Market Renewal Program

MRP Energy Detailed Design | Engagement Days

August 27, 2020



Today's Objective

- Support stakeholders in their review of the Day-Ahead Market (DAM) Calculation Engine draft detailed design document that is open for feedback until September 24
- Review specific areas of stakeholder interest contained in the design document that may require further clarification or explanation from the IESO
 - With the intention to better inform written stakeholder feedback on the detailed design document



Engagement Process MRP Detailed Design



Detailed Design Release Schedule

Date	Design Document Topics
November 28, 2019	 Overview Authorization and Participation Prudential Security Facility Registration Revenue Meter Registration Market Billing and Funds Administration
March 26, 2020	Publishing and Reporting Market Information
May 5, 2020	 Grid and Market Operations Integration Offers, Bids and Data Inputs Market Power Mitigation
May 11, 2020	Market Settlement
July 27, 2020	Day-Ahead Market Calculation Engine
August 31, 2020	Real-Time Calculation Engine
September 30, 2020	Pre-Dispatch Calculation Engine

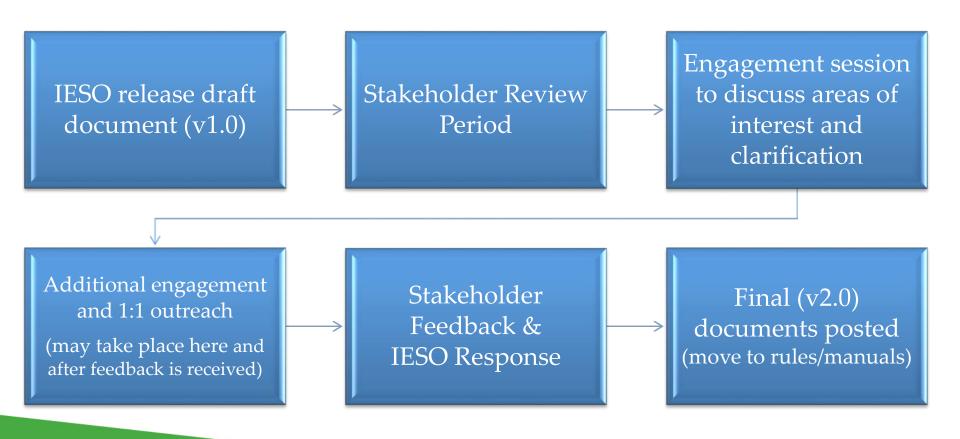


Draft Design Documents (13)

- Stakeholders continue to review draft detailed design documents and have provided feedback on ten detailed design documents already
- The IESO will post responses to stakeholder feedback and will track all changes made to the detailed design documents as the result of stakeholder feedback
- The detailed design is critical in setting the stage for the draft rules and manuals phase of engagement prior to the Technical Panel and IESO Board approval process in 2021

Engagement Process: Detailed Design

The following process will guide both stakeholders and the IESO through the detailed design phase of MRP





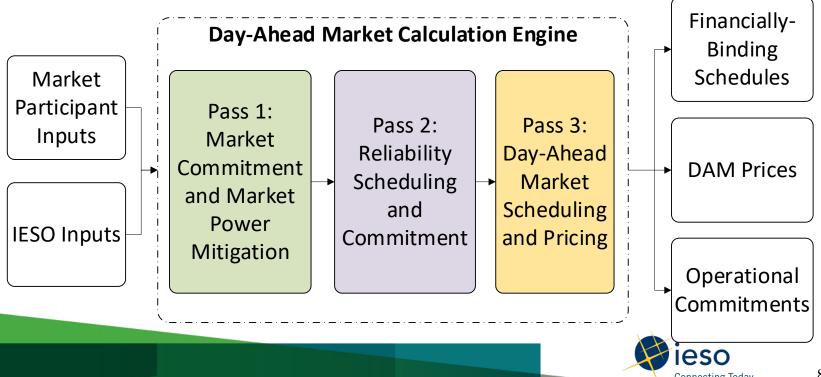
DAM Calculation Engine Draft Detailed Design Document



Day-Ahead Market Calculation Engine

Highlights:

• The DAM calculation engine will produce financially-binding schedules, DAM prices, and operational commitments



Day-Ahead Market Calculation Engine

Highlights Cont'd:

- Similar to today's Day-Ahead Calculation Engine (DACE), the DAM calculation engine will have three passes:
 - Pass 1: Market Commitment and Market Power Mitigation
 - Pass 2: Reliability Scheduling and Commitment
 - Pass 3: Day-Ahead Market Scheduling and Pricing
- The outputs of Pass 1 and Pass 2 will be used as inputs to Pass 3



Day-Ahead Market Calculation Engine

Highlights Cont'd:

- The DAM calculation engine will utilize new inputs from market participants and the IESO
 - Market Participants: New dispatch data parameters for hydroelectric generation resources and Non-Quick Start (NQS) resources
 - IESO: Enhanced network model, new pricing locations for virtual transaction zonal trading entities, and Ontario demand forecasts produced as the sum of four separate area demand forecasts

Questions? DAM Calculation Engine



Next Steps

- **August 31:** Release the Real-Time Calculation Engine design document for stakeholder review
 - A session to support the stakeholder review of this document will take place between September 28-30
- September 24: Deadline for stakeholder feedback on the DAM Calculation Engine design document
- **September 30:** Release the Pre-Dispatch Calculation Engine design document for stakeholder review
 - A session to support the stakeholder review of this document will take place between October 26-28



Thank you

For more information, or to register for upcoming MRP engagement sessions, please contact engagement@ieso.ca or visit the MRP Energy webpage

