

# MRP Energy Detailed Design Engagement Plan

## Introduction

The following is an engagement plan for the energy stream detailed design of the Market Renewal Program (MRP).

At its core, the MRP is about improving the way electricity is priced, scheduled and procured in order to meet Ontario's current and future energy needs reliably, transparently, efficiently and at lowest cost.

The Energy work stream of MRP will reduce system costs by addressing inefficiencies of the current market design and implement updated approaches to scheduling Ontario's generation fleet. To achieve that objective, the Energy work stream will enhance three market structures that are foundational to committing and dispatching electricity resources: a day-ahead market (DAM), enhanced real-time unit commitment (ERUC), and a single schedule market (SSM).

## MRP Energy Detailed Design Phase

After extensive stakeholder engagement since May 2017, the Independent Electricity System Operator (IESO) published three MRP energy work stream high-level design (HLD) documents in late 2018. Stakeholders were highly engaged in these discussions, with feedback that contributed to design updates in the [HLD documents](#).

Since posting the final HLDs in August 2019, the IESO has shifted its focus to the next phase of engagement, to the detailed design. During this detailed design phase of work, the IESO has initiated an engagement with industry stakeholders on the energy design as a whole, as opposed to engaging on each individual initiative (SSM, DAM and ERUC). This change in approach is necessary in order to more effectively capture the interactions between different components of the design.

This engagement plan outlines the main activities related to completing the detailed design of the energy stream and will be updated as the process evolves.

All comments and enquiries on this engagement can be directed to [engagement@ieso.ca](mailto:engagement@ieso.ca).

## Engagement Objectives

The objective of this engagement is twofold: a) ensure that stakeholders are provided the opportunity to inform the detailed design of the energy work stream of MRP and b) for the IESO to use that input to complete the detailed design documents, and subsequent market rules and manuals, required for implementation of MRP.

The IESO is engaging with stakeholders before and after the release of the draft detailed design documents. Engagement prior to publication of the draft detailed design will focus on specific design topics that stakeholders identified a significant interest in during high-level design or where the IESO requires stakeholder input to inform the draft design document. Additionally, stakeholders will have the opportunity to provide feedback on the draft detailed design documents in full following their publication.

Once the detailed design documents are released for stakeholder review, a scheduled review period with opportunities for discussion and additional engagement will take place in order to finalize the detailed design.

## Stakeholders and Target Audience

The IESO encourages all interested parties to participate in this engagement through interactive in-person meetings, webinars and written feedback opportunities as described in the Approach section below. The IESO anticipates that this initiative will be of particular interest to all active participants in the IESO--Administered Market.

The engagement process will be open and accessible to all stakeholders who are interested in building on the work of the high-level design of the energy work stream and who are in a position to help inform detailed design.

## Engagement Approach

The implementation of this engagement plan is in accordance with the IESO's approved [engagement principles](#).

Throughout the course of the detailed design, meeting materials and detailed design documents will be produced and posted to the energy engagement [webpage](#).

Prior to the release of the detailed design documents, technical sessions were conducted to focus on specific design topics to inform the detailed design documents.

Once the design documents are released, stakeholders will be encouraged to review and provide comments on the design documents and identify any areas of concern or risk prior to the IESO finalizing the design. The next phase of engagement with stakeholders will be the review of

proposed market rules and manuals prior to the review of market rules by the IESO's Technical Panel.

The technical sessions are structured as interactive discussions with industry experts to understand their perspective on detailed design elements.

As a result, the following expectations are required of both the IESO and stakeholders.

### **Expectations of the IESO and Stakeholders**

The IESO remains committed to ensuring that stakeholders who are interested in engaging on the design are able, aware and afforded the opportunity.

The following expectations have been established for the IESO and stakeholders:

#### **Expectations of the IESO**

The IESO will ensure that the required reading materials for any engagement session are posted with enough time to review. For the technical sessions, that material review period has been two weeks prior to the meeting date.

#### **Expectations of Stakeholders**

Stakeholders are expected to review meeting materials provided in advance to facilitate productive discussion on design. The IESO is open to receiving questions or feedback that can be discussed at the subsequent meeting. The IESO will not present on the materials that were shared in advance.

### **Stakeholder Feedback**

Foundational in the IESO engagement framework is to receive and incorporate stakeholder feedback, both written and verbal, where possible.

To provide a review and record of the discussions at the technical sessions, the IESO will post meeting summaries to reflect the main areas of discussion. Stakeholder feedback during the technical session phase of engagement will not be posted or responded to separately. The intention for feedback during the technical sessions is to help inform the detailed design document which will be open to a review phase with feedback posted once the documents have been released. Stakeholders will be afforded an appropriate amount of time to review and can expect an IESO response to that feedback before the design documents are finalized.

### **Detailed Design Technical Sessions**

As noted above, technical sessions on the detailed design were scheduled between September and December 2019 with additional sessions scheduled in early 2020 as required. As additional

dates are scheduled, the IESO will communicate this information to stakeholders through email, the MRP Energy engagement webpage and the IESO weekly bulletin.

