EXHIBIT 3

OPERATING REVENUE

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TOTAL OPERATING REVENUE

Overview

This Exhibit provides the supporting evidence for OPUCN's distribution revenue resulting from forecasted customer connections, energy consumption and load, and proposed distribution rates in accordance with this rate application, and other revenue from means other than distribution rates. OPUCN provides total distribution and other revenue amounts from its: 2015-2019 Board-Approved custom IR application, *EB-2014-0101,*including interim updates for 2018-2019 as approved by the Board, *EB-2017-0069*; 2015 to 2019 Audited results; estimated 2020 Bridge Year results; and estimated results for the 2021 Test Year.

The OEB letter dated March 25, 2020 created certain DVAs for COVID related costs. Given the unprecedented nature of the COVID-19 crisis, OPUCN has no ability to forecast 2021 impacts of COVID-19 on the load forecast or on other revenue. There are no COVID-19 related impacts forecasted for inclusion in rates in this Application on the assumption that the costs of those impacts will be tracked in the DVAs and disposed of by the OEB later.

Total operating revenue has been separately categorized as:

- Distribution Revenue; and
- Other Revenue

Distribution Revenue is determined by applying Board-Approved or proposed distribution rates by customer category to the appropriate billing determinants. Billing determinants include the number of customer connections, energy consumption (measured by kWh) and energy demand (measured by kW). Distribution Revenue presented below is net of Transformer Allowance, a description of which is included with Other Revenue.

Distribution rates combine a fixed and variable component. The fixed rates are multiplied by the number of customer connections and are not impacted by the customers' levels of consumption and demand. Variable rates are multiplied by the appropriate level of customer energy consumption or demand depending upon the category of customer.

Distribution Revenue for 2015-2019 Board-Approved, 2015-2019 Audited and 2020 Bridge Year results were determined using the applicable Board-Approved Tariff of Rates and Charges for those years. The 2021 Test Year's Distribution Revenues are formulated by using the proposed rates; and, the forecast customer connections, and consumption and demand usage, for 2021.

In addition, to Distribution Revenue results, OPUCN has provided a detailed variance analysis of the material changes in Distribution Revenue for each year by revenue type and customer rate category.

Other Revenue is comprised of the following:

- Account 4080 – Distribution Services Revenue (SSS Charge)
- Account 4082 – Retail Services Revenue
- Account 4084 – Retailed Transaction Requests (ST) Revenues
- Account 4210 – Rent from Electric Property
- Account 4225 – Late Payment Charges
- Account 4235 – Miscellaneous Service Revenues
- Account 4245 – Government Assistance & Other Contributions
- Account 4325 – Revenues from Merchandise, Jobbing
- Account 4330 – Costs and Expenses of Merchandising, Jobbing, Etc
- Account 4355 – Gain on Disposal of Utility and Other Property
- Account 4360 – Loss on Disposal of Utility and Other Property
- Account 4375 – Revenues from Non-Utility Operations
- Account 4380 – Expenses of Non-Utility Operations
- Account 4390 – Miscellaneous Non-Operating Income
- Account 4405 – Interest and Dividend Income

Other Revenue has been calculated using the appropriate Board-Approved schedule of rates and charges applied to specific services including; retailer subscription, rent from electric property, late payment charges, interest, disconnect/connection and other miscellaneous services.

Other Revenue for 2015-2019 Board-Approved, 2015-2019 Audited and 2020 Bridge Year results were determined using the applicable Board-Approved Tariff of Rates and Charges for those years. The 2021 Test Year's Other Revenues are formulated by using the proposed rates; and the forecast service levels for 2021.

In addition to Other Revenue results, OPUCN has provided a detailed variance analysis of the material changes in Other Revenue for each year.

SUMMARY OF TOTAL OPERATING REVENUE

Table 3-1 provides a summary, in thousands of dollars, of OPUCN's Total Operating Revenue from its: 2015-2019 Board-Approved cost of service application; 2015-2019 Audited results; estimated 2020 Bridge Year results; and estimated results for the 2021 Test Year.

TABLE 3-1 - SUMMARY OF OPERATING REVENUE

$000's	Board Approved					Actual					Bridge Yr	Test Yr
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2020	2021
Residential	$12,846	$13,924	$14,340	$15,011	$15,848	$11,436	$13,896	$14,137	$15,196	$16,201	$16,405	$17,825
GS < 50 kW	$2,706	$2,893	$2,976	$3,102	$3,249	$2,778	$2,860	$2,823	$3,014	$3,049	$3,165	$3,344
GS 50 to 999 kW	$3,795	$4,105	$4,221	$4,401	$4,618	$3,512	$4,058	$3,897	$4,286	$4,283	$4,495	$4,700
GS 1,000 to 4,999 kW	$480	$513	$522	$536	$553	$592	$551	$651	$570	$581	$559	$586
Large Use	$226	$242	$247	$256	$265	$249	$237	$250	$245	$242	$259	$274
Street Lighting	$861	$697	$706	$744	$789	$686	$683	$713	$708	$734	$765	$543
Unmetered Scat. Load	$59	$63	$64	$66	$68	$48	$60	$54	$72	$78	$67	$73
Sentinel Lights	$2	$2	$2	$2	$2	$2	$2	$2	$2	$2	$2	$2
Distribution Revenue	**$20,975**	**$22,439**	**$23,079**	**$24,117**	**$25,393**	**$19,303**	**$22,348**	**$22,527**	**$24,092**	**$25,170**	**$25,717**	**$27,349**
Other Revenue	$1,319	$1,472	$1,579	$1,385	$1,434	$1,965	$1,867	$1,351	$1,968	$1,669	$1,100	$1,300
Total Revenue	**$22,294**	**$23,911**	**$24,658**	**$25,502**	**$26,827**	**$21,269**	**$24,214**	**$23,878**	**$26,059**	**$26,839**	**$26,817**	**$28,649**

MATERIALITY THRESHOLD

Section 2.0.8 of *Filing Requirements For Electricity Distribution Rate Applications – 2020 Edition for 2021 Rates Applications* – ("Filing Requirements") set out the methodology for calculating the materiality threshold that distributors are to use to explain year over year variances exceeding this threshold for rate base, capital expenditures and OM&A.

The Filing Requirements state the relevant default materiality threshold as, "0.5% of distribution revenue for distributors with a revenue requirement greater than $10 million and less than or equal to $200 million."

OPUCN's revenue requirement exceeds $10 million and is less than $200 million and as such the materiality threshold is calculated as 0.5% of the Company's distribution revenue. OPUCN has calculated a materiality threshold ranging from $96,000 to $136,000, as reported in the following table.

	2015 OEB Approved	Actual 2015	Actual 2016	Actual 2017	Actual 2018	2019 OEB Approved	Actual 2019	Bridge Year 2020	Test Year 2021
Distribution Revenue	20,975,186	19,303,183	22,347,654	22,526,985	24,091,935	25,392,522	25,169,935	25,716,790	27,348,953
Materiality Threshold Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Materiality Threshold $'s	104,876	96,516	111,738	112,635	120,460	126,963	125,850	128,584	136,745

In an effort to provide a thorough and relevant analysis OPUCN has used a materiality threshold of $100,000 throughout this Application.

WEATHER NORMALIZED LOAD AND CUSTOMER/CONNECTION FORECAST

The purpose of this evidence is to present:

1. The methodology used by OPUCN to predict future load forecasts and estimated customer connections; and
2. The resulting data ("Load Forecast") employed in designing proposed electricity distribution rates included in this Cost of Service Application for the year 2021.

METHODOLOGY

A multifactor regression model was used to develop an equation describing the relationship between monthly actual energy purchases and other explanatory variables determined to influence the consumption of electricity. In determining a prediction model, OPUCN has used a regression analysis methodology similar to that included in its approved 2015 to 2019 Custom IR application, and the methodology used by a number of other distributors in past and current applications.

With regard to the overall process of load forecasting, OPUCN submits that conducting a regression analysis based on historical electricity purchases to produce an equation that predicts future purchases is appropriate for the purpose of designing electricity distribution rates.

The methodology uses monthly wholesale deliveries for the period January 2010 to December 2019, as metered in kWh's at the wholesale points of delivery, to represent electricity purchases. Monthly total wholesale electricity purchases are used rather than monthly class specific consumption, due to constraints in compiling applicable data.

Using a regression analysis, these purchases are related to other monthly explanatory variables that are believed to influence the amount of electricity consumed by OPUCN's customers such as heating degree days ("HDD"), and cooling degree days ("CDD"). The results of the regression analysis produce an equation that predicts wholesale electricity

purchases based on historical purchases and other explanatory variables that occur simultaneously.

This prediction model is then used as the basis to forecast the total level of OPUCN wholesale electricity purchases for the 2020 bridge year ("Bridge Year") and 2021 test year ("Test Year") which are then allocated to kWh's billed for each customer rate class based upon geometric or historic trends.

A more detailed explanation of the process is provided later in this evidence.

Although, among certain stakeholders, the preferred regression analysis methodology is to develop equations for each customer rate category to predict monthly consumption data, there are several constraints with respect to the availability of data that has to be considered when developing the weather normalized load forecast methodology and process for OPUCN.

Cycle billing process is an example of a constraint that makes it difficult to produce the data required to develop individual rate class models to predict future consumption. OPUCN employed cycle billing processes since 2003. Under cycle billing, customers are billed at monthly intervals whereby invoices are prepared on each working day of the month and issued to a designated subset of OPUCN's total base of customers. The cycle is the monthly interval between billings. A billing cycle may start on any day of the month and end approximately 30 days later: for example, one billing cycle starts on the 1st day of a month and ends on the 30th day of that same month; while another cycle begins on the 15th of a month and ends on the 14th of the following month. Billing cycles vary in lengths, ranging from 27 to 33 days and may not necessarily line up with calendar months.

OPUCN submits that conducting a regression analysis which relates the monthly billed kWh's of a class to other monthly explanatory variables is problematic. The monthly kWh's billed to OPUCN's customers does not generally reflect the amount consumed in a calendar month. There is a lag between the amount consumed and the amount billed which is caused by a number of issues that include monthly billing cycle meter reading schedules whose reading dates vary and typically are not in line with calendar months.

The amount billed could include consumption from the prior month or even earlier, or may be estimates based upon prior year's consumption.

Therefore, the Load Forecast for OPUCN is based on monthly wholesale kWh's of electricity purchased from the IESO from January 1, 2010 to December 31, 2019.

While it may be desirable to isolate consumption determinants related to individual rate classes, this is simply not possible with the data available to OPUCN at this time. For example, using regression analysis to relate monthly billing data to a variable such as HDD would be a mismatch since the monthly interval used for billing is inconsistent with a calendar month which is the basis for HDD data.

LOAD FORECAST

OPUCN's Load Forecast was developed using a three-step process:

1. As explained above, a total system weather normalized purchased energy forecast is developed based on a multifactor regression model that incorporates independent variables that impact the monthly historical load pattern for OPUCN.
2. The purchased energy forecast was adjusted by a historical loss factor to produce a billed energy forecast.
3. The forecast of billed energy by rate class was developed based on a forecast of customer connection counts and historical usage patterns per customer connection. For the rate classes that have weather sensitive load, their forecasted billed energy was adjusted to ensure that the total billed energy forecast by rate class was equivalent to the total weather normalized billed energy forecast that was determined from the regression model. The forecast of customers by rate class was determined using a geometric mean analysis. For those rate classes that use kW's for the distribution volumetric billing determinant, an adjustment factor was applied to the rate class energy forecast based on the historical relationship between kW's and kWh's.

A detailed explanation of the load forecasting process follows.

PURCHASED KWH LOAD FORECAST

An equation to predict total system purchased energy is developed using a multifactor regression model with the following independent variables:

- OPUCN's historical monthly predicted kWh purchases from 2010 through 2019 as the dependent variable; and
- The following independent variables:
    - Weather data – heating and cooling degree days; and
    - Calendar variables – number of days in month and seasonal spring/fall flag.

The regression model used monthly kWh's and monthly values for the independent variables from January 2010 to December 2019 to determine the monthly regression coefficients. This model generated 120 monthly data points which OPUCN believes represents a reasonable data set for use in a regression analysis.

OPUCN submits that it is appropriate to review the impact of weather since 2010 on the energy usage, and then determine the average weather conditions from January 2010 to December 2019 which would be applied in the forecasting process to determine a weather normalized forecast. However, in accordance with the Board's Filing Requirements, OPUCN has also provided a sensitivity analysis showing the impact on the Test Year's forecast of purchases assuming weather normal conditions are based on a 10 year average trend and a 20 year average trend for weather data.

The multifactor regression model has determined drivers of year over year changes in OPUCN's load growth; these include, weather and calendar factors.

Overview of Variables Used

<u>Weather</u>

Weather impacts on load are apparent in both the winter heating season, and in the summer cooling season. For that reason, both heating degree days ("HDD") (i.e., a measure of coldness in winter) and cooling degree days ("CDD") (i.e., a measure of

summer heat) are modeled. The data was sourced from the Oshawa weather station from Environment Canada website for HDD and CDD. HDD and CDD are measured at 18°C base degrees. The 10-year average monthly values were used in the regression analysis. Refer to Appendix 3-3 for HDD and CDD data used.

Number of days per month

The next major drivers determining energy use in the monthly model can be classified as "calendar factors". For example, the number of days in a particular month will impact energy use. The modeling of purchased energy uses number of days in the month and a "flag" variable to capture the typically lower usage in the spring and fall months when weather is less of a factor. The shoulder variable designates the months of March, April, May, September, October and November as shoulder months. Therefore, the variable takes a value of 1 in these months and a value of 0 in all other months.

Conservation and Demand Management

The impact of CDM programs has not been included as a variable in the regression model as it will not impact the forecasted bridge and test years' predicted consumption. The persistence from CDM programs is captured in the actual historical purchases used to forecast the test year; and as the Conservation First Framework ("CFF") ended at the LDC level in March 2019, no new projects are anticipated in 2020 that would alter the 2021 forecasted test year purchases.

Other Variables

Economic variables were tested but found not to have a statistically significant relationship with consumption. This includes employment and unemployment data for Oshawa. Service territory population size was tested but found to not have a statistically significant relationship to energy use.

Regression Results

The following outlines the statistical outcomes of the prediction model used by OPUCN to predict weather normal purchases for the Bridge Year and Test Years:

Variables	Coefficients	t-stat
HDD	40,333	23.42
CDD	214,750	17.40
Number of days in the month	2,435,313	6.84
Spring/fall flag	(5,322,570)	(7.58)
Intercept	5,416,561	0.50
Monthly predicted kWh purchases	Dependent variable	

The monthly data used in the regression model and the resulting monthly prediction for the actual and forecasted years are provided in Appendix 3-1.

The prediction formula generated the following statistical results:

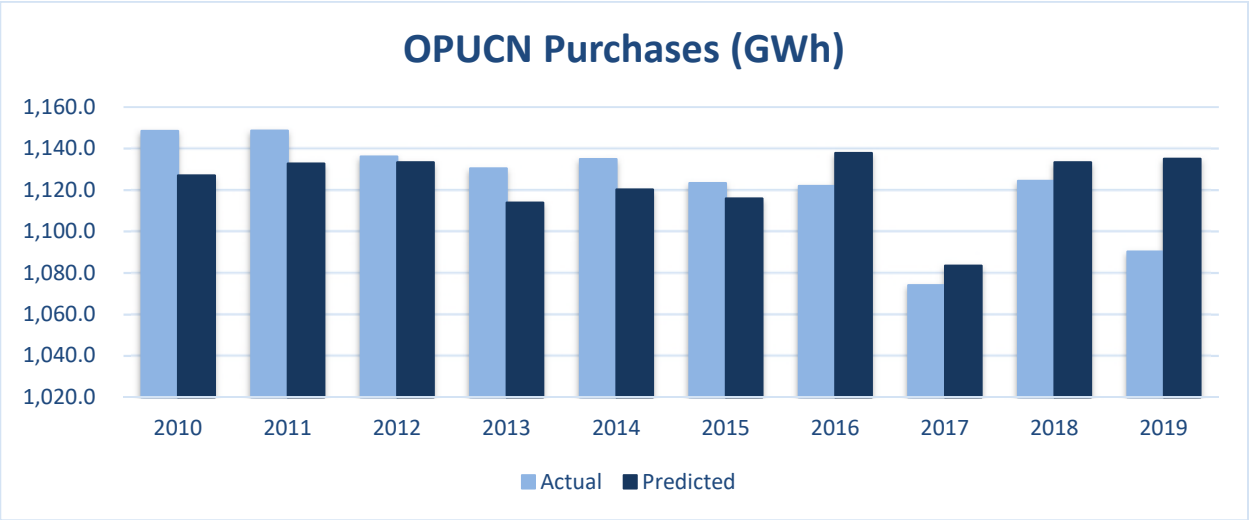
Regression Statistics	
Multiple R	95.17%
R Square	90.58%
Adjusted R Square	90.25%
Standard Error	3,074,597.87
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	1.04492E+16	2.61231E+15	276.3427872	5.51802E-58
Residual	115	1.08711E+15	9.45315E+12		
Total	119	1.15364E+16			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	5,416,561	10,755,242.76	0.50	0.615491406	-15887504.61	26720627.33
Heating Degree Days	40,333	1,722.22	23.42	1.40274E-45	36921.74774	43744.53381
Cooling Degree Days	214,750	12,342.27	17.40	5.33311E-34	190301.972	239197.2867
Number of Days in Month	2,435,313	355,807.20	6.84	3.96103E-10	1730527.708	3140098.861
Spring Fall Flag	(5,322,570)	702,148.04	(7.58)	9.60123E-12	-6713390.189	-3931749.916

OPUCN believes the resulting prediction equation is reasonable based on the regression statistics generated and the annual results of the above prediction formula when compared to the actual annual purchases from 2010 to 2019 which are shown in the chart below:



The following Table 3-2 outlines the data that supports the above chart. In addition, the predicted total system purchases for OPUCN are provided for the Bridge Year and Test Year. For the Bridge Year and Test Year, the system purchases reflect a weather normalized forecast for the full year.

