



**Lakefront  
Utilities  
Inc.**

**Lakefront Utilities Inc.**

**2022 Cost of Service Application**

**EB-2021-0039**

**Rates Effective: January 1, 2022**

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**Lakefront Utilities Inc.**

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**EXHIBIT 3 - OPERATING REVENUE**

**EB-2021-0039**

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### 2.3.1 LOAD AND REVENUE FORECAST

#### EXPLANATION OF THE CAUSES, ASSUMPTIONS, AND ADJUSTMENT FOR THE VOLUME FORECAST

1 This exhibit provides the details of Lakefront’s operating revenue for 2017 Board Approved, 2017  
2 to 2020 Actuals, 2021 Bridge Year, and the 2022 Test Year. This exhibit also provides a detailed  
3 variance analysis by rate classification of the operating revenue components.

4 Distribution revenue excludes revenue from commodity sales.

5 LUI is proposing a total Service Revenue Requirement of \$5,222,441 for the 2022 Test Year. This  
6 amount includes a Base Revenue Requirement of \$4,793,168 plus Revenue Offsets of \$429,272 to  
7 be recovered through Other Revenue.

8 Other Revenue includes:

- 9 1. Late Payment Charges
- 10 2. Specific Service Charges
- 11 3. Rent from Electric Property
- 12 4. Miscellaneous Service Revenues
- 13 5. Standard Supply Service (SSS) Administrative Charges and
- 14 6. Interest Income.

15 A summary of these Operating Revenues together is presented with a materiality analysis of  
16 variances is presented in section 2.3.3.

17 The following Table 3.0 summarizes LUI’s total Operating Revenue. The 2021 Bridge Year is  
18 comprised of projection of distribution revenue from existing distribution rates and other  
19 distribution revenue. The 2022 Test Year distribution revenue is provided on the basis of both  
20 existing and proposed distribution rates. Revenue for GS 50-2999 kW and GS 3000-4999 kW rate  
21 classes is net of transformer allowance credits to eligible customers within these rate classes.

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1 **Table 3.0: Summary of Operating Revenue**

Distribution Revenue	2017 Board Approved	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Bridge Year	2022 Test Year - Existing Rate	2022 Test Year - Proposed Rates
Residential	2,352,434	2,278,362	2,428,111	2,505,153	2,604,697	2,709,926	2,742,564	2,896,008
GS<50 kW	576,819	596,978	615,364	622,562	614,701	638,264	637,451	678,672
GS 50-2999 kW	996,014	999,038	1,054,963	1,008,352	987,018	1,000,308	988,918	991,780
GS 3000-4999 kW	128,229	128,786	134,216	130,297	138,801	148,805	152,687	110,471
Street Lighting	172,961	178,239	126,743	68,279	69,605	71,428	72,043	88,417
Sentinel Lights	4,686	4,273	4,256	4,289	4,855	4,716	4,680	6,766
Unmetered Scattered Load	28,969	27,135	27,886	28,149	28,460	28,828	28,436	21,053
<b>Total Distribution Revenue</b>	<b>4,260,112</b>	<b>4,212,811</b>	<b>4,391,540</b>	<b>4,367,081</b>	<b>4,448,137</b>	<b>4,602,275</b>	<b>4,626,779</b>	<b>4,793,168</b>

Other Disbttribution Revenue	2017 Board Approved	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Bridge Year	2022 Test Year - Existing Rate	2022 Test Year - Proposed Rates
Specific Service Charges	146,170	164,510	219,119	158,865	80,156	101,320	143,880	143,880
Late Payment Charges	73,000	49,526	55,945	40,863	25,329	45,000	45,500	45,500
Other Operating Revenues	194,667	162,281	170,540	166,031	168,912	168,470	234,892	234,892
Other Income or Deductions	5,748	4,339	1,441	6,020	1,522	5,000	5,000	5,000
<b>Total Other Disbttribution Revenue</b>	<b>419,585</b>	<b>380,655</b>	<b>447,045</b>	<b>371,780</b>	<b>275,919</b>	<b>319,790</b>	<b>429,272</b>	<b>429,272</b>

2 <b>Total Operating Revenue</b>	<b>4,679,697</b>	<b>4,593,466</b>	<b>4,838,585</b>	<b>4,738,860</b>	<b>4,724,056</b>	<b>4,922,065</b>	<b>5,056,051</b>	<b>5,222,441</b>
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3 As per the filing requirements, explanation of causes, assumptions, and adjustment for volume  
 4 forecast, including economic sources and data sources for customer and load forecasts are  
 5 documented through this Exhibit. In particular:

- 6 • Explanation of Weather Normalization Methodology
- 7 • 2.3.1.1 – Multivariate Regression Model

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## EXPLANATION OF WEATHER NORMALIZATION 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. LUI reviewed various processes used by earlier Cost of Service applications and is proposing to adopt a weather normalization methodology using Multifactor Regression (MR) for its load forecast. LUI is proposing to adopt a weather normalization forecasting method similar to its 2017 Cost of Service (EB-2016-0089).

In summary, LUI used the regression analysis methodology to determine a prediction model. With regards to the overall process of load forecasting, it is LUI's view that conducting a regression analysis on historical purchases to produce an equation that will predict energy purchases is appropriate.

LUI knows by month the specific number of kWh's purchased from the IESO for use by customers of LUI. With a regression analysis these purchases can be related to the 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 LUI for the bridge and test year, which is converted to billed kWh by rate class.

The following tables provide the material to support the weather normalized load forecast used by LUI in this application. Tables 3.1, 3.2, and 3.3 below provide a summary of the weather normalized load and customer/connection forecast used in this section for the 2021 and 2022 forecast periods. LUI has provided 2011 to 2020 actual data, unless otherwise noted.

LUI currently does not have a process to adjust weather actual data to a weather normalized basis since it is LUI's understanding that there is not a Board approved method to weather normalize actual data. However, based on the process outlined in this Exhibit, a process to forecast energy on a weather normalized basis has been developed and used in this application.

Total customers and connections are annual averages calculated by adding the beginning counts as of January 1st and the ending counts as of December 31st and dividing in half.

**APPENDIX 2-IB AND RRWF TAB 10**

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Appendix 2-IB is included in section 2.3.2 – Accuracy of Load Forecast and Variance Analysis. Lakefront confirms that the customer and load forecast for the Test Year has been entered on Revenue Requirement Work Form (RRWF), Tab 10.

### 2.3.1.1 MULTIVARIATE REGRESSION MODEL

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The purpose of this evidence is to present the process used by LUI to prepare the weather normalized load and customer/connection forecast used to design the proposed 2022 distribution rates. A copy of the Load Forecast model has been filed in live Excel format.

In summary, as a starting point LUI used the same regression analysis methodology approved by the Ontario Energy Board (the Board) in its 2017 Cost of Service Application (EB-2016-0089) and updated the analysis for actual power purchases to the end of 2020.

With regard to the overall process of load forecast, LUI believes that conducting a regression analysis on historical electricity purchases to produce an equation that will predict purchase is appropriate. LUI has the data for the amount of electricity (in kWh) purchased from the IESO for use by LUI's customers. With a regression analysis, these purchases can be related to other monthly explanatory variables such as heating degree days and cooling degree days which occur in the same month. The results of the regression analysis produce an equation that predicts the purchase based on the explanatory variables. This prediction model is then used as the basis to recast the total level of weather normalized purchase for the Bridge Year and the Test Year which is converted to billed kWh by rate class.

LUI has monthly purchases data and consistent with its 2017 Cost of Service filing and believes conducting the regression analysis on purchases provides better results since a longer level of historical data increases the accuracy of the regression analysis. Based on the Board's approval of this methodology in a number of previous Cost of Service Applications as well as the discussion that follows, LUI submits the load forecasting methodology is reasonable at this time for the purposes of this Application.

LUI's weather normalized load forecast is developed in a three-step process. A total system weather normalized purchased energy forecast is developed based on a multivariate regression model that incorporates historical load, weather, and customer data.



1 **Table 3.1: Summary of Load and Customer/Connection Forecast**

Year	kWh	Growth (kWh)	Percentage Change %	Customer/Connection Count	Growth	Percentage Change %
2011	246,399,922	-	-	12,538	-	-
2012	246,063,440	(336,482)	(0.14%)	12,681	143	1.14%
2013	245,808,892	(254,548)	(0.10%)	12,837	157	1.23%
2014	239,901,486	(5,907,406)	(2.40%)	12,749	(88)	(0.69%)
2015	243,885,875	3,984,388	1.66%	12,936	187	1.46%
2016	240,169,968	(3,715,906)	(1.52%)	12,830	(106)	(0.82%)
2017	236,393,260	(3,776,709)	(1.57%)	13,026	197	1.53%
2018	245,884,781	9,491,521	4.02%	13,386	360	2.76%
2019	247,522,436	1,637,655	0.67%	13,729	343	2.56%
2020	236,396,879	(11,125,558)	(4.49%)	13,842	114	0.83%
2021	234,100,473	(2,296,405)	(0.97%)	13,996	154	1.11%
2022	231,701,807	(2,398,666)	(1.02%)	14,152	156	1.12%

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 3 The forecast of billed energy by rate class is developed based on a forecast of customer numbers  
 4 and historical usage patterns per customer. For the rate classes that have weather sensitive load  
 5 their forecasted billed energy is adjusted to ensure that the total billed energy forecast by rate class  
 6 is equivalent to the total weather normalized billed energy forecast that has been determined from  
 7 the regression model.

8 The forecast of customers by rate class was determined using a trend analysis of historical  
 9 customer additions by rate class from 2011 to 2020 and using it to forecast the number of  
 10 customers.

11 Table 3.2 and 3.3 below provide a summary of the total load, customer/connection count, and  
 12 annual usage per customer/connection.