**Detailed Design Technical Sessions:**

Date	Design Document	Design Topics
September 27	Market Power Mitigation	Reference Levels, Conduct & Impact Thresholds
November 1	Offers, Bids, & Data Inputs	Non-Quick Start - Lead Time
	Grid & Market Operations	Non-Quick Start - Offer Price Changes
November 14	Offers, Bids, & Data Inputs	Hydroelectric Dispatch Data
November 15	Grid & Market Operations	Linked Wheel Transactions
November 25	Calculation Engines	Constraint Violation Pricing

**Release of the Detailed Design Documents**

The release of the detailed design document will be staggered. Below is the target release schedule of all 13 detailed design documents (note there are 13 detailed design documents plus one overview document):

Released	Detailed Design Document	Description
End of November 2019	Overview	Provides a guide to understanding the different components of the detailed design documents. The overview will identify where content can be found and how the documents are connected.
	Authorization and Participation	Describes the process and requirements for prospective market participants to become authorized to participate in the IESO-administered markets.
	Facility Registration	Describes the requirements for registering facilities and associated resources for IESO administered markets.
	Prudential Security	Describes the prudential support that is required to be authorized as a market participant, as well as the processes for daily monitoring of collateral.

Released	Detailed Design Document	Description
	Revenue Meter Registration	Describes the requirements for registering a revenue meter installation and collecting revenue meter data.
	Market Billing and Funds Administration	Describes the processes for invoicing market participants, receiving and distributing funds and reconciling settlement.
End of March 2020	Offers, Bids, and Data Inputs	Describes the data inputs from market participants and the IESO that are required to produce schedules, commitments, dispatch instructions and prices.
	Grid and Market Operations Integration	Describes how the processes to schedule, commit and dispatch resources are integrated to administer the energy and operating reserve markets, and to ensure system adequacy and reliability.
	Day-Ahead Market Calculation Engine	Describes the core functions of the calculation engine to operate the energy market and operating reserve market in the day-ahead timeframe.
	Pre-Dispatch Calculation Engine	Describes the core functions of the calculation engine to operate the energy market and operating reserve market in the pre-dispatch timeframe.
	Real-Time Calculation Engine	Describes the core functions of the calculation engine to operate the energy market and operating reserve market in the real-time timeframe.
	Market Power Mitigation	Describes the details of the market power mitigation framework that will apply in the day-ahead, pre-dispatch and real-time operating timeframes.
	Publishing and Reporting Market Information	Describes the IESO's responsibilities to produce automated internal and external reports used to facilitate the IESO administered markets and the reliable operation of the IESO-controlled grid.
	Market Settlements	Describes how the IESO will calculate market participant settlement amounts.

### Detailed Design Document – Stakeholder Review Period

Stakeholders are encouraged to review and provide feedback on the draft design documents as they are released in November and March. Each design document has a considerable amount of detail, and stakeholders will have over two months to review and provide comment after each batch is released.

The IESO will not be providing synopses or presentations on the content of the detailed design documents as they are intended to stand on their own. The IESO will provide a feedback form

to assist with the collection and organizing of feedback based on the elements of each design document.

To support stakeholder review and potential feedback on each of the design documents, the IESO will conduct a teleconference or webinar to describe the format of the design document, offer a Q&A opportunity for stakeholders as they begin to read through the documents.

- The timing of this initial call will take place shortly after the release of the design documents in order to support questions of clarity early on in the stakeholder review process
- Conference calls may include the review of multiple detailed design documents depending on the level of complexity/interest

More detailed engagement sessions to discuss the content of any of the detailed design documents may be scheduled approximately four to six weeks after the release of the design documents to discuss issues and rationale or answer questions to inform stakeholder feedback prior to the deadline.

There is the potential for additional meetings throughout the course of the review period to ensure there is adequate time and attention provided for the review of each detailed design document.

For the schedule and meeting specifics, please visit the Energy detailed design engagement [webpage](#).

## **Market Rules and Manuals**

The purpose of the detailed design is to document the intended form of the future IESO-Administered Market at the level of detail required to develop governing documents (e.g. market rules, market manuals). The detailed design will serve as a guide to the changes that need to be implemented in the governing documents, but does not necessarily represent the final specifications or equations that will be used. The IESO may begin drafting market rules and seeking stakeholder input during the development of the detailed design.

This engagement plan will evolve when additional details are available for the timing of the draft market rule language for stakeholder review. There may be opportunities to begin engagement on certain market rule amendments earlier than others; the timing of the engagement on market rules will be better known once the design topic sessions have taken place as well as the stakeholder review of the full sections is complete.

## Market Participant Readiness and Support

Participants in Ontario's electricity market will require training and market trials to ensure they are prepared for the transition into a renewed market with the Energy work stream enhancements in place. As a result, this detailed design engagement phase will include specifics around the training and plans for that market participant support prior to implementation. Due to the level of interaction that will be required with active market participants during this phase, components of the information and planning may begin before the completion of the detailed design phase with the bulk of it taking place between the finalization of the detailed design and the MRP Energy implementation timeline.

For any questions about this plan, or to register for any of the Energy detailed design engagement sessions, please contact IESO Engagement at [engagement@ieso.ca](mailto:engagement@ieso.ca).