EXHIBIT 3 - REVENUES

2.3 Operation Revenue

2.3.1 Summary of Load and Customer/Connection Forecast

The purpose of this evidence is to present the process used by InnPower Corporation to prepare the weather normalized load and customer/connection forecast used to design the proposed 2017 Test Year distribution rates. As part of preparing responses to interrogatories on the application, this evidence has been updated to include 2016 actual data. The evidence has been further updated to reflect the changes suggested in the technical conference held on September 5 and 6, 2017

In summary, InnPower Corporation used the same regression analysis methodology approved by the Ontario Energy Board (the "OEB") in its 2013 Cost of Service ("COS") application (EB-2012-0139) and updated the analysis for actual data to the end of the 2016. The updated regression analysis used the some variables as those in the 2013 COS application since these variables continued to provide very good statistical results.

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

During the review process of previous COS applications, for other applicants, parties have expressed concerns with the load forecasting weather normalization process being used in this application. It has been suggested the weather normalization should be conducted on an individual rate class basis and the regression analysis would be based on monthly consumed kWh by rate class. As undertaken in the 2013 COS application (EB-2013-0139), InnPower Corporation conducted a regression analysis on an

individual rate class basis. Consistent with the results in the 2013 COS application, the R square and Adjusted R square values for the rate class regression analysis were not acceptable compared to the results of the power purchased method. The R square and Adjusted R square values by rate class and power purchased method are shown in the following table. Based on these results, InnPower Corporation concluded using the equation resulting from the power purchased method would be the appropriate approach to prepare the load forecast.

Table 3-1: R Square and Adjusted R Square Values

Class	R Square	Adjusted R Square
Residential	78%	77%
General Service < 50 kW	72%	71%
General Service 50 to 4,999 kW	3%	0%
Power Purchased	96%	96%

Based on the OEB's approval of this methodology in InnPower Corporation's last COS application along with the OEB's approval of this same method in recent COS applications for other applicants, InnPower Corporation submits the load forecasting methodology is reasonable at this time for the purposes of this Application.

The following provides the material to support the weather normalized load forecast used by InnPower Corporation in this Application.

Table 3-2, Table 3-3 and Table 3-4 below provide a summary of the weather normalized load and customer/connection forecast used in this Application.

Table 3-2 Summary of Load and Customer/Connection Forecast

Year	Billed (GWh)	Growth (GWh)	Percent Change	Customer/ Connection Count	Growth	Percent Change (%)
Billed Energy (GWh) and Customer Count / Connections						
2013 Board Approved	233.4			18,369		
2007 Actual	219.6			16,645		
2008 Actual	226.8	7.2	3.3%	17,044	399	2.4%
2009 Actual	229.1	2.3	1.0%	17,361	317	1.9%
2010 Actual	231.9	2.8	1.2%	17,552	191	1.1%
2011 Actual	233.6	1.7	0.7%	17,776	224	1.3%
2012 Actual	230.0	(3.7)	(1.6%)	17,903	127	0.7%
2013 Actual	232.8	2.9	1.3%	18,286	383	2.1%
2014 Actual	238.3	5.5	2.4%	18,736	450	2.5%
2015 Actual	242.6	4.2	1.8%	19,073	337	1.8%
2016 Actual	242.0	(0.6)	(0.2%)	19,398	325	1.7%
2017 Test - Normalized	239.7	(2.3)	(1.0%)	19,906	508	2.6%

In the above Table 3-2, 2007 to 2016 are reflecting actual weather conditions in the year and. 2017 is weather normalized. In Appendix 2-IB all actual consumption data from 2011 to 2016 has been weather normalized using the OEB's weather normalization process.

On a rate class basis, the actual and forecasted billed amounts are shown in Table 3-3. Table 3-4 provides the actual and forecasted number of customers/connections. Customer/Connection values are on a 12 month average basis. The values for Sentinel Lighting, Street Lighting and Unmetered Scattered Load are measured as connections. The annual usage per customer/connection is shown in Table 3-5.

Table 3-3 Billed Energy by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
Billed Energy (GWh)							
2013 Board Approved	148.1	31.8	51.3	0.1	1.5	0.5	233.4
2007 Actual	149.5	28.6	39.3	0.1	1.5	0.5	219.6
2008 Actual	150.8	28.6	45.3	0.1	1.5	0.5	226.8
2009 Actual	151.2	28.3	47.5	0.1	1.6	0.5	229.1
2010 Actual	149.2	29.4	51.1	0.1	1.6	0.5	231.9
2011 Actual	150.9	30.8	49.9	0.1	1.5	0.5	233.6
2012 Actual	145.7	30.9	51.1	0.1	1.6	0.5	230.0
2013 Actual	148.8	31.0	50.9	0.1	1.5	0.5	232.8
2014 Actual	153.3	32.2	50.6	0.1	1.6	0.5	238.3
2015 Actual	151.9	34.4	54.6	0.1	1.1	0.5	242.6
2016 Actual	149.5	33.4	58.0	0.1	0.5	0.5	242.0
2017 Test - Normalized	144.0	31.4	63.1	0.1	0.6	0.5	239.7

Table 3-4 Customer/Connection by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
Number of Customers/Connections							
2013 Board Approved	14,189	910	66	237	2,889	78	18,369
2007 Actual	12,991	819	71	186	2,489	89	16,645
2008 Actual	13,277	836	73	186	2,588	84	17,044
2009 Actual	13,533	855	72	193	2,625	83	17,361
2010 Actual	13,651	865	68	201	2,685	82	17,552
2011 Actual	13,779	896	67	225	2,728	81	17,776
2012 Actual	13,943	914	68	172	2,728	79	17,903
2013 Actual	14,181	949	67	168	2,843	78	18,286
2014 Actual	14,509	991	67	169	2,923	76	18,736
2015 Actual	14,862	1,001	72	166	2,898	76	19,073
2016 Actual	15,202	1,016	76	166	2,863	75	19,398
2017 Test - Normalized	15,555	1,034	88	161	2,995	74	19,906

