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**Market Manual 2: Market Administration**

**Part 2.8: Reliability**

**Assessments**

**Information**

**Requirements**

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**Issue 18.0**

This procedure provides the steps required for *market participants* to submit the information required for *reliability* assessments.

PROCEDURE

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## Related Documents

Document ID	Document Title
N/A	

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# Table of Changes

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<b>Reference (Paragraph and Section)</b>	<b>Description of Change</b>
Throughout	Added reference to electricity storage participation where required.

# Market Manuals

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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. Standards and policies appended to, or referenced in, these procedures provide a supporting framework.

# Market Procedures

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The “Market Administration Manual” is Series 2 of the *market manuals*, where this document forms “Part 2.8: Reliability Assessments Information Requirements.”

## Structure of Market Procedures

Each Market Procedure is composed of the following sections:

1. **Introduction**, which contains general information about the procedure, including an overview, a description of the purpose and scope of the procedure, and information about roles and responsibilities of the parties involved in the procedure.
2. **Procedural Work Flow**, which contains a graphical representation of the steps and flow of information within the procedure.
3. **Procedural Steps**, which contains a table that describes each step and provides other details related to each step.
4. **Appendices**, which may include such items as forms, standards, policies, and agreements.

- End of Section -

# 1. Introduction

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In accordance with Market Rules, Chapter 5, Section 7, each *market participant* shall provide information for the purpose of enabling the *IESO* to perform the *reliability* assessments.

- A *generator* is to use Form 1230 for submitting information
- An *electricity storage participant* is to use Form 1230 for submitting information
- A *transmitter* is to use Form 1494 for submitting information

## 1.1 Purpose

The *IESO* is required to prepare and *publish security* and *adequacy* assessments to meet its obligations to maintain the *reliability* of the *IESO-controlled grid* (Chapter 5, Section 7.3.1.5 of the *market rules*).

*Market participants* are required to provide information for the *IESO* to conduct the *security* and *adequacy* assessments described above (Chapter 5, Section 7.5.1 of the *market rules*).

This procedure specifies the information *market participants* and *connection applicants* must provide in support of the long-term *security* and *adequacy* assessments, i.e. assessments for the period beyond the next 18-months, and describes the process for submitting such information to the *IESO*.

## 1.2 Scope

Procedural work flow and procedural steps described in this document will serve as a roadmap for *market participants*, *connection applicants*, the *IESO* and other parties, and will reflect the requirements set out in the *market rules* (Chapter 5, Section 7 and Chapter 10, Section 8.8) and applicable *IESO* policies and standards.

The process relating to preparing and *publishing reliability* assessments covering the next 18-months (“Reliability Outlook”) is set out in “Part 2.11: Reliability Outlook and Related Information Requirements.”

The process relating to the production of the near-term *security* and *adequacy* assessments is set out in “Market Manual 7: System Operations.”

Detailed and specific procedures internal to the *IESO* relative to forecasts and assessments are not provided.

- End of Section -

## 2. Overview

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The *IESO* is required to conduct assessments of the *reliability* of the *IESO-controlled grid* (Chapter 5, Section 7.3.1.5 of the *market rules*). The *IESO* will *publish* the results of the above-mentioned *reliability* assessments.

With respect to *adequacy* of *generation facilities* and *electricity storage facilities* and *transmission facilities*, the purpose of the *reliability* assessments is to notify *market participants*, the *OEB* and the public of the *IESO*'s evaluation of the *adequacy* of Ontario's resources for meeting the projected *demand* for electricity.

The *reliability* assessments are also designed to provide relevant *standards authorities* and government authorities with input on the status of *IESO-controlled grid security* and *adequacy*, and to assist the *OEB* in meeting its objectives (Chapter 5, Sections 7.4.5.2 and 7.4.5.3 of the *market rules*).

In conducting the *reliability* assessments, the *IESO* may identify an adverse condition on the *IESO-controlled grid* that requires action to be initiated within the next twelve months in order to maintain the *reliability* of the *IESO-controlled grid* (Chapter 5, Section 7.10.1 of the *market rules*). The process of issuing and responding to directives for proposal (DFP) is described in "Market Manual 2: Market Administration," Part 2.9: Directives for Proposal.

