

Market Renewal Energy Project Implementation | Engagement Days

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Webinar Participation

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 - Raise your hand (click the "Raise hand" button in the top right corner) to let the host know you'd like to verbally ask a question or make a comment. The host will let you know when to unmute
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Disclaimer

This document provides an overview of certain draft amendments to the market rules and market manuals, proposed in connection with the Ontario Market Renewal Program (MRP). The content of the proposed amendments is subject to further revision and the overview contained herein is provided for information purposes only.

The information contained in this document shall not be relied upon as a basis for any commitment, expectation, interpretation and/or decision made by any market participant or other interested party.

The market rules and market manuals, applicable laws, and other related documents will govern the future market.

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Agenda

- Quarterly status update on reference level and reference quantity one-on-one consultations
- Refresher on the engagement approach for market rules and market manuals
- Summary of the market rules and market manuals changes associated with the Market Power Mitigation (MPM) batch
- Summary of the conforming changes to market rules and market manuals for the Market Entry and Prudential Security batch
- Next steps



Quarterly Status Update: One-On-One Consultations for Reference Levels and Reference Quantities



Refresher: One-On-One Consultation Process

1. Kick-off Meeting

2. Market Participant Information Gathering

3. Facility Submission

4. IESO Review

5. Preliminary View



Consultation Status Update

Consultations are progressing as expected

Thermal: 29% of submissions received.

Nuclear: 100% of submissions received.

Hydro: 32% of submissions received.

Wind: 17% of submissions received.

Solar: 100% of submissions received.

Dispatchable Loads: 17% of submissions received.

Storage: Consultations begin in Q4, 2021.



Refresher: Engagement on Market Rules and Market Manuals

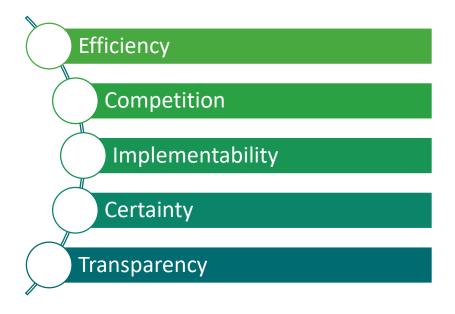


Engagement on Market Rules and Manuals

- Provide transparency and an opportunity to review and provide feedback on the draft market rules and manuals
- Ensure the spirit of the Market Renewal principles and the detailed design are captured in the codified rules prior to formal Technical Panel and IESO Board review processes

More information on the purpose and method of engagement can be found in the <u>Implementation Engagement Plan</u>

Market Renewal Principles





Market Rules and Manuals Batches

Market Entry and Prudential Security (Conditionally Approved)

Market Power Mitigation (Published for Review)

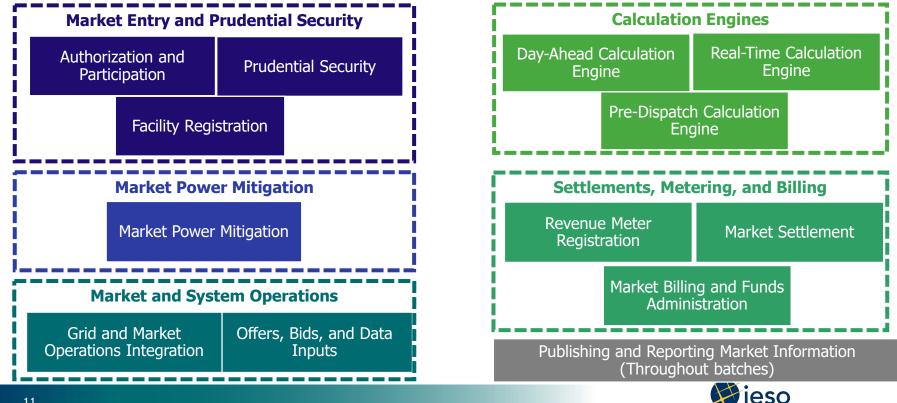
Market and System Operations

Market Settlement, Metering, and Billing

Calculation Engines

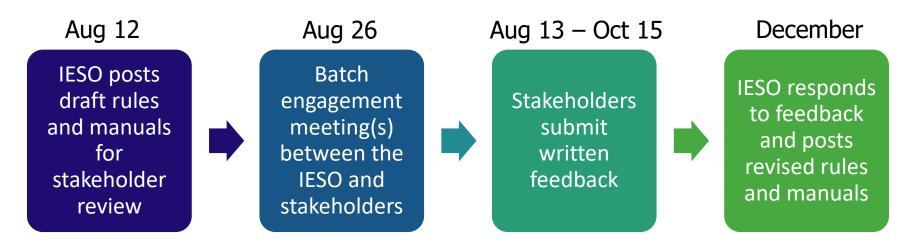


Market Rules and Market Manuals: Batch Mapping



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Batch Review Process



Stakeholder feedback on the draft market rules and market manuals will be summarized and provided to the Technical Panel and IESO Board of Directors



