Table of Contents

21

3.0 Operating Revenue

3.1 Operating Revenue

3.1.1 Overview

This exhibit provides the details of BPI's operating revenue for 2017 Board Approved, 2017 Actual, 2018 Actual, 2019 Actual, 2020 Actual, the 2021 Bridge year and the 2022 Test Year. This exhibit also provides a detailed variance analysis by rate class of the operating revenue components. Distribution revenue excludes revenues from commodity sales.

BPI is proposing a total Service Revenue Requirement of $23,846,829 for the 2022 Test Year. This amount includes a Base Revenue Requirement of $22,779,797 plus revenue offsets of $1,067,032 to be recovered through Other Revenue.

A summary of all operating revenue is presented below in Table 3.1-A and provides a comparison of total revenues from the 2017 Board Approved year to the 2022 Test Year.

Table 3.1-A – Historical Comparison of Total Revenue

	2017 Board Approved (Base RR)	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Bridge	2022 Test-Existing Rates	2022 Test - Proposed Rates
Distribution Revenues								
Residential	$ 10,072,166	$ 9,820,752	$ 10,162,519	$ 10,387,161	$ 10,725,918	$ 10,919,812	$ 11,006,554	$ 14,232,489
GS<50 kW	$ 1,839,733	$ 1,756,404	$ 1,783,967	$ 1,797,349	$ 1,785,321	$ 1,769,590	$ 1,790,407	$ 2,218,670
GS>50 kW	$ 4,621,192	$ 4,795,900	$ 4,970,426	$ 5,124,133	$ 5,187,700	$ 5,022,801	$ 5,061,249	$ 5,659,355
Street Lighting	$ 235,550	$ 225,246	$ 232,386	$ 235,791	$ 234,607	$ 243,122	$ 248,442	$ 305,942
Sentinel Lighting	$ 52,686	$ 36,597	$ 37,483	$ 37,444	$ 37,473	$ 12,858	$ 34,790	$ 43,196
Unmetered Scattered Load	$ 78,003	$ 78,962	$ 78,904	$ 78,544	$ 79,657	$ 80,428	$ 79,829	$ 96,182
Embedded Distributor	$ 199,626	$ 155,377	$ 140,591	$ 147,887	$ 154,012	$ 159,903	$ 161,412	$ 223,963
Total Distribution Revenue	***$ 17,098,955***	***$ 16,869,238***	***$ 17,406,276***	***$ 17,808,309***	***$ 18,204,688***	***$ 18,208,514***	***$ 18,382,682***	***$ 22,779,797***
SSS Admin Charge Included in Dist Revs		$ -	$ -	$ -	$ -			
Standby Revenue Included in Dist Revs		$ -	$ -	$ -	$ -			
Other Revenue								
Late Payment Charges	$ 235,599	$ 281,546	$ 235,598	$ 326,283	$ 359,302	$ 336,598	$ 341,499	$ 341,499
Specific Service Charges	$ 651,903	$ 356,655	$ 335,683	$ 603,136	$ 640,437	$ 625,825	$ 188,127	$ 188,127
Other Revenue	$ 315,768	$ 327,460	$ 305,943	$ 25,129	$ 117,876	$ 298,114	$ 410,715	$ 410,715
SSS Administration Charge	$ 111,730	$ 115,299	$ 117,154	$ 117,891	$ 121,153	$ 125,287	$ 126,691	$ 126,691
Standby Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Other Revenue	***$ 1,315,000***	***$ 1,080,960***	***$ 994,377***	***$ 1,072,439***	***$ 1,238,768***	***$ 1,385,823***	***$ 1,067,032***	***$ 1,067,032***
Total Operating Revenue	**$ 18,413,955**	**$ 17,950,198**	**$ 18,400,653**	**$ 18,880,747**	**$ 19,443,456**	**$ 19,594,337**	**$ 19,449,714**	**$ 23,846,829**

3.1.2 Throughput Revenue

Information related to BPI's throughput revenue includes details on the weather normalized load forecasting methodology and a forecast of customers by rate class based on the historical number of customers billed throughout the year.

A detailed variance analysis on the historical throughput revenue is also provided in this Exhibit.

3.1.3 Other Revenue

Other revenue includes Standard Service Supply (SSS) Administration charges, Late Payment charges and Miscellaneous Service revenue. BPI has a Standby Classification however no Standby fees have been charged since 2015. There are no new proposed Specific Service Charges or proposed changes to rate or application of existing Specific Service Charge.

A detailed variance analysis on the other revenue is set out later in this Exhibit.

3.2 Load and Revenue Forecasts

3.2.1 Load and Revenue Forecasts

3.2.1.1 Weather Normalized and Customer/Connection Forecast

The purpose of this evidence is to present the process used by BPI to prepare the weather normalized load and customer/connection forecast used to design the proposed 2022 electricity distribution rates.

In summary, BPI has used the same Board Approved Load Forecast model and methodology as in BPI's 2017 cost of Service application file number EB-2016-0058 (i.e. a Multivariate Regression Model). This regression analysis methodology is also used by a number of distributors in cost of service applications to determine a prediction model. With regard to the overall process of load forecasting, BPI submits conducting a regression analysis on historical electricity purchases to produce an equation to predict purchases is appropriate. BPI has the data for the amount of electricity (in kWh) purchased from the IESO and other suppliers for use by BPI's customers. The regression model was only performed on the total purchased kWh and not broken down by billing class because of lacking historical data. BPI does not have an adequate monthly billing history by rate class to produce statistically significant results. In BPI's view, running forecasting on insufficient data would not be an appropriate basis for its load forecast. With regression analysis, these total monthly purchases can be related to other monthly explanatory variables such as heating degree days and cooling degree days, which occur in the same month. The results of the regression analysis produce an equation that predicts the purchases based on the explanatory variables. This prediction model is then used as the basis to forecast the total level of weather normalized purchases for the Bridge Year and the Test Year, which is converted to billed kWh by class. A detailed explanation of the process is provided later in this Exhibit.

Increased Uncertainty of Forecast

BPI has found increased challenges in forecasting for this application due to two key factors- the impacts of the COVID-19 pandemic and the discontinuation of CDM programs.

Regarding the COVID-19 pandemic, the impacts to 2020 customer consumption patterns have been very unusual and the future impacts of COVID-19 concerning consumption levels, consumption patterns, and customer usage (industrial production, business closures) are unknown. At the initial onset of the pandemic, popular belief was that life would be "back to normal" within a few weeks. This viewpoint has been extended time and time again. At the time of drafting this Application, it is still uncertain how long the situation will continue and what its impacts will be. Vaccination campaigns are underway, however increasing cases related to COVID-19 variants are being observed as well. One of the impacts of the pandemic in 2020 is that residential consumption has increased as students, workers etc. have been working from home. Businesses have also been impacted by working from home, lockdowns, self-isolation and economic reasons. This has resulted in a shift of consumption levels from business classes to residential. BPI's proposed approach to the load forecasting prevents an increase in power purchases, driven by increases in customer consumption from being re-allocated to business classes. In BPI's view, this would not be appropriate, as the shift in forecasted consumption would likely lead to a revenue shortfall as the business classes are not expected to increase their consumption, rather BPI believes the long term economic impacts of the pandemic and increasing energy efficiency measures will continue to result in business class decreases in consumption. To address this issue, BPI has based the regression analysis on data up to the end of 2019 only. BPI has also included a GDP variable which is statistically significant and which should incorporate some level of the economic effects of the pandemic on consumption.

Further supporting the exclusion of 2020 data from the regression, at the time of filing, the Q4 2020 figures for actual GDP were not yet available. BPI did not believe it would be appropriate to base its regression estimation on partially estimated data. For the 2020 prediction, BPI has used the actual values for most variables, with the exception of the Q4 GDP values which were not yet available at the time of filing. BPI anticipates that through the future stages of this Application, further certainty regarding expectations for the pandemic and economic reality may be available.

With respect to CDM activity, BPI is again facing uncertainty in its forecasting as the prior levels of insight and control into CDM activities in its service territory are no longer available as a result of the discontinuation of the CFF. BPI knows that energy efficiency measures will continue, through IESO delivered CDM programs and customer take-up of other energy efficiency measures such as behind the meter generation, net metered generation, battery storage and others. BPI has included the trend variable to capture the impacts of these items over time, which can be easily forecasted into further periods.

Regression Results

BPI's load forecast regression is statistically significant and has a strong fit with an R Squared of 90% (See Table 3.2-E). Additionally, based on the Board's approval of this methodology in a number of previous cost of service applications and based on the discussion that follows, BPI submits its load forecasting methodology is reasonable at this time for the purposes of this Application.

The following Table 3.2-A provides the material to support the weather normalized load forecast used by BPI in this Application. Please note the kWh in the table below exclude Wholesale Market Participants (WMP) and Embedded Distributor. Inclusive of these customer types, the 2022 Test Year billed energy forecast is: 928,196,629 kWh; 1,474,981 kW; and 47,809 customer/connections.

Table 3.2-A – Summary of Load and Customer/Connection Forecast

Year	Billed kWh	Growth	Percent change	Customer/ Connection count	Growth	Percent change
2017 Board Approved	961,567,897					
2010	917,169,662			48,362		
2011	919,260,512	2,090,850	0.2%	48,827	466	1.0%
2012	936,319,334	17,058,822	1.9%	49,287	460	0.9%
2013	926,349,236	(9,970,098)	-1.1%	49,691	405	0.8%
2014	889,619,639	(36,729,597)	-4.0%	50,130	439	0.9%
2015	904,891,892	15,272,253	1.7%	50,646	516	1.0%
2016	909,331,461	4,439,569	0.5%	50,494	(152)	-0.3%
2017	892,260,753	(17,070,708)	-1.9%	46,201	(4,293)	-8.5%
2018	934,510,743	42,249,990	4.7%	46,506	305	0.7%
2019	932,356,870	(2,153,873)	-0.2%	46,736	230	0.5%
2020	933,148,230	791,360	0.1%	47,172	437	0.9%
2021 - Bridge Normalized	857,658,459	(75,489,771)	-8.1%	47,487	315	0.7%
2022 - Test Normalized	878,272,205	20,613,747	2.4%	47,805	318	0.7%

The information in Table 3.2-A above provides weather actual data from 2010 to 2020 while the 2021 Bridge year and 2022 Test year is weather normalized. BPI understands there is not a Board approved method to properly adjust actual data to a weather normal basis. Therefore, based on the process outlined in this Exhibit, a process to forecast energy on a weather normalized basis has been developed and used in this Application.

Total customer and connections are on a yearly average basis and streetlight, sentinel lights and unmetered loads are measured as connections.

Actual and forecasted billed amounts and numbers of customers/connections by rate class are shown in Table 3.2-B. Customer usage by rate class is shown in Table 3.2-C.

Table 3.2-B – Billed Energy by Rate Class

Year	Residential	GS<50	GS>50*	Sentinel	Streetlight	USL	Total
2017 Board Approved	301,593,274	103,442,407	496,695,575	382,297	7,460,329	1,405,154	910,979,036
2010	287,357,342	98,691,975	521,725,747	480,615	7,354,351	1,559,632	917,169,662
2011	291,380,972	99,001,655	519,515,098	475,427	7,330,830	1,556,530	919,260,512
2012	287,058,174	100,340,238	539,521,215	459,394	7,395,374	1,544,939	936,319,334
2013	282,501,947	99,838,335	534,621,114	448,778	7,386,717	1,552,345	926,349,236
2014	282,925,750	99,356,580	497,985,709	445,147	7,378,259	1,528,194	889,619,639
2015	287,594,336	100,078,635	507,886,846	446,247	7,369,714	1,516,114	904,891,892
2016	291,787,861	99,573,959	508,774,431	314,139	7,368,093	1,512,978	909,331,461
2017	273,448,641	96,495,542	513,281,236	186,504	7,324,649	1,524,181	892,260,753
2018	301,310,523	94,728,588	529,592,600	190,023	7,191,580	1,497,429	934,510,743
2019	292,180,865	93,124,427	538,150,482	194,958	7,147,042	1,559,095	932,356,870
2020	315,774,546	87,228,067	521,485,545	187,739	6,962,317	1,510,016	933,148,230
2021 - Bridge Normalized	281,856,415	76,054,488	490,713,363	170,250	7,357,575	1,506,368	857,658,459
2022 - Test Normalized	293,509,087	77,363,528	497,967,199	154,391	7,775,272	1,502,728	878,272,205

*excluding WMP

Table 3.2-C – Number of Customers/Connections

Year	Residential	GS<50	GS>50*	Sentinel	Streetlight	USL	Total
2017 Board Approved	36,433	2,840	449	597	5,849	425	46,593
2010	34,256	2,688	417	603	9,953	446	48,362
2011	34,643	2,709	421	621	9,988	446	48,827
2012	34,938	2,728	419	625	10,134	443	49,287
2013	35,226	2,749	424	625	10,232	438	49,691
2014	35,479	2,772	432	622	10,392	434	50,130
2015	35,744	2,784	438	619	10,632	431	50,646
2016	36,043	2,792	452	551	10,229	427	50,494
2017	36,241	2,798	457	512	5,769	425	46,201
2018	36,521	2,804	483	507	5,771	420	46,506
2019	36,733	2,834	489	501	5,771	408	46,736
2020	37,077	2,930	491	495	5,771	409	47,172
2021 - Bridge Normalized	37,371	2,956	499	485	5,771	405	47,487
2022 - Test Normalized	37,668	2,981	507	476	5,771	402	47,805

*excluding WMP

3.2.2 Forecast Methodology - Multivariate Regression Model

BPI's weather normalized load forecast is developed in a three-step process. First, total system weather normalized purchased energy forecast is developed based on a multivariate regression model incorporating historical load, weather, calendar, economic data, as well as a "trend variable" used to decrease the load for customers' increased adoption of energy efficiency measures, including CDM. Second, the weather normalized purchased energy forecast is adjusted by a historical loss factor to

produce a weather normalized billed energy forecast. Next, the forecast of billed energy by rate class is developed based on a forecast of customer numbers and historical usage patterns per customer. For the rate classes that have weather sensitive load, the forecasted billed energy is adjusted to ensure the total billed energy forecast by rate class is equivalent to the total weather normalized billed energy forecast determined from the regression model. The forecast of customers by rate class is determined using a geometric mean analysis. For those rate classes that use kW for the distribution volumetric billing determinant, an adjustment factor is applied to the rate class's energy forecast based on the historical relationship between kW and kWh. Streetlights demands (kW) have been adjusted downward to take into account the City of Brantford plans for energy efficiency in regards to Streetlights. The load forecast for the 2022 Test Year is summarized in Table 3.2-A.

A detailed explanation of the load forecasting process follows.

3.2.2.1 Purchased kWh Load Forecast

An equation to predict total system purchased energy is developed using a multivariate regression model with the following independent variables: weather (heating and cooling degree days), days in the month, Real Ontario GDP, trend variable, and several monthly flag variables. The monthly flag variables control for seasonal variability in power purchases during the spring and fall months beyond variability caused by heating Degree Days ("HDD") and Cooling Degree Days ("CDD"). The regression model uses monthly kWh and monthly values of independent variables from January 2010 to December 2019 to determine the monthly regression coefficients. This provides 120 monthly data points representing a reasonable data set for use in a regression analysis.

BPI submits for weather normalization purposes it is appropriate to utilize the last 10-year average weather conditions from January 2011 to December 2020 because of being the most relevant time period. However, in accordance with the filing requirements, BPI has also provided a sensitivity analysis showing the impact on the 2022 forecast of purchases assuming weather normal conditions are based on a 20-year trend of weather data below in Table 3.2-E.

The multivariate regression model has determined drivers of year-over-year changes in BPI's load growth. These include weather (including fall and spring monthly flags), economic conditions (Ontario

Real GDP Monthly), number of days in the month, and Trend Variable. These factors are captured within the multivariate regression model.

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

The following outlines the prediction model used by BPI to predict weather normal purchases for 2021 and 2022:

BPI's Monthly Predicted Weather Normal Purchases =

(59,011,249.23)
+ Heating Degree Days x 14,056.51
+ Cooling Degree Days x 123,984.14
+ Real Ontario GDP (Indexed) x 519,199.51
+ Number of Days in Month x 2,118,055.30
+ March Flag x (1,778,951.71)
+ April Flag x (4,190,279.03)
+ May Flag x (3,150,225.68)
+ October Flag x (1,930,403.22)
+ Trend x (147,249.17)

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

The sources of data for the various data points are:

a) Environment Canada website was used for the monthly Heating Degree Day and Cooling Degree Day information. Weather data was taken from the Pearson Airport CS Station. The base numbers from which HDDs and CDDs are measured is 18° C.
b) The calendar provided information related to the number of days in the month, including consideration of leap years.

c) The trend variable measures the energy efficiency gains. BPI has previously used a CDM variable instead of a trend variable. As of Q1 of 2019, BPI no longer has access to consistent reporting related to the CDM results in its service territory, which continue to be provided by the IESO (with some CFF extended programs being provided by BPI). While BPI believes that CDM activity continues to be an important driver of electricity usage in BPI's service area, it would not be appropriate to include a variable in the regression which BPI is unable to accurately update or accurately forecast.

   Since it is known that CDM persistence and new program activity is occurring in BPI's Service territory, the trend variable has been used as a proxy for this and other measures of energy efficiency.

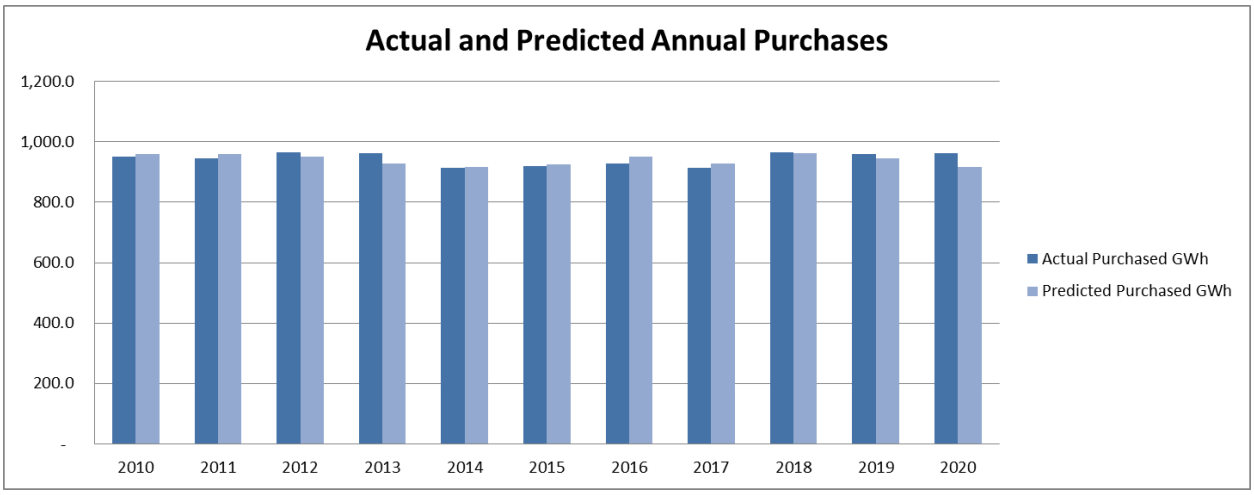
d) The Ontario Real GDP (Indexed) variable is an indicator of province-wide economic growth and calculated from the Quarterly Data provided by the Ontario Ministry of Finance. At the time of running the regression on only GDP data for the first 3 quarters of 2020 were available.

The prediction formula has the following statistical results:

Table 3.2-D – Regression Statistics

Multiple R	0.95
R Square	0.90
Adjusted R Square	0.90
ANOVA	
	df
Regression	9.00
Residual	110.00
Total	119.00
	t Stat
Intercept	(3.41)
Heating Degree Days	11.57
Cooling Degree Days	19.12
Ontario Real GDP (Indexed)	4.37
Number of Days in Month	7.80
Mar	(2.32)
Apr	(5.64)
May	(3.87)
Oct	(2.32)
Trend	(4.58)

The annual results of the above prediction formula compared to the actual annual purchases from 2011 to 2020 are shown in the chart below. The chart indicates the resulting prediction equation appears to be reasonable. BPI has reviewed each variable and determined the relationships to be intuitive. Heating and Cooling increase power purchases, as do incremental days in a month and improved economic performance. The monthly flag variables represent "shoulder" months in which the typical impacts of weather patterns may be lower than usual (presumably as customers are slower to turn heating and cooling on). The trend variable represents energy efficiency measures and results in decreases to the power purchases.



The following Table 3.2-E outlines the data supporting the above chart.

