REPORT

Power to Ontario.
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Smart Metering Entity (SME)

MDM/R Report

4th Quarter 2013

October to December

Issue 2.0 - January 29, 2014

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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 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 71 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, 2013, the MDM/R operated well, meeting and exceeding service levels for 98.47% of meter reads, 99.62% of billing quantity requests, and 100% for master data updates. Where there were processing delays, service was restored in a timely manner, or the delay was related to poor quality or timing of data submissions by one or more LDCs.

During the past quarter, the SME published LDC-specific performance metrics reports for the months of September, October and November. These reports provide each LDC with valuable data related to their organization's meter read, synchronization, and billing performance. Feedback from LDCs has been very positive on this initiative.

As part of the SME's outreach plan, and as a result of the positive feedback received from LDCs, the SME plans to continue scheduling and conducting more on-site visits with LDCs for 2014.

Although the SME continues to observe improvements in LDC performance related to the MDM/R, the SME continues to work with LDCs and their metering providers to manage the quality and timing of meter read data submissions in order to improve the performance of meter read and billing processing. As part of the scheduled SME Steering Committee meetings, a conference call was held in November for the benefit of all LDCs. All LDCs were invited to participate during this call.

2.2 Training

During the fourth quarter, the SME delivered one Advanced Graphical User Interface training session and one basic session. The advanced course provides LDCs with a variety of scenarios for investigation and troubleshooting of meter read data submissions, synchronizations, and billing exceptions. For the complete training schedule, please visit the SME website.

2.3 Other Activities

On November 15, 2013 the IESO received an unqualified opinion in the completed annual audit. The Meter Data Management and Repository's (MDM/R) operations, processes, and procedures are in accordance with the Canadian Standard on Assurance Engagements for Reporting Controls at a Service Organization, set out in the CICA Handbook – Assurance ("CSAE3416"). The CSAE 3416 report covered the period from April 1, 2013 to September 30, 2013 and the results of this audit were made available to Distributors upon request.

In December, the SME deployed enhanced functionality in the MDM/R Service Desk tool enabling LDCs to better manage their contact information and users. The SME continues to make improvements to this tool and processes based on feedback from Distributors and agents.

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 Meter Read Data, Billing Quantity Response, MDM/R Master Directory, and the Graphical User Interface (GUI). The Non-Critical Service Level Summary section includes processing metrics for Service Desk Response Times. The table includes a Service Level breakdown for each month along with a quarterly summary.

		Oct-2013	Nov-2013	Dec-2013	4th Quarter
Critical Service Level Summary					
Meter Read Data Processing	# of Intervals Processed	3,206,387,570	3,058,223,015	3,119,569,125	9,384,179,710
	# of Intervals Processed within Service Level Time	3,089,086,178	3,034,888,847	3,116,949,741	9,240,924,766
	% Intervals Processed within Service Level Time	96.34%	99.24%	99.92%	98.47%
	# of Incidents with Single Delay > 45 mins and/ or # of Incidents resulting in Accumulated Delay > 240 mins	2	6	0	8
Billing Quantity Response Processing	# of BQ Requests Processed	3,041,811	3,751,092	3,474,013	10266916
	# of BQ Requests Processed within Service Level Time	3,002,562	3,751,092	3,474,013	10227667
	% Requests Processed within Service Level Time	98.71%	100.00%	100.00%	99.62%
	# of Incidents with Single Delay > 45 mins and/or # of Incidents resulting in Accumulated Delay > 240 mins	1	0	0	1
MDM/R Master Directory (MMD) Processing	# of Data Elements Processed	3,581,200	2,030,207	1,818,637	7430044
	# of Data Elements Processed within Service Level Time	3,581,200	2,030,207	1,818,637	7430044
	% Data Elements Processed within Service Level Time	100.00%	100.00%	100.00%	100.00%
	# of Incidents resulting in Data Elements Processed outside Service Level Time	0	0	0	0
MDM/R Graphical User	User Interface Availability	99.64%	100.00%	100.00%	99.88%
	# of Incidents resulting in non-availability of Service < 99.80%	1	0	0	1
Non-Critical Service Level Summary					
Service Desk Response Time	Response Time (90% of Sev 1 and Sev 2 incidents response time within 15 minutes)	100.00%	100.00%	100.00%	100.00%
	# of Incidents (Sev 1 and Sev 2) OSP responded after 15 mins	0	0	0	0

4. Initiatives and Software Testing

MDM/R Release 7.6 Upgrade

This project will upgrade the MDM/R software to a more current version to keep it maintainable and supportable, and also deliver the Measurement Canada 2012 Phase 2 solution functionality. We are targeting to complete this project by Q3 2014.

This project is well underway, and the SME will continue to provide updates to LDCs as the project progresses.

Measurement Canada 2012 Phase 2

The software for the Measurement Canada (MC) 2012 Phase 2 solution is expected to be made available for LDC testing at the same time as the upgrade of the MDM/R (above) in mid 2014.

The MC 2012 Phase 2 solution provides additional quality indicators for estimated and calculated register reads and the ability to designate externally submitted register reads as estimated. It also allows LDCs to use the MDM/R for billing based on hourly and periodic consumption in order to further support Measurement Canada requirements.

Phase 2 of the Measurement Canada 2012 solution includes the following components:

- Calculative reads equality adjustment (periodic and hourly) and related measurement profiles;
- Additional quality indicators for externally estimated and calculated register reads using estimated intervals; and
- Extension of the Trilliant meter readings interface for estimated register reads.

To reduce the SME's and LDCs' efforts and costs of testing and deploying both the Measurement Canada 2012 Phase 2 solution and the MDM/R Release 7.6 upgrade in two separate releases, the SME is combining the testing and deployment into one software release. The SME Steering Committee expressed unanimous support of this approach.

MDM/R Infrastructure Refresh

The project to update the computing infrastructure of the MDM/R is currently underway in order to deliver further improvements to the performance and operation of the MDM/R. Testing of the updating computing infrastructure is progressing well. At this time, the SME is targeting to have the MDM/R transitioned to the new computing infrastructure in March 2014 pending successful completion of testing.

MDM/R Data Access

The SME is involved in three Ministry initiatives to improve access to electricity data stored in the MDM/R and derive additional value from that data:

- To help consumers conserve energy and save on electricity costs the Ministry launched the 'Green Button Initiative' on November 21, 2012 with the objective to provide electricity consumers with greater access to information about their energy consumption, and encourage the creation of new innovative tools for consumers..

- In March 2013 the Ministry launched the MDM/R Road Map initiative to identify opportunities to derive additional value from the investments already made in the Province's smart metering infrastructure and the MDM/R.

- In accordance with a Ministry Directive, on February 11, 2013, the OEB's Supplemental Report on Smart Grid stated that "The Smart Metering Entity (SME) must investigate opportunities for providing access to depersonalized, generic data to third parties for planning, research, and customer benchmarking purposes (e.g., allowing customers to compare their consumption with that of their neighbours)."

The SME has conducted initial research of technologies that could be used to support broader data access and analysis of data stored in the MDM/R.

The IESO has provided multiple updates to the Ontario Energy Board, the Ministry, OPA, and LDCs on the progress of this project over the past few months. Feedback from the Ministry, OEB, OPA and LDCs has been very supportive and encouraging.

Further work is required with the Ministry of Energy, the Ontario Energy Board and stakeholders of the MDM/R to assess the future level of demand for and value of data access and analytics, in order to determine next steps.

In December, the SME received a letter from the Ministry indicating that the Ministry would be working with the IESO to develop a business case over the coming months for a data access platform.

5.   Additional Risks and Issues

There are no additional risks and issues to report.