13 **Table 3.2: Summary of Load**

Year	Customer Usage												
	Residential kWh	General Service <50 kW kWh	General Service 50 - 2999 kW		General Service 3000 - 4999 kW		Street Lighting		Sentinel Lights		Unmetered Scattered Load kWh	Total kWh	
2011	70,957,666	37,629,361	120,834,914	300,129	15,051,682	42,336	1,222,967	3,321	43,758	132	659,574	246,399,922	345,918
2012	68,431,708	32,014,524	128,532,327	322,335	15,193,348	39,663	1,222,128	3,340	41,938	132	627,467	246,063,440	365,470
2013	72,171,332	32,367,581	125,354,819	323,427	13,952,451	37,943	1,249,953	3,386	44,355	132	668,402	245,808,892	364,888
2014	74,316,917	31,807,450	119,336,146	314,352	12,584,229	36,604	1,258,253	3,409	42,943	132	555,548	239,901,486	354,496
2015	78,658,151	32,511,939	115,685,946	306,814	14,943,860	33,868	1,439,933	3,416	43,818	132	602,228	243,885,875	344,230
2016	86,737,657	31,736,946	104,065,809	305,435	15,890,466	37,224	1,080,612	2,916	45,386	132	613,092	240,169,968	345,707
2017	81,423,304	32,374,514	101,900,559	292,263	18,956,591	39,385	1,077,264	2,916	45,386	132	615,642	236,393,260	334,696
2018	77,282,085	35,191,711	111,495,776	297,531	20,169,223	42,961	1,087,264	2,916	44,706	132	614,016	245,884,781	343,540
2019	77,067,212	35,397,172	115,404,710	278,379	17,917,827	38,240	1,077,264	2,916	44,342	132	613,910	247,522,436	319,667
2020	76,102,272	33,194,524	106,071,560	278,617	19,292,259	41,553	1,080,612	2,916	44,222	132	611,429	236,396,879	323,218
2021	75,363,000	32,872,066	105,041,160	276,979	19,104,850	46,149	1,070,115	2,861	43,793	131	605,489	234,100,473	326,120
2022	74,590,807	32,535,249	103,964,876	274,141	18,909,096	48,547	1,059,150	2,831	43,344	130	599,285	231,701,807	325,649

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1 **Table 3.3: Summary of Customer/Connection**

Customer Counts/Customer Connections								
Year	Residential	General Service <50 kW	General Service 50 - 2999 kW	General Service 3000 - 4999 kW	Street Lighting	Sentinel Lights	Unmetered Scattered Load	Total
2011	8,425	1,073	132	1	2,759	53	96	12,538
2012	8,525	1,067	137	1	2,802	54	95	12,681
2013	8,627	1,058	142	1	2,862	54	94	12,837
2014	8,761	1,069	138	1	2,634	54	93	12,749
2015	8,885	1,078	134	1	2,694	54	90	12,936
2016	8,988	1,083	134	1	2,491	48	85	12,830
2017	9,073	1,097	131	1	2,593	48	84	13,026
2018	9,175	1,120	121	1	2,838	48	84	13,386
2019	9,271	1,131	114	1	3,082	47	84	13,729
2020	9,384	1,134	110	1	3,082	50	83	13,842
2021	9,497	1,140	107	1	3,120	50	81	13,996
2022	9,611	1,148	105	1	3,159	49	80	14,152

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 3 **Purchased kWh Load Forecast**

4 An equation to predict total system purchased energy is developed using a multivariate regression  
 5 model with the following independent variables: weather (heating and cooling degree days),  
 6 calendar variables (days in month, peak hours, and spring/fall), and number of customers  
 7 (residential and GS<50). The regression model uses monthly kWh and monthly values of  
 8 independent variables from January 2011 to December 2020 to determine the monthly regression  
 9 coefficients.

10 Data for LUI's total system load is available and provides monthly data points which are a  
 11 reasonable data set for use in a multiple regression analysis. The average weather conditions over  
 12 this period are applied in the prediction formula to determine a weather normalized forecast for  
 13 2021 and 2022. This analysis assumes weather normal conditions are based on a ten-year average  
 14 of weather data.

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## OVERVIEW OF VARIABLES USED

In order to better represent the trend in wholesale purchases, LUI has adjusted its base wholesale purchases prior to running the regression analysis. The purpose of the adjustment was to normalize the data as best as possible.

The following historical monthly data were used as inputs in the regression model:

- Monthly total system purchased energy data from January 2011 to December 2020 from wholesale meter and billing system data.
- Weather data: weather impacts on load are apparent in both the winter heating season and in the summer cooling season. For that reason, both heating degree days (HDD) and cooling degree-days (CDD) are modeled.
- Number of days in the month.
- Number of peak hours: the number of days and peak hours in a particular month will impact energy use. The modeling of purchased energy uses number of days in the month, peak hours. The number is calculated as 16 x number of business days in any given month, excluding weekends and holidays based on Ontario's Statutory Holiday calendar.
- Spring/fall flag (1 for spring and fall, and 0 for summer and winter).
- Number of customers (residential and GS<50).

### Heating and Cooling Degree Days

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. For LUI, the monthly HDD and CDD as reported at Cobourg were used.

LUI has adopted the 10-year average from 2011 to 2020 as the definition of weather normal. Our view is that a ten-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.

1 **Table 3.4: HDD and CDD as reported at Cobourg, Ontario**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2001	657.40	601.00	581.10	335.80	158.20	51.10	28.00	3.00	80.90	263.80	368.50	521.10
2002	573.80	547.40	474.80	354.00	261.90	57.80	5.00	3.00	35.80	295.90	446.60	617.40
2003	832.60	713.40	592.20	435.40	207.70	65.40	11.90	9.70	59.90	325.60	420.50	606.40
2004	872.60	636.40	519.90	372.30	205.40	100.80	14.70	26.90	50.30	250.10	411.00	645.20
2005	782.80	631.30	612.10	362.50	259.90	40.70	4.20	1.00	45.50	251.90	411.50	668.40
2006	589.00	627.20	564.40	342.60	192.10	40.10	5.90	6.70	103.30	296.40	390.90	505.50
2007	669.30	728.20	578.30	401.00	208.10	45.40	22.40	12.10	61.80	165.80	441.50	648.30
2008	633.30	660.60	632.30	326.30	253.60	71.00	9.40	15.20	73.50	288.10	459.00	652.50
2009	823.90	608.50	568.10	345.40	231.10	86.10	41.50	15.70	70.10	313.30	361.00	638.60
2010	718.00	597.20	450.70	262.70	160.40	37.90	5.10	6.00	99.90	265.50	412.10	676.50
2011	789.50	648.90	574.50	372.40	177.60	64.00	8.40	9.10	59.70	244.30	360.30	546.20
2012	633.00	539.60	425.10	355.60	136.00	36.60	0.00	7.30	87.50	245.10	449.40	535.80
2013	649.60	633.30	556.10	383.60	171.60	67.10	9.30	18.50	110.40	202.20	481.90	683.90
2014	792.30	714.70	692.70	394.20	218.90	61.90	36.90	26.90	97.30	231.40	473.20	519.40
2015	759.20	842.50	639.70	351.00	183.40	88.30	18.50	12.90	43.10	271.10	349.80	430.80
2016	427.40	417.30	255.90	334.10	204.80	53.30	5.40	0.80	38.90	212.20	378.90	573.30
2017	609.50	534.00	606.00	298.20	226.10	73.80	3.40	26.00	57.60	167.00	407.20	716.10
2018	752.00	573.40	528.10	455.60	161.40	62.80	0.60	0.90	56.00	306.90	467.60	580.00
2019	773.00	624.70	580.20	363.90	237.90	79.80	2.00	7.50	71.50	236.60	523.70	604.00
2020	624.80	610.40	487.40	391.80	230.90	63.40	0.00	5.60	84.20	279.10	359.90	552.90
<b>10 year average</b>	681.03	613.88	534.57	370.04	194.86	65.10	8.45	11.55	70.62	239.59	425.19	574.24
<b>20 year average</b>	698.15	624.50	545.98	361.92	204.35	62.37	11.63	10.74	69.36	255.62	418.73	596.12
<b>20 year trend</b>	725.28	644.08	567.10	356.82	209.63	56.91	17.29	9.78	65.53	276.61	407.11	610.40

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Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2001	0.00	0.00	0.00	0.00	0.00	26.50	45.40	83.20	18.50	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	18.30	72.70	68.40	30.30	2.80	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	5.60	20.40	77.70	10.90	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	5.10	41.20	43.10	18.10	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	52.60	116.80	87.60	16.30	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	6.30	18.00	86.90	56.40	1.30	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	19.90	45.30	91.50	17.90	4.10	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	2.60	50.90	40.40	16.20	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	12.10	18.20	58.60	11.60	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	9.10	15.70	90.20	80.70	14.40	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.10	14.70	91.30	57.50	21.40	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	5.60	39.30	120.30	74.20	18.20	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.10	13.30	72.00	40.60	14.50	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	17.50	18.80	33.30	10.10	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	5.60	37.00	44.70	41.70	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	5.30	15.60	102.10	124.40	31.50	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	8.50	52.40	40.50	33.60	0.90	0.00	0.00
2018	0.00	0.00	0.00	0.00	4.80	7.90	99.60	113.70	52.10	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	14.40	61.40	47.00	5.20	1.20	0.00	0.00
2020	0.00	0.00	0.00	0.00	3.10	23.50	139.00	82.20	14.70	0.00	0.00	0.00
<b>10 year average</b>	0.00	0.00	0.00	0.00	1.90	16.03	79.39	65.81	24.30	0.21	0.00	0.00
<b>20 year average</b>	0.00	0.00	0.00	0.00	1.72	16.84	69.10	67.29	19.93	0.45	0.00	0.00
<b>20 year trend</b>	0.00	0.00	0.00	0.00	0.71	20.02	50.98	67.00	14.10	0.77	0.00	0.00

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1 **Number of Days in a Month**

2 LUI used a days per month variable. Although the variables did not particularly change the results,  
 3 it did significantly improve the R-Square and therefore LUI opted to keep it as a variable.

4 **Table 3.5: Number of Days in a Month**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2012	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2013	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2014	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2015	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2016	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2017	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2018	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2019	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
2020	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00
<b>10 year average</b>	31.00	28.30	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00

6 **Spring/Fall**

7 LUI used a spring and fall flag. This utility specific flag was created following the analysis of the  
 8 wholesale purchases which showed lower purchases during the spring and fall seasons. The  
 9 assumption is that consumers are not using as much electricity to heat or cool their homes; and as  
 10 such would have an impact on the wholesale purchases. The variable applies to the months of  
 11 March, April, May, September, October and November.

12 **Peak Hours**

13 This measurement of the daylight hours per month captures the variation in demand between  
 14 months.

15 **Table 3.6: Peak Hours**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	352.00	320.00	352.00	320.00	352.00	336.00	336.00	352.00	304.00	352.00	352.00	304.00
2012	352.00	320.00	304.00	352.00	336.00	336.00	352.00	320.00	336.00	352.00	304.00	336.00
2013	352.00	304.00	320.00	352.00	352.00	320.00	352.00	336.00	320.00	352.00	336.00	320.00
2014	352.00	304.00	336.00	336.00	336.00	336.00	352.00	320.00	336.00	352.00	320.00	336.00
2015	336.00	304.00	352.00	336.00	320.00	352.00	352.00	320.00	336.00	336.00	336.00	352.00
2016	320.00	336.00	368.00	320.00	336.00	368.00	320.00	352.00	336.00	320.00	352.00	320.00
2017	336.00	320.00	368.00	304.00	352.00	352.00	320.00	352.00	320.00	336.00	352.00	304.00
2018	352.00	304.00	352.00	320.00	352.00	336.00	336.00	352.00	304.00	352.00	418.00	304.00
2019	352.00	304.00	336.00	336.00	352.00	320.00	352.00	336.00	320.00	352.00	400.00	320.00
2020	352.00	304.00	352.00	336.00	304.00	352.00	352.00	320.00	336.00	336.00	336.00	336.00
<b>10 year average</b>	345.60	312.00	344.00	331.20	339.20	340.80	342.40	336.00	324.80	344.00	350.60	323.20

17 **Number of Customers**

18 Lakefront incorporated a variable for fluctuations in Residential and GS<50 customers based on the  
 19 historical information from Lakefront’s billing system.

