EXHIBIT 3 – OPERATING REVENUE

1
2

Exhibit	Contents	Page
3 – Operating Revenue		
	Load and Revenue Forecasts	2
	Summary of Load and Customer/Connection Forecast	4
	Forecast Methodology – Multivariate Regression Model	8
	• **Purchase KWh Load Forecast**	8
	• **Billed KWh Load Forecast**	11
	• **Billed KWh Load Forecast and Customer/Connection Forecast by Rate Class**	11
	• **CDM Adjustment and LRAMVA**	15
	• **Bill KW Load Forecast**	19
	Accuracy of Load Forecast and Variance Analyses	22
	Other Revenue	30
	Appendix 3-A Monthly Data Used For Regression Analysis	38

3

LOAD AND REVENUE FORECAST

This Exhibit provides the details of E.L.K. Energy Inc. ("E.L.K.") operating revenue for 2012 Board Approved, 2012 Actual, 2013 Actual, 2014 Actual, 2015 Actual, the 2016 Bridge Year ("Bridge Year") and the 2017 Test Year ("Test Year"). This Exhibit also provides a detailed variance analysis by rate classification of the operating revenue components. Distribution revenue excludes revenue from commodity sales.

E.L.K. is proposing a total Service Revenue Requirement of $4,513,093 for the 2017 Test Year. This amount includes a Base Revenue Requirement of $3,963,096 plus revenue offsets of 549,998 to be recovered through Other Revenue.

Other Revenue include Late Payment charges, Specific Service charges, Rent from Electric Property, Miscellaneous Service revenues, Standard Supply Service ("SSS") Administrative charges and Interest. A summary of these operating revenues together is presented with a materiality analysis of variances and presented in this exhibit.

The following Table 3-1 summarizes E.L.K.'s total operating revenue. Revenue for each of the actual years is from E.L.K.'s audited Financial Statements. The Bridge Year and Test Year are provided on the basis of both existing and proposed distribution rates. The GS>50 kW revenue is shown as before the transformer allowance credits to eligible customers are applied.

Table 3-1 Summary of Operating Revenue

Table 3-1: Summary of Operating Revenue

	2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Bridge	2017 Test at Current Rates	2017 Test at Proposed Rates
Distribution Throughput Revenue									
Residential	1,917,697	2,012,554	2,055,322	2,471,804	2,213,912	2,248,530	2,221,220	2,232,303	2,681,391
General Service <50 kW	182,517	422,909	351,937	423,253	428,932	385,021	380,218	382,867	571,022
General Service 50 to 4,999 kW	855,946	431,398	397,449	477,987	424,151	434,811	512,805	506,050	609,089
Sentinel Lighting	564	381	248	299	298	272	345	345	515
Street Lighting	563	117,759	83,561	100,493	82,503	91,416	113,558	113,741	99,029
Unmetered Scattered Load	2,054	3,074	2,570	3,091	2,805	2,812	2,883	2,888	4,473
Embedded Distributor	-	102,204	149,301	179,555	165,926	163,336	116,295	115,410	59,039
Total	**2,959,341**	**3,090,279**	**3,040,389**	**3,656,482**	**3,318,528**	**3,326,198**	**3,347,324**	**3,353,604**	**4,024,559**
Specific Service Charges	65,524	66,000	108,922	72,073	77,125	75,229	75,000	81,670	81,670
Late Payment Charges	127,882	130,000	108,646	111,041	107,336	120,092	126,000	114,623	114,623
Other Operating Revenues	66,689	72,305	460,219	323,318	64,039	45,894	51,000	48,447	48,447
Other Income or Deductions	513,834	359,500	411,008	- 109,654	322,948	477,533	354,017	303,758	303,758
Total	**773,929**	**627,805**	**1,088,795**	**396,778**	**571,448**	**718,748**	**606,017**	**548,498**	**548,498**
Grand Total	**3,733,270**	**3,718,084**	**4,129,184**	**4,053,260**	**3,889,976**	**4,044,946**	**3,953,341**	**3,902,102**	**4,573,057**

SUMMARY OF LOAD AND CUSTOMER/CONNECTION FORECAST

The purpose of this evidence is to present the process used by E.L.K. to prepare the weather normalized load and customer/connection forecast used to design the proposed 2017 distribution rates.

In summary, as a starting point, E.L.K. used the same regression analysis methodology approved by the Ontario Energy Board (the "Board") in its 2012 Cost of Service ("COS") application (EB-2011-0099) and updated the analysis for actual power purchases to the end of the 2015. The updated regression analysis included the variables used in the 2012 COS application but excluded the Ontario Real GDP variables since it had a negative coefficient and it was not statistically significant. The regression analysis used in this application has also been used by a number of distributors in more recent cost of service rate applications to determine a prediction model. With regard to the overall process of load forecasting, E.L.K. believes that conducting a regression analysis on historical electricity purchases to produce an equation that will predict purchases is appropriate. E.L.K. has the data for the amount of electricity (in kWh) purchased from the IESO for use by E.L.K.'s customers. With a regression analysis, these purchases can be related to other monthly explanatory variables such as heating degree days and cooling degree days which occur in the same month. The results of the regression analysis produce an equation that predicts the purchases based on the explanatory variables. This prediction model is then used as the basis to forecast the total level of weather normalized purchases for the Bridge Year and the Test Year which is converted to billed kWh and kW, where applicable, by rate class. A detailed explanation of the process is provided later in this evidence.

Based on the Board's approval of this methodology in a number of previous costs of service applications as well as the discussion that follows, E.L.K. submits the load forecasting methodology is reasonable at this time for the purposes of this Application.

The following provides the material to support the weather normalized load forecast used by E.L.K. in this Application.

Table 3-2, Table 3-3 and Table 3-4 below provide a summary of the weather normalized load and customer/connection forecast used in this Application.

Table 3-2 Summary of Load and Customer/Connection Forecast

Year	Billed Actual (GWh)	Growth (GWh)	Billed Weather Normal (GWh)	Growth (GWh)	Customer/ Connection Count	Growth
Billed Energy (GWh) and Customer Count / Connections						
2012 Board Approved			240.7		14,176	
2006	198.5		201.6		13,571	
2007	257.6	59.1	253.4	51.8	13,656	85
2008	248.2	(9.3)	246.0	(7.4)	13,697	41
2009	233.1	(15.1)	238.9	(7.1)	13,823	126
2010	238.5	5.4	234.3	(4.6)	13,981	158
2011	241.9	3.4	238.8	4.5	14,054	73
2012	233.4	(8.6)	233.0	(5.8)	14,143	89
2013	229.7	(3.6)	230.5	(2.5)	14,229	87
2014	230.9	1.2	231.8	1.3	14,317	88
2015	232.5	1.6	235.7	4.0	14,399	82
2016 Bridge			233.1	(2.6)	14,499	100
2017 Test			229.8	(3.4)	14,600	101

In the above Table 3-2, the billed GWh data from 2006 to 2015 reflects actual weather and weather normal conditions in each year. The weather normal values are the actual values adjusted by the weather normal conversion factor outlined in Table 3-6. The weather conversion factor is determined consistent with the approach outlined by the OEB in Appendix 2-IA. For 2016 and 2017, the forecasted billed GWh is on a weather normal basis.

Customer/Connection values are on an average basis and street lights, sentinel lights and unmetered scattered loads are measured as connections.

On a rate class basis, the actual and forecasted billed amounts are shown in Table 3-3. Actual volumes have been weather normalized by rate class using the weather normal conversion factor from Table 3-6. The actual and forecasted number of customers/connections and customer/connection usage on a weather normal basis is shown in Table 3-4.

Table 3-3 Billed Energy by Rate Class

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor	Total
Billed Energy (GWh) - Actual								
2006	91.2	27.5	77.1	2.2	0.3	0.19		198.5
2007	93.9	27.5	70.5	2.4	0.4	0.18	62.6	257.6
2008	91.6	27.3	71.8	2.3	0.3	0.09	54.9	248.2
2009	89.5	27.0	63.0	2.1	0.3	0.05	51.1	233.1
2010	94.3	27.8	65.6	2.4	0.3	0.02	48.1	238.5
2011	91.8	30.6	64.3	2.2	0.2	0.01	52.7	241.9
2012	90.3	29.4	60.9	2.3	0.3	0.01	50.1	233.4
2013	88.8	28.9	59.4	2.5	0.3	0.01	49.8	229.7
2014	89.1	29.7	57.3	2.3	0.3	0.01	52.2	230.9
2015	90.7	28.6	62.3	2.4	0.3	0.01	48.2	232.5
Billed Energy (GWh) - Weather Normal								
2006	92.6	28.0	78.3	2.3	0.3	0.19		201.6
2007	92.4	27.0	69.4	2.4	0.4	0.18	61.6	253.4
2008	90.8	27.1	71.1	2.3	0.3	0.09	54.4	246.0
2009	91.7	27.7	64.6	2.1	0.3	0.05	52.4	238.9
2010	92.6	27.4	64.4	2.4	0.3	0.02	47.3	234.3
2011	90.6	30.2	63.5	2.2	0.2	0.01	52.1	238.8
2012	90.2	29.4	60.9	2.3	0.3	0.01	50.0	233.0
2012 Board Approved	96.0	32.6	66.7	2.2	0.2	0.01	43.0	240.7
2013	89.1	29.0	59.6	2.5	0.3	0.01	50.0	230.5
2014	89.5	29.9	57.6	2.3	0.3	0.01	52.3	231.8
2015	92.0	29.0	63.2	2.4	0.3	0.01	48.9	235.7
2016 Bridge	92.5	29.2	62.1	2.4	0.3	0.01	46.6	233.1
2017 Test	92.1	29.1	60.7	2.4	0.3	0.01	45.1	229.8

Table 3-4 Number of Customers/Connections and Annual Normalized Usage by Rate Class

