



Market Manual 11: Reliability Compliance

Part 11.3: Reliability Information Catalogue

Issue 4.0

A catalogue of the information that is to be shared between the *IESO* and *Market Participants* in relation to maintaining the reliability of the *IESO-controlled grid*

Disclaimer

The posting of documents on this website is done for the convenience of *market participants* and other interested visitors to the *IESO* website. 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 website 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 website are exact reproductions of the original documents listed. In addition, the documents and information posted on this website 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 document 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 IESO_CAT_0011

Document Name Part 11.3: Reliability Information Catalogue

Issue 4.0

Reason for Issue Issue released for Baseline 36.0

Effective Date September 14, 2016

Document Change History

Issue	Reason for Issue	Date
1.0	This manual is new, superseding Market Manual 7.5 "Reliability Information Catalogue"	March 6, 2013
2.0	Issue released in advance of Baseline 33.1 to update the IESO logo.	March 31, 2015
3.0	Issue released in advance of Baseline 36.0	June 21, 2016
4.0	Issue released for Baseline 36.0	September 14, 2016

Related Documents

Document ID	Document Title
N/A	

Table of Contents

Tal	ole of	f Contents	i
Lis	t of T	ables	ii
Tal	ole of	f Changes	iii
Ma	rket	Manuals	1
Ma	rket	Procedures	1
1.	Intr	oduction	2
	1.1	Purpose	
	1.2	Scope	2
	1.3	Overview	2
	1.4	Contact Information	2
2.	Reli	ability Information Provided by the IESO	4
3.	Reli	ability Information Required by the IESO	19
P۵.	feren	291	31

List of Tables IESO_CAT_0011

List of Tables

Table 2-1:	Reliability In	nformation I	Provided by	the IE	SO	 4
Table 3-1:	Reliability In	nformation I	Required by	the IE	SO	 19

Table of Changes

Reference (Section and Paragraph)	Description of Change
Section 3	Updated content in items 37 and 38.

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.

Market Procedures

The "Reliability Compliance Manual" is Volume 11 of the "Market Manuals", where this document forms "Part 11.3: Reliability Information Catalogue".

1. Introduction IESO_CAT_0011

1. Introduction

1.1 Purpose

The *IESO* is required by the "*Market Rules*" to produce a catalogue of the information that is to be shared between the *IESO* and *market participants* in relation to maintaining the *reliability* of the *IESO-controlled grid*.

This catalogue is designed to advise *market participants* on the *reliability*-related information requirements and needs, and to assist them in meeting their obligations for maintaining the *reliability* of the *IESO-controlled grid*.

This document catalogues:

- The information relating to the *reliability* of the *IESO-controlled grid* that is provided by the *IESO* to *market participants*; and
- The information relating to the reliability of the IESO-controlled grid that is provided by market participants to the IESO.

1.2 Scope

This document catalogues only the information that relates to the *reliability* of the *IESO-controlled grid*.

1.3 Overview

The following sections of this document describe the information that is shared between the *IESO* and the *market participants*. Each entry in the table identifies:

- To whom the information is provided;
- A description of the information that is provided;
- The frequency with which the information is provided;
- The method by which the information is provided;
- Any referenced documents relating to the information; and
- The "Market Rules" reference relating to the information.

1.4 Contact Information

As part of the participant authorization process, *applicants* are able to identify a range of contacts within their organization that address specific areas of market operations. For system operations, these contacts will most likely be the *authority centre*, *dispatch* or *control centre*, *facility* location operator or the restoration plan coordinator as indicated in the participant registration data. If the *market participant* has not identified a specific contact, the *IESO* will seek to contact the Main

Contact established during the participant authorization process. The *IESO* will seek to contact these individuals for activities within this procedure, unless alternative arrangements have been established between the *IESO* and the *market participant*.

If you wish to contact us, you can email *IESO* Customer Relations at <u>customer.relations@ieso.ca</u> or contact us by telephone or mail. Our telephone numbers and mailing address can be found on the IESO website (http://www.ieso.ca/Pages/Contact-Us.aspx). Customer Relations staff will respond as soon as possible.

2. Reliability Information Provided by the IESO

Table 2-1: Reliability Information Provided by the IESO

Item	Item Information To	Timing	•	Means of Provision	Reference Document	Market Rules Reference	
No.					Chapter	Section	
1.	Market participants	Reliability Standards NERC/NPCC	Ongoing	By e-mail from the IESO or by links to http://www.ieso.ca/imoweb/ircp/ircp.asp http://www.nerc.com http://www.npcc.org	NERC Standards NPCC Criteria	4	2.1.1
2.	Market participants	Reliability policy and security for local area supply	Ongoing	"Market manual" (Details upon request of authorized market participants, subject to confidentiality provisions.)	"Market Manual 7: System Operations. Part 7.4: IESO-Controlled Grid Operating Policies". (Appendix B: Reliability Standards and Security Criteria.)	5	5.4

