



Market Renewal Program (MRP): Readiness Plan for Registration Launch and Reference Level Launch

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1. Introduction

The purpose of this document is to prepare external stakeholders for two important launch dates that will impact them prior to MRP Go-Live: Registration Launch and Reference Level Launch.

This document will outline key dates when Market Registration systems and data become available in Production, the activities that Market Participants must and are recommended to perform prior to and after these launch dates, and other considerations they will need to think about when submitting data in the updated registration system.

Although the intent of this document is to support external stakeholders in ensuring that their organization, facility, and resource attributes are up to date before MRP Go-Live, Market Participants are ultimately responsible for complying with all their obligations under the market rules and associated policies that govern Ontario's electricity market. The dates in this plan assume that the final batch of market rule and market manual amendments will be in effect on November 11, 2024, and the MRP Go-Live date is planned for May 1, 2025. The tasks that are noted in this document are expected to occur between June 2024 and March 2025.

2. Registration Launch – Milestones

November 11, 2024: Launch of the Updated Registration System (Registration Launch)

This is the day when the IESO is scheduled to cutover to the updated registration system and workflows for the renewed market and make them available in the Production environment of Online IESO.

November 12, 2024 onwards: Post-Registration Launch Activities

Market Participants will use the updated workflows to enter and verify their registration and authorization data via the Production environment of Online IESO. Market Participants with registration information added to support the renewed market are asked to verify this information to ensure accuracy prior to MRP Go-Live.

3. Reference Level Launch – Milestones

February 1, 2025: Reference Level Launch

This is the day when Market Participants that are subject to Market Power Mitigation (i.e. dispatchable generators, dispatchable electricity storage resources and dispatchable loads) can begin to view their Reference Levels and Reference Quantities and assign a Market Power Mitigation (MPM) Contact in the Production environment of Online IESO.

4. Preparing for Registration Launch and Reference Level Launch

To minimize delays and potential issues encountered by Market Participants at Registration Launch and Reference Level Launch, below is a list of recommended steps they can take to prepare for the launch dates:

- Ensure all contact roles (particularly Applicant Representatives) are up to date in the Production environment of Online IESO. Maintaining user accounts will ensure that Market Participants can view the new MRP workflows and validate authorization and registration data in the updated registration system.
- Provide all required information to the IESO to complete reference level consultations by June 30, 2024. If this is not possible, Market Participants should contact the IESO's Market Power Mitigation (MPM) team to receive support and clarification.
- Participate in all MRP testing phases: Connectivity, Market Trials, and End-to-End Testing. There will be no structured testing of the new registration workflows during the Market Trials test phase. The Sandbox environment of Online IESO however will be available for exploratory testing to allow Market Participants to familiarize themselves with the new registration forms and data parameters.
- Market Participants should review MRP's training materials to prepare for the changes that will be introduced at Registration Launch. If they have not already done so, Market Participants are encouraged to sign up for MRP's [eLearning Modules](#), which provides an overview of how the market is changing for specific participation and resource types.
- From October 5, 2024 to November 3, 2024, the IESO will work with Market Participants to close or cancel as many in-flight market resource records as possible. This is to minimize the risk of data alignment issues during the transition and the number of resource updates that Market Participants may need to re-enter into the system post Registration Launch.

5. Implementation of Key MRP Concepts at Registration Launch and Reference Level Launch

New data, resource type, and participation type for the renewed market will be implemented in the registration system as part of Registration Launch on November 11, 2024. Market Participants should review the following sections to confirm if any of these concepts are applicable to them and what they must consider when submitting this new data and/or forms in Production Online IESO starting on November 12, 2024:

- Submit required Market Control Entities (MCEs); see Section 7.1.
- Register load resources as a Price Responsive Load (PRL) if interested; see Section 7.2.
- Register organization as a new Virtual Trader participant type if interested; see Section 7.3.
- Submit new and updated resource registration parameters in the Production environment of Online IESO; see Section 7.4.
- Review established Reference Levels and Reference Quantities that will be used to validate data submitted by resources as part of the new Market Power Mitigation (MPM) framework in the renewed market; see Section 7.5.

