REPORT

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Smart Metering Entity (SME) MDM/R Report

4th Quarter 2017

October to December

Issue 18.0 - January 31, 2018

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1.   Introduction

1.1   Purpose and Contents

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).

More information about the provincial Smart Metering Initiative and the MDM/R is available on the IESO/SME website (http://www.ieso.ca/sector-participants/smart-metering-entity), the Ontario Energy Board website (www.ontarioenergyboard.ca/OEB/Industry), and the Ministry of Energy website (http://www.mei.gov.on.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.

This report includes the following updates:

- MDM/R Operation and Processing Performance
- MDM/R Performance
- LDC Performance
- MDM/R Service Levels
- Fourth Quarter Key SME Activities
- SME Achievements for 2017
- Additional Risks and Issues, and
- Other Opportunities and Next Steps

2.   MDM/R Operation and Processing Performance

2.1   MDM/R Performance

The MDM/R production environment remains stable and reliable, processing reads from over 4.9 million meters for 67 LDCs on a daily basis. The SME continues to respond to and address LDC support, service requests and issues in a timely manner.

67 LDCs

4,941,440 Smart Meters

In the fourth quarter of 2017, the MDM/R was operationally stable by **exceeding** service levels for 100% of meter reads, 100% of billing quantity requests, and 100% of master data updates.

2.2   LDC Performance

The SME continues to produce monthly performance metrics reports and daily summarized operational data for each LDC through the MDM/R Service Desk tool. During the fourth quarter, there was no significant change in LDC meter data submissions; however, the number of successful billing responses increased by more than 2% which is a positive reflection of the underlying data quality. The SME continues to monitor the MDM/R and work with the LDC community to improve the quality of their data submissions.

2.3   MDM/R Service Levels

The Service Level Performance Chart presents two summary levels:

I.   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.

II.   Non-Critical Service Level Summary

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].

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

Critical Service Level Summary		Oct-2017	Nov-2017	Dec-2017	4th Quarter
Automatic Meter Read Processing	Intervals Loaded	3,530,259,784	3,661,026,024	3,786,734,137	10,978,019,945
	Intervals Loaded on Time	3,530,259,784	3,661,026,024	3,786,734,137	10,978,019,945
	% Intervals Loaded on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in accumulated delay >240 minutes[2]	0	0	0	0
Automatic Billing Quantity Processing	BQ Requests	4,517,738	6,652,215	4,318,896	15,488,849
	BQ Requests Fulfilled on Time	4,517,738	6,652,215	4,318,896	15,488,849
	% Requests Fulfilled on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in accumulated delay >240 minutes[2]	0	0	0	0
Automatic MMD Incremental Synchronization Processing	Data Elements Requested	27,789,502	1,514,328	1,496,431	30,800,261
	Data Elements Loaded on Time	27,789,502	1,514,328	1,496,431	30,800,261
	% 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	99.99%	100.00%	100.00%	100.00%
	Number of incidents resulting in MDM/R Graphical User Interface availability outside of agreed Service Level target[2]	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	0	0	0	0
Reporting	Percentage completed on time	100.00%	99.68%	100.00%	99.89%
	Number of incidents resulting in Reporting percentage completion outside of agreed Service Level target	0	0	0	0
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	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in Vendor Service Desk Request resolution time outside of agreed Service Level target	0	0	0	0

Non-Critical Service Level Summary		Oct-2017	Nov-2017	Dec-2017	4th Quarter
Meter Read Retrieval Web Services	Response Time	99.97%	99.98%	99.99%	99.98%
	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	99.57%	98.89%	100.00%	99.49%
	Number of incidents resulting in MDM/R Availability outside of agreed Service Level target	1	1	0	2
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

2.4 4th Quarter Key SME Activities

SME Steering Committee

The SME Steering Committee held a meeting on November 21st 2017 which was hosted by Veridian. During this meeting LDCs were given the opportunity to provide feedback and suggestions to the SME during a pre-scheduled meeting open call. LDCs can also communicate feedback and suggestions through email and online live via the webinar presentation. The next meeting and call is scheduled for March 27th 2018 and is being hosted at the Waterloo North Hydro office.

EIP 8.X Update

The SME is in the early stages of planning the next major upgrade of the EnergyIP platform. The upgrade to version 8.5 will include a refresh the hardware and simplify the architecture which will improve system performance. The SME has completed an impact assessment of the eIP 8.5 upgrade and is currently developing an upgrade plan and migration strategy. The goal is to have no impact to LDCs by minimizing changes to the application interfaces. This upgrade is expected take up to 2 years.

LDC Training

No general training was required during the 4th quarter; however, the SME has scheduled Basic and Advanced GUI Training courses in January 2018. Structure and frequency of LDC MDM/R GUI training is still under review.

