

**EXTERNAL**



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**Smart Metering Entity (SME)  
MDM/R Report  
2<sup>nd</sup> Quarter 2016**

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**April to June**

**Issue 12.0 - July 21, 2016**

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**REPORT**

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# 1. Introduction

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## 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.smi-ieso.ca/>), the Ontario Energy Board website ([www.ontarioenergyboard.ca/OEB/Industry](http://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 Service Levels
- Key SME Activities
- Additional Risks and Issues, and
- 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 million meters for 69 LDCs on a daily basis. The SME continues to respond to and address LDC support, service requests and issues in a timely manner.



**69**  
**LDCs**



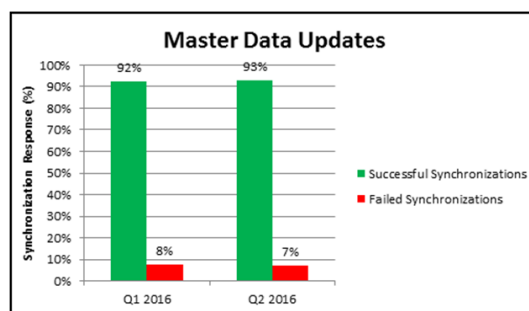
**4,153,764**  
**Smart Meters**

In the second quarter of 2016, the MDM/R was operationally stable **exceeding** service levels for 100% of meter reads, 100% of billing quantity requests, and 100% of master data updates.

### 2.2 LDC Performance

For each LDC the SME continues to publish monthly Performance Metrics reports and provide daily summarized operational data through the MDM/R Service Desk tool. The SME continues to seek feedback and development suggestions from LDCs to provide more operational value. The MDM/R successfully upgraded the MDM/R Service Desk Tool on April 5<sup>th</sup>, 2016. Furthermore, on June 16<sup>th</sup> the interactive daily performance metrics dashboard was enhanced by providing additional information and functionality – this latest upgrade offers LDCs a more user friendly help desk interface, a more detailed view of the overall health and quality of their daily data submissions, as well as other operational interactions with the MDM/R. It also provides the SME with new applications to support business operations.

Since the first quarter, the quality of LDC meter data and billing responses has remained the same, but synchronization failures were reduced by 1%. Synchronization of MDM/R master data can have a direct impact on data delivery and billing success for residential customers. The graph below provides insight into the improvement in LDC submission of MDM/R master data synchronizations between Q1 2016 and Q2 2016. The SME continues to work with LDCs to improve their data submissions.



## **2.3 Key SME Activities**

### **SME Steering Committee**

A SME Steering Committee meeting was held on June 21<sup>st</sup>, 2016. LDCs are given the opportunity to provide feedback and suggestions to the SME during pre-scheduled SME Steering Committee meeting open calls. LDCs can also communicate feedback and suggestions through email. The next meeting and call is scheduled for September 20<sup>th</sup>, 2016.

### **LDC Training**

On March 30<sup>th</sup> and April 1<sup>st</sup>, 2016 the SME delivered two webinar info sessions regarding the new interactive daily performance metrics dashboard. Basic and Advanced GUI training was also offered onsite April 6<sup>th</sup> and 7<sup>th</sup>, 2016.

### **LDC Mergers**

The SME continues to provide full support to Hydro One for their upcoming two mergers with Haldimand County Hydro Inc. and Woodstock Hydro Services Inc. The mergers are scheduled to be completed within the MDM/R system by September 1<sup>st</sup>, 2016.

### **Additional LDC Test Environments**

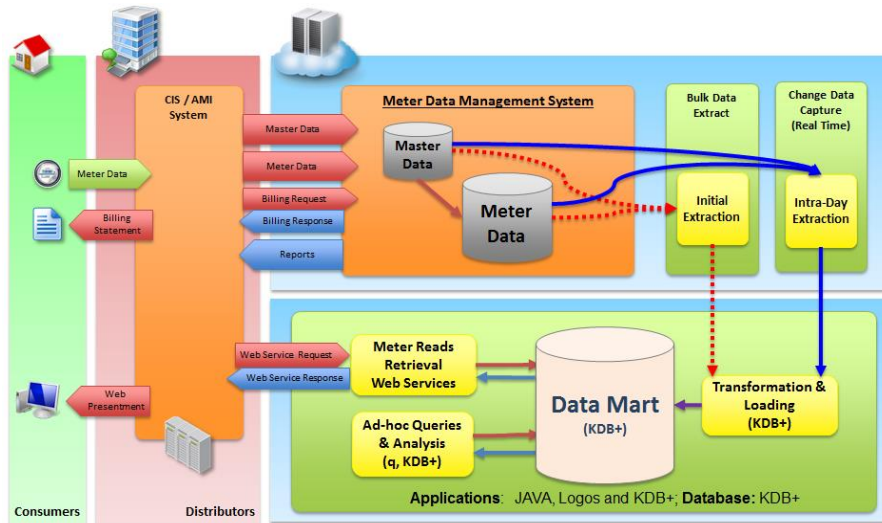
Due to a higher demand for test environments, the SME has built a new test environment to support the growing need for LDC MDM/R testing. This need is partially driven by merger activities and Customer Information System (CIS) upgrades which require extended periods of testing in an MDM/R test environment. The SME also utilizes these test environments to support future major system upgrades and for testing the functionality of new releases of software.

