Exhibit 3
Operating Revenue

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1.0 Operating Revenue Overview

1.1 Overview

This Exhibit provides the details of E.L.K. Energy Inc. ("E.L.K.") operating revenue for 2016 Actual, 2017 Actual, 2018 Actual, 2019 Actual, 2020 Actual, the 2021 Bridge Year ("Bridge Year") and the 2022 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 $4,511,973 for the 2022 Test Year. This amount includes a Base Revenue Requirement of $4,024,650 plus revenue offsets of $486,747 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. The Bridge Year and Test Year are provided on the basis of 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

	2016	2017	2018	2019	2020
Distribution Service Revenue					
Residential	$2,188,261	$2,206,176	$2,327,575	$2,385,378	$2,432,579
GS < 50 kW	$371,281	$371,219	$384,722	$384,741	$377,149
GS 50 to 4,900 kW	$523,033	$485,249	$512,511	$562,118	$553,250
Street Lighting	$94,397	$83,758	$88,066	$87,387	$90,422
USL	$2,815	$2,840	$2,940	$2,992	$3,002
Sentinel Light	$2,827	$2,996	$2,968	$2,858	$2,989
Embedded	$158,480	$169,450	$176,087	$175,802	$177,152
Subtotal	**$3,341,094**	**$3,321,688**	**$3,494,869**	**$3,601,276**	**$3,636,544**
Other Revenues					
Specific Service Charges	$65,796	$108,781	$117,560	$108,676	$163,733
Late Payment Charges	$122,163	$42,630	$97,310	$93,143	$86,403
Retail Services Revenues	$-	$-	$-	$-	$-
Rent from Electric Property	$46,279	$46,329	$49,745	$-	$-
Other Utility Operating Income	$10,445	-$5,126	$-	$2,314	$6,928
Other Electric Revenues	-$17,998	$-	$-	$-	$9,741
Regulatory Debits	-$163,489	$-	$-	$-	$-
Expenses of Electric Plant Leased to Others	-$12	$-	$-	$-	$-
Revenues from Merchandise	$-	$-	$-	$-	$-
Gain on Disposition of Utility and Other Property	$50,385	$-	$-	$-	$-
Revenues from Non Rate-Regulated Utility Operations	$917,618	$721,598	$816,572	$711,014	$651,522
Expenses of Non Rate-Regulated Utility Operations	-$470,223	-$257,651	-$418,032	-$342,822	-$225,375
Non Rate-Regulated Utility Rental Income	$-	$-	$-	$65,905	$66,363
Interest and Dividend Income	$56,444	$77,374	$128,220	$196,293	$141,846
Subtotal	**$617,407**	**$733,934**	**$791,375**	**$834,522**	**$901,161**
Total Revenue	**$3,958,502**	**$4,055,622**	**$4,286,244**	**$4,435,798**	**$4,537,705**

Table 3-1 Summary of Operating Revenue (cont.)

	2021 Bridge Year	2022 Test Year at Current Rates	2022 Test Year at Proposed Rates as of May 1	2022 Test Year at Proposed Rates
Distribution Service Revenue				
Residential	$2,480,948	$2,516,821	$2,652,106	$2,720,023
GS < 50 kW	$387,803	$392,461	$454,482	$485,501
GS 50 to 4,900 kW	$552,455	$514,123	$587,026	$582,035
Street Lighting	$89,733	$91,099	$116,260	$128,810
USL	$3,030	$3,044	$3,388	$3,565
Sentinel Light	$2,949	$2,964	$3,201	$3,319
Embedded	$178,102	$179,041	$127,278	$101,397
Subtotal	**$3,695,020**	**$3,699,554**	**$3,943,742**	**$4,024,650**
Other Revenues				
Specific Service Charges	$91,153	$91,153	$91,153	$91,153
Late Payment Charges	$79,871	$75,000	$75,000	$75,000
Retail Services Revenues	$-	$-	$-	$-
Rent from Electric Property	$-	$-	$-	$-
Other Utility Operating Income	$5,000	$5,964	$5,964	$5,964
Other Electric Revenues	$-	$-	$-	$-
Regulatory Debits	$-	$-	$-	$-
Expenses of Electric Plant Leased to Others	$-	$-	$-	$-
Revenues from Merchandise	$-	$-	$-	$-
Gain on Disposition of Utility and Other Property	$-	$-	$-	$-
Revenues from Non Rate-Regulated Utility Operations	$586,034	$464,751	$464,751	$464,751
Expenses of Non Rate-Regulated Utility Operations	-$342,821	-$317,340	-$317,340	-$317,340
Non Rate-Regulated Utility Rental Income	$66,134	$66,248	$66,248	$66,248
Interest and Dividend Income	$100,971	$100,971	$100,971	$100,971
Subtotal	**$586,342**	**$486,747**	**$486,747**	**$486,747**
Total Revenue	**$4,281,362**	**$4,186,301**	**$4,430,489**	**$4,511,397**

Distribution Service Revenues in the "2022 Test Year at Proposed Rates as of May 1" provides forecast revenues at current rates for January 1, 2022 to April 30, 2022 and at proposed rates for May 1, 2022 to December 31, 2022.

1.2 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 2022 distribution rates.

As a starting point, E.L.K. used the same regression analysis methodology approved by the OEB in its 2012 COS application (EB-2011-0099)[1] and updated the analysis for actual power purchases to the end of the 2020. As described below, the regression analysis and variables were refined to produce a regression in which predicted volumes are more aligned with actual volumes.

The updated regression analysis includes the variables used in the 2012 COS application with the exception of the Ontario Real GDP variables since it was not statistically significant and had a counterintuitive coefficient. The regression methodology used in this application is similar to the methodology used by a number of distributors in recent cost of service rate applications. With a regression analysis, E.L.K.'s purchases are correlated with 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 and forecasts of explanatory variables is then used 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.

[1] The same methodology was also proposed in E.L.K.'s 2017 COS application (EB-2016-0066).

Table 3-2 Summary of Load and Customer Forecast

Year	Total Consumption				Customers / Connections	
	Actual		Weather-Normal			
	MWh	Percent Change	MWh	Percent Change	Customers / Connections	Percent Change
2012 Approved			240,659		14,176	
2011	242,103		238,856		14,011	
2012	233,519	-3.7%	233,357	-2.4%	14,057	0.6%
2013	229,906	-1.6%	229,959	-1.5%	14,147	0.6%
2014	239,176	3.9%	241,041	4.6%	14,231	0.6%
2015	246,710	3.1%	249,114	3.2%	14,321	0.6%
2016	238,443	-3.5%	236,279	-5.4%	14,402	0.9%
2017	219,821	-8.5%	225,210	-4.9%	14,535	1.1%
2018	246,427	10.8%	239,892	6.1%	14,697	1.1%
2019	242,877	-1.5%	243,581	1.5%	14,855	1.1%
2020	229,297	-5.9%	230,776	-5.5%	15,016	1.4%
2021 Forecast			237,606	2.9%	15,361	0.9%
2022 Forecast			240,081	1.0%	15,497	0.9%

In the above Table 3-2, data from 2011 to 2020 reflects actual billed consumption, weather normal consumption, and customer/connection counts. The weather normal values are the actual values adjusted by the differences between actual weather and 10-year average weather. For 2021 and 2022, the forecasted billed MWh is on a weather normal basis. Customer/Connection values are on an average basis and Street Lights, Sentinel Lights and Unmetered Scattered Load are measured as connections.

On a rate class basis, the actual and forecasted billed amounts are shown in Table 3-3 and Table 3-4, respectively.