1 **Table 3.7: Number of Customers**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	9,569	9,571	9,579	9,599	9,607	9,605	9,620	9,633	9,639	9,647	9,653	9,689
2012	9,686	9,686	9,698	9,717	9,721	9,722	9,734	9,758	9,768	9,752	9,751	9,772
2013	9,780	9,792	9,796	9,804	9,820	9,832	9,841	9,840	9,872	9,882	9,925	9,873
2014	9,883	9,892	9,904	9,928	9,936	9,957	9,968	9,971	10,028	10,040	10,041	10,051
2015	10,053	10,054	10,056	10,062	10,070	10,078	10,088	10,107	10,123	10,130	10,133	10,140
2016	10,147	10,149	10,159	10,166	10,171	10,163	10,170	10,208	10,214	10,215	10,230	10,262
2017	10,240	10,250	10,255	10,267	10,281	10,300	10,300	10,309	10,323	10,344	10,352	10,360
2018	10,367	10,376	10,392	10,412	10,415	10,419	10,441	10,450	10,449	10,454	10,456	10,464
2019	10,475	10,480	10,486	10,498	10,509	10,514	10,512	10,514	10,519	10,528	10,556	10,556
2020	10,568	10,582	10,589	10,594	10,600	10,606	10,629	10,635	10,650	10,661	10,682	10,685
2 <b>10 year average</b>	10,077	10,083	10,091	10,105	10,113	10,120	10,130	10,143	10,159	10,165	10,178	10,185

3 **Impact of Variables on Regression Analysis**

4 During the process of testing the regression analysis, the variables were tested to arrive at the best  
 5 -R-Squared.

6 In some cases, the variable only slightly improved the R-Square, however Lakefront has opted to  
 7 keep the variable as part of the regression analysis.

8 **Table 3.8: Analysis of Impact to R-Square**

Variable	Adjusted R-Square	Impact on Final R-Squared
Heating Degree Days	28.15%	59.87%
Cooling Degree Days	63.75%	24.27%
Days in the Month	85.55%	2.47%
Peak Hours	87.43%	0.59%
Spring/Fall Flag	86.59%	1.43%
9 Number of Customers	78.70%	9.32%

10 Table 3.8 summarizes the impact that each variable had on the final R-Squared. That is, excluding  
 11 heating degree days, the adjusted R-Square would be 28.15%, which is a decrease of 59.87% from  
 12 the final R-Squared or conversely, heating degree days had a positive impact of 59.87% on the final  
 13 R-Squared.

14 As indicated in the table above, the fluctuation in residential and GS<50 customers was found to be  
 15 statistically significant variable in the regression analysis.

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**REGRESSION RESULTS**

The prediction formula has the following statistical results included in Table 3.9 below which generally indicate the formula has a very good fit to the actual data set. Moreover, all of the variable coefficients above have intuitive relationships with purchases.

**Table 3.9: Correlation/Regression Results**

Equation Parameters	
Multiple R	94.23%
R Square	88.80%
Adjusted R Square	88.20%
Standard Error	596,932.6837
Observations	120.00

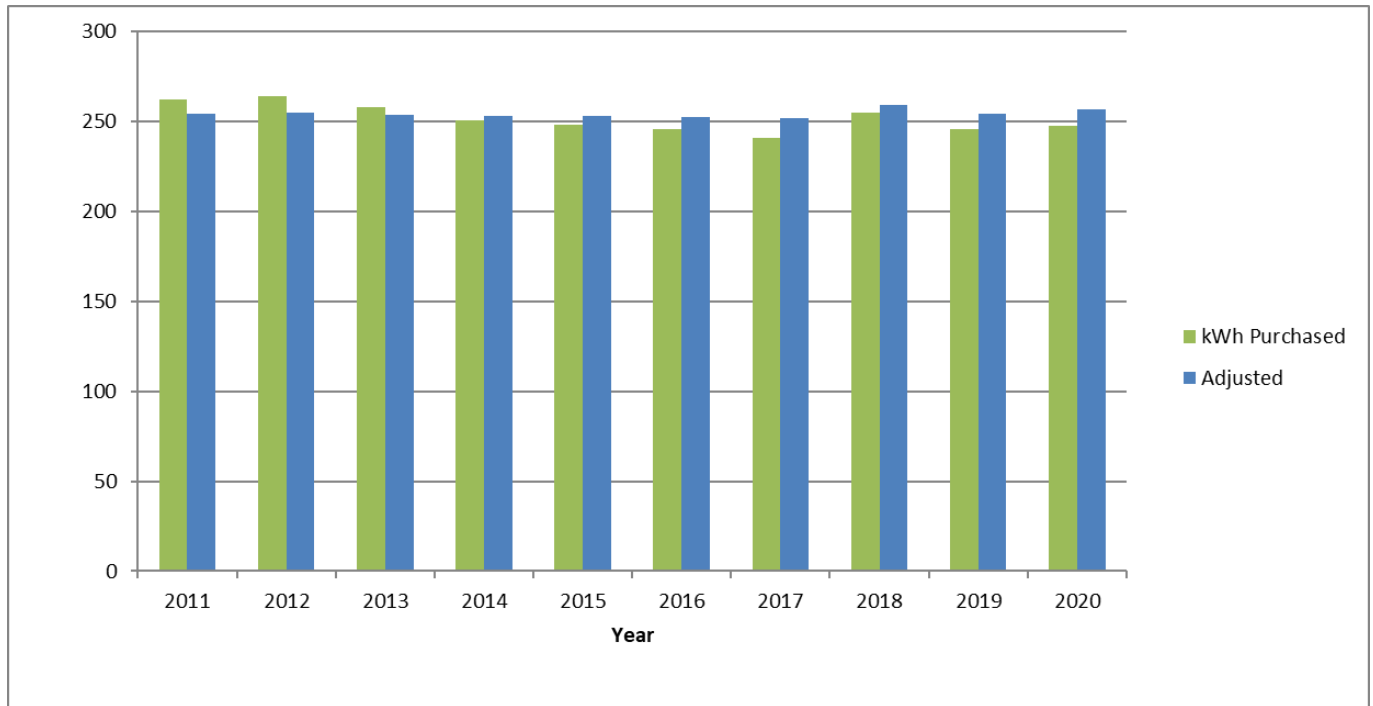
ANOVA					
	df	SS	MS	F	Significance F
Regression	6	3.1909E+14	5.31817E+13	149.248898	2.60545E-51
Residual	113	4.02651E+13	3.56329E+11		
Total	119	3.59355E+14			

Multiple Regression Equation								
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
<b>Intercept</b>	20,094,287.04	2,719,759.72	7.39	0.00	14,705,952.49	25,482,621.58	14,705,952.49	25,482,621.58
HDD	7,256.97	301.02	24.11	0.00	6,660.58	7,853.35	6,660.58	7,853.35
CDD	41,287.70	2,680.66	15.40	0.00	35,976.83	46,598.56	35,976.83	46,598.56
Number of Days in Month	384,120.43	74,453.59	5.16	0.00	236,614.45	531,626.42	236,614.45	531,626.42
Peak Number of Hours	8,663.13	2,986.44	2.90	0.00	2,746.45	14,579.81	2,746.45	14,579.81
Spring and Fall	(522,639.64)	128,382.84	(4.07)	0.00	(776,989.19)	(268,290.08)	(776,989.19)	(268,290.08)
Customer #	(1,619.75)	168.17	(9.63)	0.00	(1,952.92)	(1,286.59)	(1,952.92)	(1,286.59)

The resulting regression equation yields an adjusted R-squared of 88.20% when actual annual wholesale values are compared to annual values predicted by the regression equation; the mean absolute percentage error (MAPE) is 2.74%.

The annual results of the above prediction formula compared to the actual annual purchases from 2011 to 2020 are shown in Table 3.10 below.

1 **Figure 3.10: kWh Purchased to Adjusted**



2  
 3 Table 3.11 as seen below, demonstrates the monthly results by year comparison between the actual  
 4 and predicted wholesale purchases from January 1, 2011 to December 31, 2020.

5 **Table 3.11: Actual Purchased vs Predicted Purchases**

Year	Actual kWh Purchased	Year over Year	Predicted kWh	Year over Year	Purchased vs Predicted
2011	262,348,777		254,409,161		(3.03%)
2012	264,021,825	0.64%	254,793,337	0.15%	(3.50%)
2013	257,528,109	(2.46%)	253,261,077	(0.60%)	(1.66%)
2014	250,323,660	(2.80%)	252,761,268	(0.20%)	0.97%
2015	248,042,590	(0.91%)	253,070,140	0.12%	2.03%
2016	245,731,772	(0.93%)	252,375,486	(0.27%)	2.70%
2017	240,806,896	(2.00%)	251,482,151	(0.35%)	4.43%
2018	254,570,985	5.72%	259,096,002	3.03%	1.78%
2019	245,663,816	(3.50%)	254,184,212	(1.90%)	3.47%
2020	247,239,799	0.64%	256,707,770	0.99%	3.83%

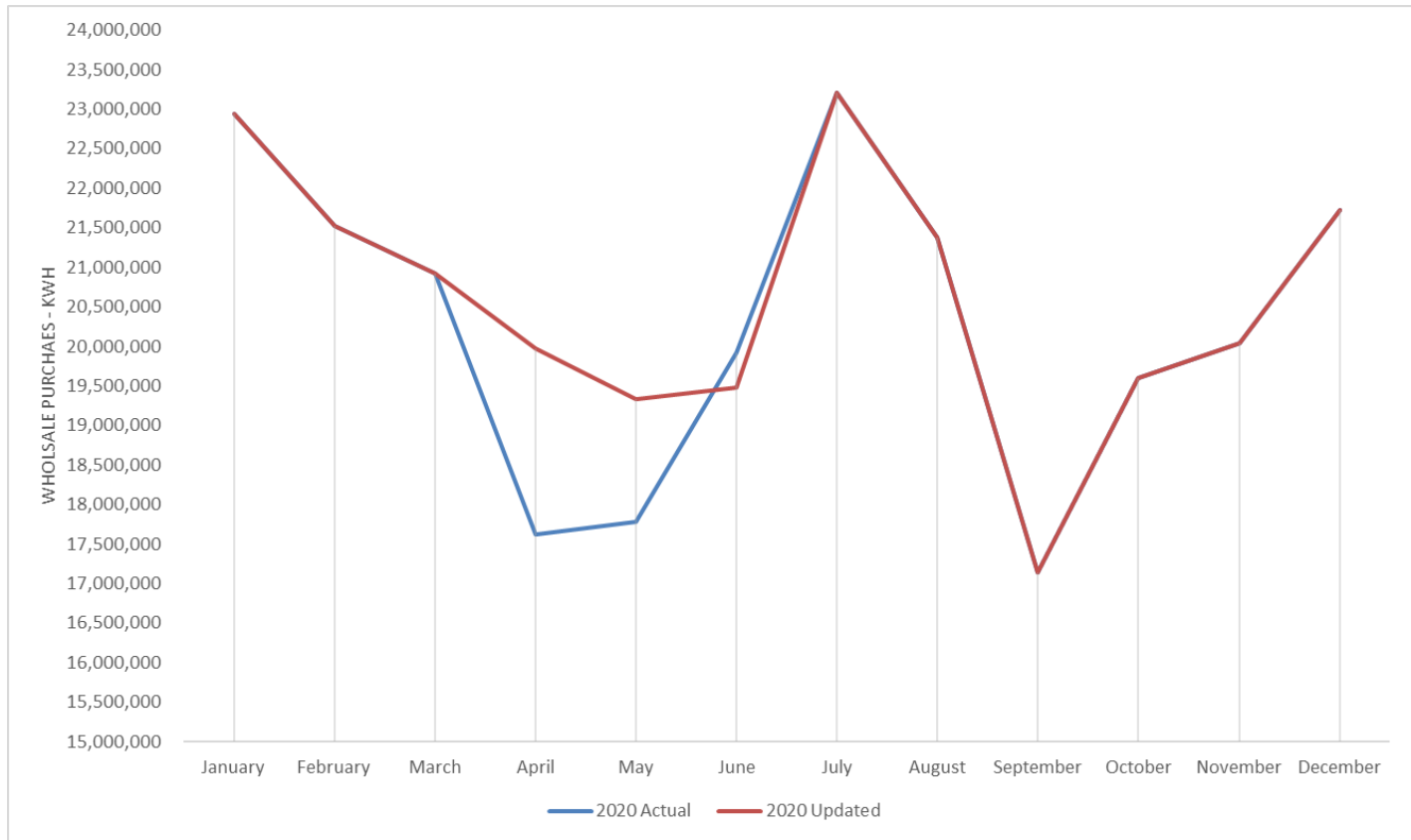
6  
 7 **COVID-19 Impact on Load Forecast**

