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Revenue Metering Sub-Committee

Minutes of the [10th] Meeting of the Revenue Metering Sub-Committee

8 March 2005, 9:00 to 3:00
IESO Skymark Training Room

Attendees:

Randy Church, HydroOne
Matt Weninger, Guelph Hyrdo
Vito Genovese, Hamilton Hydro
Vlad Stanisic, OPG
Alex Lunycz, Rodan
Paul Grod, Rodan (part)
Kevin Myers, Veridian
Graham Henderson, HydroOne (part)
Tom Wasik, Enersource
George Rosatti, Enersource
Ron Merrett, Great Lakes Power
Doug Currie, HydroOne
Patrick Guran, Powerstream
Julio Lopez, Enerwise
Bob McBean, Falconbridge
Keith Rye, Peterborough Utilities
Bunli Yang, E4
Rowan Jones, IESO
Richard Zaworski, IESO
Tuire Pickering, IESO
Dave Wilkinson, IESO
Silviu Motoc, IESO
Doug Thomas, IESO
Rayhan Malik, IESO
Carmela Phillips, IESO (part)

1. Items from Last Meeting

1.1. Metering for small generators. The proposed Market Rule amendment has been approved by the Technical Panel and is presently scheduled to go to the IESO Board on 1st April 2005.

1.2. Harmonics in compliant meters. The IESO is investigating this issue further and is presently waiting for a response from a manufacturer.

1.3. MTRs due to reclosure. Consideration being given to a future MTR working group as approx. 80% of validation errors is power outages.

1.4. Falconbridge Recommendations.

1.4.1. Blondel conformance – neutral grounded through a high impedance exclude from count. No definition of “high impedance”. Referred to next meeting.

1.4.2. IT failure in an existing installation, why not allow a like-for-like replacement under all circumstances without triggering the “substantial upgrade”. The Sub-Committee agreed in principle. The IESO will review its definition of substantial upgrade.

Revenue Metering Sub-Committee of the IESO
Committee Chair: Rowan Jones
rowan.jones@ieso.ca

1.4.3. Revised definition of enclosure was covered by a separate presentation (see item 9 of these minutes).

2. Update on seal expiry progress.

2.1. Present status of 2003/2004 seal expiry.

2.1.1. A total of 777 meters seal expire in years 2003 and 2004

2.1.2. So far 404 metering installations have been upgraded (cf. 292 in Nov 2004)

3. MACD compliance update

3.1. Presentation by the IESO (see IESO non-conforming meters update.ppt).

3.1.1. The IESO updated the group on the present status of meter upgrade compliance.

3.1.2. It was noted that 13 out of 75 did not self report.

3.1.3. It was commented that MMPs knew that metering obligations had to be met.

3.1.4. MACD noted that documentation is required to prove that an MMP had no control over a delay (to upgrading).

3.1.5. MACD advised that the principles used in assessing non-compliance will not be made public.

4. IESO-HONI 2005 Metering Plan

4.1. Presentation by the IESO (see IESO-HONI 2005 Metering Plan.ppt)

4.2. The group requested that a report be brought back to them on the findings as soon as possible after the end of the process.

4.3. There was a concern in the group that any form of stakeholder consultation may cause participants to halt meter upgrades and may also create uncertainty amongst MMPs. The IESO stated that this was not the intent – work on upgrading had to continue and that talking to participants to see if there is a better way of meeting the requirements of the rules is not reason enough for a stay of non-compliance. MACD confirmed that while the consultation is happening, MMPS with NABs are still in non-compliance.

4.4. It was noted that the bulk of the meter upgrade progress to date has been outside of HONI TS's.

5. Toronto Hydro Bulk Metering Proposal

5.1. For information, see attached file from Toronto Hydro – "IESO Presentation – Revenue Metering Subcommittee.ppt".

6. EU Reports and Commissioning

6.1. Presentation by the IESO (see Commissioning_and_End-to-End_Testing.ppt)

6.2. Concern is the relative high number of errors related to the commissioning of metering installations.

6.3. The IESO to convene an MSP working group to improve commissioning and to create detailed procedures.

6.4. The intent is to update the manual prior to the next baseline.

6.5. There was general agreement with no objectors – IESO to proceed to convene the working group.

7. Settlement TLFs

7.1. Presentation by the IESO (see Settlement Principles with TLF.ppt).

7.1.1. The IESO gave examples of settlement in the wholesale market using TLFs for embedded participants.

7.1.2. The IESO stated that the intent is to have typical settlement examples in a market manual to allow all participants to see the settlement principles being applied in the wholesale market.

7.1.3. Some of the examples shown distinguished between TLFs for embedded customers and TLFs for embedded distributors. The IESO was advised by the group that this distinction may not exist. The IESO will revise accordingly.

7.1.4. The group noted that there were some concerns about the TLFs imposed at the time of meter upgrade. In reply the IESO stated that TLFs are approved by the OEB, not the IESO. The IESO is not party to the rate order for TLFs.
7.1.5. There were no objections from the group to moving forward on these principles and including them in a market manual.
7.1.6. The IESO confirmed that it had the technical capability to use radial line losses rather than TLFs, but such a change would require approval of the OEB.
7.1.7. There were no objections to the proposed principles – IESO to proceed with inclusion in the market manuals.