Market Power Mitigation: Batch Summary Market Rules and Market Manuals

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Impacted Market Rules and Manuals

Market Rules

Market rule provisions that describe the obligations and authorities regarding market power mitigation, including new defined terms. Chapter 11 - Definitions Chapter 7 Chapter 3 (single provision)

Market Manual 14.1: Market Power Mitigation Procedures

Describes the procedures that support market power mitigation (e.g., designation of constrained zones).

Market Manual 14.2: Reference Level and Reference Quantity Procedures

Describes the procedures that support determination and calculation of reference levels and reference quantities.



MPM Topics in Future Batches: Ex-Ante Mitigation & Settlement Mitigation

Market Entry and Prudential Security

Market Power Mitigation

Market and System Operations

Market Settlement, Metering, and Billing

Calculation Engines

Settlement mitigation will be described in Batch 4 market rules and market manuals

Ex-ante mitigation will be described in Batch 5 market rules and market manuals



Market Rules - Chapter 11 Definitions

- Added many new defined terms (>50), which loosely fall into three categories:
 - Framework (e.g., short-run marginal cost, unrestricted competition)
 - Process-related (e.g., preliminary view, simulated as-offered energy locational marginal price)
 - Dispatch data (e.g., start-up offer, speed no-load offer)
- Modified existing defined terms (e.g., energy market, offer)
- Deleted existing defined terms (e.g., start-up-cost, speed no-load cost)



MPM Batch: Topic Areas

During Registration (e.g., determine reference levels)

Prior to Running the Market (e.g., designate constrained areas)

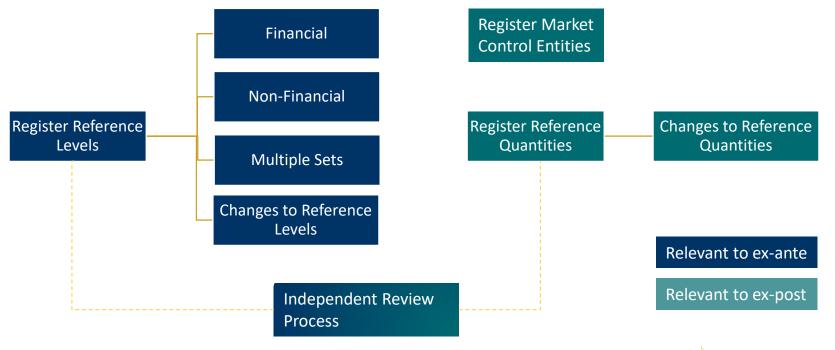
During Market Execution (e.g., fuel cost change requests)

During Market Settlement (e.g., reference level settlement charge)

Following Settlement (e.g., ex-post mitigation for physical withholding)



MPM Topics: During Registration





During Registration: Market Rules – Chapter 7

| Торіс | Market Rule Section |
|---|------------------------|
| Reference Levels - General | 22.1 |
| Reference Levels for Financial Dispatch Data Parameters | 22.2 |
| Reference Levels for Non-Financial Dispatch Data Parameters | 22.3 |
| Resources with Multiple Sets of Reference Levels | 22.4 |
| Changes to Reference Levels | 22.5 |



During Registration: Market Rules – Chapter 7 (Cont'd)

| Торіс | Market Rule Section |
|-----------------------------------|------------------------|
| Reference Quantities | 22.6 |
| Revisions to Reference Quantities | 22.7 |
| Independent Review Process | 22.8 |
| Market Control Entities | 22.9 |



During Registration: Market Rules – Chapter 3

| Торіс | Market Rule Section |
|---|------------------------|
| Notice of Dispute related to Independent Review Process | 2.5.1A.6 |