Table 3-5 Annual Usage per Customer/Connection by Rate Class

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Energy Usage per Customer/Connection (kWh per customer/connection)						
2013 Board Approved	10,441	34,924	777,717	443	525	6,085
2007 Actual	11,511	34,967	553,811	679	601	5,882
2008 Actual	11,360	34,185	620,129	668	593	6,097
2009 Actual	11,170	33,071	659,351	632	601	5,991
2010 Actual	10,926	33,989	751,894	581	588	6,064
2011 Actual	10,948	34,331	745,100	490	534	6,085
2012 Actual	10,451	33,846	752,954	659	575	6,125
2013 Actual	10,496	32,698	760,026	606	518	6,114
2014 Actual	10,568	32,507	753,235	637	556	6,186
2015 Actual	10,220	34,361	764,144	625	382	6,151
2016 Actual	9,835	32,877	767,108	640	187	6,271
2017 Test - Normalized	9,258	30,373	721,401	640	187	6,272

2.3.1.1 Forecast Methodology – Multivariate Regression Model

InnPower Corporation's weather normalized load forecast is developed in a three-step process. First, a total system weather normalized purchased energy forecast is developed based on multivariate regression model that incorporates historical load, weather, and other variables that impact electricity usage. Second, the weather normalized purchased energy forecast is adjusted by a historical loss factor to produce a weather normalized billed energy forecast. Finally, the forecast of billed energy by rate class is developed based on a forecast of customer/connections numbers and the 2016 usage per customer/connection. For the rate classes that have weather sensitive load their forecasted billed energy is adjusted to ensure that the total billed energy forecast by rate class is equivalent to the total weather normalized billed energy forecast that has been determined from the regression analysis. The 2017 forecast of average customers/connections by rate class is determined based on using the actual customers/connections by rate class from January 2017 to August 2017 and determining the average monthly increase over that time. The average monthly increase is applied to the August 2017 value to forecast the September 2017 amount. The same process is used to the forecast the months of October 2017 to December 2017. Then the average of all the month in 2017 is used as the 2017 forecast.

The billed energy forecast is also adjusted for expected Conservation and Demand Management ("CDM") results in 2017 from 2016 and 2017 programs. For those rate classes that use kW for the distribution volumetric billing determinant an adjustment factor is applied to the class energy forecast based on the historical relationship between kW and kWh. The following will explain the forecasting process in more detail.

Purchased KWh Load Forecast

An equation to predict total system purchased energy is developed using a multivariate regression model with the following independent variables: weather (heating and cooling degree days), calendar variables (days in month, seasonal) and number of customers in the Residential, General Service < 50 kW and General Service 50 to 4,999 kW rate classes. The regression model uses monthly kWh and monthly values of independent variables from January 2007 to December 2016 to determine the monthly regression coefficients.

With regards to weather normalization, InnPower Corporation submits that it is appropriate to review the impact of weather over the past ten years January 2007 to December 2016 since it is consistent with a time period outlined in the filing requirements and it is reflective of more recent weather conditions. The average weather conditions over this period are applied in the prediction formula to determine a weather normalized forecast for 2017. In accordance with the filing requirement, InnPower Corporation has also provided sensitivity analysis showing the impact on the 2017 forecast of purchases. This analysis assumes weather normal conditions are based on a 20 year trend of weather data.

The multivariate regression model has determined drivers of year-over-year changes in InnPower Corporation's load growth are weather, "calendar" factors and number of customers. These factors are captured within the multivariate regression model.

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

The second main factor determining energy use in the monthly model can be classified as "calendar factors". For example, the number of days in a particular month will impact energy use. The modeling of

purchased energy uses number of days in the month and a "flag" variable to capture the typically lower usage in the spring and fall months.

The third main factor is the total number of customers in the Residential, General Service < 50 kW and General Service 50 to 4,999 kW rate classes.

The following outlines the predication model used by InnPower Corporation to predict weather normal purchases the 2017 Test Year.

InnPower Corporation Monthly Predicted kWh Purchases:

= Heating Degree Days * 12,944
+ Cooling Degree Days * 33,134
+ Number of Days in the Month * 646,626
+ Spring Fall Flag * (945,406)
+ Number of Customers * 513
+ Constant of (11,122,367)

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

The sources of data for the various data points are:

a) Environment Canada website for monthly heating degree days and cooling degree days. Weather data form the Toronto Pearson International Airport weather station was used. 18° C is the base numbers from which heating degree days and cooling degree days are measured.
b) The calendar provided information related to number of days in the month and the spring/fall flag.
c) InnPower Corporation's billing system provided the historical number of customers.

The prediction formula has the following statistical results which generally indicate the formula has a good fit to the actual data set.

Table 3-6 Statistical Results

Statistic	Value
R Square	96.1%
Adjusted R Square	96.0%
F Test	565.8
MAPE (Monthly)	2.1%
T-stats by Coefficient	
Heating Degree Days	38.7
Cooling Degree Days	16.7
Number of Days in Month	9.5
Spring Fall Flag	(6.7)
Number of Customers - 3 Main Classes	7.0
Constant	(4.8)

The annual results of the above prediction formula compared to the actual annual purchases from 2007 to 2016 are shown in Figure 3-2 below..

