Table of Contents

Load and Revenue Forecast

Ex.3/Tab 1/Sch.1 - Introduction

The evidence presented in this exhibit provides information supporting the revenues derived from activities regulated by the Ontario Energy Board. Actual operating revenues from regulated operations are derived mainly from fixed and variable tariff charges and specific service charges. Rideau St. Lawrence Distribution Inc. ("RSL") revenues are collected from six (6) customer classes:

1. Residential;
2. General Service less than 50 kW;
3. General Service 50 to 4,999 kW;
4. Unmetered Scattered Load ("USL");
5. Sentinel Lighting; and
6. Street Lighting.

RSL does not anticipate any changes in its customer classes.

This exhibit also describes RSL's load and customer count forecasts. The load forecast methodology and assumptions are described in detail within this Exhibit.

The evidence herein is organized according to the following topics:

1. Revenue and Load Forecast
2. Accuracy of Load Forecast and Variance Analysis, and
3. Other Revenues.

Ex.3/Tab 1/Sch.2 - Overview of Revenue Forecast

RSL is proposing a total Service Revenue Requirement of $3,360,105 for the 2022 Test Year. This amount includes a Base Revenue Requirement of $3,152,487 plus revenue offsets of $207,618 to be recovered through Other Distribution Revenue.

The following Table 3.1 summarizes RSL's total Operating Revenue. The 2022 Test Year Base Revenues are projected by applying the proposed rates to weather normalized load forecasts based upon the methodology described within this rate Application. For the 2016 - 2020 Actual data, the revenue is derived from the actual energy consumption by each class.

Table 3.1: Summary of Operating Revenue

	2016 Board Approved	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Bridge Year	2022 Test Year
Base Revenue								
Residential	1,530,713	1,412,658	1,500,818	1,609,148	1,623,109	1,634,619	1,633,051	2,072,305
GS < 50 kW	494,424	466,732	495,355	503,343	531,693	506,733	488,346	502,426
GS 50 to 4999 kW	450,385	419,957	425,839	456,243	460,313	454,448	436,424	442,161
Sentinel Lights	8,220	6,474	7,064	7,499	7,970	7,969	7,898	9,487
Street Lighting	94,907	98,403	127,247	101,590	97,216	99,153	96,242	109,634
Unmetered and Scattered	13,785	12,979	13,087	13,921	14,140	13,949	14,247	16,474
Subtotal	**2,592,434**	**2,417,203**	**2,569,409**	**2,691,743**	**2,734,440**	**2,716,871**	**2,676,208**	**3,152,487**
Other Distribution Revenue								
Specific Service Charges	116,376	116,376	97,264	81,167	78,315	106,104	107,197	23,875
Late Payment Charges	75,314	75,314	70,390	58,516	55,106	69,107	60,000	60,000
Other Operating Revenues	72,038	74,017	76,255	77,819	80,834	85,311	81,710	128,243
Other Income or Deductions	6,526	18,594	56,606	14,395	12,433	6,207	-2,500	-4,500
Subtotal	**270,254**	**284,301**	**300,514**	**231,897**	**226,688**	**266,728**	**246,407**	**207,618**
Service Revenue Total	**2,862,688**	**2,701,503**	**2,869,924**	**2,923,640**	**2,961,128**	**2,983,600**	**2,922,615**	**3,360,105**

Ex.3/Tab 1/Sch.3 - Proposed Load Forecast

The following section of the application covers the approach taken to determine the Load Forecast. This section also covers economic assumptions and data sources for customer and load forecasts. It explains wholesale purchases and subsequent adjustments to the wholesale purchases. It also provides the rationale behind each variable used in the regression analysis. Lastly, it presents the regression results and explains how they were used to determine the forecast for the 2022 Test Year.

Table 3.2 below presents the actual and forecasted trends for customer/connection counts, kWh consumption and billed kW demand.

Table 3.2: Customer and Volume Trend Table

				Actual							Forecast	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Weather Normal	2022 Weather Normal
Actual kWh Purchases	118,004,234	115,280,490	116,595,095	115,949,736	112,684,386	109,734,472	107,186,399	110,285,589	108,750,347	108,483,759		
Predicted kWh Purchases	117,538,829	116,675,268	115,401,698	113,813,986	112,653,587	112,051,388	108,951,913	110,816,286	108,141,943	106,909,610	104,901,184	**103,508,233**
% Difference	-0.4%	1.2%	-1.0%	-1.8%	0.0%	2.1%	1.6%	0.5%	-0.6%	-1.5%		
CDM Purchase Adjustment												-
Predicted kWh Purchases after CDM											104,901,184	**103,508,233**
Billed kWh	108,810,680	106,397,501	107,193,012	107,593,001	104,215,272	101,711,018	98,838,309	101,848,630	100,219,092	99,512,150	96,816,968	**95,531,364**
By Class												
Residential												
Customers	5,004	5,025	5,035	5,040	5,054	5,071	5,089	5,105	5,113	5,107	5,118	**5,129**
kWh	43,287,278	42,116,982	42,764,838	42,272,228	40,938,311	40,480,043	39,379,535	42,538,789	42,182,601	43,593,897	43,191,009	**43,536,196**
General Service < 50 kW												
Customers	769	770	759	754	742	740	741	739	735	731	729	**727**
kWh	20,434,679	19,669,183	20,094,189	20,739,791	20,653,133	20,348,623	19,816,423	20,252,449	19,700,297	18,533,558	17,747,657	**17,290,656**
General Service 50 to 4,999 kW												
Customers	66	67	65	64	64	64	63	65	62	61	60	**59**
kWh	43,031,208	42,549,997	42,246,503	42,584,416	40,918,077	39,456,019	38,286,678	37,703,866	37,004,001	36,107,964	34,605,282	**33,433,327**
kW	130,762	125,469	133,148	131,947	125,734	115,477	111,704	112,493	109,764	109,147	102,549	**99,076**
Street Lights												
Connections	1,703	1,703	1,707	1,707	1,711	1,711	1,711	1,711	1,711	1,712	1,712	**1,712**
kWh	1,453,874	1,453,808	1,447,303	1,321,505	1,052,678	773,158	716,670	714,489	691,963	644,755	642,914	**642,914**
kW	3,941	3,919	3,920	3,620	2,862	2,070	1,945	1,939	1,887	1,744	1,744	**1,744**
Sentinel Lights												
Connections	75	75	75	75	75	73	71	72	74	73	73	**73**
kWh	108,262	108,266	108,281	109,302	109,502	106,791	99,906	97,401	98,084	96,660	94,789	**92,955**
kW	300	300	300	302	302	302	276	270	272	269	263	**258**
Unmetered Loads												
Connections	59	60	61	61	59	58	57	57	57	57	57	**57**
kWh	495,379	499,265	531,898	565,759	543,571	546,384	539,097	541,637	542,146	535,316	535,316	**535,316**
Total												
Customer/Connections	7,676	7,700	7,702	7,701	7,705	7,717	7,732	7,749	7,752	7,741	7,749	**7,757**
kWh	108,810,680	106,397,501	107,193,012	107,593,001	104,215,272	101,711,018	98,838,309	101,848,630	100,219,092	99,512,150	96,816,968	**95,531,364**
kW from applicable classes	135,003	129,688	137,368	135,869	128,898	117,849	113,925	114,702	111,923	111,159	104,556	**101,078**

Ex.3/Tab 1/Sch.4 - Load Forecast Methodology

The purpose of weather normalization is to predict future customer consumption based on normal weather conditions. To achieve this goal, the relationship between weather change and customer consumption must be defined. RSL reviewed the various processes used by earlier Cost of Service applicants and is proposing to adopt a weather normalization methodology using Multifactor Regression ("MR") for its load forecast. RSL is proposing to adopt a weather normalization forecasting method that is similar to RSL's 2016 Cost of Service (EB-2015-0100).

In summary, RSL has used the regression analysis methodology to determine a prediction model. With regards to the overall process of load forecasting, it is RSL's view that conducting a regression analysis on historical purchases to produce an equation that will predict energy purchases is appropriate. RSL knows by month the exact number of kWh purchased from the IESO for use by customers of RSL. 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 result of the regression analysis produces 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 RSL's Test Year, which is converted to Billed kWh by rate class. A detailed explanation of the process is provided later in this Exhibit.

RSL chooses not to use a regression analysis on an individual rate class basis as the Utility does not have reliable data available prior to 2012. RSL has decided, based on past Cost of Service applications and since the Board has accepted the wholesale purchase approach in the past, to prepare the regression analysis based on wholesale purchase volumes.

The following tables provide the material to support the weather normalized load forecast used by RSL in this application. Tables 3.3, 3.4 (in Ex.3/Tab 1/Sch.6), and 3.5 (in Ex.3/Tab 1/Sch.7) below provide a summary of the weather normalized load and customer/connection forecast used in this section for the 2022 Forecast period. RSL has provided 2011-2020 Actual Data, unless otherwise noted. The years 2011 to 2020 are weather actual while 2021 and 2022 are weather normalized.

The total weather normalized purchase forecast is then converted to the forecast of billed energy by rate class on weather normalized basis. Weather normalized historical data is also provided for comparison purpose, as required in the filing requirements.

Ex.3/Tab 1/Sch.5 - Economic Overview

Economic conditions in RSL's service territory remain relatively unchanged from past years. Population saw a smaller decrease (1%) over the 2011-2016 census period than the 2011-2006 census period (6%). Residential customers account for 86% of total RSL customers and over 40% of kWh consumption approximately since 2011.

The changes in RSL customer numbers have been small and inconsistent among customer classes over past years. While 2020 actual residential customer count is 2.1% higher than 2011 count, GS <50 kW and GS 50 to 4,999 kW rate classes for 2020 saw a decline of 4.9% and 7.6% respectively compared to 2011.

Residential customer number increased from 5,071 in the 2016 Board Approved number to 5,107 in 2020. GS < 50 kW customers decreased from 740 in the 2016 Board Approved number to 731 in 2020. GS 50 to 4,999 kW customers decreased from 64 in the 2016 Board Approved number to 61 in 2020. The changes in the customer numbers are reflective of the overall business climate in this region.

RSL is projecting a small increase in Residential customer number and a continued small decrease in the GS<50 kW rate class and GS 50 to 4,999 kW rate class. There is virtually no change in the other customer classes. Overall, the trend table (Table 3.12 and 3.13) shows the customer numbers remain stable.

Ex.3/Tab 1/Sch.6 - Wholesale Purchases

RSL purchases its power from the Independent Electricity System Operator ("IESO"). Table 3.3 outlines the unadjusted monthly wholesale purchases:

Table 3.3: Unadjusted Wholesale Purchases 2011-2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	12,132,585	11,698,538	11,999,817	12,521,267	12,178,875	10,989,034	10,464,420	11,412,898	11,356,602	10,475,746
February	10,866,454	10,394,346	10,701,983	10,693,642	11,445,612	10,461,168	9,412,266	9,438,920	9,954,781	9,817,627
March	11,067,608	9,868,346	10,574,475	11,270,883	10,922,675	9,905,017	10,449,490	9,778,013	10,085,138	9,509,806
April	9,072,415	8,701,738	9,116,700	9,026,483	8,724,747	8,448,753	8,073,164	8,757,348	8,524,502	8,024,763
May	8,656,277	8,473,818	8,204,917	8,278,885	8,214,246	7,971,052	7,836,699	7,670,323	7,801,649	7,939,253
June	8,776,092	9,028,518	8,279,408	8,570,154	8,082,238	8,152,771	7,883,609	7,836,187	7,764,971	8,515,025
July	9,998,192	9,776,500	9,591,758	9,070,654	8,969,560	9,080,665	8,447,553	9,698,694	9,557,985	10,333,884
August	9,450,654	9,430,200	9,610,958	8,980,123	8,928,793	9,517,733	8,640,906	9,512,830	8,688,391	9,206,403
September	8,631,923	8,456,345	8,187,217	8,455,877	8,487,586	8,054,076	8,076,439	8,248,876	7,563,722	7,627,587
October	8,921,515	8,663,345	8,725,825	8,663,323	8,442,808	8,074,621	7,983,759	8,273,205	7,908,177	8,195,562
November	9,478,715	9,765,918	9,926,917	9,594,308	8,788,398	8,792,790	9,161,805	9,371,732	9,264,874	8,711,857
December	10,916,892	10,958,364	11,614,675	10,753,031	9,419,775	10,206,407	10,688,479	10,215,218	10,207,018	10,055,028
Total	**117,969,322**	**115,215,976**	**116,534,650**	**115,878,630**	**112,605,314**	**109,654,088**	**107,118,589**	**110,214,244**	**108,677,811**	**108,412,540**
Change %		**97.7%**	**101.1%**	**99.4%**	**97.2%**	**97.4%**	**97.7%**	**102.9%**	**98.6%**	**99.8%**

The RSL load has been declining over the past 10 years, except for 2013 and 2018 during which lower temperature in winter or higher temperature in summer contributed to a higher consumption. The wholesale purchases dropped by 8.1% from 2011 to 2020. This decline is primarily a reflection of the effects of energy efficiency as a result of the implementation of conservation measures and conservation awareness

To better represent the trend in wholesale purchases, RSL adjusted its base wholesale purchases prior to running the regression analysis. The purpose of the adjustment was to normalize the data as much as possible. The following adjustment was made to the wholesale purchases:

- RSL adjusted the wholesale purchases to add back microFIT generation kWh data since 2011. This adjustment was made because the generated kWh volume is consumed within the utility's service territory. If there was no generation activity, RSL's wholesale purchases would have been higher in order to meet customer demand.

RSL's "Adjusted Wholesale Purchases" are summarized below in Table 3.4. The "Adjusted kWh Wholesale Purchases" represented in this table were used in RSL's regression analysis.

Table 3.4: Adjusted Wholesale Purchases 2011 - 2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	12,134,384	11,700,033	12,001,631	12,523,093	12,181,568	10,991,287	10,466,845	11,414,673	11,358,371	10,476,516
February	10,867,487	10,398,024	10,704,529	10,696,289	11,447,914	10,463,596	9,415,533	9,441,551	9,958,176	9,819,257
March	11,070,010	9,874,057	10,579,437	11,276,393	10,929,864	9,911,616	10,455,799	9,783,376	10,092,612	9,516,021
April	9,075,017	8,708,404	9,123,026	9,034,518	8,733,624	8,458,651	8,080,526	8,763,985	8,531,518	8,032,449
May	8,659,105	8,482,332	8,213,090	8,288,462	8,224,666	7,981,694	7,844,439	7,680,410	7,809,400	7,949,233
June	8,779,481	9,036,890	8,286,351	8,579,621	8,091,482	8,163,034	7,891,979	7,845,956	7,774,207	8,525,132
July	10,001,974	9,784,641	9,600,048	9,079,781	8,980,189	9,091,044	8,455,074	9,709,721	9,568,434	10,343,833
August	9,453,692	9,437,648	9,618,514	8,988,796	8,937,908	9,527,175	8,648,638	9,521,412	8,698,039	9,215,375
September	8,637,539	8,462,407	8,193,461	8,463,316	8,495,280	8,062,338	8,083,641	8,256,576	7,571,102	7,634,417
October	8,925,375	8,667,157	8,730,286	8,667,688	8,448,428	8,079,602	7,989,198	8,277,307	7,912,987	8,199,976
November	9,481,486	9,769,298	9,929,183	9,596,696	8,792,027	8,796,258	9,164,555	9,373,459	9,266,907	8,714,890
December	10,918,684	10,959,599	11,615,539	10,755,083	9,421,435	10,208,176	10,690,172	10,217,163	10,208,594	10,056,661
Total	**118,004,234**	**115,280,490**	**116,595,095**	**115,949,736**	**112,684,386**	**109,734,472**	**107,186,399**	**110,285,589**	**108,750,347**	**108,483,759**
Change %		**97.7%**	**101.1%**	**99.4%**	**97.2%**	**97.4%**	**97.7%**	**102.9%**	**98.6%**	**99.8%**

Ex.3/Tab 1/Sch.7 - Variables Used

In RSL's case, the variation in monthly electricity consumption is influenced by seven main factors:

- Weather (e.g. heating and cooling), which is by far the most dominant effect for most systems;
- Number of days per month;
- Seasonality, in this case, winter/summer flag factor;
- Number of workdays in the month;
- Trend;
- August flag.

Heating and Cooling

In order to determine the relationship between observed weather and energy consumption, monthly weather observations describing the extent of heating or cooling required within the month are necessary. Environment Canada publishes monthly observations on heating degree days (HDD) and cooling degree days (CDD) for selected weather stations across Canada. Heating degree-days for a given day are the number of Celsius degrees that the mean temperature is below 18°C. Cooling degree-days for a given day are the number of Celsius degrees that the mean temperature is above 18°C. Consistent with RSL's 2016 Cost of Service Rate Application, the monthly HDD and CDD as reported at the Ottawa International Airport Weather Station were used in this application.

RSL has adopted the 10-year average from 2011 to 2020 as the definition of weather normal. Our view is that a 10-year average based on the most recent ten calendar years available is a reasonable compromise that likely reflects the "average" weather experienced in recent years. Many other LDCs have also adopted this definition for the purposes of cost-of-service rebasing. The following table outlines the monthly weather data used in the regression analysis.

