

**Exhibit 3:**

**REVENUE**

Exhibit 3: Revenue

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**Tab 1 (of 3): Load and Revenue Forecast**

## HISTORICAL & FORECAST VOLUMES

### Population and Load Trends

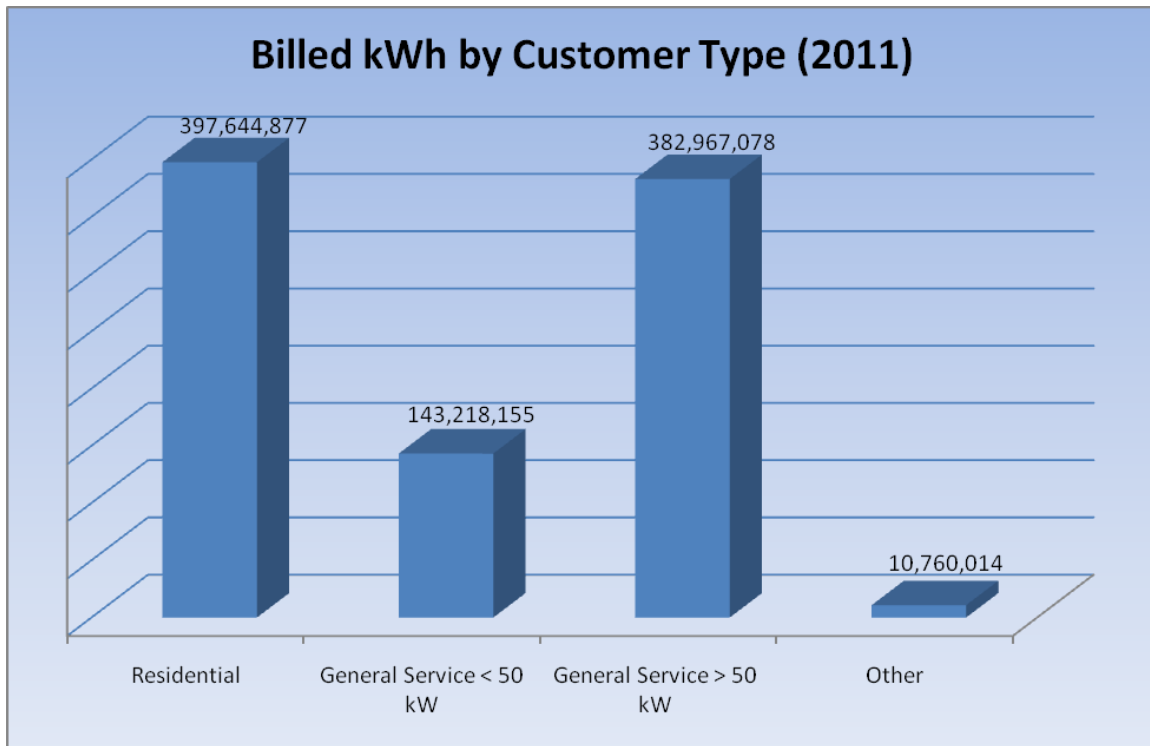
Greater Sudbury is made up of four distinct geographic areas. In the year 2000 the former City of Sudbury and several regional municipalities amalgamated. At that time, Capreol Hydro and Nickel Centre Hydro became part of the Greater Sudbury utility. In 2008, the former West Nipissing Energy Services Ltd amalgamated with Greater Sudbury. The areas are in reasonable close proximity that growth patterns are considered for the utility as a whole.

The latest census information for the areas that Greater Sudbury provides service (City of Greater Sudbury, Municipality of West Nipissing) shows that the total population of these communities increased by 1.8 percent between 2006 and 2011, or about 0.36 percent per year. This is consistent with the generally very modest growth in customer numbers and load in most classes.

Greater Sudbury's customer base is predominantly residential. While there is a great deal of industrial load within the geographic area, these large users are not customers of Greater Sudbury. Many of the customers in the General Service > 50 kW class belong to the "MUSH" sector which is relatively stable. data for consumption by rate class is detailed in Table below.

Conservation efforts are influencing consumption trends and are producing a downward trend in average customer usage.

**Table 1**



### **Customer Count and Volumetric Forecasts**

The following tables summarize actual and forecast customer count, energy (kWh) forecast and demand (kW) forecast. A full discussion of the development of the load forecast is provided in the report prepared by Elenchus Research Associates (Elenchus) found in Exhibit 3, Tab 1, Schedule 2, Attachment 1. The three major customer classes are all weather sensitive. While street lighting and USL loads are not weather sensitive, the City of Greater Sudbury has undertaken a program for replacement of incandescent traffic lights with LED lights. This program is nearing completion. In addition, in 2012 the City has authorized replacement of over 1,300 HPS streetlight fixtures with LED units that will significantly impact the streetlight load. Proposals for a complete replacement of all fixtures in the City is under consideration. The variance analysis is contained in Schedule 2, Tab 1 of this Exhibit.

1 Table 2 contains the customer count by year. Actual and forecast kWh and kW  
 2 forecasts are contained in Table 3 and Table 4 respectively. As an addendum to the  
 3 load forecast report, an adjusted forecast was prepared by Elenchus reflecting expected  
 4 impacts of CDM on the load forecast. The CDM adjustment is detailed in Exhibit 3, Tab  
 5 1, Schedule 3.

6 **Table 2 - Customer Count (average per year)**

Customer Class Name	2009 Approved	2009 Actual	2010 Actual	2011 Actual	2012 Forecasted	2013 Forecasted
Residential	41,742	41,780	41,997	42,174	42,342	42,512
General Service < 50 kW	4,023	4,004	4,015	4,029	4,045	4,061
General Service > 50 kW	569	514	518	527	529	531
Unmetered Scattered Load (connections)	338	338	338	345	345	345
Sentinel Lighting (connections)	432	436	436	436	436	436
Street Lighting (connections)	9,647	9,504	9,513	9,540	9,559	9,578
<b>TOTAL</b>	<b>56,751</b>	<b>56,576</b>	<b>56,817</b>	<b>57,051</b>	<b>57,256</b>	<b>57,463</b>

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8 **Table 3 - Historical and Forecast Energy (kWh) Forecast**

Customer Class Name	2009 EDR Approved	2009 Actual	2010 Actual	2011 Actual	2011 Normalized	2012 Normalized	2013 Normalized
Residential	411,365,208	412,129,188	394,465,898	397,644,877	406,358,911	408,611,069	406,137,555
General Service < 50 kW	142,022,495	143,769,626	142,203,409	143,218,155	144,457,943	145,339,777	144,316,198
General Service > 50 kW	411,264,889	389,924,101	382,334,753	382,967,078	392,651,146	393,082,594	392,452,934
Unmetered Scattered Load (connections)	2,223,118	1,851,166	1,759,891	1,645,761	1,645,761	1,536,748	1,457,735
Sentinel Lighting (connections)	567,330	523,175	467,532	467,079	467,079	467,079	467,079
Street Lighting (connections)	8,681,572	8,601,957	8,626,792	8,647,174	8,647,174	8,605,967	8,096,785
<b>TOTAL</b>	<b>976,124,612</b>	<b>956,799,213</b>	<b>929,858,275</b>	<b>934,590,124</b>	<b>954,228,014</b>	<b>957,643,234</b>	<b>952,928,286</b>

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**Table 4 - Historical and Forecast Energy (kW) Forecast**

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<b>Customer Class Name</b>	<b>2009 EDR Approved</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2011 Normalized</b>	<b>2012 Normalized</b>	<b>2013 Normalized</b>
Residential							
General Service < 50 kW							
General Service > 50 kW	1,012,838	967,553	965,342	957,195	971,149	972,216	970,659
Unmetered Scattered Load (connections)							
Sentinel Lighting (connections)	1,453	1,255	1,153	1,287	1,287	1,287	1,287
Street Lighting (connections)	23,889	24,038	24,111	24,155	24,155	24,040	22,618
<b>TOTAL</b>	<b>1,038,180</b>	<b>992,846</b>	<b>990,606</b>	<b>982,637</b>	<b>996,591</b>	<b>997,543</b>	<b>994,564</b>

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## Sudbury (ED-2002-0559)

2013 EDR Application (EB-2012-0126) version: 1  
November 9, 2012

### Volumetric Trend Table

#### CUSTOMERS (CONNECTIONS)

Customer Class Name	2009 Approved	2009 Actual	2010 Actual	2011 Actual	2011 Normalized	2012 Normalized	2012 Estimated	2013 Normalized
Residential	41,742	41,926	42,068	42,279	42,174	42,342	42,342	42,512
General Service < 50 kW	4,023	3,911	4,118	3,940	4,029	4,045	4,045	4,061
General Service > 50 to 4999 kW	569	512	524	529	527	529	529	531
Unmetered Scattered Load	338	352	352	352	345	345	345	345
Street Lighting	9,647	9,513	9,513	9,566	9,540	9,559	9,559	9,578
Sentinel Lighting	432	436	436	436	436	436	436	436
<b>TOTAL</b>	<b>56,751</b>	<b>56,650</b>	<b>57,011</b>	<b>57,102</b>	<b>57,051</b>	<b>57,256</b>	<b>57,256</b>	<b>57,463</b>

#### METERED KILOWATT-HOURS (kWh)

Customer Class Name	2009 Approved	2009 Actual	2010 Actual	2011 Actual	2011 Normalized	2012 Normalized	2012 Estimated	2013 Normalized
Residential	411,365,208	412,159,188	394,465,898	397,644,877	406,358,911	408,611,069	408,611,069	401,373,120
General Service < 50 kW	142,022,495	143,769,626	144,489,006	143,218,155	144,457,943	145,339,777	145,339,777	141,856,898
General Service > 50 to 4999 kW	411,264,889	389,924,100	382,334,753	382,967,078	392,651,146	393,082,594	393,082,594	385,479,346
Unmetered Scattered Load	2,223,118	2,252,111	2,285,597	2,310,407	1,645,761	1,536,748	1,536,748	1,437,650
Street Lighting	8,681,572	8,601,957	8,626,792	8,647,174	8,647,174	8,605,967	8,605,967	7,985,224
Sentinel Lighting	567,330	523,174	476,529	467,079	467,079	467,079	467,079	460,643
<b>TOTAL</b>	<b>976,124,612</b>	<b>957,230,156</b>	<b>932,678,575</b>	<b>935,254,770</b>	<b>954,228,014</b>	<b>957,643,234</b>	<b>957,643,234</b>	<b>938,592,881</b>

#### KILOWATTS (kW)

Customer Class Name	2009 Approved	2009 Actual	2010 Actual	2011 Actual	2011 Normalized	2012 Normalized	2012 Estimated	2013 Normalized
Residential								
General Service < 50 kW								
General Service > 50 to 4999 kW	1,012,838	967,553	965,342	957,195	971,149	972,216	972,216	969,057
Unmetered Scattered Load								
Street Lighting	23,889	24,038	24,111	24,155	24,155	24,040	24,040	22,306
Sentinel Lighting	1,453	1,255	1,153	1,287	1,287	1,287	1,287	1,269
<b>TOTAL</b>	<b>1,038,180</b>	<b>992,846</b>	<b>990,606</b>	<b>982,637</b>	<b>996,591</b>	<b>997,543</b>	<b>997,543</b>	<b>992,632</b>

Customer Class Name	Loss Factor
Residential	1.0540
General Service < 50 kW	1.0540
General Service > 50 to 4999 kW	1.0540
Unmetered Scattered Load	1.0540
Street Lighting	1.0540
Sentinel Lighting	1.0540

#### WHOLESALE kWh's <sup>1</sup>

2012 Normalized	2012 Estimated	2013 Normalized
430,664,488	430,664,488	423,035,895
153,184,006	153,184,006	149,513,151
414,297,915	414,297,915	406,284,307
1,619,689	1,619,689	1,515,242
9,070,445	9,070,445	8,416,200
492,288	492,288	485,505

<sup>1</sup> Metered kWh's multiplied by Loss Factor

## **APPROACH TO WEATHER NORMALIZED LOAD FORECAST**

Greater Sudbury has used weather normalized forecasts in its determination of load for those rate classes that are weather sensitive. The residential, General Service <50kW and General Service >50 kW are weather sensitive, the weather sensitivity for the General Service >50kW being restricted to heating only. The remaining rate classes are not weather sensitive and forecast numbers for connections are based on a five year historical average rate increase.

