# hydrone Brampton 

## EXHIBIT 3

OPERATING REVENUE

## EXHIBIT 3: Operating Revenue

## TAB 1 (of 4)

## Load and Revenue Forecasts

## Introduction

In the Board's "Filing Requirements for Electricity Distribution Rate Applications", updated July 17, 2013, the Board presented Local Distribution Companies (LDCs) with two options in which to derive their load forecast. The first is the Multivariate Regression model and second is the Normalized Average Use per Customer (NAC) model.

Hydro One Brampton has opted to utilize the multivariate regression model to forecast the weather normalized load for the 2014 Bridge and 2015 Test Years for all rate classes with the exception of the Embedded Distributor, Distributed Generation and Energy from Waste Generation. The Embedded Distributor class is an existing class that HOBNI is proposing to make adjustments to. The Distributed Generation and the Energy from Waste Generation are new classes being proposed by HOBNI in this Application. Discussion on these rate classes will follow later in this report.

The model has incorporated historical load, weather, Ontario Real Gross Domestic Product, ("GDP") number of days in the month, spring/fall flag, number of peak hours, and number of customers/connections as well as population.

Hydro One Brampton's forecasted energy consumption for the 2015 Test Year is 3,972,635,063 kWh or 3.18\% higher than its 2011 Board Approved kWh. HOBNI's forecasted number of customers (excluding connections) for the 2015 Test Year is 151,708 or $12.76 \%$ higher than the 2011 Board Approved customer count. The forecasted number of connections for 2015 is 1,377 or $6.11 \%$ higher than the 2011 Board Approved count. For more details on the data provided in Table 1, refer to the "Summary" tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1.

Table 1 below provides a summary of Hydro One Brampton's 2015 Test Year and 2011 Board Approved retail metered kWh load forecast, average number of customers and average number of connections.

Table 1: Load and Customer Growth - 2015 Test Year vs 2011 Board Approved

| Description | 2011 Board <br> Approved | 2015 Test Year | Change | Percentage <br> Change |
| :--- | ---: | ---: | ---: | ---: |
| Retail Metered $\mathrm{kWh}^{*}$ | $3,850,115,760$ | $3,972,635,063$ | $122,519,302$ | $3.18 \%$ |
| Average Number of Customers** | 134,539 | 151,708 | 17,169 | $12.76 \%$ |
| Average Number of Connections*** | 22,519 | 23,896 | 1,377 | $6.11 \%$ |

Note:

* 2011 OEB approved 3,815,870,096 kWh. For comparative purposes HOBNI added volumes for Embedded Distributor class.
** 2011 OEB approved 134,537 customers. For comparative purposes HOBNI added new class counts.
*** 2011 OEB approved 1,300 connections for Unmetered Scattered Load and 42,158 Street Light lamps, for comparative purposes HOBNI used 21,219 Street Light connections.


## Load Forecast Methodology and Results

The objective of regression analysis is to predict future values of a particular variable (the dependent variable) using other variables (independent variables). Hydro One Brampton's objective is to determine the load forecast for both the 2014 Bridge and the 2015 Test Years using various independent variables which reasonably explain the dependent variable, in this case, total purchased kWh.

## Data

Hydro One Brampton applied a similar approach to the one used in its 2011 Cost of Service Application in selecting data for use in the regression analysis. At a minimum, the independent variables should at least be correlated with and reasonably explain variations in purchased kWh. In addition, HOBNI reviewed applications submitted by other LDCs to identify the independent variables selected for use in their regressions and the consistency of the results from these regressions.

The data set covers actual monthly data from 2004 to 2013. Hydro Brampton submits that this time period is reasonable and consistent with other applications submitted by LDCs to the Board.

The following provides a description of the data set:

- Monthly Historical kWh load data. This includes purchases from the IESO and embedded generators, as well as wholesale market participant loads less power sold to an embedded distributor, embedded generators and load transfer customers;
- Monthly Heating Degree Days ("HDD") and Cooling Degree Days ("CDD") data from Toronto Lester B. Pearson International Airport weather station. According to Environment Canada, "Degree-days for a given day represent the number of Celsius degrees that the mean temperature is above or below a given base temperature. For example, heating degree-days are the number of degrees below 18 degrees Celsius. If the temperature is equal to or greater than 18, then the number will be zero. Values above or below the base 18 degrees Celsius are used primarily to estimate the heating and cooling requirements of buildings". The data was obtained from Environment Canada's website;
- Monthly Ontario Real GDP. This data was sourced from Statistics Canada as well as the Government of Ontario's 2013 Budget Summary (A Prosperous and Fair Ontario);
- Number of Days in the Month. A regular calendar provides this data;
- Spring/Fall Flag - The spring/fall flag relates to the months of March, April, May, September, October and November;
- Number of Peak Hours in a Month.
- Number of Customers/Connections. This data comes from HOBNI's internal statistical records;
- Population data. This represents data for the City of Brampton and was provided by its planning department.


## Methodology and Results

Hydro One Brampton employed Ordinary Least Square ("OLS") regression technique in an attempt to determine the forecasted purchased kWh for both the 2014 Bridge and 2015 Test Years. The Adjusted R-Square, t-Statistics and the F-test values were the main indicators used to assess the robustness of the results.

The higher the Adjusted R-Square value, the more reliable the regression results since this statistic measures goodness of fit or how well the forecasted purchased kWh is explained by the independent variables. T-Statistics values of two or more measured at the $95 \%$ confidence level are considered statistically significant. A significance value of 0.05 or lower at the $95 \%$ confidence level for the F-test is considered statistically significant.

In general, all the independent variables with the exception of Spring/Fall Flag should be directly related to total purchased kWh . In other words, an increase in these variables should result in an increase in purchased kWh and a decrease should result in a reduction in purchased kWh.

HOBNI has always considered different approaches that could to improve its regression forecasting methodology. Intervenors as well as Board staff have suggested that LDCs should examine the possibility of using class specific regressions to determine forecasted load. A number of LDCs including HOBNI have explored this possibility in the past. However, the results have consistently been less favourable compared to the total system purchased kWh approach.

Hydro One Brampton tested the class-specific regression approach in this Application by regressing the monthly billed kWh (uplifted) for each class, used as a proxy for purchases, against all the independent variables highlighted above. The results were consistent with the findings previously reported. Table 2 below provides the results of these tests. For more details on the class specific regression statistics refer to HOBNI Class Specific Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 2.

Table 2: Results from the Class-Specific Regressions

|  | Residential |  | GS<50 |  | GS>50 |  | Intermediate |  | Large User |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Independent Variable | Coefficient | T-Statistics | Coefficient | T-Statistics | Coefficient | T-Statistics | Coefficient | T-Statistics | Coefficient | T-Statistics |
| Constant | 61,324,082 | 0.8960 | 5,584,261 | 0.6260 | $(30,785,617)$ | (1.2068) | $(52,147,718)$ | (2.1400) | $(34,554,483)$ | (2.9492) |
| Heating Degree Days | 32,377 | 5.3679 | 5,473 | 5.6173 | 13,952 | 6.6696 | $(5,974)$ | (2.9237) | $(2,033)$ | (1.6750) |
| Cooling Degree days | 311,189 | 8.9399 | 30,244 | 5.4860 | 77,167 | 6.3493 | 45,538 | 3.8891 | 10,812 | 1.5437 |
| Ontario Real GDP | (9,017,782) | (0.0972) | 10,979,531 | 1.1467 | 72,189,418 | 3.6197 | 102,937,257 | 5.8462 | 44,338,385 | 4.1737 |
| Number of Days in Month | 555,345 | 0.4503 | 39,189 | 0.2009 | 168,490 | 0.3978 | 155,198 | 0.3734 | 223,353 | 0.9003 |
| Spring/Fall Flag | $(3,372,759)$ | (1.3235) | $(790,916)$ | (1.9579) | $(1,287,461)$ | (1.4524) | 2,165,697 | 2.5221 | 237,833 | 0.4634 |
| Number of Peak Hours | $(175,578)$ | (3.1313) | $(39,805)$ | (4.4843) | 82,385 | 4.2797 | 91,726 | 4.8637 | 15,392 | 1.3667 |
| Number of Customers/Connection | 471 | 0.4717 | 4,234 | 2.5618 | 20,554 | 2.1434 | 250,980 | 2.6682 | 1,505,092 | 4.8679 |
| Population | 27 | 0.1717 | (30) | (1.8809) | (50) | (2.5730) | (107) | (8.5096) | (7) | (0.8671) |


| Model Statistics | Residential | GS<50 | GS>50 | Intermediate | Large User |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adjusted R-Square | 68.43\% | 64.53\% | 55.66\% | 73.98\% | 70.67\% |
| F-Test | 33.24 | 28.07 | 19.68 | 43.28 | 36.84 |
| F-Test Significance | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

As illustrated in Table 2, even though some of the coefficients for the independent variables are significant, that is, the $t$-statistics values are greater than or equal to 2 , the adjusted R -square values range between $55.66 \%$ and $73.98 \%$. This indicates that the class-specific purchased kWh is not reasonably explained by the independent variables. Hydro One Brampton will continue to work with the OEB, Intervenors, LDCs and other stakeholders in an attempt to develop more reasonable model specifications for class-specific regressions.

Given that the class-specific results do not reasonably explain the class-specific purchased kWh, HOBNI then regressed total system historical purchased kWh load against all the independent variables. The results are presented under Model \# One in Table 3 below.

As can be seen in Table 3 below, all the independent variables with the exception of number of customers/connections and population are significant. The adjusted R-Square is $94.50 \%$. In addition, all the coefficients of the independent variables displayed the expected sign. However, the results could be improved by removing the insignificant independent variables.

Hydro One Brampton then removed the number of customers/connections and population variables from the equation and re-ran the regression. The results are presented under Model \# Two in Table 3 below. HOBNI selected and used the results from this model to forecast purchased kWh for the 2014 Bridge and 2015 Test Years. For more details on the results presented in Table 3 below refer to the "Model \# One" and "Model \# Two" tabs in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1.

Table 3: Summary from Total System Purchased kWh Regressions

|  | Model \# One |  | Model \# Two |  |
| :---: | :---: | :---: | :---: | :---: |
| Independent Variable | Coefficient | T-Statistics | Coefficient | T-Statistics |
| Constant | $(235,145,122)$ | (6.2712) | $(221,662,899)$ | (8.2446) |
| Heating Degree Days | 52,994 | 14.7027 | 53,035 | 14.8354 |
| Cooling Degree days | 502,492 | 24.1313 | 504,004 | 24.5387 |
| Ontario Real GDP | 293,904,594 | 4.7447 | 256,369,295 | 16.7446 |
| Number of Days in Month | 6,003,193 | 8.1421 | 5,981,256 | 8.1798 |
| Spring/Fall Flag | $(5,352,070)$ | (3.5129) | $(5,294,424)$ | (3.5066) |
| Number of Peak Hours | 157,282 | 4.6949 | 158,718 | 4.7833 |
| Number of Customers/Connections | (406) | (0.6172) | - | - |
| Population | 70 | 0.5805 | - | - |
| Model Statistics | Model \# One |  | Model \# Two |  |
| Adjusted R-Square |  | 94.50\% |  | 94.58\% |
| F-Test |  | 256.67 |  | 347.05 |
| F-Test Significance |  | 0.0000 |  | 0.0000 |

## Review of Model \# Two Results

All the t-statistics are greater than two and the F-test value is less than 0.05 which indicate statistical significance. Also, the adjusted R-Square is $94.58 \%$. This is marginally higher than the adjusted R-Square value from Model \# One.

The Adjusted R-Square value indicates that $94.58 \%$ of the forecasted purchased kWh is explained by the independent variables - weather, Ontario Real GDP, number of days in the month, spring/fall flag and number of peak hours. Also, since all the coefficients of the independent variables are significant, this speaks to the robustness of the model.

Ontario Real GDP is the biggest driver of forecasted purchased kWh. Intuitively, a 1\% increase in Ontario Real GDP will increase forecasted purchased kWh by $256,369,295$ and inversely, a 1\% reduction in Ontario Real GDP will reduce purchased kWh by the said amount.

Weather also has a big impact on purchased kWh but more so during the summer months. A 1 degree change in CDD above the average temperature of 18 degrees will increase the purchased kWh by $504,004 \mathrm{kWh}$. The impact is somewhat lower for HDD. A 1 degree drop in
temperature below the average temperature of 18 degrees will increase purchased kWh by only 53,035.

As expected, the number of days in a month positively impacted purchased kWh. The results show a $5,981,256$ increase in purchased kWh for each additional day in a month. For example, kWh usage in July, which has thirty-one days, should be higher than usage in June which has thirty days.

Spring/Fall Flag attempts to capture and compare kWh consumption between the months in which demand is lower - March, April, May, September, October and November to the months where demand is higher - December, January, February, June, July and August. As expected, the demand during the spring/fall months is lower than the demand during the winter/summer months.

Finally, the number of peak hours in a month is expected to increase purchased kWh. The results show that as the number of peak hours in a month increases, purchased kWh is expected to increase by $158,718 \mathrm{kWh}$.

## Weather Normalized Forecast Purchased kWh

The weather normalized forecast purchased kWh for the 2014 Bridge and 2015 Test Years were calculated by multiplying the monthly values for the independent variables for 2014 and 2015 by the respective coefficients from Model \# Two above then sum the results.

The 2014 and 2015 monthly values for HDD and CDD are based on the average monthly values over a ten-year period, that is, January 2004 to December 2013. Analysis done by HOBNI reveals that over time, the average temperature during summer and winter is increasing. HOBNI compared the average monthly HDD and CDD between 2004 to 2013 and 1994 to 2003. This information is presented in Table 4 below. For more details on the results presented in Table 4 below refer to the "HDD-CDD" tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1.

The results show an average monthly decline in HDD which would suggest that the weather during colder months is becoming warmer. In such case, consumers are expected to demand less electricity since they would not be compelled to run their furnaces longer than normal or even at higher temperature.

A similar argument can be raised for CDD. The results indicate that the average monthly temperature is rising which would suggest consumers are running their air conditioning units for longer periods.

Given the above, Hydro One Brampton submits that the ten-year average for HDD and CDD being proposed for weather normalization calculation reasonably reflects the current trend in weather pattern. Further, this approach is consistent with submissions by other LDCs to the Board.

Table 4: Ten Year Monthly Averages for HDD and CDD (2004 to 2013 and 1994 to 2003)

| 10 Year Average |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Month | 2004 to 2013 |  | 1994 to 2003 |  | Difference |  |
|  | HDD | CDD | HDD | CDD | HDD | CDD |
|  | 700.25 | - | 730.15 | - | $(29.90)$ | - |
| Feb | 628.93 | - | 622.71 | - | 6.22 | - |
| Mar | 520.30 | 0.02 | 548.00 | - | $(27.70)$ | 0.02 |
| Apr | 308.54 | 0.12 | 342.65 | 1.26 | $(34.11)$ | $(1.14)$ |
| May | 140.57 | 18.57 | 162.83 | 11.20 | $(22.26)$ | 7.37 |
| Jun | 25.84 | 72.82 | 32.07 | 67.92 | $(6.23)$ | 4.90 |
| Jul | 1.72 | 139.54 | 5.25 | 118.59 | $(3.53)$ | 20.95 |
| Aug | 5.36 | 106.42 | 7.41 | 102.32 | $(2.05)$ | 4.10 |
| Sep | 58.56 | 33.61 | 70.74 | 34.16 | $(12.18)$ | $(0.55)$ |
| Oct | 238.27 | 3.35 | 250.81 | 1.92 | $(12.54)$ | 1.43 |
| Nov | 408.47 | - | 423.04 | - | $(14.57)$ | - |
| Dec | 615.72 | - | 601.84 | - | 13.88 | - |
| Totals | $\mathbf{3 , 6 5 2 . 5 3}$ | $\mathbf{3 7 4 . 4 5}$ | $\mathbf{3 , 7 9 7 . 5 0}$ | $\mathbf{3 3 7 . 3 7}$ | $\mathbf{( 1 4 4 . 9 7 )}$ | $\mathbf{3 7 . 0 8}$ |

Real GDP for Ontario in 2013, 2014 and 2015 were derived by adjusting the 2012 actual real GDP by the forecasted growth rates provided by the Government of Ontario in its 2013 Ontario Economic Outlook and Fiscal Review, released November 7, 2013. The Government of Ontario forecasted growth of $1.30 \%, 2.10 \%$ and $2.50 \%$ for 2013, 2014 and 2015, respectively. HOBNI has submitted the Load Forecast model which shows the calculations.

The calendar provided information related to the number of days in the month; the spring fall flag applies to the months of March, April, May, September, October and November.

Table 5 below shows the 2014 Bridge and 2015 Test Years' forecasted weather normalized purchased kWh, excluding the adjustments for Conservation and Demand Management ("CDM") and wholesale market participants. Also, as pointed out earlier, the forecast purchased kWh excludes kWh relating to the energy consumption associated with the Embedded Distributor, Distributed Generation and the Energy from Waste Generation classes. The 10-year weather normalized average for 2015 has been used as the purchased forecast in this Application for the purposes of determining billed kWh load forecast. The 20-year weather normalized average for 2015 was calculated and presented as requested by the Board. It reflects the average monthly HDD and CDD days from January 1994 to December 2013.

Table 5: Forecast Purchased kWh Excluding CDM \& Wholesale Market Participants ${ }^{1}$

| Year | Actual (kWh) | Forecasted <br> Purchases (kWh) | Variance |
| ---: | ---: | ---: | ---: | ---: |
| Difference |  |  |  |$|$

The annual results of the regression model compared to the actual annual purchased kWh from 2004 to 2013 are presented in the chart below. The chart illustrates how well the actual values tract the forecasted values.

[^0]Figure 1: Comparison of Actual and Predicted Energy Purchases


## Billed KWh Load Forecast

To determine the weather normalized billed kWh forecast, the total weather normalized forecast purchased kWh, excluding adjustments for CDM and wholesale market participants, is first adjusted for losses using the average loss factor between 2004 and 2013. The average loss factor during this time period was 1.0324 or $3.24 \%$ (see Table 6 below). After adjustments, the calculated weather normalized billed kWh for the 2014 Bridge and 2015 Test Years are $3,980,104,863 \mathrm{kWh}$ and 4,063,316,871 kWh, respectively.

Table 6: Average Loss Factor ${ }^{2}$

| Year | Purchase kWh | Billed kWh | Loss Factor |
| ---: | ---: | ---: | ---: |
| 2004 | $3,606,734,355$ | $3,483,144,427$ | $3.55 \%$ |
| 2005 | $3,848,828,345$ | $3,723,506,554$ | $3.37 \%$ |
| 2006 | $3,854,274,114$ | $3,718,723,113$ | $3.65 \%$ |
| 2007 | $3,958,591,768$ | $3,839,000,000$ | $3.12 \%$ |
| 2008 | $3,915,443,564$ | $3,791,763,566$ | $3.26 \%$ |
| 2009 | $3,727,941,968$ | $3,616,714,781$ | $3.08 \%$ |
| 2010 | $3,911,054,142$ | $3,788,730,865$ | $3.23 \%$ |
| 2011 | $3,968,502,600$ | $3,860,871,231$ | $2.79 \%$ |
| 2012 | $4,043,243,029$ | $3,927,063,219$ | $2.96 \%$ |
| 2013 | $4,027,156,664$ | $3,892,597,115$ | $3.46 \%$ |
| Average |  |  | $3.24 \%$ |

## Customer/Connection Forecast by Rate Class

The forecast number of customer/connection is based on a review of historical customer/connection data. This is presented in Table 7 below. The total for each class is based on the average per year. Further, the average for the Unmetered Scattered Load and Street Lighting classes are based on connections and not the number of customers.

Table 7: Average Historical Number of Customers/Connections by Year

| Year | Residential | General Service < 50 kW | Unmetered Scattered Load | General Service > 50 to 699 kW | General $\begin{gathered} \text { Service > } 700 \\ \text { to } 4999 \mathrm{~kW} \\ \hline \end{gathered}$ | Large <br> User | Street Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 91,671 | 6,512 | 1,105 | 1,357 | 126 | 4 | 19,210 | 119,985 |
| 2004 | 98,355 | 6,648 | 1,130 | 1,393 | 124 | 3 | 19,382 | 127,036 |
| 2005 | 104,822 | 6,892 | 1,159 | 1,364 | 121 | 3 | 19,532 | 133,891 |
| 2006 | 109,778 | 7,075 | 1,207 | 1,402 | 119 | 4 | 19,701 | 139,286 |
| 2007 | 114,119 | 7,294 | 1,250 | 1,417 | 117 | 5 | 20,002 | 144,204 |
| 2008 | 119,060 | 7,437 | 1,267 | 1,491 | 116 | 6 | 20,282 | 149,659 |
| 2009 | 121,041 | 7,529 | 1,280 | 1,554 | 114 | 6 | 20,465 | 151,988 |
| 2010 | 123,013 | 7,752 | 1,293 | 1,539 | 114 | 6 | 20,691 | 154,407 |
| 2011 | 126,317 | 8,080 | 1,369 | 1,537 | 112 | 6 | 21,003 | 158,424 |
| 2012 | 129,699 | 8,328 | 1,424 | 1,525 | 112 | 6 | 21,359 | 162,453 |
| 2013 | 133,723 | 8,532 | 1,477 | 1,511 | 115 | 6 | 21,727 | 167,092 |

From the historical data, Hydro One Brampton calculates the growth rate for each class by year. HOBNI also calculates the geometric growth rate over the past six years (2008 to 2013) for all

[^1]classes except the General Service > 50 kW and the Large User, where four and five years were applied, respectively. The results are presented in Table $\mathbf{8}$ below.

Table 8: Historical Customer/Connection Percentage Growth Rates by Year³

| Year | Residential | General Service < 50 kW | Unmetered Scattered Load | > General Service $>50$ to 699 kW | ```General Service > 700 to 4999 kW``` | Large <br> User | Street <br> Lights |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 |  |  |  |  |  |  |  |
| 2004 | 107.29\% | 102.10\% | 102.26\% | 102.65\% | 98.74\% | 77.08\% | 100.90\% |
| 2005 | 106.58\% | 103.66\% | 102.57\% | 97.88\% | 96.92\% | 97.30\% | 100.77\% |
| 2006 | 104.73\% | 102.67\% | 104.14\% | 102.81\% | 98.48\% | 130.56\% | 100.86\% |
| 2007 | 103.95\% | 103.10\% | 103.56\% | 101.05\% | 98.46\% | 125.53\% | 101.53\% |
| 2008 | 104.33\% | 101.95\% | 101.36\% | 105.25\% | 99.00\% | 122.03\% | 101.40\% |
| 2009 | 101.66\% | 101.24\% | 101.03\% | 104.19\% | 98.49\% | 100.00\% | 100.90\% |
| 2010 | 101.63\% | 102.96\% | 101.02\% | 99.06\% | 100.07\% | 100.00\% | 101.10\% |
| 2011 | 102.69\% | 104.24\% | 105.86\% | 99.87\% | 98.17\% | 100.00\% | 101.51\% |
| 2012 | 102.68\% | 103.06\% | 104.04\% | 99.25\% | 99.63\% | 100.00\% | 101.70\% |
| 2013 | 103.10\% | 102.45\% | 103.73\% | 99.08\% | 103.29\% | 100.00\% | 101.72\% |
| 6-Year Geometric Mean | 102.68\% | 102.65\% | 102.82\% | 99.31\% | 99.76\% | 100.00\% | 101.39\% |

Hydro One Brampton based its forecast for growth for 2014 and 2015 on the trend over the past six years, that is, 2008 to 2013. HOBNI expects the number of Residential, General Service < 50 kW as well as Unmetered Scattered Load customers to continue growing at a rate of $2.68 \%$, $2.65 \%$ and $2.82 \%$ per year, respectively, as the City of Brampton continues on its expansion path.

There was a noteworthy decline in the number of customers in the General Service $>50 \mathrm{~kW}$ class between 2009 and 2010. This may have been as a result of the recession during 2009. Previous to that, this customer class saw a very healthy growth rate consistent with most of the other classes. Further, since 2009, the number of customers within this class has been steadily declining and HOBNI does not anticipate any change in the current trend in the foreseeable future.

The average number of customers in the General Service > 700 kW class ranges between 112 and 116 during 2008 and 2013. HOBNI does not anticipate any new customer within this class in the near future and therefore submits that the forecasted customer count using the geometric mean approach over the past six years is reasonable.

[^2]The average number of customers in the Large User class has been stable at six since 2009 and HOBNI does not anticipate any new customer within this class in the near future.

HOBNI is anticipating a growth rate of $1.39 \%$ in the number of Street Lighting connections as the City of Brampton expands and the demand for street lights increase.

Hydro One Brampton's forecasted average number of customers and connections for the 2014 Bridge and 2015 Test Years is presented Table 9 below.

Table 9: Forecasted Average Number of Customers/Connections by Year4

| Year | Residential | $\begin{gathered} \text { General } \\ \text { Service < } 50 \\ \text { kW } \\ \hline \end{gathered}$ | Unmetered Scattered Load | $\begin{gathered} \text { General } \\ \text { Service >50 } \\ \text { to } 699 \mathrm{~kW} \\ \hline \end{gathered}$ | General Service > 700 to 4999 kW | Large User | Street <br> Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | 137,303 | 8,758 | 1,519 | 1,501 | 115 | 6 | 22,029 | 171,230 |
| 2015 | 140,979 | 8,989 | 1,562 | 1,491 | 115 | 6 | 22,335 | 175,476 |

## Billed kWh Load Forecast by Rate Class

This section reviews the annual historical customer/connection usage by rate class then incorporates the results, along with the forecasted number of customers/connections in the previous section, to allocate forecasted billed kWh by rate class. Table 10 below provides the average annual usage per customer by rate classification from 2003 to 2013.

Table 10: Average Historical kWh Usage by Year ${ }^{5}$

| Year | Residential | General Service $<50 \mathrm{~kW}$ | Unmetered Scattered Load | General Service > 50 to 699 kW | General Service > 700 to 4999 kW | Large User | Street <br> Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 10,020 | 40,147 | 6,808 | 733,771 | 6,711,752 | 70,446,082 | 995 | 77,949,573 |
| 2004 | 9,489 | 39,727 | 5,148 | 750,508 | 7,423,304 | 94,159,492 | 1,082 | 102,388,750 |
| 2005 | 10,173 | 41,802 | 4,770 | 794,275 | 7,917,519 | 101,474,120 | 1,122 | 110,243,780 |
| 2006 | 9,488 | 39,956 | 4,387 | 770,866 | 8,009,145 | 85,298,993 | 1,208 | 94,134,043 |
| 2007 | 9,659 | 40,961 | 4,038 | 783,290 | 8,063,181 | 72,265,680 | 1,289 | 81,168,098 |
| 2008 | 9,183 | 38,846 | 4,031 | 748,867 | 7,542,181 | 64,768,041 | 1,321 | 73,112,470 |
| 2009 | 8,993 | 37,721 | 3,988 | 695,778 | 6,918,965 | 57,087,232 | 1,336 | 64,754,014 |
| 2010 | 9,522 | 37,642 | 4,020 | 707,593 | 7,367,674 | 60,533,133 | 1,370 | 68,660,953 |
| 2011 | 9,423 | 38,360 | 3,982 | 715,774 | 7,424,232 | 65,738,085 | 1,417 | 73,931,272 |
| 2012 | 9,345 | 37,936 | 3,906 | 722,419 | 7,701,445 | 67,040,612 | 1,432 | 75,517,096 |
| 2013 | 8,959 | 37,893 | 3,863 | 717,832 | 7,544,515 | 63,408,544 | 1,440 | 71,723,047 |

From the historical usage per customer/connection data, Hydro One Brampton has calculated the growth rate per customer/connection per year. HOBNI also calculated the average usage

[^3]per customer/connection over the past five years (2009 to 2013) using the geometric mean approach. The results are provided in Table 11 below.

Table 11: Historical kWh Usage Growth Rates by Year ${ }^{6}$

| Year | Residential | $\begin{gathered} \text { General } \\ \text { Service < } 50 \\ \text { kW } \\ \hline \end{gathered}$ | Unmetered Scattered Load | $\begin{gathered} \text { General } \\ \text { Service }>50 \\ \text { to } 699 \mathrm{~kW} \\ \hline \end{gathered}$ | ```General Service > 700 to 4999 kW``` | Large <br> User | Street Lights |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 107.29\% | 102.10\% | 102.26\% | 102.65\% | 98.74\% | 77.08\% | 100.90\% |
| 2005 | 106.58\% | 103.66\% | 102.57\% | 97.88\% | 96.92\% | 97.30\% | 100.77\% |
| 2006 | 104.73\% | 102.67\% | 104.14\% | 102.81\% | 98.48\% | 130.56\% | 100.86\% |
| 2007 | 103.95\% | 103.10\% | 103.56\% | 101.05\% | 98.46\% | 125.53\% | 101.53\% |
| 2008 | 104.33\% | 101.95\% | 101.36\% | 105.25\% | 99.00\% | 122.03\% | 101.40\% |
| 2009 | 101.66\% | 101.24\% | 101.03\% | 104.19\% | 98.49\% | 100.00\% | 100.90\% |
| 2010 | 101.63\% | 102.96\% | 101.02\% | 99.06\% | 100.07\% | 100.00\% | 101.10\% |
| 2011 | 102.69\% | 104.24\% | 105.86\% | 99.87\% | 98.17\% | 100.00\% | 101.51\% |
| 2012 | 102.68\% | 103.06\% | 104.04\% | 99.25\% | 99.63\% | 100.00\% | 101.70\% |
| 2013 | 103.10\% | 102.45\% | 103.73\% | 99.08\% | 103.29\% | 100.00\% | 101.72\% |
| Geometric Mean | 102.68\% | 102.65\% | 102.82\% | 99.31\% | 99.76\% | 100.00\% | 101.39\% |

As illustrated above, the results indicate that the average usage per customer/connection is declining for all classes with the exception of General Service $>700 \mathrm{~kW}$ class and Street Lighting.

Hydro Brampton applied the geometric mean growth rate by class to the 2013 average annual kWh usage to derive the forecasted average annual kWh usage for the 2014 Bridge Year. To determine the forecasted average annual kWh usage for the 2015 Test Year, HOBNI applied the same geometric growth rate by class to the calculated 2014 Bridge Year forecasted average annual kWh usage. The results are presented in Table 12 below.

Table 12: Forecasted Average Annual kWh Usage per Customer/Connection by Year

| Year | Residential | $\begin{gathered} \text { General } \\ \text { Service }<50 \\ \text { kW } \\ \hline \end{gathered}$ | Unmetered Scattered Load | $\begin{gathered} \text { General Service > } \\ 50 \text { to } 699 \mathrm{~kW} \\ \hline \end{gathered}$ | $\begin{gathered} \text { General Service > } \\ 700 \text { to } 4999 \mathrm{~kW} \\ \hline \end{gathered}$ | Large User | Street <br> Lights |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | 8,915 | 37.705 | 3.831 | 711.781 | 7.544,982 | 63,140,088 | 1,466 |
| 2015 | 8,871 | 37.518 | 3.798 | 705,781 | 7,545,449 | 62,872,769 | 1,491 |

Given the above average consumption per customer by class, Hydro One Brampton then calculates the forecasted weather non-normalized billed kWh by class. This is done by multiplying the forecasted average number of customers/connections by the calculated average annual kWh usage per customer/connection. The results are shown in Table 13 below.

[^4]Table 13: Forecasted Billed kWh - Weather Non-Normalized

| Year | Residential | General <br> Service < 50 <br> kW | Unmetered <br> Scattered <br> Load | General Service <br> $>\mathbf{> 5}$ to $\mathbf{6 9 9} \mathbf{~ k W}$ | General Service <br> $>\mathbf{7 0 0}$ to $\mathbf{4 9 9 9} \mathbf{~ k W}$ | Large U ser | Street <br> Lights | Total |
| :---: | :---: | ---: | :---: | ---: | ---: | ---: | :---: | :---: |
| 2014 | $1,224,042,990$ | $330,211,012$ | $5,818,253$ | $1,068,407,758$ | $866,852,150$ | $378,840,527$ | $32,285,800$ | $3,906,458,489$ |
| 2015 | $1,250,627,456$ | $337,269,906$ | $5,931,733$ | $1,052,124,730$ | $864,832,332$ | $377,236,612$ | $33,306,955$ | $3,921,329,723$ |

As indicated on page 10 of this Exhibit, the forecasted weather normalized billed kWh for the 2014 Bridge and 2015 Test Years are 3,980,104,863 kWh and 4,063,316,871 kWh, respectively. These numbers are different from the forecasted billed kWh presented in Table 13 above. In order to reconcile these numbers, the non-normalized kWh amounts identified in Table 13 were adjusted based on weather sensitivity factors.

Hydro One Brampton engaged Hydro One Networks Inc. to determine the weather sensitivity of the of the various rate classes for this Application. The results indicated weather sensitivity of $100 \%$ for both Residential and General Service < 50 kW rate classes. The weather sensitivity of the General Service > 50 kW , General Service > 700 kW , and Large User classes are 60\%, $26 \%$ and $26 \%$, respectively. Unmetered Scattered Load and Street Lighting classes are not affected by changes in weather. The difference between the non-normalized and the normalized forecast for 2014 and 2015 has been assigned on a pro rata basis to each rate class based on the above level of weather sensitivity. This information is presented in Table 14 below.

Table 14: Weather Sensitivity by Rate Class

| Year | Residential | $\begin{gathered} \text { General } \\ \text { Service < } 50 \\ \text { kW } \\ \hline \end{gathered}$ | Unmetered Scattered Load | General Service $>50 \text { to } 699 \mathrm{~kW}$ | $\begin{aligned} & \text { General Service } \\ & >700 \text { to } 4999 \mathrm{~kW} \end{aligned}$ | Large U ser | Street Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | 35,710,310 | 9,633,598 | - | 18,827,067 | 6,646,107 | 2,829,291 | - | 73,646,374 |
| 2015 | 69,711,799 | 18,799,917 | - | 35,423,727 | 12,668,804 | 5,382,902 | - | 141,987,148 |

The weather non-normalized billed forecast kWh is then adjusted by the allocated weather sensitivity data present in Table 14 above to derive the weather normalized billed forecast kWh. Table 15 below provides the weather normalized billed forecast kWh, excluding CDM and wholesale market participant adjustments, for the 2014 Bridge Year and the 2015 Test Year.

Table 15: Normalized Billed Forecast $\mathbf{k W h}^{\mathbf{7}}$

| Year | Residential | General <br> Service < 50 <br> kW | Unmetered <br> Scattered <br> Load | General Service <br> $>\mathbf{5 0}$ to $\mathbf{6 9 9} \mathbf{k W}$ | General Service <br> $>\mathbf{7 0 0}$ to $\mathbf{4 9 9 9} \mathbf{k W}$ | Large U ser | Street <br> Lights | Total |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| 2014 | $1,259,753,300$ | $339,844,610$ | $5,818,253$ | $1,087,234,825$ | $873,498,257$ | $381,669,818$ | $32,285,800$ | $3,980,104,863$ |
| 2015 | $1,320,339,255$ | $356,069,822$ | $5,931,733$ | $1,087,548,457$ | $877,501,136$ | $382,619,513$ | $33,306,955$ | $4,063,316,871$ |

## Wholesale Market Participants Adjustment

Wholesale market participants are customers who buy power directly from the Independent Electricity System Operator ("IESO") and use the distribution system of LDCs to deliver the power to their business locations. Hydro One Brampton has four wholesale market participants operating within its distribution territory. They are billed transmission and distribution charges by HOBNI for use of its facilities in delivering power to their service addresses within the City of Brampton. Other charges such as commodity, global adjustment and wholesale market service are billed directly to the wholesale market participants by the IESO.

HOBNI has included the power purchased by wholesale market participants in its historical purchased kWh for load forecasting purposes. Further, HOBNI has also included the related kW for wholesale market participants in the billed kW for the General Service $>700 \mathrm{~kW}$ class. These adjustments were necessary to ensure the accuracy of the 2014 Bridge Year and the 2015 Test Year forecast billed kW for the General Service > 700 class.

The forecasted kWh for wholesale market participants was subsequently removed from the forecasted kWh for the General Service $>700 \mathrm{~kW}$ class after the calculation of billed kW for the class. See Tables 17 and 18 below.

Table 16 below shows the historical and forecasted kWh for the wholesale market participants since 2011. The forecasted kWh for the 2014 Bridge Year was calculated by multiplying the actual kWh for 2013 by one plus the five year historical average growth rate for the General Service > 700 class. The forecast for the 2015 Test Year was calculated by applying the same growth rate to the 2014 Bridge Year forecast. The five year historical average growth rate for the General Service > 700 is approximately $0.01 \%$.

[^5]Please note that the program commenced in May 2011 and this explains the lower kWh in 2011.
Table 16: Historical and Forecasted kWh for Wholesale Market Participants ${ }^{8}$

| Year | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | 2014 Bridge Year | 2015 Test Year | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Billed kWh | $29,584,746$ | $50,918,813$ | $55,911,393$ | $55,914,853$ | $55,918,315$ | $248,248,120$ |
| Uplifted Billed | $30,590,627$ | $52,650,053$ | $57,812,380$ | $57,815,958$ | $57,825,129$ | $256,694,148$ |

After calculating the billed kWh for the General Service > 700 kW class, the kWh associate with wholesale market participants was then deducted from the weather normalized billed kWh to arrive at the final forecasted billed kWh for General Service > 700 kW class.

## Forecasted Weather Normalized Billed kWh after Adjusting for CDM and

## Wholesale Market Participants

Tables 17 and 18 below provide detail on the final weather normalized billed kWh, after adjusting for CDM and Wholesale Market Participants, for the rate classes that were included in the regression analysis. The CDM adjustments included in Tables $\mathbf{1 7}$ and $\mathbf{1 8}$ below are net of losses. Detail CDM adjustments are discussed in Schedule 2 of this Exhibit.

The kWh and kW for the Embedded Distributor, Distributed Generation and Energy from Waste Generation rate classes are discussed below.

Table 17: 2014 Weather Normalized Billed kWh Forecast after Adjusting for CDM and Wholesale Market Participants

| Rate Class | Non- <br> Normalized <br> Billed Energy | Adjustment <br> for Weather <br> Normalization | Normalized <br> Billed Energy | Weather Normal <br> Adjustment | Wholesale <br> Milled Energy <br> Forecast After <br> CDM Adjustment | Weather <br> Participant <br> Adjustment | Normal Billed <br> Energy <br> Forecast |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Residential | $1,224,042,990$ | $35,710,310$ | $1,259,753,300$ | $(10,299,141)$ | $1,249,454,159$ | - | $1,249,454,159$ |
| General Service < 50 kW | $330,211,012$ | $9,633,598$ | $339,844,610$ | $(1,194,987)$ | $338,649,623$ | - | $338,649,623$ |
| Unmetered Scattered Load | $5,818,253$ | - | $5,818,253$ | - | $5,818,253$ | - | $5,818,253$ |
| General Service >50 to 699 kW | $1,068,407,758$ | $18,827,067$ | $1,087,234,825$ | $(19,661,974)$ | $1,067,572,851$ | - | $1,067,572,851$ |
| General Service > 700 to 4999 kW | $866,852,150$ | $6,646,107$ | $873,498,257$ | $(13,171,813)$ | $860,326,444$ | $(55,914,853)$ | $804,411,590$ |
| Large User | $378,840,527$ | $2,829,291$ | $381,669,818$ | - | $381,669,818$ | - | $381,669,818$ |
| Street Lights | $32,285,800$ | - | $32,285,800$ | - | $32,285,800$ | - | $32,285,800$ |
| Total | $\mathbf{3 , 9 0 6 , 4 5 8 , 4 8 9}$ | $\mathbf{7 3 , 6 4 6 , 3 7 4}$ | $\mathbf{3 , 9 8 0 , 1 0 4 , 8 6 3}$ | $\mathbf{( 4 4 , 3 2 7 , 9 1 5 )}$ | $\mathbf{3 , 9 3 5 , 7 7 6 , 9 4 8}$ | $\mathbf{( 5 5 , 9 1 4 , 8 5 3 )}$ | $\mathbf{3 , 8 7 9 , 8 6 2 , 0 9 5}$ |

[^6]Table 18: 2015 Weather Normalized Billed kWh Forecast after Adjusting for CDM and Wholesale Market Participants ${ }^{9}$

| Rate Class | Non- <br> Normalized Billed Energy | Adjustment for Weather Normalization | Normalized Billed Energy | CDM <br> Adjustment | Weather Normal <br> Billed Energy <br> Forecast After <br> CDM Adjustment | Wholesale <br> Market <br> Participant <br> Adjustment | Weather Normal Billed Energy Forecast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | 1,250,627,456 | 69,711,799 | 1,320,339,255 | (12,074,272) | 1,308,264,983 | - | 1,308,264,983 |
| General Service < 50 kW | 337,269,906 | 18,799,917 | 356,069,822 | $(1,400,952)$ | 354,668,870 |  | 354,668,870 |
| Unmetered Scattered Load | 5,931,733 | - | 5,931,733 | - | 5,931,733 | - | 5,931,733 |
| General Service > 50 to 699 kW | 1,052,124,730 | 35,423,727 | 1,087,548,457 | (23,050,858) | 1,064,497,599 | - | 1,064,497,599 |
| General Service > 700 to 4999 kW | 864,832,332 | 12,668,804 | 877,501,136 | $(15,428,642)$ | 862,072,495 | (55,918,315) | 806,154,180 |
| Large User | 377,236,612 | 5,382,902 | 382,619,513 | - | 382,619,513 | - | 382,619,513 |
| Street Lights | 33,306,955 | - | 33,306,955 | - | 33,306,955 | - | 33,306,955 |
| Total | 3,921,329,723 | 141,987,148 | 4,063,316,871 | (51,954,724) | 4,011,362,147 | $(55,918,315)$ | 3,955,443,833 |

## Load Forecast for Embedded Distributor, Distributed Generation and Energy from Waste Generation

As outlined above, energy supplied to the Embedded Distributor, Distributed Generation and Energy from Waste Generation rate classes were excluded from the general regression model. The Embedded Distributor class was excluded because future load is expected to drop significantly compared to historical load and inclusion in the regression analysis would skew the results. According to projections from HOBNI's engineering group, the load forecast for the Embedded Distributor class in the 2014 Bridge Year is expected to be zero and the 2015 Test Year load is expected to be less than one half the actual for 2013.

The Distributed Generation and Energy from Waste Generation classes were excluded because the existing data was insufficient for the regression analysis. There is no data for the Energy from Waste Generation class since they do not purchase load from HOBNI and the Distributed Generation class only started purchasing load from HOBNI in 2011.

To forecast consumption data for the 2014 Bridge Year and 2015 Test Year for the Embedded Distributor and Distributed Generation rate classes, HOBNI used the actual load profile for 2013. As noted above, the load forecast for the Embedded Distributor class in the 2014 Bridge Year will be zero.

Table 19 below provides forecasted billed kWh and kW as well as the forecasted customer counts for these rate classes.

[^7]Table 19: Forecasted Load and Customer Count for the Proposed New Rate Classes

| Description | Embedded Distributor |  | Distributed Generation |  | Energy From Waste Generation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2014 Bridge Year | 2015 Test Year | 2014 Bridge Year | 2015 Test Year | 2014 Bridge Year | 2015 Test <br> Year |
| Billed kWh | 0 | 17,012,414 | 113,715 | 178,816 | 0 | 0 |
| Billed kW | 0 | 40,073 | 0 | 0 | 0 | 0 |
| Uplifted kWh | 0 | 17,432,620 | 117,684 | 184,913 | 0 | 0 |
| Number of Customers | 1 | 1 | 43 | 68 | 1 | 1 |

## Summary of Total Forecasted Billed kWh and Customer/Connection Counts

Table 20 below provides a summary of the total forecasted billed kWh and customer/connection counts for all customer classes for the 2014 Bridge Year and the 2015 Test Year. The forecasted billed kWh for the 2014 Bridge Year is $3,879,975,810$ meanwhile forecasted billed kWh for the 2015 Test Year is $3,972,635,063$. HOBNI is also forecasting an average of 147,788 customers in 2014 and 151,708 in 2015. Connection count is expected to average 23,548 and 23,896 in 2014 and 2015, respectively.

Table 20: Summary of Total Forecasted Billed kWh and Customer/Connection Counts ${ }^{10}$

| Rate Class | 2014 Weather Normalized Billed Energy Forecast | 2015 Weather Normalized Billed Energy Forecast | 2014 Customer Counts | 2015 Customer Counts | 2014 <br> Connection <br> Counts | 2015 <br> Connection <br> Counts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | 1,249,454,159 | 1,308,264,983 | 137,303 | 140,979 |  |  |
| General Service < 50 kW | 338,649,623 | 354,668,870 | 8,758 | 8,989 |  |  |
| Unmetered Scattered Load | 5,818,253 | 5,931,733 | 57 | 56 | 1,519 | 1,562 |
| General Service > 50 to 699 kW | 1,067,572,851 | 1,064,497,599 | 1,501 | 1,491 |  |  |
| General Service > 700 to 4999 kW | 804,411,590 | 806,154,180 | 115 | 115 |  |  |
| Large User | 381,669,818 | 382,619,513 | 6 | 6 |  |  |
| Street Lights | 32,285,800 | 33,306,955 | 2 | 2 | 22,029 | 22,335 |
| Embeddded Distributor | - | 17,012,414 | 1 | 1 |  |  |
| Distributed Generation | 113,715 | 178,816 | 43 | 68 |  |  |
| Energy From Waste Generation | - | - | 1 | 1 |  |  |
| Bakup/Standby | - | - | 1 | 1 |  |  |
| Total | 3,879,975,810 | 3,972,635,063 | 147,788 | 151,708 | 23,548 | 23,896 |

[^8]
## Billed kW Load Forecast

The volumetric revenue components for General Service > 50 kW, General Service > 700 kW, Large User and Street Lights rate classes are calculated based on billed kW demand. Since the load forecast is calculated based on kWh, forecasted kW for these classes must be correlated with the forecasted kW for each class. In order to convert billed kWh to billed kW, Hydro One Brampton calculated the historical ratios between kW and kWh for the most recent five years for each class. An average of the ratios associated with these five years was then used to multiply the forecasted weather normalized billed kWh, after adjusting for CDM impact, to determine the forecasted KW demands for each class. Tables 21, 22, 23A and 23B provide information on historical billed kW, ratio of historical billed kW to billed kWh and forecasted billed kW, respectively.

Table 21: Historical Billed kW by Year

| Year | General Service > 50 to 699 kW | General Service <br> $>700$ to 4999 kW | Large User | Street <br> Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 2,726,683 | 1,956,285 | 531,189 | 58,415 | 5,272,572 |
| 2004 | 2,792,673 | 2,104,962 | 505,001 | 60,474 | 5,463,110 |
| 2005 | 2,901,457 | 2,167,872 | 515,785 | 65,522 | 5,650,636 |
| 2006 | 2,962,866 | 2,137,488 | 589,471 | 70,150 | 5,759,975 |
| 2007 | 3,039,974 | 2,106,615 | 639,861 | 76,385 | 5,862,835 |
| 2008 | 3,064,109 | 1,976,551 | 712,935 | 79,929 | 5,833,524 |
| 2009 | 3,049,119 | 1,839,970 | 696,851 | 81,921 | 5,667,861 |
| 2010 | 3,049,813 | 1,916,781 | 684,290 | 84,893 | 5,735,777 |
| 2011 | 3,051,053 | 1,894,300 | 716,743 | 90,235 | 5,752,331 |
| 2012 | 3,074,186 | 1,928,037 | 736,260 | 92,995 | 5,831,478 |
| 2013 | 3,051,058 | 1,980,476 | 701,011 | 95,410 | 5,827,955 |

Table 22: Historical Billed kW/kWh Ratio by Year ${ }^{11}$

| Year | General Service > 50 to 699 kW | General Service $>700$ to 4999 kW | Large User | Street Lights |
| :---: | :---: | :---: | :---: | :---: |
| 2003 | 0.2738\% | 0.2315\% | 0.1885\% | 0.3057\% |
| 2004 | 0.2671\% | 0.2281\% | 0.1739\% | 0.2885\% |
| 2005 | 0.2679\% | 0.2272\% | 0.1694\% | 0.2991\% |
| 2006 | 0.2741\% | 0.2249\% | 0.1764\% | 0.2949\% |
| 2007 | 0.2739\% | 0.2236\% | 0.1801\% | 0.2962\% |
| 2008 | 0.2744\% | 0.2266\% | 0.1835\% | 0.2984\% |
| 2009 | 0.2821\% | 0.2334\% | 0.2034\% | 0.2996\% |
| 2010 | 0.2801\% | 0.2282\% | 0.1884\% | 0.2996\% |
| 2011 | 0.2773\% | 0.2280\% | 0.1817\% | 0.3033\% |
| 2012 | 0.2790\% | 0.2245\% | 0.1830\% | 0.3039\% |
| 2013 | 0.2812\% | 0.2279\% | 0.1843\% | 0.3049\% |
| 5-Year Average | 0.2799\% | 0.2284\% | 0.1882\% | 0.3023\% |

Table 23A: 2014 Billed kW Forecast

| Description | General Service > <br> 50 to $\mathbf{6 9 9} \mathbf{~ k W ~}$ | General Service <br> $>\mathbf{7 0 0}$ to $\mathbf{4 9 9 9} \mathbf{~ k W}$ | Large User | Street Lights | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Forecasted kWh | $1,067,572,851$ | $860,326,444$ | $381,669,818$ | $32,285,800$ | $2,341,854,913$ |
| Ratio of kW/kWh | $0.2799 \%$ | $0.2284 \%$ | $0.1882 \%$ | $0.3023 \%$ | $0.2464 \%$ |
| Forecasted Billed kW | $2,988,434$ | $1,965,158$ | 718,200 | 97,585 | $5,769,378$ |

Table 23B: 2015 Billed kW Forecast ${ }^{12}$

| Description | $\begin{array}{c\|} \hline \text { General Service > } \\ 50 \text { to } 699 \mathrm{~kW} \\ \hline \end{array}$ | General Service $>700$ to 4999 kW | Large User | Street Lights | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Forecasted kWh | 1,064,497,599 | 862,072,495 | 382,619,513 | 33,306,955 | 2,342,496,561 |
| Ratio of kW/kWh | 0.2799\% | 0.2284\% | 0.1882\% | 0.3023\% | 0.2463\% |
| Forecasted Billed kW | 2,979,826 | 1,969,146 | 719,987 | 100,672 | 5,769,631 |

[^9]
## Transformer Ownership Allowance Credit

Hydro One Brampton currently provides transformer allowance credit to customers who own their own transformers. Currently, only customers in the General Service > 50 kW and the General Service > 700 kW classes are eligible.

Hydro One Brampton is proposing to provide eligible customers in the General Service < 50 kW class transformer allowance credit. From time to time, customers are reclassified from one class to another depending on changes in their consumption pattern. For example, a customer currently in the General Service > 50 kW class may be reclassified to the General Service < 50 kW class in a year from now because of a reduction in its consumption pattern. If that customer is currently eligible for transformer allowance credit, the reclassification to the General Service < 50 kW class would deem the customer ineligible for transformer allowance credit given that there is no provision in the current rate schedule. The proposal been put forward by Hydro One Brampton would address this issue.

Hydro One Brampton is also proposing new transformer allowance rates for the existing classes. The current rates are $(\$ 0.7048)$ and $(\$ 0.8758)^{13}$ for the General Service $>50 \mathrm{~kW}$ class and the General Service $>700 \mathrm{~kW}$ class, respectively. The proposed rates are (\$0.0033), ( 0.7019 ) and $(\$ 0.8737)^{14}$ for the General Service $<50 \mathrm{~kW}$ class, General Service $>50 \mathrm{~kW}$ class and the General Service > 700 kW class, respectively.

To derive the forecasted transformer allowance credit for each rate class, HOBNI calculated the average historical relationship between billed transformer allowance quantities and the total historical billed quantities over a five year period (2009 to 2013). Once these ratios were calculated, they were then multiplied by the forecasted billed quantities and the existing rates (for 2014) and the proposed rates (for 2015) to derive the transformer allowance credits. The forecasted billed quantities are summarized in Tables 20, 23A and 23B above. The historical billed quantities are summarized in Table 1 in Tab 2 Schedule 2 of this Exhibit. Tables 24, 25 and $\mathbf{2 6}$ provide a summary of the calculation of the transformer allowance credits.

[^10]| Year | General Service < 50 kW |  |  | General Service > 50 kW |  |  | General Service > 700 kW |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Historical Transformer Allowance kWh (A) | Total Historical Billed kWh for <br> Rate Class (B) | Historical Ratio (A $\div B$ ) | Historical Billed Transformer Allowance kW (C) | Total Historical Billed kWh for Rate Class (D) | Historical <br> Ratio (C $\div$ D) | Historical Billed Transformer Allowance kW (E) | Total Historical Billed kWh for Rate Class (F) | Historical <br> Ratio ( $\mathrm{E} \div \mathrm{F}$ ) |
| 2009 | 296,906 | 283,991,997 | 0.10\% | 273,288 | 3,049,083 | 8.96\% | 1,505,237 | 1,839,970 | 81.81\% |
| 2010 | 308,813 | 291,782,860 | 0.11\% | 239,997 | 3,049,813 | 7.87\% | 1,593,722 | 1,916,781 | 83.15\% |
| 2011 | 311,192 | 309,962,282 | 0.10\% | 251,508 | 3,051,053 | 8.24\% | 1,588,949 | 1,894,300 | 83.88\% |
| 2012 | 315,016 | 315,917,674 | 0.10\% | 267,290 | 3,074,187 | 8.69\% | 1,629,356 | 1,928,038 | 84.51\% |
| 2013 | 361,185 | 323,299,858 | 0.11\% | 205,212 | 3,051,064 | 6.73\% | 1,383,849 | 1,980,483 | 69.87\% |
| Total | 1,593,112 | 1,524,954,672 |  | 1,237,295 | 15,275,200 |  | 7,701,112 | 9,559,572 |  |
|  |  |  |  |  |  |  |  |  |  |
| 5-Year Weighted Average Ratio |  |  | 0.10\% |  |  | 8.10\% |  |  | 80.56\% |

Table 25: Proposed Transformer Allowance Credit for 2014 Bridge Year

|  | $\mathbf{2 0 1 4}$ <br> Forecasted <br> Billed <br> Rate Class | Historical Ratio <br> $(\mathbf{B})$ | Existing <br> Transformer <br> Allowance <br> Rate (C) | 2014 Forecasted <br> Transformer <br> Allowance Credit <br> $\left(\mathbf{A} \times \mathbf{B} \times\right.$ C $^{\prime}$ |
| :--- | ---: | ---: | ---: | ---: |
| General Service $<50 \mathrm{kWh}$ | $338,649,623$ | $0.10 \%$ | - | - |
| General Service $>50 \mathrm{~kW}$ | $2,988,434$ | $8.10 \%$ | -0.7048 | $(170,607)$ |
| General Service $>700 \mathrm{~kW}$ | $1,965,158$ | $80.56 \%$ | -0.8758 | $(1,386,492)$ |
| Total |  |  |  | $(\mathbf{1 , 5 5 7 , 0 9 9 )}$ |

Table 26: Proposed Transformer Allowance Credit for 2015 Test Year

| Rate Class | 2015 <br> Forecasted Billed Quantities (A) | Historical Ratio (B) | Proposed Transformer Allowance Rate (C) | 2015 Forecasted Transformer Allowance Credit $(A \times B \times C)$ |
| :---: | :---: | :---: | :---: | :---: |
| General Service < 50 kWh | 354,668,870 | 0.10\% | (0.0033) | $(1,223)$ |
| General Service > 50 kW | 2,979,826 | 8.10\% | (0.7019) | $(169,415)$ |
| General Service > 700 kW | 1,969,146 | 80.56\% | (0.8737) | $(1,385,975)$ |
| Total |  |  |  | $(1,556,613)$ |

## CDM ADJUSTMENT TO LOAD FORECAST

## Adjustments to the Load Forecast for CDM

Consistent with the Board's Guidelines for Electricity Distributor Conservation and Demand Management (EB-2012-0003), dated April 26, 2012, HOBNI has integrated a manual adjustment into its 2015 load forecast for anticipated CDM results.

The load forecast, which draws on the regression analysis of historical actual usage date, accounts for some but not all of the load reductions that are expected from HOBNI's CDM initiatives in 2015.

To calculate the aggregate amount for the Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA"), and estimate the corresponding CDM adjustment to load forecast, HOBNI used the methodology proposed by the Board and is set out in Appendix 2-I Load Forecast CDM Adjustment Work Form (2014).

The methodology adopted by HOBNI is summarized in Figure 1. In this section, each of these steps will be described, and the relevant data for HOBNI's forecast presented in Tables 27 to 32 below.

Figure 1. Methodology for calculating adjustments required to the forecast for CDM


## Estimating 2015 Savings

The methodology for estimating 2015 savings is consistent with the methodology set out in the OEB Appendix 2-I. Historic data on the persistence of 2011 and 2012 initiative savings through 2014 are subtracted from the OEB assigned target for 2014, and this difference is allocated $1 / 3$ to 2013 initiatives in 2013, 1/3 to 2013 initiatives in 2014 and $1 / 3$ to 2014 initiatives in 2014. A new framework will be introduced in 2015, the details of which have not yet been fully determined. The Ontario Power Authority has discussed ending various province-wide initiatives
that are reaching saturation, and the Minister of Energy has indicated that LDCs will have a greater role in delivering CDM programs and initiatives in 2015. New initiatives are also expected to be introduced, but these are not yet defined, and are likely to yield modest results in 2015, as they ramp up.

As a transition year, with new initiatives starting up and some of the older initiatives discontinued, HOBNI anticipates that savings are likely to be lower than in the latter years of the 2011-2014 framework, and has estimated the savings in 2015 from initiatives offered in that year as equivalent to those realized in 2012. Table 27 shows the overall estimated 2015 savings, based on these two considerations (the allocation of remaining savings to reach the targets, and the 2015 initiative savings).

Table 27: Estimated CDM Savings by Year 2011-2015 (net kWh)

| Programs | Energy savings (net kWh) |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012 | 2013 | 2014 | 2015 |  |
| 2011 CDM Programs | 13,923,054 | 13,787,187 | 13,787,187 | 13,783,181 | 13,779,046 | 69,059,656 |
| 2012 CDM Programs |  | 15,234,570 | 15,163,186 | 15,160,146 | 15,155,598 | 60,713,500 |
| 2013 CDM Programs |  |  | 29,567,163 | 29,567,163 | 29,558,293 | 88,692,618 |
| 2014 CDM Programs |  |  |  | 29,567,163 | 29,558,293 | 59,125,455 |
| 2015 CDM Programs |  |  |  |  | 15,234,570 | 15,234,570 |
| Total in Year | 13,923,054 | 29,021,757 | 58,517,536 | 88,077,653 | 103,285,799 | 292,825,799 |

Notes:

## Weight Factors for 2015 Savings to be Included in the Forecast

The 2015 column in Table 27 shows estimated savings in 2015 from initiatives in each of the years 2011 through 2015 inclusive. Total CDM impact on the load forecast in 2015 of 103,285,799 kWh consists of persisting CDM results from 2011 and 2012, persisting CDM results from 2013, persisting results from 2014 and in-year results in 2015.

Results from 2011 and 2012 are already captured in the forecast through the use of actual usage data for 2011 through 2012 in the regression analysis, and thus CDM results from 2011 and 2012 initiatives are fully captured already.