6. Registration Launch Schedule

| Planned Activity Date(s) | Description |
|--------------------------------------|--|
| October 3, 2024 – November 3, 2024 | IESO will prepare and validate registration data that is reflective of the renewed market for Registration Launch. |
| October 11, 2024 | <p>IESO will confirm its decision to proceed with Registration Launch on November 11 and communicate the cutover schedule via the IT Release Schedule and Planned IT Outages page.</p> <p>Note: the final decision however is dependent on the IESO Board's approval of the Final Alignment batch of market rules and market manuals.</p> |
| November 3, 2024 | IESO will send a reminder to Market Participants that access to Production Online IESO will be restricted from November 4 to November 11, 2024. |
| November 4, 2024 – November 11, 2024 | <p>Access to Production Online IESO will remain available subject to the following restriction:</p> <ul style="list-style-type: none"> • No request for additions or changes of generation, load, and storage resource and synchronous machine/motor will be accepted. The IESO will reject these requests. <p>All other changes will be permitted, including activities like:</p> <ul style="list-style-type: none"> • Changes to organization profiles, contact roles, and user accounts. • Changes to other resource types (i.e. stations) and equipment (i.e. switches, transformers, breakers, etc.) • Registration Approval Notices (RANs) with effective dates during this period that were approved prior to November 4th. |
| November 11, 2024 | <p>Registration Launch; cutover to the updated registration system and MRP workflows. Registration-related Market Rules are in effect as of this date.</p> <p>IESO will send a notification to Market Participants at the start and end of the cutover period.</p> |

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| November 12, 2024, onwards | Post-Registration Launch. Market Participants should log in to Production Online IESO to view the workflows for the renewed market, and to validate and maintain their authorization and registration data for the renewed market. |
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7. Reference Level Launch Schedule

| Planned Activity Date(s) | Description |
|--------------------------------------|--|
| June 30, 2024 | Market Participants are asked to have fully addressed any outstanding comments or questions regarding their reference level consultations by this date. |
| June 30, 2024 – November 11, 2024 | IESO will issue preliminary view (PV) reports to Market Participants on a rolling basis between June 30, 2024, and Registration Launch (November 11, 2024). |
| November 11, 2024 | Registration Launch. Market Rules enabling registration of reference levels are in effect as of this date. |
| November 12, 2024 – January 31, 2025 | <ul style="list-style-type: none"> PV reports are issued via Workspaces and are available for review. Market Participants are provided access to the Independent Review Process (IRP) as of this date. Market Participants are given 11 days after the IESO issues the PV report to request an IRP. Once the 11-day period has elapsed, the IESO will register RL/RQs and execute any necessary IRPs. |
| February 1, 2025 | Reference Level Launch. Workflows for entering RL/RQ data are available to Market Participants. All registered RL/RQs will be visible in Production Online IESO. Participants can initiate workflows to request further consultations to update these values and assign an MPM Contact as of this date. |

8. Updating Registration Data Post-Registration and Reference Level Launch

This section shows a list of registration data that can be submitted and validated starting at Registration Launch and Reference Level Launch. Detailed information about a specific registration data can be found in its respective subsections.

Data Submissions Following Registration Launch

Market Participants will be able to perform the following in the Production environment of Online IESO as of **November 12, 2024**:

- Submit Market Control Entities (MCE),
- Change the load resource type to a Price Responsive Load (PRL)*, and
- Provide and/or validate information for the new and updated parameters for generation, load, and storage resources.

Notes:

Registration as a PRL will be effective at least 6 days after MRP Go-Live (i.e. May 7 trade date).

Authorization for Virtual Traders will begin 6 days after MRP Go-Live.

Data Submissions Following Reference Level Launch

Market Participants will be able to do the following in the Production environment of Online IESO as of **February 1, 2024**:

- View and/or trigger an update to registered reference level and reference quantity data for resources, and
- Assign a Market Power Mitigation Contact for the organization.