### **MDM/R Data Mart Project**

The SME has architected and developed the MDM/R Data Mart to improve the resiliency of the MDM/R and to address the growing volumes of Web Services Requests. At this point, the Data Mart will have no restrictions to the amount of data and will be available for 24/7 access.

In Q2 2016, the SME made improvements based on LDC feedback provided during the Q1 pilot testing phase. A final round of testing is expected to begin mid-July before LDCs begin to transition to the new Data Mart Web Services Facility. The transition is expected to be non-disruptive from an application perspective. The SME will communicate a detailed transition plan to all LDCs, including preparation for the connectivity of the remaining LDCs, in Q3 2016.

Once transitioned to this new Web Services Facility LDCs and their agents will be able to access and retrieve large amounts of data very efficiently. This facility has also been designed to support new and evolving value-added data services.



### SME Licence Order Working Group

The SME Licence Order Working Group has had several meetings to date, and a web page has been established for the posting of meeting materials:

<http://www.ieso.ca/Pages/Participate/Stakeholder-Engagement/Working-Groups/Smart-Metering-Entity-SME-Licence-Order-Working-Group.aspx>

At the advice of the IPC, the IESO has retained a privacy consultant to provide support with risk analysis for re-identification of individuals within the smart metering data being collected. The Privacy Consultant's report was completed and released in early June. The analysis concluded that the collection of the six character Postal Code, and generalizing the Occupancy Change date to just the year, represents an acceptable very low risk of re-identification. The Privacy Consultant's summary report was made available to interested LDCs.

Based on that recommendation, the SME finalized the Synchronization Technical Interface Specifications, published it to the LDCs, and reviewed the technical details with them during a webinar held on June 13<sup>th</sup>, 2016. An updated Synchronization Technical Interface Specification was published and LDCs have been updated through a series of communications. The SME continues to develop and test the code changes required for the MDM/R system and intends to make those available to LDCs to start their own testing by early August.

The working group is now turning its focus to the second phase of the project, the development of an implementation plan for Third Party Access with costing implications, as required in the OEB order. The privacy consultant will continue to be engaged throughout this phase as will the IPC who will continue to provide advice and guidance to ensure that privacy requirements are being met. This Third Party Access plan will be filed in the Fall 2016, with the SME licence renewal application.

### 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<sup>1</sup>.

Critical Service Level Summary		Apr-2016	May-2016	Jun-2016	2nd Quarter
Automatic Meter Read Processing	Intervals Loaded	3,099,777,809	3,207,279,031	3,108,464,352	9,415,521,192
	Intervals Loaded on Time	3,099,777,809	3,207,279,031	3,108,464,352	9,415,521,192
	% Intervals Loaded on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in accumulated delay >240 minutes <sup>2</sup>	0	0	0	0
Automatic Billing Quantity Processing	BQ Requests	3,836,275	5,715,533	4,339,827	13,891,635
	BQ Requests Fulfilled on Time	3,836,275	5,715,533	4,339,827	13,891,635
	% Requests Fulfilled on Time	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in accumulated delay >240 minutes <sup>2</sup>	0	0	0	0
Automatic MMD Incremental Synchronization Processing	Data Elements Requested	3,550,757	1,500,973	1,474,918	6,526,648
	Data Elements Loaded on Time	3,550,757	1,500,973	1,474,918	6,526,648
	% 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 <sup>2</sup>	0	0	0	0
MDM/R Graphical User Interface	Availability	99.98%	99.99%	99.99%	99.99%
	Number of incidents resulting in MDM/R Graphical User Interface availability outside of agreed Service Level target <sup>2</sup>	0	0	0	0
Meter Read Retrieval Web Services	Availability	100.00%	100.00%	99.99%	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%	99.98%	100.00%	99.99%
	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

<sup>1</sup> Percentages are rounded to the second decimal place for each metric.

Non-Critical Service Level Summary		Apr-2016	May-2016	Jun-2016	2nd Quarter
<b>Meter Read Retrieval Web Services</b>	Response Time	99.91%	99.93%	99.90%	99.91%
	Number of incidents resulting in Meter Read Retrieval Web Services response time outside of agreed Service Level target	0	0	0	0
<b>MDM/R Availability</b>	Availability	100.00%	100.00%	100.00%	100.00%
	Number of incidents resulting in MDM/R Availability outside of agreed Service Level target	0	0	0	0
<b>Service Requests</b>	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. Additional Risks and Issues

There are no additional risks or issues to report.

## 5. Opportunities and Next Steps

### Key Technology Upgrades

The SME has completed its evaluation and upgrade assessment of the Meter Data Management Repository (MDM/R) application software. To maintain software support, and to ensure MDM/R operational stability, the SME will be upgrading the MDM/R to eMeter's EnergyIP software version 7.7. This upgrade is expected to have minimal impact to the LDC community. A project plan has been developed, and this new version is expected to be tested and deployed in the MDM/R Production environment by the end of Q1 2017. The SME is also performing a detailed long term software upgrade assessment to determine the best software solution available after the 7.7 upgrade.

### Net Metering

The Net Metering/Self-Consumption Advisory Working Group was established in July 2015 and the SME is actively participating in order to provide feedback for the following:

- Recommendations on program design and implementation considerations associated with the policy proposal.
- Guidance on the engagement plan and materials.
- SME responsibility for the work of a technical sub-committee.

Based on conversations with the Ministry, this project is expected to ramp up in the third quarter with program completion currently targeted for late 2017 or early 2018.