TABLE 3-2 - KWH PURCHASES AND PREDICTED PURCHASES

Year	Actual	Predicted	% Difference	Predicted Weather Normal	Weather Normal Conversion Factor	Actual Weather Normal
Purchased Energy (GWh)						
2010	1,148.5	1,127.0	-1.9%	1,122.8	0.9963	1,144.2
2011	1,148.6	1,132.7	-1.4%	1,122.8	0.9913	1,138.6
2012	1,136.2	1,133.3	-0.3%	1,125.2	0.9929	1,128.1
2013	1,130.4	1,113.9	-1.5%	1,122.8	1.0080	1,139.4
2014	1,135.0	1,120.2	-1.3%	1,122.8	1.0023	1,137.6
2015	1,123.3	1,115.9	-0.7%	1,122.8	1.0062	1,130.3
2016	1,122.0	1,137.9	1.4%	1,125.2	0.9889	1,109.6
2017	1,074.2	1,083.5	0.9%	1,122.8	1.0363	1,113.1
2018	1,124.3	1,133.4	0.8%	1,122.8	0.9907	1,113.9
2019	1,090.3	1,135.1	4.1%	1,122.8	0.9892	1,078.5
2020 Weather Normal - Bridge Year		1,125.2		1,125.2	1.0000	
2021 Weather Normal - Test Year		1,122.8		1,122.8	1.0000	
2021 Test - 20 yr trend		1,119.1		1,119.1	1.0000	

In addition, values for the Test Year are provided with 10 year average and 20 year trend assumptions for weather normalization are included in Table 3-3.

TABLE 3-3 - GWH PREDICTED PURCHASES

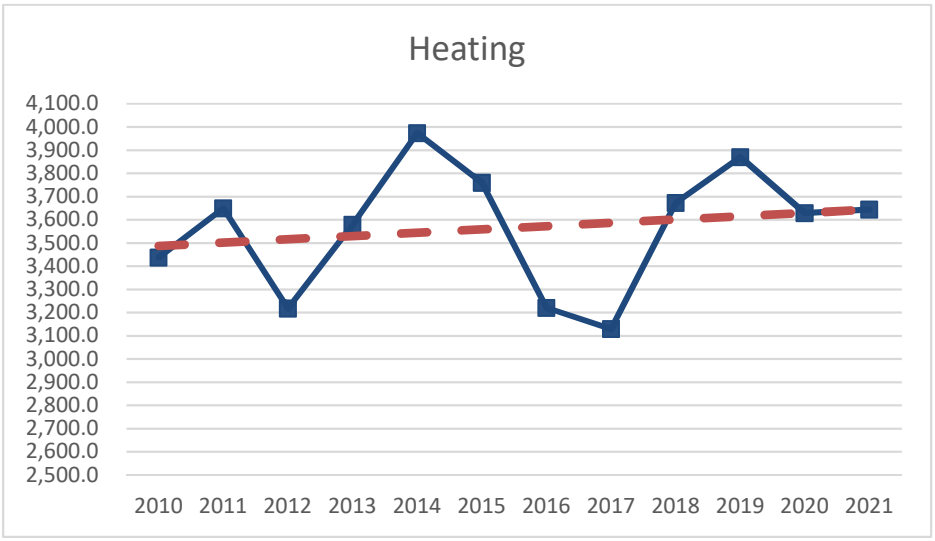
Month	Normalized 10Year Average	Normalized 20 Year Trend	% Difference
Predicted Energy (GWh)			
January-21	108.0	107.0	-0.9%
February-21	97.4	96.6	-0.9%
March-21	97.1	97.8	0.7%
April-21	86.9	86.9	0.0%
May-21	83.4	83.4	0.0%
June-21	87.7	87.1	-0.8%
July-21	104.0	104.2	0.3%
August-21	98.9	97.5	-1.4%
September-21	82.6	83.0	0.5%
October-21	84.5	83.6	-1.0%
November-21	89.5	89.9	0.4%
December-21	102.9	102.2	-0.7%
	1,122.8	**1,119.1**	**-0.3%**

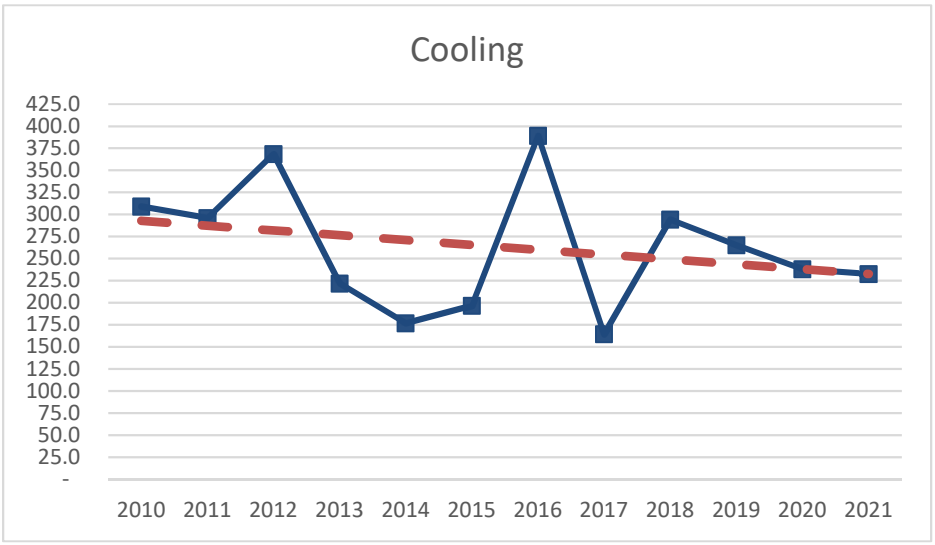
The weather normalized amounts for the Test Year are calculated using a linear trend (refer to Figure 3-1 below for linear trend analysis) of the average monthly HDD and CDD that occurred between January 2010 and December 2019 (i.e. ten years).

The Test Year's weather normalized 20 year trend values reflect the linear trend for monthly HDD and CDD that occurred between January 2000 and December 2019.

The weather normal linear trend for the period beginning January 2019 and ending December 2019 (10-year trend) was used to determine the purchase forecast in this Application for the purposes of determining a billed kWh load forecast which was used to design rates. This linear trend has been used as this is consistent with the period of time over which the regression analysis was conducted. For comparison, results using 20 year average trends has been provided. The differences in purchases between the two methodologies is less than 1% for the test year.

FIGURE 3-1 - LINEAR TREND ANALYSIS OF WEATHER NORMALIZED AMOUNTS





BILLED KWH LOAD FORECAST

To determine the total weather normalized energy billed forecast, the total system weather normalized purchases forecast is adjusted by a historical loss factor. As outlined in this Exhibit, OPUCN's proposed loss factor is 4.37%. With this average loss factor the total weather normalized billed energy will be:

Forecast Year	Billed Energy Consumption (kWh)
2020 Bridge Year	1,078,000,817
2021 Test Year	1,075,667,737

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 average customer connections for the years 2010 through 2019 are included in Table 3-4 below.

TABLE 3-4 - HISTORICAL AND PREDICTED AVERAGE CUSTOMER/CONNECTION COUNTS

Year	Residential	GS<50kW	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	USL	Total
Annual Average Customer Count									
2015 Board Approved	50,977	4,002	507	1	12	12,710	23	296	68,529
2016 Board Approved	51,742	4,062	515	1	12	12,960	22	296	69,611
2017 Board Approved	52,518	4,123	522	1	12	13,215	22	296	70,710
2018 Board Approved	53,516	4,202	532	1	12	13,466	21	297	72,047
2019 Board Approved	54,533	4,282	542	1	12	13,722	20	297	73,409
2010 Actuals	48,199	3,926	511	1	10	12,076	30	307	65,060
2011 Actuals	48,674	3,876	522	1	10	12,131	29	302	65,544
2012 Actuals	48,989	3,858	503	1	10	12,222	26	297	65,905
2013 Actuals	49,554	3,911	499	1	11	12,328	26	295	66,625
2014 Actuals	50,170	3,940	503	1	11	12,466	26	295	67,412
2015 Actuals	51,121	4,020	509	1	12	12,676	25	286	68,651
2016 Actuals	52,140	4,150	518	1	13	12,955	23	274	70,074
2017 Actuals	52,923	4,162	524	1	13	13,171	23	274	71,091
2018 Actuals	54,033	4,199	519	1	13	13,828	23	276	72,892
2019 Actuals	54,652	4,195	535	1	13	13,934	23	278	73,631
10-year geo mean average	1.0140	1.0088	1.0000	1.0000	1.0000	1.0163	0.9738	0.9914	1.0005
2020 - Bridge year forecast	55,416	4,232	535	1	13	14,161	22	275	74,655
2021 - Test year forecast	56,190	4,269	535	1	13	14,391	22	273	75,694

The model produced an annual predicted growth rate of approximately 1% in total customer connections for 2021.

The next step in the process is to review the historical customer connection average consumption and to reflect this consumption per customer connection in the forecast. The following Table 3-5 provides the average annual consumption per customer connection by rate class for OEB-approved 2019 and Actual 2019. The average consumption per customer/connection for the historic year, 2019, was used as the basis for the non-normalized weather billed energy forecast, as this best estimates current usage by customer class.

TABLE 3-5 – HISTORICAL AND PREDICTED CUSTOMER CONNECTION USAGE

Year	Residential	GS<50kW	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	USL
Usage per Customer/Connection (kWh per customer/connection)								
2019 Board Approved	9,087	31,753	641,831	42,532,142	7,150,269	367	1,422	8,745
2019 Actuals	8,734	29,800	606,210	38,878,939	5,937,299	317	1,117	9,181
2020 - Bridge year (not normalized or weather corrected)	8,734	29,800	606,210	38,878,939	5,937,299	317	1,117	9,181
2021 - Test year (not normalized or weather corrected)	8,734	29,800	606,210	38,878,939	5,937,299	317	1,117	9,181

The non-normalized weather billed energy forecast has been determined however the results needs to be adjusted based on weather sensitivity factors. The total non-normalized and weather normalized billed energy forecast is presented in the following chart:

Forecast Year	Non-Normalized Billed Energy Consumption (kWh)	Normalized Billed Energy Consumption (kWh)
2020 Bridge Year	1,056,192,080	1,078,000,817
2021 Test Year	1,064,116,656	1,075,667,737

The differences are assumed to be associated with moving the forecast from a non-normalized to a weather normal basis and this amount will be assigned to those rate classes that are weather sensitive.

TABLE 3-6 – WEATHER SENSITIVITY BY RATE CLASS

Residential	GS<50kW	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	USL
Weather Sensitivity							
94.24%	94.24%	88.48%	0.00%	81.48%	0.00%	0.00%	0.00%

Table 3-7 provides the forecast weather normalized results.

TABLE 3-7 - FORECAST WEATHER NORMALIZED BILLED ENERGY

Year	Residential	GS<50kW	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	USL	Total
Non-Normalized Billed Energy (kWh)									
2020 (non-normalized)	483,995,941	126,106,905	324,474,004	38,878,939	75,700,561	4,482,653	25,016	2,528,061	**1,056,192,080**
2021 (non-normalized)	490,757,856	127,218,941	324,474,004	38,878,939	75,700,561	4,555,628	24,360	2,506,367	**1,064,116,656**
Adjustment for Weather (kWh)									
2020	10,768,568	2,805,790	6,778,151	-	1,456,228	-	-	-	**21,808,737**
2021	5,737,212	1,487,255	3,561,465	-	765,150	-	-	-	**11,551,081**
Normalized Billed Energy (kWh)									
2020 (normalized)	494,764,509	128,912,694	331,252,155	38,878,939	77,156,789	4,482,653	25,016	2,528,061	**1,078,000,817**
2021 (normalized)	496,495,068	128,706,195	328,035,469	38,878,939	76,465,711	4,555,628	24,360	2,506,367	**1,075,667,737**

As noted above, there are no anticipated further savings to the load forecast from CDM programs. Therefore the forecast has not been further adjusted for CDM program savings.

BILLED KW LOAD FORECAST

There are five rate classes that charge volumetric distribution on per kW basis. These include General Service 50 to 999 kW, General Service > 1000 kW, Large User, 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 these classes is based on a review of the historical ratio of kW to kWh and applying the average ratio to the forecasted kWh to produce the required kW.

Table 3-8 outline the annual billed demand (kW) by rate class.

TABLE 3-8 - HISTORICAL ANNUAL BILLED DEMAND (KW)

Year	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	Total
Billed Demand (kW)						
2010 Actuals	871,715	70,585	195,141	27,634	99	1,165,174
2011 Actuals	867,070	83,704	192,700	27,830	100	1,171,404
2012 Actuals	846,459	89,554	182,189	27,720	100	1,146,022
2013 Actuals	843,160	92,753	184,241	25,276	100	1,145,530
2014 Actuals	831,789	93,203	186,714	25,520	100	1,137,326
2015 Actuals	847,479	95,584	190,580	26,032	100	1,159,775
2016 Actuals	850,825	99,526	202,815	26,568	85	1,179,819
2017 Actuals	839,126	92,549	193,828	13,693	85	1,139,281
2018 Actuals	858,828	88,409	190,151	12,085	85	1,149,558
2019 Actuals	833,274	87,535	183,732	11,969	85	1,116,595

The following Table 3-9 illustrates the historical ratios of kW/kWh as well as the 10 year average used for the forecast.

TABLE 3-9 - HISTORICAL RATES KW/KWH

Year	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels
Ratio kW to kWh					
2010	0.25%	0.21%	0.24%	0.27%	0.29%
2011	0.24%	0.22%	0.24%	0.27%	0.30%
2012	0.25%	0.22%	0.24%	0.27%	0.33%
2013	0.25%	0.22%	0.23%	0.28%	0.35%
2014	0.25%	0.22%	0.23%	0.28%	0.35%
2015	0.25%	0.23%	0.23%	0.28%	0.36%
2016	0.26%	0.24%	0.24%	0.28%	0.33%
2017	0.26%	0.23%	0.24%	0.27%	0.33%
2018	0.26%	0.21%	0.24%	0.28%	0.33%
2019	0.26%	0.23%	0.24%	0.27%	0.33%
Rate Applied	0.25%	0.22%	0.24%	0.27%	0.33%
Average Rate	0.25%	0.22%	0.24%	0.27%	0.33%

The “Rate Applied” from Table 3-10 was used to calculate the billed demand for each rate class by multiplying the rate by the relative weather normalized billed energy consumption forecast from above. The following table outlines the forecast of billed demand for the Bridge Year and Test Year by rate class.