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document		et Rules erence
No.		•	Timing			Chapter	Section
3.	Market participants	Equipment Performance Standards	Ongoing	IESO website http://www.ieso.ca/ "Market Rules"	General: Appendix 4.1 of "Market Rules (Chapter 4) Generators: Appendix 4.2 of "Market Rules (Chapter 4) Connected Wholesale Customers and Distributors Connected to IESO- Controlled Grid: Appendix 4.3 of "Market Rules (Chapter 4) Transmitter: Appendix 4.4 of "Market Rules (Chapter 4)	4	3.1.1
4.	Market participants	Operating Procedures and Instruction	Ongoing	IESO website http://www.ieso.ca/ Upon request of authorized Market Participants, subject to confidentiality provisions	"Market Manual 7: System Operations - Part 7.1: System Operating Procedures" For internal procedures: Publicly available System Control Orders (SCO) and Internal Manuals	5	3.2.3

Item	Information To	ition To Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.			Timing			Chapter	Section
5.	Market participants	Requirements for commissioning, inspection and testing of equipment connected to IESO-controlled grid.	Ongoing, as changes occur	IESO website http://www.ieso.ca/ OEB website http://www.oeb.gov.on.ca	"Market Rules Appendices 4.2 to 4.9 (Chapter 4) Transmission System Code (OEB), and Appendices Other reference documents to be added when developed.	4	Transmitters: 3.3.1.3 Generators: 3.4.1.3 Connected Wholesale Customers and Distributors Connected to IESO- Controlled Grid: 3.5.1.3, 5
6.	Market participants	Ancillary Service provider performance standards: black start, regulation, voltage control and reactive support, and Operating Reserve.	Ongoing	"Market Rules"	Appendix 5.1 of "Market Rules" (Chapter 5)	5	4.2.2 , 4.3.2
7.	Market participants	Ancillary Services: requirements and procedures for testing ancillary service provider facilities.	Ongoing; within 6 months of "Market Rules" (Chapter 5) being in force	IESO website http://www.ieso.ca/	Appendix 5.1 of "Market Rules (Chapter 5) contains performance standards "Market Manual 7 System Operations. Part 7.8: Ontario Power System Restoration Plan"	5	4.9

Item	Intermation To	o Information Description	Frequency; —. Means of Provisi	Means of Provision	Means of Provision Reference Document	Market Rules Reference	
No.		,	Timing			Chapter	Section
8.	Market participants	List of equipment and facilities the outage of which must be reported and scheduled with the IESO.	As required	Generic list available in Market Manual Participant specific list available through IOMS	"Market Manual 7: System Operations: Part 7.3: Outage Management". (Sections 1.3 and Appendix B).	5	6.1.3
9.	Market participants	Planned outage information provided by transmitters and generators subject to confidentiality provisions	Refer to reference document for schedule	Included in the security and adequacy assessments	(1) "Market Manual 7: System Operations. Part 7.3 Outage Management" (2) "Market Manual 7: System Operations - Part 7.2 Near Term Assessments and Reports"	5	6.5.2
10.	Generators affected	Generation facilities whose outages must be reported to support monthly summaries when their generation facilities are identified by the IESO as affecting the reliability of the IESO-controlled grid but are less than 0.5% of the generator's total capacity and the generator's total capacity is greater than 4000 MW	Ongoing/as required	Hardcopy or electronic advice to generators affected	"Market Manual 2: Market Administration. Part 2.11: 18-Month Outlook and Related Information Requirements"	5	6.2.5.2
11.	Market participants	Dispatch criteria for Special Protection Systems (SPS e.g. Load rejection, generation rejection)	Ongoing; updates as criteria changes	IESO website http://www.ieso.ca/	"Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies". (Sections 4.6.1, 4.6.2, 4.7 and Appendix D)	5	8.2.4

Item Ir	Information To	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		monitorion Decomposition	Timing	11.00.15 01 1 01.510.1		Chapter	Section
12.	Market participants	Specifications regarding exclusions to load management activities undertaken for the purpose of controlling demand	As required	Market manuals available on the IESO website http://www.ieso.ca/	"Market Manual. Part 7.1: System Operating Procedures" (Section 4.6.3)	5	10.3.6
13.	Market participants	Specifications regarding exclusions to load management activities undertaken for the purpose of shedding load during underfrequency conditions	As required	Market manuals, available on the IESO website http://www.ieso.ca/	(1) "Market Manual. Part 7.1: System Operating Procedures" (Section 4.6.3)	5	10.4.11
14.	Distributors and Connected Wholesale Customers subject to automatic under- frequency load shedding	Specification for automatic under- frequency load shedding discrete MW blocks: number, location, size, associated low frequency settings of these blocks	Annually, by week 24 of calendar year	Market Manuals, available on the IESO website http://www.ieso.ca/	Covered in: (2) "Market Manual. Part 7.1: System Operating Procedures" (Section 4.6.1) (3) "Market Manual. Part 7.4: IESO-Controlled Grid Policies"." (Section 4.4)	5	10.4.7
15.	Minister of Energy	Ontario electricity emergency plan and emergency preparedness plan for major market participants – filing with Minister (see subsection 39(1) of the Electricity Act, 1998)	As required	IESO website http://www.ieso.ca/	Emergency Preparedness link on the IESO website http://www.ieso.ca/imowe b/EmergencyPrep/prepared ness.asp	5	11.2.2
16.	Minister of Energy	Ontario power system restoration plan – filing with Minister	As required	IESO website http://www.ieso.ca/	"Market Manual 7 System Operations. Part 7.8: Ontario Power System Restoration Plan"	5	11.3.4

