



August 21, 2018

Stakeholder Engagement
Independent Electricity System Operator
engagement@ieso.ca

RE: IESO Market Renewal Program – Energy Workstream – July 19, 2018 Session

Good afternoon:

This letter constitutes the feedback of Workbench Corp. on the material presented by the IESO on July 19, 2018 related to the Market Renewal Energy Workstream elements Day-Ahead Market, Enhanced Real Time Unit Commitment, Combined Cycle Modeling and Settlements Topics. This feedback is organized by these elements.

Day Ahead Market

Workbench appreciates the IESO's amended position on several of the Day-Ahead Market elements previously discussed.

By allowing virtual transactions, IESO enables making participation in the DAM voluntary. Voluntary DAM participation allows more simple management of issues regarding the development of flexible processes to identify and mitigate physical withholding of energy. Workbench continues to hold the position that there be no obligation to offer Operating Reserve, that OR remain a voluntary product and should not be subject to physical withholding mitigation.

In theory, we support the inclusion of virtual transactions on day 1 of DAM, given the IESO's proposed controls. Given that this is a new element to Ontario's market, some consideration should be given to the process of suspending the option or amending these limits if unforeseen negative impacts are identified at go-live.

The IESO's decision to build DAM timelines in Eastern Prevailing Time is another positive development. This allows gas-fired generators to access their natural gas services uniformly across the year, and should allow for better estimation of fuel costs incorporated in day-ahead offers and more firm fuel management once commitments are achieved.

The modification of reporting obligations of IESO in a DAM environment is appropriate, though only in detailed design do specific decisions need to be made.

Discussions around the management of DAM delays or failures brings up some concerns. Where a market delay results in the publication of financially-binding schedules after the gas market's timely window has passed, a gas-fired generator's ability to secure fuel at the offered price may be compromised. It is suggested that the IESO consider the application of cost compensation were market delays impact legitimate cost recovery of generators. As noted by IESO on slide 57 of the deck *Market Renewal – Day Ahead Market, Stakeholder Engagement Session 7*, similar cost compensation is available where administered pricing do not adequately compensate costs.



ERUC

Workbench commends the IESO in the clear communication of new ERUC terminology, including the transition from CMSC to make-whole payments, from RT-GCG to “Cost Guarantee”, and from pre-dispatch timeframe to look-ahead period.

The IESO has done an excellent job communicating the justification for the preliminary decision on the ERUC look-ahead period. The interaction between DAM and ERUC is well explained, and the look-ahead period is reasonable. However, the interaction between the look-ahead period, the advisory schedule, the binding commitment and the physical operation remains cloudy. It would be helpful for the IESO to provide specific examples of resource scheduling within the ERUC.

For example, while the look-ahead period and advisory schedules are clear, it is unclear how a generator would communicate synchronization, ramp-up and ramp-down outside of the advisory schedule. An advisory schedule may show a combined cycle model unit with a financially binding ERUC commitment 4 hours out. The resource’s lead time may vary over the day, depending on the hot/warm/cold status. The lead time of the physical resources that make up that scheduled combined cycle model unit will vary from one another. Will the advisory schedule include assumptions on synchronization and ramp, or will the resource will need to schedule its physical units to synchronize and ramp to meet that obligation? Will mandatory window offer submissions for ramp be permitted for the purpose of meeting a schedule? Where synchronization happens mid-hour to meet an hourly schedule MLP requirement, is the commitment period determined after synchronization? How will these ramp-up and ramp-down offers, price and quantity, impact the mitigation criteria? Operating examples would be helpful to allow market participants to better evaluate the impact of preliminary design decisions prior to moving toward detailed design.

Combined Cycle Modelling

Workbench thanks the IESO for acknowledging the challenges that exist in the modeling of combined cycle resources in the current day-ahead and real-time market processes, and for taking steps to address these challenges before using flawed models to create financially binding operating schedules. We look forward to more discussion on this topic.

Settlement Topics

The complex nature of settlements does not lend well to simple examples. We appreciate the IESO taking the time to provide specific scenarios and look forward to studying more complex examples as we delve deeper into detailed design.

Thank you for your consideration of this feedback. We look forward to the next Energy Stream session in September.

Sincerely,

Heather Sears
VP, Gas and Power Services
Workbench Corp.