TABLE 3-10 - FORECAST RATES KW/KWH

Year	GS>50kW	Large User	GS 1,000 - 4,999 kW	Streetlights	Sentinels	Total
Predicted Billed Demand (kW)						
2020 Normalized Bridge	833,808	86,319	184,129	12,304	83	1,116,642
2021 Normalized Test	825,711	86,319	182,480	12,504	81	1,107,095

The following Table 3-11 provides a summary of the billing determinants by rate class resulting from the Load Forecast process described in detail above and that OPUCN is proposing to be used in designing its rates:

TABLE 3-11 - BILLING DETERMINATES BY RATE CLASS

	Actual Results					Weather Normal Forecast	
Description	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Actual kWh Purchases	1,123,341,031	1,122,027,434	1,074,174,685	1,124,349,572	1,090,293,582		
Predicted kWh Purchases	1,115,923,051	1,137,865,447	1,083,497,510	1,133,372,323	1,135,059,363	1,125,237,967	1,122,802,653
% Difference	-0.7%	1.4%	0.9%	0.8%	4.1%		
Billed kWh	1,079,788,016	1,075,184,905	1,035,410,214	1,077,322,376	1,048,371,769	1,078,000,817	1,075,667,737
Billed kW	1,159,775	1,179,819	1,139,281	1,149,558	1,116,595	1,116,642	1,107,095
By Class							
Residential							
Customers	51,121	52,140	52,923	54,033	54,652	55,416	56,190
kWh	479,213,665	477,491,267	452,164,405	485,718,955	477,327,195	494,764,509	496,495,068
GS<50							
Customers	4,020	4,150	4,162	4,199	4,195	4,232	4,269
kWh	132,197,810	130,049,530	126,639,545	132,517,306	125,004,589	128,912,694	128,706,195
GS>50							
Customers	509	518	524	519	535	535	535
kWh	333,350,818	330,893,084	327,193,987	332,346,251	324,474,004	331,252,155	328,035,469
kW	847,479	850,825	839,126	858,828	833,274	833,808	825,711
Large User							
Customers	1	1	1	1	1	1	1
kWh	41,948,976	41,438,246	40,954,643	41,879,817	38,878,939	38,878,939	38,878,939
kW	95,584	99,526	92,549	88,409	87,535	86,319	86,319
GS 1,000 - 4,999 kW (I2)							
Customers	12	13	13	13	13	13	13
kWh	81,234,207	83,295,745	80,815,499	77,975,782	75,700,561	77,156,789	76,465,711
kW	190,580	202,815	193,828	190,151	183,732	184,129	182,480
Streetlights							
Connections	12,676	12,955	13,171	13,828	13,934	14,161	14,391
kWh	9,302,763	9,490,651	5,107,520	4,336,239	4,410,847	4,482,653	4,555,628
kW	26,032	26,568	13,693	12,085	11,969	12,304	12,504
Sentinels							
Connections	25	23	23	23	23	22	22
kWh	27,547	25,800	25,668	25,643	25,690	25,016	24,360
kW	100	85	85	85	85	83	81
USL							
Connections	286	274	274	276	278	275	273
kWh	2,512,230	2,500,582	2,508,947	2,522,383	2,549,944	2,528,061	2,506,367
Total of Above							
Customer/Connections	68,651	70,074	71,091	72,892	73,631	74,655	75,694
kWh	1,079,788,016	1,075,184,905	1,035,410,214	1,077,322,376	1,048,371,769	1,078,000,817	1,075,667,737
kW from applicable classes	1,159,775	1,179,819	1,139,281	1,149,558	1,116,595	1,116,642	1,107,095

TRANSFORMER ALLOWANCE

OPUCN currently provides a Transformer Ownership Allowance Credit of $0.60 per kW of demand per month for eligible customers in GS > 50 kW categories who own their own transformer facilities.

The following Table 3-12 provide the kW's allowed and the transformer allowances for the: Board-Approved 2015 to 2019 allowance ; 2015 to 2019 actual results; and forecast 2020 Bridge Year and 2021 Test Year:

TABLE 3-12 – KW'S ALLOWED AND TRANSFORMER ALLOWANCES

kW	Board-Approved					Actual					Bridge Year	Test Year
	2015	2015	2015	2015	2015	2015	2016	2017	2018	2019	2020	2021
GS 50 to 999 kW (I1 & I4)	182,799	182,178	180,883	179,096	177,389	188,750	198,928	192,911	192,977	188,655	183,259	181,618
GS 1,000 to 4,999 kW (I2)	110,796	111,894	112,563	113,345	114,266	103,529	109,476	107,732	96,102	87,001	82,562	81,760
Large Use (I3)	96,451	96,498	96,706	96,631	96,208	95,583	99,526	92,548	88,408	87,535	78,538	78,538
TOTAL	390,046	390,571	390,153	389,072	387,862	387,862	407,930	393,190	377,488	363,191	344,359	341,916

$	Board-Approved					Actual					Bridge Year	Test Year
	2015	2015	2015	2015	2015	2015	2016	2017	2018	2019	2020	2021
GS 50 to 999 kW (I1 & I4)	$109,680	$109,307	$108,530	$107,458	$106,433	$113,250	$119,357	$115,746	$115,786	$113,193	$109,955	$108,971
GS 1,000 to 4,999 kW (I2)	$66,478	$67,136	$67,538	$68,007	$68,560	$62,117	$65,685	$64,639	$57,661	$52,200	$49,537	$49,056
Large Use (I3)	$57,871	$57,899	$58,024	$57,978	$57,725	$57,350	$59,716	$55,529	$53,045	$52,521	$47,123	$47,123
TOTAL	$234,028	$234,343	$234,092	$233,443	$232,717	$232,717	$244,758	$235,914	$226,493	$217,915	$206,615	$205,149

OPUCN is proposing to maintain the rate of $0.60 per kW of demand per month for the 2015 through 2019 Test Years for eligible customers.

ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSIS

Overview

Provided in the following sections is OPUCN's analysis of the accuracy of the historical load forecast covering 2015 to 2019 Board Approved (weather-normalized), historical actual results from 2015 to 2019, historical actual results weather-normalized from 2015 to 2019, the 2020 Bridge Year and the 2021 Test Year. The variance analysis has been completed by rate class on the following basis:

- Customer / Connection counts summarised by year with year-over-year variances and comparisons to OEB-approved counts;
- Consumption and demand summarised by year with year-over-year variances and comparisons to OEB-approved amounts for actuals and weather-normalized actuals;
- Average consumption and demand summarised by year with year-over-year variances and comparisons to average OEB-approved amounts for actuals and weather-normalized actuals;
- Explanation of material variances;
- Explanations of the bridge year and test year forecasts;
- Calculation of bridge year revenue forecast of revenues at existing rates;
- Calculation of test year revenue forecast on the basis of existing rates and proposed rates.

OPUCN has completed Appendix 2-IB Customer, Connections, Load Forecast and Revenues Data and Analysis as presented in Appendix 3-4. All historical data has been reported as presented in the OEB RRR filings. All historical actual amounts reflect actual weather conditions in the year. Customer/connection numbers are shown in average format.

Variance Analysis Actuals, Weather-Normalized and Board Approved

Table 3-13 below summarizes total system consumption for the period 2015 through 2021. The methodology used by OPUCN to predict future load forecasts and estimated customer connections is explained in detail in the section titled "WEATHER-NORMALIZED LOAD AND CUSTOMER/CONNECTION FORECAST" earlier in this exhibit.

Table 3-13: Distribution System Total Consumption

	Year	Consumption (kWh)			
		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	1,079,788,016	1,086,444,848	1,102,042,241	
Actual	*2016*	1,075,184,905	1,063,253,023	1,105,604,445	
Actual	*2017*	1,035,410,214	1,072,970,934	1,107,833,051	
Actual	*2018*	1,077,322,376	1,067,275,420	1,111,201,028	
Actual	*2019*	1,048,371,769	1,037,051,138	1,115,391,817	
Bridge Year	*2020*		1,078,000,817		
Test Year	*2021*		1,075,667,737		

Variance Analysis	Year	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015			-2.0%	-1.4%
	2016	-0.4%	-2.1%	-2.8%	-3.8%
	2017	-3.7%	0.9%	-6.5%	-3.1%
	2018	4.0%	-0.5%	-3.0%	-4.0%
	2019	-2.7%	-2.8%	-6.0%	-7.0%
	2020		3.9%		
	2021		-0.2%		
2021 Test Yr Vs 2019 Approved			3.7%		
CAGR (2019 v 2015)		-1.0%	-1.5%	0.4%	
CAGR (2021 Test v 2015)			-0.2%	-0.5%	

Consumption forecast for 2021 represents an average annual decline of 0.2% compared to 2015 weather-normalized actual and a decline of 0.5% compared to 2015 OEB-approved. The forecast is based on a 10 year regression, which forecasts slightly higher consumption than the trend for 2015 to 2019, which saw average annual declines of 1.0%

and 1.5% for actual and weather-normalized actual consumption respectively. The forecast decline in consumption, despite forecast customer growth, reflects the decline in consumption per customer driven by the success of conservation programs over several years along with increased efficiencies inherent in modern electrical equipment and appliances.

The uneven trend in the actual year over year consumption trends in the above table are primarily weather related, with the following Table 3-14 illustrating the variability in the numbers of heating and cooling-degree days in Oshawa for the period 2011 through 2019:

TABLE 3-14: HEATING AND COOLING-DEGREE DAYS IN OSHAWA FROM 2011 TO 2019

Oshawa Climate Data						
	Cooling Degree Days (°C)	Vs Average 2011-2019	Vs Previous Year	Heating Degree Days (°C)	Vs Average 2011-2019	Vs Previous Year
2011	235	2.3%		3,636	(2.9)%	
2012	285	24.0%	21.3%	3,379	(9.7)%	(7.1)%
2013	209	(9.1)%	(26.7)%	4,014	7.2%	18.8%
2014	156	(32.1)%	(25.3)%	4,229	12.9%	5.3%
2015	195	(15.3)%	24.9%	4,042	8.0%	(4.4)%
2016	304	32.3%	56.1%	3,366	(10.1)%	(16.7)%
2017	165	(28.4)%	(45.9)%	3,129	(16.4)%	(7.0)%
2018	295	28.1%	79.0%	3,674	(1.9)%	17.4%
2019	226	(1.7)%	(23.3)%	4,228	12.9%	15.1%
Average	230	0.0%		3,744	0.0%	

Tables 3-15 to 3-22 below detail by customer class the billing determinants for each of the years 2015 through 2021, with variance analysis of year over year movements for weather actuals and weather-normalized actuals and forecast, and comparisons of weather actuals and weather-normalized actuals/forecast to OEB-approved.

Table 3-15: Residential Customer Class

	Year	Customers		Consumption (kWh)				Consumption (kWh) per Customer			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	51,121	50,977	479,213,665	482,167,990	488,310,442		9,374	9,458	9,579	
Actual	*2016*	52,140	51,742	477,491,267	472,192,300	491,380,161		9,158	9,126	9,497	
Actual	*2017*	52,923	52,518	452,164,405	468,567,199	492,297,001		8,544	8,922	9,374	
Actual	*2018*	54,033	53,516	485,718,955	481,189,209	493,730,171		8,989	8,992	9,226	
Actual	*2019*	54,652	54,533	477,327,195	472,172,874	495,549,476		8,734	8,658	9,087	
Bridge Year	*2020*	55,416			494,764,509				8,928		
Test Year	*2021*	56,190			496,495,068				8,836		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		0.3%			-1.9%	-1.3%			-2.1%	-1.3%
	2016	2.0%	0.8%	-0.4%	-2.1%	-2.8%	-3.9%	-2.3%	-3.5%	-3.6%	-3.9%
	2017	1.5%	0.8%	-5.3%	-0.8%	-8.2%	-4.8%	-6.7%	-2.2%	-8.9%	-4.8%
	2018	2.1%	1.0%	7.4%	2.7%	-1.6%	-2.5%	5.2%	0.8%	-2.6%	-2.5%
	2019	1.1%	0.2%	-1.7%	-1.9%	-3.7%	-4.7%	-2.8%	-3.7%	-3.9%	-4.7%
	2020	1.4%			4.8%				3.1%		
	2021	1.4%			0.3%				-1.0%		
2021 Test Yr Vs 2019 Approved			3.0%		5.2%				2.1%		
CAGR (2019 v 2015)		2.3%	2.3%	-0.1%	-0.7%			-2.3%	-2.9%		
CAGR (2021 Test v 2015)		1.9%	2.0%		0.6%	0.3%			-1.4%	-1.6%	

Customer growth is forecast at 1.4% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. Actual growth of 1.9% between 2015 and 2018 reflects larger than normal subdivision completions in these years, with a reduced growth level of 1.1% seen in 2019.

Consumption forecast for 2021 represents average annual growth of 0.6% compared to 2015 weather-normalized actual and growth of 0.3% compared to 2015 OEB-approved. The higher growth rate in customer numbers is offset by declines in average consumption per customer of 1.4% compared to 2015 weather-normalized actual and 1.6% compared to 2015 OEB-approved.

The declines in consumption per customer reflect the success of conservation programs over several years, together with increased efficiencies inherent in modern electrical equipment and appliances.

Table 3-16: GS < 50 kW Customer Class

	Year	Customers		Consumption (kWh)				Consumption (kWh) per Customer			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	4,020	4,002	132,197,810	133,012,802	134,064,266		32,885	33,233	33,495	
Actual	*2016*	4,150	4,062	130,049,530	128,606,303	134,854,492		31,339	31,657	33,195	
Actual	*2017*	4,162	4,123	126,639,545	131,233,543	135,063,742		30,428	31,827	32,756	
Actual	*2018*	4,199	4,202	132,517,306	131,281,468	135,448,705		31,557	31,242	32,234	
Actual	*2019*	4,195	4,282	125,004,589	123,654,752	135,967,584		29,800	28,878	31,753	
Bridge Year	*2020*	4,232			128,912,694				30,463		
Test Year	*2021*	4,269			128,706,195				30,148		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		0.4%			-1.4%	-0.8%			-1.8%	-0.8%
	2016	3.2%	2.1%	-1.6%	-3.3%	-3.6%	-4.6%	-4.7%	-4.7%	-5.6%	-4.6%
	2017	0.3%	0.9%	-2.6%	2.0%	-6.2%	-2.8%	-2.9%	0.5%	-7.1%	-2.8%
	2018	0.9%	-0.1%	4.6%	0.0%	-2.2%	-3.1%	3.7%	-1.8%	-2.1%	-3.1%
	2019	-0.1%	-2.0%	-5.7%	-5.8%	-8.1%	-9.1%	-5.6%	-7.6%	-6.2%	-9.1%
	2020	0.9%			4.3%				5.5%		
	2021	0.9%			-0.2%				-1.0%		
2021 Test Yr Vs 2019 Approved			-0.3%		4.1%				4.4%		
CAGR (2019 v 2015)		1.4%	2.3%	-1.8%	-2.4%			-3.2%	-4.6%		
CAGR (2021 Test v 2015)		1.2%	1.3%		-0.7%	-0.8%			-1.9%		

Customer growth is forecast at 0.9% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. The compound annual average actual growth (CAGR) between 2015 and 2019 was 1.4%, or 0.9% below OEB-approved growth for the period. Growth has been slow in the most recent years, averaging 0.4% from 2017 to 2019, and the forecast growth of 0.9% is more reflective of this than the 1.4% CAGR for the period 2015 to 2019.

Consumption forecast for 2021 represents an average annual decline of 0.7% compared to 2015 weather-normalized actual and a decline of 0.8% compared to 2015 OEB-approved. The 0.9% growth rate in customer numbers is more than offset by declines in average consumption per customer of 1.9% compared to 2015 weather-normalized actual and 2.1% compared to 2015 OEB-approved.

The declines in consumption per customer reflect the success of conservation programs over several years, together with increased efficiencies inherent in modern electrical equipment and appliances.

Table 3-17: GS 50 to 999 kW (I1 & I4) Customer Class

	Year	Customers		Demand (kW)				Demand (kW) per Customer			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	509	507	847,479	852,704	851,954		1,664	1,682	1,680	
Actual	*2016*	518	515	850,825	841,383	860,398		1,644	1,635	1,672	
Actual	*2017*	524	522	839,126	869,566	865,544		1,601	1,665	1,657	
Actual	*2018*	519	532	858,828	850,819	871,554		1,653	1,599	1,638	
Actual	*2019*	535	542	833,274	824,276	878,637		1,557	1,521	1,621	
Bridge Year	*2020*	535			833,808				1,558		
Test Year	*2021*	535			825,711				1,543		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		0.4%			-0.5%	0.1%			-1.0%	0.1%
	2016	1.6%	0.6%	0.4%	-1.3%	-1.1%	-2.2%	-1.2%	-2.8%	-1.7%	-2.2%
	2017	1.2%	0.3%	-1.4%	3.3%	-3.1%	0.5%	-2.6%	1.8%	-3.4%	0.5%
	2018	-0.9%	-2.4%	2.3%	-2.2%	-1.5%	-2.4%	3.3%	-3.9%	0.9%	-2.4%
	2019	3.0%	-1.2%	-3.0%	-3.1%	-5.2%	-6.2%	-5.8%	-4.9%	-4.0%	-6.2%
	2020	0.0%			1.2%				2.4%		
	2021	0.0%			-1.0%				-1.0%		
2021 Test Yr Vs 2019 Approved			-1.2%		0.2%				1.4%		
CAGR (2019 v 2015)		1.7%	2.3%	-0.6%	-1.1%			-2.2%	-3.3%		
CAGR (2021 Test v 2015)		1.0%	1.1%		-0.6%	-0.6%			-1.7%	-1.7%	

Customer growth is forecast at 0.0% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. The compound annual average actual growth (CAGR) between 2015 and 2019 was 1.7%, or 0.6% below OEB-approved growth for the period. Growth in 2020 has been flat, with a decline of 1 for the period May year to date.