8 During the preparation of this Application, a global pandemic (COVID-19) occurred. It is difficult to  
 9 determine the lasting implications of this pandemic and the affect on customers, businesses, and  
 10 electricity load.

11 Lakefront has noted the following trend in total system load for April to June 2020 as shown in  
 12 Figure 3.12 As indicated, Lakefront has replaced the actual total system load for April to June 2020  
 13 with the average from 2011 to 2019 thereby removing any load impacts resulting from COVID-19  
 14 on the load forecast.



1 **Figure 3.12: Total System Load Reductions**



2

3 LUI anticipates that several businesses may not run at full capacity, may integrate more work from  
4 home practices or may close altogether. LUI also anticipates that although residential usage will  
5 stay relatively the same, customer growth will slow due to construction stoppages and the pending  
6 recession.

7 In the absence of not updating the usage for April, May, and June, the impact to the revenue  
8 deficiency as calculated in Exhibit 6 is approximately \$4,000 negative impact to customers. That is,  
9 by updating the actuals in April to June to the historical average, the revenue deficiency has  
10 increased by approximately \$4,000.

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**2.3.1.2 NORMALIZED AVERAGE USE PER CUSTOMER (NAC) MODEL**

**Billed kWh Load Forecast and Customer/Connection Forecast by Rate Class**

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

The next step in the forecasting process is to determine a customer/connection forecast. The customer/connections forecast is based on reviewing historical customer/connections data that is available as shown in the following Table 3.13 below. The annual customer/connections data is based on the average count opposed to the end of year count.

**Table 3.13: Growth Rate in Customer/Connections**

Year	Residential	General Service <50 kW	General Service 50 - 2999 kW	General Service 3000 - 4999 kW	Street Lighting	Sentinel Lights	Unmetered Scattered Load	Total
2011	-	-	-	-	-	-	-	-
2012	1.19%	(0.51%)	4.18%	0.00%	1.56%	1.89%	(1.56%)	1.14%
2013	1.20%	(0.84%)	3.28%	0.00%	2.14%	0.00%	(1.06%)	1.23%
2014	1.55%	0.99%	(2.47%)	0.00%	(7.97%)	0.00%	(0.53%)	(0.69%)
2015	1.42%	0.84%	(2.90%)	0.00%	2.28%	0.00%	(3.23%)	1.46%
2016	1.16%	0.46%	0.00%	0.00%	(7.54%)	(11.11%)	(5.56%)	(0.82%)
2017	0.94%	1.34%	(2.61%)	0.00%	4.09%	0.00%	(1.18%)	1.53%
2018	1.13%	2.10%	(7.66%)	0.00%	9.43%	(1.04%)	0.00%	2.76%
2019	1.04%	0.98%	(5.39%)	0.00%	8.62%	(2.11%)	(0.60%)	2.56%
2020	1.22%	0.22%	(3.95%)	0.00%	0.00%	7.53%	(1.20%)	0.83%
2021	1.20%	0.62%	(2.01%)	0.00%	1.24%	(0.65%)	(1.67%)	1.11%
2022	1.20%	0.62%	(2.01%)	0.00%	1.24%	(0.65%)	(1.67%)	1.12%
Average	1.20%	0.62%	(1.96%)	0.00%	1.37%	(0.56%)	(1.66%)	1.11%

The next step in the process is to review the historical customer/connection usage and to reflect this usage per customer in the forecast. Table 3.14 below provides the average annual usage per customer by rate class from 2011 to 2022.

**Table 3.14: Historical Annual Usage per Customer (kWh)**

Year	Residential	General Service <50 kW	General Service 50 - 2999 kW	General Service 3000 - 4999 kW	Street Lighting	Sentinel Lights	Unmetered Scattered Load	Total
2011	8,422	35,086	918,897	15,051,682	443	826	6,871	19,652
2012	8,027	30,004	938,192	15,193,348	436	777	6,640	19,405
2013	8,366	30,593	885,900	13,952,451	437	821	7,149	19,148
2014	8,483	29,768	864,755	12,584,229	478	795	5,974	18,817
2015	8,853	30,173	863,328	14,943,860	534	811	6,691	18,854
2016	9,650	29,318	776,611	15,890,466	434	946	7,213	18,720
2017	8,975	29,512	780,847	18,956,591	415	946	7,329	18,148
2018	8,423	31,421	925,276	20,169,223	383	941	7,310	18,369
2019	8,313	31,297	1,012,322	17,917,827	350	954	7,352	18,030
2020	8,110	29,285	968,690	19,292,259	351	884	7,411	17,078
2021	7,936	28,823	978,994	19,104,850	343	882	7,464	16,726
2022	7,761	28,353	988,876	18,909,096	335	878	7,513	16,372

1 From the historical usage per customer/connection data the growth rate in usage per  
 2 customer/connection can be reviewed which is provided in Table 3.15.

3 **Table 3.15: Historical Annual Usage per Customer**

Year	Residential	General Service <50 kW	General Service 50 - 2999 kW	General Service 3000 - 4999 kW	Street Lighting	Sentinel Lights	Unmetered Scattered Load	Total
2011	-	-	-	-	-	-	-	-
2012	(4.69%)	(14.48%)	2.10%	0.94%	(1.60%)	(5.93%)	(3.36%)	(1.26%)
2013	4.22%	1.96%	(5.57%)	(8.17%)	0.13%	5.76%	7.66%	(1.32%)
2014	1.40%	(2.70%)	(2.39%)	(9.81%)	9.38%	(3.18%)	(16.44%)	(1.73%)
2015	4.36%	1.36%	(0.16%)	18.75%	11.89%	2.04%	12.02%	0.20%
2016	9.01%	(2.83%)	(10.04%)	6.33%	(18.84%)	16.53%	7.79%	(0.71%)
2017	(7.00%)	0.66%	0.55%	19.30%	(4.23%)	0.00%	1.61%	(3.06%)
2018	(6.15%)	6.47%	18.50%	6.40%	(7.77%)	(0.46%)	(0.26%)	1.22%
2019	(1.31%)	(0.39%)	9.41%	(11.16%)	(8.78%)	1.32%	0.58%	(1.85%)
2020	(2.44%)	(6.43%)	(4.31%)	7.67%	0.31%	(7.25%)	0.80%	(5.28%)
2021	(2.15%)	(1.58%)	1.06%	(0.97%)	(2.18%)	(0.33%)	0.71%	(2.06%)
2022	(2.20%)	(1.63%)	1.01%	(1.02%)	(2.23%)	(0.38%)	0.66%	(2.12%)
Average	(0.63%)	(1.78%)	0.92%	2.57%	(2.18%)	0.74%	1.07%	(1.63%)

4  
 5 From Table 3.15 LUI used the average kWh per customer for the 2021 Bridge and 2022 Test Year  
 6 and multiplied by the forecasted average customer in that rate class for the 2021 Bridge and 2022  
 7 Test Year. The non-weather billed consumption by rate class is illustrated in Table 3.16.

8 **Table 3.16: Non-Weather Billed Consumption**

Non-Weather	Residential	General Service <50	General Service 50 - 2999 kW	General Service 3000 - 4999 kW	Street Lighting	Sentinel Lights	Unmetered Scattered	Total	
2021	234,100,473	75,363,000	32,872,066	105,041,160	19,104,850	1,070,115	43,793	605,489	234,100,473
2022	231,701,807	74,590,807	32,535,249	103,964,876	18,909,096	1,059,150	43,344	599,285	231,701,807

9  
 10 **Billed kW Load Forecast**

11 The volumetric revenue components for General Service 50-2999 kW, General Service kW, Street  
 12 Lighting, and Sentinel Lights are calculated base don billed kW demand. Since the load forecast is  
 13 calculated based on kWh, forecasted kW for these classes must be correlated with the forecasted  
 14 kWh for each class.

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**2.3.1.3 CDM ADJUSTMENT FOR THE LOAD FORECAST FOR DISTRIBUTORS**

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As stated in the filing requirements, Lakefront does not expect impacts from any CFF-related projects not deployed by April 2019. Further, due to the inclusion of 2021 and 2022 projected net program savings in the Persistent CDM variable used in the regression model, a manual adjustment to the load forecast is not required. CDM results for historical years up to the conclusion of the program in 2019 are inherently included in the actual billed data. The wind-down of the programs in 2020 is not significant and is sufficiently considered in the forecast usage.

**2.3.2 ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSES**

**APPENDIX 2-IB**

Table 3.17 (OEB Appendix 2-IB) provides a variance analysis between each year and the last Board approved values.

**Table 3.17: OEB Appendix 2-IA Summary and Variances of Actual and Forecast Data**

*Distribution System (Total)*

	Calendar Year (for 2022 Cost of Service)	Consumption (kWh) <sup>(3)</sup>			
			Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2016	Actual	240,169,968	240,169,968	OEB-approved  241,290,276
Historical	2017	Actual	236,393,260	236,393,260	
Historical	2018	Actual	245,884,781	245,884,781	
Historical	2019	Actual	247,522,436	247,522,436	
Historical	2020	Actual	236,396,879	236,396,879	
Bridge Year	2021	Forecast		234,100,473	
Test Year	2022	Forecast		231,701,807	

**CUSTOMER/CONNECTION COUNTS AND CONSUMPTION AND DEMAND**

The following section of the application covers economic assumptions and data sources for customer and load forecast. Table 3.18 to 3.24 below presents the actual and forecast trends for customer/connection counts and consumption and demand. The forecast trend is what LUI has based its proposed rates on.