Number of Customers/Connections								
Year	**Residential**	**GS<50**	**GS>50**	**Street Lights**	**Unmetered Scattered Load**	**Sentinel Lights**	**Embedded Distributor**	**Total**
2006	9,497	1,081	108	2,745	35	105	0	13,571
2007	9,581	1,090	109	2,754	35	83	4	13,656
2008	9,629	1,096	110	2,763	34	61	4	13,697
2009	9,741	1,122	113	2,772	34	39	4	13,823
2010	9,871	1,167	108	2,781	34	18	4	13,981
2011	9,932	1,194	95	2,790	33	7	4	14,054
2012	10,008	1,205	89	2,799	32	7	4	14,143
2012 Board Approved	10,023	1,214	93	2,801	32	7	4	14,176
2013	10,083	1,208	89	2,808	32	7	4	14,229
2014	10,154	1,215	90	2,817	31	7	4	14,317
2015	10,218	1,221	93	2,826	31	7	4	14,399
2016 Bridge	10,302	1,237	93	2,826	31	7	4	14,499
2017 Test	10,386	1,253	93	2,826	31	7	4	14,600
Actual Annual Energy Usage per Customer/Connection (kWh per customer/connection)								
2006	9,601	25,461	711,135	820	7,656	1,786		
2007	9,803	25,206	645,094	875	12,409	2,202	15,649,460	
2008	9,513	24,914	652,998	831	8,646	1,530	13,716,194	
2009	9,186	24,117	560,286	751	8,396	1,304	12,774,444	
2010	9,549	23,869	610,225	867	8,224	1,078	12,023,594	
2011	9,241	25,658	677,097	805	6,206	852	13,185,104	
2012	9,021	24,406	684,657	838	8,325	852	12,527,923	
2013	8,806	23,952	667,725	895	8,273	852	12,452,811	
2014	8,778	24,493	637,182	817	8,377	852	13,037,808	
2015	8,882	23,441	673,561	838	8,374	852	12,048,303	
Normalized Annual Energy Usage per Customer/Connection (kWh per customer/connection)								
2006	9,751	25,859	722,227	832	7,776	1,814		
2007	9,645	24,800	634,714	861	12,210	2,167	15,397,669	
2008	9,427	24,690	647,125	824	8,568	1,516	13,592,829	
2009	9,415	24,717	574,231	770	8,605	1,336	13,092,391	
2010	9,382	23,450	599,519	852	8,080	1,059	11,812,656	
2011	9,122	25,327	668,357	794	6,126	841	13,014,913	
2012	9,009	24,373	683,746	837	8,314	851	12,511,249	
2012 Board Approved	9,576	26,839	713,314	794	5,901	795	10,749,196	
2013	8,836	24,032	669,962	898	8,301	855	12,494,523	
2014	8,810	24,582	639,509	820	8,407	855	13,085,429	
2015	9,005	23,768	682,935	850	8,491	864	12,215,976	
2016 Bridge	8,977	23,623	671,533	840	8,458	852	11,660,823	
2017 Test	8,865	23,248	656,668	842	8,543	852	11,285,804	

FORECAST METHODOLOGY – MULTIVARIATE REGRESSION MODEL

E.L.K.'s weather normalized load forecast is developed in a three-step process. First, a total system weather normalized purchased energy forecast is developed based on multivariate regression model that incorporates variables that impact energy usage. Second, the weather normalized purchased energy forecast is adjusted by a historical loss factor to produce a weather normalized billed energy forecast. Finally, the forecast of billed energy by rate class is developed based on a forecast of customer numbers and historical usage patterns per customer. For the rate classes that have weather sensitive load, their forecasted billed energy is adjusted to ensure that the total billed energy forecast by rate class is equivalent to the total weather normalized billed energy forecast that has been determined from the regression model. The forecast of customers by rate class is determined using a geometric mean analysis and judgement of E.L.K.. The forecast is also adjusted for expected Conservation and Demand Management ("CDM") results. For those rate classes that use kW for the distribution volumetric billing determinant an adjustment factor is applied to the class energy forecast based on the historical relationship between kW and kWh. The following will explain the forecasting process in more detail.

Purchased KWh Load Forecast

An equation to predict total system purchased energy is developed using a multivariate regression model with independent variables outlined below: weather (heating and cooling degree days), calendar variables (days in month, seasonal), and Embedded Distributor usage. The regression model uses monthly kWh and monthly values of independent variables from January 2006 to December 2015 to determine the monthly regression coefficients. This provides 120 monthly data points which are a reasonable data set for use in a multiple regression analysis.

With regards to weather normalization, E.L.K. submits that it is appropriate to review the impact of weather over the past ten years January 2006 to December 2015 since it is consistent with the time period used in the regression analysis and a time period outlined in the filing requirements. It is also reflective of more recent weather conditions. The average weather conditions over this period are applied in the prediction formula to determine a weather normalized forecast. In accordance with the filing requirement, E.L.K. has also provided sensitivity analysis showing the impact on the 2017 forecast of purchases. This analysis assumes weather normal conditions are based on a 20 year trend of weather data.

The multivariate regression model has determined drivers of year-over-year changes in E.L.K.'s load growth are weather (heating and cooling degree days), calendar variables (days in month and seasonal flag), and Embedded Distributor usage. These factors are captured within the multivariate regression model.

Weather impacts on load are apparent in both the winter heating season, and in the summer cooling season. For that reason, both Heating Degree Days (i.e. a measure of coldness in winter) and Cooling Degree Days (i.e. a measure of summer heat) are modeled.

Other factors determining energy use in the monthly model are the number of days in a particular month and a flag that indicates spring and fall months

The regression analysis indicates that the monthly energy usage for the Embedded Distributor is a significant contributor to the total energy used in the E.L.K. service area.

The following outlines the predication model used by E.L.K. to predict weather normal purchases for 2016 and 2017.

E.L.K. Monthly Predicted kWh Purchases

= Heating Degree Days * 7,957
+ Cooling Degree Days * 44,442
+ Number of Days in the Month * 654,903
+ Spring Fall Flag * (832,634)
+ Embedded Distributor Usage * 0.61
+ Constant of (5,282,170)

The monthly data used in the regression model and the resulting monthly prediction for the actual and forecasted years are provided in Appendix 3-A.

The sources of data for the various data points are:

a) The Environment Canada website provided the monthly heating degree day and cooling degree information. Weather data from the Windsor A Weather Station was used. 18° C is the base numbers from which heating degree days and cooling degree days are measured
b) The calendar provided information related to number of days in the month and the months defined to be spring or fall (i.e. March to May and September to November)
c) E.L.K.'s billing system provided the Embedded Distributor monthly usage.

The prediction formula has the following statistical results (Table 3-5) which generally indicate the formula has a good fit to the actual data set.

Table 3-5 Statistical Results

R Square	89.4%
Adjusted R Square	89.0%
F Test	192.7
MAPE (Monthly)	3.4%
T-stats by Coefficient	
Embedded Distributor Usage	11.1
Heating Degree Days	11.4
Cooling Degree Days	14.2
Number of Days in Month	6.1
Spring Fall Flag	(3.1)
Constant	(1.6)

The annual results of the above prediction formula compared to the actual annual purchases from 2006 to 2015 are shown below in Table 3-6 along with the predicted total system purchases for E.L.K. for 2016 and 2017 on a weather normal basis. In addition, weather normal values for 2017 are provided on a 20 year trend assumption for weather normalization. Information is also provided to show the Weather Normal Conversion Factor which is used to weather normalize actual volume data. In Table 3-6, the Predicted Weather Normal values are similar to the Predicted amounts but the weather normalized heating degree days and cooling degree days used to determine the weather normal forecast for 2016 and 2017 are used in the prediction formula in place of actual heating degree days and cooling degree days. The ratio of Predicted Weather Normal to Predicted values results in a Weather Normal Conversion Factor. This factor is applied to the Actual amount which results in the Actual Weather Normal value.

Table 3-6 Total System Purchase

Year	Actual	Predicted	% Difference	Predicted Weather Normal	Weather Normal Conversion Factor	Actual Weather Normal
Purchased Energy (GWh)						
2006	213.8	216.2	1.1%	219.6	1.0156	217.2
2007	271.1	264.9	(2.3%)	260.6	0.9839	266.7
2008	262.6	258.5	(1.6%)	256.2	0.9910	260.3
2009	248.9	246.9	(0.8%)	253.1	1.0249	255.1
2010	261.3	255.6	(2.2%)	251.1	0.9825	256.7
2011	255.0	257.5	0.9%	254.1	0.9871	251.7
2012	246.9	253.4	2.6%	253.1	0.9987	246.6
2013	247.7	251.4	1.5%	252.2	1.0033	248.5
2014	249.8	252.8	1.2%	253.7	1.0037	250.7
2015	247.7	247.7	(0.0%)	251.2	1.0139	251.2
2016 Bridge		250.8		250.8	1.0000	
2017 Test		249.2		249.2	1.0000	
2017 WN - 20 year trend		249.8		249.8	1.0000	

The weather normalized amount for 2017 is determined by using 2017 dependent variables in the prediction formula on a monthly basis along with the average monthly heating degree days and cooling degree days which have occurred from January 2006 to December 2015 (i.e. 19 years). The 2017 weather normal 20 year trend value reflects the trend in monthly heating degree days and cooling degree days which have occurred from January 1996 to December 2015.

Billed KWh Load Forecast

To determine the total weather normalized energy billed forecast, the total system weather normalized purchases forecast is adjusted by a historical loss factor. The historical loss factor used is 6.89% which represents the average loss factor from 2006 to 2015. With this average loss factor the total weather normalized billed energy before adjustment discussed below will be 234.6 (GWh) for 2016 (i.e. 250.8/1.0689) and 233.1 (GWh) for 2017 (i.e. (i.e. 249.2/1.0689)

Billed KWh Load Forecast and Customer/Connection Forecast by Rate Class

Since the total weather normalized billed energy amount is known this amount needs to be distributed by rate class for rate design purposes taking into consideration the customer/connection forecast and expected usage per customer by rate class.

The next step in the forecasting process is to determine a customer/connection forecast. The customer/connection forecast is based on reviewing historical customer/connection data that is available as shown in the following Table 3-7.

Table 3-7 Historical Customer/Connection Data

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor	Total
Number of Customers/Connections								
2006	9,497	1,081	108	2,745	35	105		13,571
2007	9,581	1,090	109	2,754	35	83	4	13,656
2008	9,629	1,096	110	2,763	34	61	4	13,697
2009	9,741	1,122	113	2,772	34	39	4	13,823
2010	9,871	1,167	108	2,781	34	18	4	13,981
2011	9,932	1,194	95	2,790	33	7	4	14,054
2012	10,008	1,205	89	2,799	32	7	4	14,143
2013	10,083	1,208	89	2,808	31	7	4	14,229
2014	10,154	1,215	90	2,817	31	7	4	14,317
2015	10,218	1,221	93	2,826	31	7	4	14,399

From the historical customer/connection data the growth rate in customer/connection can be evaluated which is provided on the following Table 3-8.

Table 3-8 Growth Rate in Customer/Connections

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor
Growth Rate in Customers/Connections							
2006							
2007	0.9%	0.9%	0.9%	0.3%	(1.4%)	(21.0%)	
2008	0.5%	0.5%	0.5%	0.3%	(1.4%)	(26.5%)	0.0%
2009	1.2%	2.3%	2.4%	0.3%	0.0%	(36.1%)	0.0%
2010	1.3%	4.0%	(4.4%)	0.3%	(1.5%)	(55.1%)	0.0%
2011	0.6%	2.4%	(11.6%)	0.3%	(3.0%)	(60.0%)	0.0%
2012	0.8%	0.9%	(6.3%)	0.3%	(3.1%)	0.0%	0.0%
2013	0.7%	0.2%	0.0%	0.3%	(1.6%)	0.0%	0.0%
2014	0.7%	0.6%	1.1%	0.3%	0.0%	0.0%	0.0%
2015	0.6%	0.5%	2.8%	0.3%	0.0%	0.0%	0.0%
Geometric Mean	0.8%	1.3%	(1.5%)	0.3%	(1.3%)	(25.2%)	0.0%

For the Residential and GS < 50 kW classes the geometric mean analysis was used to forecast the number of customer for 2016 and 2017. The results of the geometric mean analysis were applied to the 2015 customer value to determine the 2016 customer forecast. The 2017 customer forecast is determined by applying the geometric mean factor to the 2016 forecast.

For the GS > 50 kW, Street Light, Unmetered Scattered Load, Sentinel Light and Embedded Distributor classes, E.L.K. proposes it is reasonable to use the 2015 customers and connections as the forecast for 2016 and 2017 since E.L.K. believes these values are more reflective of the values that will occur in the forecast period compared to those produced by using the results of the geometric mean analysis. Table 3-9 outlines the forecast of customers/connections by rate class.

Table 3-9 Customer/Connection Forecast

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor	Total
Forecast Number of Customers/Connections								
2016 Bridge	10,302	1,237	93	2,826	31	7	4	14,499
2017 Test	10,386	1,253	93	2,826	31	7	4	14,600

The next step in the process is to review the historical customer/connection usage and to reflect this usage per customer in the forecast. Table 3-10 below provides the average annual usage per customer by rate class from 2006 to 2015.

Table 3-10 Historical Annual Usage per Customer

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor
Annual kWh Usage Per Customer/Connection							
2006	9,601	25,461	711,135	820	7,656	1,786	
2007	9,803	25,206	645,094	875	12,409	2,202	15,649,460
2008	9,513	24,914	652,998	831	8,646	1,530	13,716,194
2009	9,186	24,117	560,286	751	8,396	1,304	12,774,444
2010	9,549	23,869	610,225	867	8,224	1,078	12,023,594
2011	9,241	25,658	677,097	805	6,206	852	13,185,104
2012	9,021	24,406	684,657	838	8,325	852	12,527,923
2013	8,806	23,952	667,725	895	8,273	852	12,452,811
2014	8,778	24,493	637,182	817	8,377	852	13,037,808
2015	8,882	23,441	673,561	838	8,374	852	12,048,303

As can been seen from the above table, usage per customer/connection generally declines after 2007. It is E.L.K.'s view that this decline is partially due to the CDM programs initiated in 2006 and onwards and changing individual usage caused by a variety of factors including weather and the economy.

From the historical usage per customer/connection data the growth rate in usage per customer/connection can be reviewed which is provided on the following table. The geometric mean growth rate from 2006 to 2015 has also been shown.

Table 3-11 Growth Rate in Usage per Customer/Connection

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor
Growth Rate in Customer/Connection							
2006							
2007	2.1%	(1.0%)	(9.3%)	6.8%	62.1%	23.3%	
2008	(3.0%)	(1.2%)	1.2%	(5.0%)	(30.3%)	(30.5%)	(12.4%)
2009	(3.4%)	(3.2%)	(14.2%)	(9.6%)	(2.9%)	(14.8%)	(6.9%)
2010	3.9%	(1.0%)	8.9%	15.4%	(2.0%)	(17.3%)	(5.9%)
2011	(3.2%)	7.5%	11.0%	(7.1%)	(24.5%)	(21.0%)	9.7%
2012	(2.4%)	(4.9%)	1.1%	4.2%	34.1%	0.0%	(5.0%)
2013	(2.4%)	(1.9%)	(2.5%)	6.8%	(0.6%)	0.0%	(0.6%)
2014	(0.3%)	2.3%	(4.6%)	(8.7%)	1.3%	0.0%	4.7%
2015	1.2%	(4.3%)	5.7%	2.5%	(0.0%)	0.0%	(7.6%)
Geometric Mean	(0.9%)	(0.9%)	(0.6%)	0.2%	1.0%	(7.9%)	(3.2%)

For the Residential, GS < 50 kW, GS > 50 kW and the Sentinel Light classes, the 2016 and 2017 forecast of usage per customer/connection have been held constant at the 2015 level. E.L.K. was concerned with using the geometric mean factor since it could cause double counting of CDM results. For the Street Lights, Unmetered Scattered Load and Embedded Distributor classes the 2016 and 2017 forecast of usage per customer uses the geometric mean factor. The resulting usage forecast is as follows in Table 3-12.

Table 3-12 Forecast Annual kWh Usage per Customer/Connection

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor
Forecast Annual kWh Usage per Customers/Connection							
2016 Bridge	8,882	23,441	673,561	840	8,458	852	11,660,823
2017 Test	8,882	23,441	673,561	842	8,543	852	11,285,804

The preceding information is used to determine the non-normalized weather billed energy forecast by applying the forecast number of customer/connection from Table 3-9 by the forecast of annual usage per customer/connection from Table 3-12. The resulting non-normalized weather billed energy forecast is shown in the following Table 3-13.

Table 3-13 Non-normalized Weather Billed Energy Forecast

Year	Residential	GS<50	GS>50	Street	Unmetered	Sentinel	Embedded	Total
NON-normalized Weather Billed Energy Forecast (GWh)								
2016 Bridge	91.5	29.0	62.3	2.4	0.3	0.0	46.6	232.1
2017 Test	92.2	29.4	62.3	2.4	0.3	0.0	45.1	231.7

The non-normalized weather billed energy forecast has been determined but this needs to be adjusted in order to be aligned with the total weather normalized billed energy forecast. As previously determined, the total weather normalized billed energy forecast is 234.6 (GWh) for 2016 and 233.1 (GWh) for 2017.

The difference between the non-normalized and normalized forecast adjustments is 2.5 GWh in 2016 (i.e. 234.6 – 232.1) and 1.4 GWh in 2017 (i.e. 233.1 – 231.7). The difference is assumed to be the adjustment needed to move the forecast to a weather normal basis and this amount will be assigned to those rate classes that are weather sensitive. Based on the weather normalization work completed by Hydro One for E.L.K. for the cost allocation study, which has been used to support this Application, it was determined that the weather sensitivity by rate classes is as follows in Table 3-14.

Table 3-14 Weather Sensitivity by Rate Class

Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor
Weather Sensitivity						
79%	79%	57%	0%	0%	0%	0%

For the GS > 50 kW class the weather sensitivity amount of 57% was provided in the weather normalization work completed by Hydro One. For the Residential and General Service < 50 kW classes, it was assumed in the 2012 COS application that the weather sensitivity for the Residential and General Service < 50 kW classes was mid-way between 100% and 57%, or 79%. This assumption has been maintained in this application.

The difference between the non-normalized and normalized forecast of 2.5 GWh in 2016 and 1.4 GWh in 2017 has been assigned on a pro rata basis to each rate class based on the above level of weather sensitivity.

CDM Adjustment and LRAMVA

A manual adjustment has been made to reflect the impact of 2015 to 2017 CDM programs on the load forecast. E.L.K. has made this adjustment to reflect the "net" impact of the CDM programs on the load forecast.

The following Table 3-15, outlines the expected full year savings from 2015 to 2017 CDM programs based on the 2015 to 2020 CDM Plan for E.L.K.. It assumed that the savings that occur in the first year of a program will persist at 100% for the years that follow.

Table 3-15 2015 to 2017 Expected Full Year Total kWh Savings

	2015	2016	2017
2015 Programs	1,278,913	1,278,913	1,278,913
2016 Programs		1,785,578	1,785,578
2017 Programs			1,855,381
Total Applicaable to Target	1,278,913	1,785,578	1,855,381
Total Including Persistence	1,278,913	3,064,492	4,919,873

The following outlines how the above information is assigned to rate class based on information in E.L.K.'s 2015 to 2020 CDM Plan.

Table 3-16 2015 to 2017 Expected Full Year Residential kWh Savings

	2015	2016	2017
2015 Programs	355,151	355,151	355,151
2016 Programs		495,850	495,850
2017 Programs			515,234
Total Applicaable to Target	355,151	495,850	515,234
Total Including Persistence	355,151	851,000	1,366,234

Table 3-17 2015 to 2017 Expected Full Year GS < 50 kW kWh Savings

	2015	2016	2017
2015 Programs	185,094	185,094	185,094
2016 Programs		258,422	258,422
2017 Programs			268,524
Total Applicaable to Target	185,094	258,422	268,524
Total Including Persistence	185,094	443,516	712,040

Table 3-18 2015 to 2017 Expected Full Year GS > 50 kW kWh Savings

	2015	2016	2017
2015 Programs	738,669	738,669	738,669
2016 Programs		1,031,306	1,031,306
2017 Programs			1,071,623
Total Applicaable to Target	738,669	1,031,306	1,071,623
Total Including Persistence	738,669	1,769,976	2,841,598

Since the regression analysis is based on actual power purchased data up to and including 2015 actual data, it is assumed that any savings from programs initiated up to and including 2015 are reflected in the prediction equation resulting from the regression analysis. However, for 2015 it is assumed that for those programs that were initiated in 2015 only one half of the full year results actually occur since they were initiated throughout the year. This has been classified as the half year rule for CDM purposes. As a result, consistent with approach used in previous COS applications and using the rate class specific information mentioned above, the following equation is used to determine the rate class manual CDM adjustment for each year.

Rate class CDM adjustment 2016 = 2015 Programs rate class savings x 50% + 2016 Programs rate class savings x 50%

Rate class CDM adjustment 2017 = 2015 Programs rate class savings x 50% + 2016 Programs rate class savings + 2017 Programs rate class savings x 50%

The following table outlines the CDM adjustment by rate class.

Table 3-19 Manual CDM Adjustment by Rate Class (kWh)

Year	Residential	GS<50	GS>50	Total
2016 Bridge	425,500	221,758	884,988	1,532,246
2017 Test	931,042	485,231	1,936,452	3,352,725

In accordance with the Guidelines for Electricity Distributor Conservation and Demand Management (EB-2013-0003), issued April 26, 2013 ("CDM Guidelines"), it is E.L.K.'s understanding that as part of this application expected CDM savings in 2017 from 2016 and 2017 programs will need to be established for lost revenue adjustment mechanism ("LRAM") variance accounts purposes. E.L.K. also understands that the IESO will measure CDM results on a full year net basis. Consistent with past practices, it is expected the full year net level of savings will be used for LRAM variance calculations. As a result, it is E.L.K.'s view the units used for the LRAM variance account should also be on a full year net basis. Based on the evidence provided above in regards to the CDM manual adjustment the following equation is used to determine the rate class kWh assumed in the load forecast for LRAM variance account purposes

Rate class LRAMVA Threshold 2017 = Rate class 2016 Program savings + Rate class 2017 Program savings. The conversion to kW for the GS > 50 kW class uses the kW/kWh factor from Table 3-23

Table 3-20 2017 Expected CDM Savings by Rate Class for LRAM Variance Account

Year	Residential	GS<50	GS>50	Total
2017 Test - kWh	1,011,084	526,946	2,102,929	3,640,959
2017 Test - kW Annual			6,527	6,527
2017 Test - kW Monthly			544	544

The following Table 3-21 outlines how the classes have been adjusted to align the non-normalized forecast with the normalized forecast and reflect the adjustments discussed above.

Table 3-21 Alignment of Non-normal to Weather Normal Forecast

Year	Residential	GS<50	GS>50	Street Lights	Unmetered Scattered Load	Sentinel Lights	Embedded Distributor	Total
Non-normalized Weather Billed Energy Forecast (GWh)								
2016 Bridge	91.5	29.0	62.3	2.4	0.3	0.0	46.6	232.1
2017 Test	92.2	29.4	62.3	2.4	0.3	0.0	45.1	231.7
Weather Adjustment (GWh)								
2016 Bridge	1.4	0.4	0.7	0.0	0.0	0.0	0.0	2.6
2017 Test	0.8	0.2	0.4	0.0	0.0	0.0	0.0	1.4
CDM Adjustment (GWh)								
2016 Bridge	(0.4)	(0.2)	(0.9)					(1.5)
2017 Test	(0.9)	(0.5)	(1.9)					(3.4)
Weather Normalized Billed Energy Forecast (GWh)								
2016 Bridge	92.5	29.2	62.1	2.4	0.3	0.0	46.6	233.1
2017 Test	92.1	29.1	60.7	2.4	0.3	0.0	45.1	229.8

Billed KW Load Forecast

There are four rate classes that charge volumetric distribution on per kW basis. These include GS > 50 kW, Street Lights, Sentinel Lights and Embedded Distributor. The forecast of kW for these classes is based on a review of the historical ratio of kW to kWh and applying the average ratio to the forecasted kWh to produce the required kW.

The following Table 3-22 outlines the annual demand units by applicable rate class on actual and weather normal basis. The weather normal values are actual values adjusted by the weather normal conversion factor outlined in Table 3-6.

Table 3-22 Historical Annual kW per Applicable Rate Class

Year	GS>50	Street Lights	Sentinel Lights	Embedded Distributor	Total	GS>50	Street Lights	Sentinel Lights	Embedded Distributor	Total
Billed Annual kW										
	Actual					**Weather Normal**				
2006	241,321	5,910	496		247,727	245,085	6,002	504		251,591
2007	218,225	6,521	498	115,967	341,211	214,714	6,416	490	114,101	335,721
2008	209,583	6,487	265	112,771	329,106	207,698	6,429	263	111,757	326,146
2009	207,445	5,754	143	109,952	323,294	212,608	5,897	147	112,689	331,341
2010	200,283	6,759	52	107,517	314,610	196,769	6,641	51	105,630	309,091
2011	195,461	5,760	14	113,911	315,146	192,938	5,686	14	112,440	311,078
2012	186,874	6,354	14	111,194	304,435	186,625	6,345	14	111,046	304,030
2013	181,893	6,799	14	110,635	299,341	182,502	6,822	14	111,005	300,343
2014	186,326	6,450	14	115,371	308,160	187,006	6,474	14	115,792	309,286
2015	195,328	6,398	14	105,467	307,207	198,046	6,487	14	106,935	311,483

The following Table 3-23 shows the historical ratio of kW/kWh as well as the average

Table 3-23 Historical kW/KWh Ratio per Applicable Rate Class

Year	GS>50	Street Lights	Sentinel Lights	Embedded Distributor
Ratio of kW to kWh				
2006	0.3131%	0.2627%	0.2644%	
2007	0.3094%	0.2706%	0.2724%	0.1853%
2008	0.2920%	0.2825%	0.2839%	0.2055%
2009	0.3291%	0.2763%	0.2812%	0.2152%
2010	0.3053%	0.2805%	0.2757%	0.2236%
2011	0.3039%	0.2565%	0.2348%	0.2160%
2012	0.3067%	0.2708%	0.2348%	0.2219%
2013	0.3061%	0.2706%	0.2348%	0.2221%
2014	0.3249%	0.2802%	0.2348%	0.2212%
2015	0.3135%	0.2702%	0.2348%	0.2188%
Average 2006 to 2015	0.3104%	0.2721%	0.2348%	0.2144%

The average ratio for the Sentinel Lights class reflects the 2011 to 2015 time period. The average ratio was applied to the weather normalized billed energy forecast in Table 3-21 to provide the forecast of kW for this class. The following Table 3-24 outlines the forecast of kW for the applicable rate classes.

Table 3-24 kW Forecast by Applicable Rate Class

Year	GS>50	Street Lights	Sentinel Lights	Embedded Distributor	Total
Predicted Billed kW					
2016 Bridge	192,808	6,460	14	100,002	299,284
2017 Test	188,540	6,476	14	96,786	291,816

Table 3-25 provides a summary of the total load forecast on a power purchased and billed level.

Table 3-25 Summary of Total Load Forecast

	2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Bridge	2017 Test
Purchases								
Actual kWh Purchases	255,035,715		246,901,827	247,681,431	249,772,655	247,718,854		
Predicted kWh Purchases before CDM adjustment	257,456,891		253,403,284	251,372,242	252,824,165	247,706,725	250,793,262	249,155,392
% Difference between actual and predicted purchases	0.9%		2.6%	1.5%	1.2%	0.0%		
Loss Factor							1.0689	1.0689
Total Billed Before CDM Adjustments							234,637,983	233,105,619
CDM Adjustment							1,532,246	3,352,725
Total Billed After Adjustments	241,928,636		233,351,046	229,730,887	230,942,888	232,502,517	233,105,737	229,752,894
Billing Determinants								
Residential								
Customers	9,932	10,023	10,008	10,083	10,154	10,218	10,302	10,386
kWh	91,775,630	95,979,438	90,281,488	88,791,227	89,130,958	90,749,018	92,479,880	92,079,767
GS<50								
Customers	1,194	1,214	1,205	1,208	1,215	1,221	1,237	1,253
kWh	30,635,475	32,594,962	29,408,826	28,921,439	29,746,584	28,622,003	29,223,413	29,137,274
GS>50								
Customers	95	93	89	89	90	93	93	93
kWh	64,324,224	66,668,106	60,934,472	59,427,522	57,346,380	62,304,427	62,116,820	60,741,788
kW	195,461	214,067	186,874	181,893	186,326	195,328	192,808	188,540
Street Lights								
Connections	2,790	2,801	2,799	2,808	2,817	2,826	2,826	2,826
kWh	2,245,234	2,225,084	2,346,377	2,512,898	2,302,093	2,368,289	2,374,164	2,380,054
kW	5,760	6,083	6,354	6,799	6,450	6,398	6,460	6,476
Unmetered Scattered Load								
Connections	33	32	32	32	31	31	31	31
kWh	201,696	188,991	262,229	260,597	259,677	259,607	262,207	264,832
Sentinel Lights								
Connections	7	7	7	7	7	7	7	7
kWh	5,962	5,564	5,962	5,962	5,962	5,962	5,962	5,962
kW	14	15	14	14	14	14	14	14
Embedded Distributor								
Customers	4	4	4	4	4	4	4	4
kWh	52,740,415	42,996,782	50,111,691	49,811,242	52,151,234	48,193,212	46,643,291	45,143,217
kW	113,911	96,049	111,194	110,635	115,371	105,467	100,002	96,786
Total								
Customer/Connections	14,054	14,176	14,143	14,229	14,317	14,399	14,499	14,600
kWh	241,928,636	240,658,928	233,351,046	229,730,887	230,942,888	232,502,517	233,105,737	229,752,894
kW from applicable classes	315,146	316,213	304,435	299,341	308,160	307,207	299,284	291,816

ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSIS

Variance Analysis of Distribution Revenue and Billing Determinants

The following discussion provides a year over year variance analysis on E.L.K.'s distribution revenue and billing determinants. The variance analysis will compare 2012 Actual to 2012 Board Approved; 2011 Actual to 2012 Actual; 2012 Actual to 2013 Actual; 2013 Actual to 2014 Actual; 2014 Actual to 2015 Actual; 2015 Actual to 2016 Bridge and 2016 Bridge Year to 2017 Test Year. The distribution revenue variance analysis is based on information provided in Table 3-1. The billing determinant variance analysis is based on data outlined in Table 3-25. The overall variance analysis has been provided based on E.L.K.'s materiality of $50,000; the materiality calculation being noted earlier in Exhibit 1 of this Application.

2012 Actual vs 2012 Board Approved

Table 3-26 Distribution Revenue - 2012 Actual vs 2012 Board Approved

Distribution Throughput Revenue	2012 Board Approved	2012 Actual	Difference $	Difference %
Residential	2,012,554	2,055,322	42,768	2%
General Service <50 kW	422,909	351,937	- 70,972	-17%
General Service 50 to 4,999 kW	431,398	397,449	- 33,949	-8%
Sentinel Lighting	381	248	- 133	-35%
Street Lighting	117,759	83,561	- 34,198	-29%
Unmetered Scattered Load	3,074	2,570	- 504	-16%
Embedded Distributor	102,204	149,301	47,097	46%
Total	**3,090,279**	**3,040,389**	- 49,890	-2%

Throughput revenue for 2012 was $49,890 or 2.0% lower than the amounts approved in the 2012 Cost of Service and is below the materiality threshold.

Table 3-27 Billing Determinants - 2012 Actual vs 2012 Board Approved

Billing Quantiites	Customers / Connections		Units	Volume		Volume Weather Normal		Annual Usage Per Customer / Connection		Annual Usage Per Customer / Connection Weather Normal	
Weather Normal Conversion Factor						0.9987					
	2012 Actual	2012 Board Approved		2012 Actual	2012 Board Approved	2012 Actual	2012 Board Approved	2012 Actual	2012 Board Approved	2012 Actual	2012 Board Approved
Residential	10,008	10,023	kWh	90,281,488	95,979,438	90,161,333	95,979,438	9,021	9,576	9,009	9,576
GS<50	1,205	1,214	kWh	29,408,826	32,594,962	29,369,686	32,594,962	24,406	26,839	24,373	26,839
GS>50	89	93	kW	186,874	214,067	186,625	214,067	2,100	2,290	2,097	2,290
Street Lights	2,799	2,801	kW	6,354	6,083	6,345	6,083	2	2	2	2
Unmetered Scattered Load	32	32	kWh	262,229	188,991	261,880	188,991	8,325	5,901	8,314	5,901
Sentinel Lights	7	7	kW	14	15	14	15	2	2	2	2
Embedded Distributor	4	4	kW	111,194	96,049	111,046	96,049	27,798	24,012	27,761	24,012
Total	14,143	14,176									
	Variance			Variance		Variance		Variance		Variance	
Residential	16		kWh	5,697,950		5,818,105		554		566	
GS<50	9		kWh	3,186,136		3,225,275		2,433		2,465	
GS>50	4		kW	27,193		27,442		191		193	
Street Lights	3		kW	(271)		(262)		(0)		(0)	
Unmetered Scattered Load	1		kWh	(73,238)		(72,889)		(2,424)		(2,413)	
Sentinel Lights	0		kW	1		1		0		0	
Embedded Distributor	0		kW	(15,145)		(14,997)		(3,786)		(3,749)	

When comparing the 2012 actual results to the 2012 board approved amounts the customer/connection forecast for 2012 was fairly consistent with 2012 actual values. However, it is apparent the volume forecast supporting the 2012 cost of service application forecasted on the high side. Specifically in the Residential, GS < 50 kW and GS > 50 kW classes the forecasted usage per customer was significantly higher than actual. E.L.K has attempted to address this outcome in its 2017 load forecast used in this application.

2011 Actual vs 2012 Actual

Table 3-28 Distribution Revenue - 2011 Actual vs 2012 Actual

Distribution Throughput Revenue	2011 Actual	2012 Actual	Difference $	Difference %
Residential	1,917,697	2,055,322	137,625	7%
General Service <50 kW	182,517	351,937	169,420	93%
General Service 50 to 4,999 kW	855,946	397,449	- 458,497	-54%
Sentinel Lighting	564	248	- 316	-56%
Street Lighting	563	83,561	82,998	14742%
Unmetered Scattered Load	2,054	2,570	516	25%
Embedded Distributor	-	149,301	149,301	
Total	**2,959,341**	**3,040,388**	81,047	3%

The 2012 throughput revenue was $81,047 or 3.0% higher than 2011 actual revenue primarily due to the increase in number of customers in the Residential and GS < 50 kW rate classes.

Table 3-29 Billing Determinants - 2011 Actual vs 2012 Actual

Billing Quantiites	Customers / Connections		Units	Volume		Volume Weather Normal		Annual Usage Per Customer / Connection		Annual Usage Per Customer / Connection Weather Normal	
Weather Normal Conversion Factor						0.9871	0.9987				
	2011 Actual	2012 Actual		2011 Actual	2012 Actual	2011 Actual	2012 Actual	2011 Actual	2012 Actual	2011 Actual	2012 Actual
Residential	9,932	10,008	kWh	91,775,630	90,281,488	90,591,005	90,161,333	9,241	9,021	9,122	9,009
GS<50	1,194	1,205	kWh	30,635,475	29,408,826	30,240,037	29,369,686	25,658	24,406	25,327	24,373
GS>50	95	89	kW	195,461	186,874	192,938	186,625	2,057	2,100	2,031	2,097
Street Lights	2,790	2,799	kW	5,760	6,354	5,686	6,345	2	2	2	2
Unmetered Scattered Load	33	32	kWh	201,696	262,229	199,093	261,880	6,206	8,325	6,126	8,314
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	113,911	111,194	112,440	111,046	28,478	27,798	28,110	27,761
Total	14,054	14,143									
	Variance			Variance		Variance		Variance		Variance	
Residential	76		kWh	(1,494,142)		(429,671)		(219)		(112)	
GS<50	11		kWh	(1,226,649)		(870,351)		(1,252)		(953)	
GS>50	(6)		kW	(8,587)		(6,313)		42		66	
Street Lights	9		kW	594		660		0		0	
Unmetered Scattered Load	(1)		kWh	60,533		62,787		2,119		2,188	
Sentinel Lights	0		kW	0		0		0		0	
Embedded Distributor	0		kW	(2,717)		(1,394)		(679)		(349)	

The variance in customer connections is primarily within the residential class, and is not material in number. What would have contributed to this increase is simple growth as well as the addition of residential subdivisions, two phases of Cooper's subdivision. The decrease in volume from 2012 to 2011 actual can be attributed to a number of factors being, the decline in the economy in E.L.K.'s service territory. Windsor/Essex has one of the highest unemployment rates during this time in all of Canada. Further, during E.L.K. rate reclassification review there were a few businesses that were reclassified from General Service >50 to General Service <50. In addition, ongoing CDM programs also were a contributor to the results.

2012 Actual vs 2013 Actual

Table 3-30 Distribution Revenue - 2012 Actual vs 2013 Actual

Distribution Throughput Revenue	2012 Actual	2013 Actual	Difference $	Difference %
Residential	2,055,322	2,471,804	416,482	20%
General Service <50 kW	351,937	423,253	71,316	20%
General Service 50 to 4,999 kW	397,449	477,987	80,538	20%
Sentinel Lighting	248	299	51	21%
Street Lighting	83,561	100,493	16,932	20%
Unmetered Scattered Load	2,570	3,091	521	20%
Embedded Distributor	149,301	179,555	30,254	20%
Total	**3,040,388**	**3,656,482**	616,094	20%

The 2013 throughput revenue was $616,094 or 20% higher than the 2012 actual revenue primarily due to an increase in the distribution rates based on a cost of service application that implemented new rates on May 1, 2013.

Table 3-31 Billing Determinants - 2012 Actual vs 2013 Actual

Billing Quantiites	Customers /		Units	Volume		Volume Weather		Annual Usage Per		Annual Usage Per	
Weather Normal Conversion Factor						0.9987	1.0033				
	2012 Actual	2013 Actual		2012 Actual	2013 Actual	2012 Actual	2013 Actual	2012 Actual	2013 Actual	2012 Actual	2013 Actual
Residential	10,008	10,083	kWh	90,281,488	88,791,227	90,161,333	89,088,647	9,021	8,806	9,009	8,836
GS<50	1,205	1,208	kWh	29,408,826	28,921,439	29,369,686	29,018,316	24,406	23,952	24,373	24,032
GS>50	89	89	kW	186,874	181,893	186,625	182,502	2,100	2,044	2,097	2,051
Street Lights	2,799	2,808	kW	6,354	6,799	6,345	6,822	2	2	2	2
Unmetered Scattered Load	32	32	kWh	262,229	260,597	261,880	261,470	8,325	8,273	8,314	8,301
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	111,194	110,635	111,046	111,005	27,798	27,659	27,761	27,751
Total	14,143	14,229									
	Variance			Variance		Variance		Variance		Variance	
Residential	75		kWh	(1,490,261)		(1,072,687)		(215)		(173)	
GS<50	3		kWh	(487,387)		(351,370)		(454)		(341)	
GS>50	0		kW	(4,981)		(4,123)		(56)		(46)	
Street Lights	9		kW	446		477		0		0	
Unmetered Scattered Load	0		kWh	(1,632)		(410)		(52)		(13)	
Sentinel Lights	0		kW	0		0		0		0	
Embedded Distributor	0		kW	(559)		(41)		(140)		(10)	

Similar to 2012, the variance in customer connections is primarily within the residential class, and is not material in number. What would have contributed to this increase is simple growth as well as the addition of two new residential subdivisions, Timbercreek and Jakana as well as the continued build out of the subdivisions from 2012. The decrease in volume from 2013 to 2012 actual can be attributed again to a decline in the economy as well as a

few reclassifications classes to a reduced class. The continued participation and promotion of conservation measures continued to be a contributing factor.

2013 Actual vs 2014 Actual

Table 3-32 Distribution Revenue - 2013 Actual vs 2014 Actual

Distribution Throughput Revenue	2013 Actual	2014 Actual	Difference $	Difference %
Residential	2,471,804	2,213,912	- 257,892	-10%
General Service <50 kW	423,253	431,737	8,484	2%
General Service 50 to 4,999 kW	477,987	590,077	112,090	23%
Sentinel Lighting	299	298	- 1	0%
Street Lighting	100,493	82,503	- 17,990	-18%
Unmetered Scattered Load	3,091	1	- 3,090	-100%
Embedded Distributor	179,555	1	- 179,554	-100%
Total	**3,656,482**	**3,318,529**	- 337,953	-9%

The 2014 throughput revenue was $337,953 or 9% lower than the 2013 actual revenue primarily due to a reduction in kWh as well as a decrease in the tariff of rates and charges effective May 1, 2014. The lower charges resulted from E.L.K. transitioning its capital assets and depreciation expense to be consistent with IFRS standards as part of the settlement agreement from the 2012 Cost of Service application.

Table 3-33 Billing Determinants - 2013 Actual vs 2014 Actual

Billing Quantiites	Customers /		Units	Volume		Volume Weather		Annual Usage Per		Annual Usage Per	
Weather Normal Conversion Factor						1.0033	1.0037				
	2013 Actual	2014 Actual		2013 Actual	2014 Actual	2013 Actual	2014 Actual	2013 Actual	2014 Actual	2013 Actual	2014 Actual
Residential	10,083	10,154	kWh	88,791,227	89,130,958	89,088,647	89,456,507	8,806	8,778	8,836	8,810
GS<50	1,208	1,215	kWh	28,921,439	29,746,584	29,018,316	29,855,233	23,952	24,493	24,032	24,582
GS>50	89	90	kW	181,893	186,326	182,502	187,006	2,044	2,070	2,051	2,078
Street Lights	2,808	2,817	kW	6,799	6,450	6,822	6,474	2	2	2	2
Unmetered Scattered Load	32	31	kWh	260,597	259,677	261,470	260,625	8,273	8,377	8,301	8,407
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	110,635	115,371	111,005	115,792	27,659	28,843	27,751	28,948
Total	14,229	14,317									
	Variance			Variance		Variance		Variance		Variance	
Residential	71		kWh	339,731		367,860		(28)		(26)	
GS<50	7		kWh	825,145		836,917		541		551	
GS>50	1		kW	4,433		4,505		27		27	
Street Lights	9		kW	(349)		(349)		(0)		(0)	
Unmetered Scattered Load	(1)		kWh	(920)		(844)		104		107	
Sentinel Lights	0		kW	0		0		0		0	
Embedded Distributor	0		kW	4,736		4,787		1,184		1,197	

Although revenue decreased in 2014, as a result of the depreciation conversion for IFRS, the economy has slowly rebounded causing continued growth. This can be seen with both residential as well as general service customers. E.L.K. had 5 new residential subdivisions as well as a commercial center that had 8 units help increase the 2014 volumes. Further, E.L.K. had customers who changed between General Service <50 and General Service >50. The fact that the bad debts expense in 2014 decreased from 2013 also hints to the recovering economy and increase in volumes.

2014 Actual vs 2015 Actual

Table 3-34 Distribution Revenue - 2014 Actual vs 2015 Actual

Distribution Throughput Revenue	2014 Actual	2015 Actual	Difference $	Difference %
Residential	2,213,912	2,248,530	34,618	2%
General Service <50 kW	431,737	385,021	- 46,716	-11%
General Service 50 to 4,999 kW	590,077	434,811	- 155,266	-26%
Sentinel Lighting	298	272	- 26	-9%
Street Lighting	82,503	91,416	8,913	11%
Unmetered Scattered Load	1	2,812	2,811	281100%
Embedded Distributor	1	163,336	163,335	16333500%
Total	**3,318,529**	**3,326,198**	7,669	0%

Throughput revenue for 2015 was $7,669 or 0.0% higher than 2014 and is below the materiality threshold.