Demand forecast for 2021 represents an average annual decline of 0.6% compared to 2015 weather-normalized actual and a decline of 0.6% compared to 2015 OEB-approved. This is consistent with the actual average annual decline of 0.6% in the period 2015 through 2019.

Average demand per customer represents an average annual decline of 1.7% compared to 2015 weather-normalized actual and a decline of 1.7% compared to 2015 OEB-approved.

Table 3-18: GS 1,000 to 4,999 kW (I2) Customer Class

	Year	Customers		Demand (kW)				Demand (kW) per Customer			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	12	12	190,580	191,755	195,333		15,349	15,980	16,278	
Actual	*2016*	13	12	202,815	200,564	194,670		15,601	16,714	16,222	
Actual	*2017*	13	12	193,828	200,859	193,286		15,202	16,738	16,107	
Actual	*2018*	13	12	190,151	188,378	191,376		14,627	15,698	15,948	
Actual	*2019*	13	12	183,732	181,748	189,551		14,410	15,146	15,796	
Bridge Year	*2020*	13			184,129				14,442		
Test Year	*2021*	13			182,480				14,312		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		3.5%			-2.4%	-1.8%			-5.7%	-1.8%
	2016	4.7%	8.3%	6.4%	4.6%	4.2%	3.0%	1.6%	4.6%	-3.8%	3.0%
	2017	-1.9%	6.3%	-4.4%	0.1%	0.3%	3.9%	-2.6%	0.1%	-5.6%	3.9%
	2018	2.0%	8.3%	-1.9%	-6.2%	-0.6%	-1.6%	-3.8%	-6.2%	-8.3%	-1.6%
	2019	-1.9%	6.3%	-3.4%	-3.5%	-3.1%	-4.1%	-1.5%	-3.5%	-8.8%	-4.1%
	2020	0.0%			1.3%				-4.6%		
	2021	0.0%			-0.9%				-0.9%		
2021 Test Yr Vs 2019 Approved			6.3%		0.4%				-5.5%		
CAGR (2019 v 2015)		0.9%	0.0%	-1.2%	-1.8%			-2.1%	-1.8%		
CAGR (2021 Test v 2015)		0.5%	1.2%		-1.0%	-1.4%			-2.2%		

Customer growth is forecast at 0.0% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019, rounded to reflect the small numbers of customers in this class. The compound annual average actual growth (CAGR) between 2015 and 2019 was 0.9%, or 0.9% above OEB-approved growth for the period. One customer was lost in late 2019 and forecast assumes no customer growth, or losses, in 2020 and 2021.

Demand forecast for 2021 represents an average annual decline of 1.0% compared to 2015 weather-normalized actual and a decline of 1.4% compared to 2015 OEB-approved. This is consistent with the actual average annual decline of 1.2% in the period 2015 through 2019.

Average demand per customer represents an average annual decline of 2.2% compared to 2015 weather-normalized actual and a decline of 2.5% compared to 2015 OEB-approved. This is consistent with the actual average annual decline of 2.1% in the period 2015 through 2019.

TABLE 3-19: LARGE USE (I3) CUSTOMER CLASS

	Year	Customers		Demand (kW)				Demand (kW) per Customer			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	1	1	95,584	96,173	96,450		95,584	96,173	96,450	
Actual	*2016*	1	1	99,526	98,422	96,498		99,526	98,422	96,498	
Actual	*2017*	1	1	92,549	95,906	96,706		92,549	95,906	96,706	
Actual	*2018*	1	1	88,409	87,585	96,630		88,409	87,585	96,630	
Actual	*2019*	1	1	87,535	86,590	96,207		87,535	86,590	96,207	
Bridge Year	*2020*	1			86,319				86,319		
Test Year	*2021*	1			86,319				86,319		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		0.0%			-0.9%	-0.3%			-0.9%	-0.3%
	2016	0.0%	0.0%	4.1%	2.3%	3.1%	2.0%	4.1%	2.3%	3.1%	2.0%
	2017	0.0%	0.0%	-7.0%	-2.6%	-4.3%	-0.8%	-7.0%	-2.6%	-4.3%	-0.8%
	2018	0.0%	0.0%	-4.5%	-8.7%	-8.5%	-9.4%	-4.5%	-8.7%	-8.5%	-9.4%
	2019	0.0%	0.0%	-1.0%	-1.1%	-9.0%	-10.0%	-1.0%	-1.1%	-9.0%	-10.0%
	2020	0.0%			-0.3%				-0.3%		
	2021	0.0%			0.0%				0.0%		
2021 Test Yr Vs 2019 Approved			0.0%		-0.3%				-0.3%		
CAGR (2019 v 2015)		0.0%	0.0%	-2.9%	-3.4%			-2.9%	-3.4%		
CAGR (2021 Test v 2015)		0.0%	0.0%		-2.1%	-2.2%			-2.1%		

Customer growth is forecast at 0.0% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019, and reflects the fact there is just a single customer in this class with no indication of imminent customer growth.

Demand forecast for 2021 represents an average annual decline of 2.1% compared to 2015 weather-normalized actual and a decline of 2.2% compared to 2015 OEB-approved. This is slightly better than the actual average annual decline of 2.9% in the period 2015 through 2019.

With a single customer in this class, average demand per customer is equal to total demand for the class in all historical and forecast years.

TABLE 3-20: STREET LIGHTING CUSTOMER CLASS

		Connections		Demand (kW)				Demand (kW) per Connection			
	Year	Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	12,676	12,710	26,032	26,192	23,912		2.1	2.1	1.9	
Actual	*2016*	12,955	12,960	26,568	26,273	14,599		2.1	2.0	1.1	
Actual	*2017*	13,171	13,215	13,693	14,189	13,528		1.0	1.1	1.0	
Actual	*2018*	13,828	13,466	12,085	11,972	13,785		0.9	0.9	1.0	
Actual	*2019*	13,934	13,722	11,969	11,840	14,047		0.9	0.9	1.0	
Bridge Year	*2020*	14,161			12,494				0.9		
Test Year	*2021*	14,391			12,698				0.9		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		-0.3%			8.9%	9.5%			9.2%	9.5%
	2016	2.2%	0.0%	2.1%	0.3%	82.0%	80.0%	-0.1%	-1.6%	82.0%	80.0%
	2017	1.7%	-0.3%	-48.5%	-46.0%	1.2%	4.9%	-49.3%	-47.0%	1.6%	4.9%
	2018	5.0%	2.7%	-11.7%	-15.6%	-12.3%	-13.2%	-15.9%	-17.2%	-14.6%	-13.2%
	2019	0.8%	1.5%	-1.0%	-1.1%	-14.8%	-15.7%	-1.7%	-3.0%	-16.1%	-15.7%
	2020	1.6%			5.5%				2.3%		
	2021	1.6%			1.6%				0.0%		
2021 Test Yr Vs 2019 Approved			4.9%		7.2%				2.3%		
CAGR (2019 v 2015)		3.2%	2.6%	-22.8%	-23.3%			-25.2%	-25.2%		
CAGR (2021 Test v 2015)		2.6%	2.5%		-13.5%	-11.9%			-15.6%		

Connection growth is forecast at 1.6% for 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. The compound annual average actual growth (CAGR) between 2015 and 2019 was 3.2%, or 0.6% above OEB-approved growth for the period.

The changeover to LED lights, completed in 2017, distorts the trends for demand owing to the significant reduction in demand compared to previous lights. The demand forecast for 2021 of 1.6% is consistent with estimated growth in connections, which utilises the geometric mean of the actual annual growth between 2010 and 2019..

Average demand per connection reflects the changeover to LED lights and is not expected to change in 2021 from current levels.

TABLE 3-21: UNMETERED SCATTERED LOAD CUSTOMER CLASS

	Year	Connections		Consumption (kWh)				Consumption (kWh) per Connection			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	286	296	2,512,230	2,527,718	2,686,537		8,789	8,545	9,082	
Actual	*2016*	274	296	2,500,582	2,472,832	2,667,193		9,118	8,350	9,007	
Actual	*2017*	274	296	2,508,947	2,599,962	2,652,385		9,154	8,770	8,947	
Actual	*2018*	276	297	2,522,383	2,498,860	2,629,927		9,142	8,420	8,861	
Actual	*2019*	278	297	2,549,944	2,522,409	2,598,290		9,181	8,490	8,745	
Bridge Year	*2020*	275			2,528,061				9,181		
Test Year	*2021*	273			2,506,367				9,181		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		-3.4%			-6.5%	-5.9%			-3.2%	-5.9%
	2016	-4.1%	-7.4%	-0.5%	-2.2%	-6.2%	-7.3%	3.7%	-2.3%	1.2%	-7.3%
	2017	-0.1%	-7.5%	0.3%	5.1%	-5.4%	-2.0%	0.4%	5.0%	2.3%	-2.0%
	2018	0.7%	-7.0%	0.5%	-3.9%	-4.1%	-5.0%	-0.1%	-4.0%	3.2%	-5.0%
	2019	0.7%	-6.5%	1.1%	0.9%	-1.9%	-2.9%	0.4%	0.8%	5.0%	-2.9%
	2020	-0.9%			0.2%				8.1%		
	2021	-0.9%			-0.9%				0.0%		
2021 Test Yr Vs 2019 Approved			-8.1%		-0.6%				8.1%		
CAGR (2019 v 2015)		-1.0%	0.1%	0.5%	-0.1%			1.5%	-0.2%		
CAGR (2021 Test v 2015)		-0.9%	-1.6%		-0.2%	-1.4%			1.4%		

Connection growth is forecast to decline by 0.9% in 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. This is consistent with actual average annual decline in the period 2015 through 2019 of 1.0%.

Consumption forecast for 2021 represents an average annual decline of 0.2% compared to 2015 weather-normalized actual and a decline of 1.4% compared to 2015 OEB-approved. This forecast is consistent with the actual average annual decline in the period 2015 through 2019 of 0.1%.

The average consumption per connection is forecast to remain consistent with 2019 actuals, which reflects actual experience over the period 2016 through 2019.

TABLE 3-22: SENTINEL LIGHTS CUSTOMER CLASS

	Year	Connections		Demand (kW)				Demand (kW) per Connection			
		Actual	OEB-approved	Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized		Actual (Weather actual)	Actual Weather-normalized	OEB-approved Weather-normalized	
Actual	*2015*	25	23	100	101	100		4.0	4.3	4.3	
Actual	*2016*	23	22	85	84	96		3.7	3.7	4.3	
Actual	*2017*	23	22	85	88	92		3.7	4.1	4.2	
Actual	*2018*	23	21	85	84	89		3.7	4.0	4.2	
Actual	*2019*	23	20	85	84	85		3.7	4.1	4.2	
Bridge Year	*2020*	22			83				3.7		
Test Year	*2021*	22			81				3.7		

Variance Analysis	Year	Year-over-year	Actual / Test Year Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved	Year-over-year	Actual Weather-normalized Year-over-year	Actuals Versus OEB-approved	Actual Weather-normalized Versus OEB-approved
	2015		7.7%			-0.2%	0.5%			-7.3%	0.5%
	2016	-8.0%	2.4%	-15.0%	-16.5%	-11.6%	-12.5%	-7.6%	-13.7%	-13.6%	-12.5%
	2017	0.0%	5.8%	0.0%	4.8%	-8.0%	-4.6%	0.0%	8.3%	-13.0%	-4.6%
	2018	0.0%	9.4%	0.0%	-4.4%	-4.0%	-4.9%	0.0%	-1.2%	-12.2%	-4.9%
	2019	0.0%	13.0%	0.0%	-0.1%	0.6%	-0.5%	0.0%	3.2%	-11.0%	-0.5%
	2020	-2.6%			-1.6%				-10.6%		
	2021	-2.6%			-2.6%				0.0%		
2021 Test Yr Vs 2019 Approved			7.2%		-4.2%				-10.6%		
CAGR (2019 v 2015)		-2.7%	-4.3%	-5.3%	-5.8%			-2.6%	-1.6%		
CAGR (2021 Test v 2015)		-2.7%	-1.2%		-4.4%	-4.3%			-3.1%		

Connection growth is forecast to decline by 2.6% in 2020 and 2021, based on geometric mean of the actual annual growth between 2010 and 2019. This is consistent with actual average annual decline in the period 2015 through 2019 of 2.7%.

Demand forecast for 2021 represents an average annual decline of 4.4% compared to 2015 weather-normalized actual and a decline of 4.3% compared to 2015 OEB-approved. This forecast is consistent with the actual average annual decline in the period 2015 through 2019 of 5.3%.

The average demand per connection is forecast to remain consistent with 2019 actuals, which reflects actual experience over the period 2016 through 2019.

CALCULATED BRIDGE YEAR REVENUE AT EXISTING RATES

Table 3-23 calculates OPUCN's 2020 Distribution Revenue at existing rates. 2020 rates are as approved in OPUCN's 2020 IRM rate application EB-2019-0062 and are applied to the 2020 forecast billing determinants.

TABLE 3-23: 2020 DISTRIBUTION REVENUE AT EXISTING RATES

Class	Annual kWh	Annual kW	Annualized Customers / Connections	Monthly Fixed Charge	Volumetric Charge	Dist. Rev. Including Transformer	Trans-former Allowance	Distribution Revenue
Residential	494,764,509		664,987	24.67	0.0000	16,405,218		16,405,218
GS Less Than 50 KW	128,912,694		50,782	17.39	0.0177	3,164,852		3,164,852
GS 50 To 999 KW	331,252,155	833,808	6,423	58.43	4.9998	4,544,167	49,537	4,494,630
GS 1,000 To 4,999 KW	77,156,789	184,129	153	1,227.87	2.6132	669,031	109,955	559,075
Large Use	38,878,939	86,319	12	9,343.15	2.2526	306,560	47,123	259,438
Street Lighting	4,482,653	12,494	169,930	2.11	32.5022	764,648		764,648
Sentinel Lighting	25,016	83	269	5.88	8.4045	2,275		2,275
Unmetered	2,528,061		3,304	4.87	0.0200	66,654		66,654
	1,078,000,817	1,116,833				**25,923,405**	**206,615**	**25,716,790**

CALCULATED TEST YEAR REVENUE AT EXISTING RATES

Table 3-24 calculates OPUCN's 2021 Distribution Revenue at prior year rates. 2020 rates are applied to the 2021 forecast billing determinants.

TABLE 3-24: 2021 DISTRIBUTION REVENUE AT EXISTING 2020 RATES

Class	Annual kWh	Annual kW	Annualized Customers / Connections	Monthly Fixed Charge Previous Year (2020)	Volumetric Charge Previous Year (2020)	Dist. Rev. Including Transformer	Trans-former Allowance	Distribution Revenue
Residential	496,495,068		674,277	24.67	0.0000	16,634,415		16,634,415
GS Less Than 50 KW	128,706,195		51,230	17.39	0.0177	3,168,984		3,168,984
GS 50 To 999 KW	328,035,469	825,711	6,423	58.43	4.9998	4,503,684	49,056	4,454,629
GS 1,000 To 4,999 KW	76,465,711	182,480	153	1,227.87	2.6132	664,721	108,971	555,750
Large Use	38,878,939	86,319	12	9,343.15	2.2526	306,560	47,123	259,438
Street Lighting	4,555,628	12,698	172,696	2.11	32.5022	777,096		777,096
Sentinel Lighting	24,360	81	262	5.88	8.4045	2,216		2,216
Unmetered	2,506,367		3,276	4.87	0.0200	66,082		66,082
	1,075,667,737	1,107,288				**26,123,759**	**205,149**	**25,918,610**
				Proposed 2021 Revenue				27,356,201
				Revenue Deficiency				(1,437,591)

CALCULATED TEST YEAR REVENUE AT PROPOSED RATES

Table 3-25 calculates OPUCN's 2021 Distribution Revenue at proposed 2021 rates. 2021 rates are applied to the 2021 forecast billing determinants.