Figure 3-2 Actual vs Predicted Purchases (Millions of kWhs)

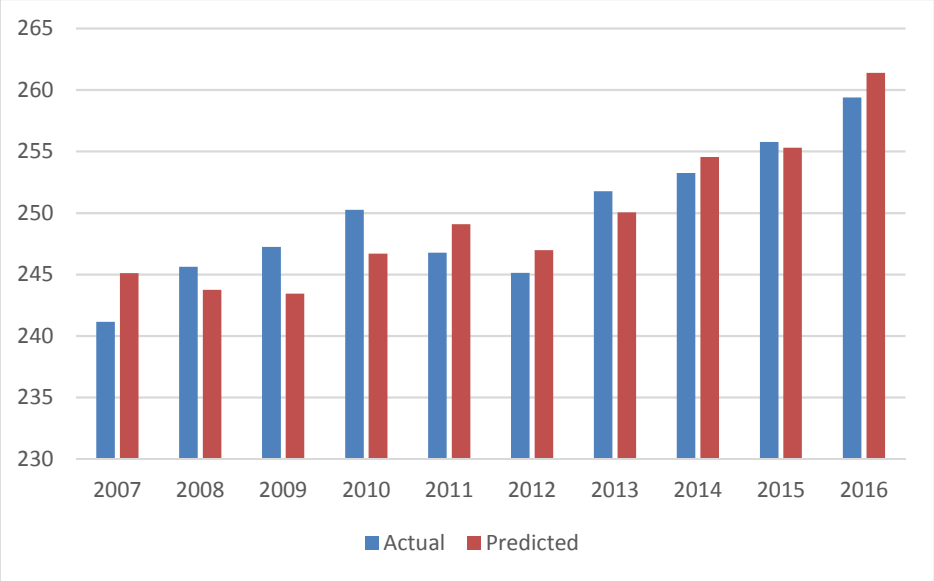

Table 3-7 below outlines the data that supports the above chart. In addition, the predicted total system purchases for InnPower Corporation on a weather normal basis. In addition, values for 2017 Test Year are provided on a 20 year trend assumption for weather normalization as per the filing requirements.

Table 3-7 Total System Purchase

Year	Actual	Predicted	% Difference
Purchased Energy (GWh)			
2007	241.2	245.1	1.6%
2008	245.6	243.8	(0.8%)
2009	247.2	243.4	(1.5%)
2010	250.2	246.7	(1.4%)
2011	246.8	249.1	0.9%
2012	245.1	247.0	0.8%
2013	251.8	250.1	(0.7%)
2014	253.3	254.5	0.5%
2015	255.8	255.3	(0.2%)
2016	259.4	261.4	0.8%
2017 Test - Normalized		259.7	
2017 Test - Normalized - 20 Year Trend		260.6	

The weather normalized amount for 2017 is determined by using 2017 dependent variables in the prediction formula on a monthly basis along with the average monthly heating degree days and cooling degree days which have occurred from January 2007 to December 2016 (i.e. 10 years). The 2017 weather normal 20 year trend value reflects the trend in monthly heating degree days and cooling degree days which have occurred from January 1997 to December 2016.

Billed KWh Load Forecast

To determine the total weather normalized energy billed forecast, the total system weather normalized purchases forecast is adjusted by an average historical loss factor of 7.31%. The following table shows the conversion from total power purchases to total billed.

Table 3-8 Conversion of Total System Purchases to Total Billed

Year	Power Purchased	Loss Factor	Billed
2017 Test - Normalized	259.7	1.0731	242.0

2.3.1.2 Normalized Average Use per Customer

Billed KWh Load Forecast and Customer/Connection Forecast by Rate Class

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

The next step in the forecasting process is to determine a customer/connection forecast. The customer/connection forecast is based on reviewing actual 2017 customer/connection monthly data that is available as shown in the following Table 3-9.

Table 3-9 2017 Actual Customer/Connection Data by Month

Month	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
Number of Customers/Connections (2017)							
January	15,377	1,023	78	165	2,884	75	19,602
February	15,382	1,022	78	165	2,909	75	19,631
March	15,396	1,015	85	162	2,909	74	19,641
April	15,409	1,015	85	162	2,916	74	19,661
May	15,441	1,023	85	161	2,985	73	19,768
June	15,475	1,028	85	161	2,985	73	19,807
July	15,592	1,037	89	161	3,025	73	19,977
August	15,641	1,044	89	161	3,025	73	20,033

From the 2017 actual customer/connection data the growth in customer/connection can be evaluated which is provided on the following Table 3-10.

Table 3-10 Monthly Growth in 2017 Customer/Connections

Month	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Growth in Customers/Connections (2017)						
January						
February	5	-1	0	0	25	0
March	14	-7	7	-3	0	-1
April	13	0	0	0	7	0
May	32	8	0	-1	69	-1
June	34	5	0	0	0	0
July	117	9	4	0	40	0
August	49	7	0	0	0	0
Average	38	3	2	-1	20	0

The 2017 forecast of average customers/connections by rate class is determined based on using the actual customers/connections by rate class from January 2017 to August 2017 and determining the average monthly increase over that time which is determined above. The average monthly increase is applied to the August 2017 value to forecast the September 2017 amount. The same process is used to the forecast the months from October 2017 to December 2017. Then the average of all the months in 2017 is used as the 2017 forecast. Table 3-11 outlines the forecast of customers by rate class for the 2017 Test Year.

Table 3-11 Customer/Connection Forecast

Month	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
Number of Customers/Connections (2017)							
January (Actual)	15,377	1,023	78	165	2,884	75	19,602
February (Actual)	15,382	1,022	78	165	2,909	75	19,631
March (Actual)	15,396	1,015	85	162	2,909	74	19,641
April (Actual)	15,409	1,015	85	162	2,916	74	19,661
May (Actual)	15,441	1,023	85	161	2,985	73	19,768
June (Actual)	15,475	1,028	85	161	2,985	73	19,807
July (Actual)	15,592	1,037	89	161	3,025	73	19,977
August (Actual)	15,641	1,044	89	161	3,025	73	20,033
September (Forecast)	15,679	1,047	91	160	3,045	73	20,095
October (Forecast)	15,717	1,050	93	159	3,065	73	20,157
November (Forecast)	15,755	1,053	95	158	3,085	73	20,219
December (Forecast)	15,793	1,056	97	157	3,105	73	20,281
Forecast number of Customers/Connections							
2017 Monthly Average	15,555	1,034	88	161	2,995	74	19,906

The next step in the process is to review the historical customer/connection usage and to reflect this usage per customer in the forecast. Table 3-12 below provides the average annual usage per customer by rate class from 2007 to 2016 before the allocation of Hydro One load transfers.