Regression models were developed using recent historical consumption and weather data as well as other variables that would affect consumption patterns. The weather normalization is based on a report prepared by Elenchus entitled 2012-2013 Weather Normalized Load Forecast Greater Sudbury Hydro Inc. This report is enclosed as Exhibit 3, Tab 1, Schedule 2, Attachment 1.

The methodology uses actual data for 2007 to 2011 which is then modeled through separate multiple regression equations to determine a weather normalized forecast for 2012 and 2013 for the weather sensitive classes. The most recent ten year monthly degree day average has been adopted as the definition of weather normal for the purposes of Greater Sudbury's weather normal load forecast.

The load forecast report provides details on the regression models including all variables and assumptions used. The report provides an explanation on the weather normalization methodology and details of the development of the billing kW for the applicable classes.

A separate discussion of the impacts of conservation and demand management impacts on the load forecast is found at Exhibit 3, Tab 1, Schedule 3.



- 1 An excel file containing the load data used to derive the load forecast is provided by
- 2 Greater Sudbury and has been filed through the RESS.

3

Load Forecast Report

# **2012 – 2013 Weather Normalized Load Forecast Greater Sudbury Hydro Inc.**

**A Report Prepared by  
Elenchus Research Associates Inc.**

**On Behalf of  
Greater Sudbury Hydro Inc.**

**August 17, 2012**



## 1 INTRODUCTION

This report outlines the methodology used to derive the weather normal load forecast prepared for Greater Sudbury Hydro Inc. ("Sudbury") for its cost-of-service rate application for 2013. The forecast for Sudbury is based on monthly class specific retail data. Class specific retail data do not include losses; therefore, distribution system losses are not part of the class retail volumes.

In order to isolate demand determinants at the class specific level, separate multiple regression equations have been estimated to weather normalize and forecast kWh consumption for the weather sensitive residential and GS<50kW classes. For Sudbury, the GS>50 kW class also exhibits weather sensitivity and a regression equation is developed to normalize and forecast kWh in this class. This is consistent with the fact that many of these customers belong to the "MUSH" sector (e.g., municipal, university, schools and hospitals) or similar institutional type customers, which would typically exhibit weather sensitive consumption patterns. One slight peculiarity is that weather sensitivity in this class is restricted to heating. Cooling was not found to be statistically significant in the GS>50 kW class for Sudbury. More details about specific explanatory variables for each of the classes are outlined in the next section.

The latest census information for the areas that Greater Sudbury Hydro provides service (City of Greater Sudbury, Municipality of West Nipissing) shows that the total population of these communities increased by 1.8 per cent between 2006 and 2011<sup>1</sup>, or about 0.36 per cent per year. This is consistent with the generally very modest growth in customer numbers and load in most classes.

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<sup>1</sup> See Appendix to this report for summary census profiles.

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## **2 CLASS SPECIFIC NORMALIZATION – WEATHER SENSITIVE**

In order to determine the relationship between observed weather and energy consumption, monthly weather observations describing the extent of heating or cooling required within the month are necessary. Environment Canada publishes monthly observations on heating degree days (HDD) and cooling degree days (CDD) for selected weather stations across Canada. Heating degree days for a given day are the number of Celsius degrees that the mean temperature is below 18°C. Cooling degree days for a given day are the number of Celsius degrees that the mean temperature is above 18°C. For Greater Sudbury Hydro, the monthly HDD and CDD as reported for Greater Sudbury Airport have been used.

In order to measure the change in economic activity, a data series must be chosen which represents, as much as possible, regional economic activity. For Sudbury, monthly full-time employment as reported in Statistics Canada's Monthly Labour Force Survey (Table 282-0109) for the Greater Sudbury Census Metropolitan Area (35580) is the basis for economic activity. The number of days in the month is also used as an explanatory variable.

Details of each of the regression models are outlined in detail below.

### **2.1 RESIDENTIAL CLASS**

Using the monthly class consumption and explanatory variables, the following regression model has been estimated for residential class kWh consumption.

Table 1: Residential kWh Model

OLS using observations 2006:02-2011:12 (T = 71)

Dependent variable: ReskWh

	coefficient	t-ratio	p-value
const	-34,855,162.3	-4.71	1.3E-05
SudHDD	32,984.6	38.98	2.76E-47
SudCDD	71,824.6	5.87	1.58E-07
Monthdays	1,770,332.3	7.32	4.3E-10
d_SudFTE_1	519,138.5	2.27	0.026266

R-squared	0.970	Adj R-squared	0.968
F(4, 66)	532.6	P-value(F)	1.94E-49
D-W	1.811	Theil's U	0.244

The variable d\_SudFTE\_1 represents the monthly change in full-time employment in Sudbury, lagged by one month. Monthly actual versus predicted values for residential kWh are plotted in the chart below. Annual actual versus predicted residential kWh values and the annual prediction errors are displayed in the table following.

**Chart 1: Greater Sudbury Monthly Actual vs. Predicted Residential kWh**

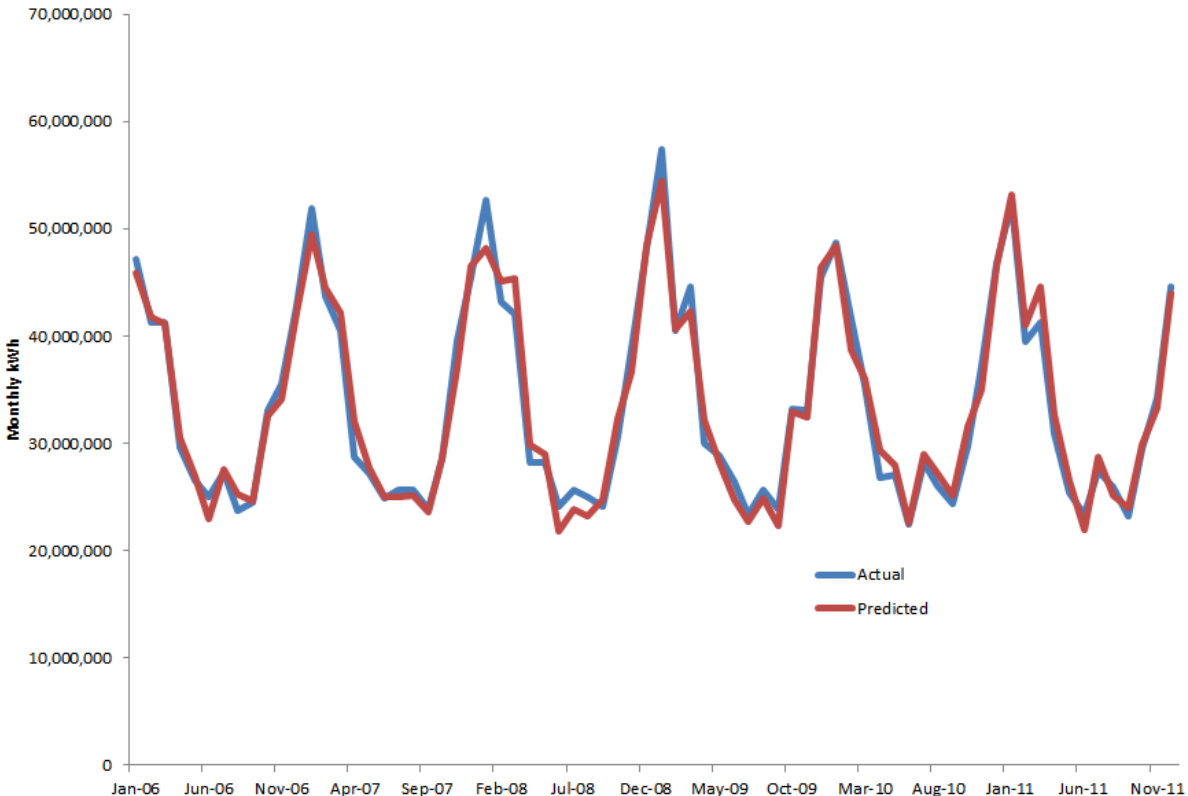


Table 2: Residential kWh Actual vs Predicted – Sudbury

Year	Actual Res kWh	Predicted Res kWh	Error
2006	397,678,409	395,487,845	-0.6%
2007	405,736,204	406,823,908	0.3%
2008	411,072,290	408,464,774	-0.6%
2009	412,129,188	404,334,137	-1.9%
2010	394,465,898	397,458,660	0.8%
2011	397,644,877	404,893,988	1.8%
<b>Mean Absolute Percentage Error</b>			<b>1.0%</b>

## 2.2 GS<50 kW CLASS

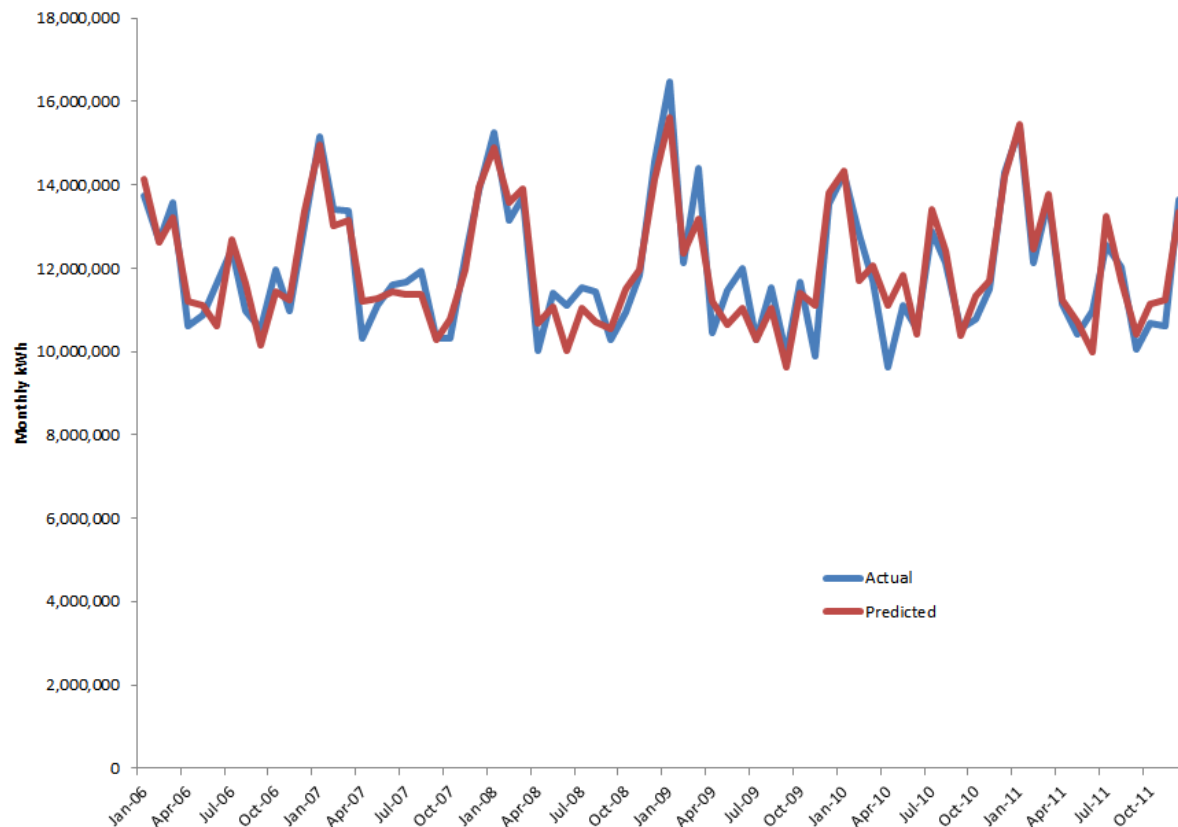
Using the monthly class consumption and explanatory variables, the following regression model has been estimated for GS<50 kW class kWh consumption. Actual (not weather normalized) use per customer in this class has been declining steadily since 2007, as can be seen in the use per customer summary table at the end of this report. The regression model results are shown in the table following, as are the annual actual versus predicted and annual errors and a plot on monthly actual versus predicted.