Table 3.5: HDD and CDD

Heating Degree Days (HDD)

	20 year										10 year										Use this
Month	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**10 Year Average**
January	848.2	709.4	977.3	1,045.3	920.7	733.5	797.1	754.2	979.5	789.2	888.7	831.0	839.9	918.3	968.2	804.8	732.5	881.5	934.9	755.6	**855.5**
February	746.8	668.8	841.5	750.0	700.6	720.9	820.0	774.3	711.5	655.8	731.6	671.4	728.5	793.2	957.8	756.3	662.1	644.6	762.2	725.9	**743.4**
March	652.3	651.7	675.0	559.2	668.8	600.4	643.0	721.1	598.3	460.7	634.6	460.3	612.9	783.6	718.6	591.4	731.7	611.6	692.3	561.7	**639.9**
April	338.1	358.8	424.6	377.8	324.8	321.6	361.1	299.6	334.3	258.1	347.4	363.3	381.1	384.2	352.6	433.8	319.4	454.4	398.8	407.8	**384.3**
May	109.6	227.6	154.1	166.2	205.0	128.2	157.3	185.4	181.6	112.3	142.8	102.4	121.2	127.3	94.2	145.4	190.4	110.4	213.2	200.2	**144.7**
June	25.5	61.7	38.9	54.0	16.1	27.6	34.2	22.4	50.4	37.6	18.5	31.4	58.1	20.3	45.2	36.3	52.1	39.0	55.1	44.7	**40.1**
July	21.6	5.3	2.0	1.8	2.9	0.3	11.8	0.3	13.1	4.5	-	-	7.7	8.8	9.3	3.4	4.8	-	-	-	**3.4**
August	4.7	6.8	13.3	29.8	8.4	18.2	20.1	14.4	26.1	14.7	2.3	8.4	13.4	21.4	5.6	1.4	26.9	3.6	6.3	25.5	**11.5**
September	89.9	56.9	60.4	66.8	59.2	121.0	76.0	95.4	106.5	112.0	55.4	127.3	133.2	110.3	48.4	75.1	69.8	96.8	104.0	138.5	**95.9**
October	266.0	370.0	336.6	287.0	269.7	335.7	227.5	321.8	355.5	311.0	259.1	259.9	265.2	257.9	337.3	291.1	197.3	359.1	286.8	327.4	**284.1**
November	410.1	535.2	468.8	484.3	484.2	417.3	517.0	502.8	417.4	491.6	392.9	541.7	560.8	510.6	429.0	449.5	540.8	599.5	611.0	429.9	**506.6**
December	602.2	728.3	722.2	814.9	762.0	610.0	787.7	796.7	759.4	731.4	672.2	719.1	858.2	696.4	519.9	733.4	871.3	766.6	717.2	673.1	**722.7**

Cooling Degree Days (CDD)

Month	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**10 Year Average**
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
February	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
April	-	10.3	-	1.9	-	-	-	-	2.5	1.6	-	3.2	-	-	-	-	1.2	-	-	-	**0.4**
May	13.7	6.5	0.1	4.0	1.9	16.9	17.3	-	3.2	38.2	16.7	21.0	15.3	8.8	25.3	28.7	9.1	15.7	-	25.7	**16.6**
June	75.9	39.5	54.8	27.1	111.6	48.2	66.9	60.5	44.9	33.4	59.1	70.4	39.4	54.9	20.3	52.0	45.0	36.2	32.0	70.4	**48.0**
July	78.4	121.0	90.1	86.5	128.6	130.6	65.1	78.9	42.9	150.8	137.5	142.2	114.9	62.8	100.0	112.6	63.8	156.9	133.1	185.8	**121.0**
August	127.5	106.5	106.2	47.5	115.4	68.1	79.3	49.5	82.1	93.0	82.3	97.6	57.2	55.8	67.4	124.6	51.0	115.4	54.8	70.4	**77.7**
September	25.9	51.4	23.7	11.1	33.1	5.3	25.7	25.0	5.0	26.2	32.9	20.6	10.1	21.6	46.5	24.9	52.0	49.5	9.1	9.0	**27.6**
October	-	4.1	-	-	6.4	-	1.9	-	-	-	1.4	-	0.7	3.1	-	-	0.4	0.7	-	-	**0.6**
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**

Number of Days per Month

RSL used a "Days per month" variable because it identifies less/more days in calendar months.

Winter and Summer Flag

RSL used a winter and summer flag. This utility-specific flag was created following the analysis of the Wholesale purchases which showed higher purchases during the winter and summer seasons. The assumption is that with the same temperature in winter and summer as in spring or fall consumers are using more electricity to heat or cool their homes in winter or summer, and as such would have an impact on the wholesale purchases. The variable applies to the months of January - March, June – September, and December.

Number of Workdays in Month

RSL used a variable of "Number of Workdays in Month" to identify high usage months due to workdays. The assumption is that while residential customers consume less electricity on workdays industrial and commercial customers consume more energy as they are fully open on workdays.

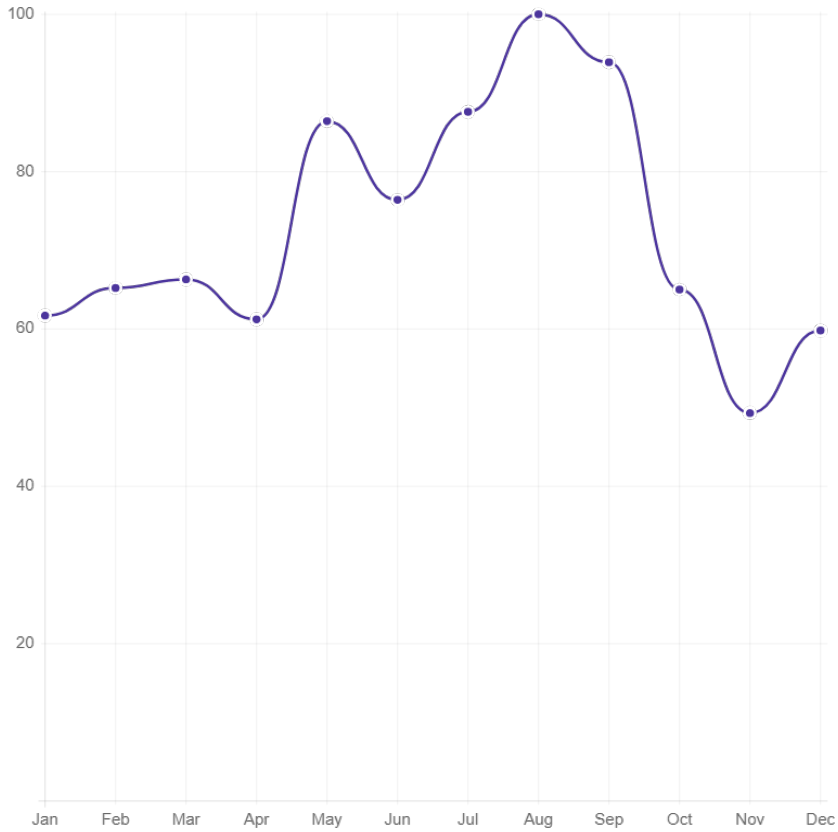
Trend

A Trend variable was used, indicating 1 in January 2011, and increasing by one each month, reaching 120 in the last month of the regression, December 2020. The time trend reflects a gradual decline in consumption that is not explained by the other variables. A number of the potential factors may be related to the trend, including conservation activities from and outside of the CFF, improved building efficiency, and an increase in the proportion of customers living in apartments, etc. A Trend variable has been used in the COS of ENWIN Utilities Ltd.'s (EB-2019-0032) and the COS of Greater Sudbury Hydro Inc.'s (EB-2019-0037).

August Flag

An August Flag variable was used to improve the regression model. A positive coefficient for this variable indicates a higher consumption in August that is not explained by temperature, season, or other variables. The higher consumptions in August may be related to peak tourism taking place in August in our service territories, as shown in the below chart. Similar month variables were used in the COS of ENWIN Utilities Ltd.'s (EB-2019-0032).

Most Popular Months to Visit in Prescott, ON



Tourists Seeking Accommodations

Similar charts for Morrisburg and Iroquois show peak tourism in August

From Champion Traveler (https://championtraveler.com/dates/best-time-to-visit-prescott-on-ca/)

With a combination of wholesale purchases and the variables listed above, a multiple regression analysis was used to develop an equation describing the relationship between monthly actual wholesale kWh and the explanatory variables.

To project the adjusted wholesale purchases for the test year, the model uses the simple average of the last 10 years of historical data for HDD, CDD. Actual was used for Winter/Summer Flag, Days in the Month, Number of Workdays in the Month, and August Flag. For Trend variable, numbers from 1 to 120 were assigned to each month in ascending order with 1 in January 2011, and 120 in the last month of the regression, December 2020.

Origin of Variables

- HDD: Environment Canada, weather station of OTTAWA MACDONALD-CARTIER INT'L A: 2001-2011 Weather station of OTTAWA INTL A (same location with a changed name): 2012-2020
- HDD: Environment Canada, weather station of OTTAWA MACDONALD-CARTIER INT'L A: 2001-2011, Weather station of OTTAWA INTL A (same location with a changed name): 2012-2020
- Winter/Summer Flag: Computed by RSL
- Day per Month: Computed by RSL
- Number of Workdays in Month Computed by RSL
- Trend Computed by RSL
- August Flag Computed by RSL

In preparing its Load Forecast, RSL also considered but rejected the following variables:

1) Customer Count (residential + commercial + industrial) – this was excluded because the variable yielded a negative coefficient, which is unintuitive.
2) GDP - this was also excluded because the variable yielded a negative coefficient, which is unintuitive.

Four scenarios tested by RSL can be found in Appendix 3.2 - "Regression Scenarios Performed."

Ex.3/Tab 1/Sch.8 - Regression Results

Table 3.6 below presents the regression results used to determine the load forecast Monthly data used in the regression analysis is from 2011 to 2020.

Table 3.6: Correlation/Regression Results

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.983719412
R Square	0.967703882
Adjusted R Square	0.965685374
Standard Error	215570.5034
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	7	1.55951E+14	2.22787E+13	479.4155752	2.28898E-80
Residual	112	5.20471E+12	46470641941		
Total	119	1.61156E+14			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1822632.67	784550.9886	2.323153876	0.021976387	268145.4536	3377119.886	268145.4536	3377119.886
HDD	4457.413749	99.7690347	44.67732661	3.21163E-73	4259.734195	4655.093302	4259.734195	4655.093302
CDD	15778.80625	812.8384166	19.4119839	1.24553E-37	14168.27113	17389.34138	14168.27113	17389.34138
Number of Days in Month	152445.4293	28655.74234	5.319891123	5.38005E-07	95667.74911	209223.1095	95667.74911	209223.1095
Winter/Summer Flag	341350.9707	51918.50703	6.574745504	1.60914E-09	238481.1042	444220.8372	238481.1042	444220.8372
Number of Workdays in Month	55839.53733	20963.49515	2.66365589	0.008869551	14303.05889	97376.01577	14303.05889	97376.01577
Trend	-9285.500991	568.8073756	-16.32450877	2.16846E-31	-10412.51989	-8158.482089	-10412.51989	-8158.482089
August Flag	430435.1952	80291.22335	5.36092461	4.49233E-07	271348.4283	589521.9621	271348.4283	589521.9621

The resulting regression equation yields an adjusted R-squared of 96.6%. When actual annual wholesale values are compared to annual values predicted by the regression equation, the mean absolute percentage error (MAPE) is 1.07%.

RSL then used the coefficients from the regression results to calculate predicted. The resulting equation is shown in Table 3.7.

Table 3.7: Regression Equation

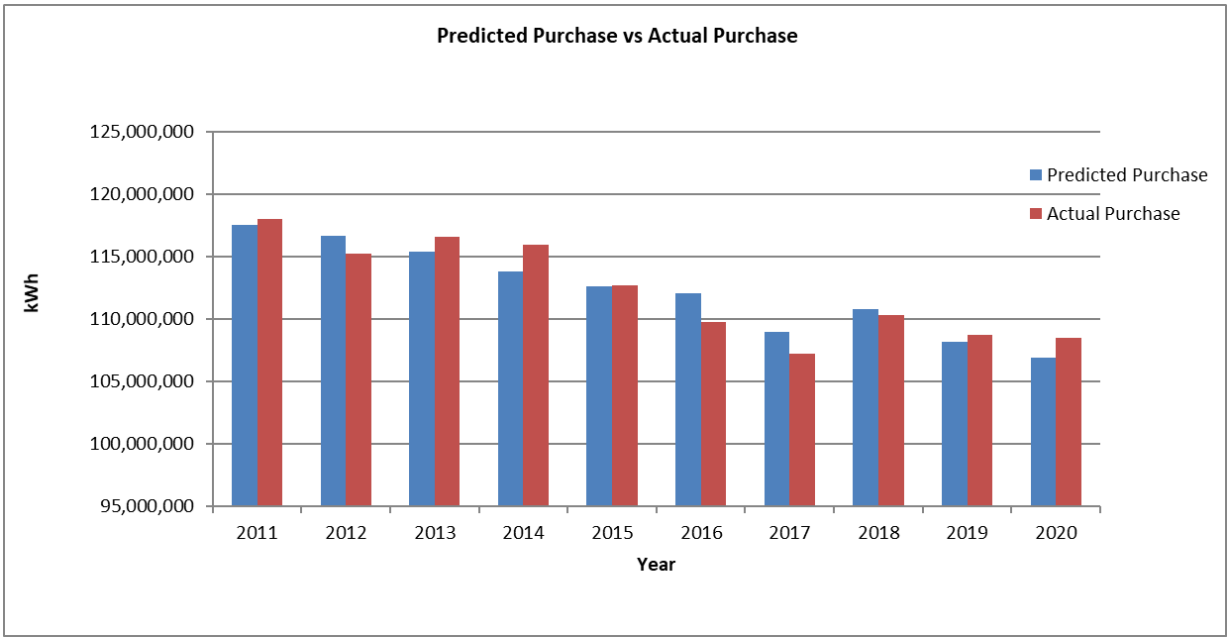
RSL Monthly Predicted kWh Purchases					
		=	Constant of		1,822,632.67
		+	Heating Degree	*	4,457.41
		+	Cooling Degree	*	15,778.81
		+	Number of Days in Month	*	152,445.43
		+	Winter/Summer Flag	*	341,350.97
		+	Number of Workdays in Month	*	55,839.54
		+	Trend	*	(9,285.50)
		+	August Flag	*	430,435.20

Table 3.8 as seen below, demonstrates the actual and predicted wholesale purchases from January 1, 2011 – December 31, 2020. Table 3.9 provides a graph showing annual Predicted Purchases versus Actual Purchases.

Table 3.8: Predicted Purchases vs Actual Purchased

Year	Predicted Purchase	Actual Purchase	kWh Variance	% Variance	% Variance Abs
2011	117,538,829	118,004,234	(465,405)	-0.39%	0.39%
2012	116,675,268	115,280,490	1,394,778	1.21%	1.21%
2013	115,401,698	116,595,095	(1,193,397)	-1.02%	1.02%
2014	113,813,986	115,949,736	(2,135,750)	-1.84%	1.84%
2015	112,653,587	112,684,386	(30,799)	-0.03%	0.03%
2016	112,051,388	109,734,472	2,316,916	2.11%	2.11%
2017	108,951,913	107,186,399	1,765,514	1.65%	1.65%
2018	110,816,286	110,285,589	530,697	0.48%	0.48%
2019	108,141,943	108,750,347	(608,405)	-0.56%	0.56%
2020	106,909,610	108,483,759	(1,574,150)	-1.45%	1.45%
2021	**104,901,184**				
2022	**103,508,233**				
2022 Normal -10 year average	103,508,233				
2022 Normal -20 year trend	103,572,856				

Table 3.9: Predicted VS Actual



In accordance with the Filing Requirements, RSL has also provided a 2022 forecast using 20-year normal weather conditions. The impact of using both a 10-year average as well as a 20-

year trend on weather normalized wholesale purchases is presented in Table 3.10 and Table 3.11 respectively.

Table 3.10: Forecast Using a Ten-Year Average Weather Normalization

	HDD	CDD	Number of Days in Month	Winter/Summer Flag	Number of Workdays in Month	Trend	August Flag	Predicted Purchases (kWh)
Jan-22	855.5	-	31	1	20	133	-	10,585,107
Feb-22	743.4	-	28	1	19	134	-	9,562,613
Mar-22	639.9	-	31	1	23	135	-	9,772,724
Apr-22	384.3	0.4	30	-	19	136	-	7,913,956
May-22	144.7	16.6	31	-	21	137	-	7,356,548
Jun-22	40.1	48.0	30	1	22	138	-	7,619,935
Jul-22	3.4	121.0	31	1	20	139	-	8,639,658
Aug-22	11.5	77.7	31	1	22	140	1	8,525,122
Sep-22	95.9	27.6	30	1	21	141	-	7,463,909
Oct-22	284.1	0.6	31	-	20	142	-	7,623,009
Nov-22	506.6	-	30	-	22	143	-	8,554,631
Dec-22	722.7	-	31	1	20	144	-	9,891,022
Total								**103,508,233**

Table 3.11: Forecast Using a Twenty-Year Average Weather Normalization

	HDD	CDD	Number of Days in Month	Winter/Summer Flag	Number of Workdays in Month	Trend	August Flag	Predicted Purchases (kWh)
Jan-22	843.6	-	31	1	20	133	-	10,532,000
Feb-22	736.7	-	28	1	19	134	-	9,533,143
Mar-22	636.3	-	31	1	23	135	-	9,756,754
Apr-22	390.0	0.3	30	-	19	136	-	7,937,071
May-22	149.7	16.9	31	-	21	137	-	7,382,378
Jun-22	42.8	46.9	30	1	22	138	-	7,614,863
Jul-22	1.8	121.3	31	1	20	139	-	8,638,242
Aug-22	13.2	75.2	31	1	22	140	1	8,494,809
Sep-22	106.3	25.9	30	1	21	141	-	7,483,059
Oct-22	287.3	0.5	31	-	20	142	-	7,634,663
Nov-22	522.6	-	30	-	22	143	-	8,626,070
Dec-22	733.7	-	31	1	20	144	-	9,939,805
Total								**103,572,856**

Ex.3/Tab 1/Sch.9 - Forecast of Customer Count

RSL has used a geometric mean function to determine the forecasted customer number for the 2022 Test Year. The geometric mean results as shown in Table 3.13 were analyzed by RSL and then further adjusted for known particulars. Historical customer counts and projected customer counts for the 2022 Test Year are presented in Table 3.12 below. The Customer Counts are presented in year-end format, which is consistent with RSL's 2016 Cost of Service Application. RSL is not proposing any changes in definition or composition of class.

Table 3.12: Number of Customers/Connections

	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lights	Sentinel Lights	Unmetered Loads	Total
2011	5,004	769	66	1,703	75	59	7,676
2012	5,025	770	67	1,703	75	60	7,700
2013	5,035	759	65	1,707	75	61	7,702
2014	5,040	754	64	1,707	75	61	7,701
2015	5,054	742	64	1,711	75	59	7,705
2016	5,071	740	64	1,711	73	58	7,717
2017	5,089	741	63	1,711	71	57	7,732
2018	5,105	739	65	1,711	72	57	7,749
2019	5,113	735	62	1,711	74	57	7,752
2020	5,107	731	61	1,712	73	57	7,741
2021	5,118	729	60	1,712	73	57	7,749
2022	**5,129**	**727**	**59**	**1,712**	**73**	**57**	**7,757**

Table 3.13: Growth Rate in Customer Numbers

	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lights	Sentinel Lights	Unmetered Loads
2011						
2012	1.0042	1.0013	1.0152	1.0000	1.0000	1.0169
2013	1.0020	0.9857	0.9701	1.0023	1.0000	1.0167
2014	1.0010	0.9934	0.9846	1.0000	1.0000	1.0000
2015	1.0028	0.9841	1.0000	1.0023	1.0000	0.9672
2016	1.0034	0.9973	1.0000	1.0000	0.9733	0.9831
2017	1.0035	1.0014	0.9844	1.0000	0.9726	0.9828
2018	1.0031	0.9973	1.0317	1.0000	1.0141	1.0000
2019	1.0016	0.9946	0.9538	1.0000	1.0278	1.0000
2020	0.9988	0.9946	0.9839	1.0006	0.9865	1.0000
2021	1.0021	0.9970	0.9904	1.0000	0.9946	1.0000
2022	1.0021	0.9970	0.9904	1.0000	0.9946	1.0000
Geomean	1.0021	0.9970	0.9904	1.0001	0.9946	0.9931

Residential

RSL has used a 5-year geometric mean of 1.0021 derived from the historical actuals (2016 to 2020) and proposed no revision to the customer growth projection shown in Table 3.13 above for this customer class. The Residential customer count in 2022 is projected to be 5,129, or 22 more than 2020 Actual.

