “ERO Enterprise Compliance Monitoring and Enforcement Program Implementation Plan”¹³ and guide the development of the annual Regional Entity¹⁴ implementation plans¹⁵.

At the regional level, *NPCC* runs its own risk elements identification process to assess and identify risk elements that are specific to *NPCC*'s footprint and initiates plans for managing these risks through appropriate compliance assurance activities. These risk elements are included in the annual “NPCC Implementation Plan” along with all or a subset of the continent-wide risk elements identified by *NERC*.

2.2 Ontario Reliability Risk Drivers

Using the risk elements identified by *NERC* and *NPCC*, and the Ontario-specific *reliability* risks MACD identified, MACD annually creates the list of Ontario *reliability* risk drivers and the *market rules*, *reliability standards*, *market participant* classes related to each Ontario *reliability* risk driver. This information will help prioritize and focus MACD's monitoring activities and will be one of the key inputs when developing the *market participant*-specific compliance oversight plans.

¹¹ *NERC* and *NPCC* refer to the drivers of *reliability* risk as “risk elements”

¹² Bulk Electric System is a *NERC* defined term.

¹³ For illustration, see the [“2019 ERO Enterprise Compliance Monitoring and Enforcement Program Implementation Plan”](#)

¹⁴ Regional Entity is a term defined by *NERC*

¹⁵ <https://www.nerc.com/pa/comp/Pages/RegionalEntityImplementationPlans.aspx>

MACD will publish the Ontario *reliability* risk drivers in its annual MACD CMP, along with the *reliability standards* and requirements that outline the focus areas for MACD's compliance monitoring activities in the following year.

Events may occur during the year that may require MACD to update the Ontario *reliability* risk drivers and rankings. Such events may include, but are not limited to:

- The retirement of existing *reliability standards* or the adoption of new/revised *reliability standards*; and
- The emergence of new risks or the rapid evolution of existing risks.

If any of the above events occur, MACD will adjust the Ontario *reliability* risk drivers and the focus areas for compliance monitoring, and republish the MACD CMP as needed.

– End of Section –

3. Assess Inherent Risk

This section presents the process used by MACD to evaluate, prioritize and periodically update the inherent risk that each *market participant* poses to the *reliability* of the *IESO-controlled grid*, taking into account several factors related to the particular circumstances associated with each *market participant*, such as their compliance history, the type of *facilities* owned/operated, and their location and *connection points*.

3.1 Inherent risk sources

A key component of the Inherent Risk Assessment (IRA) is the identification of the *market participant's* risk sources, which are intrinsically linked to the business and operating environment of each *market participant*. IRAs help identify the *reliability* risks that are unique to each *market participant* and are used to define a *market participant's* inherent risk profile.

Due to the complexity of the power system, developing an exhaustive list of inherent risk sources would be a difficult task and the list would be impractical to maintain. Therefore, MACD will instead focus on a subset of the *reliability* risk sources¹⁶ that have a greater impact on the *reliability* of the *IESO-controlled grid*, such as the assets owned or operated by the *market participant* and the compliance and operating history of the *market participant*.

The inherent risk sources will be used to define the scope of the IRA and guide the execution of the IRA process, from risk identification and evaluation to ranking each *market participant* according to the risk it poses to the *reliability* of the *IESO-controlled grid*.

3.2 Information gathering

Once the scope of the *market participant's* IRA has been established, MACD will identify and collect the information required to conduct the IRA. This information includes but is not limited to the following:

- The prioritized list of Ontario *reliability* risk drivers and associated *reliability standards*;
- The list of *reliability* risk sources applicable to the *market participant*; and
- The *market participant*-specific information needed to score each applicable *reliability* risk source.

MACD will seek this information from *market participants*, the *IESO* and other reliable sources.

¹⁶ The “ERO Enterprise Inherent Risk Assessment Guide” provides examples of risk sources that are similar to the risk sources used by MACD.

3.3 Assessment

MACD will review the collected information and then identify and assess the risks that are specific to each *market participant*. This analysis will provide a better understanding of the inherent risks that each *market participant* poses to *reliability* and allow MACD to focus its CMEP activities on key risks.

For each *market participant*, the IRA assessment process includes the following steps:

- Identify the applicable *reliability standards*;
- Using the collected information, formulate and assess each applicable risk; and
- Evaluate the overall inherent risk of the *market participant* and rank it against other *market participants*.

3.3.1 Identify applicable reliability standards

MACD will confirm with the *IESO* which *reliability standards* apply to the *market participant*, based on their *market participant* class, corresponding *NERC* functional model role, and other criteria used by the *IESO* to determine *reliability standards* applicability under Chapter 5, section 3.2.5 of the *market rules*.