The section details the following as per the Filing Requirements for customer/connection counts and consumption and demand:

1. Identification as to whether customer/connection count is shown in year end or average format - the customer count is based on average annual values.
2. Year-over-year variances in customer count/connection count and kWh and kW by rate class and for system consumption overall (kWh) with explanations for material changes in the definition of or major changes over time – Table 3.18 to 3.24.
3. Explanations of Bridge and Test Year forecasts by rate class – Table 3.25.
4. Variance analysis between the last OEB-approved and the actual and weather-normalized actual results – Table 3.26.

**Table 3.18: Residential Variance**

Year	Customer Count	% Change	kWh	% Change
2011	8,425	-	70,957,666	-
2012	8,525	1.19%	68,431,708	(3.56%)
2013	8,627	1.20%	72,171,332	5.46%
2014	8,761	1.55%	74,316,917	2.97%
2015	8,885	1.42%	78,658,151	5.84%
2016	8,988	1.16%	71,332,111	(9.31%)
2017	9,073	0.94%	70,979,992	(0.49%)
2018	9,175	1.13%	77,282,085	8.88%
2019	9,271	1.04%	77,067,212	(0.28%)
2020	9,384	1.22%	76,102,272	(1.25%)
2021	9,497	1.20%	75,363,000	(0.97%)
2022	9,611	1.20%	74,590,807	(1.02%)

The residential customer class has been growing steadily since 2011, with an average annual increase of 1.20%. Residential growth typically fluctuates annually based on residential development. Lakefront is not expecting any significant residential developments within the next five years.

1 **Table 3.19: GS<50 kW Variance**

Year	Customer Count	% Change	kWh	% Change
2011	1,073	-	37,629,361	-
2012	1,067	(0.51%)	32,014,524	(14.92%)
2013	1,058	(0.84%)	32,367,581	1.10%
2014	1,069	0.99%	31,807,450	(1.73%)
2015	1,078	0.84%	32,511,939	2.21%
2016	1,083	0.46%	31,736,946	(2.38%)
2017	1,097	1.34%	32,374,514	2.01%
2018	1,120	2.10%	35,191,711	8.70%
2019	1,131	0.98%	35,397,172	0.58%
2020	1,134	0.22%	33,194,524	(6.22%)
2021	1,140	0.62%	32,872,066	(0.97%)
2022	1,148	0.62%	32,535,249	(1.02%)

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3 The number of customers in the GS < 50 kW class has been steadily increasing since 2011. The  
 4 customer count had decreased slightly in 2012 and 2013 due to an economic downturn, but  
 5 recovered in 2014 and 2015. Furthermore the kWh consumption decreased significantly in 2012 as  
 6 a result of LUI's increased conservation initiatives.

7 **Table 3.20: GS 50-2999 kW Variance**

Year	Customer Count	% Change	kWh	% Change	kW	% Change
2011	132	-	120,834,914	-	300,129	-
2012	137	4.18%	128,532,327	6.37%	322,335	7.40%
2013	142	3.28%	125,354,819	(2.47%)	323,427	0.34%
2014	138	(2.47%)	119,336,146	(4.80%)	314,352	(2.81%)
2015	134	(2.90%)	115,685,946	(3.06%)	306,814	(2.40%)
2016	134	0.00%	104,065,809	(10.04%)	305,435	(0.45%)
2017	131	(2.61%)	101,900,559	(2.08%)	292,263	(4.31%)
2018	121	(7.66%)	111,495,776	9.42%	297,531	1.80%
2019	114	(5.39%)	115,404,710	3.51%	278,379	(6.44%)
2020	110	(3.95%)	106,071,560	(8.09%)	278,617	0.09%
2021	107	(2.01%)	105,041,160	(0.97%)	276,979	(0.59%)
2022	105	(2.01%)	103,964,876	(1.02%)	274,141	(1.02%)

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9 This customer count is for large commercial customers and can therefore fluctuate depending on  
 10 new businesses/closures. Total consumption for both kWh and kW are consistent with fluctuations  
 11 in customer counts and can vary depending on operations and customer reclassifications.

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1 **Table 3.21: GS 3000-4999 kW Variance**

Year	Customer Count	% Change	kWh	% Change	kW	% Change
2011	1	-	15,051,682	-	42,336	-
2012	1	0.00%	15,193,348	0.94%	39,663	(6.31%)
2013	1	0.00%	13,952,451	(8.17%)	37,943	(4.34%)
2014	1	0.00%	12,584,229	(9.81%)	36,604	(3.53%)
2015	1	0.00%	14,943,860	18.75%	33,868	(7.47%)
2016	1	0.00%	15,890,466	6.33%	37,224	9.91%
2017	1	0.00%	18,956,591	19.30%	39,385	5.81%
2018	1	0.00%	20,169,223	6.40%	42,961	9.08%
2019	1	0.00%	17,917,827	(11.16%)	38,240	(10.99%)
2020	1	0.00%	19,292,259	7.67%	41,553	8.66%
2021	1	0.00%	19,104,850	(0.97%)	46,149	11.06%
2022	1	0.00%	18,909,096	(1.02%)	48,547	5.20%

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 3 LUI only has one GS 3000-4999 kW customer and doesn't expect any changes in the customer count  
 4 for the class. Total consumption for both kWh and kW fluctuates depending on the customer's  
 5 operational activity.

6 **Table 3.22: Street Lighting Variance**

Year	Customer Count	% Change	kWh	% Change	kW	% Change
2011	2,759	-	1,222,967	-	3,321	-
2012	2,802	1.56%	1,222,128	(0.07%)	3,340	0.57%
2013	2,862	2.14%	1,249,953	2.28%	3,386	1.38%
2014	2,634	(7.97%)	1,258,253	0.66%	3,409	0.67%
2015	2,694	2.28%	1,439,933	14.44%	3,416	0.22%
2016	2,491	(7.54%)	1,080,612	(24.95%)	2,916	(14.64%)
2017	2,593	4.09%	1,077,264	(0.31%)	2,916	0.00%
2018	2,838	9.43%	1,087,264	0.93%	2,916	0.00%
2019	3,082	8.62%	1,077,264	(0.92%)	2,916	0.00%
2020	3,082	0.00%	1,080,612	0.31%	2,916	0.00%
2021	3,120	1.24%	1,070,115	(0.97%)	2,861	(1.90%)
2022	3,159	1.24%	1,059,150	(1.02%)	2,831	(1.02%)

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 8 The customer count for street lights increased consistently from 2011 to 2022 and decreased in  
 9 2014.

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1 **Table 3.23: Sentinel Lights Variance**

Year	Customer Count	% Change	kWh	% Change	kW	% Change
2011	53	-	43,758	-	132	-
2012	54	1.89%	41,938	(4.16%)	132	0.00%
2013	54	0.00%	44,355	5.76%	132	0.00%
2014	54	0.00%	42,943	(3.18%)	132	0.00%
2015	54	0.00%	43,818	2.04%	132	0.00%
2016	48	(11.11%)	45,386	3.58%	132	0.00%
2017	48	0.00%	45,386	0.00%	132	0.00%
2018	48	(1.04%)	44,706	(1.50%)	132	0.00%
2019	47	(2.11%)	44,342	(0.81%)	132	0.00%
2020	50	7.53%	44,222	(0.27%)	132	0.00%
2021	50	(0.65%)	43,793	(0.97%)	131	(0.61%)
2022	49	(0.65%)	43,344	(1.02%)	130	(1.02%)

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 3 Total customer count, kWh consumption, kW consumption were consistent from the period 2011 to  
 4 2022. LUI does not expect any significant changes in the Sentinel Light class.

5 **Table 3.24: Unmetered Scattered Load Variance**

Year	Customer Count	% Change	kWh	% Change
2011	96	-	659,574	-
2012	95	(1.56%)	627,467	(4.87%)
2013	94	(1.06%)	668,402	6.52%
2014	93	(0.53%)	555,548	(16.88%)
2015	90	(3.23%)	602,228	8.40%
2016	85	(5.56%)	613,092	1.80%
2017	84	(1.18%)	615,642	0.42%
2018	84	0.00%	614,016	(0.26%)
2019	84	(0.60%)	613,910	(0.02%)
2020	83	(1.20%)	611,429	(0.40%)
2021	81	(1.67%)	605,489	(0.97%)
2022	80	(1.67%)	599,285	(1.02%)

6  
 7 Customer count has remained consistent from 2011 to 2020 and LUI does not expect changes in the  
 8 customer counts in 2021 and 2022.

9 Table 3.25 below provides details of the variances by rate class between the 2021 Bridge Year and  
 10 2022 Test Year (Weather Normalized).

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1 **Table 3.25: Variance Analysis by Class**

<b>Customer Class</b>	<b>Year</b>	<b>2021 Bridge Year</b>	<b>2022 Test Year</b>	<b>Variance</b>
Residential	Cust/Conn	9,497	9,611	114
	kWh	75,363,000	75,357,216	(5,784)
General Service < 50 kW	Cust/Conn	1,140	1,148	7
	kWh	32,872,066	32,869,543	(2,523)
	kW	-	-	-
General Service > 50 kW - 2999 kW	Cust/Conn	107	105	(2)
	kWh	105,041,160	105,033,099	(8,062)
	kW	276,979	276,957	(21)
Streetlighting	Cust/Conn	3,120	3,159	39
	kWh	1,070,115	1,070,033	(82)
	kW	2,861	2,860	(0)
Sentinel Lighting	Cust/Conn	50	49	(0)
	kWh	43,793	43,789	(3)
	kW	131	131	(0)
General Service 3000-4999 kW	Cust/Conn	1	1	0
	kWh	19,104,850	19,103,384	(1,466)
	kW	46,149	49,046	2,896
Unmetered Scattered Load	Cust/Conn	81	80	(1)
	kWh	605,489	605,443	(46)
<b>Total</b>	<b>Cust/Conn</b>	<b>13,996</b>	<b>14,152</b>	<b>156</b>
	<b>kWh</b>	<b>234,100,473</b>	<b>234,082,507</b>	<b>(17,966)</b>
	<b>kW</b>	<b>326,120</b>	<b>328,995</b>	<b>2,875</b>

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3 Table 3.26 below provides details of the variances by rate class between the 2017 Board Approved  
 4 and 2017 Actual.