Table 3.2-E – Total System Purchases (GWh)

Year	Actual	Predicted	% Difference
2010	951	960	1.0%
2011	945	959	1.5%
2012	964	951	-1.4%
2013	961	927	-3.7%
2014	914	918	0.5%
2015	920	924	0.4%
2016	929	950	2.3%
2017	915	927	1.4%
2018	966	962	-0.4%
2019	959	945	-1.5%
2020	961	917	-4.8%
2021 Bridge year		882	
2022 Weather Normal - 10 year average		903	
2022 Weather Normal - 20 year trend		898	

The weather normalized amount for 2022 is determined by using 120 independent variables in the prediction formula on a monthly basis together with the average monthly heating degree days and cooling degree days from January 2011 to December 2020. The 2022 weather normalized 20 year trend value reflects the trend in monthly heating degree days and cooling degree days from January 2001 to December 2020.

The weather normal ten year average has been used as the purchased forecast in this Application for the purposes of determining a billed kWh load forecast which is used to design rates. The ten year average has been used as this is consistent with the period of time over which the regression analysis was conducted.

3.2.2.2 Billed kWh Load Forecast

In determining the total weather normalized energy billed forecast, the total system weather normalized purchases forecast is adjusted by a historical loss factor. This adjustment has been made by BPI using the average loss factor from 2011 to 2020 of 1.0279. With this average loss factor, the total weather normalized billed energy will be 878.3 GWh for 2022.

3.2.2.3 Billed kWh Load forecast and Customer/Connection Forecast by Rate Class

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

The next step in the forecasting process is to determine a customer/connection forecast. The customer/connection forecast is based on reviewing historical customer/connection data available and as shown in the following table.

Table 3.2-F – Historical Number of Customer/Connections

Year	Residential	GS<50	GS>50*	Sentinel	Streetlight	USL	Total
2017 Board Approved	36,433	2,840	449	597	5,849	425	46,593
2010	34,256	2,688	417	603	9,953	446	48,362
2011	34,643	2,709	421	621	9,988	446	48,827
2012	34,938	2,728	419	625	10,134	443	49,287
2013	35,226	2,749	424	625	10,232	438	49,691
2014	35,479	2,772	432	622	10,392	434	50,130
2015	35,744	2,784	438	619	10,632	431	50,646
2016	36,043	2,792	452	551	10,229	427	50,494
2017	36,241	2,798	457	512	5,769	425	46,201
2018	36,521	2,804	483	507	5,771	420	46,506
2019	36,733	2,834	489	501	5,771	408	46,736
2020	37,077	2,930	491	495	5,771	409	47,172

*excluding WMP

From the historical customer/connection data the growth rates in customer/connections can be evaluated. The growth rates are provided in the following table. The geometric mean growth rate in number of customers is also provided. The geometric mean approach provides the average compounding growth rate from 2011 to 2020.

Table 3.2-G – Historical Growth in Customers by Rate Class

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
2011	1.13%	0.80%	0.96%	2.99%	0.35%	0.00%
2012	0.85%	0.70%	-0.48%	0.73%	1.46%	-0.67%
2013	0.82%	0.75%	1.07%	-0.08%	0.96%	-1.13%
2014	0.72%	0.84%	2.01%	-0.48%	1.57%	-0.80%
2015	0.75%	0.45%	1.27%	-0.48%	2.30%	-0.81%
2016	0.84%	0.30%	3.31%	-10.87%	-3.79%	-0.87%
2017	0.55%	0.20%	1.05%	-7.21%	-43.60%	-0.47%
2018	0.77%	0.22%	5.80%	-0.98%	0.03%	-1.06%
2019	0.58%	1.07%	1.14%	-1.04%	0.00%	-2.91%
2020	0.94%	3.40%	0.39%	-1.28%	0.00%	0.22%
Geomean	0.79%	0.87%	1.64%	-1.95%	-5.30%	-0.85%

*excluding WMP

The numbers for projected customers by rate class for 2021 and 2022 were determined by increasing the 2020 actual number of customers in each class by the geomean rate calculated above. With the Sentinel Light class exception, the forecasted results are shown in Table 3.2-H below, consistently trending with actual results from the past 2 years. BPI has not changed the definition or composition of any of the rate classes, however there have been impacts as business customer accounts have been assessed between the GS<50kW and GS 50 to 4,999 kW classes over the years.

BPI notes it has not made specific adjustments for the new customers projected in capital budgeting. New or upgraded physical customer connections do not always relate to the change in the number of customers on a direct basis, so the historic “geomean” increase in customers has been applied. Additionally, there is some level of uncertainty regarding the number and timing of projected new connections.

Table 3.2-H – Projected Customers by Rate Class

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
2021	37,371	2,956	499	485	5,771	405
2022	37,668	2,981	507	476	5,771	402

*excluding WMP

The next step in the process is to review the historical customer/connection usage and to reflect this usage per customer in the forecast. The following table provides the average annual usage per customer/connection by rate class from 2011 to 2020.

Table 3.2-I – Historical Annual Usage per Customer/Connection by Rate Class

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
2011	8,411	36,545	1,234,003	766	734	3,494
2012	8,216	36,782	1,287,640	735	730	3,491
2013	8,020	36,325	1,262,388	719	722	3,548
2014	7,974	35,849	1,152,745	716	710	3,521
2015	8,046	35,948	1,160,884	721	693	3,522
2016	8,096	35,661	1,125,607	570	720	3,545
2017	7,545	34,490	1,123,768	365	1,270	3,588
2018	8,250	33,783	1,095,898	375	1,246	3,563
2019	7,954	32,860	1,101,075	389	1,238	3,821
2020	8,517	29,768	1,062,810	379	1,206	3,693

*excluding WMP

As can be seen from the above table, except for residential and USL, the usage per customer/connection has generally continued a decline since the last cost-of-service application. BPI's view is this decline is partially due to energy efficiency measures as well as from changing individual usage caused by a variety of factors, including weather and the economy. BPI's customer base is sensitive to weather, and during the summer months, a substantial amount of air conditioning is used throughout the service territory. From the historical usage per customer/connection data, the growth rate in usage per customer/connection can be derived as shown in the following table. The geometric mean growth rate has also been provided.

Table 3.2-J – Historical Annual Customer/Connection Usage Growth by Rate Class

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
2011	0.27%	-0.48%	-1.37%	-3.95%	-0.67%	-0.20%
2012	-2.32%	0.65%	4.35%	-4.07%	-0.57%	-0.07%
2013	-2.39%	-1.24%	-1.96%	-2.23%	-1.07%	1.63%
2014	-0.57%	-1.31%	-8.69%	-0.33%	-1.66%	-0.76%
2015	0.90%	0.27%	0.71%	0.73%	-2.37%	0.02%
2016	0.62%	-0.80%	-3.04%	-21.02%	3.92%	0.67%
2017	-6.80%	-3.28%	-0.16%	-36.02%	76.26%	1.21%
2018	9.35%	-2.05%	-2.48%	2.89%	-1.85%	-0.70%
2019	-3.59%	-2.73%	0.47%	3.67%	-0.62%	7.24%
2020	7.07%	-9.41%	-3.48%	-2.45%	-2.58%	-3.37%
Geomean	0.14%	-2.25%	-1.65%	-7.51%	5.68%	0.62%

*excluding WMP

For the forecast of usage per customer/connection the historical geometric mean was applied to the 2020 usage to determine the 2021 and 2022 forecast. The resulting usage forecast is shown in the following table.

Table 3.2-K – Projected Annual Usage per Customer/Connection by Rate Class

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
2021	8,529	29,097	1,045,319	351	1,275	3,716
2022	8,541	28,442	1,028,116	325	1,347	3,738

*excluding WMP

With the preceding information the non-weather normalized billed energy forecast can be determined by applying the forecast number of customer/connections from Table 3.2-I by the forecast annual usage per customer/connection from Table 3.2-L. The resulting non-weather normalized billed energy forecast is shown below.

Table 3.2-L– Projected Non-Weather Normal Billed energy by Rate Class (GWh)

Year	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL	Total
2021	318.7	86.0	521.3	0.2	7.4	1.5	935.1
2022	321.7	84.8	521.1	0.2	7.8	1.5	937.1

*excluding WMP

The non-weather normalized billed energy forecast has been determined but this needs to be adjusted in order to align with the total weather normalized billed energy forecast. As previously determined, the total weather normalized billed energy forecast for 2021 and 2022 is 935.1 GWh and 937.1 GWh respectively.

The difference between the non-weather normalized and the weather normalized forecasts are (77.4) GWh for 2021 and (58.8) GWh for 2022. The remaining difference is assumed to be associated with moving the forecast from a non-weather normalized to a weather normalized basis and this amount will be assigned to those rate classes that are weather sensitive. Based on the weather normalization work completed by Hydro One for BPI for the cost allocation information filing used to support the Application, it was determined the weather sensitivity by rate class is as follows:

Table 3.2-M – Weather Sensitivity by Rate Class

	Residential	GS<50	GS>50*	Streetlight	Sentinel	USL
Weather Sensitivity Percent	67.00%	67.00%	34.00%	0.00%	0.00%	0.00%

*excluding WMP

For the GS>50 kW class the weather sensitivity amount of 34% was provided in the weather normalization work completed by Hydro One. For the Residential and GS<50 kW classes it has been assumed in cost of service applications prior to 2013 that these two classes are 100% weather sensitive. Intervenors expressed concern with this assumption and have suggested sensitivity of 100% for these classes is not appropriate. BPI agrees with this position but also submits the weather sensitivity for the Residential and GS<50 kW classes should be higher than the GS>50 kW class. As a result BPI has assumed the weather sensitivity for the Residential and GS<50 kW classes to be mid-way between 100% and 34%, therefore 67%.

The difference between the non-weather normalized and the weather normalized forecast of (77.4) GWh for 2021 and (58.8) GWh for 2022 have been assigned on a pro rata basis to each rate class based on the above level of weather sensitivity.

Table 3.2-N – Alignment of Non-Weather Normalized and Weather Normalized Forecasts

	Residential	GS<50	GS>50*	Sentinel	Streetlight	USL	Total
2021							
Non-Weather Corrected Forecast	318,725,610	86,003,056	521,315,477	170,250	7,357,575	1,506,368	935,078,335
Weather Sensitivity %	*67.0%*	*67.0%*	*34.0%*	-	-	-	
Allocation of Weather Sensitive Amount	(36,869,195)	(9,948,568)	(30,602,114)	-	-	-	(77,419,876)
Weather Corrected Forecast	**281,856,415**	**76,054,488**	**490,713,363**	**170,250**	**7,357,575**	**1,506,368**	**857,658,459**
2022							
Non-Weather Corrected Forecast	321,704,252	84,795,249	521,145,464	154,391	7,775,272	1,502,728	937,077,356
Weather Sensitivity %	*67.0%*	*67.0%*	*34.0%*	-	-	-	
Allocation of Weather Sensitive Amount	(28,195,165)	(7,431,720)	(23,178,265)	-	-	-	(58,805,150)
Weather Corrected Forecast	**293,509,087**	**77,363,528**	**497,967,199**	**154,391**	**7,775,272**	**1,502,728**	**878,272,205**

*excluding WMP

CDM Adjustment

Historically, a manual adjustment has been made to reflect the impact of new and forecasted new CDM program results on the load forecast. Due to the discontinuation of the Conservation First Framework, BPI has not made any such adjustment.

3.2.2.4 Billed kW Load Forecast

There are four rate classes that charge volumetric distribution on a per kW basis. These include GS>50 kW, Streetlights, Sentinel Lighting and Embedded Distributor. As a result, the energy forecast for these classes needs to be converted to a kW basis for rate-setting purposes. The forecast of kW for GS>50, Sentinels are based on this historical average ratio of kW to kWh and applying the average ratio to the forecasted kWh to produce the required kW. An adjustment factor was applied to Streetlights because of the City of Brantford's efforts to continually improve the efficiencies of street lighting. The Embedded Distributor demand and consumption forecast assume growth of 1% per year.

Table 3.2-N outlines the annual demand units by applicable rate class.

Table 3.2-O – Historical kW per Applicable Class

Year	GS>50*	Sentinel	Streetlight	Total
2010	1,323,482	1,534	22,480	1,347,497
2011	1,344,251	1,487	22,428	1,368,166
2012	1,398,784	1,392	22,533	1,422,709
2013	1,395,148	1,385	22,581	1,419,114
2014	1,368,652	1,361	22,553	1,392,566
2015	1,388,241	1,363	22,527	1,412,132
2016	1,378,958	923	22,444	1,402,325
2017	1,400,391	570	22,338	1,423,299
2018	1,435,245	520	22,227	1,457,992
2019	1,450,909	568	21,979	1,473,456
2020	1,428,137	554	21,543	1,450,234

*excluding WMP

The following table illustrates the historical ratio of kW/kWh as well as the average ratio for 2011 to 2020.

Table 3.2-P – Historical kW/kWh Ratio by Class

Year	GS>50*	Sentinel	Streetlight
2011	0.2588%	0.3128%	0.3059%
2012	0.2593%	0.3030%	0.3047%
2013	0.2610%	0.3086%	0.3057%
2014	0.2748%	0.3057%	0.3057%
2015	0.2733%	0.3055%	0.3057%
2016	0.2710%	0.2938%	0.3046%
2017	0.2728%	0.3056%	0.3050%
2018	0.2710%	0.2737%	0.3091%
2019	0.2696%	0.2913%	0.3075%
2020	0.2739%	0.2952%	0.3094%
Average	0.2685%	0.2995%	0.3063%

*excluding WMP

The average ratio was applied to the weather normalized billed energy forecast in Table 3.2-O to provide the forecast of kW by rate class as shown below.

Table 3.2-Q – Forecast kW per Applicable Class

Year	GS>50*	Sentinel	Streetlight
2021	1,317,808	510	22,103
2022	1,337,288	462	22,948

*excluding WMP

In addition to the forecasts per class set out above, which are calculated in BPI's load forecast regression analysis, BPI has also forecast the Test Year billing determinants expected for its Embedded Distributor class and its Wholesale Market Participants (WMPs), which are part of the General Service 50 to 4,999 kW class. The forecast kW usage for the Embedded Distributor class is 101,593kW for 2021 and 102,609 kW for 2022. The forecast of 11,674 kW for 2021 and 2022 for WMPs is consistent with 2020 actuals. Throughout the Rate Design and Cost Allocation portions of the Application, the General Service 50 to 4,999 kW forecast should be inclusive of WMP billings.

The Table 3.2-R shows the test year forecast output from the live excel forecasting model (Brantford_2021_filing_Requirements_Weather Normalization Regression Model _ 20210512). Also, Table 3.2-S has a summary of the historical and forecasts for the bridge and test years from the live excel forecasting model.

Table 3.2-R - Forecast for 2022 Test Year

	Customer / Connections	kWh	kW
Residential	37,668	293,509,087	
GS<50	2,981	77,363,528	
GS > 50 kW (incl. WMP)	509	503,997,167	1,348,962
Street Lighting	5,771	7,775,272	22,948
Sentinel Lighting	476	154,391	462
Unmetered Scattered Load (USL)	402	1,502,728	
Embedded distributor class	2	43,894,456	102,609

Table 3.2-S – Summary and Variances of Actual and Forecast Data

	2017 Board Approved	2017	2018	2019	2020	2021 Bridge	2022 Test
Residential							
# of Customers	36,433	36,241	36,521	36,733	37,077	37,371	37,668
kWh	301,593,274	273,448,641	301,310,523	292,180,865	315,774,546	281,856,415	293,509,087
kW							
Variance Analysis							
# of Customers		-0.53%	0.77%	0.58%	0.94%	0.79%	0.79%
kWh		-9.33%	10.19%	-3.03%	8.08%	-10.74%	4.13%
kW							
General Service <50 kW							
# of Customers	2,840	2,798	2,804	2,834	2,930	2,956	2,981
kWh	103,442,407	96,495,542	94,728,588	93,124,427	87,228,067	76,054,488	77,363,528
kW							
Variance Analysis							
# of Customers		-1.49%	0.22%	1.07%	3.40%	0.87%	0.87%
kWh		-6.72%	-1.83%	-1.69%	-6.33%	-12.81%	1.72%
kW							
General Service 50-4999							
# of Customers	449	457	483	489	491	499	507
kWh	496,695,575	513,281,236	529,592,600	538,150,482	521,485,545	490,713,363	497,967,199
kW	1,342,821	1,400,391	1,435,245	1,450,909	1,428,137	1,317,808	1,337,288
Variance Analysis							
# of Customers		1.73%	5.80%	1.14%	0.39%	1.64%	1.64%
kWh		3.34%	3.18%	1.62%	-3.10%	-5.90%	1.48%
kW		4.29%	2.49%	1.09%	-1.57%	-7.73%	1.48%
Sentinel Lights							
# of Connections	597	512	507	501	495	485	476
kWh	382,297	186,504	190,023	194,958	187,739	170,250	154,391
kW	1,155	570	520	568	554	510	462
Variance Analysis							
# of Connections		-14.32%	-0.98%	-1.04%	-1.28%	-1.95%	-1.95%
kWh		-51.21%	1.89%	2.60%	-3.70%	-9.32%	-9.32%
kW		-50.65%	-8.77%	9.23%	-2.41%	-8.00%	-9.32%
Street Lights							
# of Connections	5,849	5,769	5,771	5,771	5,771	5,771	5,771
kWh	7,460,329	7,324,649	7,191,580	7,147,042	6,962,317	7,357,575	7,775,272
kW	22,796	22,338	22,227	21,979	21,543	22,103	22,948
Variance Analysis							
# of Connections		-1.37%	0.03%	0.00%	0.00%	0.00%	0.00%
kWh		-1.82%	-1.82%	-0.62%	-2.58%	5.68%	5.68%
kW		-2.01%	-0.50%	-1.12%	-1.98%	2.60%	3.82%
Unmetered Scattered Load							
# of Connections	425	425	420	408	409	405	402
kWh	1,405,154	1,524,181	1,497,429	1,559,095	1,510,016	1,506,368	1,502,728
kW							
Variance Analysis							
# of Connections		-0.06%	-1.06%	-2.91%	0.22%	-0.85%	-0.85%
kWh		8.47%	-1.76%	4.12%	-3.15%	-0.24%	-0.24%
kW							

Embedded Distributor							
# of Connections	2	2	2	2	2	2	2
kWh *EST	51,013,084	43,309,246	41,227,723	41,261,684	43,029,562	43,459,857	43,894,456
kW	139,437	107,291	95,219	97,683	100,587	101,593	102,609
Variance Analysis	963544924						
# of Connections		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
kWh		-15.10%	-4.81%	0.08%	4.28%	1.00%	1.00%
kW		-23.05%	-11.25%	2.59%	2.97%	1.00%	1.00%
Wholesale Market Participants (Billed under GS>50 kW for Dist. Rates)							
# of Customers	-	2	2	2	2	2	2
kWh *EST	-	6,489,035	6,330,357	6,085,995	6,029,968	6,029,968	6,029,968
kW	-	12,330	12,258	10,962	11,674	11,674	11,674
Variance Analysis							
# of Customers			0.00%	0.00%	0.00%	0.00%	0.00%
kWh			-2.45%	-3.86%	-0.92%	0.00%	0.00%
kW			-0.58%	-10.57%	6.49%	0.00%	0.00%
Totals Except Wholesale Market Participants							
Customers / Connections	46,595	46,203	46,508	46,738	47,174	47,489	47,807
kWh	961,992,120	935,569,999	975,738,466	973,618,554	976,177,792	901,118,316	922,166,661
kW from applicable classes	1,506,209	1,530,590	1,553,211	1,571,139	1,550,821	1,442,014	1,463,307
Totals Except Wholesale Market Participants - Variance							
Customers / Connections		-2.75%	4.29%	-0.22%	0.26%	-7.69%	2.34%
kWh		1.62%	1.48%	1.15%	-1.29%	-7.02%	1.48%
kW from applicable classes		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Totals							
Customers / Connections		46,205	46,510	46,740	47,176	47,491	47,809
kWh		942,059,034	982,068,823	979,704,549	982,207,759	907,148,284	928,196,629
kW from applicable classes		1,542,920	1,565,469	1,582,102	1,562,495	1,453,688	1,474,981
Totals - Variance							
Customers / Connections		0.00%	4.25%	-0.24%	0.26%	-7.64%	2.32%
kWh		0.00%	1.46%	1.06%	-1.24%	-6.96%	1.46%
kW from applicable classes		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

3.3 Accuracy of load forecast and Variance Analysis

3.3.1 Variance Analysis of Distribution Revenue and Billing Determinants

The following discussion provides a variance analysis on BPI's Distribution Revenue and Billing Determinants with a summary of distribution revenue provided in Table 3.1-A. The variance analysis will compare 2017 Actual to 2017 Board Approved and a year-over-year comparison of actuals for years; 2017 to 2018, 2018 to 2019, 2019 to 2020, 2020 to 2021 Bridge year, and 2021 Bridge year to 2022 Test Year. The distribution Revenue variance analysis is based on information provided in Table 3.1-A. The Billing Determinant variance analysis is based on data provided in Table 3.1-A. Each rate class is billed based on the following measures:

- Residential is billed based on fixed and variable per kWh charge for the years 2017 to 2018 and starting on January 1, 2019 only billed based on a fixed charge.