Table 3-3 Actual Energy by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	USL	Sentinel Lights	Embedded	Total
	Actual Energy (MWh)							
2012 Approved	95,979	32,595	66,669	2,225	189	6	42,997	240,659
2011	91,776	30,635	64,324	2,245	202	180	52,740	242,103
2012	90,281	29,409	60,934	2,346	262	174	50,112	233,519
2013	88,791	28,921	59,428	2,513	261	181	49,811	229,906
2014	89,131	29,747	57,346	2,302	260	179	60,211	239,176
2015	90,749	28,622	62,304	2,368	260	163	62,244	246,710
2016	90,966	28,274	59,052	1,586	257	154	58,155	238,443
2017	86,530	27,228	47,450	1,362	255	153	56,843	219,821
2018	94,517	28,693	59,788	1,349	249	150	61,681	246,427
2019	92,485	28,348	59,632	1,354	247	145	60,666	242,877
2020	98,306	26,410	52,048	1,284	248	142	50,859	229,297

Table 3-4 Weather-Normal and Forecast Energy by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	USL	Sentinel Lights	Embedded	Total
	Weather-Normal/Forecast Energy (MWh)							
2012 Approved	95,979	32,595	66,669	2,225	189	6	42,997	240,659
2011	90,014	30,048	63,427	2,245	202	180	52,740	238,856
2012	90,192	29,380	60,891	2,346	262	174	50,112	233,357
2013	88,821	28,931	59,442	2,513	261	181	49,811	229,959
2014	90,166	30,092	57,830	2,302	260	179	60,211	241,041
2015	92,074	29,040	62,965	2,368	260	163	62,244	249,114
2016	89,752	27,897	58,479	1,586	257	154	58,155	236,279
2017	89,675	28,218	48,703	1,362	255	153	56,843	225,210
2018	90,811	27,568	58,084	1,349	249	150	61,681	239,892
2019	92,881	28,470	59,818	1,354	247	145	60,666	243,581
2020	99,201	26,651	52,392	1,284	248	142	50,859	230,776
2021 Forecast	91,656	27,409	59,120	1,296	248	142	57,735	237,606
2022 Forecast	93,507	27,657	59,483	1,309	248	142	57,735	240,081

The actual and forecasted number of customers/connections and customer/connection usage on a weather normal basis is shown in Table 3-6.

Table 3-5 Number of Customers/Connections

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	USL	Sentinel Lights	Embedded	Total
	Customers / Connections							
2012 Approved	10,023	1,214	93	2,801	32	7	4	14,176
2011	9,934	1,195	95	2,790	32	7	4	14,057
2012	10,011	1,205	89	2,799	31	7	4	14,147
2013	10,085	1,207	89	2,808	31	7	4	14,231
2014	10,157	1,215	90	2,817	31	7	5	14,321
2015	10,220	1,221	93	2,826	31	7	5	14,402
2016	10,280	1,228	94	2,885	30	11	6	14,535
2017	10,380	1,237	95	2,932	31	16	6	14,697
2018	10,510	1,238	95	2,957	32	17	6	14,855
2019	10,635	1,237	95	2,993	32	17	6	15,016
2020	10,783	1,246	97	3,046	32	17	6	15,227
2021 Forecast	10,881	1,251	97	3,076	32	17	6	15,361
2022 Forecast	10,981	1,257	98	3,106	32	17	6	15,497

Consumption per customer/connection on an actual basis is provided in Table 3-6 and on a weather-normalized basis in Table 3-7

Table 3-6 Actual Annual Usage by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	USL	Sentinel Lights	Embedded	Total
	Actual Energy (MWh) per Customer/Connection							
2011	9,238	25,645	680,080	805	6,214	25,742	13,185,104	9,238
2012	9,018	24,399	685,299	838	8,336	24,906	12,527,923	9,018
2013	8,804	23,954	667,100	895	8,406	25,820	12,452,811	8,804
2014	8,776	24,479	637,182	817	8,377	25,543	13,257,511	8,776
2015	8,880	23,445	672,048	838	8,374	23,224	12,448,850	8,880
2016	8,849	23,021	628,770	550	8,440	13,561	10,494,093	8,849
2017	8,336	22,010	498,598	464	8,365	9,500	9,473,902	8,336
2018	8,993	23,177	626,872	456	7,899	8,798	10,280,109	8,993
2019	8,696	22,908	627,160	452	7,715	8,509	10,111,055	8,696
2020	9,117	21,202	536,113	421	7,757	8,353	8,476,578	9,117

Table 3-7 Weather Normalized Annual Usage by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	USL	Sentinel Lights	Embedded	Total
	Weather-Normal/Forecast Energy (MWh) per Customer/Connection							
2011	9,061	25,153	670,596	805	6,214	25,742	13,185,104	9,061
2012	9,009	24,375	684,805	838	8,336	24,906	12,527,923	9,009
2013	8,807	23,962	667,262	895	8,406	25,820	12,452,811	8,807
2014	8,877	24,763	642,561	817	8,377	25,543	13,257,511	8,877
2015	9,010	23,787	679,178	838	8,374	23,224	12,448,850	9,010
2016	8,731	22,713	622,671	550	8,440	13,561	10,494,093	8,731
2017	8,639	22,810	511,769	464	8,365	9,500	9,473,902	8,639
2018	8,640	22,268	609,010	456	7,899	8,798	10,280,109	8,640
2019	8,733	23,007	629,115	452	7,715	8,509	10,111,055	8,733
2020	9,200	21,395	539,658	421	7,757	8,353	8,476,578	9,200
2021 Forecast	8,423	21,901	607,195	421	7,757	8,353	9,622,581	8,423
2022 Forecast	8,515	21,997	609,154	421	7,757	8,353	9,622,581	8,515

1.3 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 accounts for historic Conservation and Demand Management ("CDM") results and the anticipated loss in persistence of those programs by 2022. 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 load forecasting process is explained in more detail below.

1.3.1 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 customer counts. The regression model uses monthly kWh purchases (plus CDM) and monthly values of independent variables from January 2011 to December 2020 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. CDM is then removed from predicted purchases.

With regards to weather normalization, E.L.K. submits that it is appropriate to use 10-year average weather data from January 2011 to December 2020 to as “Normal Weather” 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 2022 forecast of purchases. This analysis assumes weather normal conditions are based on a 20-year trend of weather data.

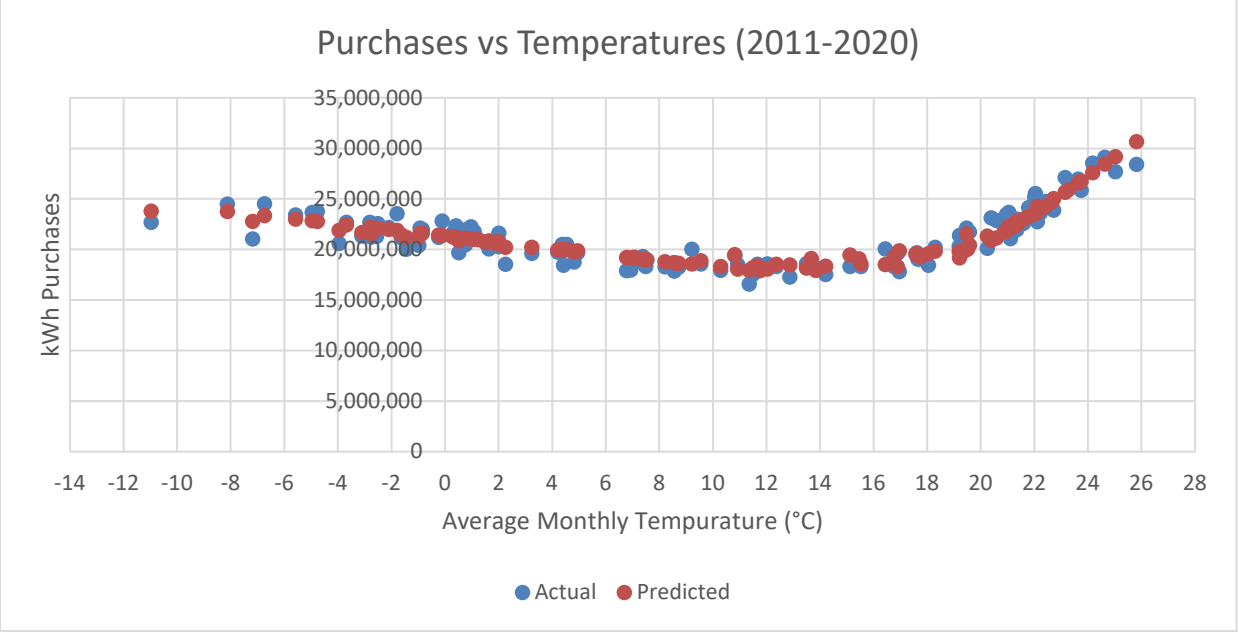
The multivariate regression model has determined drivers of year-over-year changes in E.L.K.'s load growth are weather (heating and cooling degree days), calendar variables (days in month and seasonal flag), and Customer Counts. These factors are captured within the multivariate regression model.