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1 **Table 3.26: Variance Analysis Between Last OEB-Approved and Actual**

<b>Customer Class</b>	<b>Year</b>	<b>2017 Board Approved</b>	<b>2017 Actual</b>	<b>Variance</b>
Residential	Cust/Conn	9,171	9,073	(99)
	kWh	78,329,378	81,423,304	3,093,926
General Service < 50 kW	Cust/Conn	1,087	1,097	10
	kWh	32,376,046	32,374,514	(1,532)
General Service > 50 kW - 2999 kW	Cust/Conn	132	131	(2)
	kWh	115,903,663	101,900,559	(14,003,104)
	kW	292,729	292,263	(466)
Streetlighting	Cust/Conn	2,699	2,593	(106)
	kWh	1,442,643	1,077,264	(365,379)
	kW	3,875	2,916	(959)
Sentinel Lighting	Cust/Conn	54	48	(6)
	kWh	43,900	45,386	1,486
	kW	134	132	(2)
General Service 3000-4999 kW	Cust/Conn	1	1	0
	kWh	14,971,984	18,956,591	3,984,607
	kW	39,878	39,385	(493)
Unmetered Scattered Load	Cust/Conn	96	84	(12)
	kWh	603,361	615,642	12,281
<b>Total</b>	<b>Cust/Conn</b>	<b>13,240</b>	<b>13,026</b>	<b>(214)</b>
	<b>kWh</b>	<b>243,670,975</b>	<b>236,393,260</b>	<b>(7,277,715)</b>
	<b>kW</b>	<b>336,616</b>	<b>334,696</b>	<b>(1,920)</b>

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**REVENUE**

Consistent with the Filing Requirements, Lakefront has provided the following:

1. Calculation of 2021 (Bridge Year) forecast of revenues at existing rates – Table 3.27.
2. Calculation of 2022 (Test Year) forecasted revenues at each of:
  - a. Existing rates – Table 3.28
  - b. Proposed rates – Table 3.29

Table 3.27 calculates the distribution revenue for 2021 Bridge Year based on the 2021 volume and customer counts, including the current existing rates.

**Table 3.27: Distribution Revenue - 2021**

Bridge Year Projected Revenue from Existing Rates										
Customer Class Name	per	Bridge Year Volume	Fixed Rate	Variable Distribution Rate	Customers/Connections (Average)	Fixed Charge Revenue	Transformer Allowance	Variable Revenue	Total	% Total
Residential	kWh	75,363,000	23.78	0	9,497	2,709,926		0	2,709,926	58.88%
General Service < 50 kW	kWh	32,872,066	25.50	0.0088	1,140	348,989		289,274	638,264	13.87%
General Service 50-2999 kW	kW	276,979	89.62	3.5909	107	115,389	(109,684)	994,603	1,000,308	21.74%
General Service 3000-4999 kW	kW	46,149	6174.88	2.2188	1	74,099	(27,690)	102,396	148,805	3.23%
Street Lighting	kW	2,861	1.59	4.1584	3,120	59,532		11,895	71,428	1.55%
Sentinel Lights	kW	131	5.27	12.0041	50	3,142		1,575	4,716	0.10%
Unmetered Scattered Load	kWh	605,489	15.37	0.0229	81	14,962		13,866	28,828	0.63%
<b>Total Fixed Revenue</b>		<b>109,166,675</b>			<b>13,996</b>	<b>3,326,039</b>	<b>(137,373)</b>	<b>1,413,609</b>	<b>4,602,275</b>	<b>100.00%</b>

Table 3.23 details the distribution revenue for 2022 based on existing rates.

**Table 3.28: Distribution Revenue - 2022 - Existing Rates**

Test Year Projected Revenue from Existing Rates										
Customer Class Name	per	Test Year Volume	Fixed Rate	Variable Distribution Rate	Customers/Connections (Average)	Fixed Charge Revenue	Transformer Allowance	Variable Revenue	Total	% Total
Residential	kWh	74,590,807	23.78	0	9,611	2,742,564		0	2,742,564	59.28%
General Service < 50 kW	kWh	32,535,249	25.50	0.0088	1,148	351,141		286,310	637,451	13.78%
General Service 50-2999 kW	kW	274,141	89.62	3.5909	105	113,066	(108,560)	984,412	988,918	21.37%
General Service 3000-4999 kW	kW	48,547	6174.88	2.2188	1	74,099	(29,128)	107,716	152,687	3.30%
Street Lighting	kW	2,831	1.59	4.1584	3,159	60,269		11,773	72,043	1.56%
Sentinel Lights	kW	130	5.27	12.0041	49	3,121		1,559	4,680	0.10%
Unmetered Scattered Load	kWh	599,285	15.37	0.0229	80	14,712		13,724	28,436	0.61%
<b>Total Fixed Revenue</b>		<b>108,050,990</b>			<b>14,152</b>	<b>3,358,973</b>	<b>(137,688)</b>	<b>1,405,494</b>	<b>4,626,779</b>	<b>100.00%</b>

1 **Table 3.29: Distribution Revenue – 2022 – Proposed Rates**

Test Year Projected Revenue from Proposed Rates										
Customer Class Name	per	Test Year Volume	Fixed Rate	Variable Distribution Rate	Customers/Connections (Average)	Fixed Charge Revenue	Transformer Allowance	Variable Revenue	Total	% Total
Residential	kWh	74,590,807	25.14	0.0000	9,611	2,899,195		0	2,899,195	60.49%
General Service < 50 kW	kWh	32,535,249	27.42	0.0095	1,148	377,586		307,873	685,459	14.30%
General Service 50-2999 kW	kW	274,141	89.88	3.6001	105	113,393	(108,560)	986,946	991,780	20.69%
General Service 3000-4999 kW	kW	48,547	6174.88	1.3492	1	74,099	(29,128)	65,500	110,471	2.30%
Street Lighting	kW	2,831	1.59	6.4194	3,159	60,269		18,175	78,444	1.64%
Sentinel Lights	kW	130	6.34	23.1932	49	3,755		3,012	6,766	0.14%
Unmetered Scattered Load	kWh	599,285	15.37	0.0106	80	14,712		6,341	21,053	0.44%
<b>Total Fixed Revenue</b>		<b>108,050,990</b>			<b>14,152</b>	<b>3,543,009</b>	<b>(137,688)</b>	<b>1,387,847</b>	<b>4,793,168</b>	<b>100.00%</b>

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 3 Table 3.30 to Table 3.35 below presents year over year variances of distribution operating  
 4 revenues. An explanation of variances above the materiality threshold of \$50,000 is provided in the  
 5 detail.

6 **Table 3.30: 2017 Board Approved vs 2017 Actual**

Distribution Revenue	2017 Board Approved	2017 Actual	Variance - \$	Variance - %
Residential	2,352,434	2,278,362	(74,072)	(3.15%)
GS<50 kW	576,819	596,978	20,159	3.49%
GS 50-29999 kW	996,014	999,038	3,024	0.30%
GS 3000-4999 kW	128,229	128,786	557	0.43%
Street Lighting	172,961	178,239	5,278	3.05%
Sentinel Lights	4,686	4,273	(413)	(8.81%)
Unmetered Scattered Load	28,969	27,135	(1,834)	(6.33%)
<b>Total Distribution Revenue</b>	<b>4,260,112</b>	<b>4,212,811</b>	<b>(47,301)</b>	<b>(1.11%)</b>

7  
 8 The total distribution revenue in 2017 of \$4,212,811 is \$47,301 or 1.11% less than 2017 Board  
 9 Approved. The main reasons for the variance is:

- 10 1) The 2017 Board Approved customer count and kWh for residential customers was 9,171  
 11 customers and 77,842,368 kWh. The actual customer count for 2017 was 9,073. The  
 12 resulting reduction in kWh due to the reduced customer count was 72,808,555 kWh.

13  
 14 The 2017 Board Approved is based on estimate and therefore fluctuations in 2017 actuals  
 15 are expected. As approximately 55% of Lakefront's revenue is from residential customers,  
 16 fluctuations in customer counts and usage can materially impact revenue. Further, delays in  
 17 potential residential developments can have a greater impact.

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1 **Table 3.31: 2017 Actual vs 2018 Actual**

Distribution Revenue	2017 Actual	2018 Actual	Variance - \$	Variance - %
Residential	2,278,362	2,428,111	149,750	6.57%
GS<50 kW	596,978	615,364	18,385	3.08%
GS 50-2999 kW	999,038	1,054,963	55,926	5.60%
GS 3000-4999 kW	128,786	134,216	5,431	4.22%
Street Lighting	178,239	126,743	(51,495)	(28.89%)
Sentinel Lights	4,273	4,256	(17)	(0.40%)
Unmetered Scattered Load	27,135	27,886	751	2.77%
<b>Total Distribution Revenue</b>	<b>4,212,811</b>	<b>4,391,540</b>	<b>178,729</b>	<b>4.24%</b>

2  
 3 The total distribution revenue in 2018 of \$4,391,540 is \$178,729 or 4.24% more than 2017. The  
 4 main reasons for the variance are:

5 1) Residential revenue increase by \$149,750 from 2017. The increase was the result of an  
 6 increase in rates. The 2017 monthly service charge was \$16.00, and the 2018 monthly  
 7 service charge was increased to \$19.32 (EB-2017-0057). Further, residential customers  
 8 increased in 2018 from 9,073 to 9,175. Overall, the increase in the monthly service charge  
 9 and increased customer count, resulted in an increased revenue of approximately \$385,000.

10  
 11 The increase was offset by a decrease in the distribution volumetric rate from \$0.0076 to  
 12 \$0.0039. Although total residential consumption increased by 6,112,280 kWh consistent  
 13 with the increase in customers, the decrease in the volumetric rate resulted in a decrease in  
 14 revenue of approximately \$245,000.

15  
 16 2) Increase in revenue for GS 50-2999 kW rate class is due to inflationary increase of 1.05%  
 17 which accounts for approximately \$10,000 of additional revenue. Further, there was an  
 18 increase demand from 2017 of 5,268 kW. Demand typically fluctuates for larger commercial  
 19 customers depending on business activities, operating hours, etc.

20  
 21 3) Decrease in revenue for Street Lighting is consistent with decrease in monthly service  
 22 charge (per device) as detailed in Lakefront's rate design (EB-2017-0057). The monthly  
 23 service charge decreased in 2018 from \$4.08 per device to \$2.81 per device which accounts  
 24 for a decrease in revenue of approximately \$31,000. Further, the distribution volumetric  
 25 rate decreased from \$10.6354 to \$7.3264, which accounted for a decrease of approximately  
 26 \$9,000.