- General Service Less than 50 kW is billed based on fixed and variable per kWh charge.
- General Service 50 to 4,999 kW is billed based on fixed and variable per kW charge.
- Street Light is billed based on fixed and variable per kW charge.
- Sentinel Lighting kW is billed based on fixed and variable per kW charge.
- Unmetered Scattered Load is billed based on fixed and variable per kWh charge.
- Embedded Distributor is billed based on fixed and variable per kW charge.

The normalization was done based on the overall purchase and not individual rates for the forecasts because of insufficient data to produce a statistically significant forecast. The overall variance analysis has been provided based on BPI's materiality of $115,000 as calculated in Exhibit 1 of this application. BPI notes that at time, rate rider revenue is recorded in Account 4080 with Distribution Revenues. The distribution revenue analysis provided below is focused solely on the distribution monthly fixed and volumetric rates applicable to each rate class (as well as transformer allowance, as applicable).

3.3.1.1 Variance for 2017 Actual vs 2017 Board Approved

Table 3.3-A – Distribution Revenue 2017 Actual vs 2017 Board Approved

Distribution Revenue	2017 Board Approved	2017 Actual	Variance
Residential	$ 10,072,166	$ 9,820,752	$ (251,414)
General Service Less than 50 kW	$ 1,839,733	$ 1,756,404	$ (83,328)
General Service 50 to 4,999 kW	$ 4,621,192	$ 4,795,900	$ 174,709
Street Light	$ 235,550	$ 225,246	$ (10,304)
Sentinel Lighting	$ 52,686	$ 36,597	$ (16,089)
Unmetered Scattered Load	$ 78,003	$ 78,962	$ 958
Embedded Distributor	$ 199,626	$ 155,377	$ (44,249)
Total	$ 17,098,955	$ 16,869,238	$ (229,717)

Table 3.3-A shows the rate classes Residential and General Service 50 to 4,999 kW (GS>50KW) had a variance above the threshold. The corresponding consumption and demand variance can be seen in Table 3.3-B below. HDD & CDD were 5% and 2% percent lower in 2017 compared to the 10-year average. Residential and GS<50 have a high degree of sensitivity to weather resulting in lower than expected consumption. Additionally, Residential and GS<50 had lower customer connections by -192

and -42 compared board approved. GS>50 saw an increase of 10 customers which increased power demand.

The remaining rate classes fall below the $115,000 materiality threshold and are assumed not to be weather-sensitive. The street lights and the sentinel lighting rate classes saw reduced customer connection levels of -80 and -86, respectively, resulting in lower customer demand. Sentinel lighting also saw energy efficiency gains over the period.

Table 3.3-B – Billing Determinants – 2017 Actual vs. 2017 Board Approved

	Customers/Connections			kWh		kW		Volumetric Variance	
	2017 Board Approved	2017 Actual	Variance	2017 Board Approved	2017 Actual	2017 Board Approved	2017 Actual	kWh	kW
Residential	36,433	36,241	(192)	301,593,274	273,448,641	-	-	(28,144,633)	-
General Service Less than 50 kW	2,840	2,798	(42)	103,442,407	96,495,542	-	-	(6,946,865)	-
General Service 50 to 4,999 kW	449	459	10	496,695,575	519,770,271	1,342,821	1,412,721	23,074,696	69,900
Street Light	5,849	5,769	(80)	7,460,329	7,324,649	22,796	22,338	(135,680)	(458)
Sentinel Lighting	597	512	(86)	382,297	186,504	1,155	570	(195,793)	(585)
Unmetered Scattered Load	425	425	(0)	1,405,154	1,524,181	-	-	119,027	-
Embedded Distributor	2	2	-	51,013,084	43,309,246	139,437	107,291	(7,703,838)	(32,146)
Total	46,595	46,205	(391)	961,992,120	942,059,034	1,506,209	1,542,920	(19,933,086)	36,711

3.3.1.2 Variance for 2018 Actual vs 2017 Actual

Table 3.3-C – 2018 Actual vs. 2017 Actual

Distribution Revenue	2017 Actual	2018 Actual	Variance
Residential	$ 9,820,752	$ 10,162,519	$ 341,767
General Service Less than 50 kW	$ 1,756,404	$ 1,783,967	$ 27,562
General Service 50 to 4,999 kW	$ 4,795,900	$ 4,970,426	$ 174,526
Street Light	$ 225,246	$ 232,386	$ 7,140
Sentinel Lighting	$ 36,597	$ 37,483	$ 886
Unmetered Scattered Load	$ 78,962	$ 78,904	$ (58)
Embedded Distributor	$ 155,377	$ 140,591	$ (14,786)
Total	$ 16,869,238	$ 17,406,276	$ 537,038

Table 3.3-C shows the rate classes Residential and General Service 50 to 4,999 kW (GS>50KW) had a variance above the threshold. The corresponding consumption and demand variance can be seen in Table 3.3-D below. HDD & CDD increased year-over-year by 7% and 49% in 2018. The residential consumption has a high degree of sensitivity to weather resulting in higher than expected consumption from the increase in degree days. Additionally, the residential and GS>50 rate classes saw increased customers connections of 280 and 27 customers, respectively, also contributing to higher consumption and demand. The IRM rate increase applicable 2018 also contributed to the increases in revenues.

The remaining rate classes fell below the $115,000 materiality threshold and assumed not to be weather-sensitive.

Table 3.3-D – Billing Determinants – 2018 Actual vs. 2017 Actual

	Customers/Connections			kWh		kW		Volumetric Variance	
	2017 Actual	2018 Actual	Variance	2017 Actual	2018 Actual	2017 Actual	2018 Actual	kWh	kW
Residential	36,241	36,521	280	273,448,641	301,310,523	-	-	27,861,882	-
General Service Less than 50 kW	2,798	2,804	6	96,495,542	94,728,588	-	-	(1,766,954)	-
General Service 50 to 4,999 kW	459	485	27	519,770,271	535,922,957	1,412,721	1,447,503	16,152,686	34,782
Street Light	5,769	5,771	2	7,324,649	7,191,580	22,338	22,227	(133,069)	(111)
Sentinel Lighting	512	507	(5)	186,504	190,023	570	520	3,519	(50)
Unmetered Scattered Load	425	420	(5)	1,524,181	1,497,429	-	-	(26,752)	-
Embedded Distributor	2	2	-	43,309,246	41,227,723	107,291	95,219	(2,081,523)	(12,072)
Total	46,205	46,510	305	942,059,034	982,068,823	1,542,920	1,565,469	40,009,789	22,549

3.3.1.3 Variance for 2018 Actual vs 2019 Actual

Table 3.3-E – 2019 Actual vs. 2018 Actual

Distribution Revenue	2018 Actual	2019 Actual	Variance
Residential	$ 10,162,519	$ 10,387,161	$ 224,643
General Service Less than 50 kW	$ 1,783,967	$ 1,797,349	$ 13,382
General Service 50 to 4,999 kW	$ 4,970,426	$ 5,124,133	$ 153,707
Street Light	$ 232,386	$ 235,791	$ 3,405
Sentinel Lighting	$ 37,483	$ 37,444	$ (38)
Unmetered Scattered Load	$ 78,904	$ 78,544	$ (361)
Embedded Distributor	$ 140,591	$ 147,887	$ 7,295
Total	$ 17,406,276	$ 17,808,309	$ 402,033

Table 3.3-E shows Residential and GS>50 were the only rate classes with a variance above the threshold. The corresponding consumption and demand variance can be seen in Table 3.3-F below. The increases were driven by changes in the number of customers and demand as well as the IRM rate increase. The residential and GS>50 rate classes saw increased customer numbers by 212 and 6, respectively. Residential rates changed in 2019 from a fixed plus kWh charge to only being a fixed charge. The remaining rate classes fell below the $115,000 materiality threshold and assumed not to be weather-sensitive except for GS<50. Street lights had no customer connection changes. Sentinel lighting and unmetered scattered Load rate classes saw reduced customer connection of 5 and 12, respectively, resulting in lower customer demand and consumption.

Table 3.3-F – Billing Determinants – 2019 Actual vs. 2018 Actual

	Customers/Connections			kWh		kW		Volumetric Variance	
	2018 Actual	2019 Actual	Variance	2018 Actual	2019 Actual	2018 Actual	2019 Actual	kWh	kW
Residential	36,521	36,733	212	301,310,523	292,180,865	-	-	(9,129,658)	-
General Service Less than 50 kW	2,804	2,834	30	94,728,588	93,124,427	-	-	(1,604,161)	-
General Service 50 to 4,999 kW	485	491	6	535,922,957	544,236,477	1,447,503	1,461,872	8,313,520	14,369
Street Light	5,771	5,771	-	7,191,580	7,147,042	22,227	21,979	(44,538)	(248)
Sentinel Lighting	507	501	(5)	190,023	194,958	520	568	4,935	48
Unmetered Scattered Load	420	408	(12)	1,497,429	1,559,095	-	-	61,666	-
Embedded Distributor	2	2	-	41,227,723	41,261,684	95,219	97,683	33,961	2,464
Total	46,510	46,740	230	982,068,823	979,704,549	1,565,469	1,582,102	(2,364,274)	16,633

3.3.1.4 Variance for 2019 Actual vs 2020 Actual

Table 3.3-G – 2020 Actual vs. 2019 Actual

Distribution Revenue	2019 Actual	2020 Actual	Variance
Residential	$ 10,387,161	$ 10,725,918	$ 338,757
General Service Less than 50 kW	$ 1,797,349	$ 1,785,321	$ (12,028)
General Service 50 to 4,999 kW	$ 5,124,133	$ 5,187,700	$ 63,567
Street Light	$ 235,791	$ 234,607	$ (1,184)
Sentinel Lighting	$ 37,444	$ 37,473	$ 29
Unmetered Scattered Load	$ 78,544	$ 79,657	$ 1,114
Embedded Distributor	$ 147,887	$ 154,012	$ 6,125
Total	$ 17,808,309	$ 18,204,688	$ 396,379

Table 3.3-G shows only the rate class Residential had a variance above the threshold. The corresponding consumption and demand variances can be seen in Table 3.3-H below. The residential class had an increase in customer connections of 344, driving the change in revenues together with the IRM rate increase for 2020. In 2020 BPI began collecting incremental capital rate rider revenue, however these amounts have been excluded from the table above.

The remaining rate classes fell below the $115,000 materiality threshold and assumed not to be weather-sensitive. Street lights had no customer connection changes. Sentinel lighting saw reduced connections of 6. Unmetered scattered Load rate classes had one additional connection. Street lights, unmetered scattered Load, Sentinel lighting saw energy efficiency gains over the period with a drop in kWh/Customer of 3%, 2%, and 3%, respectively.

Table 3.3-H – Billing Determinants – 2020 Actual vs. 2019 Actual

	Customers/Connections			kWh		kW		Volumetric Variance	
	2019 Actual	2020 Actual	Variance	2019 Actual	2020 Actual	2019 Actual	2020 Actual	kWh	kW
Residential	36,733	37,077	344	292,180,865	315,774,546	-	-	23,593,681	-
General Service Less than 50 kW	2,834	2,930	96	93,124,427	87,228,067	-	-	(5,896,360)	-
General Service 50 to 4,999 kW	491	493	2	544,236,477	527,515,513	1,461,872	1,439,811	(16,720,965)	(22,061)
Street Light	5,771	5,771	-	7,147,042	6,962,317	21,979	21,543	(184,725)	(435)
Sentinel Lighting	501	495	(6)	194,958	187,739	568	554	(7,219)	(14)
Unmetered Scattered Load	408	409	1	1,559,095	1,510,016	-	-	(49,079)	-
Embedded Distributor	2	2	-	41,261,684	43,029,562	97,683	100,587	1,767,878	2,904
Total	46,740	47,176	437	979,704,549	982,207,759	1,582,102	1,562,495	2,503,210	(19,606)

3.3.1.5 Variance for 2020 Actual vs 2021 Bridge Year

Table 3.3-I – 2021 Bridge vs. 2020 Actual

Distribution Revenue	2020 Actual	2021 Bridge	Variance
Residential	$ 10,725,918	$ 10,919,812	$ 193,894
General Service Less than 50 kW	$ 1,785,321	$ 1,769,590	$ (15,731)
General Service 50 to 4,999 kW	$ 5,187,700	$ 5,022,801	$ (164,899)
Street Light	$ 234,607	$ 243,122	$ 8,515
Sentinel Lighting	$ 37,473	$ 12,858	$ (24,615)
Unmetered Scattered Load	$ 79,657	$ 80,428	$ 770
Embedded Distributor	$ 154,012	$ 159,903	$ 5,892
Total	$ 18,204,688	$ 18,208,514	$ 3,826

Table 3.3-I shows the Residential and General Service 50 to 4,999 kW (GS>50KW) rate classes are projected to have a variance above the threshold. The corresponding consumption and demand variance can be seen in Table 3.3-K below, showing an expected decrease in GS>50 kW demand which is driving a decrease in projected revenues for that class. Additionally, the residential and GS>50 rate classes are expected to see an increase in customer connections of 295 and 8. The IRM distribution rate increase in 2021 contributed to the change in revenues.

The remaining rate classes fell below the $115,000 materiality threshold and assumed not to be weather-sensitive except for GS<50.

Table 3.3-K – Billing Determinants – 2021 Bridge vs. 2020 Actual

	Customers/Connections			kWh		kW		Volumetric Variance	
	2020 Actual	2021 Bridge	Variance	2020 Actual	2021 Bridge	2020 Actual	2021 Bridge	kWh	kW
Residential	37,077	37,371	295	315,774,546	281,856,415	-	-	(33,918,131)	-
General Service Less than 50 kW	2,930	2,956	25	87,228,067	76,054,488	-	-	(11,173,579)	-
General Service 50 to 4,999 kW	493	501	8	527,515,513	496,743,331	1,439,811	1,329,482	(30,772,182)	(110,328)
Street Light	5,771	5,771	-	6,962,317	7,357,575	21,543	22,103	395,258	560
Sentinel Lighting	495	485	(10)	187,739	170,250	554	510	(17,488)	(44)
Unmetered Scattered Load	409	405	(3)	1,510,016	1,506,368	-	-	(3,648)	-
Embedded Distributor	2	2	-	43,029,562	43,459,857	100,587	101,593	430,296	1,006
Total	47,176	47,491	315	982,207,759	907,148,284	1,562,495	1,453,688	(75,059,476)	(108,807)

3.3.1.6 Variance for 2021 Bridge Year vs 2022 Test Year

Table 3.3-L – 2022 Test (at current rates) vs. 2021 Bridge

Distribution Revenue	2021 Bridge	2022 Test (current rts)	Variance
Residential	$ 10,919,812	$ 11,006,554	$ 86,742
General Service Less than 50 kW	$ 1,769,590	$ 1,790,407	$ 20,817
General Service 50 to 4,999 kW	$ 5,022,801	$ 5,061,249	$ 38,447
Street Light	$ 243,122	$ 248,442	$ 5,320
Sentinel Lighting	$ 12,858	$ 34,790	$ 21,932
Unmetered Scattered Load	$ 80,428	$ 79,829	$ (599)
Embedded Distributor	$ 159,903	$ 161,412	$ 1,509
Total	$ 18,208,514	$ 18,382,682	$ 174,168

Table 3.3-M – 2022 Test (at proposed rates) vs. 2021 Bridge

Distribution Revenue	2021 Bridge	2022 Test - Proposed	Variance
Residential	$ 10,919,812	$ 14,232,489	$ 3,312,678
General Service Less than 50 kW	$ 1,769,590	$ 2,218,670	$ 449,080
General Service 50 to 4,999 kW	$ 5,022,801	$ 5,659,355	$ 636,554
Street Light	$ 243,122	$ 305,942	$ 62,821
Sentinel Lighting	$ 12,858	$ 43,196	$ 30,338
Unmetered Scattered Load	$ 80,428	$ 96,182	$ 15,754
Embedded Distributor	$ 159,903	$ 223,963	$ 64,060
Total	$ 18,208,514	$ 22,779,797	$ 4,571,283

Table 3.3-L shows none of the rate classes would have a material variance in 2022 from 2021 if rates remain the same. The Residential, GS <50 kW and GS>50KW rate classes would have a variance above the threshold at the proposed rates (see Table 3.3-M). The remaining rates classes all are below the threshold of $115,000. The corresponding consumption and demand variance can be seen in Table 3.3-N below. The variance is as a result of the rate changes combined with estimated higher consumption resulting from the forecast.

Table 3.3-N – Billing Determinants – 2022 Test vs. 2021 Bridge

	Customers/Connections			kWh		kW		Volumetric Variance	
	2021 Bridge	2022 Test	Variance	2021 Bridge	2022 Test	2021 Bridge	2022 Test	kWh	kW
Residential	37,371	37,668	297	281,856,415	293,509,087	-	-	11,652,672	-
General Service Less than 50 kW	2,956	2,981	26	76,054,488	77,363,528	-	-	1,309,040	-
General Service 50 to 4,999 kW	501	509	8	496,743,331	503,997,167	1,329,482	1,348,962	7,253,836	19,480
Street Light	5,771	5,771	-	7,357,575	7,775,272	22,103	22,948	417,697	845
Sentinel Lighting	485	476	(9)	170,250	154,391	510	462	(15,859)	(48)
Unmetered Scattered Load	405	402	(3)	1,506,368	1,502,728	-	-	(3,639)	-
Embedded Distributor	2	2	-	43,459,857	43,894,456	101,593	102,609	434,599	1,016
Total	47,491	47,809	318	907,148,284	928,196,629	1,453,688	1,474,981	21,048,345	21,293

3.4 Other Revenue

3.4.1 Variance Analysis of Other Revenue

Table 3.4-A below is Appendix 2-H-Other Operating Revenue.