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 (“HDD” - i.e. a measure of coldness in winter) and Cooling Degree Days (“CDD” - i.e. a measure of summer heat) are modeled. E.L.K. considered a range of HDD and CDD base temperatures from 10°C to 20°C to analyse the

weather variables that most closely predict total system purchases. HDD with a base of 18°C and CDD with a base of 16°C were found to be the most predictive.

Figure 3-1 shows actual and predicted consumption (plus CDM) for each month from January 2011 to December 2020. The adjusted R^2 for the regression with only a constant, HDD at 18°C, and CDD at 16°C as dependent variables is 0.9089.

Figure 3-1 Weather Variable Regression Results



Other factors determining energy use in the monthly model are the number of days in a particular month, the number of peak days in a month, flag variables for each month, and seasonal flag variables for spring, fall, and the combined spring/fall months.

A set of COVID-19 variables were considered but none were found to be statistically significant. Predicted purchases did not deviate from actual purchases consistently from month to month and total predicted purchases in 2020 was within 0.1% of actual purchases. Though COVID-19 had an impact on a class-by-class basis in 2020, it did not have a significant impact total system purchases to the extent that specific COVID-19 variables or adjustments were required.

The following outlines the predication model used by E.L.K. to predict weather normal purchases for 2021 and 2022.

E.L.K. Monthly Predicted kWh Purchases plus CDM =

= Heating Degree Days (18°C) * 11,008
+ Cooling Degree Days (16°C) * 45,501
+ Number of Days in the Month * 481,703
+ Spring Flag * (614,549)
+ GDP Index * 25,483
+ Constant of (3,168,790)

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) Monthly heating degree day and cooling degree information was calculated based on daily weather data gathered from the Environment Canada website. Weather data from the Windsor A Weather Station was used.

b) Economic data is from Statistics Canada. Forecast economic data is based on Ontario employment and real GDP forecasts from four major banks: TD, BMO, Scotiabank, and RBC.[2]

c) 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)

Derivation of the economic forecasts is provided in Table 3-8. Economic forecast data is provided for GDP and FTE as both measures were tested, however, only GDP is used in the forecast.

[2] CIBC provincial forecasts are not published regularly.

Table 3-8 Economic Forecasts

		TD	BMO	Scotia	RBC	Average
	Report Date	22-Sep-21	24-Sep-21	9-Sep-21	13-Sep-21	
GDP	2021	4.40%	4.50%	4.30%	5.00%	4.55%
	2022	5.00%	4.90%	4.00%	4.50%	4.60%
	Report Date	22-Sep-21	24-Sep-21	9-Sep-21	13-Sep-21	
FTE	2021	4.40%	4.80%	3.80%	5.20%	4.55%
	2022	3.80%	3.70%	3.50%	2.90%	3.48%

The prediction formula has the following statistical results (Table 3-9) which generally indicate the formula has a good fit to the actual data set.

Table 3-9 Statistical Results

Statistic	Value
R Square	93.86%
Adjusted R Square	93.59%
F Test	302.1
MAPE (Monthly)	2.70%
MAPE (Annual)	1.01%
Durbin-Watson	1.93
T-stats by Coefficient	
Constant	-1.22
Heating Degree Days (18°)	22.95
Cooling Degree Days (16°)	30.24
Number of Days in Month	6.66
Spring Flag	-3.07
GDP Index	2.56

This prediction model differs from the model used in E.L.K.'s 2012 COS in four ways:

1) The dependent variable of Total Purchases has been replaced with Total Purchases plus cumulative CDM. Cumulative CDM is then removed from the predicted volumes. This methodology better accounts for the persisting impacts of CDM and is consistent with methodologies used in other LDC load forecasts.

2) Cooling Degree Days now use 16°C as the base temperature. Heating Degree Days continue to be in relation to 18°C. The 2012 model used 18°C for both HDD and CDD, which is the base temperature used in Environment Canada's definition of HDD and CDD. Other base temperatures were not considered in 2012.

3) The Spring/Fall Flag used in 2012 has been replaced with a Spring Flag. When separate Spring Flag and Fall Flag variables were tested, the Fall Flag was found not to be statistically significant.

4) The Embedded Distributor variable has been removed. Since Embedded Distributor purchases are within Total Purchases, it is not an independent variable.

The annual results of the above prediction formula compared to the actual annual purchases from 2011 to 2020 are shown below in Table 3-10 along with the predicted total system purchases for E.L.K. for 2021 and 2022 on a weather normal basis. In addition, weather normal values for the 2022 test year are provided using the 20-year HDD and CDD trend as "Normal Weather".

Table 3-10 Total System Purchase

Year	Actual	Predicted	% Difference
Purchased Energy (GWh)			
2011	255,036	252,125	-1.14%
2012	246,902	249,342	0.99%
2013	247,681	248,329	0.26%
2014	249,773	246,549	-1.29%
2015	247,719	245,688	-0.82%
2016	244,970	249,823	1.98%
2017	236,059	240,380	1.83%
2018	252,553	252,752	0.08%
2019	248,932	245,786	-1.26%
2020 – Actual	245,635	244,448	-0.48%
2020 - Normalized		247,219	
2021 – Bridge Year		247,960	
2022 – Test Year		250,543	
2022 - Test Year - 20 Year Trend		250,698	

The weather normalized amounts for 2021 and 2022 are determined by using 2021 and 2022 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 2011 to December 2020 (i.e. 10 years). The 2022 weather normal 20-year trend value reflects the trend in monthly heating degree days and cooling degree days which have occurred from January 2001 to December 2020.

1.3.2 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 4.36% which represents the average loss factor from 2016 to 2020. With this average loss factor the total weather normalized billed energy is 238.6 GWh for 2021 (i.e. 249.0/1.0436) and 239.8 GWh for 2021 (i.e. 250.3/1.0436).

1.3.3 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 provided in the following Table 3-11.

Table 3-11 Historical Customer/Connection Data

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	Total
	Customer / Connections							
2011	9,934	1,195	95	2,790	32	7	4	14,057
2012	10,011	1,205	89	2,799	31	7	4	14,147
2013	10,085	1,207	89	2,808	31	7	4	14,231
2014	10,157	1,215	90	2,817	31	7	5	14,321
2015	10,220	1,221	93	2,826	31	7	5	14,402
2016	10,280	1,228	94	2,885	30	11	6	14,535
2017	10,380	1,237	95	2,932	31	16	6	14,697
2018	10,510	1,238	95	2,957	32	17	6	14,855
2019	10,635	1,237	95	2,993	32	17	6	15,016
2020	10,783	1,246	97	3,046	32	17	6	15,227

From the historical customer/connection data the growth rate in customer/connection can be evaluated which is provided on the following Table 3-12.

Table 3-12 Growth Rate in Customer/Connections

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	Total
	Customer / Connections							
2011								
2012	0.8%	0.9%	-6.0%	0.3%	-3.1%	0.0%	0.0%	0.6%
2013	0.7%	0.2%	0.2%	0.3%	-1.5%	0.0%	0.0%	0.6%
2014	0.7%	0.6%	1.0%	0.3%	0.0%	0.0%	13.5%	0.6%
2015	0.6%	0.5%	3.0%	0.3%	0.0%	0.0%	10.1%	0.6%
2016	0.6%	0.6%	1.3%	2.1%	-1.7%	61.9%	10.8%	0.9%
2017	1.0%	0.7%	1.3%	1.6%	0.3%	41.9%	8.3%	1.1%
2018	1.3%	0.1%	0.2%	0.8%	3.3%	5.7%	0.0%	1.1%
2019	1.2%	0.0%	-0.3%	1.2%	1.5%	0.0%	0.0%	1.1%
2020	1.4%	0.7%	2.1%	1.8%	0.0%	0.0%	0.0%	1.4%
Geomean	0.9%	0.5%	0.3%	1.0%	0.0%	0.0%	0.0%	0.9%

For the Residential, General Service < 50 kW, General Service 50 to 4,999 kW, and Streetlights classes the geometric mean analysis was used to forecast the number of customers/connections for 2021 and 2022. The geometric mean was applied to the 2020 customer counts to determine 2021 customer counts and again to the 2021 customer counts to determine the 2022 customer forecast.

