EXHIBIT 3 - REVENUES

2020 Cost of Service

Algoma Power Inc.
EB-2019-0019

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3.1 LOAD AND REVENUE FORECAST

3.1.1 INTRODUCTION

The evidence presented in this exhibit provides information supporting the revenues derived from activities regulated by the OEB. Revenues from regulated operations are derived mainly from fixed and variable tariff charges as well as pass through charges and specific service charges. API also receives a significant portion of its revenue from Rural and Remote Rate Protection ("RRRP") payments, as explained in Exhibit 8. Revenues are collected from five (5) customer classes/subclasses: Residential – R1(i) (traditional residential customers), Residential – R1(ii) (traditional General Service less than 50 kW customers that are deemed residential under RRRP regulations), Residential – R2 (traditional General Service greater than 50 kW customers that are deemed residential under RRRP regulations), Seasonal and Street Lighting. API does not anticipate any significant changes in its customer classes going forward.

This exhibit also describes API's load and customer forecasts. The load forecast methodology and assumptions are described in detail at 3.1.4 Load Forecast Methodology. Customer counts used throughout this Exhibit are based on 12-month averages.

The evidence herein is organized per the following topics:

1) Revenue and Load Forecast
2) Impact and Persistence from Historical CDM Programs
3) Accuracy of Load Forecast and Variance Analysis, and
4) Other Revenues

3.1.2 OVERVIEW OF CURRENT REVENUES

Table 1 - Revenues at Current Rates below shows revenues from current distribution charges for 2019. Distribution Revenues are derived from a combination of fixed monthly charges and volumetric charges applied to the utility's proposed Load Forecast. Fixed rate revenues are determined by applying the current fixed monthly charge to the number of customers or connections in each of the customer classes in each month. Variable rate revenue is based on a volumetric rate applied to meter readings for consumption or demand volume.

API's 2020 forecasted revenues recovered through its currently approved distribution rates are projected at $$23,692,323. (exclusive of all rate riders). The revenues at proposed distribution rates are presented in Exhibit 6 and Exhibit 8.

Table 1 - Revenues at Current Rates

2019 Rates at 2020 Load

	Test Year Projected Revenue from Existing Variable Charges							
Customer Class Name	**Variable Distribution Rate**	**per**	**Test Year Volume**	**Gross Variable Revenue**	**Transform. Allowance Rate**	**Transform. Allowance kW's**	**Transform. Allowance $'s**	**Net Variable Revenue**
Residential R1	$0.0553	kWh	103,931,742	$5,743,200.15			$0.00	$5,743,200.15
Residential R2	$17.7530	kW	196,648	$3,491,098.00	-0.60	145,265	-$87,159.17	$3,403,938.83
Seasonal	$0.1494	kWh	5,439,365	$812,795.43			$0.00	$812,795.43
Street Lighting	$0.3310	kWh	595,435	$197,076.52			$0.00	$197,076.52
Total Variable Revenue				**$10,244,170.09**	**-0.60**	**145,265**	**-$87,159.17**	**$10,157,010.92**

2019 Rates at 2020 Load

	Total Test Year Projected Revenue from Existing Rates							
Customer Class Name	**Fixed Rate**	**Customers (Connections)**	**Fixed Charge Revenue**	**Variable Revenue**	**TOTAL**	**% Fixed Revenue**	**% Variable Revenue**	**% Total Revenue**
Residential R1	$102.45	9,113	$11,203,467.92	$5,743,200.15	$16,946,668.06	66.11%	33.89%	71.53%
Residential R2	$803.26	37	$359,366.81	$3,403,938.83	$3,763,305.64	9.55%	90.45%	15.88%
Seasonal	$54.75	2,960	$1,944,978.06	$812,795.43	$2,757,773.49	70.53%	29.47%	11.64%
Street Lighting	$2.05	1,117	$27,499.65	$197,076.52	$224,576.17	12.25%	87.75%	0.95%
Total		**13,227**	**$13,535,312.44**	**$10,157,010.92**	**$23,692,323.36**			

A completed Appendix 2-IB Load Forecast Analysis is presented at Appendix A of this Exhibit.

3.1.3 PROPOSED LOAD FORECAST

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

Table 2 - Customer and Volume Trend Table below presents the actual and forecast trends for customer/connection counts, kWh consumption and billed kW demand. The forecast trend is what API has based its proposed rates on.

Table 2 - Customer and Volume Trend Table

Final Load Forecast Results

	Year	2013	2014	2015	2016	2017	2018	2019	2020	2020 CDM Adjusted
R1(i)	Cust/Conn	7,301	7,398	7,480	7,544	7,596	7,640	7,722	8,116	8,116
	kWh	80,510,678	85,393,126	80,876,150	75,910,136	76,321,856	82,834,418	75,387,475	79,805,566	78,446,984
	kW									
R1(ii)	Cust/Conn	947	956	954	951	961	961	956	997	997
	kWh	25,739,747	27,212,831	26,130,351	24,984,442	25,604,789	26,240,994	23,881,888	26,928,875	25,484,758
	kW									
R2	Cust/Conn	50	43	42	42	38	40	39	37	37
	kWh	83,700,857	83,470,708	86,528,984	89,578,886	94,512,143	109,202,680	99,385,190	91,043,719	85,867,987
	kW	199,528	196,688	208,261	217,369	210,836	234,800	229,529	210,264	196,648
Seasonal	Cust/Conn	3,331	3,255	3,176	3,140	3,108	3,076	3,018	2,960	2,960
	kWh	8,458,860	7,919,568	6,868,390	6,205,026	6,042,453	6,043,635	5,500,303	5,502,049	5,439,365
	kW									
Street Lights	Cust/Conn	1,018	1,019	1,023	1,066	1,070	1,067	1,067	1,117	1,117
	kWh	807,249	777,269	742,696	584,575	582,537	568,784	568,784	595,435	595,435
	kW	2,388	2,227	2,128	1,623	1,619	1,581	1,581	1,655	1,655
Total	**Cust/Conn**	**12,648**	**12,670**	**12,675**	**12,743**	**12,774**	**12,784**	**12,802**	**13,227**	**13,227**
	kWh	**199,217,390**	**204,773,502**	**201,146,571**	**197,263,065**	**203,063,777**	**224,890,511**	**204,723,640**	**203,875,644**	**195,834,528**
	kW	**201,916**	**198,915**	**210,389**	**218,992**	**212,455**	**236,381**	**231,110**	**211,919**	**198,303**

3.1.4 LOAD FORECAST METHODOLOGY AND DETAIL

API's load forecast is prepared in two phases. The first phase, a billed energy forecast by customer class for 2020, is developed using a total purchase ("Wholesale") basis regression analysis. Then, in the second phase, usage associated with the known change in customers for 2020 is determined and adjusted ("Adjusted Wholesale"). The methodology proposed in this application predicts wholesale consumption ("Predicted") using a multiple regression analysis that relates historical monthly wholesale kWh usage to carefully selected variables. The one-way analysis of variance ("ANOVA") is used to determine whether there are any statistically significant differences between the means of three or more independent (unrelated) groups. The ANOVA compares the means between the groups you are interested in and determines whether any of those means are statistically significantly different from each other. The utility did not test the Normalized Average Consumption method because this method is generally seen as an alternative to regression-based analysis when sound historical data is not available.

The most significant variables used in weather related regressions are monthly historical heating degree days and cooling degree days. Heating degree-days provide a measure of how much (in degrees), and for how long (in days), the outside temperature was below a given base temperature. The most readily available heating degree days come with a base temperature of 18°C. Cooling degree-day figures also come with a base temperature, and provide a measure of how much, and for how long, the outside temperature was above that base temperature.

For degree days, daily observations as reported in Wawa were used. The regression model also uses other variables which are tested to see their relationship and contribution to the fluctuating wholesale purchases. Each variable is discussed in detail later in this section.

Explanation of Multiple Regression Analysis

Multiple regression can be utilized for forecasting purposes by analyzing how several variables have affected a dependent variable historically. From this, the relationship between these variables and the dependent variable can be expressed as:

Y=A+B1X1+B2X2…+BnXn + E

Where:

Y = Predicted dependent variable value

A = the value of Y when all Xs are zero

X = the independent variable

B = the coefficients corresponding to the independent variables

n = the number of independent variables

E = an error term

By forecasting the independent variables, the dependent variable can be predicted. However, to ascertain that the relationship is not coincidental, the utility must first assess the correlation between the dependent and individual independent variables. This can be accomplished by the Pearson Correlation Coefficient (otherwise known as "R") to each independent variable. This depicts how much of the change in dependent variable can be explained by the change in independent variables. Those variables with a high R-squared should then be used for multiple regression. The same correlation coefficient can be applied to multiple independent variables to ascertain how much of the change in a dependent variable can be explained by changes in all independent variables.

R Squared=(B'X'Y – nAVG(Y)^2)/Y'Y-nAVG(Y)^2)

Where:

B',X',Y' = Matrixes of all combinations of B,X&Y respectively

^2 = Squared

The adjusted R-squared is calculated by "correcting" for the number of independent variables in a multiple regression analysis. The formula: Adj RSq=(1-(1-RSq)*((n-1)/(n-k)). It is often used to compare models involving a different number of coefficients. The statistical significance of the multiple regression can be tested with the F-test which is derived from a normal probability distribution. A critical point along the distribution can be found given a degree of confidence required, the number of variables and the number of observations. If the F-statistic is at this point, then the analysis can be deemed statistically significant at the level of confidence.

F-statistic = (R Squared/k-1)/(1-R Squared)/(n-k)

Where:

k = number of independent variable

n = number of observations

Independent variables that are highly correlated themselves can lead to high variances in slope estimation (B). This is known as "Multicollinearity." For this reason, independent variables with a high level of multicollinearity to the other independent variables should consider being omitted from the analysis.

The formula behind the monthly weather normalized values is as follows; (coefficient for the intercept) + (monthly HDD*coefficient for HDD) + (monthly CDD*coefficient for CDD) + (spring/fall flag*coefficient for spring/fall flag) + (monthly Employment Stats*coefficient for monthly Employment Stats). When the regression line is linear (y = ax + b), the regression coefficient is the constant (a) that represents the rate of change of one variable (y) as a function of changes in the other (x); it is the slope of the regression line. The intercept is the predicted value of the dependent variable when all predictor variables are set to 0.

3.1.5 ECONOMIC OVERVIEW

API's economic and service area overview is presented in Section 3.1 of the Business Plan and duplicated below for ease of reference:

Location and Geography

API's service area extends approximately 93 km east and 255 km north of the City of Sault Ste. Marie, covering approximately 14,200 km^2, which includes 7 First Nation Reserves, 14 organized townships, and a large number of unorganized townships. This vast service area is located in the Canadian Shield; a rugged and unyielding expanse of bare rock, lakes, muskeg, and trees. It also spans two different forest zones (the Great Lakes – St. Lawrence forest zone and the Boreal forest zone), with the result that the majority of API's distribution lines, 99% of which are overhead, are constructed through areas of dense vegetation.

Employment and Industry

Employment in API's service area has historically been driven by the natural resource, agricultural and tourism sectors. Development and maintenance of hydroelectric generation facilities has also been a large part of the economy, particularly in the Wawa to Montreal River area. Private and public sector service industries supporting these industries and local populations have also been large employers.

Approximately two thirds of API's customers are residential. Among these customers is a mix of customers employed by organizations in API's service area, and customers residing in API's service area but commuting to other municipalities for work, mostly in the City of Sault Ste. Marie. An aging population also means that API's residential class includes a large base of retirees. As of the 2016 census, the median age in the Algoma District was 49.0 years, compared to 41.3 years for Ontario as a whole. Commercial and Industrial customers currently comprise less than one-tenth of API's total customer base, with only 0.3% of all accounts having a demand greater than 50 kW.

The rugged wilderness, rural and remote nature, and recreational opportunities associated with API's service area attracts a relatively large seasonal population, with one-quarter of API's customer accounts classified as Seasonal.

Climate

The climate in API's service area is humid continental, which is characterized by large variations in seasonal temperatures including cold winters and warm, humid summers. Due to the size of its service area, temperatures and weather conditions are often quite varied between the northern and southern limits of its service area. The annual average temperature ranges from 2.1°C in Wawa to 4.7°C in Sault Ste. Marie. Daily average temperatures in Wawa and Sault Ste. Marie fluctuate from a low of approximately −10°C to −14°C in January to a high of approximately 15°C to 18°C in July and August. Weather extremes are more pronounced, with Wawa experiencing extreme minimum temperatures as cold as −50°C and Sault Ste. Marie experiencing extreme maximums of 36.8°C.

The entire API service territory is located on the leeward shore of Lake Superior. As a result, the region is prone to lake effect precipitation which occasionally limits API's ability to access portions of its service territory. In recent years, API has seen a number of severe storms, with significant precipitation, and winds approaching, and in some cases exceeding, current design standards. While API's distribution assets have generally withstood these weather conditions, the winds and associated precipitation have caused a large number of tree-related outages during major event days.

3.1.6 OVERVIEW OF WHOLESALE PURCHASES

API purchases electricity from the IESO as a market participant, via Hydro One's transmission system, as well as from embedded generation.

The following table outlines the unadjusted monthly wholesale purchases:

Table 3 - Wholesale Purchases 2009-2018

API's load has seen an increase over the past ten years with the largest total wholesale being in 2018. This increase is primarily associated with the R2 rate class and with annual variability primarily due to weather, especially in 2018.


Wholesale Purchases by year
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
-
January
February
March
April
May
June
July
August
September
October
November
December
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

3.1.7 OVERVIEW OF VARIABLES USED

In API's case, variation in monthly electricity consumption is influenced by 4 main factors – weather (e.g. heating and cooling), which is by far the most dominant effect on most systems, the spring/fall flag, and employment. Specifics relating to each variable used in the regression analysis are presented in the next section.

Heating and Cooling:

To determine the relationship between observed weather and energy consumption, monthly weather observations describing the extent of heating or cooling required within the month are necessary. Environment Canada publishes monthly observations on heating degree days (HDD) and cooling degree days (CDD) for selected weather stations across Canada. Heating degree-days for a given day are the number of Celsius degrees that the mean temperature is below 18°C. Cooling degree-days for a given day are the number of Celsius degrees that the mean temperature is above 18°C. For API, the monthly HDD and CDD as reported in Wawa were used as they offered a complete 10 years of history.

API has adopted the 10-year average from 2009 to 2018 as the definition of weather normal. Our view is that a ten-year average based on the most recent ten calendar years available is a reasonable compromise that likely reflects the "average" weather experienced in recent years. Many other LDCs have also adopted this definition for the purposes of cost-of-service rebasing. The following table outlines the monthly weather data used in the regression analysis.