8.1 Submit Market Control Entities (MCEs)

In the renewed market, Market Participants are required to disclose MCEs during the market registration process. MCEs are people and/or entities that can control or influence the participation of a Market Participant in the day-ahead market (DAM) and real-time market (RTM).

The following types of Market Participants are required to submit MCEs to the IESO:

1. *Generators*, which includes dispatchable and non-dispatchable generators
2. *Wholesale Consumers*, which includes dispatchable loads and price responsive loads (PRLs)
3. *Electricity Storage Resources*, dispatchable generation resource, dispatchable load resource, self-scheduling generation resource, and non-dispatchable generation resource
4. *Energy Traders*, and
5. *Virtual Traders*.

MCEs are mandatory data. Failure to submit this information will prevent Market Participants from requesting updates to equipment, resource, facility and/or organization data in Production Online IESO. Production Online IESO will continue to prompt Market Participants to submit this data until it is entered in the registration system.

For this reason, the IESO strongly recommends for Market Participants to register their MCEs immediately after Registration Launch (by December 31, 2024 where possible) so that subsequent registration updates can be processed and approved before MRP Go-Live.

Instructions on how to submit MCEs can be found in Appendix D of the Guide to Submitting New Registration Parameters and Forms in Online IESO. Market Participants are also advised to review Section 3 of this document to learn about best practices and maintaining their MCE information in Production Online IESO.

8.2 Update Resource Type to a PRL

Non-dispatchable loads may participate in the renewed market as a Price Responsive Load (PRL). PRLs are a new load resource type that allows the registered market participant to submit bids for energy into the day-ahead market but for which the load resource is considered a non-dispatchable load in the real-time market.

For those interested in updating their load resources to a PRL, Market Participants can submit the request between **November 12, 2024 and February 21, 2025**. They can initiate this change by updating the bid/offer type parameter for their load resources in Production Online IESO.

Updates to resource and equipment data will be restricted once a resource elects to become a PRL, and this restriction will last until the specified effective date for the PRL. Therefore, although the system will allow Market Participants to update their load resource type as of Registration Launch, Market Participants are recommended to initiate this change starting in February 2025 to minimize the length of the restriction.

Other Considerations and Takeaways:

- Resources that elect to become a PRL must set an effective date at least 75 days after they submit the request, and this effective date must be at least 6 days after Go-Live (i.e., May 7 trade date).
- Market Participants can cancel their PRL request via Production Online IESO and should do so before **March 21, 2025** to ensure their desired participation is reflected at Go-Live.
- Any demand response provider registered as Price Responsive Load (PRL) is not eligible to contribute to a virtual Hourly Demand Response (HDR) resource.
- A Non-Dispatchable Load (NDL) resource that intends to become a PRL and is a contributor to a virtual HDR resource must work with their HDR resource owner (aggregator) to de-register from the portfolio by the PRL effective date.
- No changes are required for NDL resources that have elected to become a PRL and are registered as a Physical HDR resource.

This change is voluntary but presents an opportunity for Market Participants. The steps on how to update the resource type to a PRL can be found in Section 2.4 of the [Guide to Submitting New Registration Parameters and Forms in Online IESO](#).

8.3 Register as a Virtual Trader

Virtual Trader is a new market participation type that the IESO is introducing as part of the Market Renewal Program. This new participation role will help to drive price convergence between the new Day-Ahead Market (DAM) and the Real-Time Market (RTM). For more information on Virtual Traders, refer to Chapter 11 of the Market Rules and the [Introduction to Virtual Traders](#) training guide.

Existing Market Participants will be able to begin authorization of their organization as a Virtual Trader 6 days after Go-Live.

To become a Virtual Trader in the renewed market, new Market Participants can select this new participation type under the “Intent of Registration” section of the *Register an Organization* form on the IESO’s corporate website. This change will be available at MRP Go-Live.

