MDP\_PRO\_0030

## PUBLIC



### Market Manual 4: Market Operations

# Part 4.5: Market Suspension and Resumption

Issue 10.0

This procedure provides *market participants* with the information necessary to respond to market suspension, operate during the suspension and support the subsequent resumption of normal market operations.

Public

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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.

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9.0	Issue released in advance of Baseline 33.1 to update IESO logo	March 31, 2015
10.0	Issue released for Baseline 41.0	March 6, 2019

#### **Related Documents**

Document ID	Document Title

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Reference (Paragraph and Section)	Description of Change
All	Rewrote document to bring all content up-to-date.

### 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 "Market Operations Manual" is Series 4 of the *market manuals*, where this document forms "Part 4.5: Market Suspension and Resumption".

- End of Section

### 1. Introduction

#### 1.1 Purpose

This manual describes the activities undertaken by the *IESO* (including the *IESO Board*), market participants, and other parties in response to the suspension of normal operations within the *IESO*-administered markets. The manual addresses:

- The declaration of a suspension of *market operations* and notification by the *IESO* that normal *market operations* are suspended,
- Directing the operation of the IESO-controlled grid during market suspension,
- The subsequent resumption of normal *market operations*, and
- The production and publication of reports reviewing the events leading up to, and during, the market suspension.

#### 1.2 Scope

This manual is intended to provide *market participants* with a summary of the activities performed by *market participants*, the *IESO*, and other parties relating to market suspension and resumption.

This manual does not describe in detail the control actions the *IESO* may take to operate the *IESO*controlled grid during market suspension. Refer to <u>Market Manual 7.1: IESO-Controlled Grid Operating</u> <u>Procedures</u> for details on actions that the *IESO* and *market participants* are required to undertake to maintain the security and reliability of the *IESO-controlled grid*.

This manual does not address the system restoration procedures that are implemented in the event of a major blackout. Refer to <u>Market Manual 7.8: Ontario Power System Restoration Plan</u> for more details on this process.

#### 1.3 Roles and Responsibilities

#### 1.3.1 Market Participants

Market participants are responsible for:

- Complying with *IESO* Market Suspension Advisory Notices (described in Section 2.1), and any other directions issued by the *IESO*,
- Immediately notifying the IESO if they are unable to fully comply with an IESO direction,
- Upon resumption of normal market operations, resuming normal operations and interactions with the *IESO* pursuant to the *market rules*,
- Complying with requests for information concerning their operation prior to and during market suspension and supporting the *IESO* analysis of the market suspension, and
- If directed, implementing corrective measures as a result of the investigation into the market suspension.

#### 1.3.2 IESO

The *IESO* is responsible for the following activities, as applicable:

- Issuing a Market Suspension Advisory Notice and an Emergency Priority message<sup>1</sup>, informing market participants of the nature and scope of the market suspension, and its expected duration (if known),
- Informing the IESO Board, the Ontario Energy Board (OEB), and other government authorities of a market suspension,
- Restoring and maintaining reliable operation of the *IESO-controlled grid*, and restoring market operations as rapidly as practical, consistent with safety of persons and facilities,
- Endeavouring to continue use of normal market information, scheduling, and pricing procedures to the extent practical during market suspension, and prescribing and *applying administrative prices*,
- Providing timely information to *market participants* concerning the reasons for the suspension and efforts by the *IESO* to resume normal market operations,
- Issuing *dispatch instructions*, Market Suspension Advisory Notices, Emergency Priority messages, or other directions to *market participants* that will enable the *IESO* to continue reliable operations, continue non-suspended market operations, and resume normal market operations as soon as practical,
- Where applicable, compensating a *market participant* for the costs of complying with *dispatch instructions* issued during a market suspension (see <u>Section 2.2.5</u>),
- Monitoring the conditions that triggered the market suspension to determine when normal market operations are possible,
- Issuing a Market Resumption Advisory Advance Notice (described in Section 3.1) notice declaring the end of the suspension and indicating the *dispatch hour* for which normal market operations are to resume, providing at least one hour advance notice,
- Issuing preliminary and final reports detailing the circumstances that triggered the market suspension, the steps taken by the *IESO* to ensure reliable operations and to remedy the causes of the suspension, the actions taken by *market participants* during the suspension, and any conclusions or recommendations for avoiding similar suspensions in the future,
- Directing applicable *market participants* to implement corrective measures, if the *IESO Board* determines that corrective measures from these *market participants* are warranted to avoid the recurrence of a market suspension, and
- Where applicable, compensating *market participants* for implementing corrective measures.