The 2013 program results in Table 27 are for the full year of results, consistent with the way the OPA reports on CDM results. Since 2013 programs were implemented throughout the entire year, on average only about half of the anticipated annualized results (or about 15 GWh ) would be expected in 2013, and these would be captured in the forecast. However, those measures will result in CDM savings of about 30 GWh in 2015, as the full set of measures installed throughout 2013 will realize savings for the full year in 2015. In order to capture the difference between the results incorporated in the regression analysis, and the actual anticipated results, the additional 15 GWh needs to be captured in the adjustment to the forecast. This is done by setting the weight for 2013 programs in 2015 to 0.5 .

None of the results from 2014 initiatives is captured through the regression analysis as this is a forecast year, so a weighting factor of 1.0 is used for 2014 results that persist into 2015. Although only about half of annualized 2014 program results will actually be realized in 2014, those measures will be available for the full year of 2015 and therefore a weighting factor of 1.0 is needed.

Consistent with the above, a weighting factor of 0.5 is required for the 2015 results, as the measures will be implemented throughout the year, and on average can only be expected to be present for about half the year. Applying the 0.5 weighting factor to the anticipated results ensures that the manual adjustment to the load forecast captures the expected impact on load.
Table 28 below shows the weight factors for each year's CDM program impact on 2015 load forecast.

Table 28: Weighting Factor for each CDM Program Impact on 2015 Load Forecast

| Description | 2015 Savings From Programs Offered in the Following Years |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012 | 2013 | 2014 | 2015 |
| Weighting Factor for each year's CDM program impact on 2015 load forecast | 0 | 0 | 0.5 | 1 | 0.5 |
| Value selection rationale. | Actuals captured in regression analysis | Actuals captured in regression analysis | 50\% of 2013 CDM impact reflected in base forecast based on 1/2 year rule. | Full year impact of 2014 CDM programs on adjustment for 2015 load forecast | $50 \%$ of 2015 CDM impact reflected in base forecast based on 1/2 year rule. |

## Manual Adjustment Required to the 2015 Load Factor

Applying the weighting factors in Table 28 to the 2015 savings in Table 27 results in the manual adjustment required to the 2015 load forecast. These numbers are then adjusted to account for estimated line losses. This approach is consistent with that laid out in the Board Appendix 2-I. The resulting manual adjustment required to the 2015 load forecast is shown on Table 29 below. The total manual adjustment required to 2015 load forecast is $53,726,380 \mathrm{kWh}$.

Table 29: Manual Adjustment Required to 2015 Load Forecast

| Description | 2015 net energy savings (kWh) from programs offered in |  |  |  |  | Total for 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012 | 2013 | 2014 | 2015 |  |
| Amount used for CDM threshold for LRAMVA (2015) | 13,779,046 | 15,155,598 | 29,558,293 | 29,558,293 | 15,234,570 | 103,285,799 |
| Weight factor on 2015 load forecast | 0 | 0 | 0.5 | 1 | 0.5 |  |
| Manual adjustment for 2015 load forecast (billed basis) | - | - | 14,779,146 | 29,558,293 | 7,617,285 | 51,954,724 |
| Proposed Loss Factor (TLF) | 3.41\% |  |  |  |  |  |
| Manual adjustment required to 2015 load forecast | - | - | 15,283,115 | 30,566,230 | 7,877,034 | 53,726,380 |

The next step is to estimate the incremental revenue requirement associated with this total amount. In order to perform these calculations, the total kWh savings need to be assigned to the individual rate classes.

## Historic Split of Savings across Rate Classes

In the absence of specific information on what initiatives will be offered in 2015, HOBNI has estimated the distribution across rate classes based on historic values for CDM initiatives. The historic energy savings from CDM initiatives are reported by the OPA by initiative, not by rate class, though many initiatives are targeted at a particular rate class. Some initiatives, such as the Equipment Replacement Incentive Initiative (ERII), may be utilized by multiple rate classes.

Table 30 shows energy savings and demand reductions by initiative for 2011 through 2013. The 2011 and 2012 values are based on OPA measured results. The 2013 values are HOBNI estimates, drawing on OPA preliminary results in quarterly reports. HOBNI anticipates that actual results will be higher than those shown as additional projects are realized. Next, the total savings for all initiatives, the percentage of total savings attributable to each initiative for both

| Program |  | 2011 Actual |  | 2012 Actual |  | 2013 Estimate |  | Total |  | Percentage |  | kW/kWh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW (annual) | kWh |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Appliance Retirement | 49 | 355,028 | 33 | 230,362 | 40 | 120,452 | 122 | 705,842 | 0.64\% | 1.67\% | 0.000173 |
| 2 | Appliance Exchange | 4 | 5,189 | 5 | 8,106 | 1 | 848 | 10 | 14,143 | 0.05\% | 0.03\% | 0.000740 |
| 3 | HVAC Incentives | 909 | 1,654,205 | 710 | 1,202,085 | 1,000 | 1,900,000 | 2,619 | 4,756,290 | 13.68\% | 11.25\% | 0.000551 |
| 4 | Conservation Instant Coupon Booklet | 39 | 651,777 | 6 | 39,402 | 25 | 400,000 | 70 | 1,091,179 | 0.36\% | 2.58\% | 0.000064 |
| 5 | Bi-Annual Retailer Event | 50 | 889,674 | 42 | 754,713 | 15 | 200,000 | 107 | 1,844,387 | 0.56\% | 4.36\% | 0.000058 |
| 6 | Retailer Co-Op | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 7 | Residential Demand Response (switch/pstat) | - | - | 467 | 3,387 | 750 | 1,400,000 | 1,217 | 1,403,387 | 6.36\% | 3.32\% | 0.000867 |
| 8 | Residential Demand Response (IHD) | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 9 | Residential New Construction | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 10 | Retrofit | 772 | 3,258,374 | 2,097 | 12,489,528 | 1,200 | 7,679,188 | 4,069 | 23,427,090 | 21.25\% | 55.41\% | 0.000174 |
| 11 | Direct Install Lighting | - | - | - | - | 600 | 1,140,000 | 600 | 1,140,000 | 3.13\% | 2.70\% | 0.000526 |
| 12 | Building Commissioning | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 13 | New Construction | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 14 | Energy Audit | - | - | 16 | 75,529 | - | - | 16 | 75,529 | 0.08\% | 0.18\% | 0.000212 |
| 15 | Small Commercial Demand Response (switch/pstat) | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 16 | Small Commercial Demand Response (IHD) | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 17 | Demand Response 3 | 57 | 2,251 | 58 | 840 | 500 | 19,400 | 615 | 22,491 | 3.21\% | 0.05\% | 0.027365 |
| 18 | Process \& System Upgrades | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 19 | Monitoring \& Targeting | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 20 | Energy Manager | - | - | - | - | - | - | - | - | 0.00\% | 0.00\% |  |
| 21 | Retrofit | 190 | 1,185,812 | - | - | 1,000 | 6,399,323 | 1,190 | 7,585,135 | 6.22\% | 17.94\% | 0.000157 |
| 22 | Demand Response 3 | 2,276 | 133,616 | 2,787 | 67,157 | 3,200 | 1,000 | 8,263 | 201,773 | 43.15\% | 0.48\% | 0.040953 |
| 23 | Home Assistance Program | - | - | - | - | 250 | 10,000 | 250 | 10,000 | 1.31\% | 0.02\% | 0.025000 |
| Total | 0 | 4,348 | 8,135,925 | 6,221 | 14,871,109 | 8,581 | 19,270,212 | 19,150 | 42,277,245 | 100.00\% | 100.00\% | 0.000453 |

Notes:
2011 and 2012 actuals are from OPA final results
2013 estimate prepared by HOBN
pre-2011 programs are excluded

## Estimate Savings by Initiative for the Manual Adjustment Required

Applying the percentages by initiative in Table 30 to the aggregate manual adjustment required gives the distribution of the savings in that adjustment across initiatives, and is shown in the "Forecast allocation" columns in Table 31.

## Allocate Savings to Rate Classes

The savings by initiative are allocated to individual rate classes based on the target consumers for those programs. As mentioned above, for many programs, only one customer class is targeted. For others, more than one customer class may be targeted. In the latter case, HOBNI has estimated the split across rate classes based on the estimated split in 2013.

## Convert Energy Savings by Rate Class to the Billing Units for Each Rate class

Finally, the energy savings measured in kilowatt-hours by each rate class are converted to billing units for that rate class based on the ratio of demand (kW) to energy (kWh) presented on Table 30 and, for rate classes that bill by customer monthly peak demand, multiplying by 12 for the number of billings per year. The resulting impact on billing units by initiative, and in total, is presented in the final four columns of Table 31.

| Program |  | Percentage |  | Forecast allocation |  | Forecast allocation by rate class (energy) |  |  |  | Forecast allocation by rate class (billing unit) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { kW } \\ \text { (annual) } \end{gathered}$ | kWh | kW | kWh | Residential | GS < 50 kW | $\begin{gathered} \text { GS } 50 \text { to } 699 \\ \text { kW } \end{gathered}$ | $\begin{gathered} \text { GS } 700 \text { to } \\ 4,999 \mathrm{~kW} \end{gathered}$ | Residential | GS $<50 \mathrm{~kW}$ | GS 50 to 699 kW | $\begin{array}{\|r\|} \hline \text { GS } 700 \text { to } \\ 4,999 \mathrm{~kW} \end{array}$ |
|  |  | kWh |  |  |  | kWh | kWh | kWh | kWh | kWh | kW-mo | kW-mo |
| 1 | Appliance Retirement |  | 0.64\% | 1.67\% | 155 | 896,991 | 896,991 |  |  |  | 896,991 |  |  |  |
| 2 | Appliance Exchange | 0.05\% | 0.03\% | 13 | 17,973 | 17,973 |  |  |  | 17,973 |  |  |  |
| 3 | HVAC Incentives | 13.68\% | 11.25\% | 3,328 | 6,044,345 | 6,044,345 |  |  |  | 6,044,345 |  |  |  |
| 4 | Conservation Instant Coupon Booklet | 0.36\% | 2.58\% | 88 | 1,386,682 | 1,386,682 |  |  |  | 1,386,682 |  |  |  |
| 5 | Bi-Annual Retailer Event | 0.56\% | 4.36\% | 137 | 2,343,866 | 2,343,866 |  |  |  | 2,343,866 |  |  |  |
| 6 | Retailer Co-Op |  |  | - | - |  |  |  |  |  |  |  |  |
| 7 | Residential Demand Response (switch/pstat) | 6.36\% | 3.32\% | 1,547 | 1,783,439 | 1,783,439 |  |  |  | 1,783,439 |  |  |  |
| 8 | Residential Demand Response (IHD) |  |  | - | - |  |  |  |  |  |  |  |  |
| 9 | Residential New Construction |  |  | - | - |  |  |  |  |  |  |  |  |
| 10 | Retrofit | 21.25\% | 55.41\% | 5,171 | 29,771,399 |  |  | 17,862,840 | 11,908,560 |  |  | 37,232 | 24,821 |
| 11 | Direct Install Lighting | 3.13\% | 2.70\% | 762 | 1,448,724 |  | 1,448,724 |  |  |  | 1,448,724 |  |  |
| 12 | Building Commissioning |  |  | - | - |  |  |  |  |  |  |  |  |
| 13 | New Construction |  |  | - | - |  |  |  |  |  |  |  |  |
| 14 | Energy Audit | 0.08\% | 0.18\% | 20 | 95,983 |  |  | 47,992 | 47,992 |  |  | 122 | 122 |
| 15 | Small Commercial Demand Response (switch/pstat) |  |  | - | - |  |  |  |  |  |  |  |  |
| 16 | Small Commercial Demand Response (IHD) |  |  | - | - |  |  |  |  |  |  |  |  |
| 17 | Demand Response 3 | 3.21\% | 0.05\% | 782 | 28,581 |  |  | 14,290.64 | 14,290.64 |  |  | N/A* | N/A* |
| 18 | Process \& System Upgrades |  |  | - | - |  |  |  |  |  |  |  |  |
| 19 | Monitoring \& Targeting |  |  | - | - |  |  |  |  |  |  |  |  |
| 20 | Energy Manager |  |  | - | - |  |  |  |  |  |  |  |  |
| 21 | Retrofit | 6.22\% | 17.94\% | 1,513 | 9,639,272 |  |  | 5,783,563 | 3,855,709 |  |  | 10,892 | 7,261 |
| 22 | Demand Response 3 | 43.15\% | 0.48\% | 10,501 | 256,415 |  |  | 128,208 | 128,208 |  |  | N/A* | N/A* |
| 23 | Home Assistance Program | 1.31\% | 0.02\% | 318 | 12,708 | 12,708 |  |  |  | 12,708 |  |  |  |
| Total |  | 100.00\% | 100.00\% | 24,336 | 53,726,380 | 12,486,005 | 1,448,724 | 23,836,892 | 15,954,758 | 12,486,005 | 1,448,724 | 48,246 | 32,205 |

## Summary by Rate Class

The estimated allocation of the manual adjustment by rate class, in both total energy units (kWh) and billing units by rate class is summarized in Table 32. HOBNI acknowledges that there are a number of assumptions about CDM programs in 2013 through 2015 that go into these values that will need to be adjusted. Through the LRAMVA process, actual impacts on billing units will be trued up once the 2015 measured results are available from the evaluation of initiatives.

Table 32: Allocation of Manual Adjustment across Rate Classes for 2015

| Rate class | kWh | kW |
| :--- | ---: | ---: |
| Residential | $12,486,005$ | - |
| GS < 50 kW | $1,448,724$ | - |
| GS 50 to 699 kW | $23,836,892$ | 48,246 |
| GS 700 to 4,999 kW | $15,954,758$ | 32,205 |
| GS 700 to 4,999 kW | - | - |
| Large Use | - | - |
| Sentinel Lighting | - | - |
| Standby Power | - | - |
| Street Lighting | - | - |
| Total | $\mathbf{5 3 , 7 2 6 , 3 8 0}$ | $\mathbf{8 0 , 4 5 0}$ |

## Appendix 1

## OEB Appendix 2-I - Load Forecast CDM Adjustment Work Form

| File Number: | EB-2014-0083 |
| :--- | ---: |
| Exhibit: | 3 |
| Tab: | 1 |
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## Appendix 2-I

 Load Forecast CDM Adjustment Work Form (2015)Input the 2011-2014 CDM target in Cell B21.
Input the measured results for 2011 CDM programs for each of the years 2011 and persistence into 2012, 2013 and 2014 into cells B29 to E29. These results are taken from the final 2011 CDM Report issued by the OPA for that distributor in the fall of 2012.

Measured results for 2012 CDM programs for each of the years 2012 and persistence into 2013 and 2014 are input into cells C30 to E30. These results are taken from the final 2012 CDM Report issued by the OPA for that distributor in the fall of 2013. Until that report is issued, the distributor should use the results from the preliminary 2012 CDM Report issued in the spring of 2013.

Based on these inputs, the residual kWh to achieve the 4 year CDM target is allocated so that there is an equal incremental increase in each of the years 2012 , 2013 and


From each of the 2006-2010 CDM Final Report, 2011 CDM Final Report, and the 2012 CDM Final Report, issued by the OPA for the distributor, the distributor should input the "gross" and "net" results of the cumulative CDM savings for 2014 into cells D31 to E33. The model will calculate the cumulative savings for all programs from 2006 to 2012 and determine the "net" to "gross" factor "g".

The Board has determined that the "net" number should be used in its Decision and Order with respect to Centre Wellington Hydro Ltd.'s 2013 Cost of

| Net-to-Gross Conversion |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Is CDM adjustment being done on a "net" or "gross" basis? |  |  |  | net |
|  | "Gross" | "Net" | Difference | "Net-to-Gross" |
| Persistence of Historical CDM programs to 2014 | kWh | kWh | kWh | ('g') |
| 2006-2010 CDM programs | 64,279,013.00 | 38,085,814.92 |  |  |
| 2011 CDM program | 18,785,313.86 | 13,783,181.19 |  |  |
| 2012 CDM program | 20,785,293.14 | 15,160,146.04 |  |  |
| 2006 to 2012 OPA CDM programs: Persistence to 2014 | 103,849,620.01 | 67,029,142.16 | 36,820,477.84 | 0.00\% |


| File Number: | EB-2014-0083 |
| :--- | ---: |
| Exhibit: | 3 |
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## Appendix 2-I

 Load Forecast CDM Adjustment Work Form (2015)The default values represent the factor that each year's CDM program is factored into the manual CDM adjustment. Distributors can choose alternative weights of " 0 ", " 0.5 " or " 1 " from the drop-down menu for each cell, but must support its alternatives.

These factors do not mean that CDM programs are excluded, but also reflect the assumption that impacts of 2011 and 2012 programs are already

| Weight Factor for Inclusion in CDM Adjustment to 2015 Load Forecast |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weight Factor for each year's CDM program impact on 2014 load forecast <br> Default Value selection rationale. | 2011 | 2012 | 2013 | 2014 | 2015 |  |
|  | 0 | 0 | 0.5 | 1 | 0.5 | Utility can select "0", "0.5", or "1" <br> from drop-down list |
| Default Value selection rationale. | Persistence of 2011 CDM programs for the full year of 2012 means that all of 2011 CDM impact is assumed to be in the base forecast before the CDM Adjustment | Persistence of 2012 CDM programs for the full year of 2013 means that all of 2012 CDM impact is assumed to be in the base forecast before the CDM Adjustment | $50 \%$ of 2013 CDM impact is assumed reflected in base forecast based on $1 / 2$ year rule. | Full year impact of 2014 CDM programs on adjustment for 2015 load forecast | Only 50\% of 2015 CDM impact is used based on a half year rule |  |

The Amount used for the CDM threshold of the LRAMVA is the kWh that will be used to determine the base amount for the LRAMVA balance for
The proposed loss factor should correspond with the loss factor calculated in Appendix 2-R
The Manual Adjustment for the 2014 Load Forecast is the amount manually subtracted from the load forecast derived from the base forecast from
If the distributor has developed their load forecast on a system purchased basis, then the manual adjustment should be on system purchased basis,

The distributor should determine the allocation of the savings to all customer classes in a reasonable manner, for both the LRAMVA and for the load


## Notes:

*     - For persistence of 2011 to 2014 program years in 2015, plus estimated 2015 program savings.


## REVENUE FORECAST OVERVIEW

Table 33 below provides a summary of forecasted distribution revenue by rate class for the 2014 Bridge Year.

Table 33: Forecasted Distribution Revenues by Rate Class (2014) ${ }^{15}$

| Rate Class | 2014 Bridge Year | Rates | Total |
| :---: | :---: | :---: | :---: |
| Residential Customers kWh | $\begin{array}{r} 137,303 \\ 1,249,454,159 \end{array}$ | $\begin{array}{r} 10.51 \\ 0.0147 \end{array}$ | $\begin{aligned} & 17,316,664 \\ & 18,366,976 \end{aligned}$ |
| General Service < 50 kW Customers kWh | $\begin{array}{r} 8,758 \\ 338,649,623 \\ \hline \end{array}$ | $\begin{array}{r} 24.39 \\ 0.0160 \\ \hline \end{array}$ | $\begin{aligned} & 2,563,204 \\ & 5,418,394 \end{aligned}$ |
| Unmetered Scattered Load Connections kWh | $\begin{array}{r} 1,519 \\ 5,818,253 \\ \hline \end{array}$ | $\begin{array}{r} 0.96 \\ 0.0176 \\ \hline \end{array}$ | $\begin{array}{r} 17,497 \\ 102,401 \\ \hline \end{array}$ |
| ```General Service > 50 kW Customers kW kW Tx Credit``` | $\begin{array}{r} 1,501 \\ 2,988,434 \\ 242,064 \\ \hline \end{array}$ | $\begin{gathered} 121.18 \\ 2.5039 \\ (0.7048) \\ \hline \end{gathered}$ | $\begin{array}{r} 2,182,745 \\ 7,482,740 \\ (170,607) \\ \hline \end{array}$ |
| ```General Service > 700 kW Customers kW kW Tx Credit``` | $\begin{array}{r} 115 \\ 1,965,158 \\ 1,583,115 \end{array}$ | $\begin{gathered} 1,196.32 \\ 3.4411 \\ (0.8758) \end{gathered}$ | $\begin{gathered} 1,649,360 \\ 6,762,305 \\ (1,386,492) \end{gathered}$ |
| Large Use Customers kW | $\begin{array}{r} 6 \\ 718,200 \\ \hline \end{array}$ | $\begin{array}{r} 4,549.67 \\ 2.2038 \\ \hline \end{array}$ | $\begin{array}{r} 327,576 \\ 1,582,769 \\ \hline \end{array}$ |
| SLR <br> Lights kW | $\begin{aligned} & 44,887 \\ & 97,585 \\ & \hline \end{aligned}$ | $\begin{array}{r} 0.84 \\ 8.7506 \end{array}$ | $\begin{aligned} & 452,462 \\ & 853,931 \end{aligned}$ |
| Embedded Distributor Customers kW | 1 | $\begin{gathered} 0.00 \\ 0.0634 \\ \hline \end{gathered}$ | - - |
| Distributed Generation Customers kWh | $\begin{array}{r} 43 \\ 113,715 \\ \hline \end{array}$ | $\begin{array}{r} 5.40 \\ 0.0160 \\ \hline \end{array}$ | $\begin{aligned} & 2,789 \\ & 1,819 \\ & \hline \end{aligned}$ |
| Energy From Waste Generation Customers kW | 1 | $\begin{gathered} 0.00 \\ 0.0000 \end{gathered}$ | 1,819 - - |
| Back-up/Standby Power Customers kW | $\begin{array}{r} 1 \\ 54,580 \end{array}$ | $\begin{gathered} 0.00 \\ 1.5573 \end{gathered}$ | $84,997$ |
| Total <br> Fixed Revenue <br> Volumetric Revenue <br> Transformer Allowance <br> Total Revenue |  |  | $24,512,298$ <br> $40,656,334$ <br> $(1,557,099)$ <br> $\mathbf{6 3 , 6 1 1 , 5 3 2}$ |

[^11]1 Table 34 below provides a summary of forecasted distribution revenue by rate class for the

Table 34: Forecasted Distribution Revenues by Rate Class (2015) ${ }^{16}$

| Rate Class | 2015 Test Year | Rates | Total |
| :---: | :---: | :---: | :---: |
| Residential |  |  |  |
| Customers | 140,979 | 12.93 | 21,874,330 |
| kWh | 1,308,264,983 | 0.0137 | 17,923,230 |
| General Service < 50 kW |  |  |  |
| Customers | 8,989 | 30.21 | 3,258,859 |
| kWh | 354,668,870 | 0.0138 | 4,894,430 |
| kW Tx Credit | 370,521 | -0.0033 | $(1,223)$ |
| Unmetered Scattered Load |  |  |  |
| Connections | 1,562 | 3.06 | 57,346 |
| kWh | 5,931,733 | 0.0145 | 86,010 |
| General Service > 50 kW |  |  |  |
| Customers | 1,491 | 183.15 | 3,276,314 |
| kW | 2,979,826 | 2.6224 | 7,814,295 |
| kW Tx Credit | 241,367 | (0.7019) | $(169,415)$ |
| General Service > 700 kW |  |  |  |
| Customers | 115 | 1,435.10 | 1,973,839 |
| kW | 1,969,146 | 3.0427 | 5,991,522 |
| kW Tx Credit | 1,586,328 | (0.8737) | $(1,385,975)$ |
| Large Use |  |  |  |
| Customers | 6 | 9,212.02 | 663,265 |
| kW | 719,987 | 2.15 | 1,547,612 |
| SLR |  |  |  |
| Lights | 22,335 | 3.39 | 908,570 |
| kW | 100,672 | 7.3844 | 743,402 |
| Embedded Distributor |  |  |  |
| Customers | 1 | 4,106.75 | 49,281 |
| kW | - | 0.0000 | - |
| Distributed Generation |  |  |  |
| Customers | 68 | 21.03 | 17,055 |
| kWh | 178,816 | 0.1624 | 29,040 |
| Energy From Waste Generation |  |  |  |
| Customers | 1 | 62.25 | 747 |
| kW | - | 0.0000 | - |
| Back-up/Standby Power |  |  |  |
| Customers | 1 | 0.00 | - |
| kW | 54,580 | 1.6605 | 90,630 |
| Total |  |  |  |
| Fixed Revenue |  |  | 32,079,607 |
| Volumetric Revenue |  |  | 39,120,171 |
| Transformer Allowance |  |  | $(1,556,613)$ |
| Total Revenue |  |  | 69,643,165 |

[^12]
## EXHIBIT 3: Operating Revenue

## TAB 2 (of 4)

## Accuracy of Load Forecast and Variance Analysis

## OVERVIEW

This section of the Exhibit provides detail schedules and variance analyses of sales volumes, customer/connection counts and revenues as a whole as well as by individual rate classes. The first part outlines historical as well as weather normalized values for 2009 to 2015 while the second part analyses customer/connection usage between 2009 and 2015 Test Year. The third and final part looks at variance analysis. All parts take into consideration the 2011 Board Approved values.

As indicated in Table 1 of Exhibit 3 Tab 1 Schedule 1, overall, HOBNI is forecasting a volume (kWh) increase of $122,519,302$ or $3.18 \%$ in the 2015 Test Year compared to the 2011 Board Approved amount. In addition, HOBNI's customer count is forecasted to increase by 17,169 or $12.76 \%$ in the 2015 Test Year over the 2011 Board Approved count. Connections are projected to grow by 1,377 or $6.11 \%$ over the same period.

# SCHEDULES OF VOLUMES, CUSTOMERS/CONNECTIONS AND REVENUES 

## Historical and Forecasted Volumes, Customer/Connection Counts

Table 1 provides a summary of the historical actual and the 2011 Board Approved kWh, kW, customer and connection counts by rate classification. For the 2014 Bridge and the 2015 Test Years, the billed kW forecast amounts were calculated based on the historical relationship between kWh and kW for the customer billed based on demand and the customer and connection counts were average for each year. This data is displayed in Table 2. Table 2 also shows a comparison of the 2011 Board Approved and the 2011 actual kWh, kW and customer and connection counts.

| Rate Class | 2009 Actual | 2010 Actual | 2011 Board Approved | 2011 Actual | 2012 Actual | 2013 Actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |
| Customers | 121,041 | 123,013 | 124,916 | 126,317 | 129,699 | 133,723 |
| kWh | 1,088,557,819 | 1,171,315,280 | 1,123,427,772 | 1,190,237,359 | 1,212,040,627 | 1,198,023,626 |
| General Service < 50 kW |  |  |  |  |  |  |
| Customers | 7,529 | 7,752 | 7,893 | 8,080 | 8,328 | 8,532 |
| kWh | 283,991,997 | 291,782,860 | 291,481,574 | 309,962,282 | 315,917,674 | 323,299,858 |
| Unmetered Scattered Load |  |  |  |  |  |  |
| Customers | 66 | 62 | 62 | 61 | 61 | 59 |
| Connections | 1,280 | 1,293 | 1,300 | 1,369 | 1,424 | 1,477 |
| kWh | 5,104,985 | 5,197,576 | 4,969,698 | 5,450,025 | 5,562,245 | 5,706,945 |
| General Service > 50 kW |  |  |  |  |  |  |
| Customers | 1,554 | 1,539 | 1,552 | 1,537 | 1,525 | 1,511 |
| kWh | 1,081,007,720 | 1,088,985,441 | 1,131,611,317 | 1,100,145,274 | 1,101,990,613 | 1,084,942,787 |
| kW | 3,049,119 | 3,049,813 | 3,101,358 | 3,051,053 | 3,074,186 | 3,051,058 |
| General Service > 700 kW |  |  |  |  |  |  |
| Customers | 114 | 114 | 106 | 112 | 112 | 115 |
| kWh | 788,185,444 | 839,914,785 | 843,484,098 | 801,310,497 | 807,792,313 | 812,965,292 |
| kW | 1,839,970 | 1,916,781 | 1,904,929 | 1,894,300 | 1,928,037 | 1,980,476 |
| Large Use |  |  |  |  | 21,792,407 |  |
| Customers | 6 | 6 | 6 | 6 | 6 | 6 |
| kWh | 342,523,390 | 363,198,797 | 391,244,134 | 394,428,511 | 402,243,669 | 380,451,262 |
| kW | 696,851 | 684,290 | 711,951 | 716,743 | 736,260 | 701,011 |
| Street Lights |  |  |  |  |  |  |
| Customers | 2 | 2 | 2 | 2 | 2 | 2 |
| Lights | 38,829 | 40,459 | 42,158 | 41,470 | 42,363 | 43,516 |
| Connections | 20,465 | 20,691 | 21,219 | 21,003 | 21,359 | 21,727 |
| kWh | 27,343,426 | 28,336,125 | 29,651,502 | 29,752,537 | 30,597,265 | 31,295,952 |
| kW | 81,921 | 84,893 | 88,254 | 90,235 | 92,995 | 95,410 |
| Embedded Distributor |  |  |  |  |  |  |
| Customers | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | 15,195,322 | 19,041,917 | 34,245,664 | 33,946,646 | 33,806,316 | 40,323,932 |
| kW | 34,990 | 39,259 | 84,901 | 84,159 | 76,798 | 94,985 |
| Distributed Generation |  |  |  |  |  |  |
| Customers | - | - | - | 1 | 6 | 19 |
| kWh | - | - | - | 1,718 | 14,366 | 49,101 |
| Energy From Waste Generation |  |  |  |  |  |  |
| Customers | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | - | - | - | - | - | - |
| kW | - | - | - | - | - | - |
| Back-up/Standby Power |  |  |  |  |  |  |
| Customers | - | - | - | - | - | 1 |
| kWh | - | - | - | - | - | - |
| kW | - | - | - | - | - | 40,935 |
| Total |  |  |  |  |  |  |
| Customers | 130,313 | 132,489 | 134,539 | 136,119 | 139,740 | 143,970 |
| Connections | 21,745 | 21,984 | 22,519 | 22,372 | 22,784 | 23,204 |
| kWh | 3,631,910,103 | 3,807,772,782 | 3,850,115,760 | 3,865,234,849 | 3,909,965,088 | 3,877,058,755 |
| kW from applicable classes | 5,702,851 | 5,775,036 | 5,891,393 | 5,836,490 | 5,908,276 | 5,963,875 |

Table 2 provides a summary of the weather normalized kWh and kW as well as the customer and connection counts by rate classification for the historical, 2014 Bridge and 2015 Test Years. The normalized kWh amounts for the historical years were provided by Hydro One Networks. Hydro One Brampton calculated the normalized kW for the historical years by first deriving the historical kW to kWh ratio then multiplied these ratios by the normalized kWh data provided by Hydro One Networks. For the 2014 Bridge and the 2015 Test Years, the kW amounts were calculated based on historical relationship between kWh and kW.

Table 2: Weather Normalized Actual and Forecasted Volumes and Customers/Connections

| Rate Class | 2009 Weather Normalized | 2010 Weather Normalized | 2011 Board Approved | 2011 Weather Normalized | 2012 Weather Normalized | 2013 Weather Normalized | 2014 Bridge Year | 2015 Test Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |  |  |
| Customers | 121,041 | 123,013 | 124,916 | 126,317 | 129,699 | 133,723 | 137,303 | 140,979 |
| kWh | 1,115,888,474 | 1,177,664,858 | 1,123,427,772 | 1,192,668,901 | 1,220,835,179 | 1,205,670,409 | 1,249,454,159 | 1,308,264,983 |
| General Service < 50 kW |  |  |  |  |  |  |  |  |
| Customers | 7,529 | 7,752 | 7,893 | 8,080 | 8,328 | 8,532 | 8,758 | 8,989 |
| kWh | 290,164,103 | 293,428,537 | 291,481,574 | 310,673,553 | 318,669,115 | 324,486,114 | 338,649,623 | 354,668,870 |
| Unmetered Scattered Load |  |  |  |  |  |  |  |  |
| Customers | 66 | 62 | 62 | 61 | 61 | 59 | 57 | 56 |
| Connections | 1,280 | 1,293 | 1,300 | 1,369 | 1,424 | 1,477 | 1,519 | 1,562 |
| kWh | 5,162,842 | 5,256,468 | 4,969,698 | 5,509,573 | 5,621,483 | 5,767,707 | 5,818,253 | 5,931,733 |
| General Service > $\mathbf{5 0} \mathbf{~ k W}$ |  |  |  |  |  |  |  |  |
| Customers | 1,554 | 1,539 | 1,552 | 1,537 | 1,525 | 1,511 | 1,501 | 1,491 |
| kWh | 1,090,747,173 | 1,097,960,912 | 1,131,611,317 | 1,108,606,699 | 1,112,266,841 | 1,089,802,508 | 1,067,572,851 | 1,064,497,599 |
| kW | 3,076,590 | 3,074,950 | 3,101,358 | 3,074,519 | 3,102,853 | 3,064,724 | 2,988,434 | 2,979,826 |
| General Service > 700 kW |  |  |  |  |  |  |  |  |
| Customers | 114 | 114 | 106 | 112 | 112 | 115 | 115 | 115 |
| kWh | 801,126,399 | 853,839,633 | 843,484,098 | 813,890,185 | 815,930,763 | 817,925,218 | 804,411,590 | 806,154,180 |
| kW | 1,870,180 | 1,948,559 | 1,904,929 | 1,924,038 | 1,947,462 | 1,992,559 | 1,965,158 | 1,969,146 |
| Large Use |  |  |  |  |  |  |  |  |
| Customers | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| kWh | 344,971,561 | 365,551,177 | 391,244,134 | 396,857,107 | 406,313,173 | 382,721,457 | 381,669,818 | 382,619,513 |
| kW | 701,832 | 688,722 | 711,951 | 721,156 | 743,709 | 705,194 | 718,200 | 719,987 |
| SLR |  |  |  |  |  |  |  |  |
| Customers | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Lights | 38,829 | 40,459 | 42,158 | 41,470 | 42,363 | 43,516 | 44,887 | 46,301 |
| Connections | 20,465 | 20,691 | 21,219 | 21,003 | 21,359 | 21,727 | 22,029 | 22,335 |
| kWh | 27,653,325 | 28,657,273 | 29,651,502 | 30,077,898 | 30,923,126 | 31,629,254 | 32,285,800 | 33,306,955 |
| kW | 82,849 | 85,855 | 88,254 | 91,222 | 93,985 | 96,426 | 97,585 | 100,672 |
| Embedded Distributor |  |  |  |  |  |  |  |  |
| Customers | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | 15,461,213 | 19,238,567 | 34,245,664 | 34,245,664 | 34,179,598 | 40,610,366 | - | 17,012,414 |
| kW | 35,602 | 39,665 | 84,901 | 84,901 | 77,646 | 95,660 | - | 40,073 |
| Distributed Generation |  |  |  |  |  |  |  |  |
| Customers | - | - | - | 1 | 6 | 19 | 43 | 68 |
| kWh | - | - | - | 1,736 | 14,519 | 49,624 | 113,715 | 178,816 |
| Energy From Waste Generation |  |  |  |  |  |  |  |  |
| Customers | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | - | - | - | - | - | - | - | - |
| kW | - | - | - | - | - | - | - | - |
| Back-up/Standby Power |  |  |  |  |  |  |  |  |
| Customers | - | - | - | - | - | 1 | 1 | 1 |
| kWh | - | - | - | - | - | - | - | - |
| kW | - | - | - | - | - | 40,935 | 54,580 | 54,580 |
| Total |  |  |  |  |  |  |  |  |
| Customers | 130,313 | 132,489 | 134,539 | 136,119 | 139,740 | 143,970 | 147,788 | 151,708 |
| Connections | 21,745 | 21,984 | 22,519 | 22,372 | 22,784 | 23,204 | 23,548 | 23,896 |
| kWh | 3,691,175,091 | 3,841,597,426 | 3,850,115,760 | 3,892,531,317 | 3,944,753,798 | 3,898,662,657 | 3,879,975,810 | 3,972,635,063 |
| kW from applicable classes | 5,767,053 | 5,837,751 | 5,891,393 | 5,895,836 | 5,965,656 | 5,995,498 | 5,823,957 | 5,864,284 |

## Historical and Forecasted Distribution Revenues

Distribution revenues by class per year were calculated by multiplying the billing determinants (customers/ connections, kWh, kW) by the Board Approved rates between 2009 and 2014 and HOBNI's 2015 proposed rates. Distribution revenues were then adjusted to reflect transformer allowance credits given to customers in the General Service < 50 kW , the General Service > 50 kW and the General Service > 700 kW . Transformer allowance credit for the General Service < 50 kW was applied only in the 2015 Test Year. The billing determinants can be found in the Summary and Summary (Weather Normalized) Tabs as well as the Summary of Rates Tab in the HOBNI Multivariate Regression Model, found in Exhibit 3 Tab 4 Schedule 1.

During the 2011 Cost of Service proceeding, Hydro One Brampton requested and received approval from the OEB to adjust its rates on a calendar basis effective January $1^{\text {st }}$ of each year. Prior to this approval, HOBNI's rate adjustments were done on May $1^{\text {st }}$ each year. The distribution revenues calculated for 2009 and 2010 were based on the rate adjustments effective May $1^{\text {st }}$ in each year. These rates were applied to the entire year in question, that is no proration was done.

Table 3 provides a summary of the actual distribution revenues by rate classification for 2009 to 2013.

Table 3: Historical Actual Distribution Revenues by Class

| Description | 2009 Actual | 2010 Actual | 2011 OEB <br> Approved | 2011 Actual | 2012 Actual | 2013 Actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution Revenue: |  |  |  |  |  |  |
| Residential | 32,588,426 | 33,685,467 | 30,567,846 | 31,680,420 | 32,631,455 | 33,792,507 |
| General Service < 50 kW | 6,994,135 | 7,079,210 | 6,185,903 | 6,511,951 | 6,702,091 | 7,369,437 |
| General Service > 50 kW | 8,884,916 | 8,728,574 | 9,317,740 | 9,186,206 | 9,289,584 | 9,499,221 |
| Intermediate | 8,058,687 | 8,133,398 | 6,917,001 | 6,948,392 | 6,591,906 | 7,139,452 |
| Large Use (> 5000 kW ) | 1,987,502 | 1,915,449 | 1,832,459 | 1,842,662 | 1,898,910 | 1,846,631 |
| Street Lighting | 183,904 | 187,155 | 669,977 | 675,800 | 1,209,234 | 1,256,790 |
| Unmetered Scattered Load | 108,693 | 107,508 | 99,494 | 108,472 | 111,734 | 116,141 |
| Embedded Distributor | 2,141 | 2,403 | 5,196 | 5,151 | 4,738 | 5,937 |
| Distributed Generation Class | - | - | - | 118 | 613 | 1,991 |
| Energy from Waste Generation | - | - | - | - | - | - |
| Backup/Standby Power | - | - | - | - | - | 62,868 |
| Total | 58,808,404 | 59,839,164 | 55,595,618 | 56,959,173 | 58,440,268 | 61,090,973 |

Table 4 provides a summary of the weather normalized actual distribution revenues by rate classification for the historical years 2009 to 2013, the 2014 Bridge Year and 2015 Test Year.

| Description | 2009 Weather Normalized | 2010 Weather Normalized | 2011 OEB Approved | 2011 <br> Weather Normalized | 2012 <br> Weather Normalized | 2013 <br> Weather Normalized | $\begin{array}{\|c\|} \hline 2014 \text { Bridge } \\ \text { Year } \end{array}$ | $\begin{gathered} 2015 \text { Test } \\ \text { Year } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution Revenue: |  |  |  |  |  |  |  |  |
| Residential | 33,017,517 | 33,783,250 | 30,567,846 | 31,714,948 | 32,757,217 | 33,903,385 | 35,683,641 | 39,797,560 |
| General Service < 50 kW | 7,105,850 | 7,108,503 | 6,185,903 | 6,522,976 | 6,752,415 | 7,388,180 | 7,981,598 | 8,152,067 |
| General Service > 50 kW | 8,947,595 | 8,785,039 | 9,317,740 | 9,241,612 | 9,357,721 | 9,532,320 | 9,494,879 | 10,921,194 |
| Intermediate | 8,158,768 | 8,236,252 | 6,917,001 | 6,839,938 | 6,341,153 | 6,816,407 | 7,025,173 | 6,579,386 |
| Large Use (> 5000 kW ) | 1,999,233 | 1,925,653 | 1,832,459 | 1,852,059 | 1,914,895 | 1,855,722 | 1,910,345 | 2,210,877 |
| Street Lighting | 185,989 | 189,276 | 669,977 | 680,633 | 1,217,673 | 1,265,559 | 1,306,393 | 1,651,972 |
| Unmetered Scattered Load | 109,740 | 108,557 | 99,494 | 109,490 | 112,753 | 117,198 | 119,898 | 143,356 |
| Embedded Distributor | 2,179 | 2,427 | 5,196 | 5,196 | 4,791 | 5,979 | - | 49,281 |
| Distributed Generation Class | - | - | - | 119 | 615 | 1,999 | 4,609 | 46,095 |
| Energy from Waste Generation | - | - | - | - | - | - | - | 747 |
| Backup/Standby Power | - | - | - | - | - | 62,868 | 84,997 | 90,630 |
| Total | 59,526,870 | 60,138,956 | 55,595,618 | 56,966,971 | 58,459,234 | 60,949,616 | 63,611,532 | 69,643,165 |

## AVERAGE CUSTOMER AND CONNECTION USAGE ANALYSIS

Table 5 provides a summary of the weather normalized average annual kWh usage by rate class for 2009 to 2013 as well as the 2014 Bridge Year and the 2015 Test Year.

In general, all rate classes with the exception of the Street Lights, Embedded Distributor and Distributed Generation, have shown decline in average annual consumption between 2011 and 2013. This decline may be attributed to the government's effort to reduce overall consumption through initiatives such as CDM as well as the introduction of smart meters which facilitates time of use pricing. A consumer will respond positively to price changes during peak periods by reducing consumption.

The average annual consumption for Residential customers has decreased by $4.51 \%$ from $9,442 \mathrm{kWh}$ in 2011 to $9,016 \mathrm{kWh}$ in 2013. The average annual consumption for the General Service < 50 kW rate class has decreased by $1.08 \%$ or 416 kWh per customer.

The General Service > 50 kW , General Service > 700 kW and Larger User classes also experienced decline in average annual consumption between 2011 and 2013; -0.03\%, -2.34\% and $-3.56 \%$, respectively.

However, Street Lights, the Embedded Distributor and the Distributed Generation classes all experienced increase in average annual consumption between 2011 and 2013. Street Lights increased by $1.65 \%$ meanwhile the Embedded Distributor and the Distributed Generation saw increases of $18.59 \%$ and $115.97 \%$, respectively.

Table 5: Weather Normalized Average Annual Historical \& Forecasted kWh Usage ${ }^{17}$

| Rate Class | 2009 Actual | 2010 Actual | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Bridge Year | $\begin{aligned} & 2015 \text { Test } \\ & \text { Year } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |  |
| Average kWh Usage | 9,219 | 9,574 | 9,442 | 9,413 | 9,016 | 9,100 | 9,280 |
| kWh Change Y/Y |  | 3.84\% | -1.37\% | -0.31\% | -4.21\% | 0.93\% | 1.98\% |
| General Service < 50 kW |  |  |  |  |  |  |  |
| Average kWh Usage | 38,541 | 37,854 | 38,448 | 38,267 | 38,032 | 38,669 | 39,454 |
| kWh Change Y/Y |  | -1.78\% | 1.57\% | -0.47\% | -0.61\% | 1.67\% | 2.03\% |
| Unmetered Scattered Load |  |  |  |  |  |  |  |
| Average kWh Usage | 4,033 | 4,065 | 4,025 | 3,947 | 3,905 | 3,831 | 3,798 |
| kWh Change Y/Y |  | 0.79\% | -0.99\% | -1.93\% | -1.09\% | -1.89\% | -0.85\% |
| General Service > $\mathbf{5 0} \mathbf{~ k W}$ |  |  |  |  |  |  |  |
| Average kWh Usage | 702,047 | 713,425 | 721,280 | 729,156 | 721,047 | 711,225 | 714,081 |
| kWh Change Y/Y |  | 1.62\% | 1.10\% | 1.09\% | -1.11\% | -1.36\% | 0.40\% |
| General Service > 700 kW |  |  |  |  |  |  |  |
| Average kWh Usage | 7,032,565 | 7,489,821 | 7,272,288 | 7,317,765 | 7,102,100 | 7,001,507 | 7,033,497 |
| kWh Change $\mathrm{Y} / \mathrm{Y}$ |  | 6.50\% | -2.90\% | 0.63\% | -2.95\% | -1.42\% | 0.46\% |
| Large Use |  |  |  |  |  |  |  |
| Average kWh Usage | 57,495,260 | 60,925,196 | 66,142,851 | 67,718,862 | 63,786,910 | 63,611,636 | 63,769,919 |
| kWh Change $\mathrm{Y} / \mathrm{Y}$ |  | 5.97\% | 8.56\% | 2.38\% | -5.81\% | -0.27\% | 0.25\% |
| Street Lights |  |  |  |  |  |  |  |
| Average kWh Usage | 1,351 | 1,385 | 1,432 | 1,448 | 1,456 | 1,466 | 1,491 |
| Connections Change $\mathrm{Y} / \mathrm{Y}$ |  | 2.50\% | 3.40\% | 1.10\% | 0.55\% | 0.68\% | 1.75\% |
| Embedded Distributor |  |  |  |  |  |  |  |
| Average kWh Usage | 15,461,213 | 19,238,567 | 34,245,664 | 34,179,598 | 40,610,366 | 0 | 17,012,414 |
| kWh Change Y/Y |  | 24.43\% | 78.01\% | -0.19\% | 18.81\% | -100.00\% | 0.00\% |
| Distributed Generation |  |  |  |  |  |  |  |
| Average kWh Usage | - | - | 1,225 | 2,420 | 2,647 | 2,642 | 2,646 |
| kWh Change Y/Y |  | 0.00\% | 0.00\% | 97.47\% | 9.37\% | -0.17\% | 0.15\% |
| Energy From Waste Generation |  |  |  |  |  |  |  |
| Average kWh Usage | - | - | - | - | - | - | - |
| kW Change Y/Y |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Back-up/Standby Power |  |  |  |  |  |  |  |
| Average kWh Usage | - | - | - | - | - | - | - |
| kWh Change Y/Y |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  |  |  |  |  |  |  |
| Average kWh Usage | 80,744,230 | 88,419,888 | 108,436,655 | 110,000,876 | 112,275,478 | 71,380,075 | 88,586,579 |
| kWh Change Y/Y |  | 9.51\% | 22.64\% | 1.44\% | 2.07\% | -36.42\% | 24.11\% |

## Comparison of 2011 Board Approved vs. 2011 Actual Average Annual kWh Usage

Table 6 below provides a summary of the variances between Hydro One Brampton's 2011 Actual and the 2011 Board Approved average annual kWh usage by rate class. Average consumption in 2011 was higher than 2011 Board Approved amounts for the Residential, General Service < 50 kW , the Unmetered Scattered Load, the Large User Street Lights and the Distributed Generation classes in 2011 compared 2011 Board Approved average annual kWh usage. However, average consumption in 2011 was lower than 2011 Board Approved amounts

[^13]for the General Service > 50 kW , General Service > 700 kW , and the Embedded Generator classes. The General Service $>700 \mathrm{~kW}$ class experienced the biggest reduction on average consumption dropping just over 10\% compared to the 2011 Board Approved average consumption. HOBNI attributes the decline in consumption in the commercial classes to the Government of Ontario CDM program as well as reduction in the number of customers in the General Service > 50 kW due to economic factors.

Table 6: 2011 Board Approved vs. 2011 Actual Average Annual kWh Usage ${ }^{18}$

| Rate Class | 2011 Board Approved | 2011 Actual | Change | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |
| Average kWh Usage | 8,993 | 9,423 | 429 | 4.77\% |
| General Service < 50 kW |  |  |  |  |
| Average kWh Usage | 36,929 | 38,360 | 1,431 | 3.87\% |
| Unmetered Scattered Load |  |  |  |  |
| Average kWh Usage | 3,822 | 3,982 | 160 | 4.18\% |
| General Service > 50 kW |  |  |  |  |
| Average kWh Usage | 729,031 | 715,774 | $(13,256)$ | -1.82\% |
| General Service > 700 kW |  |  |  |  |
| Average kWh Usage | 7,960,906 | 7,159,885 | (801,020) | -10.06\% |
| Large Use |  |  |  |  |
| Average kWh Usage | 65,207,356 | 65,738,085 | 530,730 | 0.81\% |
| Street Lights |  |  |  |  |
| Average kWh Usage | 1,397 | 1,417 | 19 | 1.37\% |
| Embedded Distributor |  |  | - |  |
| Average kWh Usage | 34,245,664 | 33,946,646 | $(299,018)$ | -0.87\% |
| Distributed Generation |  |  | - |  |
| Average kWh Usage | - | 1,213 | 1,213 | 0.00\% |
| Energy From Waste Generation |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |
| Back-up/Standby Power |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |

[^14]Comparison of 2011 Board Approved vs. 2014 Bridge Year Average Annual kWh Usage

Table 7 below provides a summary of the variances between Hydro One Brampton's 2014 Bridge Year and the 2011 Board Approved average annual kWh usage by rate class. Average consumption is expected to be higher for the Residential, General Service < 50 kW , the Unmetered Scattered Load, Street Lights and the Distributed Generation classes in 2011 compared 2011 Board Approved average annual kWh usage. However, HOBNI is forecasting lower average consumption for the General Service $>50 \mathrm{~kW}$, General Service $>700 \mathrm{~kW}$, Large User and the Embedded Generator classes. The Embedded Generator class is expected to experience the biggest decline in average consumption dropping $100 \%$ compared to the 2011 Board Approved average annual consumption. The reason for this decline is that HOBNI is forecasting zero consumption for the Embedded Generator in 2014 based on information from its HOBNI's Engineering department. The other rate class that is expected to experience a significant decline in 2014 over the 2011 Board Approved average annual consumption is the General Service > 700 kW class. Average annual kWh consumption is expected to decline just over $12 \%$ compared to the 2011 Board Approved average consumption. HOBNI attributes the decline in the commercial classes to the Government of Ontario CDM program and the continued decline in the General Service $>50 \mathrm{~kW}$ due to economic factors.

Table 7: 2011 Board Approved vs. 2014 Bridge Year Average Annual kWh Usage ${ }^{19}$

| Rate Class | 2011 Board Approved | 2014 Bridge Year | Change | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |
| Average kWh Usage | 8,993 | 9,100 | 107 | 1.18\% |
| General Service < 50 kW |  |  |  |  |
| Average kWh Usage | 36,929 | 38,669 | 1,739 | 4.71\% |
| Unmetered Scattered Load |  |  |  |  |
| Average kWh Usage | 3,822 | 3,831 | 9 | 0.24\% |
| General Service > 50 kW |  |  |  |  |
| Average kWh Usage | 729,031 | 711,225 | $(17,806)$ | -2.44\% |
| General Service > 700 kW |  |  |  |  |
| Average kWh Usage | 7,960,906 | 7,001,507 | $(959,399)$ | -12.05\% |
| Large Use |  |  |  |  |
| Average kWh Usage | 65,207,356 | 63,611,636 | $(1,595,719)$ | -2.45\% |
| Street Lights |  |  |  |  |
| Average kWh Usage | 1,397 | 1,466 | 68 | 4.88\% |
| Embedded Distributor |  |  |  |  |
| Average kWh Usage | 34,245,664 | - | $(34,245,664)$ | -100.00\% |
| Distributed Generation |  |  |  |  |
| Average kWh Usage | - | 2,642 | 2,642 | 0.00\% |
| Energy From Waste Generation |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |
| Back-up/Standby Power |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |

## Comparison of 2011 Board Approved vs. 2015 Test Year Average Annual kWh

## Usage

Table 8 below provides a summary of the variances between Hydro One Brampton's 2015 Test Year and the 2011 Board Approved average annual kWh usage by rate class. Average consumption is expected to be higher for the Residential, General Service < 50 kW , Street Lights and the Distributed Generation classes in 2015 compared 2011 Board Approved average annual kWh usage. However, HOBNI is forecasting a decline in average consumption for the General Service < 50 kW Unmetered Scattered Load, General Service > 50 kW, General

[^15]Service > 700 kW, Large User and the Embedded Generator classes in 2015 compared 2011 Board Approved average annual kWh usage. The Embedded Generator class is expected to experience the biggest decline in average consumption dropping just over 50\% compared to the 2011 Board Approved average annual consumption. The reason for this decline is that the Embedded Generator is expected to purchase less kWh from HOBNI in the 2015 Test Year. The General Service > 700 kW class is also expected to experience significant decline in 2015 compared to the 2011 Board Approved average consumption. The decline is forecasted to be approximately $11.65 \%$. HOBNI attributes the decline in the commercial classes to the Government of Ontario Conversation and Demand Management (CDM) program.

Table 8: 2011 Board Approved vs. 2015 Test Year Average Annual kWh Usage ${ }^{20}$

| Rate Class | 2011 Board Approved | 2015 Test Year | Change | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |
| Average kWh Usage | 8,993 | 9,280 | 286 | 3.18\% |
| General Service < 50 kW |  |  |  |  |
| Average kWh Usage | 36,929 | 39,454 | 2,525 | 6.84\% |
| Unmetered Scattered Load |  |  |  |  |
| Average kWh Usage | 3,822 | 3,798 | (23) | -0.61\% |
| General Service > 50 kW |  |  |  |  |
| Average kWh Usage | 729,031 | 714,081 | $(14,950)$ | -2.05\% |
| General Service > 700 kW |  |  |  |  |
| Average kWh Usage | 7,960,906 | 7,033,497 | $(927,409)$ | -11.65\% |
| Large Use |  |  |  |  |
| Average kWh Usage | 65,207,356 | 63,769,919 | $(1,437,437)$ | -2.20\% |
| Street Lights |  |  |  |  |
| Average kWh Usage | 1,397 | 1,491 | 94 | 6.72\% |
| Embedded Distributor |  |  |  |  |
| Average kWh Usage | 34,245,664 | 17,012,414 | $(17,233,250)$ | -50.32\% |
| Distributed Generation |  |  |  |  |
| Average kWh Usage | - | 2,646 | 2,646 | 0.00\% |
| Energy From Waste Generation |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |
| Back-up/Standby Power |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |

[^16]
## Comparison of 2014 Bridge Year vs. 2015 Test Year Average Annual kWh Usage

Table 9 below provides a summary of the variances between Hydro One Brampton's 2015 Test Year and the 2014 Bridge Year average annual kWh usage by rate class. HOBNI is forecasting increases in the annual average consumption for all rate classes with the exception of the Unmetered Scattered class, Energy from Waste Generation and Back-up/Standby. Unmetered Scattered class is expected to decline by approximately $0.85 \%$.

Table 9: 2014 Bridge Year vs. 2015 Test Year Average Annual kWh Usage

| Rate Class | 2014 Bridge Year | 2015 Test Year | Change | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |
| Average kWh Usage | 9,100 | 9,280 | 180 | 1.98\% |
| General Service < 50 kW |  |  |  |  |
| Average kWh Usage | 38,669 | 39,454 | 785 | 2.03\% |
| Unmetered Scattered Load |  |  |  |  |
| Average kWh Usage | 3,831 | 3,798 | (32) | -0.85\% |
| General Service > 50 kW |  |  |  |  |
| Average kWh Usage | 711,225 | 714,081 | 2,856 | 0.40\% |
| General Service > 700 kW |  |  |  |  |
| Average kWh Usage | 7,001,507 | 7,033,497 | 31,990 | 0.46\% |
| Large Use |  |  |  |  |
| Average kWh Usage | 63,611,636 | 63,769,919 | 158,283 | 0.25\% |
| Street Lights |  |  |  |  |
| Average kWh Usage | 1,466 | 1,491 | 26 | 1.75\% |
| Embedded Distributor |  |  |  |  |
| Average kWh Usage | - | 17,012,414 | 17,012,414 | 0.00\% |
| Distributed Generation |  |  |  |  |
| Average kWh Usage | 2,642 | 2,646 | 4 | 0.15\% |
| Energy From Waste Generation |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |
| Back-up/Standby Power |  |  |  |  |
| Average kWh Usage | - | - | - | 0.00\% |

## Customers and Connections Variance Analysis

Table 10 below provides the variances for customer and connection counts between 2011 and 2015 Test Year. Customer numbers are based on the averages for each year.

## Total Customer and Connection Counts Variance Analysis

Overall, Hydro One Brampton is forecasting an increase in the total number of customers, excluding connections, of 17,169 or $12.76 \%$ more customers in the 2015 Test Year compared to the 2011 Board Approved customer count. This represents an increase of 7,739 customers between the 2013 actual and the 2015 Test Year. Connections are forecasted to grow by 1,377 or $6.11 \%$ in the 2015 Test Year compared to the 2011 Board Approved. In 2011, the actual number of customers increased by 1,579 or $1.17 \%$ compared to the 2011 Board Approved. During the same period, the number of connections decreased by 147 or $0.65 \%$.

In 2012, the number of customers increased $2.66 \%$ over to the 2011 actual and the number of connections increased by 411. Meanwhile, customer growth in 2013 compared to 2012 was $3.03 \%$ or 4,230. Connections increased by $1.85 \%$ during the same period. In 2014 and 2015, HOBNI is forecasting customer and connection growth of $2.65 \%$ and $1.48 \%$, respectively, per year. Hydro One Brampton submits that these growth rates are reasonable and consistent with past trends.

The growth in total number of customers and connections can be attributed to the overall growth in the City of Brampton.

## Customer and Connection Counts Variance Analysis by Rate Class

Residential customer count is projected to increase by 16,063 or $12.86 \%$ in the 2015 Test Year compared to the 2011 Board Approved customer count. The number of Residential customers is forecasted to increase by 3,580 in 2014 over the 2013 actual count and 3,676 in 2015 over the 2014 projected count, a forecasted annual increase of $2.68 \%$. This forecast is based on the average growth rate over the past six years (2008 to 2013) for residential customers.

General Service < 50 kW customer count is forecasted to increase by 1,097 or $13.89 \%$ in the 2015 Test Year compared to the 2011 Board Approved customer count. HOBNI expects the growth in this class to increase by 458 customers between 2013 and 2015 Test Year. This represents an annual increase of $2.65 \%$ per year which is consistent with the average growth rate over the past six years.

Unmetered Scattered Load connection count is projected to increase by 261 or $20.09 \%$ in the 2015 Test Year compared to the 2011 Board Approved connection count. HOBNI is forecasting growth of approximately 2.82\% per year in 2014 and 2015.

The number of customers in the General Service $>50 \mathrm{~kW}$ class is forecasted to decline by 61 or $3.96 \%$ in the 2015 Test Year compared to the 2011 Board Approved count. In fact, the number of customers in this class has decline every year since 2010 and Hydro One Brampton expects the current trend to continue. As such, Hydro One Brampton is forecasting a decline of 10 customers or $0.69 \%$ per year between 2013 and 2015.

The number of customers in the General Service > 700 kW class is forecasted to increase by nine in the 2015 Test Year over the 2011 Board Approved count. However, HOBNI does not anticipate any growth in 2014 over 2013 or 2015 over 2014. The six year trend for this customer class shows a flat growth rate and therefore HOBNI submits that the forecasted number of customers in 2014 and 2015 should remain at the 2013 level.

The number of customers in the Large User class has remained constant at six since 2008. Hydro One Brampton does not expect this trend to change in 2014 and 2015 and submits that the forecast of six customers in 2014 and 2015 is reasonable.

Street Light connections are projected to increase 1,116 or $5.26 \%$ in the 2015 Test Year compared to the 2011 Board Approved connection count. HOBNI is forecasting an increase of $1.39 \%$ per year in 2014 and 2015. This projected growth is consistent with the growth in the number of street light connections over the past six years. As the City of Brampton expands, the number of connections is expected to increase.