Table 3-12 Historical Annual Usage per Customer before Allocation of Hydro One Load Transfers

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Annual kWh Usage Per Customer/Connection						
2007	11,446	34,754	553,811	679	601	5,839
2008	11,295	33,971	620,129	668	593	6,050
2009	11,112	32,881	659,351	632	601	5,948
2010	10,867	33,744	751,894	581	588	6,020
2011	10,893	34,095	745,100	490	534	6,041
2012	10,395	33,623	752,954	659	575	6,080
2013	10,434	32,492	760,026	606	518	6,068
2014	10,502	32,305	753,235	637	556	6,129
2015	10,163	34,199	764,144	625	382	6,093
2016	9,784	32,711	767,108	640	187	6,213

As can been seen from the above table, usage per customer/connection generally declines in the Residential, General Service < 50 kW, Sentinel Lighting and Street Lighting classes. It is InnPower Corporation's view that this decline is partially due to the CDM programs initiated in 2005 and onwards. The increase usage per customer in the General Service 50 to 4,999 kW class is due to expansions of 8 of our key GS > 50 customers in terms of products. The usage per connection for the Unmetered Scattered Load has generally remained stable which is expected since this is typically a flat load class which reflects estimated usage.

From the historical usage per customer/connection data the growth rate in usage per customer/connection can be reviewed which is provided on the following table. The geometric mean growth rate from 2007 and 2016 has also been shown.

Table 3-13 Growth Rate in Usage per Customer/Connection

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Growth Rate in Usage Per Customer/Connection						
2007						
2008	(1.3%)	(2.3%)	12.0%	(1.7%)	(1.4%)	3.6%
2009	(1.6%)	(3.2%)	6.3%	(5.3%)	1.4%	(1.7%)
2010	(2.2%)	2.6%	14.0%	(8.2%)	(2.0%)	1.2%
2011	0.2%	1.0%	(0.9%)	(15.6%)	(9.2%)	0.3%
2012	(4.6%)	(1.4%)	1.1%	34.4%	7.7%	0.7%
2013	0.4%	(3.4%)	0.9%	(8.0%)	(10.0%)	(0.2%)
2014	0.7%	(0.6%)	(0.9%)	5.1%	7.4%	1.0%
2015	(3.2%)	5.9%	1.4%	(2.0%)	(31.3%)	(0.6%)
2016	(3.7%)	(4.3%)	0.4%	2.5%	(50.9%)	2.0%
Geo Mean - 2007 to 2016	(1.7%)	(0.7%)	3.7%	(0.7%)	(12.1%)	0.7%

The 2017 forecast of usage per customer/connection have been held constant at the 2016 level since using the geometric mean factor could cause double counting of CDM results.

Table 3-14 Forecast Annual kWh Usage per Customer/Connection

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Forecast Annual kWh Usage per Customers/Connection						
2017	9,784	32,711	767,108	640	187	6,213

The preceding information is used to determine the non-normalized weather billed energy forecast by applying the forecast number of customer/connection from Table 3-11 by the forecast of annual usage per customer/connection from Table 3-14. The resulting non-normalized weather billed energy forecast is shown in the following Table 3-15.

Table 3-15 Non-normalized Weather Billed Energy Forecast

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	TOTAL
NON-normalized Weather Billed Energy Forecast (GWh)							
2017(Not Normalized)	152.180	33.837	67.122	0.103	0.561	0.457	254.3

The non-normalized weather billed energy forecast has been determined but this needs to be adjusted in order to be aligned with the total weather normalized billed energy forecast shown in Table 3-8

The difference between the non-normalized and normalized forecast is assumed to be the adjustment to move the forecast to a weather normal basis and this amount will be assigned to those rate classes that are weather sensitive. Based on the weather normalization work completed by Hydro One for InnPower Corporation for the cost allocation study, which has been used to support this Application, it was determined that the weather sensitivity by rate classes is as follows in Table 3-16.

Table 3-16 Weather Sensitivity by Rate Class

Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load
Weather Sensitivity					
83%	83%	65%	0%	0%	0%

For the General Service 50 to 4,999 kW class the weather sensitivity amount of 65% was provided in the weather normalization work completed by Hydro One. For the Residential and General Service < 50 kW classes, the weather sensitivity assumptions is consistent with that assumed in InnPower Corporation 2013 COS application.

The difference between the non-normalized and normalized forecast has been assigned on a pro rata basis to each rate class based on the above level of weather sensitivity.

Hydro One Load Transfers

InnPower Corporation has historically had load transfers with Hydro One. Hydro One provides power to customers that are in the InnPower Corporation service area but are connected to the Hydro One distribution system. These customers/connections are in the Residential, General Service < 50 kW and Unmetered Scattered Load rate classes. InnPower Corporation expects Hydro One load transfers to continue in 2017. The follow table outlines the historical and forecasted kWh for Hydro One load transfers. In order to determine the 2017 forecast, the 2016 value has been held constant.

Table 3-17 Hydro One Load Transfers

Year	Hydro One Load Transfers (GWh)
2007 - Actual	1.0
2008 - Actual	1.1
2009 - Actual	1.0
2010 - Actual	1.0
2011 - Actual	1.0
2012 - Actual	1.0
2013 - Actual	1.1
2014 - Actual	1.2
2015 - Actual	1.0
2016 - Actual	1.0
2017 - Test Year Forecast	1.0

The Hydro One load transfers are allocated to the Residential, General Service < 50 kW and Unmetered Scattered Load rate classes based rate class specific data provided by Hydro One for the LTLT customers.

In order to determine the difference between the non-normalized and normalized billed forecast discussed above, the forecast in Table 3-17 is added to the results in Table 3-15 and the resulting total is subtracted from Table 3-8. The results are used to determine the amount to be assigned to each rate class based on the level of weather sensitivity. The following table outlines the difference between the non-normalized and normalized billed forecast.

