Smart Metering Entity (SME) MDM/R Report

4th Quarter 2018 October to December

Issue 22.0 - January 31, 2018



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Introduction

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 (<u>http://www.ieso.ca/sector-participants/smart-metering-entity</u>), the Ontario Energy Board website (<u>https://www.oeb.ca</u>), and the Ministry of Energy, Northern Development and Mines website (<u>https://www.mndm.gov.on.ca/en</u>).

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
- Key SME Achievements in 2018
- Additional Risks and Issues, and
- Other Opportunities and Next Steps

MDM/R Operation and Processing Performance

MDM/R PERFORMANCE

The MDM/R production environment remains stable and reliable, processing reads from approximately 5 million smart meters, for all LDCs in Ontario¹ on a daily basis. The SME continues to respond to and address LDC support, service requests and issues in a timely manner.



In the fourth quarter of 2018, the MDM/R was operationally stable and exceeded service levels for 99.99% of meter reads, 100% of billing quantity requests, and 100% of master data updates.

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 the number of duplicate intervals declined significantly which reduces processing load on the MDM/R. However, the SME noticed that the average number of estimated intervals slightly increased between November and December. The SME found that this was due to a process error made by a limited number of LDCs who submitted data out of order, which has since been corrected. The SME continues to monitor the MDM/R and work with the LDC community to improve the quality of their data submissions.

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 summary².

¹ The number of LDCs has been updated to reflect the merge of Alectra Utilities and Brampton Hydro.

² Percentages are rounded to the second decimal place for each metric.

Critica	Service Level Summary	Oct-2018	Nov-2018	Dec-2018	4th Quarter
Automatic Meter Read	Intervals Loaded	3,831,715,854	3,711,007,093	3,834,976,162	11,377,699,109
Processing	Intervals Loaded on Time	3,830,044,854	3,711,007,093	3,834,976,162	11,376,028,109
	% Intervals Loaded on Time	99.96%	100.00%	100.00%	99.99%
	Number of incidents resulting in accumulated	1	0	0	1
	delay >240 minutes ²				
Automatic Billing	BQ Requests	4,541,791	6,796,144	10,771,271	22,109,206
Quantity Processing	BQ Requests Fulfilled on Time	4,541,791	6,796,144	10,771,271	22,109,206
	% Requests Fulfilled on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in accumulated	•		0	0
	delay >240 minutes ²	0	0		
Automatic MMD	Data Elements Requested	1,441,425	1,249,774	1,100,302	3,791,501
Incremental	Data Elements Loaded on Time	1,441,425	1,249,774	1,100,302	3,791,501
Synchronization	% Data Elements Loaded on Time	100.00%	100.00%	100.00%	100.00%
Processing	Number of incidents resulting in Data Elements	0	0	0	0
-	loaded outside of agreed Service Level target ²				
MDM/R Graphical User	Availability	100.00%	100.00%	100.00%	100.00%
Interface	Number of incidents resulting in MDM/R		0	0	0
	Graphical User Interface availability outside of	0			
	agreed Service Level target ²				
Meter Read Retrieval	Availability	100.00%	100.00%	100.00%	100.00%
Web Services		100.00 /8	100.00 /8	100.00 /6	100.00 /8
	Number of incidents resulting in Meter Read	0	o	0	0
	Retrieval Web Services availability outside of				
	agreed Service Level target				
Reporting	Percentage completed on time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in Reporting	0	0 0	0	0
	percentage completion outside of agreed Service				
	Level target				
Vendor Service Desk	Response Time	100.00%	100.00%	100.00%	100.00%
Incident Response	Number of incidents resulting in Vendor Service	10010070			
	Desk Incident Response Time outside of agreed	0	0	0	0
	Service Level target	U			
Vendor Service Desk	Resolution Time	100.00%	100.00%	100.00%	100.00%
Service Requests	Number of incidents resulting in Vendor Service	100.00 /0	100.00 //	100.00 /0	100.00 %
Service Requests	Desk Request resolution time outside of agreed	0	0	0	0
	Service Level target				
	Service Lever larger				

Non-Critical Service Level Summary		Oct-2018	Nov-2018	Dec-2018	4th Quarter
Meter Read Retrieval	Response Time	99.99%	99.95%	99.97%	99.97%
Web Services	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%	99.79%	100.00%	99.93%
	Number of incidents resulting in MDM/R Availability outside of agreed Service Level target	0	1	0	1
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

4TH QUARTER ACTIVITIES

Province-Wide LDC Event

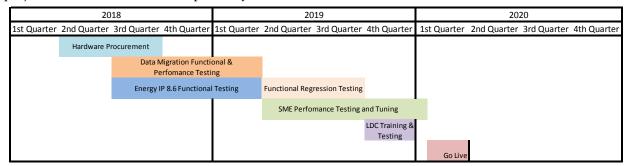
The Smart Metering Entity hosted its third annual LDC Event "Creating Value. Together" on November 21, 2018 at the International Centre in Mississauga. The event also constituted the open portion of that day's SME Steering Committee meeting. Discussion topics included key MDM/R operational updates, ServiceNow enhancements, Data Governance and the status of the OEB Order implementation; additional topics of general interest for the LDCs were also discussed, such as Alectra's blockchain pilot and IESO's considerations on Distributed Energy Resources (DER). Attendee feedback was excellent and the SME plans to continue hosting such informative events in the future.