Customer counts for the Embedded Distributor, the Energy from Waste Generation and the Back-up/Standby Power classes are expected to remain at the 2013 level during 2014 and 2015. However, the customer count is expected to increase by an average of 24 in 2014 and 25
in 2015 for the Distributed Generation class. Hydro One Brampton as seen significant growth in this class since 2012.

Table 10: Variance Analysis for Customer and Connection Counts - 2011 to 2015 Test Year ${ }^{21}$

| Rate Class | 2011 Actual vs 2011 Board Approved | $\begin{gathered} 2012 \text { vs } 2011 \\ \text { Actual } \\ \hline \end{gathered}$ | $\begin{gathered} 2013 \text { vs } 2012 \\ \text { Actual } \end{gathered}$ | 2014 Bridge vs 2013 Actual | 2015 Test vs 2014 Bridge | 2015 Test <br> Year vs 2011 <br> Board Approved |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |
| Change in Customer Count | 1,401 | 3,382 | 4,024 | 3,580 | 3,676 | 16,063 |
| \% Change in Customer Count | 1.12\% | 2.68\% | 3.10\% | 2.68\% | 2.68\% | 12.86\% |
| General Service < 50 kW |  |  |  |  |  |  |
| Change in Customer Count | 187 | 247 | 204 | 226 | 232 | 1,097 |
| \% Change in Customer Count | 2.37\% | 3.06\% | 2.45\% | 2.65\% | 2.65\% | 13.89\% |
| Unmetered Scattered Load |  |  |  |  |  |  |
| Change in Customer Count | (1) | (1) | (2) | (2) | (1) | (6) |
| Change in Connection Count | 68 | 55 | 53 | 42 | 43 | 261 |
| \% Change in Customer Count | -1.34\% | -0.82\% | -3.02\% | -2.57\% | -2.57\% | -9.92\% |
| \% Change in Connection Count | 5.26\% | 4.04\% | 3.73\% | 2.82\% | 2.82\% | 20.09\% |
| General Service > 50 kW |  |  |  |  |  |  |
| Change in Customer Count | (15) | (12) | (14) | (10) | (10) | (61) |
| \% Change in Customer Count | -0.98\% | -0.75\% | -0.92\% | -0.69\% | -0.69\% | -3.96\% |
| General Service > 700 kW |  |  |  |  |  |  |
| Change in Customer Count | 6 | (0) | 4 | (0) | (0) | 9 |
| Change in kW | 5.63\% | -0.37\% | 3.29\% | -0.24\% | -0.24\% | 7.56\% |
| Large Use |  |  |  |  |  |  |
| Change in Customer Count | - | - | - | - | - | - |
| \% Change in Customer Count | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Street Lights |  |  |  |  |  |  |
| Change in Customer Count | - | - | - | - | - | - |
| Change in Connection Count | (216) | 356 | 368 | 302 | 306 | 1,116 |
| \% Change in Customer Count | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| \% Change in Connection Count | -1.02\% | 1.70\% | 1.72\% | 1.39\% | 1.39\% | 5.26\% |
| Embedded Distributor |  |  |  |  |  |  |
| Change in Customer Count | - | - | - | - | - | - |
| \% Change in Customer Count | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Distributed Generation |  |  |  |  |  |  |
| Change in Customer Count | 1 | 5 | 13 | 24 | 25 | 68 |
| \% Change in Customer Count | 0.00\% | 323.53\% | 212.50\% | 129.56\% | 57.02\% | 0.00\% |
| Energy From Waste Generation |  |  |  |  |  |  |
| Change in Customer Count | - | - | - | - | - | - |
| \% Change in Customer Count | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Back-up/Standby Power |  |  |  |  |  |  |
| Change in Customer Count | - | - | 1 | - | - | 1 |
| \% Change in Customer Count | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  |  |  |  |  |  |
| Change in Customer Count | 1,579 | 3,621 | 4,230 | 3,818 | 3,920 | 17,169 |
| Change in Connection Count | (147) | 411 | 421 | 343 | 349 | 1,377 |
| \% Change in Customer Count | 1.17\% | 2.66\% | 3.03\% | 2.65\% | 2.65\% | 12.76\% |
| \% Change in Connection Count | -0.65\% | 1.84\% | 1.85\% | 1.48\% | 1.48\% | 6.11\% |

[^17]
## Volume Variances Analysis

## Historical Board Approved vs. Historical Actual

As shown in Table 11 below, the historical billed consumption of 3,865,234,849 kWh for 2011 was $0.39 \%$ higher than the Board Approved kWh of $3,850,115,760$ while the 2011 weather normalized volume was $1.10 \%$ higher than the Board Approved kWh. The Board actual approval was $3,815,870,096 \mathrm{kWh}$. However HOBNI added $34,245,664 \mathrm{kWh}$ related to the Embedded Distributor for comparative purposes.

Table 11: Board Approved vs. Actual Billed Volumes

| Year | 2011 Board <br> Approved | 2011 Actual | Weather Normalized <br> 2011 Actual |
| :--- | ---: | ---: | ---: |
| kWh | $3,850,115,760$ | $3,865,234,849$ | $3,892,531,317$ |
| kWh Change Y/Y |  | $15,119,089$ | $42,415,556$ |
| kWh \% Change Y/Y |  | $0.39 \%$ | $1.10 \%$ |

## Year-Over-Year Weather Normalized Historical and Forecasted Volume Changes

Table 12 provides the year over year variances for historical weather normalized billed volumes. The 2009 global recession had a negative impact on the Ontario economy and during this period, kWh consumption declined as businesses reduced operations and residential consumers conserved. However, in 2010 the economy began its path to recovery and billed kWh increased by 4.08\% between 2009 and 2010.

Between 2010 and 2012 kWh consumption increased an average of $1.33 \%$ per year. However, in 2013, there was a decline in kWh consumption of $1.17 \%$ compared to 2012. This may be as a result of the warmer summer experienced in 2012 compared to 2013. During warmer periods, consumers are expected to operate their air conditioning systems longer to remain cool while indoors.

In the 2014 Bridge Year, Hydro One Brampton is forecasting a decline in weather normalized kWh consumption compared to the 2013 actual by $0.48 \%$. This is mainly attributable to the projected decline in consumption in the General Service > 50 kW , General Service $>700 \mathrm{~kW}$, the Large User and the Embedded Generator classes. The forecasted decline in consumption
for the General Service > 50 kW is consistent with the trend over the past 5 years. The class has seen a significant reduction in the number of customers from 2010 onward and HOBNI expects this trend to continue in 2014 and 2015. The kWh for the Embedded Distributor class is expected to be zero in 2014.

HOBNI is forecasting an increase of $2.39 \%$ in KWh consumption in the 2015 Test Year over the 2014 Bridge Year. Consumption is expected to increase in all classes with the exception of the General Service > 50 kW where consumption is forecasted to decline by $0.29 \%$.

Table 12: Weather Normalized Year-Over-Year Volume Changes ${ }^{22}$

| Year | Historical Weather <br> Normalized kWh | Year over <br> Year Variance |
| ---: | ---: | ---: |
| 2009 | $3,691,175,091$ |  |
| 2010 | $3,841,597,426$ | $4.08 \%$ |
| 2011 | $3,892,531,317$ | $1.33 \%$ |
| 2012 | $3,944,753,798$ | $1.34 \%$ |
| 2013 | $3,898,662,657$ | $-1.17 \%$ |
| 2014 Bridge Year | $3,879,975,810$ | $-0.48 \%$ |
| 2015 Test Year | $3,972,635,063$ | $2.39 \%$ |

## Year-Over-Year Weather Normalized Historical and Forecasted Volume Variance Analysis by Rate Class

Table 13 below provides by class specific variance analysis of volume between 2011 and 2015 Test Year.

[^18]1 Table 13: Historical and Forecasted Volume Variance Analysis ${ }^{23}$

| Rate Class | 2011 Actual vs 2011 Board Approved | 2011 Weather Normalized vs 2011 Board Approved | Weather <br> Normalized - <br> 2012 vs 2011 | Weather Normalized 2013 vs 2012 | Weather Normalized 2014 Bridge Year vs 2013 | 2015 Test <br> Year vs 2014 <br> Bridge Year | 2015 Test Year vs 2011 Board Approved |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |  |
| Change in kWh | 66,809,587 | 69,241,129 | 28,166,278 | (15,164,771) | 43,783,751 | 58,810,824 | 184,837,211 |
| \% Change in kWh | 5.95\% | 6.16\% | 2.36\% | -1.24\% | 3.63\% | 4.71\% | 16.45\% |
| GS<50 |  |  |  |  |  |  |  |
| Change in kWh | 18,480,708 | 19,191,979 | 7,995,562 | 5,816,999 | 14,163,508 | 16,019,247 | 63,187,296 |
| \% Change in kWh | 6.34\% | 6.58\% | 2.57\% | 1.83\% | 4.36\% | 4.73\% | 21.68\% |
| USL |  |  |  |  |  |  |  |
| Change in kWh | 480,327 | 539,874 | 111,910 | 146,224 | 50,546 | 113,479 | 962,035 |
| \% Change in Customer Count | 9.67\% | 10.86\% | 2.03\% | 2.60\% | 0.88\% | 1.95\% | 19.36\% |
| GS>50 |  |  |  |  |  |  |  |
| Change in kWh | $(31,466,044)$ | $(23,004,619)$ | 3,660,143 | (22,464,334) | (22,229,657) | $(3,075,253)$ | (67,113,719) |
| Change in kW | $(50,305)$ | $(26,839)$ | 28,334 | $(38,129)$ | $(76,290)$ | $(8,608)$ | $(121,532)$ |
| \% Change in kWh | -2.78\% | -2.03\% | 0.33\% | -2.02\% | -2.04\% | -0.29\% | -5.93\% |
| \% Change in kW | -1.62\% | -0.87\% | 0.92\% | -1.23\% | -2.49\% | -0.29\% | -3.92\% |
| Intermediate |  |  |  |  |  |  |  |
| Change in kWh | $(42,173,601)$ | $(29,593,913)$ | 2,040,577 | 1,994,455 | $(13,513,628)$ | 1,742,590 | $(37,329,918)$ |
| Change in kW | $(10,629)$ | 19,109 | 23,423 | 45,097 | $(27,401)$ | 3,988 | 64,217 |
| \% Change in kWh | -5.00\% | -3.51\% | 0.25\% | 0.24\% | -1.65\% | 0.22\% | -4.43\% |
| \% Change in kW | -0.56\% | 1.00\% | 1.22\% | 2.32\% | -1.38\% | 0.20\% | 3.37\% |
| Large Use |  |  |  |  |  |  |  |
| Change in kWh | 3,184,377 | 5,612,973 | 9,456,066 | (23,591,716) | $(1,051,639)$ | 949,695 | $(8,624,620)$ |
| Change in kW | 4,792 | 9,205 | 22,553 | $(38,515)$ | 13,006 | 1,787 | 8,036 |
| \% Change in kWh | 0.81\% | 1.43\% | 2.38\% | -5.81\% | -0.27\% | 0.25\% | -2.20\% |
| \% Change in kW | 0.67\% | 1.29\% | 3.13\% | -5.18\% | 1.84\% | 0.25\% | 1.13\% |
| SLR |  |  |  |  |  |  |  |
| Change in kWh | 101,035 | 426,396 | 845,228 | 706,128 | 656,546 | 1,021,155 | 3,655,452 |
| Change in kW | 1,981 | 2,968 | 2,764 | 2,441 | 1,159 | 3,086 | 12,418 |
| \% Change in kWh | 0.34\% | 1.44\% | 2.81\% | 2.28\% | 2.08\% | 3.16\% | 12.33\% |
| \% Change in kW | 2.24\% | 3.36\% | 3.03\% | 2.60\% | 1.20\% | 3.16\% | 14.07\% |
| Embedded Distributor |  |  |  |  |  |  |  |
| Change in kWh | $(299,018)$ | - | $(66,066)$ | 6,430,767 | $(40,610,366)$ | 17,012,414 | $(17,233,250)$ |
| Change in kW | (741) | - | $(7,254)$ | 18,013 | $(95,660)$ | 40,073 | $(44,827)$ |
| \% Change in kWh | -0.87\% | 0.00\% | -0.19\% | 18.81\% | -100.00\% | 0.00\% | -50.32\% |
| \% Change in kW | -0.87\% | 0.00\% | -8.54\% | 23.20\% | -100.00\% | 0.00\% | -52.80\% |
| Distributed Generation |  |  |  |  |  |  |  |
| Change in kWh | 1,718 | 1,736 | 12,783 | 35,105 | 64,092 | 65,100 | 178,816 |
| \% Change in kWh | 0.00\% | 0.00\% | 736.34\% | 241.78\% | 129.16\% | 57.25\% | 0.00\% |
| Energy From Waste Generation |  |  |  |  |  |  |  |
| Change in kWh | - | - | - | - | - | - | - |
| Change in kW | - | - | - | - | - | - | - |
| \% Change in kWh | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| \% Change in kW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Back-up/Standby Power |  |  |  |  |  |  |  |
| Change in kWh | - | - | - | - | - | - | - |
| Change in kW | - | - | - | 40,935 | 13,645 | - | 54,580 |
| \% Change in kWh | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| \% Change in kW | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% | 0.00\% |
| Total |  |  |  |  |  |  |  |
| Change in kWh | 15,119,089 | 42,415,556 | 52,222,482 | $(46,091,141)$ | $(18,686,846)$ | 92,659,252 | 122,519,302 |
| Change in kW | $(54,902)$ | 4,443 | 69,819 | 29,842 | $(171,540)$ | 40,327 | $(27,108)$ |
| \% Change in kWh | 0.39\% | 1.10\% | 1.34\% | -1.17\% | -0.48\% | 2.39\% | 3.18\% |
| \% Change in kW | -0.93\% | 0.08\% | 1.18\% | 0.50\% | -2.86\% | 0.69\% | -0.46\% |

[^19]
## Distribution Revenue Variance Analysis

HOBNI calculated distribution revenue for each rate class by multiplying the fixed charge by the average number of customers/connections in the year then add the total of the product of the variable component and the volumetric billing determinants (kWh or kW ). Operating revenues also include the Smart Meter Incremental Rider (SMIRR) approved by the OEB in Hydro One Brampton's Final Smart Meter Disposition Application (EB-2012-0440) in April 2013. The SMIRR is applicable to the Residential, General Service < 50 kW and the General Service > 50 kW classes. Further, operating revenues were adjusted to reflect transformer allowance credits given to customers in the General Service < 50 kW , the General Service > 50 kW and the General Service > 700 kW . Transformer allowance credit for the General Service < 50 kW was applied only in the 2015 Test Year.

The billing determinants can be found in the Summary and Summary (Weather Normalized) Tabs as well as the Summary of Rates Tab in the HOBNI Multivariate Regression Model, found in Exhibit 3 Tab 4 Schedule 1.

Tables 14 and 15 below show OEB Approved 2011 Distribution Revenue of $\$ 55,595,618$. The actual OEB Approved 2011 distribution revenue was $55,553,649$. However, due to rate rounding, HOBNI's 2011 throughput distribution revenue was $\$ 36,773$ higher. The approved amount excluded revenue from the Embedded Distributor class, however, for comparative purposes; HOBNI has included revenue from this class.

## Comparison of 2011 Actual and 2011 Board Approved

Table 14 below provides a summary of the variances between Hydro One Brampton's 2011 Actual and the 2011 Board Approved distribution revenues by rate class. Actual revenues increased by $\$ 1,363,555$ or $2.45 \%$ compared to the 2011 Board Approved distribution revenue. The total increase in revenue was driven by growth in customer/connection counts as well as billed consumption.

Table 14: Distribution Revenue: 2011 Actual vs. 2011 Board Approved

| Description | 2011 OEB <br> Approved | 2011 Actual | Variance (\$) | Variance (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Distribution Revenue: |  |  |  |  |
| Residential | 30,567,846 | 31,680,420 | 1,112,574 | 3.64\% |
| General Service < 50 kW | 6,185,903 | 6,511,951 | 326,048 | 5.27\% |
| General Service > 50 kW | 9,317,740 | 9,186,206 | $(131,535)$ | -1.41\% |
| Intermediate | 6,917,001 | 6,948,392 | 31,391 | 0.45\% |
| Large Use (> 5000 kW ) | 1,832,459 | 1,842,662 | 10,203 | 0.56\% |
| Street Lighting | 669,977 | 675,800 | 5,823 | 0.87\% |
| Unmetered Scattered Load | 99,494 | 108,472 | 8,977 | 9.02\% |
| Embedded Distributor | 5,196 | 5,151 | (45) | -0.87\% |
| Distributed Generation Class | - | 118 | 118 | 0.00\% |
| Energy from Waste Generation | - | - | - | 0.00\% |
| Backup/Standby Power | - | - | - | 0.00\% |
| Total | 55,595,618 | 56,959,173 | 1,363,555 | 2.45\% |

## Comparison of 2011 Weather Normalized and 2011 Board Approved

Table 15 below provides a summary of the variances between Hydro One Brampton's 2011 weather normalized and the 2011 Board Approved distribution revenues by rate class. Actual revenues increased by $\$ 1,371,353$ or $2.47 \%$ compared to the 2011 Board Approved distribution revenue. The total increase in revenue was driven by growth in customer/connection counts as well as billed consumption.

Table 15: Distribution Revenue: Weather Normalized 2011 vs 2011 Board Approved

| Description | 2011 OEB <br> Approved | $2011$ <br> Weather Normalized | Variance (\$) | Variance (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Distribution Revenue: |  |  |  |  |
| Residential | 30,567,846 | 31,714,948 | 1,147,102 | 3.75\% |
| General Service < 50 kW | 6,185,903 | 6,522,976 | 337,073 | 5.45\% |
| General Service > 50 kW | 9,317,740 | 9,241,612 | $(76,129)$ | -0.82\% |
| Intermediate | 6,917,001 | 6,839,938 | $(77,063)$ | -1.11\% |
| Large Use (> 5000 kW) | 1,832,459 | 1,852,059 | 19,600 | 1.07\% |
| Street Lighting | 669,977 | 680,633 | 10,655 | 1.59\% |
| Unmetered Scattered Load | 99,494 | 109,490 | 9,996 | 10.05\% |
| Embedded Distributor | 5,196 | 5,196 | - | 0.00\% |
| Distributed Generation Class | - | 119 | 119 | 0.00\% |
| Energy from Waste Generation | - | - | - | 0.00\% |
| Backup/Standby Power | - | - | - | 0.00\% |
| Total | 55,595,618 | 56,966,971 | 1,371,353 | 2.47\% |

## Comparison of 2012 and 2011 Weather Normalized Distribution Revenues

Table 16 below provides a summary of the variances between Hydro One Brampton's weather normalized 2012 and 2011 distribution revenues by rate class. Weather normalized revenues in 2012 increased by $\$ 1,492,263$ or $2.62 \%$ compared to the 2011 weather normalized distribution revenues. The drivers were mainly due to the price changes as a result of the Board's annual Incentive Rate Mechanism (IRM) adjustment as well as the overall increase in customer/connection counts, billed kWh and billed kW. On January 1, 2012 Hydro One Brampton implemented new Board Approved distribution rates based on its 2012 IRM Rate Application. This rate adjustment resulted in increased volumetric and fixed rates for all rate classes with the exception of the General Service $>700 \mathrm{~kW}$. The reduction in revenue was due to an adjustment in the revenue to cost ratio primarily between the General Service $>700 \mathrm{~kW}$ and the Street Lights classes.

Table 16: Distribution Revenue: Weather Normalized 2012 vs 2011

| Description | Weather <br> Normalized | Weather <br> Normalized | Variance (\$) | Variance (\%) |
| :--- | ---: | ---: | ---: | ---: |
| Distribution Revenue: |  |  |  |  |
| Residential | $31,714,948$ | $32,757,217$ | $1,042,269$ | $3.29 \%$ |
| General Service < 50 kW | $6,522,976$ | $6,752,415$ | 229,439 | $3.52 \%$ |
| General Service > 50 kW | $9,241,612$ | $9,357,721$ | 116,110 | $1.26 \%$ |
| Intermediate | $6,839,938$ | $6,341,153$ | $(498,785)$ | $-7.29 \%$ |
| Large Use (>5000 kW) | $1,852,059$ | $1,914,895$ | 62,836 | $3.39 \%$ |
| Street Lighting | 680,633 | $1,217,673$ | 537,040 | $78.90 \%$ |
| Unmetered Scattered Load | 109,490 | 112,753 | 3,263 | $2.98 \%$ |
| Embedded Distributor | 5,196 | 4,791 | $(405)$ | $-7.80 \%$ |
| Distributed Generation Class | 119 | 615 | 497 | $418.33 \%$ |
| Energy from Waste Generation | - | - | - | $0.00 \%$ |
| Backup/Standby Power | - | - | - | $0.00 \%$ |
| Total | $\mathbf{5 6 , 9 6 6 , 9 7 1}$ | $58,459,234$ | $\mathbf{1 , 4 9 2 , 2 6 3}$ | $\mathbf{2 . 6 2 \%}$ |

## Comparison of 2013 and 2012 Weather Normalized Distribution Revenues

Table 17 below provides a summary of the variances between Hydro One Brampton's 2013 weather normalized and 2012 distribution revenues by rate class. Weather normalized revenues in 2013 increased by $\$ 2,490,382$ or $4.26 \%$ compared to the 2012 weather normalized actual distribution revenues. The drivers were primarily the price changes due to the Board's annual Incentive Rate Mechanism (IRM) adjustment, approval of the Smart Meter Incremental Rider (SMIRR) in Hydro One Brampton's Final Smart Meter Disposition Application (EB-2012-0440) in April 2013, as well as the overall changes in customer/connection counts and energy consumption. On January 1, 2013 Hydro One Brampton implemented new Board Approved distribution rates based on its 2013 IRM Rate Application. On May 1, 2013 HOBNI implemented Board Approved SMIRR which impacted the Residential, General Service < 50 KW and the General Service > 50 KW. The revenue from SMIRR in 2013 was approximately \$980,000.

Table 17: Distribution Revenue: Weather Normalized 2013 vs 2012

| Description | $2012$ <br> Weather Normalized | $2013$ <br> Weather Normalized | Variance (\$) | Variance (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Distribution Revenue: |  |  |  |  |
| Residential | 32,757,217 | 33,903,385 | 1,146,167 | 3.50\% |
| General Service < 50 kW | 6,752,415 | 7,388,180 | 635,765 | 9.42\% |
| General Service > 50 kW | 9,357,721 | 9,532,320 | 174,599 | 1.87\% |
| Intermediate | 6,341,153 | 6,816,407 | 475,254 | 7.49\% |
| Large Use (> 5000 kW) | 1,914,895 | 1,855,722 | $(59,173)$ | -3.09\% |
| Street Lighting | 1,217,673 | 1,265,559 | 47,886 | 3.93\% |
| Unmetered Scattered Load | 112,753 | 117,198 | 4,445 | 3.94\% |
| Embedded Distributor | 4,791 | 5,979 | 1,188 | 24.80\% |
| Distributed Generation Class | 615 | 1,999 | 1,384 | 224.89\% |
| Energy from Waste Generation | - | - | - | 0.00\% |
| Backup/Standby Power | - | 62,868 | 62,867.67 | 0.00\% |
| Total | 58,459,234 | 60,949,616 | 2,490,382 | 4.26\% |

## Comparison of 2014 Bridge Year and 2013 Weather Normalized Distribution

 RevenuesTable 18 below provides a summary of the variances between Hydro One Brampton's weather normalized 2014 Bridge Year and 2013 distribution revenues by rate class. Revenue in the 2014 Bridge Year is forecasted to increase by $\$ 2,661,917$ or $4.37 \%$ compared to the 2013 actual distribution revenue. The drivers are expected to be price changes due to the Board's annual Incentive Rate Mechanism (IRM) adjustment, Smart Meter Incremental Rider (SMIRR), forecasted changes in customer/connection counts, billed kWh and billed kW. On January 1, 2014 Hydro One Brampton implemented new Board Approved distribution rates based on its 2014 IRM Rate Application. The change in revenue based on SMIRR is expected to be approximately $\$ 523,000$.

Table 18: Distribution Revenue: Weather Normalized 2014 Bridge Year vs 2013

| Description | Weather <br> Normalized | 2014 Bridge <br> Year | Variance (\$) | Variance (\%) |
| :--- | ---: | ---: | ---: | ---: |
| Distribution Revenue: |  |  |  |  |
| Residential | $33,903,385$ | $35,683,641$ | $1,780,256$ | $5.25 \%$ |
| General Service < 50 kW | $7,388,180$ | $7,981,598$ | 593,418 | $8.03 \%$ |
| General Service > 50 kW | $9,532,320$ | $9,494,879$ | $(37,442)$ | $-0.39 \%$ |
| Intermediate | $6,816,407$ | $7,025,173$ | 208,766 | $3.06 \%$ |
| Large Use (>5000 kW) | $1,855,722$ | $1,910,345$ | 54,624 | $2.94 \%$ |
| Street Lighting | $1,265,559$ | $1,306,393$ | 40,834 | $3.23 \%$ |
| Unmetered Scattered Load | 117,198 | 119,898 | 2,701 | $2.30 \%$ |
| Embedded Distributor | 5,979 | - | $(5,979)$ | $-100.00 \%$ |
| Distributed Generation Class | 1,999 | 4,609 | 2,609 | $130.54 \%$ |
| Energy from Waste Generation | - | - | - | $0.00 \%$ |
| Backup/Standby Power | 62,868 | 84,997 | $22,129.35$ | $35.20 \%$ |
| Total | $60,949,616$ | $63,611,532$ | $\mathbf{2 , 6 6 1 , 9 1 7}$ | $\mathbf{4 . 3 7 \%}$ |

## Comparison of Weather Normalized 2015 Test Year and 2014 Bridge Year

Table 19 below provides a summary of the variances between Hydro One Brampton's 2015 Test Year and 2014 Bridge Year forecasted distribution revenues by rate class. Revenue in the 2015 Test Year is forecasted to increase by $\$ 6,031,632$ or $9.48 \%$ compared to the 2014 Bridge Year forecasted distribution revenue. The forecasted growth in distribution revenue is driven by forecasted growth in overall customer/connection and volume as well as expected price changes to cover HOBNI's projected revenue requirement.

Table 19: Distribution Revenue: 2015 Test Year vs. 2014 Bridge Year

| Description | 2014 Bridge <br> Year | 2015 Test <br> Year | Variance (\$) | Variance (\%) |
| :--- | ---: | ---: | ---: | ---: |
| Distribution Revenue: |  |  |  |  |
| Residential | $35,683,641$ | $39,797,560$ | $4,113,920$ | $11.53 \%$ |
| General Service < 50 kW | $7,981,598$ | $8,152,067$ | 170,469 | $2.14 \%$ |
| General Service >50 kW | $9,494,879$ | $10,921,194$ | $1,426,315$ | $15.02 \%$ |
| Intermediate | $7,025,173$ | $6,579,386$ | $(445,787)$ | $-6.35 \%$ |
| Large Use (>5000 kW) | $1,910,345$ | $2,210,877$ | 300,532 | $15.73 \%$ |
| Street Lighting | $1,306,393$ | $1,651,972$ | 345,579 | $26.45 \%$ |
| Unmetered Scattered Load | 119,898 | 143,356 | 23,458 | $19.56 \%$ |
| Embedded Distributor | - | 49,281 | 49,281 | $0.00 \%$ |
| Distributed Generation Class | 4,609 | 46,095 | 41,486 | $900.21 \%$ |
| Energy from Waste Generation | - | 747 | 747.00 | $0.00 \%$ |
| Backup/Standby Power | 84,997 | 90,630 | $5,632.63$ | $6.63 \%$ |
| Total | $\mathbf{6 3 , 6 1 1 , 5 3 2}$ | $\mathbf{6 9 , 6 4 3 , 1 6 5}$ | $\mathbf{6 , 0 3 1 , 6 3 2}$ | $\mathbf{9 . 4 8 \%}$ |

## Comparison of Distribution Revenue at Existing and Proposed Rates

Table 20 below provides a summary of the variances between Hydro One Brampton's 2015 distribution revenues at proposed rates and distribution revenues at Board Approved 2014 existing rates. Revenue in the 2015 Test Year is forecasted to increase by $\$ 4,355,570$ or $6.67 \%$ compared to the 2014 Bridge Year forecasted distribution revenue.

| Description | 2015 <br> Revenue at <br> Existing <br> Rates | 2015 <br> Revenue at <br> Proposed <br> Rates | Variance (\$) | Variance (\%) |
| :--- | ---: | ---: | ---: | ---: |
| Distribution Revenue: |  |  |  |  |
| Residential | $37,011,790$ | $39,797,560$ | $2,785,770$ | $7.53 \%$ |
| General Service < 50 kW | $8,305,737$ | $8,152,067$ | $(153,670)$ | $-1.85 \%$ |
| General Service >50 kW | $9,458,822$ | $10,921,194$ | $1,462,372$ | $15.46 \%$ |
| Intermediate | $7,032,138$ | $6,579,386$ | $(452,753)$ | $-6.44 \%$ |
| Large Use (> 5000 kW) | $1,914,284$ | $2,210,877$ | 296,594 | $15.49 \%$ |
| Street Lighting | $1,347,656$ | $1,651,972$ | 304,316 | $22.58 \%$ |
| Unmetered Scattered Load | 122,389 | 143,356 | 20,967 | $17.13 \%$ |
| Embedded Distributor | 2,541 | 49,281 | 46,740 | $1839.70 \%$ |
| Distributed Generation Class | 7,240 | 46,095 | 38,855 | $536.63 \%$ |
| Energy from Waste Generation | - | 747 | 747.00 | $0.00 \%$ |
| Backup/Standby Power | 84,997 | 90,630 | $5,632.63$ | $6.63 \%$ |
| Total | $65,287,595$ | $69,643,165$ | $4,355,570$ | $6.67 \%$ |

## EXHIBIT 3: Operating Revenue

## TAB 3 (of 4)

## Other Revenue

## SUMMARY OF OTHER REVENUE

Hydro One Brampton earns and forecasts to earn Other Revenue. Other Revenue is comprised of four major categories: Specific Service Charges, Late Payment Charges, Other Operating Revenues; and Other Income or Deductions. Table 1 below provides a high level summary and comparison of these four categories of Other Revenue for the Historic, Bridge and Test years. More details of Other Revenue amounts earned and expected to be earned in the Bridge and Test years is found in Appendix 1 to this exhibit, which is "Board Appendix 2-H Other Operating Revenue."

Table 1: Summary of Other Revenue

| Other Distribution Revenue | 2011 Actual | 2012 Actual | 2013 Actual | Bridge Year 2014 | Test Year 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis | CGAAP | CGAAP | CGAAP | CGAAP | MIFRS |
| Specific Service Charges | $1,230,341$ | $1,309,257$ | $1,311,839$ | $1,316,903$ | $1,341,796$ |
| Late Payment Charges | $1,427,041$ | $1,270,525$ | $1,223,989$ | $1,295,936$ | $1,321,854$ |
| Other Operating Revenues | $1,146,177$ | $1,138,505$ | $1,061,581$ | $1,128,981$ | $1,153,939$ |
| Other Income or Deductions | 146,081 | 350,771 | 350,402 | $\mathbf{2 0 7 , 0 0 0}$ | 209,000 |
| Total | $\mathbf{3 , 9 4 9 , 6 4 1}$ | $\mathbf{4 , 0 6 9 , 0 5 8}$ | $\mathbf{3 , 9 4 7 , 8 1 1}$ | $\mathbf{3 , 9 4 8 , 8 2 0}$ | $\mathbf{4 , 0 2 6 , 5 8 9}$ |

## SPECIFIC SERVICE CHARGES

Hydro One Brampton applies Specific Service Charges to charge customers for services or activities not directly related to the distribution of electricity to the customer. These charges are determined based on charges and rates approved by Board, which are listed under the Tariff of Rates and Charges.

Table 2 below provides details on Specific Service Charges made for the 2011 to 2013 Historic Years, as well as the 2014 Bridge and 2015 Test years.

Table 2: Specific Service Charges

| Specific Service Charges | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Bridge Year | 2015 Test Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Account History | 570 | 240 | 180 | 240 | 240 |
| Admin Charge | 6,446 | 6,146 | 5,846 | 6,384 | 6,390 |
| Arrears Certificate | 135 | 315 | 180 | - | - |
| Cash Discounts | - | - | 1,593 | - | - |
| Credit Reference/Credit Check | 9,243 | 7,650 | 6,164 | 8,000 | 8,000 |
| Disconnect/Reconnect At Pole During Regular Hours | 370 | 1,110 | 1,295 | - | 1,000 |
| Disconnect/Reconnect For $>300$ Volts After Regular Hours | 155 | 155 | - | - | 155 |
| Duplicate Invoices For Previous Billing | 390 | 345 | 75 | 504 | 500 |
| Easement Letter | 850 | 1,155 | 1,477 | 1,080 | 1,000 |
| Income Tax Letter | 480 | 435 | 405 | 420 | 425 |
| Lawyer Letter Fees | 247 | - | - | - | - |
| Legal Letter Charge | 45 | 15 | 15 | - | - |
| Misc Energy Charges | 0 | 0 | (0) | - | - |
| Misc Ser Revs - Discon/Recon | 569,240 | 611,020 | 711,305 | 594,651 | 605,366 |
| Misc Service Revenues - New Oc | 611,190 | 650,820 | 669,810 | 670,000 | 683,000 |
| Miscellaneous Income | - | 2,260 | $(111,933)$ | - | - |
| NSF Cheque Revenues | 25,300 | 23,820 | 22,800 | 31,000 | 31,000 |
| Owner Requested Disconnection/Reconnection Regular Hours | 2,520 | 1,680 | 960 | 2,500 | 2,600 |
| Pool Approvals | 1,834 | 2,120 | 1,667 | 2,124 | 2,120 |
| Special Charges | 846 | - | - | - | - |
| Special Meter Read Residential | 480 | (30) | - | - | - |
|  | 1,230,341 | 1,309,257 | 1,311,839 | 1,316,903 | 1,341,796 |

Hydro One Brampton did not experience significant fluctuations in actual Specific Service Charges in the 2011 to 2013 Historic Years. Average Specific Service Charges for each of the years in the 3-year period were $\$ 1,283,812$ per annum. Specific Service Charges for the 2014 Bridge and 2015 Test years are projected to be $\$ 1,316,903$ and $\$ 1,341,796$ respectively, representing small year-over-year increases from the 2013 Historic actual as a result of expected increases in the volumes of customer requests triggering such charges.

Hydro One Brampton has not proposed any new Specific Service Charges or revisions to existing charges in its current application.

## LATE PAYMENT CHARGES

Historic, Bridge and Test year amounts related to Late Payment Charges are shown in Table 3 below.

Table 3 - Late Payment Charges

| Late Payment Charges |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 Actual |  |  |  |  |  |  | 2012 Actual | 2013 Actual | 2014 Bridge Year | 2015 Test Year |
| Reporting Basis | CGAAP | CGAAP | CGAAP | CGAAP | MIFRS |  |  |  |  |  |
| Late Payment <br> Charges | $1,427,041$ | $1,270,525$ | $1,223,989$ | $1,295,936$ | $1,321,854$ |  |  |  |  |  |
| Total | $1,427,041$ | $1,270,525$ | $1,223,989$ | $1,295,936$ | $1,321,854$ |  |  |  |  |  |

Hydro One Brampton levies a late payment charge for overdue accounts. The Company's policy is to charge $1.5 \%$ per month (or $19.56 \%$ per annum) for late payments. This amount is applied to all accounts that are not paid by the invoice due date. Late Payment Charge revenues declined over the 2011 to 2013 Historic period, primarily as a result of 2011 OEB Customer Service Amendments whereby security deposits previously collected from residential customers were applied to the outstanding balances prior to disconnection of service. The resultant reduction of customer account amounts in arrears led to a temporary reduction in late payment charges in 2012 and 2013. Forecast revenues for the 2014 Bridge year and the 2015 Test year are $\$ 72$ thousand (6\%) and $\$ 98$ thousand ( $8 \%$ ) higher respectively than 2013 levels as the Company expects the temporary impact of offsetting security deposits to be less impactive and expects late payment revenues to return to normal levels.

|  |  |  |  |  |  | Bridge Year |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 2014 |  |  |  |  |  |  |

## OTHER OPERATING REVENUES

Historic, Bridge and Test year amounts related to Other Operating Revenues are shown in more detail in Table 4 below.

Table 4: Detail of Other Operating Revenues

## Retail Services Revenues

Hydro One Brampton's revenues from providing Retail services costs have declined over the Historic years 2011 to 2013. The forecast Bridge and Test year amounts are approximately equal to the three year Historical average. The Company was expecting more customers to continue be with Retailers but in 2013 many existing Retailer contracts ended and customers who were no longer with Retailers began paying the standard service supply (SSS) charge.

## Service Transaction Requests (STR) Revenues

Hydro One Brampton charges its customers for Service Transaction Requests at the rates approved by Board and listed on the Tariff of Rates and Charges. Actual revenues in the Historic year and the Bridge and Test year forecasts are consistent and relatively small amounts.

## SSS Administration Charges

Hydro One Brampton charges its customers who are on standard service supply the OEB approved rate as listed under the Tariff of Rates and Charges. SSS administration charge revenues are based on historical experience combined with projected customer information.

Revenues are projected to increase moderately from 2013 actual levels in the 2014 Bridge and 2015 Test years based on customer growth projections.

## Electric Services Incidental to Energy Sales

Distribution revenue from load transfers is relatively small. The average for the 2011 to 2013 Historic years was $\$ 2,900$. No amounts have been forecasted in the Bridge or Test years due to the low and variable level of Historical revenue levels in this area.

## Rent from Electric Property

Hydro One Brampton receives other income from renting space on its poles to communications and telecom companies and space in its facilities. Pole rentals are charged based on Boardapproved pole rental rates and space leases are based on market values. A portion of current and forecast pole rentals and all space rentals are to affiliates. The basis for these affiliate transactions is discussed in more detail in Exhibit, 3, Tab 3, Schedule 3 "Revenue from Affiliate Transactions."

The Company does not expect to experience significant period-to-period fluctuations in the numbers of poles rented and existing space rentals are made under intercompany leases that are expected to continue into the Test year. The Company forecasts building space rental revenues of $\$ 81,750$ and pole rental revenues of $\$ 440,592$ in the Test year.

## Government Assistance

The amount included in 2013 was a one-time government grant related to the Line Apprenticeships and it is not anticipated to recur in the Bridge or Test years.

|  | Other Income or Deductions | $\mathbf{2 0 1 1}$ <br> Actual | $\mathbf{2 0 1 2}$ <br> Actual | 2013 <br> Actual | Bridge Year <br> $\mathbf{2 0 1 4}$ | Test Year <br> $\mathbf{2 0 1 5}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Reporting Basis | CGAAP | CGAAP | CGAAP | CGAAP | MIFRS |
| 4390 | Miscellaneous Non-Operating <br> Income | 94,723 | 84,424 | 168,342 |  |  |
| 4398 | Foreign Exchange Gains / Losses | 2,739 | -182 | 28 | 154,000 | $\mathbf{1 5 4 , 0 0 0}$ |
| 4405 | Interest and Dividend Income | 48,620 | 266,529 | 182,032 | 0 |  |
|  | Total | $\mathbf{1 4 6 , 0 8 1}$ | $\mathbf{3 5 0 , 7 7 1}$ | $\mathbf{3 5 0 , 4 0 2}$ | 53,000 | $\mathbf{5 5 , 0 0 0}$ |

## OTHER INCOME OR DEDUCTIONS

Historic, Bridge and Test year amounts related to Other Income and Deductions are shown in more detail in Table 5 below.

Table 5: Detail of Other Income or Deductions

## Miscellaneous Non-Operating Income

Hydro One Brampton periodically receives cash from salvage value following the sale of surplus inventory or scrap items. The Company's forecast of salvage recoveries is $\$ 154,000$ in both the Bridge and Test years. This exceeds the 3-year average of approximately \$115,000 earned in the Historic years 2011 to 2013.

## Foreign Exchange Gains/Losses

The Company has experienced only incidental foreign exchange gains and losses in the historic years. No amounts have been forecast in the Bridge and Test years due to materiality and an inability to reasonably estimate future events.

## Interest \& Dividend Income

Hydro One Brampton received an annual average of approximately \$166,000 in interest income related to cash on hand in the three Historic years 2011 to 2013. Interest revenues for the 2014 Bridge and 2015 Test years are forecast to decrease from the unusually higher levels experienced in 2012 and 2013, when larger than normal amounts of cash were on hand.

## EXHIBIT 3: Operating Revenue

## Appendix 1

## OEB Appendix 2-H - Other Operating Revenue

| File Number: | EB-2014-0083 |
| :--- | ---: |
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## Other Operating Revenue

| USOA \# | USoA Description | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | $\begin{gathered} \hline \text { Bridge Year }^{3} \\ \hline 2014 \end{gathered}$ |  | $\begin{gathered} \text { Test Year } \\ 2015 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Reporting Basis |  | CGAAP |  | CGAAP |  | CGAAP |  | CGAAP |  | MIFRS |
| 4235 | Specific Service Charges | \$ | 1,230,341 | \$ | 1,309,257 | \$ | 1,311,839 | \$ | 1,316,903 | \$ | 1,341,796 |
| 4225 | Late Payment Charges | \$ | 1,427,041 | \$ | 1,270,525 | \$ | 1,223,989 | \$ | 1,295,936 | \$ | 1,321,854 |
| 4082 | Retail Services Revenues | \$ | 281,906 | \$ | 193,139 | \$ | 150,899 | \$ | 197,002 | + | 200,942 |
| 4084 | Service Transaction Requests (STR) Revenues | \$ | 10,200 | \$ | 8,500 | \$ | 5,120 |  | 8,670 | - | 8,843 |
| 4086 | SSS Administration Charges | \$ | 340,039 | \$ | 363,757 | \$ | 393,310 | \$ | 402,000 | \$ | 413,000 |
| 4090 | Electric Services Incidental to Energy Sales | \$ | 4,917 | \$ | 888 | \$ | 2,924 | \$ |  | \$ |  |
| 4210 | Rent from Electric Property | \$ | 509,116 | \$ | 572,221 | \$ | 507,328 | \$ | 521,309 | \$ | 531,154 |
| 4245 | Government Assistance Directly | \$ |  | \$ |  | \$ | 2,000 | \$ |  | \$ |  |
| 4390 | Miscellaneous Non-Operating Income | \$ | 94,723 | \$ | 84,424 | \$ | 168,342 | \$ | 154,000 | \$ | 154,000 |
| 4398 | Foreign Exchange Gains / Losses | \$ | 2,739 | \$ | (182) | \$ | 28 | \$ |  | \$ |  |
| 4405 | Interest and Dividend Income | \$ | 48,620 | \$ | 266,529 | \$ | 185,534 | \$ | 54,000 | \$ | 55,000 |
| Specific Service Charges |  | \$ | 1,230,341 | \$ | 1,309,257 | \$ | 1,311,839 | \$ | 1,316,903 | \$ | 1,341,796 |
| Late Payment Charges |  | \$ | 1,427,041 | \$ | 1,270,525 | \$ | 1,223,989 | \$ | 1,295,936 | \$ | 1,321,854 |
| Other Operating Revenues |  | \$ | 1,146,177 | \$ | 1,138,505 | \$ | 1,061,581 | \$ | 1,128,981 | \$ | 1,153,939 |
| Other Income or Deductions |  | \$ | 146,081 | \$ | 350,771 | S | 353,904 | \$ | 208,000 | \$ | 209,000 |
| Total |  | \$ | 3,949,641 | \$ | 4,069,058 | \$ | 3,951,313 | \$ | 3,949,820 |  | 4,026,589 |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  | 2014 |  | 2015 |
| Account History | \$ | 570 | \$ | 240 | \$ | 180 | \$ | 240 | \$ | 240 |
| Admin Charge | \$ | 6,446 | \$ | 6,146 | \$ | 5,846 | \$ | 6,384 | \$ | 6,390 |
| Arrears Certificate | \$ | 135 | \$ | 315 | \$ | 180 | \$ | - | \$ | - |
| Cash Discounts | \$ | - | \$ | - | \$ | 1,593 | \$ | - | \$ | - |
| Credit Reference/Credit Check | \$ | 9,243 | \$ | 7,650 | \$ | 6,164 | \$ | 8,000 | \$ | 8,000 |
| Disconnect/Reconnect At Pole During Regular Hours | \$ | 370 | \$ | 1,110 | \$ | 1,295 | \$ | - | \$ | 1,000 |
| Disconnect/Reconnect For >300 Volts After Regular Hours | \$ | 155 | \$ | 155 | \$ | - | \$ | - | \$ | 155 |
| Duplicate Invoices For Previous Billing | \$ | 390 | \$ | 345 | \$ | 75 | \$ | 504 | \$ | 500 |
| Easement Letter | \$ | 850 | \$ | 1,155 | \$ | 1,477 | \$ | 1,080 | \$ | 1,000 |
| Income Tax Letter | \$ | 480 | \$ | 435 | \$ | 405 | \$ | 420 | \$ | 425 |
| Lawyer Letter Fees | \$ | 247 | \$ | - | \$ | - | \$ | - | \$ | - |
| Legal Letter Charge | \$ | 45 | \$ | 15 | \$ | 15 | \$ | - | \$ |  |
| Misc Energy Charges | \$ | 0 | \$ | 0 | \$ | (0) | \$ | - | \$ | - |
| Misc Ser Revs - Discon/Recon | \$ | 569,240 | \$ | 611,020 | \$ | 711,305 | \$ | 594,651 | \$ | 605,366 |
| Misc Service Revenues - New Oc | \$ | 611,190 | \$ | 650,820 | \$ | 669,810 | \$ | 670,000 | \$ | 683,000 |
| Miscellaneous Income | \$ | - | \$ | 2,260 | \$ | $(111,933)$ | \$ |  | \$ |  |
| NSF Cheque Revenues | \$ | 25,300 | \$ | 23,820 | \$ | 22,800 | \$ | 31,000 | \$ | 31,000 |
| Owner Requested Disconnection/ Reconnection Regular Hours | \$ | 2,520 | \$ | 1,680 | \$ | 960 | \$ | 2,500 | \$ | 2,600 |
| Pool Approvals | \$ | 1,834 | \$ | 2,120 | \$ | 1,667 | \$ | 2,124 | \$ | 2,120 |
| Special Charges | \$ | 846 | \$ | - | \$ | - | \$ | - | \$ | - |
| Special Meter Read Residential | \$ | 480 | \$ | (30) | \$ | - | \$ | - | \$ | - |
| Total | \$ | 1,230,341 | \$ | 1,309,257 | \$ | 1,311,839 | \$ | 1,316,903 | \$ | 1,341,796 |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  | 2014 |  | 2015 |
| Late Payment Charges | \$ | 1,427,041 | \$ | 1,270,525 | \$ | 1,223,989 | \$ | 1,295,936 | \$ | 1,321,854 |
|  |  |  |  |  |  |  |  |  |  |  |
| Total | \$ | 1,427,041 | \$ | 1,270,525 | \$ | 1,223,989 | + | 1,295,936 | \$ | 1,321,854 |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  | 014 |  | 015 |
| Standard One Time Charge | \$ | 200 | \$ | $(6,900)$ | \$ |  | \$ | - | \$ | $(2,151)$ |
| Fixed Monthly Charge | \$ | 59,973 | \$ | 18,865 | \$ | 11,648 | \$ | 15,207 | \$ | 29,048 |
| Request Fee | \$ | 51 | \$ | 91 | \$ | 303 | \$ | 396 | \$ | 143 |
| Standard Billing Charge | \$ | 83,882 | \$ | 68,716 | \$ | 52,453 | \$ | 68,478 | \$ | 65,826 |
| Variable Monthly Charge | \$ | 137,800 | \$ | 112,368 | \$ | 86,495 | \$ | 112,921 | \$ | 108,076 |
|  |  |  |  |  |  |  |  |  |  |  |
| Total | \$ | 281,906 | \$ | 193,139 | \$ | 150,899 | \$ | 197,002 | \$ | 200,942 |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  |  |  |  |
| Fixed Monthly Charge | \$ | 4,100 | \$ | 1,580 | \$ | 373 | \$ | 1,611 | \$ | 1,643 |
| Request Fee | \$ | 2,441 | \$ | 2,711 | \$ | 1,892 | \$ | 2,765 | \$ | 2,820 |
| Processing Fee | \$ | 3,660 | \$ | 4,210 | \$ | 2,855 | \$ | 4,294 | \$ | 4,380 |
|  |  |  |  |  |  |  |  |  |  |  |
| Total | \$ | 10,200 | \$ | 8,500 | \$ | 5,120 | \$ | 8,670 | \$ | 8,843 |


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## Appendix 2-H <br> Other Operating Revenue

|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  | 214 |  | 215 |
| SSS Administration Charges | \$ | 340,039 | \$ | 363,757 | \$ | 393,310 | \$ | 402,000 | \$ | 413,000 |
| Total | \$ | 340,039 | \$ | 363,757 | \$ | 393,310 | \$ | 402,000 | \$ | 413,000 |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  | 2014 |  | $2015$ |
| Distribution Revenue Load Transfers | \$ | 4,917 | \$ | 888 | \$ | 2,924 |  |  |  |
| Total | \$ | 4,917 | \$ | 888 | \$ | 2,924 | \$ | \$ |  |


|  | 2011 Actual |  | 2012 Actual |  | 2013 Actual ${ }^{2}$ |  | Bridge Year |  | Test Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Basis |  |  |  |  |  |  |  | 214 |  | 015 |
| Rental Income - Joint Use | \$ | 269,165 | \$ | 273,839 | \$ | 271,705 | \$ | 292,592 | \$ | 301,404 |
| Rental Income - Poles | \$ | 140,041 | \$ | 149,646 | \$ | 147,344 | \$ | 148,000 | \$ | 148,000 |
| Rental Income - Building Spaces | \$ | 99,909 | \$ | 148,737 | \$ | 88,280 | \$ | 80,717 | + | 81,750 |
| Total | \$ | 509,116 | \$ | 572,221 | \$ | 507,328 | \$ | 521,309 | \$ | 531,154 |




## REVENUES FROM AFFILIATE TRANSACTIONS

Historic, Bridge and Test year amounts for Revenues from Affiliate Transactions are shown in Table 6 below.

Revenues from affiliate transactions are included in account 4210. Table 6 below has the detail of the transactions for 2011 Actual, 2012 Actual, 2013 Actual, 2014 Bridge Year and 2015 Test Year.

Table 6: Summary of Revenues from Affiliate Transactions

| Affiliate Transactions |  | 2011 Actual | 2012 Actual | 2013 Actual | $\frac{2014 \text { Bridge }}{\text { Year }}$ | $\underline{2015}$ Test Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account \# 4210 |  |  |  |  |  |  |
| Income Type | Affiliate |  |  |  |  |  |
| Rental Income - Poles | Hydro One Networks Inc. | 8,097 | 8,097 | 8,097 | 8,097 | 8,097 |
| Rental Income - Poles and Ducts | Hydro One Telecom Inc. | 124,937 | 125.596 | 125,685 | 125,685 | 125,685 |
|  | sub-total | \$ 133,033 | \$ 133,692 | \$ 133,782 | \$ 133,782 | \$ 133,782 |
| Rental Income - Spaces | Hydro One Networks Inc. | 88,709 | 133,537 | 64,922 | 60,959 | 61,747 |
| Rental Income - Spaces | Hydro One Telecom Inc. | 5.200 | $\underline{9.200}$ | 17,358 | 19,758 | 20,003 |
|  | sub-total | 93,909 | \$ 142,737 | 82,280 | \$ 80,717 | 81,750 |
|  | tal Affiliate Transactions | \$ 226,942 | \$ 276,429 | \$ 216,061 | \$ 214,499 | \$ 215,532 |

## Pole Rentals

Pole rental revenues are received through charging other entities, such as telecommunications and cable companies, for access space on Hydro One Brampton's distribution poles or in underground ducts. Affiliated company Hydro One Networks rented 283 poles from Hydro One Brampton in 2013. Actual rental revenues earned from Hydro One Networks was $\$ 8,097$ in each of the three historical years shown. This level of rental revenue is forecast to continue in the Bridge and Test years.

Affiliated company Hydro One Telecom rented 2,564 poles and 5,398 meters of ducts from Hydro One Brampton in 2013, resulting in related party rental income of $\$ 125,685$. These arrangements are forecast to continue in the Bridge and tests years and the same level of related party rental income is expected.

## Space Rentals

Hydro One Networks currently leases a portion of its main administrative building to Hydro One Networks. The leased space comprises of approximately 2,676 square feet of office space on the second floor. The lease agreement specifies a basic rent of $\$ 11$ per square foot plus an additional rent of $\$ 11.78$ per square foot. The additional rent is subject to a $2.5 \%$ annual increase. In accordance with the lease agreement, annual rent in the Test Year will total \$61,747.

Hydro One Telecom currently rents 419 square feet in a secured environment for the co-location of telecommunications equipment. The lease agreement specifies a basic rent in the amount of $\$ 1.50$ per square foot of rentable area plus a cost of power utility charge in the amount of $\$ 1.95$ per square foot of rented area. The utility charge is subject to a $2.5 \%$ annual increase. In 2015, in accordance with the lease agreement, annual rent will be charged at \$20,003.