Existing Market Participants will be able to update their market participation type using the *Manage Participation* form in Online IESO. This change will be available at MRP Go-Live.

8.4 New and Updated Resource Registration Parameters

The IESO will introduce new and updated registration parameters in Online IESO to better reflect operational characteristics of resources in the system. These parameters are described in Section 2.1, 2.2, and 2.3 of the [Guide to Submitting New Registration Parameters and Forms in Online IESO](#).

As part of Registration Launch, mandatory new and updated parameters for generation, load, and storage resources will be established by the IESO using existing registered information of the Market Participant. This data will be loaded into Production Online IESO on behalf of Market Participants.

Optional new and updated parameters for generation, load, and storage resources will have a default of ‘Not Selected’ in the updated registration system. Elections can be submitted by Market Participations after Registration Launch for review and approval.

Market Participants should log in to Production Online IESO to validate and maintain their authorization and registration data after Registration Launch. If a Market Participant does not perform this validation, the IESO-established values will be used at MRP Go-Live until the Market Participant updates the registration data in the system.

It is important to note that changes to resource parameters may trigger a new reference consultation to ensure that the registered Reference Levels and Reference Quantities reflect the current state of the resource.

Considerations for Hydroelectric Resources:

Market Participants with hydroelectric resources on a cascade river system submitted their cascade group and forebay data to the IESO by April 2024. This data will be used as one of the inputs to support Market Participant testing, and it will also be loaded in Production Online IESO at Registration Launch to expedite the registration process. Market Participants who do not submit this data to the IESO will have their hydroelectric resources classified as an independent resource at MRP Go-Live.

Market Participants who wish to update the cascade group and forebay data for their hydroelectric resources can still do so after Registration Launch. This information will need to be provided to their Enrolment Specialist. It is important to note that failure to provide data or submitting a different set of cascade group and forebay data from what was used during reference consultations will impact the Reference Levels and Reference Quantities (RLs/RQs) used at Reference Level Launch. When this change is triggered, Market Participants must notify their Enrolment Specialist and the MPM team as soon as possible to ensure that their Reference Levels and Reference Quantities are reviewed and (if needed) recalculated to accurately reflect their status in the renewed market.

8.5 View and Update Reference Levels and Reference Quantities

Registering reference levels and reference quantities is a requirement for Market Participants with dispatchable generators and dispatchable loads to be able to participate in the renewed market. Market Manual 14.2 outlines how reference levels and reference quantities are determined by the IESO.

The IESO has been involved in one-on-one consultations with Market Participants for some time leading up to Registration Launch to determine reference levels and reference quantities that will be used for their resources. Prior to Registration Launch, the IESO provides draft preliminary view (PV) reports to Market Participants via Workspaces. The draft PV reports communicate the information that Market Participants can expect to see in the PV reports that will be issued following Registration Launch by the IESO.

After Registration Launch, the IESO will issue PV reports to Market Participants via Workspaces. Market Participants will access these files in the same Workspaces folder that were used during one-on-one consultations. Market Participants can contact the MPM team directly to keep their user permissions current in response to staffing changes on the Market Participant side. MPM staff can add or remove access permissions from the relevant Workspace folders at the request of the applicant representative for the resource.

PV reports are issued per resource and communicate the following information to Market Participants:

- the reference levels and reference quantities that the Market Participant requested for the resource; the reference levels and reference quantities that are consistent with the materials provided, given the relevant market rules and market manuals, in the view of the IESO; and
- Any variances between the requested reference levels and reference quantities and the IESO view of the reference levels and reference quantities.

The extensive discussions involved in reference level consultations typically result in no variances existing by the time the PV report is issued, as most issues stem from differences in understanding and are addressed by discussions between the Market Participant and the IESO prior to issuance of the PV report.

After receiving their PV report, Market Participants can request use of the Independent Review Process (IRP) to review the RL/RQ data and variances that exist in the PV report. Market Participants can find more information about the IRP in Market Manual 14.2, section 3.5 and Chapter 7, section 22.8.