Item	Information To	o Information Description	Frequency; Mean	Means of Provision	Reference Document	Market Rules Reference	
No.		,	Timing			Chapter	Section
17.	Market participants	Security limits for all facilities that are part of IESO-controlled grid	Ongoing, updates as changes occur	Upon request of authorized market participants, subject to confidentiality provisions.	System Control Orders IESO Summary of Limits and Transfer Capability	5	5.1.2.2
18.	Market participants	Criteria and margins for developing security limits, and a process for reviewing and revising such criteria and margins	Ongoing, updates as criteria changes	IESO website http://www.ieso.ca/	"Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies".	5	5.1.2.3
19.	Market participants	Transmission transfer capabilities	Ongoing, updates as changes occur	By e-mail. IESO website NERC website NPCC website http://www.ieso.ca/ http://www.nerc.com/ http://www.npcc.org/	(1) Reliability Assessments and Regional/interregional Studies, available on NERC and NPCC websites (2) 18-month outlooks, on IESO website	5	5.2.2 and 5.2.1

Item	Information To	Information To Information Description	Frequency; Means of Provision	Reference Document	Market Rules Reference		
No.			Timing			Chapter	Section
20.	Market participant	Demand Forecast Methodology	Ongoing, updated as changes in methodology occur	IESO website http://www.ieso.ca	(1) "Market Manual 7: System Operations. Part 7.2: Near Term Assessments and Reports" (Appendix C) (2) "Market Manual 2. Part 2.11: 18-Month Outlook and Related Information Requirements" (3) "Market Manual 2. Part 2.8: Reliability Assessments Information Requirements"	5	7.1.3

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document		et Rules erence
No.		·	Timing			Chapter	Section
21.	Market participants	Advance security and adequacy assessments of IESO-controlled grid	For the next 34 days Refer to reference document for schedule Quarterly: For at least the next 18 months Annually: Exceeding the 18 month timeframe	Market Manuals, Quarterly and Annual assessments outlooks available at the IESO website http://www.ieso.ca/ Security and adequacy assessments available on website	(1) "Market Manual 7: System Operations. Part 7.1: System Operating Procedures". (Section 4.1.2) (2) "Market Manual 7: System Operations. Part 7.2: Near Term Assessments and Reports", for the daily and weekly assessments. (3) "Market Manual 2. Part 2.11: 18-Month Outlook and Related Information Requirements", for monthly assessments. (4) "Market Manual 2. Part 2.8: Reliability Assessments Information Requirements"	5	7.3

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		,	Timing			Chapter	Section
22.	Market participants	Demand forecasts for Ontario or parts thereof	For the next 34 days Refer to reference document for schedule Monthly: For next 18 months Annually: Exceeding the 18 month timeframe	Market Manuals, Quarterly and Annual assessments available at the IESO website http://www.ieso.ca/ Adequacy assessments available on website	For the daily and weekly: "Market Manual 7: System Operations. Part 7.2: Near Term Assessments and Reports" For monthly: "Market Manual 2. Part 2.11: 18- Month Outlook and Related Information Requirements" For yearly: "Market Manual 2. Part 2.8: Reliability Assessments Information Requirements"	5	7.1.1
23.	Market participants	IESO-controlled grid emergency operating state anticipated or declared	As required; promptly	Advisory notice, or telephone call if required	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.5) List of <i>Emergency Operating State</i> Control Actions (EOSCA) as per "Market Manual 7: System Operations Manual. Part 7.4: <i>IESO-Controlled Grid</i> Policies".	5	2.3.3

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		mornidation Beschption	Timing	Wicans of Frontier	Reference Bodament	Chapter	Section
24.	Market Participants	Issue NERC Energy Emergency Alerts	As required	Posted on <i>NERC</i> public website Advisory notice	List of Emergency Operating State Control Actions (EOSCA) as per "Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies". NERC Standard EOP-002 Attachment 1.		
25.	Market participants	IESO-controlled grid high-risk operating state anticipated or declared	As required; promptly	Advisory notice, or telephone call if required	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.4.1) "Market Manual 7: System Operations. Part 7.3 Outage Management" (Section 1.3.4 and 1.3.5)	5	2.4.3
26.	Market participants	10 minute Operating Reserve requirements for next day	Refer to reference document for schedule	Adequacy Report	"Market Manual 7: System Operations Part 7.2: Near Term Assessments and Reports"	5	4.5.11
27.	Market participants	Black Start required amounts and location	Before obtaining black start capability service	Contracts	OPSRP – Version 3.0 Section 7.0	5	4.7.2

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document		et Rules erence
No.			Timing			Chapter	Section
28.	Market participants	Conditions on IESO-controlled grid that may require demand reductions by non-dispatchable load	As required, promptly	Advisory notice SCOs upon request of authorized Market Participants, subject to confidentiality provisions	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures". (Section 3.4.1.) Also System Control Order SCO 425 (Controlled Rotation and Emergency Load shedding)	5	10.1.2
29.	Market participants	Warning of request to reduce demand through voltage reductions or interruptions	By 16:00 hrs of previous day (whenever possible)	Advisory notice SCOs upon request of authorized <i>Market Participants,</i> subject to confidentiality provisions	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.4.1). List of Emergency Operating State Control Actions (EOSCA) as per "Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies". Also System Control Orders SCO 424 (Load Reduction through Supply Voltage Reduction), SCO 425 (Controlled Rotation and Emergency Load Shedding)	5	10.3.2
30.	Transmitters	Conditions on the IESO-controlled grid after load shedding	Immediately after loads have been shed	Advisory notice	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.4.1).	5	10.4.5

