

# Revenue Metering Standing Committee



## Minutes of Meeting

| <b>Date held:</b> <i>Apr. 29, 2010</i> | <b>Time held:</b> 09:00 am    | <b>Location held:</b> Monte Carlo Inn                            |
|--|-------------------------------|--|
| <b>Invited/Attended:</b>               | <b>Company name:</b>          | <b>Attendance Status:</b><br>(A)ttended; (R)egrets; (S)ubstitute |
| Mohamed El-Madhoun                     | Rodan Energy Solutions Inc.   | R  |
| Alex Lunycz                            | Rodan Energy Solutions Inc.   | A  |
| Matt Weninger                          | Guelph Hydro                  | A  |
| Tanya Laschuk for Kevin Myers          | Veridian Connections Inc.     | A  |
| Mark Simpson                           | Brantford Power               | A  |
| Muhammad Ali                           | Ontario Power Generation Inc. | A  |
| Luc Van Overberghe                     | Measurement Canada            | A  |
| Terry Court                            | Hydro One Networks Inc.       | A  |
| Xenia Kant                             | Hydro One Networks Inc.       | A  |
| John Stonehouse                        | Hydro One Networks Inc.       | A  |
| Vito Genovese                          | Horizon Utilities Inc.        | A  |
| Rob Henschel                           | Horizon Utilities Inc.        | A  |
|  |                               |  |
| <b>Guests:</b>                         |                               |  |
| Peter Hajek                            | LaPrairie Inc.                | A  |
| Rob Reid                               | N-Sci Technologies Inc.       | A  |
|  |                               |  |

| <b>IESO Staff :</b>  |      |   |
|--|------|---|
| Richard Zaworski   | IESO | A |
| John Antonakos   | IESO | A |
| Neill Wong   | IESO | A |
| Robert Stancu  | IESO | A |
| Susan Harrison   | IESO | A |
| Elizabeth Morris   | IESO | A |
| Doug Thomas  | IESO | A |
| <b>Scribe:</b> <i>Neill Wong</i>   |      |   |
| Please report any corrections, additions or deletions e-mail to <a href="mailto:neill.wong@ieso.ca">neill.wong@ieso.ca</a> |      |   |

All meeting material is available on the IESO web site at:

[http://www.ieso.ca/imoweb/consult/revMetering\\_sub.asp](http://www.ieso.ca/imoweb/consult/revMetering_sub.asp)

**Agenda item below:**

**Item 1a – Items from last meeting**

IESO to present in this meeting the following items:

- 1.1 TCP/IP
  - 1.1.1 The TCP/IP framework was finalized and presented.
  - 1.1.2 Present port assignment will be maintained. IESO will look into opening additional ports on a request basis.
- 1.2 MR Amendment – See Item 8 on the agenda.
- 1.3 High Accuracy Instrument Transformer Working Group – See Item 6 on the agenda.
- 1.4 IT Spot Check – Will continue to look at and respond to questions. Will be scheduling a Hydro One Networks Inc. meeting to continue discussions.

**Item 1b – Meter Seal Expiry and Meter Installation Upgrade Update**

Presentation by the IESO (Seal Expiry Update.pdf)

- 1.5. 99 metering installations with 2003-2010 seal expiry remain to be upgraded.
- 1.6. 194 metering installations with Measurement Canada IT Temporary Permission.
- 1.7. IESO permits legacy meter replacement (e.g. PSI recorder/induction meter; ION 7700; JEM) with IESO Conforming Meter List meters. However, MI remains non-compliant and will be addressed with MACD. IESO continued support for 'legacy' meters is limited, with no assurance into the future.
- 1.8. IESO may consider MACD to issue compliance order to MP to replace legacy meters. To be discussed at next meeting.

**Item 1c – 2010 Meter Programs/Meter Initiatives**

- 1.10 2010 meter audit program – 90 Metering installations for field audit; to include SS (station service) estimates
- 1.11 Assessment of CT operating range guidelines
- 1.12. CIDE (Customer Information & Data Exchange) database to replace PLC. To be shared with Grid Assessment, Market Entry and Metering. Scheduled for year end 2010.
- 1.13. TCPIP expansion with other MP's and MSP's.
- 1.14. MV90xi V3.0 upgrade
- 1.15. MVSTAR replacement
- 1.16. Provide support to MR Amendment – Maximum Adjustment Period (MAP)
- 1.17. Process Improvement – Post registration commissioning; Issuance Communication MTRs; Update to IESO CML test process; Update to Meter Frameworks; Update to MIRT & MVT; Enhanced MSP web page
- 1.18. Participation on Centralized Wind Forecasting Working Group

- 1.19. Support for GEA (Green Energy Act) - How to integrate renewables into the HV/LV grid (where to connect; implication for settlement). A high level strawman document may be next steps.
- 1.20. MSP Performance Measures initiative parked for 2010.