1 **Table 3.32: 2018 Actual vs 2019 Actual**

Distribution Revenue	2018 Actual	2019 Actual	Variance - \$	Variance - %
Residential	2,428,111	2,505,153	77,041	3.17%
GS<50 kW	615,364	622,562	7,198	1.17%
GS 50-2999 kW	1,054,963	1,008,352	(46,611)	(4.42%)
GS 3000-4999 kW	134,216	130,297	(3,920)	(2.92%)
Street Lighting	126,743	68,279	(58,464)	(46.13%)
Sentinel Lights	4,256	4,289	33	0.78%
Unmetered Scattered Load	27,886	28,149	263	0.94%
<b>Total Distribution Revenue</b>	<b>4,391,540</b>	<b>4,367,081</b>	<b>(24,459)</b>	<b>(0.56%)</b>

2  
 3 The total distribution revenue in 2019 of \$4,367,081 is \$24,459 or 0.56% less than 2018. The main  
 4 reasons for the variance are:

- 5 1) The increase residential revenue is related to Lakefront moving to a fully fixed rate. The  
 6 2018 revenue consisted of a monthly fixed charge of \$19.32 and a distribution volumetric  
 7 rate of \$0.0039 per kWh. The 2019 monthly fixed charge was increased to \$22.88 and the  
 8 volumetric rate was eliminated. This resulted in an increase in revenue and removed the  
 9 fluctuation resulting from consumption. Further, there was an increase in 2019 of 96  
 10 customers, which accounted for approximately \$26,000 of the revenue increase.  
 11  
 12 2) Decrease in revenue for Street Lighting is consistent with decrease in monthly service  
 13 charge (per device) as detailed in Lakefront's rate design (EB-2017-0057). The monthly  
 14 service charge decreased in 2019 from \$2.81 per device to \$1.53 per device which accounts  
 15 for a decrease in revenue of approximately \$39,000. Further, the distribution volumetric  
 16 rate decreased from \$7.3264 to \$4.009, which accounted for a decrease of approximately  
 17 \$10,000.

18 **Table 3.33: 2019 Actual vs 2020 Actual**

Distribution Revenue	2019 Actual	2020 Actual	Variance - \$	Variance - %
Residential	2,505,153	2,604,697	99,544	3.97%
GS<50 kW	622,562	614,701	(7,861)	(1.26%)
GS 50-2999 kW	1,008,352	987,018	(21,334)	(2.12%)
GS 3000-4999 kW	130,297	138,801	8,505	6.53%
Street Lighting	68,279	69,605	1,326	1.94%
Sentinel Lights	4,289	4,855	566	13.19%
Unmetered Scattered Load	28,149	28,460	311	1.10%
<b>Total Distribution Revenue</b>	<b>4,367,081</b>	<b>4,448,137</b>	<b>81,057</b>	<b>1.86%</b>

19  
 20 The total distribution revenue in 2020 of \$4,448,137 is \$81,057 or 1.86% more than 2019. The  
 21 main reasons for the variance is:

- 1) Increase mainly due to an increase in residential rate from \$22.88 to \$23.30 or 1.84%. The remaining the increase was the result of an increase in number of customers.

**Table 3.34: 2020 Actual vs 2021 Bridge Year**

Distribution Revenue	2020 Actual	2021 Bridge Year	Variance - \$	Variance - %
Residential	2,604,697	2,709,926	105,229	4.04%
GS<50 kW	614,701	638,264	23,563	3.83%
GS 50-2999 kW	987,018	1,000,308	13,290	1.35%
GS 3000-4999 kW	138,801	148,805	10,004	7.21%
Street Lighting	69,605	71,428	1,823	2.62%
Sentinel Lights	4,855	4,716	(138)	(2.85%)
Unmetered Scattered Load	28,460	28,828	368	1.29%
<b>Total Distribution Revenue</b>	<b>4,448,137</b>	<b>4,602,275</b>	<b>154,138</b>	<b>3.47%</b>

The total distribution revenue in 2021 Bridge Year of \$4,602,275 is \$154,138 or 3.47% more than 2020. main reasons for the variance is:

- 1) Increase mainly due to an increase in residential rate from \$23.30 to \$23.78 or 2.06%. The remaining the increase was the result of an increase in number of customers.

**Table 3.35: 2021 Bridge Year vs 2022 Test Year**

Distribution Revenue	2021 Bridge Year	2022 Test Year	Variance - \$	Variance - %
Residential	2,709,926	2,899,195	189,269	6.98%
GS<50 kW	638,264	685,459	47,195	7.39%
GS 50-2999 kW	1,000,308	991,780	(8,529)	(0.85%)
GS 3000-4999 kW	148,805	110,471	(38,335)	(25.76%)
Street Lighting	71,428	78,444	7,016	9.82%
Sentinel Lights	4,716	6,766	2,050	43.46%
Unmetered Scattered Load	28,828	21,053	(7,775)	(26.97%)
<b>Total Distribution Revenue</b>	<b>4,602,275</b>	<b>4,793,168</b>	<b>190,893</b>	<b>4.15%</b>

The total distribution revenue in 2022 Test Year of \$4,793,168 is \$190,893 or 4.15% more than 2021. The main increases are due to the impact of rebasing with the is remaining being due to fluctuations in customer count and consumption.



**AVERAGE CONSUMPTION**

As per the Filing Requirements, with respect to average consumption, for each rate class, LDCs are to provide:

1. Weather-actual and weather-normalized average annual consumption or demand per customer as applicable for the rate class for the last OEB approved and historical.
2. Weather normalized average annual consumption or demand per customer for the bridge and test years.
3. Explanation of the net change in average consumption from the last OEB-approved and actuals from historical, bridge, and test years based on year-over-year variances and any apparent trends in data.

Table 3.36 to 3.41 includes the above requires.

**Table 3.36: 2017 Board Approved vs 2017 Actual**

Customer Class	kWh/kW	2017 Board Approved (Normalized)	2017 Weather-Actual		2017 Weather-Normalized	
			Average	Variance	Average	Variance
Residential	kWh	8,456	7,824	(7.47%)	7,824	(7.47%)
GS<50 kW	kWh	29,494	29,512	0.06%	29,512	0.06%
GS 50-2999 kW	kW	2,196	2,240	1.98%	2,240	1.98%
GS 3000-4999 kW	kW	39,489	39,385	(0.26%)	39,385	(0.26%)
Street Lighting	kW	1	1	(20.90%)	1	(20.90%)
Sentinel Lights	kW	2	3	12.50%	3	12.50%
Unmetered Scattered Load	kWh	6,224	7,329	17.76%	7,329	17.76%

The overall average consumption decline can be explained by the decline in number of customers in residential customer class and changes in weather patterns and effects of energy efficiencies.

**Table 3.37: 2017 Actual vs 2018 Actual**

Customer Class	kWh/kW	Weather-Actual			Weather-Normalized		
		2017	2018	Variance	2017	2018	Variance
Residential	kWh	8,025	8,602	7.18%	8,025	8,602	7.18%
GS<50 kW	kWh	30,272	32,087	6.00%	30,272	32,087	6.00%
GS 50-2999 kW	kW	2,240	2,469	10.25%	2,240	2,469	10.25%
GS 3000-4999 kW	kW	39,385	42,961	9.08%	39,385	42,961	9.08%
Street Lighting	kW	1	1	(8.62%)	1	1	(8.62%)
Sentinel Lights	kW	3	3	1.05%	3	3	1.05%
Unmetered Scattered Load	kWh	7,329	7,310	(0.26%)	7,329	7,310	(0.26%)

The overall average consumption decline can be explained by the increase in GS 50-2999 kW customer class and an increase in consumption in GS 3000-4999 kW.

1 **Table 3.38: 2018 Actual vs 2019 Actual**

Customer Class	kWh/kW	Weather-Actual			Weather-Normalized		
		2018	2019	Variance	2018	2019	Variance
Residential	kWh	8,602	8,219	(4.45%)	8,602	8,219	(4.45%)
GS<50 kW	kWh	32,087	30,944	(3.56%)	32,087	30,944	(3.56%)
GS 50-2999 kW	kW	2,469	2,442	(1.10%)	2,469	2,442	(1.10%)
GS 3000-4999 kW	kW	42,961	38,240	(10.99%)	42,961	38,240	(10.99%)
Street Lighting	kW	1	1	(7.93%)	1	1	(7.93%)
Sentinel Lights	kW	3	3	2.15%	3	3	2.15%
Unmetered Scattered Load	kWh	7,310	7,352	0.58%	7,310	7,352	0.58%

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 3 The majority of customer classes experienced lower kWh totals. This indicates that 2019 saw  
 4 moderate weather trends in both the winter and summer months.

5 **Table 3.39: 2019 Actual vs 2020 Actual**

Customer Class	kWh/kW	Weather-Actual			Weather-Normalized		
		2019	2020	Variance	2019	2020	Variance
Residential	kWh	8,219	8,912	8.42%	8,219	8,912	8.42%
GS<50 kW	kWh	30,944	31,023	0.26%	30,944	31,023	0.26%
GS 50-2999 kW	kW	2,442	2,548	4.33%	2,442	2,548	4.33%
GS 3000-4999 kW	kW	38,240	38,868	1.64%	38,240	38,868	1.64%
Street Lighting	kW	1	1	0.00%	1	1	0.00%
Sentinel Lights	kW	3	3	(7.00%)	3	3	(7.00%)
Unmetered Scattered Load	kWh	7,352	7,397	0.61%	7,352	7,397	0.61%

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 7 The overall average consumption increase can be explained by an increase in resident customers.

8 **Table 3.40: 2020 Actual vs 2021 Bridge Year**

Customer Class	kWh/kW	Weather-Actual			Weather-Normalized		
		2020	2021	Variance	2020	2021	Variance
Residential	kWh	8,912	9,096	2.07%	8,912	9,096	2.07%
GS<50 kW	kWh	31,023	31,843	2.64%	31,023	31,843	2.64%
GS 50-2999 kW	kW	2,548	2,693	5.72%	2,548	2,693	5.72%
GS 3000-4999 kW	kW	38,868	42,915	10.41%	38,868	42,915	10.41%
Street Lighting	kW	1	1	6.68%	1	1	6.68%
Sentinel Lights	kW	3	3	7.30%	3	3	7.30%
Unmetered Scattered Load	kWh	7,397	7,762	4.94%	7,397	7,762	4.94%

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 10 The overall average consumption increase can be explained by an increase in GS 50-2999 kW  
 11 customer class and increased consumption in GS 3000-4999 kW.

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1 **Table 3.41: 2021 Bridge Year vs 2022 Test Year**

Customer Class	kWh/kW	Weather-Actual			Weather-Normalized		
		2021	2022	Variance	2021	2022	Variance
Residential	kWh	9,096	8,992	(1.15%)	9,096	8,907	(2.09%)
GS<50 kW	kWh	31,843	31,655	(0.59%)	31,843	31,354	(1.54%)
GS 50-2999 kW	kW	2,693	2,752	2.16%	2,693	2,725	1.19%
GS 3000-4999 kW	kW	42,915	45,816	6.76%	42,915	45,380	5.74%
Street Lighting	kW	1	1	(1.22%)	1	1	(2.16%)
Sentinel Lights	kW	3	3	0.65%	3	3	(0.31%)
Unmetered Scattered Load	kWh	7,762	7,889	1.63%	7,762	7,814	0.67%

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 3 The overall average consumption decline can be explained by the decline in number of customers in  
 4 residential customer class and changes in weather patterns and effects of energy efficiencies.

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### 2.3.3 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 LUI's proposed revenue requirement.

Other Distribution Revenues includes items such as:

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



**VARIANCE ANALYSIS**

Table 3.43 to 3.48 below presents year over year variances of other operating revenues. An explanation of variances above the materiality threshold of \$50,000 is provided in the detail.

