

## Market Renewal Implementation Stakeholder Update on Navigating Design Solutions

Karlyn Mibus / Jessica Tang



## Webinar Participation

- Ways to interact in today's webinar:
  - 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
  - Enter a written question/comment in the chat. The host will read it out for you
- Microphones should be muted at all times, unless the host has called on you to unmute yourself



# Background

- Currently, the IESO is drafting the full set of Market Rules and Market Manuals for stakeholder review
- Alongside, the IESO is working on solution development, technical specifications, among other efforts to support IESO and Market Participant readiness
- Within this process of implementing the design, there are issues and opportunities that may need to be resolved, and the IESO wants to be proactive and transparent about how these items are resolved



# Background (Cont'd)

- One of the goals of MRP Engagement is to use stakeholder time and effort wisely, to focus and draw attention to areas of change and to build on the principles of transparency
  - Example of this approach used in detailed design were the technical sessions to gain stakeholder advice prior to full review of the detailed design



## Market Renewal Principles





# Approach

- Update stakeholders quarterly if any design integration issues exist, show how they were resolved, and the rationale behind decisions
- Stakeholders are open to provide advice on the solutions, ask questions, or recommend alternatives to resolve these challenges



## **Design Implementation Solutions**



## Implementability – Ramp Up to MLP

#### Issue:

Modeling a ramp to minimum loading point (MLP) profile of up to 24 hours when establishing a commitment is infeasible due to impact on calculation engine performance and time limitations to produce results.

### Proposal:

Existing Design	New Design
Maximum number that can be submitted is 24 hours	Maximum number that can be submitted is 12 hours

### **Rationale:**

Reducing the maximum number of ramp hours to MLP to 12 hours allows the calculation engine to produce results within an acceptable runtime. Historical assessment shows that less that 1% of commitments require longer ramp times, with the earlier hours involving less impactful MW amounts.



# Efficiency – Energy Ramp Rate (DAM and PD)

#### **Issue:**

Energy ramp rate is an hourly dispatch data parameter. Using the first submitted hourly ramp rate for the entire forecast period may not be an accurate reflection of resource ramping, potentially resulting in less efficient scheduling.

### Proposal:

Existing Design	New Design
Use energy ramp rate from first submitted hour to determine day-ahead market (DAM) and pre- dispatch (PD) schedules for the entire forecast period	Use a dedicated daily dispatch data parameter for energy ramp rate to determine DAM/PD schedules for the entire forecast period

## **Rationale:**

Ramp rates from hourly dispatch data used by real-time scheduling may not be appropriate for DAM and PD. This way, the participant will be able to submit the most accurate ramp rate for the forecast period.



# Implementability – Max DEL in DAM and PD Pricing

**Issue:** When the maximum daily energy limit (Max DEL) is binding, hourly energy schedules in the pricing algorithm can be greater than those from the scheduling algorithm, understating energy prices and creating misalignment between prices and schedules.

#### Proposal:

**Existing Design** 

# When Max DEL is binding, sum of hour T energy<br/>and operating reserve (OR) schedules in pricing<br/>must be less than or equal to the sum of hour T<br/>energy and OR schedules in scheduling.Whe<br/>in pr<br/>energy

## **New Design**

When Max DEL is binding, hour T energy schedule in pricing must be less than or equal to the hour T energy schedule in scheduling; and sum of hour T energy and OR schedules in pricing must be less or equal to Max DEL minus the sum of energy schedules up to hour T in scheduling.

## **Rationale:**

Hourly prices will align with schedules because the pricing algorithm will see the same amount of energy available as the scheduling algorithm.



## Next Steps

- July 15: Deadline for stakeholder feedback on the three design implementation solutions
- September: Next quarterly update on design implementation issues and opportunities





<u>ieso.ca</u>

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca



