REPORT

ieso

Independent Electricity
System Operator

Smart Metering Entity (SME)

MDM/R Report

4th Quarter 2014

October to December

Issue 6.0 - January 29, 2015

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1.   Introduction

1.1   Purpose

The purpose of this report is to provide a quarterly update to the Ontario Energy Board on the ongoing operations of the Meter Data Management and Repository (MDM/R). This report includes the following updates:

- MDM/R Operation and Processing Performance;

- MDM/R Service Levels for both Critical and Non-Critical Services as set out in Appendix A of the "MDM/R Terms of Service";

- Initiatives and Software Testing;

- Additional Risks and Issues; and,

- Roles and Responsibilities of the SME as set out in Article 2.2 of the "Smart Metering Agreement for Distributors"

1.2   How to Use this Document

This report presents information and status updates on MDM/R operation and processing performance (in Section 2), MDM/R Service Levels (in Section 3), and Initiatives and Software Testing (in Section 4). The report focuses on quarterly updates for the MDM/R including updates on the Roles and Responsibilities of the SME through the end of the indicated month. More information about the provincial Smart Metering Initiative and the MDM/R is available on the websites of the Ministry of Energy (http://www.mei.gov.on.ca/), the Ontario Energy Board (http://www.oeb.gov.on.ca/OEB/Industry) and the IESO/SME website (http://www.smi-ieso.ca/).

Each section of this report provides updates as required by the Ontario Energy Board in connection with MDM/R operations and performance, service level attainment, initiatives and software testing, as well as risks and issues.

2. MDM/R Operation and Processing Performance

2.1 Performance

The MDM/R production environment remains stable and reliable, processing reads from over 4 million meters for 72 LDCs on a daily basis. The SME continues to respond to and address LDC support, service requests, and issues in a timely manner.

For the reporting period October 1 to December 31, 2014, the MDM/R operated well, meeting or exceeding service levels for 99.96% of meter reads, 99.99% of billing quantity requests, and 100.00% of master data updates. Where there were processing delays, service was restored in a timely manner.

The SME published LDC-specific performance metrics reports for the months of October, November, and December 2014. In September 2014, the SME deployed a new application to provide these reports through the MDM/R Service Desk Tool. These reports provide each LDC with information related to their organization's meter read, synchronization, and billing performance. This information assists LDCs in improving the quality and timing of their data submissions to the MDM/R.

As part of the SME's outreach plan, one on-site LDC visit was conducted during the fourth quarter. These meetings continue to have positive outcomes, so the SME plans to continue this outreach program into 2015. The SME also met with two of the largest smart meter vendors in Ontario. The goal of these meetings was to foster information and knowledge sharing aimed at providing more value to LDCs in Ontario. Seeing the value in these meetings, the SME plans to continue to meet with these and other AMI vendors.

An SME Steering Committee meeting was held on November 25, 2014. The SME encourages all LDCs to participate during these pre-scheduled SME Steering Committee meeting open calls. During these calls LDCs are given the opportunity to provide feedback and suggestions to the SME. The next call is scheduled for January 20, 2015.

The SME continues to encourage LDCs to propose and submit opportunities for change or improvements; this can be done through their Service Desk agent and the MDM/R Change Management process.

2.2 Training

During the third quarter, the SME delivered one Basic Graphical User Interface (GUI) training session, and two advanced Graphical User Interface (GUI) training sessions. Feedback from participants remains positive. For the complete 2015 training schedule, please visit the SME website. The SME is currently in the process of assessing and formulating a plan to offer LDCs additional training to address some of the recommendations in the Auditor General's report. That plan will be communicated with the LDCs once it is finalized.

2.3 Other Activities

To support the mergers and acquisitions of LDCs, the IESO developed a utility to re-assign historical MDM/R data from one utility to another.

On January 4, 2015 the SME successfully merged Lakeland Power Distribution Ltd. and Parry Sound Power in the MDM/R using the new LDC MDM/R Merge Utility, and is currently in discussions with other LDCs who will benefit from this utility.

3.   MDM/R Service Levels

The Service Level Performance Chart splits Service Level summaries into two parts:

Critical Service Level Summary, and;

Non-Critical Service Level Summary

The Critical Service Level Summary section includes processing metrics for Automatic Meter Read Processing, Billing Quantity Response Processing, Automatic MMD Incremental Synchronization Processing, MDM/R Graphical User Interface, Meter Read Retrieval Web Services, Reporting, Vendor Service Desk Incident Response, and Vendor Service Desk Service Requests.

The Non-Critical Service Level Summary section includes processing metrics for Meter Read Retrieval Web Services, MDM/R Availability, and Service Requests[1]. The table also includes a Service Level breakdown for each month along with a quarterly summary[1].