TABLE 3-25: 2021 DISTRIBUTION REVENUE AT PROPOSED 2020 RATES

Class	Annual kWh	Annual kW	Annualized Customers / Connections	Proposed Monthly Fixed Charge	Proposed Volumetric Charge	Dist. Rev. Including Transformer	Trans-former Allowance	Distribution Revenue
Residential	496,495,068		674,277	26.45	0.0000	17,834,628		17,834,628
GS Less Than 50 KW	128,706,195		51,230	18.35	0.0187	3,346,871		3,346,871
GS 50 To 999 KW	328,035,469	825,711	6,423	61.62	5.2729	4,749,675	49,056	4,700,620
GS 1,000 To 4,999 KW	76,465,711	182,480	153	1,295.54	2.7247	695,421	108,971	586,450
Large Use	38,878,939	86,319	12	9,860.14	2.3467	320,887	47,123	273,764
Street Lighting	4,555,628	12,698	172,696	1.46	22.5584	538,579		538,579
Sentinel Lighting	24,360	81	262	6.03	8.6243	2,273		2,273
Unmetered	2,506,367		3,276	5.38	0.0221	73,016		73,016
	1,075,667,737	1,107,288				**27,561,350**	**205,149**	**27,356,201**

OTHER OPERATING REVENUE

Table 3-26 provides a summary of Other Operating Revenue for the: 2015 to 2019 Board-Approved amounts; actual results for 2015 to 2019; and forecast revenue for the 2020 Bridge Year and 2021 Test Year.

TABLE 3-26 - SUMMARY OF OTHER OPERATING REVENUE (APPENDIX 2-H)

USoA #	USoA Description	Board Approved					Actual					Bridge	Test
	$'000s	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2020	2021
4235	Specific Service Charges	$801	$814	$827	$843	$859	$939	$1,078	$697	$719	$469	$484	$483
4225	Late Payment Charges	$286	$292	$297	$303	$310	$285	$326	$309	$254	$247	$254	$257
4086	SSS Administration Revenue	$155	$159	$164	$169	$173	$165	$175	$181	$190	$196	$190	$197
4210	Rent from Electric Property	$176	$176	$176	$176	$176	$184	$184	$184	$195	$294	$200	$346
4084	Service Transaction Requests (STR) Revenues	$1	$1	$1	$1	$1	$1	$1	$0	$0	$0	$0	$0
4325	Revenues from Merchandise, Jobbing, Etc.	$1,389	$1,389	$1,389	$1,389	$1,389	$153	$48	$185	$176	$183	$191	$191
4330	Costs of Merchandising, Jobbing, Etc	$(1,376)	$(1,376)	$(1,376)	$(1,376)	$(1,376)	$(134)	$(68)	$(204)	$(119)	$(200)	$(190)	$(190)
4355	Gain on Disposition of Utility/Other Property	$0	$0	$0	$0	$0	$1	$8	$(74)	$34	$10	$0	$0
4360	Loss on Disposition of Utility/Other Property	$(396)	$(265)	$(182)	$(403)	$(381)	$(107)	$(429)	$(440)	$(387)	$189	$(278)	$(278)
4375	Revenues from Non-Utility Operations	$2,377	$2,377	$2,377	$2,377	$2,377	$1,589	$3,209	$2,851	$2,918	$3,483	$3	$3
4380	Expenses of Non-Utility Operations	$(2,369)	$(2,369)	$(2,369)	$(2,369)	$(2,369)	$(1,455)	$(2,933)	$(2,706)	$(2,372)	$(3,482)	$0	$0
4390	Miscellaneous Non-Operating Income	$147	$147	$147	$147	$147	$154	$123	$207	$190	$146	$150	$150
4405	Interest and Dividend Income	$128	$128	$128	$128	$128	$191	$145	$159	$169	$132	$74	$74
4245	Government Assistance & Other Contributions											$22	$66
Total Other Revenue		$1,319	$1,472	$1,579	$1,385	$1,434	$1,965	$1,867	$1,351	$1,968	$1,669	$1,100	$1,300

VARIANCE ANALYSIS OTHER REVENUE ACTUALS TO BOARD APPROVED

Tables 3-27 to 3-31 below detail Other Revenue for each actual year compared to Board Approved for each of the years 2015 to 2019. The tables summarise the variance by account description followed by a discussion on those material variances over $100,000.

Table 3-27: 2015 Actual Comparison to 2015 Board-Approved

USoA #	Description	Approved	Actual	Difference	
		2015	2015	$	%
4235	Specific Service Charges	$801,258	$938,848	$137,590	17.2%
4225	Late Payment Charges	$286,274	$285,462	$(811)	(0.3)%
4086	SSS Administration Revenue	$155,052	$164,503	$9,452	6.1%
4210	Rent from Electric Property	$176,388	$183,586	$7,198	4.1%
4084	Service Transaction Requests (STR) Revenues	$1,326	$992	$(334)	(25.2)%
4325	Revenues from Merchandise, Jobbing, Etc.	$1,388,670	$153,070	$(1,235,599)	(89.0)%
4330	Costs of Merchandising, Jobbing, Etc	$(1,375,610)	$(134,452)	$1,241,158	(90.2)%
4355	Gain on Disposition of Utility/Other Property	$0	$500	$500	0.0%
4360	Loss on Disposition of Utility/Other Property	$(396,446)	$(106,535)	$289,911	(73.1)%
4375	Revenues from Non-Utility Operations	$2,376,719	$1,588,923	$(787,796)	(33.1)%
4380	Expenses of Non-Utility Operations	$(2,369,144)	$(1,454,655)	$914,490	(38.6)%
4390	Miscellaneous Non-Operating Income	$146,629	$154,246	$7,617	5.2%
4405	Interest and Dividend Income	$128,000	$190,832	$62,832	49.1%
Total Other Revenue		$1,319,113	$1,965,320	$646,207	49.0%

OPUCN's 2015 other revenue was $646,207 or 49.0% more than the Board-Approved amount of $1,319,113.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $126,694 higher than the Board-Approved amount of $7,574. Incentives earned under the CDM 2011-2015 legacy framework accounted for $128,086 of the total variance.

Revenues from Specific Service Charges, principally collection charges, were $137,590 higher than Board-Approved. Collection charges in 2015 were approximately $100,000 higher than 2010-2014 average on which the forecast was based.

OPUCN experienced a loss on disposal of assets resulting from retrofit projects whereby utility assets were removed and disposed of; the net book value then written-off. The net loss of $106,035 was $290,411 lower than forecast due to fluctuations in actual versus estimated age of replaced equipment, together with timing of projects. The forecast amounts over the 2015 to 2019 rate period was an average based on total estimated disposals over this period from the Distribution System Plan.

Table 3-28: 2016 Actual Comparison to 2016 Board-Approved

USoA #	Description	Approved	Actual	Difference	
		2016	2016	$	%
4235	Specific Service Charges	$814,159	$1,077,943	$263,785	32.4%
4225	Late Payment Charges	$291,567	$326,018	$34,451	11.8%
4086	SSS Administration Revenue	$158,735	$175,179	$16,444	10.4%
4210	Rent from Electric Property	$176,388	$184,007	$7,619	4.3%
4084	Service Transaction Requests (STR) Revenues	$1,327	$770	$(557)	(42.0)%
4325	Revenues from Merchandise, Jobbing, Etc.	$1,388,670	$48,353	$(1,340,317)	(96.5)%
4330	Costs of Merchandising, Jobbing, Etc	$(1,375,610)	$(67,997)	$1,307,613	(95.1)%
4355	Gain on Disposition of Utility/Other Property	$0	$7,875	$7,875	0.0%
4360	Loss on Disposition of Utility/Other Property	$(265,096)	$(429,437)	$(164,341)	62.0%
4375	Revenues from Non-Utility Operations	$2,376,719	$3,208,616	$831,898	35.0%
4380	Expenses of Non-Utility Operations	$(2,369,144)	$(2,932,676)	$(563,531)	23.8%
4390	Miscellaneous Non-Operating Income	$146,629	$122,788	$(23,841)	(16.3)%
4405	Interest and Dividend Income	$128,000	$145,298	$17,298	13.5%
Total Other Revenue		$1,472,342	$1,866,737	$394,395	26.8%

OPUCN's 2016 other revenue was $394,395 or 26.8% more than the Board-Approved amount of $1,472,342.

Revenues from Specific Service Charges, principally collection charges, were $263,785 higher than Board-Approved. Collection charges in 2016 were approximately $200,000 higher than the 2010-2014 average on which the forecast was based.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $268,366 higher than the Board-Approved amount of $7,574. Incentives earned under the CDM 2011-2015 legacy framework accounted for $178,739 of the total variance.

OPUCN experienced a loss on disposal of assets resulting from retrofit projects whereby utility assets were removed and disposed of; the net book value then written-off. The net loss of $421,562 was $156,466 higher than forecast due to fluctuations in actual versus estimated age of replaced equipment, together with timing of projects. The forecast amounts over the 2015 to 2019 rate period was an average based on total estimated disposals over this period from the Distribution System Plan.

Table 3-29: 2017 Actual Comparison to 2017 Board-Approved

USoA #	Description	Approved	Actual	Difference	
		2017	2017	$	%
4235	Specific Service Charges	$827,331	$696,833	$(130,498)	(15.8)%
4225	Late Payment Charges	$296,971	$308,614	$11,643	3.9%
4086	SSS Administration Revenue	$163,581	$181,223	$17,642	10.8%
4210	Rent from Electric Property	$176,388	$183,913	$7,525	4.3%
4084	Service Transaction Requests (STR) Revenues	$1,328	$365	$(963)	(72.5)%
4325	Revenues from Merchandise, Jobbing, Etc.	$1,388,670	$185,119	$(1,203,551)	(86.7)%
4330	Costs of Merchandising, Jobbing, Etc	$(1,375,610)	$(203,663)	$1,171,947	(85.2)%
4355	Gain on Disposition of Utility/Other Property	$0	$(73,591)	$(73,591)	0.0%
4360	Loss on Disposition of Utility/Other Property	$(182,214)	$(439,947)	$(257,733)	141.4%
4375	Revenues from Non-Utility Operations	$2,376,719	$2,851,179	$474,460	20.0%
4380	Expenses of Non-Utility Operations	$(2,369,144)	$(2,706,242)	$(337,098)	14.2%
4390	Miscellaneous Non-Operating Income	$146,629	$207,459	$60,830	41.5%
4405	Interest and Dividend Income	$128,000	$159,458	$31,458	24.6%
Total Other Revenue		$1,578,649	$1,350,720	$(227,929)	(14.4)%

OPUCN's 2017 other revenue was $227,929 or 14.4% lower than the Board-Approved amount of $1,578,649.

Revenues from Specific Service Charges, principally collection charges, were $130,498 lower than Board-Approved, driven by changes in OEB customer service rules.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $137,362 higher than the Board-Approved amount of $7,574. Final settlement of incentives earned under the CDM 2011-2015 legacy framework accounted for $140,892 of the total variance.

OPUCN experienced a loss on disposal of assets resulting from retrofit projects whereby utility assets were removed and disposed of; the net book value then written-off. The net loss of $513,538 was $331,324 higher than forecast due to fluctuations in actual versus estimated age of replaced equipment, together with timing of projects. The forecast amounts over the 2015 to 2019 rate period was an average based on total estimated disposals over this period from the Distribution System Plan.

Table 3-30: 2018 Actual Comparison to 2018 Board-Approved

USoA #	Description	Approved	Actual	Difference	
		2018	2018	$	%
4235	Specific Service Charges	$842,953	$719,470	$(123,484)	(14.6)%
4225	Late Payment Charges	$303,381	$254,142	$(49,239)	(16.2)%
4086	SSS Administration Revenue	$168,678	$189,855	$21,178	12.6%
4210	Rent from Electric Property	$176,388	$194,697	$18,308	10.4%
4084	Service Transaction Requests (STR) Revenues	$1,330	$257	$(1,073)	(80.7)%
4325	Revenues from Merchandise, Jobbing, Etc.	$1,388,670	$175,831	$(1,212,839)	(87.3)%
4330	Costs of Merchandising, Jobbing, Etc	$(1,375,610)	$(118,523)	$1,257,087	(91.4)%
4355	Gain on Disposition of Utility/Other Property	$0	$33,661	$33,661	0.0%
4360	Loss on Disposition of Utility/Other Property	$(403,265)	$(386,552)	$16,712	(4.1)%
4375	Revenues from Non-Utility Operations	$2,376,719	$2,918,149	$541,431	22.8%
4380	Expenses of Non-Utility Operations	$(2,369,144)	$(2,371,942)	$(2,797)	0.1%
4390	Miscellaneous Non-Operating Income	$146,629	$189,631	$43,002	29.3%
4405	Interest and Dividend Income	$128,000	$168,840	$40,840	31.9%
Total Other Revenue		$1,384,728	$1,967,515	$582,787	42.1%

OPUCN's 2018 other revenue was $582,787 or 42.1% higher than the Board-Approved amount of $1,384,728.

Revenues from Specific Service Charges, principally collection charges, were $123,484 lower than Board-Approved, driven by changes in OEB customer service rules.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $538,633 higher than the Board-Approved amount of $7,574. Incentives earned under the 2015 - 2020 Conservation First Framework programs accounted for $523,086 of the total variance.

OPUCN experienced a loss on disposal of assets resulting from retrofit projects whereby utility assets were removed and disposed of; the net book value then written-off. The net loss of $513,538 was $331,324 higher than forecast due to fluctuations in actual versus estimated age of replaced equipment, together with timing of projects. The forecast amounts over the 2015 to 2019 rate period was an average based on total estimated disposals over this period from the Distribution System Plan.

Table 3-31: 2019 Actual Comparison to 2019 Board-Approved

USoA #	Description	Approved	Actual	Difference	
		2019	2019	$	%
4235	Specific Service Charges	$858,945	$469,443	$(389,501)	(45.3)%
4225	Late Payment Charges	$309,942	$247,470	$(62,473)	(20.2)%
4086	SSS Administration Revenue	$173,482	$195,618	$22,135	12.8%
4210	Rent from Electric Property	$176,388	$293,620	$117,231	66.5%
4084	Service Transaction Requests (STR) Revenues	$1,331	$494	$(837)	(62.9)%
4325	Revenues from Merchandise, Jobbing, Etc.	$1,388,670	$182,826	$(1,205,843)	(86.8)%
4330	Costs of Merchandising, Jobbing, Etc	$(1,375,610)	$(199,582)	$1,176,028	(85.5)%
4355	Gain on Disposition of Utility/Other Property	$0	$10,400	$10,400	0.0%
4360	Loss on Disposition of Utility/Other Property	$(381,240)	$189,483	$570,723	(149.7)%
4375	Revenues from Non-Utility Operations	$2,376,719	$3,483,340	$1,106,622	46.6%
4380	Expenses of Non-Utility Operations	$(2,369,144)	$(3,481,513)	$(1,112,369)	47.0%
4390	Miscellaneous Non-Operating Income	$146,629	$145,804	$(825)	(0.6)%
4405	Interest and Dividend Income	$128,000	$131,553	$3,553	2.8%
Total Other Revenue		$1,434,111	$1,668,955	$234,844	16.4%

OPUCN's 2019 other revenue was $234,844 or 16.4% higher than the Board-Approved amount of $1,384,728.

Revenues from Specific Service Charges, principally collection charges, were $389,501 lower than Board-Approved, driven by changes in OEB customer service rules.

OPUCN experienced a gain on disposal of assets resulting from retrofit projects whereby utility assets were removed and disposed of; the net book value then written-off. The net gain of $199,883 was $581,123 higher than forecast due to fluctuations in actual versus estimated age of replaced equipment, together with timing of projects, and an adjustment to the 2018 booked loss which was overstated due to an error in the year end accrual estimate. The forecast amounts over the 2015 to 2019 rate period was an average based on total estimated disposals over this period from the Distribution System Plan.

VARIANCE ANALYSIS YEAR OVER YEAR ACTUALS

Tables 3-32 and 3-33 below detail other revenue for each actual year compared to prior year actual for each of the years 2016 to 2019, and for 2020 and 2021 forecast years compared to prior year actual or forecast.