For the Unmetered Scattered Load, Sentinel Light, and Embedded Distributor classes, E.L.K. proposes it is reasonable to use the 2020 customers and connections as the forecast for 2021 and 2022 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. The connection counts have not changed from 2018 to 2020 for any of these classes so the counts are forecast to persist to 2022. Table 3-13 outlines the forecast of customers/connections by rate class.

Table 3-13 Customer/Connection Forecast

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	**Total**
	Customer/Connection Forecast							
2021	10,881	1,251	97	3,076	32	17	6	15,361
2022	10,981	1,257	98	3,106	32	17	6	15,497

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 3-14 below provides the average annual usage per customer by rate class from 2011 to 2020.

Table 3-14 Historical Annual Usage per Customer

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded
	Billed Energy (kWh) per Customer/Connection						
2011	9,238	25,645	680,080	805	6,214	25,742	13,185,104
2012	9,018	24,399	685,299	838	8,336	24,906	12,527,923
2013	8,804	23,954	667,100	895	8,406	25,820	12,452,811
2014	8,776	24,479	637,182	817	8,377	25,543	13,257,511
2015	8,880	23,445	672,048	838	8,374	23,224	12,448,850
2016	8,849	23,021	628,770	550	8,440	13,561	10,494,093
2017	8,336	22,010	498,598	464	8,365	9,500	9,473,902
2018	8,993	23,177	626,872	456	7,899	8,798	10,280,109
2019	8,696	22,908	627,160	452	7,715	8,509	10,111,055
2020	9,117	21,202	536,113	421	7,757	8,353	8,476,578

Table 3-15 provides average annual usage on a weather-normalized basis.

Table 3-15 Weather-Normalized Annual Usage per Customer

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded
	Billed Energy (kWh) per Customer/Connection						
2011	9,061	25,153	670,585	805	6,214	25,742	13,185,104
2012	9,009	24,375	684,807	838	8,336	24,906	12,527,923
2013	8,807	23,962	667,262	895	8,406	25,820	12,452,811
2014	8,878	24,763	642,565	817	8,377	25,543	13,257,511
2015	9,010	23,787	679,185	838	8,374	23,224	12,448,850
2016	8,731	22,713	622,665	550	8,440	13,561	10,494,093
2017	8,640	22,811	511,784	464	8,365	9,500	9,473,902
2018	8,640	22,267	608,990	456	7,899	8,798	10,280,109
2019	8,733	23,007	629,117	452	7,715	8,509	10,111,055
2020	9,200	21,395	539,663	421	7,757	8,353	8,476,578

The usage per customer/connection of the Residential and General Service classes has generally declined since 2011, aside from the anomalous 2020 year for the Residential class.

The growth rate of weather-normalized usage per customer/connection is provided in the following table. The geometric mean growth rates from 2011 to 2020 and from 2011 to 2019 are also included.

Table 3-16 Growth Rate in Usage per Customer/Connection

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded
	Year-over-Year Weather-Normalized Energy (kWh) per Customer/Connection						
2011							
2012	-0.57%	-3.09%	2.12%	4.17%	34.14%	-3.25%	-4.98%
2013	-2.24%	-1.69%	-2.56%	6.75%	0.85%	3.67%	-0.60%
2014	0.80%	3.34%	-3.70%	-8.68%	-0.35%	-1.08%	6.46%
2015	1.49%	-3.94%	5.70%	2.55%	-0.03%	-9.08%	-6.10%
2016	-3.10%	-4.52%	-8.32%	-34.43%	0.78%	-41.61%	-15.70%
2017	-1.04%	0.43%	-17.81%	-15.50%	-0.89%	-29.94%	-9.72%
2018	0.00%	-2.39%	18.99%	-1.74%	-5.57%	-7.40%	8.51%
2019	1.08%	3.32%	3.30%	-0.89%	-2.33%	-3.28%	-1.64%
2020	5.35%	-7.01%	-14.22%	-6.83%	0.54%	-1.84%	-16.17%
Geomean 2011-19	-0.46%	-1.11%	-0.79%	-6.95%	2.74%	-12.92%	-3.26%
Geomean 2011-20	0.17%	-1.78%	-2.38%	-6.94%	2.49%	-11.76%	-4.79%
Trend Used	Geomean 2011-19	Geomean 2011-19	Geomean 2011-19	No trend	No trend	No trend	No trend
	-0.46%	-1.11%	-0.79%	0%	0%	0%	0%

A trend in usage per customer is applied to the Residential, General Service < 50 kW and General Service 50 to 4,999 kW classes to derive average use per customer in 2021 and 2022. Since consumption by rate class was influenced by the COVID-19 pandemic, the average growth rates from 2011 to 2019 are applied instead of the 2011 to 2020 growth rates. No trend is applied to the Street Lighting, USL, Sentinel, or Embedded Distributor classes.

The resulting usage forecast is as follows in Table 3-17.

Table 3-17 Forecast Annual kWh Usage per Customer/Connection

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded
	kWh Consumption per Customer/Connection Forecast						
2021	8,653	22,499	619,156	421	7,757	8,353	9,622,581
2022	8,614	22,250	614,236	421	7,757	8,353	9,622,581

The preceding information is used to determine the non-normalized weather billed energy forecast by applying the forecast number of customer/connection from Table 3-13 by the forecast of annual usage per customer/connection from Table 3-17. The resulting non-normalized weather billed energy forecast is shown in the following Table 3-18.

Table 3-18 Non-Normalized Weather Billed Energy Forecast

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	**Total**
	Non-Weather Normalized Consumption Forecast							
2021	94,158,143	28,157,189	60,283,836	1,296,261	248,217	141,998	57,735,484	**242,021,127**
2022	94,582,881	27,974,824	59,978,201	1,308,977	248,217	141,998	57,735,484	**241,970,581**

The non-normalized weather billed energy forecast is then 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 238.6 GWh in 2021 and 239.8 GWh in 2022.

The difference between the non-normalized and normalized forecast adjustments is -3.4 GWh in 2021 (i.e. 238.6 - 242.0) and -2.2 GWh in 2021 (i.e. 242.0 – 239.8). 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 3-19.

Table 3-19 Weather Sensitivity by Rate Class

Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded
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 and 2017 COS applications 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 -3.4 GWh in 2021 and -2.2 GWh in 2022 has been assigned on a pro rata basis to each rate class based on the above level of weather sensitivity. This adjustment is detailed in Table 3-20.

Table 3-20 Weather-Normalization Adjustment

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	**Total**
	Weather Normalization Adjustment (kWh)							
2021	(2,502,442)	(748,334)	(1,164,212)	0	0	0	0	(4,414,987)
2022	(1,075,702)	(318,161)	(495,676)	0	0	0	0	(1,889,539)

The weather normalization adjustment from Table 3-20 is applied to the non-normalized billed energy forecast from Table 3-18 to produce the consumption forecast by rate class in Table 3-21.

Table 3-21 Forecast Consumption by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lighting	Unmetered Scattered Load	Sentinel Lights	Embedded	**Total**
	Weather Normalization Adjustment (kWh)							
2021	91,655,701	27,408,855	59,119,624	1,296,261	248,217	141,998	57,735,484	237,606,140
2022	93,507,179	27,656,663	59,482,525	1,308,977	248,217	141,998	57,735,484	240,081,043

1.3.4 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 an average ratio to the forecasted kWh to produce the required kW.

The following Table 3-22 outlines the annual billed kW demand by applicable rate class.

