



Market Manual 7: System Operations

Part 7.0: System Operations Overview

Issue 10.0

This manual provides *market participants* with an overview of the procedures contained in the “System Operations Manual” and the timelines for *IESO* and *market participants* actions related to those procedures.

Disclaimer

The posting of documents on this Web site is done for the convenience of *market participants* and other interested visitors to the *IESO* Web site. Please be advised that, while the *IESO* attempts to have all posted documents conform to the original, changes can result from the original, including changes resulting from the programs used to format the documents for posting on the Web site as well as from the programs used by the viewer to download and read the documents. The *IESO* makes no representation or warranty, express or implied, that the documents on this Web site are exact reproductions of the original documents listed. In addition, the documents and information posted on this Web site are subject to change. The *IESO* may revise, withdraw or make final these materials at any time at its sole discretion without further notice. It is solely your responsibility to ensure that you are using up-to-date documents and information.

This *market manual* may contain a summary of a particular *market rule*. Where provided, the summary has been used because of the length of the *market rule* itself. The reader should be aware, however, that where a *market rule* is applicable, the obligation that needs to be met is as stated in the “Market Rules”. To the extent of any discrepancy or inconsistency between the provisions of a particular *market rule* and the summary, the provision of the *market rule* shall govern.

Document ID	IMP_MAN_0012
Document Name	Part 7.0: System Operations Overview
Issue	Issue 10.0
Reason for Issue	Issue released for Baseline 23.1
Effective Date	June 2, 2010

Document Change History

Issue	Reason for Issue	Date
1.0	Unapproved version released for Baseline 5.0	January 4, 2001
2.0	Unapproved version released for Baseline 6.0	February 26, 2001
3.0	Unapproved version released for Baseline 6.1	April 3, 2001
4.0	Issue released for Baseline 6.2	May 22, 2001
5.0	Issue released for Baseline 6.4	August 14, 2001
6.0	Issue released for Baseline 6.5	October 9, 2001
7.0	Issue released for Baseline 6.6	November 26, 2001
8.0	Issue released as update to Baseline 7.0	April 26, 2002
9.0	Issue released for Baseline 10.1	December 10, 2003
10.0	Issue released for Baseline 23.1	June 2, 2010

Related Documents

Document ID	Document Title
N/A	

Table of Contents

Table of Contents	i
Table of Changes	ii
Market Manuals	1
1. About This Manual	3
1.1 Purpose.....	3
1.2 Scope	3
1.3 Who Should Use This Manual	4
1.4 Conventions	4
2. Procedures Summary	5
2.1 Interrelationship of the Procedures	5
2.2 About the Procedures and Policies and other documents in this Market Manual	5
3. Applicability of Procedures	7

Table of Changes

Reference (Section and Paragraph)	Description of Change
Sections 1, 2.1, 2.2 and 3	Addition of reference to Market Manual 7.10.
Entire Document	References to IMO changed to IESO.

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

– End of Section –

1. About This Manual

This document is Volume 7.0 of the *market manuals*, and provides an overview of “Market Manual 7: System Operations”.

The “System Operations Manual” is composed of the following document set:

“Market Manual 7: System Operations”

Document ID	Part No.	Name of Procedure Document
IMP_MAN_0012	7.0	System Operations Overview
MDP_PRO_0040	7.1	System Operating Procedures
IMP_PRO_0033	7.2	Near-Term Assessment and Reports
IMP_PRO_0035	7.3	Outage Management
IMP_POL_0002	7.4	IESO-Controlled Grid Operating Policies
IMP_CAT_0001	7.5	Reliability Information Catalogue
IMP_GOT_0002	7.6	Glossary of Standard Operating Terms
IMO_PRO_0011	7.7	Disturbance Reporting
IMO_PLAN_0001	7.8	Ontario Power System Restoration Plan
IMO_PRO_0033	7.9	Reliability Compliance Program
IMO_PLAN_0002	7.10	Ontario Electricity Emergency Plan

1.1 Purpose

The “System Operations Manual” is designed to provide *market participants* with a brief overview of the system operation processes by which the *IESO*, *market participants* and other parties operating *facilities* within the *IESO control area*¹, maintain the *security* and *reliability* of the *IESO-controlled grid*, as required under the “Market Rules”.