Table 3-32: 2015 to 2019 Actual, 2020 and 2021 Forecast Other Revenue

USoA #	Other Revenue	Actual	Actual	Actual	Actual	Actual	Bridge Yr	Test Yr
		2015	2016	2017	2018	2019	2020	2021
4235	Specific Service Charges	$938,848	$1,077,943	$696,833	$719,470	$469,443	$483,894	$483,271
4225	Late Payment Charges	$285,462	$326,018	$308,614	$254,142	$247,470	$253,938	$257,473
4086	SSS Administration Revenue	$164,503	$175,179	$181,223	$189,855	$195,618	$189,782	$197,418
4210	Rent from Electric Property	$183,586	$184,007	$183,913	$194,697	$293,620	$200,288	$345,505
4084	Service Transaction Requests (STR) Revenues	$992	$770	$365	$257	$494	$0	$0
4325	Revenues from Merchandise, Jobbing, Etc.	$153,070	$48,353	$185,119	$175,831	$182,826	$191,174	$191,174
4330	Costs of Merchandising, Jobbing, Etc	$(134,452)	$(67,997)	$(203,663)	$(118,523)	$(199,582)	$(190,405)	$(190,405)
4355	Gain on Disposition of Utility/Other Property	$500	$7,875	$(73,591)	$33,661	$10,400	$0	$0
4360	Loss on Disposition of Utility/Other Property	$(106,535)	$(429,437)	$(439,947)	$(386,552)	$189,483	$(277,875)	$(277,875)
4375	Revenues from Non-Utility Operations	$1,588,923	$3,208,616	$2,851,179	$2,918,149	$3,483,340	$2,988	$2,988
4380	Expenses of Non-Utility Operations	$(1,454,655)	$(2,932,676)	$(2,706,242)	$(2,371,942)	$(3,481,513)	$0	$0
4390	Miscellaneous Non-Operating Income	$154,246	$122,788	$207,459	$189,631	$145,804	$149,788	$149,788
4405	Interest and Dividend Income	$190,832	$145,298	$159,458	$168,840	$131,553	$74,431	$74,431
4245	Government Assistance & Other Contributions	$0	$0	$0	$0	$0	$21,756	$66,213
Total Other Revenue		$1,965,320	$1,866,737	$1,350,720	$1,967,515	$1,668,955	$1,099,760	$1,299,981

Table 3-33: Variance Summary Year over Year 2015 to 2021 Other Revenue

USoA #	Variance	Actual	Actual	Actual	Actual	Bridge Yr	Test Yr
		2016	2017	2018	2019	2020	2021
4235	Specific Service Charges	$139,096	$(381,110)	$22,637	$(250,026)	$14,451	$(623)
4225	Late Payment Charges	$40,556	$(17,404)	$(54,472)	$(6,673)	$6,469	$3,535
4086	SSS Administration Revenue	$10,676	$6,044	$8,632	$5,762	$(5,836)	$7,636
4210	Rent from Electric Property	$421	$(94)	$10,784	$98,923	$(93,332)	$145,217
4084	Service Transaction Requests (STR) Revenues	$(222)	$(405)	$(108)	$237	$(494)	$0
4325	Revenues from Merchandise, Jobbing, Etc.	$(38,262)	$1,100	$75,852	$(74,064)	$17,525	$0
4330	Costs of Merchandising, Jobbing, Etc						
4355	Gain on Disposition of Utility/Other Property	$(315,527)	$(91,976)	$160,647	$552,774	$(477,758)	$0
4360	Loss on Disposition of Utility/Other Property						
4375	Revenues from Non-Utility Operations	$141,672	$(131,004)	$401,271	$(544,381)	$1,161	$0
4380	Expenses of Non-Utility Operations						
4390	Miscellaneous Non-Operating Income	$(31,459)	$84,671	$(17,828)	$(43,826)	$3,984	$0
4405	Interest and Dividend Income	$(45,534)	$14,161	$9,382	$(37,287)	$(57,122)	$0
4245	Government Assistance & Other Contributions	$0	$0	$0	$0	$21,756	$44,457
Total Other Revenue		$(98,583)	$(516,017)	$616,795	$(298,561)	$(569,195)	$200,221
		(5.0)%	(27.6)%	45.7%	(15.2)%	(34.1)%	18.2%

2016 Actual vs. 2015 Actual

OPUCN's 2016 other revenue was $98,583 or 5.0% lower than the 2015 prior year amount of $1,965,320.

Revenues from Specific Service Charges, principally collection charges, were $139,096 higher than prior year.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $141,672 higher than the prior year, principally due to incentives earned under the CDM 2011-2015 legacy framework.

The net loss on disposal and retirement of assets of $421,562 was $315,527 higher than prior year due to fluctuations in ages of replaced equipment, together with timing of projects.

2017 Actual vs. 2016 Actual

OPUCN's 2017 other revenue was $516,017 or 27.6% lower than the 2016 prior year amount of $1,866,737.

Revenues from Specific Service Charges, principally collection charges, were $381,110 lower than prior year.

The net loss on disposal and retirement of assets of $531,891 was $131,004 higher than prior year due to fluctuations in ages of replaced equipment, together with timing of projects.

2018 Actual vs. 2017 Actual

OPUCN's 2018 other revenue was $616,795 or 45.7% higher than the 2017 prior year amount of $1,350,720.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $544,271 higher than the prior year, principally due to mid-term incentives earned under the 2015 - 2020 Conservation First Framework programs.

The net loss on disposal and retirement of assets of $352,891 was $160,647 lower than prior year due to fluctuations in ages of replaced equipment, together with timing of projects.

2019 Actual vs. 2018 Actual

OPUCN's 2019 other revenue was $298,561 or 15.2% lower than the 2018 prior year amount of $1,967,515.

Revenues from Specific Service Charges were $250,026 lower than prior year, principally due to unusually high enhancement revenues in 2018.

Revenues from Non-Utility Operations, net of Expenses (Accounts 4375 less 4380) were $544,381 lower than the prior year, principally due to mid-term incentives earned under the 2015 - 2020 Conservation First Framework programs in 2018.

The net gain on disposal and retirement of assets of $199,883 was $552,774 higher than prior year due to fluctuations in ages of replaced equipment, together with timing of projects, and an adjustment to the 2018 booked loss which was overstated due to an error in the year end accrual estimate.

2020 Bridge Year vs. 2019 Actual

OPUCN's 2020 other revenue forecast is $569,195 or 34.1% lower than the 2019 prior year amount of $1,668,955.

The primary driver is the forecast net loss on disposal and retirement of assets of $277,875 compared to net gain in 2019 of $199,883. The amount forecast for loss on disposal of utility assets is based upon the levels of retrofit activity included in OPUCN's Distribution System Plan. The amount is approximately equivalent to the average net loss of the actual years 2016 to 2019.

2021 Test Year vs. 2020 Bridge Year

OPUCN's 2021 other revenue forecast is $200,221 or 18.2% higher than the 2020 bridge year forecast of $1,099,760.

The primary driver is the recognition of changes in the 3rd party pole attachment charges, with OPUCN adopting the OEB's updated single provincial charge as per OEB Report EB-2015-0304. As per the OEB guidelines, increases prior to rebasing date of January 1, 2021 have been credited to a variance account for separate disposition.

APPENDIX 3-1: 10 YEAR TREND WEATHER NORMALIZED LOAD REGRESSION

Month	Purchased	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
January-10	114,148,404	699.9	0	31	0	109,140,438
February-10	100,280,892	583.8	0	28	0	97,151,821
March-10	95,443,611	411	0	31	1	92,165,624
April-10	80,941,806	244	0	30	1	82,994,676
May-10	87,418,768	121.7	23.2	31	1	85,479,438
June-10	89,087,289	19.4	46.6	30	0	89,265,756
July-10	107,904,059	3.5	124	31	0	107,681,393
August-10	102,274,426	3.2	96.8	31	0	101,828,103
September-10	83,491,003	85.5	18.5	30	1	80,574,742
October-10	84,900,189	247.8	0	31	1	85,583,255
November-10	91,736,752	389.2	0	30	1	88,851,048
December-10	110,862,133	628.7	0	31	0	106,268,719
January-11	113,644,387	760.9	0	31	0	111,600,760
February-11	100,561,048	634.2	0	28	0	99,184,611
March-11	102,613,397	559.8	0	31	1	98,167,195
April-11	87,015,565	350.8	0	30	1	87,302,256
May-11	82,921,010	157.7	2.8	31	1	82,550,538
June-11	88,149,132	26.7	36.9	30	0	87,477,116
July-11	108,927,665	0.2	141.2	31	0	111,241,987
August-11	100,307,974	3.7	80.5	31	0	98,347,851
September-11	85,805,170	48.9	34.6	30	1	82,556,018
October-11	85,767,950	225.3	0	31	1	84,675,760
November-11	89,407,468	349.7	0	30	1	87,257,889
December-11	103,511,621	531.2	0	31	0	102,336,238
January-12	107,982,172	611	0	31	0	105,554,822
February-12	97,310,519	536.2	0	29	0	97,667,277
March-12	92,940,594	399.4	0	31	1	91,697,760
April-12	84,061,512	336.9	0	30	1	86,741,625
May-12	84,298,341	109.3	21.8	31	1	84,678,657
June-12	93,187,122	28.2	64.3	30	0	93,421,756
July-12	110,767,075	0	155.3	31	0	114,261,891
August-12	101,373,952	4.4	102.8	31	0	103,165,001
September-12	85,023,139	84	24.4	30	1	81,781,265
October-12	85,295,690	229	0	31	1	84,824,992
November-12	91,679,200	427.9	0	30	1	90,411,941
December-12	102,292,638	451.1	0	31	0	99,105,553
January-13	107,376,383	615.4	0	31	0	105,732,288
February-13	98,702,892	611.5	0	28	0	98,269,049
March-13	98,851,083	545	0	31	1	97,570,265
April-13	87,330,008	366.5	0	30	1	87,935,486
May-13	81,913,958	133.4	3	31	1	81,613,393
June-13	86,391,933	42.9	32.2	30	0	87,121,190
July-13	104,037,067	4.4	110	31	0	104,711,198
August-13	95,663,442	11	57.9	31	0	93,788,941
September-13	83,012,108	96.6	15.7	30	1	80,421,140
October-13	84,463,400	221	3	31	1	85,146,576
November-13	94,249,183	458.6	0	30	1	91,650,168
December-13	108,415,583	472.8	0	31	0	99,980,782
January-14	117,702,582	771.3	0	31	0	112,020,225
February-14	101,945,538	690.85	0	28	0	101,469,484
March-14	106,417,935	677.95	0	31	1	102,932,556
April-14	86,925,100	371.3	0	30	1	88,129,085
May-14	81,755,065	160.5	1.3	31	1	82,341,347
June-14	88,119,245	26.9	40.1	30	0	88,172,382
July-14	93,045,474	9.6	54.6	31	0	93,023,801
August-14	92,680,249	12.7	58	31	0	93,878,983
September-14	84,852,397	77.4	22.5	30	1	81,107,042
October-14	84,720,129	216.3	0.5	31	1	84,420,136
November-14	94,073,965	407.3	0	30	1	89,581,078
December-14	102,732,462	551.8	0	31	0	103,167,100
January-15	113,173,668	775.6	0	31	0	112,193,657
February-15	107,355,855	809.4	0	28	0	106,250,977
March-15	101,615,900	611.6	0	31	1	100,256,452
April-15	84,454,598	335.6	0	30	1	86,689,192
May-15	81,506,282	120.5	1.8	31	1	80,835,396
June-15	83,276,944	50.2	13.1	30	0	83,313,904
July-15	99,414,180	6.8	71.5	31	0	96,540,137
August-15	95,068,872	4.9	62	31	0	94,423,383
September-15	91,662,129	37	48.6	30	1	85,082,548
October-15	83,968,946	248.1	0	31	1	85,595,355
November-15	87,046,493	345.6	0	30	1	87,092,523
December-15	94,797,165	415	0	31	0	97,649,527

Month	Purchased	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
January-16	105,036,544	624.1	0	31	0	106,083,186
February-16	96,391,484	493.1	0	29	0	95,928,918
March-16	93,754,132	454.8	0	31	1	93,932,216
April-16	84,646,746	334.6	0	30	1	86,648,859
May-16	82,523,655	126.3	16.1	31	1	84,140,248
June-16	88,597,408	28.7	42.4	30	0	88,738,905
July-16	105,096,208	0.7	128.8	31	0	108,599,259
August-16	110,653,600	0	155.5	31	0	114,304,841
September-16	88,623,306	34.6	46.1	30	1	84,448,874
October-16	81,876,960	194	0.3	31	1	83,477,757
November-16	84,765,723	350.3	0	30	1	87,282,089
December-16	100,061,669	579.4	0	31	0	104,280,295
January-17	100,646,849	459.5	0	31	0	99,444,351
February-17	87,854,689	428.6	0	28	0	90,892,117
March-17	97,321,782	535.8	0	31	1	97,199,200
April-17	79,555,525	245.6	0	30	1	83,059,209
May-17	78,949,382	197.9	3.4	31	1	84,300,780
June-17	83,100,588	41.1	33.9	30	0	87,413,664
July-17	95,213,619	1.1	55	31	0	92,766,869
August-17	92,095,645	16.2	26.6	31	0	87,277,010
September-17	87,354,677	70.6	42.2	30	1	85,063,344
October-17	80,445,481	156	3.4	31	1	82,610,822
November-17	87,535,410	322.3	0	30	1	86,152,761
December-17	104,101,037	654.7	0	31	0	107,317,380
January-18	108,785,438	635.7	0	31	0	106,551,051
February-18	90,878,321	502.2	0	28	0	93,860,637
March-18	93,820,032	564.7	0	31	1	98,364,828
April-18	87,253,421	458.1	0	30	1	91,630,002
May-18	81,068,747	108.3	19.4	31	1	84,122,925
June-18	85,876,568	20.4	25	30	0	84,667,497
July-18	106,621,772	0.2	92.7	31	0	100,826,630
August-18	107,044,537	1.8	107.9	31	0	104,155,358
September-18	90,486,080	62.5	47.8	30	1	85,939,243
October-18	83,580,178	211.7	1.7	31	1	84,492,303
November-18	91,162,745	512.9	0	30	1	93,840,258
December-18	97,771,732	595.3	0	31	0	104,921,592
January-19	108,096,092	755.5	0	31	0	111,382,961
February-19	94,804,828	607.2	0	28	0	98,095,616
March-19	97,105,658	573.2	0	31	1	98,707,659
April-19	82,635,430	353.3	0	30	1	87,403,088
May-19	76,934,878	208.1	0	31	1	83,982,030
June-19	82,502,807	50.3	33.9	30	0	87,784,729
July-19	108,491,040	0	135.3	31	0	109,966,898
August-19	96,662,056	0.5	77.8	31	0	97,638,961
September-19	79,032,587	46.7	18.3	30	1	78,966,866
October-19	78,556,596	211.8	0	31	1	84,131,262
November-19	90,825,761	487.2	0	30	1	92,803,696
December-19	94,645,849	577.3	0	31	0	104,195,595
January-20		670.89	0	31	0	107,970,374
February-20		589.705	0	29	0	99,825,301
March-20		533.325	0	31	1	97,099,375
April-20		339.67	0	30	1	86,853,348
May-20		144.37	9.28	31	1	83,404,475
June-20		33.48	36.84	30	0	87,737,690
July-20		2.65	106.84	31	0	103,962,006
August-20		5.84	82.58	31	0	98,880,843
September-20		64.38	31.87	30	1	82,594,108
October-20		216.1	0.89	31	1	84,495,822
November-20		405.1	0	30	1	89,492,345
December-20		545.73	0	31	0	102,922,278
January-21		670.89	0	31	0	107,970,374
February-21		589.705	0	28	0	97,389,988
March-21		533.325	0	31	1	97,099,375
April-21		339.67	0	30	1	86,853,348
May-21		144.37	9.28	31	1	83,404,475
June-21		33.48	36.84	30	0	87,737,690
July-21		2.65	106.84	31	0	103,962,006
August-21		5.84	82.58	31	0	98,880,843
September-21		64.38	31.87	30	1	82,594,108
October-21		216.1	0.89	31	1	84,495,822
November-21		405.1	0	30	1	89,492,345
December-21		545.73	0	31	0	102,922,278

Run: 10 yr regression, starting with Jan 2010

SUMMARY OUTPUT

Regression Statistics	
Multiple R	95.17%
R Square	90.58%
Adjusted R Square	90.25%
Standard Error	3,074,597.87
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	1.04492E+16	2.61231E+15	276.3427872	5.51802E-58
Residual	115	1.08711E+15	9.45315E+12		
Total	119	1.15364E+16			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	5,416,561	10,755,242.76	0.50	0.615491406	-15887504.61	26720627.33	-15887504.61	26720627.33
Heating Degree Days	40,333	1,722.22	23.42	1.40274E-45	36921.74774	43744.53381	36921.74774	43744.53381
Cooling Degree Days	214,750	12,342.27	17.40	5.33311E-34	190301.972	239197.2867	190301.972	239197.2867
Number of Days in Month	2,435,313	355,807.20	6.84	3.96103E-10	1730527.708	3140098.861	1730527.708	3140098.861
Spring Fall Flag	(5,322,570)	702,148.04	(7.58)	9.60123E-12	-6713390.189	-3931749.916	-6713390.189	-3931749.916

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APPENDIX 3-2: 20 YEAR TREND WEATHER NORMALIZED LOAD REGRESSION

Month		Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Predicted Purchases
Jan-21		647.21	-	31	0	107,015,240
Feb-21		569.07	-	28	0	96,557,841
Mar-21		549.50	-	31	1	97,751,910
Apr-21		340.53	-	30	1	86,887,889
May-21		135.66	10.90	31	1	83,401,396
Jun-21		30.21	34.28	30	0	87,057,036
Jul-21		0.65	108.49	31	0	104,235,523
Aug-21		4.99	76.50	31	0	97,540,377
Sep-21		59.01	34.80	30	1	83,006,537
Oct-21		194.29	0.95	31	1	83,628,731
Nov-21		414.47	-	30	1	89,870,418
Dec-21		526.86	-	31	0	102,161,001
						1,119,113,899