Table 3: GS&lt;50 kWh Model

OLS using observations 2006:02-2011:12 (T = 71)

Dependent variable: GS&lt;50kWh

	coefficient	t-ratio	p-value
const	-8,341,180.0	-3.20	0.002082
SudHDD	5,983.7	20.09	7.89E-30
SudCDD	29,702.5	6.89	2.52E-09
Monthdays	573,297.2	6.74	4.72E-09
d_SudFTE_1	332,429.7	4.14	1.02E-04
R-squared	0.869	Adjusted R-squared	0.861
F(4, 66)	109.1	P-value(F)	2.41E-28
D-W	1.986	Theil's U	0.335

**Chart 2: Greater Sudbury Monthly Actual vs. Predicted GS<50 kWh**

**Table 4: GS<50 kWh Actual vs Predicted – Sudbury**

Year	Actual GS<50 kWh	Predicted GS<50 kWh	Error
2006	143,019,502	143,410,200	0.3%
2007	145,298,164	144,717,764	-0.4%
2008	145,232,506	144,089,115	-0.8%
2009	143,769,626	141,287,883	-1.7%
2010	142,203,409	144,944,396	1.9%
2011	143,218,155	144,659,700	1.0%
<b>Mean Absolute Percentage Error</b>			<b>1.0%</b>

## 2.3 GS>50 kW CLASS

As outlined in the Introduction, the GS>50 kW class is also weather sensitive. The GS>50 class in Sudbury is predominantly made up of customers that are institutional and “MUSH” sector, rather than industrial. Therefore, it is not surprising that the load is degree-day sensitive. The regression model for GS>50 load does not contain CDD as this was found to be statistically insignificant. This may be the result of the fact that air-

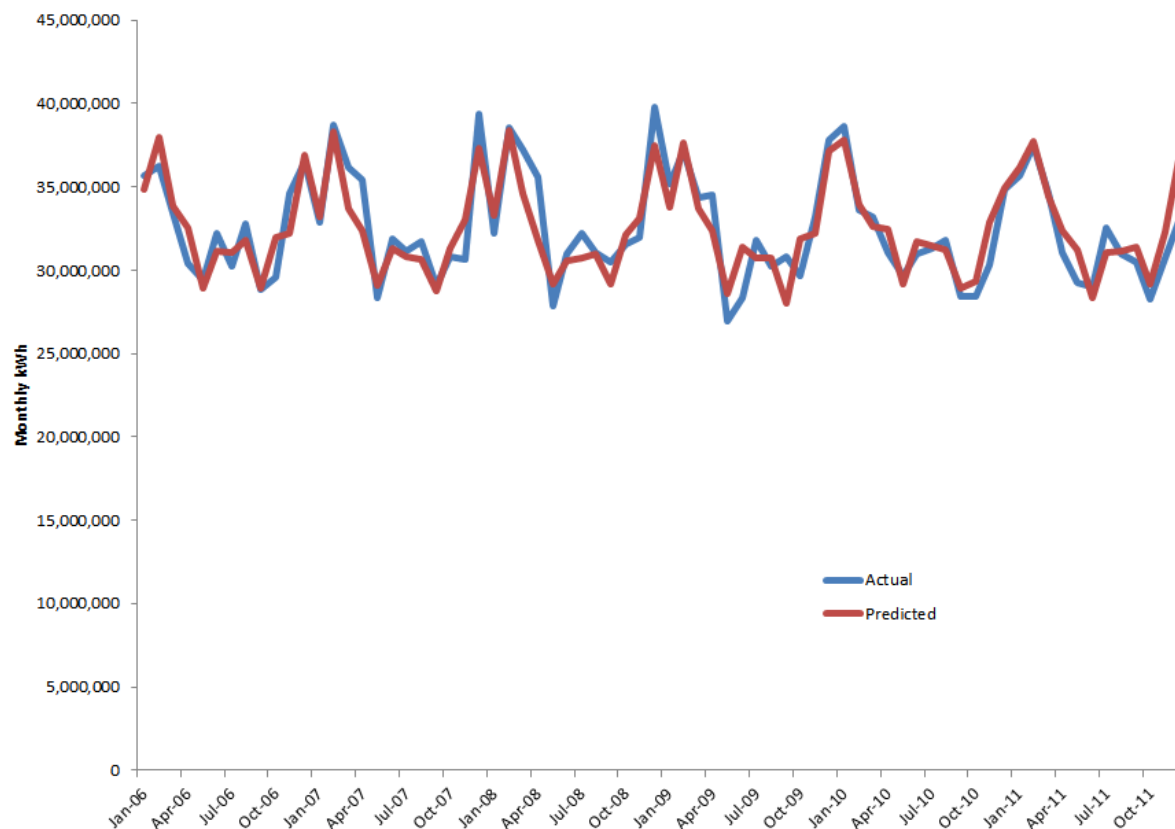
conditioning load in Sudbury is less important than heating load. It may also reflect that some of these customers may have reduced usage in the summer (university, college and schools). The GS>50 model also includes two seasonal dummy variables, “GS50LowD” and “GS50HighD” which essentially reflect Spring and Fall off-season and Winter on-season. Unusual high peaks in monthly consumption generally occur in February and December. Low troughs in consumption occur in June and October. Historically, the months have occasionally shifted in some years, but typically occur in these months. For the forecast period, high consumption is forecast for February and December, and low consumption is forecast for June and October. Table 5 below outlines the regression model for the GS>50 class.

Table 5: GS>50 kWh Model  
OLS using observations 2006:02-2011:12 (T = 71)  
Dependent variable: GS>50kWh

	coefficient	t-ratio	p-value
const	30,055,512.3	76.45	3.76E-66
SudHDD	6,103.8	6.97	1.81E-09
GS50LowD	-2,548,581.1	-5.61	4.36E-07
GS50HighD	2,861,256.5	4.55	2.35E-05
d_SudFTE_1	464,859.6	2.48	1.57E-02
R-squared	0.772	Adjusted R-squared	0.759
F(4, 66)	56.0	P-value(F)	1.638E-20
D-W	1.898	Theil's U	0.459

Below are the charted monthly actual versus predicted kWh and a table of annual actual and predicted kWh along with the annual error.



**Chart 3: Greater Sudbury Monthly Actual vs. Predicted GS>50 kWh**

**Table 6: GS>50 kWh Actual vs Predicted – Sudbury**

Year	Actual GS>50 kWh	Predicted GS>50 kWh	Error
2006	389,920,829	392,025,733	0.5%
2007	396,226,283	389,825,248	-1.6%
2008	399,285,797	391,355,311	-2.0%
2009	389,924,101	388,218,706	-0.4%
2010	382,334,753	386,377,823	1.1%
2011	382,967,078	392,007,383	2.4%
<b>Mean Absolute Percentage Error</b>			<b>1.3%</b>

### 3 WEATHER NORMALIZATION AND FORECASTS

#### 3.1 WEATHER SENSITIVE CLASS FORECASTS

The most recent 10 year monthly degree day average has been adopted as the definition of weather normal for the purposes of Greater Sudbury Hydro's weather

normal load forecast. To our knowledge, this approach is consistent with most LDCs load forecast filings for cost-of-service rebasing applications, and has been approved in many applications considered by the Board. The table below displays the most recent 10 year average of heating degree days and cooling degree days as reported by Environment Canada for Sudbury, Ontario.

**Table 7: 10-yr HDD and CDD, Sudbury, Ontario**

	2002-2011 10-yr normal	
	<u>HDD</u>	<u>CDD</u>
Jan	940.7	0.0
Feb	815.2	0.0
Mar	700.3	0.0
Apr	418.1	0.0
May	221.1	6.8
Jun	66.7	31.1
Jul	18.8	63.7
Aug	36.7	43.4
Sep	126.9	12.3
Oct	359.3	1.0
Nov	540.0	0.0
Dec	802.7	0.0
<b>Annual</b>	<b>5,046.4</b>	<b>158.4</b>

Recent forecasts for Ontario's employment outlook for 2012 and 2013 from four Canadian Chartered Banks are summarized below.

**Table 8: Employment Forecast – Ontario**

(figures in annual percentage change)

	BMO	RBC	Scotia	TD	<b>Avg</b>
	(Jun 22, 2012)	(June, 2012)	(June 6, 2012)	(Apr 9, 2012)	
2012	0.8	1.0	0.9	0.8	<b>0.9</b>
2013	1.0	1.4	1.0	1.1	<b>1.1</b>

Incorporating the forecast economic variables, 10-yr weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

<b>Table 9: Weather Corrected Consumption for Greater Sudbury Hydro.</b>				
			10-yr (2002-2011)	
Year	Actual residential kWh	%chg	Weather Normal	%chg
2007	405,736,204	2.0%	406,151,255	-0.5%
2008	411,072,290	1.3%	408,492,640	0.6%
2009	412,129,188	0.3%	402,880,683	-1.4%
2010	394,465,898	-4.3%	408,643,120	1.4%
2011	397,644,877	0.8%	406,358,911	-0.6%
2012F			408,611,069	0.6%
2013F			406,137,555	-0.6%
Year	Actual GS<50 kWh	%chg	Weather Normal	%chg
2007	145,298,164	1.6%	144,324,971	-1.0%
2008	145,232,506	0.0%	145,263,941	0.7%
2009	143,769,626	-1.0%	142,230,664	-2.1%
2010	142,203,409	-1.1%	145,920,634	2.6%
2011	143,218,155	0.7%	144,457,943	-1.0%
2012F			145,339,777	0.6%
2013F			144,316,198	-0.7%
Year	Actual GS>50 kWh	%chg	Weather Normal	%chg
2007	396,226,283	1.6%	389,916,621	-1.1%
2008	399,285,797	0.8%	390,427,967	0.1%
2009	389,924,101	-2.3%	386,988,006	-0.9%
2010	382,334,753	-1.9%	389,286,691	0.6%
2011	382,967,078	0.2%	392,651,146	0.9%
2012F			393,082,594	0.1%
2013F			392,452,934	-0.2%

### 3.2 NON-WEATHER SENSITIVE CLASS FORECASTS

#### LIGHTING AND UNMETERED SCATTERED LOAD

For streetlights, the forecast number of connections for 2012 and 2013 is based on the historical average rate of increase over the past 5 years, which is roughly 0.2 per cent per year. In 2012, Sudbury started to change a significant number of high pressure sodium (HPS) streetlamps to LEDs. In 2011, 63 units were replaced. The City has

authorized the replacement of 1,344 units in 2012. The City is considering replacing all HPS streetlight units in the next 10 years. As a result, street lighting load is significantly reduced in 2013 with overall average use per unit down by almost 7 per cent in 2013 versus 2011 (845 kWh/yr versus 906 kWh/yr)<sup>2</sup>, with kW demand similarly reduced.

The City has also been converting traffic lights to LED units for the past several years. Since traffic lights comprise a significant portion of the USL class consumption, USL kWh consumption and average use per connection has been declining. No change in the number of USL connections is expected for 2013, but the usage for traffic lights will continue to decline as the LED conversion continues.

No changes are anticipated for the Sentinel lights class.

<b>Table 10: Street Lighting, Sentinel Lighting, USL Consumption: Sudbury</b>						
Year	Street light kWh	%chg	Sentinel light kWh	%chg	USL kWh	%chg
2007	8,545,010	0.2%	582,854	3.5%	1,896,643	2.1%
2008	8,641,710	1.1%	324,822	-44.3%	1,909,863	0.7%
2009	8,601,957	-0.5%	523,175	61.1%	1,851,166	-3.1%
2010	8,626,792	0.3%	476,532	-8.9%	1,759,891	-4.9%
2011	8,647,174	0.2%	467,079	-2.0%	1,645,761	-6.5%
2012F	8,605,967	-0.5%	467,079	0.0%	1,536,748	-6.6%
2013F	8,096,785	-5.9%	467,079	0.0%	1,457,735	-5.1%

### 3.3 KW FORECAST

Table 11 summarizes historical actual billed kW for those classes with kW demand charges. For the GS>50 kW, the average annual relationship between annual kW and kWh for the years 2007 to 2011 is used to determine normalized kW, both historic and forecast. For Street kW, the annual growth is equivalent to connection and energy growth.

<sup>2</sup> See table at the end of this report for average use.