#### 1.4 Contact Information

Changes to this *market manual* are managed via the <u>IESO Change Management process</u>. Stakeholders are encouraged to participate in the evolution of this *market manual* via this process.

To contact the *IESO*, you can email *IESO* Customer Relations at <u>customer.relations@ieso.ca</u> or use telephone or mail. Telephone numbers and the mailing address can be found on the IESO website

<sup>&</sup>lt;sup>1</sup> Emergency Priority messages are issued by the *IESO* directly to *market participants' dispatch* stations.

(<u>http://www.ieso.ca/Pages/Contact-Us.aspx</u>). Customer Relations staff will respond as soon as possible.

- End of Section -

### 2. Market Suspension

In extreme conditions, normal operation of the *IESO-administered markets* may become impossible or detrimental to operating the *IESO-controlled grid* reliably. Under such circumstances, it may be necessary to suspend the operation of all or part of the *IESO-administered markets*.

For the purposes of this manual, a "market suspension" is defined as an *IESO*-declared suspension of market operations in *response* to an event determined to have substantially impaired the ability of the IESO to operate the market in accordance with the *market rules*.

If the *IESO* determines that its ability to operate the *IESO-administered markets* in accordance with the *market rules* has become substantially impaired, the IESO may declare a market suspension. The conditions in which a market suspension may and may not be declared are listed in Market Rules Chapter 7, Sections 13.2.4 and 13.3.

#### 2.1 Market Suspension Declaration

The *IESO* will issue a declaration of a suspension of normal *market operations* in accordance with Market Rules Chapter 7, Section 13.4, and will notify *market participants* of the declaration primarily via a Market Suspension Advisory Notice<sup>2</sup>.

The *IESO* will notify, as soon as practical, the *IESO Board*, the *OEB*, and the relevant government authorities of a suspension of normal *market operations*. The *IESO Board* may determine whether to continue the suspension or to resume normal *market operations* under such conditions as the *IESO Board* may specify.

For a market suspension resulting from a software, hardware, or communications systems failure, this manual assumes that the *IESO* will continue to have some form of reporting or message notification tool available (or at least have access to basic voice and/or data telecommunications). If a tool typically used to deliver notifications to *market participants* during normal market operations becomes unavailable, the *IESO* will make every effort (using all available means) to maintain communication with *market participants* during the suspension and resumption of normal market operations.

#### 2.2 Operations during Market Suspension

During a suspension of *market operations*, the *IESO* will monitor the conditions that triggered the suspension to determine whether it is possible to resume normal *market operations*. The *IESO* issues regular timely Market Suspension Advisory Updates (described in Section 2.2.2) to provide information to *market participants* concerning the reasons for the suspension and the IESO's efforts to resume normal *market operations*. The *IESO* also provides direction to *market participants* as required, and otherwise prescribes and applies *administrative prices*.

While operating during market suspension, the *IESO's* key priorities are:

<sup>&</sup>lt;sup>2</sup> Market Suspension Advisory Notices are posted on the <u>Day 0 Advisory Notices Summary</u> page of the *IESO* website.

- Ensuring the safety of persons and equipment, and
- Ensuring the *security* and *adequacy* of the *IESO-controlled grid* to enable the *IESO* to continue *reliable* operations, continue non-suspended *market operations*, and resume normal *market operations* as soon as possible.

Market Rules Chapter 7, Section 13.5.1.2 requires the *IESO* to continue using normal market information, and scheduling and pricing procedures to the extent practical. This is accomplished by dispatching according to the current *pre-dispatch schedule* to the extent possible (see Section 2.2.1).

#### 2.2.1 Dispatch Instructions

In circumstances where it is no longer practical for the *IESO* to issue *dispatch instructions* using normal scheduling and pricing procedures, the *IESO* will issue instructions to *market participants* using whatever communication means are available.

The dispatch process during market suspension is based on the following obligations:

- *Market participants* will hold to their most recent *dispatch* request until the *IESO* directs otherwise.
- If a *market participant* must deviate from *dispatch*, they must notify the *IESO* immediately by whatever means available. The *IESO* will take appropriate action if notified by an individual *market participant* of their inability to comply with a *dispatch instruction*.

#### 2.2.2 Market Suspension Advisory Updates

The *IESO* will post Market Suspension Advisory Updates on a regular basis on the <u>Day 0 Advisory</u> <u>Notices Summary</u> page of the *IESO* website. These updates identify:

- The reason(s) for the market suspension,
- Efforts by IESO to restore normal market operations,
- The expected duration of the market suspension (if known), and
- Other conditions and directions, as applicable.