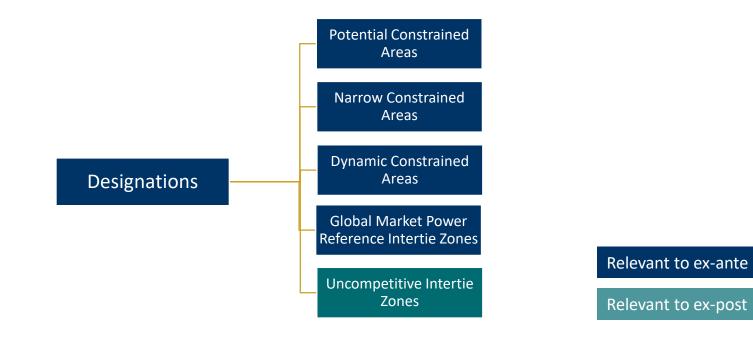


During Registration: Market Manual 14.2

| Торіс | Market Manual Section |
|--|--------------------------|
| Overview of Reference Levels and Reference Quantities | 2 |
| Determine and Update Reference Levels and Reference Quantities | 3 |
| Reference Level and Reference Quantity Reports | 4 |
| Cost Components of Financial Dispatch Data Parameters | 6 |
| Reference Levels for Financial Dispatch Data Parameters | 7 |
| Reference Levels for Non-Financial Dispatch Data Parameters | 8 |
| Reference Quantities | 9 |



MPM Topics: Prior to Running the Market





Prior to Market: Market Rules – Chapter 7

| Торіс | Market Rule Section |
|--|------------------------|
| Designation of Constrained Areas – Potential Constrained Areas, Narrow Constrained Areas, and Dynamic Constrained Areas | 22.10 |
| Global Market Power Reference Interties Zones | 22.11 |
| Uncompetitive Intertie Zones | 22.12 |



Prior to Market: Market Manual 14.1

| Торіс | Market Manual Section |
|---|--------------------------|
| Designation of Constrained Areas | 2 |
| Designation of Uncompetitive Intertie Zone Status | 3 |
| Determination of Global Market Power Reference Intertie Zones | 4 |



MPM Topics: Market Execution

Validation of Non-Financial Dispatch Data

Request to Use High Cost Profile

Fuel Cost Change Requests

Ex-Ante Mitigation

Determine Intertie Reference Levels Described in Batch 5 market rules and market manuals

Relevant to ex-ante

Relevant to ex-post



Market Execution: Market Rules – Chapter 7

| Section Description | Market Rule Section |
|--|------------------------|
| Changes to Reference Levels | 22.5 |
| Ex-Ante Validation of Non-Financial Dispatch Data Parameters | 22.13 |
| Intertie Reference Levels | 22.17 |



Market Execution: Market Manual 14.2

| Section Description | Market Manual Section |
|---|--------------------------|
| Temporary Reference Level Change Requests | 5 |



MPM Topics: Market Settlement

Reference Level Settlement Charge

Settlement Mitigation

Settlement mitigation will be described in Batch 4 market rules and market manuals

Relevant to settlement



MPM Topics: Following Settlement - Ex-Post Mitigation

Physical Withholding

- Energy Price Impact
- Operating Reserve Price Impact

Intertie Economic Withholding

- Energy Price Impact
- Operating Reserve Price Impact
- Make-whole Payment Impact

Relevant to ex-post



Following Settlement: Market Rules – Chapter 7

| Section Description | Market Rule Section |
|--|------------------------|
| Ex-Post Mitigation of Physical Withholding | 22.15 |
| Intertie Economic Withholding on an Uncompetitive Intertie Zone | 22.16 |
| Mitigation for Make-Whole Payment Impact on Uncompetitive Interties | 22.18 |
| Intertie Economic Withholding – Procedural Steps and Timelines | 22.19 |



Following Settlement: Market Manual 14.1

| Торіс | Market Manual Section |
|---|--------------------------|
| Ex-Post Mitigation for Physical Withholding | 5 |
| Ex-Post Mitigation for Economic Withholding on an Uncompetitive Intertie Zone | 6 |

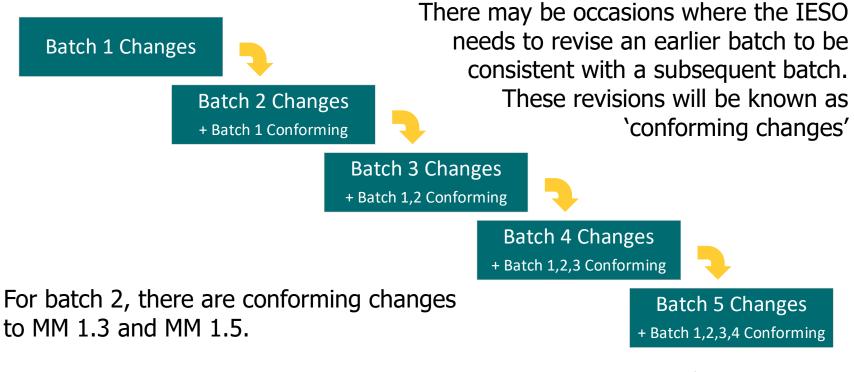


Conforming Changes: Market Entry

Market Manuals



Conforming Changes Refresher





Impacted Market Manuals

Market Manual 1.3: Identity Management Operations Guide

Describes the way that participants manage assignments of the roles required to interact with the IESO in various capacities.

