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**REPORT**

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**Smart Metering Entity (SME)  
Time-of-Use Mandate Progress Report  
Through January 31, 2013**

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**Issue 30.0 - February 22, 2013**

# Table of Contents

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- Table of Contents ..... 1**
  
- 1. Introduction.....2**
  - 1.1 Purpose.....2
  - 1.2 How to Use this Document .....2
  
- 2. SME and MDM/R Readiness – Relevant Issues.....4**
  - 2.1 MDM/R Operation and Software Testing .....4
  - 2.2 Processing Performance .....4
  - 2.3 Resourcing .....5
  - 2.4 Training .....5
  - 2.5 Additional Risks and Issues.....5
  
- 3. Distributor Readiness – MDM/R Integration and Meter Enrolment .....7**
  - 3.1 January Highlights .....7
  - 3.2 MDM/R Cutover Targets.....7
  - 3.3 MDM/R Enrolled Meter Counts by Distributor .....9
  - 3.4 Distributor Enrolment Testing Activities with the MDM/R ..... 11
  - 3.5 MDM/R Enrolment Wave Calendar..... 11

# 1. Introduction

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## 1.1 Purpose

The purpose of this report is to provide a monthly update to the Ontario Energy Board on the Smart Metering Entity's readiness and performance and the progress in respect to distributor integration with the Meter Data Management and Repository (MDM/R). This report includes information and status updates on:

- The Smart Metering Entity (SME) and the MDM/R Readiness - Any issues relevant to the ability of the SME and the MDM/R to support MDM/R enrolment and TOU implementation, such as resourcing, software operation, and processing performance.
- Distributor (LDC<sup>1</sup>) Readiness – Integrating with the MDM/R is a prerequisite to enable LDCs to execute their individual TOU rollout strategies and contribute to Ontario's provincial targets for total customers on time-of-use (TOU) rates. This report includes information regarding LDC progress against their project plans, testing activities and MDM/R enrolment activities both achieved and projected.

## 1.2 How to Use this Document

This report presents information and status updates on SME and MDM/R readiness (in Section 2), distributor readiness, and MDM/R enrolment progress (in Section 3). This report focuses on updates through the end of the indicated month. However, in the area of MDM/R readiness (Section 2), important updates that occurred between the end of the reporting month and the date the report is submitted to the OEB will also be reported. More information about the provincial Smart Metering Initiative, the MDM/R and the implementation of Time-of-Use rates 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 (<http://www.smi-ieso.ca/>).

SME and MDM/R readiness will include updates on implementation and testing for new MDM/R software, processing performance, status of resourcing and training programs, and any other issues that may affect the implementation of mandatory TOU.

Distributor readiness and MDM/R enrolment progress will be communicated using a series of tables; some summarizing aggregate results and others detailing by individual LDC. The tables provided in the report are:

- MDM/R Cutover Targets Outlook
- MDM/R Enrolled Meter Counts by Distributor
- MDM/R Enrolment Wave Calendar (2013)

Each table is accompanied by a description of its contents and how to interpret it. The information contained in two of the tables is interrelated and these relationships are described below.

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<sup>1</sup> LDCs in Ontario (meaning each Local Distribution Company or "distributor" as defined in the Ontario Energy Board Act, 1998)

- The MDM/R Enrolment Wave Calendar contains detailed schedules for the planned enrolment testing and cutover to production that each LDC has provided to the SME. The Wave Calendar includes updates received from LDCs verbally and through project plan submissions. If an LDC's self-certification for enrolment testing has been accepted by the SME, this is also indicated on the MDM/R Enrolment Wave Calendar. Verbally provided milestone information, while shown in the calendar, is not included in any of the other tables. The information in the MDM/R Enrolment Wave Calendar can be further refined based on the SME's assessment of an organisation's readiness. The basis for such refinements can include our interactions with the LDC's project team, along with observed levels of testing activity in the MDM/R testing environments.
- MDM/R Cutover Targets uses the actual number of LDCs enrolled in the MDM/R production environment and the number of meters that they have each enrolled at the end of each month. It projects forward the number of LDCs that will be enrolled in subsequent time periods based on the MDM/R Enrolment Wave Calendar.