As Market Suspension Advisory Updates are very brief, the *IESO* issues detailed directions to *market participants* as required. *Market participants* are expected to comply in full with these directions, or immediately notify the *IESO* if their *facility* will be unable to comply.

#### 2.2.3 Manual Procurement of Operating Reserve

Depending on the duration of the market suspension, the *operating reserve* schedules may not be adequate and the *IESO* may have to manually procure *operating reserve*.

#### 2.2.4 Set Administrative Price

In circumstances where *administrative prices* are required due to the suspension of the *IESOadministered markets*, the *IESO* shall establish *market prices* either on the basis of recent historical average *market prices*, or on the basis of prices determined using market systems.

See <u>Appendix A</u> for more details on the application of *administrative pricing*.

You may also refer to:

• Administrative Pricing Quick Take

• IMO\_GDL\_0025: Guidelines for Additional Compensation during Administrative Pricing

#### 2.2.5 Compensation

Where the *IESO* applies *administrative pricing* during a market suspension, there may be situations where the *administrative price* does not adequately compensate *market participants* for complying with the *dispatch instructions* the *IESO* issues. In such circumstances, the *IESO* will provide additional compensation to a *market participant* as defined in Market Rules Chapter 7, Sections 8.4A.9 and 8.4A.10.

*Market participants* who follow *dispatch instructions* based on the established *administrative price*<sup>3</sup> may apply for additional compensation by completing and submitting the <u>Additional Compensation</u> <u>during Administrative Pricing Form</u>, on which the *market participant* provides the following information:

- Any actions taken by the *market participant* under direction of the *IESO*,
- Compensation they require as a result of the actions taken, and
- Justification for the compensation requested.

The *IESO* reviews requests for additional compensation and issues a decision to the *market participant* stating:

- Whether the request has been approved, partially approved, or denied,
- Justification for the decision, and
- A summary of compensation offered/denied

The *market participant* has the right to dispute the *IESO* decision, as described in <u>Market Manual</u> 2.1: <u>Dispute Resolution</u>.

– End of Section –

<sup>&</sup>lt;sup>3</sup> Administrative pricing may be applied in circumstances other than a market suspension.

### 3. Market Resumption

Once the conditions that triggered the market suspension have been resolved, and the *IESO* has determined that normal market operations are possible and *reliable* system operations can be maintained, the *IESO* shall begin the process of resuming market operations, as stated in Market Rules Chapter 7, Section 13.7. The *IESO's* decision to resume normal market operations is subject to any decision or direction the *IESO Board* may issue.

#### 3.1 Market Resumption Advisory Notices

When the *IESO* determines that normal market operations can be resumed, they will complete the following actions at least one hour prior to the resumption of normal market operations:

- Post a Market Resumption Advisory Advance Notice on the <u>Day 0 Advisory Notices Summary</u> page of the *IESO* website.
- Notify *market participants* providing any necessary additional information, conditions, or directions not contained in the Advisory Notice
- *Publish* a valid *pre-dispatch* schedule.

The Market Resumption Advisory Advance Notice states:

- The *dispatch hour*<sup>4</sup> for which normal market operations are to resume, and
- The timeline in which the *IESO* will accept short notice *bids* and *offers* (refer to <u>Market</u> <u>Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve</u> <u>Markets</u>, Appendix B: Short Notice Change Criteria).

Once normal market operations have resumed, the *IESO* will post a Market Resumption Advisory Notice on the Day 0 Advisory Notices Summary page of the *IESO* website to notify that normal market operations have resumed at the stated time. The *IESO* will begin publishing appropriate public/market participant-specific reports.

#### 3.2 Post-Suspension Review

Market Rules Chapter 7, Section 13.7.2 requires the *IESO* (immediately after the resumption of normal market operations) to conduct a review of the events that led to the market suspension, and events that occurred during the suspension itself.

The *IESO* may require *market participants* to submit information regarding their operations prior to and during the suspension, and to assist the *IESO* in analyzing the suspension. If *market participant* input is needed, the *IESO* will email the applicable *market participants* requesting:

- The specific information needed, and
- The date by which a *response* is required.

<sup>&</sup>lt;sup>4</sup> Market operations resume at the top of the hour.