The IRP can be requested for a resource up to 11 days after the IESO issues the PV report. To request use of the Independent Review Process, Market Participants will be required to complete and submit an IRP form via Workspaces. This form will be posted on the IESO's public website. A communication will be sent to MRP Contacts once it becomes available.

If an IRP is not triggered within 11 days after the PV report is issued, the IESO will register the RL/RQ data in the Production Online IESO system as reflected in this report. **Approved updates to the RL/RQ data by January 31, 2025, will be visible in Production Online IESO as of Reference Level Launch.**

8.6 Assign a Market Power Mitigation (MPM) Contact

The Market Power Mitigation Contact is a new role that will allow specific individuals from the registered Market Participant organization to participate in mitigation-related activities.

In the renewed market, the Market Power Mitigation Contact can carry out several actions:

- Initiate the Establish Reference Level and Reference Quantity workflow in Online IESO,
- Access the Financial Reference Level Value Report (day-ahead and real-time),
- View registered non-financial reference levels in Online IESO, and
- Support ex-post mitigation for physical withholding assessments and ex-post mitigation for economic withholding on uncompetitive interties.

Market Participants will be able to assign a Market Power Mitigation Contact in Production Online IESO at Reference Level Launch. The same steps to assign existing contact roles to individuals will be used to perform this action in the registration system. Once an MPM Contact is assigned, they will also be able to initiate workflows in Production Online IESO to update the reference levels and reference quantities for their resources. Doing so will initiate another reference level consultation with the IESO.

9. Estimating Prudential Support Obligations Prior to MRP Go-Live

The fundamentals of Prudential Support Obligations (PSO) for Market Participants will not be changing under MRP. However, the underlying prices that inform Prudential Support Obligations for physical transactions will be changing, where Hourly Ontario Energy Price (HOEP) will be retired, and Locational Marginal Prices (LMPs) or the Ontario Zonal Price (OZP) will be used instead to calculate a participant's PSO amount. Thus, Market Participants should be prepared for potential changes in their obligation amounts starting at MRP Go-Live.

To prepare Market Participants for these changes, the IESO will provide an opportunity for participants to calculate their MRP Prudential Support estimates in the Sandbox environment of Online IESO. This feature will be available to existing participants one week after Registration Launch. However, it will not be available for Price Responsive Loads and Virtual Traders as these will be new resource and participation types without historical data that can be used generate PSO estimates.

The obligation amount that will be calculated in the November 2024 PSO estimate will not represent the actual obligation amounts for Market Participants at MRP Go-Live. The actual PSO amount will be calculated and due in May 2025, as part of the normal mechanics of setting and maintaining prudential support in the renewed market. The PSO estimates that will be available in Sandbox Online IESO are intended to be a guide for Market Participants, so they can financially prepare, and secure additional support required to meet potential changes in their future obligation amounts.

The IESO will provide these estimates in a self-service model in Sandbox Online IESO. This feature will be available to individuals with a contact role of *Prudential Requirements Support Contact* in the Sandbox environment. Market Participants will be able to enter their expected MW of activity and other applicable inputs, and the Prudentials module will output an estimate of the PSO required for that level of activity. If Market Participants are uncertain of their future MW levels of activity, they will be able to enter different MW activity amounts and receive multiple estimates for consideration.

As stated above, the ability to calculate PSO estimates in Sandbox Online IESO will not be available for Virtual Traders. However, the methodology for estimating prudential obligations for virtual trading activity can be found in Market Manual 5.4, section 4.2, which provides the formulas for Trading Limit, DPA, and reductions.

Note: The feature to calculate PSO estimates in Sandbox Online IESO will only be **available from November 18, 2024, to December 13, 2024**. After this date, the feature cannot be accessed to allow MRP End-to-End testing to proceed as planned. Market Participants are reminded that none of the information entered in Sandbox Online IESO will be transferred to Production Online IESO. Any values of expected market activity levels will have to be re-entered by the Prudential Requirements Support Contact in Production Online IESO to calculate actual PSO amounts.