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document		et Rules erence
No.		, and the second process	Timing		No. o. o	Chapter	Section
31.	Market participants	The total of MW of energy being directed to submit bids or offers from the aggregate of reliability must-run resources under reliability must-run contracts	As required, promptly	Advisory notice	"Market Manual 7. Part 7.2: Near-Term Assessments and Reports" (Appendix D).	7	12.1.2.5
32.	Market Participants	Issuance of a System Advisory for under-generation via an advisory notice.	2 days prior to dispatch day; 1 day prior to dispatch day; any time thereafter if condition is present	Advisory notice	List of Emergency Operating State Control Actions (EOSCA) as per "Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies". "Market Manual 4: Market Operations. Part 4.2 Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets" Section 1.3.3 and Appendix E.	7	12.1.1 12.1.3.2 12.1.3.3
33.	Market participants	Pre-dispatch schedule- reliability related information: total system load and losses, projected hourly energy shortfalls, operating reserve requirements and shortfalls, reliability must-run resources and security constraints.	As required under relevant market rules and market manual Initial predispatch schedule by 12:00 EST of each predispatch day	MPI (Market Participant Interface)/Dispatch Workstation Adequacy Report, Transmission Facility Outage Limits Report, and advisory notices	"Market Manual 4: Market Operations. Part 4.2 Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets" (Section 1.3.7, Table 3.1, Appendix E) "Market Manual 4: Market Operations. Part 4.3 Real-Time Scheduling of the Physical Markets" (Details given in Table 3.2 and 3.3)	7	5.5 (5.5.3.1 to 5.5.3.8)

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		,	Timing			Chapter	Section
34.	Market participants	Real-Time schedule- reliability related information: total system load and losses, area operating reserve requirements and shortfalls, list of network and security constraints affecting real-time schedule	As required under relevant market rules and market manual Within five minute period after each dispatch interval for operating reserve, and for other items: within one hour after end of each dispatch hour	MPI (Market Participant Interface) /Dispatch Workstation	"Market Manual 4: Market Operations. Part 4.3 Real-Time Scheduling of the Physical Markets" (Details given in Table 3.1, 3.2 and 3.3)	7	6.5 (6.5.3.1, 6.5.3.2, 6.5.3.6, 6.5.3.7)
35.	Market participants	Real-Time dispatch – reliability related information: total load met, transmission capacity, outages of transmission facilities, total operating reserve scheduled and total energy called from such operating reserve	As required under relevant market rules and market manual Within one hour after each dispatch hour	Real Time Dispatch Workstation	"Market Manual 4: Market Operations. Part 4.3 Real- Time Scheduling of the Physical Markets" (Details given in Table 3.2 and 3.3)	7	7.8 (7.8.1.1 to 7.8.1.4)

Item	Information To	ation To Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		monneauen 2000 paien	Timing		No. o. o	Chapter	Section
36.	Market participants	To provide to all market participants, the OEB and relevant government authorities, a preliminary and final report (to market participants and the public) related to market suspension and all related steps and actions taken by the IESO	Within 10 business days following the resumption of normal market operations Final report as soon as practicable	By electronic or hard copy to market participants IESO website Http://www.ieso.ca	"Market Manual 4: Market Operations Part 4.5: Market Suspension and Resumption"	7	13.7.3 and 13.7.4
37.	Market participants	Estimate of aggregate load curtailed following return to a normal operating state	As soon as practicable	MPI (Market Participant Interface)/Real Time Dispatch Workstation	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures".	5	10.3.7
38.	Market Participants (dispatchable generation facilities)	Spare Generation on-line – expected start time, run time, spare <i>generation</i> amount	Hourly basis	MPI (Market Participant Interface) / Dispatch Workstation	"Market Manual 4; Market Operations. Parts 4.2, 4.3"	7	2.2B, 5.7, 6.3A
39.	Market Participants	Acceptance/Approval of planned Replacement <i>Energy</i> to Support <i>Planned Outages</i> (boundary entity, time period, amount etc.)	Promptly	MPI (Market Participant Interface) / Dispatch Workstation		5	6.3.6 - 6.3.10
40.	Market Participants	RMR (Reliability Must Run) requirements to generators, dispatchable loads	As soon as possible	By Phone/Electronically		5	4.8
41.	Market Participants	Information/communications during Planned Outage	As required	Telephone Call, IOMS, Outage Form		5	6.1.7

Item	Information To	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.		·	Timing			Chapter	Section
42.	Market Participants	Emergency Demand Response Load. IESO may request these loads to reduce consumption prior to or during an emergency operating state	As required	Telephone notification call if required	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.5) List of Emergency Operating State Control Actions (EOSCA) as per "Market Manual 7: System Operations Manual. Part 7.4: IESO-Controlled Grid Policies"	5	4.8A.1, 2.3.3
43.	Market Participants	To publish the times and quantities of voltage reductions and reductions in thirty minute operating reserve upon scheduling of these sources of reserves	As and when required	IESO website http://www.ieso.ca MPI (Market Participant Interface) / Dispatch Workstation	"Market Manual 4: Market Operations. Part 4.3: Real-Time Scheduling of the Physical Market". Section 1.6.1 "Market Manual 4: Market Operations. Part 4.2: Dispatch Data in the Real-Time Energy and Operating Reserve Markets". Section 1.3.1	5	4.5.6 A

