Memorandum

To: MARKETS COMMITTEE

Presenter: Michael Lyle, Vice President, Legal Resources and Corporate Governance

Chair, IESO Technical Panel

Date: May 31, 2022

Re: Updates to Real-Time Monitoring Requirements (Market Rule Amendment MR-00471-R00)

Purpose of Item: Recommendation for Approval to the Board

Executive Summary:

The IESO is seeking a decision from the IESO Board on a proposed market rule amendment that will require certain generator and transmission facilities to provide synchrophasor data to the IESO. (MR-00471-R00). The Technical Panel unanimously recommended this proposal to the IESO Board for consideration.

Significant Issues, Risks and Opportunities:

This initiative will enhance the IESO situational awareness which is a necessary step to maintain reliability and improve resiliency as the electricity grid transforms to become an increasingly dynamic and stressed power system. This initiative will result in additional costs for applicable generator and transmission facilities. The IESO launched a stakeholder engagement in Q2, 2020 and held 1:1 meetings with market participants who will be most impacted with the change. The stakeholder community is supportive of the



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change. The proposed market rules were updated based on stakeholder feedback, and the December 31, 2024 implementation date is agreed to by stakeholders.

Background:

Effective use of Phasor Measurement Unit (PMU) technology will enhance IESO situational awareness which is a necessary step to maintain reliability and improve resiliency as the electricity grid transforms to become an increasingly dynamic and stressed power system. PMU data is more comprehensive, accurate, granular and consistent in quality than existing data supplied to the IESO. PMU data also facilitates sharing and viewing a wider portion of the interconnected grid for Ontario and neighbouring jurisdictions.

Additional information can be found on the stakeholder engagement <u>webpage</u>.

Proposal and Analysis

The proposed changes add requirements in the market rules that will enable the collection of synchrophasor data by the IESO for use in operational and planning purposes. In order to provide PMU data, generators and transmitters will need to create or leverage existing real-time data links with the IESO and install new PMUs or leverage existing equipment.

Next Steps / Implementation:

I recommend that the Markets Committee recommend that the Board accept the unanimous vote and recommendation of the Technical Panel to approve market rule amendment MR-00471-R00: Updates to Synchrophasor Monitoring Requirements with an effective date of December 31, 2024 in order to ensure a smooth transition and successful project implementation for generators, transmitters and the IESO.

Requested Committee Resolution:

The Committee is asked to pass the following resolution:

CONCERNING MR-00471-R00: Updates to Synchrophasor Monitoring Requirements, which is a market rule amendment to require certain generator and transmission facilities to provide synchrophasor data to the IESO.

WHEREAS the IESO engaged with the Technical Panel and incorporated their suggestions into the proposed market rule amendment.

WHEREAS the Technical Panel voted unanimously to recommend MR-00471-R00 for approval by the IESO Board.

NOW THEREFORE the Markets Committee of the IESO Board recommends MR-00471-R00 for approval by the IESO Board, to come into effect on December 31, 2024.

Michael Lyle

Cc: IESO Records

Encls.

- a. Market Rule Amendment Proposal form
- b. Technical Panel Materials
 - i. Memo to Technical Panel from IESO staff
 - ii. TP member Rationale
- c. Stakeholder feedback summary, stakeholder engagement and Technical Panel
- d. Consumer Impact Assessment