

# MRP Detailed Design Overview

Webinar

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December 10, 2019

# Agenda

- What is Detailed Design?
- 13 Detailed Design Documents
- Document Structure: Sections and Appendices
- Engagement Opportunities & Next Steps
- Project Plan
- Q&A

# MRP Energy - Detailed Design

The detailed design documents are intended to inform the future market at the level of detail required to develop market rules and manuals, user requirements and business processes.

# MRP Detailed Design

## What it is:

- The end-to-end functional design for the future energy market
- A level of detail required to support the development of market rules and manuals, processes, procedures and tools

## What it isn't:

- A basis for any commitment, expectation, interpretation and/or decision made by any market participant
- A representation of the final specifications or equations that will be used

# How we got here

- **May 2017 – December 2018:** Robust stakeholder engagement phase on the development of the high level design (HLD) for the three energy stream initiatives: *Single Schedule Market, Day-Ahead Market and Enhanced Real-Time Unit Commitment*
- **August 2019:** Upon review of stakeholder feedback and modifications that were made to the HLDs, the IESO posted final high level designs for the energy stream initiatives which allowed the transition to detailed design
- **September 2019 – today:** IESO and stakeholders participating in technical sessions to better inform the release of draft detailed design documents

# Energy stream – Phasing Timeline

HIGH-LEVEL DESIGN	DETAILED DESIGN	IMPLEMENTATION
3 Initiatives	14 Design Sections	Market Rules & Manuals
Single Schedule Market	Overview	Process Models & Business Requirements
	Authorization & Participation	
	Prudential Security	
	Facility Registration	
Day-Ahead Market	Revenue Meter Registration	Contract Amendments
	Offers, Bids, and Data Inputs	
	Grid & Market Operations	Solution Development
	Calculation Engines (3): Day Ahead Pre-Dispatch Real-Time	Test Planning & Execution
Enhanced Real-Time Unit Commitment	Market Power Mitigation	Market Participant Readiness
	Publishing & Reporting	
	Market Settlements	IESO Readiness
	Market Billing & Funds Administration	

# 13 Detailed Design Documents

Design Document	Released
Overview Authorization and Participation Facility Registration Prudential Security Market Billing and Funds Administration Wholesale Revenue Metering	November 28, 2019
Offers, Bids, Data Input Market Power Mitigation Grid & Market Operations Integration Market Settlement Publishing & Reporting DAM Calculation Engine PD Calculation Engine RTM Calculation Engine	March 2020

# Detailed Design Document Sections

Section & Title		Description
1	Introduction	<ul style="list-style-type: none"><li>Identifies relationship between reference materials, scope, purpose, structure, intended audience and level of detail</li></ul>
2	Summary of Current and Future State	<ul style="list-style-type: none"><li>High level view of the process that exists today, what aspects are changing and why</li></ul>
3	Functional Design	<ul style="list-style-type: none"><li>Describes what is changing and what remains the same</li><li>Identifies dependencies with other design documents</li></ul>
4	Market Rule Requirements	<ul style="list-style-type: none"><li>Identifies required market rule changes</li></ul>
5	Procedural Requirements	<ul style="list-style-type: none"><li>Identifies required market manuals and market-facing procedural requirement changes</li></ul>
6	Business Process and Information Flow Overview	<ul style="list-style-type: none"><li>Describes the current business processes and required changes (includes process/activity maps)</li></ul>



# Detailed Design Document Sections

Section & Title		Description
Appendix A	Market Participant Interfaces	<ul style="list-style-type: none"><li>• Describes current technical MPI and any changes</li></ul>
Appendix B	Internal-Facing Procedural Requirements <i>(internal to the IESO)</i>	<ul style="list-style-type: none"><li>• Identifies changes required to internal procedural requirements</li></ul>
Appendix C	Internal Business Process and Information Requirements <i>(internal to the IESO)</i>	<ul style="list-style-type: none"><li>• Describes the current process and changes to internal IESO business process activities and information flows</li></ul>

# Engagement Opportunities

## Technical Sessions | Detailed Design Documents

(to inform the design documents that will be released in March 2020)

- January 23, 2020      Physical Withholding
- February 6, 2020      Hydroelectric Dispatch Data (Follow-up discussion)
- February 13, 2020      Negative Pricing
- February 27, 2020      Pseudo Units

## Engagement Sessions | Detailed Design Documents

(to support the stakeholder review/feedback of the publically released design documents)

- January 28, 2020:      Authorization and Participation, Facility Registration, Revenue Meter Registration
- February 3, 2020:      Prudential Security, Market Billing and Funds Administration

To register for these sessions, please email [engagement@ieso.ca](mailto:engagement@ieso.ca)

# Feedback and Next Steps

- Stakeholder review and feedback on the first set of design documents is currently underway (documents were released on November 28)
- Feedback forms have been posted for each design documents to help both stakeholders and IESO organize feedback and prepare responses
- Feedback deadlines are staggered to support the time for stakeholder review

Detailed Design Document	Stakeholder Feedback Due	IESO Responses
Authorization and Participation	February 28, 2020	March 20, 2020
Facility Registration		
Revenue Meter Registration		
Prudential Security	March 6, 2020	March 27, 2020
Market Billing and Funds Administration		

Please submit the feedback form to: [engagement@ieso.ca](mailto:engagement@ieso.ca)

# A look ahead

- The remaining design documents planned for March are:
  - Offers, Bids, Data Input
  - Grid & Market Operations Integration
  - Publishing & Reporting
  - PD Calculation Engine
  - Market Power Mitigation
  - Market Settlement
  - DAM Calculation Engine
  - RTM Calculation Engine
- A similar review and feedback phase with opportunities for engagement will be scheduled for these design documents as they were for the release of the November design documents
- Stakeholders will have an opportunity to revisit their feedback that is due for the November 2019 documents earlier if interdependencies require changes to that input

# Questions?