3. Reliability Information Required by the IESO

Table 3-1: Reliability Information Required by the IESO

Item	Information From	Information Description	Frequency;	, Means of Provision	Reference Document	Market Rules Reference		
No.	illioilliation From	information bescription	Timing	Wieans of Provision	Reference bocument	Chapter	Section	
1.	Market participants	Complying with reliability related information requirements Results of compliance monitoring and performance testing The IESO is authorized by the Electricity Act (1988) to administer Ontario's reliability compliance program including the specific IESO reliability related information requirements, set forth in the market rules and as listed in this "Market Manual 11: Reliability Compliance. Part 11.3: Reliability Information Catalogue". The market participants may be required to provide the reliability compliance related information and/or other associated data to the IESO (as per market rules), where applicable.	Upon request of the IESO	Hard or electronic copy to IRCP (IESO Reliability Compliance Program) team¹ at the IESO. IRCP@ieso.ca To facilitate market participants in the submission of reliability compliance related information, where applicable, a dedicated email link to the Reliability Compliance Program has been established that would be utilized for e-mailing the information to the IESO via IRCP@ieso.ca.	"Market Manual 11: Reliability Compliance. Part 11.2: Ontario Reliability Compliance Program"	5 4	14 and 3 1 to 5	

¹ IRCP Team to make initial contact with the *market participants*.

Item			Frequency;			Market Ru	les Reference
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section
2.	Market participants	Network Impact Information for proposed new or modified connection to IESO-controlled grid	At least 60 days prior to proposed change	As per Connection Assessment and Approval process	General: "Market Manual 2: Market Administration. Part 2.10: Connection Assessment and Approval" Generators: Appendix 4.6 of "Market Rules (Chapter 4). Connected Wholesale Customers and Distributors Connected to the IESO-Controlled Grid: Appendix 4.7 of "Market Rules" (Chapter 4). Registered Facilities providing Ancillary Services: Appendix 4.8 of "Market Rules (Chapter 4). Transmitters: Appendix 4.9 of "Market Rules" (Chapter 4).	4	6.1.6

Item	Information From	Information Description	Frequency;	Means of Provision	Reference Document	Market Ru	ules Reference
No.	illioilliation Fiolii	information bescription	Timing	iviedis of Provision	Reference Document	Chapter	Section
3.	Market participants	Connection Information Equipment ratings, in form suitable for dynamic calculation Functional descriptions, equipment ratings and operating restrictions for equipment and distribution facilities included within the IESO-controlled grid.	As part of facility registration	Facility Registration Facility.Registration@ieso.ca	General: "Facility Registration Guide" "Market Manual 1: Market Entry. Part 1.2: Facility Registration" Appendix 4.5A to 4.9 of "Market Rules" (Chapter 4)	4 5 5	6.1.11 5.2.5 Generators: 3.6.1.2 Distributors: 3.7.1.4 Transmitters: 3.4.1.3
4.	Generator and Connected Wholesale Customer	Connection Agreement with transmitter or distributor for new or modified connection facility	Facility Registration	Facility Registration Facility.Registration@ieso.ca	OEB Transmission and Distribution System Codes "Facility Registration Guide" "Market Manual 1: Market Entry. Part 1.2: Facility Registration"	7	4 and 6 2.2.6.3
5.	Transmitters	Detailed procedures for processing connection requests; and Requirements that must be met for connection to its transmission system or for the modification of an existing connection to such system	Within 6 months following the coming into force of Chapter 4.	OEB Transmission Code	OEB Transmission and Distribution System Codes "Market Manual 2: Market Administration. Part 2.10: Connection Assessment and Approval"	4	6.1

Item	Information From	Information Description	Frequency;	Means of Provision	Reference Document	Market Ru	<i>lles</i> Reference
No.	information From	Information Description	Timing	ivieans of Provision	Reference Document	Chapter	Section
6.	Market participants	IESO Monitoring Requirements	Continual Basis	Control and Monitoring Equipment through <i>real-time</i> network	Generators: Appendix 2.2 of "Market Rules" (Chapter 2) Appendix 4.15 and 4.19 of "Market Rules" (Chapter 4) Transmitters: Appendix 2.2 of "Market Rules" (Chapter 2) Appendix 4.16, 4.20, and 4.21 of "Market Rules (Chapter 4) Connected Wholesale Customers and Distributors Connected to IESO-Controlled Grid:		7.3 7.4 7.5
					Appendix 2.2 of "Market Rules" (Chapter 2) Appendix 4.17 and 4.22 of "Market Rules" (Chapter 4) Embedded Load Customers: Appendix 2.2 of "Market Rules" (Chapter 2) Appendix 4.18 and 4.23 of "Market Rules" (Chapter 4)		7.6
7.	Generators (embedded and connected)	Maximum unit capabilities (physical rating) to facilitate dispatch in an emergency operating state	Facility Registration	Facility Registration Facility.Registration@ieso.ca	Facility Registration Guide	5	3.6.1.5