Table 3-18 Difference between Normalized and Non-normalized Bill Forecast

Year	Table 3-8 (A)	Table 3-15 (B)	Table 3-17 (C)	Difference = (A) - (B) - (C)
Billed Energy (GWh)				
2017 Test - Normalized	242.0	254.3	1.0	(13.2)

2.3.1.3 CDM Adjustment and LRAMVA

A manual adjustment has been made to reflect the impact of 2016 and 2017 CDM programs on the load forecast. InnPower Corporation has made this adjustment to reflect the "net" impact of the CDM programs on the load forecast.

The following Table 3-19, outlines the expected full year savings from 2016 to 2017 CDM programs in 2017. The persistence data from the Final Verified 2016 Annual LDC CDM Program Results Report for InnPower Corporation was used to reflect the impact of 2016 programs in 2017. Information on 2017 programs is based on the revised 2015 to 2020 CDM Plan for InnPower Corporation recently filed with the IESO.

Table 3-19 2016 to 2017 Expected Full Year Total kWh Savings

2016-2017 Expected kWh Savings		
	2016	2017
2016 Programs	2,593,587	2,569,466
2017 Programs		2,103,200
Target Credit	2,593,587	2,103,200
Total Including Persistence	2,593,587	4,672,666

In order to assign the above savings to rate classes the following outlines the allocation to each rate class based on information from the Final Verified 2016 Annual LDC CDM Program Results Report and the revised 2015 to 2020 CDM Plan for InnPower Corporation. Table 3-20 from the previous version is no longer needed and has been deleted and table numbers have not been renumbered.

Table 3-21 2015 to 2017 Expected Full Year Residential kWh Savings

2016-2017 Expected Residential kW kWh Savings		
	2016	2017
2016 Programs	780,670	773,409
2017 Programs		317,600
Target Credit	780,670	317,600
Total Including Persistence	780,670	1,091,009

Table 3-22 2015 to 2017 Expected Full Year General Service < 50 kWh Savings

2016-2017 Expected General Service < 50 kW kWh Savings		
	2016	2017
2016 Programs	725,167	718,423
2017 Programs		714,200
Target Credit	725,167	714,200
Total Including Persistence	725,167	1,432,623

Table 3-23 2016 to 2017 Expected Full Year General Service 50 to 4,999 kW kWh Savings

2016-2017 Expected General Service 50 to 4,999 kW kWh Savings		
	2016	2017
2016 Programs	1,087,750	1,077,634
2017 Programs		1,071,400
Target Credit	1,087,750	1,071,400
Total Including Persistence	1,087,750	2,149,034

Since the regression analysis is based on actual power purchased data up to and including 2016 actual data, it is assumed that any savings from programs initiated up to and including 2016 are reflected in the prediction equation resulting from the regression analysis. However, for 2016 it is assumed that for those programs that were initiated in 2016 only one half of the full year results actually occur since they were initiated throughout the year. This has been classified as the half year rule for CDM purposes. As a result, consistent with approach used in previous COS applications and using the rate class specific information mentioned above, the following equation is used to determine the rate class manual CDM adjustment for each year.

Rate class CDM adjustment (2017) = 2016 Programs rate class savings x 50% + 2017 Programs rate class savings x 50%.

For example: Residential CDM adjustment (2017) = 773,409 kWh (2016 Programs rate class savings in 2017) x 50% + 317,600 kWh (2017 Program rate class savings) x 50% = 545,505 kWh

In accordance with the Guidelines for Electricity Distributor Conservation and Demand Management (EB-2013-0003), issued April 26, 2013 (“CDM Guidelines”), it is InnPower Corporation’s understanding that as part of this application expected CDM savings in 2017 from 2017 programs will need to be established for lost revenue adjustment mechanism (“LRAM”) variance accounts purposes. InnPower Corporation also understands that the IESO will measure CDM results on a full year net basis. Consistent with past practices, it is expected the full year net level of savings will be used for LRAM variance calculations. As a result, it is InnPower Corporation’s view the units used for the LRAM variance account should also be on a full year net basis. Based on the evidence provided above in

regards to the CDM manual adjustment the following table provides expected CDM savings by rate class for LRAM variance account purposes The expected kW saving has also been provided for those classes billed distribution charges on a kW basis using the average kW/KWh ratios from Table 3-27.

Following the afore-mentioned tables, InnPower Corporation has completed and presented in APPENDIX B – 2-I Load Forecast CDM Adjustment Work Form.

Table 3-24 2017 Expected CDM Savings by Rate Class for LRAM Variance Account

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
2017 LRAMVA kWh	317,600	714,200	1,071,400	0	0	0	2,103,200
2017 LRAMVA kW - Annual	0	0	3,052	0	0	0	3,052
2017 LRAMVA kW - Monthly	0	0	254	0	0	0	254

The following Table 3-25 outlines how the classes have been adjusted to align the non-normalized forecast with the normalized forecast. This table also reflects the adjustments for Hydro One load transfers and manual CDM.

Table 3-25 Alignment of Non-normal to Weather Normal Forecast and Other Adjustments

Year	Residential	General Service < 50 kW	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Unmetered Scattered Load	Total
Non-normalized Weather Billed Energy Forecast (GWh)							
2017(Not Normalized)	152.2	33.8	67.1	0.1	0.6	0.5	254.3
Adjustment for Hydro One Load Transfer (GWh)							
2017 Monthly Average	0.8	0.2	0.0	0.0	0.0	0.004	1.0
Adjustment for Weather (GWh)							
2017 Monthly Average	(8.4)	(1.9)	(2.9)	0.0	0.0	0.0	(13.2)
Adjustment for CDM (GWh)							
2017 Monthly Average	(0.5)	(0.7)	(1.1)	0.0	0.0	0.0	(2.3)
Weather Normalized Billed Energy Forecast (GWh)							
2017 Test - Normalized	144.0	31.4	63.1	0.1	0.6	0.5	239.7

Billed KW Load Forecast

Historically, there were three rate classes that charge volumetric distribution on per kW basis. These include General Service 50 to 4,999 kW, Sentinel Lighting and Street Lighting. As a result, the energy forecast for these classes needs to be converted to a kW basis for rate setting purposes. The forecast of kW for these classes is based on a review of the historical ratio of kW to kWh and applying the results of a trend analysis to the forecasted kWh to produce the required kW.

