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Interim Energy Storage Design Proposed Market Rules

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Purpose and Summary

- Purpose of Item
 - Recommend interim storage rules for IESO Board approval
- Executive Summary
 - Market rule amendments are required to implement an interim design to integrate energy storage resources within IESO markets
- Significant Issues, Risks and Opportunities
 - Clarifying and defining participation options for storage in today's markets is a necessary step for future storage integration efforts.



Market Rules for the Interim Design

Do the market rules make clear the requirements for storage resources in	Current Market Rules	Interim Design Market Rules
the registration and commissioning processes?	×	✓
sharing static and real time data?	×	✓
providing real time energy and OR?	×	✓
providing ancillary services?	×	✓
participating in the capacity auction?	✓	✓



Background: Technical Panel

- The Technical Panel voted unanimously to recommend these interim rules for consideration by the IESO Board
- With respect to the interim rules, Technical Panel members sought clarity on consistency with the capacity auction to be held in December which will be supported by a versioning strategy that applies the version of the rules in effect when a resource clears the capacity auction
- Other comments related to longer term efforts to enable storage to more fully compete to provide reliability services



Stakeholder comments

- Overall support for an interim period along with the interim design proposals to expedite the participation of energy storage resources
- Appreciation of the tool limitations that necessitate an interim design, but a desire for the IESO to address these limitations quickly, for both pure storage resources and also hybrid resources (e.g. combination of renewable and storage facilities)
- Market Surveillance Panel among the many stakeholders calling on the IESO to move quickly on the enduring design



Recap: Markets Committee

- The interim storage design was introduced to the Markets Committee in October. Key discussion topics included:
 - Facilitating entry of a new resource type will support a more competitive market providing greater ratepayer value.
 - The interim design is an initial step with more work required to upgrade IESO tools and processes to capture the full value that can be provided from storage.
 - Other resource types also have the potential to provide ratepayer value but require investments to facilitate; i.e. hybrid resources which combine storage with generation.



Next Steps/Implementation

- December 9 IESO Board consideration
- January 18 Proposed effective date of market rules
- 2021 Phase II Integration with Market Renewal
- TBD Enduring Design



Appendix

The proposed market rules have been split thematically into six proposals;

- R00: Updates to defined terms
- R01: Participation and connection requirements
- R02: Power system reliability
- R03: System operations, physical markets and settlements
- R04: Interim design
- R05: Miscellaneous changes