General Service <50kW

RSL has used a 5-year geometric mean of 0.9970 derived from the historical actuals (2016 to 2020) and proposed no revisions to the customer growth projection shown in Table 3.13 above for this customer class. The projection of GS<50kW for 2022 is 727, or decreased by 4 from 2020 Actual.

General Service 50 to 4999kW

RSL has used a 5-year geometric mean of 0.9904 derived from the historical actuals (2016 to 2020) and proposed no revisions to the customer growth projection shown in Table 3.13 above for this customer class. The 2022 customer number is calculated to be 59, or 2 fewer than 2020 Actual.

Street Lights

RSL has adjusted a 5-year geometric mean of 1.0001 derived from the historical year actuals (2016 to 2020) and proposed to use the 2020 Actual for the 2022 Test Year for this rate class. The connection number of Street Lights has been stable since 2015 with 1 addition in 2020. RSL does not expect changes in the number of Street Lights Connection for the 2022 Test Year.

Sentinel Lights

RSL has used a 5-year geometric mean of 0.9946 derived from the historical actuals (2016 to 2020) and proposed no revisions to the customer growth projection shown in Table 3.13 above for this customer class. The 2022 customer number is calculated to be 73, the same as the 2020 Actual.

Unmetered Scattered Loads

RSL has adjusted a 5-year geometric mean of 0.9931 derived from the historical year actuals (2016 to 2020) and proposed to use the 2020 Actual for the 2022 Test Year projection for this customer class. The connection number of Unmetered Scattered Loads has remained unchanged for the past 4 years and RSL is not aware of any potential change in the near future.

Ex.3/Tab 1/Sch.10 - Determination of Weather Normalized Forecast

Total Weather Normalized Billed kWh

To determine the total weather normalized energy billed forecast, the total system weather normalized purchases forecast as determined by the regression analysis and presented in Ex.3/Tab 1/Sch.8 is adjusted by the proposed loss factor of 8.35% as presented in Ex.8 /Tab 1/Sch.12. Total predicted/forecasted wholesale purchase calculated for the 2022 Test Year is 103,508,233 kWh. With the proposed loss factor applied, the total weather normalized billed energy will be 95,531,364 kWh for the 2022 Test Year.

Average Consumption per Rate Class

The first 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.

RSL has applied a 5-year geometric growth rate of the average usage kWh per customer to determine the 2022 Test Year average forecasted consumption per customer prior to weather normalization.

For the rate classes of Residential, GS < 50 kW, GS 50 to 4,999 kW, and Sentinel, the geometric growth rate has been calculated based on the 5-year historical data from 2016-2020.

However, the 2020 Actual usage per customer/connection (i.e., growth rate of 1) has been applied to Unmetered Scattered Loads Class since the growth rate of 1 better reflects historical and most recent energy consumption trend for this rate class.

The 2022 Test Year average customer usage per rate class is equal to the growth rate adopted multiple 2020 class average customer usage for all rate classes except Street Lighting. The results are shown in Table 3.14.

2020 Actual consumption for Street Lights with a small adjustment for a 28-day February in 2022 has been used for the 2022 Test Year energy forecast for this rate class. RSL believes this treatment is an appropriate forecast for Street Lights. The actual consumption and average consumption per connection for Street Lights have dropped significantly since 2015 as a result

of Streetlight LED conversion. By 2020 all the municipalities in RSL's service area had gone through LED conversion for their streetlights. The number 376 in Table 3.14 representing kWh usage per customer/connection for Street Lights, is a backward calculation which is the forecasted class consumption divided by forecasted customer/connection number.

Table 3.14: Annual kWh Usage per Customer/Connection

	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lights	Sentinel Lights	Unmetered Loads
2011	8,651	26,573	651,988	854	1,443	8,396
2012	8,381	25,544	635,075	854	1,444	8,321
2013	8,494	26,475	649,946	848	1,444	8,720
2014	8,387	27,506	665,382	774	1,457	9,275
2015	8,100	27,834	639,345	615	1,460	9,213
2016	7,983	27,498	616,500	452	1,463	9,420
2017	7,738	26,743	607,725	419	1,407	9,458
2018	8,333	27,405	580,059	418	1,353	9,502
2019	8,250	26,803	596,839	404	1,325	9,511
2020	8,536	25,354	591,934	377	1,324	9,392
2021	8,626	24,885	582,882	376	1,298	9,392
2022	**8,717**	**24,424**	**573,969**	**376**	**1,273**	**9,392**
Adopted Growth Rate	1.0105	0.9815	0.9847	N/A	0.9806	1.0000
Calculated Geomean	1.0105	0.9815	0.9847	0.9065	0.9806	1.0038

Non-Weather Billed (Metered) kWh Consumption by Rate Class

From Table 3.14, RSL used the Average kWh per customer for the 2022 Test Year and multiplied that by the forecasted average customer/connection number in that rate class for the 2022 Test Year (Ex. 3/Tab 1/Sch.9, Table 3.12). As discussed above, the 2020 Actual annual consumption for Street Lights with a small adjustment for a 28-day February is used for the 2022 Test Year forecast for this rate class. Please note that Street Lighting's consumption is not weather sensitive. The total Non-Normalized Weather Billed Consumption for all rate classes is 97,601,313 kWh, as shown in Table 3.16.

Normalized Billed (Metered) Consumption by Rate Class

The difference between the non-normalized and normalized forecast is assumed to be the amount related to moving the forecast to a weather normal basis. This difference has been assigned to those rate classes that are weather sensitive. RSL used the weather normalization

work completed by Hydro One for RSL for its 2007 Cost Allocation Study as a starting point and has shown its weather sensitivity by rate class below in Table 3.15.

Table 3.15: Weather Sensitivity

Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Street Lights	Sentinel Lights	Unmetered Loads
66%	66%	32%	0%	0%	0%

RSL has reviewed previous rate applications and has noted the concern of Interveners that the Residential and GS <50kW classes are not 100% weather sensitive. RSL has, thus, applied a weather sensitivity factor of 66%, which is the mid-point between the 100% HONI reported for these two classes and the GS 50 to 4,999 kW sensitivity factor of 32%. None of the other rate classes were assumed to be weather sensitive.

The difference of 2,069,949 kWh between the non-normalized and normalized forecasts for 2022 has been assigned on a pro rata basis to each rate class based on the level of weather sensitivity shown in the above Table 3.15. The Weather Normalized Billed Consumption is shown in Table 3.16.

Table 3.16: Adjustment for Weather

	Non-Normal Weather Billed Energy Forecast (kWh)						
Year	**Residential**	**General Service < 50 kW**	**General Service 50 to 4,999 kW**	**Street Lights**	**Sentinel Lights**	**Unmetered Loads**	**Total**
Annual Usage Per Customer/Connection	8,717	24,424	573,969	376	1,273	9,392	
Customer/Connection	5,129	727	59	1,712	73	57	7,757
2022 Non-Normal Weather Billed kWh	44,709,375	17,756,591	33,864,163	642,914	92,955	535,316	97,601,313
	Adjustment for Weather (kWh)						
Year	**Residential**	**General Service < 50 kW**	**General Service 50 to 4,999 kW**	**Street Lights**	**Sentinel Lights**	**Unmetered Loads**	**Total**
2022	(1,173,179)	(465,935)	(430,836)				(2,069,949)
	Weather Normalized Billed Energy Forecast (kWh)						
Year	**Residential**	**General Service < 50 kW**	**General Service 50 to 4,999 kW**	**Street Lights**	**Sentinel Lights**	**Unmetered Loads**	**Total**
2022	43,536,196	17,290,656	33,433,327	642,914	92,955	535,316	95,531,364

Ex.3/Tab 1/Sch.11 - CDM Adjustment

In March 2019, the 2015-2020 Conservation First Framework was discontinued, and a new interim framework was put in place by the Ministry of Energy. RSL expected that new CDM programs will continue to be implemented in RSL's service areas in the Bridge Year (2021) or Test Year (2022) but the related information is beyond the Utility's control. Their impact on the Load Forecast, if there is any, would be captured by the Trend variable. Therefore, no CDM adjustment is required for the 2022 weather normalized forecast. Consistently, the weight factors for CDM adjustment in Table 3.18 are all 0, and the manual adjustment amount to the 2022 load forecast in Table 3.19 is left blank.

RSL's assigned CDM target for 2015-2020 is 5,020,494 kWh. RSL has achieved 5,114,047 kWh or 101.1% by 2020. The following Table 3.17 from Appendix 2-I outlines the actual savings from 2015-2020.

Table 3.17: 2019-2020 CDM Activities (Appendix 2-I)

Former CFF 6 Year (2015-2020) kWh Target*								
5,020,494								
	2015	2016	2017	2018	2019	2020	2021**	Total for 2022**
%								
2015 CDM Programs						28.34%		
2016 CDM Programs						12.61%		
2017 CDM Programs						33.85%		
2018 CDM Programs						23.27%		
2019 CDM Programs						0.08%		
2020 CDM Programs						1.85%		
Total in Year						**100.00%**		
kWh								
2015 CDM Programs	1,471,773.00	1,468,799.00	1,468,724.00	1,477,537.00	1,464,249.00	1,449,191	1,448,960.00	1,448,888.00
2016 CDM Programs		650,336.00	650,337.00	649,531.00	644,898.00	644,898	629,611.00	627,462.00
2017 CDM Programs			1,919,195.44	1,750,851.17	1,732,859.39	1,730,935	1,730,780.20	1,724,698.77
2018 CDM Programs				1,216,917.50	1,209,610.50	1,190,247	1,190,246.55	1,190,246.55
2019 CDM Programs					4,763.87	4,195	3,063.11	3,053.82
2020 CDM Programs						94,582	94,582.08	94,582.08
2021 CDM Programs (if applicable)***								
Total in Year	1,471,773.00	2,119,135.00	4,038,256.44	5,094,836.67	5,056,380.76	**5,114,047.68**	**5,097,242.94**	**5,088,931.22**

Table 3.18: Weight Factor for Inclusion in CDM Adjustment to 2022 Load Forecast (Appendix 2-I)

	2015	2016	2017	2018*	2019**	2020**	2021***	
Weight Factor for each year's CDM program impact on 2022 load forecast	0	0	0	0	0	0	0	Distributor can select "0", "0.5", or "1" from drop-down list
Default Value selection rationale.	*Full year impact of 2015 CDM is assumed to be reflected in the base forecast, as the full year persistence of 2015 CDM programs is in the 2018 historical actual data. No further impact is necessary for the manual adjustment to the load forecast.*	*Full year impact of 2016 CDM is assumed to be reflected in the base forecast, as the full year persistence of 2016 CDM programs is in the 2018 historical actual data. No further impact is necessary for the manual adjustment to the load forecast.*	*Full year impact of 2017 CDM is assumed to be reflected in the base forecast, as the full year persistence of 2017 CDM programs is in the 2018 historical actual data. No further impact is necessary for the manual adjustment to the load forecast.*	*Default is 0. Full year impact of 2018 CDM is assumed to be reflected in the base forecast.*	*Default is 0. Full year impact of 2019 CDM is assumed to be reflected in the base forecast. Adjust based on distributor's circumstance*	*Default is 0.5. Adjust based on distributor's circumstance*	*Default is 1. Adjust based on distributor's circumstance*	

Table 3.19: CDM Impact and LRAMVA Threshold (Appendix 2-I)

	2015	2016	2017	2018	2019	2020	2021	Total for 2022
Amount used for CDM threshold for LRAMVA (2022)	1,448,960.00	629,611.00	1,730,780.20	1,190,246.55	3,063.11	94,582.08	-	
Manual Adjustment for 2022 Load Forecast (billed basis)					-	-	-	-
Manual Adjustment for 2022 LDC-only CDM programs (billed basis)								
Total Manual Forecast to Load Forecast							-	-
Proposed Loss Factor (TLF)		Format: X.XX%						
Manual Adjustment for 2022 Load Forecast (system purchased basis)	-	-	-	-	-	-	-	-

Ex.3/Tab 1/Sch.12 - Billed kW Load Forecast by Class

There are three rate classes that charge volumetric distribution on a per kW basis. These include GS 50 - 4,999 kW, Street Lighting, and Sentinel Lighting. As a result, the energy forecast for these classes needs to be converted to a kW basis for rate setting purposes.

The forecast of kW for GS 50 - 4,999 kW and Sentinel Lighting is based on a review of the historical ratios of kW to kWh and applying the average ratio, if appropriately, to the forecasted kWh to produce the required kW. For GS 50 - 4,999 kW, the adopted ratio is a 5-year average (2016 - 2020). For Sentinel Lighting, the Actual 2020 kW/kWh ratio is used, as the monthly billed kWh for this rate class is based on its approved load profile. 2020 Actual billed demand for Street Lights is used for the 2022 Test Year demand forecast for this rate class. Similar to Sentinel Lighting, Street Lighting's monthly consumption is also based on its approved load profile. As Actual 2020 consumption is used for the Forecast for Street Lighting, using Actual 2020 demand for the Forecast is appropriate.

Table 3.20 outlines the annual demand units by applicable rate class.

Table 3.20: Historical Annual kW

Year	General Service 50 to 4,999 kW	Street Lights	Sentinel Lights	Total
2011	130,762	3,941	300	135,003
2012	125,469	3,919	300	129,688
2013	133,148	3,920	300	137,368
2014	131,947	3,620	302	135,869
2015	125,734	2,862	302	128,898
2016	115,477	2,070	302	117,849
2017	111,704	1,945	276	113,925
2018	112,493	1,939	270	114,702
2019	109,764	1,887	272	111,923
2020	109,147	1,744	269	111,159
2021 Bridge	102,549	1,744	263	104,556
2022 Test	**99,076**	**1,744**	**258**	**101,078**

The following Table 3.21 shows the historical ratios of kW/kWh as well as the average ratio used in calculating the forecasted kW demand for the 2022 Test Year.

Table 3.21: kW/kWh Ratios

Year	General Service 50 to 4,999 kW	Street lights	Sentinel Lights
2011	0.3039%	0.2711%	0.2771%
2012	0.2949%	0.2696%	0.2771%
2013	0.3152%	0.2708%	0.2771%
2014	0.3098%	0.2739%	0.2763%
2015	0.3073%	0.2718%	0.2758%
2016	0.2927%	0.2678%	0.2828%
2017	0.2918%	0.2713%	0.2760%
2018	0.2984%	0.2713%	0.2774%
2019	0.2966%	0.2727%	0.2777%
2020	0.3023%	0.2705%	0.2778%
2021 Bridge	0.2963%	0.2712%	0.2778%
2022 Test	0.2963%	0.2712%	0.2778%

The forecast of kW for the applicable rate classes for the 2022 Test Year is shown in the above Table 3.20.

Ex.3/Tab 1/Sch.13 - Final Normalized Load Forecast

A summary of the billing determinants by rate class that has been used to develop the proposed rates is provided in Table 3.22. The 2022 Test Year Load Forecast has also been entered in Tab 10. "Load Forecast" of RRWF Model.

Table 3.22: RSL Weather Normalized Load Forecast for 2022 Rate Application

				Actual							Forecast	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Weather Normal	2022 Weather Normal
Actual kWh Purchases	118,004,234	115,280,490	116,595,095	115,949,736	112,684,386	109,734,472	107,186,399	110,285,589	108,750,347	108,483,759		
Predicted kWh Purchases	117,538,829	116,675,268	115,401,698	113,813,986	112,653,587	112,051,388	108,951,913	110,816,286	108,141,943	106,909,610	104,901,184	**103,508,233**
% Difference	-0.4%	1.2%	-1.0%	-1.8%	0.0%	2.1%	1.6%	0.5%	-0.6%	-1.5%		
CDM Purchase Adjustment												-
Predicted kWh Purchases after CDM											104,901,184	**103,508,233**
Billed kWh	108,810,680	106,397,501	107,193,012	107,593,001	104,215,272	101,711,018	98,838,309	101,848,630	100,219,092	99,512,150	96,816,968	**95,531,364**
By Class												
Residential												
Customers	5,004	5,025	5,035	5,040	5,054	5,071	5,089	5,105	5,113	5,107	5,118	**5,129**
kWh	43,287,278	42,116,982	42,764,838	42,272,228	40,938,311	40,480,043	39,379,535	42,538,789	42,182,601	43,593,897	43,191,009	**43,536,196**
General Service < 50 kW												
Customers	769	770	759	754	742	740	741	739	735	731	729	**727**
kWh	20,434,679	19,669,183	20,094,189	20,739,791	20,653,133	20,348,623	19,816,423	20,252,449	19,700,297	18,533,558	17,747,657	**17,290,656**
General Service 50 to 4,999 kW												
Customers	66	67	65	64	64	64	63	65	62	61	60	**59**
kWh	43,031,208	42,549,997	42,246,503	42,584,416	40,918,077	39,456,019	38,286,678	37,703,866	37,004,001	36,107,964	34,605,282	**33,433,327**
kW	130,762	125,469	133,148	131,947	125,734	115,477	111,704	112,493	109,764	109,147	102,549	**99,076**
Street Lights												
Connections	1,703	1,703	1,707	1,707	1,711	1,711	1,711	1,711	1,711	1,712	1,712	**1,712**
kWh	1,453,874	1,453,808	1,447,303	1,321,505	1,052,678	773,158	716,670	714,489	691,963	644,755	642,914	**642,914**
kW	3,941	3,919	3,920	3,620	2,862	2,070	1,945	1,939	1,887	1,744	1,744	**1,744**
Sentinel Lights												
Connections	75	75	75	75	75	73	71	72	74	73	73	**73**
kWh	108,262	108,266	108,281	109,302	109,502	106,791	99,906	97,401	98,084	96,660	94,789	**92,955**
kW	300	300	300	302	302	302	276	270	272	269	263	**258**
Unmetered Loads												
Connections	59	60	61	61	59	58	57	57	57	57	57	**57**
kWh	495,379	499,265	531,898	565,759	543,571	546,384	539,097	541,637	542,146	535,316	535,316	**535,316**
Total												
Customer/Connections	7,676	7,700	7,702	7,701	7,705	7,717	7,732	7,749	7,752	7,741	7,749	**7,757**
kWh	108,810,680	106,397,501	107,193,012	107,593,001	104,215,272	101,711,018	98,838,309	101,848,630	100,219,092	99,512,150	96,816,968	**95,531,364**
kW from applicable classes	135,003	129,688	137,368	135,869	128,898	117,849	113,925	114,702	111,923	111,159	104,556	**101,078**

Accuracy of Load Forecast and Variance Analysis

Ex.3/Tab 2/Sch.1 - Overview

As per section 2.3.2 of the OEB Filing Requirements Applicants must demonstrate the historical accuracy of the load forecast approach. In this section of the Application, RSL has provided calculation for Bridge Year and Test Year revenue, variance analysis for customer/connection count, consumption, and average annual consumption (on both weather actual and weather normalized actual basis) by rate class. “Appendix 2-IB Load Forecast Analysis” has been completed and included as Appendix 3.3 in this Exhibit. Determination of customer count and billed kWh / kW for 2022 is included in Ex.3/Tab 1/Sch. 9, Ex.3/Tab 1/Sch.10 and Ex.3/Tab 1/Sch. 12 respectively.