## 2. SME and MDM/R Readiness – Relevant Issues

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### 2.1 MDM/R Operation and Software Testing

The Smart Metering Entity (SME) has completed the enrolment of 71 of 72<sup>2</sup> distributors and their eligible meters under the Board's TOU mandate. The enrolment and transition of remaining customers to TOU billing is subject to the Board's regulatory and exemption processes.

The MDM/R production environment remains stable and reliable, and the SME continues to respond to, and address, LDC support and service requests in a timely manner.

The SME continues to work with LDCs as they transition to the new billing quantity interface that enables them to comply with Measurement Canada's requirements by including register readings on customer's time-of-use bills. With the cooperation of LDCs, the MDM/R continues to offer a stable, centralized system that effectively supports LDCs with their time-of-use billing.

### 2.2 Processing Performance

At the end of January, the MDM/R was supporting 71 LDCs<sup>2</sup> with a total of 4.5 million enrolled smart meters. The average number of smart meters reporting data to the MDM/R on a daily basis amounted to 3.9 million for the month of January. However, the MDM/R was required to process an average of 5.6% more interval data daily, due to the poor quality of data submitted by some LDCs and their respective AMI agents, which resulted in temporary data estimations as well as duplicate data submissions.

In January, the considerable increase in the volume of meter read data submitted by LDCs just before the close of the midnight to 5 AM service level window continued and resulted in the MDM/R processing only 87.8% of meter reads within service level time lines. On average, the remaining 12.2% of meter read data submittals completed processing 60 minutes after the service level requirement. No business impacts from these delays were reported to the IESO by the affected LDCs. The MDM/R processed 100% of meter master data updates, and 100% of billing quantities within contracted service level time lines.<sup>3</sup>

To ensure the reliable operation of the MDM/R, the SME has taken a proactive approach to contact LDCs and their metering providers directly to manage the quality and timing of meter read data submission to the MDM/R.

On January 28<sup>th</sup> at 20:40 EST there was a power outage to the MDM/R production hosting facility. After recovering from the equipment failure, the hosting facility was brought up on diesel generator power and restoration of the MDM/R was initiated. MDM/R operation was fully restored at 10:20 EST on January 29<sup>th</sup>. The power outage caused delays in the processing of files, but once the MDM/R was fully restored, the recovery continued without further incident. LDCs were provided with extensive notifications and status updates throughout the process. They have indicated that these communications were very effective in helping them manage the outage within their own operations.

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<sup>2</sup> The updated LDC count reflects the amalgamation of Algoma and CNPI.

<sup>3</sup> These metrics do not include the January 28<sup>th</sup> power outage.

The utility's power feed to the hosting facility was restored on February 10<sup>th</sup>, and a permanent fix in the electrical infrastructure has since been tested and implemented to prevent further occurrences.

## **2.3 Resourcing**

The SME continues to make resources available to LDCs in support of their time-of-use implementation plans and transition to the interface and measurement profiles required for LDCs to receive and present register reads on electricity bills. There were no significant resource changes in January.

## **2.4 Training**

The SME continues to update training materials and the training environment to provide a more advanced training program for LDCs.

## **2.5 Additional Risks and Issues**

### **WEB-SERVICES METER READS RETRIEVAL FACILITY**

Over the past few months, the MDM/R has experienced an increase of web service request volumes that represents approximately two to three times the expected volumes. The Web Services facility was originally designed to support the retrieval of specified meter reads by ratepayers and agents; however, the use of this service has been expanded beyond its original scope by LDCs and third party organizations. Initially, to maintain reliable operation of the MDM/R, the SME had to temporarily suspend processing of all web service requests for all LDCs when volumes exceeded system thresholds, until volumes subsided and fell within specified tolerances. The SME has been engaged with LDCs and these third party organizations to better understand the nature of this increased demand and, where possible, either eliminate it or improve the efficiency of how information is retrieved from the MDM/R.