3.3.2 Formulate risks and evaluate overall inherent risk

Using the information collected and the list of *reliability standards* identified in the previous section, MACD will identify the specific risks applicable to each *market participant*, including the sources of risk, areas of impact and potential consequences.

MACD will then evaluate each risk taking into account other factors that influence the risk, such as the time horizon¹⁷ and any correlations or dependences with other risks, and will then determine the overall inherent risk of the *market participant*.

3.3.3 Finalize IRA review

Once the inherent risks have been formulated and rated based their likelihood and impact, MACD will conduct a final review to ensure that the results are documented, the most significant inherent risks are correctly identified and the risk ratings are consistently applied.

As needed, MACD will maintain an open dialogue with the *market participant* to ensure that sufficient and accurate information is used to formulate and assess the *market participant's* inherent risks, and that the *market participant* is given the opportunity to review and comment on the IRA results before it is finalized.

¹⁷ The time horizon refers to timeframe when the risk event could occur and the impact it may have on real-time operations. It also refers to duration of the risk exposure, or the time required to reverse the negative consequences of the risk event.

3.4 Results and reporting

The purpose of the IRA is for MACD to obtain a better understanding of the level of *reliability* risk across Ontario so that MACD focuses on the control measures meant to mitigate the risks that are inherently more significant.

A summary of the IRA results along with a *market participant*-specific compliance oversight plan will be shared with each *market participant*.

3.5 Updating the IRA

MACD will review and regularly update each *market participant*'s IRA to reflect material changes to the inputs and assumptions used in the IRA. Some of the changes that may trigger an IRA update include but are not limited to:

- Changes related to applicable *reliability standards*;
- Changes to *market participant*'s asset ownership;
- Organizational and compliance activity changes;
- Technology and operating practice changes; and
- Changes in risk priorities and policy.

– End of Section –

4. Monitor Compliance

Every year MACD publishes the MACD CMP, which provides an overview of Ontario's *reliability* risk drivers and MACD's compliance monitoring priority areas and activities in the following year. In the development of this plan, MACD will be informed not only by the Ontario *reliability* risk drivers and the IRAs it has performed, but also by the "ERO Enterprise Compliance Monitoring and Enforcement Program Implementation Plan", the "NPCC CMEP Implementation Plan" and the NPCC Criteria Compliance and Enforcement Program, in particular the risk elements and focus areas identified in these plans.

MACD will also develop compliance oversight plans that are specific to each *market participant* in which it will outline the *reliability standards* and requirements that MACD will monitor, along with the monitoring techniques chosen for each *reliability standard*. These *market participant*-specific compliance oversight plans reflect MACD's assessment of the most significant *reliability* risks identified by integrating the current set of *reliability* risk drivers and the results of the IRA process.

The following sections outline the techniques used by MACD to monitor compliance with *reliability standards*.

4.1 Self-Reports

Unlike other monitoring techniques that are typically initiated by MACD, self-reporting relies on the monitoring mechanisms of the *market participant's* internal compliance program¹⁸ to review its compliance with *market rules* and *reliability standards*, and to detect potential breaches.

If a *market participant* believes it may have breached a *market rule* or *reliability standard*, it is 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* or *reliability standards*.

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 writing¹⁹ and on a timely basis;
- providing details of the activities that were potentially non-compliant;
- providing reasons for the non-compliance;

¹⁸ For more information on internal compliance programs, see the [Internal Compliance Programs web page](#) on the IESO website.

¹⁹ *Market participants* should use [Online IESO](#) to self-report potential breaches of *market rules* and *reliability standards*.

- identifying all the *market rules, reliability standards* 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.

A potential non-compliance identified in a self-certification does not need to be reported again in a self-report. However, if a potential non-compliance was previously reported either as a self-report or as a self-certification and the non-compliance has not been remedied by the due date of the next self-certification, the outstanding non-compliance and any change in its severity need to be identified in the self-certification. In this case, a reference to the initial identification of non-compliance shall be provided with the self-certification.

4.2 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 upon MACD'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* and *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.

4.3 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).

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.

Scheduled compliance audits focus on one or more areas identified in the Compliance Monitoring Priority Areas section of the MACD CMP. However, they may also include additional *market rules* and/or *reliability standards* that will be communicated to the selected *market participants* in the audit notification letter.

4.4 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*.

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.

For more information on unscheduled audits, see “Market Manual 2: Market Administration, Part 2.17 Compliance Auditing of Reliability Standards for Ontario Market Participants” (IESO_PRO_0803).

4.5 Periodic Data Submittals

Periodic Data Submittals are scheduled (e.g. monthly, annually etc.) or ad-hoc requests to provide *reliability* information as required by a particular standard. These requests will be issued via the IESO Reliability Compliance Tool or email.

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