Ex.3/Tab 2/Sch.2 - Distribution Revenues

The Table 3.23, 3.24 below show the 2022 Test Year Revenues at current rates and at proposed rates. The 2021 Bridge Year revenue at current rates is presented in Table 3.25.

Table 3.23: 2022 Test Year Revenue at Current Rates

Class	Unit	Test Year Volume	Annualized Customers/ Connections	Monthly Service Charge	Volumetric Charge	Fixed Distribution Revenue	Gross Variable Distribution Revenue	Transformer Allowance	Net Dist. Rev.
Residential	kWh	43,536,196	61,548	26.59	-	1,636,561	0		1,636,561
GS < 50 kW	kWh	17,290,656	8,724	32.29	0.0116	281,698	200,572		482,270
GS 50 to 4999 kW	kW	99,076	708	307.78	2.3698	217,908	234,790	-27,243	425,455
Street Lighting	kW	1,744	20,544	3.54	13.4847	72,726	23,516		96,242
Sentinel Lighting	kW	258	876	2.82	20.6153	2,470	5,323		7,793
Unmetered Scattered Load	kWh	535,316	684	4.55	0.0208	3,112	11,135		14,247
Total						**$2,214,476**	**$475,336**	**($27,243)**	**$2,662,568**

Table 3.24: 2022 Test Year Distribution Revenue at Proposed Rates

Class	Unit	Test Year Volume	Annualized Customers/ Connections	Monthly Service Charge	Volumetric Charge	Fixed Distribution Revenue	Gross Variable Distribution Revenue	Transformer Allowance	Net Dist. Rev.
Residential	kWh	43,536,196	61,548	33.67	0.0000	2,072,305	0		2,072,305
GS < 50 kW	kWh	17,290,656	8,724	32.29	0.0128	281,698	220,728		502,426
GS 50 to 4999 kW	kW	99,076	708	307.78	2.5384	217,908	251,495	-27,243	442,161
Street Lighting	kW	1,744	20,544	4.03	15.3611	82,846	26,788		109,634
Sentinel Lighting	kW	258	876	3.43	25.0961	3,007	6,480		9,487
Unmetered Scattered Load	kWh	535,316	684	5.26	0.0241	3,599	12,876		16,474
Total						**$2,661,363**	**$518,367**	**($27,243)**	**$3,152,487**

Table 3.25: 2021 Bridge Year Distribution Revenue at Current Rates

Class	Unit	Test Year Volume	Annualized Customers/ Connections	Monthly Service Charge	Volumetric Charge	Fixed Distribution Revenue	Gross Variable Distribution Revenue	Transformer Allowance	Net Dist. Rev.
Residential	kWh	43,191,009	61,416	26.59	-	1,633,051	-		1,633,051
GS < 50 kW	kWh	17,747,657	8,748	32.29	0.01	282,473	205,873		488,346
GS 50 to 4999 kW	kW	102,549	720	307.78	2.37	221,602	243,021	-28,198	436,424
Street Lighting	kW	1,744	20,544	3.54	13.48	72,726	23,516		96,242
Sentinel Lighting	kW	263	876	2.82	20.62	2,470	5,428		7,898
Unmetered Scattered Load	kWh	535,316	684	4.55	0.02	3,112	11,135		14,247
Total						**$2,215,434**	**$488,972**	**($28,198)**	**$2,676,208**

Ex.3/Tab 2/Sch.3 - Variance of Billing Determinants

Total Distribution System

The total actual consumption shows a steadily declining trend since 2016 with the exception in 2018. The average growth rate per year is -0.7%. The higher 2018 consumption is related to the above-warmer summer. The weather normalized consumption declined at an average rate of 1.6% per year. RSL's consumption is affected by several factors, such as weather, energy conservation, and the COVID -19 pandemic, etc. Table 3.26 from Appendix 2-IB. compares historical actual and weather normalized consumptions for total distribution system.

Table 3.26: Total Distribution System Analysis

Distribution System (Total)

	Calendar Year (for 2022 Cost of Service		Consumption (kWh) [3]				
				Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*		Actual	101,711,018.28	103,645,080.82	OEB-approved	
Historical	*2017*		Actual	98,838,309.30	101,675,800.04		
Historical	*2018*		Actual	101,848,630.36	100,645,711.79		
Historical	*2019*		Actual	100,219,092.00	99,202,493.02		
Historical	*2020*		Actual	99,512,150.00	97,707,592.03		
Bridge Year	*2021*		Forecast		96,816,967.58		
Test Year	*2022*		Forecast		95,531,363.82		

Variance Analysis	Year	Year-over-year		Versus OEB-approved
	2016			
	2017	-2.8%	-1.9%	
	2018	3.0%	-1.0%	
	2019	-1.6%	-1.4%	
	2020	-0.7%	-1.5%	
	2021		-0.9%	
	2022		-1.3%	
	Geometric Mean	-0.7%	-1.6%	

Note:

1) Weather normalized actual kWh:
   - Use the 10-year average weather condition in the regression equation (Table 3.7) for each historical year to calculate weather normalized purchased kWh.
   - Convert the purchased kWh to billed kWh for all rate classes after an adjustment for loss factor.
   - For rate class billed kWh, since Street Lighting, Sentinel Lighting, and Unmetered Loads are non-weather sensitive rate classes, their actual consumption is weather normalized consumption.

- The difference between the total weather normalized billed kWh and the total actual billed kWh is allocated to Residential, GS < 50 kW and GS 50 to 4,999 kW by applying their weather sensitivity ratios.
- The actual billed kWh for each of these three rate classes is then adjusted for weather sensitive amount. The derivation of weather normalized actual kWh is similar to the forecast of billed kWh for the 2022 Test Year.

The following discussion provides a year over year variance analysis by rate class.

Residential

Table 3.27 below shows the yearly change in customer count and consumption for the Residential class.

Table 3.27: Residential Variance

1 **Customer Class:** Residential — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3]				Consumption (kWh) per Customer			
						Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized
Historical	*2016*	Actual	5,071	OEB-approved	Actual	40,480,043.33	41,459,183.58	OEB-approved	Actual	7,982.65	8,175.74	OEB-approved
Historical	*2017*	Actual	5,089		Actual	39,379,535.36	40,816,523.81		Actual	7,738.17	8,020.54	
Historical	*2018*	Actual	5,105		Actual	42,538,788.82	41,907,612.07		Actual	8,332.77	8,209.13	
Historical	*2019*	Actual	5,113		Actual	42,182,601.00	41,645,385.82		Actual	8,250.07	8,145.00	
Historical	*2020*	Actual	5,107		Actual	43,593,897.00	42,606,035.39		Actual	8,536.11	8,342.67	
Bridge Year	*2021*	Forecast	5,118		Forecast		43,191,009.09		Forecast	0.00	8,439.04	
Test Year	*2022*	Forecast	5,129		Forecast		43,536,196.04		Forecast	0.00	8,488.24	

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	0.4%		*2017*	-2.7%	-1.6%		*2017*	-3.1%	-1.9%	
	2018	0.3%		*2018*	8.0%	2.7%		*2018*	7.7%	2.4%	
	2019	0.2%		*2019*	-0.8%	-0.6%		*2019*	-1.0%	-0.8%	
	2020	-0.1%		*2020*	3.3%	2.3%		*2020*	3.5%	2.4%	
	2021	0.2%		*2021*		1.4%		*2021*		1.2%	
	2022	0.2%		*2022*		0.8%		*2022*		0.6%	
	Geometric Mean	0.2%		Geometric Mean	2.5%	1.0%		Geometric Mean	2.3%	0.8%	

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 1,412,658	OEB-approved	
Historical	*2017*	Actual	$ 1,500,818		
Historical	*2018*	Actual	$ 1,609,148		
Historical	*2019*	Actual	$ 1,623,109		
Historical	*2020*	Actual	$ 1,634,619		
Bridge Year (Foreca	*2021*	Forecast	$ 1,633,051		
Test Year (Forecast	*2022*	Forecast	$ 2,102,195		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	6.2%	
	2018	7.2%	
	2019	0.9%	
	2020	0.7%	
	2021	-0.1%	
	2022	28.7%	
	Geometric Mean	8.3%	

The number of residential customers has steadily increased at an average rate of 0.2% per year since 2016 with the exception in 2020. The 2020 count showed a small decrease that may be related to the housing market change during the COVID19 pandemic in 2020. A 5-year

geomean growth rate 1.0021 was applied to 2020 Actual count for the 2021 Bridge Year and then to the 2021 Bridge Year for the 2022 Test year forecast. The forecast for the 2021 Bridge Year and the 2022 Test Year is an increase of 11 customers over prior year, which is consistent with historical trend.

The actual kWh consumption has been fluctuated year over year primarily due to the weather impact and other factors at an average growth rate of 2.5% per year for the period 2016 – 2020. The mild winter and summer in 2017 resulted in a lower consumption (-2.7%) over 2016. The 2018 consumption saw a big jump (8.0%) over 2017, which can be attributed to above-warmer summer temperatures. The increase in 2020 is related to shut down policy during the COVID 19 pandemic and a warmer summer.

If the weather factor is eliminated, i.e. **weather normalized consumption**, the average change over 2016 – 2020 is 0.9%. With the 2021 Bridge Year and 2022 Test Year added, the average change is 1.0%. The 2021 Bridge Year and 2022 Test Year weather normalized Forecast kWh is 1.4% and 0.8% higher than prior year.

The average consumption per customer shows a small increasing trend in both actual and weather normalized consumption reflecting the combined changes in customer count and class consumption. The average change in actual consumption for 2016 – 2020 is 2.3%, and the change in weather normalized consumption for 2016 – 2022 is 0.8%.

General Service < 50 kW

Table 3.28 below shows the yearly change in consumption for the General Service < 50 kW class.

Table 3.28: General Service < 50 kW Variance

2 **Customer Class:** GS < 50 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3] Actual (Weather actual)	Consumption (kWh) Weather-normalized		Consumption (kWh) per Customer Actual (Weather actual)	Consumption (kWh) per Customer Weather-normalized	
Historical	2016	Actual	740	OEB-approved	20,348,622.96	20,840,819.95	OEB-approved	27,498.14	28,163.27	OEB-approved
Historical	2017	Actual	741		19,816,422.94	20,539,538.91		26,742.81	27,718.68	
Historical	2018	Actual	739		20,252,448.66	19,951,949.40		27,405.21	26,998.58	
Historical	2019	Actual	735		19,700,297.00	19,449,404.49		26,803.13	26,461.77	
Historical	2020	Actual	731		18,533,558.00	18,113,577.41		25,353.70	24,779.18	
Bridge Year	2021	Forecast	729			17,747,657.26		0.00	24,345.21	
Test Year	2022	Forecast	727			17,290,656.16		0.00	23,783.57	

Variance Analysis	Year	Customers Year-over-year	Test Year Versus OEB-approved	Consumption (kWh) Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved	Consumption (kWh) per Customer Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved
	2016			2016				2016			
	2017	0.1%		2017	-2.6%	-1.4%		2017	-2.7%	-1.6%	
	2018	-0.3%		2018	2.2%	-2.9%		2018	2.5%	-2.6%	
	2019	-0.5%		2019	-2.7%	-2.5%		2019	-2.2%	-2.0%	
	2020	-0.5%		2020	-5.9%	-6.9%		2020	-5.4%	-6.4%	
	2021	-0.3%		2021		-2.0%		2021		-1.8%	
	2022	-0.3%		2022		-2.6%		2022		-2.3%	
	Geometric Mean	-0.4%		Geometric Mean	-3.1%	-3.7%		Geometric Mean	-2.7%	-3.3%	

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	2016	Actual	$ 466,732	OEB-approved	
Historical	2017	Actual	$ 495,355		
Historical	2018	Actual	$ 503,343		
Historical	2019	Actual	$ 531,693		
Historical	2020	Actual	$ 506,733		
Bridge Year (Forec	2021	Forecast	$ 488,346		
Test Year (Forecast	2022	Forecast	$ 497,133		

Variance Analysis	Year	Revenues Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	6.1%	
	2018	1.6%	
	2019	5.6%	
	2020	-4.7%	
	2021	-3.6%	
	2022	1.8%	
	Geometric Mean	1.3%	

The number of GS < 50 kW customers has steadily decreased since 2016 at an average rate of 0.4% per year. The trend can be attributed to a low growth in the local economy. A 5-year geomean growth rate was applied to 2020 Actual count for the 2021 Bridge Year and then to the 2021 Bridge Year for the 2022 Test year forecast. The forecast for the 2021 Bridge Year and the 2022 Test Year is a decrease of 2 customers over prior year, which is consistent with historical trend.

The actual kWh consumption has been decreasing since 2016 with the exception for 2018. Weather and pandemic are the major drivers to the changes in commercial consumption. The lower consumption in 2017 is related to the mild winter and summer. A very hot summer in 2018 pushed consumption higher. The shutdown policy during the COVID 19 pandemic has an opposite impact on commercial customers compared to residential in 2020. Business consumed 5.9% less energy despite a warmer summer in 2020. The average growth rate is -3.1% for the period 2016 - 2020.

If the weather factor is eliminated, i.e. **weather normalized consumption**, the average change over 2016 – 2020 is -4.6% per year. With the 2021 Bridge Year and 2022 Test Year added, the average change is -3.7% per year. The 2021 Bridge Year and 2022 Test Year weather normalized Forecast kWh is -2.0% and -2.6% lower than prior year.

The average consumption per customer shows a similar trend in both actual and weather normalized consumption which eliminates the impact of customer count changes. The average change in actual consumption for 2016 – 2020 is -2.7%, and the change in weather normalized consumption for period 2016 – 2022 is -3.3%.

General Service 50 to 4,999 kW

Table 3.29 below shows the yearly change in customer count and consumption for the General Service 50 to 4,999 kW class.

Table 3.29: General Service 50 to 4,999 kW Variance

3 **Customer Class:** GS 50 to 4,999 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3] Actual (Weather actual)	Consumption (kWh) [3] Weather-normalized		Consumption (kWh) per Customer Actual (Weather actual)	Consumption (kWh) per Customer Weather-normalized	
Historical	*2016*	Actual	64	OEB-approved	Actual 39,456,019.00	39,918,744.30	OEB-approved	Actual 616,500.30	623,730.38	OEB-approved
Historical	*2017*	Actual	63		Actual 38,286,678.00	38,964,064.32		Actual 607,725.05	618,477.21	
Historical	*2018*	Actual	65		Actual 37,703,866.30	37,432,623.76		Actual 580,059.48	575,886.52	
Historical	*2019*	Actual	62		Actual 37,004,001.00	36,775,509.71		Actual 596,838.73	593,153.38	
Historical	*2020*	Actual	61		Actual 36,107,964.00	35,711,248.23		Actual 591,933.84	585,430.30	
Bridge Year	*2021*	Forecast	60		Forecast	34,605,282.26		Forecast 0.00	576,754.70	
Test Year	*2022*	Forecast	59		Forecast	33,433,327.13		Forecast 0.00	566,666.56	

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved
	2016			*2016*			*2016*		
	2017	-1.6%		*2017*	-3.0% -2.4%		*2017*	-1.4% -0.8%	
	2018	3.2%		*2018*	-1.5% -3.9%		*2018*	-4.6% -6.9%	
	2019	-4.6%		*2019*	-1.9% -1.8%		*2019*	2.9% 3.0%	
	2020	-1.6%		*2020*	-2.4% -2.9%		*2020*	-0.8% -1.3%	
	2021	-1.6%		*2021*	-3.1%		*2021*	-1.5%	
	2022	-1.7%		*2022*	-3.4%		*2022*	-1.7%	
	Geometric Mean	-1.6%		Geometric Mean	-2.9% -3.5%		Geometric Mean	-1.3% -1.9%	

	Calendar Year (for 2022 Cost of Service)	Revenues			Demand (kW) Actual (Weather actual)	Demand (kW) Weather-normalized		Demand (kW) per Customer Actual (Weather actual)	Demand (kW) per Customer Weather-normalized	
Historical	*2016*	Actual	$ 419,957	OEB-approved	Actual 115,476.90	116,831	OEB-approved	Actual 1804.33	1825.49	OEB-approved
Historical	*2017*	Actual	$ 425,839		Actual 111,704.20	113,681		Actual 1773.08	1804.45	
Historical	*2018*	Actual	$ 456,243		Actual 112,493.40	111,684		Actual 1730.67	1718.22	
Historical	*2019*	Actual	$ 460,313		Actual 109,763.60	109,086		Actual 1770.38	1759.45	
Historical	*2020*	Actual	$ 454,448		Actual 109,147.00	107,948		Actual 1789.30	1769.64	
Bridge Year (Forecast)	*2021*	Forecast	$ 436,424		Forecast	102,549		Forecast 0	1709.15	
Test Year (Forecast)	*2022*	Forecast	$ 416,354		Forecast	99,076		Forecast 0	1679.26	

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved
	2016			*2016*			*2016*		
	2017	1.4%		*2017*	-3.3% -2.7%		*2017*	-1.7% -1.2%	
	2018	7.1%		*2018*	0.7% -1.8%		*2018*	-2.4% -4.8%	
	2019	0.9%		*2019*	-2.4% -2.3%		*2019*	2.3% 2.4%	
	2020	-1.3%		*2020*	-0.6% -1.0%		*2020*	1.1% 0.6%	
	2021	-4.0%		*2021*	-5.0%		*2021*	-3.4%	
	2022	-4.6%		*2022*	-3.4%		*2022*	-1.7%	
	Geometric Mean	-0.2%		Geometric Mean	-1.9% -3.2%		Geometric Mean	-0.3% -1.7%	

The number of customers in the GS 50 to 4,999 kW class has steadily decreased at an average rate of -1.6% per year since 2016. The region's manufacturing and retail footprint has struggled

over the past decade, reflecting the challenges faced in small towns in east Ontario with its' relatively narrow economic base and concentration in slow growing or declining industries. A 5-year geomean growth rate 0.9904 was applied to 2020 Actual count for the 2021 Bridge Year and then to the 2021 Bridge Year for the 2022 Test year forecast. The forecast for the 2021 Bridge Year and the 2022 Test Year is a decrease of 1 customer over prior year, which is consistent with historical trend.

The actual kWh consumption and kW demand has been declining since 2016 at an average rate of 2.9% and 1.9% respectively. Energy conservation, customer count and weather together affect industrial consumption and demand. The average growth rate for **weather normalized consumption and demand** is -3.5% and -3.2%. The 2021 Bridge Year and 2022 Test Year weather normalized Forecast kWh is -3.1% and -3.4% lower than prior year. The 2021 Bridge Year and 2022 Test Year weather normalized Forecast kW is -5.0% and -3.4% lower than prior year.