In early January, to better maintain the continuous availability of the service, the IESO put a limit on the number of simultaneous connections to the web services facility. This limitation, while eliminating the need to suspend all web services requests for short periods of time, may result in some requests being rejected when the system is experiencing high volumes.

We continue to monitor and tune the Web Services facility to handle higher volumes. As part of the planned refresh of the MDM/R computing infrastructure in 2013, the MDM/R web services retrieval facility will have additional capacity to support the increased volume of requests.

### **SME INITIATIVES**

#### **Transitioning of LDCs to Enable their Receipt of Cumulative Register Reads from the MDM/R for Inclusion on TOU Bills to Customers**

In April of 2012, MDM/R functionality needed to support LDCs with their incorporation of cumulative register reads on customer TOU bills was put in place with the deployment of Release 7.2 to the MDM/R production environment.

LDCs are responsible for the inclusion of cumulative register reads on customer's TOU bills by making necessary changes to their own systems, business processes, and by conducting their own tests before transitioning.

By the end of January, 62 LDCs have transitioned to the MDM/R interface enabling them to receive register reads for billing and support their compliance with Measurement Canada requirements. Based on requested transition schedules submitted by the LDCs, we expect to have 67 LDCs enabled to receive register reads for billing by the end of February 2013. The SME continues to work with the remaining LDCs to obtain and confirm transition schedules.

### **Measurement Canada 2012 Phase 2**

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

The following components comprise Phase 2 of the Measurement Canada 2012 solution:

- 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.

The software solution for this Phase 2 functionality has been delivered and has been under test for several months. Our expectation is that this software will be made available for LDC testing and be deployed to Production later in 2013.

### **Green Button Initiative**

Since the launch of the 'Green Button initiative' on November 21, 2012, the IESO has been providing input and advice to the Ministry of Energy, MaRS Discovery District (MaRS), LDCs and industry stakeholders, on the Electricity Data Access Project (EDAP). A working group and four sub-committees have been formed to move this initiative forward, with representation from LDCs, the Privacy Commissioner of Ontario, the IESO, the OPA, the OEB and the Ministry.

The Green Button initiative is focused on providing consumers with the ability to download their electricity consumption information in a standard format ("Download My Data") and enabling authorized third party service and application providers to access electricity consumption information on behalf of consumers from LDCs and the MDM/R ("Connect My Data"). The Ministry of Energy has issued a request for proposal to select a technical advisor to assist in the development and testing of a proof-of-concept version of the "Connect My Data" solution.

The IESO is participating in the working group as well as the four subcommittees in support of the Green Button initiative while maintaining the reliability and security of the MDM/R in support of LDCs' business operations.

## 3. Distributor Readiness – MDM/R Integration and Meter Enrolment

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### 3.1 January Highlights

By the end of January there were 71 LDCs<sup>2</sup> in production with 4.5 million meters enrolled in the MDM/R. One LDC has not connected to and started testing with the MDM/R. This LDC has submitted a project plan and is planning to begin integration testing with the MDM/R in the third and fourth quarters of 2013 with a targeted cutover to production in the fourth quarter of 2013.

### 3.2 MDM/R Cutover Targets<sup>4</sup>

The MDM/R Cutover Targets table provides both actual and projected numbers of LDCs that have been or are to be cutover to MDM/R production operations in each calendar quarter.

For information on which specific LDCs are included in the *Production LDCs* column for each time period refer to the MDM/R Enrolment Wave Calendar.

The *RPP Eligible Customers* column contains the aggregate total for all the LDCs included in the *Production LDCs* column. LDC filings with the OEB include their total RPP eligible customers and these figures form the basis for the aggregated figures reported in this table.

The *Enrolled in MDMR* column contains the aggregate total number of smart meters for those LDCs that are included in the *Production LDCs* column. It is included in this table to track the ramp-up of enrolled meters after the LDCs complete their cutover to MDM/R production operations. The source of these figures is the LDC filings with the OEB.