TAB 4 (of 4)
HOBNI Multivariate Regression Model

HOBNI Historical and Forecasted Load, Customer and Connection Counts for 2015 Rate Application

|  | 2003 Actual | 2004 Actual | 2005 Actual | 2006 Actual | 2007 Actual | 2008 Actual | 2009 Actual | 2010 Actual | 2011 Actual vs 2010 Actual | 2011 Board | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Weather | 2015 Weather |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual Purchases Excluding Adjustments | 0 | 3,606,734,355 | 3,848,888,345 | 3,854,274,114 | 3,958,591,768 | 3,915,443,564 | 3,727,941,968 | 3,911,054,142 |  |  | 3,968,502,600 | 4,043,243,029 | 4,027,156,664 |  |  |
| Wholesale Market Participant Adjustment |  |  |  | 0 |  |  | 15,570,646 | 19.512 .25 |  |  | ${ }_{\substack{(30,590,627) \\ 34785128}}$ | $(52,650,053)$ 34641332 | (57,812,380) |  |  |
| Embedded Distributor |  |  |  | 0 | 0 | 0 | 15,570,646 | 19,512,252 |  |  | ${ }^{34,785,128}$ |  | 41,319,933 |  |  |
| Total Actual Purchases |  |  |  | 3,854,274,114 | 3,958,591,768 | 3,915,443,564 | 3,743,512,615 | 3,930,56,395 |  |  | 3,972,698,879 | 4,025, 249,175 | 4,010,715,032 |  |  |
| Predicted kWh Purchases from Regression | 0 | 3,618,703,271 | 3,848,828,345 | 3,831,498,914 | 3,951,695,295 | 3,896,414,064 | 3,781,079,154 | 3,889,917,169 |  | 3,962,577,442 | 3,969,819,877 | 4,039,088,423 | 4,036,523,438 | 4,109,065,670 | 4,194,973,860 |
| Wholosale Market Participant Adjustment com Adustment |  |  |  |  |  |  |  |  |  | (19,000.000) | (30,590,627) | (52,650,053) | (57,81,380) | (57,815,958) | (57,825,129) |
| Embedded Distributor |  |  |  |  |  |  | 15,570,646 | 19,512,252 |  | 34,785, 128 | 34,785,128 | 34,641,332 | 41,319,933 |  | 17,432,620 |
| Distributed Generation |  |  |  |  |  |  |  |  |  |  | 1,778 | 14,867 | 50,814 | 17,684 | 184,9 |
| Total Predicted Purchases | 0.0\% | ${ }_{\text {3,618,703,271 }}^{\substack{\text { a }}}$ | ${ }_{\substack{\text { a } \\ \text { 3,48,828,345 } \\ 0.0 \%}}$ | 3,831,498.914 $0.6 \%$ |  |  | ${ }_{\text {c }}{ }^{3,799,649,801} 1.4 \%$ | ${ }_{\text {3, }}^{3,909,429.422}$ |  | 3,978,32, 570 | 3,974,016,1566 | 4,021,094,569 |  | 4,005,504,291 | 4,101,039,885 |
| Billed kWh | 3,329,496,978 | 3,483, 144,427 | 3,723,506,554 | 3,718,723,113 | 3,839,000,000 | 3,791,763,566 | 3.631,910,103 | 3,807,72, 782 |  | 3.850,115760 | 3,865, 234,849 | 3,909,965.088 | 3,877,058,755 | 3.879.975.810 | 3.972,635.063 |
|  |  |  | 106.359\% | 99.550\% | 103.137\% | 98.601\% | 97.440\% | 102.971\% |  |  | 99.892\% | 101.185\% | 99.975\% | 99.637\% | 102.385\% |
| By Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | 91,671 | 98,355 | 104,822 | 109,778 | 114,119 | 119,060 | 121,041 | 123,013 |  | 124,916 | 126,317 | 129,699 | 133,723 | 137,303 | 140,979 |
| kWh | 918,500,653 | 933,248,820 | 1,066,310,557 | 1,041,609,067 | 1,102,238,845 | 1,093,308,663 | 1,088,557,819 | 1,171,315,280 |  | 1,123,427,772 | 1,190,237,359 | 1,212,040,627 | 1,198,023,626 | 1,249,454,159 | 1,308,264,983 |
| Average kWh Usage | 10,020 | 9,489 | 10,173 | 9,488 | 9,659 | 9,183 | 8,993 | 9,522 |  | 8,993 | 9,423 | 9,345 | 8,959 | 9,100 | 9,280 |
| Customer Change $Y$ Y |  | 6,684 | 6,467 | 4,957 | 4,341 | 4,941 | ${ }^{1,981}$ | 1,972 | 3,304 |  | 1,401 | 3,382 | 4,024 | ${ }^{3,580}$ | 3,676 |
| kWh Change Y $M$ |  | 14,748,167 | 133,061,737 | $(24,70,490)$ | 60,629,778 | (8,930, 182) | (4,750,844) | 82,757,461 | 18,922,079 |  | 66,80, ${ }^{\text {, 887 }}$ | 21,80, 268 | (14,017,001) | 51,430,533 | 58,810,824 |
| Average kWh Usage Change YY |  | (531) | 684 | (684) | 170 | (476) | (190) | 529 | (99.26) |  | 429 | (78) | ${ }^{(386)}$ | 141 | 180 |
|  |  | 107.29\% | 106.58\% | 104.73\% | 103.95\% | 104.33\% | 101.66\% | 101.63\% | 102.69\% |  | 101.12\% | 102.68\% | 103.10\% | 2.68\% | $2.68 \%$ 4710 |
| KWh Change YM \% Average KWh Usage Change \% |  | $\stackrel{1.016}{0.947}$ | 14.26\% | ${ }_{\text {- }}$ | $5.82 \%$ 1.018 | ${ }_{0.951}^{0.992}$ | $-0.43 \%$ 0.979 | 7.60\% | +10.62\% ${ }^{\text {0.9896 }}$ |  | ${ }_{\text {1. }}^{\text {1.0477 }}$ | (1.83\% | - 0.19587 | 4.29\% | $4.71 \%$ $1.98 \%$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | 6,512 | 6,648 | 6,892 | 7,075 | 7,294 | 7,437 | 7,529 | 7,752 |  | 7,893 | 8,080 | 8,328 | 8,532 | 8,758 | 8,889 |
| kWh | 261,424,109 | 264,116,354 | 288,084,106 | 282,703,766 | 298,781,693 | 288,887,931 | 283,991,997 | 291,782,860 |  | 291,481,574 | 309,962,282 | 315,917,674 | 323,299,858 | 338,49,623 | 354,668,870 |
| Average kWh Usage | 40,147 | ${ }^{39,727}$ | 41,802 | 39,956 | 40,961 | 38,846 | 37,721 | 37,642 |  | 36,929 | 38,360 | 37,936 | 37,893 | 38,669 | 39,454 |
| Customer Change Y $/$ Y |  | 137 |  |  |  |  |  |  | 329 |  | 187 |  |  |  |  |
| kWh Change Y M |  | 2,692,245 | 23,967,752 | (5,380,340) | 16,077,927 | (9,893,762) | (4,895,934) | 7,790,863 | 18,179,422 |  | 18,480,708 | 5,955,392 | 7,382,184 | 15,349,765 | 16,019,247 |
| Average KWW Usage Change Y Y |  | (419) | 2,075 | ${ }_{(1,846)}$ | 1,005 | (2,115) | ${ }^{(1,125)}$ | (79) | 717.97 |  | ${ }^{1,431}$ | (424) | (43) | 776 | 785 |
| Customer Change $Y$ YY \% KWH Change $Y$ \% |  | 2.10\% | 3.66\% | 2.67\% | 3.10\% | 1.95\% $-3.31 \%$ | 1.24\% | 2.96\% | 104.24\% |  | ¢,$2.37 \%$ <br> $6.34 \%$ | 3.06\% | $2.45 \%$ <br> $2.34 \%$ | 2.65\% ${ }_{\text {4.75\% }}$ |  |
| KWh Change YY \% Average KWh Usage Change \% |  | 1.83\% | ${ }_{1}^{9.0522}$ | - | ${ }_{1.0251}^{\text {f.69\% }}$ | - | - ${ }_{\text {0. }}^{\text {- }}$ | 2.9979 | ${ }_{1}^{10.0191}$ |  | 6.0387 | 0.9890 | - | ${ }^{\text {1.0205 }}$ | 4.730\% <br> 1.0203 |
| USL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | 72 | 72 | 72 | 72 | 70 | 67 | 66 | 62 |  | 62 | 61 | 61 | 59 | 57 |  |
| Connections | 1,105 | 1,130 | 1,159 | 1,207 | 1,250 | 1,267 | 1,280 | 1,293 |  | 1,300 | 1,369 | 1,424 | 1,477 | ,519 |  |
| kWh | 7,522,732 | 5,817,642 | 5,528,171 | 5,294,847 | 5,047,284 | 5,107,860 | 5,104,985 | 5,197,576 |  | 4,969,698 | 5,450,025 | 5,562,245 | 5,706,945 | 5,818,253 | 5,931,733 |
| Average kWh Usage | 6,808 | 5,148 | 4,770 | 4,387 | 4,038 | 4,031 | 3,988 | 4,020 |  | 3,822 | 3,982 | 3,906 | 3,863 | 3,831 | 3,798 |
| Customer Change $Y$ Y |  |  | , | ${ }^{(0)}$ | ${ }^{(2)}$ | ${ }^{(3)}$ | ${ }^{(1)}$ | ${ }^{(4)}$ | ${ }^{(1)}$ |  | ${ }^{(1)}$ | ${ }^{(1)}$ | ${ }^{(2)}$ | ${ }^{(2)}$ | ${ }^{(1)}$ |
| Connection Change YY |  | ${ }^{25}$ | 29 | 48 | 43 | 17 | 13 | 13 |  |  | 68 | 55 | 53 | 42 | 43 |
| kWh Change YY |  | (1,705,990) | (289,471) | (233,324) | (247,562) | 60,575 | (2,875) | 92,592 | 252,449 |  | 480,327 | 112,220 | 144,700 | 111,308 | 113,479 |
| Average KWh Usage Change YM |  | (1,660) | (379) | (383) | (349) | (6) | (43) | 32 | (38) |  | 160 | (76) | (42) | (33) |  |
| Customer Change $Y$ Y \% \% Connecion Chang $Y Y \%$ |  |  | 0.35\% | -0.46\% | -3.13\% | 3.83\% | -1.24\% |  |  |  |  |  |  |  |  |
| Comnection Change YY \% KWh Change $Y$ Y |  | - $\begin{array}{r}2.26 \% \\ -22.67 \%\end{array}$ | 2.57\% $-4.98 \%$ | 4.14\% $.4 .22 \%$ | $3.56 \%$ $-4.68 \%$ | - ${ }_{\text {1.36\% }}$ | ${ }^{1.03 \%}$-0.06\% | 1.88\% | 5.88\%\% |  | 9.6.26\% ${ }_{\text {9,67\% }}$ |  | 3.3.73\% | 2.8.92\% | 2.8.82\% |
| Average KWh Usage Change \% |  | ${ }_{0} \mathbf{0 . 7 5 6 2}$ | 0.9265 | 0.9197 | 0.9205 | 0.9984 | 0.9893 | ${ }^{1.0079}$ | ${ }^{\text {0.9905 }}$ |  | ${ }_{1}^{1.0418}$ | 0.9810 | ${ }_{0}$ | ${ }_{0}$ | ${ }_{0}$ |
| GS>50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | ${ }^{1,357}$ | 1,393 | 1,364 | 1,402 | 1,417 | 1,491 | 1,554 | 1,539 |  | 1,552 | 1,537 | 1,525 | 1,511 | 1,501 | 1,491 |
| kWh | 996,032,849 | 1,045,707,603 | 1,083,191,856 | 1,080,817,874 | 1,109,791,374 | 1,116,685,267 | 1,081,007,720 | 1,088,985,441 |  | 1,131,611,317 | 1,100, 145,274 | 1,101,990,613 | 1,084,942,787 | 1,067,572,851 | 1,064,497,599 |
| kW | 2,776,683 | 2,792,673 | 2,901,457 | 2,962,866 | 3,0039,974 | 3,064,109 | 3,049, 119 | 3,049,813 |  | 3,101,358 | 3,051,053 | 3,074,186 | 3,051,058 | 2,988,434 | 2,979,826 |
| Average kWh Usage | ${ }^{733,771}$ | 750,508 | 794,275 | 770,866 | 783,290 | 748,867 | 695,778 | 707,593 |  | ${ }^{729,031}$ | 715,774 | 722,419 | 717,832 | 711,225 | 744,081 |
| Average kW Usage | 2,009 | 2,004 | 2,128 | 2,113 | 2,146 | 2,055 | 1,963 | 1,982 |  | 1,998 | 1,985 | 2,015 | 2,019 | 1,991 |  |
| Customer Change Y/ |  | 36 | (30) | 38 | 15 |  | 63 |  | ${ }^{(2)}$ |  | (15) | (12) | ${ }^{(14)}$ | (10) |  |
| KWW Change Y KW Change Y |  | 49,674,754 | 37,484,253 | (2,373,982) | 28,973,500 | 6,893,894 | ${ }_{(35,677,547)}$ | 7,977,721 | 11,159,832 |  | (31,466,044) | 1,845,339 | $(17,047,825)$ | $(17,369,936)$ | (3,075,253) |
| KW Change YY |  | 65,990 | 108,78 | 61,409 | 77,108 | 24,135 |  | 694 |  |  | (50,305) | 23,133 | (23, 28) | (62,624) | (8,608) |
| Average $k$ Wh Usage Change $Y$ Y Average $k W$ Usage Change $Y$ Y |  | 16,737 | ${ }^{43,767}$ | $(23,409)$ $(14)$ | 12,424 32 | ${ }_{\text {(34,423) }}^{\text {(91) }}$ | ${ }_{\text {(53,088) }}^{(92)}$ | 11,814 19 | 8,182 <br> 3 |  | $\underset{(13)}{(13,26)}$ | 6,645 30 |  | ${ }^{(6,6077)}$ |  |
| Customer Change YY \% |  | 2.65\% | -2.12\% | 2.81\% | 1.05\% | 5.25\% | 4.19\% | -0.94\% | -0.13\% |  | -0.98\% | -0.75\% | -0.92\% | -0.69\% | -0.69\% |
| $\mathrm{KWWh}^{\text {Change }}$ YY \% |  | 4.99\% | 3.58\% | -0.22\% | 2.68\% | 0.62\% | -3.19\% | 0.74\% | 1.02\% |  | $-2.78 \%$ | 0.17\% | $-1.55 \%$ | -1.60\% | -0.29\% |
| KW Change YY \% |  | 2.42\% | 3.90\% | 2.12\% | 2.60\% | 0.79\% | -0.49\% | 0.02\% | 0.04\% |  | -1.62\% | 0.76\% | -0.75\% | ${ }^{-2.05 \%}$ | -0.29\% |
| Average kWh Usage Change Average WW Usage Change |  | 1.0228 0.9978 | ${ }_{1.0615}^{1.0583}$ | 0.9705 0.9932 | ${ }_{1.0153}^{1.0161}$ | ${ }_{0}^{0.9561}$ | ${ }^{0} 0.9291$ | 1.00770 1.0098 | ${ }_{1}^{1.00116}$ |  | -1.82\% 0.9935 | - ${ }_{\text {0.933\% }}$ | -0.64\% | - | O.4.0\% $0.40 \%$ |
| Intermediate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | 126 | 124 | 121 | 119 | 117 | 116 | 114 | 114 |  | 106 | 112 | 12 | 15 | 15 | 115 |
| kWh | 845,12, ,401 | 922,964,134 | 954,061,083 | 950,418,593 | 942,048,351 | 872,37,904 | 788,185,444 | 839,914,785 |  | 843,484,098 | 801,310,497 | 807,792,313 | 812,965,292 | 804,411,590 | 806,154,180 |
| ${ }_{\text {Averae }} \mathrm{KWW}$ Usage | - $\begin{aligned} & 1,956,285 \\ & 6,711752\end{aligned}$ | ${ }_{7,423,304}^{2,104}$ |  | 2, ${ }_{8,009,145}$ | ${ }_{\substack{2,1006,615 \\ 8,063181}}$ | $1,976,551$ 7.542181 | (1,839,970 | ${ }_{\text {l }}^{1,996,781}$ |  | (1,904,929 | ${ }_{7}^{1,894,300}$ |  | ${ }_{\text {1, }}^{1,980,476}$ | - | - 1 1,969,146 |
| Average kW Usage | ${ }_{\text {, }}^{6,41,536}$ | $7,423,904$ 16,930 | 7,97,5991 | ${ }^{8,009,145} 18,013$ | ${ }_{\text {r }}$ | $\xrightarrow{7,542,081} 1$ | ${ }_{\text {, }}^{6,96,165}$ | ${ }_{\text {7, }}^{16067,874}$ |  | 7,900,906 | 7,159,985 | 7,24,7,292 | 7,059,039 17,197 | 7,001,507 | 7,033,497 |
| Customer Change YY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| kWh Change YY |  | 77,842,733 | 31,096,449 | (3,642,490) | (8,370,242) | (69,669,447) | (84, 193,460) | 51,729,341 | (38,604,288) |  | (42,173,601) | 6,481,816 | 5,172,978 | (8,55,701) | 1,742,590 |
| KW Change YY |  | ${ }_{7}^{148,677}$ | ${ }^{62,910}$ | ${ }^{(30,384)}$ | ${ }^{(30,873)}$ | $\left(\begin{array}{l}(130,064) \\ (52,061)\end{array}\right.$ | ${ }_{(136,581)}^{(625219}$ | 76.811 | (22,481) |  | (10,629) | 33,737 | 52,439 $(185741)$ | $\stackrel{(15,388)}{(57526)}$ | ${ }^{3,988}$ |
| Average kWh Usage Change $Y$ Y Average kW Usage Change $Y / Y$ |  | 711,552 1,394 | 494,215 <br> 1,061 | 91,266 22 | $\begin{array}{r}54,036 \\ \hline 18\end{array}$ | $\xrightarrow{(521,001)}(943)$ | $\underset{(633,216)}{(936)}$ | 448,708 662 | (207,788) |  | $\underset{(100,020)}{(1,053)}$ | 84,889 366 | $(185,741)$ (95) | ${ }_{\text {(57,526) }}^{(92)}$ | 31,990 76 |
| Customer Change YY\% |  | -1.26\% | -3.08\% | -1.52\% | -1.54\% | -1.00\% | -1.51\% | 0.07\% | -1.83\% |  | 5.63\% | -0.37\% | 3.29\% | -0.24\% | 0.24\% |
| kWh Change YY \% |  | 9.21\% | 3.37\% | -0.38\% | -0.88\% | -7.40\% | -9.65\% | 6.56\% | -4.60\% |  | -5.00\% | 0.81\% | 0.64\% | -1.05\% | 0.22\% |
| ${ }_{\text {KW Change }}^{\text {PY \% \% }}$ \% |  | 7.60\% | ${ }^{2} .99 \%$ | ${ }^{-1.40 \%}$ | ${ }^{-1.444 \%}$ | ${ }^{-6.17 \%}$ | ${ }^{-6.91 \%}$ | 4.17\% | - ${ }^{-1.17 \% \%}$ |  | -0.56\% | 1.78\% | 2.72\% | ${ }^{-0.77 \%}$ | -$0.20 \%$ <br> $0.46 \%$ |
| Averae $\begin{aligned} & \text { kVh Usage Change \% } \\ & \text { Average } k \text { U Usage Change \% }\end{aligned}$ |  | (10.60\% |  | (1.16\% | - $0.67 \%$ | - ${ }_{\text {- } 5.6 .43 \%}$ | - ${ }_{\text {- } 5.88 \%}^{8.26 \%}$ |  | 0.9778 1.0067 |  | - $\begin{gathered}-1.006 \% \\ -5.86 \%\end{gathered}$ | (1.19\% | - | - | ${ }^{0.46 \%}$ 0.44\% |

HOBNI Historical and Forecasted Load, Customer and Connection Counts for 2015 Rate Application

|  | 2003 Actual | 2004 Actual | 2005 Actual | 2006 Actual | 2007 Actual | 2008 Actual | 2009 Actual | 2010 Actual | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Weather | 2015 Weather Normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers | 281,784,328 | 290,325,102 | 304,422,360 | 334,087,722 | 355,300,260 | 388,608,247 | 342,523,390 | 363,198,797 |  | 399,244,134 | 394,428,511 | 402,243,669 | 380,451,262 | 381,669,818 | $382,619,51{ }^{6}$ |
| kw | 531,189 | 505,001 | 515,785 | 589,471 | 639,861 | 712,935 | 699,851 | 684,290 |  | 711,951 | 716,743 | 736,260 | 701,011 | 718,200 | 719,987 |
| Average kWh Usage | 70,466,082 | 94,159,492 | 101,474,120 | 85,298,993 | 72,265,680 | 64,768,041 | 57,087,232 | 60,533, 133 |  | 65,207,356 | 65,738,885 | 67,040,612 | 63,408,544 | 63,611,636 | 3,769,919 |
| Average kW Usage | 132,797 | 163,784 | 171,928 | 150,503 | 130,141 | 118,823 | 116,142 | 114,048 |  | 118,659 | 119,457 | 122,710 | 116,835 | 119,700 | 119,998 |
| Customer Change Y Y |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{KWh} \mathrm{Change} Y$ Y kW Change $Y$ Y |  | ${ }_{\text {8,540,774 }}$ | $14,097,258$ 10,784 1, | ${ }^{29,665,362}$ | $21,218,538$ 50,390 | $33,301,987$ <br> 73,074 | $(46,084,857)$ | 20,675,407 | 31,2929714 32.453 |  | $3,184,377$ 4,792 | 7,815,158 19.517 $1,3,58$ | $(21,792,407)$ $(35249)$ | $1,218,557$ 17189 | 949,695 |
| Average KWh Usage Change Y $/$ Y |  | 23,713,410 | 7,314,628 | (16,175,127) | (13,033,313) | (7,497,639) | (7.680.809) | 3,445,901 | 5,204,952 |  | 530,730 | 1,302,526 | (3,632,068) | 203,093 | ${ }_{158,283}^{1,87}$ |
| Average kW Usage Change Y Y |  | 30,987 | 8,144 | (21,425) | (20,362) | (11,39) | (2,681) | (2,094) | 5,409 |  | 799 | 3,253 | $(5,875)$ | 2,865 | 298 |
| Customer Change Y/ \% |  | -22.92\% | -2.70\% | 30.56\% | 25.53\% | 22.03\% | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kWh Change YY \% |  | 3.03\% | 4.86\% | 9.74\% | 6.35\% | 9.37\% | -11.86\% | 6.04\% | 8.60\% |  | 0.81\% | 1.98\% | -5.42\% | 0.32\% | 0.25\% |
| kW Change Y \% \% |  | -4.93\% | 2.14\% | 14.29\% | 8.55\% | 11.42\% | -2.26\% | -1.80\% | 4.74\% |  | 0.67\% | 2.72\% | -4.79\% | 2.45\% | 0.25\% |
| Average KWW Usage Change \% Averae KW Usage Change \% |  |  | $7.77 \%$ $4.97 \%$ | $-15.94 \%$ $-1246 \%$ | -15.28\% $-13.53 \%$ | -10.3\%\% | -11.86\% | - $6.04 \%$ | ${ }_{1}^{1.08474}$ |  | 0.881\% | -1.98\% | -5.42\% | 年.32\% | (0.25\% |
| SLR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers |  |  |  |  |  |  |  |  |  | 2 | 2 | 2 | 2 | 2 |  |
| ${ }_{\text {L }}^{\text {Lamps }}$ Cornections | 30,338 <br> 19,210 | ${ }_{\substack{31,611 \\ 19,382}}$ | 32,938 <br> 19,532 | 34,221 19701 | ${ }_{\substack{35,762 \\ 20,02}}$ | 37,265 <br> 20282 | ${ }_{\substack{38,829 \\ 20.465}}$ | ${ }_{\substack{40,459 \\ 20691}}$ |  | ${ }_{\substack{42,158 \\ 21219}}$ | ${ }^{41,470}{ }_{2}$ | 42,363 21359 | ${ }_{\substack{4,516 \\ 21727}}$ | 44,887 202029 | ${ }_{3}^{46,301}$ |
| kWh | 19,110,906 | 20,964,771 | 21,908,421 | 23,791,245 | 25,786,193 | 26,786,993 | 27,343,426 | 28,336,125 |  | 29,651,502 | 29,752,537 | 30,597,265 | 31,25,952 | 32,28,800 | 33,306,955 |
| kW | 58,415 | 60,474 | ${ }^{65,522}$ | 70,150 | 76,385 | 79,929 | 81,921 | 84,893 |  | 88,254 | 90,235 | 92,995 | 95,410 | 97,585 | 100,672 |
| Average KWh Usage | 995 | 1,082 | 1,122 | 1,208 | 1,289 | 1,321 | 1,336 | 1,370 |  | 1,397 | 1,417 | 1,432 | 1,440 | 1,466 | 1,491 |
| Average kW Usage Customer Change Y Y | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |  | 4 | 4 | 4 | 4 | 4 | 5 |
| Lamp Change $Y$ Y $Y$ |  | 1,273 | 1,327 | 1,383 | 1,441 | 1,502 | 1,565 | 1,630 | 1,011 |  | (688) | 893 | 1,153 | 1,371 | ${ }^{1,414}$ |
| Comnection Change YY |  | 173 | 150 | 168 | 302 | 280 | 183 | 226 | 313 |  | (216) | 356 | 368 | 302 | 306 |
| ${ }^{\mathrm{KWH}}$ Change Y Y |  | 1,853,865 | 943,650 | 1,882,824 | 1,994,948 | 1,000,500 | 556,733 | 992,699 | 1,416,412 |  | 101,035 | 844,728 | 698,687 | 989,847 | 1,021,155 |
| ${ }^{\text {Average }} \mathrm{KWW}$ U Usage Change $Y$ Y |  | 2,059 | 5,048 | 4,628 | 6,235 | 3,544 | 1,992 | 2,972 | 5,342 |  | 1,981 | 2,760 | 2,415 | 2,175 | 3,086 |
|  |  | 87 | 40 | ${ }^{86}$ | 82 | 32 | 15 | 33 | 47 |  | 19 | 16 | 8 | 25 | ${ }^{26}$ |
| Average kW Usage Change YY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customer Change YY\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Lamp Change YY \% \% Comnection Change YY \% |  | 4.2.20\% | - ${ }_{\text {4.20\% }}^{0.77 \%}$ | 4.8.80\% | ${ }_{\text {l }}^{\text {4.20\% }}$ | ${ }^{4.20 \%}$ | - ${ }_{\text {4.20\% }}$ | - $4.12 \%$ | ${ }^{2.50 \%}$ |  | -1.63\% | 2.1.75\% | ${ }_{\text {l }}^{\text {2.7.72\% }}$ | 3.1.59\% | 3.1.39\% |
| KWh Change YYY\% |  | ${ }^{\text {9.70\% }}$ | 4.50\% | 8.59\% | 8.39\% | ¢.88\% | 2.08\% | 3.63\% | 5.00\% |  | -1.34\% | 2.84\% | 2.1.28\% | - ${ }_{\text {3 }}^{\text {3.1.16\% }}$ | ${ }_{\text {3 }}$ |
| KW Change YY \% |  | 3.52\% | 8.35\% | 7.06\% | 8.89\% | 4.64\% | 2.49\% | 3.63\% | 6.29\% |  | 2.24\% | 3.06\% | 2.60\% | 2.28\% | 3.16\% |
| Average KWW Usage Change \% |  | 8.72\% | 3.70\% | 7.67\% | 6.755\% | 2.45\% | 1.17\% | 2.50\% | 3.44\% |  | 1.37\% | 1.12\% | 0.55\% | 1.75\% | ${ }^{1.75 \%}$ |
| Embedded Distributor |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.75\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| kWh |  |  |  |  |  |  | 15,195,322 | 19,041,917 |  | 34,245,664 | 33,946,646 | 33,806,316 | 40,323,932 | 0 | 17,012,414 |
| kW |  |  |  |  |  |  | +34,990 | -39,259 |  | ${ }^{845,901}$ | ${ }^{84,159}$ | ${ }^{76,798}$ | 94,985 | 0 | 40,073 |
| Average kWh Usage Average $k W$ Usage |  |  |  |  |  |  | ${ }^{15,195,322} 34,990$ | ${ }_{\text {19, }}^{\text {394, } 3 \text {, } 299}$ |  | $\xrightarrow{34,24,5,64} 84,901$ | 33,946,646 84,159 | ${ }^{33,806,316} 77,798$ | ${ }_{\text {40,323,932 }}^{94,985}$ | 0 | $7,012,414$ 40,073 |
| Customer Change $Y$ Y |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 15,195,322 | 3,846,595 | 14,904,729 |  | ${ }^{(299,018)}$ | (140,330) | ${ }^{6,517,616}$ | $(40,323,932)$ | 17,012,414 |
| KW Change YY Averag kWh Usage Change YM |  |  |  |  |  |  | 34,990 | 4.270 3.846.595 | 44,900 14.904729 |  | (299, $\begin{gathered}(741) \\ \text { (29018) }\end{gathered}$ | (170.330) | 18,187 6.517.616 | $\underset{(40,32,9382)}{(94,98)}$ | 40,073 17.012.414 |
| Average kW Usage Change YY |  |  |  |  |  |  |  | 4,270 | 44,900 |  | (741) | (7,361) | 18,187 | (94,985) | 40,073 |
| Customer Change YY\% |  |  |  |  |  |  |  | 0.00\% | 0.00\% |  | ${ }^{0.000 \%}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| KW Change YY\% |  |  |  |  |  |  |  | 25.312\% | 78.27\% $114.37 \%$ |  | - ${ }^{-0.87 \% \%}$ | ${ }_{-}^{-0.75 \%}$ | - ${ }_{\text {23, }}^{\text {19.68\% }}$ | ${ }^{-1000000 \%}$ | 0.0.00\% |
| Average KWH Usage Change \% |  |  |  |  |  |  |  | 25.31\% | 1.7827 |  | -0.87\% | -0.41\% | 19.28\% | -100.00\% | 0.00\% |
| Listributed Generation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| kWh |  |  |  |  |  |  | 0 | 0 |  | 0 | ${ }_{1}^{1,718}$ | ${ }^{14,366}$ | 49,101 | ${ }^{113,715}$ | 178,816 |
| Average kWh Usage Customer Change Y/Y |  |  |  |  |  |  | 0 | 0 |  | 0 | 1,213 | 2,394 | ${ }^{2,619} 1{ }^{13}$ | ${ }_{2}^{2,642}$ | 2,646 25 |
| $\mathrm{kWh}^{\text {Change } Y \text { Y }}$ |  |  |  |  |  |  |  |  | 1,718 |  | 1,718 | 12,648 | 34,735 | 64,615 | 65,100 |
| Average kWh Usage Change Y/Y |  |  |  |  |  |  |  |  |  |  | 1,213 $0.000 \%$ 0 | 1,182 $32353 \%$ | - 224 | 23 $12.56 \%$ |  |
| KWh Change YY\% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 736.34\% | 241.78\% | 131.60\% | 57.25\% |
| Average KWh Usage Change \% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 97.47\% | 9.37\% | 0.89\% | 0.15\% |

HOBNI Historical and Forecasted Load, Customer and Connection Counts for 2015 Rate Application

|  | 2003 Actual | 2004 Actual | 2005 Actual | 2006 Actual | 2007 Actual | 2008 Actual | 2009 Actual | 2010 Actual | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Weather | 2015 Weather |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Energy From Waste Generation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers |  |  |  |  |  |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |
| ${ }_{\text {kWh }}^{\text {k }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average kWh Usage |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |
| Average kW Usage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customer Change $Y$ Y |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| kW Change YY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average KWW Usage Change Y Y |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average kW Usage Change Y/ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customer Change YY\% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| KWh Change $Y$ YY \% kWW Change $Y$ \% |  |  |  |  |  |  | -0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.0.0\% | 0.00\% | -$0.00 \%$ <br> $0.00 \%$ |
| Average KWW Usage Change \% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Average kW Usage Change \% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Back-up/Standby Power Customers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {cWh }}$ |  |  |  |  |  |  | - |  |  |  |  |  | ${ }^{1}$ | ${ }^{1}$ |  |
| kw |  |  |  |  |  |  |  |  |  |  |  |  | 40,935 | 54,580 | 54,580 |
| Average kWh Usage Averae kW Usage |  |  |  |  |  |  |  |  |  |  |  |  | 40.935 | 54.580 | 54,580 |
| Customer Change Y/Y |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  |
| kWh Change Y/Y |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| KW Change $Y$ YY Average KWh Usage Change $Y$ Y |  |  |  |  |  |  | : | - |  |  |  |  | 40,935 | 13,645 | : |
| Average KW Usage Change YY |  |  |  |  |  |  |  |  |  |  |  |  | 40,935 | 13,645 |  |
| Customer Change YY\% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| ${ }_{\text {KWh }} \mathrm{Change} \mathrm{Y}$ Y \% \% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| ${ }_{\text {AVerage }} \mathrm{WWW}$ U Usage Change \% |  |  |  |  |  |  | 0.00\% | 0.0.00\% | -0.00\% | -0.00\% | -0.00\% | 0.0.00\% | -0.00\% | 0.00\% | - ${ }_{\text {0.00\% }}^{0.00 \%}$ |
| Average KW Usage Change \% |  |  |  |  |  |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% |
| $\xrightarrow{\text { Total }}$ Customers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Customers Comenecions | 20,315 | ${ }^{106,558}$ | 20,691 | ${ }^{18,459}$ | ${ }_{21,252}$ | ${ }_{21,549}$ | ${ }_{21,745}$ | ${ }_{2}{ }_{21,984}$ |  | ${ }_{2}^{22,519}$ | ${ }_{22,372}$ | ${ }_{22,784}$ | ${ }_{23,204}$ | ${ }_{23,548}$ | 51,708 23,896 |
| kWh | 3,329,496,978 | 3,483,144,427 | 3,723,506,554 | 3,718,723,113 | 3,839,000,000 | 3,791,763,566 | 3,631,910,103 | 3,807,772,782 |  | 3,850,115,760 | 3,865,234,849 | 3,909,965,088 | 3,877,058,755 | 3,879,975,810 | 3,972,635,063 |
| kW from applicable classes | 5,272,572 | 5,463,110 | ${ }_{5,550,636}$ | 5,759,975 | 5,862,835 | 5,833,524 | 5,702,851 | 5,775,036 |  | 5,891,393 | 5,886,490 | 5,908,276 | 5,96, 8 , | 5,823,957 | 5,864,284 |


|  | 2009 Weather Normalized | 2010 Weather Normalized | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Weather Normalized | 2012 Weather Normalized | 2013 Weather Normalized | 2014 Weather Normal | 2015 Weather Normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual Purchases Excluding Adjustments | 3,727,941,968 | 3,911,054,142 |  |  | 3,968,502,600 | 4,043,243,029 | 4,027,156,664 |  |  |
| Wholesale Market Participant Adjustment | 0 | 0 |  |  | $(30,590,627)$ | $(52,650,053)$ | $(57,812,380)$ |  |  |
| Embedded Distributor | 15,570,646 | 19,512,252 |  |  | 34,785,128 | 34,641,332 | 41,319,933 |  |  |
| Distributed Generation | 0 | 0 |  |  | 1,797 | 15,026 | 51,355 |  |  |
| Total Actual Purchases | 3,743,512,615 | 3,930,566,395 |  |  | 3,972,698,898 | 4,025,249,333 | 4,010,715,573 |  |  |
| Predicted kWh Purchases from Regression | 3,781,079,154 | 3,889,917,169 |  | 3,962,537,442 | 3,969,819,877 | 4,039,088,423 | 4,036,523,438 | 4,109,065,670 | 4,194,973,860 |
| Wholesale Market Participant Adjustment |  |  |  |  | $(30,590,627)$ | $(52,650,053)$ | $(57,812,380)$ | $(57,815,958)$ | $(57,825,129)$ |
| CDM Adjustment |  |  |  | $(19,000,000)$ |  |  |  | $(45,863,104)$ | $(53,726,380)$ |
| Embedded Distributor | 15,570,646 | 19,512,252 |  | 34,785,128 | 34,785,128 | 34,641,332 | 41,319,933 |  | 17,432,620 |
| Distributed Generation |  |  |  |  | 1,797 | 15,026 | 51,355 | 117,684 | 184,913 |
| Total Predicted Purchases | 3,796,649,801 | 3,909,429,422 |  | 3,978,322,570 | 3,974,016,175 | 4,021,094,727 | 4,020,082,347 | 4,005,504,291 | 4,101,039,885 |
| \% Difference (Predicted/Actual) | 1.4\% | -0.5\% |  |  | 0.0\% | -0.1\% | 0.2\% |  |  |
| Billed kWh | 3,632,175,994 | 3,807,969,432 |  | 3,850,115,760 | 3,865,533,886 | 3,910,338,523 | 3,877,345,712 | 3,879,975,810 | 3,972,635,063 |
|  |  | 102.971\% |  |  | 99.892\% | 101.185\% | 99.975\% | 99.637\% | 102.385\% |
| By Class |  |  |  |  |  |  |  |  |  |
| Residential |  |  |  |  |  |  |  |  |  |
| Customers | 121,041 | 123,013 |  | 124,916 | 126,317 | 129,699 | 133,723 | 137,303 | 140,979 |
| kWh | 1,115,888,474 | 1,177,664,858 |  | 1,123,427,772 | 1,192,668,901 | 1,220,835,179 | 1,205,670,409 | 1,249,454,159 | 1,308,264,983 |
| Average kWh Usage | 9,219 | 9,574 |  | 8,993 | 9,442 | 9,413 | 9,016 | 9,100 | 9,280 |
| Customer Change Y/Y | 121,041 | 1,972 | 3,304 |  | 1,401 | 3,382 | 4,024 | 3,580 | 3,676 |
| kWh Change Y/Y | 1,115,888,474 | 61,776,384 | 15,004,043 |  | 69,241,129 | 28,166,278 | (15,164,771) | 43,783,751 | 58,810,824 |
| Average kWh Usage Change Y/Y | 9,219 | 354 | (131.63) |  | 448 | (29) | (397) | 84 | 180 |
| Customer Change Y/Y \% |  | 1.63\% | 102.69\% |  | 1.12\% | 2.68\% | 3.10\% | 2.68\% | 2.68\% |
| kWh Change Y/Y \% |  | 5.54\% | 101.27\% |  | 6.16\% | 2.36\% | -1.24\% | 3.63\% | 4.71\% |
| Average kWh Usage Change \% |  | 3.84\% | 0.9863 |  | 4.99\% | -0.31\% | -4.21\% | 0.93\% | 1.98\% |
| GS<50 |  |  |  |  |  |  |  |  |  |
| Customers | 7,529 | 7,752 |  | 7,893 | 8,080 | 8,328 | 8,532 | 8,758 | 8,989 |
| kWh | 290,164,103 | 293,428,537 |  | 291,481,574 | 310,673,553 | 318,669,115 | 324,486,114 | 338,649,623 | 354,668,870 |
| Average kWh Usage | 38,541 | 37,854 |  | 36,929 | 38,448 | 38,267 | 38,032 | 38,669 | 39,454 |
| Customer Change Y/Y | 7,529 | 223 | 329 |  | 187 | 247 | 204 | 226 | 232 |
| kWh Change Y/Y | 290,164,103 | 3,264,435 | 17,245,016 |  | 19,191,979 | 7,995,562 | 5,816,999 | 14,163,508 | 16,019,247 |
| Average kWh Usage Change Y/Y | 38,541 | (686) | 593.69 |  | 1,519 | (181) | (235) | 637 | 785 |
| Customer Change Y/Y \% |  | 2.96\% | 104.24\% |  | 2.37\% | 3.06\% | 2.45\% | 2.65\% | 2.65\% |
| kWh Change Y/Y \% |  | 1.13\% | 105.88\% |  | 6.58\% | 2.57\% | 1.83\% | 4.36\% | 4.73\% |
| Average kWh Usage Change \% |  | -1.78\% | 1.0157 |  | 4.11\% | -0.47\% | -0.61\% | 1.67\% | 2.03\% |
| USL |  |  |  |  |  |  |  |  |  |
| Customers | 66 | 62 |  | 62 | 61 | 61 | 59 | 57 | 56 |
| Connections | 1,280 | 1,293 |  | 1,300 | 1,369 | 1,424 | 1,477 | 1,519 | 1,562 |
| kWh | 5,162,842 | 5,256,468 |  | 4,969,698 | 5,509,573 | 5,621,483 | 5,767,707 | 5,818,253 | 5,931,733 |
| Average kWh Usage | 4,033 | 4,065 |  | 3,822 | 4,025 | 3,947 | 3,905 | 3,831 | 3,798 |
| Customer Change Y/Y | 66 | (4) | (1) |  | (1) | (1) | (2) | (2) | (1) |
| Connection Change Y/Y | 1,280 | 13 | 76 |  | 68 | 55 | 53 | 42 | 43 |
| kWh Change Y/Y | 5,162,842 | 93,626 | 253,105 |  | 539,874 | 111,910 | 146,224 | 50,546 | 113,479 |
| Average kWh Usage Change Y/Y | 4,033 | 32 | (40) |  | 203 | (78) | (43) | (74) | (32) |
| Customer Change Y/Y \% |  | -6.30\% | -1.34\% |  | -1.34\% | -0.82\% | -3.02\% | -2.57\% | -2.57\% |
| Connection Change Y/Y \% |  | 1.02\% | 5.86\% |  | 5.26\% | 4.04\% | 3.73\% | 2.82\% | 2.82\% |
| kWh Change Y/Y \% |  | 1.81\% | 4.82\% |  | 10.86\% | 2.03\% | 2.60\% | 0.88\% | 1.95\% |
| Average kWh Usage Change \% |  | 0.79\% | 0.9901 |  | 5.32\% | -1.93\% | -1.09\% | -1.89\% | -0.85\% |
| GS>50 |  |  |  |  |  |  |  |  |  |
| Customers | 1,554 | 1,539 |  | 1,552 | 1,537 | 1,525 | 1,511 | 1,501 | 1,491 |
| kWh | 1,090,747,173 | 1,097,960,912 |  | 1,131,611,317 | 1,108,606,699 | 1,112,266,841 | 1,089,802,508 | 1,067,572,851 | 1,064,497,599 |


|  | 2009 Weather Normalized | 2010 Weather Normalized | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Weather Normalized | 2012 Weather Normalized | 2013 Weather Normalized | 2014 Weather Normal | 2015 Weather Normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kW | 3,076,590 | 3,074,950 |  | 3,101,358 | 3,074,519 | 3,102,853 | 3,064,724 | 2,988,434 | 2,979,826 |
| Average kWh Usage | 702,047 | 713,425 |  | 729,031 | 721,280 | 729,156 | 721,047 | 711,225 | 714,081 |
| Average kW Usage | 1,980 | 1,998 |  | 1,998 | 2,000 | 2,034 | 2,028 | 1,991 | 1,999 |
| Customer Change Y/Y | 1,554 | (15) | (2) |  | (15) | (12) | (14) | (10) | (10) |
| kWh Change Y/Y | 1,090,747,173 | 7,213,740 | 10,645,786 |  | (23,004,619) | 3,660,143 | $(22,464,334)$ | $(22,229,657)$ | $(3,075,253)$ |
| kW Change Y/Y | 3,076,590 | $(1,641)$ | (430) |  | $(26,839)$ | 28,334 | $(38,129)$ | $(76,290)$ | $(8,608)$ |
| Average kWh Usage Change Y/Y | 702,047 | 11,378 | 7,855 |  | $(7,751)$ | 7,877 | $(8,109)$ | $(9,823)$ | 2,856 |
| Average kW Usage Change Y/Y | 1,980 | 18 | 2 |  | ) | 34 | (6) | (37) | 8 |
| Customer Change Y/Y \% |  | -0.94\% | -0.13\% |  | -0.98\% | -0.75\% | -0.92\% | -0.69\% | -0.69\% |
| kWh Change Y/Y \% |  | 0.66\% | 0.97\% |  | -2.03\% | 0.33\% | -2.02\% | -2.04\% | -0.29\% |
| kW Change Y/Y \% |  | -0.05\% | -0.01\% |  | -0.87\% | 0.92\% | -1.23\% | -2.49\% | -0.29\% |
| Average kWh Usage Change \% |  | 1.62\% | 1.10\% |  | -1.06\% | 1.09\% | -1.11\% | -1.36\% | 0.40\% |
| Average kW Usage Change \% |  | 0.90\% | 0.12\% |  | 0.12\% | 1.69\% | -0.31\% | -1.81\% | 0.40\% |
| Intermediate |  |  |  |  |  |  |  |  |  |
| Customers | 114 | 114 |  | 106 | 112 | 112 | 115 | 115 | 115 |
| kWh | 801,126,399 | 853,839,633 |  | 843,484,098 | 813,890,185 | 815,930,763 | 817,925,218 | 804,411,590 | 806,154,180 |
| kW | 1,870,180 | 1,948,559 |  | 1,904,929 | 1,924,038 | 1,947,462 | 1,992,559 | 1,965,158 | 1,969,146 |
| Average kWh Usage | 7,032,565 | 7,489,821 |  | 7,960,906 | 7,272,288 | 7,317,765 | 7,102,100 | 7,001,507 | 7,033,497 |
| Average kW Usage | 16,417 | 17,093 |  | 17,979 | 17,192 | 17,466 | 17,302 | 17,105 | 17,180 |
| Customer Change Y/Y | 114 | 0 | (2) |  |  | (0) |  | (0) | (0) |
| kWh Change Y/Y | 801,126,399 | 52,713,233 | $(39,949,447)$ |  | $(29,593,913)$ | 2,040,577 | 1,994,455 | $(13,513,628)$ | 1,742,590 |
| kW Change Y/Y | 1,870,180 | 78,379 | $(24,521)$ |  | 19,109 | 23,423 | 45,097 | $(27,401)$ | 3,988 |
| Average kWh Usage Change Y/Y | 7,032,565 | 457,256 | $(217,534)$ |  | $(688,618)$ | 45,477 | $(215,664)$ | $(100,593)$ | 31,990 |
| Average kW Usage Change Y/Y | 16,417 | 676 | 99 |  | (787) | 274 | (165) | (197) | 76 |
| Customer Change Y/Y \% |  | 0.07\% | -1.83\% |  | 5.63\% | -0.37\% | 3.29\% | -0.24\% | -0.24\% |
| kWh Change Y/Y \% |  | 6.58\% | -4.68\% |  | -3.51\% | 0.25\% | 0.24\% | -1.65\% | 0.22\% |
| kW Change Y/Y \% |  | 4.19\% | -1.26\% |  | 1.00\% | 1.22\% | 2.32\% | -1.38\% | 0.20\% |
| Average kWh Usage Change \% |  | 6.50\% | -2.90\% |  | -8.65\% | 0.63\% | -2.95\% | -1.42\% | 0.46\% |
| Average kW Usage Change \% |  | 4.11\% | 0.58\% |  | -4.38\% | 1.60\% | -0.94\% | -1.14\% | 0.44\% |
| Large Use |  |  |  |  |  |  |  |  |  |
| Customers | 6 | 6 |  | 6 | 6 | 6 | 6 | 6 | 6 |
| kWh | 344,971,561 | 365,551,177 |  | 391,244,134 | 396,857,107 | 406,313,173 | 382,721,457 | 381,669,818 | 382,619,513 |
| kW | 701,832 | 688,722 |  | 711,951 | 721,156 | 743,709 | 705,194 | 718,200 | 719,987 |
| Average kWh Usage | 57,495,260 | 60,925,196 |  | 65,207,356 | 66,142,851 | 67,718,862 | 63,786,910 | 63,611,636 | 63,769,919 |
| Average kW Usage | 116,972 | 114,787 |  | 118,659 | 120,193 | 123,951 | 117,532 | 119,700 | 119,998 |
| Customer Change Y/Y | 6 |  | - |  |  |  | - |  |  |
| kWh Change Y/Y | 344,971,561 | 20,579,616 | 31,305,930 |  | 5,612,973 | 9,456,066 | $(23,591,716)$ | $(1,051,639)$ | 949,695 |
| kW Change Y/Y | 701,832 | $(13,110)$ | 32,434 |  | 9,205 | 22,553 | $(38,515)$ | 13,006 | 1,787 |
| Average kWh Usage Change Y/Y | 57,495,260 | 3,429,936 | 5,217,655 |  | 935,496 | 1,576,011 | $(3,931,953)$ | $(175,273)$ | 158,283 |
| Average kW Usage Change Y/Y | 116,972 | $(2,185)$ | 5,406 |  | 1,534 | 3,759 | $(6,419)$ | 2,168 | 298 |
| Customer Change Y/Y \% |  | 0.00\% | 0.00\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kWh Change Y/Y \% |  | 5.97\% | 8.56\% |  | 1.43\% | 2.38\% | -5.81\% | -0.27\% | 0.25\% |
| kW Change Y/Y \% |  | -1.87\% | 4.71\% |  | 1.29\% | 3.13\% | -5.18\% | 1.84\% | 0.25\% |
| Average kWh Usage Change \% |  | 5.97\% | 8.56\% |  | 1.43\% | 2.38\% | -5.81\% | -0.27\% | 0.25\% |
| Average kW Usage Change \% |  | -1.87\% | 4.71\% |  | 1.29\% | 3.13\% | -5.18\% | 1.84\% | 0.25\% |
| SLR |  |  |  |  |  |  |  |  |  |
| Customers | 2 | 2 |  | 2 | 2 | 2 | 2 | 2 | 2 |
| Lamps | 38,829 | 40,459 |  | 42,158 | 41,470 | 42,363 | 43,516 | 44,887 | 46,301 |
| Connections | 20,465 | 20,691 |  | 21,219 | 21,003 | 21,359 | 21,727 | 22,029 | 22,335 |
| kWh | 27,653,325 | 28,657,273 |  | 29,651,502 | 30,077,898 | 30,923,126 | 31,629,254 | 32,285,800 | 33,306,955 |
| kW | 82,849 | 85,855 |  | 88,254 | 91,222 | 93,985 | 96,426 | 97,585 | 100,672 |
| Average kWh Usage | 1,351 | 1,385 |  | 1,397 | 1,432 | 1,448 | 1,456 | 1,466 | 1,491 |
| Average kW Usage | 4 | 4 |  | 4 | 4 | 4 | 4 | 4 | 5 |
| Customer Change Y/Y | 2 | - | - |  | - | - | - | - | - |
| Lamp Change Y/Y | 38,829 | 1,630 | 1,011 |  | (688) | 893 | 1,153 | 1,371 | 1,414 |
| Connection Change Y/Y | 20,465 | 226 | 313 |  | (216) | 356 | 368 | 302 | 306 |


|  | 2009 Weather Normalized | 2010 Weather Normalized | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Weather Normalized | 2012 Weather Normalized | 2013 Weather Normalized | 2014 Weather Normal | 2015 Weather Normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh Change Y/Y | 27,653,325 | 1,003,948 | 1,420,625 |  | 426,396 | 845,228 | 706,128 | 656,546 | 1,021,155 |
| kW Change Y/Y | 82,849 | 3,006 | 5,367 |  | 2,968 | 2,764 | 2,441 | 1,159 | 3,086 |
| Average kWh Usage Change Y/Y | 1,351 | 34 | 47 |  | 35 | 16 | 8 | 10 | 26 |
| Average kW Usage Change Y/Y | 4 | 0 | 0 |  | 0 | 0 | 0 | (0) | 0 |
| Customer Change Y/Y \% |  | 0.00\% | 0.00\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Lamp Change Y/Y \% |  | 4.20\% | 2.50\% |  | -1.63\% | 2.15\% | 2.72\% | 3.15\% | 3.15\% |
| Connection Change Y/Y \% |  | 1.10\% | 1.51\% |  | -1.02\% | 1.70\% | 1.72\% | 1.39\% | 1.39\% |
| kWh Change Y/Y \% |  | 3.63\% | 4.96\% |  | 1.44\% | 2.81\% | 2.28\% | 2.08\% | 3.16\% |
| kW Change Y/Y \% |  | 3.63\% | 6.25\% |  | 3.36\% | 3.03\% | 2.60\% | 1.20\% | 3.16\% |
| Average kWh Usage Change \% |  | 2.50\% | 3.40\% |  | 2.48\% | 1.10\% | 0.55\% | 0.68\% | 1.75\% |
| Average kW Usage Change \% |  | 2.50\% | 4.67\% |  | 4.42\% | 1.31\% | 0.86\% | -0.18\% | 1.75\% |
| Embedded Distributor |  |  |  |  |  |  |  |  |  |
| Customers |  | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | 15,461,213 | 19,238,567 |  | 34,245,664 | 34,245,664 | 34,179,598 | 40,610,366 | 0 | 17,012,414 |
| kW | 35,602 | 39,665 |  | 84,901 | 84,901 | 77,646 | 95,660 | 0 | 40,073 |
| Average kWh Usage | 15,461,213 | 19,238,567 |  | 34,245,664 | 34,245,664 | 34,179,598 | 40,610,366 | 0 | 17,012,414 |
| Average kW Usage | 35,602 | 39,665 |  | 84,901 | 84,901 | 77,646 | 95,660 | 0 | 40,073 |
| Customer Change Y/Y | 1 | - | - |  | - | - | - | - | - |
| kWh Change Y/Y | 15,461,213 | 3,777,354 | 15,007,097 |  | - | $(66,066)$ | 6,430,767 | $(40,610,366)$ | 17,012,414 |
| kW Change Y/Y | 35,602 | 4,063 | 45,236 |  | - | $(7,254)$ | 18,013 | $(95,660)$ | 40,073 |
| Average kWh Usage Change Y/Y |  | 3,777,354 | 15,007,097 |  | - | $(66,066)$ | 6,430,767 | $(40,610,366)$ | 17,012,414 |
| Average kW Usage Change Y/Y |  | 4,063 | 45,236 |  | - | $(7,254)$ | 18,013 | $(95,660)$ | 40,073 |
| Customer Change Y/Y \% |  | 0.00\% | 0.00\% |  | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kWh Change Y/Y \% |  | 24.43\% | 78.01\% |  | 0.00\% | -0.19\% | 18.81\% | -100.00\% | 0.00\% |
| kW Change Y/Y \% |  | 11.41\% | 114.05\% |  | 0.00\% | -8.54\% | 23.20\% | -100.00\% | 0.00\% |
| Average kWh Usage Change \% |  | 24.43\% | 1.7801 |  | 0.00\% | -0.19\% | 18.81\% | -100.00\% | 0.00\% |
| Average kW Usage Change \% |  | 11.41\% | 2.1405 |  | 0.00\% | -8.54\% | 23.20\% | -100.00\% | 0.00\% |
|  |  |  |  |  |  |  |  |  |  |
| Customers | 0 | 0 |  | 0 | 1 | 6 | 19 | 43 | 68 |
| kWh | 0 | 0 |  | 0 | 1,736 | 14,519 | 49,624 | 113,715 | 178,816 |
| Average kWh Usage | 0 | 0 |  | 0 | 1,225 | 2,420 | 2,647 | 2,642 | 2,646 |
| Customer Change Y/Y | - | - | 1 |  | 1 | 5 | 13 | 24 | 25 |
| kWh Change Y/Y | - | - | 1,736 |  | 1,736 | 12,783 | 35,105 | 64,092 | 65,100 |
| Average kWh Usage Change Y/Y | - | - | 1,225.42 |  | 1,225 | 1,194 | 227 | (5) | 4 |
| Customer Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 323.53\% | 212.50\% | 129.56\% | 57.02\% |
| kWh Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 736.34\% | 241.78\% | 129.16\% | 57.25\% |
| Average kWh Usage Change \% | 0.00\% | 0.00\% | 0.00\% |  | 0.00\% | 97.47\% | 9.37\% | -0.17\% | 0.15\% |
| Energy From Waste Generation |  |  |  |  |  |  |  |  |  |
| Customers | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |
| kWh | - | - |  | - | - | - | - | - | - |
| kW | - | - |  | - | - | - | - | - | - |
| Average kWh Usage | - | - |  | - | - | - | - | - | - |
| Average kW Usage | - | - |  | - | - | - | - | - | - |
| Customer Change Y/Y | 1 | - | - | - | - | - | - | - | - |
| kWh Change Y/Y | - | - | - | - | - | - | - | - | - |
| kW Change Y/Y | - | - | - | - | - | - | - | - | - |
| Average kWh Usage Change Y/Y | - | - | - | - | - | - | - | - | - |
| Average kW Usage Change Y/Y | - | - | - | - | - | ${ }^{-}$ | - | - | - |
| Customer Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kWh Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kW Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Average kWh Usage Change \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Average kW Usage Change \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Back-up/Standby Power |  |  |  |  |  |  |  |  |  |
| Customers | - | - |  | - | - | - | 1 | 1 | 1 |

HOBNI Weather Normalized Historical and Forecasted Load, Customer and Connection for 2015 Rate Application

|  | 2009 Weather Normalized | 2010 Weather Normalized | 2011 Actual vs 2010 Actual | 2011 Board Approved | 2011 Weather Normalized | 2012 Weather Normalized | 2013 Weather Normalized | 2014 Weather Normal | 2015 Weather Normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kWh |  |  |  |  |  |  |  |  |  |
| kW | - | - |  | - | - | - | 40,935 | 54,580 | 54,580 |
| Average kWh Usage | - | - |  | - | - | - | - | - | - |
| Average kW Usage | - | - |  | - | - | - | 40,935 | 54,580 | 54,580 |
| Customer Change Y/Y | - | - | - | - | - | - | 1 | - | - |
| kWh Change Y/Y | - | - | - | - | - | - | - | - | - |
| kW Change Y/Y | - | - | - | - | - | - | 40,935 | 13,645 | - |
| Average kWh Usage Change Y/Y | - | - | - | - | - | - | - | - | - |
| Average kW Usage Change Y/Y | ${ }^{-}$ | - | - | - | - | - | 40,935 | 13,645 | - |
| Customer Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kWh Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| kW Change Y/Y \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% |
| Average kWh Usage Change \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Average kW Usage Change \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% |
| Total |  |  |  |  |  |  |  |  |  |
| Customers | 130,313 | 132,489 | - | 134,539 | 136,119 | 139,740 | 143,970 | 147,788 | 151,708 |
| Connections | 21,745 | 21,984 | - | 22,519 | 22,372 | 22,784 | 23,204 | 23,548 | 23,896 |
| kWh | 3,691,175,091 | 3,841,597,426 | - | 3,850,115,760 | 3,892,531,317 | 3,944,753,798 | 3,898,662,657 | 3,879,975,810 | 3,972,635,063 |
| kW from applicable classes | 5,767,053 | 5,837,751 | - | 5,891,393 | 5,895,836 | 5,965,656 | 5,995,498 | 5,823,957 | 5,864,284 |