Table 4 - HDD and CDD as reported at Utility Location

HDD	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
January	970.40	810.70	935.00	935.00	778.70	980.30	957.50	794.20	710.90	860.40
February	747.80	691.10	732.30	755.30	759.10	912.00	1015.20	731.20	638.70	769.00
March	680.70	510.80	699.20	579.90	721.10	895.00	786.60	588.80	706.20	737.70
April	425.50	327.80	444.60	437.50	547.80	511.10	474.40	499.70	392.10	585.90
May	298.90	168.00	221.90	198.40	249.50	267.90	242.90	241.20	273.80	214.00
June	126.10	83.50	99.40	75.70	106.20	96.90	141.80	116.80	104.10	104.50
July	87.70	6.50	19.60	10.30	45.00	88.10	52.60	27.20	42.00	19.60
August	69.30	32.70	24.20	34.30	58.10	63.40	37.50	17.10	55.50	24.60
September	93.10	168.70	129.50	181.90	165.60	158.20	75.50	65.10	112.70	135.00
October	381.10	315.50	269.50	346.70	319.00	341.00	331.20	277.40	266.30	376.40
November	416.70	475.90	428.80	467.20	543.70	616.10	413.00	391.50	497.40	604.10
December	748.50	775.90	653.50	679.10	904.60	691.40	541.20	689.80	849.90	686.60
Total	**5045.80**	**4367.10**	**4657.50**	**4701.30**	**5198.40**	**5621.40**	**5069.40**	**4440.00**	**4649.60**	**5117.80**

CDD	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
January	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
April	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.00	19.00	3.20	8.40	3.00	0.80	1.10	3.50	0.00	5.60
June	19.20	5.30	2.70	23.70	12.40	12.00	0.40	8.60	3.50	17.10
July	8.00	61.70	64.40	61.20	51.80	6.40	29.20	44.20	13.80	59.60
August	25.20	78.60	35.40	37.70	27.10	13.50	35.60	51.70	9.20	45.50
September	5.00	0.00	11.00	5.30	5.80	1.40	31.40	12.80	33.30	22.50
October	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.90	0.00
November	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**57.40**	**164.80**	**118.20**	**136.30**	**100.10**	**34.10**	**97.70**	**120.80**	**61.70**	**150.30**

Spring Fall Flag:

API also tested a "Spring/Fall Flag" variable. Although the variables did not yield particularly strong results, it did slightly improve the R-Square, and therefore API opted to keep it as a variable. The variable accounts for the seasonal increase in consumption in the summer and winter months.

Employment:

API also tested an "Employment" variable. Although the variables did not yield particularly strong results, it did slightly improve the R-Square, and therefore API opted to keep it as a variable.

Summary

Using a combination of wholesale purchases and variables listed above, a multiple regression analysis was used to develop an equation describing the relationship between monthly actual wholesale kWh and the explanatory variables. API also used a correlation function to examine the relationship between the variables included in the analysis.

To project the adjusted wholesale purchases for the bridge and test year, the model uses, for the most part, a simple average of the last ten years of historical data. API has applied this method of prediction to all variables.

Origin of variables

- HDD: Stats Canada
- CDD: Stats Canada
- Spring/Fall Computed by the utility
- Employment Stats Canada CANSIM 02820122

Rational for including and excluding variables

During the process of testing the regression analysis, many different variables and times periods are tested to arrive at the best R-Squared.

3.1.8 REGRESSION RESULTS

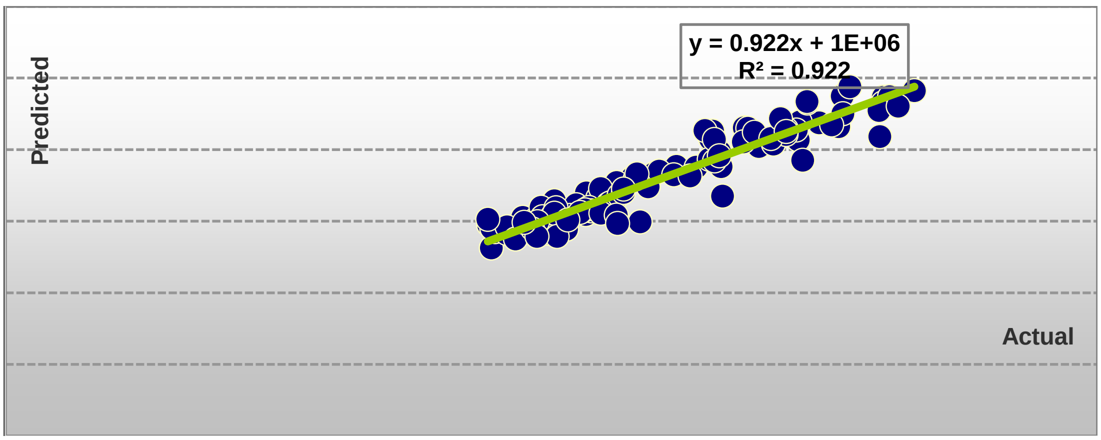
Table 5 - Correlation/Regression Results below presents the regression results used to determine the load forecast

Table 5 - Correlation/Regression Results

Equation Parameters			95% Confidence/Autocorrelation		
R Squared	**0.9220**	**91.93% of the change in WS can be explained by the change in the 4 independent variables**	**1.015**	**Durbin-Watson Statistic**	
Adjusted R Squared	**0.9193**		**1.65 - 1.75**	**Positive autocorrelation detected**	
Standard Error	**932423.0000**	**to +/- on result of Regression Equation**	**2.448**	**Critical F-Statistic - 95% Confidence**	
F - Statistic	**339.9021**	**Therefore analysis IS Significant**	**86.12%**	**Confidence to which analysis holds**	

Multiple Regression Equation					Independent Analysis			Auto Correlation	Multicollinearity	
	Coefficients	**Standard Error**	**t Stat**	**p Value**	**R Squared**	**Coefficient**	**Intercept**	**Dl=1.69 Du=1.72 DW-Stat**	**Adjusted R-Squared against other Indep**	**Variables With RSQ at > 90%**
Intercept	21,906,871.729	3,232,792.795	6.776	0.00%						
HDD	10,936.540	420.597	26.002	0.00%	88.13%	10272.24	13412634.00	**0.33**	52.91%	
CDD	34,152.578	7,335.285	4.656	0.00%	18.84%	-84759.30	18331426.00	**0.98**	50.69%	
Spring/Fall	-610,646.866	199,045.391	-3.068	0.27%	4.11%	-1324554.15	18258134.00	**1.34**	24.96%	
Employment	-34,494.856	12,340.758	-2.795	0.61%	23.01%	-195006.01	67094232.00	**0.24**	24.51%	

Multiple Regression Equation			**Variable Trend Analysis For Forecasting**												**Step 2:**	
	Linear			**Exponential**			**2nd Order Polynomial**				**3rd Order Polynomial**					**Forecast Method**
Intercept	**Coef**	**Int**	**RSQ**	**Coef**	**Int**	**RSQ**	**Coef1**	**Coef2**	**Int**	**RSQ**	**Coef1**	**Coef2**	**Coef3**	**Int**	**RSQ**	
HDD	-0.19	419.0	0%	1.00	265.6	0%	0.25	0.00	409.7	0%	-4.16	0.09	0.00	457.6	**0%**	Linear
CDD	0.00	8.4	0%	0.00	0.0	0%	-0.05	0.00	9.6	0%	0.60	-0.01	0.00	2.5	**2%**	Linear
Spring/Fall	0.00	0.5	0%	0.00	0.0	0%	0.00	0.00	0.5	0%	0.00	0.00	0.00	0.5	**0%**	Linear
Employment	-0.11	260.5	22%	1.00	260.5	22%	-0.01	0.00	258.4	23%	-0.19	0.00	0.00	260.4	**24%**	Linear



The resulting regression equation yields an adjusted R-squared of 0.9193. When actual annual wholesale values are compared to annual values predicted by the regression equation, the mean absolute percentage error (MAPE) is 2.77%. More detailed model statistics can be found in the next section.

Once API calculated its preferred Regression Results, the Load Forecast model then uses the coefficients from the regression results to predict historical wholesale purchases. Table 6 compares the actual and predicted wholesale purchases for the 2009-2018 period.

Table 6 - Wholesale vs. Predicted using the coefficients from the regression results

Year	**Wholesale**	**year over year**	**Predicted**	**year over year**	**Wholesale vs Predicted**	
2009	201,931,225		206,962,091		2.49%	2.49%
2010	200,455,300	-0.73%	208,419,622	-0.73%	3.97%	3.97%
2011	209,265,738	4.40%	209,352,130	3.25%	0.04%	0.04%
2012	207,672,192	-0.76%	207,434,463	-1.71%	-0.11%	0.11%
2013	218,662,491	5.29%	213,449,122	5.62%	-2.38%	2.38%
2014	222,844,848	1.91%	217,052,675	1.90%	-2.60%	2.60%
2015	216,436,884	-2.88%	211,935,646	-3.26%	-2.08%	2.08%
2016	211,050,246	-2.49%	208,497,216	-2.80%	-1.21%	1.21%
2017	217,280,995	2.95%	209,640,368	2.93%	-3.52%	3.52%
2018	241,087,151	10.96%	218,759,530	11.05%	-9.26%	9.26%
					Mean	**2.77%**
					Median	**2.44%**

Table **7** as seen below, shows the results of the mean absolute deviation (MAD), the mean square error (MSE), the root mean square (RMSE) and the mean absolute Percentage error (MAPE).

Table 7 - MAP-MSE-MAPE

Period	**Actual**	**Forecast**	**Error**	**Absolute Value of Error**	**Square of Error**	**Absolute Values of Errors Divided by Actual Values.**
t	A_t	F_t	$A_t - F_t$	$\lvert A_t - F_t \rvert$	$(A_t - F_t)^2$	$\lvert (A_t - F_t)/A_t \rvert$
1	201,931,225	206,962,091	-5,030,866	5,030,866	25,309,614,016,533	0.0249
2	200,455,300	208,419,622	-7,964,322	7,964,322	63,430,432,379,774	0.0397
3	209,265,738	209,352,130	-86,392	86,392	7,463,586,979	0.0004
4	207,672,192	207,434,463	237,729	237,729	56,515,068,901	0.0011
5	218,662,491	213,449,122	5,213,369	5,213,369	27,179,211,684,731	0.0238
6	222,844,848	217,052,675	5,792,173	5,792,173	33,549,270,481,494	0.0260
7	216,436,884	211,935,646	4,501,238	4,501,238	20,261,141,889,910	0.0208
8	211,050,246	208,497,216	2,553,030	2,553,030	6,517,960,728,244	0.0121
9	217,280,995	209,640,368	7,640,627	7,640,627	58,379,178,020,186	0.0352
10	241,087,151	218,759,530	22,327,621	22,327,621	498,522,646,939,519	0.0926
	Totals					0.277

The mean absolute deviation (MAD) is the sum of absolute differences between the actual value and the forecast divided by the number of observations.

Mean square error (MSE) is probably the most commonly used error metric. It penalizes larger errors because squaring larger numbers has a greater impact than squaring smaller numbers. The MSE is the sum of the squared errors divided by the number of observations.

Mean Absolute Percentage Error (MAPE) is the average of absolute errors divided by actual observation values.

In accordance with the Filing Requirements, API has also provided a 2020 forecast assuming twenty-year normal weather conditions. Table 8 below displays 20 years of historical Heating Degree Days and Cooling Degree Days. The impact of using both a 10-year average as well as a 20-year average to weather normalize wholesale purchases is presented in Table 9.

Table 8 – Twenty-Year HDD and CDD

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10 year avg	20 year
HDD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	avg	avg
Jan	910.7	893.0	781.9	721.4	920.6	1006.0	925.1	689.8	776.9	761.9	970.4	810.7	935.0	935.0	778.7	980.3	957.5	794.2	710.9	860.4	873.3	856.0
Feb	677.9	699.1	786.6	685.7	902.6	707.0	693.6	734.6	843.5	831.3	747.8	691.1	732.3	755.3	759.1	912.0	1015.2	731.2	638.7	769.0	775.2	765.7
Mar	681.0	538.2	704.2	778.6	745.5	652.7	744.9	635.4	654.6	795.5	680.7	510.8	699.2	579.9	721.1	895.0	786.6	588.8	706.2	737.7	690.6	691.8
Apr	374.4	427.2	399.6	470.5	497.2	457.4	369.1	360.0	459.1	391.8	425.5	327.8	444.6	437.5	547.8	511.1	474.4	499.7	392.1	585.9	464.6	442.6
May	175.6	234.7	195.9	326.0	236.5	297.9	259.0	185.1	204.6	320.0	298.9	168.0	221.9	198.4	249.5	267.9	242.9	241.2	273.8	214.0	237.7	240.6
Jun	81.6	124.6	89.5	93.1	112.8	151.4	31.7	81.2	67.8	99.8	126.1	83.5	99.4	75.7	106.2	96.9	141.8	116.8	104.1	104.5	105.5	99.4
Jul	19.9	49.9	53.0	19.1	28.0	54.7	34.9	8.4	38.0	34.8	87.7	6.5	19.6	10.3	45.0	88.1	52.6	27.2	42.0	19.6	39.9	37.0
Aug	61.7	50.6	33.0	28.9	32.2	83.0	23.7	35.0	33.8	29.0	69.3	32.7	24.2	34.3	58.1	63.4	37.5	17.1	55.5	24.6	41.7	41.4
Sep	133.4	176.0	152.0	89.9	123.1	84.1	82.6	151.9	127.6	140.1	93.1	168.7	129.5	181.9	165.6	158.2	75.5	65.1	112.7	135.0	128.5	127.3
Oct	366.9	318.1	319.3	409.8	348.5	307.3	273.6	375.3	233.5	334.5	381.1	315.5	269.5	346.7	319.0	341.0	331.2	277.4	266.3	376.4	322.4	325.5
Nov	442.4	499.7	414.9	574.4	494.7	462.7	497.6	467.9	541.0	496.8	416.7	475.9	428.8	467.2	543.7	616.1	413.0	391.5	497.4	604.1	485.4	487.3
Dec	688.8	891.4	593.9	686.5	657.8	796.9	738.6	624.3	711.6	814.7	748.5	775.9	653.5	679.1	904.6	691.4	541.2	689.8	849.9	686.6	722.1	721.3
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10 year avg	20 year
CDD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	avg	avg
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
May	3.3	1.7	0.0	0.2	0.0	0.2	0.0	8.4	12.5	0.0	0.0	19.0	3.2	8.4	3.0	0.8	1.1	3.5	0.0	5.6	4.5	3.5
Jun	32.0	6.7	29.9	21.0	11.9	2.2	41.8	12.9	35.9	7.8	19.2	5.3	2.7	23.7	12.4	12.0	0.4	8.6	3.5	17.1	10.5	15.4
Jul	74.5	37.1	41.8	79.0	27.9	15.4	78.8	78.2	41.7	18.7	8.0	61.7	64.4	61.2	51.8	6.4	29.2	44.2	13.8	59.6	40.0	44.7
Aug	15.1	18.3	59.4	33.3	48.6	13.5	40.6	20.1	42.5	24.0	25.2	78.6	35.4	37.7	27.1	13.5	35.6	51.7	9.2	45.5	36.0	33.7
Sep	19.2	8.6	9.3	36.0	14.2	24.3	22.3	5.2	17.0	9.8	5.0	0.0	11.0	5.3	5.8	1.4	31.4	12.8	33.3	22.5	12.9	14.7
Oct	0.0	0.4	0.0	0.8	0.0	0.0	9.6	0.0	0.8	1.3	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.3	0.8
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 **Table 9 - Forecast using a ten year vs. twenty-year weather normalization**

Date	Weather Normalized 10Year	Weather Normalized 20Year	Difference
2020-January	22,958,307	22,780,557	-177,750
2020-February	21,955,551	21,796,293	-159,258
2020-March	20,358,188	20,381,726	23,538
2020-April	17,851,812	17,660,479	-191,333
2020-May	15,511,649	15,575,279	63,630
2020-June	14,881,712	15,048,983	167,271
2020-July	15,251,743	15,370,983	119,240
2020-August	15,149,466	15,049,894	-99,572
2020-September	14,733,018	14,732,905	-113
2020-October	16,311,632	16,429,871	118,239
2020-November	18,169,675	18,175,093	5,418
2020-December	21,108,390	21,347,813	239,422
Total	**214,241,143**	**214,349,876**	**108,734**

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3.1.9 DETERMINATION OF CUSTOMER FORECAST

API has used a simple geometric mean function to determine the forecasted number of customers for 2019 and 2020. The geometric mean is more appropriate to use when dealing with percentages and rates of change. Although the formula is somewhat simplistic, it is reasonably representative of API's natural customer growth. The geometric mean results were analyzed by API and then further adjusted for known particulars. Historical customer counts and projected customer counts for 2019 and 2020 are presented in Table 10 below. A variance analysis of customer counts and projections is presented at 3.3.10.