The average actual kW demand per customer showed a geomean decrease of 0.3% for period 2016 - 2020 and **weather normalized kW per customer** showed a geomean decrease of 1.7% for period 2016 - 2022.

Street Lights

Table 3.30 below illustrates the yearly change in consumption for the Street Lights class.

Table 3.30: Street Lights Variance

4 **Customer Class:** Street Lights — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3] Actual (Weather actual)	Consumption (kWh) Weather-normalized		Consumption (kWh) Weather-normalized	Consumption (kWh) per Customer Actual (Weather actual)	Consumption (kWh) per Customer Weather-normalized		Consumption (kWh) per Customer Weather-normalized
Historical	*2016*	Actual	1,711	OEB-approved	Actual 773,158.00	773,158.00	OEB-approved		Actual 451.87	451.87	OEB-approved	
Historical	*2017*	Actual	1,711		Actual 716,670.00	716,670.00			Actual 418.86	418.86		
Historical	*2018*	Actual	1,711		Actual 714,488.57	714,488.57			Actual 417.59	417.59		
Historical	*2019*	Actual	1,711		Actual 691,963.00	691,963.00			Actual 404.42	404.42		
Historical	*2020*	Actual	1,712		Actual 644,755.00	644,755.00			Actual 376.61	376.61		
Bridge Year	*2021*	Forecast	1,712		Forecast	642,913.64			Forecast 0.00	375.53		
Test Year	*2022*	Forecast	1,712		Forecast	642,913.64			Forecast 0.00	375.53		

Variance Analysis	Year	Customers Year-over-year	Test Year Versus OEB-approved	Consumption (kWh) Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved	Consumption (kWh) per Customer Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	0.0%		*2017*	-7.3%	-7.3%		*2017*	-7.3%	-7.3%	
	2018	0.0%		*2018*	-0.3%	-0.3%		*2018*	-0.3%	-0.3%	
	2019	0.0%		*2019*	-3.2%	-3.2%		*2019*	-3.2%	-3.2%	
	2020	0.1%		*2020*	-6.8%	-6.8%		*2020*	-6.9%	-6.9%	
	2021	0.0%		*2021*		-0.3%		*2021*		-0.3%	
	2022	0.0%		*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	0.0%		Geometric Mean	-5.9%	-3.6%		Geometric Mean	-5.9%	-3.6%	

	Calendar Year (for 2022 Cost of Service)	Revenues			Demand (kW) Actual (Weather actual)	Demand (kW) Weather-normalized		Demand (kW) Weather-normalized	Demand (kW) per Customer Actual (Weather actual)	Demand (kW) per Customer Weather-normalized		Demand (kW) per Customer Weather-normalized
Historical	*2016*	Actual	$ 98,403	OEB-approved	Actual 2070.32	2,070	OEB-approved		Actual 1.21	1.21	OEB-approved	
Historical	*2017*	Actual	$ 127,247		Actual 1944.62	1,945			Actual 1.14	1.14		
Historical	*2018*	Actual	$ 101,590		Actual 1938.5	1,939			Actual 1.13	1.13		
Historical	*2019*	Actual	$ 97,216		Actual 1886.9	1,887			Actual 1.10	1.10		
Historical	*2020*	Actual	$ 99,153		Actual 1743.9	1,744			Actual 1.02	1.02		
Bridge Year (Forec	*2021*	Forecast	$ 96,242		Forecast	1,744			Forecast 0	1.02		
Test Year (Forecast	*2022*	Forecast	$ 109,617		Forecast	1,744			Forecast 0	1.02		

Variance Analysis	Year	Revenues Year-over-year	Test Year Versus OEB-approved	Demand (kW) Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved	Demand (kW) per Customer Year	Year-over-year Actual (Weather actual)	Year-over-year Weather-normalized	Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	29.3%		*2017*	-6.1%	-6.1%		*2017*	-6.1%	-6.1%	
	2018	-20.2%		*2018*	-0.3%	-0.3%		*2018*	-0.3%	-0.3%	
	2019	-4.3%		*2019*	-2.7%	-2.7%		*2019*	-2.7%	-2.7%	
	2020	2.0%		*2020*	-7.6%	-7.6%		*2020*	-7.6%	-7.6%	
	2021	-2.9%		*2021*		0.0%		*2021*		0.0%	
	2022	13.9%		*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	2.2%		Geometric Mean	-5.6%	-3.4%		Geometric Mean	-5.6%	-3.4%	

The connection count has been consistent since 2015 with 1 addition in 2020. The 2020 Actual connection has been used for the forecast for the 2021 Bridge Year and the 2022 Test Year.

LED conversion CDM programs for Street Lights implemented in 2016 and 2019 have reduced kWh **consumption** and kW demand by 5.9% and 5.6% on average in this rate class. Street Lights **consumption /demand** is not weather sensitive. For its Load Forecast, RSL is proposing to use 2020 Actual kWh with an adjustment for a 28-day February and 2022 Actual kW for the 2022 Test Year Forecast.

Sentinel Lights

Table 3.31 below illustrates the yearly change in consumption for the Sentinel Lights class.

Table 3.31: Sentinel Lights Variance

5 **Customer Class:** Sentinel Lights — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3] Actual (Weather actual)	Weather-normalized		Weather-normalized	Consumption (kWh) per Customer Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	2016	Actual	73	OEB-approved	Actual 106,791.00	106,791.00	OEB-approved		Actual 1,462.89	1,462.89	OEB-approved	
Historical	2017	Actual	71		Actual 99,906.00	99,906.00			Actual 1,407.13	1,407.13		
Historical	2018	Actual	72		Actual 97,401.00	97,401.00			Actual 1,352.79	1,352.79		
Historical	2019	Actual	74		Actual 98,084.00	98,084.00			Actual 1,325.46	1,325.46		
Historical	2020	Actual	73		Actual 96,660.00	96,660.00			Actual 1,324.11	1,324.11		
Bridge Year	2021	Forecast	73		Forecast	94,789.32			Forecast 0.00	1,298.48		
Test Year	2022	Forecast	73		Forecast	92,954.85			Forecast 0.00	1,273.35		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			2016				2016			
	2017	-2.7%		2017	-6.4%	-6.4%		2017	-3.8%	-3.8%	
	2018	1.4%		2018	-2.5%	-2.5%		2018	-3.9%	-3.9%	
	2019	2.8%		2019	0.7%	0.7%		2019	-2.0%	-2.0%	
	2020	-1.4%		2020	-1.5%	-1.5%		2020	-0.1%	-0.1%	
	2021	0.0%		2021		-1.9%		2021		-1.9%	
	2022	0.0%		2022		-1.9%		2022		-1.9%	
	Geometric Mean	0.0%		Geometric Mean	-3.3%	-2.7%		Geometric Mean	-3.3%	-2.7%	

	Calendar Year (for 2022 Cost of Service)	Revenues			Demand (kW) Actual (Weather actual)	Weather-normalized		Weather-normalized	Demand (kW) per Customer Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	2016	Actual	$ 6,474	OEB-approved	Actual 302	302	OEB-approved		Actual 4.14	4.14	OEB-approved	
Historical	2017	Actual	$ 7,064		Actual 275.7	276			Actual 3.88	3.88		
Historical	2018	Actual	$ 7,499		Actual 270.2	270			Actual 3.75	3.75		
Historical	2019	Actual	$ 7,970		Actual 272.4	272			Actual 3.68	3.68		
Historical	2020	Actual	$ 7,969		Actual 268.5	269			Actual 3.68	3.68		
Bridge Year (Forec	2021	Forecast	$ 7,898		Forecast	263			Forecast 0	3.61		
Test Year (Forecast	2022	Forecast	$ 10,077		Forecast	258			Forecast 0	3.54		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			2016				2016			
	2017	9.1%		2017	-8.7%	-8.7%		2017	-6.1%	-6.1%	
	2018	6.2%		2018	-2.0%	-2.0%		2018	-3.4%	-3.4%	
	2019	6.3%		2019	0.8%	0.8%		2019	-1.9%	-1.9%	
	2020	0.0%		2020	-1.4%	-1.4%		2020	-0.1%	-0.1%	
	2021	-0.9%		2021		-1.9%		2021		-1.9%	
	2022	27.6%		2022		-1.9%		2022		-1.9%	
	Geometric Mean	9.3%		Geometric Mean	-3.8%	-3.1%		Geometric Mean	-3.8%	-3.1%	

The connection count for the Sentinel Lights has been stable since 2016. The forecast for the 2021 Bridge Year and the 2022 Test Year remains unchanged from the 2020 Actual.

The consumption kWh and demand kW has declined at an average rate of 3.3% and 3.8% for the past 5 years. Sentinel Lights **consumption /demand** are not weather sensitive. RSL is proposing to use 2020 connection count and average consumption kWh to calculate consumption and demand for the 2022 Test Year forecast for this rate class.

Unmetered Loads

Table 3.32 below illustrates the yearly change in consumption for the Unmetered Loads class.

Table 3.32: Unmetered Loads Variance

6 **Customer Class:** Unmetered Loads — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service	Customers			Consumption (kWh) [3] Actual (Weather actual)	Consumption (kWh) Weather-normalized		Consumption (kWh) Weather-normalized	Consumption (kWh) per Customer Actual (Weather actual)	Consumption (kWh) per Customer Weather-normalized		Consumption (kWh) per Customer Weather-normalized
Historical	*2016*	Actual	58	OEB-approved	Actual 546,384.00	546,384.00	OEB-approved		Actual 9,420.41	9,420.41	OEB-approved	
Historical	*2017*	Actual	57		Actual 539,097.00	539,097.00			Actual 9,457.84	9,457.84		
Historical	*2018*	Actual	57		Actual 541,637.00	541,637.00			Actual 9,502.40	9,502.40		
Historical	*2019*	Actual	57		Actual 542,146.00	542,146.00			Actual 9,511.33	9,511.33		
Historical	*2020*	Actual	57		Actual 535,316.00	535,316.00			Actual 9,391.51	9,391.51		
Bridge Year	*2021*	Forecast	57		Forecast	535,316.00			Forecast 0.00	9,391.51		
Test Year	*2022*	Forecast	57		Forecast	535,316.00			Forecast 0.00	9,391.51		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	-1.7%		*2017*	-1.3%	-1.3%		*2017*	0.4%	0.4%	
	2018	0.0%		*2018*	0.5%	0.5%		*2018*	0.5%	0.5%	
	2019	0.0%		*2019*	0.1%	0.1%		*2019*	0.1%	0.1%	
	2020	0.0%		*2020*	-1.3%	-1.3%		*2020*	-1.3%	-1.3%	
	2021	0.0%		*2021*		0.0%		*2021*		0.0%	
	2022	0.0%		*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	-0.3%		Geometric Mean	-0.7%	-0.4%		Geometric Mean	-0.1%	-0.1%	

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual	$ 12,979	OEB-approved	
Historical	*2017*	Actual	$ 13,087		
Historical	*2018*	Actual	$ 13,921		
Historical	*2019*	Actual	$ 14,140		
Historical	*2020*	Actual	$ 13,949		
Bridge Year (Foreca	*2021*	Forecast	$ 14,247		
Test Year (Forecast	*2022*	Forecast	$ 16,308		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	0.8%	
	2018	6.4%	
	2019	1.6%	
	2020	-1.3%	
	2021	2.1%	
	2022	14.5%	
	Geometric Mean	4.7%	

The connection count of the Unmetered Loads has been consistent since 2016. The 2020 Actual has been used for the forecast for the 2021 Bridge Year and the 2022 Test Year.

The **consumption** shows a slight decrease of 0.7% on average per year. The forecast consumption for 2022 remains unchanged from 2020 Actual.

<u>2016 Actual vs 2016 Board Approved</u>

According to the OEB's Decision on RSL's 2016 COS, 2016 Actual consumption (kWh and kW) and customer / connection counts were used as the Test Year Forecast to determine distribution rates and rate riders. Therefore in the following table, the billing determinants for 2016 Actual and 2016 Board Approved are identical.

Table 3.33: 2016 Actual vs 2016 Board Approved

	2016 Board Approved	2016 Actual	Variance	
				%
Residential				
# of Customers	5,071	5,071	0	0.0%
kWh - actual	40,480,043	40,480,043	0	0.0%
kWh - weather normalized	40,480,043	40,480,043	0	0.0%
General Service < 50 kW				
# of Customers	740	740	0	0.0%
kWh - actual	20,348,623	20,348,623	-0	0.0%
kWh - weather normalized	20,348,623	20,348,623	0	0.0%
General Service 50 to 4,999 kW				
# of Customers	64	64	0	0.0%
kWh - actual	39,456,019	39,456,019	0	0.0%
kWh - weather normalized	39,456,019	39,456,019	0	0.0%
kW - actual	115,477	115,477	-0	0.0%
kW - weather normalized	115,477	115,477	0	0.0%
Street Lights				
# of Customers	1,711	1,711	0	0.0%
kWh - actual	773,158	773,158	0	0.0%
kWh - weather normalized	773,158	773,158	0	0.0%
kW - actual	2,070	2,070	0	0.0%
kW - weather normalized	2,070	2,070	0	0.0%
Sentinel Lights				
# of Customers	73	73	0	0.0%
kWh - actual	106,791	106,791	0	0.0%
kWh - weather normalized	106,791	106,791	0	0.0%
kW - actual	302	302	0	0.0%
kW - weather normalized	302	302	0	0.0%
Unmetered Loads				
# of Customers	58	58	0	0.0%
kWh - actual	546,384	546,384	0	0.0%
kWh - weather normalized	546,384	546,384	0	0.0%
Total				
# of Customers	7,717	7,717	0	0.0%
kWh - actual	101,711,018	101,711,018	0	0.0%
kWh - weather normalized	101,711,018	101,711,018	0	0.0%
kW - actual	117,849	117,849	0	0.0%
kW - weather normalized	117,849	117,849	0	0.0%

2022 Test Year vs 2021 Bridge Year

Table 3.24 below provides details of the variances by rate class between the 2021 Bridge Year and 2022 Test Year (Weather Normalized).

Table 3.34: 2022 Test Year vs 2021 Bridge Year

	Forecast		
	2021 Bridge Year	**2022 Test Year**	**Variance**
By Class			
Residential			
Customers	5,118	**5,129**	11
kWh	43,191,009	**43,536,196**	345,187
General Service < 50 kW			
Customers	729	**727**	-2
kWh	17,747,657	**17,290,656**	-457,001
General Service 50 to 4,999 kW			
Customers	60	**59**	-1
kWh	34,605,282	**33,433,327**	-1,171,955
kW	102,549	**99,076**	-3,473
Street Lights			
Connections	1,712	**1,712**	0
kWh	642,914	**642,914**	0
kW	1,744	**1,744**	0
Sentinel Lights			
Connections	73	**73**	0
kWh	94,789	**92,955**	-1,834
kW	263	**258**	-5
Unmetered Loads			
Connections	57	**57**	0
kWh	535,316	**535,316**	0
Total			
Customer/Connections	7,749	**7,757**	8
kWh	96,816,968	**95,531,364**	-1,285,604
kW from applicable classes	104,556	**101,078**	-3,478

RSL has completed worksheet “Appendix 2-IB Load Forecast Analysis” and included it in Appendix 3.3 of this Exhibit.

Other Revenues

Ex.3/Tab 3/Sch. 1 - Overview 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 RSL's proposed revenue requirement. Further details on the derivation of the Revenue Requirement are presented in Exhibit 6.

Other Distribution Revenues includes items such as:

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

A detailed breakdown by USoA account is shown in Table 3.35 - Appendix 2-H.

Table 3.35: 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
4082	Retail Services Revenues	-$ 6,756	-$ 6,492	-$ 6,160	-$ 7,045	-$ 7,152	-$ 7,260	-$ 9,300
4084	Service Transaction Requests (STR) Revenues	-$ 45	-$ 28	-$ 31	-$ 36	-$ 34	-$ 40	-$ 40
4086	SSS Administration Revenue	-$ 21,243	-$ 22,043	-$ 21,942	-$ 21,856	-$ 21,748	-$ 21,000	-$ 21,000
4090	Electric Services Incidental to Energy Sales	$ -	$ -	$ -	$ -	$ -		
4205	Interdepartmental Rents	$ -	$ -	$ -	$ -	$ -		
4210	Rent from Electric Property	-$ 43,739	-$ 43,739	-$ 42,402	-$ 44,208	-$ 44,409	-$ 44,410	-$ 88,903
4215	Other Utility Operating Income	$ -	$ -	$ -	$ -	$ -		
4220	Other Electric Revenues	-$ 2,234	-$ 3,954	-$ 7,284	-$ 7,688	-$ 11,968	-$ 9,000	-$ 9,000
4225	Late Payment Charges	-$ 75,314	-$ 70,390	-$ 58,515	-$ 55,106	-$ 69,107	-$ 60,000	-$ 60,000
4230	Sales of Water and Water Power	$ -	$ -	$ -	$ -	$ -		
4235	Miscellaneous Service Revenues	-$ 116,376	-$ 97,264	-$ 81,167	-$ 78,315	-$ 106,104	-$ 107,197	-$ 23,875
4240	Provision for Rate Refunds	$ -	$ -	$ -	$ -	$ -		
4245	Government and Other Assistance Directly Credited to Income	$ -	$ -	$ -	$ -	$ -		
4305	Regulatory Debits	$ -	$ -	$ -	$ -	$ -		
4310	Regulatory Credits	$ -	$ -	$ -	$ -	$ -		
4315	Revenues from Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -		
4320	Expenses of Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -		
4325	Revenues from Merchandise	$ -	$ -	$ -	$ -	$ -		
4330	Costs and Expenses of Merchandising	$ -	$ -	$ -	$ -	$ -		
4335	Profits and Losses from Financial Instrument Hedges	$ -	$ -	$ -	$ -	$ -		
4340	Profits and Losses from Financial Instrument Investments	$ -	$ -	$ -	$ -	$ -		
4345	Gains from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -		
4350	Losses from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -		
4355	Gain on Disposition of Utility and Other Property	-$ 3,285	-$ 5,008	$ -	$ -	$ -		
4357	Gain from Retirement of Utility and Other Property	$ -	$ -	$ -	$ -	$ -		
4360	Loss on Disposition of Utility and Other Property	$ 8,790	$ 5,278	$ 8,614	$ 7,731	$ 4,076	$ 6,000	$ 8,000
4362	Loss from Retirement of Utility and Other Property	$ -	$ -	$ -	$ -	$ -		
4365	Gains from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -		
4370	Losses from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -		
4375	Revenues from Non Rate-Regulated Utility Operations	-$ 6,799	-$ 39,529	-$ 5,064	$ -	$ -	$ -	$ -
4380	Expenses of Non Rate-Regulated Utility Operations	$ -	$ -	$ -	$ -	$ -		
4385	Non Rate-Regulated Utility Rental Income	$ -	$ -	$ -	$ -	$ -		
4390	Miscellaneous Non-Operating Income	$ -	$ -	$ -	$ -	$ -		
4395	Rate-Payer Benefit Including Interest	$ -	$ -	$ -	$ -	$ -		
4398	Foreign Exchange Gains and Losses, Including Amortization	$ -	$ -	$ -	$ -	$ -		
4405	Interest and Dividend Income	-$ 17,300	-$ 17,347	-$ 17,945	-$ 20,164	-$ 10,282	-$ 3,500	-$ 3,500
4410	Lessor's Net Investment in Finance Lease	$ -	$ -	$ -	$ -	$ -		
4415	Equity in Earnings of Subsidiary Companies	$ -	$ -	$ -	$ -	$ -		
4420	Share of Profit or Loss of Joint Venture	$ -	$ -	$ -	$ -	$ -		
Miscellaneous Service Revenues		-$ 116,376	-$ 97,264	-$ 81,167	-$ 78,315	-$ 106,104	-$ 107,197	-$ 23,875
Late Payment Charges		-$ 75,314	-$ 70,390	-$ 58,515	-$ 55,106	-$ 69,107	-$ 60,000	-$ 60,000
Other Operating Revenues		-$ 74,016	-$ 76,254	-$ 77,820	-$ 80,833	-$ 85,311	-$ 81,710	-$ 128,243
Other Income or Deductions		-$ 18,594	-$ 56,605	-$ 14,394	-$ 12,433	-$ 6,207	$ 2,500	$ 4,500
Total		-$ 284,299	-$ 300,513	-$ 231,896	-$ 226,687	-$ 266,728	-$ 246,407	-$ 207,618