Regression Model \# One

|  |  | Purchased | Heating Decrree Davs | $\frac{\text { Cooling Dearee }}{\text { Days }}$ | $\frac{\text { Ontario Real GDP }}{\text { Monthly \% }}$ | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | $\frac{\text { Number of Peak }}{\text { Hours }}$ | Number of Customers | Population | Predicted Purchases, | Varriances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 318,825,772 | 849.1 | 0.0 | 101.59\% | 31 | 0 | 336 | 123,570 | 373,417 | 323,256,508 | 4,430,736 | 1.39\% |
| 2004 | Feb-04 | 292,561,276 | 631.7 | 0.0 | 101.81\% | 29 | - | 320 | 124,466 | 374,833 | 297,579,548 | 5,018,272 | 1.72\% |
| 2004 | Mar-04 | 304,403,356 | 487.3 | 0.0 | 102.02\% | 31 | 1 | 368 | 124,884 | 376,250 | 304,693,228 | 289,872 | 0.10\% |
| 2004 | Apr-04 | 280,729,504 | 331.5 | 0.0 | 102.24\% | 30 | 1 | 336 | 125,343 | 377,667 | 285,947,436 | 5,217,932 | 1.86\% |
| 2004 | May-04 | 284,754,157 | 158.9 | 8.6 | 102.45\% | 31 | 1 | 320 | 125,702 | 379,083 | 285,197,202 | 443,045 | 0.16\% |
| 2004 | Jun-04 | 296,130,055 | 44.2 | 31.6 | 102.67\% | 30 | 0 | 352 | 126,445 | 380,500 | 295,492,226 | -637,829 | -0.22\% |
| 2004 | Jul-04 | 316,526,152 | 3.6 | 86.4 | 102.89\% | 31 | 0 | 336 | 126,961 | 381,917 | 324,891,609 | 8,365,458 | 2.64\% |
| 2004 | Aug-04 | 311,532,144 | 12.8 | 59.6 | 103.11\% | 31 | 0 | 336 | 127,757 | 383,333 | 312,327,729 | 795,584 | 0.26\% |
| 2004 | Sep-04 | 300,510,639 | 30.0 | 41.2 | 103.32\% | 30 | 1 | 336 | 128,704 | 384,750 | 292,993,511 | -7,517,128 | -2.50\% |
| 2004 | Oct-04 | 288,181,524 | 226.3 | 1.5 | 103.54\% | 31 | 1 | 320 | 129,339 | 386,167 | 287,417,327 | -764,197 | -0.27\% |
| 2004 | Nov-04 | 296,760,230 | 379.1 | 0.0 | 103.76\% | 30 | 1 | 352 | 130,303 | 387,583 | 294,142,028 | -2,618,202 | -0.88\% |
| 2004 | Dec-04 | 315,899,546 | 643.4 | 0.0 | 103.98\% | 31 | 0 | 336 | 130,956 | 389,000 | 317,465,802 | 1,646,256 | 0.52\% |
| 2005 | Jan-05 | 329,967,591 | 770.0 | 0.0 | 104.22\% | 31 | 0 | 320 | 131,351 | 391,000 | 322,332,365 | -7,635,226 | -2.31\% |
| 2005 | Feb-05 | 293,588,958 | 616.4 | 0.0 | 104.45\% | 28 | 0 | 320 | 131,775 | 393,000 | 296,846,870 | 3,257,912 | 1.11\% |
| 2005 | Mar-05 | 313,508,514 | 608.6 | 0.0 | 104.69\% | 31 | 1 | 352 | 132,095 | 395,000 | 314,832, 142 | 1,323,628 | 0.42\% |
| 2005 | Apr-05 | 285,449,756 | 306.8 | 0.0 | 104.93\% | 30 | 1 | ${ }^{336}$ | ${ }^{132,548}$ | 397,000 | 290,974,281 | 5,524,525 | 1.94\% |
| 2005 | May-05 | 287,810,113 | 189.4 | 0.8 | 105.17\% | 31 | 1 | 336 | 132,946 | 399,000 | 291,837,230 | 4,027,117 | 1.40\% |
| 2005 | Jun-05 | 354,566,496 | 8.9 | 146.3 | 105.41\% | 30 | 0 | 352 | 133,426 | 401,000 | 357,897,335 | 3,330,838 | 0.94\% |
| 2005 | Jul-05 | 365,920,796 | 0.0 | 188.7 | 105.65\% | 31 | 0 | 320 | 133,937 | 403,000 | 380,338,447 | 14,417,651 | 3.94\% |
| 2005 | Aug-05 | 358,835,199 | 0.2 | 140.7 | 105.89\% | 31 | 0 | 352 | 134,411 | 405,000 | 361,915,590 | 3,080,391 | 0.86\% |
| 2005 | Sep-05 | 314,383,694 | 22.6 | 52.1 | 106.13\% | 30 | 1 | 336 | 135,185 | 407,000 | 305,243,056 | -9,140,638 | -2.91\% |
| 2005 | Oct-05 | 304,341,532 | 220.2 | 7.6 | 106.37\% | 31 | 1 | 320 | 135,713 | 409,000 | 297,474,808 | -6,866,724 | -2.26\% |
| 2005 | Nov-05 | 311,009,155 | 388.4 | 0.0 | 106.61\% | 30 | 1 | 352 | 136,467 | 411,000 | 302,143,892 | $-8,865,263$ | -2.85\% |
| 2005 | Dec-05 | 329,446,542 | 665.3 | 0.0 | 106.85\% | 31 | 0 | 320 | 136,843 | 413,000 | 323,839,412 | -5,607,131 | -1.70\% |
| 2006 | Jan-06 | 329,248,077 | 551.8 | 0.0 | 107.07\% | 31 | 0 | 336 | 137,418 | 414,667 | 320,856,987 | $-8,391,090$ | -2.55\% |
| 2006 | Feb-06 | 304,825,405 | 604.3 | 0.0 | 107.29\% | 28 | 0 | 320 | 137,684 | 416,333 | 303,756,021 | -1,069,383 | -0.35\% |
| 2006 | Mar-06 | 325,241,932 | 516.6 | 0.0 | 107.50\% | 31 | 1 | 368 | 138,077 | 418,000 | 319,907,782 | -5,334,149 | -1.64\% |
| 2006 | Apr-06 | 289,070,045 | 293.3 | 0.0 | 107.72\% | 30 | 1 | 304 | 138,376 | 419,667 | 292,636,818 | 3,566,773 | 1.23\% |
| 2006 | May-06 | 310,032,606 | 136.9 | 26.0 | 107.94\% | 31 | 1 | 352 | 138,710 | 421,333 | 311,535,306 | 1,559,700 | 0.50\% |
| 2006 | Jun-06 | 333,895,801 | 19.5 | 73.6 167.3 | 108.15\% | 30 31 | 0 | 352 320 | 138,913 +139218 | 423,000 424,667 | $329,304,588$ $376,958,394$ | $-4,591,213$ $5.732,691$ | $-1.38 \%$ $1.54 \%$ |
| 2006 2006 | Jul-06 Aug-06 | $371,225,703$ $353,706,210$ | 0.0 4.2 | 167.3 101.6 | 108.37\% | 31 31 | 0 | 320 352 | 139,218 139,677 | 424,667 426,333 | $376,958,394$ $349,772,149$ | 5,732,691 $-3,934,061$ | 1.54\% $-1.11 \%$ |
| 2006 | Sep-06 | 298,103,405 | 80.9 | 12.9 | 108.81\% | 30 | 1 | 320 | 140,113 | 428,000 | 299,460,374 | ${ }_{-4,643,031}$ | -1.56\% |
| 2006 | Oct-06 | 307,942,171 | 288.3 | 1.1 | 109.03\% | 31 | 1 | 336 | 140,876 | 429,667 | 307,492,573 | -449,598 | -0.15\% |
| 2006 | Nov-06 | 312,999,806 | 382.2 | 0.0 | 109.25\% | 30 | 1 | 352 | 141,076 | 431,333 | 309,110,545 | -3,889,260 | -1.24\% |
| 2006 | Dec-06 | 317,982,954 | 500.5 | 0.0 | 109.47\% | ${ }^{31}$ | 0 | 304 | 141,291 | 433,000 | $319,861,537$ $\mathbf{3 3 5} 5923$ | 1,878,584 | 0.59\% |
| 2007 | Jan-07 | 332,533,628 | 647.1 | 0.0 | 109.65\% | 31 | 0 | 352 | 141,799 | 434,417 | 335,592,396 | 3,058,768 | 0.92\% |
| 2007 | Feb-07 | $318,174,492$ 330139211 | 740.1 546.7 | 0.0 | 109.82\% | ${ }_{31}^{28}$ | 1 | 320 352 | 142,119 142417 | 435,833 437250 | $317,988,244$ 325909201 | $-206,249$ $-4,420210$ | $-0.06 \%$ $-134 \%$ |
| 2007 2007 | Mar-07 Apr-07 | $330,329,411$ $301,193,988$ | 546.7 356.4 | 0.0 0.0 | $110.00 \%$ $110.18 \%$ | 31 30 | 1 | 352 320 | 142,417 <br> 142,744 | 437,250 438,667 | $325,999,201$ $305,276,762$ | $-4,420,210$ $4,082,774$ | $-1.34 \%$ $1.36 \%$ |
| 2007 | May-07 | 313,881,665 | 136.4 | 22.4 | 110.36\% | 31 | 1 | 352 | 143,194 | 440,083 | 316,349,932 | 2,468,267 | 0.79\% |
| 2007 | Jun-07 | 352,305,947 | 16.5 | 99.2 | 110.53\% | 30 | 0 | ${ }^{336}$ | 143,586 | 441,500 | 345,883,845 | $-6,422,103$ | ${ }^{-1.82 \%}$ |
| 2007 | Jul-07 | 350,987,926 | 3.2 | 106.1 | 110.71\% | 31 | 0 | 336 | 144,178 | 442,917 | 355,032,741 | 4,044,815 | 1.15\% |
| 2007 | Aug-07 | 363,680,291 | 5.2 | 141.0 | 110.89\% | 31 | 0 | 352 304 | 144,838 | 444,333 | $375,549,146$ 31794 | ${ }^{11,868,856}$ | ${ }^{3.26 \%}$ |
| 2007 | Sep-07 | 320,412,436 | 36.9 | 47.5 | 111.07\% | 30 | 1 | 304 | 145,264 | 445,750 | $311,794,061$ 317081825 | $-8,618,374$ -163 | -2.69\% |
| 2007 | Oct-07 | $318,245,128$ 32351579 | 137.7 462.5 | ${ }^{19.8}$ | 111.25\% | 31 | 1 | $\begin{array}{r}352 \\ 352 \\ \hline\end{array}$ | 146,037 146813 | ${ }_{448,167}$ | $317,081,825$ 318653941 | $-1,163,303$ $-4,861838$ | -0.37\% |
| 2007 | ${ }^{\text {Nov-07 }}$ | $383,515,779$ $333,331,077$ | 462.5 630.7 | 0.0 0.0 | 111.43\% | 30 31 | 1 | 352 304 | 146,813 147,458 | 448,583 450,000 | $318,653,941$ $331,739,562$ | $-4,861,838$ $-1,591,514$ | $-1.50 \%$ $-0.48 \%$ |
| 2008 | Jan-08 | 344,575,662 | 623.5 | 0.0 | 111.55\% | 31 | 0 | 352 | 147,966 | 451,250 | 338,613,261 | -5,962,401 | -1.73\% |
| 2008 | Feb-08 | 326,113,372 | 674.7 | 0.0 | 111.49\% | 29 | 0 | 320 | 148,406 | 452,500 | 324,020,970 | -2,092,402 | -0.64\% |
| 2008 | Mar-08 | 331,077,485 | 610.2 | 0.0 | 111.43\% | 31 | 1 | 304 | 148,695 | 453,750 | 324,535,521 | -6,541,964 | -1.98\% |
| 2008 | Apr-08 | 303,230,329 | 253.9 | 0.0 | 111.37\% | 30 | 1 | 352 | 149,036 | 455,000 | 306,974,049 | 3,743,720 | 1.23\% |
| 2008 | May-08 | 301,056,523 | 193.5 | 2.5 | 111.31\% | 31 | 1 | 336 | 149,376 | 456,250 | 308,290,857 | 7,234,334 | 2.40\% |
| 2008 | Jun-08 | 334,428,490 | 22.7 | 71.5 | 111.25\% | 30 | 0 | 336 | 149,525 | 457,500 | 333,112,294 | -1,316,197 | -0.39\% |
| 2008 | Jul-08 | 363,118,367 | 1.0 | 111.0 | 111.19\% | 31 | 0 | 352 | 149,860 | 458,750 | 360,107,364 | -3,011,002 | -0.83\% |
| 2008 | Aug-08 | 341,326,026 | 12.7 | 64.0 | 111.13\% | 31 | 0 | 320 | 150,043 | 460,000 | 331,915,564 | $-9,410,463$ | -2.76\% |
| 2008 | Sep-08 | 317,499,538 | 59.0 | 26.7 | 111.08\% | 30 |  | 336 | 150,235 | 461,250 | 306,622,603 | -10,876,935 | -3.43\% |
| 2008 | Oct-08 | 310,230,042 | 278.6 | 0.0 | 111.02\% | 31 | 1 | 352 | 150,639 | 462,500 | 313,111,905 | 2,881,864 | 0.93\% |
| 2008 | Nov-08 | 313,840,850 | 451.6 | 0.0 | 110.96\% | 30 | 1 | 304 | ${ }^{150,967}$ | 463,750 | 308,507,179 | -5,333,670 | $-1.70 \%$ |
| 2008 | Dec-08 | 328,946,880 | ${ }^{654.6}$ | 0.0 | 110.90\% | 31 | 0 | ${ }^{336}$ | 151,156 15158 | 465,000 | 335,489, 355 | 6,542,475 | 1.99\% |
| 2009 | Jan-09 | 340,125,286 | 830.2 | 0.0 | 110.59\% | 31 | 0 | ${ }^{336}$ | 151,358 | 467,667 | $344,006,863$ <br> 0087297 | 3,881,577 | 1.14\% |
| 2009 | Feb-09 | 298,423,228 | 606.4 5338 | 0.0 | 110.29\% | 28 31 | 0 | 304 <br> 352 | 151,427 151559 |  | $308,372,597$ $\mathbf{3 2 3} 977423$ |  |  |
| 2009 2009 | Mar-09 Apr-09 | $317,878,968$ $288,048,157$ | 533.8 305.8 | 0.0 1.2 | 109.99\% $109.69 \%$ | 31 30 | 1 | 352 320 | 151,559 151,619 | 473,000 475,667 | $323,977,423$ $300,738,469$ | 6,098,455 $12,690,313$ | 1.92\% $4.41 \%$ |
| 2009 | May-09 | 279,549,261 | 158.8 | 6.9 | 109.39\% | 31 | 1 | 320 | 151,734 | 478,333 | 301,072,690 | 21,523,429 | 7.70\% |
| 2009 | Jun-09 | 301,280,403 | 49.3 | 34.2 | 109.09\% | 30 | 0 | 352 | 151,834 | 481,000 | 312,635,185 | 11,354,782 | 3.77\% |
| 2009 | Jul-09 | 312,634,481 | 6.2 | 43.7 | 108.79\% | 31 | 0 | 352 | 152,017 | 483,667 | 320,362,110 | 7,727,629 | 2.47\% |
| 2009 | Aug-09 | 342,969,587 | 9.8 | 91.0 | 108.49\% | 31 | 0 | 320 | 152,184 | 486,333 | 338,530,712 | -4,438,875 | -1.29\% |
| 2009 | Sep-09 | 305,441,230 | 55.2 | 20.9 | 108.20\% | 30 | 1 | 336 | 152,275 | 489,000 | 296,149,815 | -9,291,415 | -3.04\% |
| 2009 | Oct-09 | 307,520,270 | 287.8 | 0.0 | 107.90\% | 31 | 1 | 336 | 152,458 | 491,667 | 303,218,481 | $-4,301,789$ | -1.40\% |
| 2009 | Nov-09 | 303,012,736 | 361.2 | 0.0 | 107.6\% | 30 | 1 | 320 | 152,600 | 494,333 | $297,848,786$ $\mathbf{3 2 7} 793369$ | $-5,163,950$ $-364,992$ | -1.70\% |
| 2009 | Dec-09 | 331,058,361 | 631.3 | 0.0 | 107.31\% | 31 | 0 | 352 | 152,791 | 497,000 | 327,793,369 | -3,264,992 | -0.99\% |

Regression Model \# One

|  |  | Purchased | Heating Dearee Davs | Cooling Dearee | Ontario Real GDP Monthly | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | $\frac{\text { Number of Peak }}{\text { Hours }}$ | Number of | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 338,841,930 | 720.0 | 0.0 | 107.57\% | 31 | 0 | 320 | 152,971 | 497,583 | 328,193,773 | -10,648,157 | -3.14\% |
| 2010 | Feb-10 | 307,563,620 | 598.3 | 0.0 | 107.83\% | 28 | 0 | 304 | 153,108 | 498,167 | 301,970,568 | $-5,593,052$ | -1.82\% |
| 2010 | Mar-10 | 317,385,709 | 422.8 | 0.0 | 108.09\% | 31 | 1 | 368 | 153,432 | 498,750 | 316,071,862 | -1,313,847 | -0.41\% |
| 2010 | Apr-10 | 288,580,435 | 225.1 | 0.0 | 108.35\% | 30 | 1 | 320 | 153,606 | 499,333 | 292,783,211 | 4,202,776 | 1.46\% |
| 2010 | May-10 | 317,160,058 | 107.9 | 45.7 | 108.62\% | 31 | 1 | 320 | 153,766 | 499,917 | 316,287,859 | -872,199 | -0.28\% |
| 2010 | Jun-10 | 327,911,313 | 21.7 | 58.7 | 108.88\% | 30 | 0 | 352 | 154,026 | 500,500 | 323,343,789 | -4,567,524 | -1.39\% |
| 2010 | Jul-10 | 387,084,558 | 1.8 | 164.9 | 109.15\% | 31 | 0 | 336 | 154,334 | 501,083 | 379,832,604 | -7,251,954 | -1.87\% |
| 2010 | Aug-10 | 372,085,384 | 2.1 | 138.8 | 109.41\% | 31 | 0 | 336 | 154,779 | 501,667 | 367,371,798 | -4,713,586 | -1.27\% |
| 2010 | Sep-10 | 309,880,175 | 78.2 | 31.5 | 109.68\% | 30 | 1 | 336 | 155,109 | 502,250 | 306,818,874 | -3,061,300 | -0.99\% |
| 2010 | Oct-10 | 301,944,347 | 241.6 | 0.0 | 109.94\% | 31 | 1 | 320 | 155,544 | 502,833 | 303,782,368 | 1,838,021 | 0.61\% |
| 2010 | Nov-10 | 309,107,401 | 405.3 | 0.0 | 110.21\% | 30 | 1 | 336 | 155,939 | 503,417 | 309,635,000 | 527,600 | 0.17\% |
| 2010 | Dec-10 | 333,509,214 | 676.2 | 0.0 | 110.48\% | 31 | 0 | 368 | 156,272 | 504,000 | 341,070,565 | 7,561,351 | 2.27\% |
| 2011 | Jan-11 | 346,157,898 | 775.3 | 0.0 | 110.64\% | 31 | 0 | 320 | 156,635 | 505,659 | 339,224,020 | -6,933,878 | -2.00\% |
| 2011 | Feb-11 | 312,406,685 | 654.2 | 0.0 | 110.80\% | 28 | 0 | 304 | 156,847 | 507,319 | 312,794,142 | 387,457 | 0.12\% |
| 2011 | Mar-11 | 334,049,130 | 572.8 | 0.0 | 110.97\% | 31 | 1 | 368 | 157,135 | 508,978 | 331,687,166 | -2,361,964 | -0.71\% |
| 2011 | Apr-11 | 299,909,526 | 332.3 | 0.0 | 111.13\% | 30 | 1 | 304 | 157,417 | 510,637 | 303,359,313 | 3,449,787 | 1.15\% |
| 2011 | May-11 | 308,520,842 | 134.1 | 13.0 | 111.30\% | 31 | 1 | 336 | 157,766 | 512,296 | 310,884,812 | 2,363,970 | 0.77\% |
| 2011 | Jun-11 | 331,406,120 | 19.0 | 52.2 | 111.47\% | 30 | 0 | 352 | 158,225 | 513,956 | 326,764,175 | -4,641,945 | -1.40\% |
| 2011 | Jul-11 | 399,276,724 | 0.0 | 198.6 | 111.63\% | 31 | 0 | 320 | 158,541 | 515,615 | 400,767,301 | 1,490,577 | 0.37\% |
| 2011 | Aug-11 | 367,773,295 | 0.0 | 122.2 | 111.80\% | 31 | 0 | 352 | 158,871 | 517,274 | 367,879,591 | 106,296 | 0.03\% |
| 2011 | Sep-11 | 313,781,747 | 48.2 | 39.7 | 111.96\% | 30 | 1 | 336 | 159,293 | 518,933 | 315,539,950 | 1,758,202 | 0.56\% |
| 2011 | Oct-11 | 312,095,897 | 235.5 | 2.4 | 112.13\% | 31 | 1 | 336 | 159,764 | 520,593 | 313,140,119 | 1,044,222 | 0.33\% |
| 2011 | Nov-11 | 314,340,389 | 342.1 | 0.0 | 112.30\% | 30 | 1 | 352 | 160,172 | 522,252 | 314,536,671 | 196,282 | 0.06\% |
| 2011 | Dec-11 | 328,784,347 | 534.0 | 0.0 | 112.46\% | 31 | 0 | 336 | 160,422 | 523,911 | 334,050,262 | 5,265,916 | 1.60\% |
| 2012 | Jan-12 | 342,744,742 | 611.1 | 0.0 | 112.60\% | 31 | 0 | 336 | 160,564 | 525,085 | 338,570,807 | -4,173,935 | -1.22\% |
| 2012 | Feb-12 | 317,435,425 | 531.7 | 0.0 | 112.74\% | 29 | 0 | 320 | 160,858 | 526,259 | $\begin{array}{r}320,213,348 \\ \hline 202734\end{array}$ | 2,777,922 | 0.88\% |
| 2012 | Mar-12 | 323,010,362 | 349.4 | 0.2 | 112.88\% | 31 | 1 | 352 | 161,103 | 527,433 | 322,754,364 | -275,998 | $-0.09 \%$ |
| 2012 | Apr-12 | 301,644,611 | 321.7 | 0.0 | 113.02\% | 30 | 1 | 320 | 161,361 | 528,606 | 310,518,868 | 8,874,257 | 2.94\% |
| 2012 | May-12 | 326,399,579 | 80.7 | 36.7 | 113.16\% | 31 | 1 | 352 | 161,659 | 529,780 | 327,598,055 | 1,198,476 | 0.37\% |
| 2012 | Jun-12 | 357,950,417 | 23.2 | 101.6 | 113.30\% | 30 | 0 | 336 | 162,106 | 530,954 | 354,308,400 | -3,642,017 | -1.02\% |
| 2012 | Jul-12 | 407,476,192 | 0.0 | 195.4 | 113.45\% | 31 | 0 | 352 | 162,563 | 532,128 | 409,042,198 | 1,566,006 | 0.38\% |
| 2012 | Aug-12 | 375,206,978 | 2.0 | 112.1 | 113.57\% | 31 | 0 | ${ }^{352}$ | 162,978 | 533,302 | 367,617,993 | -7,588,985 | -2.02\% |
| 2012 | Sep-12 | 319,835,103 | 85.0 | 35.6 | 113.73\% | 30 | 1 | 304 | 163,310 | 534,476 | 315,032,622 | -4,802,481 | -1.50\% |
| 2012 | Oct-12 | 318,167,447 | 242.5 | 1.1 | 113.87\% | 31 | 1 | 352 | 163,821 | 535,649 | $\begin{array}{r}319,885,239 \\ \hline 32394\end{array}$ | 1,717,792 | 0.54\% |
| 2012 | Nov-12 | 324,129,468 | ${ }^{434.0}$ | 0.0 | 114.01\% | 30 | 1 | 352 | 164,393 | 536,823 | 323,742,691 | -386,777 | -0.12\% |
| 2012 | Dec-12 | 329,242,704 | 533.5 | 0.0 | 114.15\% | 31 | 0 | 304 | 164,718 | 537,997 | 333,187,194 | 3,944,490 | 1.20\% |
| 2013 | Jan-13 | 348,513,720 | 624.4 | 0.0 | 114.27\% | 31 | 0 | 352 | 165,120 | 539,268 | 345,840,521 | -2,673,199 | -0.77\% |
| 2013 | Feb-13 | 317,590,943 | 631.5 | 0.0 | 114.40\% | 28 | 0 | 304 | 165,419 | 540,539 | 320,986,565 | 3,395,621 | 1.07\% |
| 2013 | Mar-13 | 333,368,808 | 554.8 | 0.0 | 114.52\% | 31 | 1 | 320 | 165,718 | 541,809 | 332,425,232 | -943,576 | -0.28\% |
| 2013 | Apr-13 | 312,277,396 | 358.6 | 0.0 | 114.64\% | 30 | 1 | ${ }^{352}$ | 166,144 | 543,080 | 321,336,194 | 9,058,799 | 2.90\% |
| 2013 | May-13 | 320,170,213 | 109.1 | 23.1 | 114.77\% | 31 | 1 | 352 | 166,550 | 544,351 | 326,011,622 | 5,841,409 | 1.82\% |
| 2013 | Jun-13 | 335,997,920 | 33.4 | 59.3 | 114.89\% | 30 | 0 | 320 | 166,778 | 545,622 | 334,865,275 | -1,132,645 | -0.34\% |
| 2013 | Jul-13 | 385,395,998 | 1.4 | 133.3 | 115.01\% | 31 | 0 | 352 | 167,168 | 546,892 | 381,684,283 | $-3,711,714$ | -0.96\% |
| 2013 | Aug-13 | 362,278,437 | 4.6 | 93.2 | 115.14\% | 31 | 0 | 336 | 167,611 | 548,163 | 359,460,096 | $-2,818,340$ | -0.78\% |
| 2013 | Sep-13 | 318,477,237 | 89.6 | 28.0 | 115.26\% | 30 | 1 | 320 | 167,963 | 549,434 | 317,640,292 | -836,945 | -0.26\% |
| 2013 | Oct-13 | 318,760,032 | 224.2 | 0.0 | 115.39\% | 31 | 1 | 352 | 168,366 | 550,705 | 322,029,707 | 3,269,675 | 1.03\% |
| 2013 | Nov-13 | 329,707,415 | 478.3 | 0.0 | 115.51\% | 30 | 1 | 336 | 168,896 | 551,975 | 327,214,125 | -2,493,290 | -0.76\% |
| 2013 | Dec-13 | 344,618,546 | 687.7 | 0.0 | 115.64\% | 31 | 0 | 320 | ${ }^{169,366}$ | 553,246 | 347,413,328 | 2,794,782 | 0.81\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31 | 0 | 352 | 169,653 | 554,325 | 353,659,301 | 353,659,301 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28 | 0 | 304 | 169,940 | 555,403 | 324,889,621 | 324,869,621 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31 | 1 | 320 | 170,226 | 556,482 | $334,846,937$ 323565 | 334,846,937 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30 31 | 1 1 | 352 336 | 170,513 170800 | 557,561 558.639 | $323,256,055$ 327664,381 | $323,256,055$ 327664,381 |  |
| 2014 | May-14 |  | 140.6 25.8 | 18.6 <br> 72.8 | 116.84\% | 31 30 | 0 | ${ }_{336}$ | 171,087 | 559,718 | 348,746,504 | 348,746,504 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31 | 0 | 352 | 171,374 | 560,797 | 390,068,295 | 390,068,295 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31 | 0 | 320 | 171,661 | 561,875 | 369,140,733 | 369,140,733 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30 | 1 | 336 | 171,947 | 562,954 | 327,090,920 | 327,090,920 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31 | 1 | 352 | 172,234 | 564,033 | 330,485,833 | 330,485,833 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30 | 1 | 320 | 172,521 | 565,111 | $327,343,966$ 35,757867 | 327,343,966 |  |
| 2014 2015 | Dec-14 Jan-15 |  | 615.7 700.3 | 0.0 0.0 | 118.06\% | 31 31 | 0 | 336 336 | 172,808 <br> 173,218 | 566,190 567,269 | $352,757,867$ $357,860,723$ | $352,757,867$ $357,860,723$ |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28 | 0 | 304 | 173,629 | 568,347 | 331,663,419 | 331,663,419 |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31 | 1 | 352 | 174,039 | 569,426 | 346,750,068 | 346,750,068 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30 | 1 | 336 | 174,450 | 570,504 | 327,686,448 | 327,686,448 |  |
| 2015 | May-15 |  | 140.6 | 18.6 | 119.28\% | 31 | 1 | 320 | 174,860 | 571,583 | 332,172,005 | 332,172,005 |  |
| 2015 | Jun-15 |  | 25.8 | 72.8 1395 | 119.53\% | 30 | 0 | 352 | 175,271 | 572,662 | 358,364,826 | 358,364,826 |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31 | 0 | 352 | 175,682 | 573,740 | 397,248,257 | 397,248,257 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31 | 0 | 320 | 176,092 | 574,819 | 376,399,299 | 376,399,299 |  |
| 2015 2015 | Sep-15 Oct-15 |  | 58.6 238.3 | $\begin{array}{r}33.6 \\ 3.4 \\ \hline\end{array}$ | 120.27\% | 30 31 | 1 | 336 336 | 176,503 <br> 176,913 <br> 17 | 575,897 576,976 | $334,428,549$ $335,386,482$ | $334,428,549$ $335,386,482$ |  |
| 2015 | Nov-15 |  | 408.5 | 0.0 | 120.77\% | 30 | 1 | 336 | 177,324 | 578,054 | 337,357,614 | 337,357,614 |  |
| 2015 | Dec-15 |  | 615.7 | 0.0 | 121.02\% | 31 | 0 | 352 | 177,734 | 579,133 | 362,851,967 | 362,851,967 |  |
|  |  |  | Weather Norm | ized |  |  |  |  |  |  |  |  |  |

Regression Model \# One


Regression Model \# Two


Regression Model \# Two

|  |  |  |  | Cooling Degree | Ontario Real GDP | Number of Days in |  | Number of Peak | Predicted | Variances |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Purchased | Heating Degree Days | Days | Monthly \% | Month | Spring Fall Fiag | Hours | Purchases | (kWh) | \% Variance |
| 2010 | Jan-10 | 338,841,930 | 720.0 | 0.0 | 107.57\% | 31 | 0 | 320 | 328,506,982 | -10,334,948 | -3.05\% |
| 2010 | Feb-10 | 307,563,620 | 598.3 | 0.0 | 107.83\% | 28 | 0 | 304 | 302,238,491 | $-5,325,129$ | -1.73\% |
| 2010 | Mar-10 | 317,385,709 | 422.8 | 0.0 | 108.09\% | 31 | 1 | 368 | 316,408,882 | -976,827 | -0.31\% |
| 2010 | Apr-10 | 288,580,435 | 225.1 | 0.0 | 108.35\% | 30 | 1 | 320 | 292,996,525 | 4,416,090 | 1.53\% |
| 2010 | May-10 | 317,160,058 | 107.9 | 45.7 | 108.62\% | 31 | 1 | 320 | 316,469,068 | -690,990 | -0.22\% |
| 2010 | Jun-10 | 327,911,313 | 21.7 | 58.7 | 108.88\% | 30 | 0 | 352 | 323,517,281 | -4,394,032 | -1.34\% |
| 2010 | Jul-10 | 387,084,558 | 1.8 | 164.9 | 109.15\% | 31 | 0 | 336 | 380,106,159 | -6,978,399 | -1.80\% |
| 2010 | Aug-10 | 372,085,384 | 2.1 | 138.8 | 109.41\% | 31 | 0 | 336 | 367,646,482 | -4,438,902 | -1.19\% |
| 2010 | Sep-10 | 309,880,175 | 78.2 | 31.5 | 109.68\% | 30 | 1 | 336 | 307,007,694 | -2,872,480 | -0.93\% |
| 2010 | Oct-10 | 301,944,347 | 241.6 | 0.0 | 109.94\% | 31 | 1 | 320 | 303,921,467 | 1,977,121 | 0.65\% |
| 2010 | Nov-10 | 309,107,401 | 405.3 | 0.0 | 110.21\% | 30 | 1 | 336 | 309,845,392 | 737,992 | 0.24\% |
| 2010 | Dec-10 | 333,509,214 | 676.2 | 0.0 | 110.48\% | 31 | 0 | 368 | 341,252,747 | 7,743,533 | 2.32\% |
| 2011 | Jan-11 | 346,157,898 | 775.3 | 0.0 | 110.64\% | 31 | 0 | 320 | 339,311,428 | -6,846,470 | -1.98\% |
| 2011 | Feb-11 | 312,406,685 | 654.2 | 0.0 | 110.80\% | 28 | 0 | 304 | 312,827,642 | 420,957 | 0.13\% |
| 2011 | Mar-11 | 334,049,130 | 572.8 | 0.0 | 110.97\% | 31 | 1 | 368 | 331,740,510 | -2,308,620 | -0.69\% |
| 2011 | Apr-11 | 299,909,526 | 332.3 | 0.0 | 111.13\% | 30 | 1 | 304 | 303,269,660 | 3,360,134 | 1.12\% |
| 2011 | May-11 | 308,520,842 | 134.1 | 13.0 | 111.30\% | 31 | 1 | 336 | 310,794,299 | 2,273,458 | 0.74\% |
| 2011 | Jun-11 | 331,406,120 | 19.0 | 52.2 | 111.47\% | 30 | 0 | 352 | 326,724,104 | -4,682,016 | -1.41\% |
| 2011 | Jul-11 | 399,276,724 | 0.0 | 198.6 | 111.63\% | 31 | 0 | 320 | 400,830,067 | 1,553,343 | 0.39\% |
| 2011 | Aug-11 | 367,773,295 | 0.0 | 122.2 | 111.80\% | 31 | 0 | 352 | 367,828,914 | 55,618 | 0.02\% |
| 2011 | Sep-11 | 313,781,747 | 48.2 | 39.7 | 111.96\% | 30 | 1 | 336 | 315,416,112 | 1,634,365 | 0.52\% |
| 2011 | Oct-11 | 312,095,897 | 235.5 | 2.4 | 112.13\% | 31 | 1 | 336 | 312,958,517 | 862,620 | 0.28\% |
| 2011 | Nov-11 | 314,340,389 | 342.1 | 0.0 | 112.30\% | 30 | 1 | 352 | 314,388,348 | 47,959 | 0.02\% |
| 2011 | Dec-11 | 328,784,347 | 534.0 | 0.0 | 112.46\% | 31 | 0 | 336 | 333,730,275 | 4,945,928 | 1.50\% |
| 2012 | Jan-12 | 342,744,742 | 611.1 | 0.0 | 112.60\% | 31 | 0 | 336 | 338,177,224 | -4,567,518 | -1.33\% |
| 2012 | Feb-12 | 317,435,425 | 531.7 | 0.0 | 112.74\% | 29 | 0 | 320 | 319,822,646 | 2,387,220 | 0.75\% |
| 2012 | Mar-12 | 323,010,362 | 349.4 | 0.2 | 112.88\% | 31 | 1 | 352 | 322,361,072 | -649,290 | -0.20\% |
| 2012 | Apr-12 | 301,644,611 | 321.7 | 0.0 | 113.02\% | 30 | 1 | 320 | 310,090,261 | 8,445,650 | 2.80\% |
| 2012 | May-12 | 326,399,579 | 80.7 | 36.7 | 113.16\% | 31 | 1 | 352 | 327,225,742 | 826,163 | 0.25\% |
| 2012 | Jun-12 | 357,950,417 | 23.2 | 101.6 | 113.30\% | 30 | 0 | 336 | 354,019,955 | -3,930,462 | -1.10\% |
| 2012 | Jul-12 | 407,476,192 | 0.0 | 195.4 | 113.45\% | 31 | 0 | 352 | 408,946,490 | 1,470,297 | 0.36\% |
| 2012 | Aug-12 | 375,206,978 | 2.0 | 112.1 | 113.59\% | 31 | 0 | 352 | 367,430,097 | -7,776,881 | -2.07\% |
| 2012 | Sep-12 | 319,835,103 | 85.0 | 35.6 | 113.73\% | 30 | 1 | 304 | 314,743,075 | -5,092,028 | -1.59\% |
| 2012 | Oct-12 | 318,167,447 | 242.5 | 1.1 | 113.87\% | 31 | 1 | 352 | 319,669,626 | 1,502,179 | 0.47\% |
| 2012 | Nov-12 | 324,129,468 | 434.0 | 0.0 | 114.01\% | 30 | 1 | 352 | 323,652,581 | -476,887 | -0.15\% |
| 2012 | Dec-12 | 329,242,704 | 533.5 | 0.0 | 114.15\% | 31 | 0 | 304 | 332,949,654 | 3,706,950 | 1.13\% |
| 2013 | Jan-13 | 348,513,720 | 624.4 | 0.0 | 114.27\% | 31 | 0 | 352 | 345,704,152 | -2,809,568 | -0.81\% |
| 2013 | Feb-13 | 317,590,943 | 631.5 | 0.0 | 114.40\% | 28 | 0 | 304 | 320,833,979 | 3,243,035 | 1.02\% |
| 2013 | Mar-13 | 333,368,808 | 554.8 | 0.0 | 114.52\% | 31 | 1 | 320 | 332,270,868 | -1,097,940 | -0.33\% |
| 2013 | Apr-13 | 312,277,396 | 358.6 | 0.0 | 114.64\% | 30 | 1 | 352 | 321,279,306 | 9,001,910 | 2.88\% |
| 2013 | May-13 | 320,170,213 | 109.1 | 23.1 | 114.77\% | 31 | 1 | 352 | 325,987,354 | 5,817,141 | 1.82\% |
| 2013 | Jun-13 | 335,997,920 | 33.4 | 59.3 | 114.89\% | 30 | 0 | 320 | 334,768,615 | -1,229,306 | -0.37\% |
| 2013 | Jul-13 | 385,395,998 | 1.4 | 133.3 | 115.01\% | 31 | 0 | 352 | 381,745,227 | -3,650,771 | -0.95\% |
| 2013 | Aug-13 | 362,278,437 | 4.6 | 93.2 | 115.14\% | 31 | 0 | 336 | 359,482,438 | -2,795,999 | -0.77\% |
| 2013 | Sep-13 | 318,477,237 | 89.6 | 28.0 | 115.26\% | 30 | 1 | 320 | 317,632,070 | -845,167 | -0.27\% |
| 2013 | Oct-13 | 318,760,032 | 224.2 | 0.0 | 115.39\% | 31 | 1 | 352 | 322,036,921 | 3,276,889 | 1.03\% |
| 2013 | Nov-13 | 329,707,415 | 478.3 | 0.0 | 115.51\% | 30 | 1 | 336 | 327,310,938 | -2,396,477 | -0.73\% |
| 2013 | Dec-13 | 344,618,546 | 687.7 | 0.0 | 115.64\% | 31 | 0 | 320 | 347,471,571 | 2,853,026 | 0.83\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31 | 0 | 352 | 353,729,998 | 353,729,998 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28 | 0 | 304 | 324,900,077 | 324,900,077 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31 | 1 | 320 | 334,853,447 | 334,853,447 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30 | 1 | 352 | 323,287,422 | 323,287,422 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31 | 1 | 336 | 327,637,222 | 327,637,222 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 116.84\% | 30 | 0 | 336 | 348,726,244 | 348,726,244 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31 | 0 | 352 | 390,114,165 | 390,114,165 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31 | 0 | 320 | 369,055,762 | 369,055,762 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30 | 1 | 336 | 326,965,529 | 326,965,529 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31 | 1 | 352 | 330,287,961 | 330,287,961 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30 | 1 | 320 | 327,088,715 | 327,088,715 |  |
| 2014 | Dec-14 |  | 615.7 | 0.0 | 118.06\% | 31 | 0 | 336 | 352,419,127 | 352,419,127 |  |
| 2015 | Jan-15 |  | 700.3 | 0.0 | 118.31\% | 31 | 0 | 336 | 357,525,642 | 357,525,642 |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28 | 0 | 304 | 331,345,204 | 331,345,204 |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31 | 1 | 352 | 346,487,936 | 346,487,936 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30 | 1 | 336 | 327,414,241 | 327,414,241 |  |
| 2015 | May-15 |  | 140.6 | 18.6 | 119.28\% | 31 |  | 320 | 331,875,226 | 331,875,226 |  |
| 2015 | Jun-15 |  | 25.8 | 72.8 | 119.53\% | 30 | 0 | 352 | 358,154,800 | 358,154,800 |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31 | 0 | 352 | 397,115,217 | 397,115,217 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31 | 0 | 320 | 376,169,194 | 376,169,194 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30 | 1 | 336 | 334,191,744 | 334,191,744 |  |
| 2015 | Oct-15 |  | 238.3 | 3.4 | 120.52\% | 31 | 1 | 336 | 335,087,875 | 335,087,875 |  |
| 2015 | Nov-15 |  | 408.5 | 0.0 | 120.77\% | 30 | 1 | 336 | 337,081,188 | 337,081,188 |  |
| 2015 | Dec-15 |  | 615.7 | 0.0 | 121.02\% | 31 | 0 | 352 | 362,525,593 | 362,525,593 |  |
|  |  |  | Weather Nor | alized |  |  |  |  |  |  |  |


|  | Actual | Predicted | Variance (kWh) | Variace \% |
| :---: | :---: | :---: | :---: | :---: |
| 200120022003 |  |  |  |  |
|  |  |  |  |  |
| 2004 | 3,606,734,355 | 3,618,703,271 | -11,968,916 | -0.33\% |
| 2005 | 3,848,828,345 | 3,847,030,944 | 1,797,401 | 0.05\% |
| 2006 | 3,854,274,114 | 3,831,498,914 | 22,775,200 | 0.59\% |
| 2007 | 3,958,591,768 | 3,951,695,295 | 6,896,473 | 0.17\% |
| 2008 | 3,915,443,564 | 3,896,414,064 | 19,029,500 | 0.49\% |
| 2009 | 3,727,941,968 | 3,781,079,154 | -53,137,186 | -1.43\% |
| 2010 | 3,911,054,142 | 3,889,917,169 | 21,136,973 | 0.54\% |
| 2011 | 3,968,502,600 | 3,969,819,877 | -1,317,277 | -0.03\% |
| 2012 | 4,043,243,029 | 4,039,088,423 | 4,154,606 | 0.10\% |
| 2013 | 4,027,156,664 | 4,036,523,438 | -9,366,774 | -0.23\% |
| 2014 |  | 4,109,065,670 |  |  |
| 2015 |  | 4,194,973,860 |  |  |


| Total $38,861,770,550$ | $38,861,770,550$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |

SUMMARY OUTPUT

| Regression Statistics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiple R | 97.39\% |  |  |  |  |  |  |  |
| R Square | 94.85\% |  |  |  |  |  |  |  |
| Adjusted R Square | 94.58\% |  |  |  |  |  |  |  |
| Standard Error | 5,815,931.18 |  |  |  |  |  |  |  |
| Observations | 120 |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | df | SS | MS | F | Significance $F$ |  |  |  |
| Regression | 6 | $7.04342 \mathrm{E}+16$ | 1.1739E+16 | 347.05 | 0.0000 |  |  |  |
| Residual | 113 | $3.82223 \mathrm{E}+15$ | $3.38251 \mathrm{E}+13$ |  |  |  |  |  |
| Total | 119 | $7.42565 \mathrm{E}+16$ |  |  |  |  |  |  |
|  | Coeficients | Standard | $t$ Stat | P-value | Lower 95\% | Upper 95\% | Lower $950 \%$ | Upper $950 \%$ |
| Intercept | Coelcients | Stancara, Eror | ${ }_{\text {(8.2446) }}$ | 0.0000 | (274,928,686) | (168,397,111) | Lower 95.0\% | ${ }_{-168397111}$ |
| Heating Degree Days | 53,035 | 3,575 | 14.8354 | 0.0000 | 45,952 | 60,117 | 45952.43392 | 60117.49593 |
| Cooling Degree Days | 504,004 | 20,539 | 24.5387 | 0.0000 | 463,312 | 544,696 | 463312.2633 | 544695.8085 |
| Ontario Real GDP Monthly \% | 256,369,295 | 15,310,538 | 16.7446 | 0.0000 | 226,036,359 | 286,702,231 | 226036359.3 | 286702230.8 |
| Number of Days in Month | 5,981,256 | 731,227 | 8.1798 | 0.0000 | 4,532,564 | 7,429,948 | 4532564.374 | 7429947.605 |
| Spring Fall Flag | $(5,294,424)$ | 1,509,855 | (3.5066) | 0.0007 | $(8,285,720)$ | $(2,303,129)$ | -8285719.738 | -2303128.771 |
| Number of Peak Hours | 158,718 | 33,182 | 4.7833 | 0.0000 | 92,978 | 224,457 | 92978.33 | 224457.3571 |

Heating Degree Days and Cooling Degree Days Data

| $\mathbf{1 0}$ Year Average - 2004 to 2013 |  |  |
| :--- | ---: | ---: |
| Month | HDD | CDD |
| Jan | 700.25 | - |
| Feb | 628.93 | - |
| Mar | 520.30 | 0.02 |
| Apr | 308.54 | 0.12 |
| May | 140.57 | 18.57 |
| Jun | 25.84 | 72.82 |
| Jul | 1.72 | 139.54 |
| Aug | 5.36 | 106.42 |
| Sep | 58.56 | 33.61 |
| Oct | 238.27 | 3.35 |
| Nov | 408.47 | - |
| Dec | 615.72 | - |
| Total | $\mathbf{3 , 6 5 2 . 5 3}$ | $\mathbf{3 7 4 . 4 5}$ |


| 10 Year Average - 1994 to 2013 |  |  |
| :--- | ---: | ---: |
| Month | HDD | CDD |
| Jan | 730.15 | - |
| Feb | 622.71 | - |
| Mar | 548.00 | - |
| Apr | 342.65 | 1.26 |
| May | 162.83 | 11.20 |
| Jun | 32.07 | 67.92 |
| Jul | 5.25 | 118.59 |
| Aug | 7.41 | 102.32 |
| Sep | 70.74 | 34.16 |
| Oct | 250.81 | 1.92 |
| Nov | 423.04 | - |
| Dec | 601.84 | - |
| Total | $3,797.50$ | $\mathbf{3 3 7 . 3 7}$ |


| 20 Year Average - 1994 to 2013 |  |  |
| :--- | ---: | ---: |
| Month | HDD | CDD |
| Jan | 715.20 | - |
| Feb | 625.82 | - |
| Mar | 534.15 | 0.01 |
| Apr | 325.60 | 0.69 |
| May | 151.70 | 14.89 |
| Jun | 28.96 | 70.37 |
| Jul | 3.49 | 129.07 |
| Aug | 6.39 | 104.37 |
| Sep | 64.65 | 33.89 |
| Oct | 244.54 | 2.64 |
| Nov | 415.76 | - |
| Dec | 608.78 | - |
| Total | $3,725.02$ | $\mathbf{3 5 5 . 9 1}$ |

Regression Model Using 20 Year HDD and CDD Averages

|  |  | Purchased | Heating Dearee Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Spring Fall Flaq | Number of Peak | Predicted <br> Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 318,825,772 | 849.1 | 0.0 | 101.59\% | 31 | 0 | 336 | 322,566,086 | 3,740,314 | 1.17\% |
| 2004 | Feb-04 | 292,561,276 | 631.7 | 0.0 | 101.81\% | 29 | 0 | 320 | 297,085,243 | 4,523,967 | 1.55\% |
| 2004 | Mar-04 | 304,403,356 | 487.3 | 0.0 | 102.02\% | 31 | 1 | 368 | 304,265,659 | -137,697 | -0.05\% |
| 2004 | Apr-04 | 280,729,504 | 331.5 | 0.0 | 102.24\% | 30 | 1 | 336 | 285,495,873 | 4,766,369 | 1.70\% |
| 2004 | May-04 | 284,754,157 | 158.9 | 8.6 | 102.45\% | 31 | 1 | 320 | 284,672,702 | -81,455 | -0.03\% |
| 2004 | Jun-04 | 296,130,055 | 44.2 | 31.6 | 102.67\% | 30 | 0 | 352 | 295,129,456 | -1,000,599 | -0.34\% |
| 2004 | Jul-04 | 316,526,152 | 3.6 | 86.4 | 102.89\% | 31 | 0 | 336 | 324,594,235 | 8,068,084 | 2.55\% |
| 2004 | Aug-04 | 311,532,144 | 12.8 | 59.6 | 103.11\% | 31 | 0 | 336 | 312,132,834 | 600,690 | 0.19\% |
| 2004 | Sep-04 | 300,510,639 | 30.0 | 41.2 | 103.32\% | 30 | 1 | 336 | 293,054,847 | -7,455,792 | -2.48\% |
| 2004 | Oct-04 | 288,181,524 | 226.3 | 1.5 | 103.54\% | 31 | 1 | 320 | 287,458,769 | -722,755 | -0.25\% |
| 2004 | Nov-04 | 296,760,230 | 379.1 | 0.0 | 103.76\% | 30 | 1 | 352 | 294,465,755 | -2,294,475 | -0.77\% |
| 2004 | Dec-04 | 315,819,546 | 643.4 | 0.0 | 103.98\% | 31 | 0 | 336 | 317,781,813 | 1,962,267 | 0.62\% |
| 2005 | Jan-05 | 329,967,591 | 770.0 | 0.0 | 104.22\% | 31 | 0 | 320 | 322,562,831 | -7,404,760 | -2.24\% |
| 2005 | Feb-05 | 293,588,958 | 616.4 | 0.0 | 104.45\% | 28 | 0 | 320 | 297,080,549 | 3,491,591 | 1.19\% |
| 2005 | Mar-05 | 313,508,514 | 608.6 | 0.0 | 104.69\% | 31 | 1 | 352 | 315,004,229 | 1,495,716 | 0.48\% |
| 2005 | Apr-05 | 285,449,756 | 306.8 | 0.0 | 104.93\% | 30 | 1 | 336 | 291,087,959 | 5,638,203 | 1.98\% |
| 2005 | May-05 | 287,810,113 | 189.4 | 0.8 | 105.17\% | 31 | 1 | 336 | 291,857,925 | 4,047,813 | 1.41\% |
| 2005 | Jun-05 | 354,566,496 | 8.9 | 146.3 | 105.41\% | 30 | 0 | 352 | 358,083,558 | 3,517,062 | 0.99\% |
| 2005 | Jul-05 | 365,920,796 | 0.0 | 188.7 | 105.65\% | 31 | 0 | 320 | 380,498,201 | 14,577,405 | 3.98\% |
| 2005 | Aug-05 | 358,835,199 | 0.2 | 140.7 | 105.89\% | 31 | 0 | 352 | 362,011,581 | 3,176,382 | 0.89\% |
| 2005 | Sep-05 | 314,383,694 | 22.6 | 52.1 | 106.13\% | 30 | 1 | 336 | 305,347,038 | -9,036,656 | -2.87\% |
| 2005 | Oct-05 | 304,341,532 | 220.2 | 7.6 | 106.37\% | 31 | 1 | 320 | 297,459,139 | -6,882,393 | -2.26\% |
| 2005 | Nov-05 | 311,009,155 | 388.4 | 0.0 | 106.61\% | 30 | 1 | 352 | 302,267,112 | -8,742,043 | -2.81\% |
| 2005 | Dec-05 | 329,446,542 | 665.3 | 0.0 | 106.85\% | 31 | 0 | 320 | 323,770,822 | -5,675,720 | -1.72\% |
| 2006 | Jan-06 | 329,248,077 | 551.8 | 0.0 | 107.07\% | 31 | 0 | 336 | 320,843,143 | -8,404,933 | -2.55\% |
| 2006 | Feb-06 | 304,825,405 | 604.3 | 0.0 | 107.29\% | 28 | 0 | 320 | 303,697,644 | -1,127,761 | -0.37\% |
| 2006 | Mar-06 | 325,241,932 | 516.6 | 0.0 | 107.50\% | 31 | 1 | 368 | 319,868,811 | -5,373,121 | -1.65\% |
| 2006 | Apr-06 | 289,070,045 | 293.3 | 0.0 | 107.72\% | 30 | 1 | 304 | 292,442,557 | 3,372,512 | 1.17\% |
| 2006 | May-06 | 310,032,606 | 136.9 | 26.0 | 107.94\% | 31 | 1 | 352 | 311,408,478 | 1,375,872 | 0.44\% |
| 2006 | Jun-06 | 333,895,801 | 19.5 | 73.6 | 108.15\% | 30 | 0 | 352 | 329,043,828 | -4,851,974 | -1.45\% |
| 2006 | Jul-06 | 371,225,703 | 0.0 | 167.3 | 108.37\% | 31 | 0 | 320 | 376,696,128 | 5,470,425 | 1.47\% |
| 2006 | Aug-06 | 353,706,210 | 4.2 | 101.6 | 108.59\% | 31 | 0 | 352 | 349,444,927 | -4,261,283 | -1.20\% |
| 2006 | Sep-06 | 298,103,405 | 80.9 | 12.9 | 108.81\% | 30 | 1 | 320 | 293,014,176 | -5,089,229 | -1.71\% |
| 2006 | Oct-06 | 307,942,171 | 288.3 | 1.1 | 109.03\% | 31 | 1 | 336 | 307,149,529 | -792,642 | -0.26\% |
| 2006 | Nov-06 | 312,999,806 | 382.2 | 0.0 | 109.25\% | 30 | 1 | 352 | 308,696,878 | -4,302,928 | -1.37\% |
| 2006 | Dec-06 | 317,982,954 | 500.5 | 0.0 | 109.47\% | 31 | 0 | 304 | 319,192,815 | 1,209,862 | 0.38\% |
| 2007 | Jan-07 | 332,533,628 | 647.1 | 0.0 | 109.65\% | 31 | 0 | 352 | 335,039,821 | 2,506,194 | 0.75\% |
| 2007 | Feb-07 | 318,174,492 | 740.1 | 0.0 | 109.82\% | 28 | 0 | 320 | 317,403,691 | $-770,801$ | -0.24\% |
| 2007 | Mar-07 | 330,329,411 | 546.7 | 0.0 | 110.00\% | 31 | 1 | 352 | 325,330,134 | -4,999,276 | -1.51\% |
| 2007 | Apr-07 | 301,193,988 | 356.4 | 0.0 | 110.18\% | 30 | 1 | 320 | 304,633,180 | 3,439,192 | 1.14\% |
| 2007 | May-07 | 313,881,665 | 136.4 | 22.4 | 110.36\% | 31 | 1 | 352 | 315,771,969 | 1,890,304 | 0.60\% |
| 2007 | Jun-07 | 352,305,947 | 16.5 | 99.2 | 110.53\% | 30 | 0 | 336 | 345,351,571 | -6,954,376 | -1.97\% |
| 2007 | Jul-07 | 350,987,926 | 3.2 | 106.1 | 110.71\% | 31 | 0 | 336 | 354,563,130 | 3,575,204 | 1.02\% |
| 2007 | Aug-07 | 363,680,291 | 5.2 | 141.0 | 110.89\% | 31 | 0 | 352 | 375,257,208 | 11,576,917 | 3.18\% |
| 2007 | Sep-07 | 320,412,436 | 36.9 | 47.5 | 111.07\% | 30 | 1 | 304 | 311,379,425 | -9,033,011 | -2.82\% |
| 2007 | Oct-07 | 318,245,128 | 137.7 | 19.8 | 111.25\% | 31 | 1 | 352 | 316,824,415 | -1,420,713 | -0.45\% |
| 2007 | Nov-07 | 323,515,779 | 462.5 | 0.0 | 111.43\% | 30 | 1 | 352 | 318,550,645 | -4,965,134 | -1.53\% |
| 2007 | Dec-07 | 333,331,077 | 630.7 | 0.0 | 111.61\% | 31 | 0 | 304 | 331,590,105 | -1,740,972 | -0.52\% |
| 2008 | Jan-08 | 344,575,662 | 623.5 | 0.0 | 111.55\% | 31 | 0 | 352 | 338,674,001 | -5,901,662 | -1.71\% |
| 2008 | Feb-08 | 326,113,372 | 674.7 | 0.0 | 111.49\% | 29 | 0 | 320 | 324,195,281 | -1,918,091 | -0.59\% |
| 2008 | Mar-08 | 331,077,485 | 610.2 | 0.0 | 111.43\% | 31 | 1 | 304 | 324,750,582 | -6,326,903 | -1.91\% |
| 2008 | Apr-08 | 303,230,329 | 253.9 | 0.0 | 111.37\% | 30 | 1 | 352 | 307,338,960 | 4,108,631 | 1.35\% |
| 2008 | May-08 | 301,056,523 | 193.5 | 2.5 | 111.31\% | 31 | 1 | 336 | 308,685,046 | 7,628,523 | 2.53\% |
| 2008 | Jun-08 | 334,428,490 | 22.7 | 71.5 | 111.25\% | 30 | 0 | 336 | 333,563,819 | -864,671 | -0.26\% |
| 2008 | Jul-08 | 363,118,367 | 1.0 | 111.0 | 111.19\% | 31 | 0 | 352 | 360,689,641 | $-2,428,726$ | -0.67\% |
| 2008 | Aug-08 | 341,326,026 | 12.7 | 64.0 | 111.13\% | 31 | 0 | 320 | 332,390,850 | -8,935,176 | -2.62\% |
| 2008 | Sep-08 | 317,499,538 | 59.0 | 26.7 | 111.08\% | 30 | 1 | 336 | 307,158,766 | -10,340,772 | -3.26\% |
| 2008 | Oct-08 | 310,230,042 | 278.6 | 0.0 | 111.02\% | 31 | 1 | 352 | 313,717,101 | 3,487,059 | 1.12\% |
| 2008 | Nov-08 | 313,840,850 | 451.6 | 0.0 | 110.96\% | 30 | 1 | 304 | 309,140,542 | -4,700,308 | -1.50\% |
| 2008 | Dec-08 | 328,946,880 | 654.6 | 0.0 | 110.90\% | 31 | 0 | 336 | 336,109,476 | 7,162,596 | 2.18\% |
| 2009 | Jan-09 | 340,125,286 | 830.2 | 0.0 | 110.59\% | 31 | 0 | 336 | 344,644,224 | 4,518,938 | 1.33\% |
| 2009 | Feb-09 | 298,423,228 | 606.4 | 0.0 | 110.29\% | 28 | 0 | 304 | 308,976,199 | 10,552,970 | 3.54\% |
| 2009 | Mar-09 | 317,878,968 | 533.8 | 0.0 | 109.99\% | 31 | 1 | 352 | 324,619,723 | 6,740,755 | 2.12\% |
| 2009 | Apr-09 | 288,048,157 | 305.8 | 1.2 | 109.69\% | 30 | 1 | 320 | 301,300,510 | 13,252,353 | 4.60\% |
| 2009 | May-09 | 279,549,261 | 158.8 | 6.9 | 109.39\% | 31 | 1 | 320 | 301,588,742 | 22,039,482 | 7.88\% |
| 2009 | Jun-09 | 301,280,403 | 49.3 | 34.2 | 109.09\% | 30 | 0 | 352 | 313,165,263 | 11,884,861 | 3.94\% |
| 2009 | Jul-09 | 312,634,481 | 6.2 | 43.7 | 108.79\% | 31 | 0 | 352 | 320,883,252 | 8,248,771 | 2.64\% |
| 2009 | Aug-09 | 342,969,587 | 9.8 | 91.0 | 108.49\% | 31 | 0 | 320 | 339,071,194 | -3,898,393 | -1.14\% |
| 2009 | Sep-09 | 305,441,230 | 55.2 | 20.9 | 108.20\% | 30 | 1 | 336 | 296,650,790 | $-8,790,440$ | -2.88\% |
| 2009 | Oct-09 | 307,520,270 | 287.8 | 0.0 | 107.90\% | 31 | 1 | 336 | 303,675,065 | -3,845,205 | -1.25\% |
| 2009 2009 | Nov-09 Dec-09 | $303,012,736$ $331,058,361$ | 361.2 631.3 | 0.0 0.0 | 107.60\% 107.31\% | 30 31 | 1 | 320 352 | 298,289,938 $328,14,253$ | $-4,722,798$ $-2,844,107$ | $-1.56 \%$ $-0.86 \%$ |

Regression Model Using 20 Year HDD and CDD Averages

|  |  | Purchased | Heating Decree Davs | $\frac{\text { Cooling Decree }}{\text { Days }}$ | Ontario Real GDP Monthly \% | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | $\frac{\text { Number of Peak }}{\text { Hours }}$ | Predicted Purchases | Variances (kWh) | \%Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 338,841,930 | 720.0 | 0.0 | 107.57\% | 31 | 0 | 320 | 328,506,982 | -10,334,948 | -3.05\% |
| 2010 | Feb-10 | 307,563,620 | 598.3 | 0.0 | 107.83\% | 28 | 0 | 304 | 302,238,491 | $-5,325,129$ | -1.73\% |
| 2010 | Mar-10 | 317,385,709 | 422.8 | 0.0 | 108.09\% | 31 | 1 | 368 | 316,408,882 | -976,827 | -0.31\% |
| 2010 | Apr-10 | 288,580,435 | 225.1 | 0.0 | 108.35\% | 30 | 1 | 320 | 292,996,525 | 4,416,090 | 1.53\% |
| 2010 | May-10 | 317,160,058 | 107.9 | 45.7 | 108.62\% | 31 | 1 | 320 | 316,469,068 | -690,990 | -0.22\% |
| 2010 | Jun-10 | 327,911,313 | 21.7 | 58.7 | 108.88\% | 30 | 0 | 352 | 323,517,281 | -4,394,032 | -1.34\% |
| 2010 | Jul-10 | 387,084,558 | 1.8 | 164.9 | 109.15\% | 31 | 0 | 336 | 380,106,159 | -6,978,399 | -1.80\% |
| 2010 | Aug-10 | 372,085,384 | 2.1 | 138.8 | 109.41\% | 31 | 0 | 336 | 367,646,482 | -4,438,902 | -1.19\% |
| 2010 | Sep-10 | 309,880,175 | 78.2 | 31.5 | 109.68\% | 30 | 1 | 336 | 307,007,694 | $-2,872,480$ | -0.93\% |
| 2010 | Oct-10 | 301,944,347 | 241.6 | 0.0 | 109.94\% | 31 | 1 | 320 | 303,921,467 | 1,977,121 | 0.65\% |
| 2010 | Nov-10 | 309, 107,401 | 405.3 | 0.0 | 110.21\% | 30 | 1 | 336 | 309,845,392 | 737,992 | 0.24\% |
| 2010 | Dec-10 | 333,509,214 | 676.2 | 0.0 | 110.48\% | 31 | 0 | 368 | 341,252,747 | 7,743,533 | 2.32\% |
| 2011 | Jan-11 | 346,157,898 | 775.3 | 0.0 | 110.64\% | 31 | 0 | 320 | 339,311,428 | -6,846,470 | -1.98\% |
| 2011 | Feb-11 | 312,406,685 | 654.2 | 0.0 | 110.80\% | 28 | 0 | 304 | 312,827,642 | 420,957 | 0.13\% |
| 2011 | Mar-11 | 334,049,130 | 572.8 | 0.0 | 110.97\% | 31 | 1 | 368 | 331,740,510 | -2,308,620 | -0.69\% |
| 2011 | Apr-11 | 299,909,526 | 332.3 | 0.0 | 111.13\% | 30 | 1 | 304 | 303,269,660 | 3,360,134 | 1.12\% |
| 2011 | May-11 | 308,520,842 | 134.1 | 13.0 | 111.30\% | 31 | 1 | 336 | 310,794,299 | 2,273,458 | 0.74\% |
| 2011 | Jun-11 | 331,406,120 | 19.0 | 52.2 | 111.47\% | 30 | 0 | 352 | 326,724,104 | -4,682,016 | -1.41\% |
| 2011 | Jul-11 | 399,276,724 | 0.0 | 198.6 | 111.63\% | 31 | 0 | 320 | 400,830,067 | 1,553,343 | 0.39\% |
| 2011 | Aug-11 | 367,773,295 | 0.0 | 122.2 | 111.80\% | 31 | 0 | 352 | 367,828,914 | 55,618 | 0.02\% |
| 2011 | Sep-11 | 313,781,747 | 48.2 | 39.7 | 111.96\% | 30 | 1 | 336 | 315,416,112 | 1,634,365 | 0.52\% |
| 2011 | Oct-11 | 312,095,897 | 235.5 | 2.4 | 112.13\% | 31 | 1 | 336 | 312,958,517 | 862,620 | 0.28\% |
| 2011 | Nov-11 | 314,340,389 | 342.1 | 0.0 | 112.30\% | 30 | 1 | 352 | 314,388,348 | 47,959 | 0.02\% |
| 2011 | Dec-11 | 328,784,347 | 534.0 | 0.0 | 112.46\% | 31 | 0 | 336 | 333,730,275 | 4,945,928 | 1.50\% |
| 2012 | Jan-12 | 342,744,742 | 611.1 | 0.0 | 112.60\% | 31 | 0 | 336 | 338,177,224 | -4,567,518 | -1.33\% |
| 2012 | Feb-12 | 317,435,425 | 531.7 | 0.0 | 112.74\% | 29 | 0 | 320 | 319,822,646 | 2,387,220 | 0.75\% |
| 2012 | Mar-12 | 323,010,362 | 349.4 | 0.2 | 112.88\% | 31 | 1 | 352 | 322,361,072 | -649,290 | -0.20\% |
| 2012 | Apr-12 | 301,644,611 | 321.7 | 0.0 | 113.02\% | 30 | 1 | 320 | 310,090,261 | 8,445,650 | 2.80\% |
| 2012 | May-12 | 326,399,579 | 80.7 | 36.7 | 113.16\% | 31 | 1 | 352 | 327,225,742 | 826,163 | 0.25\% |
| 2012 | Jun-12 | 357,950,417 | 23.2 | 101.6 | 113.30\% | 30 | 0 | 336 | 354,019,955 | -3,930,462 | -1.10\% |
| 2012 | Jul-12 | 407,476,192 | 0.0 | 195.4 | 113.45\% | 31 | 0 | 352 | 408,946,490 | 1,470,297 | 0.36\% |
| 2012 | Aug-12 | 375,206,978 | 2.0 | 112.1 | 113.59\% | 31 | 0 | 352 | 367,430,097 | -7,776,881 | -2.07\% |
| 2012 | Sep-12 | 319,835,103 | 85.0 | 35.6 | 113.73\% | 30 | 1 | 304 | 314,743,075 | -5,092,028 | -1.59\% |
| 2012 | Oct-12 | 318,167,447 | 242.5 | 1.1 | 113.87\% | 31 | 1 | 352 | 319,669,626 | 1,502,179 | 0.47\% |
| 2012 | Nov-12 | 324,129,468 | 434.0 | 0.0 | 114.01\% | 30 | 1 | 352 | 323,652,581 | -476,887 | -0.15\% |
| 2012 | Dec-12 | 329,242,704 | 533.5 | 0.0 | 114.15\% | 31 | 0 | 304 | 332,949,654 | 3,706,950 | 1.13\% |
| 2013 | Jan-13 | 348,513,720 | 624.4 | 0.0 | 114.27\% | 31 | 0 | 352 | 345,704,152 | -2,809,568 | -0.81\% |
| 2013 | Feb-13 | 317,590,943 | 631.5 | 0.0 | 114.40\% | 28 | 0 | 304 | 320,833,979 | 3,243,035 | 1.02\% |
| 2013 | Mar-13 | 333,368,808 | 554.8 | 0.0 | 114.52\% | 31 | 1 | 320 | 332,270,868 | -1,097,940 | -0.33\% |
| 2013 | Apr-13 | 312,277,396 | 358.6 | 0.0 | 114.64\% | 30 | 1 | 352 | 321,279,306 | 9,001,910 | 2.88\% |
| 2013 | May-13 | 320,170,213 | 109.1 | 23.1 | 114.77\% | 31 | 1 | 352 | 325,987,354 | 5,817,141 | 1.82\% |
| 2013 | Jun-13 | 335,997,920 | 33.4 | 59.3 | 114.89\% | 30 | 0 | 320 | 334,768,615 | -1,229,306 | -0.37\% |
| 2013 | Jul-13 | 385,395,998 | 1.4 | 133.3 | 115.01\% | 31 | 0 | 352 | 381,745,227 | -3,650,771 | -0.95\% |
| 2013 | Aug-13 | 362,278,437 | 4.6 | 93.2 | 115.14\% | 31 | 0 | 336 | 359,482,438 | -2,795,999 | -0.77\% |
| 2013 | Sep-13 | 318,477,237 | 89.6 | 28.0 | 115.26\% | 30 | 1 | 320 | 317,632,070 | -845,167 | -0.27\% |
| 2013 | Oct-13 | 318,760,032 | 224.2 | 0.0 | 115.39\% | 31 | 1 | 352 | 322,036,921 | 3,276,889 | 1.03\% |
| 2013 | Nov-13 | 329,707,415 | 478.3 | 0.0 | 115.51\% | 30 | 1 | 336 | 327,310,938 | $-2,396,477$ | -0.73\% |
| 2013 | Dec-13 | 344,618,546 | 687.7 | 0.0 | 115.64\% | 31 | 0 | 320 | 347,471,571 | 2,853,026 | 0.83\% |
| 2014 | Jan-14 |  | 715.2 | 0.0 | 115.84\% | 31 | 0 | 352 | 354,522,870 | 354,522,870 |  |
| 2014 | Feb-14 |  | 625.8 | 0.0 | 116.04\% | 28 | 0 | 304 | 324,735,138 | 324,735,138 |  |
| 2014 | Mar-14 |  | 534.2 | 0.0 | 116.24\% | 31 | 1 | 320 | 335,582,942 | 335,582,942 |  |
| 2014 | Apr-14 |  | 325.6 | 0.7 | 116.44\% | 30 | 1 | 352 | 324,479,215 | 324,479,215 |  |
| 2014 | May-14 |  | 151.7 | 14.9 | 116.64\% | 31 | 1 | ${ }^{336}$ | $326,370,247$ 34765638 | $326,370,247$ 34765638 |  |
| 2014 | Jun-14 |  | 29.0 | 70.4 | 116.84\% | 30 | 0 | 336 | 347,656,638 | 347,656,638 |  |
| 2014 | Jul-14 |  | 3.5 | 129.1 | 117.05\% | 31 | 0 | 352 | 384,928,330 | 384,928,330 |  |
| 2014 | Aug-14 |  | 6.4 64.7 | 104.4 | 117.25\% | 31 | 0 | 320 | 368,076,915 | 368,076,915 |  |
| 2014 | Sep-14 |  | 64.7 244.5 | 33.9 | 117.45\% | 30 | 1 | 336 | 327,427,113 | 327,427,113 |  |
| 2014 2014 | Oct-14 Nov-14 |  | 244.5 415.8 | 2.6 0.0 | 117.66\% | 31 30 | 1 | 352 320 | $330,260,127$ $327,475,075$ | $330,260,127$ $327,475,075$ |  |
| 2014 | Dec-14 |  | 608.8 | 0.0 | 118.06\% | 31 | 0 | 336 | 352,051,065 | 352,051,065 |  |
| 2015 | Jan-15 |  | 715.2 | 0.0 | 118.31\% | 31 | 0 | 336 | 358,318,515 | 358,318,515 |  |
| 2015 | Feb-15 |  | 625.8 | 0.0 | 118.55\% | 28 | 0 | 304 | 331,180,265 | 331,180,265 |  |
| 2015 | Mar-15 |  | 534.2 | 0.0 | 118.79\% | 31 | 1 | 352 | 347,217,431 | 347,217,431 |  |
| 2015 | Apr-15 |  | 325.6 | 0.7 | 119.04\% | 30 | 1 | 336 | 328,606,035 | 328,606,035 |  |
| 2015 | May-15 |  | 151.7 | 14.9 | 119.28\% | 31 | 1 | 320 | 330,608,250 | 330,608,250 |  |
| 2015 | Jun-15 |  | 29.0 | 70.4 | 119.53\% | 30 | 0 | 352 | 357,085,194 | 357,085,194 |  |
| 2015 | Jul-15 |  | 3.5 | 129.1 | 119.78\% | 31 | 0 | 352 | 391,929,381 | 391,929,381 |  |
| 2015 | Aug-15 |  | 6.4 | 104.4 | 120.02\% | 31 | 0 | 320 | 375,190,347 | 375,190,347 |  |
| 2015 | Sep-15 |  | 64.7 | 33.9 | 120.27\% | 30 | 1 | 336 | 334,653,328 | 334,653,328 |  |
| 2015 | Oct-15 |  | 244.5 | 2.6 | 120.52\% | 31 | 1 | 336 | 335,060,041 | 335,060,041 |  |
| 2015 | Nov-15 |  | 415.8 | 0.0 | 120.77\% | 30 | 1 | 336 | 337,467,548 | 337,467,548 |  |
| 2015 | Dec-15 |  | 608.8 | 0.0 | 121.02\% | 31 | 0 | 352 | 362,157,530 | 362,157,530 |  |
|  |  |  | Weather N | nalized |  |  |  |  |  |  |  |