Table 10 - Customer Forecast

	R1(i)		R1(ii)		R2		Seasonal		Street Lights	
Date	**Customers or Connections**	**Growth Rate**	**Customers or Connections**	**Growth Rate**	**Customers or Connections**	**Growth Rate**	**Customers or Connections**	**Growth Rate**	**Customers or Connections**	**Growth Rate**
2009	6940		1005		47		3659		1021	
2010	7000	1.0085	1015	1.0093	44	0.9274	3622	0.9900	1021	1.0000
2011	7078	1.0112	1031	1.0158	43	0.9943	3539	0.9770	1021	1.0000
2012	7208	1.0183	1021	0.9909	49	1.1209	3422	0.9670	1019	0.9983
2013	7301	1.0129	947	0.9277	50	1.0257	3331	0.9735	1018	0.9988
2014	7398	1.0133	956	1.0087	43	0.8698	3255	0.9770	1019	1.0006
2015	7480	1.0110	954	0.9985	42	0.9712	3176	0.9759	1023	1.0040
2016	7544	1.0086	951	0.9968	42	0.9980	3140	0.9887	1066	1.0427
2017	7596	1.0070	961	1.0105	38	0.9069	3108	0.9899	1070	1.0034
2018	7640	1.0057	961	0.9997	40	1.0415	3076	0.9898	1067	0.9973
Geomean		*1.0107*		*0.9950*		*0.9814*		*0.9809*		*1.0049*
2019	7722		956		39		3018		1072	
2020	7805		951		38		2960		1078	
Adjusted										
2019	7722	1.0107	956	0.9950	39	0.9814	3018	0.9809	1067	1.0000
2020	8116	1.0510	997	1.0431	37	0.9557	2960	0.9809	1117	1.0469

3.1.10 DETERMINATION OF WEATHER NORMALIZED FORECAST

Allocation to specific weather sensitive rate classes (R1(i), R1(ii), R2, and Seasonal) is based on historical ratios of actual retail kWh (exclusive of distribution losses) to actual wholesale kWh for each class. Weather normalized wholesale kWh, for historical years, are allocated to these classes based on these historical shares. Forecast values for 2019 and 2020 are allocated based on the most recent year's (2018) actual share.

For the Street Lighting rate class, which is not weather sensitive, the forecasted 2019 and 2020 load is equal to 2018 actuals, plus a 2020 adjustment for street lights in Dubreuilville, as described below.

After determining the 2020 load forecast based on the process described above, API made the following additional adjustments (based on 2018 actual load) to reflect the integration of DLI customers:

- 1 customer and associated load was removed from the R2 rate class to reflect that API will no longer bill DLI as an embedded distributor at R2 rates;
- 357 customers and associated load were added to the R1(i) and R1(ii) rate classes to reflect former customers of DLI that will be billed as individual API customers; and
- 50 street light connections and associated load were added to the Street Lighting rate class to reflect street lights that will be billed by API.

For those rate classes that use kW consumption as a billing determinant, sales for these customer classes are then converted to kW based on the historical volumetric relationship between kWh and kW.

Explanations for material changes over time, explanations of the bridge and test year forecasts by rate class, as well as variance analysis between the last OEB-approved and the actual and weather-normalized historical results are presented at Section 3.3.1 Variance Analysis of Load Forecast.

3.1.11 LOAD FORECAST BY CLASS.

The following section presents class-specific adjusted historical and forecast values for those classes that have weather sensitive load. Historic class specific kWh consumption is allocated based on each class' share of wholesale kWh, exclusive of distribution losses. Forecast class values are allocated based on the class share for 2018.

Table 11 – R1(i) Residential Forecast (Weather Sensitive)

R1(i) (Residential)

Year	Residential Actual kWh	Total Actual Wholesale	Ratio%	Predicted Wholesale	Residential Weather Normal	Per customer
2009	76,536,240	201,931,225	37.90%	206,962,091	78,443,046	11,303
2010	72,452,502	200,455,300	36.14%	208,419,622	75,331,125	10,762
2011	78,116,651	206,961,897	37.74%	209,352,130	79,018,831	11,164
2012	77,791,365	203,428,335	38.24%	207,434,463	79,323,316	11,005
2013	80,510,678	214,860,024	37.47%	213,449,122	79,981,996	10,955
2014	85,393,126	218,938,328	39.00%	217,052,675	84,657,660	11,443
2015	80,876,150	211,807,379	38.18%	211,935,646	80,925,127	10,820
2016	75,910,136	205,874,625	36.87%	208,497,216	76,877,138	10,120
2017	76,321,856	211,916,088	36.02%	209,640,368	75,502,253	9,883
2018	82,834,418	235,329,659	35.20%	218,759,530	77,001,847	9,972
2019			35.20%	214,173,157	75,387,475	9,763
2020			35.20%	214,241,143	75,411,406	9,663

Load adjusted based on utility input

Residential						
Year	New Customer	DLI 44 kV Supply allocation %	Added Load			Total
2019	0					75,387,475
2020	311	52.48%	4,394,160			79,805,566

Table 12 – R1(ii) Forecast (Weather Sensitive)

R1(ii) (GS < 50)

Year	**Actual kWh**	**Total Wholesale**	**Ratio%**	**Predicted Wholesale**	**Weather Normal**	**Per customer**
2009	27,224,772	201,931,225	13.48%	206,962,091	27,903,043	27,755
2010	26,062,992	200,455,300	13.00%	208,419,622	27,098,505	26,707
2011	24,356,720	206,961,897	11.77%	209,352,130	24,638,019	23,905
2012	25,721,085	203,428,335	12.64%	207,434,463	26,227,612	25,682
2013	25,739,747	214,860,024	11.98%	213,449,122	25,570,724	26,990
2014	27,212,831	218,938,328	12.43%	217,052,675	26,978,455	28,230
2015	26,130,351	211,807,379	12.34%	211,935,646	26,146,175	27,400
2016	24,984,442	205,874,625	12.14%	208,497,216	25,302,713	26,602
2017	25,604,789	211,916,088	12.08%	209,640,368	25,329,825	26,353
2018	26,240,994	235,329,659	11.15%	218,759,530	24,393,302	25,385
2019			11.15%	214,173,157	23,881,888	24,978
2020			11.15%	214,241,143	23,889,469	25,112
	Load adjusted based on utility input					
GS<50						
Year	New Customer	DLI 44 kV Supply allocation %	Added Load			Total
2019	0					23,881,888
2020	46	36.30%	3,039,406			26,928,875

Table 13 – R2 (kWh) (Weather Sensitive)

R2 (GS>50)

Year	**Actual kWh**	**Total Wholesale**	**Ratio%**	**Predicted Wholesale**	**Weather Normal**	**Per customer**
2009	69,931,762	201,931,225	34.63%	206,962,091	71,674,025	1,522,280
2010	70,938,155	200,455,300	35.39%	208,419,622	73,756,610	1,689,083
2011	75,394,032	206,961,897	36.43%	209,352,130	76,264,768	1,756,578
2012	79,423,076	203,428,335	39.04%	207,434,463	80,987,160	1,664,120
2013	83,700,857	214,860,024	38.96%	213,449,122	83,151,226	1,665,801
2014	83,470,708	218,938,328	38.13%	217,052,675	82,751,799	1,905,992
2015	86,528,984	211,807,379	40.85%	211,935,646	86,581,384	2,053,313
2016	89,578,886	205,874,625	43.51%	208,497,216	90,720,011	2,155,723
2017	94,512,143	211,916,088	44.60%	209,640,368	93,497,198	2,449,708
2018	109,202,680	235,329,659	46.40%	218,759,530	101,513,457	2,553,798
2019			46.40%	214,173,157	99,385,190	2,547,737
2020			46.40%	214,241,143	99,416,738	2,596,943

Load adjusted based on utility input

GS>50						
Year	New Customer	DLI 44 kV Supply	Added Load			Total
2019	0		0			99,385,190
2020	-1	8,373,019	-8,373,019			91,043,719

Table 14 – R2 Demand (kW)

R2 (GS>50)

Year	**kWh**	**kW**	**KW/kWh Ratio**
2009	69,931,762	150,499	0.00215
2010	70,938,155	163,570	0.00231
2011	75,394,032	176,514	0.00234
2012	79,423,076	185,948	0.00234
2013	83,700,857	199,528	0.00238
2014	83,470,708	196,688	0.00236
2015	86,528,984	208,261	0.00241
2016	89,578,886	217,369	0.00243
2017	94,512,143	210,836	0.00223
2018	109,202,680	234,800	0.00215
2019	99,385,190	229,529	0.00231
2020	91,043,719	210,264	0.00231
Avg			*0.00231*

Table 15 - Street Lighting (Non-Weather Sensitive)

Street Lights

Year	kWh	kW	Connection	kWh per connection	KW per connection	KW/kWh Ratio
2009	791,996	2,304	1,021	776	2.2566	0.00291
2010	721,376	2,304	1,021	707	2.2566	0.00319
2011	523,958	2,304	1,021	513	2.2566	0.00440
2012	728,404	2,197	1,019	715	2.1555	0.00302
2013	807,249	2,388	1,018	793	2.3458	0.00296
2014	777,269	2,227	1,019	763	2.1864	0.00287
2015	742,696	2,128	1,023	726	2.0808	0.00287
2016	584,575	1,623	1,066	548	1.5220	0.00278
2017	582,537	1,619	1,070	544	1.5131	0.00278
2018	568,784	1,581	1,067	533	1.4814	0.00278
2019	568,784	1,581	1,067	533	1.4816	0.00278
2020	595,435	1,655	1,117	533	1.4815	0.00278
Last Actual				*533*	*1.4814*	*0.00278*

1 **Table 16 - Seasonal (Weather Sensitive)**

Seasonal

Year	kWh	Ratio%	Customer	kWh per customer
2009	12,341,792	6.11%	3,659	3,373
2010	11,130,245	5.55%	3,622	3,073
2011	10,958,186	5.29%	3,539	3,097
2012	10,136,343	4.98%	3,422	2,962
2013	8,458,860	3.94%	3,331	2,539
2014	7,919,568	3.62%	3,255	2,433
2015	6,868,390	3.24%	3,176	2,163
2016	6,205,026	3.01%	3,140	1,976
2017	6,042,453	2.85%	3,108	1,944
2018	6,043,635	2.57%	3,076	1,965
2019	5,500,303	2.57%	3,018	1,822
2020	5,502,049	2.57%	2,960	1,859
Avg			*3,333*	*2,553*

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3.1.12 FINAL NORMALIZED LOAD FORECAST

Table 17 below presents historical and projected weather normalized Load Forecast by customer class.

Table 17 - Final Load Forecast

Final Load Forecast Results

	Year	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2020 CDM Adjusted**
R1(i)	Cust/Conn	7,301	7,398	7,480	7,544	7,596	7,640	7,722	8,116	8,116
	kWh	80,510,678	85,393,126	80,876,150	75,910,136	76,321,856	82,834,418	75,387,475	79,805,566	78,446,984
	kW									
R1(ii)	Cust/Conn	947	956	954	951	961	961	956	997	997
	kWh	25,739,747	27,212,831	26,130,351	24,984,442	25,604,789	26,240,994	23,881,888	26,928,875	25,484,758
	kW									
R2	Cust/Conn	50	43	42	42	38	40	39	37	37
	kWh	83,700,857	83,470,708	86,528,984	89,578,886	94,512,143	109,202,680	99,385,190	91,043,719	85,867,987
	kW	199,528	196,688	208,261	217,369	210,836	234,800	229,529	210,264	196,648
Seasonal	Cust/Conn	3,331	3,255	3,176	3,140	3,108	3,076	3,018	2,960	2,960
	kWh	8,458,860	7,919,568	6,868,390	6,205,026	6,042,453	6,043,635	5,500,303	5,502,049	5,439,365
	kW									
Street Lights	Cust/Conn	1,018	1,019	1,023	1,066	1,070	1,067	1,067	1,117	1,117
	kWh	807,249	777,269	742,696	584,575	582,537	568,784	568,784	595,435	595,435
	kW	2,388	2,227	2,128	1,623	1,619	1,581	1,581	1,655	1,655
Total	**Cust/Conn**	**12,648**	**12,670**	**12,675**	**12,743**	**12,774**	**12,784**	**12,802**	**13,227**	**13,227**
	kWh	**199,217,390**	**204,773,502**	**201,146,571**	**197,263,065**	**203,063,777**	**224,890,511**	**204,723,640**	**203,875,644**	**195,834,528**
	kW	**201,916**	**198,915**	**210,389**	**218,992**	**212,455**	**236,381**	**231,110**	**211,919**	**198,303**

3.2 IMPACT AND PERSISTENCE FROM HISTORICAL CDM PROGRAMS

3.2.1 LOAD FORECAST CDM ADJUSTMENT WORK FORM

While the forecast as presented in the previous section assumes some level of embedded "natural conservation," it does not consider the impacts on energy purchases arising from CDM programs undertaken by API's customers. The load forecast is a projection of the expected level of electricity purchases that would occur over the specified period in the absence of any CDM initiatives. Therefore, in accordance with the filing requirements, the forecasted energy purchases are further adjusted to reflect CDM reductions.

The schedule to achieve CDM targets is presented in Table 18 on the following page. API notes that amounts in the 2020 column represent the total persisting savings expected in 2020 as a result of all 2015-2020 CDM programs. The total column in OEB Appendix 2-I adds the kWh totals for 2015-2020, however the final total of this column was revised in the 2019 version of the Chapter 2 Appendices model to equal the LDC's assigned target. The total percentages above indicate the ratio of persisting savings to that target.

API submitted a joint CDM plan with Canadian Niagara Power Inc., which allows aggregation of the assigned energy savings targets and funding for the two LDCs. The most recently approved joint API-CNPI CDM plan forecasts that API will achieve savings equal to 173.54% of its target, as shown in the table.

1

Table 18 – OEB Appendix 2-I

2015-2020 CDM Programs

6 Year (2015-2020) kWh Target:

7,510,000

	2015	2016	2017	2018	2019	2020	Total
%							
2015 CDM Programs						8.27%	14.34%
2016 CDM Programs						10.96%	19.01%
2017 CDM Programs						17.13%	29.72%
2018 CDM Programs						55.53%	96.37%
2019 CDM Programs						3.91%	6.78%
2020 CDM Programs						4.21%	7.31%
Total in Year						**100.00%**	**173.54%**
				kWh			
2015 CDM Programs	1,077,169.00	1,068,894.00	1,068,387.00	1,093,167.00	1,086,232.00	1,077,279.00	6,471,128.00
2016 CDM Programs		1,437,693.00	1,437,694.00	1,437,694.00	1,437,694.00	1,427,961.00	7,178,736.00
2017 CDM Programs			2,640,268.00	2,250,773.00	2,248,143.00	2,232,142.00	9,371,326.00
2018 CDM Programs				7,237,615.43	7,237,615.43	7,237,615.43	21,712,846.29
2019 CDM Programs					509,000.00	509,000.00	1,018,000.00
2020 CDM Programs						549,000.00	549,000.00
Total in Year	**1,077,169.00**	**2,506,587.00**	**5,146,349.00**	**12,019,249.43**	**12,518,684.43**	**13,032,997.43**	**7,510,000.00**

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Weight Factor for Inclusion in CDM Adjustment to 2020 Load Forecast

	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Weight Factor for each year's CDM program impact on 2020 load forecast	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0.5**	**1**	Distributor can select "0", "0.5", or "1" from drop-down list
Default Value selection rationale.										