Table 3-35 Billing Determinants - 2014 Actual vs 2015 Actual

Billing Quantiites	Customers /		Units	Volume		Volume Weather		Annual Usage Per		Annual Usage Per	
Weather Normal Conversion Factor						1.0037	1.0139				
	2014 Actual	2015 Actual		2014 Actual	2015 Actual	2014 Actual	2015 Actual	2014 Actual	2015 Actual	2014 Actual	2015 Actual
Residential	10,154	10,218	kWh	89,130,958	90,749,018	89,456,507	92,011,947	8,778	8,882	8,810	9,005
GS<50	1,215	1,221	kWh	29,746,584	28,622,003	29,855,233	29,020,327	24,493	23,441	24,582	23,768
GS>50	90	93	kW	186,326	195,328	187,006	198,046	2,070	2,112	2,078	2,141
Street Lights	2,817	2,826	kW	6,450	6,398	6,474	6,487	2	2	2	2
Unmetered Scattered Load	31	31	kWh	259,677	259,607	260,625	263,220	8,377	8,374	8,407	8,491
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	115,371	105,467	115,792	106,935	28,843	26,367	28,948	26,734
Total	14,317	14,399									
	Variance			Variance		Variance		Variance		Variance	
Residential	64		kWh	1,618,060		2,555,440		103		195	
GS<50	7		kWh	(1,124,581)		(834,905)		(1,051)		(815)	
GS>50	3		kW	9,002		11,040		41		63	
Street Lights	9		kW	(52)		13		(0)		(0)	
Unmetered Scattered Load	0		kWh	(70)		2,594		(2)		84	
Sentinel Lights	0		kW	0		0		0		0	
Embedded Distributor	0		kW	(9,903)		(8,857)		(2,476)		(2,214)	

The customer growth continues with the rebound of the economy as well as the addition of 3 additional subdivision phases in E.L.K. territory. 2015 was a transition year for CDM programs causing the results to not be at the same level as previous years. The overall volume variance is not of great significance.

2015 Actual vs 2016 Bridge

Table 3-36 Distribution Revenue – 2015 Actual vs 2016 Bridge

Distribution Throughput Revenue	2015 Actual	2016 Bridge	Difference $	Difference %
Residential	2,248,530	2,221,220	- 27,310	-1%
General Service <50 kW	385,021	380,218	- 4,803	-1%
General Service 50 to 4,999 kW	434,811	512,805	77,994	18%
Sentinel Lighting	272	345	73	27%
Street Lighting	91,416	113,558	22,142	24%
Unmetered Scattered Load	2,812	2,883	71	3%
Embedded Distributor	163,336	116,295	- 47,041	-29%
Total	**3,326,198**	**3,347,324**	21,126	1%

Throughput revenue for 2016 are forecasted to be $21,126 or 1% higher than 2015 and is below the materiality threshold.

Table 3-37 Billing Determinants - 2015 Actual vs 2016 Bridge

Billing Quantiites	Customers /		Units	Volume		Volume Weather		Annual Usage Per		Annual Usage Per	
Weather Normal Conversion Factor						1.0139	1.0000				
	2015 Actual	2016 Bridge		2015 Actual	2016 Bridge	2015 Actual	2016 Bridge	2015 Actual	2016 Bridge	2015 Actual	2016 Bridge
Residential	10,218	10,302	kWh	90,749,018	92,479,880	92,011,947	92,479,880	8,882	8,977	9,005	8,977
GS<50	1,221	1,237	kWh	28,622,003	29,223,413	29,020,327	29,223,413	23,441	23,623	23,768	23,623
GS>50	93	93	kW	195,328	192,808	198,046	192,808	2,112	2,084	2,141	2,084
Street Lights	2,826	2,826	kW	6,398	6,460	6,487	6,460	2	2	2	2
Unmetered Scattered Load	31	31	kWh	259,607	262,207	263,220	262,207	8,374	8,458	8,491	8,458
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	105,467	100,002	106,935	100,002	26,367	25,001	26,734	25,001
Total	14,399	14,499									
	Variance			Variance		Variance		Variance		Variance	
Residential	84		kWh	1,730,862		467,933		96		(28)	
GS<50	16		kWh	601,410		203,086		182		(144)	
GS>50	0		kW	(2,520)		(5,238)		(27)		(57)	
Street Lights	0		kW	62		(27)		0		(0)	
Unmetered Scattered Load	0		kWh	2,600		(1,013)		84		(33)	
Sentinel Lights	0		kW	0		(0)		0		(0)	
Embedded Distributor	0		kW	(5,465)		(6,933)		(1,366)		(1,733)	

The growths in customer numbers reflect the geometric analysis used to forecast the 2016 customer numbers. On a weather normalization basis 2016 values are essentially flat compared to 2015.

2016 Bridge vs 2017 Test

Table 3-38 Distribution Revenue - 2016 Bridge vs 2017 Test

Distribution Throughput Revenue	2016 Bridge	2017 Test	Difference $	Difference %
Residential	2,221,220	2,681,391	460,172	21%
General Service <50 kW	380,218	571,022	190,804	50%
General Service 50 to 4,999 kW	512,805	609,089	96,283	19%
Sentinel Lighting	345	515	170	49%
Street Lighting	113,558	99,029	- 14,528	-13%
Unmetered Scattered Load	2,883	4,473	1,590	55%
Embedded Distributor	116,295	59,039	- 57,256	-49%
Total	**3,347,324**	**4,024,559**	677,235	20%

The proposed Test Year distribution revenue is a reflection of the 2017 COS application and the proposed base revenue requirement of $4,024,559. The variance in distribution revenue over the Bridge Year is a result of the proposed increases to fixed and variable distribution revenue in the Test Year.

Table 3-39 Billing Determinants - 2016 Bridge vs 2017 Test

Billing Quantiites	Customers /		Units	Volume		Volume Weather		Annual Usage Per		Annual Usage Per	
Weather Normal Conversion Factor						1.0000	1.0000				
	2016 Bridge	2017 Test		2016 Bridge	2017 Test	2016 Bridge	2017 Test	2016 Bridge	2017 Test	2016 Bridge	2017 Test
Residential	10,302	10,386	kWh	92,479,880	92,079,767	92,479,880	92,079,767	8,977	8,865	8,977	8,865
GS<50	1,237	1,253	kWh	29,223,413	29,137,274	29,223,413	29,137,274	23,623	23,248	23,623	23,248
GS>50	93	93	kW	192,808	188,540	192,808	188,540	2,084	2,038	2,084	2,038
Street Lights	2,826	2,826	kW	6,460	6,476	6,460	6,476	2	2	2	2
Unmetered Scattered Load	31	31	kWh	262,207	264,832	262,207	264,832	8,458	8,543	8,458	8,543
Sentinel Lights	7	7	kW	14	14	14	14	2	2	2	2
Embedded Distributor	4	4	kW	100,002	96,786	100,002	96,786	25,001	24,197	25,001	24,197
Total	14,499	14,600									
	Variance			Variance		Variance		Variance		Variance	
Residential	85		kWh	(400,113)		(400,113)		(112)		(112)	
GS<50	16		kWh	(86,140)		(86,140)		(375)		(375)	
GS>50	0		kW	(4,268)		(4,268)		(46)		(46)	
Street Lights	0		kW	16		16		0		0	
Unmetered Scattered Load	0		kWh	2,626		2,626		85		85	
Sentinel Lights	0		kW	0		0		0		0	
Embedded Distributor	0		kW	(3,216)		(3,216)		(804)		(804)	

The variances outlined above reflects the difference in the 2017 and 2016 load forecast which is explained in detail in load forecast evidence provided in this Exhibit. The general decline in volumes reflects the increase in CDM results from 2016 to 2017 and an expected decline in the usage of the Embedded Distributor.

OTHER REVENUE

Variance Analysis of Other Revenue:

Other Distribution Revenues are revenues that are distribution related but are sourced from means other than distribution rates. For this reason, other revenues are deducted from E.L.K.'s proposed revenue requirement. Further details on the derivation of the Revenue Requirement are presented at Exhibit 6.

E.L.K. does not have any discrete customer groups that may be materially impacted by changes to other rates and charges.

Other Distribution revenues include such items as:

- Specific Service Charges
- Late Payment Charges
- Other Distribution Revenues
- Other Income and Expenses

Table 3-40: OEB Appendix 2-H Other Operating Revenue

A detailed breakdown by USoA account is shown below in Table 3-40 – OEB Appendix 2-H. Year over year variance analysis will follow with a discussion on those variances over $50,000.

Table 3-40

USoA #	USoA Description	2012 Actual	2013 Actual	2014 Actual	2015 Actual	Bridge Year[2]	Test Year
		2012	2013	2014	2015	2016	2017
	Reporting Basis	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS
4082	Retail Services Revenues	$ 16,055	$ -	$ -	$ -	$ -	$ -
4084	Serv Tx Requests	$ 256	$ -	$ -	$ -	$ -	$ -
4210	Rent from Electric Property	$ 46,273	$ 46,006	$ 46,336	$ 45,894	$ 46,000	$ 45,947
4215	Other Utility Operating Income	$ 21,381	$ 50,086	$ 14,720	$ -	$ 5,000	$ 2,500
4220	Other Electric Revenues	$ 376,254	$ 227,226	$ 2,983	$ -	$ -	$ -
4225	Late Payment Charges	$ 108,646	$ 111,041	$ 107,336	$ 120,092	$ 126,000	$ 114,623
4235	Miscellaneous Service Charges	$ 108,922	$ 72,073	$ 77,125	$ 75,229	$ 75,000	$ 83,170
4305	Regulatory Debits	$ -	-$ 459,136	$ -	$ -	$ -	$ -
4325	Revenues from merchandise, Jobbing	$ 25	$ 22	$ -	$ -	$ -	$ -
4330	Costs & expenses of merchandising, jobbing	-$ 11,776	$ -	$ -	$ -	$ -	$ -
4355	Gain on Disposition of utility & other property	$ 20,222	$ -	$ 20,000	$ -	$ 50,259	$ -
4375	Revenues from non-utility operations	$ 465,964	$ 631,400	$ 448,790	$ 739,901	$ 571,514	$ 571,514
4380	Expenses of non-utility operations	-$ 144,017	-$ 471,978	-$ 329,185	-$ 329,072	-$ 318,563	-$ 318,563
4390	Miscellaneous non-operating income	$ 925	$ 548	$ -	$ 24,582	$ 8,685	$ 8,685
6300	Unrealized Gain (Loss) on Investment	$ 11,026	$ 16,457	$ 6,494	$ 136,241	$ -	$ -
4405	Interest and Dividend Income	$ 79,663	$ 189,491	$ 183,343	$ 42,122	$ 42,122	$ 42,122
Specific Service Charges		$ 108,922	$ 72,073	$ 77,125	$ 75,229	$ 75,000	$ 83,170
Late Payment Charges		$ 108,646	$ 111,041	$ 107,336	$ 120,092	$ 126,000	$ 114,623
Other Operating Revenues		$ 460,219	$ 323,318	$ 64,039	$ 45,894	$ 51,000	$ 48,447
Other Income or Deductions		$ 411,008	-$ 109,654	$ 322,948	$ 477,533	$ 354,017	$ 303,758
Total		$ 1,088,795	$ 396,779	$ 571,448	$ 718,747	$ 606,017	$ 549,998

2012 Board Approved Comparison to 2012 Actual – Other Operating Revenue

Table 3-41 below summarizes the variance by account description followed by a discussion on those variances over $50,000

Table 3-41: Comparision 2012 Actual to 2012 Board Approved

Other Distribution Revenue	2012 Board Approved	2012 Actual	Difference $	Difference %
Specific Service Charges	$ 66,000.00	$ 108,922.00	$ 42,922.00	65%
Late Payment Charges	$ 130,000.00	$ 108,646.00	-$ 21,354.00	-16%
Other Operating Revenues	$ 72,305.00	$ 460,219.00	$ 387,914.00	536%
Other Income or Deductions	$ 411,750.00	$ 411,008.00	-$ 742.00	0%
Total	**$ 680,055.00**	**$ 1,088,795.00**	**-$ 408,740.00**	**-60%**

Other operating revenues for 2012 were 536% or $387,914 higher than the amounts approved in the 2012 Board Approved COS. Based on a detailed review, the Low Voltage Service rate totaling $376,254.17 was recorded in error under account 4220 other electric revenues rather than account 4075 LV Charges in the 2012 2.1.7 year end filing. This accounts for virtually the entire difference and has been corrected going forward.