Table 3.4-A – Appendix 2-H- Other Operating Revenue

Appendix 2-H
Other Operating Revenue

USoA #	USoA Description	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
		2017	2018	2019	2020	2021	2022
	Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	Specific Service Charges	-$ 356,655	-$ 335,683	-$ 603,136	-$ 640,437	-$ 625,825	-$ 188,127
4225	Late Payment Charges	-$ 281,546	-$ 235,598	-$ 326,283	-$ 359,302	-$ 336,598	-$ 341,499
4082	Retail Services Revenues	-$ 16,290	-$ 11,859	-$ 10,828	-$ 8,789	-$ 29,641	-$ 28,042
4086	SSS Revenue	-$ 115,299	-$ 117,154	-$ 117,891	-$ 121,153	-$ 125,287	-$ 126,691
4084	Service Tax Requests	-$ 7,072	-$ 5,125	-$ 5,624	-$ 6,057	-$ 673	-$ 637
4090	Electric Services Incidental to Energy Sales	$ -	$ -	$ -	$ -	$ -	$ -
4205	Interdepartmental Rents	$ -	$ -	$ -	$ -	$ -	$ -
4210	Rent from Electic Property	-$ 113,253	-$ 123,556	-$ 147,806	-$ 259,429	-$ 239,773	-$ 420,792
4215	Other Utility Operating Income	$ -	$ -	$ -	$ -	$ -	$ -
4220	Other Electric Revenues	-$ 90	$ 180	-$ 34,270	-$ 14,733	$ -	$ -
4240	Provision for Rate Refunds	$ -	$ -	$ -	$ -	$ -	$ -
4245	Government Assistance Directly Credited to Income	$ -	$ -	$ -	$ -	$ -	$ -
4305	Regulatory Debits	$ -	$ -	$ -	$ -	$ -	$ -
4310	Regulatory Credits	$ -	$ -	$ -	$ -	$ -	$ -
4315	Revenues from Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -	$ -
4320	Expenses of Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -	$ -
4325	Revenues from Merchandise, Jobbing, Etc.	$ -	$ -	$ -	$ -	$ -	$ -
4330	Costs and Expenses of Merchandising, Jobbing, Etc	$ -	$ -	$ -	$ -	$ -	$ -
4335	Profits and Losses from Financial Instrument Hedges	$ -	$ -	$ -	$ -	$ -	$ -
4340	Profits and Losses from Financial Instrument Investments	$ -	$ -	$ -	$ -	$ -	$ -
4345	Gains from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -	$ -
4350	Losses from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -	$ -
4355	Gain on Disposition of Utility and Other Property	$ 60,527	$ 213,961	$ 110,195	$ 289,331	$ 199,944	$ 178,900
4360	Loss on Disposition of Utility and Other Property	$ -	$ -	$ -	$ -	$ -	$ -
4362		$ -	$ -	$ -	$ -	$ -	$ -
4365	Gains from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -	$ -
4370	Losses from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -	$ -
4375	Revenues from Non-Utility Operations	-$ 1,631,477	-$ 1,929,363	-$ 1,864,026	-$ 1,144,322	-$ 4,333,149	-$ 822,068
4380	Expenses from Non-Utility Operations	$ 1,673,837	$ 1,912,722	$ 2,243,845	$ 1,156,985	$ 4,211,035	$ 789,852
4385	Expenses of Non-Utility Operations	$ -	$ -	$ -	$ -	$ -	$ -
4390	Miscellaneous Non-Operating Income	-$ 130,030	-$ 45,905	-$ 28,357	-$ 34,795	-$ 6,542	$ -
4395	Rate-Payer Benefit Including Interest	$ -	$ -	$ -	$ -	$ -	$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	$ -	$ -	$ -	$ -	$ -	$ -
4405	Interest and Dividend Income	-$ 163,612	-$ 316,999	-$ 288,258	-$ 96,066	-$ 99,315	-$ 107,928
4415	Equity in Earnings of Subsidiary Companies	$ -	$ -	$ -	$ -	$ -	$ -
4420							
Specific Service Charges		-$ 356,655	-$ 335,683	-$ 603,136	-$ 640,437	-$ 625,825	-$ 188,127
Late Payment Charges		-$ 281,546	-$ 235,598	-$ 326,283	-$ 359,302	-$ 336,598	-$ 341,499
Other Operating Revenues		-$252,003.75	-$257,512.94	-$316,418.86	-$410,161.08	-$395,374.04	-$576,162.13
Other Income or Deductions		-$190,755.14	-$165,583.52	$173,399.17	$171,132.76	-$28,026.86	$38,756.02
Total		-$ 1,080,960	-$ 994,377	-$ 1,072,439	-$ 1,238,768	-$ 1,385,823	-$ 1,067,032

Account 4235 - Specific Service Charges

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
FIELD COLLECTION CHARGE	-$ 169,765	-$ 160,466	-$ 64,016	$ -	$ -	$ -
RECONNECT AT METER - RE/AF/REG/AFT	-$ 13,865	-$ 8,285	-$ 3,477	-$ 6,320	-$ 8,453	-$ 8,453
TEMPORARY OVERHEAD CHAR	-$ 2,500	$ -	-$ 2,000	-$ 4,000	-$ 1,500	-$ 1,500
ARREARS CERTIFICATE REV	-$ 213	-$ 330	-$ 90	-$ 360	-$ 211	-$ 211
CREDIT CHECK FEE/RETURNED CHEQUE CH	-$ 6,586	-$ 6,543	-$ 6,243	-$ 4,920	-$ 6,457	-$ 6,457
NEW ACCOUNT SET UP FEE	-$ 156,800	-$ 150,690	-$ 141,135	-$ 173,995	-$ 159,542	-$ 162,732
MFIT SERVICE CHARGES	-$ 6,927	-$ 9,369	-$ 10,022	-$ 9,953	-$ 8,773	-$ 8,773
REG MVNT - FIELD COLLECTION CHARGE		$ -	-$ 376,153	-$ 440,889	-$ 440,889	$ -
Total	-$ 356,655	-$ 335,683	-$ 603,136	-$ 640,437	-$ 625,825	-$ 188,127

Account 4225 - Late Payment Charges

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis	-163612.23	-316998.89	-288257.59	-96065.67	-99315.165	-107927.938
LATE PAYMENT REVENUE - CIS	-$ 281,546	-$ 235,598	-$ 326,283	-$ 359,302	-$ 336,598	-$ 341,499
LATE PAYMENT REVENUE - OTHER	$ -	$ -	$ -	$ -	$ -	$ -
Total	-$ 281,546	-$ 235,598	-$ 326,283	-$ 359,302	-$ 336,598	-$ 341,499

4082 - Retail Services Revenues

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
ONE-TIME CHARGE - NEW RETAILER	$ -	$ -	$ -	$ -	$ -	$ -
MONTHLY FIXED CHARGE	-$ 4,080	-$ 4,080	-$ 6,520	-$ 6,924	-$ 6,554	-$ 6,200
MONTHLY VARIABLE CHARGE	-$ 12,345	-$ 10,305	-$ 14,926	-$ 15,581	-$ 14,465	-$ 13,685
DCBR MONTHLY CHARGE	-$ 7,048	-$ 5,879	-$ 8,795	-$ 9,306	-$ 8,622	-$ 8,157
REGULATORY MOVEMENT - RSVA ADJUSTN	$ 7,183	$ 8,405	$ 19,412	$ 23,022	$ -	$ -
Total	-$ 16,290	-$ 11,859	-$ 10,828	-$ 8,789	-$ 29,641	-$ 28,042

Account 4086 - SSS Revenue

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
SSS ADMIN - RESIDENTIAL	-$ 103,585	-$ 105,353	-$ 106,197	-$ 109,402	-$ 112,533	-$ 113,830
SSS ADMIN - GS <50KW	-$ 7,795	-$ 7,814	-$ 7,783	-$ 7,807	-$ 8,499	-$ 8,535
SSS ADMIN - UMETERED	-$ 1,273	-$ 1,261	-$ 1,224	-$ 1,231	-$ 1,228	-$ 1,218
SSS ADMIN - GS >50KW	-$ 1,113	-$ 1,184	-$ 1,141	-$ 1,181	-$ 1,509	-$ 1,542
SSS ADMIN - STREET LIGHTING	-$ 3	-$ 3	-$ 3	-$ 3	-$ 3	-$ 3
SSS ADMIN - SENTINEL LIGHTI	-$ 1,529	-$ 1,539	-$ 1,504	-$ 1,471	-$ 1,515	-$ 1,563
SSS ADMIN - CLASS A	$ -	$ -	-$ 40	-$ 57	$ -	$ -
Total	-$ 115,299	-$ 117,154	-$ 117,891	-$ 121,153	-$ 125,287	-$ 126,691

Account 4084 - Service Tax Requests

	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
RCVA REVENUE - STR - REQUEST FEE	-$ 158	-$ 115	-$ 213	-$ 265	-$ 310	-$ 293
RCVA REVENUE - STR - ACCEPT FEE	-$ 211	-$ 164	-$ 349	-$ 314	-$ 363	-$ 343
REGULATORY MOVEMENT - RSVA ADJUSTN	-$ 6,704	-$ 4,846	-$ 5,063	-$ 5,479	$ -	$ -
Total	-$ 7,072	-$ 5,125	-$ 5,624	-$ 6,057	-$ 673	-$ 637

Account 4210 - Rent from Electric Property

	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis			**-376152.9**	**-440889**	**-440889**	
Pole Rental Revenues Other	-$ 65,290	-$ 74,565	-$ 96,848	-$ 208,002	-$ 189,368	-$ 320,385
Pole Rental Revenues Affiliates	-$ 47,963	-$ 48,991	-$ 50,958	-$ 51,427	-$ 50,405	-$ 100,407
Total	-$ 113,253	-$ 123,556	-$ 147,806	-$ 259,429	-$ 239,773	-$ 420,792

Account 4220 - Other Electric Revenues

	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
OCCUPANCY/COLLECTION REVENUE	-$ 90	$ 180	-$ 3,655	$ -	$ -	$ -
OTHER ELEC REV	$ -	$ -	-$ 30,615	-$ 14,733	$ -	$ -
Total	-$ 90	$ 180	-$ 34,270	-$ 14,733	$ -	$ -

Account 4355 - Gain on Disposition of Utility

	2017 Actual²	2018 Actual²	2019 Actual²	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
PROCEEDS ON DISPOSAL OF ASSETS	-$ 55,000	-$ 9,000	-$ 63,746	-$ 41,783	$ -	$ -
NBV OF DISPOSED ASSETS	$ -	$ -	$ -	$ -	$ -	$ -
NBV OF DISPOSED ASSETS.FINANCE..	$ 115,527	$ 222,961	$ 173,941	$ 331,113	$ 199,944	$ 178,900
Total	$ 60,527	$ 213,961	$ 110,195	$ 289,331	$ 199,944	$ 178,900

1

Account 4375 - Revenues from Non-Utility C

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
Affiliate Management Fees	-$ 254,673	-$ 193,688	-$ 245,124	-$ 218,636	-$ 206,837	-$ 195,240
CDM Bonus	-$ 1,376,804	-$ 1,690,308	-$ 1,553,047	-$ 304,847	-$ 3,465,893	$ -
Affordability Fund Trust	$ -	-$ 45,367	-$ 65,854	$ 49,235	$ -	$ -
Gain On Non-Utility Property	$ -	$ -	$ -	-$ 649,992	$ -	$ -
Affiliate Rental				-$ 28,625	-$ 31,674	-$ 39,277
New Building Rental Income- Non-Utility	$ -	$ -	$ -	$ 8,543	-$ 628,745	-$ 587,551
Total	-$ 1,631,477	-$ 1,929,363	-$ 1,864,026	-$ 1,144,322	-$ 4,333,149	-$ 822,068

Account 4380 - Expenses from Non-Utility C

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
BEC Management Fees	$ 97,910	$ 93,422	$ 214,302	$ 279,356	$ -	$ -
Affiliate Allocations	$ 268,119	$ 138,492	$ 129,492	$ 180,563	$ 182,030	$ 195,458
CDM Bonus	$ 1,307,807	$ 1,643,957	$ 1,675,071	$ 287,859	$ 3,468,586	$ 2,475
Affordability Trust	$ -	$ 30,570	$ 10,403	$ 12,529	$ -	$ -
New Building Operational Cost- Non-Utility	$ -	$ 6,280	$ 214,577	$ 396,678	$ 560,419	$ 591,918
Total	$ 1,673,837	$ 1,912,722	$ 2,243,845	$ 1,156,985	$ 4,211,035	$ 789,852

Account 4390 - Miscellaneous Non-Operatir

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
Sales of Scrap	-$ 36,175	-$ 2,501	-$ 9,126	-$ 20,491	$ -	$ -
DERIVATIVE GAIN/LOSS	-$ 93,421	-$ 42,125	-$ 19,230	-$ 14,304	-$ 6,542	$ -
Other	-$ 434	-$ 1,279	$ -	$ -	$ -	$ -
Total	-$ 130,030	-$ 45,905	-$ 28,357	-$ 34,795	-$ 6,542	$ -

Account 4405 - Interest and Dividend Incon

	2017 Actual[2]	2018 Actual[2]	2019 Actual[2]	2020 Actual	Bridge Year	Test Year
	2017	2018	2019	2020	2021	2022
Reporting Basis						
Interest income on Bank Balance	-$ 163,612	-$ 316,999	-$ 288,258	-$ 96,066	-$ 99,315	-$ 107,928
Total	-$ 163,612	-$ 316,999	-$ 288,258	-$ 96,066	-$ 99,315	-$ 107,928

1

2

Table 3.4-B below provides the variances on the Other Revenue included in BPI's Operating Revenue.

Table 3.4-B – Total Other Revenue

USoA #	USoA Description	Actual Year 2017	Actual Year 2018	Variance 2018 vs 2017	Actual Year 2019	Variance 2019 vs 2018	Actual Year 2020	Variance 2020 vs 2019	Bridge Year 2021	Variance 2021Bridge vs 2020	Test Year 2022	Variance 2022Test vs 2021 Bridge
	Reporting Basis	MIFRS	MIFRS		MIFRS		MIFRS		MIFRS		MIFRS	
4235	Specific Service Charges	(356,655)	(335,683)	20,972	(603,136)	(267,452)	(640,437)	(37,301)	(625,825)	14,612	(188,127)	437,698
4225	Late Payment Charges	(281,546)	(235,598)	45,948	(326,283)	(90,686)	(359,302)	(33,019)	(336,598)	22,705	(341,499)	(4,902)
4086	SSS Revenue	(115,299)	(117,154)		(117,891)		(121,153)	(3,262)	(125,287)	(4,135)	(126,691)	(1,404)
4082	Retail Services Revenues	(16,290)	(11,859)	4,431	(10,828)	1,030	(8,789)	2,039	(29,641)	(20,851)	(28,042)	1,598
4084	Service Tax Requests	(7,072)	(5,125)	1,947	(5,624)	(500)	(6,057)	(432)	(673)	5,384	(637)	36
4090	Electric Services Incidental to Energy Sales	-	-	-	-	-	-	-	-	-	-	-
4205	Interdepartmental Rents	-	-	-	-	-	-	-	-	-	-	-
4210	Rent from Electic Property	(113,253)	(123,556)	(10,303)	(147,806)	(24,250)	(259,429)	(111,624)	(239,773)	19,656	(420,792)	(181,019)
4215	Other Utility Operating Income	-	-	-	-	-	-	-	-	-	-	-
4220	Other Electric Revenues	(90)	180	270	(34,270)	(34,450)	(14,733)	19,537	-	14,733	-	-
4240	Provision for Rate Refunds	-	-	-	-	-	-	-	-	-	-	-
4245	Government Assistance Directly Credited to Income	-	-	-	-	-	-	-	-	-	-	-
4305	Regulatory Debits	-	-	-	-	-	-	-	-	-	-	-
4310	Regulatory Credits	-	-	-	-	-	-	-	-	-	-	-
4315	Revenues from Electric Plant Leased to Others	-	-	-	-	-	-	-	-	-	-	-
4320	Expenses of Electric Plant Leased to Others	-	-	-	-	-	-	-	-	-	-	-
4325	Revenues from Merchandise, Jobbing, Etc.	-	-	-	-	-	-	-	-	-	-	-
4330	Costs and Expenses of Merchandising, Jobbing, Etc	-	-	-	-	-	-	-	-	-	-	-
4335	Profits and Losses from Financial Instrument Hedges	-	-	-	-	-	-	-	-	-	-	-
4340	Profits and Losses from Financial Instrument Investments	-	-	-	-	-	-	-	-	-	-	-
4345	Gains from Disposition of Future Use Utility Plant	-	-	-	-	-	-	-	-	-	-	-
4350	Losses from Disposition of Future Use Utility Plant	-	-	-	-	-	-	-	-	-	-	-
4355	Gain on Disposition of Utility and Other Property	60,527	213,961	153,433	110,195	(103,766)	289,331	179,136	199,944	(89,387)	178,900	(21,044)
4360	Loss on Disposition of Utility and Other Property	-	-	-	-	-	-	-	-	-	-	-
4365	Gains from Disposition of Allowances for Emission	-	-	-	-	-	-	-	-	-	-	-
4370	Losses from Disposition of Allowances for Emission	-	-	-	-	-	-	-	-	-	-	-
4375	Revenues from Non-Utility Operations	(1,631,477)	(1,929,363)	(297,886)	(1,864,026)	65,337	(1,144,322)	719,704	(4,333,149)	(3,188,827)	(822,068)	3,511,081
4380	Expenses from Non-Utility Operations	1,673,837	1,912,722	238,885	2,243,845	331,123	1,156,985	(1,086,860)	4,211,035	3,054,050	789,852	(3,421,183)
4385	Expenses of Non-Utility Operations	-	-	-	-	-	-	-	-	-	-	-
4390	Miscellaneous Non-Operating Income	(130,030)	(45,905)	84,125	(28,357)	17,548	(34,795)	(6,438)	(6,542)	28,253	-	6,542
4395	Rate-Payer Benefit Including Interest	-	-	-	-	-	-	-	-	-	-	-
4398	Foreign Exchange Gains and Losses, Including Amortization	-	-	-	-	-	-	-	-	-	-	-
4405	Interest and Dividend Income	(163,612)	(316,999)	(153,387)	(288,258)	28,741	(96,066)	192,192	(99,315)	(3,249)	(107,928)	(8,613)
4415	Equity in Earnings of Subsidiary Companies	-	-	-	-	-	-	-	-	-	-	-
Specific Service Charges		(356,655)	(335,683)		(603,136)		(640,437)		(625,825)		(188,127)	
Late Payment Charges		(281,546)	(235,598)		(326,283)		(359,302)		(336,598)		(341,499)	
Other Operating Revenues		(252,004)	(257,513)		(316,419)		(410,161)		(395,374)		(576,162)	
Other Income or Deductions		(190,755)	(165,584)		173,399		171,133		(28,027)		38,756	
Total		(1,080,960)	(994,377)	-	(1,072,439)		(1,238,768)		(1,385,823)		(1,067,032)	

Each variance above the materiality threshold of $115,000 as calculated in Exhibit 1 is highlighted in gray and an explanation for the variance is provided below.

Table 3.4-C - Variances in Other Revenue - 2017 Actual vs. 2018 Actual

USoA #	USoA Description	Actual Year 2017	Actual Year 2018	Variance 2018 vs 2017
	Reporting Basis	MIFRS	MIFRS	
4355	Gain on Disposition of Utility and Other Property	60,527	213,961	153,433
4375	Revenues from Non-Utility Operations	(1,631,477)	(1,929,363)	(297,886)
4380	Expenses from Non-Utility Operations	1,673,837	1,912,722	238,885
4405	Interest and Dividend Income	(163,612)	(316,999)	(153,387)

The variance in 4355 is related to a higher level of net loss on early disposals recorded in 2018 compared to 2017. The overall level of early disposals was higher in 2018, and the offsetting proceeds on disposal were also lower in 2019.

The variance in 4375 was driven by higher CDM activity in 2018, compared to 2017 as well as the introduction of the affordability fund trust. Revenues from affiliates decreased by a non-material amount.

The variance in 4380 was driven by higher CDM activity in 2018, compared to 2017 as well as the introduction of the affordability fund trust. Costs from affiliates decreased by a non-material amount. BPI notes that the BEC Management Fees recorded in Expenses from Non-Utility Operations are costs incurred from BEC for Management services provided to BPI, rather than costs incurred in BPI for BEC with no offsetting revenue collected.

Interest income from bank balances increased in 2018 over 2017 levels.

Table 3.4-D - Variances in Other Revenue - 2018 Actual vs. 2019 Actual

USoA #	USoA Description	Actual Year 2018	Actual Year 2019	Variance 2019 vs 2018
	Reporting Basis	MIFRS	MIFRS	
4235	Specific Service Charges	(335,683)	(603,136)	(267,452)
4380	Expenses from Non-Utility Operations	1,912,722	2,243,845	331,123

Specific Service charges increased in 2019 compared to 2018. This increase was driven by the inclusion of "regulatory movement" or the offsetting entry for the Collection of Account DVA. In reality, the specific service charges collected from customers decreased by 108k, as a result of the full elimination of the Collection of Account charge partway through 2019.

Expenses from non-utility operations increased in 2019 as a result of booking OM&A expenses allocated to the non-regulated portions of the building to this account. BPI purchased its new facility in 2019. BPI notes there is no offsetting entry included in 4375 because BPI did not have any tenants and therefore did not collect any lease/rental revenue in 2019.

Table 3.4-E - Variances in Other Revenue - 2019 Actual vs. 2020 Actual

USoA #	USoA Description	Actual Year 2019	Actual Year 2020	Variance 2020 vs 2019
	Reporting Basis	MIFRS	MIFRS	
4355	Gain on Disposition of Utility and Other Property	110,195	289,331	179,136
4375	Revenues from Non-Utility Operations	(1,864,026)	(1,144,322)	719,704
4380	Expenses from Non-Utility Operations	2,243,845	1,156,985	(1,086,860)
4405	Interest and Dividend Income	(288,258)	(96,066)	192,192

4355 increased in 2020 as a result of higher early asset disposals. Revenues from Non Utility Operations were reduced compared to the prior year due to lower CDM activity. In 2020, BPI recorded a gain on non-utility property following the sale of its Garden Avenue property. BPI notes this property was never funded through rates. Expenses from Non-Utility Operations decreased in 2020, driven by a decrease in CDM activity. Non-Utility facility costs increased in 2020 as BPI owned the facility for the entire year, and the building became occupied, increasing operating costs as compared to a vacant building in 2019.

Interest and dividend income decreased as a result of lower bank interest. BPI notes that it began to collect offsetting rent for its new facility in 2020 (though this did not represent a material amount).

