

# Market Renewal Enhanced Real-time Unit Commitment (ERUC)

## Meeting 3: Response to Stakeholder Feedback

Following the November 27th Day-Ahead Market and Enhanced Real-time Unit Commitment stakeholder meetings, the IESO invited stakeholders to provide comments and feedback on a series of design options.

The IESO received feedback from:  
Powerful Solutions

This feedback has been posted on the IESO stakeholder webpage for this engagement.

### Note on Feedback Summary

The IESO appreciates the feedback received from stakeholders outlining their preferred approach or recommendation on different aspects of the ERUC design. These have been noted and will be considered as the engagement moves toward making preliminary decisions. The IESO has provided a summary table below, which outlines specific feedback or questions for which an IESO response was required at this time.

### Stakeholder comments and IESO responses

| Design Element     | Company            | Stakeholder Feedback  | IESO Response  |
|--------------------|--------------------|---|--|
| Bids/Offer Changes | Powerful Solutions | During the presentation, it was stated that suppliers can change offers and prices from DAM up until two hours before Real Time Dispatch. What is the rationale for allowing this flexibility when it increases uncertainty in both price and quantity of supply? | The DAM provides financially binding schedules for supply, and hedge for loads against price volatility in the real-time market (RTM) caused by changes in supply, demand as well as system conditions.<br><br>If a resource's real-time generation does not deviate from its DA schedule, it will not be affected by RT |

| Design Element     | Company            | Stakeholder Feedback  | IESO Response   |
|--------------------|--------------------|---|---|
|                    |                    | <p>The IESO and relevant stakeholders should consider that in all other commercial markets, supplier commitment to deliver products on time and at the price offered is a keystone of supplier performance. It is recommended that the IESO and relevant stakeholders adopt this philosophy in the electricity sector. This would require generators to commit to reliably deliver hourly energy, and ancillary services at the price offered in the Day Ahead Market. Replacement generation to cover forced outages, deratings or variations in market forecast would come from resources identified next in the DAM stack.</p> | <p>prices. If it does deviate and the resource does not produce at least its DA schedule, it is subject to buying back the reduced MW at the real-time price. Any decision to change offers by suppliers should reflect changes in their operating cost as well as the potential impact of buying back portions of their day-ahead schedule. Providing flexibility for market participants to update offers following the close of the DAM will allow them better evaluate their real-time capabilities and risks, for example changes in fuel prices will impact resources that have not secured their gas.</p> <p>A RTM reflective of the updated offers provides better signals and incentives for market participants to closely follow the IESO dispatch instructions. It is not expected that these offer changes following the close of the DAM will have material impact on the overall electricity market settlements.</p> <p>While recognizing the benefits of providing offer flexibility, the IESO needs to apply restrictions to offer changes that can increase uplift costs and allow the exercise of market power, which is in the scope of ERUC’s Design Element 10.</p> |
| Bids/Offer Changes | Powerful Solutions | <p>With the uncertainty created by allowing suppliers change their offers and prices from DAM up until two hours before real-time dispatch, how much additional Operating</p>   | <p>The IESO is mandated by reliability standards to schedule a certain amount of operating reserve. The amount of reserve is usually based on the single largest contingency. It is not expected that the IESO</p>  |

| Design Element     | Company            | Stakeholder Feedback  | IESO Response   |
|--------------------|--------------------|---|---|
|                    |                    | Reserve does the IESO need to carry to ensure reliability?  | needs to carry additional reserve as a result of allowing market participants to update their offers following the close of DAM.  |
| Bids/Offer Changes | Powerful Solutions | Suppliers that offer flexibility services provide additional value to the IESO in managing supply and demand on a real time basis. Ideally, the value of Operating Flexibility should be integrated into the evaluation of DAM market bids.   | Currently, the IESO co-optimizes energy and operating reserve in the DACP and RTM. Other ancillary services such as AGC (regulation) are procured through contracts. Enabling system flexibility is one of the initiatives that the IESO is undertaking.  |
| General            | Powerful Solutions | The ERUC economic evaluation should consider the amount of Operating Reserve that is provided based on the difference between the generator's Maximum Load Point (MxLP) and Minimum Load Point (MnMLP).   | ERUC will be a security constrained unit commitment, jointly optimizing energy and operating reserves over the entire timeframe of the look-ahead period based on the energy and operating reserve requirements. A market participant may choose to offer the available capacity between the Maximum Load Point and Minimum Load Point as energy, operating reserve or a combination of both. |
| General            | Powerful Solutions | The whole purpose of committing on-line resources is to provide operating flexibility and operating reserves to meet IESO requirements. Therefore RT-GCG payments should consider not just costs, but also that a unit that provides more operating reserve and higher ramp rates will provide increased value to the IESO than a unit with less flexibility. | See the two previous responses. In addition to energy and reserve offers, ERUC will take into account physical characteristics of the resources. For instance, with two resources available with the same cost offers, based on hour-to-hour system ramping needs, ERUC will commit a faster resource that can satisfy the ramping needs.   |