8. Small Loads

8.1. Presentation by Rodan Energy & Metering Solutions (see Presentation to the IMO re Small Loads (Mar 8-05).ppt)
8.2. Proposal is to use the same standards for small loads as for small generators – same limits of 2 MW or 17 GWh p.a.
8.3. The advantage of the proposal is that it would allow small customers to participate in the wholesale market should they wish to do so.
8.4. A concern raised is the consequences of a metering installation failure. In the case of a generator they have an incentive to fix the meter as they do not get paid. For small loads there is less incentive as they presumably still consume even though the meter no longer works. Rodan suggested settling on 1.8X nameplate rating of the transformer until the meter is fixed.
8.5. It was noted that existing MMPs would benefit from the 2 MW limit for some points like station service.
8.6. The concern was raised that considering the pending smart meter initiative by the Ministry it was premature to make these changes. This was the prevailing sentiment and the item was deferred to the next meeting.

9. DS Shack

9.1. Presentation by the IESO (see Meter_Enclosures.ppt)
9.2. The IESO suggested a new definition of "enclosure". No objections from the group.
9.3. Item to be discussed at the upcoming IESO-MSP User Group Meeting.

10. Measurement Error Correction for ITs

10.1. Two presentations – HONI and the IESO.
10.2. HONI Proposal (see RMS-IT MEC.ppt)
10.2.1. HONI proposal is to exempt all legacy ITs from an error correction due to unknown accuracy or accuracy greater than 0.3 ANSI.
10.2.2. Group comments:
10.2.2.1. ITs errors can be in favour of the market, not always against.
10.2.2.2. HONI resources are already fully committed; they may not be able to change any more ITs than those that must be changed to meet MC commitments.
10.2.2.3. The market has lived with it so far, what is the purpose of applying MEC now!
10.2.2.4. Having an error correction will not accelerate the change out of ITs
10.2.2.5. Delay until 2012.
10.2.2.6. There is a large spike in 2009 of ITs requiring change out.

10.3. IESO Proposal (see Legacy_IT_Accuracy.ppt)
10.3.1. The IESO's concerns are:
10.3.1.1. Allowing a zero MEC for legacy ITs will disadvantage those MMPs that have complied.
10.3.1.2. The IESO has to hold the market harmless and cannot do so with unknown or inaccurate ITs.

10.3.1.3. The principle the IESO is following is that known metering errors must be adjusted for and always in favour of the market.

10.3.2. The IESO presented multiple options for application of a MEC from a worst case assumption to correcting by 0.3 in all cases.

10.3.3. Comments:

10.3.3.1. How many ITs are truly unknown. This does not improve the misallocation.

10.3.3.2. How can you prove the allocation is better, it may not be!

10.3.3.3. Let the customer decide based on a cost benefit analysis.

10.3.3.4. There is potentially a significant financial impact on individual participants

10.3.3.5. Why not test a cross section of the ITs and use these values.

10.3.3.6. What is the incremental cost to the market?

10.3.3.7. What is the misallocation in the market?

10.4. The Sub-Committee was split on the application of a MEC. The most popular option was option 5 (exempt legacy ITs), however the Sub-Committee final vote was six (6) in favour of some form of MEC and six (6) in favour of exemption for all legacy ITs until 2012.

10.5. The IESO to consider the next step.

11. Replacement of Legacy ITs

11.1. Presentation by Guelph Hydro (see Replacement of ITs for Metering Installations registered under AMS.ppt)

11.2. Are burdens an issue? Having P&C crews adding to the non-revenue meter winding that affects the accuracy may occur. The group considered this a low risk, and with new meters having a much lower burden it will be OK.

11.3. The group noted modifications to arc proof switchgear - such as adding another set of ITs - cannot be made without affecting the arc proof rating.

11.4. Sometimes insufficient space to install a separate set of revenue ITs.

11.5. The Sub-Committee agreed in principle to allow legacy IT replacements with dual secondary ITs. No objectors.

11.6. Market manuals will have to be updated to reflect this proposal.

12. Station Service Metering (Hardware Std section 3.2.2)

12.1. HydroOne presentation (see second part of RMS-IT MEC.ppt)

12.2. Recommends Market Manual 3, Part 3.7 Totalization Table Registration, Section 2.3.1 Non-Metered Station Services be amended as follows:

12.2.1. Existing - connected station service estimated and signed by P.Eng.

12.2.2. Recommended addition: “or Station Service estimate based on an energy meter installed by the Transmitter”.

12.2.3. The energy meter would meet MC but not Ch 6.

12.3. The Sub-Committee generally supported the proposal. No objectors.

13. Meter Framework

13.1. For information only – see Meter_Framework_Update_Project_R1.ppt

14. New IEEE IT Accuracy Standard

14.1. For information only – see High_Accuracy_Instrument_Transformers.ppt

15. Voltage code changes

15.1. Presentation by the IESO (see MVSTAR_Implementation.ppt)

15.2. Options discussed for the introduction of the new MVSTAR voltage codes, namely:

15.2.1. Option 1. Implement, run script and issue SRR for signature

15.2.2. Option 2. Implement, continue as per existing model, run script at a future date and issue SRR for signature

15.2.3. Option 3. Implement, rebuild as per NEW model on an as needed basis and issue SRR for signature

15.2.4. Option 4. Implement, run script and issue something other than SRR for signature (Before and After snapshot)

15.3. The concern with option 3 is the propensity for errors.

15.4. Option 1 would create a significant number of SRRs for the transmitter

15.5. The IESO is considering options 1 and 4 in combination.

15.6. SRRs are controlled documents in some systems – participants need the same version as the IESO.

15.7. Item to be discussed with MSPs on the 24th Mar.

Next Meeting: 10 May 2005 at Skymark