MDM/R DataMart

The total number of LDCs enrolled into the MDM/R DataMart has reached 13. LDCs are invited to enroll voluntarily and transitions are expected to be non-disruptive from an application perspective. Once transitioned, LDCs and their agents can take advantage of the 24/7 access to data and the ability to retrieve large amounts of data efficiently.

This facility continues to support new and evolving value-added data services including the delivery of several custom aggregated reports to assist LDCs with business operations and future analytics through the 3rd party access initiative.

LDC Mergers

In November 2017 Alectra began testing activities in preparation for the 2018 phased merger approach with Enersource and PowerStream. The first merger will take place in May 2018 followed by mergers of Hydro One Brampton and Horizion in Q3.

MDM/R Annual CSAE3416 Audit

External auditors issued the 2017 CSAE3416 audit report on November 15th, 2017 and the result of the audit marked the 8th consecutive year of the MDM/R obtaining an unqualified audit opinion.

Third Party Access Implementation Plan

The IESO's Data Strategy Advisory Council (DSAC) is a committee of representatives within Ontario's electricity sector and other sectors as applicable, appointed by the IESO, to provide input in the review and development of processes for the implementation of Third Party Access to the data within the Province's Meter Data Management/Repository (MDM/R), in a de-identified manner, as per OEB Orders (EB-2015-0297 and EB-2016-0284).

The IESO's Data Strategy Advisory Council (DSAC) held two meetings during the fourth quarter. On November 15th the committee received updates on stakeholder engagement, a status update of pilot test cases and an update on the Request for Proposal (RFP) for contract services. The December 13th meeting included updates on project timelines and third party access discussions with industry leaders from the Municipal Property Assessment Corporation (MPAC) and Mission Data based out of California. The DSAC test cases analysis will be completed in January 2018. These test cases will provide valuable learnings for the broader implementation of the 3rd party access project and will be reviewed at the next DSAC meeting scheduled for Wednesday January 31st. A Request for Proposal (RFP) was issued on December 22nd for Consulting Services to assist in the development of a Market Analysis & Costing Model for electricity Consumption Data. The successful candidate will provide draft options to the DSAC members at the January 31st, 2018 meeting.

The IESO will continue to work closely with the Office of Information and Privacy Commissioner of Ontario (IPC) and the privacy consultant (Privacy Analytics Inc.) to ensure privacy compliance, ethics and fairness as the 3rd Party Access Implementation Plan gets developed and rolled out.

Further information regarding the Data Strategy Advisory Council and its activities can be found on our website at http://www.ieso.ca/en/sector-participants/smart-metering-entity/data-strategy-advisory-council

2.5   SME Achievements for 2017

The SME had a successful and productive year through technical enhancements, LDC mergers, LDC self-serve and service desk enhancements, training, and big data Initiatives. Specific accomplishments include:

MDM/R EnergyIP 7.7 upgrade

On March 19th the SME successfully upgraded the MDM/R to eMeter's EnergyIP software version 7.7. This upgrade extended software support and ensures MDM/R operational stability. The upgrade had minimal impact on the LDC community.

Toronto Hydro MDM/R Enrolment

Toronto Hydro (THESL) successfully completed MDM/R System Integration and Qualification Testing in the MDM/R Sandbox and QA environments. On September 11th THESL completed Phase 1 of their enrolment by sending their first synchronization to the MDM/R production environment. By October 23rd, THESL reached steady state operations with current synchronizations and meter read data flowing to the MDM/R on a daily basis.

MDM/R Service Desk tool Upgrade and Enhancements

On May 13th the SME successfully upgraded the MDM/R Service Desk tool to maintain software support and provide an enhanced user interface with added functionality allowing LDCs to monitor and correct missing data and manage meter activities.

LDC Mergers

Newmarket Hydro and Tay Hydro were successfully merged in the MDM/R on July 8th, 2017.

2017 Province wide LDC Event ("Establishing the Value of Smart Meter Data in Ontario")

On November 9th, 2017 the SME organized a province-wide event for LDCs which was held at the International Centre in Mississauga. This event showcased many of the key initiatives that the SME is currently engaged in and featured presentations from influential LDCs, on utility analytics and cybersecurity. The SME also presented updates on Third Party Access and reviewed results from a recent LDC Survey.

MDM/R Annual CSAE3416 Audit

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MDM/R Data Mart

The total number of LDCs enrolled into the MDM/R DataMart in 2017 reached 13. The SME also provided several custom extracts and reports throughout the year to assist LDCs with their business operations and reporting requirements.

SME Rate Filing

On August 31st, 2017 the SME submitted an application for a new 5-year budget and rate filing for the period of January 1st, 2018 to December 31st, 2022. The new SME fee is proposed to be $0.57/meter/month, which is 25% lower compared to the current fee of $0.79/meter/month.

3.   Additional Risks and Issues

There are no additional risks or issues to report.

4.   Other Opportunities and Next Steps

There are no other opportunities to report.