The % complete figure at the bottom of the table indicates the percentage of the total RPP eligible customers enrolled in the MDM/R as of the reporting date.

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<sup>4</sup> As of January 2012, distributors who have implemented TOU for over 98% of their RPP eligible customers are no longer required to report monthly the number of meters enrolled in the MDM/R to the OEB. For a distributor that has met its TOU targets and is no longer reporting to the OEB, their number of meters enrolled will be based on data taken directly from the MDM/R. Additionally, for these LDCs:

- If the number of meters enrolled in the MDM/R exceeds their last OEB reported number of RPP eligible customers we will equate their number of RPP eligible customers to the MDM/R meters enrolled count.
- If the number of meters enrolled in the MDM/R is less than their last OEB reported number of RPP eligible customers, we will retain the RPP eligible customers last reported to the OEB.



January 31, 2013	MDM/R Cutover Targets		
	Production LDCs	RPP Eligible Customers	Enrolled in MDMR
<b>Actuals - Based on Production LDCs data</b>			
Pre- Q2 2010	9	3,005,896	2,816,758
Q3 2010	2	160,624	160,624
Q4 2010	4	122,982	122,982
Q1 2011	13	286,101	286,597
Q2 2011	14	292,248	292,248
Q3 2011	16	582,369	577,867
Q4 2011	5	39,177	38,139
Q1 2012	6	207,401	207,401
Q2 2012	2	55,107	55,107
Q3 2012	-	-	-
Q4 2012	0*	-	-
Q1 2013			
Q2 2013			
Q3 2013			
<b>Actual Totals for LDCs in Production</b>	<b>71</b>	<b>4,751,905</b>	<b>4,557,723</b>
<b>Projected - Based on enrolment plans submitted to the SME</b>			
Q4 2013	1	84,464	
<b>Projected Totals for Committed LDCs</b>	<b>72</b>	<b>84,464</b>	
<b>Totals (Actual and Projected)</b>	<b>72</b>	<b>4,836,369</b>	<b>4,557,723</b>
<b>% Complete of total RPP Eligible Customers Enrolled in the MDM/R</b>		<b>95.9%</b>	
<b>Notes:</b>			
(1) "RPP Eligible customers" are the total customers reported to the OEB that will ultimately be put on TOU rates and whose smart meters will be enrolled in the MDM/R.			
(2) "Enrolled in MDMR" represents the number of "RPP Eligible Customers" whose smart meters are currently enrolled in the MDM/R.			
* Algoma's meters were enrolled in the MDM/R as part of CNP. Therefore, the Algoma meters have been added to the CNP count.			

### 3.3 MDM/R Enrolled Meter Counts by Distributor<sup>4</sup>

The MDM/R Enrolled Meter Counts by Distributor table shows each MDM/R production LDC's progress in enrolling smart meters over the previous month. The total meters enrolled in the previous and the current reporting months are provided, along with the net increase or decrease over the period. Note that in some cases there may be a small decrease in the number of meters enrolled from month to month. This reflects the routine day-to-day activities within an LDC's operation that involve the removals and deactivations of meters.

The source of the data in the *Total Meters Enrolled* and the *Total RPP Eligible Customers* columns come from data filed by the LDCs with the OEB. The *% Complete* column indicates what percentages of the Total RPP Eligible Customers are enrolled in MDM/R production as of the end of the reporting period.