Table 11: Class kW, Greater Sudbury Hydro

Actual						
	GS>50 kW		kW/kWh	Street kW	kW/kWh	Sent kW
2007	967,689		0.002442	23,879	0.0027945	1,320
2008	965,727	-0.2%	0.002419	23,894	0.002765	1,325
2009	967,553	0.2%	0.002481	24,038	0.0027945	1,255
2010	965,342	-0.2%	0.002525	24,111	0.0027949	1,153
2011	957,195	-0.8%	0.002499	24,155	0.0027934	1,287
Normalized & Forecast						
	GS>50 kW			Street kW		Sent kW
2007	964,386			23,879		1,320
2008	965,651	0.1%		23,894	0.1%	1,325
2009	957,143	-0.9%		24,038	0.6%	1,255
2010	962,828	0.6%		24,111	0.3%	1,153
2011	971,149	0.9%		24,155	0.2%	1,287
2012	972,216	0.1%		24,040	-0.5%	1,287
2013	970,659	-0.2%		22,618	-5.9%	1,287

## 4 CUSTOMER COUNT AND FORECAST SUMMARY

Table 12 displays the year end and annual average customer count summary for all classes. Table 11 displays a forecast summary.

As indicated in the Introduction, the latest census information for the areas that Greater Sudbury Hydro provides service (City of Greater Sudbury, Municipality of West Nipissing) shows that the total population of these communities increased by 1.8 per cent between 2006 and 2011, or about 0.36 per cent per year. This is consistent with the generally very modest growth in customer numbers and load in most classes. For the Residential, GS<50 and GS>50 classes, customer growth is forecast at 0.4% per year, in line with historical population growth and average historical growth in the classes. Street lights are assumed to growth at 0.2 per cent per year. No changes are assumed in USL and Sentinel lighting.

**Table 12 – Annual Customer Connections – Greater Sudbury Hydro**

YEAR END	Residential	%chg	GS<50	%chg	GS>50	%chg	USL	Street	Sentinel
2007	41,661	0.4%	3,957	1.8%	534	3.7%	338	9,495	444
2008	41,634	-0.1%	4,097	3.5%	515	-3.6%	338	9,495	436
2009	41,926	0.7%	3,911	-4.5%	512	-0.6%	338	9,513	436
2010	42,068	0.3%	4,118	5.3%	524	2.3%	338	9,513	436
2011	42,279	0.5%	3,940	-4.3%	529	1.0%	352	9,566	436
ANNUAL AVERAGE	Residential	%chg	GS<50	%chg	GS>50	%chg	USL	Street	Sentinel
2007	41,569	0.3%	3,923	1.1%	525	1.7%	338	9,467	446
2008	41,648	0.2%	4,027	2.7%	525	0.0%	338	9,495	440
2009	41,780	0.3%	4,004	-0.6%	514	-2.1%	338	9,504	436
2010	41,997	0.5%	4,015	0.3%	518	0.9%	338	9,513	436
2011	42,174	0.4%	4,029	0.4%	527	1.6%	345	9,540	436
2012f	42,342	0.4%	4,045	0.4%	529	0.4%	345	9,559	436
2013f	42,512	0.4%	4,061	0.4%	531	0.4%	345	9,578	436

**Table 13 – Forecast Summary – Greater Sudbury Hydro.**

	2011 Actual	2011 Normalized	2012f Normalized	2013f Normalized
Residential (kWh)	397,644,877	406,358,911	408,611,069	406,137,555
GS<50 (kWh)	143,218,155	144,457,943	145,339,777	144,316,198
GS>50 (kWh)	382,967,078	392,651,146	393,082,594	392,452,934
(kW)	957,195	971,149	972,216	970,659
Street Lights (kWh)	8,647,174	8,647,174	8,605,967	8,096,785
(kW)	24,155	24,155	24,040	22,618
Sentinel Lights (kWh)	467,079	467,079	467,079	467,079
(kW)	1,287	1,287	1,287	1,287
USL (kWh)	1,645,761	1,645,761	1,536,748	1,457,735
Total Retail kWh	934,590,125	954,228,014	957,643,234	952,928,287

## 5 APPENDIX

### Average Use Per Customer ACTUAL

	Residential kWh	GS<50 kWh	GS>50 kWh	USL kWh	Street kWh	Sent kWh
2007	9,761	37,042	755,436	5,611	903	1,308
2008	9,870	36,065	761,269	5,650	910	738
2009	9,864	35,907	759,346	5,477	905	1,200
2010	9,393	35,422	738,098	5,207	907	1,093
2011	9,429	35,547	727,383	4,770	906	1,071

### NORMALIZED & FORECAST

	Residential kWh	GS<50 kWh	GS>50 kWh	USL kWh	Street kWh	Sent kWh
2007	9,771	36,794	743,406	5,611	903	1,308
2008	9,808	36,072	744,381	5,650	910	738
2009	9,643	35,522	753,628	5,477	905	1,200
2010	9,730	36,348	751,519	5,207	907	1,093
2011	9,635	35,855	745,776	4,770	906	1,071
2012	9,650	35,930	743,621	4,454	900	1,071
2013	9,554	35,535	739,472	4,225	845	1,071

## APPROACH TO CONSERVATION AND DEMAND MANAGEMENT

Sections 2.6.1.2 and 2.6.1.3 of the Board's latest Filing Requirements specify that an LDC must provide a description of how CDM impacts have been accounted for in the historical period and how the CDM target is factored into the test year load forecast.

It is Greater Sudbury's understanding that the Board expects LDCs to make an appropriate adjustment to their weather normalized load forecast to ensure customers realize at the earliest date possible the effects of conservation efforts undertaken to meet the government's provincial target in 2014. As noted by the Board in its Decision in the Hydro One Brampton Inc. proceeding (EB-2010-0132)<sup>1</sup>:

*The Board is of the view that CDM targets will be achieved on an incremental, staged basis and that any adjustment to the test year's rates should be commensurate with the quantum of forecast savings for the test year.*

The CDM Adjustment to Greater Sudbury's load forecast, as prepared by Elenchus, addresses past and future reductions from CDM programs. Load reductions from the persistence of previous OPA programs are known and Greater Sudbury also makes an adjustment for CDM programs contributing to meet its 2014 provincial target.

The specific adjustment for the 2014 CDM target for the 2013 test year is 30% of Greater Sudbury's assigned cumulative target of 43.7 MWh which is 13.1 MWh.

The CDM Adjustment results are presented in the Table 1 and a description of the methodology used to derive those results follows the table.

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<sup>1</sup> EB-2010-0132, issued April 4, 2011, page 8.



1

**Table 1: CDM Adjustment per Class – Energy (kWh)**

	Weather Normalized	2006-2010 CDM Programs		Weather Normalized	2011-2014 CDM Target	Weather Normalized
	2013F	5 yr. Avg.	2013	Revised	(30% of Target)	Adjusted
	(Elenchus)	(2006/11)	Persistence	2013F		2013F
Residential (kWh)	406,137,555	6,132,287	5,289,173	406,980,669	5,607,549	401,373,120
GS<50 (kWh)	144,316,198	894,684	1,372,114	143,838,768	1,981,870	141,856,898
GS>50 (kW)	392,452,934	3,470,446	5,058,536	390,864,845	5,385,499	385,479,346
Intermediate	0	0	0	0	0	0
Large Users	0	0	0	0	0	0
Street Lights (kW)	8,096,785	0	0	8,096,785	111,561	7,985,224
Sentinel Lights (kW)	467,079	0	0	467,079	6,436	460,643
USL (kWh)	1,457,735	0	0	1,457,735	20,085	1,437,650
Total Customer (kWh)	952,928,286	9,620,782	11,719,823	951,705,881	13,113,000	938,592,881

2

3 With respect to the energy forecast adjustment, Greater Sudbury proceeded first by  
 4 grossing up the weather normalized forecast prepared by Elenchus by the average  
 5 results of the 2006-2010 OPA programs of the previous six years (2006 to 2011). The  
 6 grossed up forecast was then netted down with the expected persistence in CDM  
 7 reductions from those same programs in 2013. This provides a revised load forecast  
 8 from which the 30% CDM target is subtracted. The CDM target reduction is allocated by  
 9 class based on their respective revised energy volume. Greater Sudbury does not  
 10 expect CDM reductions for the unmetered classes (i.e., USL and Sentinel) and they  
 11 have been excluded from the allocation of the 2014 target.

12

13 Greater Sudbury adjusted the demand forecast for past CDM programs by grossing it up  
 14 by the six year average of the 2006-2010 programs and netted it down with the expected  
 15 2013 CDM persistence. The demand forecast is then further adjusted to reflect the  
 16 reduction in the energy forecast from the 2014 CDM target. The reduction in demand is  
 17 proportional to that in energy (i.e., a 10% reduction in energy will yield a 10% reduction in  
 18 demand). The CDM Adjustment results for Demand are presented in Table 2.

19

20

21

**Table 2: CDM Adjustment per Class – Demand (kW)**

	Weather Normalized	2006-2010 CDM Programs		Weather Normalized	2011-2014 CDM Target	Weather Normalized
	2013F	5 yr. Avg.	2013	Revised	Proportional	Adjusted
	(Elenchus)	(2006/11)	Persistence	2013F		2013F
GS>50 (kW)	970,659	20,455	8,519	982,595	13,539	969,057
Intermediate	0	0	0	0	0	0
Large Users	0	0	0	0	0	0
Street Lights (kW)	22,618	0	0	22,618	312	22,306
Sentinel Lights (kW)	1,287	0	0	1,287	18	1,269
Total Demand	994,564	20,455	8,519	1,006,500	13,868	992,632

Overall, the CDM adjusted weather normalized load forecast for the 2013 test year for Greater Sudbury is 938,592,881 kWh or 1.5% less than the load forecast prepared by Elenchus.

The detailed results of the 2006-2010 CDM programs for the years 2006 to 2013 are provided in Exhibit 3, Tab 1, Schedule 3, Attachment 1.

# Greater Sudbury Hydro Inc.

OPA Programs from 2006 to 2010 with Persistence

kWh Savings	2006	2007	2008	2009	2010	2011	2012	2013
<b>2006</b>								
Cool & Hot Savings Rebate	136,246	136,246	136,246	136,246	136,246	136,246	136,246	136,246
Every Kilowatt Counts	3,535,267	3,535,267	3,535,267	3,535,267	455,808	455,808	455,808	455,808
Secondary Refrigerator Retirement Pilot	55,192	55,192	55,192	55,192	55,192	55,192		
<b>2006 Total</b>	<b>3,726,705</b>	<b>3,726,705</b>	<b>3,726,705</b>	<b>3,726,705</b>	<b>647,246</b>	<b>647,246</b>	<b>592,054</b>	<b>592,054</b>
<b>2007</b>								
Aboriginal		327,600	327,600	327,600	327,600			
Cool & Hot Savings Rebate		215,472	215,472	215,472	215,472	215,472	205,257	205,257
Every Kilowatt Counts		1,291,634	1,275,837	1,275,837	1,275,837	1,275,837	1,232,268	1,232,268
Great Refrigerator Roundup		103,827	103,827	103,827	103,827	103,620	103,413	103,413
Social Housing Pilot		117,393	117,393	117,393	117,393	117,393	117,393	117,393
<b>2007 Total</b>		<b>2,055,926</b>	<b>2,040,129</b>	<b>2,040,129</b>	<b>2,040,129</b>	<b>1,712,322</b>	<b>1,658,330</b>	<b>1,658,330</b>
<b>2008</b>								
Cool Savings Rebate			236,585	236,585	236,585	236,585	236,585	236,585
Electricity Retrofit Incentive			1,030,252	1,030,245	1,030,245	1,030,245	1,030,245	1,030,245
Every Kilowatt Counts Power Savings Event			1,200,965	1,195,741	1,195,741	1,195,741	1,014,905	1,014,905
Great Refrigerator Roundup			184,216	184,216	184,216	184,216	184,074	183,932
High Performance New Construction			1,939	1,939	1,939	1,939	1,939	1,939
peaksaver®			1,168	1,168	1,168	1,168	1,168	1,168
Power Savings Blitz			53,963	53,963	46,153	46,153	46,153	46,153
Summer Sweepstakes			122,832	44,324	44,324	44,324	44,324	44,324
<b>2008 Total</b>			<b>2,831,920</b>	<b>2,748,181</b>	<b>2,740,371</b>	<b>2,740,371</b>	<b>2,559,393</b>	<b>2,559,251</b>
<b>2009</b>								
Cool Savings Rebate				300,219	300,219	300,219	299,152	297,616
Demand Response 1				53,084				
Demand Response 2				505,332				
Demand Response 3				9,652				
Electricity Retrofit Incentive				3,271,860	3,271,860	3,271,860	3,271,860	3,271,860
Every Kilowatt Counts Power Savings Event				522,035	500,373	500,373	500,343	497,014
Great Refrigerator Roundup				233,057	233,057	233,057	232,855	179,990
High Performance New Construction				61,008	61,008	61,008	61,008	61,008
peaksaver®				261	261	261	261	261
Power Savings Blitz				661,698	661,698	661,698	661,698	661,698
<b>2009 Total</b>				<b>5,618,208</b>	<b>5,028,478</b>	<b>5,028,478</b>	<b>5,027,177</b>	<b>4,969,448</b>
<b>2010</b>								
Cool Savings Rebate					203,045	203,045	203,045	203,045
Demand Response 2					948,924			
Demand Response 3					33,632			
Electricity Retrofit Incentive					522,206	522,206	522,206	522,206
Every Kilowatt Counts Power Savings Event					185,316	162,879	157,695	157,695
Great Refrigerator Roundup					340,404	340,404	340,404	339,454
High Performance New Construction					200,791	200,791	200,791	200,791
Multi-Family Energy Efficiency Rebates					116,831	116,831	116,831	116,831
peaksaver®					192	192	192	192
Power Savings Blitz					400,526	400,526	400,526	400,526
<b>2010 Total</b>					<b>2,951,867</b>	<b>1,946,874</b>	<b>1,941,690</b>	<b>1,940,740</b>
<b>Grand Total</b>	<b>3,726,705</b>	<b>5,782,631</b>	<b>8,598,754</b>	<b>14,133,223</b>	<b>13,408,090</b>	<b>12,075,291</b>	<b>11,778,644</b>	<b>11,719,823</b>

