

Feedback Form

Updates to IESO Monitoring Requirements: Phasor Data – September 21, 2021

Feedback Provided by:

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Following the September 21, 2021 webinar to discuss the synchrophasor technology, the IESO is seeking feedback on the changes made in red text in the proposed Market Rules and Draft Market Manual since our last November 19, 2020 engagement session. The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation and supporting materials can be found under the September 21, 2021 entry on the [Updates to IESO Monitoring Requirements: Phasor Data webpage](#).

Please provide feedback by October 12, 2021 to engagement@ieso.ca. Please use subject: *Feedback: Phasor Data*. To promote transparency, this feedback will be posted on the [Updates to IESO Monitoring Requirements: Phasor Data webpage](#) unless otherwise requested by the sender.

Thank you for your time.

Proposed Market Rules and Draft Market Manual

Topic	Feedback
Please provide any comments on the changes made in proposed Market Rules.	<p>In the “Synchrophasor Data Requirements” table of Appendix 4.15 of the draft Market Rules, the IESO identifies a set of requirements applicable to generation facilities “unless exempted by the IESO”. OPG suggests that any exclusions to the Synchrophasor Data Requirements should be explicitly stated in the Market Manuals or Rules, rather than subject to “exemption”. The Market Rule exemption process is lengthy and should be avoided by appropriately identifying exclusions in the rules or manuals up front. OPG encourages the IESO to ensure the Market Rules and Manuals provide explicit enough direction, flexibility, and exclusions to facilitate the development of Phasor Monitoring Units (PMUs) at existing facilities.</p>

Please provide any comments on the changes made in red text in proposed requirements and specifications listed in the draft Market Manual.

Section 1.5

- Paragraph two lists “infrastructure required” to provide synchrophasor data. This list should include measuring devices such as instrument transformers.

Section 2.1, Table 1, Attribute

- *Measurement Point:* The requirement outlines exclusions as follows:

“Generators in (1) and (2) are not required to provide the synchrophasor data if: The generation facility is not a BPS station or has no connection point voltage > 200 kV.”

Based on the IESO’s stakeholding discussions, OPG’s understanding of the requirement is that a generator must meet both criteria (i.e., “is not a BPS station” and “has no connection point voltage > 200kV”). If OPG’s interpretation is correct, more appropriate wording would be:

“Generators in (1) and (2) are not required to provide the synchrophasor data if: The generation facility is not a BPS station ~~or~~ **and** has no connection point voltage > 200 kV.”

- *Time-Tag Accuracy:* OPG suggests removing the requirement for less than one microsecond accuracy if this requirement is not critical to the IESO’s goals. If a facility can achieve a Total Vector Error of less than 1% (as stated in the *Data Format* attribute), OPG feels that a time-tag accuracy requirement of one microsecond is unnecessarily limiting.
- *Data Format:* OPG suggests the IESO allow flexibility in this requirement for existing PMU devices that can provide the required synchrophasor data, but in a form other than IEEE (i.e., DNP3 protocol or Modbus). This flexibility could be included in the Market Manual via a statement such as “approvals will be reviewed by exception or on a case-by-case basis.”
- *Instrument Transformers:*

Please clarify whether metering instrument transformers (specifically current transformers (CTs)) are acceptable for the PMU solution.

Can market participants use CTs on the neutral side of the generator winding of a transformer as part of the PMU solution?

Can market participants use of a combination of transformer high side current and low side voltage (generator output transformer), and allow the IESO to calculate the required PMU measurements?

Topic	Feedback
	<p data-bbox="532 170 802 201"><u>Section 2.2, Figure 4</u></p> <ul data-bbox="581 226 1511 352" style="list-style-type: none"><li data-bbox="581 226 1511 352">• The figure identifies limits on active power (MW). This does not align with the requirements under the “Measurement Point” attribute in Section 2.1, Table 1, which specifies MVA. Please clarify whether the requirements are based on MW or MVA.

General Comments/Feedback

OPG appreciates the detailed stakeholding between the IESO and market participants. Additional discussions should take place with respect to the designation of some attributes as "Required" vs "Preferred".