Table 3.4-F - Variances in Other Revenue - 2020 Actual Year vs. 2021 Bridge

USoA #	USoA Description	Actual Year 2020	Bridge Year 2021	Variance 2021Bridge vs 2020
	Reporting Basis	MIFRS	MIFRS	
4375	Revenues from Non-Utility Operations	(1,144,322)	(4,333,149)	(3,188,827)
4380	Expenses from Non-Utility Operations	1,156,985	4,211,035	3,054,050

Revenues from Non Utility Operations are projected to increase as a result of anticipated final CDM bonuses and incentives in 2021. BPI will also collect a projected 630k in rental income in 2021.

Expenses from Non Utility Operations are expected to increase in 2020 related to CDM incentives paid. BPI also expects a further increase in facility OM&A costs allocated as non-utility.

Table 3.4-F - Variances in Other Revenue - 2021 Bridge Year vs. 2022 Test

USoA #	USoA Description	Bridge Year	Test Year	Variance 2022Test vs 2021 Bridge
		2021	2022	
	Reporting Basis	MIFRS	MIFRS	
4235	Specific Service Charges	(625,825)	(188,127)	437,698
4210	Rent from Electic Property	(239,773)	(420,792)	(181,019)
4375	Revenues from Non-Utility Operations	(4,333,149)	(822,068)	3,511,081
4380	Expenses from Non-Utility Operations	4,211,035	789,852	(3,421,183)

Specific Service Charge revenue is shown as decreasing in 2022, however this is related to the elimination of the "regulatory movement" line associated with the Lost Revenues- Collection of Accounts DVA. The DVA regulatory movement is not expected to continue into 2022, as the Test Year will result in the discontinuation of the DVA as distribution rates are rebased to reflect the elimination of this charge. Similarly, Account 4210, Rent from Electric Property, will increase as a result of BPI recording pole rental revenue at the updated rates, and the elimination of the requirement to book only the revenues associated with 2017 pole rental rates, with the remainder being recorded in a DVA. BPI notes it has projected pole rental revenue based on current rates on its tariff schedule. Should an unexpected adjustment be made to the pole rental rates, BPI has requested the continuation of the pole rental DVA.

The reduction to 4375 is the result of reduced expected CDM incentives and bonuses. BPI has included the revenues to offset the components of the OM&A facilities budget which have been allocated as non-affiliate. There is a small discrepancy between the amounts in 4375 and 4380 to reflect the amount of $6,966 to be collected as "Emergency Operations Centre" payments. BPI will provide this temporary service to the City of Brantford Emergency Services and has included the revenue collected as revenue offset.

The reduction in 4380 is the result of reduced expected CDM incentives and bonuses. BPI has included the components of the OM&A facilities budget which have been allocated as non-affiliate.

BPI has not included "capital rent" paid by its tenants in the revenue offsets. BPI has already made adjustments to remove the capital components of the non-utility portion of the building from rate base, amortization expense and PILS for rate setting purposes, so to include the capital rent in revenue offsets would result in a "double counting" effect on rates. BPI notes this treatment is consistent with the proposals included in its ICM.

3.4.1 Service Changes of Other Revenue

BPI is not requesting any new proposed specific service charges, or proposed changes to rates or application of existing specific service charges.

3.5 Other Rate Changes

BPI has not proposed any charges to other rates and charges, and therefore no discrete customer groups are expected to be impacted by such changes.

3.6 Affiliate Transactions

Please refer to Appendix 2-N for a listing of revenue from affiliate transactions, shared services, corporate cost allocation. For each affiliate transaction, identification of the service, the nature of the service provided to affiliate entities, accounts used to record the revenue and associated costs (Appendix 2-N). Please also see the discussion and variance analysis provided in Exhibit 4, section 4.3.2.

List of Attachments

Attachment 3-A - Monthly Data used in Regression Model

Attachment 3-B – Appendix 2-IB- Load Forecast

Attachment 3-C – Appendix 2-I-LF_CDM

Attachment 3-A

Regression Model (Data and Results)

Brantford Power Weather Normal Load Forecast for 2022 Rate Application

	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Weather Normal, CDM Adjusted	2022 Weather Normal, CDM Adjusted
Actual kWh Purchases	950,759,113	944,902,732	964,379,231	961,335,479	913,546,785	920,489,867	928,717,585	914,942,349	965,883,912	959,330,221	961,031,703		
Predicted kWh Purchases	960,319,810	958,844,382	950,666,119	927,029,805	918,015,075	924,465,660	950,199,934	927,473,628	962,401,471	944,871,387	917,239,284	881,577,393	902,766,029
% Difference	1.0%	1.5%	-1.4%	-3.6%	0.5%	0.4%	2.3%	1.4%	-0.4%	-1.5%	-4.6%		
Billed kWh	**917,169,662**	**919,260,512**	**936,319,334**	**926,349,236**	**889,619,639**	**904,891,892**	**909,331,461**	**892,260,753**	**934,510,743**	**932,356,870**	**933,148,230**	**857,658,459**	**878,272,205**
											Change from 2019	-8.01%	-5.80%
By Class													
Residential													
Customers	34,256	34,643	34,938	35,226	35,479	35,744	36,043	36,241	36,521	36,733	37,077	37,371	37,668
kWh	287,357,342	291,380,972	287,058,174	282,501,947	282,925,750	287,594,336	291,787,861	273,448,641	301,310,523	292,180,865	315,774,546	281,856,415	293,509,087
GS<50													
Customers	2,688	2,709	2,728	2,749	2,772	2,784	2,792	2,798	2,804	2,834	2,930	2,956	2,981
kWh	98,691,975	99,001,655	100,340,238	99,838,335	99,356,580	100,078,635	99,573,959	96,495,542	94,728,588	93,124,427	87,228,067	76,054,488	77,363,528
GS>50 (excl. WMP)													
Customers	417	421	419	424	432	438	452	457	483	489	491	499	507
kWh	521,725,747	519,515,098	539,521,215	534,621,114	497,985,709	507,886,846	508,774,431	513,281,236	529,592,600	538,150,482	521,485,545	490,713,363	497,967,199
kW	1,323,482	1,344,251	1,398,784	1,395,148	1,368,652	1,388,241	1,378,958	1,400,391	1,435,245	1,450,909	1,428,137	1,317,808	1,337,288
Embedded Distributor													
Customers	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	2.00	2	2
kWh	0	0	0	0	0	0	65,359,955	43,309,246	41,227,723	41,261,684	43,029,562	43,459,857	43,894,456
kW	158,115	156,839	153,310	159,286	164,324	142,203	136,187	107,291	95,219	97,683	100,587	101,593	102,609
Sentinels													
Connections	603	621	625	625	622	619	551	512	507	501	495	485	476
kWh	480,615	475,427	459,394	448,778	445,147	446,247	314,139	186,504	190,023	194,958	187,739	170,250	154,391
kW	1,534	1,487	1,392	1,385	1,361	1,363	923	570	520	568	554	510	462
Streetlights													
Connections	9,953	9,988	10,134	10,232	10,392	10,632	10,229	5,769	5,771	5,771	5,771	5,771	5,771
kWh	7,354,351	7,330,830	7,395,374	7,386,717	7,378,259	7,369,714	7,368,093	7,324,649	7,191,580	7,147,042	6,962,317	7,357,575	7,775,272
kW	22,480	22,428	22,533	22,581	22,553	22,527	22,444	22,338	22,227	21,979	21,543	22,103	22,948
USL													
Connections	446	446	443	438	434	431	427	425	420	408	409	405	402
kWh	1,559,632	1,556,530	1,544,939	1,552,345	1,528,194	1,516,114	1,512,978	1,524,181	1,497,429	1,559,095	1,510,016	1,506,368	1,502,728
Wholesale Market Participants		0											
Connections			2	2	2	2	2	2	2	2	2	2	2
kWh			0	0	0	6,792,378	6,607,289	6,489,035	6,330,357	6,085,995	6,029,968	6,029,968	6,029,968
kW			3,486.38	13,589.76	12,736.70	12,397.70	12,437.30	12,330.00	12,258.00	10,962.46	11,674.01	11,674	11,674
Total of Above													
Customer/Connections	48,365	48,830	49,292	49,696	50,135	50,651	50,498	46,205	46,510	46,740	47,176	47,491	47,809
kWh	917,169,662	919,260,512	936,319,334	926,349,236	889,619,639	911,684,270	981,298,705	942,059,034	982,068,823	979,704,549	982,207,759	907,148,284	928,196,629
kW from applicable classes	1,505,612	1,525,006	1,579,506	1,591,990	1,569,627	1,566,733	1,550,950	1,542,920	1,565,469	1,582,102	1,562,495	1,453,688	1,474,981
Less: Total from Model													
Customer/Connections	48,362	48,827	49,287	49,691	50,130	50,646	50,494	46,201	46,506	46,736	47,172	47,487	47,805
kWh	917,169,662	919,260,512	936,319,334	926,349,236	889,619,639	904,891,892	909,331,461	892,260,753	934,510,743	932,356,870	933,148,230	857,658,459	878,272,205
kW from applicable classes	1,347,497	1,368,166	1,422,709	1,419,114	1,392,566	1,412,132	1,402,325	1,423,299	1,457,992	1,473,456	1,450,234	1,340,421	1,360,699
Less: Embedded +WMP													
Customer/Connections	3.00	3.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4	4
kWh	-	-	-	-	-	6,792,377.60	71,967,244.00	49,798,281.00	47,558,080.00	47,347,679.01	49,059,529.37	49,489,825	49,924,424
kW from applicable classes	158,115.16	156,839.26	156,796.84	172,875.47	177,061.14	154,601.12	148,624.50	119,621.00	107,476.60	108,645.51	112,260.93	113,267	114,283
Check should all be zero													
Customer/Connections	0	0	0	0	0	0	0	0	0	0	0	-	-
kWh	0	0	0	0	0	0	0	0	0	0	0	-	-
kW from applicable classes	0	0	0	0	0	0	0	0	0	0	0	-	-
GS>50 with WMP													
Connections	417	421	421	426	434	440	454	459	485	491	493	501	509
kWh	521,725,747	519,515,098	539,521,215	534,621,114	497,985,709	514,679,224	515,381,720	519,770,271	535,922,957	544,236,477	527,515,513	496,743,331	503,997,167
kW	1,323,482	1,344,251	1,402,270	1,408,738	1,381,389	1,400,639	1,391,396	1,412,721	1,447,503	1,461,872	1,439,811	1,329,482	1,348,962

*detail from the YoY RRR summary

	Purchases	Modeled Purchases	Difference	% Difference	Loss Factor	Total Billed	Residential	GS<50	GS>50 (excl. WMP)	Sentinels	Streetlights	USL				
	Weatther Normal Projection															
2010	950,759,113	960,319,810	9,560,698	1.0%	1.0366	917,169,662	287,357,342	98,691,975	521,725,747	480,615	7,354,351	1,559,632	32%	11%	57%	
2011	944,902,732	958,844,382	13,941,650	1.5%	1.0279	919,260,512	291,380,972	99,001,655	519,515,098	475,427	7,330,830	1,556,530	32%	11%	57%	4,023,630
2012	964,379,231	950,666,119	(13,713,111)	-1.4%	1.0300	936,319,334	287,058,174	100,340,238	539,521,215	459,394	7,395,374	1,544,939	31%	11%	58%	-4,322,798
2013	961,335,479	927,029,805	(34,305,674)	-3.6%	1.0378	926,349,236	282,501,947	99,838,335	534,621,114	448,778	7,386,717	1,552,345	31%	11%	58%	-4,556,227
2014	913,546,785	918,015,075	4,468,290	0.5%	1.0269	889,619,639	282,925,750	99,356,580	497,985,709	445,147	7,378,259	1,528,194	32%	11%	57%	423,803
2015	920,489,867	924,465,660	3,975,793	0.4%	1.0172	904,891,892	287,594,336	100,078,635	507,886,846	446,247	7,369,714	1,516,114	32%	11%	57%	4,668,586
2016	928,717,585	950,199,934	21,482,350	2.3%	1.0213	909,331,461	291,787,861	99,573,959	508,774,431	314,139	7,368,093	1,512,978	32%	11%	57%	4,193,525
2017	914,942,349	927,473,628	12,531,279	1.4%	1.0254	892,260,753	273,448,641	96,495,542	513,281,236	186,504	7,324,649	1,524,181	31%	11%	58%	-18,339,220
2018	965,883,912	962,401,471	(3,482,441)	-0.4%	1.0336	934,510,743	301,310,523	94,728,588	529,592,600	190,023	7,191,580	1,497,429	33%	10%	57%	27,861,882
2019	959,330,221	944,871,387	(14,458,834)	-1.5%	1.0289	932,356,870	292,180,865	93,124,427	538,150,482	194,958	7,147,042	1,559,095	32%	10%	58%	-9,129,658
2020	961,031,703	917,239,284	(43,792,419)	-4.6%	1.0299	933,148,230	315,774,546	87,228,067	521,485,545	187,739	6,962,317	1,510,016	34%	9%	56%	23,593,681
2021		881,577,393				857,658,459										
2022		902,766,029				878,272,205										
Average					1.0279											
					May want to be consistent with proposed loss factor											
Usage Per Customer																
2010							8,389	36,723	1,251,141	798	739	3,501				
2011							8,411	36,545	1,234,003	766	734	3,494				
2012							8,216	36,782	1,287,640	735	730	3,491				
2013							8,020	36,325	1,262,388	719	722	3,548				
2014							7,974	35,849	1,152,745	716	710	3,521				
2015							8,046	35,948	1,160,884	721	693	3,522				
2016							8,096	35,661	1,125,607	570	720	3,545				
2017							7,545	34,490	1,123,768	365	1,270	3,588				
2018							8,250	33,783	1,095,898	375	1,246	3,563				
2019							7,954	32,860	1,101,075	389	1,238	3,821				
2020							8,517	29,768	1,062,810	379	1,206	3,693				
2021							8,529	29,097	1,045,319	351	1,275	3,716				
2022							8,541	28,442	1,028,116	325	1,347	3,738				
2011							1.0027	0.9952	0.9863	0.9605	0.9933	0.9980				
2012							0.9768	1.0065	1.0435	0.9593	0.9943	0.9993				
2013							0.9761	0.9876	0.9804	0.9777	0.9893	1.0163				
2014							0.9943	0.9869	0.9131	0.9967	0.9834	0.9924				
2015							1.0090	1.0027	1.0071	1.0073	0.9763	1.0002				
2016							1.0062	0.9920	0.9696	0.7898	1.0392	1.0067				
2017							0.9320	0.9672	0.9984	0.6398	1.7626	1.0121				
2018							1.0935	0.9795	0.9752	1.0289	0.9815	0.9930				
2019							0.9641	0.9727	1.0047	1.0367	0.9938	1.0724				
2020							1.0707	0.9059	0.9652	0.9755	0.9742	0.9663				
Used							1.0014	0.9775	0.9835	0.9249	1.0568	1.0062				
Geomean							1.0014	0.9775	0.9835	0.9249	1.0568	1.0062				
Non Weather Corrected Forecast																
2021						935,078,335	318,725,610	86,003,056	521,315,477	170,250	7,357,575	1,506,368				
2022						937,077,356	321,704,252	84,795,249	521,145,464	154,391	7,775,272	1,502,728				
Weather Corrected Forecast													Total			
2021						857,658,459	281,856,415	76,054,488	490,713,363	170,250	7,357,575	1,506,368	857,658,459			
2022						878,272,205	293,509,087	77,363,528	497,967,199	154,391	7,775,272	1,502,728	878,272,205			
% Weather Sensitive							67.00%	67.00%	34.00%	0.00%	0.00%	0.00%	Total			
2021						(77,419,876)	213,546,158	57,622,047	177,247,262	0	0	0	448,415,468			
2022						(58,805,150)	215,541,849	56,812,817	177,189,458	0	0	0	449,544,123			
Allocation of Weather Sensitive Amount																
2021							(36,869,195)	(9,948,568)	(30,602,114)	0	0	0	(77,419,876)			
2022							(28,195,165)	(7,431,720)	(23,178,265)	0	0	0	(58,805,150)			
Allocation of CDM Amount																
						(to be entered as negaitv	5%	5%	89%	0%	0%	0%	1			
2021						0	0	0	0	0	0	0	0			
2022						0	0	0	0	0	0	0	0			
Adjust Sentinel Light Consumption																
2021										0						
2022										0						
CDM Adjusted Weather Corrected Forecast																
2021						857,658,459	281,856,415	76,054,488	490,713,363	170,250	7,357,575	1,506,368	857,658,459			
2022						878,272,205	293,509,087	77,363,528	497,967,199	154,391	7,775,272	1,502,728	878,272,205			

average number of customers opening and closing average change 2016-2020

	Residential	GS<50	GS>50 (excl. WMP)	Sentinels	Streetlights	USL	Total
2006	32,800	2,546	399	277	9,366	456	45,843
2007	33,264	2,640	409	569	9,602	439	46,923
2008	33,684	2,702	407	585	9,740	442	47,560
2009	33,947	2,704	409	590	9,852	444	47,945
2010	34,256	2,688	417	603	9,953	446	48,362
2011	34,643	2,709	421	621	9,988	446	48,827
2012	34,938	2,728	419	625	10,134	443	49,287
2013	35,226	2,749	424	625	10,232	438	49,691
2014	35,479	2,772	432	622	10,392	434	50,130
2015	35,744	2,784	438	619	10,632	431	50,646
2016	36,043	2,792	452	551	10,229	427	50,494
2017	36,241	2,798	457	512	5,769	425	46,201
2018	36,521	2,804	483	507	5,771	420	46,506
2019	36,733	2,834	489	501	5,771	408	46,736
2020	37,077	2,930	491	495	5,771	409	47,172
2021	37,371	2,956	499	485	5,771	405	47,487
2022	37,668	2,981	507	476	5,771	402	47,805

Growth Rate in Customer Numbers

2006						
2007	1.0141	1.0369	1.0263		1.0252	0.9638
2008	1.0126	1.0235	0.9951	1.0281	1.0144	1.0068
2009	1.0078	1.0006	1.0037	1.0085	1.0115	1.0045
2010	1.0091	0.9941	1.0208	1.0212	1.0103	1.0034
2011	1.0113	1.0080	1.0096	1.0299	1.0035	1.0000
2012	1.0085	1.0070	0.9952	1.0073	1.0146	0.9933
2013	1.0082	1.0075	1.0107	0.9992	1.0096	0.9887
2014	1.0072	1.0084	1.0201	0.9952	1.0157	0.9920
2015	1.0075	1.0045	1.0127	0.9952	1.0230	0.9919
2016	1.0084	1.0030	1.0331	0.8913	0.9621	0.9913
2017	1.0055	1.0020	1.0105	0.9279	0.5640	0.9953
2018	1.0077	1.0022	1.0580	0.9902	1.0003	0.9894
2019	1.0058	1.0107	1.0114	0.9896	1.0000	0.9709
2020	1.0094	1.0340	1.0039	0.9872	1.0000	1.0022
Used	1.0079	1.0087	1.0164	0.9805	1.0000	0.9915
Geomean	1.0079	1.0087	1.0164	0.9805	0.9470	0.9915

Description: Brantford Power Embedded Distributor is billed directly by the IESO for electricity consumption, global adjustment, and other charges.
Brantford Power bills its Embedded Distributor for distribution and transmission charges only.
Based on the above, BPI does not have - or reuire- kWh billing data for its embedded distritbutor.