If the *IESO* identifies an adverse condition on the *IESO-controlled grid* that does not require action within the current annual planning period, the *IESO* shall notify the *OEB* of its determination and assess the options that may be available for *market participants* or others to remove or alleviate the condition (Chapter 5, Section 7.10.3 of the *market rules*).

In order to conduct its *reliability* assessments, the *IESO* requires *market participants* and *connection applicants* to provide the information set out in this procedure (Chapter 4, Sections 6.1.6, and 7.1.2, Chapter 5, Section 7.5.1, and Chapter 10, Section 8.7.2 of the *market rules*).

Information submitted as part of this procedure should include information for all relevant *facilities*, existing and planned, over the data coverage period defined in Section 3.1.

Annually, *market participants* and *connection applicants* shall submit the required information between March 1 and April 1.

**- End of Section -**

## 3. Information Requirements

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### 3.1 Market Participant Information

Some of the required information related to the *reliability* assessments is provided by *market participants* via the market entry process, as detailed in “Market Manual 1.5: Market Registration Procedures”. Other information is submitted by *market participants* as part of the *outage* management process using the IESO’s *outage* management system, as detailed in “Market Manual 7.3: Outage Management.”

The remaining information must be provided by *market participants* using the associated forms listed in Appendix A (Chapter 5, Section 7.5.1, and Chapter 10, Section 8.7.2 of the *market rules*). The submitted data shall apply to the next 10 years and 6 months period starting from July 1 of the current calendar year, (e.g. information submitted by April 1, 2016 covers a period from July 1, 2016 to December 31, 2026).

When submitting the information required by this procedure, *market participants* must also ensure before April 1 that *outage* information relating to their *facilities* for the specified data coverage period residing in the *outage* management system is up to date (Chapter 5, Section 7.5.1 of the *market rules*). In addition, they must keep up-to-date, at all times, the registration information they submitted to the IESO as part of the market entry process (Chapter 5, Section 7.5.1 of the *market rules*).

The IESO will assign an appropriate confidentiality level to all information received from *market participants* (Chapter 3, Section 5.4.1 of the *market rules*), and will obtain written permission from the *market participant* before *publishing* confidential information that is specific to that *market participant* (Chapter 3, Section 5.3.1.3b of the *market rules*).

The forms listed in this procedure are to be used annually by *generators* and *electricity storage participants* (Form 1230) and *transmitters* (Form 1494) for submitting information. The forms are not to be used for submitting any information required by the IESO to prepare the near-term forecasts and assessments described in “Market Manual 7: System Operations.” Separate forms are available for these other forecast and assessment processes, as detailed in the relevant market procedure.

### 3.2 Plans for New, Modified or Retiring Facilities

In preparing its *reliability* assessments, the IESO must consider resource changes that could impact the *reliability* of the IESO-controlled grid. As such, information on all new, modified and retiring *facilities* that have estimated in-service or retirement dates falling within the specified data coverage period must be provided to the IESO by *market participants* and *connection applicants*.

*Market participants* and *connection applicants* must inform the IESO of any such plans they might have and submit the information required by this procedure using the forms listed in Appendix A, as relevant (Chapter 5, Section 7.5.1, and Chapter 10, Section 8.7.2 of the *market rules*).

### 3.3 Timing

*Market participants* and *connection applicants* are required to submit information specified in this procedure to enable the *IESO* to perform *reliability* assessments (Chapter 5, Section 7.5.1 of the *market rules*). The information shall be submitted annually between March 1 and April 1. In advance of the last day to submit the require information, the *IESO* may send a reminder notice to *market participants*.

### 3.4 Information Contained in the Reliability Assessments

The results of *reliability* assessments will be made available to the public, as required, via the *IESO* website. The information in the *reliability* assessments will be presented in aggregate form where necessary for confidentiality purposes and will include, as appropriate:

1) Forecasts of:

- Ontario electricity *demand* (a summary of the methodology used to prepare the forecast will be provided in a separate document);
- generation and *transmission system* capability (including electricity storage, import and export capability);

2) Assessments of:

- the *adequacy* of relevant existing and planned generation, electricity storage and *transmission facilities* and other related resources, taking into account any planned retirements, to meet current and future electricity needs of Ontario; and
- relevant options identified by *market participants* independently or in response to *IESO* directives for proposal.