Market Participants can consider the following caveats, when using their PSO estimates to make business decisions about Prudentials:

- Historical energy prices used by the Prudential calculation process in Production will be updated with recent price data in the days ahead of MRP go-live, so PSO determinations may change relative to the estimate or to PSO values in effect during the spring of 2025.
- Global Adjustment Class A and Class B rates may change over time, affecting Prudential obligations independently of the MRP project.
- Market Participants' eligibility for reductions in PSO may change between the availability date of the PSO estimate and the MRP Go-Live date (credit rating, good payment history, etc.).
- Market Participants' expectations of their future activity in the market for the post-MRP period may change.

- Uplift values used in PSO estimate may change (although this scenario is not likely to occur).
- Estimated net settlement amounts for energy traders will change (based on most recent invoices) which will inform their minimum trading limit, impacting their Prudentials.

Detailed instructions on how to retrieve PSO estimates from Sandbox Online IESO will be available in Q4 2024. Additionally, the IESO will update the "Guide to Prudentials at the IESO" to reflect MRP changes. This document will be available in the coming months.

10. Sandbox Testing of Registration Workflows

Registration workflows will be available in Sandbox Online IESO for **exploratory testing** only:

- Registration as a Virtual Trader,
- Registration as a Price Responsive Load (except where requests have been received by June 28, 2024, to enable interested Market Participants to participate in Market Trials),
- Market Control Entity form,
- Form to view and/or update Reference Levels and Reference Quantities, and
- Form(s) to submit and/or update registration parameters for specific resource types

Market Participants will be able to submit the above forms. However, the IESO will **not** process and complete workflows that have been initiated by Market Participants during Market Trials

Sandbox Online IESO will continue to be available for Market Participants to update their user and system accounts. This will ensure Market Participants can access information and systems needed for testing activities in the Sandbox environment.

11. IESO Support for Market Participants

General MRP enquiries and feedback should be submitted to IESO Customer Relations at IESOCustomerRelations@ieso.ca. Prior to Registration Launch, a member of the Market Renewal team will be in touch with Market Participants directly to address their concerns. Post Registration Launch, enquiries and updates regarding Market Participant's registration data will be handled by the IESO's registration teams.

Stakeholders who are interested in becoming a Virtual Trader and/or a Price Responsive Load in the renewed market should submit an email to the Market Renewal team at Market.Renewal@ieso.ca. These new market participation and resource types will be available for registration as of Registration Launch but can prepare their organizations by taking part in testing during the Market Trials and End-to-End Testing phases of MRP.

If Market Participants have questions and/or concerns related to their RL/RQ data and Market Control Entities, they can contact the Market Power Mitigation team directly at MPM@ieso.ca to receive additional support.

12. IESO Communication

It is the responsibility of Market Participants to stay up to date on the [Market Renewal Program](#).

In preparation for Registration and Reference Level Launch, Market Participants are recommended to subscribe to the [MRP Newsletter](#) and to elect an MRP Contact for their organization. To nominate an MRP Contact, participants can email the name and contact details of the individual to the Market Renewal External Readiness Team at market.renewal@ieso.ca. These contacts will receive MRP-related updates via email, as well as reminders from the Market Renewal team closer to Registration Launch. Some of these reminders are already listed in Section 5 of this plan.

Market Participants should also review the [IT Release Schedule](#) and the [Planned IT Outages](#) page prior to the cutover to the updated registration system. These channels will continue to be utilized to update Market Participants on the specific schedule and duration of IT-related activities, and how the changes will impact them.

**Independent Electricity
System Operator**

1600-120 Adelaide Street West
Toronto, Ontario M5H 1T1

Phone: 905.403.6900

Toll free: 1.888.448.7777

E mail: customer.relations@ieso.ca

ieso.ca

 [@IESO_Tweets](https://twitter.com/IESO_Tweets)

 linkedin.com/company/IESO