Historic Load	kW	Number of connections	GS>50 kWh to kW	Est. kWh
2006	24,679.71			
2007	23,111.48			
2008	136,273.85			
2009	215,796.66			
2010	158,115.16	3		
2011	156,839.26	3		
2012	153,310.46	3		
2013	159,285.71	3		
2014	164,324.44	3		
2015	142,203.42	3		
2016	136,187.20	2		65,359,955.00
2017	107,291.00	2		43,309,246.00
2018	95,218.60	2		41,227,723.00
2019	97,683.05	2		41,261,684.09
2020	100,586.92	2		43,029,561.79
2021-Forecast	101,592.79	2		43,459,857.41
2022-	102,608.72	2		43,894,455.98

Forecast Years are based on the following assumptions :

1% growth annually

	GS>50 (excl. WMP)	Sentinels	Streetlights	Total		Adjustments to streetlights
2006	1,481,343	0	21,299	1,502,642		
2007	1,489,946	0	21,758	1,511,704		
2008	1,450,726	0	22,064	1,472,790		
2009	1,326,770	0	22,380	1,349,150		
2010	1,323,482	1,534	22,480	1,347,497		
2011	1,344,251	1,487	22,428	1,368,166		
2012	1,398,784	1,392	22,533	1,422,709		
2013	1,395,148	1,385	22,581	1,419,114		
2014	1,368,652	1,361	22,553	1,392,566		
2015	1,388,241	1,363	22,527	1,412,132	* from RRR data	
2016	1,378,958	923	22,444	1,402,325	* from RRR data	
2017	1,400,391	570	22,338	1,423,299	* from RRR data	
2018	1,435,245	520	22,227	1,457,992	* from RRR data	
2019	1,450,909	568	21,979	1,473,456	* from RRR data	
2020	1,428,137	554	21,543	1,450,234	* from RRR data	
2021	1,317,808	510	22,103	1,340,421		-435
2022	1,337,288	462	22,948	1,360,699		-870

kW/kWh

2010	0.2537%	0.3192%	0.3057%
2011	0.2588%	0.3128%	0.3059%
2012	0.2593%	0.3030%	0.3047%
2013	0.2610%	0.3086%	0.3057%
2014	0.2748%	0.3057%	0.3057%
2015	0.2733%	0.3055%	0.3057%
2016	0.2710%	0.2938%	0.3046%
2017	0.2728%	0.3056%	0.3050%
2018	0.2710%	0.2737%	0.3091%
2019	0.2696%	0.2913%	0.3075%
2020	0.2739%	0.2952%	0.3094%
Average	0.2685%	0.2995%	0.3063%
5 Year Average	0.2717%	0.2919%	0.3071%

	Data						
Year	Count of Purchased	Sum of Purchased2	Sum of Heating Degree Days	Sum of Cooling Degree Days	Sum of Predicted Purchases	Sum of Predicted Less Acturals	
2010	12	950,759,113	3,501	439.6	960319810.4	-9560697.769	-1%
2011	12	944,902,732	3,648	428	958844382.3	-13941650.18	-1%
2012	12	964,379,231	3,215	477.4	950666119.4	13713111.26	1%
2013	12	961,335,479	3,775	325.8	927029805.3	34305673.69	4%
2014	12	913,546,785	4,103	264.2	918015075.3	-4468289.954	0%
2015	12	920,489,867	3,766	351.2	924465660.2	-3975793.225	0%
2016	12	928,717,585	3,462	566.4	950199934.4	-21482349.65	-2%
2017	12	914,942,349	3,502	348.5	927473628.1	-12531279.11	-1%
2018	12	965,883,912	3,758	518.7	962401471.1	3482441.044	0%
2019	12	959,330,221	3,915	342	944871386.9	14458833.9	2%
2020	12	961,031,703	3,512	497.6	917239283.8	43792419.01	5%
2021			3,682	411.98	881577393.1	-881577393.1	
2022			3,682	411.98	902766029.3	-902766029.3	

<-Forecast (GDP still an est.)
<-Forecast
<-Forecast

MMM-YYYY	Month	Year	Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP (Indexed)	Number of Days in Month	Mar	Apr	May	Oct	Trend	Predicted Purchases	Predicted Less Acturals
Jan-2010	1	2010	85,740,318	720.00	-	128.73	31	0	0	0	0	1	83,457,069	2,283,248
Feb-2010	2	2010	76,200,453	598.30	-	129.08	28	0	0	0	0	2	75,427,607	772,845
Mar-2010	3	2010	78,025,071	422.80	-	129.43	31	1	0	0	0	3	77,571,784	453,286
Apr-2010	4	2010	69,790,834	225.10	-	129.79	30	0	1	0	0	4	70,299,811	(508,977)
May-2010	5	2010	76,066,070	107.90	45.70	130.14	31	0	0	1	0	5	77,513,454	(1,447,384)
Jun-2010	6	2010	79,225,718	21.70	58.70	130.50	30	0	0	0	0	6	78,983,132	242,585
Jul-2010	7	2010	89,977,040	1.80	164.90	130.85	31	0	0	0	0	7	94,026,468	(4,049,428)
Aug-2010	8	2010	88,856,918	2.10	138.80	131.21	31	0	0	0	0	8	90,833,094	(1,976,176)
Sep-2010	9	2010	74,349,622	78.10	31.50	131.57	30	0	0	0	0	9	76,518,738	(2,169,116)
Oct-2010	10	2010	73,264,038	241.60	-	131.93	31	0	0	0	1	10	75,138,540	(1,874,501)
Nov-2010	11	2010	76,397,905	405.30	-	132.29	30	0	0	0	0	11	77,291,859	(893,954)
Dec-2010	12	2010	82,865,127	676.20	-	132.65	31	0	0	0	0	12	83,258,254	(393,127)
Jan-2011	1	2011	86,054,286	775.30	-	132.82	31	0	0	0	0	13	84,591,173	1,463,113
Feb-2011	2	2011	76,331,650	654.20	-	132.99	28	0	0	0	0	14	76,474,794	(143,144)
Mar-2011	3	2011	80,293,454	572.80	-	133.15	31	1	0	0	0	15	79,845,949	447,505
Apr-2011	4	2011	71,266,778	332.30	-	133.32	30	0	1	0	0	16	71,876,228	(609,450)
May-2011	5	2011	72,652,306	134.10	13.00	133.49	31	0	0	1	0	17	73,800,493	(1,148,187)
Jun-2011	6	2011	76,886,232	19.00	52.20	133.66	30	0	0	0	0	18	78,015,410	(1,129,178)
Jul-2011	7	2011	93,432,708	-	198.50	133.83	31	0	0	0	0	19	97,945,855	(4,513,147)
Aug-2011	8	2011	86,792,643	-	122.20	134.00	31	0	0	0	0	20	88,426,560	(1,633,917)
Sep-2011	9	2011	75,561,451	48.20	39.70	134.17	30	0	0	0	0	21	76,698,143	(1,136,692)
Oct-2011	10	2011	73,210,552	235.50	2.40	134.34	31	0	0	0	1	22	74,834,887	(1,624,336)
Nov-2011	11	2011	74,362,595	342.10	-	134.51	30	0	0	0	0	23	75,789,126	(1,426,531)
Dec-2011	12	2011	78,058,079	534.00	-	134.68	31	0	0	0	0	24	80,545,765	(2,487,686)
Jan-2012	1	2012	83,475,292	610.80	-	134.80	31	0	0	0	0	25	81,542,546	1,932,746
Feb-2012	2	2012	76,561,560	532.00	-	134.93	29	0	0	0	0	26	76,116,084	445,475
Mar-2012	3	2012	76,020,278	349.40	0.20	135.05	31	1	0	0	0	27	75,948,683	71,595
Apr-2012	4	2012	69,885,112	321.70	-	135.18	30	0	1	0	0	28	70,922,558	(1,037,447)
May-2012	5	2012	77,152,267	81.30	36.70	135.30	31	0	0	1	0	29	75,169,181	1,983,086
Jun-2012	6	2012	83,683,997	23.20	101.60	135.43	30	0	0	0	0	30	83,348,779	335,218
Jul-2012	7	2012	97,430,291	-	190.10	135.55	31	0	0	0	0	31	96,030,919	1,399,372
Aug-2012	8	2012	90,717,699	2.00	112.10	135.68	31	0	0	0	0	32	86,305,928	4,411,771
Sep-2012	9	2012	77,862,575	85.00	35.60	135.80	30	0	0	0	0	33	75,787,495	2,075,080
Oct-2012	10	2012	75,966,062	242.50	1.10	135.93	31	0	0	0	1	34	73,829,373	2,136,689
Nov-2012	11	2012	77,579,681	434.00	-	136.05	30	0	0	0	0	35	76,114,998	1,464,683
Dec-2012	12	2012	78,044,417	533.50	-	136.18	31	0	0	0	0	36	79,549,575	(1,505,158)
Jan-2013	1	2013	84,721,792	624.40	-	136.33	31	0	0	0	0	37	80,760,917	3,960,875
Feb-2013	2	2013	76,515,852	631.50	-	136.49	28	0	0	0	0	38	74,440,250	2,075,602
Mar-2013	3	2013	80,320,040	554.80	-	136.64	31	1	0	0	0	39	77,871,122	2,448,918
Apr-2013	4	2013	73,854,215	358.60	-	136.80	30	0	1	0	0	40	70,517,736	3,336,479
May-2013	5	2013	75,766,818	109.10	23.10	136.96	31	0	0	1	0	41	72,966,757	2,800,061
Jun-2013	6	2013	79,605,453	33.00	59.60	137.11	30	0	0	0	0	42	77,388,718	2,216,736
Jul-2013	7	2013	91,347,063	1.30	120.80	137.27	31	0	0	0	0	43	86,583,173	4,763,890
Aug-2013	8	2013	86,194,914	4.40	93.80	137.43	31	0	0	0	0	44	83,213,432	2,981,482
Sep-2013	9	2013	77,473,370	83.00	28.10	137.58	30	0	0	0	0	45	73,988,809	3,484,562
Oct-2013	10	2013	76,800,879	208.50	0.40	137.74	31	0	0	0	1	46	72,440,633	4,360,245
Nov-2013	11	2013	77,253,769	478.20	-	137.90	30	0	0	0	0	47	75,928,962	1,324,807
Dec-2013	12	2013	81,481,313	687.90	-	138.06	31	0	0	0	0	48	80,929,296	552,017
Jan-2014	1	2014	87,110,628	825.90	-	138.30	31	0	0	0	0	49	82,847,062	4,263,567
Feb-2014	2	2014	75,310,896	737.10	-	138.54	28	0	0	0	0	50	75,222,865	88,031

MMM-YYYY	Month	Year	Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP (Indexed)	Number of Days in Month	Mar	Apr	May	Oct	Trend	Predicted Purchases	Predicted Less Acturals
Mar-2014	3	2014	79,598,362	690.60	-	138.78	31	1	0	0	0	51	79,122,858	475,504
Apr-2014	4	2014	69,107,663	356.90	-	139.02	30	0	1	0	0	52	69,881,446	(773,782)
May-2014	5	2014	69,871,028	132.10	11.90	139.27	31	0	0	1	0	53	71,333,909	(1,462,881)
Jun-2014	6	2014	77,517,702	14.10	68.10	139.51	30	0	0	0	0	54	77,654,386	(136,685)
Jul-2014	7	2014	79,980,082	4.00	71.00	139.75	31	0	0	0	0	55	79,969,311	10,770
Aug-2014	8	2014	78,148,912	8.80	81.80	140.00	31	0	0	0	0	56	81,355,319	(3,206,407)
Sep-2014	9	2014	73,189,575	69.70	30.10	140.24	30	0	0	0	0	57	73,663,054	(473,479)
Oct-2014	10	2014	72,005,492	224.30	1.30	140.49	31	0	0	0	1	58	72,433,049	(427,557)
Nov-2014	11	2014	74,401,961	482.10	-	140.73	30	0	0	0	0	59	75,688,158	(1,286,197)
Dec-2014	12	2014	77,304,485	557.30	-	140.98	31	0	0	0	0	60	78,843,658	(1,539,173)
Jan-2015	1	2015	84,626,741	792.40	-	141.30	31	0	0	0	0	61	82,169,343	2,457,398
Feb-2015	2	2015	77,436,620	856.80	-	141.63	28	0	0	0	0	62	76,741,804	694,817
Mar-2015	3	2015	78,097,659	615.50	-	141.95	31	1	0	0	0	63	77,946,958	150,701
Apr-2015	4	2015	68,989,290	313.70	-	142.28	30	0	1	0	0	64	69,197,486	(208,196)
May-2015	5	2015	73,375,077	89.30	34.10	142.61	31	0	0	1	0	65	73,451,727	(76,649)
Jun-2015	6	2015	75,340,519	33.80	32.30	142.93	30	0	0	0	0	66	73,503,533	1,836,987
Jul-2015	7	2015	85,365,000	4.00	114.30	143.26	31	0	0	0	0	67	85,392,738	(27,738)
Aug-2015	8	2015	81,751,306	4.40	88.60	143.59	31	0	0	0	0	68	82,235,695	(484,389)
Sep-2015	9	2015	79,343,691	31.10	81.90	143.92	30	0	0	0	0	69	79,686,374	(342,683)
Oct-2015	10	2015	71,236,446	249.80	-	144.25	31	0	0	0	1	70	72,818,396	(1,581,950)
Nov-2015	11	2015	71,636,024	345.00	-	144.59	30	0	0	0	0	71	73,993,832	(2,357,808)
Dec-2015	12	2015	73,291,493	429.70	-	144.92	31	0	0	0	0	72	77,327,777	(4,036,284)
Jan-2016	1	2016	79,986,061	670.40	-	145.19	31	0	0	0	0	73	80,705,242	(719,181)
Feb-2016	2	2016	73,679,442	588.40	-	145.46	29	0	0	0	0	74	75,310,828	(1,631,386)
Mar-2016	3	2016	73,829,400	476.10	-	145.74	31	1	0	0	0	75	76,184,038	(2,354,638)
Apr-2016	4	2016	69,308,215	394.80	-	146.01	30	0	1	0	0	76	70,506,724	(1,198,508)
May-2016	5	2016	72,726,898	142.50	36.90	146.28	31	0	0	1	0	77	74,688,520	(1,961,622)
Jun-2016	6	2016	79,069,060	24.20	83.70	146.56	30	0	0	0	0	78	79,855,661	(786,600)
Jul-2016	7	2016	90,249,922	-	176.90	146.83	31	0	0	0	0	79	93,184,535	(2,934,612)
Aug-2016	8	2016	94,016,713	-	195.40	147.11	31	0	0	0	0	80	95,474,175	(1,457,461)
Sep-2016	9	2016	77,678,226	25.90	69.40	147.39	30	0	0	0	0	81	78,094,383	(416,157)
Oct-2016	10	2016	71,025,279	194.20	4.10	147.66	31	0	0	0	1	82	72,548,052	(1,522,774)
Nov-2016	11	2016	71,123,496	337.80	-	147.94	30	0	0	0	0	83	73,867,321	(2,743,825)
Dec-2016	12	2016	76,024,871	608.00	-	148.22	31	0	0	0	0	84	79,780,455	(3,755,585)
Jan-2017	1	2017	78,997,942	608.90	-	148.65	31	0	0	0	0	85	79,869,020	(871,078)
Feb-2017	2	2017	69,829,357	510.40	-	149.08	28	0	0	0	0	86	72,206,850	(2,377,493)
Mar-2017	3	2017	76,565,565	574.00	-	149.51	31	1	0	0	0	87	77,753,268	(1,187,703)
Apr-2017	4	2017	66,644,954	257.50	-	149.94	30	0	1	0	0	88	68,852,862	(2,207,908)
May-2017	5	2017	70,677,545	177.00	9.00	150.38	31	0	0	1	0	89	72,073,793	(1,396,248)
Jun-2017	6	2017	78,699,725	26.70	68.20	150.82	30	0	0	0	0	90	78,412,301	287,425
Jul-2017	7	2017	85,577,696	-	116.50	151.25	31	0	0	0	0	91	86,223,306	(645,610)
Aug-2017	8	2017	83,019,510	11.60	75.20	151.69	31	0	0	0	0	92	81,346,300	1,673,209
Sep-2017	9	2017	77,334,131	49.10	71.50	152.13	30	0	0	0	0	93	79,377,767	(2,043,636)
Oct-2017	10	2017	73,469,058	154.00	8.10	152.57	31	0	0	0	1	94	73,261,158	207,900
Nov-2017	11	2017	74,459,348	414.20	-	153.01	30	0	0	0	0	95	75,809,208	(1,349,860)
Dec-2017	12	2017	79,667,517	718.50	-	153.46	31	0	0	0	0	96	82,287,795	(2,620,277)
Jan-2018	1	2018	84,752,511	732.30	-	153.86	31	0	0	0	0	97	82,542,341	2,210,170
Feb-2018	2	2018	72,631,313	555.00	-	154.26	28	0	0	0	0	98	73,757,065	(1,125,752)
Mar-2018	3	2018	77,931,843	554.00	-	154.66	31	1	0	0	0	99	78,379,875	(448,032)
Apr-2018	4	2018	72,888,275	437.20	-	155.07	30	0	1	0	0	100	72,270,890	617,385
May-2018	5	2018	76,624,694	75.30	43.40	155.47	31	0	0	1	0	101	75,785,604	839,090
Jun-2018	6	2018	80,769,044	14.80	60.50	155.88	30	0	0	0	0	102	78,150,776	2,618,268
Jul-2018	7	2018	95,230,727	-	167.80	156.28	31	0	0	0	0	103	93,428,133	1,802,594
Aug-2018	8	2018	93,580,217	1.20	162.40	156.69	31	0	0	0	0	104	92,839,877	740,340
Sep-2018	9	2018	79,916,023	41.40	76.40	157.10	30	0	0	0	0	105	80,689,200	(773,177)
Oct-2018	10	2018	75,870,343	289.40	8.20	157.51	31	0	0	0	1	106	75,972,643	(102,300)
Nov-2018	11	2018	77,972,579	494.10	-	157.92	30	0	0	0	0	107	77,711,739	260,840
Dec-2018	12	2018	77,716,342	563.60	-	158.33	31	0	0	0	0	108	80,873,329	(3,156,986)
Jan-2019	1	2019	85,029,524	764.50	-	158.56	31	0	0	0	0	109	83,669,745	1,359,779
Feb-2019	2	2019	75,571,375	621.70	-	158.79	28	0	0	0	0	110	75,280,949	290,426
Mar-2019	3	2019	79,381,068	593.90	-	159.02	31	1	0	0	0	111	79,438,205	(57,137)
Apr-2019	4	2019	73,998,853	346.80	-	159.26	30	0	1	0	0	112	71,408,448	2,590,404
May-2019	5	2019	74,079,885	181.00	-	159.49	31	0	0	1	0	113	72,209,152	1,870,734
Jun-2019	6	2019	77,200,775	35.50	41.30	159.72	30	0	0	0	0	114	76,289,984	910,791
Jul-2019	7	2019	97,266,633	-	166.90	159.95	31	0	0	0	0	115	93,454,955	3,811,678
Aug-2019	8	2019	88,226,115	0.90	103.30	160.19	31	0	0	0	0	116	85,555,905	2,670,210
Sep-2019	9	2019	76,664,331	38.40	25.40	160.42	30	0	0	0	0	117	74,280,470	2,383,861
Oct-2019	10	2019	75,138,465	236.50	5.10	160.65	31	0	0	0	1	118	74,709,880	428,584
Nov-2019	11	2019	79,324,528	513.30	-	160.89	30	0	0	0	0	119	77,754,969	1,569,559
Dec-2019	12	2019	77,448,670	582.40	-	161.12	31	0	0	0	0	120	80,818,725	(3,370,055)
Jan-2020	1	2020	81,251,440	605.00	-	160.36	31	0	0	0	0	121	80,595,721	655,719
Feb-2020	2	2020	75,883,614	611.80	-	159.61	29	0	0	0	0	122	75,916,364	(32,750)
Mar-2020	3	2020	75,425,735	458.70	-	158.86	31	1	0	0	0	123	75,684,483	(258,748)
Apr-2020	4	2020	68,179,453	362.30	-	158.11	30	0	1	0	0	124	69,264,898	(1,085,445)
May-2020	5	2020	72,113,730	208.10	24.20	157.37	31	0	0	1	0	125	72,722,578	(608,848)
Jun-2020	6	2020	86,099,648	23.80	97.70	156.63	30	0	0	0	0	126	79,745,453	6,354,195
Jul-2020	7	2020	103,947,133	-	215.70	155.89	31	0	0	0	0	127	95,629,383	8,317,750
Aug-2020	8	2020	92,534,942	0.80	126.70	155.16	31	0	0	0	0	128	84,078,131	8,456,812
Sep-2020	9	2020	76,554,650	69.10	33.30	154.43	30	0	0	0	0	129	70,813,897	5,740,753
Oct-2020	10	2020	74,574,751	270.30	-	153.70	31	0	0	0	1	130	69,176,708	5,398,043
Nov-2020	11	2020	75,524,140	334.80	-	152.98	30	0	0	0	0	131	69,373,137	6,151,003
Dec-2020	12	2020	78,942,466	567.30	-	152.26	31	0	0	0	0	132	74,238,531	4,703,936
Jan-2021	1	2021		700.99	-	152.77	31	0	0	0	0	133	76,235,646	(76,235,646)
Feb-2021	2	2021		629.89	-	153.28	28	0	0	0	0	134	69,000,853	(69,000,853)