# Greater Sudbury Hydro Inc.

## OPA Programs from 2006 to 2010 with Persistence

kW Savings	2006	2007	2008	2009	2010	2011	2012	2013
<b>2006</b>								
Cool & Hot Savings Rebate	126	126	126	126	126	126	126	126
Demand Response 1	10,916							
Every Kilowatt Counts	42	42	42	42	42	42	42	42
Loblaw & York Region Demand Response	1,069							
Secondary Refrigerator Retirement Pilot	13	13	13	13	13	13		
<b>2006 Total</b>	<b>12,165</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>168</b>	<b>168</b>
<b>2007</b>								
Aboriginal		16	16	16	16			
Cool & Hot Savings Rebate		144	144	144	144	144	133	133
Demand Response 1		12,538						
Every Kilowatt Counts		50	45	45	45	45	45	45
Great Refrigerator Roundup		13	13	13	13	12	12	12
Loblaw & York Region Demand Response		2,086						
Social Housing Pilot		166	166	166	166	166	166	166
<b>2007 Total</b>		<b>15,012</b>	<b>383</b>	<b>383</b>	<b>383</b>	<b>367</b>	<b>355</b>	<b>355</b>
<b>2008</b>								
Cool Savings Rebate			150	150	150	150	150	150
Demand Response 1			17,817					
Demand Response 3			2,871					
Electricity Retrofit Incentive			2,318	2,318	2,318	2,318	2,318	2,318
Every Kilowatt Counts Power Savings Event			65	63	63	63	57	57
Great Refrigerator Roundup			19	19	19	19	19	19
High Performance New Construction			2	2	2	2	2	2
Loblaw & York Region Demand Response			2,368					
peaksaver®			58	58	58	58	58	58
Power Savings Blitz			7	7	6	6	6	6
Summer Sweepstakes			31	18	18	18	18	18
<b>2008 Total</b>			<b>25,708</b>	<b>2,636</b>	<b>2,635</b>	<b>2,635</b>	<b>2,629</b>	<b>2,629</b>
<b>2009</b>								
Cool Savings Rebate				198	198	198	197	197
Demand Response 1				7,249				
Demand Response 2				9,845				
Demand Response 3				5,860				
Electricity Retrofit Incentive				4,805	4,805	4,805	4,805	4,805
Every Kilowatt Counts Power Savings Event				53	52	52	52	52
Great Refrigerator Roundup				34	34	34	34	25
High Performance New Construction				27	27	27	27	27
Loblaw & York Region Demand Response				2,416				
peaksaver®				146	146	146	146	146
Power Savings Blitz				170	170	170	170	170
<b>2009 Total</b>				<b>30,802</b>	<b>5,431</b>	<b>5,431</b>	<b>5,430</b>	<b>5,421</b>
<b>2010</b>								
Cool Savings Rebate					124	124	124	124
Demand Response 2					9,742			
Demand Response 3					8,585			
Electricity Retrofit Incentive					1,111	1,111	1,111	1,111
Every Kilowatt Counts Power Savings Event					16	16	15	15
Great Refrigerator Roundup					49	49	49	48
High Performance New Construction					88	88	88	88
Loblaw & York Region Demand Response					2,391			
Multi-Family Energy Efficiency Rebates					119	119	119	119
peaksaver®					49	49	49	49
Power Savings Blitz					131	131	131	131
<b>2010 Total</b>					<b>22,405</b>	<b>1,686</b>	<b>1,685</b>	<b>1,684</b>
<b>Grand Total</b>	<b>12,165</b>	<b>15,192</b>	<b>26,272</b>	<b>34,002</b>	<b>31,035</b>	<b>10,299</b>	<b>10,268</b>	<b>10,257</b>

## OVERVIEW OF DISTRIBUTION REVENUE

Greater Sudbury's base Revenue Requirement proposed to be recovered through rates is \$23,554,760, plus an additional \$130,200 to be recovered related to transformer allowance credits, for a gross revenue requirement of \$23,684,960.

**Table 1 – Base Revenue Requirement**

Rate Class	Base Revenue Requirement	Add: Transformer Allowance	Gross Revenue Requirement
Residential	13,747,467		13,747,467
General Service < 50 kW	3,780,417		3,780,417
General Service > 50 kW	5,244,664	130,200	5,374,864
Unmetered Scattered Load	48,419		48,419
Street Lighting	693,713		693,713
Sentinel Lighting	40,080		40,080
TOTAL	23,554,760	130,200	23,684,960

The attachment included as Exhibit 3, Tab 1, Schedule 4, Attachment 1 includes the 2012 and 2013 projected revenues using the currently approved distribution rates (approved effective May 1, 2012).

The attachment included as Exhibit 3, Tab 1, Schedule 4, Attachment 2 includes an overview of the distribution revenue from the 2009 Board Approved values, 2009 Actual, 2010 Actual, 2011 Actual, and 2012 Bridge Year (at existing rates), and 2013 Test Year (at proposed rates). The amounts indicated represent the revenue attributable to fixed and variable distribution charges only and exclude any rate riders. A variance analysis on the distribution revenue is at Exhibit 3, Tab 2, Schedule 2.

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

**Revenue from Current Distribution Charges**

Customer Class Name	2012 PROJECTED REVENUE FROM EXISTING VARIABLE CHARGES							
	Variable Distribution Rate	per	Volume	Gross Variable Revenue	Transform. Allowance Rate	Transform. Allowance kW's	Transform. Allowance \$'s	Net Variable Revenue
Residential	\$0.0124	kWh	408,611,069	5,066,777				5,066,777
General Service < 50 kW	\$0.0186	kWh	145,339,777	2,703,320				2,703,320
General Service > 50 to 4999 kW	\$4.2709	kW	972,216	4,152,237	(\$0.60)	217,000	-130,200	4,022,037
Unmetered Scattered Load	\$0.0123	kWh	1,536,748	18,902				18,902
Street Lighting	\$10.8171	kW	24,040	260,043	(\$0.60)			260,043
Sentinel Lighting	\$11.8706	kW	1,287	15,277	(\$0.60)			15,277
<b>TOTAL VARIABLE REVENUE</b>				<b>12,216,557</b>		<b>217,000</b>	<b>-130,200</b>	<b>12,086,357</b>

Customer Class Name	2012 PROJECTED DISTRIBUTION REVENUE AT EXISTING RATES							
	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue
Residential	\$16.1400	42,342	8,200,799	5,066,777	13,267,576	61.81%	38.19%	58.05%
General Service < 50 kW	\$21.5500	4,045	1,046,037	2,703,320	3,749,357	27.90%	72.10%	16.40%
General Service > 50 to 4999 kW	\$164.4900	529	1,044,183	4,022,037	5,066,220	20.61%	79.39%	22.17%
Unmetered Scattered Load	\$8.0500	345	33,327	18,902	52,229	63.81%	36.19%	0.23%
Street Lighting	\$3.7200	9,559	426,714	260,043	686,757	62.13%	37.87%	3.00%
Sentinel Lighting	\$3.7100	436	19,411	15,277	34,688	55.96%	44.04%	0.15%
<b>DISTRIBUTION REVENUE</b>			<b>10,770,470</b>	<b>12,086,357</b>	<b>22,856,827</b>	<b>47.12%</b>	<b>52.88%</b>	<b>100.00%</b>

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

**Revenue from Current Distribution Charges**

Customer Class Name	2013 PROJECTED REVENUE FROM EXISTING VARIABLE CHARGES							
	Variable Distribution Rate	per	Volume	Gross Variable Revenue	Transform. Allowance Rate	Transform. Allowance kW's	Transform. Allowance \$'s	Net Variable Revenue
Residential	\$0.0124	kWh	401,373,120	4,977,027				4,977,027
General Service < 50 kW	\$0.0186	kWh	141,856,898	2,638,538				2,638,538
General Service > 50 to 4999 kW	\$4.2709	kW	969,057	4,138,746	(\$0.60)	217,000	-130,200	4,008,546
Unmetered Scattered Load	\$0.0123	kWh	1,437,650	17,683				17,683
Street Lighting	\$10.8171	kW	22,306	241,286	(\$0.60)			241,286
Sentinel Lighting	\$11.8706	kW	1,269	15,064	(\$0.60)			15,064
<b>TOTAL VARIABLE REVENUE</b>				<b>12,028,344</b>		<b>217,000</b>	<b>-130,200</b>	<b>11,898,144</b>

Customer Class Name	2013 PROJECTED DISTRIBUTION REVENUE AT EXISTING RATES							
	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue
Residential	\$16.1400	42,512	8,233,724	4,977,027	13,210,751	62.33%	37.67%	58.17%
General Service < 50 kW	\$21.5500	4,061	1,050,175	2,638,538	3,688,713	28.47%	71.53%	16.24%
General Service > 50 to 4999 kW	\$164.4900	531	1,048,130	4,008,546	5,056,676	20.73%	79.27%	22.27%
Unmetered Scattered Load	\$8.0500	345	33,327	17,683	51,010	65.33%	34.67%	0.22%
Street Lighting	\$3.7200	9,578	427,562	241,286	668,848	63.93%	36.07%	2.95%
Sentinel Lighting	\$3.7100	436	19,411	15,064	34,475	56.30%	43.70%	0.15%
<b>DISTRIBUTION REVENUE</b>			<b>10,812,329</b>	<b>11,898,144</b>	<b>22,710,472</b>	<b>47.61%</b>	<b>52.39%</b>	<b>100.00%</b>

**Distribution Revenue Variance Analysis Table**

<b>Rate Class</b>	<b>2009 Board Approved</b>	<b>2009 Actual</b>	<b>Variance 2009 Board Approved- 2009 Actual</b>	<b>2010 Actual</b>	<b>Variance 2010-2009 Actual</b>	<b>2011 Actual</b>	<b>Variance 2011-2010 Actual</b>	<b>2012 Bridge Year</b>	<b>Variance 2012-2013</b>	<b>2013 Test Year</b>	<b>Variance 2013-2012</b>
Residential	13,097,243	12,627,666	(469,577)	12,710,962	83,296	12,903,869	192,908	12,750,185	(153,685)	13,747,467	997,282
GS < 50 kW	3,763,235	3,590,003	(173,232)	3,605,040	15,038	4,062,188	457,148	3,503,895	(558,293)	3,780,417	276,522
GS > 50 kW	5,449,966	5,182,403	(267,563)	5,255,170	72,767	4,603,990	(651,180)	5,161,082	557,092	5,244,664	83,582
USL	61,543	84,899	23,356	66,352	(18,547)	58,437	- 7,915	57,865	(572)	48,419	(9,446)
Street Lighting	394,330	52,006	(342,324)	327,544	275,538	608,799	281,256	677,788	68,989	693,713	15,925
Sentinel Lighting	27,352	7,374	(19,978)	21,940	14,565	32,953	11,014	35,884	2,931	40,080	4,196
<b>TOTAL Dist Revenue</b>	<b>22,793,669</b>	<b>21,544,350</b>	<b>(1,249,319)</b>	<b>21,987,007</b>	<b>442,657</b>	<b>22,270,237</b>	<b>283,229</b>	<b>22,186,699</b>	<b>(83,538)</b>	<b>23,554,760</b>	<b>1,368,061</b>



Exhibit 3: Revenue

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**Tab 2 (of 3): Variance Analysis**

## OVERVIEW OF CHANGES TO LOAD FORECAST

Table 1 provides a variance analysis of the number of customers by rate class each year. The number of customers presented represents the average number of customers in the respective year. There are no annual variances in excess of 10%.

