EXTERNAL

REPORT

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Smart Metering Entity (SME)
MDM/R Report
3rd Quarter 2014
July to September

Issue 5.0 - October 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 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 July 1 to September 30, 2014, the MDM/R operated well, meeting or exceeding service levels for 100.00% of meter reads, 100.00% 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 June, July and August 2014. 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, two on-site LDC visits were conducted during the third quarter. These meetings continue to have positive outcomes, so the SME plans to continue this outreach program for the remainder of 2014.

A Smart Metering Steering Committee meeting was held on September 9, 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 currently scheduled for November 25, 2014.

As part of the SME's commitment to continual service improvement, 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 one advanced Graphical User Interface (GUI) training session. Feedback from participants continues to be very positive. For the complete training schedule, please visit the SME website.

2.3 Other Activities

Larry Herod (Newmarket-Tay Hydro), the Chairperson of the SME Steering Committee, resigned from the committee. During the September meeting, the Committee nominated and appointed John McClean (PowerStream) as the new Chairperson.

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. The table also includes a Service Level breakdown for each month along with a quarterly summary[1].

Critical Service Level Summary		Jul-2014	Aug-2014	Sep-2014	3rd Quarter
Automatic Meter Read Processing	Intervals Loaded	**3,135,534,759**	**3,159,853,914**	**3,043,280,475**	**9,338,669,148**
	Intervals Loaded on Time	**3,135,534,759**	**3,159,853,914**	**3,043,004,633**	**9,338,393,306**
	% Intervals Loaded on Time	**100.00%**	**100.00%**	**99.99%**	**100.00%**
	Number of incidents resulting in accumulated delay >240 minutes[1]	**0**	**0**	**2**	**2**
Automatic Billing Quantity Processing	BQ Requests	**4,699,215**	**4,113,060**	**3,979,503**	**12,791,778**
	BQ Requests Fulfilled on Time	**4,699,215**	**4,113,060**	**3,979,503**	**12,791,778**
	% Requests Fulfilled on Time	**100.00%**	**100.00%**	**100.00%**	**100.00%**
	Number of incidents resulting in accumulated delay >240 minutes[1]	**0**	**0**	**0**	**0**
Automatic MMD Incremental Synchronization Processing	Data Elements Requested	**1,678,472**	**1,575,048**	**1,468,466**	**4,721,986**
	Data Elements Loaded on Time	**1,678,472**	**1,575,048**	**1,468,466**	**4,721,986**
	% 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[1]	**0**	**0**	**0**	**0**
MDM/R Graphical User Interface	Availability	**100.00%**	**100.00%**	**99.98%**	**99.99%**
	Number of incidents resulting in MDM/R Graphical User Interface availability outside of agreed Service Level target[1]	**0**	**0**	**0**	**0**
Meter Read Retrieval Web Services	Availability	**100.00%**	**100.00%**	**100.00%**	**100.00%**
	Number of incidents resulting in Meter Read Retrieval Web Services availability outside of agreed Service Level target[1]	**0**	**0**	**0**	**0**
Reporting	Percentage completion	**93.30%**	**95.03%**	**95.26%**	**94.53%**
	Number of incidents resulting in Reporting percentage completion outside of agreed Service Level target[1]	**0**	**0**	**0**	**0**
Vendor Service Desk Incident Response	Response Time	**75.00%**	**75.00%**	**100.00%**	**83.33%**
	Number of incidents resulting in Vendor Service Desk Incident Response Time outside of agreed Service Level target[1]	**2**	**1**	**1**	**4**
Vendor Service Desk Service Requests	Resolution Time	**97.98%**	**94.51%**	**100.00%**	**97.50%**
	Number of incidents resulting in Vendor Service Desk Request resolution time outside of agreed Service Level target[1]	**0**	**0**	**0**	**0**

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

Non-Critical Service Level Summary		Jul-2014	Aug-2014	Sep-2014	3rd Quarter
Meter Read Retrieval Web Services	Response Time	**99.96%**	**99.96%**	**99.96%**	**99.96%**
	Number of incidents resulting in Meter Read Retrieval Web Services response time outside of agreed Service Level target[1]	**0**	**0**	**0**	**0**
MDM/R Availability	Availability	**100.00%**	**100.00%**	**99.99%**	**100.00%**
	Number of incidents resulting in MDM/R Availability outside of agreed Service Level target[1]	**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[1]	**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]. We are currently targeting to complete this project by the end of 1Q 2015.

The SME's extensive testing has uncovered defects that need to be addressed by the vendor prior to allowing LDCs to conduct their own tests. The vendor has analyzed the defects and a new release will be delivered to the IESO by October 31, 2014. As tentative dates change, we will continue to update LDCs and provide revised dates.

MDM/R Data Access

The MDM/R Data Access Platform ("MDAP") concept emerged as a possible way of addressing the new and emerging needs for data access and analytics of electricity consumption data and pursuing the Ministry of Energy's (the "Ministry") objectives for deriving greater value for consumers, energy stakeholders and the province from MDM/R data. Specifically, high level objectives for MDAP would include:

- Enhancing the value of the electricity consumption data by adding attributes to existing data (e.g. meter location), as well as new data sources (e.g. weather),
- Providing new interfaces and functionality for data access by current users of the MDM/R,
- Supporting access for authorized new classes of users such as researchers, commercial enterprises and other third parties,
- Supporting authorized access to anonymized data for research purposes and analysis.

In late September, The Ministry, the Advanced Energy Center and the IESO ratified the Project Definition Document to develop a business case for an MDM/R Data Access Platform (MDAP). This project is currently underway and is expected to be completed by Q4 2015

In order to protect the operational stability of the MDM/R and support the increasing volumes of data retrieval requests, the SME is in the process of implementing infrastructure reinforcements, including an MDM/R Data Mart. 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. Significant progress has been made on the project with development substantially completed. 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 for the MDM/R Data Access Platform without stranding investments.

[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.*

MDM/R LDC Merger Utility

In order to support the merger of LDCs, the SME was requested to provide a facility for the re-assignment of historical electricity consumption data in the MDM/R from one utility to another. This approach enables LDCs and their electricity consumers to be able to retrieve their historical consumption data from the consolidated utility. Preliminary testing has been completed and functional testing will begin in Q4 of 2014.

5. Additional Risks and Issues

There are no additional risks or issues to report.