Market Manual 1.5: Market Registration Procedures

Describes the way that market participants are registered to participate in the IESO-administered markets.



Conforming Changes: Market Manual 1.3

Change Description

Market Manual Section

Added Market Power Mitigation Contact

Appendix B



Conforming Changes: Market Manual 1.5 (1 of 3)

| Change Description | Market Manual Section |
|---|--------------------------|
| Updated section cross-references to account for new content elsewhere in the market manual regarding reference levels, reference quantities and market control entities | 1.3.1 |
| Added new IESO responsibilities related to reference levels, reference quantities and market control entities | |
| Added content to reflect that prospective market participants seeking authorization as a subset of participation types are required to disclose market control entities and a market control entity for physical withholding | 2.2.1 Table 2-2 |



Conforming Changes: Market Manual 1.5 (2 of 3)

| Change Description | Market Manual Section |
|--|--------------------------|
| Updated the content describing market control entity and market control entity for physical withholding | 3.1.5 Table 3-2 |
| Added new section to describe the requirements to register reference levels for financial dispatch data parameters, non- financial dispatch data parameters and reference quantities | 3.2.6 |



Conforming Changes: Market Manual 1.5 (3 of 3)

| Change Description | Market Manual Section |
|--|----------------------------|
| Updated table cross references and table titles. These are conforming changes resulting from other incremental changes noted above | 3.5, 3.5.2.1, 3.7.2, 3.7.3 |
| Added Market Control Entity for Physical Withholding to the list of market participant changes | 4.2 |
| Added changes to reference levels and reference quantities to the list of changes for which the IESO will issue a Registration Approval Notification | |
| Added Market Power Mitigation Contact | Appendix A |
| | ieso |

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How to Read MPM Batch Documents

Market Rule

Market Manual

Impact Test – Energy

- 22.15.7 The *IESO* may apply an impact test for *physical withholding* to the *energy offers* of a *registered market participant* for a *resource* that had an *energy offer* fail any of the conduct tests in section 22.15.4. An *energy offer* will fail the impact test if:
 - 22.15.7.1 the resource met the condition in 22.15.3.3 and the resource's simulated as-offered energy LMP is greater than the resource's simulated reference quantity energy LMP by the lesser of 50% or \$25/MWh;
 - 22.15.7.2 the resource met the condition in 22.15.3.4 and the resource's simulated as-offered energy LMP is greater than the resource's simulated reference quantity energy LMP by the lesser of 50% or \$25/MWh;
 - 22.15.7.3 the resource met the condition in 22.15.3.5 and the resource's simulated as-offered energy LMP is greater than the resource's simulated reference quantity energy LMP by the lesser of 100% or \$50/MWh; or
 - 22.15.7.4 the resource met the condition in 22.15.3.6 and the resource's simulated as-offered energy LMP is greater than the resource's simulated reference quantity energy LMP by the lesser of 100% or \$50/MWh.

5.6. Impact Tests: Proceedural Steps and Timelines

(Market Rules: Chapter 7, sections 22,15,18-22,15,26)

The IESO applies impact tests for *energy* and *operating reserve* in accordance with the conditions set out in **MR Ch.7, ss.** 22.15.7-22.15.9, and **MR: Ch.7, s.** 22.15.15-22.15.17, respectively.

Details with respect to the procedural steps and timelines associated with impact tests, including timelines related to first and second notices of *physical withholding* assessments, are set out in **MR: Ch.7, ss.22.15.18-22.15.26**.



Update to the Written Guide

The IESO will replace the written guide for reference levels and reference quantities with a link to draft Market Manual 14.2.

| Reference Levels and Reference Quantities |
|---|
| Here you'll find supporting materials for ongoing one-on-one consultations for reference levels and reference quantities. |
| - Written Guide and Instructions |
| Written Guide April 2021 (clean) |
| Workbook Instructions and Frequently Asked Questions April 2021 (clean) |
| Written Guide April 2021 (redline) |
| Workbook Instructions and Frequently Asked Questions April 2021 (redline) |





August 13 - October 15: IESO outreach and opportunity for stakeholders to submit clarifying questions and written feedback on the MPM batch and conforming changes to the Market Entry batch

Submit questions and feedback to <u>engagement@ieso.ca</u>

September 21-23: Engagement meeting to address questions received to date that may be of general benefit to stakeholders

November/December: IESO to post feedback responses and revised market rules and manuals





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