SME Steering Committee (SSC)

The SSC held the closed portion of its meeting after the LDC Event on November 21st 2018. Certain changes in the SSC leadership and membership were ratified; as such, Marianne Blasman from Waterloo North, whose term as the SSC Chair has reached the 2-year mark, has stepped down. . Kevin Myers from Veridian Connections was appointed as the new Chair, with Andy Armitage from Thunder Bay Hydro (now Synergy North, following the merger of Thunder Bay Hydro and Kenora Hydro) replacing him as Vice Chair. The committee members have acknowledged and thanked Marianne for her excellent leadership and contributions to the LDCs community, as former chair of the SSC. Two other members stepped down from the committee (Hydro One and Entergrus Powerlines), however a replacement from Hydro One has joined the SSC. The next meeting is scheduled for January 23rd 2019 at the IESO downtown Toronto office.

EIP 8.6 Update

The SME is testing the next major release of the EnergyIP platform. The upgrade to eIP version 8.6 is expected to improve operating performance by providing the MDM/R with the latest supported technology and hardware, which simplifies the architecture and improves system performance. Data migration testing and functional exploratory testing is still underway. One of the guiding principles of this upgrade is to limit impact to LDCs by minimizing changes to the application interfaces. The upgrade project is still on track to be completed by Q1 2020.



LDC Training

The SME provided Basic and Advanced GUI Training on October 2nd & 3rd, 2018 with additional training scheduled for January 7th & 8th 2019. The SME is planning to suspend eIP 7.7 training in mid-2019 and begin eIP 8.6 training in late Q3 2019.

SME Service Desk

On October 24th, 2018, the SME upgraded the SME Service Desk software to the "London" version release. This upgrade was deployed to maintain software support and was completely seamless from an LDC perspective. Service Desk upgrades will now be performed annually in the fall to coincide with the vendor's Service Development Lifecycle (SDLC).

LDC Mergers

The SME successfully merged Brampton Hydro with Alectra Utilities on December 1st, 2018. Alectra is actively testing for their next merge with Horizon Utilities, which is expected to be completed in the MDM/R production environment by the end of Q1 2019.

2019 is expected to be a busy year for LDC merger activities, so the SME is working with multiple LDCs on scheduling to ensure resources and systems are available as needed. There is an expectation that mergers between Entegrus Powerlines and St Thomas Energy, ERTH Corporation and West Coast Huron Energy, and Thunder Bay Hydro and Kenora Hydro to be completed within the MDM/R by the end of 2019.

Toronto Hydro Phase 2 Enrolment

In Q4 2018 Toronto Hydro completed phase 2 of their enrolment and began billing from the MDM/R. Over the next few months, Toronto Hydro is expected to slowly ramp up their production billing requests to full production volume.

LDC Compliance with OEB Order EB 2015-0297

At the time of this report, all LDCs have completed the processes for submission of the additional data to the MDM/R with only a small percentage of the additional data fields outstanding. Overall, the percentage of Service Delivery Points (SDPs) with a Distributor Rate Class is at 99.89%, Commodity Rate Class is at 99.87% and the number of SDPs with a valid Postal Code is at 99.98%.

The SME continues to work with LDCs to ensure the completeness, and the validity of the new data fields and specifically in addressing the small number of LDCs with a high percentage of SDPs assigned with the default W8W8W8 postal code, which may indicate incorrect coding at the source.

Key SME Achievements in 2018

The SME had a successful and productive year through technical enhancements, LDC mergers, LDC selfserve and service desk enhancements, training, and big data initiatives. Key accomplishments include:

SME Rate Filing

On March 1st, 2018, the OEB approved the SME's 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 now \$0.57/meter/month, which is over 25% less than the previous fee of \$0.79/meter/month.

MDM/R Annual CSAE 3416 Audit

The annual MDM/R CSAE3416 Audit completed and a final audit report was issued on November 15th, 2018. There were no qualifiable observations from the auditor which makes this the SME's 9th consecutive clean audit report.

LDC Mergers

In 2018, the SME supported and successfully completed three LDC Mergers. Mergers included the Alectra Utilities merge with Enersource Hydro, Newmarket Hydro merge with Tay Hydro, and Alectra Utilities merge with Brampton Hydro.

MDM/R Service Desk tool improvements

The SME worked with the Operational Service Provider to automate the MDM/R GUI password reset process, which has freed up both time and resources for both the LDCs and SME since it was deployed in mid-October 2018.

Third Party Access Implementation Plan

Following a year of intense work and consultations with a diverse group of stakeholders and industry experts, the SME filed an application with the OEB on December 4th, 2018 seeking approval to amend its licence to enable it to provide access to certain non-personal data about electricity usage to third parties at market price.

Information on the OEB filing can be found on the OEB's website at <u>https://www.oeb.ca/participate/applications/current-major-applications/eb-2018-0316</u>

Additional Risks and Issues

There are no additional risks or issues to report.

Other Opportunities and Next Steps

There are no other opportunities to report.