APPENDIX 3-3: HDD AND CDD DATA

HDD	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Jan	711	655	547	786.00	828.80	745.50	558.20	573.10	432.80	684.30	699.90	760.90	611.00	615.40	771.30	775.60	624.10	459.50	635.70	755.50
Feb	587	587	531	686.50	615.60	589.50	608.80	693.50	317.60	595.30	583.80	634.20	536.20	611.50	690.85	809.40	493.10	428.60	502.20	607.20
Mar	445	550	533	572.50	487.10	578.30	534.00	477.90	430.00	442.20	411.00	559.80	399.40	545.00	677.95	611.60	454.80	535.80	564.70	573.20
Apr	359	312	336	403.90	345.00	325.30	323.60	280.40	144.60	313.80	244.00	350.80	336.90	366.50	371.30	335.60	334.60	245.60	458.10	353.30
May	169	141	235	192.00	177.50	216.10	172.60	72.80	151.00	170.10	121.70	157.70	109.30	133.40	160.50	120.50	126.30	197.90	108.30	208.10
Jun	56	35	45	55.10	73.20	13.70	22.60	6.20	15.50	57.90	19.40	26.70	28.20	42.90	26.90	50.20	28.70	41.10	20.40	50.30
Jul	9	18	1	5.70	2.00	2.20	1.70	8.70	1.00	16.80	3.50	0.20	-	4.40	9.60	6.80	0.70	1.10	0.20	-
Aug	15	1	4	10.40	19.60	-	4.40	4.00	13.80	13.10	3.20	3.70	4.40	11.00	12.70	4.90	-	16.20	1.80	0.50
Sep	109	69	25	55.20	41.70	36.70	70.70	20.10	51.60	64.80	85.50	48.90	84.00	96.60	77.40	37.00	34.60	70.60	62.50	46.70
Oct	235	252	274	289.70	235.00	223.80	274.60	101.50	203.10	287.90	247.80	225.30	229.00	221.00	216.30	248.10	194.00	156.00	211.70	211.80
Nov	412	339	432	387.60	385.70	398.50	367.50	314.10	268.80	347.40	389.20	349.70	427.90	458.60	407.30	345.60	350.30	322.30	512.90	487.20
Dec	741	494	593	548.20	627.50	641.10	471.50	337.80	378.90	619.10	628.70	531.20	451.10	472.80	551.80	415.00	579.40	654.70	595.30	577.30
	3,848	3,451	3,555	3,993	3,839	3,771	3,410	2,890	2,409	3,613	3,438	3,649	3,217	3,579	3,974	3,760	3,221	3,129	3,674	3,871

HDD	20 yr trend - 2020	20 yr trend - 2021	10 yr trend - 2020	10 yr trend - 2021
Jan	648.45	647.21	634.12	627.43
Feb	570.50	569.07	540.10	531.08
Mar	546.86	549.50	594.63	605.78
Apr	339.35	340.53	377.90	384.85
May	137.52	135.66	171.49	176.42
Jun	30.69	30.21	42.79	44.48
Jul	1.00	0.65	1.32	1.08
Aug	5.18	4.99	5.19	5.08
Sep	59.04	59.01	46.13	42.82
Oct	197.12	194.29	188.32	183.27
Nov	411.92	414.47	442.09	448.82
Dec	528.47	526.86	585.30	592.49
	3,476	3,472	3,629	3,644

CDD	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Jan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	2	3	-	-	0.30	12.80	4.50	-	-	23.20	2.80	21.80	3.00	1.30	1.80	16.10	3.40	19.40	-
Jun	14	46	41	31.00	15.60	89.90	36.20	32.80	23.60	26.30	46.60	36.90	64.30	32.20	40.10	13.10	42.40	33.90	25.00	33.90
Jul	45	68	131	59.10	69.30	153.00	107.60	41.60	61.40	25.60	124.00	141.20	155.30	110.00	54.60	71.50	128.80	55.00	92.70	135.30
Aug	67	120	100	106.50	53.60	108.00	82.10	87.80	29.90	77.70	96.80	80.50	102.80	57.90	58.00	62.00	155.50	26.60	107.90	77.80
Sep	23	24	52	12.10	26.70	32.80	5.10	12.30	15.10	9.00	18.50	34.60	24.40	15.70	22.50	48.60	46.10	42.20	47.80	18.30
Oct	-	0	5	-	-	0.50	-	-	-	-	-	-	-	3.00	0.50	-	0.30	3.40	1.70	-
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	149	261	332	209	165	385	244	179	130	139	309	296	369	222	177	197	389	165	295	265

CDD	20 yr trend - 2020	20 yr trend - 2021	10 yr trend - 2020	10 yr trend - 2021
Jan	-	-	-	-
Feb	-	-	-	-
Mar	-	-	-	-
Apr	-	-	-	-
May	10.45	10.90	4.45	3.58
Jun	34.46	34.28	25.31	23.21
Jul	107.01	108.49	84.64	80.60
Aug	77.05	76.50	80.47	80.08
Sep	34.08	34.80	41.77	43.57
Oct	0.93	0.95	1.57	1.69
Nov	-	-	-	-
Dec	-	-	-	-
	264	266	238	233

APPENDIX 3-4: CHAPTER 2-IB

File Number:	EB-2020-0048
Exhibit:	
Tab:	
Schedule:	
Page:	
Date:	

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 2021 Cost of Service)		Consumption (kWh) [3]				
				Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2015*		Actual	1,079,788,015.96	1,086,444,847.68	OEB-approved	1,102,042,241
Historical	*2016*		Actual	1,075,184,905.46	1,063,253,023.28		
Historical	*2017*		Actual	1,035,410,213.65	1,072,970,934.19		
Historical	*2018*		Actual	1,077,322,375.93	1,067,275,419.79		
Historical	*2019*		Actual	1,048,371,768.62	1,037,051,137.60		
Bridge Year	*2020*		Forecast		1,078,000,816.81		
Test Year	*2021*		Forecast		1,075,667,737.24		

Variance Analysis	Year	Year-over-year		Versus OEB-approved
	2015			
	2016	-0.4%	-2.1%	
	2017	-3.7%	0.9%	
	2018	4.0%	-0.5%	
	2019	-2.7%	-2.8%	
	2020		3.9%	
	2021		-0.2%	-2.4%
	Geometric Mean	-1.0%	-0.2%	-0.5%

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

	Calendar Year (for 2021 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	*2015*	Actual	51,121	OEB-approved	50,977	Actual	479,213,665.00	482,167,990.00	OEB-approved	488,310,441.84	Actual	9,374.06	9,431.85	OEB-approved	9,578.97
Historical	*2016*	Actual	52,140			Actual	477,491,267.00	472,192,299.81			Actual	9,157.94	9,056.31		
Historical	*2017*	Actual	52,923			Actual	452,164,405.00	468,567,199.40			Actual	8,543.76	8,853.70		
Historical	*2018*	Actual	54,033			Actual	485,718,955.00	481,189,208.71			Actual	8,989.36	8,905.52		
Historical	*2019*	Actual	54,652			Actual	477,327,195.00	472,172,873.59			Actual	8,733.94	8,639.63		
Bridge Year	*2020*	Forecast	55,416			Forecast		494,764,508.71			Forecast	0.00	8,928.26		
Test Year	*2021*	Forecast	56,190			Forecast		496,495,067.56			Forecast	0.00	8,836.04		

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
	2015				*2015*				*2015*			
	2016	2.0%			*2016*	-0.4%	-2.1%		*2016*	-2.3%	-4.0%	
	2017	1.5%			*2017*	-5.3%	-0.8%		*2017*	-6.7%	-2.2%	
	2018	2.1%			*2018*	7.4%	2.7%		*2018*	5.2%	0.6%	
	2019	1.1%			*2019*	-1.7%	-1.9%		*2019*	-2.8%	-3.0%	
	2020	1.4%			*2020*		4.8%		*2020*		3.3%	
	2021	1.4%		10.2%	*2021*		0.3%	1.7%	*2021*		-1.0%	-7.8%
	Geometric Mean	1.9%		2.0%	Geometric Mean	-0.1%	0.6%	0.3%	Geometric Mean	-2.3%	-1.3%	-1.6%

	Calendar Year (for 2021 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	*2015*	Actual	$ 11,588,878	OEB-approved	$12,845,603	Actual			OEB-approved		Actual	0	0	OEB-approved	0
Historical	*2016*	Actual	$ 14,058,627			Actual					Actual	0	0		
Historical	*2017*	Actual	$ 14,305,203			Actual					Actual	0	0		
Historical	*2018*	Actual	$ 15,372,238			Actual					Actual	0	0		
Historical	*2019*	Actual	$ 16,358,543			Actual					Actual	0	0		
Bridge Year (Foreca	*2020*	Forecast	$ 16,558,801			Forecast					Forecast	0	0		
Test Year (Forecast	*2021*	Forecast	$ 18,107,075			Forecast					Forecast	0	0		

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
	2015				*2015*				*2015*			
	2016	21.3%			*2016*				*2016*			
	2017	1.8%			*2017*				*2017*			
	2018	7.5%			*2018*				*2018*			
	2019	6.4%			*2019*				*2019*			
	2020	1.2%			*2020*				*2020*			
	2021	9.4%		41.0%	*2021*				*2021*			
	Geometric Mean	9.3%		7.1%	Geometric Mean				Geometric Mean			

2 Customer Class: General Service Less Than 50 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2021 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	*2015*	Actual	4,020	OEB-approved	4,002	Actual	132,197,810.00	133,012,801.98	OEB-approved	134,064,266.12	Actual	32,885.03	33,087.76	OEB-approved	33,495.40
Historical	*2016*	Actual	4,150			Actual	130,049,530.00	128,606,303.20			Actual	31,339.12	30,991.34		
Historical	*2017*	Actual	4,162			Actual	126,639,545.00	131,233,543.10			Actual	30,428.18	31,532.00		
Historical	*2018*	Actual	4,199			Actual	132,517,306.00	131,281,468.34			Actual	31,556.75	31,262.45		
Historical	*2019*	Actual	4,195			Actual	125,004,589.00	123,654,752.17			Actual	29,799.66	29,477.87		
Bridge Year	*2020*	Forecast	4,232			Forecast		128,912,694.14			Forecast	0.00	30,462.68		
Test Year	*2021*	Forecast	4,269			Forecast		128,706,195.43			Forecast	0.00	30,148.03		

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
	2015			*2015*				*2015*			
	2016	3.2%		*2016*	-1.6%	-3.3%		*2016*	-4.7%	-6.3%	
	2017	0.3%		*2017*	-2.6%	2.0%		*2017*	-2.9%	1.7%	
	2018	0.9%		*2018*	4.6%	0.0%		*2018*	3.7%	-0.9%	
	2019	-0.1%		*2019*	-5.7%	-5.8%		*2019*	-5.6%	-5.7%	
	2020	0.9%		*2020*		4.3%		*2020*		3.3%	
	2021	0.9%	6.7%	*2021*		-0.2%	-4.0%	*2021*		-1.0%	-10.0%
	Geometric Mean	1.2%	1.3%	Geometric Mean	-1.8%	-0.7%	-0.8%	Geometric Mean	-3.2%	-1.8%	-2.1%

	Calendar Year (for 2021 Cost of Service	Revenues				Demand (kWh)				Demand (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2015*	Actual	$ 2,788,496	OEB-approved	$2,706,175	Actual			OEB-approved		Actual	0	0	OEB-approved	0
Historical	*2016*	Actual	$ 2,870,895			Actual					Actual	0	0		
Historical	*2017*	Actual	$ 2,834,165			Actual					Actual	0	0		
Historical	*2018*	Actual	$ 3,025,687			Actual					Actual	0	0		
Historical	*2019*	Actual	$ 3,060,749			Actual					Actual	0	0		
Bridge Year (Foreca	*2020*	Forecast	$ 3,176,398			Forecast					Forecast	0	0		
Test Year (Forecast	*2021*	Forecast	$ 3,375,654			Forecast					Forecast	0	0		

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
	2015			*2015*				*2015*			
	2016	3.0%		*2016*				*2016*			
	2017	-1.3%		*2017*				*2017*			
	2018	6.8%		*2018*				*2018*			
	2019	1.2%		*2019*				*2019*			
	2020	3.8%		*2020*				*2020*			
	2021	6.3%	24.7%	*2021*				*2021*			
	Geometric Mean	3.9%	4.5%	Geometric Mean				Geometric Mean			

3 Customer Class: General Service 50 to 999 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2021 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	*2015*	Actual	509	OEB-approved	507	Actual	333,350,818.00	335,405,906.84	OEB-approved	337,307,808.87	Actual	654,591.69	658,627.21	OEB-approved	665,301.40
Historical	*2016*	Actual	518			Actual	330,893,084.00	327,220,992.55			Actual	639,303.98	632,209.29		
Historical	*2017*	Actual	524			Actual	327,193,987.00	339,063,332.84			Actual	624,416.01	647,067.43		
Historical	*2018*	Actual	519			Actual	332,346,251.00	329,246,836.86			Actual	639,845.18	633,878.08		
Historical	*2019*	Actual	535			Actual	324,474,004.00	320,970,236.93			Actual	606,210.19	599,664.15		
Bridge Year	*2020*	Forecast	535			Forecast		331,252,155.00			Forecast	0.00	618,873.71		
Test Year	*2021*	Forecast	535			Forecast		328,035,468.51			Forecast	0.00	612,864.02		

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
	2015				*2015*				*2015*			
	2016	1.6%			*2016*	-0.7%	-2.4%		*2016*	-2.3%	-4.0%	
	2017	1.2%			*2017*	-1.1%	3.6%		*2017*	-2.3%	2.4%	
	2018	-0.9%			*2018*	1.6%	-2.9%		*2018*	2.5%	-2.0%	
	2019	3.0%			*2019*	-2.4%	-2.5%		*2019*	-5.3%	-5.4%	
	2020	0.0%			*2020*		3.2%		*2020*		3.2%	
	2021	0.0%		5.6%	*2021*		-1.0%	-2.7%	*2021*		-1.0%	-7.9%
	Geometric Mean	1.0%		1.1%	Geometric Mean	-0.9%	-0.4%	-0.6%	Geometric Mean	-2.5%	-1.4%	-1.6%

	Calendar Year (for 2021 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	*2015*	Actual	$ 3,513,588	OEB-approved	$3,795,906	Actual	847,479	852,704	OEB-approved	851,954	Actual	1,664.17	1,674.43	OEB-approved	1,680.38
Historical	*2016*	Actual	$ 4,059,724			Actual	850,825	841,383			Actual	1,643.84	1,625.60		
Historical	*2017*	Actual	$ 3,897,832			Actual	839,126	869,566			Actual	1,601.39	1,659.48		
Historical	*2018*	Actual	$ 4,287,039			Actual	858,828	850,819			Actual	1,653.45	1,638.03		
Historical	*2019*	Actual	$ 4,284,202			Actual	833,274	824,276			Actual	1,556.79	1,539.98		
Bridge Year (Foreca	*2020*	Forecast	$ 4,495,887			Forecast		833,808			Forecast	0	1,557.79		
Test Year (Forecast	*2021*	Forecast	$ 4,729,862			Forecast		825,711			Forecast	0	1,542.66		

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
	2015				*2015*				*2015*			
	2016	15.5%			*2016*	0.4%	-1.3%		*2016*	-1.2%	-2.9%	
	2017	-4.0%			*2017*	-1.4%	3.3%		*2017*	-2.6%	2.1%	
	2018	10.0%			*2018*	2.3%	-2.2%		*2018*	3.3%	-1.3%	
	2019	-0.1%			*2019*	-3.0%	-3.1%		*2019*	-5.8%	-6.0%	
	2020	4.9%			*2020*		1.2%		*2020*		1.2%	
	2021	5.2%		24.6%	*2021*		-1.0%	-3.1%	*2021*		-1.0%	-8.2%
	Geometric Mean	6.1%		4.5%	Geometric Mean	-0.6%	-0.6%	-0.6%	Geometric Mean	-2.2%	-1.6%	-1.7%