MMM-YYYY	Month	Year	Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP (Indexed)	Number of Days in Month	Mar	Apr	May	Oct	Trend	Predicted Purchases	Predicted Less Acturals
Mar-2021	3	2021		543.98	0.02	153.80	31	1	0	0	0	135	72,490,635	(72,490,635)
Apr-2021	4	2021		348.18	-	154.31	30	0	1	0	0	136	65,327,087	(65,327,087)
May-2021	5	2021		132.98	23.23	154.83	31	0	0	1	0	137	68,461,864	(68,461,864)
Jun-2021	6	2021		24.60	66.52	155.35	30	0	0	0	0	138	73,460,241	(73,460,241)
Jul-2021	7	2021		1.11	153.85	155.87	31	0	0	0	0	139	86,198,926	(86,198,926)
Aug-2021	8	2021		3.54	116.15	156.39	31	0	0	0	0	140	81,683,071	(81,683,071)
Sep-2021	9	2021		54.99	49.14	156.92	30	0	0	0	0	141	72,105,146	(72,105,146)
Oct-2021	10	2021		227.63	3.07	157.44	31	0	0	0	1	142	69,133,577	(69,133,577)
Nov-2021	11	2021		424.61	-	157.97	30	0	0	0	0	143	71,461,074	(71,461,074)
Dec-2021	12	2021		589.11	-	158.50	31	0	0	0	0	144	76,019,274	(76,019,274)
Jan-2022	1	2022		700.99	-	159.10	31	0	0	0	0	145	77,753,664	(77,753,664)
Feb-2022	2	2022		629.89	-	159.69	28	0	0	0	0	146	70,562,990	(70,562,990)
Mar-2022	3	2022		543.98	0.02	160.29	31	1	0	0	0	147	74,097,163	(74,097,163)
Apr-2022	4	2022		348.18	-	160.90	30	0	1	0	0	148	66,978,280	(66,978,280)
May-2022	5	2022		132.98	23.23	161.50	31	0	0	1	0	149	70,157,996	(70,157,996)
Jun-2022	6	2022		24.60	66.52	162.11	30	0	0	0	0	150	75,201,589	(75,201,589)
Jul-2022	7	2022		1.11	153.85	162.71	31	0	0	0	0	151	87,985,768	(87,985,768)
Aug-2022	8	2022		3.54	116.15	163.33	31	0	0	0	0	152	83,515,686	(83,515,686)
Sep-2022	9	2022		54.99	49.14	163.94	30	0	0	0	0	153	73,983,814	(73,983,814)
Oct-2022	10	2022		227.63	3.07	164.55	31	0	0	0	1	154	71,058,581	(71,058,581)
Nov-2022	11	2022		424.61	-	165.17	30	0	0	0	0	155	73,432,697	(73,432,697)
Dec-2022	12	2022		589.11	-	165.79	31	0	0	0	0	156	78,037,801	(78,037,801)
2010			950,759,113											960,319,810
2011			944,902,732											958,844,382
2012			964,379,231											950,666,119
2013			961,335,479											927,029,805
2014			913,546,785											918,015,075
2015			920,489,867											924,465,660
2016			928,717,585											950,199,934
2017			914,942,349											927,473,628
2018			965,883,912											962,401,471
2019			959,330,221											944,871,387
2020			961,031,703											917,239,284
2021			0											881,577,393
2022			0											902,766,029

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.950233371
R Square	0.902943459
Adjusted R Square	0.89500247
Standard Error	2068852.541
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	9	4.38014E+15	4.87E+14	113.7067	1.66E-51
Residual	110	4.70817E+14	4.28E+12		
Total	119	4.85095E+15			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	-59,011,249.23	17293553.96	-3.41233	0.000902	-9.3E+07	-2.5E+07	-9.3E+07	-2.5E+07
Heating Degree Days	14,056.51	1215.134234	11.56786	9.9E-21	11648.39	16464.62	11648.39	16464.62
Cooling Degree Days	123,984.14	6484.986386	19.11864	9.3E-37	111132.4	136835.9	111132.4	136835.9
Ontario Real GDP (Indexed)	519,199.51	118704.4498	4.373884	2.79E-05	283955.2	754443.9	283955.2	754443.9
Number of Days in Month	2,118,055.30	271653.7516	7.796893	3.88E-12	1579701	2656409	1579701	2656409
Mar	-1,778,951.71	767877.2632	-2.31671	0.022371	-3300704	-257199	-3300704	-257199
Apr	-4,190,279.03	742714.2179	-5.64185	1.32E-07	-5662164	-2718394	-5662164	-2718394
May	-3,150,225.68	814390.235	-3.8682	0.000186	-4764156	-1536295	-4764156	-1536295
Oct	-1,930,403.22	831522.832	-2.32153	0.022101	-3578286	-282520	-3578286	-282520
Trend	-147,249.17	32159.90272	-4.57866	1.24E-05	-210983	-83515.8	-210983	-83515.8

Summary of D

Summary of All Heating Degree Days

Month	Mo.	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	1	551.80	647.10	623.50	830.20	720.00	775.30	610.80	624.40	825.90
February	2	604.30	740.10	674.70	606.40	598.30	654.20	532.00	631.50	737.10
March	3	516.60	546.70	610.20	533.80	422.80	572.80	349.40	554.80	690.60
April	4	293.30	356.40	253.90	305.80	225.10	332.30	321.70	358.60	356.90
May	5	136.90	136.40	193.50	158.80	107.90	134.10	81.30	109.10	132.10
June	6	19.50	16.50	22.70	49.30	21.70	19.00	23.20	33.00	14.10
July	7	-	3.20	1.00	6.20	1.80	-	-	1.30	4.00
August	8	4.20	5.20	12.70	9.80	2.10	-	2.00	4.40	8.80
September	9	80.90	36.90	59.00	55.20	78.10	48.20	85.00	83.00	69.70
October	10	288.30	137.70	278.60	287.80	241.60	235.50	242.50	208.50	224.30
November	11	382.20	462.50	451.60	361.20	405.30	342.10	434.00	478.20	482.10
December	12	500.50	630.70	654.60	631.30	676.20	534.00	533.50	687.90	557.30
Total		3,378.50	3,719.40	3,836.00	3,835.80	3,500.90	3,647.50	3,215.40	3,774.70	4,102.90

Summary of All Cooling Degree Days

Month		2006	2007	2008	2009	2010	2011	2012	2013	2014
January	1	-	-	-	-	-	-	-	-	-
February	2	-	-	-	-	-	-	-	-	-
March	3	-	-	-	-	-	-	0.20	-	-
April	4	-	-	-	1.20	-	-	-	-	-
May	5	26.00	22.40	2.50	6.90	45.70	13.00	36.70	23.10	11.90
June	6	73.60	99.20	71.50	34.20	58.70	52.20	101.60	59.60	68.10
July	7	167.30	106.10	111.00	43.70	164.90	198.50	190.10	120.80	71.00
August	8	101.60	141.00	64.00	91.00	138.80	122.20	112.10	93.80	81.80
September	9	12.90	47.50	26.70	20.90	31.50	39.70	35.60	28.10	30.10
October	10	1.10	19.80	-	-	-	2.40	1.10	0.40	1.30
November	11	-	-	-	-	-	-	-	-	-
December	12	-	-	-	-	-	-	-	-	-
Total		382.50	436.00	275.70	197.90	439.60	428.00	477.40	325.80	264.20

2015	2016	2017	2018	2019	2020	10 Year Average	20 Year Trend
792.40	670.40	608.90	732.30	764.50	605.00	700.99	709.96
856.80	588.40	510.40	555.00	621.70	611.80	629.89	632.25
615.50	476.10	574.00	554.00	593.90	458.70	543.98	548.30
313.70	394.80	257.50	437.20	346.80	362.30	348.18	302.97
89.30	142.50	177.00	75.30	181.00	208.10	132.98	159.72
33.80	24.20	26.70	14.80	35.50	23.80	24.60	31.88
4.00	-	-	-	-	-	1.11	3.92
4.40	-	11.60	1.20	0.90	0.80	3.54	5.50
31.10	25.90	49.10	41.40	38.40	69.10	54.99	61.32
249.80	194.20	154.00	289.40	236.50	270.30	227.63	248.08
345.00	337.80	414.20	494.10	513.30	334.80	424.61	385.99
429.70	608.00	718.50	563.60	582.40	567.30	589.11	629.06
3,765.50	3,462.30	3,501.90	3,758.30	3,914.90	3,512.00		

2015	2016	2017	2018	2019	2020	10 Year Average	20 Year Trend
-	-	-	-	-	-	0.00	0.00
-	-	-	-	-	-	0.00	0.00
-	-	-	-	-	-	0.02	0.01
-	-	-	-	-	-	0.00	2.15
34.10	36.90	9.00	43.40	-	24.20	23.23	8.92
32.30	83.70	68.20	60.50	41.30	97.70	66.52	74.13
114.30	176.90	116.50	167.80	166.90	215.70	153.85	122.69
88.60	195.40	75.20	162.40	103.30	126.70	116.15	118.71
81.90	69.40	71.50	76.40	25.40	33.30	49.14	37.68
-	4.10	8.10	8.20	5.10	-	3.07	4.23
-	-	-	-	-	-	0.00	0.00
-	-	-	-	-	-	0.00	0.00
351.20	566.40	348.50	518.70	342.00	497.60		

	kW	kW-kWH ratio (GS>50)	Est. kWh
2011	-	0.2588%	
2012	3,486	0.2593%	
2013	13,590	0.2610%	
2014	12,737	0.2748%	
2015	12,398	0.2733%	6,792,378
2016	12,437	0.2710%	6,607,289
2017	12,330	0.2728%	6,489,035
2018	12,258	0.2710%	6,330,357
2019	10,962	0.2696%	6,085,995
2020	11,674	0.2739%	6,029,968
2021	11,674		6,029,968
2022	11,674		6,029,968
	11,674		6,029,968

Attachment 3-B

Appendix 2-IB

File Number:	EB-2021-0009
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 2022 Cost of Service		Consumption (kWh) [3]				
				Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*		Actual	909,331,461	914,637,786		
Historical	*2017*		Actual	892,260,753	914,620,253	OEB-approved	946,971,178
Historical	*2018*		Actual	934,510,743	917,296,629		
Historical	*2019*		Actual	932,356,870	923,549,990		
Historical	*2020*		Actual	933,148,230	882,633,837		
Bridge Year	*2021*		Forecast		857,658,459		
Test Year	*2022*		Forecast		878,272,205		

Variance Analysis	**Year**	**Year-over-year**		**Versus OEB-approved**
	2016			
	2017	-1.9%	0.0%	
	2018	4.7%	0.3%	
	2019	-0.2%	0.7%	
	2020	0.1%	-4.4%	
	2021		-2.8%	
	2022		2.4%	-7.3%
	Geometric Mean	0.9%	-0.8%	-1.9%

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

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

	Calendar Year (for 2022 Cost of Service)	Customers				Consumption (kWh) [3]					Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	36,043			Actual	291,787,861	293,490,564			Actual	8,095.55	8,142.79	0	
Historical	*2017*	Actual	36,241	OEB-approved	36,433.00	Actual	273,448,641	280,301,094	OEB-approved	301,593,274.00	Actual	7,545.28	7,734.36	OEB-approved	8,278.02
Historical	*2018*	Actual	36,521			Actual	301,310,523	295,760,246			Actual	8,250.34	8,098.36	0	
Historical	*2019*	Actual	36,733			Actual	292,180,865	289,420,975			Actual	7,954.18	7,879.05	0	
Historical	*2020*	Actual	37,077			Actual	315,774,546	298,680,628			Actual	8,516.72	8,055.68	0	
Bridge Year	*2021*	Forecast	37,371			Forecast		281,856,415			Forecast	0.00	7,542.12	0	
Test Year	*2022*	Forecast	37,668			Forecast		293,509,087			Forecast	0.00	7,792.00	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
	2016			*2016*				*2016*			
	2017	0.5%		*2017*	-6.3%	-4.5%		*2017*	-6.8%	-5.0%	
	2018	0.8%		*2018*	10.2%	5.5%		*2018*	9.3%	4.7%	
	2019	0.6%		*2019*	-3.0%	-2.1%		*2019*	-3.6%	-2.7%	
	2020	0.9%		*2020*	8.1%	3.2%		*2020*	7.1%	2.2%	
	2021	0.8%		*2021*		-5.6%		*2021*		-6.4%	
	2022	0.8%	3.4%	*2022*		4.1%	-2.7%	*2022*		3.3%	-5.9%
	Geometric Mean	0.9%	0.8%	Geometric Mean	2.7%	0.0%	-0.7%	Geometric Mean	1.7%	-0.9%	-1.5%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 9,644,695		
Historical	*2017*	Actual	$ 9,814,415	OEB-approved	$ 10,072,166
Historical	*2018*	Actual	$ 10,180,620		
Historical	*2019*	Actual	$ 10,201,944		
Historical	*2020*	Actual	$ 11,136,471		
Bridge Year (Foreca	*2021*	Forecast	$ 10,919,812		
Test Year (Forecast)	*2022*	Forecast	$ 14,232,489		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	1.8%	
	2018	3.7%	
	2019	0.2%	
	2020	9.2%	
	2021	-1.9%	
	2022	30.3%	41.3%
	Geometric Mean	8.1%	9.0%

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

	Calendar Year (for 2022 Cost of Service)	Customers				Consumption (kWh) [3]				Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	2,792			Actual	99,573,959	100,155,014			Actual	35,664.03	35,872.14	0	
Historical	*2017*	Actual	2,798	OEB-approved	2840	Actual	96,495,542	98,913,660	OEB-approved	103,442,407.00	Actual	34,487.33	35,351.56	OEB-approved	36,423.38
Historical	*2018*	Actual	2,804			Actual	94,728,588	92,983,644			Actual	33,783.38	33,161.07	0	
Historical	*2019*	Actual	2,834			Actual	93,124,427	92,244,790			Actual	32,859.71	32,549.33	0	
Historical	*2020*	Actual	2,930			Actual	87,228,067	82,506,124			Actual	29,770.67	28,159.09	0	
Bridge Year	*2021*	Forecast	2,956			Forecast		76,054,488			Forecast	0.00	25,728.85	0	
Test Year	*2022*	Forecast	2,981			Forecast		77,363,528			Forecast	0.00	25,952.21	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
	2016			*2016*				*2016*			
	2017	0.2%		*2017*	-3.1%	-1.2%		*2017*	-3.3%	-1.5%	
	2018	0.2%		*2018*	-1.8%	-6.0%		*2018*	-2.0%	-6.2%	
	2019	1.1%		*2019*	-1.7%	-0.8%		*2019*	-2.7%	-1.8%	
	2020	3.4%		*2020*	-6.3%	-10.6%		*2020*	-9.4%	-13.5%	
	2021	0.9%		*2021*		-7.8%		*2021*		-8.6%	
	2022	0.8%	5.0%	*2022*		1.7%	-25.2%	*2022*		0.9%	-28.7%
	Geometric Mean	1.3%	1.2%	Geometric Mean	-4.3%	-5.0%	-7.0%	Geometric Mean	-5.8%	-6.3%	-8.1%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 1,582,551		
Historical	*2017*	Actual	$ 2,059,508	OEB-approved	$ 1,839,733
Historical	*2018*	Actual	$ 1,682,379		
Historical	*2019*	Actual	$ 1,765,006		
Historical	*2020*	Actual	$ 1,856,236		
Bridge Year (Foreca	*2021*	Forecast	$ 1,769,590		
Test Year (Forecast)	*2022*	Forecast	$ 2,218,670		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	30.1%	
	2018	-18.3%	
	2019	4.9%	
	2020	5.2%	
	2021	-4.7%	
	2022	25.4%	20.6%
	Geometric Mean	7.0%	4.8%

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

	Calendar Year (for 2022 Cost of Service)	Customers				Demand (kW) [3]				Demand (kW) per Customer				
							Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	*2016*	Actual	452			Actual	1,391,396	1,385,740		Actual	3,078.31	3,065.80	0	
Historical	*2017*	Actual	457	OEB-approved	449	Actual	1,412,721	1,424,735	1,342,821.00	Actual	3,091.29	3,117.58	0	2,990.69
Historical	*2018*	Actual	483			Actual	1,447,503	1,407,657		Actual	2,996.90	2,914.40	0	
Historical	*2019*	Actual	489			Actual	1,461,872	1,443,483		Actual	2,989.51	2,951.91	0	
Historical	*2020*	Actual	491			Actual	1,439,811	1,335,678		Actual	2,932.40	2,720.32	0	
Bridge Year	*2021*	Forecast	499			Forecast		1,329,482		Forecast	0.00	2,664.29	0	
Test Year	*2022*	Forecast	507			Forecast		1,348,962		Forecast	0.00	2,660.68	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
	2016			*2016*				*2016*			
	2017	1.1%		*2017*	1.5%	2.8%		*2017*	0.4%	1.7%	
	2018	5.7%		*2018*	2.5%	-1.2%		*2018*	-3.1%	-6.5%	
	2019	1.2%		*2019*	1.0%	2.5%		*2019*	-0.2%	1.3%	
	2020	0.4%		*2020*	-1.5%	-7.5%		*2020*	-1.9%	-7.8%	
	2021	1.6%		*2021*		-0.5%		*2021*		-2.1%	
	2022	1.6%	12.9%	*2022*		1.5%	0.5%	*2022*		-0.1%	-11.0%
	Geometric Mean	2.3%	3.1%	Geometric Mean	1.1%	-0.5%	0.1%	Geometric Mean	-1.6%	-2.8%	-2.9%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 5,008,034		
Historical	*2017*	Actual	$ 5,271,409	OEB-approved	4,621,191
Historical	*2018*	Actual	$ 4,814,488		
Historical	*2019*	Actual	$ 4,987,520		
Historical	*2020*	Actual	$ 5,364,754		
Bridge Year (Foreca	*2021*	Forecast	$ 5,022,801		
Test Year (Forecast)	*2022*	Forecast	$ 5,659,355		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	5.3%	
	2018	-8.7%	
	2019	3.6%	
	2020	7.6%	
	2021	-6.4%	
	2022	12.7%	22.5%
	Geometric Mean	2.5%	5.2%

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

	Calendar Year (for 2022 Cost of Service	Customers				Demand (kW) [3]				Demand(kW) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	2			Actual	136,187	136,187			Actual	68,093.50	68,093.50	0	
Historical	*2017*	Actual	2	OEB-approved	2	Actual	107,291	107,291	OEB-approved	139,437.00	Actual	53,645.50	53,645.50	OEB-approved	69,718.50
Historical	*2018*	Actual	2			Actual	95,219	95,219			Actual	47,609.50	47,609.50	0	
Historical	*2019*	Actual	2			Actual	97,683	97,683			Actual	48,841.50	48,841.50	0	
Historical	*2020*	Actual	2			Actual	100,587	100,587			Actual	50,293.50	50,293.50	0	
Bridge Year	*2021*	Forecast	2			Forecast		101,593			Forecast	0.00	50,796.50	0	
Test Year	*2022*	Forecast	2			Forecast		102,609			Forecast	0.00	51,304.50	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
	2016			*2016*				*2016*			
	2017	0.0%		*2017*	-21.2%	-21.2%		*2017*	-21.2%	-21.2%	
	2018	0.0%		*2018*	-11.3%	-11.3%		*2018*	-11.3%	-11.3%	
	2019	0.0%		*2019*	2.6%	2.6%		*2019*	2.6%	2.6%	
	2020	0.0%		*2020*	3.0%	3.0%		*2020*	3.0%	3.0%	
	2021	0.0%		*2021*		1.0%		*2021*		1.0%	
	2022	0.0%	0.0%	*2022*		1.0%	-26.4%	*2022*		1.0%	-26.4%
	Geometric Mean	0.0%	0.0%	Geometric Mean	-9.6%	-5.5%	-7.4%	Geometric Mean	-9.6%	-5.5%	-7.4%

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual	$ 160,991		
Historical	*2017*	Actual	$ 154,450	OEB-approved	$ 199,626
Historical	*2018*	Actual	$ 140,343		
Historical	*2019*	Actual	$ 144,914		
Historical	*2020*	Actual	$ 171,870		
Bridge Year (Foreca	*2021*	Forecast	$ 159,903		
Test Year (Forecast)	*2022*	Forecast	$ 223,963		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	-4.1%	
	2018	-9.1%	
	2019	3.3%	
	2020	18.6%	
	2021	-7.0%	
	2022	40.1%	12.2%
	Geometric Mean	6.8%	2.9%

