

MRP Energy Detailed Design

Design Document: REAL-TIME CALCULATION ENGINE

Stakeholder Feedback Form

Date Submitted: <i>2020/10/30</i>	Feedback Provided By: Company Name: Evolgen (Brookfield Renewable) Contact Name: Julien Wu Phone: [REDACTED] Email: [REDACTED]
Feedback Due: October 30, 2020	

The IESO is posting a series of detailed design documents which together comprise the detailed design of the MRP energy stream.

This design document is posted to the following engagement webpage: <http://ieso.ca/en/Market-Renewal/Energy-Stream-Designs/Detailed-Design>.

Stakeholder feedback for this design document is due on **October 30, 2020** to engagement@ieso.ca.

Please let us know if you have any questions.

IESO Engagement

General feedback on the Detailed Design Document (please expand any section as required)

Evolugen appreciates the opportunity to provide feedback.

As a general recommendation, we suggest that the IESO use the same Time Zone for both the DA and RT calculation engines, be it EPT or EST.

Design Document: Section	Detailed Comments (Areas of Support or Concern)
1. Introduction	
2. Summary of Current and Future State	
3. Detailed Functional Design	<ul style="list-style-type: none">• Section 3.4.1.4 mentions that the RTCE will evaluate hydroelectric generators' forbidden regions, Hourly Must-Run and Minimum Daily Energy Limit, but what

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	<p>about other the hydro-specific data inputs? Is it possible that the RTCE would override or ignore the Max Daily Energy Limit or the Linked Resource/Time Lag/MWh Ratio parameters?</p> <ul style="list-style-type: none"> • Generators providing AGC will not be allowed to offer Operating Reserve in the RT market, therefore the RTCE will not schedule OR for a resource nominated to provide AGC. <ul style="list-style-type: none"> ○ Please clarify if this only applies to the hours where AGC has been awarded, or if it affects the whole day. • Regarding tie-breaking (Section 3.4.1.5), when two or more bids/offers for energy or OR are the same and do not create differences in the optimization runs, we understand that the tie will be broken in one of two ways: <ul style="list-style-type: none"> ○ 1st method: For variable generators only, the daily dispatch order for VG will be used ○ 2nd method: Used for all bids/offers for energy or OR, the tied offers will be pro-rated based on the amount of energy offered <ul style="list-style-type: none"> ▪ Please provide additional information, for example on how this would be affected by units' minimum generation levels, hourly must-run, forbidden regions, and/or other existing or upcoming operational parameters. • Regarding Settlement Price floor: the proposed settlement price floor (-\$100) does not financially incentivize hydrogenerators to reduce output and risk spilling their fuel. This in turn does not help the IESO reduce Surplus in the zone or region. It also eliminates "price separation" below the -\$100 settlement threshold that the IESO count on for managing surplus conditions. Please address these concerns.

Design Document: Section	Detailed Comments (Areas of Support or Concern)
4. Market Rule Requirements	
5. Procedural Requirements	
6. Business Process and Information Flow Overview	