- End of Section -

## 4. Roles and Responsibilities

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Responsibility for carrying out this procedure for providing *reliability* assessments related information is shared among:

- **Generators** and **electricity storage participants**, who are responsible for providing:
  - generation information and changes to information as per “Market Manual 1.5: Market Registration Procedures” and Chapter 4, Sections 6.1.6 and 7.1.2 of the *market rules*;
  - forecast information for existing, new or modified *facilities* as prescribed in Form 1230 (see Appendix A) and, where appropriate, inputs into the *outage* management system as per Chapter 5, Section 7.5.1 of the *market rules*; and
  - any additional information the *IESO* requires to conduct *reliability* assessments as per Chapter 5, Section 7.5.1 of the *market rules*.
- **Transmitters**, who are responsible for providing:
  - transmission information and changes to information as per “Market Manual 1.5: Market Registration Procedures” and Chapter 4, Sections 6.1.6 and 7.1.2 of the *market rules*;
  - forecast information for existing, new or modified *facilities* as prescribed in Form 1494 (see Appendix A) and, where appropriate, inputs into the *outage* management system, as per Chapter 5, Section 7.5.1 and Chapter 10, Section 8.7.2 of the *market rules*; and
  - any additional information the *IESO* requires to conduct *reliability* assessments as per Chapter 5, Section 7.5.1 of the *market rules*.
- **Connection applicants**, who are responsible for providing:
  - information required via the Connection Assessment and Approval process as per “Market Manual 1.4: Connection Assessment and Approval” and Chapter 4, Sections 6.1.6 and 7.1.2 of the *market rules*; and
  - information for the new or modified connections to the *IESO-controlled grid* that fall within the specified data coverage period, prescribed in the forms listed in Appendix A, as per Chapter 4, Section 7.1.2 and Chapter 5, Section 7.5.1 of the *market rules*.
- The **IESO**, who is responsible for (Chapter 5, Section 7 of the *market rules*):
  - receiving the information submitted by *market participants* and *connection applicants*;
  - conducting *reliability* assessments; and
  - *publishing* the results of those assessments.

- End of Section -

## 5. Submission and Response Methods

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### 5.1 Contact Information

As part of the *market participant* authorization and registration process, applicants are able to identify a range of contacts within their organization that address specific areas of market operations. For *reliability* assessments, this contact will be the *market participant's* designated primary contact unless alternative arrangements have been established between the *IESO* and the *market participant*. *Market participants* are responsible for updating their contact information.

### 5.2 Submission of Data

Standard forms to be used for data submission for this procedure are listed in Appendix A. These forms are also available for download on the *IESO* website. The method for submitting the information is via email to [forecasts.assessments@ieso.ca](mailto:forecasts.assessments@ieso.ca).

All correspondence relating to this procedure shall include the following text in the subject to facilitate identification: **Reliability Assessments Information.**