## Item 2 – Hydro One and Measurement Canada IT Temporary Permission List

### Presentation by the Hydro One Networks Inc. (IT Temporary Permission List.pdf

- 2.1 Hydro One Networks Inc. announced that it will be exiting the Metering Service Provider business by 2012. This decision is driven by capital programs and commissioning activities. Existing MSP contracts will continue to be honoured. HONI has verbally contacted Market Participants and will follow-up with email. HONI will register all contracted meter installations which are built to Hydro One construction standards.
- 2.2 Originally 6000 ITs with a 2004 expiry; MC extension granted tied to meter seal expiry dates from 2006 to 2011
- 2.3 HONI in its constructor role is faced with challenges to support IT expiries replacement resulting in upgrades not met on time. Some challenges are:
  - Capable of completing 60 upgrades per year. Own projects – 30 and external projects – 30
  - Lack of Metered Market Participant engagement
  - Availability of contractor services
  - Inaccessibility – add on to bus systems
  - Outages, especially in large urban locations
- 2.4 New information was presented in support of an extension request, comparing results of upgraded to existing metering installations to demonstrate that a low risk exists to the market. Upgraded vs. existing metering installation accuracy comparison identified an average error at 0.2%.
- 2.5 Hydro One approached MC for a 25 year or end-of-life extension for the remaining 1472 ITs. MC has granted an extension to Dec. 31, 2013. Extension beyond this date may be considered by MC and will be accepted based on meeting incremental criteria. Some highlights and conditions outlined in the Measurement Canada directive are:
  - Nonconforming ITs that are removed from service shall not be reused.
  - Minimum number of sites are upgraded per year demonstrating progress is made in removing nonconforming IT's.
  - Hydro One to notify the Market Participants affected.
  - ITs are only those in use and on the approved IT Temporary Permission list established after Market Opening.
  - Report Corrective Action implementation on ongoing basis. MC will audit random sites to verify completed IT replacements.
  - Acceptance up to 2013 will be based on performance and will be subject to MC annual reviews. MC will undertake to look at and understand issues/obstacles which may impede progress.
- 2.7 HONI expects to upgrade 4%/year (10 meter points/year) to support MC directive. MMPs will be sent a letter to identify the actual sites. MMP engagement will be required and is critical to meeting annual upgrade targets.
- 2.8 For those meter points on file, MACD expects to post how non-compliances are to be treated.

### **Item 3 – Maximum Adjustment Period**

#### Presentation by the IESO (Maximum Adjustment Period.pdf)

- 3.1 IESO proposal is to set a limitation period for settlement adjustments. A Maximum Adjustment Period at one year from date of discovery is proposed. Presently there is no time limit for adjustment and may go back to market opening. Adjustments can be a considerable undertaking and costly. Current risk impact allocates the adjustment to all Market Participants as an unbudgeted amount.
- 3.2 Other ISO/RTOs have similar limits of adjustment periods as proposed for the Ontario market
- 3.3 Errors classed to 5 categories – meter registration errors; meter data processing errors; Ancillary Service Contracts; missing data submissions by MP; IESO processing error.
- 3.4 For Tx settlement, OEB controls the Tx rates.
- 3.5 MC has the authority to investigate/resolve metering complaints but to date has not been involved. The MC mandate is limited to correcting inaccurate data.

### **Item 4 – Meter Trouble Reports – Proposed Changes to Communication MTR Process**

- 4.1 IESO currently issues communication MTRs at first failure. In many instances MSP can successfully communicate with meter and the IESO subsequently confirms communication. These MTRs can be considered as nuisance MTRs
- 4.2 IESO will implement changes to communication MTR issuance process.
  - Communication MTR to be issued after 2<sup>nd</sup> consecutive day of failure. This will result to an approximate 62% reduction in MTRs issued.
- 4.3 The proposed strategy can be easily be implemented today. Phase 1, manual review/assessment for MTR issuance – June 1, 2010; Phase 2 automated MTR issue review/assessment target – Aug. 1, 2010.