Regression Model Using 20 Year HDD and CDD Averages




HOBNI Rate Class Customer Model

|  |  | RES | GS<50 | USL | GS>50 | Intermediate | Large <br> User | Street <br> Lights | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Customers by Class | $\begin{aligned} & 1999 \\ & 2000 \\ & 2001 \\ & 2002 \end{aligned}$ |  |  |  |  |  |  |  |  |
|  | 2003 | 91,671 | 6,512 | 1,105 | 1,357 | 126 | 4 | 19,210 | 119,985 |
|  | 2004 | 98,355 | 6,648 | 1,130 | 1,393 | 124 | 3 | 19,382 | 127,036 |
|  | 2005 | 104,822 | 6,892 | 1,159 | 1,364 | 121 | 3 | 19,532 | 133,891 |
|  | 2006 | 109,778 | 7,075 | 1,207 | 1,402 | 119 | 4 | 19,701 | 139,286 |
|  | 2007 | 114,119 | 7,294 | 1,250 | 1,417 | 117 | 5 | 20,002 | 144,204 |
|  | 2008 | 119,060 | 7,437 | 1,267 | 1,491 | 116 | 6 | 20,282 | 149,659 |
|  | 2009 | 121,041 | 7,529 | 1,280 | 1,554 | 114 | 6 | 20,465 | 151,988 |
|  | 2010 | 123,013 | 7,752 | 1,293 | 1,539 | 114 | 6 | 20,691 | 154,407 |
|  | 2011 | 126,317 | 8,080 | 1,369 | 1,537 | 112 | 6 | 21,003 | 158,424 |
|  | 2012 | 129,699 | 8,328 | 1,424 | 1,525 | 112 | 6 | 21,359 | 162,453 |
|  | 2013 | 133,723 | 8,532 | 1,477 | 1,511 | 115 | 6 | 21,727 | 167,092 |
|  | 2014 | 137,303 | 8,758 | 1,519 | 1,501 | 115 | 6 | 22,029 | 171,230 |
|  | 2015 | 140,979 | 8,989 | 1,562 | 1,491 | 115 | 6 | 22,335 | 175,476 |



| Wholesale Market Participants |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Uplifted |  |  | Non-Uplifted |  |  |  |
| Year | Month | Par-Pak | Loblaw | Total | Par-Pak | Loblaw | Total | Loss Factor |
| 2011 | jan | - | - | - |  |  | - | 1.034 |
| 2011 | feb | - | - | - |  |  | - | 1.034 |
| 2011 | mar | - | - | - |  |  | - | 1.034 |
| 2011 | apr | - | - | - |  |  | - | 1.034 |
| 2011 | may | 3,287,403 | - | 3,287,403 | 3,179,306 | - | 3,179,306 | 1.034 |
| 2011 | jun | 3,439,222 | - | 3,439,222 | 3,326,133 | - | 3,326,133 | 1.034 |
| 2011 | jul | 3,630,411 | - | 3,630,411 | 3,511,036 | - | 3,511,036 | 1.034 |
| 2011 | aug | 4,085,774 | - | 4,085,774 | 3,951,426 | - | 3,951,426 | 1.034 |
| 2011 | sep | 3,958,783 | - | 3,958,783 | 3,828,610 | - | 3,828,610 | 1.034 |
| 2011 | oct | 4,062,530 | - | 4,062,530 | 3,928,946 | - | 3,928,946 | 1.034 |
| 2011 | nov | 4,192,028 | - | 4,192,028 | 4,054,186 | - | 4,054,186 | 1.034 |
| 2011 | dec | 3,934,476 | - | 3,934,476 | 3,805,102 | - | 3,805,102 | 1.034 |
| 2012 | jan | 3,723,587 | - | 3,723,587 | 3,601,148 | - | 3,601,148 | 1.034 |
| 2012 | feb | 3,294,699 | - | 3,294,699 | 3,186,363 | - | 3,186,363 | 1.034 |
| 2012 | mar | 4,066,062 | - | 4,066,062 | 3,932,362 | - | 3,932,362 | 1.034 |
| 2012 | apr | 3,975,605 | 373,674 | 4,349,280 | 3,844,879 | 361,387 | 4,206,267 | 1.034 |
| 2012 | may | 3,946,525 | 424,331 | 4,370,856 | 3,816,755 | 410,378 | 4,227,133 | 1.034 |
| 2012 | jun | 3,955,512 | 434,879 | 4,390,391 | 3,825,447 | 420,579 | 4,246,027 | 1.034 |
| 2012 | jul | 4,367,035 | 467,199 | 4,834,234 | 4,223,439 | 451,836 | 4,675,275 | 1.034 |
| 2012 | aug | 4,472,249 | 441,645 | 4,913,895 | 4,325,193 | 427,123 | 4,752,316 | 1.034 |
| 2012 | sep | 4,404,641 | 376,645 | 4,781,286 | 4,259,808 | 364,260 | 4,624,068 | 1.034 |
| 2012 | oct | 4,606,891 | 358,701 | 4,965,592 | 4,455,407 | 346,906 | 4,802,313 | 1.034 |
| 2012 | nov | 4,564,234 | 335,985 | 4,900,219 | 4,414,153 | 324,937 | 4,739,090 | 1.034 |
| 2012 | dec | 3,704,664 | 355,287 | 4,059,951 | 3,582,848 | 343,604 | 3,926,452 | 1.034 |
| 2013 | jan | 4,290,599 | 349,484 | 4,640,083 | 4,149,515 | 337,993 | 4,487,508 | 1.034 |
| 2013 | feb | 3,671,865 | 310,532 | 3,982,397 | 3,551,126 | 300,321 | 3,851,448 | 1.034 |
| 2013 | mar | 4,308,805 | 334,433 | 4,643,239 | 4,167,123 | 323,437 | 4,490,560 | 1.034 |
| 2013 | apr | 4,456,984 | 338,658 | 4,795,642 | 4,310,429 | 327,523 | 4,637,952 | 1.034 |
| 2013 | may | 4,332,483 | 393,637 | 4,726,120 | 4,190,022 | 380,693 | 4,570,716 | 1.034 |
| 2013 | jun | 4,488,024 | 406,353 | 4,894,378 | 4,340,449 | 392,992 | 4,733,441 | 1.034 |
| 2013 | jul | 4,641,752 | 450,477 | 5,092,229 | 4,489,122 | 435,665 | 4,924,786 | 1.034 |
| 2013 | aug | 4,827,391 | 453,426 | 5,280,817 | 4,668,656 | 438,517 | 5,107,173 | 1.034 |
| 2013 | sep | 4,574,462 | 395,800 | 4,970,262 | 4,424,045 | 382,785 | 4,806,830 | 1.034 |
| 2013 | oct | 4,782,026 | 381,199 | 5,163,225 | 4,624,784 | 368,664 | 4,993,448 | 1.034 |
| 2013 | nov | 4,998,876 | 345,384 | 5,344,260 | 4,834,503 | 334,027 | 5,168,530 | 1.034 |
| 2013 | dec | 3,919,827 | 359,900 | 4,279,727 | 3,790,935 | 348,066 | 4,139,001 | 1.034 |
| 2014 | jan | 4,290,864 | 349,506 | 4,640,370 | 4,149,772 | 338,014 | 4,487,786 | 1.034 |
| 2014 | feb | 3,672,092 | 310,552 | 3,982,644 | 3,551,346 | 300,340 | 3,851,686 | 1.034 |
| 2014 | mar | 4,309,072 | 334,454 | 4,643,526 | 4,167,381 | 323,457 | 4,490,838 | 1.034 |
| 2014 | apr | 4,457,260 | 338,679 | 4,795,939 | 4,310,696 | 327,543 | 4,638,239 | 1.034 |
| 2014 | may | 4,332,751 | 393,661 | 4,726,413 | 4,190,282 | 380,717 | 4,570,999 | 1.034 |
| 2014 | jun | 4,488,302 | 406,378 | 4,894,681 | 4,340,718 | 393,016 | 4,733,734 | 1.034 |
| 2014 | jul | 4,642,039 | 450,505 | 5,092,544 | 4,489,400 | 435,692 | 4,925,091 | 1.034 |
| 2014 | aug | 4,827,689 | 453,454 | 5,281,144 | 4,668,945 | 438,544 | 5,107,489 | 1.034 |
| 2014 | sep | 4,574,745 | 395,825 | 4,970,570 | 4,424,319 | 382,809 | 4,807,128 | 1.034 |
| 2014 | oct | 4,782,322 | 381,222 | 5,163,545 | 4,625,070 | 368,687 | 4,993,757 | 1.034 |
| 2014 | nov | 4,999,185 | 345,405 | 5,344,591 | 4,834,802 | 334,048 | 5,168,850 | 1.034 |
| 2014 | dec | 3,920,070 | 359,923 | 4,279,992 | 3,791,170 | 348,088 | 4,139,258 | 1.034 |
| 2015 | jan | 4,291,545 | 349,562 | 4,641,106 | 4,150,029 | 338,035 | 4,488,063 | 1.0341 |
| 2015 | feb | 3,672,674 | 310,601 | 3,983,275 | 3,551,566 | 300,359 | 3,851,925 | 1.0341 |
| 2015 | mar | 4,309,756 | 334,507 | 4,644,263 | 4,167,639 | 323,477 | 4,491,116 | 1.0341 |
| 2015 | apr | 4,457,967 | 338,733 | 4,796,700 | 4,310,963 | 327,563 | 4,638,526 | 1.0341 |
| 2015 | may | 4,333,439 | 393,724 | 4,727,162 | 4,190,541 | 380,740 | 4,571,282 | 1.0341 |
| 2015 | jun | 4,489,014 | 406,443 | 4,895,457 | 4,340,987 | 393,040 | 4,734,027 | 1.0341 |
| 2015 | jul | 4,642,776 | 450,577 | 5,093,352 | 4,489,678 | 435,719 | 4,925,396 | 1.0341 |
| 2015 | aug | 4,828,455 | 453,526 | 5,281,981 | 4,669,234 | 438,571 | 5,107,805 | 1.0341 |
| 2015 | sep | 4,575,471 | 395,887 | 4,971,359 | 4,424,593 | 382,833 | 4,807,425 | 1.0341 |
| 2015 | oct | 4,783,081 | 381,283 | 5,164,364 | 4,625,356 | 368,710 | 4,994,066 | 1.0341 |
| 2015 | nov | 4,999,978 | 345,460 | 5,345,439 | 4,835,101 | 334,068 | 5,169,170 | 1.0341 |
| 2015 | dec | 3,920,692 | 359,980 | 4,280,671 | 3,791,405 | 348,109 | 4,139,514 | 1.0341 |
|  |  | Par-Pak | Loblaw | Total | Par-Pak | Loblaw | Total |  |
|  | 2011 | 30,590,627 | - | 30,590,627 | 29,584,746 | - | 29,584,746 |  |
|  | 2012 | 49,081,707 | 3,568,346 | 52,650,053 | 47,467,802 | 3,451,012 | 50,918,813 |  |
|  | 2013 | 53,293,095 | 4,519,285 | 57,812,380 | 51,540,711 | 4,370,682 | 55,911,393 |  |
|  | 2014 | 53,296,394 | 4,519,565 | 57,815,958 | 51,543,901 | 4,370,952 | 55,914,853 |  |
|  | 2015 | 53,304,848 | 4,520,282 | 57,825,129 | 51,547,092 | 4,371,223 | 55,918,315 |  |
|  | Total | 239,566,670 | 17,127,477 | 256,694,148 | 231,684,251 | 16,563,869 | 248,248,120 |  |


|  | 2015 <br> Forecasted <br> Monthly Peak <br> kW | Forecasted <br> Monthly <br> Billed kWh | Loss <br> Factor | 2015 Forecasted <br> Monthly kWh <br> (Uplifted) |
| :--- | ---: | ---: | ---: | ---: |
| Jan | 2,612 | $1,378,242$ | 1.0247 | $1,412,285$ |
| Feb | 2,508 | $1,254,045$ | 1.0247 | $1,285,020$ |
| Mar | 2,290 | $1,261,482$ | 1.0247 | $1,292,641$ |
| Apr | 2,099 | $1,097,718$ | 1.0247 | $1,124,831$ |
| May | 3,744 | $1,578,222$ | 1.0247 | $1,617,204$ |
| Jun | 4,547 | $1,797,646$ | 1.0247 | $1,842,048$ |
| Jul | 5,000 | $2,113,370$ | 1.0247 | $2,165,570$ |
| Aug | 4,233 | $1,908,762$ | 1.0247 | $1,955,908$ |
| Sep | 4,552 | $1,728,365$ | 1.0247 | $1,771,055$ |
| Oct | 3,095 | 896,754 | 1.0247 | 918,903 |
| Nov | 2,523 | $1,107,850$ | 1.0247 | $1,135,214$ |
| Dec | 2,870 | 889,959 | 1.0247 | 911,941 |
|  | $\mathbf{4 0 , 0 7 3}$ | $\mathbf{1 7 , 0 1 2 , 4 1 4}$ |  | $\mathbf{1 7 , 4 3 2 , 6 2 0}$ |


|  | 2013 Autual <br> Monthly Peak <br> kW | 2013 Actual <br> Number of <br> Customers |
| :--- | ---: | ---: |
| Date | 10 | 14 |
| Jan | 17 | 14 |
| Feb | 14 | 16 |
| Mar | 14 | 15 |
| Apr | 11 | 17 |
| May | 12 | 20 |
| Jun | 13 | 21 |
| Jul | 14 | 21 |
| Aug | 13 | 21 |
| Sep | 13 | 21 |
| Oct | 19 | 22 |
| Nov | 22 | 23 |
| Dec | $\mathbf{1 7 1}$ | $\mathbf{1 9}$ |
|  |  |  |


| 2015 <br> Forecasted Number of Customers | 2015 Forecasted Monthly Peak kW | 2015 <br> Forecasted Monthly Billed kWh | Loss Factor | 2015 <br> Forecasted Monthly Uplifted kWh |
| :---: | :---: | :---: | :---: | :---: |
| 61 | 45 | 19,528 | 1.0341 | 20,194 |
| 62 | 78 | 21,688 | 1.0341 | 22,427 |
| 64 | 55 | 13,408 | 1.0341 | 13,866 |
| 65 | 58 | 11,656 | 1.0341 | 12,054 |
| 66 | 42 | 9,021 | 1.0341 | 9,329 |
| 67 | 39 | 7,731 | 1.0341 | 7,994 |
| 68 | 41 | 10,157 | 1.0341 | 10,503 |
| 69 | 46 | 11,323 | 1.0341 | 11,709 |
| 71 | 45 | 12,853 | 1.0341 | 13,291 |
| 72 | 43 | 15,910 | 1.0341 | 16,453 |
| 73 | 63 | 18,633 | 1.0341 | 19,268 |
| 74 | 71 | 26,908 | 1.0341 | 27,825 |
| 68 | 627 | 178,816 |  | 184,913 |


| 2014 <br> Forecasted Number of Customers | 2014 <br> Forecasted Monthly Peak kW | 2014 <br> Forecasted Monthly kWh | Loss Factor | 2014 <br> Forecasted Monthly Uplifted kWh |
| :---: | :---: | :---: | :---: | :---: |
| 26 | 19 | 8,328 | 1.0349 | 8,618 |
| 29 | 36 | 10,148 | 1.0349 | 10,502 |
| 32 | 28 | 6,810 | 1.0349 | 7,047 |
| 35 | 32 | 6,369 | 1.0349 | 6,591 |
| 38 | 24 | 5,264 | 1.0349 | 5,448 |
| 42 | 24 | 4,788 | 1.0349 | 4,955 |
| 45 | 27 | 6,643 | 1.0349 | 6,875 |
| 48 | 31 | 7,785 | 1.0349 | 8,057 |
| 51 | 32 | 9,252 | 1.0349 | 9,575 |
| 54 | 33 | 11,951 | 1.0349 | 12,368 |
| 57 | 49 | 14,561 | 1.0349 | 15,069 |
| 60 | 58 | 21,817 | 1.0349 | 22,578 |
| 43 | 394 | 113,715 |  | 117,684 |



| Historical kW for Embedded Distributor |  |  |  |
| :---: | :---: | :---: | :---: |
| 2009 | jan | 4,137.60 |  |
| 2009 | feb | 4,048.80 |  |
| 2009 | mar | 3,907.20 |  |
| 2009 | apr | 3,204.00 |  |
| 2009 | may | 2,529.60 |  |
| 2009 | jun | 2,788.80 |  |
| 2009 | jul | 5,064.00 |  |
| 2009 | aug | 2,829.60 |  |
| 2009 | sep | - |  |
| 2009 | oct |  |  |
| 2009 | nov | 2,918.40 |  |
| 2009 | dec | 3,561.60 | 34,989.60 |
| 2010 | jan | 3,664.80 |  |
| 2010 | feb | 3,552.00 |  |
| 2010 | mar | 3,115.20 |  |
| 2010 | apr | 2,856.00 |  |
| 2010 | may | 5,896.80 |  |
| 2010 | jun | 5,344.80 |  |
| 2010 | jul | 2,308.80 |  |
| 2010 | aug | 2,299.20 |  |
| 2010 | sep | 2,282.40 |  |
| 2010 | oct | 2,068.80 |  |
| 2010 | nov | 2,469.60 |  |
| 2010 | dec | 3,400.80 | 39,259.20 |
| 2011 | jan | 8,719.20 |  |
| 2011 | feb | 8,709.60 |  |
| 2011 | mar | 7,588.80 |  |
| 2011 | apr | 6,422.25 |  |
| 2011 | may | 5,476.20 |  |
| 2011 | jun | 6,070.64 |  |
| 2011 | jul | 7,458.58 |  |
| 2011 | aug | 6,480.49 |  |
| 2011 | sep | 5,968.77 |  |
| 2011 | oct | 4,801.09 |  |
| 2011 | nov | 5,424.60 |  |
| 2011 | dec | 11,039.01 | 84,159.23 |
| 2012 | jan | 11,531.75 |  |
| 2012 | feb | 5,883.68 |  |
| 2012 | mar | 5,569.18 |  |
| 2012 | apr | 4,731.66 |  |
| 2012 | may | 5,925.69 |  |
| 2012 | june | 7,029.58 |  |
| 2012 | july | 7,358.05 |  |
| 2012 | august | 6,533.96 |  |
| 2012 | september | 6,069.41 |  |
| 2012 | october | 4,852.51 |  |
| 2012 | november | 5,401.79 |  |
| 2012 | december | 5,911.02 | 76,798.28 |
| 2013 | january | 6,189.71 |  |
| 2013 | february | 5,944.24 |  |
| 2013 | march | 5,426.96 |  |
| 2013 | april | 4,975.98 |  |
| 2013 | may | 8,873.26 |  |
| 2013 | june | 10,777.62 |  |
| 2013 | july | 11,851.29 |  |
| 2013 | august | 10,034.50 |  |
| 2013 | september | 10,790.31 |  |
| 2013 | october | 7,336.53 |  |
| 2013 | november | 5,980.67 |  |
| 2013 | december | 6,803.80 | 94,984.87 |

Purchased kWh


Number of Customers and Connections by Month

| Year | Month | Residential | GS<50 | USL-Connections | GS>50 | Intermediate | Large User | Street Light Connections | Embedded Distributor | Distributed Generation | Energy from Waste Genneration | Total | Street Light-Lamps | USL - Customers | Street LightCustomers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | jan | 88,846 | 6,469 | 1,105 | 1,319 | 122 | 4 | 19,127 |  |  |  | 116,992 | 29,769 |  | 2 |
| 2003 | feb | 89,106 | 6,480 | 1,105 | 1,321 | 123 | 4 | 19,142 |  |  |  | 117,281 | 29,871 |  | 2 |
| 2003 | mar | 89,628 | 6,494 | 1,105 | 1,344 | 124 | 4 | 19,157 |  |  |  | 117,856 | 29,974 |  | 2 |
| 2003 | apr | 90,127 | 6,472 | 1,105 | 1,345 | 124 | 4 | 19,172 |  |  |  | 118,349 | 30,077 |  | 2 |
| 2003 | may | 90,572 | 6,510 | 1,105 | 1,344 | 124 | 4 | 19,187 |  |  |  | 118,846 | 30,180 |  | 2 |
| 2003 | jun | 91,036 | 6,530 | 1,105 | 1,350 | 124 | 4 | 19,202 |  |  |  | 119,351 | 30,284 |  | 2 |
| 2003 | jul | 91,828 | 6,504 | 1,105 | 1,350 | 124 | 4 | 19,217 |  |  |  | 120,132 | 30,388 |  | 2 |
| 2003 | aug | 92,229 | 6,523 | 1,105 | 1,349 | 124 | 4 | 19,232 |  |  |  | 120,566 | 30,492 |  | 2 |
| 2003 | sep | 93,180 | 6,512 | 1,105 | 1,393 | 127 | 4 | 19,247 |  |  |  | 121,568 | 30,597 |  | 2 |
| 2003 | oct | 94,084 | 6,529 | 1,105 | 1,392 | 131 | 4 | 19,262 |  |  |  | 122,507 | 30,702 |  | 2 |
| 2003 | nov | 94,708 | 6,559 | 1,105 | 1,391 | 132 | 4 | 19,277 |  |  |  | 123,176 | 30,807 |  | 2 |
| 2003 | dec | 94,708 | 6,559 | 1,105 | 1,391 | 132 | 4 | 19,292 |  |  |  | 123,191 | 30,913 |  | 2 |
| 2004 | jan | 95,064 | 6,544 | 1,130 | 1,390 | 132 | 4 | 19,306 |  |  |  | 123,570 | 31,019 |  | 2 |
| 2004 | feb | 95,895 | 6,589 | 1,130 | 1,394 | 135 | 3 | 19,320 |  |  |  | 124,466 | 31,125 |  | 2 |
| 2004 | mar | 96,285 | 6,604 | 1,130 | 1,394 | 134 | 3 | 19,334 |  |  |  | 124,884 | 31,232 |  | 2 |
| 2004 | apr | 96,725 | 6,606 | 1,130 | 1,395 | 136 | 3 | 19,348 |  |  |  | 125,343 | 31,339 |  | 2 |
| 2004 | may | 97,077 | 6,609 | 1,130 | 1,404 | 118 | 3 | 19,361 |  |  |  | 125,702 | 31,447 |  | 2 |
| 2004 | jun | 97,807 | 6,615 | 1,130 | 1,397 | 118 | 3 | 19,375 |  |  |  | 126,445 | 31,555 |  | 2 |
| 2004 | jul | 98,313 | 6,600 | 1,130 | 1,408 | 118 | 3 | 19,389 |  |  |  | 126,961 | 31,663 |  | 2 |
| 2004 | aug | 99,031 | 6,651 | 1,130 | 1,420 | 119 | 3 | 19,403 |  |  |  | 127,757 | 31,772 |  | 2 |
| 2004 | sep | 99,957 | 6,691 | 1,130 | 1,388 | 118 | 3 | 19,417 |  |  |  | 128,704 | 31,881 |  | 2 |
| 2004 | oct | 100,574 | 6,703 | 1,130 | 1,376 | 122 | 3 | 19,431 |  |  |  | 129,339 | 31,990 |  | 2 |
| 2004 | nov | 101,456 | 6,770 | 1,130 | 1,378 | 121 | 3 | 19,445 |  |  |  | 130,303 | 32,100 |  | 2 |
| 2004 | dec | 102,070 | 6,797 | 1,130 | 1,376 | 121 | 3 | 19,459 |  |  |  | 130,956 | 32,210 |  |  |
| 2005 | jan | 102,392 | 6,823 | 1,159 | 1,379 | 125 | 3 | 19,470 |  |  |  | 131,351 | 32,321 | 73 | 2 |
| 2005 | feb | 102,796 | 6,832 | 1,159 | 1,378 | 126 | 3 | 19,481 |  |  |  | 131,775 | 32,432 | 72 | 2 |
| 2005 | mar | 103,098 | 6,860 | 1,159 | 1,362 | 120 | 3 | 19,493 |  |  |  | 132,095 | 32,543 | 72 | 2 |
| 2005 | apr | 103,554 | 6,838 | 1,159 | 1,370 | 120 | 3 | 19,504 |  |  |  | 132,548 | 32,655 | 72 | 2 |
| 2005 | may | 103,932 | 6,864 | 1,159 | 1,353 | 120 | 3 | 19,515 |  |  |  | 132,946 | 32,767 | 72 | 2 |
| 2005 | jun | 104,397 | 6,870 | 1,159 | 1,351 | 120 | 3 | 19,526 |  |  |  | 133,426 | 32,879 | 72 | 2 |
| 2005 | jul | 104,872 | 6,891 | 1,159 | 1,354 | 120 | 3 | 19,538 |  |  |  | 133,937 | 32,992 | 72 | 2 |
| 2005 | aug | 105,326 | 6,895 | 1,159 | 1,359 | 120 |  | 19,549 |  |  |  | 134,411 | 33,105 | 72 | 2 |
| 2005 | sep | 106,046 | 6,931 | 1,159 | 1,366 | 120 | 3 | 19,560 |  |  |  | 135,185 | 33,219 | 72 | 2 |
| 2005 | oct | 106,556 | 6,940 | 1,159 | 1,364 | 120 | 3 | 19,571 |  |  |  | 135,713 | 33,333 | 72 | 2 |
| 2005 | nov | 107,280 | 6,965 | 1,159 | 1,360 | 117 | 3 | 19,583 |  |  |  | 136,467 | 33,448 | 72 | 2 |
| 2005 | dec | 107,609 | 6,991 | 1,159 | 1,369 | 118 | 3 | 19,594 |  |  |  | 136,843 | 33,563 | 74 | 2 |
| 2006 | jan | 108,069 | 7,029 | 1,207 | 1,381 | 119 | 3 | 19,610 |  |  |  | 137,418 | 33,678 | 72 | 2 |
| 2006 | feb | 108,299 | 7,051 | 1,207 | 1,378 | 118 | 4 | 19,627 |  |  |  | 137,684 | 33,793 | 72 | 2 |
| 2006 | mar | 108,662 | 7,047 | 1,207 | 1,396 | 118 | 4 | 19,643 |  |  |  | 138,077 | 33,909 | 72 | 2 |
| 2006 | apr | 108,948 | 7,042 | 1,207 | 1,398 | 118 | 4 | 19,659 |  |  |  | 138,376 | 34,026 | 73 | 2 |
| 2006 | may | 109,247 | 7,046 | 1,207 | 1,412 | 118 | 4 | 19,676 |  |  |  | 138,710 | 34,143 | 72 | 2 |
| 2006 | jun | 109,426 | 7,046 | 1,207 | 1,420 | 118 | 4 | 19,692 |  |  |  | 138,913 | 34,260 | 72 | 2 |
| 2006 | jul | 109,726 | 7,054 | 1,207 | 1,399 | 119 | , | 19,709 |  |  |  | 139,218 | 34,378 | 72 | 2 |
| 2006 | aug | 110,151 | 7,065 | 1,207 | 1,406 | 119 | 4 | 19,725 |  |  |  | 139,677 | 34,496 | 72 | 2 |
| 2006 | sep | 110,556 | 7,074 | 1,207 | 1,410 | 120 | 4 | 19,742 |  |  |  | 140,113 | 34,614 | 72 | 2 |
| 2006 | oct | 111,244 | 7,141 | 1,207 | 1,403 | 119 | 4 | 19,758 |  |  |  | 140,876 | 34,733 | 72 | 2 |
| 2006 | nov | 111,412 | 7,148 | 1,207 | 1,411 | 119 | 4 | 19,775 |  |  |  | 141,076 | 34,852 | 72 | 2 |
| 2006 | dec | 111,598 | 7,161 | 1,207 | 1,411 | 119 | 4 | 19,791 |  |  |  | 141,291 | 34,972 | 70 | 2 |
| 2007 | jan | 111,983 | 7,199 | 1,250 | 1,421 | 119 | 4 | 19,823 |  |  |  | 141,799 | 35,092 | 70 | 2 |
| 2007 | feb | 112,259 | 7,208 | 1,250 | 1,422 | 120 | 4 | 19,856 |  |  |  | 142,119 | 35,212 | 70 | 2 |
| 2007 | mar | 112,520 | 7,234 | 1,250 | 1,401 | 119 | 5 | 19,888 |  |  |  | 142,417 | 35,333 | 70 | 2 |
| 2007 | apr | 112,804 | 7,245 | 1,250 | 1,402 | 118 | 5 | 19,920 |  |  |  | 142,744 | 35,455 | 70 | 2 |
| 2007 | may | 113,200 | 7,258 | 1,250 | 1,411 | 117 | 5 | 19,953 |  |  |  | 143,194 | 35,577 | 70 | 2 |
| 2007 | jun | 113,547 | 7,271 | 1,250 | 1,410 | 117 | 5 | 19,986 |  |  |  | 143,586 | 35,699 | 70 | 2 |
| 2007 | jul | 114,103 | 7,283 | 1,250 | 1,402 | 117 | 5 | 20,018 |  |  |  | 144,178 | 35,821 | 70 | 2 |
| 2007 | aug | 114,683 | 7,318 | 1,250 | 1,414 | 117 | 5 | 20,051 |  |  |  | 144,838 | 35,944 | 70 | 2 |
| 2007 | sep | 115,068 | 7,322 | 1,250 | 1,420 | 115 | 5 | 20,084 |  |  |  | 145,264 | 36,068 | 70 | 2 |
| 2007 | oct | 115,774 | 7,358 | 1,250 | 1,419 | 115 | 5 | 20,116 |  |  |  | 146,037 | 36,192 | 70 | 2 |
| 2007 | nov | 116,461 | 7,396 | 1,250 | 1,437 | 115 | 5 | 20,149 |  |  |  | 146,813 | 36,316 | 68 | 2 |
| 2007 | dec | 117,024 | 7,440 | 1,250 | 1,443 | 113 | 6 | 20,182 |  |  |  | 147,458 | 36,441 | 68 | 2 |
| 2008 | jan | 117,488 | 7,434 | 1,267 | 1,461 | 113 | 6 | 20,197 |  |  |  | 147,966 | 36,566 | 67 | 2 |
| 2008 | feb | 117,900 | 7,428 | 1,267 | 1,479 | 113 | 6 | 20,213 |  |  |  | 148,406 | 36,691 | 67 | 2 |
| 2008 | mar | 118,156 | 7,437 | 1,267 | 1,488 | 113 | 6 | 20,228 |  |  |  | 148,695 | 36,817 | 67 | 2 |
| 2008 | apr | 118,500 | 7,424 | 1,267 | 1,482 | 114 | 6 | 20,243 |  |  |  | 149,036 | 36,944 | 67 | 2 |
| 2008 | may | 118,823 | 7,426 | 1,267 | 1,479 | 116 | 6 | 20,259 |  |  |  | 149,376 | 37,071 | 67 | 2 |
| 2008 | jun | 118,969 | 7,413 | 1,267 | 1,479 | 117 | 6 | 20,274 |  |  |  | 149,525 | 37,198 | 67 |  |
| 2008 | jul | 119,282 | 7,413 | 1,267 | 1,485 | 117 | 6 | 20,290 |  |  |  | 149,860 | 37,326 | 67 | 2 |
| 2008 | aug | 119,438 | 7,419 | 1,267 | 1,491 | 117 | 6 | 20,305 |  |  |  | 150,043 | 37,454 | 67 | 2 |
| 2008 | sep | 119,587 | 7,441 | 1,267 | 1,496 | 117 | 6 | 20,321 |  |  |  | 150,235 | 37,583 | 67 | 2 |
| 2008 | oct | 119,951 | 7,445 | 1,267 | 1,517 | 117 | 6 | 20,336 |  |  |  | 150,639 | 37,712 | 67 | 2 |
| 2008 | nov | 120,231 | 7,476 | 1,267 | 1,518 | 117 | 6 | 20,352 |  |  |  | 150,967 | 37,841 | 67 | 2 |

Number of Customers and Connections by Month

| Year | Month | Residential | GS<50 | USL-Connections | GS>50 | Intermediate | Large User | Street Light Connections | $\begin{aligned} & \text { Embedded } \\ & \text { Distributor } \\ & \hline \end{aligned}$ | Distributed Generation | Energy from Waste Genneration | Total | Street Light-Lamps | USL - Customers | Street LightCustomers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | dec | 120,395 | 7,485 | 1,267 | 1,519 | 117 | 6 | 20,367 |  |  |  | 151,156 | 37,971 | 67 | 2 |
| 2009 | jan | 120,546 | 7,496 | 1,280 | 1,532 | 116 | 6 | 20,382 |  |  |  | 151,358 | 38,102 | 67 | 2 |
| 2009 | feb | 120,596 | 7,497 | 1,280 | 1,535 | 116 | 6 | 20,397 |  |  |  | 151,427 | 38,232 | 67 | 2 |
| 2009 | mar | 120,697 | 7,507 | 1,280 | 1,542 | 115 | 6 | 20,412 |  |  |  | 151,559 | 38,364 | 67 | 2 |
| 2009 | apr | 120,743 | 7,490 | 1,280 | 1,558 | 115 | 6 | 20,427 |  |  |  | 151,619 | 38,495 | 67 | 2 |
| 2009 | may | 120,836 | 7,486 | 1,280 | 1,568 | 116 | 6 | 20,442 |  |  |  | 151,734 | 38,627 | 67 | 2 |
| 2009 | jun | 120,918 | 7,489 | 1,280 | 1,570 | 114 | 6 | 20,457 |  |  |  | 151,834 | 38,760 | 67 | 2 |
| 2009 | jul | 121,070 | 7,500 | 1,280 | 1,575 | 114 | 6 | 20,472 |  |  |  | 152,017 | 38,893 | 66 | 2 |
| 2009 | aug | 121,201 | 7,517 | 1,280 | 1,579 | 114 | 6 | 20,487 |  |  |  | 152,184 | 39,027 | 66 | 2 |
| 2009 | sep | 121,267 | 7,523 | 1,280 | 1,583 | 113 | 6 | 20,503 |  |  |  | 152,275 | 39,161 | 66 | 2 |
| 2009 | oct | 121,405 | 7,604 | 1,280 | 1,532 | 113 | 6 | 20,518 |  |  |  | 152,458 | 39,295 | 66 | 2 |
| 2009 | nov | 121,519 | 7,616 | 1,280 | 1,536 | 110 | 6 | 20,533 |  |  |  | 152,600 | 39,430 | 64 | 2 |
| 2009 | dec | 121,692 | 7,620 | 1,280 | 1,534 | 111 | 6 | 20,548 |  |  |  | 152,791 | 39,565 | 64 | 2 |
| 2010 | jan | 121,786 | 7,668 | 1,293 | 1,536 | 112 | 6 | 20,570 |  |  |  | 152,971 | 39,701 | 64 | 2 |
| 2010 | feb | 121,899 | 7,665 | 1,293 | 1,541 | 112 | 6 | 20,592 |  |  |  | 153,108 | 39,837 | 64 | 2 |
| 2010 | mar | 122,202 | 7,671 | 1,293 | 1,533 | 113 | 6 | 20,614 |  |  |  | 153,432 | 39,974 | 64 | 2 |
| 2010 | apr | 122,353 | 7,671 | 1,293 | 1,533 | 114 | 6 | 20,636 |  |  |  | 153,606 | 40,111 | 62 | 2 |
| 2010 | may | 122,492 | 7,665 | 1,293 | 1,538 | 114 | 6 | 20,658 |  |  |  | 153,766 | 40,249 | 62 | 2 |
| 2010 | jun | 122,689 | 7,701 | 1,293 | 1,542 | 115 | 6 | 20,680 |  |  |  | 154,026 | 40,387 | 62 | 2 |
| 2010 | jul | 122,952 | 7,727 | 1,293 | 1,539 | 115 | 6 | 20,702 |  |  |  | 154,334 | 40,526 | 62 | 2 |
| 2010 | aug | 123,306 | 7,795 | 1,293 | 1,540 | 115 | 6 | 20,724 |  |  |  | 154,779 | 40,665 | 61 | 2 |
| 2010 | sep | 123,592 | 7,817 | 1,293 | 1,540 | 115 | 6 | 20,746 |  |  |  | 155,109 | 40,805 | 61 | 2 |
| 2010 | oct | 123,975 | 7,844 | 1,293 | 1,543 | 115 | 6 | 20,768 |  |  |  | 155,544 | 40,945 | 60 | 2 |
| 2010 | nov | 124,314 | 7,880 | 1,293 | 1,541 | 115 | 6 | 20,790 |  |  |  | 155,939 | 41,085 | 61 | 2 |
| 2010 | dec | 124,592 | 7,914 | 1,293 | 1,542 | 113 | 6 | 20,812 |  |  |  | 156,272 | 41,226 | 61 | 2 |
| 2011 | jan | 124,890 | 7,934 | 1,307 | 1,545 | 112 | 6 | 20,841 | 1 | - | 1 | 156,637 | 41,260 | 61 | 2 |
| 2011 | feb | 125,033 | 7,959 | 1,321 | 1,545 | 112 | 6 | 20,871 | 1 | 1 | 1 | 156,850 | 41,294 | 61 | 2 |
| 2011 | mar | 125,247 | 7,989 | 1,336 | 1,545 | 112 | 6 | 20,900 | 1 | 1 | 1 | 157,138 | 41,328 | 61 | 2 |
| 2011 | apr | 125,456 | 8,016 | 1,351 | 1,547 | 112 | 6 | 20,929 | 1 | 1 | 1 | 157,420 | 41,362 | 61 | 2 |
| 2011 | may | 125,752 | 8,027 | 1,366 | 1,544 | 112 | 6 | 20,959 | 1 | 1 | 1 | 157,769 | 41,396 | 61 | 2 |
| 2011 | jun | 126,132 | 8,062 | 1,381 | 1,545 | 111 | 6 | 20,988 | 1 | 1 | 1 | 158,228 | 41,439 | 61 | 2 |
| 2011 | jul | 126,396 | 8,083 | 1,385 | 1,541 | 112 | 6 | 21,018 | 1 | 1 | 1 | 158,544 | 41,434 | 61 | 2 |
| 2011 | aug | 126,670 | 8,103 | 1,389 | 1,544 | 112 | 6 | 21,047 | 1 | 2 | 1 | 158,875 | 41,362 | 61 | 2 |
| 2011 | sep | 127,049 | 8,135 | 1,392 | 1,522 | 112 | 6 | 21,077 | 1 | 2 | 1 | 159,297 | 41,547 | 61 | 2 |
| 2011 | oct | 127,445 | 8,172 | 1,400 | 1,522 | 112 | 6 | 21,107 | 1 | 2 | 1 | 159,768 | 41,684 | 61 | 2 |
| 2011 | nov | 127,774 | 8,225 | 1,398 | 1,521 | 112 | 6 | 21,136 | 1 | 2 | 1 | 160,176 | 41,755 | 62 | 2 |
| 2011 | dec | 127,956 | 8,259 | 1,400 | 1,523 | 112 | 6 | 21,166 | 1 | 3 | 1 | 160,427 | 41,780 | 62 | 2 |
| 2012 | jan | 128,080 | 8,241 | 1,405 | 1,523 | 113 | 6 | 21,196 | 1 | 4 | 1 | 160,570 | 41,894 | 61 | 2 |
| 2012 | feb | 128,321 | 8,262 | 1,408 | 1,524 | 112 | 6 | 21,225 | 1 | 4 | 1 | 160,864 | 41,979 | 61 | 2 |
| 2012 | mar | 128,513 | 8,279 | 1,414 | 1,524 | 112 | 6 | 21,255 | 1 | 4 | 1 | 161,109 | 42,058 | 61 | 2 |
| 2012 | apr | 128,731 | 8,292 | 1,420 | 1,515 | 112 | 6 | 21,285 | 1 | 4 | 1 | 161,367 | 42,166 | 61 | 2 |
| 2012 | may | 128,980 | 8,310 | 1,420 | 1,517 | 112 | 6 | 21,314 | 1 | 4 | 1 | 161,665 | 42,345 | 61 | 2 |
| 2012 | jun | 129,389 | 8,317 | 1,420 | 1,518 | 112 | 6 | 21,344 | 1 | 4 | 1 | 162,112 | 42,292 | 61 | 2 |
| 2012 | jul | 129,807 | 8,323 | 1,420 | 1,521 | 112 | 6 | 21,374 | 1 | 4 | 1 | 162,569 | 42,344 | 61 | 2 |
| 2012 | aug | 130,175 | 8,336 | 1,421 | 1,524 | 112 | 6 | 21,404 | 1 | 4 | 1 | 162,984 | 42,419 | 61 | 2 |
| 2012 | sep | 130,451 | 8,357 | 1,423 | 1,528 | 111 | 6 | 21,434 | 1 | 4 | 1 | 163,316 | 42,533 | 60 | 2 |
| 2012 | oct | 130,880 | 8,384 | 1,440 | 1,537 | 110 | 6 | 21,464 | 1 | 10 | 1 | 163,833 | 42,691 | 60 | 2 |
| 2012 | nov | 131,394 | 8,404 | 1,448 | 1,537 | 110 | 6 | 21,494 | 1 | 12 | 1 | 164,407 | 42,738 | 60 | 2 |
| 2012 | dec | 131,665 | 8,426 | 1,450 | 1,537 | 110 | 6 | 21,524 | 1 | 14 | 1 | 164,734 | 42,897 | 60 | 2 |
| 2013 | jan | 131,997 | 8,449 | 1,463 | 1,540 | 110 | 6 | 21,555 | 1 | 14 | 1 | 165,136 | 43,168 | 60 | 2 |
| 2013 | feb | 132,243 | 8,471 | 1,464 | 1,538 | 111 | 6 | 21,586 | 1 | 14 | 1 | 165,435 | 42,984 | 60 | 2 |
| 2013 | mar | 132,535 | 8,448 | 1,465 | 1,536 | 111 | 6 | 21,617 |  | 16 | 1 | 165,736 | 43,078 | 60 | 2 |
| 2013 | apr | 132,899 | 8,508 | 1,476 | 1,495 | 111 | 6 | 21,649 | 1 | 15 | 1 | 166,161 | 43,237 | 59 | 2 |
| 2013 | may | 133,254 | 8,518 | 1,478 | 1,497 | 117 | 6 | 21,680 | 1 | 17 | 1 | 166,569 | 43,420 | 59 | 2 |
| 2013 | jun | 133,451 | 8,515 | 1,479 | 1,499 | 117 | 6 | 21,711 | 1 | 20 | 1 | 166,800 | 43,469 | 59 | 2 |
| 2013 | jul | 133,791 | 8,528 | 1,481 | 1,502 | 117 | 6 | 21,743 | 1 | 21 | 1 | 167,191 | 43,568 | 59 | 2 |
| 2013 | aug | 134,201 | 8,528 | 1,480 | 1,505 | 117 | 6 | 21,774 | 1 | 21 | 1 | 167,634 | 43,695 | 58 | 2 |
| 2013 | sep | 134,508 | 8,538 | 1,482 | 1,507 | 117 | 6 | 21,805 | 1 | 21 | 1 | 167,986 | 43,733 | 58 | 2 |
| 2013 | oct | 134,865 | 8,550 | 1,486 | 1,504 | 118 | 6 | 21,837 | 1 | 21 | 1 | 168,389 | 43,871 | 58 | 2 |
| 2013 | nov | 135,318 | 8,595 | 1,485 | 1,506 | 118 | 6 | 21,868 |  | 22 | 1 | 168,920 | 43,926 | 58 | 2 |
| 2013 | dec | 135,612 | 8,735 | 1,487 | 1,508 | 118 | 6 | 21,900 | 1 | 23 | 1 | 169,391 | 44,045 | 58 | 2 |
| 2014 | jan | 135,872 | 8,738 | 1,492 | 1,507 | 118 | 6 | 21,920 | 1 | 26 | 1 | 169,681 | 44,175 | 58 | 2 |
| 2014 | feb | 136,132 | 8,742 | 1,497 | 1,506 | 117 | 6 | 21,940 | 1 | 29 | 1 | 169,971 | 44,304 | 58 | 2 |
| 2014 | mar | 136,392 | 8,745 | 1,502 | 1,505 | 117 | 6 | 21,959 | 1 | 32 | 1 | 170,261 | 44,434 | 58 | 2 |
| 2014 | apr | 136,653 | 8,749 | 1,507 | 1,504 | 116 | 6 | 21,979 | 1 | 35 | 1 | 170,551 | 44,563 | 58 | 2 |
| 2014 | may | 136,913 | 8,752 | 1,512 | 1,503 | 116 | 6 | 21,999 | 1 | 38 | 1 | 170,841 | 44,693 | 57 | 2 |
| 2014 | jun | 137,173 | 8,756 | 1,516 | 1,502 | 115 | 6 | 22,019 | 1 | 42 | 1 | 171,130 | 44,822 | 57 | 2 |
| 2014 | jul | 137,433 | 8,759 | 1,521 | 1,500 | 115 | 6 | 22,039 | 1 | 45 | 1 | 171,420 | 44,952 | 57 | 2 |
| 2014 | aug | 137,693 | 8,763 | 1,526 | 1,499 | 114 | 6 | 22,058 | 1 | 48 | 1 | 171,710 | 45,081 | 57 | 2 |
| 2014 | sep | 137,953 | 8,766 | 1,531 | 1,498 | 114 |  | 22,078 | 1 | 51 | 1 | 172,000 | 45,211 | 57 | 2 |
| 2014 | oct | 138,214 | 8,770 | 1,536 | 1,497 | 113 | 6 | 22,098 | 1 | 54 | 1 | 172,290 | 45,341 | 57 | 2 |

Number of Customers and Connections by Month

| Year | Month | Residential | GS<50 | USL - Connections | GS>50 | Intermediate | Large User | Street Light Connections | $\begin{aligned} & \text { Embedded } \\ & \text { Distributor } \\ & \hline \end{aligned}$ | Distributed Generation | Energy from Waste Genneration | Total | Street Light-Lamps | USL - Customers | Street LightCustomers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | nov | 138,474 | 8,773 | 1,541 | 1,496 | 113 | 6 | 22,118 | 1 | 57 | 1 | 172,580 | 45,470 | 57 | 2 |
| 2014 | dec | 138,734 | 8,777 | 1,546 | 1,495 | 112 | 6 | 22,138 | 1 | 60 | 1 | 172,870 | 45,600 | 57 | 2 |
| 2015 | jan | 139,079 | 8,810 | 1,548 | 1,494 | 113 | 6 | 22,168 | 1 | 61 | 1 | 173,282 | 45,708 | 57 | 2 |
| 2015 | feb | 139,425 | 8,842 | 1,551 | 1,494 | 113 | 6 | 22,198 | 1 | 62 | 1 | 173,693 | 45,816 | 56 | 2 |
| 2015 | mar | 139,770 | 8,875 | 1,553 | 1,493 | 113 | 6 | 22,229 | 1 | 64 | 1 | 174,105 | 45,923 | 56 | 2 |
| 2015 | apr | 140,116 | 8,908 | 1,556 | 1,492 | 114 | 6 | 22,259 | 1 | 65 | 1 | 174,517 | 46,031 | 56 | 2 |
| 2015 | may | 140,461 | 8,940 | 1,558 | 1,492 | 114 | 6 | 22,289 | 1 | 66 | 1 | 174,928 | 46,139 | 56 | 2 |
| 2015 | jun | 140,806 | 8,973 | 1,560 | 1,491 | 114 | 6 | 22,319 | 1 | 67 | 1 | 175,340 | 46,247 | 56 | 2 |
| 2015 | jul | 141,152 | 9,006 | 1,563 | 1,490 | 115 | 6 | 22,350 | 1 | 68 | 1 | 175,752 | 46,355 | 56 | 2 |
| 2015 | aug | 141,497 | 9,039 | 1,565 | 1,490 | 115 | 6 | 22,380 | 1 | 69 | 1 | 176,163 | 46,463 | 56 | 2 |
| 2015 | sep | 141,843 | 9,071 | 1,568 | 1,489 | 116 | 6 | 22,410 | 1 | 71 | 1 | 176,575 | 46,571 | 56 | 2 |
| 2015 | oct | 142,188 | 9,104 | 1,570 | 1,488 | 116 | 6 | 22,441 | 1 | 72 | 1 | 176,987 | 46,679 | 55 | 2 |
| 2015 | nov | 142,534 | 9,137 | 1,573 | 1,488 | 116 | 6 | 22,471 | 1 | 73 | 1 | 177,398 | 46,787 | 55 | 2 |
| 2015 | dec | 142,879 | 9,169 | 1,575 | 1,487 | 117 | 6 | 22,501 | 1 | 74 | 1 | 177,810 | 46,895 | 55 | 2 |