**Table 1 – Number of Customer by Year**

Customer Class Name	2009 Approved	2009 Actual	variance 2009 approved vs. 2009 actual	2010 Actual	2010 vs. 2009	2011 Actual	2011 vs. 2010	2012 Forecast	2012 vs. 2011	2013 Forecast	2013 vs. 2012
Residential	41,742	41,780	0.1%	41,997	0.5%	42,174	0.4%	42,342	0.4%	42,512	0.4%
General Service < 50 kW	4,023	4,004	-0.5%	4,015	0.3%	4,029	0.3%	4,045	0.4%	4,061	0.4%
General Service > 50 kW	569	514	-9.7%	518	0.8%	527	1.7%	529	0.4%	531	0.4%
USL (connections)	338	338	0.0%	338	0.0%	345	2.1%	345	0.0%	345	0.0%
Sentinel Lighting (connections)	432	436	0.9%	436	0.0%	436	0.0%	436	0.0%	436	0.0%
Street Lighting (connections)	9,647	9,504	-1.5%	9,513	0.1%	9,540	0.3%	9,559	0.2%	9,578	0.2%
<b>TOTAL</b>	<b>56,751</b>	<b>56,576</b>	<b>-0.3%</b>	<b>56,817</b>	<b>0.4%</b>	<b>57,051</b>	<b>0.4%</b>	<b>57,256</b>	<b>0.4%</b>	<b>57,463</b>	<b>0.4%</b>

The one outlier above is the 2009 approved versus actual result for General Service>50kW. The customer count most likely dropped as a result of annual reviews assessing whether customers should remain in the GS over 50 class or not based on annual demand consumption.

### **Variance Analysis on Energy Forecast (kWh)**

Table 2 details the kWh variance between 2009 Actual results and the kWh included in Greater Sudbury's 2009 Board approved values. The table also includes the 2009

normalized results as compared to the 2009 Board approved values. Normalized in the context of this kWh forecast refers to 'weather normalized' in the case of weather sensitive rate classes (residential, GS<50 and GS>50). For the other rate classes, the normalized represents the actual results.

The largest variance occurs in the USL and sentinel light rate classes. Beginning in 2006, the City of Greater Sudbury embarked on a program to convert traffic lights over to LED fixtures. The impacts of this changeover are showing up in the 2009 results and continue through 2013. The sentinel light volumes are declining as this is an area that Greater Sudbury would like to see phased out over time.

**Table 2 – kWh Variance for 2009**

Customer Class Name	2009 EDR Approved	2009 Actual	Variance 2009 Actual vs. 2009 Approved	2009 Normalized	2009 Normalized vs. 2009 Approved
Residential	411,365,208	412,129,188	0.2%	402,880,683	(2.11%)
General Service < 50 kW	142,022,495	143,769,626	1.2%	142,230,664	0.1%
General Service > 50 kW	411,264,889	389,924,101	(5.47%)	386,988,006	(6.27%)
USL (connections)	2,223,118	1,851,166	(20.09%)	1,851,166	(20.09%)
Sentinel Lighting (connections)	567,330	523,175	(8.44%)	523,175	(8.44%)
Street Lighting (connections)	8,681,572	8,601,957	(0.93%)	8,601,957	(0.93%)
<b>TOTAL</b>	<b>976,124,612</b>	<b>956,799,213</b>		<b>943,075,651</b>	

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**Table 3 – kWh Variance for 2010 and 2011**

Customer Class Name	2009 Normalized	2010 Actual	2010 Normalized	Variance 2010 Normalized vs. 2009 Normalized	2011 Actual	2011 Normalized	Variance 2011 Normalized vs. 2010 Normalized
Residential	402,880,683	394,465,898	408,643,120	1.41%	397,644,877	406,358,911	(0.56%)
General Service < 50 kW	142,230,664	142,203,409	145,920,634	2.53%	143,218,155	144,457,943	(1.01%)
General Service > 50 kW	386,988,006	382,334,753	389,286,691	0.59%	382,967,078	392,651,146	0.86%
USL (connections)	1,851,166	1,759,891	1,759,891	(5.19%)	1,645,761	1,645,761	(6.93%)
Sentinel Lighting (connections)	523,175	467,532	467,532	(11.90%)	467,079	467,079	(0.10%)
Street Lighting (connections)	8,601,957	8,626,792	8,626,792	0.29%	8,647,174	8,647,174	0.24%
<b>TOTAL</b>	<b>943,075,651</b>	<b>929,858,275</b>	<b>954,704,660</b>		<b>934,590,124</b>	<b>954,228,014</b>	

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**Table 4 – kWh Variance for 2012 and 2013**

Customer Class Name	2011 Normalized	2012 - Forecast Normalized	Variance 2012 Normalized vs. 2011 Normalized	2013 Forecast Normalized	Variance 2013 Normalized vs. 2012 Normalized
Residential	406,358,911	408,611,069	0.55%	406,137,555	(0.61%)
General Service < 50 kW	144,457,943	145,339,777	0.61%	144,316,198	(0.71%)
General Service > 50 kW	392,651,146	393,082,594	0.11%	392,452,934	(0.16%)
USL (connections)	1,645,761	1,536,748	(7.09%)	1,457,735	(5.42%)
Sentinel Lighting (connections)	467,079	467,079	0.00%	467,079	0.00%
Street Lighting (connections)	8,647,174	8,605,967	(0.48%)	8,096,785	(6.29%)
<b>TOTAL</b>	<b>954,228,014</b>	<b>957,643,234</b>		<b>952,928,286</b>	

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1 **Variance on Demand (kW) Forecast**

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3 The variance analysis on the demand forecast is based on actual data. The GS>50  
 4 customers are weather sensitive during the heating season. This supports the fact  
 5 demand was below the EDR approved forecast in all years 2009 through 2013. Milder  
 6 winters as well as conservation efforts have most likely contributed to the reduction.

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**Table 5 – Variance on Demand (kW)**

Customer Class Name	2009 EDR Approved	2009 Actual	Variance 2009 Actual vs. 2009 Approved	2010 Actual	Variance 2010 Actual vs. 2009 Actual	2011 Actual	Variance 2011 Actual vs. 2010 Actual	2012 Weather Normal	Variance 2012 Normalized vs. 2011 Actual	2013 Weather Normal	Variance 2013 Normalized vs. 2012 Normalized
Residential											
GS < 50 kW											
GS > 50 kW	1,012,838	967,553	(4.68%)	965,342	(0.23%)	957,195	(0.85%)	972,216	1.5%	970,659	(0.16%)
USL											
Sentinel Lighting	1,453	1,255	(15.78%)	1,153	(8.85%)	1,287	10.4%	1,287	0.0%	1,287	0.0%
Street Lighting	23,889	24,038	0.6%	24,111	0.3%	24,155	0.2%	24,040	(0.48%)	22,618	(6.29%)
<b>TOTAL</b>	<b>1,038,180</b>	<b>992,846</b>		<b>990,606</b>		<b>982,637</b>		<b>997,543</b>		<b>994,564</b>	

## **DISTRIBUTION REVENUE VARIANCE ANALYSIS**

Greater Sudbury's total proposed Service Revenue Requirement is \$25,104,788. The amount of 'other revenue' is forecast at \$1,550,028 for a base revenue requirement of \$23,554,760. Following is a general discussion of the annual variances related to the change in distribution revenue.

### **2009 Board Approved versus 2009 Actual**

The variance of \$1,249,319 is the result of a few factors. The 2009 Board Approved rates did not come into effect until July 1, 2009. As such fifty percent of the revenues were at old rates and fifty percent were at new rates. Also contributing to the shortfall was a reduction in kWh sales. Approximately 9.6 million kWh less than the Board approved load forecast were billed. Finally, as part of Greater Sudbury's Decision and Order dated December 1, 2009, the Board's instructions were to set aside a portion of the approved revenue requirement in a deferral account pending completion of a transfer pricing study to assist in determining the appropriate cost sharing mechanism for water billing. Greater Sudbury deferred \$440,712 for the 2009 fiscal year. The revenue deficiency of \$1,688,650 divided by two for six months of the year, less the deferral amount result in a shortfall of \$1,275,037 which is very close to the actual variance.

### **2010 Actual versus 2009 Actual**

Distribution revenues are up \$442,657 but are significantly below expectations based on budget and the 2013 IRM filing. Included in this variance is \$312,000 of revenue recognition for CDM programs. Greater Sudbury had a separate CDM application to collect riders from customers for a three year period from 2009 to 2012. Offsetting expenses were also recognized. If the CDM revenues are removed the net variance is now only \$130,657. The 2010 figures reflect rates for the full year whereas the 2009 rates were only in place for six months of the year. The 2009 rate application showed a revenue deficiency of \$1,668,650 as noted above but this is offset for the full year value of the Board ordered deferral entry (water deferral) of \$881,000 for a net gain of

1 \$787,650. The 2012 IRM application included a tax reduction of \$134,609, two thirds of  
2 which (\$89,739) would reduce this gain down to \$697,911. Analysis of our actual  
3 kWh/kW sales as compared to the Board approved load forecast shows a \$500,000  
4 shortfall in revenues. This makes up the difference between the \$130,657 above and  
5 the reduced again of \$697,911.

#### 6 **2011 Actual versus 2010 Actual**

7 The 2011 variance of \$283,229 is again a combination of various factors. The 2011  
8 revenues were impacted by a further tax reduction of \$270,077 from the 2011 IRM, two  
9 thirds (\$180,051) of which would be recognized in the calendar year and one third  
10 (\$44,870) of the previous year's tax reduction. The same water deferral amount was  
11 recorded in 2011 so this would not affect the variance. CDM revenues of \$63,000 were  
12 recognized this year as compared to the \$312,000 recognized in 2010. Again the mild  
13 weather and conservation affected sales significantly with reduced load. Staff  
14 calculations substantiate a \$400,000 shortfall as a result of the reduced kWh/kW sales.

#### 15 **2012 Bridge Year versus 2011 Actual**

16 The unfavourable variance of \$83,538 is attributable mostly to the tax reduction of  
17 377,476 in the Board approved 2012 IRM rates. Offsetting the reduction is the  
18 anticipation of cooler weather affecting projected kWh/kW sales. Again the deferral  
19 entry is comparable year over year.

#### 21 **2013 Test Year versus 2012 Bridge Year**

22 The variance of \$1,955,677 is related to the fact that the 2013 Test Year values are  
23 calculated at the proposed rates, and the 2012 bridge year revenue is calculated at 2012  
24 rates. A portion of the variance is the excess revenue proposed in order to recover the  
25 revenue deficiency of \$844,288. Add to the revenue deficiency the annual water deferral  
26 entry made in prior years but not booked in the test years - \$881,000. And finally, the

- 1 proposed load forecast for the test year is 3.34 million kWh higher than the actual 2011
- 2 sales trends and this has impacted the variance positively.



Exhibit 3: Revenue

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**Tab 3 (of 3): Other Revenue**

## OVERVIEW OF OTHER REVENUE

Other revenue relates to all utility revenues other than the distribution and costs of power revenues. Greater Sudbury has classified other revenues in the following categories, consistent with OEB Appendix 2-F (Exhibit 3, Tab 3, Schedule 1, Attachment 1):

1. Specific Service Charges
2. Late Payment Charges
3. Other Operating Revenues
4. Other Income or Deductions

### **Specific Service Charges (Account 4235)**

Included with Specific Service Charges are the following items:

- Statement of Account
- Returned Cheque Charge
- Account Set Up Charge/Change of Occupancy
- Collection of Account Charge (No Disconnection)
- Disconnect/Reconnect at Meter
- Disconnect/Reconnect at Pole
- Specific Charge for Access to the Power Poles

### **Late Payment Charges (Account 4225)**

Late payment charges are imposed at a rate of 1.5% per month (19.56% annually) to customer accounts when the total amount of the bill has not been paid within 3 business days of the due date printed on the bill.