1.2 Scope

This *market manual* is intended to provide *market participants* (and other parties operating *facilities* embedded in the *IESO control area* and subject to the operational monitoring requirements of the “Market Rules”) with the procedures required to interface with the *IESO* in areas relating to the

¹ *Facilities* embedded within the *IESO-controlled grid* that meet the criteria specified in Chapter 5 of the “Market Rules” are subject to operational monitoring requirements regardless of whether they are participating in the *IESO-administered markets*, to support the *security* and *reliability* of the *IESO-controlled grid*.

operation of the *IESO-controlled grid*. The procedures in this manual provide a summary of the steps and interfaces between *market participants*, the *IESO*, and other parties. The procedural work flows and steps described in component documents serve as a roadmap for *market participants* and the *IESO*, and reflect the requirements set out in the “Market Rules” and applicable *IESO* policies and standards.

The information provided in the “System Operations Manual” is not intended for use as training material for *market participants* with regard to the above referenced procedures.

This *market manual* does not directly address the operation of the *IESO-administered markets*. This is set out in the “Market Manual 4: Market Operations”.

1.3 Who Should Use This Manual

The “System Operations Manual” is intended for *market participants* in the following roles:

- **Market Participants** having *registered facilities* with the *IESO*, (or parties with *facilities* embedded in the *IESO-controlled grid* that are subject to the operational monitoring requirements of the “Market Rules”) who are responsible for:
 - adhering to the system operation communication protocols with the *IESO* on matters relating to the *security* and *reliability* of the *IESO-controlled grid*;
 - setting equipment;
 - managing *demand* and undertaking load shedding, as required by the *IESO*, to ensure the *security* and *reliability* of the *IESO-controlled grid* is maintained;
 - testing or simulating *emergency* procedures;
 - providing data to support the production of the short-term weekly (3 and 4 weeks out) and daily (up to 14 days out) forecasts and assessments; and
 - applying to the *IESO* for *outages* to *facilities* or equipment.

1.4 Conventions

The standard conventions followed for *market manuals* are as follows:

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

Any procedure-specific convention(s) shall be identified within the procedure document itself.

– End of Section –

2. Procedures Summary

2.1 Interrelationship of the Procedures

Figure 3-1, below, shows the composition of this *market manual* and how the procedures, trigger events and other *market manuals* interrelate.

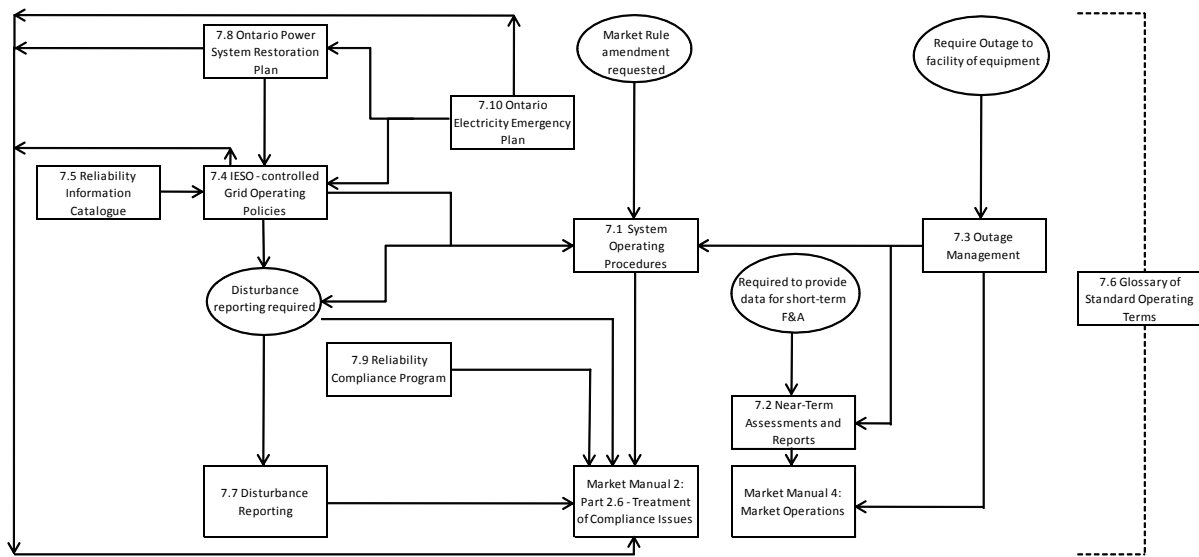


Figure 3-1: Interrelationships of the System Operations Manual procedures and other Market Manuals

2.2 About the Procedures and Policies and other documents in this Market Manual

“System Operations Manual” addresses the steps that *market participants* (and other parties operating *facilities* embedded in the *IESO control area* and subject to the operational monitoring requirements of the “Market Rules”) must take in order to maintain the *security* and *reliability* of the *IESO-controlled grid*. This *market manual* includes six procedures and a glossary of standard operating terms, which are summarized below.