The following Table 3-26 outlines the annual demand units by applicable rate class.

Table 3-26 Historical Annual kW per Applicable Rate Class

Year	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Total
Billed Annual kW				
2007	116,956	351	4,153	121,460
2008	134,693	345	4,261	139,299
2009	136,122	339	4,370	140,832
2010	144,502	324	4,389	149,215
2011	139,425	306	4,416	144,148
2012	144,982	315	4,424	149,721
2013	130,935	283	4,149	135,367
2014	135,394	300	4,581	140,275
2015	141,987	288	3,140	145,414
2016	150,802	295	1,641	152,738

The following Table 3-27 shows the historical ratio of kW/kWh and the average ratio used to forecast kW for 2017.

Table 3-27 Historical kW/KWh Ratio per Applicable Rate Class

Year	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting
Ratio of kW to kWh			
2007	0.2974%	0.2778%	0.2776%
2008	0.2975%	0.2778%	0.2778%
2009	0.2867%	0.2778%	0.2771%
2010	0.2826%	0.2778%	0.2778%
2011	0.2793%	0.2779%	0.3030%
2012	0.2835%	0.2779%	0.2818%
2013	0.2571%	0.2779%	0.2818%
2014	0.2676%	0.2778%	0.2818%
2015	0.2599%	0.2778%	0.2838%
2016	0.2601%	0.2778%	0.3059%
Average 2007 to 2016	0.2772%	0.2778%	0.2849%

For the three classes, the average factor was applied to the weather normalized billed energy forecast in Table 3-25 to provide the forecast of kW by rate class.

The following Table 3-28 outlines the forecast of kW for the applicable rate classes.

Table 3-28 kW Forecast by Applicable Rate Class

Year	General Service 50 to 4,999 kW	Sentinel Lighting	Street Lighting	Total
Predicted Billed kW				
2017 Test - Normalized	174,966	286	1,599	176,851

.

Table 3-29 Summary of Total Load Forecast

	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Weather Normal
Actual kWh Purchases	251,758,061	253,254,986	255,774,983	259,382,036	
Predicted kWh Purchases before CDM adjustment	250,054,817	254,540,890	255,309,255	261,375,685	259,701,038
% Difference between actual and predicted purchases	(0.7%)	0.5%	(0.2%)	0.8%	
Loss Factor					1.0731
Total Billed Before Adjustments					242,004,217
CDM Adjustment					2,336,333
Total Billed After Adjustments					239,667,884

Table 3-30 provides a summary of the load forecast on a billing determinant basis by rate class.

Table 3-30 Summary of Billing Determinants and Variances of Actual and Forecast Data

	2013 Board Approved	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Weather Normal
Residential						
Customers	14,189	14,181	14,509	14,862	15,202	15,555
kWh	148,148,873	148,837,682	153,331,484	151,892,216	149,508,942	144,001,990
Variance Analysis Compare to Board Approved						
Customers		(0.06%)	2.26%	4.74%	7.14%	9.63%
kWh		0.46%	3.50%	2.53%	0.92%	(2.80%)
General Service < 50 kW						
Customers	910	949	991	1,001	1,016	1,034
kWh	31,781,016	31,038,184	32,222,518	34,381,050	33,411,508	31,418,007
Variance Analysis Compare to Board Approved						
Customers		4.31%	8.93%	9.95%	11.68%	13.67%
kWh		(2.34%)	1.39%	8.18%	5.13%	(1.14%)
General Service 50 to 4,999 kW						
Customers	66	67	67	72	76	88
kWh	51,329,341	50,921,722	50,592,267	54,636,276	57,980,607	63,122,597
kW	147,666	130,935	135,394	141,987	150,802	174,966
Variance Analysis Compare to Board Approved						
Customers		1.52%	1.77%	8.33%	14.52%	32.58%
kWh		(0.79%)	(1.44%)	6.44%	12.96%	22.98%
kW		(11.33%)	(8.31%)	(3.85%)	2.12%	18.49%

	2013 Board Approved	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Weather Normal
Sentinel Lighting						
Connections	237	168	169	166	166	161
kWh	104,942	101,844	107,980	103,536	106,305	103,052
kW	292	283	300	288	295	286
Variance Analysis Compare to Board Approved						
Connections		(29.11%)	(28.52%)	(30.06%)	(29.92%)	(32.07%)
kWh		(2.95%)	2.89%	(1.34%)	1.30%	(1.80%)
kW		(3.08%)	2.72%	(1.51%)	1.13%	(1.96%)
Street Lighting						
Connections	2,889	2,843	2,923	2,898	2,863	2,995
kWh	1,516,831	1,472,134	1,625,553	1,106,444	536,550	561,223
kW	4,432	4,149	4,581	3,140	1,641	1,599
Variance Analysis Compare to Board Approved						
Connections		(1.58%)	1.19%	0.30%	(0.89%)	3.66%
kWh		(2.95%)	7.17%	(27.06%)	(64.63%)	(63.00%)
kW		(6.39%)	3.37%	(29.16%)	(62.97%)	(63.93%)
Unmetered Scattered Load						
Connections	78	78	76	76	75	74
kWh	474,652	474,344	467,562	467,455	472,406	461,015
Variance Analysis Compare to Board Approved						
Connections		(0.53%)	(3.10%)	(2.56%)	(3.42%)	(5.77%)
kWh		(0.06%)	(1.49%)	(1.52%)	(0.47%)	(2.87%)
Total						
Customer/Connections	18,369	18,286	18,736	19,073	19,398	19,906
kWh	233,355,655	232,845,910	238,347,364	242,586,977	242,016,318	239,667,884
kW from applicable classes	152,390	135,367	140,275	145,414	152,738	176,851
Variance Analysis Compare to Board Approved						
Customer/Connections		(0.45%)	2.00%	3.83%	5.60%	8.37%
kWh		(0.22%)	2.14%	3.96%	3.71%	2.70%
kW from applicable classes		(11.17%)	(7.95%)	(4.58%)	0.23%	16.05%