Critical Service Level Summary		Oct-2014	Nov-2014	Dec-2014	4th Quarter
Automatic Meter Read Processing	Intervals Loaded	3,150,913,851	3,044,657,160	3,152,348,893	9,347,919,904
	Intervals Loaded on Time	3,150,913,851	3,044,657,160	3,148,610,629	9,344,181,640
	% Intervals Loaded on Time	100.00%	100.00%	99.88%	99.96%
	Number of incidents resulting in accumulated delay >240 minutes[2]	0	0	0	0
Automatic Billing Quantity Processing	BQ Requests	4,188,557	5,650,852	4,418,349	14,257,758
	BQ Requests Fulfilled on Time	4,186,945	5,650,852	4,418,349	14,256,146
	% Requests Fulfilled on Time	99.96%	100.00%	100.00%	99.99%
	Number of incidents resulting in accumulated delay >240 minutes[2]	0	0	0	0
Automatic MMD Incremental Synchronization Processing	Data Elements Requested	1,661,238	1,496,340	1,161,610	4,319,188
	Data Elements Loaded on Time	1,661,238	1,496,340	1,161,610	4,319,188
	% Data Elements Loaded on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in Data Elements loaded outside of agreed Service Level target[2]	0	0	0	0
MDM/R Graphical User Interface	Availability	100.00%	100.00%	99.75%	99.92%
	Number of incidents resulting in MDM/R Graphical User Interface availability outside of agreed Service Level target[2]	0	0	1	1
Meter Read Retrieval Web Services	Availability	100.00%	100.00%	99.82%	99.94%
	Number of incidents resulting in Meter Read Retrieval Web Services availability outside of agreed Service Level target	0	0	0	0
Reporting	Percentage completed on time	95.70%	98.20%	96.21%	96.70%
	Number of incidents resulting in Reporting percentage completion outside of agreed Service Level target	0	0	12	12
Vendor Service Desk Incident Response	Response Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in Vendor Service Desk Incident Response Time outside of agreed Service Level target	0	0	0	0
Vendor Service Desk Service Requests	Resolution Time	93.33%	100.00%	100.00%	97.78%
	Number of incidents resulting in Vendor Service Desk Request resolution time outside of agreed Service Level target	0	0	0	0

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[1] *Percentages are rounded to the second decimal place for each metric.*

Non-Critical Service Level Summary		Oct-2014	Nov-2014	Dec-2014	2nd Quarter
Meter Read Retrieval Web Services	Response Time	99.96%	99.84%	100.00%	99.93%
	Number of incidents resulting in Meter Read Retrieval Web Services response time outside of agreed Service Level target	0	0	0	0
MDM/R Availability	Availability	100.00%	99.95%	99.82%	99.92%
	Number of incidents resulting in MDM/R Availability outside of agreed Service Level target	0	0	0	0
Service Requests	Resolution Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in Service Requests resolution time outside of agreed Service Level target	0	0	0	0

4. Initiatives and Software Testing

MDM/R Release 7 (EnergyIP Version 7.6 Upgrade and Measurement Canada 2012 Phase 2)

This project will upgrade the MDM/R software to a more current version keeping it maintainable and supportable, and will be combined with the delivery of the Measurement Canada 2012 Phase 2 solution functionality[2]. The SME has been functionally testing the latest code release in Q4 2014 and has made the MDM/R Sandbox environment available for LDC testing during the period of January 19, 2015 to February 13, 2015. In parallel with LDC testing, the SME will continue to conduct performance and operability testing of the software.   The combined results of LDC testing and SME testing will influence the schedule for completing the remaining tasks as well as the cutover date for promoting MDM/R R7.0 / EnergyIP R7.6 to the Production environment, which is currently targeted for completion by the end of March 2015.

MDM/R Data Access

Since the 3rd quarter MDM/R report, the SME has completed the development of the MDM/R Data Mart and Web Services Facility. As previously reported, the Data Mart is a purpose-designed synchronized copy of the MDM/R production database that will be used for fulfilling web service requests, data extract requests, and other ad-hoc queries without impacting the operation of the MDM/R. Internal testing is currently underway, with a follow on testing phase that involves a select number of LDCs targeted by the end of 1Q 2015. The MDM/R Data Mart has been architected such that it could, if deemed appropriate, be expanded in the future to support new and evolving requirements without stranding investments.

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[2] *An overview of the Measurement Canada 2012 Phase 2 solution is provided in the SME MDM/R Report Issue 1.0 dated October 28, 2013.*

5. Additional Risks and Issues

There are no additional risks or issues to report.