2013 Actual Comparison to 2012 Actual – Other Operating Revenue

Table 3-42 below summarizes the variance by account

Table 3-42: Comparision 2013 Actual to 2012 Actual

Other Distribution Revenue	2012 Actual	2013 Actual	Difference $	Difference %
Specific Service Charges	$ 108,922.00	$ 72,073.00	-$ 36,849.00	-34%
Late Payment Charges	$ 108,646.00	$ 111,041.00	$ 2,395.00	2%
Other Operating Revenues	$ 460,219.00	$ 323,318.00	-$ 136,901.00	-30%
Other Income or Deductions	$ 411,008.00	-$ 109,654.00	-$ 520,662.00	-127%
Total	**$ 1,088,795.00**	**$ 396,778.00**	**$ 692,017.00**	**64%**

Other operating revenues for 2013 was 30% or $136,901 lower than the 2012 amount due to the fact that in 2012, the Low Voltage Service rate totaling $376,254.17 was recorded in error under account 4220 other electric revenues rather than account 4075 LV Charges. This would then reduce other operating revenues to approximately $84,000. The remaining difference from $84,000 to the 2013 Actual is represented by $198,721 adjustment that was corrected to account 4220 in 2.1.7 as approved by the OEB.

Other Income or deductions for 2013 was 127% or $520,662 lower than 2012 primarily because of one entry totaling $459,136 that recorded the accounting changes under CGAAP, during the accounting changes for the transition of capital assets under IFRS.

2014 Actual Comparison to 2013 Actual – Other Operating Revenue

Table 3-43 below summarizes the variance by account

Table 3-43: Comparision 2014 Actual to 2013 Actual

Other Distribution Revenue	2013 Actual	2014 Actual	Difference $	Difference %
Specific Service Charges	$ 72,073.00	$ 77,125.00	$ 5,052.00	7%
Late Payment Charges	$ 111,041.00	$ 107,336.00	-$ 3,705.00	-3%
Other Operating Revenues	$ 323,318.00	$ 64,039.00	-$ 259,279.00	-80%
Other Income or Deductions	-$ 109,654.00	$ 322,948.00	$ 432,602.00	-395%
Total	**$ 396,778.00**	**$ 571,448.00**	**-$ 174,670.00**	**-44%**

Other operating revenues for 2014 was 80% or 259,279 lower in 2014 due to the one-time adjustment in account 4220 as described above in 2013. In addition, there was approximately $50,000 worth of one time work for the Town of Lakeshore, and Town of Kingsville that was non-recurring that took place in 2013.

Other Income or deductions for 2014 was 395% or $432,602 higher than 2013 as described above because of one entry totaling $459,136 that recorded the accounting changes under CGAAP, during the accounting changes for the transition of capital assets under IFRS. Further there was a $20,000 gain on disposition of E.L.K.'s Single Bucket Truck that was donated to the Powerline Technician program at Thames Campus St. Clair College.

2014 Actual Comparison to 2015 Actual – Other Operating Revenue

Table 3-44 below summarizes the variance by account

Table 3-44: Comparision 2015 Actual to 2014 Actual

Other Distribution Revenue	2014 Actual	2015 Actual	Difference $	Difference %
Specific Service Charges	$ 77,125.00	$ 75,229.00	-$ 1,896.00	-2%
Late Payment Charges	$ 107,336.00	$ 120,092.00	$ 12,756.00	12%
Other Operating Revenues	$ 64,039.00	$ 45,894.00	-$ 18,145.00	-28%
Other Income or Deductions	$ 322,948.00	$ 477,533.00	$ 154,585.00	48%
Total	**$ 571,448.00**	**$ 718,748.00**	**-$ 147,300.00**	**-26%**

Other Income or Deductions for 2015 was 48% or $154,585 higher than 2014 is the result of net movements of regulatory assets related to profit or loss, on smart meter accounts, tax provision and future tax expense, a KPMG provided entry totaling $159,425, a one-time entry. This did not occur in 2014.

2015 Actual Comparison to 2016 Bridge – Other Operating Revenue

Table 3-45 below summarizes the variance by account

Table 3-45: Comparision 2015 Actual to 2016 Bridge

Other Distribution Revenue	2015 Actual	2016 Bridge	Difference $	Difference %
Specific Service Charges	$ 75,229.00	$ 75,000.00	-$ 229.00	0%
Late Payment Charges	$ 120,092.00	$ 126,000.00	$ 5,908.00	5%
Other Operating Revenues	$ 45,894.00	$ 51,000.00	$ 5,106.00	11%
Other Income or Deductions	$ 477,533.00	$ 354,017.00	-$ 123,516.00	-26%
Total	**$ 718,748.00**	**$ 606,017.00**	**$ 112,731.00**	**16%**

Other Income or Deductions for 2016 is being projected at a 26% or $123,516 decrease due to the 2015 one-time entry described above.

2016 Bridge Comparison to 2017 Test – Other Operating Revenue

Table 3-46 below summarizes the variance by account

Table 3-46: Comparision 2016 Bridge to 2017 Test

Other Distribution Revenue	2016 Bridge	2017 Test	Difference $	Difference %
Specific Service Charges	$ 75,000.00	$ 81,670.00	$ 6,670.00	9%
Late Payment Charges	$ 126,000.00	$ 114,623.00	-$ 11,377.00	-9%
Other Operating Revenues	$ 51,000.00	$ 48,447.00	-$ 2,553.00	-5%
Other Income or Deductions	$ 354,017.00	$ 303,758.00	-$ 50,259.00	-14%
Total	**$ 606,017.00**	**$ 548,498.00**	**$ 57,519.00**	**9%**

Other Income or Deductions for 2017 is forecasted at a 14% or $50,259 decrease due to the sale of E.L.K. Kingsville Service Centre Building. E.L.K. has recorded ½ of the gain in the gain on disposition of property account and the remaining ½ gain in account 1508-09 Other Reg Assets- Sub Acct Gain on Disposition refundable to rate payers in 2016.

SPECIFIC SERVICE CHARGES

E.L.K. is proposing the current specific service charges be maintained in this application except for the service call - customer-owned equipment and service call - after regular hour's charges. In order to better align costs, with actual costs with respect to service calls, E.L.K. is proposing to increase its service call fees to a more representative of the cost of having 2 linemen respond to service calls. E.L.K. proposes the service call - customer-owned equipment charge be increased from $30 to $165 and the service call - after regular hours charge be increased from $165 to $300. The difference between service call - customer-owned equipment charge and service call - after regular hours charge has been maintained at the current differential. The justification for service call - customer-owned equipment charge of $165 is as follows.

Proposed Service call - customer-owned equipment – cost justification

Cost	Payroll Per Hour	Burden @ 50%	Total Cost Per Hours	Hours	Person(s)	
Journeyman - per Collective Agreement- Oct, 2016	$38.83	$19.42	$58.25	1	2	$116.49
Truck			$47.00	1		$47.00
Total Cost						$163.49
					Round	$165.00

Further, with respect to the specific service charges, two additional minor wording changes are proposed. The first, entitled Returned Cheque (plus bank charges). E.L.K. proposed to change this wording to Returned Item (plus bank charges). With the changing environment on how bills are paid, payments are returned in all forms, not only by cheque. This change will more closely resemble the reality of what is occurring in the industry.

The second, entitled Specific charge for access to the power poles - $/pole/year (with the exception of wireless attachments). E.L.K. is not proposing a change to the dollar value, simply the wording as a general housekeeping item to make it more specific, and all inclusive. E.L.K.'s proposal is to rename this specific charge to Specific charge for all attachments to the power poles (including streetlighting attachments) $/pole/year (with the exception of wireless attachments).

AFFILIATE TRANSACTIONS

E.L.K.'s application has been prepared to show E.L.K. as a regulated entity, separately from its parent company or its affiliate that is not regulated by the Board. Only the amounts attributable to E.L.K. have been reflected. E.L.K. confirms that the accounting treatment it has used in this application has segregated all of non-utility activities from its rate regulated activities.

Revenues from Non-Utility Operations are recorded in account 4375. The costs associated with these services are recorded in account 4380.

E.L.K. provides services for an affiliate company, E.L.K. Solutions Inc. (E.L.K. Solutions).
E.L.K. also performs services for its shareholder the Town of Essex.

SERVICES PROVIDED BY E.L.K. TO E.L.K. SOLUTIONS

Water Heater Services

From time to time, one or more of the Designated Employees will be made available by Energy to Solutions to provide Services in relation to the Business. Appendix 1I in Exhibit 1 details out the Service Agreement between E.L.K. Energy Inc. and E.L.K. Solutions Inc.

Street Light and Sentinel Light Services

From time to time, one or more of the Designated Employees will be made available by Energy to Solutions to provide Services in relation to the Business. Appendix 1HI in Exhibit 1 details out the Service Agreement between E.L.K. Energy Inc. and E.L.K. Solutions Inc.

SERVICES PROVIDED BY E.L.K. TO TOWN OF ESSEX

Water & Sewer Billing Services

E.L.K. provides the Town of Essex water and sewer billing services. These services include meter reading, service orders, billing, bill collection and payment, answering all customer water and sewage related inquiries and other customer services as required. By providing this service, E.L.K. has been able to combine meter reading, billing, collections and customer service functions. Approximately 35% of the bills issued each month are shared electricity/water and sewer bills and approximately 27% are water only accounts.