4 Customer Class: General Service 1,000 to 4,999 kW — Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2021 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	*2015*	Actual	12	OEB-approved	12	Actual	81,234,207.00	81,735,011.27	OEB-approved	88,420,452.22	Actual	6,769,517.25	6,811,250.94	OEB-approved	7,368,371.02
Historical	*2016*	Actual	13			Actual	83,295,745.00	82,371,369.10			Actual	6,407,365.00	6,336,259.16		
Historical	*2017*	Actual	13			Actual	80,815,499.00	83,747,176.06			Actual	6,338,470.51	6,568,405.97		
Historical	*2018*	Actual	13			Actual	77,975,782.00	77,248,590.88			Actual	5,998,137.08	5,942,199.30		
Historical	*2019*	Actual	13			Actual	75,700,561.00	74,883,123.77			Actual	5,937,298.90	5,873,186.18		
Bridge Year	*2020*	Forecast	13			Forecast		77,156,789.20			Forecast	0.00	6,051,512.88		
Test Year	*2021*	Forecast	13			Forecast		76,465,711.41			Forecast	0.00	5,997,310.70		

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**
	2015				*2015*				*2015*			
	2016	8.3%			*2016*	2.5%	0.8%		*2016*	-5.3%	-7.0%	
	2017	-1.9%			*2017*	-3.0%	1.7%		*2017*	-1.1%	3.7%	
	2018	2.0%			*2018*	-3.5%	-7.8%		*2018*	-5.4%	-9.5%	
	2019	-1.9%			*2019*	-2.9%	-3.1%		*2019*	-1.0%	-1.2%	
	2020	0.0%			*2020*		3.0%		*2020*		3.0%	
	2021	0.0%		6.3%	*2021*		-0.9%	-13.5%	*2021*		-0.9%	-18.6%
	Geometric Mean	1.2%		1.2%	Geometric Mean	-2.3%	-1.3%	-2.9%	Geometric Mean	-4.3%	-2.5%	-4.0%

	Calendar Year (for 2021 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	*2015*	Actual	$ 592,032	OEB-approved	$480,278	Actual	190,580	191,755	OEB-approved	195,333	Actual	15,881.67	15,979.58	OEB-approved	16,277.77
Historical	*2016*	Actual	$ 550,829			Actual	202,815	200,564			Actual	15,601.15	15,428.02		
Historical	*2017*	Actual	$ 651,049			Actual	193,828	200,859			Actual	15,202.20	15,753.67		
Historical	*2018*	Actual	$ 570,193			Actual	190,151	188,378			Actual	14,627.00	14,490.59		
Historical	*2019*	Actual	$ 581,313			Actual	183,732	181,748			Actual	14,410.39	14,254.78		
Bridge Year (Foreca	*2020*	Forecast	$ 559,075			Forecast		184,129			Forecast	0	14,441.51		
Test Year (Forecast	*2021*	Forecast	$ 589,925			Forecast		182,480			Forecast	0	14,312.16		

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**
	2015				*2015*				*2015*			
	2016	-7.0%			*2016*	6.4%	4.6%		*2016*	-1.8%	-3.5%	
	2017	18.2%			*2017*	-4.4%	0.1%		*2017*	-2.6%	2.1%	
	2018	-12.4%			*2018*	-1.9%	-6.2%		*2018*	-3.8%	-8.0%	
	2019	2.0%			*2019*	-3.4%	-3.5%		*2019*	-1.5%	-1.6%	
	2020	-3.8%			*2020*		1.3%		*2020*		1.3%	
	2021	5.5%		22.8%	*2021*		-0.9%	-6.6%	*2021*		-0.9%	-12.1%
	Geometric Mean	-0.1%		4.2%	Geometric Mean	-1.2%	-1.0%	-1.4%	Geometric Mean	-3.2%	-2.2%	-2.5%

5 Customer Class: Large Use >5000 kW

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

	Calendar Year (for 2021 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	*2015*	Actual	1	OEB-approved	1	Actual	41,948,976.00	42,207,589.05	OEB-approved	42,639,586.10	Actual	41,948,976.00	42,207,589.05	OEB-approved	42,639,586.10
Historical	*2016*	Actual	1			Actual	41,438,246.00	40,978,384.38			Actual	41,438,246.00	40,978,384.38		
Historical	*2017*	Actual	1			Actual	40,954,643.00	42,440,320.73			Actual	40,954,643.00	42,440,320.73		
Historical	*2018*	Actual	1			Actual	41,879,817.00	41,489,251.75			Actual	41,879,817.00	41,489,251.75		
Historical	*2019*	Actual	1			Actual	38,878,939.00	38,459,112.62			Actual	38,878,939.00	38,459,112.62		
Bridge Year	*2020*	Forecast	1			Forecast		38,878,939.00			Forecast	0.00	38,878,939.00		
Test Year	*2021*	Forecast	1			Forecast		38,878,939.00			Forecast	0.00	38,878,939.00		

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
	2015				*2015*				*2015*			
	2016	0.0%			*2016*	-1.2%	-2.9%		*2016*	-1.2%	-2.9%	
	2017	0.0%			*2017*	-1.2%	3.6%		*2017*	-1.2%	3.6%	
	2018	0.0%			*2018*	2.3%	-2.2%		*2018*	2.3%	-2.2%	
	2019	0.0%			*2019*	-7.2%	-7.3%		*2019*	-7.2%	-7.3%	
	2020	0.0%			*2020*		1.1%		*2020*		1.1%	
	2021	0.0%		0.0%	*2021*		0.0%	-8.8%	*2021*		0.0%	-8.8%
	Geometric Mean	0.0%		0.0%	Geometric Mean	-2.5%	-1.6%	-1.8%	Geometric Mean	-2.5%	-1.6%	-1.8%

	Calendar Year (for 2021 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	*2015*	Actual	$ 248,849	OEB-approved	$226,136	Actual	95,584	96,173	OEB-approved	96,450	Actual	95,584.00	96,173.27	OEB-approved	96,450.28
Historical	*2016*	Actual	$ 237,470			Actual	99,526	98,422			Actual	99,526.00	98,421.51		
Historical	*2017*	Actual	$ 250,472			Actual	92,549	95,906			Actual	92,549.00	95,906.32		
Historical	*2018*	Actual	$ 244,517			Actual	88,409	87,585			Actual	88,409.00	87,584.51		
Historical	*2019*	Actual	$ 241,641			Actual	87,535	86,590			Actual	87,535.16	86,589.93		
Bridge Year (Foreca	*2020*	Forecast	$ 259,438			Forecast		86,319			Forecast	-	86,319.20		
Test Year (Forecast	*2021*	Forecast	$ 275,391			Forecast		86,319			Forecast	-	86,319.20		

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
	2015				*2015*				*2015*			
	2016	-4.6%			*2016*	4.1%	2.3%		*2016*	4.1%	2.3%	
	2017	5.5%			*2017*	-7.0%	-2.6%		*2017*	-7.0%	-2.6%	
	2018	-2.4%			*2018*	-4.5%	-8.7%		*2018*	-4.5%	-8.7%	
	2019	-1.2%			*2019*	-1.0%	-1.1%		*2019*	-1.0%	-1.1%	
	2020	7.4%			*2020*		-0.3%		*2020*		-0.3%	
	2021	6.1%		21.8%	*2021*		0.0%	-10.5%	*2021*		0.0%	-10.5%
	Geometric Mean	2.0%		4.0%	Geometric Mean	-2.9%	-2.1%	-2.2%	Geometric Mean	-2.9%	-2.1%	-2.2%

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

	Calendar Year (for 2021 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	*2015*	Actual	12,676	OEB-approved	12,710	Actual	9,302,763.00	9,360,114.00	OEB-approved	8,578,851.71	Actual	733.88	738.40	OEB-approved	674.98
Historical	*2016*	Actual	12,955			Actual	9,490,651.00	9,385,328.34			Actual	732.57	724.44		
Historical	*2017*	Actual	13,171			Actual	5,107,520.00	5,292,801.28			Actual	387.78	401.85		
Historical	*2018*	Actual	13,828			Actual	4,336,239.00	4,295,799.85			Actual	313.59	310.67		
Historical	*2019*	Actual	13,934			Actual	4,410,847.00	4,363,217.36			Actual	316.55	313.13		
Bridge Year	*2020*	Forecast	14,161			Forecast		4,482,653.24			Forecast	0.00	316.55		
Test Year	*2021*	Forecast	14,391			Forecast		4,555,628.44			Forecast	0.00	316.55		

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
	2015				*2015*				*2015*			
	2016	2.2%			*2016*	2.0%	0.3%		*2016*	-0.2%	-1.9%	
	2017	1.7%			*2017*	-46.2%	-43.6%		*2017*	-47.1%	-44.5%	
	2018	5.0%			*2018*	-15.1%	-18.8%		*2018*	-19.1%	-22.7%	
	2019	0.8%			*2019*	1.7%	1.6%		*2019*	0.9%	0.8%	
	2020	1.6%			*2020*		2.7%		*2020*		1.1%	
	2021	1.6%		13.2%	*2021*		1.6%	-46.9%	*2021*		0.0%	-53.1%
	Geometric Mean	2.6%		2.5%	Geometric Mean	-22.0%	-13.4%	-11.9%	Geometric Mean	-24.4%	-15.6%	-14.1%

	Calendar Year (for 2021 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	*2015*	Actual	$ 687,690	OEB-approved	$861,202	Actual	26,032	26,192	OEB-approved	23,912	Actual	2.05	2.07	OEB-approved	1.88
Historical	*2016*	Actual	$ 685,642			Actual	26,568	26,273			Actual	2.05	2.03		
Historical	*2017*	Actual	$ 715,279			Actual	13,693	14,189			Actual	1.04	1.08		
Historical	*2018*	Actual	$ 709,849			Actual	12,085	11,972			Actual	0.87	0.87		
Historical	*2019*	Actual	$ 736,207			Actual	11,969	11,840			Actual	0.86	0.85		
Bridge Year (Foreca	*2020*	Forecast	$ 767,726			Forecast		12,494			Forecast	-	0.88		
Test Year (Forecast	*2021*	Forecast	$ 534,000			Forecast		12,698			Forecast	-	0.88		

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
	2015				*2015*				*2015*			
	2016	-0.3%			*2016*	2.1%	0.3%		*2016*	-0.1%	-1.9%	
	2017	4.3%			*2017*	-48.5%	-46.0%		*2017*	-49.3%	-46.9%	
	2018	-0.8%			*2018*	-11.7%	-15.6%		*2018*	-15.9%	-19.6%	
	2019	3.7%			*2019*	-1.0%	-1.1%		*2019*	-1.7%	-1.9%	
	2020	4.3%			*2020*		5.5%		*2020*		3.8%	
	2021	-30.4%		-38.0%	*2021*		1.6%	-46.9%	*2021*		0.0%	-53.1%
	Geometric Mean	-4.9%		-9.1%	Geometric Mean	-22.8%	-13.5%	-11.9%	Geometric Mean	-25.2%	-15.6%	-14.1%

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

	Calendar Year (for 2021 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	*2015*	Actual	25	OEB-approved	23	Actual	27,546.96	27,716.78	OEB-approved	34,297.18	Actual	1,101.88	1,108.67	OEB-approved	1,476.98
Historical	*2016*	Actual	23			Actual	25,800.46	25,514.14			Actual	1,121.76	1,109.31		
Historical	*2017*	Actual	23			Actual	25,667.65	26,598.78			Actual	1,115.98	1,156.47		
Historical	*2018*	Actual	23			Actual	25,642.93	25,403.79			Actual	1,114.91	1,104.51		
Historical	*2019*	Actual	23			Actual	25,689.62	25,412.22			Actual	1,116.94	1,104.88		
Bridge Year	*2020*	Forecast	22			Forecast		25,016.03			Forecast	0.00	1,116.94		
Test Year	*2021*	Forecast	22			Forecast		24,360.10			Forecast	0.00	1,116.94		

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
	2015			*2015*			*2015*		
	2016	-8.0%		*2016*	-6.3%	-7.9%	*2016*	1.8%	0.1%
	2017	0.0%		*2017*	-0.5%	4.3%	*2017*	-0.5%	4.3%
	2018	0.0%		*2018*	-0.1%	-4.5%	*2018*	-0.1%	-4.5%
	2019	0.0%		*2019*	0.2%	0.0%	*2019*	0.2%	0.0%
	2020	-2.6%		*2020*		-1.6%	*2020*		1.1%
	2021	-2.6%	-6.1%	*2021*		-2.6%	*2021*		0.0%
	Geometric Mean	-2.7%	-1.2%	Geometric Mean	-2.3%	-2.5%	Geometric Mean	0.5%	0.1%

	Calendar Year (for 2021 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	*2015*	Actual	$ 2,071	OEB-approved	$2,071	Actual	100	101	OEB-approved	100	Actual	4.00	4.02	OEB-approved	4.31
Historical	*2016*	Actual	$ 2,900			Actual	85	84			Actual	3.70	3.65		
Historical	*2017*	Actual	$ 2,110			Actual	85	88			Actual	3.70	3.83		
Historical	*2018*	Actual	$ 2,104			Actual	85	84			Actual	3.70	3.66		
Historical	*2019*	Actual	$ 1,593			Actual	85	84			Actual	3.70	3.66		
Bridge Year (Foreca	*2020*	Forecast	$ 2,275			Forecast		83			Forecast	-	3.69		
Test Year (Forecast	*2021*	Forecast	$ 2,273			Forecast		81			Forecast	-	3.69		

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
	2015			*2015*			*2015*		
	2016	40.1%		*2016*	-15.0%	-16.5%	*2016*	-7.6%	-9.2%
	2017	-27.2%		*2017*	0.0%	4.8%	*2017*	0.0%	4.8%
	2018	-0.3%		*2018*	0.0%	-4.4%	*2018*	0.0%	-4.4%
	2019	-24.3%		*2019*	0.0%	-0.1%	*2019*	0.0%	-0.1%
	2020	42.9%		*2020*		-1.6%	*2020*		1.0%
	2021	-0.1%	9.8%	*2021*		-2.6%	*2021*		0.0%
	Geometric Mean	1.9%	1.9%	Geometric Mean	-5.3%	-4.4%	Geometric Mean	-2.6%	-1.7%

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

	Calendar Year (for 2021 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	*2015*	Actual	286	OEB-approved	296	Actual	2,512,230.00	2,527,717.76	OEB-approved	2,686,537.31	Actual	8,789.14	8,843.33	OEB-approved	9,081.65
Historical	*2016*	Actual	274			Actual	2,500,582.00	2,472,831.75			Actual	9,117.89	9,016.71		
Historical	*2017*	Actual	274			Actual	2,508,947.00	2,599,962.00			Actual	9,153.96	9,486.03		
Historical	*2018*	Actual	276			Actual	2,522,383.00	2,498,859.61			Actual	9,141.83	9,056.57		
Historical	*2019*	Actual	278			Actual	2,549,944.00	2,522,408.94			Actual	9,180.72	9,081.58		
Bridge Year	*2020*	Forecast	275			Forecast		2,528,061.50			Forecast	0.00	9,180.72		
Test Year	*2021*	Forecast	273			Forecast		2,506,366.78			Forecast	0.00	9,180.72		

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
	2015			*2015*				*2015*			
	2016	-4.1%		*2016*	-0.5%	-2.2%		*2016*	3.7%	2.0%	
	2017	-0.1%		*2017*	0.3%	5.1%		*2017*	0.4%	5.2%	
	2018	0.7%		*2018*	0.5%	-3.9%		*2018*	-0.1%	-4.5%	
	2019	0.7%		*2019*	1.1%	0.9%		*2019*	0.4%	0.3%	
	2020	-0.9%		*2020*		0.2%		*2020*		1.1%	
	2021	-0.9%	-7.7%	*2021*		-0.9%	-6.7%	*2021*		0.0%	1.1%
	Geometric Mean	-0.9%	-1.6%	Geometric Mean	0.5%	-0.2%	-1.4%	Geometric Mean	1.5%	0.8%	0.2%

	Calendar Year (for 2021 Cost of Service	Revenues				Demand (kWh)					Demand (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2015*	Actual	$ 49,106	OEB-approved		Actual			OEB-approved		Actual	0	0	OEB-approved	
Historical	*2016*	Actual	$ 60,361			Actual					Actual	0	0		
Historical	*2017*	Actual	$ 54,516			Actual					Actual	0	0		
Historical	*2018*	Actual	$ 72,465			Actual					Actual	0	0		
Historical	*2019*	Actual	$ 103,333			Actual					Actual	0	0		
Bridge Year (Foreca	*2020*	Forecast	$ 89,246			Forecast					Forecast	0	0		
Test Year (Forecast	*2021*	Forecast	$ 97,933			Forecast					Forecast	0	0		

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
	2015			*2015*				*2015*			
	2016	22.9%		*2016*				*2016*			
	2017	-9.7%		*2017*				*2017*			
	2018	32.9%		*2018*				*2018*			
	2019	42.6%		*2019*				*2019*			
	2020	-13.6%		*2020*				*2020*			
	2021	9.7%		*2021*				*2021*			
	Geometric Mean	14.8%		Geometric Mean				Geometric Mean			