# Weather Normalized Data 

| Year | Month | Residential | GS<50 | USL | GS>50 | Intermediate | Large Use | Street Lighting | Embedded Distributor | Distributed Generation | Energy from Waste Generation | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | jan | 118,598,263 | 28,619,587 | 445,252 | 103,289,050 | 64,424,376 | 30,113,962 | 3,002,875 | 2,351,425 | - | - | 350,844,789 |
| 2009 | feb | 107,071,455 | 28,182,117 | 445,252 | 97,690,730 | 61,815,917 | 29,094,164 | 2,487,553 | 1,978,025 | - | - | 328,765,213 |
| 2009 | mar | 90,868,324 | 24,534,550 | 445,252 | 104,715,318 | 68,379,224 | 32,323,109 | 2,478,839 | 1,985,241 | - | - | 325,729,857 |
| 2009 | apr | 95,708,545 | 25,431,086 | 445,252 | 91,084,277 | 65,392,820 | 28,206,089 | 2,078,755 | 1,658,882 | - | - | 310,005,706 |
| 2009 | may | 83,289,515 | 23,279,785 | 445,252 | 85,546,901 | 68,345,251 | 22,071,420 | 1,850,410 | 1,476,658 | - | - | 286,305,192 |
| 2009 | jun | 76,926,112 | 21,922,184 | 445,252 | 87,787,644 | 71,004,469 | 25,139,774 | 1,635,619 | 1,412,811 | - | - | 286,273,865 |
| 2009 | jul | 107,552,908 | 26,182,993 | 445,252 | 87,193,061 | 75,312,771 | 27,928,234 | 1,772,912 | 1,374,323 | - | - | 327,762,454 |
| 2009 | aug | 109,131,328 | 32,100,416 | 445,252 | 92,624,009 | 76,125,780 | 31,314,332 | 2,039,153 | 1,360,403 | - |  | 345,140,674 |
| 2009 | sep | 96,799,464 | 16,307,182 | 445,252 | 91,990,314 | 73,953,358 | 30,960,882 | 2,317,560 | - | - | - | 312,774,011 |
| 2009 | oct | 84,438,120 | 23,527,743 | 445,252 | 91,927,402 | 71,327,008 | 31,544,232 | 2,775,132 |  | - | - | 305,984,888 |
| 2009 | nov | 91,828,882 | 25,053,061 | 445,252 | 92,544,226 | 69,313,026 | 28,370,192 | 2,967,757 | 103,455 | - | - | 310,625,852 |
| 2009 | dec | 92,620,066 | 25,150,126 | 445,252 | 102,421,319 | 62,970,698 | 32,320,809 | 3,211,862 | 2,141,881 | - | - | 321,282,013 |
| 2010 | jan | 123,124,605 | 30,030,094 | 447,627 | 100,829,619 | 68,357,574 | 29,369,612 | 3,151,837 | 2,201,541 | - | - | 357,512,511 |
| 2010 | feb | 100,750,007 | 26,607,766 | 448,066 | 97,057,504 | 65,128,800 | 30,795,755 | 2,613,725 | 1,907,315 | - | - | 325,308,937 |
| 2010 | mar | 93,311,172 | 25,182,021 | 448,066 | 104,798,956 | 72,756,230 | 32,711,358 | 2,570,323 | 1,798,013 | - | - | 333,576,139 |
| 2010 | apr | 103,035,493 | 28,223,548 | 448,066 | 90,070,404 | 71,590,030 | 31,009,830 | 2,161,004 | 1,333,323 | - | - | 327,871,699 |
| 2010 | may | 72,373,830 | 21,211,900 | 460,902 | 87,417,046 | 75,879,167 | 31,909,523 | 1,925,854 | 2,466,013 | - | - | 293,644,235 |
| 2010 | jun | 94,534,190 | 23,166,158 | 441,276 | 91,518,022 | 80,043,941 | 30,129,045 | 1,691,206 | 2,205,127 | - | - | 323,728,966 |
| 2010 | jul | 124,097,363 | 25,544,685 | 445,057 | 92,936,013 | 81,522,097 | 28,527,956 | 1,830,102 | 1,164,160 | - | - | 356,067,434 |
| 2010 | aug | 128,698,777 | 25,584,978 | 526,055 | 94,829,892 | 82,176,844 | 34,258,495 | 2,121,317 | 1,165,536 | - | - | 369,361,895 |
| 2010 | sep | 112,397,013 | 25,716,505 | 450,300 | 92,871,674 | 75,245,117 | 32,675,913 | 2,383,503 | 1,101,811 | - | - | 342,841,835 |
| 2010 | oct | 84,312,490 | 23,538,565 | 455,995 | 88,955,430 | 73,008,036 | 31,399,057 | 2,835,027 | 1,222,932 | - | - | 305,727,531 |
| 2010 | nov | 85,178,204 | 23,245,922 | 403,206 | 93,468,845 | 72,344,420 | 28,056,417 | 3,042,503 | 1,360,691 | - | - | 307,100,208 |
| 2010 | dec | 96,952,217 | 25,617,051 | 465,303 | 101,526,343 | 64,817,924 | 29,387,270 | 3,331,010 | 1,787,298 | - | - | 323,884,416 |
| 2011 | jan | 122,033,956 | 29,993,960 | 464,657 | 101,299,330 | 70,367,055 | 31,634,283 | 3,288,240 | 2,590,223 | - | - | 361,671,703 |
| 2011 | feb | 104,898,902 | 28,506,463 | 468,054 | 100,095,661 | 64,123,420 | 32,011,944 | 2,757,058 | 4,588,940 | 19 | - | 337,450,462 |
| 2011 | mar | 94,576,351 | 27,005,621 | 469,351 | 105,879,187 | 72,469,791 | 35,752,112 | 2,715,053 | 2,896,351 | 137 | - | 341,763,954 |
| 2011 | apr | 96,111,586 | 27,024,813 | 476,257 | 90,682,170 | 67,870,001 | 32,719,563 | 2,288,195 | 2,290,438 | 113 | - | 319,463,136 |
| 2011 | may | 82,814,009 | 24,152,290 | 476,076 | 89,320,256 | 70,239,269 | 34,980,326 | 1,962,057 | 2,314,611 | 107 | - | 306,259,001 |
| 2011 | jun | 92,604,350 | 25,519,216 | 476,196 | 91,919,418 | 73,667,438 | 34,766,791 | 1,760,883 | 2,368,040 | 95 | - | 323,082,426 |
| 2011 | jul | 120,214,059 | 26,603,632 | 476,904 | 94,069,992 | 75,212,938 | 35,174,008 | 1,931,872 | 3,197,505 | 99 | - | 356,881,010 |
| 2011 | aug | 134,269,363 | 26,820,716 | 477,250 | 98,443,120 | 76,831,974 | 35,228,640 | 2,261,136 | 2,904,671 | 128 | - | 377,236,997 |
| 2011 | sep | 110,734,676 | 27,309,054 | 479,035 | 93,149,659 | 70,752,234 | 31,536,232 | 2,564,319 | 2,559,711 | 153 | - | 339,085,072 |
| 2011 | oct | 86,214,836 | 24,400,438 | 479,089 | 90,087,645 | 69,051,008 | 34,054,199 | 2,923,384 | 2,725,359 | 176 | - | 309,936,133 |
| 2011 | nov | 89,450,698 | 25,932,812 | 477,254 | 93,865,587 | 69,234,572 | 32,483,925 | 3,203,546 | 2,840,306 | 192 | - | 317,488,892 |
| 2011 | dec | 100,370,260 | 28,247,045 | 481,734 | 98,485,049 | 61,742,752 | 31,594,855 | 3,471,874 | 3,815,377 | 578 | - | 328,209,524 |
| 2012 | jan | 118,535,681 | 31,114,268 | 482,261 | 102,767,521 | 69,307,807 | 33,936,791 | 3,438,160 | 3,991,512 | 1,018 | - | 363,575,020 |
| 2012 | feb | 106,279,178 | 30,407,139 | 482,387 | 98,330,537 | 66,995,130 | 31,584,011 | 2,969,674 | 3,175,845 | 849 | - | 340,224,751 |
| 2012 | mar | 100,132,568 | 29,032,054 | 483,251 | 98,960,635 | 72,081,327 | 34,733,875 | 2,814,479 | 2,902,405 | 712 | - | 341,141,305 |
| 2012 | apr | 94,809,368 | 26,892,831 | 483,251 | 88,499,229 | 67,789,586 | 32,490,043 | 2,335,304 | 2,546,845 | 614 | - | 315,847,070 |
| 2012 | may | 74,764,088 | 23,858,991 | 483,251 | 93,252,482 | 74,164,187 | 35,715,121 | 2,063,663 | 2,489,016 | 460 | - | 306,791,260 |
| 2012 | jun | 101,015,986 | 25,808,928 | 484,023 | 94,785,126 | 73,132,101 | 35,660,186 | 1,845,080 | 2,727,280 | 420 | - | 335,459,132 |
| 2012 | jul | 136,931,738 | 27,289,411 | 484,077 | 98,715,331 | 73,321,461 | 34,438,874 | 1,974,762 | 3,160,006 | 454 | - | 376,316,113 |
| 2012 | aug | 137,002,479 | 28,452,630 | 484,327 | 98,956,490 | 74,233,617 | 38,440,564 | 2,279,655 | 2,809,346 | 502 | - | 382,659,609 |
| 2012 | sep | 117,289,753 | 27,518,142 | 485,791 | 91,964,965 | 68,922,458 | 35,328,755 | 2,559,703 | 2,479,553 | 558 | - | 346,549,678 |
| 2012 | oct | 80,476,834 | 24,038,289 | 486,134 | 92,196,308 | 71,134,837 | 35,249,465 | 2,936,690 | 2,562,899 | 1,508 | - | 309,082,963 |
| 2012 | nov | 91,729,759 | 26,155,779 | 490,868 | 95,786,344 | 69,778,849 | 33,210,549 | 3,214,802 | 2,821,863 | 3,301 | - | 323,192,114 |
| 2012 | dec | 104,474,896 | 29,222,207 | 488,051 | 96,869,986 | 62,811,049 | 30,725,747 | 3,570,371 | 3,357,264 | 4,629 | - | 331,524,200 |
| 2013 | jan | 120,179,198 | 31,974,497 | 490,421 | 100,597,485 | 69,869,314 | 32,278,031 | 3,460,843 | 3,438,504 | 4,675 | - | 362,292,967 |
| 2013 | feb | 106,948,782 | 29,282,849 | 491,686 | 92,950,524 | 61,396,744 | 29,167,074 | 2,867,016 | 3,028,565 | 5,095 | - | 326,138,334 |
| 2013 | mar | 94,113,395 | 27,434,117 | 504,705 | 91,722,140 | 65,635,266 | 30,612,037 | 2,845,958 | 3,019,497 | 3,534 | - | 315,890,648 |
| 2013 | apr | 100,866,123 | 28,599,502 | 495,384 | 90,404,512 | 70,347,085 | 30,298,296 | 2,388,376 | 2,667,741 | 2,828 | - | 326,069,847 |
| 2013 | may | 79,728,651 | 25,664,540 | 497,815 | 94,425,487 | 73,592,929 | 34,419,341 | 2,134,159 | 3,888,565 | 2,436 | - | 314,353,923 |
| 2013 | jun | 96,420,492 | 26,547,488 | 499,291 | 91,796,117 | 75,588,241 | 34,662,988 | 1,909,094 | 4,455,436 | 2,414 | - | 331,881,560 |
| 2013 | jul | 124,010,559 | 27,317,779 | 494,805 | 100,327,155 | 77,635,401 | 33,639,198 | 2,020,795 | 5,171,793 | 3,273 | - | 370,620,758 |
| 2013 | aug | 122,647,757 | 29,131,574 | 499,001 | 96,978,037 | 77,374,349 | 36,059,996 | 2,371,371 | 4,685,810 | 3,587 | - | 369,751,483 |
| 2013 | sep | 121,272,116 | 28,583,747 | 500,512 | 90,136,024 | 67,175,844 | 32,823,867 | 2,665,740 | 4,243,955 | 4,004 | - | 347,405,809 |

## Weather Normalized Data



| Year | Loss Factor | Weather Normalized Billed Quantities (kWh) Non-Uplifted |  |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 1.0349 | 1,115,888,474 | 290,164,103 | 5,162,842 | 1,090,747,173 | 801,126,399 | 344,971,561 | 27,653,325 | 15,461,213 | - | - | 3,691,175,091 |
| 2010 | 1.0349 | 1,177,664,858 | 293,428,537 | 5,256,468 | 1,097,960,912 | 853,839,633 | 365,551,177 | 28,657,273 | 19,238,567 |  |  | 3,841,597,426 |
| 2011 | 1.0349 | 1,192,668,901 | 310,673,553 | 5,509,573 | 1,108,606,699 | 813,890,185 | 396,857,107 | 30,077,898 | 34,245,664 | 1,736 |  | 3,892,531,317 |
| 2012 | 1.0349 | 1,220,835,179 | 318,669,115 | 5,621,483 | 1,112,266,841 | 815,930,763 | 406,313,173 | 30,923,126 | 34,179,598 | 14,519 |  | 3,944,753,798 |
| 2013 | 1.0349 | 1,205,670,409 | 324,486,114 | 5,767,707 | 1,089,802,508 | 817,925,218 | 382,721,457 | 31,629,254 | 40,610,366 | 49,624 |  | 3,898,662,657 |



Ontario Real Gross Domestic Product
$1.3000 \%$

| Ontario GDP in Millions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| January | 402,076 | 431,769 | 455,905 | 464,541 | 478,308 | 485,366 | 497,910 | 511,538 | 523,843 | 532,948 | 528,378 | 513,929 | 528,598 | 537,981 | 545,961 | 553,421 | 565,227 |
| February | 404,512 | 433,851 | 456,578 | 465,727 | 478,853 | 486,392 | 499,042 | 512,570 | 524,690 | 532,664 | 526,932 | 515,176 | 529,385 | 538,649 | 546,549 | 554,380 | 566,391 |
| March | 406,963 | 435,944 | 457,251 | 466,917 | 479,399 | 487,421 | 500,177 | 513,603 | 525,538 | 532,380 | 525,489 | 516,426 | 530,172 | 539,317 | 547,137 | 555,341 | 567,558 |
| April | 409,428 | 438,046 | 457,926 | 468,110 | 479,946 | 488,452 | 501,315 | 514,639 | 526,388 | 532,096 | 524,051 | 517,679 | 530,961 | 539,987 | 547,726 | 556,304 | 568,727 |
| May | 411,908 | 440,159 | 458,601 | 469,306 | 480,493 | 489,486 | 502,455 | 515,676 | 527,238 | 531,812 | 522,616 | 518,935 | 531,751 | 540,657 | 548,316 | 557,268 | 569,898 |
| June | 414,404 | 442,281 | 459,278 | 470,505 | 481,041 | 490,521 | 503,598 | 516,716 | 528,091 | 531,528 | 521,186 | 520,194 | 532,542 | 541,328 | 548,907 | 558,234 | 571,072 |
| July | 416,914 | 444,414 | 459,955 | 471,707 | 481,589 | 491,559 | 504,743 | 517,758 | 528,944 | 531,244 | 519,759 | 521,456 | 533,334 | 542,001 | 549,498 | 559,202 | 572,249 |
| August | 419,440 | 446,557 | 460,633 | 472,912 | 482,138 | 492,599 | 505,891 | 518,801 | 529,799 | 530,961 | 518,337 | 522,721 | 534,128 | 542,673 | 550,090 | 560,171 | 573,427 |
| September | 421,981 | 448,711 | 461,313 | 474,120 | 482,688 | 493,641 | 507,042 | 519,847 | 530,656 | 530,677 | 516,918 | 523,990 | 534,923 | 543,347 | 550,682 | 561,142 | 574,608 |
| October | 424,538 | 450,875 | 461,993 | 475,331 | 483,238 | 494,685 | 508,195 | 520,895 | 531,513 | 530,394 | 515,503 | 525,261 | 535,718 | 544,022 | 551,275 | 562,115 | 575,792 |
| November | 427,110 | 453,049 | 462,675 | 476,546 | 483,789 | 495,731 | 509,351 | 521,946 | 532,372 | 530,111 | 514,092 | 526,535 | 536,515 | 544,697 | 551,869 | 563,089 | 576,978 |
| December | 429,697 | 455,234 | 463,357 | 477,763 | 484,341 | 496,780 | 510,509 | 522,998 | 533,233 | 529,828 | 512,685 | 527,813 | 537,314 | 545,373 | 552,463 | 564,065 | 578,167 |


|  | Ontario GDP in Millions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| January | 84.158\% | 90.373\% | 95.425\% | 97.232\% | 100.114\% | 101.591\% | 104.217\% | 107.069\% | 109.645\% | 111.551\% | 110.594\% | 107.570\% | 110.640\% | 112.604\% | 114.274\% | 115.836\% | 118.307\% |
| February | 84.668\% | 90.809\% | 95.566\% | 97.481\% | 100.228\% | 101.806\% | 104.454\% | 107.285\% | 109.822\% | 111.491\% | 110.291\% | 107.831\% | 110.805\% | 112.744\% | 114.397\% | 116.037\% | 118.551\% |
| March | 85.181\% | 91.247\% | 95.707\% | 97.730\% | 100.342\% | 102.022\% | 104.691\% | 107.502\% | 110.000\% | 111.432\% | 109.990\% | 108.092\% | 110.970\% | 112.884\% | 114.521\% | 116.238\% | 118.795\% |
| April | 85.697\% | 91.687\% | 95.848\% | 97.980\% | 100.457\% | 102.237\% | 104.930\% | 107.718\% | 110.178\% | 111.372\% | 109.688\% | 108.355\% | 111.135\% | 113.024\% | 114.644\% | 116.439\% | 119.040\% |
| May | 86.216\% | 92.129\% | 95.989\% | 98.230\% | 100.571\% | 102.454\% | 105.168\% | 107.936\% | 110.356\% | 111.313\% | 109.388\% | 108.618\% | 111.300\% | 113.164\% | 114.767\% | 116.641\% | 119.285\% |
| June | 86.738\% | 92.573\% | 96.131\% | 98.481\% | 100.686\% | 102.670\% | 105.407\% | 108.153\% | 110.534\% | 111.253\% | 109.089\% | 108.881\% | 111.466\% | 113.305\% | 114.891\% | 116.843\% | 119.530\% |
| July | 87.264\% | 93.020\% | 96.273\% | 98.732\% | 100.801\% | 102.888\% | 105.647\% | 108.371\% | 110.713\% | 111.194\% | 108.790\% | 109.145\% | 111.632\% | 113.445\% | 115.015\% | 117.046\% | 119.777\% |
| August | 87.793\% | 93.468\% | 96.415\% | 98.985\% | 100.916\% | 103.105\% | 105.887\% | 108.590\% | 110.892\% | 111.135\% | 108.492\% | 109.410\% | 111.798\% | 113.586\% | 115.139\% | 117.249\% | 120.023\% |
| September | 88.324\% | 93.919\% | 96.557\% | 99.237\% | 101.031\% | 103.323\% | 106.128\% | 108.809\% | 111.071\% | 111.075\% | 108.195\% | 109.676\% | 111.964\% | 113.727\% | 115.263\% | 117.452\% | 120.271\% |
| October | 88.859\% | 94.372\% | 96.699\% | 99.491\% | 101.146\% | 103.542\% | 106.370\% | 109.028\% | 111.250\% | 111.016\% | 107.899\% | 109.942\% | 112.131\% | 113.869\% | 115.387\% | 117.656\% | 120.518\% |
| November | 89.398\% | 94.827\% | 96.842\% | 99.745\% | 101.261\% | 103.761\% | 106.612\% | 109.248\% | 111.430\% | 110.957\% | 107.604\% | 110.209\% | 112.297\% | 114.010\% | 115.511\% | 117.859\% | 120.767\% |
| December | 89.939\% | 95.284\% | 96.985\% | 100.000\% | 101.377\% | 103.980\% | 106.854\% | 109.468\% | 111.610\% | 110.898\% | 107.309\% | 110.476\% | 112.464\% | 114.151\% | 115.635\% | 118.064\% | 121.015\% |



Distribution Rates

| Class | Metric | 2009 Approved Distribution Rates | 2010 Approved Distribution Rates | 2011 Approved Distribution Rates | 2011 Approved Distribution Rates | 2012 Approved Distribution Rates | 2013 Approved Distribution Rates | 2014 Approved Distribution Rates | 2015 Proposed Distribution Rates |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | Customer kWh | $\begin{array}{r} 10.67 \\ 0.0157 \end{array}$ | $\begin{gathered} 10.60 \\ 0.0154 \end{gathered}$ | $\begin{array}{r} 9.75 \\ 0.0142 \end{array}$ | $\begin{array}{r} 9.75 \\ 0.0142 \end{array}$ | $\begin{array}{r} 9.83 \\ 0.0143 \end{array}$ | $\begin{gathered} 10.23 \\ 0.0145 \end{gathered}$ | $\begin{gathered} 10.51 \\ 0.0147 \end{gathered}$ | $\begin{array}{r} 12.93 \\ 0.0137 \end{array}$ |
| GS <50 kW | Customer kWh Tx Credit kWh | $\begin{array}{r} 20.52 \\ 0.0000 \\ 0.0181 \end{array}$ | $\begin{array}{r} 20.27 \\ 0.0000 \\ 0.0178 \end{array}$ | $\begin{array}{r} 17.61 \\ 0.0000 \\ 0.0155 \end{array}$ | $\begin{array}{r} 17.61 \\ 0.0000 \\ 0.0155 \end{array}$ | $\begin{array}{r} 17.75 \\ 0.0000 \\ 0.0156 \end{array}$ | $\begin{array}{r} \hline 22.09 \\ 0.0000 \\ 0.0158 \end{array}$ | $\begin{array}{r} \hline 24.39 \\ 0.0000 \\ 0.0160 \end{array}$ | $\begin{array}{r} 30.21 \\ (0.0033) \\ 0.0138 \end{array}$ |
| GS>50 kW | Customer <br> kW <br> kW Tx Credit <br> kWh | $\begin{gathered} 103.41 \\ 2.3354 \\ (0.6000) \end{gathered}$ | $\begin{array}{r} 101.68 \\ 2.2935 \\ (0.6000) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} 107.48 \\ 2.4192 \\ (0.7048) \\ 0.00 \\ \hline \end{array}$ | 107.48 2.4192 $(0.7048)$ 0.00 | 108.32 2.4381 $(0.7048)$ 0.00 | $\begin{array}{r} 116.33 \\ 2.4693 \\ (0.7048) \\ 0.00 \\ \hline \end{array}$ | 121.18 2.5039 $(0.7048)$ 0.00 | $\begin{array}{r} 183.15 \\ 2.6224 \\ (0.7019) \\ 0.00 \\ \hline \end{array}$ |
| Intermediate | Customer kW <br> kW Tx Credit kWh | $\begin{array}{r} \hline 1,436.09 \\ 3.8037 \\ (0.6000) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} 1,410.45 \\ 3.7355 \\ (0.6000) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,227.95 \\ 3.5321 \\ (0.8758) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,227.95 \\ 3.5321 \\ (0.8758) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,164.89 \\ 3.3507 \\ (0.8758) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,179.80 \\ 3.3936 \\ (0.8758) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,196.32 \\ 3.4411 \\ (0.8758) \\ 0.00 \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,435.10 \\ 3.0427 \\ (0.8737) \\ 0.00 \\ \hline \end{array}$ |
| Large Use > 5MW | Customer <br> kW <br> kW Tx Credit <br> kWh | $\begin{array}{r} \hline 4,808.45 \\ 2.9553 \\ (0.6000) \\ 0.00 \end{array}$ | $\begin{array}{r} 4,722.33 \\ 2.9023 \\ (0.6000) \\ 0.00 \end{array}$ | $\begin{gathered} \hline 4,395.85 \\ 2.1293 \\ 0.0000 \\ 0.00 \end{gathered}$ | $\begin{array}{r} \hline 4,395.85 \\ 2.1293 \\ 0.0000 \\ 0.00 \end{array}$ | $\begin{gathered} 4,430.14 \\ 2.1459 \\ 0.0000 \\ 0.00 \end{gathered}$ | $\begin{gathered} \hline 4,486.85 \\ 2.1734 \\ 0.0000 \\ 0.00 \end{gathered}$ | $\begin{array}{r} \hline 4,549.67 \\ 2.2038 \\ 0.0000 \\ 0.00 \end{array}$ | $\begin{array}{r} \hline 9,212.02 \\ 2.1495 \\ 0.0000 \\ 0.00 \end{array}$ |
| Street Light | Connection kW <br> kWh | $\begin{array}{r} 0.00 \\ 2.2449 \\ 0.0000 \end{array}$ | $\begin{array}{r} 0.00 \\ 2.2046 \\ 0.0000 \end{array}$ | $\begin{array}{r} 0.47 \\ 4.8973 \\ 0.0000 \end{array}$ | $\begin{array}{r} 0.47 \\ 4.8973 \\ 0.0000 \end{array}$ | $\begin{array}{r} 0.82 \\ 8.5207 \\ 0.0000 \end{array}$ | 0.83 8.6298 0.0000 | $\begin{array}{r} 0.84 \\ 8.7506 \\ 0.0000 \end{array}$ | $\begin{array}{r} 3.39 \\ 7.3844 \\ 0.0000 \end{array}$ |
| Unmetered Scattered Load | Customer Connection kWh | $\begin{array}{r} 20.52 \\ 0.00 \\ 0.0181 \end{array}$ | $\begin{array}{r} 20.15 \\ 0.00 \\ 0.0178 \\ \hline \end{array}$ | $\begin{array}{r} 0.93 \\ 0.93 \\ 0.0171 \end{array}$ | $\begin{array}{r} 0.93 \\ 0.93 \\ 0.0171 \\ \hline \end{array}$ | $\begin{array}{r} 0.94 \\ 0.94 \\ 0.0172 \end{array}$ | $\begin{array}{r} 0.95 \\ 0.95 \\ 0.0174 \end{array}$ | 0.96 0.96 0.0176 | $\begin{array}{r} 3.06 \\ 3.06 \\ 0.0145 \\ \hline \end{array}$ |
| Embedded Distributor | Customer kW kWh | $\begin{array}{r} 0.00 \\ 0.0612 \\ 0.0000 \\ \hline \end{array}$ | $\begin{array}{r} \hline 0.00 \\ 0.0612 \\ 0.0000 \end{array}$ | $\begin{array}{r} 0.00 \\ 0.0612 \\ 0.0000 \end{array}$ | $\begin{array}{r} \hline 0.00 \\ 0.0612 \\ 0.0000 \end{array}$ | $\begin{array}{r} \hline 0.00 \\ 0.0617 \\ 0.0000 \\ \hline \end{array}$ | $\begin{gathered} 0.00 \\ 0.0625 \\ 0.0000 \end{gathered}$ | $\begin{array}{r} \hline 0.00 \\ 0.0634 \\ 0.0000 \\ \hline \end{array}$ | $\begin{gathered} \hline 4,106.75 \\ 0.0000 \\ 0.0000 \end{gathered}$ |
| Distributed Generation Class | Customer kW kWh | $\begin{array}{r} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{array}$ | $\begin{array}{r} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{array}$ | $\begin{gathered} \hline 5.40 \\ 0.0000 \\ 0.0155 \end{gathered}$ | $\begin{array}{r} \hline 5.40 \\ 0.0000 \\ 0.0156 \\ \hline \end{array}$ | $\begin{array}{\|r} \hline 5.40 \\ 0.0000 \\ 0.0158 \\ \hline \end{array}$ | $\begin{array}{\|c} \hline 5.40 \\ 0.0000 \\ 0.0160 \\ \hline \end{array}$ | $\begin{gathered} \hline 21.03 \\ 0.0000 \\ 0.1624 \end{gathered}$ |
| Energy from Waste Generation | Customer kW kWh | 0.00 0.0000 0.0000 | 0.00 0.0000 0.0000 | $\begin{gathered} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{array}$ | 0.00 0.0000 0.0000 | 0.00 0.0000 0.0000 | $\begin{array}{\|c\|} \hline 0.00 \\ 0.0000 \\ 0.0000 \\ \hline \end{array}$ | $\begin{gathered} 62.25 \\ 0.0000 \\ 0.0000 \end{gathered}$ |
| Backup/Standby Power | Customer kW <br> kWh | 0.00 1.5047 0.0000 | 0.00 1.5047 0.0000 | $\begin{aligned} & 0.00 \\ & 0.00 \\ & 0.00 \end{aligned}$ | 0.00 0.0000 0.0000 | 0.00 0.0000 0.0000 | 0.00 1.5358 0.0000 | $\begin{array}{r} 0.00 \\ 1.5573 \\ 0.0000 \end{array}$ | $\begin{gathered} 0.00 \\ 1.6605 \\ 0.0000 \end{gathered}$ |

## EXHIBIT 3: Operating Revenue

## TAB 4 (of 4)

HOBNI Class Specific Multivariate Regression Model

Regression Model for Residential

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Days }}$ | $\frac{\text { Ontario Real GDP }}{\text { Monthly } \%}$ | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Fiag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \%Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 100,143,636 | 849.1 | 0.0 | 101.59\% | 31.0 | 0.0 | 336.0 | 95,064 | 373,417 | 92,845,629 | -7,298,007 | -7.29\% |
| 2004 | Feb-04 | 87,647,207 | 631.7 | 0.0 | 101.81\% | 29.0 | 0.0 | 320.0 | 95,895 | 374,833 | 87,916,223 | 269,016 | 0.31\% |
| 2004 | Mar-04 | 71,845,735 | 487.3 | 0.0 | 102.02\% | 31.0 | 1.0 | 368.0 | 96,285 | 376,250 | 72,754,069 | 908,334 | 1.26\% |
| 2004 | Apr-04 | 82,063,258 | 331.5 | 0.0 | 102.24\% | 30.0 | 1.0 | 336.0 | 96,725 | 377,667 | 72,999,312 | $-9,063,946$ | -11.05\% |
| 2004 | May-04 | 70,266,359 | 158.9 | 8.6 | 102.45\% | 31.0 | 1.0 | 320.0 | 97,077 | 379,083 | 73,636,762 | 3,370,403 | 4.80\% |
| 2004 | Jun-04 | 66,433,287 | 44.2 | 31.6 | 102.67\% | 30.0 | 0.0 | 352.0 | 97,807 | 380,500 | 74,642,451 | 8,209,164 | 12.36\% |
| 2004 | Jul-04 | 85,771,389 | 3.6 | 86.4 | 102.89\% | 31.0 | 0.0 | 336.0 | 98,313 | 381,917 | 94,003,178 | 8,231,789 | 9.60\% |
| 2004 | Aug-04 | 90,532,320 | 12.8 | 59.6 | 103.11\% | 31.0 | 0.0 | 336.0 | 99,031 | 383,333 | 86,318,537 | -4,213,783 | -4.65\% |
| 2004 | Sep-04 | 83,924,386 | 30.0 | 41.2 | 103.32\% | 30.0 | 1.0 | 336.0 | 99,957 | 384,750 | 77,676,808 | -6,247,578 | -7.44\% |
| 2004 | Oct-04 | 72,669,406 | 226.3 | 1.5 | 103.54\% | 31.0 | 1.0 | 320.0 | 100,574 | 386,167 | 75,352,534 | 2,683,128 | 3.69\% |
| 2004 | Nov-04 | 69,069,532 | 379.1 | 0.0 | 103.76\% | 30.0 | 1.0 | 352.0 | 101,456 | 387,583 | 74,093,715 | 5,024,183 | 7.27\% |
| 2004 | Dec-04 | 86,082,290 | 643.4 | 0.0 | 103.98\% | 31.0 | 0.0 | 336.0 | 102,070 | 389,000 | 89,696,584 | 3,614,294 | 4.20\% |
| 2005 | Jan-05 | 104,838,692 | 770.0 | 0.0 | 104.22\% | 31.0 | 0.0 | 320.0 | 102,392 | 391,000 | 96,789,676 | -8,049,016 | -7.68\% |
| 2005 | Feb-05 | 89,341,121 | 616.4 | 0.0 | 104.45\% | 28.0 | 0.0 | 320.0 | 102,796 | 393,000 | 90,373,946 | 1,032,825 | 1.16\% |
| 2005 | Mar-05 | 81,893,716 | 608.6 | 0.0 | 104.69\% | 31.0 | 1.0 | 352.0 | 103,098 | 395,000 | 82,971,521 | 1,077,805 | 1.32\% |
| 2005 | Apr-05 | 82,047,835 | 306.8 | 0.0 | 104.93\% | 30.0 | 1.0 | 336.0 | 103,554 | 397,000 | 75,701,818 | -6,346,017 | -7.73\% |
| 2005 | May-05 | 70,819,396 | 189.4 | 0.8 | 105.17\% | 31.0 | 1.0 | 336.0 | 103,932 | 399,000 | 72,916,079 | 2,096,683 | 2.96\% |
| 2005 | Jun-05 | 85,829,567 | 8.9 | 146.3 | 105.41\% | 30.0 | 0.0 | 352.0 | 104,397 | 401,000 | 112,610,220 | 26,780,653 | 31.20\% |
| 2005 | Jul-05 | 133,054,364 | 0.0 | 188.7 | 105.65\% | 31.0 | 0.0 | 320.0 | 104,872 | 403,000 | 131,947,033 | -1,107,331 | -0.83\% |
| 2005 | Aug-05 | 116,855,067 | 0.2 | 140.7 | 105.89\% | 31.0 | 0.0 | 352.0 | 105,326 | 405,000 | 111,644,663 | -5,210,404 | -4.46\% |
| 2005 | Sep-05 | 99,779,320 | 22.6 | 52.1 | 106.13\% | 30.0 | 1.0 | 336.0 | 106,046 | 407,000 | 84,051,763 | -15,727,557 | -15.76\% |
| 2005 | Oct-05 | 78,116,059 | 220.2 | 7.6 | 106.37\% | 31.0 | 1.0 | 320.0 | 106,556 | 409,000 | $80,239,244$ | 2,123,185 | 2.72\% |
| 2005 | Nov-05 | 74,953,612 | 388.4 | 0.0 | 106.61\% | 30.0 | 1.0 | 352.0 | 107,280 | 411,000 | 77,520,107 | 2,566,495 | 3.42\% |
| 2005 | Dec-05 | 86,741,676 | 665.3 | 0.0 | 106.85\% | 31.0 | 0.0 | 320.0 | 107,609 | 413,000 | 96,219,633 | 9,477,957 | 10.93\% |
| 2006 | Jan-06 | 102,626,084 | 551.8 | 0.0 | 107.07\% | 31.0 | 0.0 | 336.0 | 108,069 | 414,667 | 89,978,299 | -12,647,785 | -12.32\% |
| 2006 | Feb-06 | 86,877,874 | 604.3 | 0.0 | 107.29\% | 28.0 | 0.0 | 320.0 | 108,299 | 416,333 | 92,955,615 | 6,077,741 | 7.00\% |
| 2006 | Mar-06 | 83,972,818 | 516.6 | 0.0 | 107.50\% | 31.0 | 1.0 | 368.0 | 108,662 | 418,000 | $80,178,593$ | $-3,794,225$ | -4.52\% |
| 2006 | Apr-06 | 87,386,872 | 293.3 | 0.0 | 107.72\% | 30.0 | 1.0 | 304.0 | 108,948 | 419,667 | 83,790,986 | -3,595,886 | -4.11\% |
| 2006 | May-06 | 65,814,615 | 136.9 | 26.0 | 107.94\% | 31.0 | 1.0 | 352.0 | 109,247 | 421,333 | 79,112,383 | 13,297,768 | 20.20\% |
| 2006 | Jun-06 | 87,554,414 | 19.5 | 73.6 | 108.15\% | 30.0 | 0.0 | 352.0 | 109,426 | 423,000 | 93,051,402 | 5,496,988 | 6.28\% |
| 2006 | Jul-06 | 115,892,341 | 0.0 | 167.3 | 108.37\% | 31.0 | 0.0 | 320.0 | 109,726 | 424,667 | 127,919,429 | 12,027,088 | 10.38\% |
| 2006 | Aug-06 | 122,691,507 | 4.2 | 101.6 | 108.59\% | 31.0 | 0.0 | 352.0 | 110,151 | 426,333 | 102,217,742 | -20,473,765 | -16.69\% |
| 2006 | Sep-06 | 90,273,997 | 80.9 | 12.9 | 108.81\% | 30.0 | 1.0 | 320.0 | 110,556 | 428,000 | 79,005,484 | -11,268,513 | -12.48\% |
| 2006 | Oct-06 | 70,418,334 | 288.3 | 1.1 | 109.03\% | 31.0 | 1.0 | 336.0 | 111,244 | 429,667 | 80,144,481 | 9,726,147 | 13.81\% |
| 2006 | Nov-06 | 81,088,193 | 382.2 | 0.0 | 109.25\% | 30.0 | 1.0 | 352.0 | 111,412 | 431,333 | 79,582,523 | -1,505,670 | $-1.86 \%$ |
| 2006 | Dec-06 | 91,101,711 | 500.5 | 0.0 | 109.47\% | 31.0 | 0.0 | 304.0 | 111,598 | 433,000 | 95,881,773 | 4,780,062 | 5.25\% |
| 2007 | Jan-07 | ${ }^{96,647,423}$ | 647.1 74.1 | 0.0 | 109.65\% | 31.0 | 0.0 | 352.0 | $\begin{array}{r}111,983 \\ \hline 11,259\end{array}$ | 434,417 | 92,404,613 | -4, 424,810 | $-4.39 \%$ |
| 2007 | Feb-07 | 105,695,411 | 740.1 | 0.0 | 109.82\% | 28.0 | 0.0 | 325.0 | 112,259 | 435,833 | ${ }^{99,520,830}$ | -6,174,581 | -5.84\% |
| 2007 | Mar-07 | 89,942,669 | 546.7 | 0.0 | 110.00\% | 31.0 | 1.0 | 352.0 | 112,520 | 437,250 | 86,079,384 | -3,863,285 | -4.30\% |
| 2007 | Apr-07 | 85,711,644 | 356.4 | 0.0 | 110.18\% | 30.0 | 1.0 | 320.0 | 112,804 | 438,667 | 85,137,499 | -574,145 | -0.67\% |
| 2007 | May-07 | 72,577,360 | 136.4 | 22.4 | 110.36\% | 31.0 | 1.0 | 352.0 | 113,200 | 440,083 | $80,131,111$ | 7,553,751 | 10.41\% |
| 2007 | Jun-07 | 94,967,423 | 16.5 | 99.2 | 110.53\% | 30.0 | 0.0 | 336.0 | 113,547 | 441,500 | 105,961,098 | 10,993,675 | 11.58\% |
| 2007 | Jul-07 | 109,012,605 | 3.2 | 106.1 | 110.71\% | 31.0 | 0.0 | 336.0 | 114,103 | 442,917 | 108,517,547 | -499,058 | -0.45\% |
| 2007 | Aug-07 | 118,290,341 | 5.2 | 141.0 | 110.89\% | 31.0 | 0.0 | 352.0 | 114,683 | 444,333 | 116,929,366 | -1,360,975 | -1.15\% |
| 2007 | Sep-07 | 107,596,866 | 36.9 | 47.5 | 111.07\% | 30.0 | 1.0 | 304.0 | 115,068 | 445,750 | 93,563,018 | -14,033,848 | -13.04\% |
| 2007 | Oct-07 | 75,610,670 | 137.7 | 19.8 | 111.25\% | 31.0 | 1.0 | 352.0 | 115,774 | 447,167 | 80,689,452 | 5,078,782 | 6.72\% |
| 2007 | Nov-07 | 82,907,242 | 462.5 | 0.0 | 111.43\% | 30.0 | 1.0 | 352.0 | 116,461 | 448,583 | 84,834,891 | 1,927,649 | 2.33\% |
| 2007 | Dec-07 | 102,589,443 | 630.7 | 0.0 | 111.61\% | 31.0 | 0.0 | 304.0 | 117,024 | 450,000 | 102,924,304 | 334,861 | 0.33\% |
| 2008 | Jan-08 | 101,798,376 | 623.5 | 0.0 | 111.55\% | 31.0 | 0.0 | 352.0 | 117,488 | 451,250 | 94,521,535 | -7,276,841 | -7.15\% |
| 2008 | Feb-08 | 103,373,674 | 674.7 | 0.0 | 111.49\% | 29.0 | 0.0 | 320.0 | 117,900 | 452,500 | 100,920,649 | -2,453,025 | -2.37\% |
| 2008 | Mar-08 | 97,635,202 | 610.2 | 0.0 | 111.43\% | 31.0 | 1.0 | 304.0 | 118,156 | 453,750 | 99,539,533 | 1,904,331 | 1.95\% |
| 2008 | Apr-08 | 77,427,839 | 253.9 | 0.0 | 111.37\% | 30.0 | 1.0 | 352.0 | 118,500 | 455,000 | 79,221,901 | 1,794,062 | 2.32\% |
| 2008 | May-08 | 78,920,457 | 193.5 | 2.5 | 111.31\% | 31.0 | 1.0 | 336.0 | 118,823 | 456,250 | 81,600,497 | 2,680,040 | 3.40\% |
| 2008 | Jun-08 | 86,543,923 | 22.7 | 71.5 | 111.25\% | 30.0 | 0.0 | 336.0 | 118,969 | 457,500 | 100,468,108 | 13,924,185 | 16.09\% |
| 2008 | Jul-08 | 110,500,461 | 1.0 | 111.0 | 111.19\% | 31.0 | 0.0 | 352.0 | 119,282 | 458,750 | 109,990,499 | -509,962 | -0.46\% |
| 2008 | Aug-08 | 116,167,597 | 12.7 | 64.0 | 111.13\% | 31.0 | 0.0 | 320.0 | 119,438 | 460,000 | 101,474,801 | -14,692,796 | -12.65\% |
| 2008 | Sep-08 | 95,168,168 | 59.0 | 26.7 | 111.08\% | 30.0 | 1.0 | 336.0 | 119,587 | 461,250 | 84,738,743 | -10,429,425 | -10.96\% |
| 2008 | Oct-08 | 78,737,248 | 278.6 | 0.0 | 111.02\% | 31.0 | 1.0 | 352.0 | 119,951 | 462,500 | 81,497,087 | 2,759,839 | 3.51\% |
| 2008 | Nov-08 | 90,034,914 | 451.6 | 0.0 | 110.96\% | 30.0 | 1.0 | 304.0 | 120,231 | 463,750 | 95,142,111 | 5,107,197 | 5.67\% |
| 2008 | Dec-08 | 92,116,228 | 654.6 | 0.0 | 110.90\% | 31.0 | 0.0 | 336.0 | 120,395 | 465,000 | 100,140,975 | 8,024,747 | 8.71\% |
| 2009 | Jan-09 | 119,021,454 | 830.2 | 0.0 | 110.59\% | 31.0 | 0.0 | 336.0 | 120,546 | 467,667 | 105,997,537 | -13,023,917 | -10.94\% |
| 2009 | Feb-09 | 103,885,776 | 606.4 | 0.0 | 110.29\% | 28.0 | 0.0 | 304.0 | 120,596 | 470,333 | 102,827,351 | -1,058,425 | -1.02\% |
| 2009 | Mar-09 | 88,019,186 | 533.8 | 0.0 | 109.99\% | 31.0 | 1.0 | 352.0 | 120,697 | 473,000 | 90,489,657 | 2,470,471 | 2.81\% |
| 2009 | Apr-09 | 93,092,071 | 305.8 | 1.2 | 109.69\% | 30.0 | 1.0 | 320.0 | 120,743 | 475,667 | 88,665,569 | -4,426,502 | -4.75\% |
| 2009 | May-09 | 79,918,980 | 158.8 | 6.9 | 109.39\% | 31.0 | 1.0 | 320.0 | 120,836 | 478,333 | 86,378,674 | 6,459,694 | 8.08\% |
| 2009 | Jun-09 | 74,470,543 | 49.3 | 34.2 | 109.09\% | 30.0 | 0.0 | 352.0 | 120,918 | 481,000 | 88,665,932 | 14,195,389 | 19.06\% |
| 2009 | Jul-09 | 99,820,428 | 6.2 | 43.7 | 108.79\% | 31.0 | 0.0 | 352.0 | 121,070 | 483,667 | 90,953,231 | -8,867,197 | 8.88\% |
| 2009 | Aug-09 | 110,640,785 | 9.8 | 91.0 | 108.49\% | 31.0 | 0.0 | 320.0 | 121,201 | 486,333 | 111,568,695 | 927,910 | 0.84\% |
| 2009 | Sep-09 | 96,007,958 | 55.2 | 20.9 | 108.20\% | 30.0 | 1.0 | 336.0 | 121,267 | 489,000 | 84,617,327 | -11,390,631 | -11.86\% |
| 2009 | Oct-09 | 83,699,628 | 287.8 | 0.0 | 107.90\% | 31.0 | 1.0 | 336.0 | 121,405 | 491,667 | 86,364,090 | 2,664,462 | 3.18\% |
| 2009 | Nov-09 | $87,785,678$ 9096365 | 361.2 6313 | 0.0 | 107.60\% | 30.0 310 | 1.0 | 320.0 352.0 | 121,519 | 494,333 | $91,147,407$ 98,382793 | $3,361,729$ 7436428 | 3.83\% |
|  |  | 90,946,365 | 631.3 |  | 107.31\% |  | 0.0 | 352.0 | 121,692 | 497,00 | 98,382,93 | 7,436,428 | 8.18\% |

Regression Model for Residential

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | $\frac{\text { Ontario Real GDP }}{\text { Monthly \% }}$ Monthly $\%$ | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 120,063,979 | 720.0 | 0.0 | 107.57\% | 31.0 | 0.0 | 320.0 | 121,786 | 497,583 | 106,909,865 | -13,154,114 | -10.96\% |
| 2010 | Feb-10 | 98,456,028 | 598.3 | 0.0 | 107.83\% | 28.0 | 0.0 | 304.0 | 121,899 | 498,167 | 104,158,350 | 5,702,322 | 5.79\% |
| 2010 | Mar-10 | 87,368,082 | 422.8 | 0.0 | 108.09\% | 31.0 | 1.0 | 368.0 | 122,202 | 498,750 | 85,667,503 | -1,700,579 | -1.95\% |
| 2010 | Apr-10 | 96,628,803 | 225.1 | 0.0 | 108.35\% | 30.0 | 1.0 | 320.0 | 122,353 | 499,333 | 87,202,295 | -9,426,508 | -9.76\% |
| 2010 | May-10 | 73,968,093 | 107.9 | 45.7 | 108.62\% | 31.0 | 1.0 | 320.0 | 122,492 | 499,917 | 98,242,052 | 24,273,959 | 32.82\% |
| 2010 | Jun-10 | 94,800,668 | 21.7 | 58.7 | 108.88\% | 30.0 | 0.0 | 352.0 | 122,689 | 500,500 | 96,780,464 | 1,979,796 | 2.09\% |
| 2010 | Jul-10 | 132,121,541 | 1.8 | 164.9 | 109.15\% | 31.0 | 0.0 | 336.0 | 122,952 | 501,083 | 132,665,088 | 543,547 | 0.41\% |
| 2010 | Aug-10 | 136,572,222 | 2.1 | 138.8 | 109.41\% | 31.0 | 0.0 | 336.0 | 123,306 | 501,667 | 124,711,614 | -11,860,608 | -8.68\% |
| 2010 | Sep-10 | 111,368,709 | 78.2 | 31.5 | 109.68\% | 30.0 | 1.0 | 336.0 | 123,592 | 502,250 | 89,983,547 | -21,385,162 | -19.20\% |
| 2010 | Oct-10 | 81,864,104 | 241.6 | 0.0 | 109.94\% | 31.0 | 1.0 | 320.0 | 123,975 | 502,833 | 89,008,550 | 7,144,446 | 8.73\% |
| 2010 | Nov-10 | 83,013,693 | 405.3 | 0.0 | 110.21\% | 30.0 | 1.0 | 336.0 | 124,314 | 503,417 | 91,095,744 | 8,082,051 | 9.74\% |
| 2010 | Dec-10 | 96,787,180 | 676.2 | 0.0 | 110.48\% | 31.0 | 0.0 | 368.0 | 124,592 | 504,000 | 98,299,181 | 1,512,001 | 1.56\% |
| 2011 | Jan-11 | 120,354,758 | 775.3 | 0.0 | 110.64\% | 31.0 | 0.0 | 320.0 | 124,890 | 505,659 | 110,106,316 | -10,248,442 | -8.52\% |
| 2011 | Feb-11 | 103,643,673 | 654.2 | 0.0 | 110.80\% | 28.0 | 0.0 | 304.0 | 125,033 | 507,319 | 107,426,330 | 3,782,657 | 3.65\% |
| 2011 | Mar-11 | 92,899,388 | 572.8 | 0.0 | 110.97\% | 31.0 | 1.0 | 368.0 | 125,247 | 508,978 | 91,978,237 | -921,151 | -0.99\% |
| 2011 | Apr-11 | 94,490,965 | 332.3 | 0.0 | 111.13\% | 30.0 | 1.0 | 304.0 | 125,456 | 510,637 | 95,001,898 | 510,933 | 0.54\% |
| 2011 | May-11 | 80,836,537 | 134.1 | 13.0 | 111.30\% | 31.0 | 1.0 | 336.0 | 125,752 | 512,296 | 87,736,766 | 6,900,229 | 8.54\% |
| 2011 | Jun-11 | 92,320,074 | 19.0 | 52.2 | 111.47\% | 30.0 | 0.0 | 352.0 | 126,132 | 513,956 | 96,426,249 | 4,106,175 | 4.45\% |
| 2011 | Jul-11 | 130,690,031 | 0.0 | 198.6 | 111.63\% | 31.0 | 0.0 | 320.0 | 126,396 | 515,615 | 147,697,685 | 17,007,654 | 13.01\% |
| 2011 | Aug-11 | 139,663,014 | 0.0 | 122.2 | 111.80\% | 31.0 | 0.0 | 352.0 | 126,670 | 517,274 | 118,463,632 | -21,199,382 | -15.18\% |
| 2011 | Sep-11 | 112,075,131 | 48.2 | 39.7 | 111.96\% | 30.0 | 1.0 | 336.0 | 127,049 | 518,933 | 93,441,030 | -18,634,101 | -16.63\% |
| 2011 | Oct-11 | 84,690,144 | 235.5 | 2.4 | 112.13\% | 31.0 | 1.0 | 336.0 | 127,445 | 520,593 | 88,670,076 | 3,979,932 | 4.70\% |
| 2011 | Nov-11 | 84,908,722 | 342.1 | 0.0 | 112.30\% | 30.0 | 1.0 | 352.0 | 127,774 | 522,252 | 88,195,234 | 3,286,512 | 3.87\% |
| 2011 | Dec-11 | 95,536,298 | 534.0 | 0.0 | 112.46\% | 31.0 | 0.0 | 336.0 | 127,956 | 523,911 | 101,261,669 | 5,725,371 | 5.99\% |
| 2012 | Jan-12 | 111,985,008 | 611.1 | 0.0 | 112.60\% | 31.0 | 0.0 | 336.0 | 128,080 | 525,085 | 103,835,758 | -8,149,250 | -7.28\% |
| 2012 | Feb-12 | 100,460,474 | 531.7 | 0.0 | 112.74\% | 29.0 | 0.0 | 320.0 | 128,321 | 526,259 | 103,096,482 | 2,636,008 | 2.62\% |
| 2012 | Mar-12 | 92,303,703 | 349.4 | 0.2 | 112.88\% | 31.0 | 1.0 | 352.0 | 128,513 | 527,433 | 89,485,571 | -2,818,132 | -3.05\% |
| 2012 | Apr-12 | 92,519,297 | 321.7 | 0.0 | 113.02\% | 30.0 | 1.0 | 320.0 | 128,731 | 528,606 | 93,711,690 | 1,192,393 | 1.29\% |
| 2012 | May-12 | 74,808,964 | 80.7 | 36.7 | 113.16\% | 31.0 | 1.0 | 352.0 | 128,980 | 529,780 | 92,402,892 | 17,593,928 | 23.52\% |
| 2012 | Jun-12 | 105,123,567 | 23.2 | 101.6 | 113.30\% | 30.0 | 0.0 | 336.0 | 129,389 | 530,954 | 116,576,109 | 11,452,542 | 10.89\% |
| 2012 | Jul-12 | 147,407,762 | 0.0 | 195.4 | 113.45\% | 31.0 | 0.0 | 352.0 | 129,807 | 532,128 | 142,976,905 | -4,430,857 | -3.01\% |
| 2012 | Aug-12 | 142,173,433 | 2.0 | 112.1 | 113.59\% | 31.0 | 0.0 | 352.0 | ${ }^{130,175}$ | 533,302 | 117,312,279 | -24,861,154 | -17.49\% |
| 2012 | Sep-12 | 118,146,831 | 85.0 | 35.6 | 113.73\% | 30.0 | 1.0 | 304.0 | 130,451 | 534,476 | 100,842,572 | -17,304,259 | -14.65\% |
| 2012 | Oct-12 | 78,983,774 | 242.5 | 1.1 | 113.87\% | 31.0 | 1.0 | 352.0 | 130,880 | 535,649 | 87,554,993 | 8,571,219 | 10.85\% |
| 2012 | Nov-12 | 90,631,547 | 434.0 | 0.0 | 144.01\% | 30.0 | 1.0 | 352.0 | 131,394 | 536,823 | 93,119,083 | 2,487,536 | 2.74\% |
| 2012 | Dec-12 | 99,803,406 | 533.5 | 0.0 | 114.15\% | 31.0 | 0.0 | 304.0 | 131,665 | 537,997 | 108,843,398 | 9,039,992 | 9.06\% |
| 2013 | Jan-13 | 115,080,698 | 624.4 | 0.0 | 114.27\% | 31.0 | 0.0 | 352.0 | 131,997 | 539,268 | 103,538,735 | -11,541,963 | -10.03\% |
| 2013 | Feb-13 | 105,789,018 | 631.5 | 0.0 | 144.40\% | 28.0 | 0.0 | 304.0 | 132,243 | 540,539 | 110,669,759 | 4,880,741 | 4.61\% |
| 2013 | Mar-13 | 92,881,576 | 554.8 | 0.0 | 114.52\% | 31.0 | 1.0 | 320.0 | 132,535 | 541,809 | 103,831,544 | 10,949,968 | 11.79\% |
| 2013 | Apr-13 | 100,213,758 | 358.6 | 0.0 | 144.64\% | 30.0 | 1.0 | 352.0 | 132,899 | 543,080 | 91,500,288 | -8,713,470 | -8.69\% |
| 2013 | May-13 | 78,855,534 | 109.1 | 23.1 | 14.77\% | 31.0 | 1.0 | ${ }^{352.0}$ | ${ }^{133,254}$ | 544,351 | 91,356,729 | 12,501, 195 | 15.85\% |
| 2013 | Jun-13 | 96,099,514 | 33.4 | 59.3 | 114.89\% | 30.0 | 0.0 | 320.0 | 133,451 | 545,622 | 108,723,016 | 12,623,502 | 13.14\% |
| 2013 | Jul-13 | 126,317,122 | 1.4 | 133.3 | 115.01\% | 31.0 | 0.0 | 352.0 | 133,791 | 546,892 | 125,835,486 | -481,636 | -0.38\% |
| 2013 | Aug-13 | 123,185,112 | 4.6 | 93.2 | 115.14\% | 31.0 | 0.0 | 336.0 | 134,201 | 548,163 | 116,486,313 | -6,698,799 | -5.44\% |
| 2013 | Sep-13 | 120,547,253 | 89.6 | 28.0 | 115.26\% | 30.0 | 1.0 | 320.0 | 134,508 | 549,434 | 97,998,086 | -22,549,167 | -18.71\% |
| 2013 | Oct-13 | 81,047,701 | 224.2 | 0.0 | 115.39\% | 31.0 | 1.0 | 352.0 | 134,865 | 550,705 | 88,771,282 | 7,723,581 | 9.53\% |
| 2013 | Nov-13 | 95,603,437 | 478.3 | 0.0 | 115.51\% | 30.0 | 1.0 | 336.0 | 135,318 | 551,975 | 99,489,178 | 3,885,741 | 4.06\% |
| 2013 | Dec-13 | 104,213,488 | 687.7 | 0.0 | 115.64\% | 31.0 | 0.0 | 320.0 | 135,612 | 553,246 | 113,168,292 | 8,954,804 | 8.59\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31.0 | 0.0 | 352.0 | 135,872 | 554,325 | 108,090,035 | 108,090,035 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28.0 | 0.0 | 304.0 | 136,132 | 555,403 | 112,676,468 | 112,676,468 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31.0 | 1.0 | 320.0 | 136,392 | 556,482 | 104,783,408 | 104,783,408 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30.0 | 1.0 | 352.0 | 136,653 | 557,561 | 91,918,260 | 91,918,260 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31.0 | 1.0 | ${ }^{336.0}$ | ${ }^{136,913}$ | 558,639 | 95,719,651 | 95,719,651 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 111.84\% | 30.0 | 0.0 | ${ }^{336.0}$ | 137,173 | 559,718 | 111,838,184 | 111,838,184 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31.0 | 0.0 | 352.0 | 137,433 | 560,797 | 129,699,614 | 129,699,614 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31.0 | 0.0 | 323.0 | 137,693 | 561,875 | 125,263,058 | 125,263,058 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30.0 | 1.0 | 336.0 | 137,953 | 562,954 | 97,724,131 | 97,724,131 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31.0 | 1.0 | 352.0 | 138,214 13474 | 564,033 | 92,005,796 | 92,005,796 |  |
| 2014 2014 | Nov-14 |  | 408.5 6157 | 0.0 0.0 | $117.86 \%$ $118.06 \%$ | 30.0 310 | 1.0 0.0 | 320.0 336.0 | 138,474 138734 | 565,111 566,190 | $101,670,685$ 109633,310 | $101,670,685$ 109633,310 |  |
| 2015 | Jan-15 |  | 700.3 | 0.0 | 118.31\% | 31.0 | 0.0 | 336.0 | 139,079 | 567,269 | 112,540,403 | 112,540,403 |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28.0 | 0.0 | 304.0 | 139,425 | 568,347 | 114,353,899 | 114,353,899 |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31.0 | 1.0 | 352.0 | 139,770 | 569,426 | 100,878,639 | 100,878,639 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30.0 | 1.0 | 336.0 | 140,116 | 570,504 | 96,477,524 | 96,477,524 |  |
| 2015 | May-15 |  | 140.6 | 18.6 | 119.28\% | 31.0 | 1.0 | 320.0 | 140,461 | 571,583 | 100,315,187 | 100,315,187 |  |
| 2015 | Jun-15 |  | 25.8 | 72.8 | 119.53\% | 30.0 | 0.0 | 352.0 3520 | $\begin{array}{r}140,806 \\ 141152 \\ \hline\end{array}$ | 572,662 573740 | 110,851,478 | 110,851,478 |  |
| 2015 2015 | Jul-15 Aug-15 |  | 1.7 5.4 | 139.5 106.4 10 | $119.78 \%$ $120.02 \%$ | 31.0 310 | 0.0 0.0 | 352.0 320.0 | 141,152 141497 | 573,740 574.819 | $131,558,401$ 127158074 | $131,558,401$ 127158.074 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30.0 | 1.0 | 336.0 | 141,843 | 575,897 | 99,655,362 | 99,655,362 |  |
| 2015 | Oct-15 |  | 238.3 | 3.4 | 120.52\% | 31.0 | 1.0 | 336.0 | 142,188 | 576,976 | 96,782,477 | 96,782,477 |  |
| 2015 | Nov-15 |  | 408.5 | 0.0 | 120.77\% | 30.0 | 1.0 | 336.0 | 142,534 | 578,054 | 100,865,054 | 100,865,054 |  |
| 2015 | Dec-15 |  | 615.7 | 0.0 | 121.02\% | 31.0 | 0.0 | 352.0 | 142,879 | 579,133 | 108,863,851 | 108,863,851 |  |
|  |  |  | Weather Nor | alized |  |  |  |  |  |  |  |  |  |

Regression Model for Residential
$\frac{\text { Cooling Degree }}{\text { Days }} \frac{\text { Ontario Real GDP }}{\text { Monthly \% } \%} \frac{\text { Number of Days in }}{\text { Month }}$ $\qquad$
Uumber of

|  | Actual | Predicted | Variance (kWh) | Variace \% |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2002 \\ & 2003 \end{aligned}$ |  |  |  |  |
|  |  |  |  |  |
| 2004 | 966,448,805 | 971,935,800 | -5,486,995 | -0.57\% |
| 2005 | 1,104,270,425 | 1,112,985,702 | -8,715,277 | -0.79\% |
| 2006 | 1,085,698,760 | 1,083,818,710 | 1,880,050 | 0.17\% |
| 2007 | 1,141,549,097 | 1,136,693,112 | 4,855,985 | 0.43\% |
| 2008 | 1,128,424,087 | 1,129,256,438 | -832,351 | -0.07\% |
| 2009 | 1,127,308,852 | 1,126,058,262 | 1,250,590 | 0.11\% |
| 2010 | 1,213,013,102 | 1,204,724,253 | 8,288,849 | 0.68\% |
| 2011 | 1,232,108,735 | 1,226,405,122 | 5,703,613 | 0.46\% |
| 2012 | ${ }^{1,254,347,766}$ | 1,249,757,733 | 4,590,033 | 0.37\% |
| 2013 | 1,239,834,211 | 1,251,368,707 | -11,534,496 | -0.93\% |
| 2014 |  | 1,281,022,599 |  |  |
| 2015 |  | 1,300,300,348 |  |  |


| Total | $11,493,003,840$ | $11,493,003,840$ |
| :--- | :--- | :--- |

SUMMARY OUTPUT

| Regression Statistics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiple R | 83.99\% |  |  |  |  |  |  |  |
| R Square | 70.55\% |  |  |  |  |  |  |  |
| Adjusted R Square | 68.43\% |  |  |  |  |  |  |  |
| Standard Error | 9,799,579.82 |  |  |  |  |  |  |  |
| Observations | 120 |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | df | SS | MS | F | Significance $F$ |  |  |  |
| Regression | ${ }^{8}$ | $2.5533 \mathrm{E}+16$ | $3.19163 \mathrm{E}+15$ | 33.24 | 0.0000 |  |  |  |
| Residual | 111 | $1.06595 \mathrm{E}+16$ | $9.60318 \mathrm{E}+13$ |  |  |  |  |  |
| Total | 119 | 3.61925E+16 |  |  |  |  |  |  |
|  | Coefficients | Standard Error | ${ }_{\text {t Stat }}$ | $P$-value | Lower 95\% | Upper 95\% | Lower 95.0\% | Upper 95.0\% |
| Intercept | 61,324,081.86 | 68,444,096.17 | 0.8960 | 0.3722 | -74302459.61 | 196950623.3 | -74302459.61 | 196950623.3 |
| Heating Degree Days | 32,377.38 | 6,031.67 | 5.3679 | 0.0000 | 20425.22276 | 44329.53924 | 20425.22276 | 44329.53924 |
| Cooling Degree Days | 311,189.44 | 34,809.11 | 8.9399 | 0.0000 | 242212.8784 | 380166.0074 | 242212.8784 | 380166.0074 |
| Ontario Real GDP Monthly \% | (9,017,782.03) | 92,775,105.07 | (0.0972) | 0.9227 | -192857840.4 | 174822276.3 | -192857840.4 | 174822276.3 |
| Number of Days in Month | 555,345.31 | 1,233,338.78 | 0.4503 | 0.6534 | -1888597.734 | 2999288.355 | -1888597.734 | 2999288.355 |
| Spring Fall Flag | (3,372,758.63) | 2,548,357.58 | (1.3235) | 0.1884 | -8422499.139 | 1676981.871 | -8422499.139 | 1676981.871 |
| Number of Peak Hours | $(175,578.10)$ | 56,071.44 | (3.1313) | 0.0022 | -286687.3982 | -64468.80261 | -286687.3982 | 64468.80261 |
| Number of Customers | 471.38 | 999.29 | 0.4717 | 0.6381 | -1508.767928 | 2451.535228 | -1508.767928 | 2451.535228 |
| Population | 27.20 | 158.48 | 0.1717 | 0.8640 | -286.8348765 | 341.241207 | -286.8348765 | 341.241207 |