### **Other Operating Revenues**

Included in Other Operating Revenues are the following items:

- Standard Supply Service – Administrative Charge (Account 4080)
- Retail Services Revenues (including Distributor-Consolidated Billing Charge) (Account 4082)
- Service Transactions Requests (Account 4084)

**Other Income or Deductions**

Included in Other Income or Deductions are the following items:

- Rent from Electric Property (Account 4210)
- Gain on Disposition of Utility and Other Property (Account 4355)
- Loss on Disposition of Utility and Other Property (Account 4360)
- Revenues for Non-Utility Operations (Account 4375)
- Expenses of Non-Utility Operations (Account 4380)
- Interest and Dividend Income (Account 4405)

It should be noted that included in Rent from Electric Property (Account 4210) is the revenue from the building rent charged to affiliate companies. For further details on revenues and transactions with affiliate companies please refer to Exhibit 4, Tab 5.

OEB Appendix 2-F Other Operating Revenue has been included at Exhibit 3, Tab 3, Schedule 1, Attachment 1. The details for each account included in the Other Operating Revenue and Other Income or Deductions categories has been provided as requested.

A table presenting the volumes from the 2009 Board Approved figures to the 2013 Test Year has been included at Exhibit 3, Tab 3, Schedule 1, Attachment 2 for Specific Service Charges, Late Payment Charges and Other Operating Revenues.

File Number: EB-2012-0126  
Exhibit: 3  
Tab: 3  
Schedule: 1  
Attachment: 1  
Date: 9 November 2012

## Appendix 2-F Other Operating Revenue

USoA #	USoA Description	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year <sup>3</sup> 2012	Test Year 2013
	<b>Reporting Basis</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>
4235	Specific Service Charges <sup>1,2</sup>	\$ (901,163)	\$ (985,662)	\$ (1,013,851)	\$ (731,825)	\$ (843,150)
4225	Late Payment Charges <sup>1</sup>	\$ (128,535)	\$ (132,947)	\$ (270,017)	\$ (200,000)	\$ (200,000)
4080	Standard Supply Service - Administrative Charge	\$ (120,492)	\$ (109,993)	\$ (130,703)	\$ (129,711)	\$ (130,503)
4082	Retail Services Revenues	\$ (76,578)	\$ (68,194)	\$ (62,658)	\$ (49,100)	\$ (39,520)
4084	Service Transactions Requests	\$ (1,424)	\$ (3,073)	\$ (1,757)	\$ (1,550)	\$ (1,228)
4210	Rent from Electric Property				\$ (65,121)	\$ (90,627)
4355	Gain on Disposition of Utility and Other Property <sup>4</sup>	\$ (2,370)		\$ (41,107)		
4360	Loss on Disposition of Utility and Other Property <sup>3</sup>	\$ 1,337,333	\$ 230,197	\$ 232,146		
4375	Revenues from Non-Utility Operations <sup>5</sup>	\$ (819,779)	\$ (1,185,318)	\$ (470,741)		
4380	Expenses of Non-Utility Operations	\$ 797,370	\$ 699,808	\$ 483,425		
4405	Interest and Dividend Income <sup>2</sup>	\$ (132,423)	\$ (125,934)	\$ (447,286)	\$ (318,200)	\$ (245,000)
	<b>Specific Service Charges</b>	\$ (901,163)	\$ (985,662)	\$ (1,013,851)	\$ (731,825)	\$ (843,150)
	<b>Late Payment Charges</b>	\$ (128,535)	\$ (132,947)	\$ (270,017)	\$ (200,000)	\$ (200,000)
	<b>Other Operating Revenues</b>	\$ (198,494)	\$ (181,260)	\$ (195,118)	\$ (245,482)	\$ (261,878)
	<b>Other Income or Deductions</b>	\$ 1,180,131	\$ (381,247)	\$ (243,563)	\$ (318,200)	\$ (245,000)
	<b>Total</b>	\$ (48,060)	\$ (1,681,116)	\$ (1,722,549)	\$ (1,495,507)	\$ (1,550,028)

<sup>1</sup> In 2009 Late Payment Charges were reported under USoA account 4235, however have been shown separately here for comparison

<sup>2</sup> In 2009, an amount was incorrectly reported under USoA account 4405, it should have been 4235, the accounts have been corrected here

<sup>3</sup> In 2010 Loss of Disposition of Utility and Other Property were incorrectly filed under USoA account 4355, however has been corrected here to account 43

<sup>4</sup> In 2011, an amount was incorrectly reported under USoA account 4360, it should have been 4355, the accounts have been corrected here

Description	Account(s)
Specific Service Charges:	4235
Late Payment Charges:	4225
Other Distribution Revenues:	4080, 4082, 4084, 4090, 4205, 4210, 4215, 4220, 4240, 4245
Other Income and Expenses:	4305, 4310, 4315, 4320, 4325, 4330, 4335, 4340, 4345, 4350, 4355, 4360, 4365, 4370, 4375, 4380, 4385, 4390, 4395, 4398, 4405, 4415

**Note:** Add all applicable accounts listed above to the table and include all relevant information.

**The above table assumes adoption of MIFRS as of January 1, 2013. If the adoption year differs, please adjust the table accordingly.**

### Account Breakdown Details

For each "Other Operating Revenue" and "Other Income or Deductions" Account, a detailed breakdown of the account components is required. See the example below for Account 4405, Interest and Dividend Income.

#### Account 4080 - Distribution Services Revenues

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
<b>Reporting Basis</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>
Residential	\$ (107,506)	\$ (98,304)	\$ (116,678)	\$ (116,340)	\$ (115,581)
GS<50kW	\$ (10,688)	\$ (9,598)	\$ (11,378)	\$ (10,911)	\$ (12,183)
GS 50kW to 4999kW	\$ (1,208)	\$ (1,133)	\$ (1,392)	\$ (1,314)	\$ (1,593)
Unmetered Scattered Load	\$ (579)	\$ (537)	\$ (599)	\$ (597)	\$ (597)
Sentinel Lighting	\$ (505)	\$ (416)	\$ (648)	\$ (543)	\$ (543)
Street Lighting	\$ (6)	\$ (6)	\$ (7)	\$ (6)	\$ (6)
<b>Total</b>	\$ (120,492)	\$ (109,993)	\$ (130,703)	\$ (129,711)	\$ (130,503)

#### Account 4082 - Retail Services Revenues

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
<b>Reporting Basis</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>
Retailer Service Agreement -- standard charge	\$ (300)	\$ (100)		\$ (300)	-
Retailer Service Agreement -- monthly fixed charge	\$ (3,440)	\$ (3,080)	\$ (3,740)	\$ (4,000)	\$ (4,000)
Retailer Service Agreement -- monthly variable charge	\$ (45,873)	\$ (41,977)	\$ (36,807)	\$ (28,000)	\$ (22,200)
Distributor-Consolidated Billing -- monthly charge	\$ (26,965)	\$ (23,037)	\$ (22,111)	\$ (16,800)	\$ (13,320)
<b>Total</b>	\$ (76,578)	\$ (68,194)	\$ (62,658)	\$ (49,100)	\$ (39,520)

#### Account 4084 - Service Transaction Requests (STR) Revenues

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
<b>Reporting Basis</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>	<b>CGAAP</b>
Service Transaction Request -- request fee	\$ (513)	\$ (1,132)	\$ (689)	\$ (635)	\$ (1,228)
Service Transaction Request -- processing fee	\$ (911)	\$ (1,941)	\$ (1,068)	\$ (915)	
<b>Total</b>	\$ (1,424)	\$ (3,073)	\$ (1,757)	\$ (1,550)	\$ (1,228)

File Number: EB-2012-0126  
Exhibit: 3  
Tab: 3  
Schedule: 1  
Attachment: 1  
Date: 9 November 2012

## Appendix 2-F Other Operating Revenue

### Account 4210 - Rent from Electric Property

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Commercial Rent charged to Affiliates				\$ (65,121)	\$ (90,627)
<b>Total</b>	\$ -	\$ -	\$ -	\$ (65,121)	\$ (90,627)

### Account 4355 - Gain on Disposition of Utility and Other Property

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Gain on sale of vehicles	\$ (2,370)		\$ (29,117)		
Sale of Scrap	\$ -		\$ (11,991)		
<b>Total</b>	\$ (2,370)	\$ -	\$ (41,107)	\$ -	\$ -

### Account 4360 - Loss on Disposition of Utility and Other Property

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Write off of SAP Customer Information System	\$ 1,337,333				
Write off of meters from Smart Meter Pilot - no longer used		\$ 221,986			
Loss on sale of land		\$ 8,211			
Write off of reorganization costs (2000 amalgamation of 3 LDC's)			\$ 232,146		
<b>Total</b>	\$ 1,337,333	\$ 230,197	\$ 232,146	\$ -	\$ -

### Account 4375 - Revenues from Non-Utility Operations

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
CDM Program Revenues	\$ (22,409)		\$ 297		
OPA Program Revenues	\$ (797,370)	\$ (1,185,318)	\$ (457,219)		
Sentinel Rentals			\$ (13,819)		
<b>Total</b>	\$ (819,779)	\$ (1,185,318)	\$ (470,741)	\$ -	\$ -

### Account 4380 - Expenses of Non-Utility Operations

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
OPA Program Expenditures	\$ 797,370	\$ 699,808	\$ 483,425		
<b>Total</b>	\$ 797,370	\$ 699,808	\$ 483,425	\$ -	\$ -

### Account 4405 - Interest and Dividend Income

	2009 Actual	2010 Actual	2011 Actual <sup>2</sup>	Bridge Year	Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Recovery of Carrying Charges - Regulatory Assets	\$ (28,362)	\$ (54,922)	\$ (210,500)		
Interest on Related Party Balances			\$ (161,783)	\$ (233,200)	\$ (160,000)
Bank Deposit Interest	\$ (104,060)	\$ (71,012)	\$ (75,003)	\$ (85,000)	\$ (85,000)
<b>Total</b>	\$ (132,423)	\$ (125,934)	\$ (447,286)	\$ (318,200)	\$ (245,000)

**Notes:**

- 1 List and specify any other interest revenue

## Other Revenue Trend Table

RateMaker 2011 release 1.0 © Elenchus Research Associates

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

Greater Sudbury Hydro Inc.

9 November, 2012

EB-2012-0126

Exhibit 3

Tab 3

Schedule 1

Attachment 2

**Other Service Revenues**

Service	USA #	2009 Approved		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	495,980	\$0.25	123,995
Arrears Certificate	4235	624	\$15.00	9,360
Statement of Account	4235	572	\$15.00	8,580
Returned Cheque charge (plus bank charges)	4235	686	\$15.00	10,290
Account set up charge / change of occupancy charge	4235	5,991	\$30.00	179,730
Late Payment - per month	4225		1.50%	112,728
Collection of account charge -- no disconnection	4235	2,623	\$30.00	78,690
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	409	\$65.00	26,585
Disconnect/Reconnect at meter -- after regular hours	4235	2	\$185.00	370
Disconnect/Reconnect at pole -- during regular hours	4235	14	\$185.00	2,590
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	14,661	\$22.35	327,673
Retailer Service Agreement -- standard charge	4082	3	\$100.00	300
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	195	\$20.00	3,900
Retailer Service Agreement -- monthly variable charge (per customer)	4082	103,831	\$0.50	51,916
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	101,661	\$0.30	30,498
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	9,253	\$0.25	2,313
Service Transaction Request -- processing fee (per processed request)	4084	8,220	\$0.50	4,110
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>973,628</b>

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

**Other Service Revenues**

Service	USA #	2009 Actual		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	481,967	\$0.25	120,492
Arrears Certificate	4235	733	\$15.00	10,997
Statement of Account	4235	681	\$15.00	10,215
Returned Cheque charge (plus bank charges)	4235	806	\$15.00	12,095
Account set up charge / change of occupancy charge	4235	7,044	\$30.00	211,320
Late Payment - per month	4225		1.50%	128,535
Collection of account charge -- no disconnection	4235	3,084	\$30.00	92,520
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	481	\$65.00	31,265
Disconnect/Reconnect at meter -- after regular hours	4235	2	\$185.00	370
Disconnect/Reconnect at pole -- during regular hours	4235	16	\$185.00	2,960
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	17,237	\$22.35	385,257
Retailer Service Agreement -- standard charge	4082	3	\$100.00	300
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	172	\$20.00	3,440
Retailer Service Agreement -- monthly variable charge (per customer)	4082	91,747	\$0.50	45,874
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	89,882	\$0.30	26,965
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	2,051	\$0.25	513
Service Transaction Request -- processing fee (per processed request)	4084	1,822	\$0.50	911
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>1,084,028</b>