### **Item 5 – MVStar Refresh – Background, Issues and Proposed Requirements**

#### Presentation by the IESO (MV-STAR Refresh.pdf)

- 5.1 MVSTAR Application of Method 1 (a,b coefficients) Losses – CT, VT  $V_{nom}$ , PF attributes are not date referenced.
- 5.2 MVSTAR Application of Method 2 (k1, k2, k3) Losses – Combination of ch1ch4 or ch2ch3 are not calculated as apparent power; Method 2 cannot be applied when kVARh channels are missing; When Ch1≠0 and Ch3≠0 both Load and No-Load Losses are applied to Delivered (Ch1) and Received (Ch2).
- 5.3 Application of Losses when disconnected from IESO grid – calculation of no-load losses when transformer is de-energized.
- 5.4 MEC, TLF Applications – (1) For Method 2, apparent power is calculated using MEC adjusted active power, but not MEC adjusted reactive power. (2) When embedded RWM records energy export to the Host Distributor, this energy will have applied same TLF as for energy withdrawn.
- 5.5 Static vs. Dynamic Loss Apportioning Allocation – Total Load Loss is allocated correctly only when load distribution matches ratio agreed between MMPs.
- 5.6 Netting of Losses – Actual vs. Metered flow – Loss allocation ratio is a fix factor
- 5.7 Settlements Principles – Incremental Generation Capacity – Transmission Connection Service charges are applied only using AMIS standards for Embedded Generation Facilities. This is done once per year as an annual adjustment using IESO Form 1563.

The requirements being proposed in the MV-Star refresh will address these areas of concern in the existing MV-Star tool, which has been in service since Market Opening.

## **Item 6 – Assessing Current Transformer Operations**

### Presentation by the IESO (CT Loading Assessment.pdf)

Alternative assessment approaches being considered included Time-based, % Energy and At Risk Dollars.

Proposed was to adopt a % Energy assessment standard to define the “minimum sustained primary current”.

- 6.1 Concurrence was obtained from the members to adopt the energy loading based assessment. However a cut-off date to implement was not decided.
- 6.2 Concerns were voiced over a retroactive implementation date. One MP has ITs purchased for Fall, 2010.
- 6.3 The two 90/10 and 65/35 thresholds pending further study.
- 6.4 Market Participants will conduct their own energy loading assessments to roll into the IESO draft paper. IESO will share the CT calculator tool.
- 6.5 This is not seen to be an issue with the EDA at this time.

## **Item 7 – Commissioning – Post Registration Process**

### Presentation by the IESO (Commissioning – Post Registration Process.pdf)

- 7.1 Implementation of commissioning reporting as a post registration process will be effective on June 2, 2010 with the release of Baseline 23.1.
- 7.2 Baseline changes to MM 3.2 posted Apr. 14, 2010.
- 7.3 New Form 1716 – Commissioning – Meter Installation Report to be introduced to MSPs at May 20, 2010 scheduled meeting.
- 7.4 IESO will be seeking commissioning reports to be submitted for all new/upgrade metering installation as of September, 2009. Will work with each MSP to schedule the completion of this task.

## **Item 8 – MR-00365 – Settlement of Transmission Tariff for Embedded Generation Facilities**

### Presentation by IESO (MR-00365.pdf)

- 8.1 At the Oct 08, 2009 RMSC, Hydro One presented limitation to existing rate orders and market rules with respect to embedded generation connecting to the grid.
- 8.1 MR-00365 Settlement of Transmission Tariffs for Embedded Generation amendment was proposed for Chapter 6 - Market Rules and approved.
- 8.2 Approved by IESO Board – Feb 11, 2010.
- 8.3 Effective June 2, 2010 for Baseline 23.1.

## **Item 9 – Estimated Station Services – Update**

### Presented by the IESO (Estimated Station Services.pdf)

- 9.1 Section 2.3.1 – equipment rating based; and Sec 2.3.2 – retail meter based.
- 9.2 If using a retail meter, the estimate must be accurate and reviewed/confirmed annually.
- 9.3 All equipment used in the station service load estimate must be reviewed for changes annually.
- 9.4 Market manual changes to the “Requirements for Non-Metered Station Services” will be updated next baseline (Sept. 2010).

## Item 10 – LaPrairie Update

### Presentation by LaPrairie (LaPrairie Update.pdf)

10.1 35 kV – Type OKY36-4 approved for 0.15 class; NOA AE-1674

10.2 50 kV – Type OKY-52-4, OCF 36-3, OCF52-3 MC approved for 0.15 class; NOAs AE-1696, AE-1697, AE-1671, AE-1653, AE-1648

| Action Item Summary |                |  |         |          |
|---------------------|----------------|--|---------|----------|
| #                   | Date           | Action   | Status  | Comments |
| 1                   | April 29, 2010 | Item #6 action: IESO will take away discussion points, plus incorporate MMP study data and analysis of risk into a paper draft document. | Ongoing |          |