Item			Frequency;		Defense Demonstra	Market Rules Reference	
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section
8.	Market participants	Emergency Preparedness Plan and such other emergency preparedness-related information	At the time of registration and updated at least annually thereafter by the market participant. Information to be submitted to the IESO as required	Market participant Authorization	Ontario Electricity Emergency Plan	5	11.2.3 and 11.2.4
9.	Market participants	A restoration participant attachment and such other system restoration-related information	Annually	Market participant Authorization	Ontario Electricity Emergency Plan	5	11.3.5, 11.3.6, and 11.3.7
10.	Market participants	Emergency Preparedness Plan and/or restoration participant attachment audit and re-file	As and when directed by the IESO	Hard or electronic copy to the Manager, via 'Emergency Preparedness Department' at the IESO at: Emergency.Preparedness@ieso.ca	Ontario Electricity Emergency Plan	5	11.4.4

Item	Item	., ., .,	Frequency;		Reference Document	Market Rules Reference	
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section
11.	Market participants	Manner in which the market participant will minimize the cutting and expedite the restoration of critical loads and priority loads during short and prolonged emergencies	At the time of registration and updated at least annually thereafter by the market participant.	Emergency Preparedness Plan	Ontario Electricity Emergency Plan	5	11.2.4, 11.2.3, and 11.3.6
			Information to be submitted to the <i>IESO</i> as required				
12.	SPS Owners	SPS Equipment maintenance for previous 12 months	No later than Dec 1 of each year	Hard or electronic copy to IRCP team at the <i>IESO</i> . IRCP@ieso.ca	NERC Standard PRC-017 (available on NERC website)	5	14.1.3.3
13.	SPS Owners	Operating statistics , performance information related to SPS	On an annual basis and when requested by IESO	Hard or electronic copy to IRCP team at the IESO. IRCP@ieso.ca	NERC Standard PRC-016 and PRC-017 (available on NERC website	5	8.3.1.2 and 8.3.1.3
14.	SPS Owners	Request and evaluation of request from affected market participant for permanent exemption from connection to SPS	As required	Exemption Application Form on the <i>IESO</i> website.	"Market Rules"	5	8.3.1.4

Item			Frequency;			Market Rules Reference		
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section	
15.	Market participants	Summary of demand control actions for previous 12 months	Annually; as and when requested by IESO	Hard or electronic copy to IRCP at the IESO. IRCP@ieso.ca	Information Submittal Form at IESO website when available. "Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Sections 4.5 and 4.6) "Market Manual 7: System Operations. Part 7.3: Outage Management" Sections 1.3.7, 1.3.6, 1.3.8 (The established procedures/principles in above documents and "Market Rules" to be used as guidelines, as applicable).	5	14.1.3.5	
16.	Market participants	Reliability related performance measures for transmission facilities and connections to IESO-controlled grid	Annually; and when requested by IESO	Hard or electronic copy to IRCP at the IESO. IRCP@ieso.ca	Forms at IESO website . IESO –Transmitter Operating Agreement with each transmitter.	5	14.1.3.7 5.4	
17.	Market participants	Summary of automatic under- frequency load shedding activities for previous 12 months	Annually; and when requested by the IESO	Form at the IESO website when available Hard or electronic copy to IRCP at the IESO. IRCP@ieso.ca	Operating Agreements	5	14.1.3.6	

Item	Information From		Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.	information From	Information Description	Timing	ivieans of Provision	Reference Document	Chapter	Section
18.	Market participants	Planned change to a setting on a fixed-tap transformer	Within one week prior to scheduled change	IOMS, Outage Form Electronic copy to the IESO at: Facility.Registration@ieso.ca	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures". (Sections 3.3 and 4.2.1)	5	14.1.3.1
19.	Market participants Parties to connection agreement	Notice of equipment testing that requires change to normal operation of that equipment	As testing proposed; (≥ 4 weeks prior to planned test)	IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3 Outage Management"	4	5.1.5
20.	Market participants	Report describing proposed or emergency modifications to primary protection relay	Within one week of date for IESO approval of proposed modification or within one week of unplanned, emergency modifications	IOMS, Outage Form Electronic copy to IESO at: Facility.Registration@ieso.ca	"Market Manual 7: System Operations. Part 7.3: Outage Management"	5	14.1.3.4
21.	Distributor and Connected Wholesale Customer	Estimate of demand reduction that has occurred as a result of disconnecting under-frequency demand	Within two weeks following an incident of under- frequency load shedding	Hard or electronic copy to IRCP at IESO. IRCP@ieso.ca	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures"	5	10.4.9

Item			Frequency;			Market Rules Reference	
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section
22.	Generators	Frequency excursion ≥ 60.2Hz or ≤ 59.8Hz Restoration action to protect equipment, personnel or public safety, environment	Immediately	By telephone to <i>IESO</i> Shift Operating Staff	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures". (Section 3.4.3).	5	10.5.2
23.	Generators (embedded and non- embedded)	If facilities cannot operate in accordance with agreed schedule	As changes occur; promptly	Telephone Call, IOMS, Outage Form Changes in bids/offers	"Market Manual 7: System Operations. Part 7.3 : Outage Management"	5	3.6.1.4
					"Market Manual 4: Market Operations. Part 4.2 Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets"		
24.	Generators	Any change or anticipated change in the status of any generation facility or related equipment that is under the dispatch control of the IESO, and could have a material impact on the IESO-controlled grid or the operation of IESO-administered markets (list of changes to be reported in Section 3.6.1.3)	As unavailability occurs, promptly	Telephone Call, IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3 Outage Management"	5	3.6.1.3
25.	Market participants	Emergency removal from service of equipment or facilities	As removal occurs; promptly	Telephone Call, IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3 Outage Management"	5	6.1.6