2011-2014 and 2015-2020 LRAMVA and CDM adjustment to Load Forecast

	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total for 2020
	kWh	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**
Amount used for CDM threshold for LRAMVA (2015) - Total	750,001.00	750,001.00	750,001.00							
Amount used for CDM threshold for LRAMVA (2020)							7,237,615.43	509,000.00	549,000.00	8,295,615.43
Manual Adjustment for 2020 Load Forecast (billed basis)	-	-		-	-	-	7,237,615.43	254,500.00	549,000.00	**8,041,115.43**

3.2.2 ALLOCATION OF CDM RESULTS

The overall CDM adjustment for 2020, as calculated above, is allocated on a pro-rata basis (using kWh forecast) per class. Table 19 below presents the method behind API's allocation of CDM reduction in consumption.

Table 19 - CDM adjustments to Load Forecast

Weather Adjusted Load Forecast Results					2017	2017	2018+2019+2020	2018+2019+2020	total (kWh)	total (kW)	Share	Target	2020 Adj
	Year	**2019**	**2020**		**2020 persist. (kWh)**	**2020 persist. (kW)**	**CDM Plan (kWh)**	**CDM Plan (kW)**					
R1(i)	Cust/Conn	7,722	8,116										8,116
	kWh	75,387,475	79,805,566		809,151		738,415		1,547,567	-	16.90%	1,358,582	78,446,984
	kW		-						-	-	0.00%		
									-	-			
R1(ii)	Cust/Conn	956	997						-	-			997
	kWh	23,881,888	26,928,875		-		1,645,000		1,645,000	-	17.96%	1,444,117	25,484,758
	kW		-						-	-	0.00%		
									-	-			
R2	Cust/Conn	39	37						-	-			37
	kWh	99,385,190	91,043,719		-		5,895,700		5,895,700	-	64.37%	5,175,733	85,867,987
	kW	229,529	210,264			1,716.00		13,616.03	-	15,332	100.00%		196,648
									-	-			
Seasonal	Cust/Conn	3,018	2,960						-	-			2,960
	kWh	5,500,303	5,502,049		60,904		10,500		71,404	-	0.78%	62,684	5,439,365
	kW	0	-						-	-	0.00%		
									-	-			
Street Lights	Cust/Conn	1,072	1,078						-	-			1,078
	kWh	568,784	595,435		-		-		-	-	0.00%	-	595,435
	kW	1,581	1,655			-			-	-	0.00%		1,655
Total	**Cust/Conn**	**12,807**	**13,188**										**13,188**
	kWh	**204,723,640**	**203,875,644**		870,055	1,716	8,289,615	13,616	9,159,670	15,332			**195,834,528**
	kW	**231,110**	**211,919**									**8,041,115.43**	**198,303**

The following table shows the per class allocation of the amount used for CDM threshold for LRAMVA (2020).

Table 20 - Allocation of amount used for CDM threshold for LRAMVA

Weather Adjusted Load Forecast Results					**2017**	**2018-2019-2020**	**total**	**Target**
	Year	**2019**	**2020**		**2020 persist. (kWh)**	**CDM Plan**		
R1(i) Residential	Cust/Conn	7,722	8,116					
	kWh	75,387,475	79,805,566		809,151	738,415	1,547,567	1,401,581
	kW		-					
R1(ii) GS < 50 kW	Cust/Conn	956	997					
	kWh	23,881,888	26,928,875		-	1,645,000	1,645,000	1,489,823
	kW		-					
R2 GS>50 kW	Cust/Conn	39	37					
	kWh	99,385,190	91,043,719		-	5,895,700	5,895,700	5,339,544
	kW	229,529	210,264		1,716	13,616	15,332	12,332
Seasonal	Cust/Conn	3,018	2,960					
	kWh	5,500,303	5,502,049					64,668
	kW	0	-					
Street Lights	Cust/Conn	1,072	1,078					
	kWh	568,784	595,435					
	kW	1,581	1,655					
Total	**Cust/Conn**	**12,807**	**13,188**					
	kWh	**204,723,640**	**203,875,644**		810,867	8,292,731	9,103,599	**8,295,615.43**
	kW	**231,110**	**211,919**					

3.2.3 FINAL CDM ADJUSTED LOAD FORECAST

The table below provides details of the Final Customer and Volume Load Forecast for each of the years. This summary of billing determinants by rate class is used to develop API's proposed rates, as detailed in Exhibit 8.

Table 21 - Final Customer and Volume Load Forecast

Customers or Connections

	Actual					Projected	
Customer Class Name	**Last Board Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	7,531	7,480	7,544	7,596	7,640	7,722	8,116
R1(ii)	965	954	951	961	961	956	997
R2	50	42	42	38	40	39	37
Seasonal	3,138	3,176	3,140	3,108	3,076	3,018	2,960
Street Lighting	1,018	1,023	1,066	1,070	1,067	1,067	1,117
TOTAL	**12,702**	**12,675**	**12,743**	**12,774**	**12,784**	**12,802**	**13,227**

Consumption (kWh)

	Actual					Projected	
Customer Class Name	**Last Board Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	80,045,884	80,876,150	75,910,136	76,321,856	82,834,418	75,387,475	79,805,566
R1(ii)	25,745,817	26,130,351	24,984,442	25,604,789	26,240,994	23,881,888	26,928,875
R2	83,288,188	86,528,984	89,578,886	94,512,143	109,202,680	99,385,190	91,043,719
Seasonal	7,731,414	6,868,390	6,205,026	6,042,453	6,043,635	5,500,303	5,502,049
Street Lighting	804,705	742,696	584,575	582,537	568,784	568,784	595,435
TOTAL	**197,616,008**	**201,146,571**	**197,263,065**	**203,063,777**	**224,890,511**	**204,723,640**	**203,875,644**

CDM Adjusted Consumption (kWh)

	Projected
Customer Class Name	**2020**
R1(i)	78,446,984
R1(ii)	25,484,758
R2	85,867,987
Seasonal	5,439,365
Street Lighting	595,435
TOTAL	**195,834,528**

Consumption (kW)

	Actual					Projected	
Customer Class Name	**Last Board Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	0	0	0	0	0	0	0
R1(ii)	0	0	0	0	0	0	0
R2	198,901	208,261	217,369	210,836	234,800	229,529	210,264
Seasonal	0	0	0	0	0	0	0
Street Lighting	2,380	2,128	1,623	1,619	1,581	1,581	1,655
TOTAL	**201,281**	**210,389**	**218,992**	**212,455**	**236,381**	**231,110**	**211,919**

CDM Adjusted Consumption (kW)

	Projected
Customer Class Name	**2020**
R1(i)	0
R1(ii)	0
R2	196,648
Seasonal	0
Street Lighting	1,655
TOTAL	**198,303**

Primary Metering Adjustment	**0.99**	**0.99**
Customer Class Name	**Current Loss Factor**	**Proposed Loss Factor**
R1(i)	1.0917	1.0829
R1(ii)	1.0917	1.0829
R2	1.0917	1.0829
Seasonal	1.0917	1.0829
Street Lighting	1.0917	1.0829

3.3 ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSIS

3.3.1 VARIANCE ANALYSIS OF LOAD FORECAST[1]

Table 22 below shows the annual change in weather-normalized consumption for the Residential (R1(i)) class.

Table 22 – R1(i) Variance

Year	Cust	%chg	kWh	%chg
2009	6,940		78,443,046	
2010	7,000	0.9%	75,331,125	-4.0%
2011	7,078	1.1%	79,018,831	4.9%
2012	7,208	1.8%	79,323,316	0.4%
2013	7,301	1.3%	79,981,996	0.8%
2014	7,398	1.3%	84,657,660	5.8%
2015	7,480	1.1%	80,925,127	-4.4%
2016	7,544	0.9%	76,877,138	-5.0%
2017	7,596	0.7%	75,502,253	-1.8%
2018	7,640	0.6%	77,001,847	2.0%
2019	7,722	1.1%	75,387,475	-2.1%
2020	8,116	5.1%	79,805,566	5.9%

The number of residential customers has increased each year since 2009. The larger than average increase in both customer counts and load for 2020 are the result of incorporating residential customers acquired from Dubreuil Lumber Inc. ("DLI") as individual R1(i) accounts (DLI was previously treated as an embedded distributor with a single R2 class account). Excluding this anomaly, the average annual growth rate for the R1(i) customer count is approximately 1.1%. Consumption for this class has seen both increases and decreases over the same period. Decreases in 2015 and 2016 consumption coincide with both the ramp-up of the Conservation First Framework, and increasing commodity prices prior to the 2017 introduction of the Fair Hydro Plan. Overall, consumption has remained relatively flat, despite the increase in

[1] All customer counts included in this section are based on an average of the 12 month-end customer counts in each year.

customer count, since average use per customer has declined. The 2020 increase in both customer count and consumption is due to the DLI adjustment described in Section 3.1.10.

As explained in Section 3.1.9 Determination of Customer Forecast, API has used a simple 10-year (2009-2018) geometric mean function to determine the forecasted number of customers of 2019 and 2020. The methodology behind the load projections for 2019 and 2020 are explained in detailed at Section 3.1.10.

Table 23 below shows the annual change in weather-normalized consumption for the R1(ii) class.

Table 23 - R1(ii) Variance

Year	Cust	%chg	kWh	%chg
2009	1,005		27,903,043	
2010	1,015	1%	27,098,505	-3%
2011	1,031	2%	24,638,019	-9%
2012	1,021	-1%	26,227,612	6%
2013	947	-7%	25,570,724	-3%
2014	956	1%	26,978,455	6%
2015	954	0%	26,146,175	-3%
2016	951	0%	25,302,713	-3%
2017	961	1%	25,329,825	0%
2018	961	0%	24,393,302	-4%
2019	956	-1%	23,881,888	-2%
2020	997	4%	26,928,875	13%

The 2013 reduction in the number of customers in the R1(ii) class coincides with API's migration to a new CIS system. During this process, ownership of certain accounts associated with unmetered loads were verified and consolidated. The 2020 increase in both customer count and load is due to the DLI adjustment described in Section 3.1.10. Customer counts have otherwise remained relatively stable, while consumption has generally decreased on a weather-normalized basis over the past 10 years as many conservation programs have been focused on small businesses.

As explained in Section 3.1.9 Determination of Customer Forecast, API has used a simple 10-year (2009-2018) geometric mean function to determine the forecasted number of customers of

2019 and 2020. The methodology behind the load projections for 2019 and 2020 are explained in detailed at Section 3.1.10.

Table 24 below shows the annual change in weather-normalized consumption for the R2 GS>50kW class. Weather-normalized demand is calculated by multiplying weather-normalized consumption by the kW/kWh ratio for each year.

Table 24 – R2 Variance

Year	Cust	%chg	kWh	%chg	kW	%chg
2009	47		71,674,025		154,248	
2010	44	-7%	73,756,610	3%	170,069	10%
2011	43	-1%	76,264,768	3%	178,553	5%
2012	49	12%	80,987,160	6%	189,610	6%
2013	50	3%	83,151,226	3%	198,218	5%
2014	43	-13%	82,751,799	0%	194,994	-2%
2015	42	-3%	86,581,384	5%	208,387	7%
2016	42	0%	90,720,011	5%	220,138	6%
2017	38	-9%	93,497,198	3%	208,572	-5%
2018	40	4%	101,513,457	9%	218,267	5%
2019	39	-2%	99,385,190	-2%	229,529	-2%
2020	37	-4%	91,043,719	-8%	210,264	-8%

The number of customers in the R2 GS>50 kW class has also decreased slightly over the past 10 years. The decrease of 11 customers from 2013 to early 2019 is comprised of 8 accounts that were reclassified to R1(ii) based on reductions in demand, and 3 disconnections. There was also one case in which two accounts were consolidated and one new account in this rate class.

There has been a steady increase in annual consumption for this class, with the result that it now accounts for approximately half of API's total wholesale load. The 2019 forecast is marginally lower than 2018, but remains higher than all other historical years, consistent with the increasing trend. The 2020 reduction in load is due to the DLI adjustment described in Section 3.1.10.

As explained in Section 3.1.9 Determination of Customer Forecast, API has used a simple 10-year (2009-2018) geometric mean function to determine the forecasted number of customers of

2019 and 2020. The methodology behind the load projections for 2019 and 2020 are explained in detailed at Section 3.1.10.

Table 25 below shows the annual change in consumption for the Streetlight class.

Table 25 -Streetlights Variance

Street Lights

Year	**Cust**	**%chg**	**kWh**	**%chg**	**kW**	**%chg**
2009	1,021		791,996		2,304	
2010	1,021	0%	721,376	-9%	2,304	0%
2011	1,021	0%	523,958	-27%	2,304	0%
2012	1,019	0%	728,404	39%	2,197	-5%
2013	1,018	0%	807,249	11%	2,388	9%
2014	1,019	0%	777,269	-4%	2,227	-7%
2015	1,023	0%	742,696	-4%	2,128	-4%
2016	1,066	4%	584,575	-21%	1,623	-24%
2017	1,070	0%	582,537	0%	1,619	0%
2018	1,067	0%	568,784	-2%	1,581	-2%
2019	1,067	0%	568,784	0%	1,581	0%
2020	1,117	5%	595,435	5%	1,655	5%

Connection count and consumption for the Streetlight class increased in 2016 as a result of changes to the number of street lights during LED conversions in two of API's larger municipalities. API does not expect any material changes to street light counts or consumption from 2018 to 2019, and therefore used 2018 actuals as a basis for the 2019 and 2020 forecast. The increase of 50 street lights and associated load from 2019 to 2020 is due to the DLI adjustment described in Section 3.1.10.

Table 26 below shows the annual change in weather-normalized consumption for the Seasonal class.

Table 26 - Seasonal Variance

Seasonal

Year	Cust	%chg	kWh	%chg
2009	3,659		12,649,272	
2010	3,622	-1%	11,572,463	-9%
2011	3,539	-2%	11,084,744	-4%
2012	3,422	-3%	10,335,959	-7%
2013	3,331	-3%	8,403,314	-19%
2014	3,255	-2%	7,851,359	-7%
2015	3,176	-2%	6,872,549	-12%
2016	3,140	-1%	6,284,070	-9%
2017	3,108	-1%	5,977,564	-5%
2018	3,076	-1%	5,618,088	-6%
2019	3,018	-2%	5,500,303	-2%
2020	2,960	-2%	5,502,049	0%

Customer count and for the Seasonal class has declined steadily since 2009, at an average rate of approximately 2% per year. The Load Forecast model uses a 10-year (2009-2018) average to determine the projections.

Much of the decline in Seasonal customer counts is due to migration of customers to the R1(i) class as seasonal dwellings become year-round residences. In most cases, these migrating customers have consumption higher than the average Seasonal customer, such that Seasonal load has decreased at a much higher rate than customer counts.

As explained in Section 3.1.9 Determination of Customer Forecast, API has used a simple 10-year (2009-2018) geometric mean function to determine the forecasted number of customers of 2019 and 2020. The methodology behind the projections for 2019 and 2020 are explained in detailed at Section 3.1.10.

Table 27 below shows the difference between the 2015 Board Approved Load Forecast and the 2020 Load Forecast (including CDM Adjustments described in Section 3.2).

In general, the consumption in all classes except for R2 has declined due to a decrease in the average consumption per customer and/or declining customer counts. Total consumption for the R2 class has increased, even with consideration of declining customer counts and CDM adjustments, such that API's total 2020 consumption forecast is within approximately 1% of its 2015 OEB-approved forecast.