Table 3-22 Historical Annual kW per Applicable Rate Class

Year	General Service 50 to 4,999 kW	Street Lighting	Sentinel Lights	Embedded
	Billed Demand (kW)			
2012 Approved	214,067	6,083	15	96,049
2011	195,461	5,760	12	113,911
2012	186,874	6,354	293	111,194
2013	181,893	6,799	465	110,635
2014	186,326	6,450	471	134,313
2015	195,328	6,398	437	135,969
2016	199,545	4,764	411	132,942
2017	170,952	3,706	405	130,522
2018	183,114	3,920	387	145,229
2019	211,572	3,756	365	139,224
2020	202,256	3,928	385	142,149

The following Table 3-23 shows the historical ratio of kW/kWh as well as a range of average ratios considered. The ratio used for each class is noted with bold text.

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

Year	General Service 50 to 4,999 kW	Street Lighting	Sentinel Lights	Embedded
	Billed Demand (kW)			
2011	0.3039%	0.2565%	0.0066%	0.2160%
2012	0.3067%	0.2708%	0.1682%	0.2219%
2013	0.3061%	0.2706%	0.2571%	0.2221%
2014	0.3249%	0.2802%	0.2635%	0.2231%
2015	0.3135%	0.2702%	0.2686%	0.2184%
2016	0.3379%	0.3005%	0.2674%	0.2286%
2017	0.3603%	0.2721%	0.2651%	0.2296%
2018	0.3063%	0.2905%	0.2588%	0.2355%
2019	0.3548%	0.2775%	0.2523%	0.2295%
2020	0.3886%	0.3060%	0.2712%	0.2795%
Average 2011-20	0.3303%	0.2795%	0.2279%	0.2304%
Average 2015-19	**0.3346%**	0.2821%	0.2624%	0.2283%
Average 2016-20	0.3496%	**0.2893%**	**0.2629%**	**0.2405%**

The kW/kWh ratio has changed over time for each class so, in addition to the 10-year average, average ratios from 2011 to 2019, 2015 to 2019, and 2016 to 2020, and actual 2020 ratios were considered for each class. Average ratios that best reflected each class's ratios in recent years were selected. Actual and forecast ratios for each class are provided in the following four figures.

Figure 3-2 General Service 50 to 4,999 kW Ratio

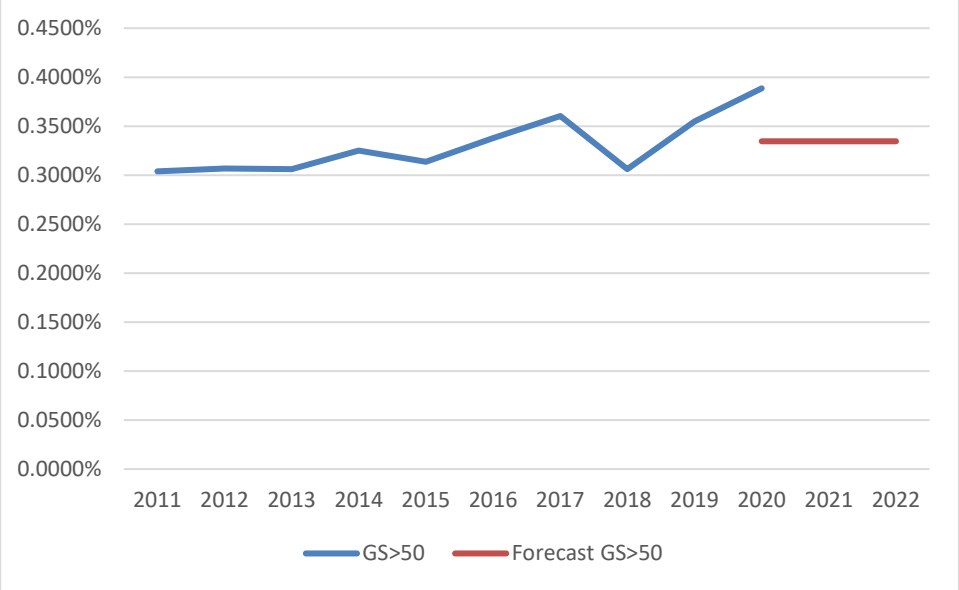


Figure 3-3 Streetlights Ratio

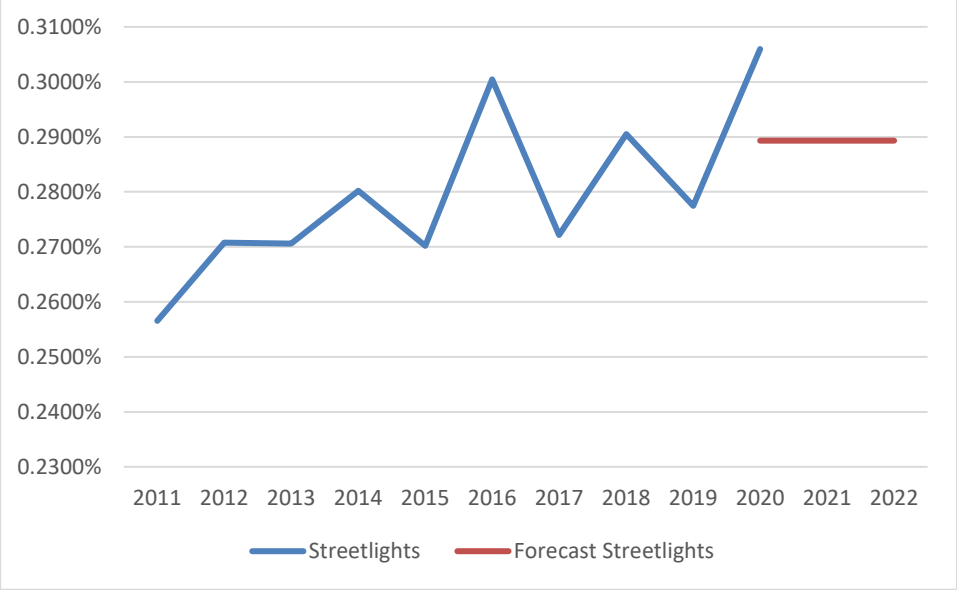


Figure 3-4 Sentinel Lights Ratio

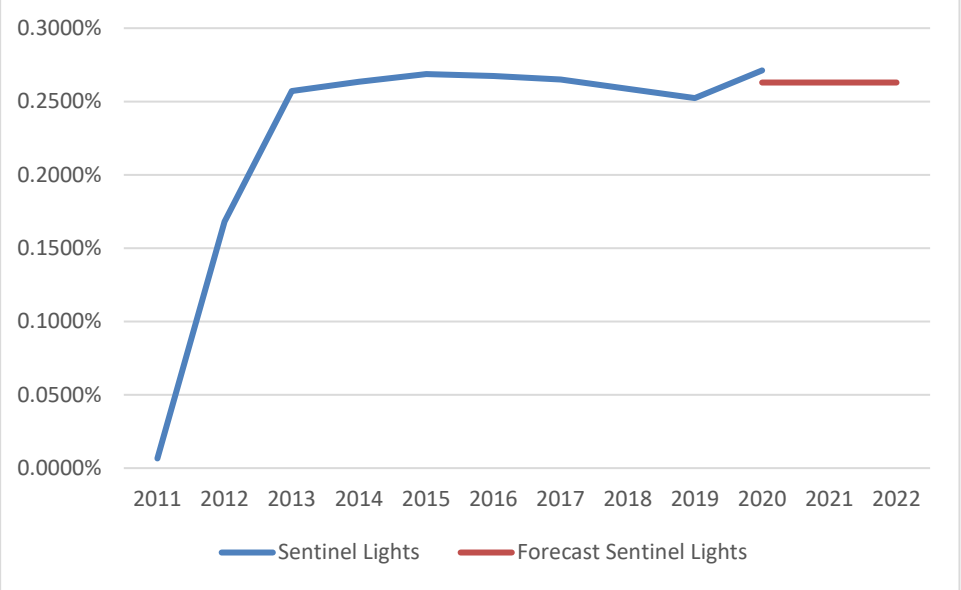
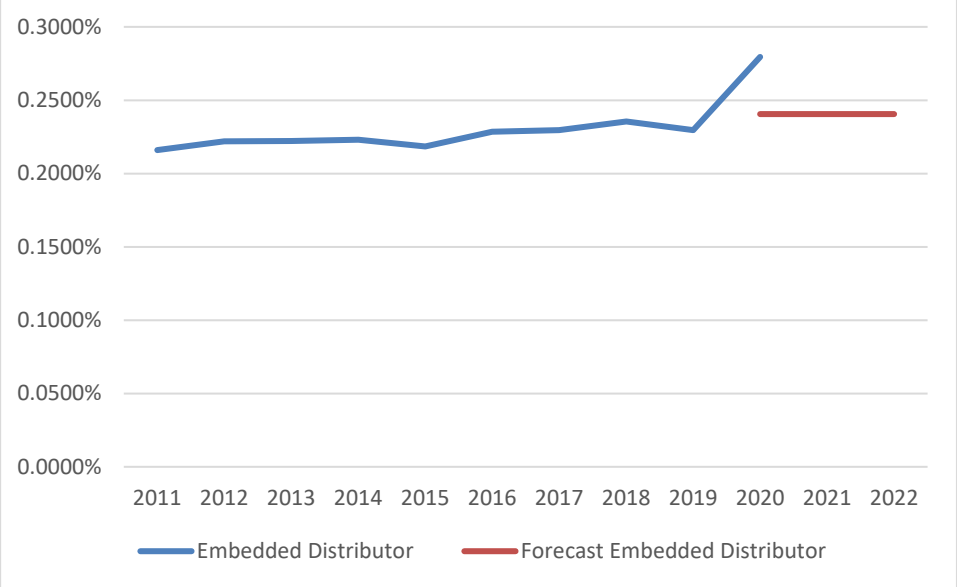


