

Peak Power Energy

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Independent Electricity System Operator

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Comments on the IESO Single Schedule Market High-Level Design

Peak Power would like to thank the IESO for the extensive engagement it has done to date and for the opportunity to provide comments. Our comments and clarifying questions are below:

Comments

- 1) **Congestion Rents** – We do not believe that the current Congestion Rents Design creates appropriate incentives for loads. Peak Power does understand the desire to ensure that customers in a volatile zone are not punished for their geographic predisposition, however, we believe that the Congestion Rent Design must also not distort incentives for flexible loads to respond to system needs. Under the current system, this is possible, as loads that respond to volatility triggered by congestion may see their disbursements reduced by a similar amount at the end of the quarter. As a result, they will have incurred depreciation on their asset, provided value to the grid and received no compensation. We believe that this misalignment of incentives can be easily addressed by disbursing rents based on energy consumption instead of expenditure.
- 2) **Negative Pricing** – IESO has said that if negative pricing is determined to be an issue, it will assess appropriate options to address it. Peak Power would like the IESO to provide additional information on what criteria would be used to assess if negative pricing is an issue and what options the IESO might consider in the future to address it. The potential for the IESO to dramatically alter market rules in the future based on ill-defined criteria is a regulatory risk for our current and future assets in the province of Ontario.
- 3) **Uplift Charges** – Peak Power acknowledges that that uplift charges should be paid by those engaging in activities that cause them. For example, when an energy storage asset operator dispatches its asset to charge without a signal from the IESO, it should pay any charges that typically result from energy withdrawals. However, when an energy storage asset is withdrawing in response to an IESO signal (I.E. Dispatch Load Up, or Regulation Down signals), the asset is behaving as a generator and should therefore be excluded from charges generally associated with consumption by loads.
- 4) **Energy Limited Resources** – Peak Power would like to note the need for design elements specific to energy limited resources (ELRs) to be discussed in the Detailed Design phase of Market Renewal. We look forward to reviewing the detailed design for ELRs.
- 5) **Minimum Asset Size and Asset Aggregation** – Peak Power and other energy storage developers are building a fleet of assets where many of them do not meet the IESO minimum required size of 1MW. We feel that this prevents valuable assets from contributing to the Ontario grid at

times when they might be needed most. Does the IESO intend to review rules on minimum generator size and the participation of virtual/aggregated assets as part of its detailed design?

- 6) **The Need to Value Ramp Rate** – Given the lack of flexible resources in Ontario, and the fast ramp rate of many energy storage technologies, we believe that there may be a need for a mechanism to value the response rate of the growing energy storage fleet (and any other technology capable of fast response) beyond the current 10-Minute Spinning Reserve price.
- 7) **Value of Embedded Generation** – Peak Power recognizes that the IESO does not have visibility into or jurisdiction over assets located on the distribution system. However, we want to note that flexible assets embedded within distribution networks have distinct value within the electricity system and believe that the IESO should work with the OEB and Ontario utilities to ensure that dispatchable assets located within distribution assets can not only be dispatched according to market signals, but also be compensated for the particular value they bring.

Clarifying Questions

- 8) Will the IESO be establishing separate Operating Reserve Requirements for each transmission zones?
- 9) Are penalty prices going to be paid to generators who help alleviate the constraints or are these only for use by the DSO?

We look forward to continuing to engage with the IESO and others on Market Renewal. Please let us know if you have any questions for us specific to energy storage or the comments above.

Sincerely,



Michael Pohlod
Director, Power Markets