Table 27 – 2015 Board Approved VS 2020 Load Forecast

Customers or Connections

Customer Class Name	**2015 Approved**	**2020**	**Variance**
R1(i)	7,531	8,116	585
R1(ii)	965	997	32
R2	50	37	-13
Seasonal	3,138	2,960	-178
Street Lighting	1,018	1,117	99
TOTAL	**12,702**	**13,227**	**525**

Consumption (kWh)

Customer Class Name	**2015 Approved**	**2020**	**Variance**
R1(i)	80,045,884	78,446,984	-1,598,900
R1(ii)	25,745,817	25,484,758	-261,059
R2	83,288,188	85,867,987	2,579,799
Seasonal	7,731,414	5,439,365	-2,292,049
Street Lighting	804,705	595,435	-209,270
TOTAL	**197,616,008**	**195,834,528**	**-1,781,480**

Consumption (kW)

Customer Class Name	**2015 Approved**	**2020**	**Variance**
R1(i)	0	0	0
R1(ii)	0	0	0
R2	198,901	210,264	11,363
Seasonal	0	0	0
Street Lighting	2,380	1,655	-725
TOTAL	**201,281**	**211,919**	**10,638**

Table 28 below, presents annual variances from 2015 Board Approved to 2020 forecast (CDM-adjusted). Explanations for changes in customer counts are provided earlier in this section. Annual variances in load for the R1(i) and R1(ii) are due to a combination of the factors listed earlier in this section, and the impact of weather since the results in Table 28 are not weather-normalized.

For the R2 class, there is an increasing trend from 2015 to 2018, followed by decreases in 2019 and 2020 due to the regression model being based on a 10-year analysis, and CDM adjustments in 2020. The decreasing trend in the Seasonal class is due to the migration of accounts to the R1(i) class, as described above, with additional variability due to weather. The decrease in Street Lighting consumption is due to LED conversions.

Table 28 - Annual Variances from Last Board Approved

Customers or Connections

	Actual					Projected	
Customer Class Name	**2015 Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	7,531	-52	64	53	43	82	394
R1(ii)	965	-11	-3	10	0	-5	41
R2	50	-8	-0	-4	2	-1	-2
Seasonal	3,138	38	-36	-32	-32	-59	-58
Street Lighting	1,018	5	44	4	-3	0	50
TOTAL	**12,702**	**-28**	**69**	**31**	**10**	**18**	**426**

Consumption (kWh)	Actual					Projected	
Customer Class Name	**2015 Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	80,045,884	830,266	-4,966,014	411,720	6,512,562	-7,446,943	3,059,509
R1(ii)	25,745,817	384,534	-1,145,909	620,347	636,205	-2,359,106	1,602,870
R2	83,288,188	3,240,796	3,049,902	4,933,257	14,690,538	-9,817,490	-13,517,204
Seasonal	7,731,414	-863,024	-663,364	-162,573	1,182	-543,332	-60,938
Street Lighting	804,705	-62,009	-158,121	-2,039	-13,753	0	26,651
TOTAL	**197,616,008**	**3,530,563**	**-3,883,506**	**5,800,713**	**21,826,734**	**-20,166,871**	**-8,889,112**

Consumption (kW)	Actual					Projected	
Customer Class Name	**2015 Appr**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
R1(i)	0	0	0	0	0	0	0
R1(ii)	0	0	0	0	0	0	0
R2	198,901	9,360	9,108	-6,533	23,964	-5,271	-32,881
Seasonal	0	0	0	0	0	0	0
Street Lighting	2,380	-252	-505	-4	-38	0	74
TOTAL	**201,281**	**9,108**	**8,603**	**-6,537**	**23,926**	**-5,271**	**-32,807**

Table 29 – OEB Appendix 2-IB (Totals Only)

	Calendar Year (for 2020 Cost of Service		Consumption (kWh) (3)				
				Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2014*		Actual	222844848	217052675		
Historical	*2015*		Actual	216436884	211935646	Board-approved	217540073
Historical	*2016*		Actual	211050246	208497216		
Historical	*2017*		Actual	217280995	209640368		
Historical	*2018*		Actual	241087151	218759530		
Bridge Year	*2019*		Forecast		214173157		
Test Year	*2020*		Forecast		214241143		

Due to its length when printed, API has filed the complete OEB Appendix 2-IB at Appendix A of this Exhibit. 2020 Test Year values populated in Appendix 2-IB include the adjustments between rate classes related to API's acquisition of DLI customers, as described in Section 3.1.10. The CDM adjustments described in Section 3.2 are not included in Appendix 2-IB, in order to allow comparison of non-CDM adjusted values across all years. API will update Appendix 2-IB during the course of the proceeding, and will include 2020 CDM adjustments in this appendix if requested by the OEB.

Table 30 below presents the historical weather-normalized actual average use per customer, by customer class, and 2019-2020 forecast average use per customer (not CDM adjusted) generated using the load forecast. As can be seen from the results below, the predicted use per customer follows the trend created from its historical usage per customer.

Table 30 - Average Consumption and Demand

	R1(i)	R1(ii)	R2		Seasonal		Street Lights	
Year	**kWh/cust**	**kWh/cust**	**kWh/cust**	**kW/cust**	**kWh/cust**	**kW/cust**	**kWh/conn**	**kW/conn**
2009	11,303	27,755	1,522,280	3,457		0	776	2
2010	10,762	26,707	1,689,083	3,195		0	707	2
2011	11,164	23,905	1,756,578	3,132		0	513	2
2012	11,005	25,682	1,664,120	3,021		0	715	2
2013	10,955	26,990	1,665,801	2,523		0	793	2
2014	11,443	28,230	1,905,992	2,412		0	763	2
2015	10,820	27,400	2,053,313	2,164		0	726	2
2016	10,191	26,602	2,155,723	2,001		0	548	2
2017	9,939	26,353	2,449,708	1,923		0	544	2
2018	10,079	25,385	2,553,798	1,826		0	533	1
2019	9,763	24,978	2,547,737	1,823		0	533	1
2020	9,834	27,001	2,442,014	1,859		0	533	1

Full details on weather-actual and weather-normalized consumption and demand per customer is provided in OEB Appendix 2-IB. Annual variations in weather-actual consumption are due to the same factors for variance in weather-normalized consumption discussed above, with additional variability due to changes in weather.

The next section details a variance analysis of the utility’s past and projected revenues.

3.3.2 VARIANCE ANALYSIS OF DISTRIBUTION REVENUES

This section analyzes annual variances in distribution revenue, based on approved, actual and forecasted customer counts, loads and distribution rates.

RRRP payments to API are included in the total distribution revenue, but are shown separately from rate revenue in the tables in this section. During IRM years, RRRP payments essentially fluctuate based on the differential between the RRRP adjustment factor, and the OEB Price-Cap IR factor applicable to API. In any IRM year where the RRRP adjustment factor is higher than the OEB Price-Cap IR factor, the forecast revenue from API's R1 and R2 rate classes (based on prior Test Year volumes and RRRP-adjusted rates) increases by more than the Price-Cap IR factor, decreasing the amount of the RRRP payment required for that year. This was the case for each IRM year from 2016 to 2019.

The table below shows annual calculations of API's revenue based on approved and proposed distribution rates (2015-2019 OEB approved and 2020 as calculated in Exhibit 8), and using actual and forecasted customer counts and loads (including 2020 CDM adjustment). API confirms that the annual 2015 to 2018 revenues calculated using this approach differ by less than 0.5% from its annual 2.1.5.4 RRR filings.

Table 31 - Variance Analysis of Revenues

	Year	2015 Board Approved	2015	Variance	2016	Variance	2017	Variance	2018	Variance	2019	Variance	2020	Variance
R1(i)	Fixed	$23.34	$23.34	$0.00	$27.76	$4.42	$32.58	$4.82	$37.40	$4.82	$42.23	$4.83	$47.17	$4.94
	Variable	$0.0328	$0.0328	$0.0000	$0.0288	-$0.0040	$0.0251	-$0.0037	$0.0212	-$0.0039	$0.0172	-$0.0040	$0.0126	-$0.0046
	Cust/Conn	7,531	7,480	-52	7,544	64	7,596	53	7,640	43	7,722	82	8,116	394
	kWh	80,045,884	80,876,150	830,266	75,910,136	-4,966,014	76,321,856	411,720	82,834,418	6,512,562	75,387,475	-7,446,943	78,446,984	3,059,509
	Revenues	$4,734,787	$4,747,596	$12,809	$4,699,186	-$48,410	$4,885,574	$186,388	$5,184,809	$299,236	$5,209,713	$24,904	$5,582,146	$372,433
R1(ii)	Fixed	$23.34	$23.34	$0.00	$23.76	$0.42	$24.46	$0.70	$25.08	$0.62	$25.64	$0.56	$26.21	$0.57
	Variable	$0.0328	$0.0328	$0.0000	$0.0334	$0.0006	$0.0344	$0.0010	$0.0353	$0.0009	$0.0361	$0.0008	$0.0369	$0.0008
	Cust/Conn	965	954	-11	951	-3	961	10	961	0	956	-5	997	41
	kWh	25,745,817	26,130,351	384,534	24,984,442	-1,145,909	25,604,789	620,347	26,240,994	636,205	23,881,888	-2,359,106	25,484,758	1,602,870
	Revenues	$1,114,740	$1,124,342	$9,602	$1,105,677	-$18,665	$1,162,926	$57,249	$1,215,505	$52,578	$1,156,310	-$59,194	$1,254,063	$97,753
R2	Fixed	$600.83	$600.83	$0.00	$611.64	$10.81	$629.74	$18.10	$645.61	$15.87	$659.94	$14.33	$674.59	$14.65
	Variable	$3.1131	$3.1131	$0.0000	$3.1691	$0.0560	$3.2629	$0.0938	$3.3451	$0.0822	$3.4194	$0.0743	$3.4953	$0.0759
	Cust/Conn	50	42	-8	42	0	38	-4	40	2	39	-1	37	-2
	kWh	83,288,188	86,528,984	3,240,796	89,578,886	3,049,902	94,512,143	4,933,257	109,202,680	14,690,538	99,385,190	-9,817,490	85,867,987	-13,517,204
	kW	198,901	208,261	9,360	217,369	9,108	210,836	-6,533	234,800	23,964	229,529	-5,271	196,648	-32,881
	Revenues	$621,067	$649,913	$28,846	$690,463	$40,551	$689,432	-$1,032	$787,025	$97,594	$786,451	-$574	$688,908	-$97,543

	Year	2015 Board Approved	2015	Variance	2016	Variance	2017	Variance	2018	Variance	2019	Variance	2020	Variance
Seasonal	Fixed	$27.15	$27.15	0	$34.27	$7.12	$42.18	$7.91	$50.05	$7.87	$54.75	$4.70	$58.75	$4.00
	Variable	$0.1462	$0.1462	0	$0.1435	-$0.0027	$0.1402	-$0.0033	$0.1338	-$0.0064	$0.1494	$0.0156	$0.1703	$0.0209
	Cust/Conn	3,138	3,176	38	3,140	-36	3,108	-32	3,076	-32	3,018	-59	2,960	-58
	kWh	7,731,414	6,868,390	-863,024	6,205,026	-663,364	6,042,453	-162,573	6,043,635	1,182	5,500,303	-543,332	5,439,365	-60,938
	Revenues	$2,152,693	$2,038,872	-$113,821	$2,181,681	$142,808	$2,420,339	$238,659	$2,656,334	$235,995	$2,804,402	$148,067	$3,013,255	$208,853
Street Lights	Fixed	$1.10	$1.10	0	$1.34	$0.24	$1.48	$0.14	$1.91	$0.43	$2.05	$0.14	$1.39	-$0.66
	Variable	$0.1767	$0.1767	0	$0.2164	$0.0397	$0.2390	$0.0226	$0.3084	$0.0694	$0.3310	$0.0226	$0.3316	$0.0006
	Cust/Conn	1,018	1,023	5	1,066	44	1,070	4	1,067	-3	1,067	0	1,117	50
	kWh	804,705	742,696	-62,009	584,575	-158,121	582,537	-2,039	568,784	-13,753	568,784	0	595,435	26,651
	kW	2,380	2,128	-252	1,623	-505	1,619	-4	1,581	-38	1,581	0	1,655	74
	Revenues	$144,350	$133,403	-$10,947	$129,271	-$4,132	$142,295	$13,024	$179,362	$37,067	$192,506	$13,144	$201,891	$9,385
RRRP Payments	Revenues	$13,757,205	$13,757,205	$0	$13,678,440	-$78,765	$13,498,952	-$179,488	$13,154,383	-$344,569	$12,886,685	-$267,698	$14,915,217	$2,028,532
Total	Cust/Conn	12,702	12,675	-28	12,743	69	12,774	31	12,784	10	12,802	18	13,227	426
	kWh	197,616,008	201,146,571	3,530,563	197,263,065	-3,883,506	203,063,777	5,800,712	224,890,511	21,826,734	204,723,640	-20,166,871	195,834,528	-8,889,112
	kW	8,203,502	8,121,199	-82,302	8,205,535	84,336	8,681,294	475,759	9,293,029	611,735	9,401,535	108,506	10,047,767	646,233
	$	$22,894,751	$22,765,106	-$129,645	$22,806,373	$41,267	$23,102,379	$296,006	$23,504,287	$401,908	$23,365,403	-$138,884	$25,969,907	$2,604,504
RRR 2.1.5.4	$		$22,670,573		$22,710,398		$23,022,027		$23,405,495					
Difference	$		-$94,533		-$95,976		-$80,352		-$98,792					
	%		-0.4%		-0.4%		-0.3%		-0.4%					

2015 Board Approved VS 2015 Actual

The total distribution revenue in 2015 of $22,765,106 was -$129,645 lower than the 2015 Board Approved revenue, primarily due to 2015 actual seasonal load being more than 11% lower than the amount included in the approved load forecast.

2015 Actual VS 2016 Actual

The total distribution revenue in 2016 of $22,806,373 was not materially different than the 2015 revenue of $22,765,106. Increased revenue resulted from 2016 IRM price-cap adjustments, additional load in the R2 class, and 2016-2019 increases in Seasonal revenue to cost ratios approved in 2015. These increases were largely offset by decreased load in all classes other than R2 and a slight decrease in RRRP payments to API.

2016 Actual VS 2017 Actual

The total distribution revenue in 2017 of $23,102,379 was $296,006 higher than the 2016 revenue. A higher than typical RRRP adjustment factor of 2.96% for 2017 resulted in increased revenue from both the R1(i) and R1(ii) rate classes, and also help to offset demand reductions in the R2 rate class. Seasonal revenue continued to increase, despite decreasing load, due to increases in revenue to cost ratios. Decreased RRRP payments offset a portion of the above increases.

2017 Actual VS 2018 Actual

The total distribution revenue in 2018 of $23,504,287 was $401,908 higher than the 2017 revenue. The primary driver is increased load across all rate classes due to atypical weather. 2018 HDD were 5% higher than the 2009-2018 average and 2018 CDD were 44% higher than average. Seasonal revenue also continued to increase due to increases in revenue to cost ratios. Decreased RRRP payments offset a portion of the above increases.

2018 Actual VS 2019 Forecast

The total distribution revenue in 2019 of $23,365,403 is projected to be $138,884 less than 2018. Increased revenue resulted from 2016 IRM price-cap adjustments and increases in Seasonal revenue to cost ratios. These increases are more than offset by decreases in load and decreases in RRRP payments. The decrease in 2019 load as compared to 2018 is caused by the regression model used to forecast 2019 load being based on a ten-year analysis, whereas actual 2018 load was atypically high due to weather.