Figure 3-5 Embedded Distributor Ratio



The following Table 3-24 outlines the forecast of kW for the applicable rate classes. Forecast demand is calculated as forecast class consumption from Table 3-21 multiplied by the selected kW/kWh ratios from Table 3-23.

Table 3-24 kW Forecast by Applicable Rate Class

Year	General Service 50 to 4,999 kW	Street Lighting	Sentinel Lights	Embedded	Total
	Billed Demand (kW)				
2011	197,786	3,750	373	138,872	380,378
2012	199,000	3,787	373	138,872	404,419

1.3.5 CDM Adjustment and LRAMVA

No manual adjustment has been made to the load forecast to account for forecast CDM activities in 2022. Similarly, there is no LRAMVA threshold.

2.0 ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSIS

2.1 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 compares 2016 Actual to 2017 Actual; 2017 Actual to 2018 Actual; 2018 Actual to 2019 Actual; 2019 Actual to 2020 Actual; 2020 Actual to 2021 Bridge and 2021 Bridge Year to 2022 Test Year. 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.

2016 Actual vs 2017 Actual

Table 3-25 Distribution Revenue - 2016 Actual vs 2017 Actual

Distribution Revenues	2016 Actual	2017 Actual	Difference $	Difference %
Residential	$2,188,261	$2,206,176	$17,915	0.8%
GS < 50 kW	$371,281	$371,219	-$62	0.0%
GS 50 to 4,900 kW	$523,033	$485,249	-$37,784	-7.2%
Street Lighting	$94,397	$83,758	-$10,638	-11.3%
USL	$2,815	$2,840	$24	0.9%
Sentinel Light	$2,827	$2,996	$169	6.0%
Embedded	$158,480	$169,450	$10,970	6.9%
Total	**$3,341,094**	**$3,321,688**	**-$19,407**	**-0.6%**

Throughput revenue for 2017 was $19,407 or 0.6% lower than 2016 and is below the materiality threshold.

Table 3-26 Billing Determinants - 2016 Actual vs 2017 Actual

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2016 Actual	2017 Actual	Diff.	2016 Actual	2017 Actual	2016 Actual	2017 Actual	
Residential	10,280	10,380	100	90,966,168	86,529,650			(4,436,518)
GS < 50 kW	1,228	1,237	9	28,273,982	27,228,067			(1,045,915)
GS > 50 kW	94	95	1	59,051,959	47,449,870	199,545	170,952	(28,593)
St. Lighting	2,885	2,932	47	1,585,584	1,361,607	4,764	3,706	(1,059)
USL	30	31	0	257,059	255,469			(1,590)
Sen. Light	11	16	5	153,690	152,795	411	405	(6)
Embedded	6	6	0	58,154,767	56,843,411	132,942	130,522	(2,420)
Total	**14,535**	**14,697**	**162**	**238,443,209**	**219,820,869**	**337,662**	**305,584**	

The number of Residential customers and Streetlight connections increased by 1% and 1.6%, respectively, which is in line with typical growth rates for those classes. Consumption and demand declined for each class weather-sensitive class because 2017 had a relatively mild winter and summer (low HDD and CDD). Streetlight consumption and demand declined considerably due to E.L.K.'s LED replacement program.

2017 Actual vs 2018 Actual

Table 3-27 Distribution Revenue - 2017 Actual vs 2018 Actual

Distribution Revenues	2017 Actual	2018 Actual	Difference $	Difference %
Residential	$2,206,176	$2,327,575	$121,399	5.5%
GS < 50 kW	$371,219	$384,722	$13,503	3.6%
GS 50 to 4,900 kW	$485,249	$512,511	$27,263	5.6%
Street Lighting	$83,758	$88,066	$4,307	5.1%
USL	$2,840	$2,940	$100	3.5%
Sentinel Light	$2,996	$2,968	-$28	-0.9%
Embedded	$169,450	$176,087	$6,638	3.9%
Total	**$3,321,688**	**$3,494,869**	**$173,182**	**5.2%**

The 2018 throughput revenue was $173,183 or 5.2% higher than 2017 actual revenue. The increase is largely the result of increases in weather-related consumption and demand, which increased variable revenues. Following a mild-weather 2017 (low HDD and CDD), there was particularly a cold winter (high HDD) and warm summer (high CDD) in 2018. E.L.K's heating load

increased by 12.1% (3,526 HDD ÷ 3,169 HDD) and its cooling load increased by 40.4% (572 CDD ÷ 407 CDD) from 2017 to 2018.

Table 3-28 Billing Determinants - 2017 Actual vs 2018 Actual

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2017 Actual	2018 Actual	Diff.	2017 Actual	2018 Actual	2017 Actual	2018 Actual	
Residential	10,380	10,510	130	86,529,650	94,517,190			7,987,540
GS < 50 kW	1,237	1,238	1	27,228,067	28,692,745			1,464,678
GS > 50 kW	95	95	0	47,449,870	59,787,962	170,952	183,114	12,162
St. Lighting	2,932	2,957	25	1,361,607	1,349,349	3,706	3,920	215
USL	31	32	1	255,469	249,143			(6,326)
Sen. Light	16	17	1	152,795	149,558	405	387	(18)
Embedded	6	6	-	56,843,411	61,680,653	130,522	145,229	14,707
Total	**14,697**	**14,855**	**158**	**219,820,869**	**246,426,600**	**305,584**	**332,650**	

Residential customers and Streetlight connections continued to grow in 2018. Volumetric differences are the result of considerable increases in heating and cooling load, as described above.

2018 Actual vs 2019 Actual

Table 3-29 Distribution Revenue - 2018 Actual vs 2019 Actual

Distribution Revenues	2018 Actual	2019 Actual	Difference $	Difference %
Residential	$2,327,575	$2,385,378	$57,803	2.5%
GS < 50 kW	$384,722	$384,741	$19	0.0%
GS 50 to 4,900 kW	$512,511	$562,118	$49,607	9.7%
Street Lighting	$88,066	$87,387	-$678	-0.8%
USL	$2,940	$2,992	$52	1.8%
Sentinel Light	$2,968	$2,858	-$109	-3.7%
Embedded	$176,087	$175,802	-$286	-0.2%
Total	**$3,494,869**	**$3,601,276**	**$106,407**	**3.0%**

The 2019 revenue was $106,407 or 3.0% higher than the 2018 actual revenue as a result of higher customer counts, inflationary rate increases, and an increase in General Service 50 to 4,999 kW demand.