- End of Section -

## 6. Procedural Work Flow

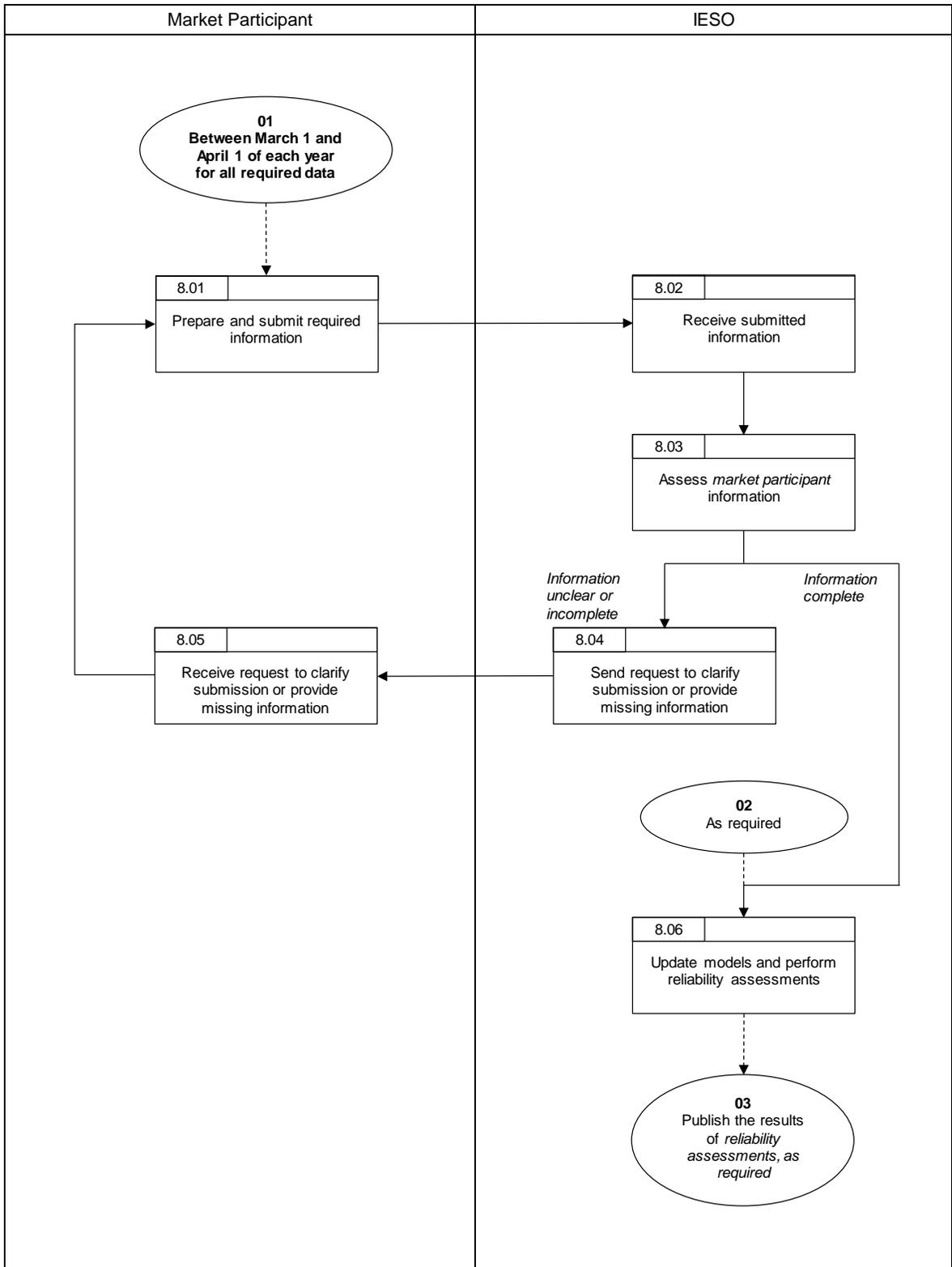
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Figure 6–1 represents the flow of work and information related to providing *reliability* assessments information shared among the *IESO* and *market participants*.

The steps illustrated in the procedural work flow diagram are described in detail in Section 7.

**Table 6–1: Legend for Work Flow Diagram**

<b>Legend</b>	<b>Description</b>
Oval	An event that triggers task or that completes task. Trigger events and completion events are numbered sequentially within procedure (01 to 99).
Task Box	Shows reference number, task name and brief summary of task. Reference number (e.g., 1A.02) indicates procedure number within current <i>Market Manual</i> (1), sub-procedure identifier (if applicable) (A), and task number (02).
Solid horizontal line	Shows information flow between the <i>IESO</i> and <i>market participants</i> .
Solid vertical line	Shows linkage between tasks.
Broken line	Links trigger events and completion events, preceding or succeeding task.



**Figure 6–1: Work Flow for Submittal of Reliability Assessments Information**

- End of Section -

## 7. Procedural Steps

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This section contains detail on the tasks (steps) that comprise the Reliability Assessments Information Requirements. The steps in the following table are illustrated in Section 6.

The table contains seven columns, as follows:

### **Ref**

The numerical reference to the task.

### **Task Name**

The task name as identified in Section 6.

### **Task Detail**

Detail about the task.

### **When**

Timeline for executing task.

### **Resulting Information**

A list of the information flows that may or must result from the task.

### **Method**

The format and method for each information flow.

### **Completion Events**

A list of all the circumstances in which the task should be deemed finished.

**Table 7–1: Procedural Steps for Submittal of Reliability Assessments Information**

Ref.	Task Name	Task Detail	When	Resulting Information	Method	Completion Events
8.01	Prepare and submit required information.	The <i>market participant</i> prepares the required information in accordance with the provided forms and sends the required information to the <i>IESO</i> .	Annually, between March 1 and April 1.	Required information, as appropriate:  For <i>generators</i> and <i>electricity storage participants</i> - Generator Information Submittal Form for Reliability Assessments (IMO_FORM_1230).  For <i>transmitters</i> - Plans for New, Modified or Retiring Transmission Facilities Information Submittal Form for Reliability Assessments (IMO_FORM_1494).	Via email.	Required information is sent to the <i>IESO</i> .

**Table 7–1: Procedural Steps for Submittal of Reliability Assessments Information**

<b>Ref.</b>	<b>Task Name</b>	<b>Task Detail</b>	<b>When</b>	<b>Resulting Information</b>	<b>Method</b>	<b>Completion Events</b>
8.02	Receive submitted information.	The <i>IESO</i> receives the required information from the <i>market participant</i> .	Following Step 8.01. By April 1, annually, for all required data.	From <i>generators</i> and <i>electricity storage participants</i> : Completed Generator Information Submittal Form for Reliability Assessments (IMO_FORM_1230).  From <i>transmitters</i> : Completed Plans for New, Modified or Retiring Transmission Facilities Information Submittal Form for Reliability Assessments (IMO_FORM_1494).	Via email.	Required information received.
8.03	Assess <i>market participant</i> information.	The <i>IESO</i> assesses the information provided by the <i>market participants</i> for completeness.	Following Step 8.02.	None.	None.	Information completeness determined. Unclear or missing information identified.
8.04	Send request to clarify submission or provide missing information.	The <i>IESO</i> sends a request to the <i>market participant</i> for the unclear or incomplete information.	Following Step 8.03, if information is unclear or incomplete.	Request for clarification or missing information.	By email.	Request to clarify submission or provide missing information sent to <i>market participant</i> .
8.05	Receive request to clarify submission or provide missing information.	The <i>market participant</i> receives the request to clarify submission or provide missing information and returns to Step 8.01.	Following Step 8.04, if information is unclear or incomplete.	None.	None.	Request to clarify submission or provide missing information received.

**Table 7–1: Procedural Steps for Submittal of Reliability Assessments Information**

<b>Ref.</b>	<b>Task Name</b>	<b>Task Detail</b>	<b>When</b>	<b>Resulting Information</b>	<b>Method</b>	<b>Completion Events</b>
8.06	Update models, conduct reliability assessments, and <i>publish</i> results, as required.	The <i>IESO</i> updates models, performs the <i>reliability</i> assessment, and <i>publishes</i> the results.	Following Step 8.04	Results of the <i>reliability</i> assessment.	Electronic publication on the <i>IESO</i> website.	<i>Reliability</i> assessment results <i>published</i> .

- End of Section -

## Appendix A: Forms

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This appendix contains a list of forms associated with this procedure, which are available on the *IESO* website (<http://www.ieso.ca>). The forms included are as follows:

<b>Form Name</b>	<b>Form Number</b>
Generator Information Submittal Form for Reliability Assessments	IMO_FORM_1230
Plans for New, Modified or Retiring Transmission Facilities Information Submittal Form for Reliability Assessments	IMO_FORM_1494

- End of Section -

# References

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<b>Document ID</b>	<b>Document Title</b>
MDP_RUL_0002	Market Rules
MDP_PRO_0048	Market Manual 1.4: Connection Assessment and Approval
PRO-408	Market Manual 1.5: Market Registration Procedures
MDP_PRO_0025	Market Manual 2.9: Directives for Proposal (DFP)
IMP_PRO_0024	Market Manual 2.11: Reliability Outlook and Related Information Requirements

**- End of Document -**