As of January 31, 2013	MDM/R Enrolled Meter Counts by Distributor				
Distributor	Total Meters Enrolled through 31-Dec	Total Meters Enrolled through 31-Jan	Increased Meter Enrolment this Month	Total RPP Eligible Customers	% Complete for Production LDCs
Atikokan Hydro*	1,671	1,671	0	1,671	100.0%
Bluewater*	35,553	35,571	18	35,571	100.0%
Brant County Power*	9,841	9,851	10	9,851	100.0%
Brantford Power*	37,945	37,972	27	37,972	100.0%
Burlington Hydro*	64,885	64,917	32	64,917	100.0%
Cambridge*	52,040	52,076	36	52,076	100.0%
Centre Wellington*	6,553	6,555	2	6,555	100.0%
Chapleau*	1,274	1,276	2	1,276	100.0%
CNPI* <sup>1</sup>	39,654	39,854	200	39,854	100.0%
COLLUS Power*	16,057	16,069	12	16,069	100.0%
E.L.K. Energy	10,937	10,965	28	10,950	100.1%
Embrun*	1,946	1,948	2	1,948	100.0%
Enersource	188,481	188,849	368	193,596	97.5%
Entegrus*	40,238	40,247	9	40,247	100.0%
Erie Thames*	18,107	18,107	0	18,107	100.0%
Espanola*	3,305	3,306	1	3,306	100.0%
Essex Power*	28,182	28,213	31	28,213	100.0%
Festival Hydro*	19,778	19,804	26	19,804	100.0%
Fort Frances*	3,739	3,739	0	3,739	100.0%
Greater Sudbury*	46,964	47,009	45	47,009	100.0%
Grimsby Power*	10,391	10,402	11	10,402	100.0%
Guelph Hydro*	50,474	50,551	77	50,551	100.0%
Haldimand County*	21,121	21,129	8	21,129	100.0%
Halton Hills*	20,899	20,947	48	20,947	100.0%
Hearst Power*	2,709	2,709	0	2,709	100.0%
Horizon Utilities*	233,828	233,873	45	233,873	100.0%
Hydro 2000*	1,207	1,207	0	1,207	100.0%
Hydro Hawkesbury*	6,537	6,537	0	6,537	100.0%
Hydro One <sup>2</sup>	1,106,038	1,119,438	13,400	1,208,801	92.6%
Hydro One Brampton*	139,387	139,677	290	139,677	100.0%
Hydro Ottawa*	303,788	306,229	2,441	306,229	100.0%

Innisfil Hydro*	15,038	15,058	20	15,058	100.0%
Kenora Hydro*	5,563	5,566	3	5,566	100.0%
Kingston Hydro*	27,169	27,181	12	27,181	100.0%
Kitchener-Wilmot*	88,305	88,374	69	88,374	100.0%
Lakefront Utilities*	9,805	9,824	19	9,824	100.0%
Lakeland Power*	9,694	9,708	14	9,708	100.0%
London Hydro*	148,042	148,131	89	148,131	100.0%
Midland Power*	6,881	6,890	9	6,890	100.0%
Milton Hydro*	30,688	30,938	250	30,938	100.0%
NewmarketTay*	33,501	33,537	36	33,537	100.0%
Niagara Peninsula	49,866	50,116	250	49,886	100.5%
Niagara-on-the-Lake*	8,089	8,109	20	8,109	100.0%
Norfolk Power*	19,139	19,157	18	19,157	100.0%
North Bay Hydro	22,632	22,632	0	23,670	95.6%
Northern Ontario Wires*	5,991	5,991	0	5,991	100.0%
Oakville Hydro	64,088	63,853	-235	63,357	100.8%
Orangeville Hydro*	11,318	11,332	14	11,332	100.0%
Orillia Power*	13,062	13,062	0	13,062	100.0%
Oshawa PUC*	52,915	53,017	102	53,017	100.0%
Ottawa River*	10,514	10,525	11	10,525	100.0%
Parry Sound*	3,380	3,384	4	3,384	100.0%
Peterborough*	35,250	35,303	53	35,303	100.0%
PowerStream*	324,741	325,217	476	325,217	100.0%
PUC Distribution*	32,992	32,992	0	32,992	100.0%
Renfrew Hydro*	4,181	4,182	1	4,182	100.0%
Rideau St. Lawrence*	5,827	5,797	-30	5,797	100.0%
Sioux Lookout*	2,735	2,735	0	2,735	100.0%
St. Thomas*	16,473	16,489	16	16,489	100.0%
Thunder Bay*	49,802	49,827	25	49,827	100.0%
Tillsonburg*	6,683	6,683	0	6,683	100.0%
Toronto Hydro	612,241	612,241	0	712,016	86.0%
Veridian*	114,883	115,038	155	115,038	100.0%
Wasaga*	12,502	12,513	11	12,513	100.0%
Waterloo North*	53,479	53,574	95	53,574	100.0%
Welland Hydro*	22,172	22,188	16	22,188	100.0%
Wellington North*	3,627	3,629	2	3,629	100.0%
West Coast Huron*	3,804	3,806	2	3,806	100.0%
Westario Power*	22,463	22,489	26	22,489	100.0%
Whitby Hydro*	40,584	40,662	78	40,662	100.0%
Woodstock Hydro*	15,264	15,275	11	15,275	100.0%
<b>Total Meter Counts</b>	<b>4,538,912</b>	<b>4,557,723</b>	<b>18,811</b>	<b>4,751,905</b>	<b>95.9%</b>
*This LDC has implemented TOU for more than 98% of their customers and has been given an exemption by the OEB from having to report monthly enrolment numbers.					
<sup>1</sup> Algoma's meters were enrolled in the MDM/R as part of CNP. Therefore, the Algoma meters have been added to the CNP count of Total RPP Eligible Customers.					
<sup>2</sup> Hydro One has been granted an exemption by the OEB from having to report monthly enrolment numbers as a result of TOU implementation for some of their hard-to-reach customers.					