Table 3-30 Billing Determinants - 2018 Actual vs 2019 Actual

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2018 Actual	2019 Actual	Diff.	2018 Actual	2019 Actual	2018 Actual	2019 Actual	
Residential	10,510	10,635	125	94,517,190	92,484,568			(2,032,622)
GS < 50 kW	1,238	1,237	(1)	28,692,745	28,348,056			(344,689)
GS > 50 kW	95	95	(0)	59,787,962	59,632,442	183,114	211,572	28,458
St. Lighting	2,957	2,993	36	1,349,349	1,353,784	3,920	3,756	(164)
USL	32	32	0	249,143	246,885			(2,258)
Sen. Light	17	17	-	149,558	144,657	387	365	(22)
Embedded	6	6	-	61,680,653	60,666,329	145,229	139,224	(6,005)
Total	**14,855**	**15,016**	**161**	**246,426,600**	**242,876,721**	**332,650**	**354,917**	

Residential customer counts and Streetlight connection counts continued to grow in 2019, with little-to-no changes in other class counts. Residential and General Service < 50 kW consumption declined as weather returned to levels more in line with normal 10-year average weather.

2019 Actual vs 2020 Actual

Table 3-31 Distribution Revenue - 2019 Actual vs 2020 Actual

Distribution Revenues	2019 Actual	2020 Actual	Difference $	Difference %
Residential	$2,385,378	$2,432,579	$47,201	2.0%
GS < 50 kW	$384,741	$377,149	-$7,592	-2.0%
GS 50 to 4,900 kW	$562,118	$553,250	-$8,868	-1.6%
Street Lighting	$87,387	$90,422	$3,035	3.5%
USL	$2,992	$3,002	$10	0.3%
Sentinel Light	$2,858	$2,989	$131	4.6%
Embedded	$175,802	$177,152	$1,351	0.8%
Total	**$3,601,276**	**$3,636,544**	**$35,268**	**1.0%**

The 2020 revenue was $35,268 or 1% higher than the 2019 actual revenue.

Table 3-32 Billing Determinants - 2019 Actual vs 2020 Actual

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2019 Actual	2020 Actual	Diff.	2019 Actual	2020 Actual	2019 Actual	2020 Actual	
Residential	10,635	10,783	147	92,484,568	98,305,958			5,821,390
GS < 50 kW	1,237	1,246	8	28,348,056	26,410,288			(1,937,768)
GS > 50 kW	95	97	2	59,632,442	52,047,649	211,572	202,256	(9,316)
St. Lighting	2,993	3,046	53	1,353,784	1,283,668	3,756	3,928	171
USL	32	32	-	246,885	248,217			1,332
Sen. Light	17	17	-	144,657	141,998	365	385	20
Embedded	6	6	-	60,666,329	50,859,469	139,224	142,149	2,925
Total	**15,016**	**15,227**	**210**	**242,876,721**	**229,297,247**	**354,917**	**348,717**	

Residential customer counts and Streetlighting connection counts continued to increase in 2020. Due to the COVID-19 pandemic, more people worked from home and generally spent more time at home in accordance with public health guidelines. This resulted in higher residential consumption but lower General Service <50 and General Service 50 to 4,999 kW consumption and demand.

2020 Actual vs 2021 Bridge

Table 3-33 Distribution Revenue – 2020 Actual vs 2021 Bridge

Distribution Revenues	2020 Actual	2021 Bridge	Difference $	Difference %
Residential	$2,432,579	$2,480,948	$48,369	2.0%
GS < 50 kW	$377,149	$387,803	$10,654	2.8%
GS 50 to 4,900 kW	$553,250	$552,455	-$795	-0.1%
Street Lighting	$90,422	$89,733	-$690	-0.8%
USL	$3,002	$3,030	$28	0.9%
Sentinel Light	$2,989	$2,949	-$40	-1.3%
Embedded	$177,152	$178,102	$950	0.5%
Total	**$3,636,544**	**$3,695,020**	**$58,476**	**1.6%**

Revenue in 2021 is forecasted to be $60,798 or 1.7% higher than 2020, primarily as a result of inflationary rate increases.

Table 3-34 Billing Determinants - 2020 Actual vs 2021 Bridge

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2020 Actual	2021 Bridge	Diff.	2020 Actual	2021 Bridge	2020 Actual	2021 Bridge	
Residential	10,783	10,881	99	98,305,958	91,655,701			(6,650,257)
GS < 50 kW	1,246	1,251	6	26,410,288	27,408,855			998,567
GS > 50 kW	97	97	0	52,047,649	59,119,624	202,256	197,786	(4,469)
St. Lighting	3,046	3,076	30	1,283,668	1,296,261	3,928	3,750	(177)
USL	32	32	-	248,217	248,217			-
Sen. Light	17	17	-	141,998	141,998	385	373	(12)
Embedded	6	6	-	50,859,469	57,735,484	142,149	138,872	(3,277)
Total	**15,227**	**15,361**	**135**	**229,297,247**	**237,606,140**	**348,717**	**340,782**	

Residential customers, General Service < 50 kW customers, and Streetlight connections are forecast to increase in line with historic growth rates. Residential consumption is forecast to decrease and General Service < 50 kW and General Service 50 to 4,999 kW consumption is forecast to increase as the impacts of COVID-19 subside, returning to consumption levels similar to 2019 and prior. General Service 50 to 4,999 kW and Embedded demand are forecast to decrease despite increases in consumption as the classes return to typical kW/kWh ratios.

2021 Bridge vs 2022 Test

Table 3-35 Distribution Revenue - 2021 Bridge vs 2022 Test

Distribution Revenues	2021 Bridge	2022 Test	Difference $	Difference %
Residential	$2,480,948	$2,652,106	$171,158	6.9%
GS < 50 kW	$387,803	$454,482	$66,679	17.2%
GS 50 to 4,900 kW	$552,455	$587,026	$34,572	6.3%
Street Lighting	$89,733	$116,260	$26,527	29.6%
USL	$3,030	$3,388	$358	11.8%
Sentinel Light	$2,949	$3,201	$252	8.5%
Embedded	$178,102	$127,278	-$50,824	-28.5%
Total	**$3,695,020**	**$3,943,742**	**$248,722**	**6.7%**

The proposed Test Year distribution revenue reflects four months at currently approved rates and eight months at the proposed rates. 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,

which is an average of approximately 8.97%. The differences by rate class are due to differential rate increases following the results of the cost allocation model.

Table 3-36 Billing Determinants - 2021 Bridge vs 2022 Test

	Customers/Devices			kWh		kW		Volumetric Difference
Billing Determinants	2021 Bridge	2022 Test	Diff.	2021 Bridge	2022 Test	2021 Bridge	2022 Test	
Residential	10,881	10,981	100	91,655,701	93,507,179			1,851,478
GS < 50 kW	1,251	1,257	6	27,408,855	27,656,663			247,808
GS > 50 kW	97	98	0	59,119,624	59,482,525	197,786	199,000	1,214
St. Lighting	3,076	3,106	30	1,296,261	1,308,977	3,750	3,787	37
USL	32	32	-	248,217	248,217			
Sen. Light	17	17	-	141,998	141,998	373	373	-
Embedded	6	6	-	57,735,484	57,735,484	138,872	138,872	-
Total	**15,361**	**15,497**	**136**	**237,606,140**	**240,081,043**	**340,782**	**342,032**	

The variances outlined above reflects the difference in the 2021 and 2022 load forecast which is explained in detail in load forecast evidence provided in this Exhibit. The increase in volumes is mostly the result in increases in customer/connection counts.

3.0 OTHER REVENUE

3.1 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

Other Distribution Revenues includes rental income from Joint Use of Poles, rental revenue for the Pearl St. Property, special customer service requests after hours, and sentinel revenues.

Other Income and Expenses includes affiliated billing revenues, the affordability trust fund, CDM revenue and expenses, scrap revenue, gain on sale of utility property or equipment, and streetlight maintenance revenues.