2019 Forecast VS 2020 Forecast

The total distribution revenue in 2020 of $25,969,907, required to recover API's Base Revenue Requirement plus Transformer Allowance, is $2,604,504 more than the 2019 projections of $23,365,403. The majority of the variance is attributed to the request for new rates to eliminate the revenue deficiency. Table 32 below shows that applying 2019 rates to the 2020 load forecast would result in revenues of $23,692,323, approximately $2.3 million short of the required 2020 revenue. The rates used in Table 32 are "Equivalent Rates", which reflect the rates that would apply in the absence of RRRP funding, as further detailed in Exhibits 7 and 8.

Table 32 - Revenues at Existing Rates

2019 Rates at 2020 Load

	Test Year Projected Revenue from Existing Variable Charges							
Customer Class Name	**Variable Distribution Rate**	**per**	**Test Year Volume**	**Gross Variable Revenue**	**Transform. Allowance Rate**	**Transform. Allowance kW's**	**Transform. Allowance $'s**	**Net Variable Revenue**
Residential - R1	$0.0553	kWh	103,931,742	$5,743,200.15			$0.00	$5,743,200.15
Residential - R2	$17.7530	kW	196,648	$3,491,098.00	-0.6	145,265	-$87,159.17	$3,403,938.83
Seasonal	$0.1494	kWh	5,439,365	$812,795.43			$0.00	$812,795.43
Street Lighting	$0.3310	kWh	595,435	$197,076.52			$0.00	$197,076.52
Total Variable Revenue				**$10,244,170.09**	**-0.6**	**145,265**	**-$87,159.17**	**$10,157,010.92**

2019 Rates at 2020 Load

	Total Test Year Projected Revenue from Existing Rates							
Customer Class Name	**Fixed Rate**	**Customers (Connections)**	**Fixed Charge Revenue**	**Variable Revenue**	**TOTAL**	**% Fixed Revenue**	**% Variable Revenue**	**% Total Revenue**
Residential - R1	$102.45	9,113	$11,203,467.92	$5,743,200.15	$16,946,668.06	66.11%	33.89%	71.53%
Residential - R2	$803.25	37	$359,366.81	$3,403,938.83	$3,763,305.64	9.55%	90.45%	15.88%
Seasonal	$54.75	2,960	$1,944,978.06	$812,795.43	$2,757,773.49	70.53%	29.47%	11.64%
Street Lighting	$2.05	1,117	$27,499.65	$197,076.52	$224,576.17	12.25%	87.75%	0.95%
Total		**13,227**	**$13,535,312.44**	**$10,157,010.92**	**$23,692,323.36**			

3.4 OTHER REVENUES

3.4.1 OVERVIEW OF OTHER REVENUE

Other Distribution Revenues are revenues that are distribution related but are sourced from means other than distribution rates. For this reason, other revenues are deducted from API's proposed Service Revenue Requirement to determine a Base Revenue Requirement for rate setting. Further details on the derivation of the Revenue Requirement is presented in Exhibit 6.

Other Distribution Revenues includes items such as:

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

OEB APPENDIX 2-H OTHER OPERATING REVENUES

A detailed breakdown by USoA account is shown in Table 33 presented on the next page. Year over year variance analysis follows in Section 3.4.2.

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Table 33 – OEB Appendix 2-H[2]

	Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
		2015	2015	2016	2017	2018	2019	2020
	USoA Description	Board Approved						
4235	**4235-Miscellaneous Service Revenues**	-$52,180	-$70,948	-$87,798	-$73,790	-$63,492	-$77,865	-$69,366
4225	**4225-Late Payment Charges**	-$89,000	-$97,159	-$105,293	-$57,095	-$42,165	-$56,597	-$33,000
4082	4082-Retail Services Revenues	$0	-$4,961	-$5,061	-$4,710	-$4,599	-$5,030	-$10,060
4084	4084-Service Transaction Requests (STR) Revenues	$0	-$106	-$56	-$19	-$34	-$65	-$129
4086	4086-SSS Administration Revenue	-$58,078	-$34,755	-$34,806	-$34,958	-$35,033	-$34,785	-$35,000
4210	4210-Rent from Electric Property	-$245,000	-$238,754	-$238,620	-$238,620	-$239,514	-$238,700	-$431,689
4215	4215-Other Utility Operating Income	$0	$0	$0	$0	$0	$0	$0
4220	4220-Other Electric Revenues	-$12,500	-$17,183	-$13,299	-$5,720	-$77,846	-$12,100	-$8,100
4305	4305-Regulatory Debits	$0	$92,979	$92,979	$92,979	$92,979	$93,000	$0
4325	4325-Revenues from Merchandise Jobbing, Etc.	-$123,913	-$85,954	-$35,534	-$55,107	-$104,784	-$70,345	-$70,345
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	$123,913	$100,947	$71,694	$72,272	$99,063	$70,345	$70,345
4355	4355-Gain on Disposition of Utility and Other Property	$0	-$12,245	-$59,563	$0	$0	$0	$0
4360	4360-Loss on Disposition of Utility and Other Property	$0	$0	$0	$200,067	$22,190	$0	$0
4380	4380-Expenses of Non-Utility Operations	$0	$525,645	$584,954	$571,402	$572,282	$546,529	$560,455
4390	4390-Miscellaneous Non-Operating Income	$0	-$37,925	$0	$0	$0	$0	$0
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	$0	$3,220	-$94	-$366	-$465	$0	$0
4405	4405-Interest and Dividend Income	-$10,000	-$54,055	-$24,662	-$31,954	-$54,425	-$25,000	-$25,000
	Total	-$466,758	$68,748	$144,840	$434,381	$164,157	$189,388	-$51,889

	Specific Service Charges	-$52,180	-$70,948	-$87,798	-$73,790	-$63,492	-$77,865	-$69,366
	Late Payment Charges	-$89,000	-$97,159	-$105,293	-$57,095	-$42,165	-$56,597	-$33,000
	Other Distribution/Operating Revenues	-$315,578	-$295,759	-$291,842	-$284,027	-$357,025	-$290,679	-$484,978
	Other Income or Deductions	-$10,000	$532,613	$629,773	$849,293	$626,840	$614,529	$535,455
	Total	-$466,758	$68,748	$144,840	$434,381	$164,157	$189,388	-$51,889

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[2] The account breakdown details for accounts 4082-4405 are included in Appendix B of this Exhibit.

3.4.2 OTHER REVENUE VARIANCE ANALYSIS

Table 34 to 39 below presents year over year variances of other operating revenues[3]:

Table 34 - Variance Analysis of Other Operating Revenues

2015BA – 2015

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2015	**2015**	**$**	**%**
USoA Description	**Board Approved**			
4235-Miscellaneous Service Revenues	-$52,180	-$70,948	-$18,768	35.97%
4225-Late Payment Charges	-$89,000	-$97,159	-$8,159	9.17%
4082-Retail Services Revenues	$0	-$4,961	-$4,961	
4084-Service Transaction Requests (STR) Revenues	$0	-$106	-$106	
4086-SSS Administration Revenue	-$58,078	-$34,755	$23,322	40.16%
4210-Rent from Electric Property	-$245,000	-$238,754	$6,246	2.55%
4220-Other Electric Revenues	-$12,500	-$17,183	-$4,683	37.46%
4305-Regulatory Debits	$0	$92,979	$92,979	
4325-Revenues from Merchandise Jobbing, Etc.	-$123,913	-$85,954	$37,959	30.63%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$123,913	$100,947	-$22,965	18.53%
4355-Gain on Disposition of Utility and Other Property	$0	-$12,245	-$12,245	
4380-Expenses of Non-Utility Operations	$0	$525,645	$525,645	
4390-Miscellaneous Non-Operating Income	$0	-$37,925	-$37,925	
4398-Foreign Exchange Gains and Losses, Including Amortization	$0	$3,220	$3,220	
4405-Interest and Dividend Income	-$10,000	-$54,055	-$44,055	440.55%
Total	-$466,758	$68,748	$535,505	115%
Specific Service Charges	-$52,180	-$70,948	-$18,768	35.97%
Late Payment Charges	-$89,000	-$97,159	-$8,159	9.17%
Other Distribution/Operating Revenues	-$315,578	-$295,759	$19,819	6.28%
Other Income or Deductions	-$10,000	$532,613	$542,613	5426.13%
Total	-$466,758	$68,748	$535,505	114.73%

2015 BA to 2015 Actual – 2015 actual other revenue offsets reflects a decrease of $535,505 compared to 2015 Board Approved. As detailed in Section 2.1.3 of Exhibit 2, in accordance with Board Staff's preference in EB-2014-0055 a shared IT charge reflected in OEB Account 4380 has been reflected in historical actuals, as well as the Bridge Year and Test Year forecasts. This

[3] Accounts with nil balances are omitted from these tables.

charge replaces the former practice of allocating capital costs to API, which is reflected in the 2015 Board Approved amounts. For 2015, the amount in Account 4380 is $525,645. Absent this change, the total change in other revenues between 2015 Board Approved and 2015 Actuals is $9860. The variance in Account 4305 – Regulatory Debits is due to a change in depreciation and capitalization policies in 2013 at the time of transitions to Modified IFRS. Monthly debits are being recorded in Account 4305 and the associated credits to Account 1576, as detailed in Section 9.6.1 of Exhibit 9.

Table 35 - Variance Analysis of Other Operating Revenues

2015 – 2016

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2015	**2016**	**$**	**%**
USoA Description				
4235-Miscellaneous Service Revenues	-$70,948	-$87,798	-$16,851	23.75%
4225-Late Payment Charges	-$97,159	-$105,293	-$8,135	8.37%
4082-Retail Services Revenues	-$4,961	-$5,061	-$100	2.02%
4084-Service Transaction Requests (STR) Revenues	-$106	-$56	$50	47.06%
4086-SSS Administration Revenue	-$34,755	-$34,806	-$50	0.14%
4210-Rent from Electric Property	-$238,754	-$238,620	$134	0.06%
4220-Other Electric Revenues	-$17,183	-$13,299	$3,884	22.60%
4305-Regulatory Debits	$92,979	$92,979	$0	0.00%
4325-Revenues from Merchandise Jobbing, Etc.	-$85,954	-$35,534	$50,420	58.66%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$100,947	$71,694	-$29,254	28.98%
4355-Gain on Disposition of Utility and Other Property	-$12,245	-$59,563	-$47,319	386.45%
4380-Expenses of Non-Utility Operations	$525,645	$584,954	$59,309	11.28%
4390-Miscellaneous Non-Operating Income	-$37,925	$0	$37,925	100.00%
4398-Foreign Exchange Gains and Losses, Including Amortization	$3,220	-$94	-$3,314	102.91%
4405-Interest and Dividend Income	-$54,055	-$24,662	$29,392	54.38%
Total	$68,748	$144,840	$76,092	111%
Specific Service Charges	-$70,948	-$87,798	-$16,851	23.75%
Late Payment Charges	-$97,159	-$105,293	-$8,135	8.37%
Other Distribution/Operating Revenues	-$295,759	-$291,842	$3,918	1.32%
Other Income or Deductions	$532,613	$629,773	$97,160	18.24%
Total	$68,748	$144,840	$76,092	110.68%

2015 Actual to 2016 Actual – 2016 actual other revenue offsets reflects a decrease of $76,092 compared to 2015 Actual. This is primarily due to increased costs and decreased revenues in the Other Income or Deductions category. Costs for shared IT assets reflected in Account 4380 increased by $59,309. Also, 2016 revenues decrease as compared to 2015 because $37,925 in miscellaneous non-operating income was recorded in 2015 only, and interest and dividend income was higher than average in 2015.

Table 36 - Variance Analysis of Other Operating Revenues

2016 – 2017

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2016	**2017**	**$**	**%**
USoA Description				
4235-Miscellaneous Service Revenues	-$87,798	-$73,790	$14,009	15.96%
4225-Late Payment Charges	-$105,293	-$57,095	$48,198	45.78%
4082-Retail Services Revenues	-$5,061	-$4,710	$351	6.93%
4084-Service Transaction Requests (STR) Revenues	-$56	-$19	$37	65.78%
4086-SSS Administration Revenue	-$34,806	-$34,958	-$153	0.44%
4210-Rent from Electric Property	-$238,620	-$238,620	$0	0.00%
4220-Other Electric Revenues	-$13,299	-$5,720	$7,579	56.99%
4305-Regulatory Debits	$92,979	$92,979	$0	0.00%
4325-Revenues from Merchandise Jobbing, Etc.	-$35,534	-$55,107	-$19,573	55.08%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$71,694	$72,272	$578	0.81%
4355-Gain on Disposition of Utility and Other Property	-$59,563	$0	$59,563	100.00%
4360-Loss on Disposition of Utility and Other Property	$0	$200,067	$200,067	
4380-Expenses of Non-Utility Operations	$584,954	$571,402	-$13,552	2.32%
4398-Foreign Exchange Gains and Losses, Including Amortization	-$94	-$366	-$272	290.09%
4405-Interest and Dividend Income	-$24,662	-$31,954	-$7,292	29.57%
Total	$144,840	$434,381	$289,541	200%
Specific Service Charges	-$87,798	-$73,790	$14,009	15.96%
Late Payment Charges	-$105,293	-$57,095	$48,198	45.78%
Other Distribution/Operating Revenues	-$291,842	-$284,027	$7,814	2.68%
Other Income or Deductions	$629,773	$849,293	$219,520	34.86%
Total	$144,840	$434,381	$289,541	199.90%

2016 Actual to 2017 Actual – 2017 actual other revenue offsets reflects a decrease of $289,541 compared to 2016 Actual. This is primarily due to changes in the gain/loss on disposition of property as API recorded a gain on disposition in 2016 and a loss on disposition in 2017. API also recognized less late payment revenue starting in 2017 and continuing in future years, coinciding with the introduction of the Fair Hydro Plan as well as ongoing changes to OEB policies.

Table 37 - Variance Analysis of Other Operating Revenues

2017 – 2018

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2017	**2018**	**$**	**%**
USoA Description				
4235-Miscellaneous Service Revenues	-$73,790	-$63,492	$10,297	13.96%
4225-Late Payment Charges	-$57,095	-$42,165	$14,930	26.15%
4082-Retail Services Revenues	-$4,710	-$4,599	$111	2.36%
4084-Service Transaction Requests (STR) Revenues	-$19	-$34	-$15	75.32%
4086-SSS Administration Revenue	-$34,958	-$35,033	-$75	0.21%
4210-Rent from Electric Property	-$238,620	-$239,514	-$894	0.37%
4220-Other Electric Revenues	-$5,720	-$77,846	-$72,126	1260.99%
4305-Regulatory Debits	$92,979	$92,979	$0	0.00%
4325-Revenues from Merchandise Jobbing, Etc.	-$55,107	-$104,784	-$49,678	90.15%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$72,272	$99,063	$26,792	37.07%
4360-Loss on Disposition of Utility and Other Property	$200,067	$22,190	-$177,877	88.91%
4380-Expenses of Non-Utility Operations	$571,402	$572,282	$880	0.15%
4398-Foreign Exchange Gains and Losses, Including Amortization	-$366	-$465	-$99	27.21%
4405-Interest and Dividend Income	-$31,954	-$54,425	-$22,471	70.32%
Total	$434,381	$164,157	-$270,224	62%
Specific Service Charges	-$73,790	-$63,492	$10,297	13.96%
Late Payment Charges	-$57,095	-$42,165	$14,930	26.15%
Other Distribution/Operating Revenues	-$284,027	-$357,025	-$72,998	25.70%
Other Income or Deductions	$849,293	$626,840	-$222,453	26.19%
Total	$434,381	$164,157	-$270,224	62.21%

2017 Actual to 2018 Actual – 2018 actual other revenue offsets reflects an increase of $270,224 compared to 2017 Actual. This is primarily due to changes in the gain/loss on disposition of property as API recorded a lower loss on disposition in 2016 as compared to 2017. The increased 2018 revenue in Account 4220 relates to a one-time CDM mid-term incentive payment.