APPENDIX 3-A
MONTHLY DATA USED FOR REGRESSION ANALYSIS

	Purchased	Embedded Distributor Usage	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
Jan-06	17,495,990	0	494.7	0	31	0	18,956,271
Feb-06	16,164,900	0	538	0	28	0	17,336,113
Mar-06	17,164,270	0	461.4	0	31	1	17,858,660
Apr-06	14,641,220	0	219.5	1.1	30	1	15,327,779
May-06	13,901,070	0	105.9	40.6	31	1	16,834,198
Jun-06	17,912,530	0	8.8	85.7	30	0	18,243,618
Jul-06	22,524,750	0	0	197.4	31	0	23,792,680
Aug-06	21,130,000	0	0	147.4	31	0	21,570,574
Sep-06	15,286,330	0	52.1	22.3	30	1	14,937,904
Oct-06	15,621,710	0	251.3	2.3	31	1	16,289,053
Nov-06	19,270,390	0	356.8	0	30	1	16,371,426
Dec-06	22,725,770	0	460.4	0	31	0	18,683,336
Jan-07	23,594,230	5,640,929	602.4	0	31	0	23,232,680
Feb-07	23,081,780	5,726,857	706.1	0	28	0	22,145,230
Mar-07	22,044,680	5,870,658	429.3	0.2	31	1	21,170,788
Apr-07	19,604,320	6,324,876	285.2	0.9	30	1	19,675,689
May-07	20,629,530	6,479,920	87.2	46	31	1	20,853,375
Jun-07	23,858,190	6,947,012	8.1	132.2	30	0	24,515,736
Jul-07	24,738,400	4,986,923	1.3	148.2	31	0	24,639,439
Aug-07	26,868,930	5,337,196	4.4	167.4	31	0	25,729,723
Sep-07	21,805,090	5,816,998	25.4	76.4	30	1	20,655,903
Oct-07	20,415,380	4,576,724	111.2	42.3	31	1	19,726,237
Nov-07	20,794,820	4,310,942	400.3	0	30	1	19,330,769
Dec-07	23,640,870	5,649,230	595	0	31	0	23,178,828
Jan-08	24,088,720	5,752,803	611	0	31	0	23,370,520
Feb-08	22,590,240	5,767,472	629	0	29	0	22,213,634
Mar-08	22,046,700	5,473,595	542	0	31	1	21,814,810
Apr-08	18,811,030	5,298,992	224	1	30	1	18,583,020
May-08	18,644,710	4,060,756	143	12	31	1	18,305,319
Jun-08	22,711,700	3,930,549	3	124	30	0	22,279,361
Jul-08	26,419,990	4,720,571	0	189	31	0	26,265,486
Aug-08	24,364,410	5,792,961	1	145	31	0	24,973,756
Sep-08	20,565,410	5,288,547	12	65	30	1	19,723,892
Oct-08	18,777,310	4,350,378	221	3	31	1	18,727,110
Nov-08	20,094,850	4,205,456	413	0	30	1	19,371,066
Dec-08	23,525,530	4,666,743	632	0	31	0	22,877,685
Jan-09	24,531,230	5,986,418	799	0	31	0	25,007,304
Feb-09	20,746,930	6,228,644	553	0	28	0	21,230,348
Mar-09	20,762,810	5,113,039	464	0	31	1	20,977,173
Apr-09	18,304,870	5,070,796	263	11	30	1	19,195,333
May-09	17,564,208	4,234,884	76	15	31	1	18,015,175
Jun-09	20,151,815	3,882,034	25	70	30	0	20,034,822
Jul-09	21,718,677	4,380,699	1	88	31	0	21,597,340
Aug-09	24,301,262	3,780,901	7	124	31	0	22,889,177
Sep-09	19,833,254	5,253,468	28	48	30	1	19,050,615
Oct-09	19,025,038	3,762,845	248	0	31	1	18,438,351
Nov-09	19,026,900	3,776,088	321	0	30	1	18,371,562
Dec-09	22,891,585	3,766,879	603	0	31	0	22,104,629

	Purchased	Embedded Distributor Usage	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
Jan-10	23,520,946	4,803,309	680	0	31	0	23,340,031
Feb-10	20,573,877	5,113,488	571	0	28	0	20,697,595
Mar-10	20,520,862	4,395,653	397	0	31	1	20,011,558
Apr-10	17,431,446	3,594,250	183	1	30	1	17,232,612
May-10	19,189,808	3,357,369	92	50	31	1	19,171,274
Jun-10	23,092,031	3,596,504	6	124	30	0	22,110,095
Jul-10	28,187,746	4,308,054	0	216	31	0	27,240,438
Aug-10	26,984,638	5,600,560	0	189	31	0	26,827,639
Sep-10	19,634,115	5,345,059	43	50	30	1	19,335,805
Oct-10	18,062,554	4,097,941	166	1	31	1	18,047,553
Nov-10	20,064,654	3,907,778	378	0	30	1	18,906,545
Dec-10	24,022,231	3,870,056	664	0	31	0	22,651,770
Jan-11	23,397,085	5,500,809	731	0	31	0	24,170,252
Feb-11	20,570,362	5,684,569	615	0	28	0	21,391,505
Mar-11	21,011,815	4,907,121	520	0	31	1	21,300,344
Apr-11	18,252,354	4,732,986	294	0	30	1	18,739,153
May-11	18,454,400	4,046,248	112	33	31	1	19,017,891
Jun-11	21,528,092	3,885,226	10	105	30	0	21,457,948
Jul-11	28,389,523	4,417,347	0	242	31	0	28,465,832
Aug-11	24,810,531	6,295,915	0	144	31	0	25,253,697
Sep-11	19,628,308	5,299,992	59	48	30	1	19,336,768
Oct-11	18,511,823	4,140,209	190	5	31	1	18,409,217
Nov-11	18,941,946	3,941,622	315	0	30	1	18,428,935
Dec-11	21,539,477	4,160,346	496	0	31	0	21,485,346
Jan-12	22,039,669	5,033,526	587	0	31	0	22,740,352
Feb-12	19,611,362	5,163,651	507	0	29	0	20,875,231
Mar-12	18,499,069	4,524,364	268	6	31	1	19,322,913
Apr-12	19,946,664	4,020,801	264	1	30	1	18,113,496
May-12	18,352,864	3,715,366	50	52	31	1	19,138,053
Jun-12	22,640,936	3,836,937	12	135	30	0	22,798,483
Jul-12	27,569,300	4,801,683	0	218	31	0	27,609,977
Aug-12	23,505,664	6,167,730	1	132	31	0	24,620,798
Sep-12	18,912,418	5,144,563	60	49	30	1	19,307,157
Oct-12	17,381,318	4,109,516	206	4	31	1	18,498,890
Nov-12	18,308,973	3,700,253	407	0	30	1	19,015,488
Dec-12	20,133,591	3,952,350	496	0	31	0	21,362,446
Jan-13	23,386,700	4,815,276	614	0	31	0	22,820,513
Feb-13	21,170,573	5,121,923	591	0	28	0	20,861,058
Mar-13	21,583,555	4,664,195	524	0	31	1	21,185,712
Apr-13	19,125,345	4,705,233	318	0	30	1	18,917,284
May-13	17,617,625	3,915,509	83	51	31	1	19,498,949
Jun-13	19,936,867	3,645,318	18	86	30	0	20,528,130
Jul-13	23,686,275	4,244,298	3	149	31	0	24,226,285
Aug-13	22,403,900	5,299,605	4	115	31	0	23,387,524
Sep-13	18,880,325	4,825,504	54	46	30	1	18,933,476
Oct-13	18,114,283	3,980,625	187	13	31	1	18,648,920
Nov-13	19,414,258	3,873,272	443	0	30	1	19,402,851
Dec-13	22,361,725	4,755,197	636	0	31	0	22,961,541

	Purchased	Embedded Distributor Usage	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
Jan-14	24,264,792	5,851,666	785	0	31	0	24,813,423
Feb-14	20,828,400	6,455,879	674	0	28	0	22,333,311
Mar-14	21,052,908	5,377,055	592	0	31	1	22,156,540
Apr-14	17,638,017	5,351,869	254	0	30	1	18,795,221
May-14	18,077,492	4,037,601	91	36	31	1	18,973,303
Jun-14	21,714,569	3,793,711	2	123	30	0	22,163,381
Jul-14	22,619,392	4,326,643	1	114	31	0	22,696,720
Aug-14	23,222,977	4,518,340	1	118	31	0	23,012,912
Sep-14	19,789,369	4,651,479	57	51	30	1	19,051,381
Oct-14	18,224,554	3,859,455	180	4	31	1	18,129,940
Nov-14	20,282,892	3,693,170	442	0	30	1	19,288,107
Dec-14	22,057,292	4,458,615	463	0	31	0	21,409,926
Jan-15	24,198,408	4,837,546	752	0	31	0	23,937,686
Feb-15	22,363,023	5,406,885	811	0	28	0	22,786,784
Mar-15	20,856,446	5,070,655	565	0	31	1	21,759,144
Apr-15	17,544,146	4,477,584	283	0	30	1	18,499,987
May-15	17,949,554	3,596,674	80	41	31	1	18,827,370
Jun-15	20,138,192	3,482,876	19	64	30	0	19,466,393
Jul-15	23,747,715	3,939,319	3	121	31	0	22,786,089
Aug-15	23,252,785	4,864,446	9	103	31	0	22,604,816
Sep-15	21,319,146	4,787,983	23	70	30	1	19,747,182
Oct-15	17,917,492	4,326,418	195	1	31	1	18,401,888
Nov-15	18,378,200	3,680,116	325	0	30	1	18,350,785
Dec-15	20,053,746	3,626,360	417	0	31	0	20,538,600
Jan-16		4,681,968	666	0	31	0	23,153,880
Feb-16		5,232,997	620	0	29	0	21,811,665
Mar-16		4,907,580	476	1	31	1	20,978,806
Apr-16		4,333,582	259	2	30	1	18,293,314
May-16		3,481,003	92	38	31	1	18,703,805
Jun-16		3,370,865	11	105	30	0	21,160,272
Jul-16		3,812,628	1	168	31	0	24,810,838
Aug-16		4,708,002	3	139	31	0	24,052,047
Sep-16		4,633,999	41	53	30	1	19,003,547
Oct-16		4,187,278	195	8	31	1	18,614,721
Nov-16		3,561,761	380	0	30	1	18,715,815
Dec-16		3,509,734	546	0	31	0	21,494,552
Jan-17		4,531,393	666	0	31	0	23,062,605
Feb-17		5,064,701	620	0	28	0	21,054,745
Mar-17		4,749,750	476	1	31	1	20,883,132
Apr-17		4,194,212	259	2	30	1	18,208,831
May-17		3,369,052	92	38	31	1	18,635,943
Jun-17		3,262,456	11	105	30	0	21,094,557
Jul-17		3,690,012	1	168	31	0	24,736,511
Aug-17		4,556,590	3	139	31	0	23,960,264
Sep-17		4,484,967	41	53	30	1	18,913,207
Oct-17		4,052,613	195	8	31	1	18,533,090
Nov-17		3,447,213	380	0	30	1	18,646,379
Dec-17		3,396,859	546	0	31	0	21,426,129