Account 4082 - Retail Services Revenues

	2016 Actual²	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2016	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Misc Bill Ready Charges (BRC)	-$ 826	-$ 839	-$ 720	-$ 775	-$ 872	-$ 781	-$ 1,000
Fixed Charges	-$ 4,076	-$ 4,047	-$ 4,039	-$ 4,665	-$ 4,481	-$ 4,918	-$ 6,300
Variable charges	-$ 1,853	-$ 1,605	-$ 1,401	-$ 1,573	-$ 1,789	-$ 1,561	-$ 2,000
Notice of Switch Letter	$ -	$ -	$ -	-$ 32	-$ 10	$ -	$ -
Total	-$ 6,755	-$ 6,492	-$ 6,160	-$ 7,045	-$ 7,152	-$ 7,260	-$ 9,300

Account 4084 - Service Transaction Requests (STR)

	2016 Actual²	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2016	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
STR Processed	-$ 14	-$ 12	-$ 10	-$ 23	-$ 13	-$ 15	-$ 15
STR Request	-$ 33	-$ 15	-$ 21	-$ 13	-$ 21	-$ 25	-$ 25
Total	-$ 47	-$ 27	-$ 31	-$ 36	-$ 34	-$ 40	-$ 40

Account 4210 - Rent from Electric Property

	2016 Actual²	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2016	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Joint Use - Be Joint Use - Bell Canada	-$ 17,768	-$ 17,768	-$ 17,969	-$ 17,969	-$ 18,011	-$ 18,011	-$ 36,056
Joint Use - W Joint Use - WTC Communications	-$ 3,643	-$ 3,643	-$ 3,955	-$ 3,911	-$ 3,703	-$ 3,703	-$ 7,414
Joint Use - Ca Joint Use - Cable Companies	-$ 22,328	-$ 22,328	-$ 20,478	-$ 22,329	-$ 22,695	-$ 22,695	-$ 45,433
Total	-$ 43,739	-$ 43,739	-$ 42,402	-$ 44,209	-$ 44,409	-$ 44,410	-$ 88,903

Account 4235 - Specific Service Charges

	2016 Actual²	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2016	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Collection Ch Collection Charges	-$ 83,067	-$ 63,650	-$ 46,617	-$ 50,251	-$ 82,887	-$ 83,067	$ -
Account Histo Account History Charges	-$ 45	-$ 15	-$ 30	-$ 45	-$ 60	-$ 45	-$ 30
Occupancy C Occupancy Charges	-$ 25,980	-$ 27,608	-$ 27,496	-$ 23,715	-$ 20,958	-$ 21,280	-$ 21,000
Returned Che Returned Cheque Charges (NSF)	-$ 1,140	-$ 1,050	-$ 1,245	-$ 1,245	-$ 735	-$ 725	-$ 700
Disconnect/Re Disconnect/Reconnect Charges	-$ 5,690	-$ 4,075	-$ 4,335	-$ 1,615	-$ 260	-$ 695	-$ 700
Micro-Fit Ser Micro-Fit Service Charges	-$ 454	-$ 867	-$ 1,444	-$ 1,445	-$ 1,444	-$ 1,445	-$ 1,445
Miscellaneous Miscellaneous Charges	$ -	$ -	$ -	$ -	$ 240	$ 60	$ -
Total	-$ 116,376	-$ 97,264	-$ 81,167	-$ 78,315	-$ 106,104	-$ 107,197	-$ 23,875

Account 4405 - Interest and Dividend Income

	2016 Actual²	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2016	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Short-term Investment Interest							
Bank Deposit Interest	-$ 5,388	-$ 6,824	-$ 9,427	-$ 11,272	-$ 2,311	-$ 500	-$ 500
Regulatory Interest Income	-$ 11,912	-$ 10,523	-$ 8,518	-$ 8,893	-$ 7,971	-$ 3,000	-$ 3,000
Total	-$ 17,300	-$ 17,347	-$ 17,945	-$ 20,164	-$ 10,282	-$ 3,500	-$ 3,500

Ex.3/Tab 3/Sch. 2 - Other Revenue Variance Analysis

2016 Actual vs 2016 Board Approved

In the 2016 COS, our unaudited 2016 Actual was used for the Test Year. The only difference between the Actual and Board Approved is Account 4405 interest and dividend income, as well as a small variance in Gain/Loss on Disposition. Table 3.36 displays the details.

Table 3.36: 2016 Actual vs 2016 Board Approved

USoA #	USoA Description	2016 Board Approved	2016 Actual	Variance	Variance
	Reporting Basis			***$***	***%***
4235	Specific Service Charges	116,376.00	116,376.00	0.00	0%
4225	Late Payment Charges	75,314.00	75,314.00	0.00	0%
4082	Retail Services Revenues	7,011.00	6,755.64	-255.36	-4%
4084	Service Transaction Requests	45.00	45.00	0.00	0%
4086	SSS Administration Revenue	21,243.00	21,243.00	0.00	0%
4210	Rent from Electric Property	43,739.00	43,739.00	0.00	0%
4220	Other Electric revenues		2,234.00		
4355	Gain on Disposition		3,285.00	3,285.00	
4360	Loss on Disposition	-5,505.00	-8,789.80	-3,284.80	60%
4375	Revenues from Non-Utility Operations	6,799.00	6,799.00	0.00	0%
4380	Expenses of Non-Utility Operations				
4390	Miscellaneous Non-Operating Income				
4405	Interest and Dividend Income	5,232.00	17,299.69	12,067.69	231%
Specific Service Charges		116,376.00	116,376.00	0.00	0%
Late Payment Charges		75,314.00	75,314.00	0.00	0%
Other Operating Revenues		72,038.00	74,016.64	-255.36	0%
Other Income or Deductions		6,526.00	18,593.89	12,067.89	185%
Total		270,254.00	284,300.53	11,812.53	4%

2017 Actual vs 2016 Actual

2017 Actual is greater than 2016 by $16,214 or 6%. Table 3.37 displays the details.

Table 3.37: 2017 Actual vs 2016 Actual

USoA #	USoA Description	2016 Actual	2017 Actual	Variance	Variance
	Reporting Basis			***$***	***%***
4235	Specific Service Charges	116,376	97,264	(19,112)	-16%
4225	Late Payment Charges	75,314	70,390	(4,924)	-7%
4082	Retail Services Revenues	6,756	6,492	(264)	-4%
4084	Service Transaction Requests	45	27	(18)	-40%
4086	SSS Administration Revenue	21,243	22,043	800	4%
4210	Rent from Electric Property	43,739	43,739	-	0%
4220	Other Electric revenues	2,234	3,954	1,720	77%
		-			
4355	Gain on Disposition	3,285	5,008	1,723	
4360	Loss on Disposition	(8,790)	(5,278)	3,512	-40%
4375	Revenues from Non-Utility Operations	6,799	39,529	32,730	481%
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	17,300	17,347	47	0%
Specific Service Charges		116,376	97,264	(19,112)	-16%
Late Payment Charges		75,314	70,390	(4,924)	-7%
Other Income or Deductions		74,016.64	76,254.55	2,237.91	3%
Other Operating Revenues		18,594	56,606	38,012	204%
Total		284,301	300,514	16,214	6%

2018 Actual vs 2017 Actual

2018 Actual is lower than 2017 by $68,618 or 23%. CDM incentive and lost revenue for Collection of Account Charge are the major drivers for the decline. RSL received a CDM incentive of $39,529 from the IESO in 2017. The CDM incentive in 2018 is $34,465 lower than 2017. RSL could not collect collection of account charge for the whole winter in 2018 because of the disconnection ban issued in EB-2017-0318 on November 2, 2017. The lost revenue for collection of account charge in 2018 is $17,000. Table 3.38 displays the details.

Table 3.38: 2018 Actual vs 2017 Actual

USoA #	USoA Description	2017 Actual	2018 Actual	Variance	Variance
	Reporting Basis			***$***	***%***
4235	Specific Service Charges	97,264	81,167	(16,097)	-17%
4225	Late Payment Charges	70,390	58,515	(11,875)	-17%
4082	Retail Services Revenues	6,492	6,160	(331)	-5%
4084	Service Transaction Requests	27	31	4	16%
4086	SSS Administration Revenue	22,043	21,942	(101)	0%
4210	Rent from Electric Property	43,739	42,402	(1,337)	-3%
4220	Other Electric revenues	3,954	7,284	3,330	84%
				-	
4355	Gain on Disposition	5,008	-	(5,008)	
4360	Loss on Disposition	(5,278)	(8,614)	(3,336)	63%
4375	Revenues from Non-Utility Operations	39,529	5,064	(34,465)	-87%
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	17,347	17,945	598	3%
				-	
				-	
				-	
Specific Service Charges		97,264	81,167	(16,097)	-17%
Late Payment Charges		70,390	58,515	(11,875)	-17%
Other Income or Deductions		76,254.55	77,819.23	1,564.68	2%
Other Operating Revenues		56,606	14,395	(42,211)	-75%
Total		300,514	231,896	(68,618)	-23%

2019 Actual vs 2018 Actual

2019 Actual is slightly lower than 2018 by $5,209, or 2%. Table 3.39 displays the details.

Table 3.39: 2019 Actual vs 2018 Actual

USoA #	USoA Description	2018 Actual	2019 Actual	Variance	Variance
	Reporting Basis			$	%
4235	Specific Service Charges	81,167	78,315	(2,852)	-4%
4225	Late Payment Charges	58,515	55,106	(3,409)	-6%
4082	Retail Services Revenues	6,160	7,045	884	14%
4084	Service Transaction Requests	31	36	5	15%
4086	SSS Administration Revenue	21,942	21,856	(86)	0%
4210	Rent from Electric Property	42,402	44,209	1,807	4%
4220	Other Electric revenues	7,284	7,688	404	6%
		-			
4355	Gain on Disposition	-	-	-	
4360	Loss on Disposition	(8,614)	(7,731)	883	-10%
4375	Revenues from Non-Utility Operations	5,064	-	(5,064)	-100%
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	17,945	20,164	2,220	12%
Specific Service Charges		81,167	78,315	(2,852)	-4%
Late Payment Charges		58,515.1	55,105.6	-3,409.5	-6%
Other Income or Deductions		77,819.2	80,833.6	3,014.4	4%
Other Operating Revenues		14,395	12,433	(1,962)	-14%
Total		231,896	226,688	(5,209)	-2%

2020 Actual vs 2019 Actual

2020 Actual is greater than 2019 by $40,041 or 19%. RSL was able to record the lost revenue for Collection of Account Charge in a 1508 variance account as per the OEB's decision for our 2019 IRM (EB-2018-0065). The establishment of the variance account has led to an increase of $32,800 in collection of account charge over 2019. For more information, please see Ex.9/Tab 1/Sch.5. Table 3.40 displays the details.

Table 3.40: 2020 Actual vs 2019 Actual

USoA #	USoA Description	2019 Actual	2020 Actual	Variance	Variance
	Reporting Basis			**$**	**%**
4235	Specific Service Charges	78,315	106,104	27,788	35%
4225	Late Payment Charges	55,106	69,107	14,001	25%
4082	Retail Services Revenues	7,045	7,152	107	2%
4084	Service Transaction Requests	36	34	(2)	-6%
4086	SSS Administration Revenue	21,856	21,748	(108)	0%
4210	Rent from Electric Property	44,209	44,409	200	0%
4220	Other Electric revenues	7,688	11,968	4,280	56%
		-			
4355	Gain on Disposition	-	-	-	
4360	Loss on Disposition	(7,731)	(4,076)	3,656	-47%
4375	Revenues from Non-Utility Operations	-	-	-	
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	20,164	10,282	(9,882)	-49%
Specific Service Charges		78,315	106,104	27,788	35%
Late Payment Charges		55,106	69,107	14,001	25%
Other Operating Revenues		80,833.60	85,311.15	4,477.55	6%
Other Income or Deductions		12,433	6,207	(6,226)	-50%
Total		226,688	266,728	40,041	18%

2021 Bridge Forecast vs 2020 Actual

The forecast for 2021 Bridge Year is $20,322 or 8% lower than 2020 Actual, primarily due to a lower forecast for late payment charge and interest income. Table 3.41 displays the details.

Table 3.41: 2021 Bridge vs 2020 Actual

USoA #	USoA Description	2020 Actual	2021 Bridge Year	Variance	Variance
	Reporting Basis			***$***	***%***
4235	Specific Service Charges	106,104	107,197	1,093	1%
4225	Late Payment Charges	69,107	60,000	(9,107)	-13%
4082	Retail Services Revenues	7,152	7,260	108	2%
4084	Service Transaction Requests	34	40	6	18%
4086	SSS Administration Revenue	21,748	21,000	(748)	-3%
4210	Rent from Electric Property	44,409	44,410	0	0%
4220	Rent from Electric Property	11,968	9,000	(2,968)	-25%
		-			
4355	Gain on Disposition	-	-	-	
4360	Loss on Disposition	(4,076)	(6,000)	(1,924)	47%
4375	Revenues from Non-Utility Operations	-	-	-	
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	10,282	3,500	(6,782)	-66%
Specific Service Charges		106,104	107,197	1,093	1%
Late Payment Charges		69,107	60,000	(9,107)	-13%
Other Operating Revenues		85,311	81,710	-3,602	-4%
Other Income or Deductions		6,207	(2,500)	(8,707)	-140%
Total		266,728	246,407	(20,322)	-8%

2022 Test Forecast vs 2021 Bridge Forecast

The forecast for 2022 Test Year is $38,789 or 16% lower than 2021 Bridge Year forecast for two reasons. The first one is Collection of Account Charge. The lost revenue for Collection of Account Charge has been recorded in 1508 lost revenue for account charge since the variance account was established in 2019, as mentioned in the discussion of 2019 V 2018. As the new distribution rates from this Application will reflect the discontinuation of Collection of Account Charge, there is no need for this 1508 variance account. Therefore the portion of Collection of Account Charge in Account 4235 will be null. Its forecast for 2021 Bridge is $82,887.

Another factor is pole rental income. The increase in pole rental income over 2016 COS Board approved has been recorded in 1508 Pole Rental Revenue Variance since the variance account was created in 2018. However, pole rental revenue will be aligned with the new distribution rates through this COS application. Therefore the full pole rental revenue recorded in Account 4210 for 2022 will not be reduced by the variance account. In addition, an estimated inflation rate of 2.2% has been applied to the 2021 Bridge forecast for the 2022 Test Year forecast. As a

result, the pole rental revenue for 2022 Test Year forecast is $44,493 higher than 2021 Bridge Year. Table 3.42 displays the details.

Table 3.42: 2022 Test Forecast vs 2021 Bridge Forecast

USoA #	USoA Description	2021 Bridge Year	2022 Test ear	Variance	Variance
	Reporting Basis			***$***	***%***
4235	Specific Service Charges	107,197	23,875	(83,322)	-78%
4225	Late Payment Charges	60,000	60,000	-	0%
4082	Retail Services Revenues	7,260	9,300	2,040	28%
4084	Service Transaction Requests	40	40	-	0%
4086	SSS Administration Revenue	21,000	21,000	-	0%
4210	Rent from Electric Property	44,410	88,903	44,493	100%
4220	Rent from Electric Property	9,000	9,000	-	0%
		-			
4355	Gain on Disposition	-	-	-	
4360	Loss on Disposition	(6,000)	(8,000)	(2,000)	33%
4375	Revenues from Non-Utility Operations	-	-	-	
4380	Expenses of Non-Utility Operations	-	-	-	
4390	Miscellaneous Non-Operating Income	-	-	-	
4405	Interest and Dividend Income	3,500	3,500	-	0%
Specific Service Charges		107,197	23,875	(83,322)	-78%
Late Payment Charges		60,000	60,000	-	0%
Other Operating Revenues		81,710	128,243	46,533	57%
Other Income or Deductions		(2,500)	(4,500)	(2,000)	80%
Total		246,407	207,618	(38,789)	-16%

Ex.3/Tab 3/Sch. 3 - Proposed Specific Service Charges

RSL is not proposing any changes to the current Specific Service Charges that have been approved by the OEB in previous applications, with the exception of “specific charge for access to power poles - $/pole/year”, known as wireline pole attachment charge.

RSL uses the provincial-wide **wireline pole attachment charge** as determined by the OEB and adjusted annually to account for inflation. The LDC acknowledges that for the wireline pole attachment charge, the OEB will issue a Decision and Rate Order declaring the annual inflation adjusted rate to be effective from January 1, 2022. In its’ “Other Operating Revenue” projections for the Test Year 2022, RSL has used an estimated inflation rate of 2.2% above the Bridge Year (2021) that is embedded in Tab 3. ‘Regulatory Charges” of the Tariff and Bill Impact Model.

RSL is proposing no change to its **microFIT Monthly Service Charge** - a non-provincial wide rate that was approved in the LDC’s 2016 Cost of Service rate application (EB-2015-0100). RSL confirm that revenue related to microFIT charges has been recorded as a revenue offset in Account 4235 – Miscellaneous Service Revenue and not been included as part of the base distribution revenue requirement.

There are no classes or discrete customer groups that may be materially impacted by changes to other rates and charges.

Ex.3/Tab 3/Sch. 4 - Revenue from Affiliate Companies

RSL does not have any revenue from affiliate transactions, shared services, and corporate cost allocation.