### **3.4 Distributor Enrolment Testing Activities with the MDM/R**

The System Integration Testing, Qualification Testing and Cutover timelines identified are sourced from the details in the Enrolment Wave Calendar. Unit testing timelines are provided by each LDC in their MDM/R project plan.

No enrolment testing activity is expected until the third quarter of 2013.

### **3.5 MDM/R Enrolment Wave Calendar**

The MDM/R Enrolment Wave Calendar is an integrated plan illustrating the three formal enrolment testing milestones of SIT, QT, and Cutover for all non-production LDCs. The background colour for each LDC's name indicates the source of the information used in the calendar:

- Green indicates that the LDC has submitted a project plan, completed Unit testing and the SME has accepted the LDC's Self-Certification for Enrolment Testing.
- Blue indicates that the SME has reviewed and accepted the LDC's project plan.
- Yellow either indicates that the SME has not received a project plan but has received verbal confirmation of the LDC's three enrolment testing milestones or that the LDC has verbally indicated that it will re-submit a new plan. This information is not used for projecting LDC cutover dates in any of the other charts in this report.
- Red indicates that the LDC has not shared their plan with the SME.
- White indicates a production LDC that has completed Cutover.
- Orange indicates that the LDC is scheduled for amalgamation.

The RPP eligible customer counts come from data filed by the LDCs with the OEB. As LDC plans change, the reason code will indicate one of five possible reasons.

1. The change may have been initiated by the SME due to resource or system constraints.
2. The LDC may have re-submitted a new plan.
3. The LDC may have missed timelines for their project tasks and therefore was not ready to proceed in accordance with their plan.
4. The LDC may have entered enrolment testing but subsequently had to withdraw because they were unable to successfully complete the tests.
5. The LDC's previous plan has changed but they have not re-submitted a new plan.

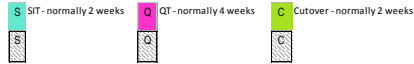
When an LDC's schedule is changed, the milestones for the previous schedule remain on the calendar but are greyed out.

Finally, each section on the timeline represents a one-week period starting on a Monday.

# SME TOU Mandate Progress Report as of January 31, 2013

## MDM/R Enrolment Wave Calendar

As of January 31, 2013



Reason for Latest Change	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Reason Code:																
1: IESO Change																
2: LDC Plan change																
3: LDC Not Ready																
4: LDC Wave Failure																
5: Update pending																
	December	January	January	January	January	February	February	February	February	March	March	March	March	April	April	April
	31	7	14	21	28	4	11	18	25	4	11	18	25	1	8	15
															22	29

RPP Eligible Customers	LDC Name															
84,464	ENWIN Powerlines Ltd.															