**Table 3.43: 2012 Board Approved vs 2012 Actual**

USoA #	USoA Description	2017 Board Approved	2017 Actual	Variance - \$	Variance - %
4235	Specific Service Charges	146,169	164,510	18,341	12.55%
4225	Late Payment Charges	73,000	49,526	(23,474)	(32.16%)
4082	Retail Services Revenues	7,959	7,043	(916)	(11.51%)
4084	Service Transaction Requests	2,984	2,124	(860)	(28.84%)
4086	SSS Administration	37,720	37,914	194	0.00%
4210	Rent from Electric Property	146,004	115,200	(30,804)	(21.10%)
4405	Interest and Dividend	5,749	4,339	(1,410)	(24.53%)
<b>Specific Service Charges</b>		<b>146,169</b>	<b>164,510</b>	<b>18,341</b>	<b>12.55%</b>
<b>Late Payment Charges</b>		<b>73,000</b>	<b>49,526</b>	<b>(23,474)</b>	<b>(32.16%)</b>
<b>Other Operating Revenues</b>		<b>194,667</b>	<b>162,281</b>	<b>(32,386)</b>	<b>(16.64%)</b>
<b>Other Income or Deductions</b>		<b>5,749</b>	<b>4,339</b>	<b>(1,410)</b>	<b>(24.53%)</b>
<b>Total</b>		<b>419,585</b>	<b>380,655</b>	<b>(38,930)</b>	<b>(9.28%)</b>

The 2017 other revenue was a decrease from the 2017 Board Approved amount by \$38,930. All variances are below materiality.

**Table 3.44: 2017 Actual vs 2018 Actual**

USoA #	USoA Description	2017 Actual	2018 Actual	Variance - \$	Variance - %
4235	Specific Service Charges	164,510	219,119	54,609	33.19%
4225	Late Payment Charges	49,526	55,945	6,420	12.96%
4082	Retail Services Revenues	7,043	6,572	(471)	(6.69%)
4084	Service Transaction Requests	2,124	1,866	(257)	(12.11%)
4086	SSS Administration	37,914	38,615	701	1.85%
4210	Rent from Electric Property	115,200	123,487	8,286	7.19%
4405	Interest and Dividend	4,339	1,441	(2,898)	(66.79%)
<b>Specific Service Charges</b>		<b>164,510</b>	<b>219,119</b>	<b>54,609</b>	<b>33.19%</b>
<b>Late Payment Charges</b>		<b>49,526</b>	<b>55,945</b>	<b>6,420</b>	<b>12.96%</b>
<b>Other Operating Revenues</b>		<b>162,281</b>	<b>170,540</b>	<b>8,259</b>	<b>5.09%</b>
<b>Other Income or Deductions</b>		<b>4,339</b>	<b>1,441</b>	<b>(2,898)</b>	<b>(66.79%)</b>
<b>Total</b>		<b>380,655</b>	<b>447,045</b>	<b>66,390</b>	<b>17.44%</b>

The 2018 other revenue was greater than the 2017 amount by \$66,390. The items primarily related to this variance include:

- Increase in specific service charges is the result of work performed in the U.S. for emergency services. Lakefront sent a crew to the U.S. to assist with emergency services on two separate occasions. The net recoverable work of \$90,980 resulted in an increase in specific service charges revenue.

**Table 3.45: 2018 Actual vs 2019 Actual**

USoA #	USoA Description	2018 Actual	2019 Actual	Variance - \$	Variance - %
4235	Specific Service Charges	219,119	158,865	(60,254)	(27.50%)
4225	Late Payment Charges	55,945	40,863	(15,082)	(26.96%)
4082	Retail Services Revenues	6,572	9,909	3,337	50.78%
4084	Service Transaction Requests	1,866	2,616	750	40.16%
4086	SSS Administration	38,615	38,721	106	0.27%
4210	Rent from Electric Property	123,487	114,785	(8,702)	(7.05%)
4405	Interest and Dividend	1,441	6,020	4,580	317.82%
<b>Specific Service Charges</b>		<b>219,119</b>	<b>158,865</b>	<b>(60,254)</b>	<b>(27.50%)</b>
<b>Late Payment Charges</b>		<b>55,945</b>	<b>40,863</b>	<b>(15,082)</b>	<b>(26.96%)</b>
<b>Other Operating Revenues</b>		<b>170,540</b>	<b>166,031</b>	<b>(4,509)</b>	<b>(2.64%)</b>
<b>Other Income or Deductions</b>		<b>1,441</b>	<b>6,020</b>	<b>4,580</b>	<b>317.82%</b>
<b>Total</b>		<b>447,045</b>	<b>371,780</b>	<b>(75,265)</b>	<b>(16.84%)</b>

The 2019 other revenue was a decrease from the 2018 amount by \$75,265. The items primarily related to this variance include:

- 2018 specific service charges included additional revenue from performing emergency services in the U.S. The 2019 specific charges of \$158,865 is consistent with 2017 balance of \$164,510.

**Table 3.46: 2019 Actual vs 2020 Actual**

USoA #	USoA Description	2019 Actual	2020 Actual	Variance - \$	Variance - %
4235	Specific Service Charges	158,865	80,156	(78,709)	(49.54%)
4225	Late Payment Charges	40,863	25,329	(15,535)	(38.02%)
4082	Retail Services Revenues	9,909	11,400	1,491	15.05%
4084	Service Transaction Requests	2,616	3,538	922	35.25%
4086	SSS Administration	38,721	38,908	187	0.00%
4210	Rent from Electric Property	114,785	115,066	281	0.24%
4405	Interest and Dividend	6,020	1,522	(4,498)	(74.71%)
<b>Specific Service Charges</b>		<b>158,865</b>	<b>80,156</b>	<b>(78,709)</b>	<b>(49.54%)</b>
<b>Late Payment Charges</b>		<b>40,863</b>	<b>25,329</b>	<b>(15,535)</b>	<b>(38.02%)</b>
<b>Other Operating Revenues</b>		<b>166,031</b>	<b>168,912</b>	<b>2,881</b>	<b>1.74%</b>
<b>Other Income or Deductions</b>		<b>6,020</b>	<b>1,522</b>	<b>(4,498)</b>	<b>(74.71%)</b>
<b>Total</b>		<b>371,780</b>	<b>275,919</b>	<b>(95,860)</b>	<b>(25.78%)</b>

The 2020 other revenue was a decrease from the 2019 amount by \$95,860. The items primarily related to this variance include:

- 1       • The decrease in specific service charges of \$78,709 is due to a decrease of \$41,628 in  
 2       interval meter charges.

3 **Table 3.47: 2020 Actual vs 2021 Bridge Year**

USoA #	USoA Description	2020 Actual	2021 Bridge Year	Variance - \$	Variance - %
4235	Specific Service Charges	80,156	101,320	21,164	26.40%
4225	Late Payment Charges	25,329	45,000	19,671	77.66%
4082	Retail Services Revenues	11,400	10,000	(1,400)	(12.28%)
4084	Service Transaction Requests	3,538	2,700	(838)	(23.69%)
4086	SSS Administration	38,908	38,843	(65)	(0.17%)
4210	Rent from Electric Property	115,066	116,927	1,860	1.62%
4405	Interest and Dividend	1,522	5,000	3,478	228.45%
<b>Specific Service Charges</b>		80,156	101,320	21,164	26.40%
<b>Late Payment Charges</b>		25,329	45,000	19,671	77.66%
<b>Other Operating Revenues</b>		168,912	168,470	(443)	(0.26%)
<b>Other Income or Deductions</b>		1,522	5,000	3,478	228.45%
<b>Total</b>		<b>275,919</b>	<b>319,790</b>	<b>43,870</b>	<b>15.90%</b>

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 5 The 2021 other revenue is a planned increase from the 2020 amount by \$43,870. All variances are  
 6 below materiality.

7 **Table 3.48: 2021 Bridge Year vs 2022 Test Year**

USoA #	USoA Description	2021 Bridge Year	2022 Test Year	Variance - \$	Variance - %
4235	Specific Service Charges	101,320	143,880	42,560	42.01%
4225	Late Payment Charges	45,000	45,500	500	1.11%
4082	Retail Services Revenues	10,000	10,000	0	0.00%
4084	Service Transaction Requests	2,700	2,700	0	0.00%
4086	SSS Administration	38,843	39,562	719	1.85%
4210	Rent from Electric Property	116,927	182,631	65,704	56.19%
4405	Interest and Dividend	5,000	5,000	0	0.00%
<b>Specific Service Charges</b>		101,320	143,880	42,560	42.01%
<b>Late Payment Charges</b>		45,000	45,500	500	1.11%
<b>Other Operating Revenues</b>		168,470	234,892	66,423	39.43%
<b>Other Income or Deductions</b>		5,000	5,000	0	0.00%
<b>Total</b>		<b>319,790</b>	<b>429,272</b>	<b>109,483</b>	<b>34.24%</b>

8  
 9 The 2022 Test Year revenue is a planned increase from the 2021 amount by \$109,483. The items  
 10 primarily related to this variance include:

- 11       • Although the increase in specific service charges of \$42,560 is immaterial, the increase is  
 12       primarily due to the revenue projected of \$41,580 for the proposed \$2 per month charge for  
 13       customers continuing to request bill prints.



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- Rent from electric property includes pole rental revenue. Lakefront has incorporated the revised pole attachment charge as detailed by the OEB (EB-2015-0304, dated March 22, 2018). The OEB approved an increase to the Single Provincial Pole Attachment Charge however the increase in the attachment rate was held in a deferral account. In this Cost of Service Application, the updated pole attachment rate has been included in revenue and increased revenue by \$64,602.

**NEW PROPOSED SPECIFIC SERVICE CHARGES**

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As part of the review of Customer Service Rules (EB-2017-0183), LUI has taken into consideration the proposed amendments to the Distribution System Code, Standard Supply Service Code, Unit Submetering, and Gas Distribution Access Rule. In light of these proposed amendments, LUI has adjusted its budgeted revenue for the proposed changes.

LUI has proposed the following changes to its specific service charges, which has impacted other revenue. In Exhibit 8, LUI has requested a new Specific Service Charge for customers requesting a paper bill. The additional revenue associated with the service charge has been incorporated in other revenue.

**REVENUE FROM AFFILIATE TRANSACTIONS**

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Lakefront confirms that it does not have transactions with affiliates. LUI does not deviate from Article 340 of the APH in any of the following disclosures.

**DISCRETE CUSTOMER GROUPS**

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3 Lakefront confirms that residential customers that request a paper bill will be impacted by the  
4 proposed \$2 per month fee. Lakefront has engaged with all customers to receive feedback on the  
5 proposal, as discussed in Exhibit #1.

6 Further, customers in the GS 50-2999 kW and GS 3000-4999 kW customer class will be impacted  
7 by the proposed standby charge. Other customer classes will also be impacted by the absence of a  
8 standby charge and the potential for cross-subsidization.

9 Lakefront confirms there are no other discrete customer groups that will be materially impacted by  
10 changes to other rates and charges.