Appendix

List of Appendices:

Appendix 3.1	Monthly Data Used for Regression Analysis
Appendix 3.2	Regression Scenarios Performed
Appendix 3.3	Appendix 2-IB Load Forecast Analysis

Appendix 3.1 - Monthly Data Used for Regression Analysis

Year	Month	IESO Purchases kWh	Adjustment for Microfit	Actual Purchases kWh	HDD	CDD	Number of Days in Month	Winter/Summer Flag	Number of Workdays in Month	Trend	August Flag
2011	Jan-11	12,132,585	1,799	12,134,384	888.7	-	31	1	20	1	-
2011	Feb-11	10,866,454	1,033	10,867,487	731.6	-	28	1	19	2	-
2011	Mar-11	11,067,608	2,402	11,070,010	634.6	-	31	1	23	3	-
2011	Apr-11	9,072,415	2,602	9,075,017	347.4	-	30	0	19	4	-
2011	May-11	8,656,277	2,828	8,659,105	142.8	16.7	31	0	21	5	-
2011	Jun-11	8,776,092	3,389	8,779,481	18.5	59.1	30	1	22	6	-
2011	Jul-11	9,998,192	3,782	10,001,974	0	137.5	31	1	20	7	-
2011	Aug-11	9,450,654	3,038	9,453,692	2.3	82.3	31	1	22	8	1
2011	Sep-11	8,631,923	5,616	8,637,539	55.4	32.9	30	1	21	9	-
2011	Oct-11	8,921,515	3,860	8,925,375	259.1	1.4	31	0	20	10	-
2011	Nov-11	9,478,715	2,771	9,481,486	392.9	-	30	0	22	11	-
2011	Dec-11	10,916,892	1,792	10,918,684	672.2	-	31	1	20	12	-
2012	Jan-12	11,698,538	1,495	11,700,033	831	-	31	1	21	13	-
2012	Feb-12	10,394,346	3,678	10,398,024	671.4	-	29	1	20	14	-
2012	Mar-12	9,868,346	5,711	9,874,057	460.3	-	31	1	22	15	-
2012	Apr-12	8,701,738	6,666	8,708,404	363.3	3.2	30	0	19	16	-
2012	May-12	8,473,818	8,514	8,482,332	102.4	21.0	31	0	22	17	-
2012	Jun-12	9,028,518	8,372	9,036,890	31.4	70.4	30	1	21	18	-
2012	Jul-12	9,776,500	8,141	9,784,641	0	142.2	31	1	21	19	-
2012	Aug-12	9,430,200	7,448	9,437,648	8.4	97.6	31	1	22	20	1
2012	Sep-12	8,456,345	6,062	8,462,407	127.3	20.6	30	1	19	21	-
2012	Oct-12	8,663,345	3,812	8,667,157	259.9	-	31	0	22	22	-
2012	Nov-12	9,765,918	3,380	9,769,298	541.7	-	30	0	22	23	-
2012	Dec-12	10,958,364	1,235	10,959,599	719.1	-	31	1	19	24	-
2013	Jan-13	11,999,817	1,814	12,001,631	839.9	-	31	1	22	25	-
2013	Feb-13	10,701,983	2,546	10,704,529	728.5	-	28	1	19	26	-
2013	Mar-13	10,574,475	4,962	10,579,437	612.9	-	31	1	20	27	-
2013	Apr-13	9,116,700	6,326	9,123,026	381.1	-	30	0	21	28	-
2013	May-13	8,204,917	8,173	8,213,090	121.2	15.3	31	0	22	29	-
2013	Jun-13	8,279,408	6,943	8,286,351	58.1	39.4	30	1	20	30	-
2013	Jul-13	9,591,758	8,290	9,600,048	7.7	114.9	31	1	22	31	-
2013	Aug-13	9,610,958	7,556	9,618,514	13.4	57.2	31	1	21	32	1
2013	Sep-13	8,187,217	6,244	8,193,461	133.2	10.1	30	1	20	33	-
2013	Oct-13	8,725,825	4,461	8,730,286	265.2	0.7	31	0	22	34	-
2013	Nov-13	9,926,917	2,266	9,929,183	560.8	-	30	0	21	35	-
2013	Dec-13	11,614,675	864	11,615,539	858.2	-	31	1	20	36	-
2014	Jan-14	12,521,267	1,826	12,523,093	918.3	-	31	1	22	37	-
2014	Feb-14	10,693,642	2,647	10,696,289	793.2	-	28	1	19	38	-
2014	Mar-14	11,270,883	5,510	11,276,393	783.6	-	31	1	21	39	-
2014	Apr-14	9,026,483	8,035	9,034,518	384.2	-	30	0	20	40	-
2014	May-14	8,278,885	9,577	8,288,462	127.3	8.8	31	0	21	41	-
2014	Jun-14	8,570,154	9,467	8,579,621	20.3	54.9	30	1	21	42	-
2014	Jul-14	9,070,654	9,127	9,079,781	8.8	62.8	31	1	22	43	-
2014	Aug-14	8,980,123	8,673	8,988,796	21.4	55.8	31	1	20	44	1
2014	Sep-14	8,455,877	7,439	8,463,316	110.3	21.6	30	1	21	45	-
2014	Oct-14	8,663,323	4,365	8,667,688	257.9	3.1	31	0	22	46	-
2014	Nov-14	9,594,308	2,388	9,596,696	510.6	-	30	0	20	47	-
2014	Dec-14	10,753,031	2,052	10,755,083	696.4	-	31	1	21	48	-
2015	Jan-15	12,178,875	2,693	12,181,568	968.2	-	31	1	21	49	-
2015	Feb-15	11,445,612	2,302	11,447,914	957.8	-	28	1	19	50	-
2015	Mar-15	10,922,675	7,189	10,929,864	718.6	-	31	1	22	51	-
2015	Apr-15	8,724,747	8,877	8,733,624	352.6	-	30	0	20	52	-
2015	May-15	8,214,246	10,420	8,224,666	94.2	25.3	31	0	20	53	-
2015	Jun-15	8,082,238	9,244	8,091,482	45.2	20.3	30	1	22	54	-
2015	Jul-15	8,969,560	10,629	8,980,189	9.3	100.0	31	1	22	55	-
2015	Aug-15	8,928,793	9,115	8,937,908	5.6	67.4	31	1	20	56	1
2015	Sep-15	8,487,586	7,694	8,495,280	48.4	46.5	30	1	21	57	-
2015	Oct-15	8,442,808	5,620	8,448,428	337.3	-	31	0	21	58	-
2015	Nov-15	8,788,398	3,629	8,792,027	429	-	30	0	21	59	-
2015	Dec-15	9,419,775	1,660	9,421,435	519.9	-	31	1	21	60	-
2016	Jan-16	10,989,034	2,253	10,991,287	804.8	-	31	1	20	61	-
2016	Feb-16	10,461,168	2,428	10,463,596	756.3	-	29	1	20	62	-
2016	Mar-16	9,905,017	6,599	9,911,616	591.4	-	31	1	21	63	-
2016	Apr-16	8,448,753	9,898	8,458,651	433.8	-	30	0	21	64	-
2016	May-16	7,971,052	10,642	7,981,694	145.4	28.7	31	0	21	65	-
2016	Jun-16	8,152,771	10,263	8,163,034	36.3	52.0	30	1	22	66	-
2016	Jul-16	9,080,665	10,379	9,091,044	3.4	112.6	31	1	20	67	-
2016	Aug-16	9,517,733	9,442	9,527,175	1.4	124.6	31	1	22	68	1
2016	Sep-16	8,054,076	8,262	8,062,338	75.1	24.9	30	1	21	69	-
2016	Oct-16	8,074,621	4,981	8,079,602	291.1	-	31	0	20	70	-
2016	Nov-16	8,792,790	3,468	8,796,258	449.5	-	30	0	22	71	-
2016	Dec-16	10,206,407	1,769	10,208,176	733.4	-	31	1	20	72	-

Year	Month	IESO Purchases kWh	Adjustment for Microfit	Actual Purchases kWh	HDD	CDD	Number of Days in Month	Winter/Summer Flag	Number of Workdays in Month	Trend	August Flag
2017	Jan-17	10,464,420	2,425	10,466,845	732.5	-	31	1	21	73	-
2017	Feb-17	9,412,266	3,267	9,415,533	662.1	-	28	1	19	74	-
2017	Mar-17	10,449,490	6,309	10,455,799	731.7	-	31	1	23	75	-
2017	Apr-17	8,073,164	7,362	8,080,526	319.4	1.2	30	0	18	76	-
2017	May-17	7,836,699	7,740	7,844,439	190.4	9.1	31	0	22	77	-
2017	Jun-17	7,883,609	8,370	7,891,979	52.1	45.0	30	1	22	78	-
2017	Jul-17	8,447,553	7,521	8,455,074	4.8	63.8	31	1	20	79	-
2017	Aug-17	8,640,906	7,732	8,648,638	26.9	51.0	31	1	22	80	1
2017	Sep-17	8,076,439	7,202	8,083,641	69.8	52.0	30	1	20	81	-
2017	Oct-17	7,983,759	5,439	7,989,198	197.3	0.4	31	0	21	82	-
2017	Nov-17	9,161,805	2,750	9,164,555	540.8	-	30	0	22	83	-
2017	Dec-17	10,688,479	1,693	10,690,172	871.3	-	31	1	19	84	-
2018	Jan-18	11,412,898	1,775	11,414,673	881.5	-	31	1	22	85	-
2018	Feb-18	9,438,920	2,631	9,441,551	644.6	-	28	1	19	86	-
2018	Mar-18	9,778,013	5,363	9,783,376	611.6	-	31	1	21	87	-
2018	Apr-18	8,757,348	6,637	8,763,985	454.4	-	30	0	20	88	-
2018	May-18	7,670,323	10,087	7,680,410	110.4	15.7	31	0	22	89	-
2018	Jun-18	7,836,187	9,769	7,845,956	39	36.2	30	1	21	90	-
2018	Jul-18	9,698,694	11,027	9,709,721	0	156.9	31	1	21	91	-
2018	Aug-18	9,512,830	8,582	9,521,412	3.6	115.4	31	1	22	92	1
2018	Sep-18	8,248,876	7,700	8,256,576	96.8	49.5	30	1	19	93	-
2018	Oct-18	8,273,205	4,102	8,277,307	359.1	0.7	31	0	22	94	-
2018	Nov-18	9,371,732	1,727	9,373,459	599.5	-	30	0	22	95	-
2018	Dec-18	10,215,218	1,945	10,217,163	766.6	-	31	1	19	96	-
2019	Jan-19	11,356,602	1,769	11,358,371	934.9	-	31	1	22	97	-
2019	Feb-19	9,954,781	3,395	9,958,176	762.2	-	28	1	19	98	-
2019	Mar-19	10,085,138	7,474	10,092,612	692.3	-	31	1	21	99	-
2019	Apr-19	8,524,502	7,016	8,531,518	398.8	-	30	0	20	100	-
2019	May-19	7,801,649	7,751	7,809,400	213.2	-	31	0	22	101	-
2019	Jun-19	7,764,971	9,236	7,774,207	55.1	32.0	30	1	20	102	-
2019	Jul-19	9,557,985	10,449	9,568,434	0	133.1	31	1	22	103	-
2019	Aug-19	8,688,391	9,648	8,698,039	6.3	54.8	31	1	21	104	1
2019	Sep-19	7,563,722	7,380	7,571,102	104	9.1	30	1	20	105	-
2019	Oct-19	7,908,177	4,810	7,912,987	286.8	-	31	0	22	106	-
2019	Nov-19	9,264,874	2,033	9,266,907	611	-	30	0	21	107	-
2019	Dec-19	10,207,018	1,576	10,208,594	717.2	-	31	1	20	108	-
2020	Jan-20	10,475,746	770	10,476,516	755.6	-	31	1	22	109	-
2020	Feb-20	9,817,627	1,630	9,819,257	725.9	-	29	1	19	110	-
2020	Mar-20	9,509,806	6,215	9,516,021	561.7	-	31	1	22	111	-
2020	Apr-20	8,024,763	7,686	8,032,449	407.8	-	30	0	20	112	-
2020	May-20	7,939,253	9,980	7,949,233	200.15	25.7	31	0	20	113	-
2020	Jun-20	8,515,025	10,108	8,525,132	44.7	70.4	30	1	22	114	-
2020	Jul-20	10,333,884	9,949	10,343,833	0	185.8	31	1	22	115	-
2020	Aug-20	9,206,403	8,972	9,215,375	25.5	70.4	31	1	20	116	1
2020	Sep-20	7,627,587	6,830	7,634,417	138.5	9.0	30	1	21	117	-
2020	Oct-20	8,195,562	4,414	8,199,976	327.4	-	31	0	21	118	-
2020	Nov-20	8,711,857	3,033	8,714,890	429.9	-	30	0	21	119	-
2020	Dec-20	10,055,028	1,633	10,056,661	673.1	-	31	1	21	120	-
2021	Jan-21			-	855.5	-	31	1	20	121	-
2021	Feb-21			-	743.4	-	28	1	19	122	-
2021	Mar-21			-	639.9	-	31	1	23	123	-
2021	Apr-21			-	384.3	0.4	30	0	20	124	-
2021	May-21			-	144.7	16.6	31	0	20	125	-
2021	Jun-21			-	40.1	48.0	30	1	22	126	-
2021	Jul-21			-	3.4	121.0	31	1	21	127	-
2021	Aug-21			-	11.5	77.7	31	1	21	128	1
2021	Sep-21			-	95.9	27.6	30	1	21	129	-
2021	Oct-21			-	284.1	0.6	31	0	20	130	-
2021	Nov-21			-	506.6	-	30	0	22	131	-
2021	Dec-21			-	722.7	-	31	1	21	132	-
2022	Jan-22			-	855.5	-	31	1	20	133	-
2022	Feb-22			-	743.4	-	28	1	19	134	-
2022	Mar-22			-	639.9	-	31	1	23	135	-
2022	Apr-22			-	384.3	0.4	30	0	19	136	-
2022	May-22			-	144.7	16.6	31	0	21	137	-
2022	Jun-22			-	40.1	48.0	30	1	22	138	-
2022	Jul-22			-	3.4	121.0	31	1	20	139	-
2022	Aug-22			-	11.5	77.7	31	1	22	140	1
2022	Sep-22			-	95.9	27.6	30	1	21	141	-
2022	Oct-22			-	284.1	0.6	31	0	20	142	-
2022	Nov-22			-	506.6	-	30	0	22	143	-
2022	Dec-22			-	722.7	-	31	1	20	144	-

Appendix 3.2 - Regression Scenarios Performed

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.979870437
R Square	0.960146074
Adjusted R Square	0.957655203
Standard Error	239469.2367
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	7	1.54733E+14	2.2105E+13	385.4661	2.92E-75
Residual	112	6.4227E+12	5.7346E+10		
Total	119	1.61156E+14			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	72408288.7	5153341.713	14.0507447	1.81E-26	62197603	82618975	62197603	82618975
HDD	4476.259466	110.8785824	40.3708216	1.42E-68	4256.568	4695.951	4256.568	4695.951
CDD	15871.44818	903.2367154	17.5717483	5.65E-34	14081.8	17661.1	14081.8	17661.1
Number of Days in Month	149894.7469	31830.87449	4.70909924	7.18E-06	86825.95	212963.5	86825.95	212963.5
Winter/Summer Flag	338582.7385	57685.48226	5.86946187	4.53E-08	224286.3	452879.1	224286.3	452879.1
Number of Workdays in Month	55832.10152	23287.70813	2.39749233	0.018162	9690.493	101973.7	9690.493	101973.7
August Flag	433140.2684	89195.27885	4.85608963	3.91E-06	256411.3	609869.3	256411.3	609869.3
Customer Count (R+C+I)	-12103.01431	867.3518596	-13.953984	2.96E-26	-13821.6	-10384.5	-13821.6	-10384.5

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.985383169
R Square	0.97097999
Adjusted R Square	0.969166239
Standard Error	204344.5001
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	7	1.56479E+14	2.2354E+13	535.3437	5.78E-83
Residual	112	4.67675E+12	4.1757E+10		
Total	119	1.61156E+14			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	6990331.733	805657.4824	8.67655534	3.67E-14	5394025	8586639	5394025	8586639
HDD	4467.543905	94.58849083	47.2313689	8.67E-76	4280.129	4654.959	4280.129	4654.959
CDD	15776.92342	770.4912236	20.4764479	1.16E-39	14250.29	17303.55	14250.29	17303.55
Number of Days in Month	150348.2227	27162.08835	5.53522324	2.07E-07	96530.03	204166.4	96530.03	204166.4
Winter/Summer Flag	345476.6921	49206.34487	7.02097856	1.8E-10	247980.6	442972.8	247980.6	442972.8
Number of Workdays in Month	55449.25115	19871.53414	2.79038602	0.00619	16076.35	94822.15	16076.35	94822.15
August Flag	429120.2379	76109.13907	5.63822221	1.3E-07	278319.7	579920.7	278319.7	579920.7
Ontario Real GDP	-49737.9954	2828.499101	-17.584589	5.32E-34	-55342.3	-44133.7	-55342.3	-44133.7

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.983720692
R Square	0.967706401
Adjusted R Square	0.965378934
Standard Error	216530.9198
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	8	1.55952E+14	1.9494E+13	415.7767	5.18E-79
Residual	111	5.20431E+12	4.6886E+10		
Total	119	1.61156E+14			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	441246.3145	14866702.43	0.02968017	0.976375	-2.9E+07	29900610	-2.9E+07	29900610
HDD	4456.965708	100.3291415	44.4234411	1.59E-72	4258.157	4655.775	4258.157	4655.775
CDD	15776.22504	816.9309242	19.3115777	2.78E-37	14157.42	17395.03	14157.42	17395.03
Number of Days in Month	152483.6024	28786.33376	5.29708311	6.02E-07	95441.56	209525.6	95441.56	209525.6
Winter/Summer Flag	341459.8823	52162.94971	6.54602326	1.9E-09	238095.5	444824.2	238095.5	444824.2
Number of Workdays in Month	55832.67608	21057.02148	2.65149922	0.009186	14106.78	97558.57	14106.78	97558.57
August Flag	430357.3805	80653.27502	5.33589467	5.08E-07	270537.5	590177.2	270537.5	590177.2
Trend	-9449.588569	1853.699547	-5.0976916	1.43E-06	-13122.8	-5776.36	-13122.8	-5776.36
Customer Count (R+C+I)	236.7666641	2544.538607	0.09304896	0.926032	-4805.41	5278.94	-4805.41	5278.94

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.943853497
R Square	0.890859425
Adjusted R Square	0.88506435
Standard Error	394527.3195
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	6	1.43567E+14	2.3928E+13	153.727	5.94E-52
Residual	113	1.75887E+13	1.5565E+11		
Total	119	1.61156E+14			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	1533922.313	1435484.627	1.06857453	0.287539	-1310032	4377876	-1310032	4377876
HDD	4415.447077	182.5321178	24.1899734	1.69E-46	4053.818	4777.076	4053.818	4777.076
CDD	15372.24956	1486.921437	10.3383065	4.93E-18	12426.39	18318.11	12426.39	18318.11
Number of Days in Month	146245.8512	52439.82897	2.78883158	0.006209	42353.09	250138.6	42353.09	250138.6
Winter/Summer Flag	370304.2829	94963.42766	3.899441	0.000164	182164.6	558444	182164.6	558444
Number of Workdays in Month	52134.71907	38364.18594	1.3589424	0.176871	-23871.7	128141.1	-23871.7	128141.1
August Flag	417271.1531	146937.9296	2.83977836	0.005355	126160.6	708381.7	126160.6	708381.7

Appendix 3.3 - Appendix 2-IB Load Forecast Analysis

Appendix 2-IB
Customer, Connections, Load Forecast and Revenues Data and Analysis

This sheet is to be filled in accordance with the instructions documented in section 2.3.2 of Chapter 2 of the Filing Requirements for Distribution Rate Applications, in terms of one set of tables per customer class.

