

IESO Clock Drift Policy

Revenue Metering Standing Committee & Metering Service Providers Users Group

May 16, 2017

Maintaining Meter Clock during Power Outage Event

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January 17, 2017

Background

The purpose of this communication is to identify the IESO's processes and procedures used to identify and address issues when the meter's clock is not maintained during a power outage event.

Meters on the IESO's Conforming Meter List have an internal battery backup which is used to maintain the meter clock during a power outage event or depressed voltage. These functional requirements are specified in the Wholesale Revenue Metering Standard – Hardware, section 5.4.2, Requirements for Main and Alternate Meters, Built-In Battery Backup.

IESO systems verify the meters clock by comparing meter time to system time during interrogation. When meter time and system time differs more than 5 seconds but less than 59 seconds, the IESO systems will synchronize the meter's clock.

If a condition exists where meter time and system time differs 60 seconds or more, IESO systems will not synchronize the meters clock and a Meter Trouble Report (MTR) will be issued, identifying the time drift.

Meter time drift greater than 60 seconds is associated with a power outage event to the meter where the meter is unable to maintain time during the outage. Failure to maintain time during power outage events is a malfunction of the meter, associated with the meter's backup circuitry. The IESO systems do not monitor meter battery status via event status. Battery status events are identified after power outage events using internal IESO reports.

Meter Clock Drift

The IESO market rules require defects or malfunctions be addressed as soon as practicable either by replacement or repair (Chapter 6, section 11.1.2). To ensure that meters are maintained in good repair and to support reliable data reads, the IESO will be utilizing the following procedure to verify that clock drift malfunctions are identified and addressed.

Effective immediately, meter clock drift issues will be monitored as follows:

1. For each incident identified, a clock drift MTR will be issued.
2. Meter Service Providers will be provided up to two opportunities to address the malfunctioning meter clock.
3. If the issue is not addressed after the second MTR and a subsequent clock drift MTR is identified, an MTR to remove and replace the meter will be issued and the incident will also be added to the conformance monitoring process for resolution confirmation. Each clock drift conformance issue will be reflected on the MSP's Monthly Performance Report.
4. Meter clock drifts will be monitored on a rolling three year period.

Should you have any questions regarding this communication, please contact Mohamed El-Madhoun, Supervisor, Metering Installations at Metering.Installations@ieso.ca.

Conformance Monitoring - Initial

- 24: Number of Conformance Monitoring request opened with an end of April deadline
- 19: Number of initial Conformance Monitoring requests closed
- Extensions granted:
 - Remote locations
 - Needed extra week or two to address
- IESO is monitoring status

Conformance Monitoring - Additional

- 9: Number of new Conformance Monitoring opened as a result of the time drift policy
- 5: Number of new Conformance Monitoring requests closed
- 4: Number of new Conformance Monitoring remaining opened
 - Deadline

Questions