Table 38 - Variance Analysis of Other Operating Revenues

2018 – 2019

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2018	**2019**	**$**	**%**
USoA Description				
4235-Miscellaneous Service Revenues	-$63,492	-$77,865	-$14,373	22.64%
4225-Late Payment Charges	-$42,165	-$56,597	-$14,432	34.23%
4082-Retail Services Revenues	-$4,599	-$5,030	-$431	9.37%
4084-Service Transaction Requests (STR) Revenues	-$34	-$65	-$31	91.64%
4086-SSS Administration Revenue	-$35,033	-$34,785	$248	0.71%
4210-Rent from Electric Property	-$239,514	-$238,700	$814	0.34%
4220-Other Electric Revenues	-$77,846	-$12,100	$65,746	84.46%
4305-Regulatory Debits	$92,979	$93,000	$21	0.02%
4325-Revenues from Merchandise Jobbing, Etc.	-$104,784	-$70,345	$34,440	32.87%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$99,063	$70,345	-$28,719	28.99%
4360-Loss on Disposition of Utility and Other Property	$22,190	$0	-$22,190	100.00%
4380-Expenses of Non-Utility Operations	$572,282	$546,529	-$25,753	4.50%
4398-Foreign Exchange Gains and Losses, Including Amortization	-$465	$0	$465	100.00%
4405-Interest and Dividend Income	-$54,425	-$25,000	$29,425	54.07%
Total	$164,157	$189,388	$25,231	15.37%
Specific Service Charges	-$63,492	-$77,865	-$14,373	22.64%
Late Payment Charges	-$42,165	-$56,597	-$14,432	34.23%
Other Distribution/Operating Revenues	-$357,025	-$290,679	$66,346	18.58%
Other Income or Deductions	$626,840	$614,529	-$12,311	1.96%
Total	$164,157	$189,388	$25,231	15.37%

2018 Actual to 2019 Forecast – 2019 actual other revenue offsets reflects a decrease of $25,231 compared to 2018 Actual. The decreased 2019 revenue in Account 4220 relates to a one-time CDM mid-term incentive payment received in 2018.

Table 39 - Variance Analysis of Other Operating Revenues

2019 – 2020

Reporting Basis	MIFRS	MIFRS	Var Analysis	Var Analysis
	2019	2020	$	%
USoA Description				
4235-Miscellaneous Service Revenues	-$77,865	-$69,366	$8,499	10.92%
4225-Late Payment Charges	-$56,597	-$33,000	$23,597	41.69%
4082-Retail Services Revenues	-$5,030	-$10,060	-$5,030	100.00%
4084-Service Transaction Requests (STR) Revenues	-$65	-$129	-$65	100.00%
4086-SSS Administration Revenue	-$34,785	-$35,000	-$215	0.62%
4210-Rent from Electric Property	-$238,700	-$431,689	-$192,989	80.85%
4220-Other Electric Revenues	-$12,100	-$8,100	$4,000	33.06%
4305-Regulatory Debits	$93,000	$0	-$93,000	100.00%
4325-Revenues from Merchandise Jobbing, Etc.	-$70,345	-$70,345	$0	0.00%
4330-Costs and Expenses of Merchandising Jobbing, Etc.	$70,345	$70,345	$0	0.00%
4380-Expenses of Non-Utility Operations	$546,529	$560,455	$13,925	2.55%
4405-Interest and Dividend Income	-$25,000	-$25,000	$0	0.00%
Total	$189,388	-$51,889	-$241,277	127.40%
Specific Service Charges	-$77,865	-$69,366	$8,499	10.92%
Late Payment Charges	-$56,597	-$33,000	$23,597	41.69%
Other Distribution/Operating Revenues	-$290,679	-$484,978	-$194,298	66.84%
Other Income or Deductions	$614,529	$535,455	-$79,075	12.87%
Total	$189,388	-$51,889	-$241,277	127.40%

2019 Forecast to 2020 Forecast – 2020 actual other revenue offsets reflects a decrease of $241,277 compared to 2019 Forecast. The primary driver is increasing joint use revenue in Account 4210. The change in Account 4305 is due to a December 31, 2019 expiry of Account 1576 rate riders, which involve debits to Account 4305, as described in the 2015 BA to 2015 Actual variance explanation above.

3.4.3 PROPOSED SPECIFIC SERVICE CHARGES

API is not proposing any changes to the current specific services charges including the MicroFit service charge. There are therefore no customer classes or discrete customer groups that may be materially impacted by changes to other rates and charges.

On March 14, 2019, the OEB issued a Rate Order in EB-2017-0183, making changes to certain Specific Service Charges related to non-payment of account, effective July 1, 2019. These changes include:

1. Elimination of charges identified as "Collection of Account" and charges identified as "Install/Remove Load Control Device";
2. Clarification that any reference to "Disconnect/Reconnect" shall be read as "Reconnection"; and,
3. Clarification that the methodology for calculating late payment charges results in and effective annual rate of 19.56%, or 0.04896%, compounded daily.

API expects that item #1 above will result in an immaterial decrease in 2019 and 2020 revenues, and that items #2 and #3 above will result in no changes to future revenues since API has historically applied any disconnect/reconnect and late payment charges in accordance with the clarifications noted above.

3.4.4 REVENUE FROM AFFILIATE TRANSACTIONS, SHARED SERVICES, CORPORATE COST ALLOCATION.

Shared services are provided to API from its affiliates, as described in Section 4.5 of Exhibit 4. Amounts recorded in OEB Account 4380 in Appendix 2-H are equal to the amounts in Appendix 2-N related to shared IT costs allocated from CNPI-Distribution to API. No amounts are recorded in Account 4375. API confirms that costs included in its OM&A are excluded from the balances incorporated into Other Operating Revenue and vice versa.

APPENDICES

Appendix 3A	OEB Appendix 2-IB
Appendix 3B	OEB Appendix 2-H

Appendix 3A

Algoma Power Inc.

2020 Cost of Service

EB-2019-0019

File Number:	EB-2019-0019
Exhibit:	3
Tab:	
Schedule:	
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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 2020 Cost of Service		Consumption (kWh) [3]				
				Actual (Weather actual)	**Weather-normalized**		**Weather-normalized**
Historical	*2014*		Actual	222844848	217052675		
Historical	*2015*		Actual	216436884	211935646	Board-approved	217540073
Historical	*2016*		Actual	211050246	208497216		
Historical	*2017*		Actual	217280995	209640368		
Historical	*2018*		Actual	241087151	218759530		
Bridge Year	*2019*		Forecast		214173157		
Test Year	*2020*		Forecast		214241143		

Variance Analysis	Year	Year-over-year			Versus Board-approved
	2014				
	2015	-2.9%	-2.4%		
	2016	-2.5%	-1.6%		
	2017	3.0%	0.5%		
	2018	11.0%	4.3%		
	2019		-2.1%		
	2020		0.0%		-1.5%
	Geometric Mean	2.7%	-0.3%		-0.4%

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

1 Customer Class: R1(i) Residential

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

	Calendar Year (for 2020 Cost of Service	Customers			
Historical	2014	Actual	7,398		
Historical	2015	Actual	7,480	Board-approved	7531
Historical	2016	Actual	7,544		
Historical	2017	Actual	7,596		
Historical	2018	Actual	7,640		
Bridge Year	2019	Forecast	7,722		
Test Year	2020	Forecast	8,116		

	Calendar Year	Consumption (kWh) [3]	Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	2014	Actual	85393126	84657660		
Historical	2015	Actual	80876150	80925127	Board-approved	80045884
Historical	2016	Actual	75910136	76877138		
Historical	2017	Actual	76321856	75502253		
Historical	2018	Actual	82834418	77001847		
Bridge Year	2019	Forecast		75387475		
Test Year	2020	Forecast		79805566		

	Calendar Year	Consumption (kWh) per Customer	Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	2014	Actual	11542.861	11443.446		
Historical	2015	Actual	10813.042	10819.5905	Board-approved	10628.85195
Historical	2016	Actual	10062.653	10190.8385		
Historical	2017	Actual	10047.087	9939.19315		
Historical	2018	Actual	10842.556	10079.1056		
Bridge Year	2019	Forecast	0	9763.06702		
Test Year	2020	Forecast	0	9833.68602		

Variance Analysis	Year	Customers Year-over-year	Customers Test Year Versus Board-approved	Consumption Year-over-year (Actual)	Consumption Year-over-year (Weather-normalized)	Consumption Test Year Versus Board-approved	Per Customer Year-over-year (Actual)	Per Customer Year-over-year (Weather-normalized)	Per Customer Test Year Versus Board-approved
	2014								
	2015	1.1%		-5.3%	-4.4%		-6.3%	-5.5%	
	2016	0.9%		-6.1%	-5.0%		-6.9%	-5.8%	
	2017	0.7%		0.5%	-1.8%		-0.2%	-2.5%	
	2018	0.6%		8.5%	2.0%		7.9%	1.4%	
	2019	1.1%			-2.1%			-3.1%	
	2020	5.1%	7.8%		5.9%	-0.3%		0.7%	-7.5%
	Geometric Mean	1.9%	1.9%	-1.0%	-1.2%	-0.1%	-2.1%	-3.0%	-1.9%

	Calendar Year (for 2020 Cost of Service	Revenues			
Historical	2014	Actual	$ 4,831,306		
Historical	2015	Actual	$ 4,747,596	Board-approved	$ 4,734,787
Historical	2016	Actual	$ 4,699,186		
Historical	2017	Actual	$ 4,885,574		
Historical	2018	Actual	$ 5,184,809		
Bridge Year (Foreca	2019	Forecast	$ 5,209,713		
Test Year (Forecast)	2020	Forecast	$ 5,582,146		

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014		
	2015	-1.7%	
	2016	-1.0%	
	2017	4.0%	
	2018	6.1%	
	2019	0.5%	
	2020	7.1%	17.9%
	Geometric Mean	2.9%	4.2%

2 Customer Class: R1(ii) GS < 50 kW

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

	Calendar Year (for 2020 Cost of Service)		Customers		
Historical	*2014*	Actual	956		
Historical	*2015*	Actual	954	Board-approved	
Historical	*2016*	Actual	951		
Historical	*2017*	Actual	961		
Historical	*2018*	Actual	961		
Bridge Year	*2019*	Forecast	956		
Test Year	*2020*	Forecast	997		

	Consumption (kWh) [3] Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	27212831	26978455		
Actual	26130351	26146175	Board-approved	25745817
Actual	24984442	25302713		
Actual	25604789	25329825		
Actual	26240994	24393302		
Forecast		23881888		
Forecast		26928875		

	Consumption (kWh) per Customer Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	28475.233	28229.984		
Actual	27383.129	27399.712	Board-approved	
Actual	26267.155	26601.7662		
Actual	26639.281	26353.2078		
Actual	27308.293	25385.4502		
Forecast	0	24978.3307		
Forecast	0	27001.3487		

Variance Analysis

Year	Year-over-year	Test Year Versus Board-approved
2014		
2015	-0.1%	
2016	-0.3%	
2017	1.1%	
2018	0.0%	
2019	-0.5%	
2020	4.3%	
Geometric Mean	0.9%	

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-4.0%	-3.1%	
2016	-4.4%	-3.2%	
2017	2.5%	0.1%	
2018	2.5%	-3.7%	
2019		-2.1%	
2020		12.8%	4.6%
Geometric Mean	-1.2%	0.0%	1.1%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-3.8%	-2.9%	
2016	-4.1%	-2.9%	
2017	1.4%	-0.9%	
2018	2.5%	-3.7%	
2019		-1.6%	
2020		8.1%	
Geometric Mean	-1.4%	-0.9%	

	Calendar Year (for 2020 Cost of Service)		Revenues		
Historical	*2014*	Actual	$ 1,150,016		
Historical	*2015*	Actual	$ 1,124,342	Board-approved	$ 1,114,740
Historical	*2016*	Actual	$ 1,105,677		
Historical	*2017*	Actual	$ 1,162,926		
Historical	*2018*	Actual	$ 1,215,505		
Bridge Year (Foreca	*2019*	Forecast	$ 1,156,310		
Test Year (Forecast)	*2020*	Forecast	$ 1,254,063		

Variance Analysis

Year	Year-over-year	Test Year Versus Board-approved
2014		
2015	-2.2%	
2016	-1.7%	
2017	5.2%	
2018	4.5%	
2019	-4.9%	
2020	8.5%	12.5%
Geometric Mean	1.7%	3.0%

3 Customer Class: R2 GS>50 kW

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

	Calendar Year (for 2020 Cost of Service)	Customers			
Historical	*2014*	Actual	43		
Historical	*2015*	Actual	42	Board-approved	
Historical	*2016*	Actual	42		
Historical	*2017*	Actual	38		
Historical	*2018*	Actual	40		
Bridge Year	*2019*	Forecast	39		
Test Year	*2020*	Forecast	37		

	Consumption (kWh) [3]			
	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	83470708	82751799		
Actual	86528984	86581384	Board-approved	83288188
Actual	89578886	90720011		
Actual	94512143	93497198		
Actual	109202680	101513457		
Forecast		99385190		
Forecast		91043719		

	Consumption (kWh) per Customer			
	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	1922549.9	1905991.52		
Actual	2052070.8	2053313.46	Board-approved	
Actual	2128607.2	2155723.04		
Actual	2476300.7	2449708.25		
Actual	2747237.2	2553797.65		
Forecast	0	2547736.72		
Forecast	0	2442014.41		

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014		
	2015	-2.9%	
	2016	-0.2%	
	2017	-9.3%	
	2018	4.1%	
	2019	-1.9%	
	2020	-4.4%	
	Geometric Mean	-3.0%	

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	3.7%	4.6%	
2016	3.5%	4.8%	
2017	5.5%	3.1%	
2018	15.5%	8.6%	
2019		-2.1%	
2020		-8.4%	9.3%
Geometric Mean	9.4%	1.9%	2.3%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	6.7%	7.7%	
2016	3.7%	5.0%	
2017	16.3%	13.6%	
2018	10.9%	4.2%	
2019		-0.2%	
2020		-4.1%	
Geometric Mean	12.6%	5.1%	

	Calendar Year (for 2020 Cost of Service)	Revenues			
Historical	*2014*	Actual	$ 918,089		
Historical	*2015*	Actual	$ 952,357	Board-approved	$ 979,697
Historical	*2016*	Actual	$ 997,741		
Historical	*2017*	Actual	$ 976,358		
Historical	*2018*	Actual	$ 1,093,385		
Bridge Year (Foreca	*2019*	Forecast	$ 1,093,775		
Test Year (Forecast)	*2020*	Forecast	$ 989,147		

	Demand (kW)			
	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	196688	194994		
Actual	208261	208387	Board-approved	198901
Actual	217369	220138		
Actual	210836	208572		
Actual	234800	218267		
Forecast		229529		
Forecast		210264		

	Demand (kW) per Customer			
	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	0.2142364	0.21239121		
Actual	0.2186795	0.21881191	Board-approved	0.203023037
Actual	0.2178607	0.22063602		
Actual	0.2159414	0.21362243		
Actual	0.2147459	0.19962509		
Forecast	0	0.20984994		
Forecast	0	0.21257124		