Color coding for Cells: Data input | Drop-down List | No data entry required | Blank or calculated value

Distribution System (Total)

	Calendar Year (for 2022 Cost of Service		Consumption (kWh) [3]				
				Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*		Actual	101,711,018.28	103,645,080.82	OEB-approved	
Historical	*2017*		Actual	98,838,309.30	101,675,800.04		
Historical	*2018*		Actual	101,848,630.36	100,645,711.79		
Historical	*2019*		Actual	100,219,092.00	99,202,493.02		
Historical	*2020*		Actual	99,512,150.00	97,707,592.03		
Bridge Year	*2021*		Forecast		96,816,967.58		
Test Year	*2022*		Forecast		95,531,363.82		

Variance Analysis	Year	Year-over-year		Versus OEB-approved
	2016			
	2017	-2.8%	-1.9%	
	2018	3.0%	-1.0%	
	2019	-1.6%	-1.4%	
	2020	-0.7%	-1.5%	
	2021		-0.9%	
	2022		-1.3%	
	Geometric Mean	-0.7%	-1.6%	

Customer Class Analysis (one for each Customer Class, excluding MicroFIT and Standby)

1 Customer Class: Residential — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service	Customers				Consumption (kWh) [3]					Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	5,071	OEB-approved		Actual	40,480,043.33	41,459,183.58	OEB-approved		Actual	7,982.65	8,175.74	OEB-approved	
Historical	*2017*	Actual	5,089			Actual	39,379,535.36	40,816,523.81			Actual	7,738.17	8,020.54		
Historical	*2018*	Actual	5,105			Actual	42,538,788.82	41,907,612.07			Actual	8,332.77	8,209.13		
Historical	*2019*	Actual	5,113			Actual	42,182,601.00	41,645,385.82			Actual	8,250.07	8,145.00		
Historical	*2020*	Actual	5,107			Actual	43,593,897.00	42,606,035.39			Actual	8,536.11	8,342.67		
Bridge Year	*2021*	Forecast	5,118			Forecast		43,191,009.09			Forecast	0.00	8,439.04		
Test Year	*2022*	Forecast	5,129			Forecast		43,536,196.04			Forecast	0.00	8,488.24		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	0.4%		*2017*	-2.7%	-1.6%		*2017*	-3.1%	-1.9%	
	2018	0.3%		*2018*	8.0%	2.7%		*2018*	7.7%	2.4%	
	2019	0.2%		*2019*	-0.8%	-0.6%		*2019*	-1.0%	-0.8%	
	2020	-0.1%		*2020*	3.3%	2.3%		*2020*	3.5%	2.4%	
	2021	0.2%		*2021*		1.4%		*2021*		1.2%	
	2022	0.2%		*2022*		0.8%		*2022*		0.6%	
	Geometric Mean	0.2%		Geometric Mean	2.5%	1.0%		Geometric Mean	2.3%	0.8%	

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual	$ 1,412,658	OEB-approved	
Historical	*2017*	Actual	$ 1,500,818		
Historical	*2018*	Actual	$ 1,609,148		
Historical	*2019*	Actual	$ 1,623,109		
Historical	*2020*	Actual	$ 1,634,619		
Bridge Year (Foreca	*2021*	Forecast	$ 1,633,051		
Test Year (Forecast	*2022*	Forecast	$ 2,102,195		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	6.2%	
	2018	7.2%	
	2019	0.9%	
	2020	0.7%	
	2021	-0.1%	
	2022	28.7%	
	Geometric Mean	8.3%	

2 Customer Class: GS < 50 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service	Customers				Consumption (kWh) [3]					Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	740	OEB-approved		Actual	20,348,622.96	20,840,819.95	OEB-approved		Actual	27,498.14	28,163.27	OEB-approved	
Historical	*2017*	Actual	741			Actual	19,816,422.94	20,539,538.91			Actual	26,742.81	27,718.68		
Historical	*2018*	Actual	739			Actual	20,252,448.66	19,951,949.40			Actual	27,405.21	26,998.58		
Historical	*2019*	Actual	735			Actual	19,700,297.00	19,449,404.49			Actual	26,803.13	26,461.77		
Historical	*2020*	Actual	731			Actual	18,533,558.00	18,113,577.41			Actual	25,353.70	24,779.18		
Bridge Year	*2021*	Forecast	729			Forecast		17,747,657.26			Forecast	0.00	24,345.21		
Test Year	*2022*	Forecast	727			Forecast		17,290,656.16			Forecast	0.00	23,783.57		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	0.1%		*2017*	-2.6%	-1.4%		*2017*	-2.7%	-1.6%	
	2018	-0.3%		*2018*	2.2%	-2.9%		*2018*	2.5%	-2.6%	
	2019	-0.5%		*2019*	-2.7%	-2.5%		*2019*	-2.2%	-2.0%	
	2020	-0.5%		*2020*	-5.9%	-6.9%		*2020*	-5.4%	-6.4%	
	2021	-0.3%		*2021*		-2.0%		*2021*		-1.8%	
	2022	-0.3%		*2022*		-2.6%		*2022*		-2.3%	
	Geometric Mean	-0.4%		Geometric Mean	-3.1%	-3.7%		Geometric Mean	-2.7%	-3.3%	

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual	$ 466,732	OEB-approved	
Historical	*2017*	Actual	$ 495,355		
Historical	*2018*	Actual	$ 503,343		
Historical	*2019*	Actual	$ 531,693		
Historical	*2020*	Actual	$ 506,733		
Bridge Year (Foreca	*2021*	Forecast	$ 488,346		
Test Year (Forecast	*2022*	Forecast	$ 497,133		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	6.1%	
	2018	1.6%	
	2019	5.6%	
	2020	-4.7%	
	2021	-3.6%	
	2022	1.8%	
	Geometric Mean	1.3%	

3 Customer Class: GS 50 to 4,999 kW

Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3] Actual (Weather actual)	Consumption (kWh) Weather-normalized		Consumption (kWh) Weather-normalized	Consumption (kWh) per Customer Actual (Weather actual)	Consumption (kWh) per Customer Weather-normalized		Consumption (kWh) per Customer Weather-normalized
Historical	*2016*	Actual	64	OEB-approved	Actual 39,456,019.00	39,918,744.30	OEB-approved		Actual 616,500.30	623,730.38	OEB-approved	
Historical	*2017*	Actual	63		Actual 38,286,678.00	38,964,064.32			Actual 607,725.05	618,477.21		
Historical	*2018*	Actual	65		Actual 37,703,866.30	37,432,623.76			Actual 580,059.48	575,886.52		
Historical	*2019*	Actual	62		Actual 37,004,001.00	36,775,509.71			Actual 596,838.73	593,153.38		
Historical	*2020*	Actual	61		Actual 36,107,964.00	35,711,248.23			Actual 591,933.84	585,430.30		
Bridge Year	*2021*	Forecast	60		Forecast	34,605,282.26			Forecast 0.00	576,754.70		
Test Year	*2022*	Forecast	59		Forecast	33,433,327.13			Forecast 0.00	566,666.56		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	-1.6%		*2017*	-3.0%	-2.4%		*2017*	-1.4%	-0.8%	
	2018	3.2%		*2018*	-1.5%	-3.9%		*2018*	-4.6%	-6.9%	
	2019	-4.6%		*2019*	-1.9%	-1.8%		*2019*	2.9%	3.0%	
	2020	-1.6%		*2020*	-2.4%	-2.9%		*2020*	-0.8%	-1.3%	
	2021	-1.6%		*2021*		-3.1%		*2021*		-1.5%	
	2022	-1.7%		*2022*		-3.4%		*2022*		-1.7%	
	Geometric Mean	-1.6%		Geometric Mean	-2.9%	-3.5%		Geometric Mean	-1.3%	-1.9%	

	Calendar Year (for 2022 Cost of Service)	Revenues			Demand (kW) Actual (Weather actual)	Demand (kW) Weather-normalized		Demand (kW) Weather-normalized	Demand (kW) per Customer Actual (Weather actual)	Demand (kW) per Customer Weather-normalized		Demand (kW) per Customer Weather-normalized
Historical	*2016*	Actual	$ 419,957	OEB-approved	Actual 115,476.90	116,831	OEB-approved		Actual 1804.33	1825.49	OEB-approved	
Historical	*2017*	Actual	$ 425,839		Actual 111,704.20	113,681			Actual 1773.08	1804.45		
Historical	*2018*	Actual	$ 456,243		Actual 112,493.40	111,684			Actual 1730.67	1718.22		
Historical	*2019*	Actual	$ 460,313		Actual 109,763.60	109,086			Actual 1770.38	1759.45		
Historical	*2020*	Actual	$ 454,448		Actual 109,147.00	107,948			Actual 1789.30	1769.64		
Bridge Year (Foreca	*2021*	Forecast	$ 436,424		Forecast	102,549			Forecast 0	1709.15		
Test Year (Forecast	*2022*	Forecast	$ 416,354		Forecast	99,076			Forecast 0	1679.26		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	1.4%		*2017*	-3.3%	-2.7%		*2017*	-1.7%	-1.2%	
	2018	7.1%		*2018*	0.7%	-1.8%		*2018*	-2.4%	-4.8%	
	2019	0.9%		*2019*	-2.4%	-2.3%		*2019*	2.3%	2.4%	
	2020	-1.3%		*2020*	-0.6%	-1.0%		*2020*	1.1%	0.6%	
	2021	-4.0%		*2021*		-5.0%		*2021*		-3.4%	
	2022	-4.6%		*2022*		-3.4%		*2022*		-1.7%	
	Geometric Mean	-0.2%		Geometric Mean	-1.9%	-3.2%		Geometric Mean	-0.3%	-1.7%	

4 Customer Class: Street Lights — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service	Customers				Consumption (kWh) [3]					Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	1,711	OEB-approved		Actual	773,158.00	773,158.00	OEB-approved		Actual	451.87	451.87	OEB-approved	
Historical	*2017*	Actual	1,711			Actual	716,670.00	716,670.00			Actual	418.86	418.86		
Historical	*2018*	Actual	1,711			Actual	714,488.57	714,488.57			Actual	417.59	417.59		
Historical	*2019*	Actual	1,711			Actual	691,963.00	691,963.00			Actual	404.42	404.42		
Historical	*2020*	Actual	1,712			Actual	644,755.00	644,755.00			Actual	376.61	376.61		
Bridge Year	*2021*	Forecast	1,712			Forecast		642,913.64			Forecast	0.00	375.53		
Test Year	*2022*	Forecast	1,712			Forecast		642,913.64			Forecast	0.00	375.53		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	0.0%		*2017*	-7.3%	-7.3%		*2017*	-7.3%	-7.3%	
	2018	0.0%		*2018*	-0.3%	-0.3%		*2018*	-0.3%	-0.3%	
	2019	0.0%		*2019*	-3.2%	-3.2%		*2019*	-3.2%	-3.2%	
	2020	0.1%		*2020*	-6.8%	-6.8%		*2020*	-6.9%	-6.9%	
	2021	0.0%		*2021*		-0.3%		*2021*		-0.3%	
	2022	0.0%		*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	0.0%		Geometric Mean	-5.9%	-3.6%		Geometric Mean	-5.9%	-3.6%	

	Calendar Year (for 2022 Cost of Service	Revenues				Demand (kW)					Demand (kW) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	$ 98,403	OEB-approved		Actual	2070.32	2,070	OEB-approved		Actual	1.21	1.21	OEB-approved	
Historical	*2017*	Actual	$ 127,247			Actual	1944.62	1,945			Actual	1.14	1.14		
Historical	*2018*	Actual	$ 101,590			Actual	1938.5	1,939			Actual	1.13	1.13		
Historical	*2019*	Actual	$ 97,216			Actual	1886.9	1,887			Actual	1.10	1.10		
Historical	*2020*	Actual	$ 99,153			Actual	1743.9	1,744			Actual	1.02	1.02		
Bridge Year (Foreca	*2021*	Forecast	$ 96,242			Forecast		1,744			Forecast	0	1.02		
Test Year (Forecast	*2022*	Forecast	$ 109,617			Forecast		1,744			Forecast	0	1.02		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	29.3%		*2017*	-6.1%	-6.1%		*2017*	-6.1%	-6.1%	
	2018	-20.2%		*2018*	-0.3%	-0.3%		*2018*	-0.3%	-0.3%	
	2019	-4.3%		*2019*	-2.7%	-2.7%		*2019*	-2.7%	-2.7%	
	2020	2.0%		*2020*	-7.6%	-7.6%		*2020*	-7.6%	-7.6%	
	2021	-2.9%		*2021*		0.0%		*2021*		0.0%	
	2022	13.9%		*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	2.2%		Geometric Mean	-5.6%	-3.4%		Geometric Mean	-5.6%	-3.4%	

5 Customer Class: Sentinel Lights — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2022 Cost of Service	Customers			Consumption (kWh) [3]				Consumption (kWh) per Customer			
					Actual (Weather actual)	Weather-normalized		Weather-normalized	Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	73	OEB-approved	Actual 106,791.00	106,791.00	OEB-approved		Actual 1,462.89	1,462.89	OEB-approved	
Historical	*2017*	Actual	71		Actual 99,906.00	99,906.00			Actual 1,407.13	1,407.13		
Historical	*2018*	Actual	72		Actual 97,401.00	97,401.00			Actual 1,352.79	1,352.79		
Historical	*2019*	Actual	74		Actual 98,084.00	98,084.00			Actual 1,325.46	1,325.46		
Historical	*2020*	Actual	73		Actual 96,660.00	96,660.00			Actual 1,324.11	1,324.11		
Bridge Year	*2021*	Forecast	73		Forecast	94,789.32			Forecast 0.00	1,298.48		
Test Year	*2022*	Forecast	73		Forecast	92,954.85			Forecast 0.00	1,273.35		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	-2.7%		*2017*	-6.4%	-6.4%		*2017*	-3.8%	-3.8%	
	2018	1.4%		*2018*	-2.5%	-2.5%		*2018*	-3.9%	-3.9%	
	2019	2.8%		*2019*	0.7%	0.7%		*2019*	-2.0%	-2.0%	
	2020	-1.4%		*2020*	-1.5%	-1.5%		*2020*	-0.1%	-0.1%	
	2021	0.0%		*2021*		-1.9%		*2021*		-1.9%	
	2022	0.0%		*2022*		-1.9%		*2022*		-1.9%	
	Geometric Mean	0.0%		Geometric Mean	-3.3%	-2.7%		Geometric Mean	-3.3%	-2.7%	

	Calendar Year (for 2022 Cost of Service	Revenues			Demand (kW)				Demand (kW) per Customer			
					Actual (Weather actual)	Weather-normalized		Weather-normalized	Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	$ 6,474	OEB-approved	Actual 302	302	OEB-approved		Actual 4.14	4.14	OEB-approved	
Historical	*2017*	Actual	$ 7,064		Actual 275.7	276			Actual 3.88	3.88		
Historical	*2018*	Actual	$ 7,499		Actual 270.2	270			Actual 3.75	3.75		
Historical	*2019*	Actual	$ 7,970		Actual 272.4	272			Actual 3.68	3.68		
Historical	*2020*	Actual	$ 7,969		Actual 268.5	269			Actual 3.68	3.68		
Bridge Year (Foreca	*2021*	Forecast	$ 7,898		Forecast	263			Forecast 0	3.61		
Test Year (Forecast	*2022*	Forecast	$ 10,077		Forecast	258			Forecast 0	3.54		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	9.1%		*2017*	-8.7%	-8.7%		*2017*	-6.1%	-6.1%	
	2018	6.2%		*2018*	-2.0%	-2.0%		*2018*	-3.4%	-3.4%	
	2019	6.3%		*2019*	0.8%	0.8%		*2019*	-1.9%	-1.9%	
	2020	0.0%		*2020*	-1.4%	-1.4%		*2020*	-0.1%	-0.1%	
	2021	-0.9%		*2021*		-1.9%		*2021*		-1.9%	
	2022	27.6%		*2022*		-1.9%		*2022*		-1.9%	
	Geometric Mean	9.3%		Geometric Mean	-3.8%	-3.1%		Geometric Mean	-3.8%	-3.1%	

6 Customer Class: Unmetered Loads — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2022 Cost of Service)	Customers			Consumption (kWh) [3]				Consumption (kWh) per Customer			
						Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized
Historical	*2016*	Actual	58	OEB-approved	Actual	546,384.00	546,384.00	OEB-approved	Actual	9,420.41	9,420.41	OEB-approved
Historical	*2017*	Actual	57		Actual	539,097.00	539,097.00		Actual	9,457.84	9,457.84	
Historical	*2018*	Actual	57		Actual	541,637.00	541,637.00		Actual	9,502.40	9,502.40	
Historical	*2019*	Actual	57		Actual	542,146.00	542,146.00		Actual	9,511.33	9,511.33	
Historical	*2020*	Actual	57		Actual	535,316.00	535,316.00		Actual	9,391.51	9,391.51	
Bridge Year	*2021*	Forecast	57		Forecast		535,316.00		Forecast	0.00	9,391.51	
Test Year	*2022*	Forecast	57		Forecast		535,316.00		Forecast	0.00	9,391.51	

Variance Analysis	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016				*2016*				*2016*			
	2017	-1.7%			*2017*	-1.3%	-1.3%		*2017*	0.4%	0.4%	
	2018	0.0%			*2018*	0.5%	0.5%		*2018*	0.5%	0.5%	
	2019	0.0%			*2019*	0.1%	0.1%		*2019*	0.1%	0.1%	
	2020	0.0%			*2020*	-1.3%	-1.3%		*2020*	-1.3%	-1.3%	
	2021	0.0%			*2021*		0.0%		*2021*		0.0%	
	2022	0.0%			*2022*		0.0%		*2022*		0.0%	
	Geometric Mean	-0.3%			Geometric Mean	-0.7%	-0.4%		Geometric Mean	-0.1%	-0.1%	

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 12,979	OEB-approved	
Historical	*2017*	Actual	$ 13,087		
Historical	*2018*	Actual	$ 13,921		
Historical	*2019*	Actual	$ 14,140		
Historical	*2020*	Actual	$ 13,949		
Bridge Year (Foreca	*2021*	Forecast	$ 14,247		
Test Year (Forecast	*2022*	Forecast	$ 16,308		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	0.8%	
	2018	6.4%	
	2019	1.6%	
	2020	-1.3%	
	2021	2.1%	
	2022	14.5%	
	Geometric Mean	4.7%	