Appendix 3-A Monthly Data Used for Regression Analysis

	Purchased	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Number of Customers - 3 Main Classes	Predicted Purchases
Jan-07	24,279,310	647.1	0.0	31	0	13,849	24,401,062
Feb-07	23,881,688	740.1	0.0	28	0	13,861	23,671,088
Mar-07	22,297,190	546.7	0.0	31	1	13,865	22,164,329
Apr-07	18,569,417	356.4	0.0	30	1	13,869	19,056,597
May-07	16,382,762	136.4	22.4	31	1	13,873	17,599,889
Jun-07	17,880,105	16.5	99.2	30	0	13,881	18,895,511
Jul-07	18,476,520	3.2	106.1	31	0	13,905	19,610,918
Aug-07	19,239,334	5.2	141.0	31	0	13,925	20,803,429
Sep-07	16,489,843	36.9	47.5	30	1	13,949	16,536,012
Oct-07	17,241,375	137.7	19.8	31	1	13,987	17,589,031
Nov-07	20,822,608	462.5	0.0	30	1	14,001	20,497,602
Dec-07	25,594,484	630.7	0.0	31	0	14,035	24,284,175
Jan-08	25,337,708	623.5	0.0	31	0	14,052	24,199,700
Feb-08	23,919,251	674.7	0.0	29	0	14,069	23,577,876
Mar-08	23,324,392	610.2	0.0	31	1	14,091	23,102,145
Apr-08	17,845,473	253.9	0.0	30	1	14,109	17,852,963
May-08	17,203,595	193.5	2.5	31	1	14,151	17,822,172
Jun-08	17,657,148	22.7	71.5	30	0	14,186	18,214,371
Jul-08	19,399,006	1.0	111.0	31	0	14,218	19,905,315
Aug-08	18,496,935	12.7	64.0	31	0	14,260	18,521,008
Sep-08	16,944,225	59.0	26.7	30	1	14,297	16,311,349
Oct-08	18,736,114	278.6	0.0	31	1	14,337	18,936,221
Nov-08	20,914,296	451.6	0.0	30	1	14,348	20,534,471
Dec-08	25,844,885	654.6	0.0	31	0	14,388	24,774,557
Jan-09	27,698,758	830.2	0.0	31	0	14,411	27,059,239
Feb-09	22,854,687	606.4	0.0	28	0	14,426	22,230,287
Mar-09	22,750,704	533.8	0.0	31	1	14,438	22,291,212
Apr-09	18,949,042	305.8	1.2	30	1	14,448	18,738,345
May-09	17,348,781	158.8	6.9	31	1	14,455	17,674,721
Jun-09	17,392,957	49.3	34.2	30	0	14,460	17,463,298
Jul-09	18,006,297	6.2	43.7	31	0	14,710	17,995,036
Aug-09	20,135,392	9.8	91.0	31	0	14,976	19,745,272
Sep-09	17,368,091	55.2	20.9	30	1	15,073	16,467,948
Oct-09	19,458,169	287.8	0.0	31	1	15,110	19,451,723
Nov-09	19,998,430	361.2	0.0	30	1	15,107	19,753,615
Dec-09	25,277,881	631.3	0.0	31	0	14,563	24,562,718

	Purchased	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Number of Customers - 3 Main Classes	Predicted Purchases
Jan-10	26,451,956	720.0	0.0	31	0	14,554	25,706,195
Feb-10	22,355,018	598.3	0.0	28	0	14,553	22,190,574
Mar-10	21,335,193	422.8	0.0	31	1	14,566	20,920,121
Apr-10	17,366,211	225.1	0.0	30	1	14,576	17,719,683
May-10	18,594,842	107.9	45.7	31	1	14,570	18,360,460
Jun-10	18,232,281	21.7	58.7	30	0	14,584	17,981,424
Jul-10	22,225,962	1.8	164.9	31	0	14,599	21,896,968
Aug-10	21,301,865	2.1	138.8	31	0	14,633	21,053,497
Sep-10	17,785,838	78.1	31.5	30	1	14,646	16,896,592
Oct-10	18,734,173	241.6	0.0	31	1	14,664	18,625,007
Nov-10	20,451,455	405.3	0.0	30	1	14,688	20,109,548
Dec-10	25,404,585	676.2	0.0	31	0	14,707	25,217,732
Jan-11	26,274,474	775.3	0.0	31	0	14,713	26,503,514
Feb-11	22,971,970	654.2	0.0	28	0	14,716	22,997,711
Mar-11	22,951,605	572.8	0.0	31	1	14,728	22,944,732
Apr-11	18,914,567	332.3	0.0	30	1	14,729	19,185,695
May-11	17,615,740	134.1	13.0	31	1	14,733	17,699,700
Jun-11	17,571,916	19.0	52.2	30	0	14,742	17,812,135
Jul-11	22,292,830	0.0	198.5	31	0	14,759	23,069,017
Aug-11	19,354,570	0.0	122.2	31	0	14,772	20,547,580
Sep-11	17,323,768	48.2	39.7	30	1	14,772	16,845,894
Oct-11	18,576,164	235.5	2.4	31	1	14,794	18,692,241
Nov-11	19,598,868	342.1	0.0	30	1	14,809	19,353,569
Dec-11	23,311,694	534.0	0.0	31	0	14,818	23,433,827
Jan-12	24,487,281	611.1	0.0	31	0	14,826	24,436,134
Feb-12	21,711,327	531.7	0.0	29	0	14,835	22,119,779
Mar-12	20,140,444	349.4	0.2	31	1	14,856	20,125,413
Apr-12	18,335,839	321.7	0.0	30	1	14,867	19,119,265
May-12	17,673,429	80.7	36.7	31	1	14,877	17,867,632
Jun-12	19,474,755	23.2	101.6	30	0	14,882	19,575,101
Jul-12	22,780,193	0.0	195.4	31	0	14,921	23,049,382
Aug-12	20,627,757	2.0	112.1	31	0	14,953	20,331,639
Sep-12	17,795,946	85.0	35.6	30	1	14,968	17,286,884
Oct-12	17,475,407	242.5	1.1	31	1	15,012	18,851,570
Nov-12	20,981,769	434.0	0.0	30	1	15,036	20,659,495
Dec-12	23,645,692	533.5	0.0	31	0	15,062	23,552,743
Jan-13	24,666,681	624.4	0.0	31	0	15,076	24,736,492
Feb-13	22,513,100	631.5	0.0	28	0	15,088	22,894,667
Mar-13	22,356,782	554.8	0.0	31	1	15,100	22,902,523
Apr-13	19,424,577	358.6	0.0	30	1	15,107	19,719,962
May-13	17,840,113	109.1	23.1	31	1	15,139	17,918,972
Jun-13	18,666,407	33.0	59.6	30	0	15,172	18,459,053
Jul-13	22,033,173	1.3	120.8	31	0	15,207	20,741,102
Aug-13	20,162,331	4.4	93.8	31	0	15,244	19,905,591
Sep-13	17,834,215	83.0	28.1	30	1	15,260	17,162,241
Oct-13	19,036,509	208.5	0.4	31	1	15,288	18,529,838
Nov-13	21,552,245	478.2	0.0	30	1	15,334	21,384,424
Dec-13	25,671,929	687.9	0.0	31	0	15,352	25,699,950