“Part 7.1, System Operating Procedures”, addresses the communications protocols established between parties in normal, abnormal and *emergency operating states*, the setting of *security limits*, *demand* management, load shedding and the testing of *emergency* procedures.

“Part 7.2, Near-Term Assessments and Reports”, addresses the processes surrounding the production and publication of the short-term weekly (3 and 4 weeks out) and daily (up to 14 days out) forecasts and assessments.

“Part 7.3, Outage Management”, addresses the processes of planning and managing *outages to facilities* registered with the *IESO*.

“Part 7.4, IESO-controlled Grid Operating Policies”, sets out the policies by which the *IESO* will manage the secure and reliable operation of the *IESO-controlled grid*.

“Part 7.5, Reliability Information Catalogue”, sets out the information that is to be shared between the *IESO* and *market participants* in relation to maintaining the *reliability* of the *IESO-controlled grid*.

“Part 7.6, System Operations Glossary”, sets out definitions of the terms used in the “System Operations Manual”.

“Part 7.7, Disturbance Reporting”, describes the process and roles of departments within the *IESO*, of *market participants* and other external parties in reporting, reviewing and analyzing *electricity system* disturbances that impact upon the *IESO-controlled grid*.

“Part 7.8, Ontario Power System Restoration Plan”, describes the necessary requirements for the *IESO* to be able to expediently recover the Ontario integrated power system after a partial or complete system blackout and re-establish interconnected operation.

“Part 7.9, Reliability Compliance Program”, describes the Ontario Reliability Compliance Program, and the associated procedures to detect and mitigate *reliability* non-compliance including procedures to assist *market participants* in meeting the *reliability* compliance related requirements.

“Part 7.10, Ontario Electricity Emergency Plan”, describes the coordinated actions required of the *IESO* and market participants to plan for and respond to emergencies affecting the reliable supply of electricity to Ontario. It supports the principles outlined in the Ontario government’s Provincial Emergency Response Plan.

– End of Section –

3. Applicability of Procedures

The table below summarizes the most common situations or events that are likely to trigger activities described in this *market manual*. To use this table, select the event that most closely matches your area of interest under the Event column, then refer to the appropriate procedures document listed in the Procedure column.

Table 4–1: Events and Procedures

Event	Procedure
Communicating with the <i>IESO</i> with regard to system operations in routine, abnormal and emergency conditions Maintaining security and reliability of the <i>IESO-controlled grid</i> <ul style="list-style-type: none"> • Setting equipment; • Demand Management; • Load shedding; and • Control Centre evacuations. 	Part 7.1: System Operating Procedures
Provide information to the <i>IESO</i> in support of the short-term forecasting activities (up to 28 days out) Receive short-term weekly (3 and 4 weeks out) and daily (up to 14 days out) forecasts and assessments	Part 7.2: Near-Term Assessments and Reports
Plan and/or report an outage to the <i>IESO</i>	Part 7.3: Outage Management
Understand operating policies applicable to the <i>IESO</i> to direct the reliable operation of the <i>IESO-controlled grid</i>	Part 7.4: IESO-Controlled Grid Operating Policies
Determine the reliability requirements required to participate in and to maintain the reliability of the <i>IESO-controlled grid</i>	Part 7.5: Reliability Information Catalogue
Unknown operating term, abbreviation or definition identified and requires understanding for use in communications between the <i>IESO</i> and market participants	Part 7.6: Glossary of Standard Operating Terms
Report, review and analyze electricity system disturbances impacting upon the <i>IESO-controlled grid</i> .	Part 7.7: Disturbance Reporting
Recover the Ontario integrated power system after a partial or complete system blackout and re-establish interconnected operation.	Part 7.8: Ontario Power System Restoration Plan

<p>Ontario <i>Reliability</i> Compliance Program and the associated procedures to detect and mitigate <i>reliability</i> non-compliance. Procedural requirements for provision and processing of <i>reliability</i> information as required by North American Electric Reliability Council (<i>NERC</i>) and Northeast Power Coordinating Council (<i>NPCC</i>) <i>reliability standards</i> and <i>reliability standards</i> established by the <i>IESO</i>.</p>	<p>Part 7.9: Reliability Compliance Program</p>
<p>Emergency planning requirements and framework for how we plan for and respond to threats, incidents, or emergency situations.</p>	<p>Part 7.10 : Ontario Electricity Emergency Plan</p>

– End of Document –