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**Other Service Revenues**

Service	USA #	2010 Actual		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	439,972	\$0.25	109,993
Arrears Certificate	4235	911	\$15.00	13,671
Statement of Account	4235	700	\$15.00	10,500
Returned Cheque charge (plus bank charges)	4235	736	\$15.00	11,045
Account set up charge / change of occupancy charge	4235	6,750	\$30.00	202,491
Late Payment - per month	4225		1.50%	132,947
Collection of account charge -- no disconnection	4235	4,262	\$30.00	127,865
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	602	\$65.00	39,140
Disconnect/Reconnect at meter -- after regular hours	4235		\$185.00	
Disconnect/Reconnect at pole -- during regular hours	4235	13	\$185.00	2,405
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	16,843	\$22.35	376,433
Retailer Service Agreement -- standard charge	4082	1	\$100.00	100
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	154	\$20.00	3,080
Retailer Service Agreement -- monthly variable charge (per customer)	4082	83,953	\$0.50	41,977
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	76,790	\$0.30	23,037
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	4,529	\$0.25	1,132
Service Transaction Request -- processing fee (per processed request)	4084	3,881	\$0.50	1,941
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>1,097,757</b>



**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

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**Other Service Revenues**

Service	USA #	2011 Actual		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	522,813	\$0.25	130,703
Arrears Certificate	4235	930	\$15.00	13,956
Statement of Account	4235	313	\$15.00	4,695
Returned Cheque charge (plus bank charges)	4235	646	\$15.00	9,685
Account set up charge / change of occupancy charge	4235	6,597	\$30.00	197,910
Late Payment - per month	4225		1.50%	270,017
Collection of account charge -- no disconnection	4235	4,526	\$30.00	135,780
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	432	\$65.00	28,080
Disconnect/Reconnect at meter -- after regular hours	4235	11	\$185.00	2,035
Disconnect/Reconnect at pole -- during regular hours	4235	8	\$185.00	1,480
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	16,689	\$22.35	372,998
Retailer Service Agreement -- standard charge	4082		\$100.00	
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	187	\$20.00	3,740
Retailer Service Agreement -- monthly variable charge (per customer)	4082	73,613	\$0.50	36,807
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	73,705	\$0.30	22,111
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	2,757	\$0.25	689
Service Transaction Request -- processing fee (per processed request)	4084	2,136	\$0.50	1,068
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>1,231,754</b>

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

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**Other Service Revenues**

Service	USA #	2012 Projection		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	518,844	\$0.25	129,711
Arrears Certificate	4235	135	\$15.00	2,025
Statement of Account	4235	270	\$15.00	4,050
Returned Cheque charge (plus bank charges)	4235	560	\$15.00	8,400
Account set up charge / change of occupancy charge	4235	4,400	\$30.00	132,000
Late Payment - per month	4225		1.50%	200,000
Collection of account charge -- no disconnection	4235	5,300	\$30.00	159,000
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	585	\$65.00	38,025
Disconnect/Reconnect at meter -- after regular hours	4235	30	\$185.00	5,550
Disconnect/Reconnect at pole -- during regular hours	4235	15	\$185.00	2,775
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	17,002	\$22.35	380,000
Retailer Service Agreement -- standard charge	4082	3	\$100.00	300
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	200	\$20.00	4,000
Retailer Service Agreement -- monthly variable charge (per customer)	4082	56,000	\$0.50	28,000
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	56,000	\$0.30	16,800
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	2,540	\$0.25	635
Service Transaction Request -- processing fee (per processed request)	4084	1,830	\$0.50	915
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>1,112,186</b>

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

**Other Service Revenues**

Service	USA #	2013 Projection (existing rates)		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	522,012	\$0.25	130,503
Arrears Certificate	4235	135	\$15.00	2,025
Statement of Account	4235	250	\$15.00	3,750
Returned Cheque charge (plus bank charges)	4235	560	\$15.00	8,400
Account set up charge / change of occupancy charge	4235	7,050	\$30.00	211,500
Late Payment - per month	4225		1.50%	200,000
Collection of account charge -- no disconnection	4235	6,000	\$30.00	180,000
Collection of account charge -- no disconnection -- after regular hours	4235		\$165.00	
Disconnect/Reconnect at meter -- during regular hours	4235	585	\$65.00	38,025
Disconnect/Reconnect at meter -- after regular hours	4235	30	\$185.00	5,550
Disconnect/Reconnect at pole -- during regular hours	4235	15	\$185.00	2,775
Disconnect/Reconnect at pole -- after regular hours	4235		\$415.00	
Specific Charge for Access to the Power Poles -- per pole/year	4235	17,500	\$22.35	391,125
Retailer Service Agreement -- standard charge	4082		\$100.00	
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	200	\$20.00	4,000
Retailer Service Agreement -- monthly variable charge (per customer)	4082	44,400	\$0.50	22,200
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	44,400	\$0.30	13,320
Retailer-Consolidated Billing -- monthly credit (per customer)	4082		(\$0.30)	
Service Transaction Request -- request fee (per request)	4084	2,010	\$0.25	503
Service Transaction Request -- processing fee (per processed request)	4084	1,450	\$0.50	725
Customer Information request -- non-EBT (more than twice a year, per request)	4084		\$2.00	
<b>TOTAL</b>				<b>1,214,401</b>

**Sudbury (ED-2002-0559)**

2013 EDR Application (EB-2012-0126) version: 1

November 9, 2012

**Other Service Revenues**

Service	USA #	2013 Projection (proposed rates)		
		Volume	Rate	Revenue
Standard Supply Service -- Administrative Charge	4080	522,012	\$0.25	130,503
Arrears Certificate	4235	135	\$15.00	2,025
Statement of Account	4235	250	\$15.00	3,750
Returned Cheque charge (plus bank charges)	4235	560	\$15.00	8,400
Account set up charge / change of occupancy charge	4235	7,050	\$30.00	211,500
Late Payment - per month	4225		1.50%	200,000
Collection of account charge -- no disconnection	4235	6,000	\$30.00	180,000
Collection of account charge -- no disconnection -- after regular hours	4235			
Disconnect/Reconnect at meter -- during regular hours	4235	585	\$65.00	38,025
Disconnect/Reconnect at meter -- after regular hours	4235	30	\$185.00	5,550
Disconnect/Reconnect at pole -- during regular hours	4235	15	\$185.00	2,775
Disconnect/Reconnect at pole -- after regular hours	4235			
Specific Charge for Access to the Power Poles -- per pole/year	4235	17,500	\$22.35	391,125
Retailer Service Agreement -- standard charge	4082		\$100.00	
Retailer Service Agreement -- monthly fixed charge (per retailer)	4082	200	\$20.00	4,000
Retailer Service Agreement -- monthly variable charge (per customer)	4082	44,400	\$0.50	22,200
Distributor-Consolidated Billing -- monthly charge (per customer)	4082	44,400	\$0.30	13,320
Retailer-Consolidated Billing -- monthly credit (per customer)	4082			
Service Transaction Request -- request fee (per request)	4084	2,010	\$0.25	503
Service Transaction Request -- processing fee (per processed request)	4084	1,450	\$0.50	725
Customer Information request -- non-EBT (more than twice a year, per request)	4084			
<b>TOTAL</b>				<b>1,214,401</b>

## OTHER REVENUE VARIANCE ANALYSIS

Table 1 below summarizes the total other revenue by category and highlights the variances year over year. Significant variances (greater than the materiality threshold \$115,000) are shown in bold and are explained below.

### **2010 vs 2009**

#### *Other Income and Expenses*

In 2009, Greater Sudbury wrote off approximately \$1.3M related to an SAP Customer Information System which is included in Other Income and Expenses, making the 2009 values low in comparison to 2010. Also contributing to the higher balance in 2010, is the fact that Greater Sudbury recognized incentives in excess of expenditures related to OPA programs for both 2009 and 2010. For further details on the write off of the SAP Customer Information System please see Exhibit 2, Tab 3, Schedule 1.

### **2011 vs 2010**

#### *Late Payment Charges*

In 2011, Greater Sudbury's Late Payment charges were up significantly over the prior year for a variety of reasons. One of the biggest contributors to the increase is the fact that Greater Sudbury was not employing collection procedures from November 2010 to April 2011 as a result of the conversion to a new Customer Information System in November 2010. Given that this was over the winter period where bills are typically for larger amounts, customers were incurring interest on these balances and allowing them to grow, incurring greater interest charges. Also compounding the issue is when collections were re-instated, Greater Sudbury was lenient with payment arrangements to assist customers with bringing their accounts back to current. However this also allowed the balances to continue to attract interest charges until the accounts were settled. Also worth noting is that the 2010 balance was lower than it typically would have been. This is because when the conversion to the new Customer Information System took place, all customer balances came over as current and therefore did not collect interest like they

1 would have had the conversion not taken place. Every customer essentially received a  
2 three week grace period. Also Greater Sudbury's billing volume was down significantly  
3 in November and December 2010 as a result of the conversion. Therefore there were  
4 lower balances to attract interest and most of them would not have become past due  
5 until 2011. Early in 2011 an effort was made to catch up on billing, and as a result it  
6 shifted the interest revenue that would have been recorded in 2010 to 2011.

7  
8 *Other Income and Expenses*

9 As discussed in the 2010 vs 2009 analysis for this category above, in 2010, Greater  
10 Sudbury recognized incentives in excess of expenditures related to OPA programs for  
11 both 2009 and 2010.

12  
13  
14 **2012 vs 2011**

15 *Specific Service Charges*

16 Beginning in 2012, revenues associated with account setup charges, collection trips and  
17 disconnect/reconnects were split 50% electricity related, 50% water related, consistent  
18 with the Board's 2009 directive to defer 50% of the water-related billing costs. For  
19 arrears certificates, it has been Greater Sudbury's experience that very few requests are  
20 received for electricity arrears certificates as the arrears cannot be transferred to the tax  
21 roll, whereas water arrears are. The split for revenues for arrears certificates is more  
22 heavily weighted towards water based on this trend. The water related revenues are not  
23 included in the 2012 or 2013 revenue projection figures. Historically all revenue had  
24 been recorded as electricity related, this has resulted in lower other service revenue  
25 projections for these items in 2012 and 2013.

26  
27 **2013 vs 2012**

28 There are no significant variances.  
29  
30  
31  
32

**Table 1 – Summary of Other Revenue and Related Variances**

	<b>Summary Totals</b>				
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Specific Service Charges	\$ (901,163)	\$ (985,662)	\$ (1,013,851)	\$ (731,825)	\$ (843,150)
Late Payment Charges	\$ (128,535)	\$ (132,947)	\$ (270,017)	\$ (200,000)	\$ (200,000)
Other Distribution Revenues	\$ (198,494)	\$ (181,260)	\$ (195,118)	\$ (245,482)	\$ (261,878)
Other Income and Expenses	\$ 1,180,131	\$ (381,247)	\$ (243,563)	\$ (318,200)	\$ (245,000)
	\$ (48,061)	\$ (1,681,116)	\$ (1,722,549)	\$ (1,495,507)	\$ (1,550,028)

	<b>Variances</b>			
	<b>2010 vs 2009</b>	<b>2011 vs 2010</b>	<b>2012 vs 2011</b>	<b>2013 vs 2012</b>
Specific Service Charges	\$ (84,499)	\$ (28,189)	\$ <b>282,026</b>	\$ (111,325)
Late Payment Charges	\$ (4,412)	\$ <b>(137,070)</b>	\$ 70,017	\$ -
Other Distribution Revenues	\$ 17,234	\$ (13,858)	\$ (50,364)	\$ (16,396)
Other Income and Expenses	\$ <b>(1,561,378)</b>	\$ <b>137,684</b>	\$ (74,637)	\$ 73,200
	\$ (1,633,055)	\$ (41,433)	\$ 227,042	\$ (54,521)