	Purchased	Heating Degree Days	Cooling Degree Days	Number of Days in Month	Spring Fall Flag	Number of Customers - 3 Main Classes	Predicted Purchases
Jan-14	27,344,318	825.9	0.0	31	0	15,406	27,513,853
Feb-14	23,698,938	737.1	0.0	28	0	15,425	24,434,331
Mar-14	24,427,815	690.6	0.0	31	1	15,444	24,836,672
Apr-14	19,352,181	356.9	0.0	30	1	15,478	19,888,220
May-14	17,549,445	132.1	11.9	31	1	15,497	18,029,171
Jun-14	18,258,424	14.1	68.1	30	0	15,515	18,671,959
Jul-14	19,452,973	4.0	71.0	31	0	15,587	19,320,867
Aug-14	19,828,414	8.8	81.8	31	0	15,628	19,761,867
Sep-14	17,976,814	69.7	30.1	30	1	15,648	17,255,340
Oct-14	19,058,731	224.3	1.3	31	1	15,688	18,969,300
Nov-14	22,053,999	482.1	0.0	30	1	15,720	21,632,858
Dec-14	24,252,934	557.3	0.0	31	0	15,775	24,226,451
Jan-15	26,957,598	792.4	0.0	31	0	15,793	27,278,711
Feb-15	25,654,360	856.8	0.0	28	0	15,802	26,177,013
Mar-15	23,473,380	615.5	0.0	31	1	15,826	24,060,515
Apr-15	18,844,477	313.7	0.0	30	1	15,843	19,516,243
May-15	18,113,892	89.3	34.1	31	1	15,856	18,394,864
Jun-15	18,210,409	33.8	32.3	30	0	15,883	17,929,482
Jul-15	21,783,994	4.0	114.3	31	0	15,881	20,906,331
Aug-15	20,815,474	4.4	88.6	31	0	15,970	20,105,614
Sep-15	19,854,447	31.1	81.9	30	1	16,005	18,655,128
Oct-15	19,438,982	249.8	0.0	31	1	16,050	19,441,933
Nov-15	20,136,180	345.0	0.0	30	1	16,127	20,067,021
Dec-15	22,491,790	429.7	0.0	31	0	16,168	22,776,398
Jan-16	25,159,552	670.4	0.0	31	0	16,197	25,906,783
Feb-16	23,014,941	588.4	0.0	29	0	16,212	23,559,852
Mar-16	21,970,551	476.1	0.0	31	1	16,243	22,470,036
Apr-16	19,763,963	394.8	0.0	30	1	16,249	20,774,176
May-16	18,836,973	142.5	36.9	31	1	16,261	19,383,933
Jun-16	19,211,234	24.2	83.7	30	0	16,269	19,706,253
Jul-16	23,404,500	0.0	176.9	31	0	16,281	23,133,863
Aug-16	24,564,804	0.0	195.4	31	0	16,292	23,752,478
Sep-16	19,239,594	25.9	69.4	30	1	16,323	18,336,732
Oct-16	19,360,398	194.2	4.1	31	1	16,370	19,022,227
Nov-16	20,317,470	337.8	0.0	30	1	16,399	20,113,319
Dec-16	24,538,056	608.0	0.0	31	0	16,425	25,216,032
Jan-17		712.0	0.0	31	0	16,464	26,582,432
Feb-17		661.9	0.0	28	0	16,503	24,013,834
Mar-17		537.3	0.0	31	1	16,541	23,415,438
Apr-17		321.9	0.1	30	1	16,580	20,004,614
May-17		128.4	23.3	31	1	16,619	18,935,507
Jun-17		25.8	66.1	30	0	16,658	19,342,788
Jul-17		2.2	130.3	31	0	16,696	21,829,358
Aug-17		4.9	112.9	31	0	16,735	21,309,157
Sep-17		57.2	41.1	30	1	16,774	18,036,884
Oct-17		230.1	2.9	31	1	16,813	19,673,853
Nov-17		410.0	0.0	30	1	16,851	21,279,623
Dec-17		594.3	0.0	31	0	16,890	25,277,551