Item	Information From	Information Description	Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.	information From	information bescription	Timing	Weatis of Provision	Reference Document	Chapter	Section
26.	Market participants	Notice of forced outage Nature and cause of forced outage	As outages occur; promptly ≤ 48 hrs after outage	Telephone Call, IOMS, Outage Form Incident Report	"Market Manual 7: System Operations. Part 7.3 Outage Management"	5	6.3.4
27.	Market participants	Action taken to control demand (list of actions and information to be reported listed in Sections 10.2.2, 10.2.3 and 10.2.4 of "Market Rules")	Prior notification by 10:00 EST day prior. Advise of actions as soon as possible	Through IOMS prior. Telephone call to advise of actions	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures". (Sections 3.5, 4.5.1 and 4.5.2)	5	10.2.1
28.	Market participants	Equipment test information (see Section 6.6.2 for list)	Sufficiently in advance of proposed test to allow co- ordination and assessment	Letter or e-mail; then <i>outage</i> request through IOMS	"Market Manual 7: System Operations. Part 7.3 Outage Management"	5	6.6
29.	Distributor or Connected Wholesale Customer	Change or anticipated change in its facilities or equipment that could have a material impact on operation of IESO-controlled grid or IESO-administered markets (Connected wholesale customers) Change or anticipated change in capability of distribution facilities that could have a material impact on operation of IESO-controlled grid or IESO-administered markets (Distributors	As soon as known, promptly in time frames of outage management	IOMS, Outage form	"Market Manual 7: System Operations. Part 7.3 Outage Management".	5	3.5.1.2

Item	Information From		Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.	information From	Information Description	Timing	ivieans of Provision	Reference Document	Chapter	Section
30.	Distributors	Event in service territory that could have material effect on the reliability of the IESO-controlled grid	As soon as known, promptly	By telephone to <i>IESO</i> Shift Operating Staff	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Section 3.3.4, 3.4.4)	5	3.7.1.3
31.	Market participants	Confirm planned outage in order to obtain IESO approval of outage; provide time required to return facilities or equipment to service Notice and request of extension to	Before 10:00 am EST on third business day prior to planned outage date As soon as	By telephone call, IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3 Outage Management"	5	6.4.1
		originally approved <i>planned</i> outage	possible				
32.	Market participants	Information and reports to facilitate preparation of disturbance report by IESO for standards authority	Within 48 hours and follow-ups as required	Initially by telephone Hard or electronic copy to IRCP at IESO. IRCP@ieso.ca	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures"	5	14.1.5
33.	Transmitters	Frequency values for stations, when under-frequency alarm or indication of declining frequency and voltage Amount and location of load shed and conditions on IESO-controlled grid	As soon as possible after occurrence	By telephone to <i>IESO</i> Shift Operating Staff	"Market Manual 7: System Operations. Part 7.1: System Operating Procedures" Section 3.4.2	5	10.4.2

Item	Information From		Frequency; Timing		Reference Document	Market Rules Reference	
No.		Information Description		Means of Provision	Reference bocument	Chapter	Section
34.	Transmitters and Distributors	Annual total forecast peak demand by connection point Annual total forecast peak demand that can be disconnected within various time scales, by connection point	Annual, by week 24 of calendar year	Hard or electronic copy to IRCP at IESO. IRCP@ieso.ca	"Market Manual 7: System Operations. Part 7.3: Outage Management" Sections 1.3.7, 1.3.6, 1.3.8 "Market Manual 7: System Operations. Part 7.1: System Operating Procedures" (Sections 4.5 and 4.6) (The established procedures/principles in above documents and "Market Rules" Section 10.2, to be used as guidelines for	5	10.2.5.4
35.	Transmitters and Generators	Outage plans for facilities forming part of the IESO-controlled grid Provide outage information for IESO to review	As frequently as necessary with reference to Market Rules Chapter 5, Sections 6.2.4.1 and 6.2.4.2	IOMS, Outage Form	submission) "Market Manual 7: System Operations. Part 7.3 Outage Management"	5	6.2.4
36.	Market participants	Schedule of all <i>planned outages</i> , regardless of duration	No later than 33 calendar days prior to a planned outage	IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3: Outage Management"	5	6.3.1