A detailed breakdown by USoA account is shown below in Table 3-37 – OEB Appendix 2-H. Year over year variance analysis will follow with a discussion on those variances over $50,000.

Table 3-37 OEB Appendix 2-H Other Operating Revenue

Appendix 2-H
Other Operating Revenue

USoA #	USoA Description	2016 Actual[2]	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
		2016	2017	2018	2019	2020	2021	2022
	Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	**Specific Service Charges**	-$ 65,796	-$ 108,781	-$ 117,560	-$ 108,676	-$ 163,733	-$ 91,153	-$ 91,153
4225	**Late Payment Charges**	-$ 122,163	-$ 42,630	-$ 97,310	-$ 93,143	-$ 86,403	-$ 79,871	-$ 75,000
4082	**Retail Services Revenues**							
4210	Rent from Electric Property	-$ 46,279	-$ 46,329	-$ 49,745	$ -	$ -	$ -	$ -
4215	Other Utility Operating Income	-$ 10,445	$ 5,126	$ -	-$ 2,314	-$ 6,928	-$ 5,000	-$ 5,964
4220	Other Electric Revenues	$ 17,998	$ -	$ -	$ -	-$ 9,741		$ -
4305	Regulatory Debits	$ 163,489						
4320	Expenses of Electric Plant Leased to Others	$ 12						
4325	Revenues from Merchandise	$ -						
4355	Gain on Disposition of Utility and Other Property	-$ 50,385						
4375	Revenues from Non Rate-Regulated Utility Operations	-$ 917,618	-$ 721,598	-$ 816,572	-$ 711,014	-$ 651,522	-$ 586,034	-$ 464,751
4380	Expenses of Non Rate-Regulated Utility Operations	$ 470,223	$ 257,651	$ 418,032	$ 342,822	$ 225,375	$ 342,821	$ 317,340
4385	Non Rate-Regulated Utility Rental Income	$ -	$ -	$ -	-$ 65,905	-$ 66,363	-$ 66,134	-$ 66,248
4405	Interest and Dividend Income	-$ 56,444	-$ 77,374	-$ 128,220	-$ 196,293	-$ 141,846	-$ 100,971	-$ 100,971
Specific Service Charges		-$ 65,796	-$ 108,781	-$ 117,560	-$ 108,676	-$ 163,733	-$ 91,153	-$ 91,153
Late Payment Charges		-$ 122,163	-$ 42,630	-$ 97,310	-$ 93,143	-$ 86,403	-$ 79,871	-$ 75,000
Other Operating Revenues		-$ 38,726	-$ 41,203	-$ 49,745	-$ 2,314	-$ 16,669	-$ 5,000	-$ 5,964
Other Income or Deductions		-$ 390,723	-$ 541,321	-$ 526,760	-$ 630,389	-$ 634,356	-$ 410,318	-$ 314,630
Total		-$ 617,407	-$ 733,934	-$ 791,375	-$ 834,522	-$ 901,161	-$ 586,342	-$ 486,747

2016 Actual Comparison to 2017 Actual – Other Operating Revenue

Table 3-38 below summarizes the variance by account description followed by a discussion on those variances over $50,000.

Table 3-38

Other Revenues	2016	2017	Diff. $	Diff. %
Specific Service Charges	$65,796	$108,781	$42,985	65%
Late Payment Charges	$122,163	$42,630	-$79,533	-65%
Other Operating Revenues	$38,726	$41,203	$2,477	6%
Other Income or Deductions	$390,723	$541,321	$150,598	39%
Total	**$617,407**	**$733,934**	**$116,527**	**19%**

Late Payment Charges decreased materially from 2016 to 2017. This was a result of E.L.K. Energy promoting the new Ontario Electricity Support Program (start date May1/2017), budget plan and arrears management plan in order to assist customers with managing to pay their bills.

Other Income or Deductions declined by $150,598 from 2016 to 2017.

2017 Actual Comparison to 2018 Actual – Other Operating Revenue

Table 3-39

Other Revenues	2017	2018	Diff. $	Diff. %
Specific Service Charges	$108,781	$117,560	$8,779	8%
Late Payment Charges	$42,630	$97,310	$54,680	128%
Other Operating Revenues	$41,203	$49,745	$8,542	21%
Other Income or Deductions	$541,321	$526,760	-$14,561	-3%
Total	**$733,934**	**$791,375**	**$57,441**	**8%**

Late Payment Charges increased by $54,680 from 2017 to 2018, which represented a return to a typical level of Large Payment Charges following a large decline in 2017 as explained in 2016.

2018 Actual Comparison to 2019 Actual – Other Operating Revenue

Table 3-40

Other Revenues	2018	2019	Diff. $	Diff. %
Specific Service Charges	$117,560	$108,676	-$8,884	-8%
Late Payment Charges	$97,310	$93,143	-$4,167	-4%
Other Operating Revenues	$49,745	$2,314	-$47,431	-95%
Other Income or Deductions	$526,760	$630,389	$103,630	20%
Total	**$791,375**	**$834,522**	**$43,147**	**5%**

Other Income or Deductions increased materially from 2018 to 2019. The increase comes principally from the introduction of Non Rate-Regulated Utility Rental Income in 2019 which persists through to the Test Year.

2019 Actual Comparison to 2020 Actual – Other Operating Revenue

Table 3-41

Other Revenues	2019	2020	Diff. $	Diff. %
Specific Service Charges	$108,676	$163,733	$55,057	51%
Late Payment Charges	$93,143	$86,403	-$6,740	-7%
Other Operating Revenues	$2,314	$16,669	$14,355	620%
Other Income or Deductions	$630,389	$634,356	$3,967	1%
Total	**$834,522**	**$901,161**	**$66,639**	**8%**

Specific Service Charges increased by $55,057 from 2019 to 2020. This was a result of increased customer requests for specific service calls, lawyer letters and credit checks.

2020 Actual Comparison to 2021 Bridge – Other Operating Revenue

Table 3-42

Other Revenues	2020	2021 Bridge	Diff. $	Diff. %
Specific Service Charges	$163,733	$91,153	-$72,580	-44%
Late Payment Charges	$86,403	$79,871	-$6,532	-8%
Other Operating Revenues	$16,669	$5,000	-$11,669	-70%
Other Income or Deductions	$634,356	$410,318	-$224,038	-35%
Total	**$901,161**	**$586,342**	**-$314,819**	**-35%**

Specific Service Charges are forecast to decrease materially from 2020 to the 2021 Bridge Year, returning to a more typical level after high Specific Service Charges revenues in 2020.

Other Income or Deductions is forecast to decrease by $224,038 from 2020 to the 2021 Bridge Year. This increase is caused by a decrease in Revenues from Non Rate-Regulated Utility Operations and an increase in Expenses of Non Rate-Regulated Utility Operations.

Windup of CDM Revenue and expenses and affordability trust fund and dramatic decrease in customer related non rate regulated requests for service due to COVID 19 restrictions.

2021 Bridge Comparison to 2022 Test – Other Operating Revenue

Table 3-43

Other Revenues	2021 Bridge	2022 Test Year	Diff. $	Diff. %
Specific Service Charges	$91,153	$91,153	$-	0%
Late Payment Charges	$79,871	$75,000	-$4,871	-6%
Other Operating Revenues	$5,000	$5,964	$964	19%
Other Income or Deductions	$410,318	$314,630	-$95,688	-23%
Total	**$586,342**	**$486,747**	**-$99,595**	**-17%**

Other Income or Deductions is forecast to decrease materially from the 2021 Bridge Year to the 2022 Test Year. The decrease is due to a decline in Revenues from Non Rate-Regulated Utility Operations, which is partially offset by a decline in Expenses of Non Rate-Regulated Utility Operations.

Other operating revenues have declined materially since 2020 because CDM revenue and expenses have finalized and decreases in customer-related non rate-regulated requests for service due to COVID 19 restrictions.

3.2 Specific Service Charges

E.L.K. is proposing the current specific service charges be maintained in this application.

3.3 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. and its shareholder the Town of Essex. Details of E.L.K.'s affiliates are provided in Exhibit 4, Tab 5.