

Time Synchronization – PSI Recorders

RMSC Meeting
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Richard Zaworski



q MR Chapter 6, section 11.2.2

- The IESO shall synchronise each meter clock to within +/- 5 seconds of eastern standard time in the Province of Ontario, or to such greater standard of accuracy as can be reasonably achieved by the IESO, at the time of commissioning of a metering installation and thereafter whenever it reads the meter.

q This is a problem for PSI recorders - issues related to MV90 autotimeset function.

- IESO successful in performing manual time set

q To temporarily address this issue, IESO proposes:

- **Disable autotimeset flag in the master file for all PSI recorders**
- **Identify all PSI recorders whose time drifts more than 20 seconds. This will be done on a daily basis – time slippage report.**
- **Production staff will force a manual timeset for all PSI recorders identified in the time slippage report.**
 - ü **Time drift will be maintained within +/- 20 seconds**
 - ü **In cases where a manual timeset is unsuccessful and time drift exceeds 1 minute, and MTR will be issued.**

- q **574 PSI recorder currently registered with IESO**
 - **Combination of PSI-100's and PSI-200's**
- q **During daily interrogations, MV90 fails to synchronise time (autotimeset) for majority of PSI recorders**
 - **Error code 23 – Checksum Error**
 - **Error code 24 – Protocol Error**
- q **All failures result in an MTR that has to be reviewed manually**
- q **Creates unacceptable burden on system and production staff**
- q **Currently being investigated with ITRON**

- q Proposal to be in effect for an extended period of time – 6 months.**
- q Negligible impact on metering data – PSI are very good at keeping time and very few recorders will drift beyond the proposed 20 second threshold.**
- q Number of PSI recorders in the market is decreasing – as meters are upgraded.**
- q Is the RMSC in agreement with this proposal?**