#### 3.2.1 Preliminary Market Suspension Report

Market Rules Chapter 7, Section 13.7.3 requires the *IESO Board* to issue a Preliminary Market Suspension Report within 10 *business days* of the market suspension. This report describes:

- The date and time period that the market was suspended,
- The circumstances that triggered the market suspension,
- The steps taken by the *IESO* during the period of suspension to ensure reliable operations and remedy the cause of the suspension,
- The actions of *market participants* during the suspension, and
- Any conclusions or recommendations for avoiding similar market suspensions in the future.

The *IESO Board distributes* the preliminary report to *market participants*, the *OEB*, and other relevant government authorities. *Market participants* may provide comments on the preliminary report for the *IESO* to include in the Final Market Suspension Report. When issuing the preliminary report, the *IESO Board* will provide a deadline date for *market participant* comments to be submitted.

#### 3.2.2 Final Market Suspension Report

Market Rules Chapter 7, Section 13.7.4 requires the *IESO Board* to issue a Final Market Suspension Report to *market participants* and the public "as soon as it is practicable to do so" after the expiry of the period in which *market participants* may submit comments related to the preliminary report. The final report covers the same scope as the preliminary report.

#### 3.2.3 Implement Corrective Measures

The *IESO Board* determines from the investigation into the market suspension whether it is necessary to implement corrective measures to avoid a recurrence of the market suspension. If applicable, the *IESO* will direct affected *market participants* to implement specific corrective measures.

The *IESO* will communicate the requirement for corrective measures to applicable *market participants* through a Notice of Corrective Measures Required, which identifies:

- Any actions required of the market participant, and
- The date by which the actions must be taken or implemented.

#### 3.2.4 Compensation for Corrective Actions

A *market participant* may apply for compensation from the *IESO* for undertaking corrective measures where compliance with the *IESO's* direction resulted in costs or damages to the *market participant*.

The *market participant* completes the <u>Additional Compensation during Administrative Pricing</u> Form, which details:

- Any actions taken by the *market participant* under direction of the IESO,
- Compensation required by *market participant* as a result of the actions taken, and
- Justification for the compensation requested.

The *IESO* considers requests for compensation from *market participants* as a result of the implementation of corrective measures directed by the *IESO* and emails a decision to the *market participant* stating:

- Whether the request has been approved, partially approved, or denied,
- Justification for the decision, and
- A summary of compensation offered/denied

The *market participant* has the right to dispute the *IESO* decision, as described in <u>Market Manual</u> 2.1: <u>Dispute Resolution</u>.

End of Section -

### **Appendix A: Administrative Pricing**

In circumstances that result in market suspension, the *IESO* shall (as it determines appropriate) establish the *administrative price* as one of the following:

- A market price calculated by the software that regularly generates market prices, provided the market suspension is not the result of failure in that software, and provided that operations of the *IESO-controlled grid* are based to some extent on market-based information and signals, or
- Where operations of the *IESO-controlled grid* are being conducted without regard to the market:
  - For each hour that the *IESO-administered markets* are suspended, the *IESO* uses the average of the published *market prices* for the corresponding hour from the four most recent *business days* (or non-business days if the prices are being administered for a non-business day), excluding any hour(s) where prices were administered.
  - The *energy price* for Ontario and all *intertie zones* is set equal to the average Hourly Ontario Energy Price (HOEP) for the corresponding hour(s) on the four most recent business (or non-business) days. Similarly, Ontario and *intertie zone operating reserve prices* are set equal to the hourly average of the price for *operating reserve* in Ontario on the four most recent business (or non-business) days.

Since there would be no *market schedule* and, therefore, no congestion management settlement credits (CMSC) under the average pricing mechanism, *market participants* can claim additional compensation if they follow *dispatch instructions* and they can demonstrate to the satisfaction of the *IESO* that the *administered price* does not cover their incremental costs. See Section 2.2.5 for more information on compensation related to *administrative pricing*.

- End of Section -

### References

Document ID	Document Title
MDP_RUL_0002	Market Rules for the Ontario Electricity Market
<u>MDP_PRO_0014</u>	Market Manual 1.1: Participant Authorization, Maintenance & Exit
<u>MDP_PRO_0017</u>	Market Manual 2.1: Dispute Resolution
<u>MDP_PRO_0027</u>	Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets
<u>IMP_PRO_0034</u>	Market Manual 4.3: Real Time Scheduling of the Physical Markets
<u>MDP_PRO_0040</u>	Market Manual 7.1: System Operating Procedures
IMO_PLAN_0001	Market Manual 7.8: Ontario Power System Restoration Plan
IMO_GDL_0025	Guidelines for Additional Compensation during Administrative Pricing
	Administrative Pricing Quick Take

- End of Document -