Item	lufa madi a Faran		Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.	Information From	Information Description	Timing	ivieans of Provision	Reference Document	Chapter	Section
37.	Transmitters and Generators	Data for IESO reliability assessments; refer to reference document for specific data requirements	Annually; refer to reference document for schedule	Electronic copy to IESO at: Forecasts.Assessments@ieso.ca	"Market Manual 2: Market Administration. Part 2.8: "Market Manual 2. Part 2.8: Reliability Assessments Information Requirements"	5	7.5 and 7.2
38.	Transmitters	Data for IESO 18 month assessment report; refer to reference document for specific data requirements	January, July, and October; refer to reference document for schedule	Electronic copy to IESO at: Forecasts.Assessments@ieso.ca	"Market Manual 2: Market Administration. Part 2.11: 18-Month Outlook and Related Information Requirements"	5	7.2 and 7.5
39.	Generators with energy limited resources	Data for IESO 34 day adequacy assessments: refer to reference document for specific data requirements	Weekly	Electronic copy to <i>IESO</i> via Online IESO	"Market Manual 7: System Operations. Part 7.2: Near-Term Assessments and Reports"	5	7.2 and 7.5
40.	Connected Wholesale Customers	Planned outage, closure, test or similar event for next 4 trading weeks that results in change in demand of ≥20 MW Planned outage closure, test or similar event for next 4 trading weeks of a facility specifically designated by the IESO	By 2:00 p.m. on last trading day of every second trading week	IOMS, Outage Form	"Market Manual 7: System Operations. Part 7.3: Outage Management" (Section 1.3)	5	3.5.1.5

Item			Frequency;	Manus of Burning	Reference Decument	Market Rules Reference	
No.	Information From	Information Description	Timing	Means of Provision	Reference Document	Chapter	Section
41.	Market participants	Data required to satisfy request by standards authority	As required: pursuant to the established procedure and submission due dates	Hard or electronic copy to IRCP team at IESO. IRCP@ieso.ca	"Market Manual 11: Reliability Compliance. Part 11.2: Ontario Reliability Compliance Program"	5	14.1.4
42.	Transmitter	Transmission system reliability related information required for scheduling and dispatching in real time	As frequently as necessary in accordance with the requirements of Market Rules Chapter 7, Section 3.9	Real Time Network, IOMS and Facility Registration, as applicable	"Market Manual 4: Market Operations. Part 4.2 Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets" Appendix 7.4 of "Market Rules" (Chapter 7)	7	3.9
43.	Market Participants (dispatchable generation facilities)	Spare Generation on-line – start time, minimum run time, minimum load level	Hourly basis	MPI (Market Participant Interface) / Dispatch Workstation	"Market Manual 4; Market Operations. Parts 4.2, 4.3"	7	2.2B, 5.7, 6.3A
44.	Market Participants	Replacement Energy to support planned outages (boundary entity, time period, amount etc.)	As required	MPI (Market Participant Interface) / Dispatch Workstation, IOMS	"Market Manual 7: System Operations. Part 7.3: Outage Management"	5	6.3.6 - 6.3.10
45.	Market Participants	RMR (Reliability Must Run) amounts, locations, time etc.	As soon as possible	Telephone, electronic copy	"Market Manual 7: System Operations. Part 7.3: Outage Management"	5	4.8

Item	lufa madi a Faran		Frequency;	Means of Provision	Reference Document	Market Rules Reference	
No.	Information From	Information Description	Timing	ivieans of Provision	Reference Document	Chapter	Section
46.	Market Participants	Information regarding market operations to assist the <i>IESO</i> in analyzing the suspension	Immediately prior to and during the suspension period	Telephone By electronic or hard copy to Manager, Shifts Operation at <i>IESO</i>	"Market Manual 4: Market Operations Part 4.5: Market Suspension and Resumption" (Table 3-2)	7	13.7.2
47.	Market Participants	Information and Request for Segregation for approval to operate its registered facility in a segregated mode of operation	Within the time required, as mentioned in Market Rules Chapter 7, Appendix 7.7, Section 1.3	IOMS, Outage Form, Telephone Call	"Market Manual 7: System Operations. Part 7.3: Outage Management". (Section 1.3)	7, Appendix 7.7	1.3
48.	Market Participants	Information/communications during <i>Planned Outage</i>	As and when required	Telephone Call, IOMS, Outage Form		5	6.1.7

References IESO_CAT_0011

References

Document Name	Document ID
Market Rules	MDP_RUL_0002
NERC Standards	
NPCC Criteria	
Reliability Assessments and Regional/Interregional Studies	
Market Manual 1.1: Participant Authorization, Maintenance and Exit	MDP_PRO_0014
Market Manual 1.2: Facility Registration, Maintenance and Deregistration.	MDP_PRO_0016
Market Manual 2.8: Reliability Assessments Information Requirements	MDP_PRO_0024
Market Manual 2.10: Connection Assessment and Approval	MDP_PRO_0048
Market Manual 2.11: 18-Month Outlook and Related Information Requirements	IMP_PRO_0024
Market Manual 4.2: Submission of <i>Dispatch Data</i> in the Real-Time <i>Energy</i> and <i>Operating Reserve</i> Markets	MDP_PRO_0027
Market Manual 4.3 Real-Time Scheduling of the Physical Markets	IMP_PRO_0034
Market Manual 4.5: Market Suspension and Resumption	MDP_PRO_0030
Market Manual 7.0: System Operations Overview	IMP_MAN_0012
Market Manual 7.1: System Operating Procedures	MDP_PRO_0040
Market Manual 7.2: Near Term Assessments and Reports	IMP_PRO_0033
Market Manual 7.3: Outage Management	IMP_PRO_0035
Market Manual 7.4: IESO-Controlled Grid Operating Policies	IMP_POL_0002
Market Manual 7.8: Ontario Power System Restoration Plan	IMO_PLAN_0001
Market Manual 11.2: Ontario Reliability Compliance Program	IESO_PRO_0874

- End of Document -