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014		
	2015	3.7%	
	2016	4.8%	
	2017	-2.1%	
	2018	12.0%	
	2019	0.0%	
	2020	-9.6%	1.0%
	Geometric Mean	1.5%	0.2%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	5.9%	6.9%	
2016	4.4%	5.6%	
2017	-3.0%	-5.3%	
2018	11.4%	4.6%	
2019		5.2%	
2020		-8.4%	5.7%
Geometric Mean	6.1%	1.5%	1.4%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	2.1%	3.0%	
2016	-0.4%	0.8%	
2017	-0.9%	-3.2%	
2018	-0.6%	-6.6%	
2019		5.1%	
2020		1.3%	4.7%
Geometric Mean	0.1%	0.0%	1.2%

4 **Customer Class:** Seasonal

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

	Calendar Year (for 2020 Cost of Service)		Customers		
Historical	*2014*	Actual	3,255		
Historical	*2015*	Actual	3,176	Board-approved	
Historical	*2016*	Actual	3,140		
Historical	*2017*	Actual	3,108		
Historical	*2018*	Actual	3,076		
Bridge Year	*2019*	Forecast	3,018		
Test Year	*2020*	Forecast	2,960		

	Calendar Year		Consumption (kWh) [3] Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2014*	Actual	7919568	7851359		
Historical	*2015*	Actual	6868390	6872549	Board-approved	7731414
Historical	*2016*	Actual	6205026	6284070		
Historical	*2017*	Actual	6042453	5977564		
Historical	*2018*	Actual	6043635	5618088		
Bridge Year	*2019*	Forecast		5500303		
Test Year	*2020*	Forecast		5502049		

	Calendar Year		Consumption (kWh) per Customer Actual (Weather actual)	Weather-normalized		Weather-normalized
Historical	*2014*	Actual	2433.4208	2412.46245		
Historical	*2015*	Actual	2162.6481	2163.95772	Board-approved	
Historical	*2016*	Actual	1976.1754	2001.34944		
Historical	*2017*	Actual	1944.1091	1923.23172		
Historical	*2018*	Actual	1964.5048	1826.1793		
Bridge Year	*2019*	Forecast	#VALUE!	1822.65537		
Test Year	*2020*	Forecast	#VALUE!	1858.68368		

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014		
	2015	-2.4%	
	2016	-1.1%	
	2017	-1.0%	
	2018	-1.0%	
	2019	-1.9%	
	2020	-1.9%	
	Geometric Mean	-1.9%	

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-13.3%	-12.5%	
2016	-9.7%	-8.6%	
2017	-2.6%	-4.9%	
2018	0.0%	-6.0%	
2019		-2.1%	
2020		0.0%	-28.8%
Geometric Mean	-8.6%	-6.9%	-8.2%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-11.1%	-10.3%	
2016	-8.6%	-7.5%	
2017	-1.6%	-3.9%	
2018	1.0%	-5.0%	
2019		-0.2%	
2020		2.0%	
Geometric Mean	-6.9%	-5.1%	

	Calendar Year (for 2020 Cost of Service)		Revenues		
Historical	*2014*	Actual	$ 1,859,618		
Historical	*2015*	Actual	$ 2,038,872	Board-approved	$ 2,152,693
Historical	*2016*	Actual	$ 2,181,681		
Historical	*2017*	Actual	$ 2,420,339		
Historical	*2018*	Actual	$ 2,656,334		
Bridge Year (Foreca	*2019*	Forecast	$ 2,804,402		
Test Year (Forecast)	*2020*	Forecast	$ 3,013,255		

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014		
	2015	9.6%	
	2016	7.0%	
	2017	10.9%	
	2018	9.8%	
	2019	5.6%	
	2020	7.4%	40.0%
	Geometric Mean	10.1%	8.8%

5 **Customer Class:** Street Lighting

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

	Calendar Year (for 2020 Cost of Service)	Customers			
Historical	*2014*	Actual	1,019		
Historical	*2015*	Actual	1,023	Board-approved	
Historical	*2016*	Actual	1,066		
Historical	*2017*	Actual	1,070		
Historical	*2018*	Actual	1,067		
Bridge Year	*2019*	Forecast	1,067		
Test Year	*2020*	Forecast	1,117		

Consumption (kWh) [3]	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	777269	777269		
Actual	742696	742696	Board-approved	804705
Actual	584575	584575		
Actual	582537	582537		
Actual	568784	568784		
Forecast		568784		
Forecast		595435		

Consumption (kWh) per Customer	Actual (Weather actual)	Weather-normalized		Weather-normalized
Actual	763.08798	763.087982		
Actual	726.23497	726.234974	Board-approved	
Actual	548.21075	548.210753		
Actual	544.42682	544.426822		
Actual	533.02658	533.026585		
Forecast	0	533.026585		
Forecast	0	533.026585		

Variance Analysis

Year	Year-over-year	Test Year Versus Board-approved
2014		
2015	0.4%	
2016	4.3%	
2017	0.3%	
2018	-0.3%	
2019	0.0%	
2020	4.7%	
Geometric Mean	1.9%	

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-4.4%	-4.4%	
2016	-21.3%	-21.3%	
2017	-0.3%	-0.3%	
2018	-2.4%	-2.4%	
2019		0.0%	
2020		4.7%	-26.0%
Geometric Mean	-9.9%	-5.2%	-7.3%

Year	Year-over-year		Test Year Versus Board-approved
2014			
2015	-4.8%	-4.8%	
2016	-24.5%	-24.5%	
2017	-0.7%	-0.7%	
2018	-2.1%	-2.1%	
2019		0.0%	
2020		0.0%	
Geometric Mean	-11.3%	-6.9%	

	Calendar Year (for 2020 Cost of Service)	Revenues			
Historical	*2014*	Actual	$ 134,709		
Historical	*2015*	Actual	$ 144,734	Board-approved	$ 155,629
Historical	*2016*	Actual	$ 143,649		
Historical	*2017*	Actual	$ 158,229		
Historical	*2018*	Actual	$ 199,870		
Bridge Year (Foreca	*2019*	Forecast	$ 214,518		
Test Year (Forecast)	*2020*	Forecast	$ 216,079		

Variance Analysis

Year	Year-over-year	Test Year Versus Board-approved
2014		
2015	7.4%	
2016	-0.7%	
2017	10.2%	
2018	26.3%	
2019	7.3%	
2020	0.7%	38.8%
Geometric Mean	9.9%	8.6%

Appendix 3B

Algoma Power Inc.

2020 Cost of Service

EB-2019-0019

File Number:	EB-2019-0019
Exhibit:	3
Tab:	
Schedule:	
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Date:	17-May-19

TO BE UPDATED AT THE DRAFT RATE ORDER STAGE

Appendix 2-H
Other Operating Revenue

USoA #	USoA Description	2015 Actual[2]	2016 Actual[2]	2017 Actual[2]	2017 Actual	Bridge Year	Test Year	
		2015	2016	2017	2018	2019	2020	2015
	Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	**Specific Service Charges**	-$ 70,948	-$ 87,798	-$ 73,790	-$ 63,492	-$ 77,865	-$ 69,366	-$ 70,948
4225	**Late Payment Charges**	-$ 97,159	-$ 105,293	-$ 57,095	-$ 42,165	-$ 56,597	-$ 33,000	-$ 97,159
4082	**Retail Services Revenues**	-$ 4,961	-$ 5,061	-$ 4,710	-$ 4,599	-$ 5,030	-$ 10,060	-$ 4,961
4084	4084-Service Transaction Requests (STR) Revenues	-$ 106	-$ 56	-$ 19	-$ 34	-$ 65	-$ 129	-$ 106
4086	4086-SSS Administration Revenue	-$ 34,755	-$ 34,806	-$ 34,958	-$ 35,033	-$ 34,785	-$ 35,000	-$ 34,755
4205	4205-Interdepartmental Rents	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4210	4210-Rent from Electric Property	-$ 238,754	-$ 238,620	-$ 238,620	-$ 239,514	-$ 238,700	-$ 431,689	-$ 238,754
4215	4215-Other Utility Operating Income	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4220	4220-Other Electric Revenues	-$ 17,183	-$ 13,299	-$ 5,720	-$ 77,846	-$ 12,100	-$ 8,100	-$ 17,183
4240	4240-Provision for Rate Refunds	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4245	4245-Government Assistance Directly Credited to Income	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4305	4305-Regulatory Debits	$ 92,979	$ 92,979	$ 92,979	$ 92,979	$ 93,000	$ -	$ 92,979
4310	4310-Regulatory Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4315	4315-Revenues from Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4320	4320-Expenses of Electric Plant Leased to Others	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4324	4324-Special Purpose Charge Recovery	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4325	4325-Revenues from Merchandise Jobbing, Etc.	-$ 85,954	-$ 35,534	-$ 55,107	-$ 104,784	-$ 70,345	-$ 70,345	-$ 85,954
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	$ 100,947	$ 71,694	$ 72,272	$ 99,063	$ 70,345	$ 70,345	$ 100,947
4335	4335-Profits and Losses from Financial Instrument Hedges	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4340	4340-Profits and Losses from Financial Instrument Investments	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4345	4345-Gains from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4350	4350-Losses from Disposition of Future Use Utility Plant	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4355	4355-Gain on Disposition of Utility and Other Property	-$ 12,245	-$ 59,563	$ -	$ -	$ -	$ -	-$ 12,245
4360	4360-Loss on Disposition of Utility and Other Property	$ -	$ -	$ 200,067	$ 22,190	$ -	$ -	$ -
4365	4365-Gains from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4370	4370-Losses from Disposition of Allowances for Emission	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4375	4375-Revenues from Non-Utility Operations	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4375	4375-Sub-account Generation Facility Revenues	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4380	4380-Expenses of Non-Utility Operations	$ 525,645	$ 584,954	$ 571,402	$ 572,282	$ 546,529	$ 560,455	$ 525,645
4380	4380-Sub-account Generation Facility Expenses	$ -	$ -	$ -	$ -			$ -
4385	4385-Non-Utility Rental Income	$ -	$ -	$ -	$ -			$ -
4390	4390-Miscellaneous Non-Operating Income	-$ 37,925	$ -	$ -	$ -			-$ 37,925
4395	4395-Rate-Payer Benefit Including Interest	$ -	$ -	$ -	$ -			$ -
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	$ 3,220	-$ 94	-$ 366	-$ 465			$ 3,220
4405	4405-Interest and Dividend Income	-$ 54,055	-$ 24,662	-$ 31,954	-$ 54,425	-$ 25,000	-$ 25,000	-$ 54,055
4415	4415-Equity in Earnings of Subsidiary Companies		$ -					
	Total	$ 68,748	$ 144,840	$ 434,381	$ 164,157	$ 189,388	-$ 51,889	$ 68,748
Specific Service Charges		-$ 70,948	-$ 87,798	-$ 73,790	-$ 63,492	-$ 77,865	-$ 69,366	-$ 70,948
Late Payment Charges		-$ 97,159	-$ 105,293	-$ 57,095	-$ 42,165	-$ 56,597	-$ 33,000	-$ 97,159
Other Operating Revenues		-$ 295,759	-$ 291,842	-$ 284,027	-$ 357,025	-$ 290,679	-$ 484,978	-$ 295,759
Other Income or Deductions		$ 532,613	$ 629,773	$ 849,293	$ 626,840	$ 614,529	$ 535,455	$ 532,613
Total		$ 68,748	$ 144,840	$ 434,381	$ 164,157	$ 189,388	-$ 51,889	$ 68,748

Description	Account(s)
Specific Service Charges:	4235
Late Payment Charges:	4225
Other Distribution Revenues:	4082, 4084, 4090, 4205, 4210, 4215, 4220, 4230, 4240, 4245
Other Income and Expenses:	4305, 4310, 4315, 4320, 4325, 4330, 4335, 4340, 4345, 4350, 4355, 4357, 4360, 4362, 4365, 4370, 4375, 4380, 4385, 4390, 4395, 4398, 4405, 4410, 4415, 4420

Note: Add all applicable accounts listed above to the table and include all relevant information.

Account Breakdown Details

For each "Other Operating Revenue" and "Other Income or Deductions" Account, a detailed breakdown of the account components is required. See the example below for Account 4405, Interest and Dividend Income.

	2015 Actual[2]	2016 Actual[2]	2017 Actual[2]	2017 Actual	Bridge Year	Test Year
	2015	2016	2017	2018	2019	2020
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4082-Retail Services Revenues						
Monthly fixed retail charge	-$ 3,140	-$ 3,020	-$ 2,840	-$ 2,880	-$ 3,015	-$ 6,030
Monthly variable service charge	-$ 1,160	-$ 1,282	-$ 1,170	-$ 1,079	-$ 1,268	-$ 2,536
Bill-ready charge	-$ 661	-$ 759	-$ 701	-$ 640	-$ 747	-$ 1,494
4084-Service Transaction Requests (STR) Revenues						
STR request fee	-$ 43	-$ 23	-$ 6	-$ 15	-$ 25	-$ 50
STR processing fee	-$ 63	-$ 33	-$ 13	-$ 19	-$ 40	-$ 80
4086-SSS Administration Revenue						
Administrative charge	-$ 34,755	-$ 34,806	-$ 34,958	-$ 35,033	-$ 34,785	-$ 35,000
4210-Rent from Electric Property						
Pole rentals	-$ 238,754	-$ 238,620	-$ 238,620	-$ 239,514	-$ 238,700	-$ 431,689
4220-Other Electric Revenues						
Returned cheque	-$ 1,618	-$ 2,062	-$ 2,655	-$ 2,445	-$ 2,100	-$ 2,100
CDM mid-term incentive revenue	$ -	$ -	$ -	-$ 71,061	$ -	$ -
Other	-$ 15,564	-$ 11,237	-$ 3,065	-$ 4,340	-$ 10,000	-$ 6,000
4305-Regulatory Debits						
Return on rate base for OEB 1576	$ 92,979	$ 92,979	$ 92,979	$ 92,979	$ 93,000	$ -
4325-Revenues from Merchandise Jobbing, Etc.						
Job order and other billable revenue	-$ 85,954	-$ 35,534	-$ 55,107	-$ 104,784	-$ 70,345	-$ 70,345
4330-Costs and Expenses of Merchandising Jobbing, Etc.						
Job order and other billable costs	$ 100,947	$ 71,694	$ 72,272	$ 99,063	$ 70,345	$ 70,345
4355-Gain on Disposition of Utility and Other Property						
Gains on disposals/retirements	-$ 12,245	-$ 59,563	$ -	$ -	$ -	$ -
4360-Loss on Disposition of Utility and Other Property						
Loss on disposal of Wawa workcenter	$ -	$ -	$ 191,000	$ -	$ -	$ -
Other	$ -	$ -	$ 9,067	$ 22,190	$ -	$ -
4380-Expenses of Non-Utility Operations						
Shared IT asset charge from affiliate	$ 525,645	$ 584,954	$ 571,402	$ 572,282	$ 546,529	$ 560,455
4390-Miscellaneous Non-Operating Income						
Billable (should have posted to 4325)	-$ 37,925	$ -	$ -	$ -	$ -	$ -
4398-Foreign Exchange Gains and Losses, Including Amortization						
Gain/loss on foreign exchange	$ 3,220	-$ 94	-$ 366	-$ 465	$ -	$ -
4405-Interest and Dividend Income						
Interest income on regulatory accounts with debit balances	-$ 23,369	-$ 13,630	-$ 9,843	-$ 16,581	$ -	$ -
Other	-$ 30,686	-$ 11,032	-$ 22,111	-$ 37,844	-$ 25,000	-$ 25,000
Total	$ 236,854	$ 337,932	$ 565,266	$ 269,814	$ 323,850	$ 50,477

0
$ 2,015
MIFRS
$ -

Notes:

1 List and specify any other interest revenue.

2 In the transition year to IFRS, the applicant is to present information in both MIFRS and CGAAP. In column N, present CGAAP transition year information. For the typical applicant that adopted IFRS on January 1, 2015, 2014 must be presented in both a CGAAP and MIFRS basis.