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

	Calendar Year (for 2022 Cost of Service)	Customers				Demand (kW) [3]				Demand (kW) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	551			Actual	923	923.00			Actual	1.68	1.68	0	
Historical	*2017*	Actual	512	OEB-approved	597	Actual	570	570.00	OEB-approved	1155	Actual	1.11	1.11	OEB-approved	1.93
Historical	*2018*	Actual	507			Actual	520	520.00			Actual	1.03	1.03	0	
Historical	*2019*	Actual	501			Actual	568	568.00			Actual	1.13	1.13	0	
Historical	*2020*	Actual	495			Actual	554	554.29			Actual	1.12	1.12	0	
Bridge Year	*2021*	Forecast	485			Forecast		509.97			Forecast	0.00	1.05	0	
Test Year	*2022*	Forecast	476			Forecast		462.46			Forecast	0.00	0.97	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
	2016			*2016*				*2016*			
	2017	-7.1%		*2017*	-38.2%	-38.2%		*2017*	-33.5%	-33.5%	
	2018	-1.0%		*2018*	-8.8%	-8.8%		*2018*	-7.9%	-7.9%	
	2019	-1.2%		*2019*	9.2%	9.2%		*2019*	10.5%	10.5%	
	2020	-1.2%		*2020*	-2.5%	-2.4%		*2020*	-1.3%	-1.2%	
	2021	-2.0%		*2021*		-8.0%		*2021*		-6.1%	
	2022	-1.9%	-20.3%	*2022*		-9.3%	-60.0%	*2022*		-7.6%	-49.8%
	Geometric Mean	-2.9%	-5.5%	Geometric Mean	-15.6%	-12.9%	-20.5%	Geometric Mean	-12.6%	-10.3%	-15.8%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 46,577		
Historical	*2017*	Actual	$ 36,439	OEB-approved	$ 52,686
Historical	*2018*	Actual	$ 37,436		
Historical	*2019*	Actual	$ 36,771		
Historical	*2020*	Actual	$ 38,814		
Bridge Year (Foreca	*2021*	Forecast	$ 12,858		
Test Year (Forecast)	*2022*	Forecast	$ 43,196		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	-21.8%	
	2018	2.7%	
	2019	-1.8%	
	2020	5.6%	
	2021	-66.9%	
	2022	235.9%	-18.0%
	Geometric Mean	-1.5%	-4.8%

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

	Calendar Year (for 2022 Cost of Service)	Customers				Demand (kW) [3]				Demand (kW) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	10,229			Actual	22,444	22,444.00			Actual	2.19	2.19	0	
Historical	*2017*	Actual	5,769	OEB-approved	5,849	Actual	22,338	22,338.00	OEB-approved	22,796.00	Actual	3.87	3.87	OEB-approved	3.90
Historical	*2018*	Actual	5,771			Actual	22,227	22,227.00			Actual	3.85	3.85	0	
Historical	*2019*	Actual	5,771			Actual	21,979	21,978.70			Actual	3.81	3.81	0	
Historical	*2020*	Actual	5,771			Actual	21,543	21,543.26			Actual	3.73	3.73	0	
Bridge Year	*2021*	Forecast	5,771			Forecast		22,103.21			Forecast	0.00	3.83	0	
Test Year	*2022*	Forecast	5,771			Forecast		22,947.73			Forecast	0.00	3.98	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
	2016			*2016*				*2016*			
	2017	-43.6%		*2017*	-0.5%	-0.5%		*2017*	76.5%	76.5%	
	2018	0.0%		*2018*	-0.5%	-0.5%		*2018*	-0.5%	-0.5%	
	2019	0.0%		*2019*	-1.1%	-1.1%		*2019*	-1.1%	-1.1%	
	2020	0.0%		*2020*	-2.0%	-2.0%		*2020*	-2.0%	-2.0%	
	2021	0.0%		*2021*		2.6%		*2021*		2.6%	
	2022	0.0%	-1.3%	*2022*		3.8%	0.7%	*2022*		3.8%	2.0%
	Geometric Mean	-10.8%	-0.3%	Geometric Mean	-1.4%	0.4%	0.2%	Geometric Mean	19.4%	12.6%	0.5%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 149,471		
Historical	*2017*	Actual	$ 224,281	OEB-approved	$ 235,550
Historical	*2018*	Actual	$ 232,095		
Historical	*2019*	Actual	$ 231,586		
Historical	*2020*	Actual	$ 243,894		
Bridge Year (Foreca	*2021*	Forecast	$ 243,122		
Test Year (Forecast)	*2022*	Forecast	$ 305,942		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	50.0%	
	2018	3.5%	
	2019	-0.2%	
	2020	5.3%	
	2021	-0.3%	
	2022	25.8%	29.9%
	Geometric Mean	15.4%	6.8%

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

	Calendar Year (for 2022 Cost of Service)	Customers				Consumption (kWh) [3]				Consumption (kWh) per Customer				
							Actual (Weather actual)	Weather-normalized		Weather-normalized		Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2016*	Actual	427			Actual	1,512,978	1,512,978.00			Actual	3,545.35	3,545.35		
Historical	*2017*	Actual	425	OEB-approved	425	Actual	1,524,181	1,524,181.00	OEB-approved	1,405,154.00	Actual	3,588.42	3,588.42	OEB-approved	3,306.24
Historical	*2018*	Actual	420			Actual	1,497,429	1,497,429.00			Actual	3,563.19	3,563.19		
Historical	*2019*	Actual	408			Actual	1,559,095	1,559,095.27			Actual	3,821.31	3,821.31		
Historical	*2020*	Actual	409			Actual	1,510,016	1,510,015.92			Actual	3,692.72	3,692.72		
Bridge Year	*2021*	Forecast	405			Forecast		1,506,367.74			Forecast	0.00	3,715.50		
Test Year	*2022*	Forecast	402			Forecast		1,502,728.37			Forecast	0.00	3,738.42		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved	Year	Year-over-year		Test Year Versus OEB-approved
	2016			*2016*				*2016*			
	2017	-0.5%		*2017*	0.7%	0.7%		*2017*	1.2%	1.2%	
	2018	-1.2%		*2018*	-1.8%	-1.8%		*2018*	-0.7%	-0.7%	
	2019	-2.9%		*2019*	4.1%	4.1%		*2019*	7.2%	7.2%	
	2020	0.2%		*2020*	-3.1%	-3.1%		*2020*	-3.4%	-3.4%	
	2021	-1.0%		*2021*		-0.2%		*2021*		0.6%	
	2022	-0.7%	-5.4%	*2022*		-0.2%	6.9%	*2022*		0.6%	13.1%
	Geometric Mean	-1.2%	-1.4%	Geometric Mean	-0.1%	-0.1%	1.7%	Geometric Mean	1.4%	1.1%	3.1%

	Calendar Year (for 2022 Cost of Service)	Revenues			
Historical	*2016*	Actual	$ 78,520		
Historical	*2017*	Actual	$ 78,627	OEB-approved	$ 78,004
Historical	*2018*	Actual	$ 78,805		
Historical	*2019*	Actual	$ 77,147		
Historical	*2020*	Actual	$ 82,702		
Bridge Year (Foreca	*2021*	Forecast	$ 80,428		
Test Year (Forecast)	*2022*	Forecast	$ 96,182		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017	0.1%	
	2018	0.2%	
	2019	-2.1%	
	2020	7.2%	
	2021	-2.7%	
	2022	19.6%	23.3%
	Geometric Mean	4.1%	5.4%

8 **Customer Class:** | Is the customer class billed on consumption (kWh) or demand (kW or kVA)? | kW

	Calendar Year (for 2022 Cost of Service	Customers				Consumption (kWh) [3]				Consumption (kWh) per Customer			
							Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized
Historical	*2016*	Actual				Actual				Actual			
Historical	*2017*	Actual		OEB-approved		Actual			OEB-approved	Actual		OEB-approved	
Historical	*2018*	Actual				Actual				Actual			
Historical	*2019*	Actual				Actual				Actual			
Historical	*2020*	Actual				Actual				Actual			
Bridge Year	*2021*	Forecast				Forecast				Forecast			
Test Year	*2022*	Forecast				Forecast				Forecast			

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved
	2016			*2016*			*2016*		
	2017			*2017*			*2017*		
	2018			*2018*			*2018*		
	2019			*2019*			*2019*		
	2020			*2020*			*2020*		
	2021			*2021*			*2021*		
	2022			*2022*			*2022*		
	Geometric Mean			Geometric Mean			Geometric Mean		

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual			
Historical	*2017*	Actual		OEB-approved	
Historical	*2018*	Actual			
Historical	*2019*	Actual			
Historical	*2020*	Actual			
Bridge Year (Foreca	*2021*	Forecast			
Test Year (Forecast)	*2022*	Forecast			

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017		
	2018		
	2019		
	2020		
	2021		
	2022		
	Geometric Mean		

9 **Customer Class:** | Is the customer class billed on consumption (kWh) or demand (kW or kVA)? | kWh

	Calendar Year (for 2022 Cost of Service	Customers				Consumption (kWh) [3]				Consumption (kWh) per Customer			
							Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized
Historical	*2016*	Actual				Actual				Actual			
Historical	*2017*	Actual		OEB-approved		Actual			OEB-approved	Actual		OEB-approved	
Historical	*2018*	Actual				Actual				Actual			
Historical	*2019*	Actual				Actual				Actual			
Historical	*2020*	Actual				Actual				Actual			
Bridge Year	*2021*	Forecast				Forecast				Forecast			
Test Year	*2022*	Forecast				Forecast				Forecast			

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved
	2016			*2016*			*2016*		
	2017			*2017*			*2017*		
	2018			*2018*			*2018*		
	2019			*2019*			*2019*		
	2020			*2020*			*2020*		
	2021			*2021*			*2021*		
	2022			*2022*			*2022*		
	Geometric Mean			Geometric Mean			Geometric Mean		

	Calendar Year (for 2022 Cost of Service	Revenues			
Historical	*2016*	Actual			
Historical	*2017*	Actual		OEB-approved	
Historical	*2018*	Actual			
Historical	*2019*	Actual			
Historical	*2020*	Actual			
Bridge Year (Foreca	*2021*	Forecast			
Test Year (Forecast)	*2022*	Forecast			

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017		
	2018		
	2019		
	2020		
	2021		
	2022		
	Geometric Mean		

10 **Customer Class:** | Is the customer class billed on consumption (kWh) or demand (kW or kVA)? | kWh

	Calendar Year (for 2022 Cost of Service	Customers			Consumption (kWh) [3]				Consumption (kWh) per Customer			
						Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized
Historical	*2016*	Actual			Actual				Actual			
Historical	*2017*	Actual		OEB-approved	Actual			OEB-approved	Actual		OEB-approved	
Historical	*2018*	Actual			Actual				Actual			
Historical	*2019*	Actual			Actual				Actual			
Historical	*2020*	Actual			Actual				Actual			
Bridge Year	*2021*	Forecast			Forecast				Forecast			
Test Year	*2022*	Forecast			Forecast				Forecast			

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved	Year	Year-over-year	Test Year Versus OEB-approved
	2016			*2016*			*2016*		
	2017			*2017*			*2017*		
	2018			*2018*			*2018*		
	2019			*2019*			*2019*		
	2020			*2020*			*2020*		
	2021			*2021*			*2021*		
	2022			*2022*			*2022*		
	Geometric Mean			Geometric Mean			Geometric Mean		

	Calendar Year (for 2022 Cost of Service	Revenues		
Historical	*2016*	Actual		
Historical	*2017*	Actual	OEB-approved	
Historical	*2018*	Actual		
Historical	*2019*	Actual		
Historical	*2020*	Actual		
Bridge Year (Foreca	*2021*	Forecast		
Test Year (Forecast)	*2022*	Forecast		

Variance Analysis	Year	Year-over-year	Test Year Versus OEB-approved
	2016		
	2017		
	2018		
	2019		
	2020		
	2021		
	2022		
	Geometric Mean		

Note: If there are more than ten (10) customer classes, please contact OEB Staff to add tables for additional customer classes.

Attachment 3-C

Appendix 2-I-LF_CDM

File Number:	EB-2021-0009
Exhibit:	
Tab:	
Schedule:	
Page:	
Date:	

Appendix 2-I
Load Forecast CDM Adjustment Work Form

Appendix 2-I was initially developed to help determine what would be the amount of CDM savings needed in each year to cumulatively achieve the four year 2011-2014 CDM target. This determined the amount of kWh (and with translation, kW of demand) savings that were converted into dollar balances for the LRAMVA, and also to determine the related adjustment to the load forecast to account for OPA-reported savings. Beginning in the 2015 year, it was adjusted because the persistence of 2011-2014 CDM programs will be an adjustment to the load forecast in addition to the estimated savings for the first year (2015) for the new 2015-2020 CDM plan. This appendix has been updated for 2021 rate applications to acknowledge that in accordance with the Minister of Energy's March 20, 2019 Directive to the IESO, the Conservation First Framework (CFF) is no longer in effect. As distributors are no longer working towards the former 2015-2020 CDM targets, for 2019 and 2020 CDM activity, distributors may propose a CDM manual adjustment to the load forecast. If a distributor elects to propose a CDM manual adjustment to the load forecast, only CDM projects that are subject to a contractual agreement entered into between the distributor and a customer by April 30, 2019 under a former CFF program should be included in the proposed CDM manual adjustment to the load forecast. Distributors should provide relevant documentation to support the manual adjustments for 2019 and 2020 CDM projects, including the corresponding CFF program, project timelines and projected savings.

2019-2020 CDM Activities *(and beyond, if applicable)*

For the first year of the new 2015-2020 CDM plan, for simplicity, it was assumed that each year's program will achieve an equal amount of new CDM savings. This resulted in each year's program being about 1/6 (or 16.67%) of the cumulative 2015-2020 CDM target for kWh savings.

For 2021 rate applications, distributors should ensure that the sum of the results for the 2015 to 2019 program years is consistent with the results provided by the IESO. For the 2020 and 2021 program year (as applicable), distributors that elect to propose a CDM manual adjustment, should only include the projected CDM savings from projects that are subject to contractual agreements between the distributor and customer made on or before April 30, 2019 under the former CFF.

Former CFF 6 Year (2015-2020) kWh Target*								
	64,320,000							
	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021****	**Total**
			%					
2015 CDM Programs						17.87%		0.00%
2016 CDM Programs						24.21%		0.00%
2017 CDM Programs						23.40%		0.00%
2018 CDM Programs						15.09%		0.00%
2019 CDM Programs						6.43%		0.00%
2020 CDM Programs						0.00%		0.00%
Total in Year						**87.00%**		**0.00%**
			kWh					
2015 CDM Programs	9,182,245.00	9,131,494.00	9,091,723.00	9,087,815.00	9,075,474.00	8,915,533.00		0.00
2016 CDM Programs		12,181,475.00	12,181,342.00	12,207,408.00	12,109,967.00	12,077,836.00		0.00
2017 CDM Programs			16,387,248.00	15,261,381.00	15,084,685.00	15,051,708.00		0.00
2018 CDM Programs				9,697,360.65	9,786,757.80	9,703,658.30		0.00
2019 CDM Programs					3,989,597.93	4,133,018.09		0.00
2020 CDM Programs								0.00
2021 CDM Programs (if applicable)***								0.00
Total in Year	**9,182,245.00**	**21,312,969.00**	**37,660,313.00**	**46,253,964.65**	**50,046,481.73**	**49,881,753.39**	**0.00**	**64,320,000.00**

Inputs do no match 2015-20 CDM target

*This total will not equal the distributor's former CFF CDM target. Rather, for 2019 and 2020, if the distributor elects to propose a CDM manual adjustment, it should only include the projected savings from projects that are subject to contractual agreements made between the LDC and a customer on or before April 30, 2019 under the former CFF.

** If a distributor wishes to include projected savings that persist from former Conservation First programs into the 2021 test year, you may do so. Please provide relevant supporting documentation to show the savings persistence into 2021.

*** If a distributor expects impacts from any CFF-related projects not deployed by April 2019, but for which a distributor is contractually obligated to complete (or for other programs delivered by the distributor after April 2019), a distributor may include these amounts as part of a CDM manual adjustment to the 2021 load forecast, but must ensure that sufficient supporting evidence is provided in support of all estimated CDM savings.

Note: The default formulae in the above table assume that the 2015-2020 kWh CDM target is achieved through persistence of CDM savings to the end of 2020. Distributors should rely on the Participant and Cost monthly reports provided by the IESO for 2018 and 2019 CDM savings.

Determination of 2021 Load Forecast Adjustment

The OEB determined that the "net" number should be used in its Decision and Order with respect to Centre Wellington Hydro Ltd.'s 2013 Cost of Service rates (EB-2012-0113). This approach has also been used in Settlement Agreements accepted by the OEB in other 2013 and 2014 applications. The distributor should select whether the adjustment is done on a "net" or "gross" basis, but must support a proposal for the adjustment being done on a "gross" basis. Sheet 2-I defaults to the adjustment being done on a "net" basis consistent with OEB policy and practice.

From each of the 2006-2010 CDM Final Report, and the 2011 to 2017 CDM Final Reports, issued by the OPA/IESO for the distributor, the distributor should input the "gross" and "net" results of the cumulative CDM savings for 2019 into cells C57 to C66 and D57 to D66. The model will calculate the cumulative savings for all programs from 2006 to 2019 and determine the "net" to "gross" factor "g".

Net-to-Gross Conversion

Is CDM adjustment being done on a "net" or "gross" basis?				**net**
Persistence of Historical CDM programs	**"Gross" kWh**	**"Net" kWh**	**Difference kWh**	**"Net-to-Gross" Conversion Factor ('g')**
2006-2010 CDM programs			**0**	
2011 CDM program			**0**	
2012 CDM program			**0**	
2013 CDM program			**0**	
2014 CDM program			**0**	
2015 CDM program			**0**	
2016 CDM program			**0**	
2017 CDM program			**0**	
2018 CDM program*			**0**	
2019 CDM program (if applicable)*			**0**	
2006 to 2019 OPA CDM programs: Persistence to 2021.	0	0	0	0.00%

*CDM programs distributors should rely on the results made available by the IESO in the Participant and Cost monthly reports

The default values below represent the factor used for how each year's CDM program is factored into the manual CDM adjustment. Distributors can choose alternative weights of "0", "0.5" or "1" from the drop-down menu for each cell, but must support its alternatives.

These factors do not mean that CDM programs are excluded, but the assumption that impacts of previous year CDM programs are already implicitly reflected in the actual data for historical years that are used to derive the load forecast prior to any manual CDM adjustment for the 2021 test year.

Weight Factor for Inclusion in CDM Adjustment to 2021 Load Forecast

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

* For 2018 CDM programs distributors should rely on the results made available by the IESO in the Participant and Cost monthly reports

** For 2019 and 2020 CDM program activity, the distributor should include only those projected CDM savings from projects that it has contractual obligations with a customer under the former CFF.

*** This may include the persistence of any remaining CDM projects that the distributor is contractually obligated to complete under the former CFF, as applicable. If this includes CDM activity that is beyond the CFF framework or other programs, please file project-level supporting documentation in accordance with section 2.3.1.3 of Chapter 2 Filing Requirements to support the breakdown of your proposal.

2021 LRAMVA and 2021 CDM adjustment to Load Forecast

One manual adjustment for CDM impacts to the 2021 load forecast is made. There is a different but related threshold amount that is used for the 2021 LRAMVA amount for Account 1568.

The amount used for the CDM threshold and the LRAMVA is the kWh that will be used to determine the base amount for the LRAMVA balance for 2021. This allows for a comparison between projected CDM savings and actual CDM savings.

If used to determine the manual CDM adjustment for the system purchased kWh, the proposed loss factor should correspond with the proposed total loss factor calculated in Appendix 2-R .

The Manual Adjustment for the 2021 Load Forecast is the amount manually subtracted from the system-wide load forecast (either based on a purchased or billed basis) derived from the base forecast from historical data. If the distributor has developed their load forecast on a system purchased basis, then the manual adjustment should be on a system purchased basis, including the adjustment for losses. If the load forecast has been developed on a billed basis, either on a system basis or on a class-specific basis, the manual adjustment should be on a billed basis, excluding losses.

The distributor should determine the allocation of the savings to all customer classes in a reasonable manner (e.g. taking into account what programs and what IESO-measured impacts were directed at specific customer classes), for both the LRAMVA and for the load forecast adjustment.

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total for 2021**
Amount used for CDM threshold for LRAMVA (2021)	-	-	-	-	-	-	-	-

Manual Adjustment for 2021 Load Forecast (billed basis)					-	-	-	-
Manual Adjustment for 2021 LDC-only CDM programs (billed basis)								
Total Manual Forecast to Load Forecast							-	-
Proposed Loss Factor (TLF)		Format: X.XX%						
Manual Adjustment for 2021 Load Forecast (system purchased basis)	-	-	-	-	-	-	-	-

Manual adjustment uses "gross" versus "net" (i.e. numbers multiplied by (1 + g). The Weight factor is also used to calculate the impact of each year's program on the CDM adjustment to the 2021 load forecast.