- Red = No project plan submitted**
- Yellow = Verbal indication of major milestones**
- Blue = Project plan submitted**
- Green = Enrolment self-certification accepted**
- White = Production LDC**
- Orange = Scheduled for amalgamation**

MDMR Production LDCs	
1,671	Atikokan Hydro Inc.
35,571	Bluewater Power Distribution Corp.
9,851	Brant County Power Inc
37,972	Brantford Power Inc.
64,917	Burlington Hydro Inc.
52,076	Cambridge & North Dumfries Hydro Inc.
6,555	Centre Wellington Hydro Ltd.
1,276	Chapleau Public Utilities Corp.
27,257	CNP - Fort Erie
9,075	CNP - Port Colborne Hydro Inc
3,522	CNP - EOP
16,069	Collus Power Corp
1,948	Cooperative Hydro Embrun Inc.
10,950	E.L.K. Energy Inc.
193,596	Enersource Hydro Mississauga Inc.
40,247	Entegrus
18,107	Erie Thames Powerlines Corp. (amalgamated with Clinton Power and West Perth Power on June 1, 2011)
3,306	Espanola Regional Hydro Distribution Corp.
28,213	Essex Power Lines Corp.
19,804	Festival Hydro Inc.
3,739	Fort Frances Power Corp.
47,009	Greater Sudbury Hydro Inc.
10,402	Grimsby Power Inc.
50,551	Guelph Hydro Electric Systems Inc.
21,129	Haldimand County Hydro
20,947	Halton Hills
2,709	Hearst Power Distribution Company Ltd
233,873	Horizon Utilities Corporation
1,207	Hydro 2000 Inc.*
6,537	Hydro Hawkesbury Inc.
1,208,801	Hydro One
139,677	Hydro One Brampton Networks Inc.
306,229	Hydro Ottawa Limited
15,058	Innisfil Hydro Distribution Systems Ltd.
5,566	Kenora Hydro Electric Corp Ltd
27,181	Kingston Hydro Corporation
88,374	Kitchener-Wilmot Hydro Inc.
9,824	Lakefront Utilities Inc.
9,708	Lakeland Power Distribution Ltd.
148,131	London Hydro
6,890	Midland Power Utility Corp
30,938	Milton Hydro
33,537	Newmarket Hydro Ltd./Tay Hydro
49,886	Niagara Peninsula Energy Inc. (includes Peninsula West @ 14,351)
8,109	Niagara-on-the-Lake Hydro Inc.
19,157	Norfolk Power Distribution Inc.
23,670	North Bay Hydro Distribution Ltd
5,991	Northern Ontario Wires Inc.
63,357	Oakville Hydro Electricity Distribution Inc.
11,332	Orangeville Hydro Ltd. (includes Grand Valley (659))
13,062	Orillia Power Distribution Corp.
53,017	Oshawa PUC Networks Inc.
10,525	Ottawa River Power Corp.
3,384	Parry Sound Power Corp.
35,303	Peterborough Distribution Inc.
325,217	PowerStream Inc
32,992	PUC Distribution Inc.
4,182	Renfrew Hydro Inc.
5,797	Rideau St. Lawrence Distribution Inc.
2,735	Sioux Lookout Hydro
16,489	St. Thomas Energy Inc.
49,827	Thunder Bay Electricity Distribution Inc.
6,683	Tillsonburg Hydro Inc.
712,016	Toronto Hydro Electric Services Ltd.
115,038	Veridian Connections
12,513	Wasaga Distribution Inc.
53,574	Waterloo North Hydro Inc.
22,188	Welland Hydro-Electric System Corp.
3,629	Wellington North Power Inc.
3,806	West Coast Huron Energy Inc.
22,489	Westario Power Inc.
40,662	Whitby Hydro Energy Services Corp.
15,275	Woodstock Hydro Services Inc.
<b>4,751,905</b>	<b>Production total customer count</b>
<b>4,836,369</b>	<b>All LDC total customer count</b>