Regression Model for General Service < 50 kW

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 26,094,845 | 849.1 | 0.0 | 101.59\% | 31.0 | 0.0 | 336.0 | 6,544 | 373,417 | 25,569,937 | -524,908 | -2.01\% |
| 2004 | Feb-04 | 25,477,138 | 631.7 | 0.0 | 101.81\% | 29.0 | 0.0 | 320.0 | 6,589 | 374,833 | 25,109,653 | $-367,485$ | -1.44\% |
| 2004 | Mar-04 | 21,012,918 | 487.3 | 0.0 | 102.02\% | 31.0 | 1.0 | 368.0 | 6,604 | 376,250 | 21,740,218 | 727,300 | 3.46\% |
| 2004 | Apr-04 | 24,139,975 | 331.5 | 0.0 | 102.24\% | 30.0 | 1.0 | 336.0 | 6,606 | 377,667 | 22,111,185 | -2,028,790 | -8.40\% |
| 2004 | May-04 | 21,593,293 | 158.9 | 8.6 | 102.45\% | 31.0 | 1.0 | 320.0 | 6,609 | 379,083 | 22,096,078 | 502,785 | 2.33\% |
| 2004 | Jun-04 | 20,478,439 | 44.2 | 31.6 | 102.67\% | 30.0 | 0.0 | 352.0 | 6,615 | 380,500 | 21,647,989 | 1,169,550 | 5.71\% |
| 2004 | Jul-04 | 24,240,608 | 3.6 | 86.4 | 102.89\% | 31.0 | 0.0 | 336.0 | 6,600 | 381,917 | 23,676,451 | -564,156 | -2.33\% |
| 2004 | Aug-04 | 22,474,547 | 12.8 | 59.6 | 103.11\% | 31.0 | 0.0 | 336.0 | 6,651 | 383,333 | 23,112,989 | 638,442 | 2.84\% |
| 2004 | Sep-04 | 22,880,474 | 30.0 | 41.2 | 103.32\% | 30.0 | 1.0 | 336.0 | 6,691 | 384,750 | 21,970,730 | -909,744 | -3.98\% |
| 2004 | Oct-04 | 21,225,576 | 226.3 | 1.5 | 103.54\% | 31.0 | 1.0 | 320.0 | 6,703 | 386,167 | 22,552,159 | 1,326,583 | 6.25\% |
| 2004 | Nov-04 | 20,014,142 | 379.1 | 0.0 | 103.76\% | 30.0 | 1.0 | 352.0 | 6,770 | 387,583 | 22,294,699 | 2,280,557 | 11.39\% |
| 2004 | Dec-04 | 23,880,235 | 643.4 | 0.0 | 103.98\% | 31.0 | 0.0 | 336.0 | 6,797 | 389,000 | 25,303,482 | 1,423,247 | 5.96\% |
| 2005 | Jan-05 | 27,353,999 | 770.0 | 0.0 | 104.22\% | 31.0 | 0.0 | 320.0 | 6,823 | 391,000 | 26,708,426 | -645,573 | -2.36\% |
| 2005 | Feb-05 | 25,071,643 | 616.4 | 0.0 | 104.45\% | 28.0 | 0.0 | 320.0 | 6,832 | 393,000 | 25,753,498 | 681,855 | 2.72\% |
| 2005 | Mar-05 | 24,188,469 | 608.6 | 0.0 | 104.69\% | 31.0 | 1.0 | 352.0 | 6,860 | 395,000 | 23,847,463 | -341,005 | -1.41\% |
| 2005 | Apr-05 | 24,302,510 | 306.8 | 0.0 | 104.93\% | 30.0 | 1.0 | 336.0 | 6,838 | 397,000 | 22,665,588 | $-1,636,922$ | -6.74\% |
| 2005 | May-05 | 22,423,980 | 189.4 | 0.8 | 105.17\% | 31.0 | 1.0 | 336.0 | 6,864 | 399,000 | 22,161,882 | -262,098 | -1.17\% |
| 2005 | Jun-05 | 23,928,235 | 8.9 | 146.3 | 105.41\% | 30.0 | 0.0 | 352.0 | 6,870 | 401,000 | 25,680,128 | 1,751,894 | 7.32\% |
| 2005 | Jul-05 | 28,807,581 | 0.0 | 188.7 | 105.65\% | 31.0 | 0.0 | 320.0 | 6,891 | 403,000 | 28,281,090 | -526,491 | -1.83\% |
| 2005 | Aug-05 | 26,138,601 | 0.2 | 140.7 | 105.89\% | 31.0 | 0.0 | 352.0 | 6,895 | 405,000 | 25,539,178 | -599,423 | -2.29\% |
| 2005 | Sep-05 | 26,023,617 | 22.6 | 52.1 | 106.13\% | 30.0 | 1.0 | 336.0 | 6,931 | 407,000 | 22,906,970 | -3,116,647 | -11.98\% |
| 2005 | Oct-05 | 22,977,259 | 220.2 | 7.6 | 106.37\% | 31.0 | 1.0 | 320.0 | 6,940 | 409,000 | 23,322,396 | 345,137 | 1.50\% |
| 2005 | Nov-05 | 22,311,103 | 388.4 | 0.0 | 106.61\% | 30.0 | 1.0 | 352.0 | 6,965 | 411,000 | 22,771,675 | 460,572 | 2.06\% |
| 2005 | Dec-05 | 24,812,891 | 665.3 | 0.0 | 106.85\% | 31.0 | 0.0 | 320.0 | 6,991 | 413,000 | 26,466,842 | 1,653,952 | 6.67\% |
| 2006 | Jan-06 | 27,457,173 | 551.8 | 0.0 | 107.07\% | 31.0 | 0.0 | 336.0 | 7,029 | 414,667 | 25,342,610 | -2,114,563 | -7.70\% |
| 2006 | Feb-06 | 25,364,554 | 604.3 | 0.0 | 107.29\% | 28.0 | 0.0 | 320.0 | 7,051 | 416,333 | 26,215,390 | 850,836 | 3.35\% |
| 2006 | Mar-06 | 23,808,899 | 516.6 | 0.0 | 107.50\% | 31.0 | 1.0 | 368.0 | 7,047 | 418,000 | 23,107,511 | -701,389 | -2.95\% |
| 2006 | Apr-06 | 25,520,411 | 293.3 | 0.0 | 107.72\% | 30.0 | 1.0 | 304.0 | 7,042 | 419,667 | 24,345,688 | -1,174,723 | -4.60\% |
| 2006 | May-06 | 20,926,756 | 136.9 | 26.0 | 107.94\% | 31.0 | 1.0 | 352.0 | 7,046 | 421,333 | 22,394,661 | 1,467,905 | 7.01\% |
| 2006 | Jun-06 | 24,140,143 | 19.5 | 73.6 | 108.15\% | 30.0 | 0.0 | 352.0 | 7,046 | 423,000 | 23,916,650 | -223,493 | -0.93\% |
| 2006 | Jul-06 | 26,672,689 | 0.0 | 167.3 | 108.37\% | 31.0 | 0.0 | 320.0 | 7,054 | 424,667 | 27,963,821 | 1,291,132 | 4.84\% |
| 2006 | Aug-06 | 25,997,349 | 4.2 | 101.6 | 108.59\% | 31.0 | 0.0 | 352.0 | 7,065 | 426,333 | 24,745,875 | -1,251,474 | -4.81\% |
| 2006 | Sep-06 | 24,758,830 | 80.9 | 12.9 | 108.81\% | 30.0 | 1.0 | 320.0 | 7,074 | 428,000 | 22,938,132 | -1,820,698 | -7.35\% |
| 2006 | Oct-06 | 21,204,405 | 288.3 | 1.1 | 109.03\% | 31.0 | 1.0 | 336.0 | 7,141 | 429,667 | 23,375,677 | 2,171,272 | 10.24\% |
| 2006 | Nov-06 | 23,229,898 | 382.2 | 0.0 | 109.25\% | 30.0 | 1.0 | 352.0 | 7,148 | 431,333 | 23,183,297 | -46,601 | -0.20\% |
| 2006 | Dec-06 | 25,587,668 | 500.5 | 0.0 | 109.47\% | 31.0 | 0.0 | 304.0 | 7,161 | 433,000 | 26,600,015 | 1,012,347 | 3.96\% |
| 2007 | Jan-07 | 25,081,163 | 647.1 | 0.0 | 109.65\% | 31.0 | 0.0 | 352.0 | 7,199 | 434,417 | 25,628,888 | 547,725 | 2.18\% |
| 2007 | Feb-07 | 28,952,050 | 740.1 | 0.0 | 109.82\% | 28.0 | 0.0 | 320.0 | 7,208 | 435,833 | 27,308,531 | -1,643,519 | -5.68\% |
| 2007 | Mar-07 | 25,748,473 | 546.7 | 0.0 | 110.00\% | 31.0 | 1.0 | 352.0 | 7,234 | 437,250 | 24,389,417 | -1,359,056 | -5.28\% |
| 2007 | Apr-07 | 25,019,788 | 356.4 | 0.0 | 110.18\% | 30.0 | 1.0 | 320.0 | 7,245 | 438,667 | 24,605,500 | -414,288 | -1.66\% |
| 2007 | May-07 | 23,360,194 | 136.4 | 22.4 | 110.36\% | 31.0 | 1.0 | 352.0 | 7,258 | 440,083 | 22,875,826 | -484,368 | -2.07\% |
| 2007 | Jun-07 | 26,003,257 | 16.5 | 99.2 | 110.53\% | 30.0 | 0.0 | 336.0 | 7,271 | 441,500 | 25,962,473 | -40,784 | -0.16\% |
| 2007 | Jul-07 | 26,124,275 | 3.2 | 106.1 | 110.71\% | 31.0 | 0.0 | 336.0 | 7,283 | 442,917 | 26,164,871 | 40,596 | 0.16\% |
| 2007 | Aug-07 | 26,552,525 | 5.2 | 141.0 | 110.89\% | 31.0 | 0.0 | 352.0 | 7,318 | 444,333 | 26,719,161 | 166,636 | 0.63\% |
| 2007 | Sep-07 | 27,464,585 | 36.9 | 47.5 | 111.07\% | 30.0 | 1.0 | 304.0 | 7,322 | 445,750 | 25,138,935 | -2,325,651 | -8.47\% |
| 2007 | Oct-07 | 22,207,166 | 137.7 | 19.8 | 111.25\% | 31.0 | 1.0 | 352.0 | 7,358 | 447,167 | 23,110,406 | 903,240 | 4.07\% |
| 2007 | Nov-07 | 24,780,730 | 462.5 | 0.0 | 111.43\% | 30.0 | 1.0 | 352.0 | 7,396 | 448,583 | 24,387,510 | -393,220 | -1.59\% |
| 2007 | Dec-07 | 28,139,373 | 630.7 | 0.0 | 111.61\% | 31.0 | 0.0 | 304.0 | 7,440 | 450,000 | 28,211,773 | 72,400 | 0.26\% |
| 2008 | Jan-08 | 26,103,597 | 623.5 | 0.0 | 111.55\% | 31.0 | 0.0 | 352.0 | 7,434 | 451,250 | 26,191,732 | 88,134 | 0.34\% |
| 2008 | Feb-08 | 27,761,619 | 674.7 | 0.0 | 111.49\% | 29.0 | 0.0 | 320.0 | 7,428 | 452,500 | 27,597,365 | -164,254 | -0.59\% |
| 2008 | Mar-08 | 26,806,415 | 610.2 | 0.0 | 111.43\% | 31.0 | 1.0 | 304.0 | 7,437 | 453,750 | 27,162,250 | 355,835 | 1.33\% |
| 2008 | Apr-08 | 22,403,714 | 253.9 | 0.0 | 111.37\% | 30.0 | 1.0 | 352.0 | 7,424 | 455,000 | 23,162,808 | 759,094 | 3.39\% |
| 2008 | May-08 | 23,491,748 | 193.5 | 2.5 | 111.31\% | 31.0 | 1.0 | 336.0 | 7,426 | 456,250 | 23,547,838 | 56,090 | 0.24\% |
| 2008 | Jun-08 | 23,813,832 | 22.7 | 71.5 | 111.25\% | 30.0 | 0.0 | 336.0 | 7,413 | 457,500 | 25,352,012 | 1,538,180 | 6.46\% |
| 2008 | Jul-08 | 25,855,003 | 1.0 | 111.0 | 111.19\% | 31.0 | 0.0 | 352.0 | 7,413 | 458,750 | 25,785,624 | -69,380 | -0.27\% |
| 2008 | Aug-08 | 26,500,312 | 12.7 | 64.0 | 111.13\% | 31.0 | 0.0 | 320.0 | 7,419 | 460,000 | 25,682,831 | -817,481 | -3.08\% |
| 2008 | Sep-08 | 23,710,615 | 59.0 | 26.7 | 111.08\% | 30.0 | 1.0 | 336.0 | 7,441 | 461,250 | 23,389,744 | -320,871 | -1.35\% |
| 2008 | Oct-08 | 22,676,278 | 278.6 | 0.0 | 111.02\% | 31.0 | 1.0 | 352.0 | 7,445 | 462,500 | 23,158,779 | 482,501 | 2.13\% |
| 2008 | Nov-08 | 24,367,815 | 451.6 | 0.0 | 110.96\% | 30.0 | 1.0 | 304.0 | 7,476 | 463,750 | 26,063,769 | 1,695,954 | 6.96\% |
| 2008 | Dec-08 | 24,675,999 | 654.6 | 0.0 | 110.90\% | 31.0 | 0.0 | 336.0 | 7,485 | 465,000 | 26,724,665 | 2,048,666 | 8.30\% |
| 2009 | Jan-09 | 28,818,592 | 830.2 | 0.0 | 110.59\% | 31.0 | 0.0 | 336.0 | 7,496 | 467,667 | 27,617,809 | -1,200,782 | -4.17\% |
| 2009 | Feb-09 | 27,435,853 | 606.4 | 0.0 | 110.29\% | 28.0 | 0.0 | 304.0 | 7,497 | 470,333 | 27,439,042 | 3,189 | 0.01\% |
| 2009 | Mar-09 | 23,845,444 | 533.8 | 0.0 | 109.99\% | 31.0 | 1.0 | 352.0 | 7,507 | 473,000 | 24,385,755 | 540,311 | 2.27\% |
| 2009 | Apr-09 | 24,819,291 | 305.8 | 1.2 | 109.69\% | 30.0 | 1.0 | 320.0 | 7,490 | 475,667 | 24,222,644 | -596,647 | -2.40\% |
| 2009 | May-09 | 22,413,054 | 158.8 | 6.9 | 109.39\% | 31.0 | 1.0 | 320.0 | 7,486 | 478,333 | 23,498,669 | 1,085,615 | 4.84\% |
| 2009 | Jun-09 | 21,293,990 | 49.3 | 34.2 | 109.09\% | 30.0 | 0.0 | 352.0 | 7,489 | 481,000 | 23,101,681 | 1,807,692 | 8.49\% |
| 2009 | Jul-09 | 24,382,545 | 6.2 | 43.7 | 108.79\% | 31.0 | 0.0 | 352.0 | 7,500 | 483,667 | 23,124,953 | -1,257,592 | -5.16\% |
| 2009 | Aug-09 | 32,654,192 | 9.8 | 91.0 | 108.49\% | 31.0 | 0.0 | 320.0 | 7,517 | 486,333 | 25,807,095 | -6,847,097 | -20.97\% |
| 2009 | Sep-09 | 16,228,399 | 55.2 | 20.9 | 108.20\% | 30.0 | 1.0 | 336.0 | 7,523 | 489,000 | 22,380, 151 | 6,151,752 | 37.91\% |
| 2009 | Oct-09 | 23,400,639 | 287.8 | 0.0 | 107.90\% | 31.0 | 1.0 | 336.0 | 7,604 | 491,667 | 23,289,526 | -111,112 | -0.47\% |
| 2009 | Nov-09 | 24,030,768 | 361.2 | 0.0 | 107.60\% | 30.0 | 1.0 | 320.0 | 7,616 | 494,333 | 24,226,174 | ${ }^{195,406}$ | 0.81\% |
| 2009 | Dec-09 | 24,778,950 | 631.3 | 0.0 | 107.31\% | 31.0 | 0.0 | 352.0 | 7,620 | 497,000 | 25,164,191 | 385,241 | 1.55\% |

Regression Model for General Service < 50 kW

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Days }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 29,382,385 | 720.0 | 0.0 | 107.57\% | 31.0 | 0.0 | 320.0 | 7,668 | 497,583 | 27,137,471 | --244,915 | -7.64\% |
| 2010 | Feb-10 | 26,089,641 | 598.3 | 0.0 | 107.83\% | 28.0 | 0.0 | 304.0 | 7,665 | 498,167 | 26,988,946 | 899,304 | 3.45\% |
| 2010 | Mar-10 | 23,657,683 | 422.8 | 0.0 | 108.09\% | 31.0 | 1.0 | 368.0 | 7,671 | 498,750 | 22,843,938 | -813,745 | -3.44\% |
| 2010 | Apr-10 | 26,557,906 | 225.1 | 0.0 | 108.35\% | 30.0 | 1.0 | 320.0 | 7,671 | 499,333 | 23,644,466 | -2,913,441 | -10.97\% |
| 2010 | May-10 | 21,752,286 | 107.9 | 45.7 | 108.62\% | 31.0 | 1.0 | 320.0 | 7,665 | 499,917 | 24,410,081 | 2,657,795 | 12.22\% |
| 2010 | Jun-10 | 23,309,823 | 21.7 | 58.7 | 108.88\% | 30.0 | 0.0 | 352.0 | 7,701 | 500,500 | 23,973,043 | 663,220 | 2.85\% |
| 2010 | Jul-10 | 27,288,151 | 1.8 | 164.9 | 109.15\% | 31.0 | 0.0 | 336.0 | 7,727 | 501,083 | 27,873,421 | 585,270 | 2.14\% |
| 2010 | Aug-10 | 27,241,780 | 2.1 | 138.8 | 109.41\% | 31.0 | 0.0 | 336.0 | 7,795 | 501,667 | 27,384,931 | 143,151 | 0.53\% |
| 2010 | Sep-10 | 25,567,181 | 78.2 | 31.5 | 109.68\% | 30.0 | 1.0 | 336.0 | 7,817 | 502,250 | 23,830,710 | -1,736,471 | -6.79\% |
| 2010 | Oct-10 | 22,932,112 | 241.6 | 0.0 | 109.94\% | 31.0 | 1.0 | 320.0 | 7,844 | 502,833 | 24,574,161 | 1,642,049 | 7.16\% |
| 2010 | Nov-10 | 22,731,626 | 405.3 | 0.0 | 110.21\% | 30.0 | 1.0 | 336.0 | 7,880 | 503,417 | 24,957,954 | 2,226,328 | 9.79\% |
| 2010 | Dec-10 | 25,659,707 | 676.2 | 0.0 | 110.48\% | 31.0 | 0.0 | 368.0 | 7,914 | 504,000 | 26,152,451 | 492,744 | 1.92\% |
| 2011 | Jan-11 | 29,681,022 | 775.3 | 0.0 | 110.64\% | 31.0 | 0.0 | 320.0 | 7,934 | 505,659 | 28,657,711 | -1,023,311 | -3.45\% |
| 2011 | Feb-11 | 28,260,358 | 654.2 | 0.0 | 110.80\% | 28.0 | 0.0 | 304.0 | 7,959 | 507,319 | 28,587,696 | 327,338 | 1.16\% |
| 2011 | Mar-11 | 26,616,254 | 572.8 | 0.0 | 110.97\% | 31.0 | 1.0 | 368.0 | 7,989 | 508,978 | 25,015,936 | -1,600,318 | -6.01\% |
| 2011 | Apr-11 | 26,658,746 | 332.3 | 0.0 | 111.13\% | 30.0 | 1.0 | 304.0 | 8,016 | 510,637 | 26,290,018 | -368,728 | -1.38\% |
| 2011 | May-11 | 23,655,095 | 134.1 | 13.0 | 111.30\% | 31.0 | 1.0 | 336.0 | 8,027 | 512,296 | 24,378,115 | 723,021 | 3.06\% |
| 2011 | Jun-11 | 25,526,693 | 19.0 | 52.2 | 111.47\% | 30.0 | 0.0 | 352.0 | 8,062 | 513,956 | 25,164,456 | -362,237 | -1.42\% |
| 2011 | Jul-11 | 29,019,546 | 0.0 | 198.6 | 111.63\% | 31.0 | 0.0 | 320.0 | 8,083 | 515,615 | 30,857,737 | 1,838,191 | 6.33\% |
| 2011 | Aug-11 | 27,992,219 | 0.0 | 122.2 | 111.80\% | 31.0 | 0.0 | 352.0 | 8,103 | 517,274 | 27,325,774 | -666,445 | -2.38\% |
| 2011 | Sep-11 | 27,732,866 | 48.2 | 39.7 | 111.96\% | 30.0 | 1.0 | 336.0 | 8,135 | 518,933 | 25,004,505 | $-2,728,361$ | -9.84\% |
| 2011 | Oct-11 | 24,049,772 | 235.5 | 2.4 | 112.13\% | 31.0 | 1.0 | 336.0 | 8,172 | 520,593 | 25,065,132 | 1,015,360 | 4.22\% |
| 2011 | Nov-11 | 24,699,073 | 342.1 | 0.0 | 112.30\% | 30.0 | 1.0 | 352.0 | 8,225 | 522,252 | 25,092,105 | 393,031 | 1.59\% |
| 2011 | Dec-11 | 26,977,323 | 534.0 | 0.0 | 112.46\% | 31.0 | 0.0 | 336.0 | 8,259 | 523,911 | 27,721,151 | 743,827 | 2.76\% |
| 2012 | Jan-12 | 29,493,944 | 611.1 | 0.0 | 112.60\% | 31.0 | 0.0 | 336.0 | 8,241 | 525,085 | 28,046,515 | -1,447,429 | -4.91\% |
| 2012 | Feb-12 | 28,839,468 | 531.7 | 0.0 | 112.74\% | 29.0 | 0.0 | 320.0 | 8,262 | 526,259 | 28,239,019 | -600,449 | -2.08\% |
| 2012 | Mar-12 | 26,852,669 | 349.4 | 0.2 | 112.88\% | 31.0 | 1.0 | 352.0 | 8,279 | 527,433 | 25,312,676 | -1,539,993 | -5.73\% |
| 2012 | Apr-12 | 26,332,063 | 321.7 | 0.0 | 113.02\% | 30.0 | 1.0 | 320.0 | 8,292 | 528,606 | 26,424,323 | 92,261 | 0.35\% |
| 2012 | May-12 | 23,954,203 | 80.7 | 36.7 | 113.16\% | 31.0 | 1.0 | 352.0 | 8,310 | 529,780 | 25,036,614 | 1,082,411 | 4.52\% |
| 2012 | Jun-12 | 26,949,491 | 23.2 | 101.6 | 113.30\% | 30.0 | 0.0 | 336.0 | 8,317 | 530,954 | 28,082,696 | 1,133,205 | 4.20\% |
| 2012 | Jul-12 | 29,476,850 | 0.0 | 195.4 | 113.45\% | 31.0 | 0.0 | 352.0 | 8,323 | 532,128 | 30,200,013 | 723,163 | 2.45\% |
| 2012 | Aug-12 | 29,626,645 | 2.0 | 112.1 | 113.59\% | 31.0 | 0.0 | 352.0 | 8,336 | 533,302 | 27,726,449 | -1,900,195 | -6.41\% |
| 2012 | Sep-12 | 27,813,125 | 85.0 | 35.6 | 113.73\% | 30.0 | 1.0 | 304.0 | 8,357 | 534,476 | 27,016,291 | -796,834 | -2.86\% |
| 2012 | Oct-12 | 23,671,212 | 242.5 | 1.1 | 113.87\% | 31.0 | 1.0 | 352.0 | 8,384 | 535,649 | 25,057,493 | 1,386,281 | 5.86\% |
| 2012 | Nov-12 | 25,927,426 | 434.0 | 0.0 | 114.01\% | 30.0 | 1.0 | 352.0 | 8,404 | 536,823 | 26,097,575 | 170,149 | 0.66\% |
| 2012 | Dec-12 | 28,006,105 | 533.5 | 0.0 | 114.15\% | 31.0 | 0.0 | 304.0 | 8,426 | 537,997 | 29,455,861 | 1,449,755 | 5.18\% |
| 2013 | Jan-13 | 30,722,693 | 624.4 | 0.0 | 114.27\% | 31.0 | 0.0 | 352.0 | 8,449 | 539,268 | 28,114,896 | -2,607,797 | -8.49\% |
| 2013 | Feb-13 | 29,067,714 | 631.5 | 0.0 | 114.40\% | 28.0 | 0.0 | 304.0 | 8,471 | 540,539 | 30,014,838 | 947,124 | 3.26\% |
| 2013 | Mar-13 | 27,173,073 | 554.8 | 0.0 | 114.52\% | 31.0 | 1.0 | 320.0 | 8,448 | 541,809 | 28,162,315 | 989,242 | 3.64\% |
| 2013 | Apr-13 | 28,512,442 | 358.6 | 0.0 | 114.64\% | 30.0 | 1.0 | 352.0 | 8,508 | 543,080 | 26,004,478 | -2,507,964 | -8.80\% |
| 2013 | May-13 | 25,468,497 | 109.1 | 23.1 | 114.77\% | 31.0 | 1.0 | 352.0 | 8,518 | 544,351 | 25,394,039 | -74,459 | -0.29\% |
| 2013 | Jun-13 | 26,545,055 | 33.4 | 59.3 | 114.89\% | 30.0 | 0.0 | 320.0 | 8,515 | 545,622 | 28,062,265 | 1,517,210 | 5.72\% |
| 2013 | Jul-13 | 27,915,178 | 1.4 | 133.3 | 115.01\% | 31.0 | 0.0 | 352.0 | 8,528 | 546,892 | 28,920,538 | 1,005,361 | 3.60\% |
| 2013 | Aug-13 | 29,355,215 | 4.6 | 93.2 | 115.14\% | 31.0 | 0.0 | 336.0 | 8,528 | 548,163 | 28,337,102 | -1,018,113 | -3.47\% |
| 2013 | Sep-13 | 28,507,872 | 89.6 | 28.0 | 115.26\% | 30.0 | 1.0 | 320.0 | 8,538 | 549,434 | 26,654,480 | -1,853,392 | -6.50\% |
| 2013 | Oct-13 | 24,620,240 | 224.2 | 0.0 | 115.39\% | 31.0 | 1.0 | 352.0 | 8,550 | 550,705 | 25,335,493 | 715,253 | 2.91\% |
| 2013 | Nov-13 | 27,112,905 | 478.3 | 0.0 | 115.51\% | 30.0 | 1.0 | 336.0 | 8,595 | 551,975 | 27,489,352 | 376,446 | 1.39\% |
| 2013 | Dec-13 | 29,581,326 | 687.7 | 0.0 | 115.64\% | 31.0 | 0.0 | 320.0 | 8,735 | 553,246 | 30,670,095 | 1,088,769 | 3.68\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31.0 | 0.0 | 352.0 | 8,738 | 554,325 | 29,468,980 | 29,468,980 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28.0 | 0.0 | 304.0 | 8,742 | 555,403 | 30,875,757 | 30,875,757 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31.0 | 1.0 | 320.0 | 8,745 | 556,482 | 28,975,656 | 28,975,656 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30.0 | 1.0 | 352.0 | 8,749 | 557,561 | 26,510,867 | 26,510,867 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31.0 | 1.0 | 336.0 | 8,752 | 558,639 | 26,829,784 | 26,829,784 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 116.84\% | 30.0 | 0.0 | 336.0 | 8,756 | 559,718 | 28,598,489 | 28,598,489 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31.0 | 0.0 | 352.0 | 8,759 | 560,797 | 29,890,845 | 29,890,845 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31.0 | 0.0 | 320.0 | 8,763 | 561,875 | 30,187,111 | 30,187,111 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30.0 | 1.0 | 336.0 | 8,766 | 562,954 | 26,813,516 | 26,813,516 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31.0 | 1.0 | 352.0 | 8,770 | 564,033 | 26,288,496 | 26,288,496 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30.0 | 1.0 | 320.0 | 8,773 | 565,111 | 28,357,607 | 28,357,607 |  |
| 2014 | Dec-14 |  | 615.7 | 0.0 | 118.06\% | 31.0 | 0.0 | 336.0 | 8,777 | 566,190 | 29,689,477 | 29,689,477 |  |
| 2015 | Jan-15 |  | 700.3 | 0.0 | 118.31\% | 31.0 | 0.0 | 336.0 | 8,810 | 567,269 | 30,284,430 | 30,284,430 |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28.0 | 0.0 | 304.0 | 8,842 | 568,347 | 31, 182,695 | 31, 182,695 |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31.0 | 1.0 | 352.0 | 8,875 | 569,426 | 28,137,212 | 28,137,212 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30.0 | 1.0 | 336.0 | 8,908 | 570,504 | 27,711,490 | 27,711,490 |  |
| 2015 | May-15 |  | 140.6 | 18.6 | 119.28\% | 31.0 | 1.0 | 320.0 | 8,940 | 571,583 | 28,158,831 | 28,158,831 |  |
| 2015 | Jun-15 |  | 25.8 | 72.8 | 119.53\% | 30.0 | 0.0 | 352.0 | 8,973 | 572,672 | 28,782,205 | 28,782,205 |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31.0 | 0.0 | 352.0 | 9,006 | 573,740 | 30,839,906 | 30,839,906 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31.0 | 0.0 | 320.0 | 9,039 | 574,819 | 31,264,648 | 31,264,648 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30.0 | 1.0 | 336.0 336.0 | ${ }_{9}^{9,071}$ | 575,897 576976 | 28,019,547 <br> 28259 <br> 18924 | 28,019,547 $28,259,924$ |  |
| 2015 2015 | Oct-15 $\mathrm{Nov-15}$ |  | 238.3 408.5 | 3.4 0.0 | $120.52 \%$ $120.77 \%$ | 31.0 30.0 | 1.0 1.0 | 336.0 336.0 | 9,104 9,137 | 576,976 578,054 | $28,259,924$ $29,183,789$ | $28,259,924$ $29,183,789$ |  |
| 2015 | Dec-15 |  | 615.7 | 0.0 | 121.02\% | 31.0 | 0.0 | 352.0 | 9,169 | 579,133 | 30,644,204 | 30,644,204 |  |
|  |  |  | Weather Nor | alized |  |  |  |  |  |  |  |  |  |

## Regression Model for General Service < 50 kW



Regression Model for General Service > 50 kW

|  |  | Purchased | Heating Decree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 107,850,864 | 849.1 | 0.0 | 101.59\% | 31.0 | 0.0 | 336.0 | 1,390 | 373,417 | 97,253,248 | -10,597,616 | \% Variance |
| 2004 | Feb-04 | 86,943,151 | 631.7 | 0.0 | 101.81\% | 29.0 | 0.0 | 320.0 | 1,394 | 374,833 | 92,731,656 | 5,788,505 | 6.66\% |
| 2004 | Mar-04 | 92,207,023 | 487.3 | 0.0 | 102.02\% | 31.0 | 1.0 | 368.0 | 1,394 | 376,250 | 93,805,806 | 1,598,783 | 1.73\% |
| 2004 | Apr-04 | 82,782,079 | 331.5 | 0.0 | 102.24\% | 30.0 | 1.0 | 336.0 | 1,395 | 377,667 | 88,932,982 | 6,150,903 | 7.43\% |
| 2004 | May-04 | 85,131,816 | 158.9 | 8.6 | 102.45\% | 31.0 | 1.0 | 320.0 | 1,404 | 379,083 | 86,309,308 | 1,177,492 | 1.38\% |
| 2004 | Jun-04 | 87,709,710 | 44.2 | 31.6 | 102.67\% | 30.0 | 0.0 | 352.0 | 1,397 | 380,500 | 90,181,081 | 2,471,371 | 2.82\% |
| 2004 | Jul-04 | 107,314,343 | 3.6 | 86.4 | 102.89\% | 31.0 | 0.0 | 336.0 | 1,408 | 381,917 | 93,005,969 | -14,308,374 | -13.33\% |
| 2004 | Aug-04 | 74,886,665 | 12.8 | 59.6 | 103.11\% | 31.0 | 0.0 | 336.0 | 1,420 | 383,333 | 91,399,372 | 16,512,707 | 22.05\% |
| 2004 | Sep-04 | 89,614,322 | 30.0 | 41.2 | 103.32\% | 30.0 | 1.0 | 336.0 | 1,388 | 384,750 | 88,192,584 | -1,421,738 | -1.59\% |
| 2004 | Oct-04 | 84,185,811 | 226.3 | 1.5 | 103.54\% | 31.0 | 1.0 | 320.0 | 1,376 | 386,167 | 86,558,641 | 2,372,830 | 2.82\% |
| 2004 | Nov-04 | 90,614,206 | 379.1 | 0.0 | 103.76\% | 30.0 | 1.0 | 352.0 | 1,378 | 387,583 | 91, 171,167 | 556,961 | 0.61\% |
| 2004 | Dec-04 | 93,555,928 | 643.4 | 0.0 | 103.98\% | 31.0 | 0.0 | 336.0 | 1,376 | 389,000 | 95,043,174 | 1,487,246 | 1.59\% |
| 2005 | Jan-05 | 93,876,052 | 770.0 | 0.0 | 104.22\% | 31.0 | 0.0 | 320.0 | 1,379 | 391,000 | 95,623,986 | 1,747,934 | 1.86\% |
| 2005 | Feb-05 | 95,439,923 | 616.4 | 0.0 | 104.45\% | 28.0 | 0.0 | 320.0 | 1,378 | 393,000 | 93,026,306 | -2,413,617 | -2.53\% |
| 2005 | Mar-05 | 93,601,879 | 608.6 | 0.0 | 104.69\% | 31.0 | 1.0 | 352.0 | 1,362 | 395,000 | 94,514,699 | 912,820 | 0.98\% |
| 2005 | Apr-05 | 85,519,196 | 306.8 | 0.0 | 104.93\% | 30.0 | 1.0 | 336.0 | 1,370 | 397,000 | 89,053,922 | 3,534,726 | 4.13\% |
| 2005 | May-05 | 87,463,993 | 189.4 | 0.8 | 105.17\% | 31.0 | 1.0 | 336.0 | 1,353 | 399,000 | 87,369,299 | -94,694 | -0.11\% |
| 2005 | Jun-05 | 95,066,850 | 8.9 | 146.3 | 105.41\% | 30.0 | 0.0 | 352.0 | 1,351 | 401,000 | 98,547,757 | 3,480,907 | 3.66\% |
| 2005 | Jul-05 | 96,303,978 | 0.0 | 188.7 | 105.65\% | 31.0 | 0.0 | 320.0 | 1,354 | 403,000 | 99,362,639 | 3,058,661 | 3.18\% |
| 2005 | Aug-05 | 98,464,599 | 0.2 | 140.7 | 105.89\% | 31.0 | 0.0 | 352.0 | 1,359 | 405,000 | 98,474,211 | 9,612 | 0.01\% |
| 2005 | Sep-05 | 95,496,155 | 22.6 | 52.1 | 106.13\% | 30.0 | 1.0 | 336.0 | 1,366 | 407,000 | 89,393,601 | -6,102,554 | -6.39\% |
| 2005 | Oct-05 | 88,954,507 | 220.2 | 7.6 | 106.37\% | 31.0 | 1.0 | 320.0 | 1,364 | 409,000 | 87,600,306 | -1,354,201 | -1.52\% |
| 2005 | Nov-05 | 97,467,256 | 388.4 | 0.0 | 106.61\% | 30.0 | 1.0 | 352.0 | 1,360 | 411,000 | 91,821,080 | -5,646,176 | -5.79\% |
| 2005 | Dec-05 | 94,031,215 | 665.3 | 0.0 | 106.85\% | 31.0 | 0.0 | 320.0 | 1,369 | 413,000 | 94,764,316 | 733,101 | 0.78\% |
| 2006 | Jan-06 | 94,853,823 | 551.8 | 0.0 | 107.07\% | 31.0 | 0.0 | 336.0 | 1,381 | 414,667 | 94,817,984 | -35,839 | -0.04\% |
| 2006 | Feb-06 | 93,524,238 | 604.3 | 0.0 | 107.29\% | 28.0 | 0.0 | 320.0 | 1,378 | 416,333 | 93,737,894 | 213,656 | 0.23\% |
| 2006 | Mar-06 | 95,014,813 | 516.6 | 0.0 | 107.50\% | 31.0 | 1.0 | 368.0 | 1,396 | 418,000 | 96,129,805 | 1,114,992 | 1.17\% |
| 2006 | Apr-06 | 85,130,049 | 293.3 | 0.0 | 107.72\% | 30.0 | 1.0 | 304.0 | 1,398 | 419,667 | 87,687,656 | 2,557,607 | 3.00\% |
| 2006 | May-06 | 89,528,473 | 136.9 | 26.0 | 107.94\% | 31.0 | 1.0 | 352.0 | 1,412 | 421,333 | 91,996,307 | 2,467,834 | 2.76\% |
| 2006 | Jun-06 | 98,963,273 | 19.5 | 73.6 | 108.15\% | 30.0 | 0.0 | 352.0 | 1,420 | 423,000 | 95,388,894 | -3,574,379 | -3.61\% |
| 2006 | Jul-06 | 99,178,685 | 0.0 | 167.3 | 108.37\% | 31.0 | 0.0 | 320.0 | 1,399 | 424,667 | 99,522,233 | 343,548 | 0.35\% |
| 2006 | Aug-06 | 100,161,420 | 4.2 | 101.6 | 108.59\% | 31.0 | 0.0 | 352.0 | 1,406 | 426,333 | 97,365,757 | -2,795,663 | -2.79\% |
| 2006 | Sep-06 | 87,696,888 | 80.9 | 12.9 | 108.81\% | 30.0 | 1.0 | 320.0 | 1,410 | 428,000 | 87,656,021 | -40,867 | -0.05\% |
| 2006 | Oct-06 | 96,462,438 | 288.3 | 1.1 | 109.03\% | 31.0 | 1.0 | 336.0 | 1,403 | 429,667 | 91,057,114 | -5,405,324 | -5.60\% |
| 2006 | Nov-06 | 93,732,318 | 382.2 | 0.0 | 109.25\% | 30.0 | 1.0 | 352.0 | 1,411 | 431,333 | 93,672,000 | -60,318 | -0.06\% |
| 2006 | Dec-06 | 92,261,800 | 500.5 | 0.0 | 109.47\% | 31.0 | 0.0 | 304.0 | 1,411 | 433,000 | 92,899,889 | 638,089 | 0.69\% |
| 2007 | Jan-07 | 99,321,481 | 647.1 | 0.0 | 109.65\% | 31.0 | 0.0 | 352.0 | 1,421 | 434,417 | 99,162,363 | -159,118 | -0.16\% |
| 2007 | Feb-07 | 98,348,800 | 740.1 | 0.0 | 109.82\% | 28.0 | 0.0 | 320.0 | 1,422 | 435,833 | 97,395,960 | -952,840 | -0.97\% |
| 2007 | Mar-07 | 96,430,076 | 546.7 | 0.0 | 110.00\% | 31.0 | 1.0 | 352.0 | 1,401 | 437,250 | 96,177,829 | -252,247 | -0.26\% |
| 2007 | Apr-07 | 90,708,197 | 356.4 | 0.0 | 110.18\% | 30.0 | 1.0 | 320.0 | 1,402 | 438,667 | 90,796,217 | 88,020 | 0.10\% |
| 2007 | May-07 | 92,269,497 | 136.4 | 22.4 | 110.36\% | 31.0 | 1.0 | 352.0 | 1,411 | 440,083 | 92,503,038 | 233,541 | 0.25\% |
| 2007 | Jun-07 | 96,254,780 | 16.5 | 99.2 | 110.53\% | 30.0 | 0.0 | 336.0 | 1,410 | 441,500 | 96,595,021 | 340,241 | 0.35\% |
| 2007 | Jul-07 | 96,448,464 | 3.2 | 106.1 | 110.71\% | 31.0 | 0.0 | 336.0 | 1,402 | 442,917 | 97,004,301 | 555,837 | 0.58\% |
| 2007 | Aug-07 | 99,154,111 | 5.2 | 141.0 | 110.89\% | 31.0 | 0.0 | 352.0 | 1,414 | 444,333 | 101,348,695 | 2,194,584 | 2.21\% |
| 2007 | Sep-07 | 92,112,959 | 36.9 | 47.5 | 111.07\% | 30.0 | 1.0 | 304.0 | 1,420 | 445,750 | 89,347,481 | -2,765,478 | -3.00\% |
| 2007 | Oct-07 | 95,101,286 | 137.7 | 19.8 | 111.25\% | 31.0 | 1.0 | 352.0 | 1,419 | 447,167 | 92,777,681 | -2,323,605 | -2.44\% |
| 2007 | Nov-07 | 95,834,053 | 462.5 | 0.0 | 111.43\% | 30.0 | 1.0 | 352.0 | 1,437 | 448,583 | 96,042,037 | 207,984 | 0.22\% |
| 2007 | Dec-07 | 97,410,215 | 630.7 | 0.0 | 111.61\% | 31.0 | 0.0 | 304.0 | 1,443 | 450,000 | 96,072,942 | -1,337,273 | -1.37\% |
| 2008 | Jan-08 | 102,963,887 | 623.5 | 0.0 | 111.55\% | 31.0 | 0.0 | 352.0 | 1,461 | 451,250 | 100,191,610 | -2,772,277 | -2.69\% |
| 2008 | Feb-08 | 98,872,834 | 674.7 | 0.0 | 111.49\% | 29.0 | 0.0 | 320.0 | 1,479 | 452,500 | 98,197,323 | -675,511 | -0.68\% |
| 2008 | Mar-08 | 100,278,173 | 610.2 | 0.0 | 111.43\% | 31.0 | 1.0 | 304.0 | 1,488 | 453,750 | 95,108,480 | -5,169,693 | -5.16\% |
| 2008 | Apr-08 | 93,247,862 | 253.9 | 0.0 | 111.37\% | 30.0 | 1.0 | 352.0 | 1,482 | 455,000 | 93,694,777 | 446,915 | 0.48\% |
| 2008 | May-08 | 86,488,914 | 193.5 | 2.5 | 111.31\% | 31.0 | 1.0 | 336.0 | 1,479 | 456,250 | 91,728,420 | 5,239,506 | 6.06\% |
| 2008 | Jun-08 | 101,028,124 | 22.7 | 71.5 | 111.25\% | 30.0 | 0.0 | 336.0 | 1,479 | 457,500 | 95,683,712 | -5,344,412 | -5.29\% |
| 2008 | Jul-08 | 96,066,527 | 1.0 | 111.0 | 111.19\% | 31.0 | 0.0 | 352.0 | 1,485 | 458,750 | 99,933,840 | 3,867,313 | 4.03\% |
| 2008 | Aug-08 | 96,037,526 | 12.7 | 64.0 | 111.13\% | 31.0 | 0.0 | 320.0 | 1,491 | 460,000 | 93,852,051 | -2,185,475 | -2.28\% |
| 2008 | Sep-08 | 96,289,315 | 59.0 | 26.7 | 111.08\% | 30.0 | 1.0 | 336.0 | 1,496 | 461,250 | 91,479,519 | -4,809,796 | -5.00\% |
| 2008 | Oct-08 | 91,666,815 | 278.6 | 0.0 | 111.02\% | 31.0 | 1.0 | 352.0 | 1,517 | 462,500 | 94,296,176 | 2,629,361 | 2.87\% |
| 2008 | Nov-08 | 92,054,395 | 451.6 | 0.0 | 110.96\% | 30.0 | 1.0 | 304.0 | 1,518 | 463,750 | 92,502,355 | 447,960 | 0.49\% |
| 2008 | Dec-08 | 97,466,500 | 654.6 | 0.0 | 110.90\% | 31.0 | 0.0 | 336.0 | 1,519 | 465,000 | 99,342,354 | 1,875,854 | 1.92\% |
| 2009 | Jan-09 | 101,974,045 | 830.2 | 0.0 | 110.59\% | 31.0 | 0.0 | 336.0 | 1,532 | 467,667 | 101,707,429 | -266,616 | -0.26\% |
| 2009 | Feb-09 | 92,396,840 | 606.4 | 0.0 | 110.29\% | 28.0 | 0.0 | 304.0 | 1,535 | 470,333 | 95,153,341 | 2,756,501 | 2.98\% |
| 2009 | Mar-09 | 96,585,229 | 533.8 | 0.0 | 109.99\% | 31.0 | 1.0 | 352.0 | 1,542 | 473,000 | 97,105,886 | 520,657 | 0.54\% |
| 2009 | Apr-09 | 88,936,742 | 305.8 | 1.2 | 109.69\% | 30.0 | 1.0 | 320.0 | 1,558 | 475,667 | 91,191,182 | 2,254,440 | 2.53\% |
| 2009 | May-09 | 85,648,865 | 158.8 | 6.9 | 109.39\% | 31.0 | 1.0 | 320.0 | 1,568 | 478,333 | 89,604,410 | 3,955,545 | 4.62\% |
| 2009 | Jun-09 | 91,411,346 | 49.3 | 34.2 | 109.09\% | 30.0 | 0.0 | 352.0 | 1,570 | 481,000 | 93,630,609 | 2,219,263 | 2.43\% |
| 2009 | Jul-09 | 93,919,308 | 6.2 | 43.7 | 108.79\% | 31.0 | 0.0 | 352.0 | 1,575 | 483,667 | 93,685,099 | -234,209 | -0.25\% |
| 2009 | Aug-09 | 96,176,801 | 9.8 | 91.0 | 108.49\% | 31.0 | 0.0 | 320.0 | 1,579 | 486,333 | 94,483,298 | -1,693,503 | -1.76\% |
| 2009 | Sep-09 | 92,717,312 | 55.2 | 20.9 | 108.20\% | 30.0 | 1.0 | 336.0 | 1,583 | 489,000 | 89,304,366 | -3,412,946 | -3.68\% |
| 2009 | Oct-09 | 90,275,253 | 287.8 | 0.0 | 107.90\% | 31.0 | 1.0 | 336.0 | 1,532 | 491,667 | 89,710,258 | -564,995 | -0.63\% |
| 2009 | Nov-09 | 91,490,331 | 361.2 | 0.0 | 107.60\% | 30.0 | 1.0 | 320.0 | 1,536 | 494,333 | 88,983,723 | -2,506,608 | -2.74\% |
| 2009 | Dec-09 | 97,899,507 | 631.3 | 0.0 | 107.31\% | 31.0 | 0.0 | 352.0 | 1,534 | 497,000 | 96,457,724 | -1,441,783 | -1.47\% |

Regression Model for General Service > 50 kW

|  |  | Purchased | Heating Decree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | $\frac{\text { Number of Days in }}{\text { Month }}$ | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 99,545,926 | 720.0 | 0.0 | 107.57\% | 31.0 | 0.0 | 320.0 | 1,536 | 497,583 | 95,258,925 | -4,287,001 | -4.31\% |
| 2010 | Feb-10 | 91,797,929 | 598.3 | 0.0 | 107.83\% | 28.0 | 0.0 | 304.0 | 1,541 | 498,167 | 91,999,433 | 201,504 | 0.22\% |
| 2010 | Mar-10 | 96,662,374 | 422.8 | 0.0 | 108.09\% | 31.0 | 1.0 | 368.0 | 1,533 | 498,750 | 94,036,847 | -2,625,527 | -2.72\% |
| 2010 | Apr-10 | 87,946,774 | 225.1 | 0.0 | 108.35\% | 30.0 | 1.0 | 320.0 | 1,533 | 499,333 | 87,315,808 | -630,966 | -0.72\% |
| 2010 | May-10 | 87,521,239 | 107.9 | 45.7 | 108.62\% | 31.0 | 1.0 | 320.0 | 1,538 | 499,917 | 89,639,138 | 2,117,899 | 2.42\% |
| 2010 | Jun-10 | 95,295,707 | 21.7 | 58.7 | 108.88\% | 30.0 | 0.0 | 352.0 | 1,542 | 500,500 | 93,438,316 | -1,857,391 | -1.95\% |
| 2010 | Jul-10 | 100,105,283 | 1.8 | 164.9 | 109.15\% | 31.0 | 0.0 | 336.0 | 1,539 | 501,083 | 100, 306,124 | 200,841 | 0.20\% |
| 2010 | Aug-10 | 98,467,295 | 2.1 | 138.8 | 109.41\% | 31.0 | 0.0 | 336.0 | 1,540 | 501,667 | 98,478,881 | 11,586 | 0.01\% |
| 2010 | Sep-10 | 93,605,638 | 78.2 | 31.5 | 109.68\% | 30.0 | 1.0 | 336.0 | 1,540 | 502,250 | 89,967,176 | -3,638,462 | -3.89\% |
| 2010 | Oct-10 | 87,356,694 | 241.6 | 0.0 | 109.94\% | 31.0 | 1.0 | 320.0 | 1,543 | 502,833 | 88,891,170 | 1,534,476 | 1.76\% |
| 2010 | Nov-10 | 92,404,420 | 405.3 | 0.0 | 110.21\% | 30.0 | 1.0 | 336.0 | 1,541 | 503,417 | 92,447,152 | 42,732 | 0.05\% |
| 2010 | Dec-10 | 97,044,044 | 676.2 | 0.0 | 110.48\% | 31.0 | 0.0 | 368.0 | 1,542 | 504,000 | 100,503,519 | 3,459,475 | 3.56\% |
| 2011 | Jan-11 | 100,009,657 | 775.3 | 0.0 | 110.64\% | 31.0 | 0.0 | 320.0 | 1,545 | 505,659 | 98,029,259 | -1,980,398 | -1.98\% |
| 2011 | Feb-11 | 94,671,447 | 654.2 | 0.0 | 110.80\% | 28.0 | 0.0 | 304.0 | 1,545 | 507,319 | 94,552,129 | -119,318 | -0.13\% |
| 2011 | Mar-11 | 97,658,736 | 572.8 | 0.0 | 110.97\% | 31.0 | 1.0 | 368.0 | 1,545 | 508,978 | 97,943,345 | 284,609 | 0.29\% |
| 2011 | Apr-11 | 88,544,116 | 332.3 | 0.0 | 111.13\% | 30.0 | 1.0 | 304.0 | 1,547 | 510,637 | 89,224,311 | 680,195 | 0.77\% |
| 2011 | May-11 | 89,426,717 | 134.1 | 13.0 | 111.30\% | 31.0 | 1.0 | 336.0 | 1,544 | 512,296 | 90,241,963 | 815,246 | 0.91\% |
| 2011 | Jun-11 | 95,713,671 | 19.0 | 52.2 | 111.47\% | 30.0 | 0.0 | 352.0 | 1,545 | 513,956 | 94,155,525 | -1,558,146 | -1.63\% |
| 2011 | Jul-11 | 101,326,740 | 0.0 | 198.6 | 111.63\% | 31.0 | 0.0 | 320.0 | 1,541 | 515,615 | 102,674,655 | 1,347,915 | 1.33\% |
| 2011 | Aug-11 | 102,219,116 | 0.0 | 122.2 | 111.80\% | 31.0 | 0.0 | 352.0 | 1,544 | 517,274 | 99,514,209 | -2,704,907 | -2.65\% |
| 2011 | Sep-11 | 93,885,819 | 48.2 | 39.7 | 111.96\% | 30.0 | 1.0 | 336.0 | 1,522 | 518,933 | 90,631,417 | -3,254,402 | -3.47\% |
| 2011 | Oct-11 | 88,468,561 | 235.5 | 2.4 | 112.13\% | 31.0 | 1.0 | 336.0 | 1,522 | 520,593 | 90,572,287 | 2,103,726 | 2.38\% |
| 2011 | Nov-11 | 92,796,644 | 342.1 | 0.0 | 112.30\% | 30.0 | 1.0 | 352.0 | 1,521 | 522,252 | 93,041,172 | 244,528 | 0.26\% |
| 2011 | Dec-11 | 94,137,020 | 534.0 | 0.0 | 112.46\% | 31.0 | 0.0 | 336.0 | 1,523 | 523,911 | 95,935,329 | 1,798,309 | 1.91\% |
| 2012 | Jan-12 | 99,002,633 | 611.1 | 0.0 | 112.60\% | 31.0 | 0.0 | 336.0 | 1,523 | 525,085 | 97,053,287 | -1,949,346 | -1.97\% |
| 2012 | Feb-12 | 94,768,891 | 531.7 | 0.0 | 112.74\% | 29.0 | 0.0 | 320.0 | 1,524 | 526,259 | 94,353,296 | $-415,595$ | -0.44\% |
| 2012 | Mar-12 | 93,975,078 | 349.4 | 0.2 | 112.88\% | 31.0 | 1.0 | 352.0 | 1,524 | 527,433 | 93,553,625 | -421,453 | -0.45\% |
| 2012 | Apr-12 | 87,004,957 | 321.7 | 0.0 | 113.02\% | 30.0 | 1.0 | 320.0 | 1,515 | 528,606 | $90,204,557$ | 3,199,600 | 3.68\% |
| 2012 | May-12 | 93,055,553 | 80.7 | 36.7 | 113.16\% | 31.0 | 1.0 | 352.0 | 1,517 | 529,780 | 92,562,840 | -492,713 | -0.53\% |
| 2012 | Jun-12 | 96,841,186 | 23.2 | 101.6 | 113.30\% | 30.0 | 0.0 | 336.0 | 1,518 | 530,954 | 96,633,007 | -208,179 | -0.21\% |
| 2012 | Jul-12 | 102,954,191 | 0.0 | 195.4 | 113.45\% | 31.0 | 0.0 | 352.0 | 1,521 | 532,128 | 105, 138,935 | 2,184,744 | 2.12\% |
| 2012 | Aug-12 | 100,915,401 | 2.0 | 112.1 35.6 | 113.59\% | 31.0 | 0.0 | 352.0 | 1,524 | 533,302 | 98,843,605 | -2,071,796 | -2.05\% |
| 2012 | Sep-12 | 92,157,092 | 85.0 | 35.6 | 113.73\% | 30.0 | 1.0 | 304.0 | 1,528 | 534,476 | 88,813,377 | -3,343,715 | -3.63\% |
| 2012 | Oct-12 | 90,948,353 | 242.5 | 1.1 | 113.87\% | 31.0 | 1.0 | 352.0 | 1,537 | 535,649 | 92,699,893 | 1,751,540 | 1.93\% |
| 2012 | Nov-12 | 94,864,844 | 434.0 | 0.0 | 114.01\% | 30.0 | 1.0 | 352.0 | 1,537 | 536,823 | 95,161,844 | 297,000 | 0.31\% |
| 2012 | Dec-12 | 93,961,906 | 533.5 | 0.0 | 114.15\% | 31.0 | 0.0 | 304.0 | 1,537 | 537,997 | 94,095,186 | 133,280 | 0.14\% |
| 2013 | Jan-13 | 98,255,480 | 624.4 | 0.0 | 114.27\% | 31.0 | 0.0 | 352.0 | 1,540 | 539,268 | 99,404,940 | 1,149,460 | 1.17\% |
| 2013 | Feb-13 | 93,830,172 | 631.5 | 0.0 | 114.40\% | 28.0 | 0.0 | 304.0 | 1,538 | 540,539 | 95,028,415 | 1,198,243 | 1.28\% |
| 2013 | Mar-13 | 93,451,193 | 554.8 | 0.0 | 114.52\% | 31.0 | 1.0 | 320.0 | 1,536 | 541,809 | 94,478,924 | 1,027,731 | 1.10\% |
| 2013 | Apr-13 | 90,501,173 | 358.6 | 0.0 | 114.64\% | 30.0 | 1.0 | 352.0 | 1,495 | 543,080 | 93,392,302 | 2,891,129 | 3.19\% |
| 2013 | May-13 | 93,141,210 | 109.1 | 23.1 | 114.77\% | 31.0 | 1.0 | 352.0 | 1,497 | 544,351 | 91,929,200 | $-1,212,010$ | -1.30\% |
| 2013 | Jun-13 | 89,891,967 | 33.4 | 59.3 | 114.89\% | 30.0 | 0.0 | 320.0 | 1,499 | 545,622 | 92,216,106 | 2,324,139 | 2.59\% |
| 2013 | Jul-13 | 99,173,181 | 1.4 | 133.3 | 115.01\% | 31.0 | 0.0 | 352.0 | 1,502 | 546,892 | 100,372,443 | 1,199,262 | 1.21\% |
| 2013 | Aug-13 | 95,771,587 | 4.6 | 93.2 | 115.14\% | 31.0 | 0.0 | 336.0 | 1,505 | 548,163 | 96,092,234 | 320,647 | 0.33\% |
| 2013 | Sep-13 | 89, 139,209 | 89.6 | 28.0 | 115.26\% | 30.0 | 1.0 | 320.0 | 1,507 | 549,434 | 89,539,990 | 400,781 | 0.45\% |
| 2013 | Oct-13 | 93,628,156 | 224.2 | 0.0 | 115.39\% | 31.0 | 1.0 | 352.0 | 1,504 | 550,705 | 92,026,631 | -1,601,525 | -1.71\% |
| 2013 | Nov-13 | 90,860,690 | 478.3 | 0.0 | 115.51\% | 30.0 | 1.0 | 336.0 | 1,506 | 551,975 | 94,152,632 | 3,291,942 | ${ }^{3.62 \%}$ |
| 2013 | Dec-13 | 95,163,273 | 687.7 | 0.0 | 115.64\% | 31.0 | 0.0 | 320.0 | 1,508 | 553,246 | 97,279,517 | 2,116,244 | 2.22\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31.0 | 0.0 | 352.0 | 1,507 | 554,325 | 100,159,814 | 100,159,814 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28.0 | 0.0 | 304.0 | 1,506 | 555,403 | 94,773,942 | 94,773,942 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31.0 | 1.0 | 320.0 | 1,505 | 556,482 | 93,865,431 | 93,865,431 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30.0 | 1.0 | 352.0 | 1,504 | 557,561 | 93,456,135 | 93,456,135 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31.0 | 1.0 | 336.0 | 1,503 | 558,639 | 91,456,572 | 91,456,572 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 116.84\% | 30.0 | 0.0 | 336.0 | 1,502 | 559,718 | 95,231,295 | 95,231,295 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31.0 | 0.0 | 352.0 | 1,500 | 560,797 | 101,600,416 | 101,600,416 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31.0 | 0.0 | 320.0 | 1,499 | 561,875 | 96,529,749 | 96,529,749 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30.0 | 1.0 | 336.0 | 1,498 | 562,954 | 91,586,555 | 91,586,555 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31.0 | 1.0 | 352.0 | 1,497 | 564,033 | 93,316,591 | 93,316,591 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30.0 | 1.0 | 320.0 | 1,496 | 565,111 | 92,699,313 | 92,699,313 |  |
| 2014 | Dec-14 |  | 615.7 | 0.0 | 118.06\% | 31.0 | 0.0 | 336.0 | 1,495 | 566,190 | 98,436,642 | 98,436,642 |  |
| 2015 | ${ }_{\text {Jan-15 }}$ |  | 700.3 | 0.0 | 118.31\% | 31.0 | 0.0 | 336.0 3040 | 1,494 1 1 | 567,269 568347 | 99,723,811 | 99,723,811 |  |
| 2015 | Feb-15 Mar-15 |  | 628.9 520.3 | 0.0 0.0 | $118.55 \%$ $118.79 \%$ | 28.0 31.0 | 0.0 1.0 | 304.0 352.0 | 1,494 1,493 | 568,347 569,426 | $95,695,133$ $97,462,087$ | $95,695,133$ $97,462,087$ |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30.0 | 1.0 | 336.0 | 1,492 | 570,504 | 93,137,571 | 93,137,571 |  |
| 2015 | May-15 |  | 140.6 | 18.6 | 119.28\% | 31.0 | 1.0 | 320.0 | 1,492 | 571,583 | 91,177,377 | 91,177,377 |  |
| 2015 | Jun-15 |  | 25.8 | 72.8 | 119.53\% | 30.0 | 0.0 | 352.0 | 1,491 | 572,662 | 97,627,900 | 97,627,900 |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31.0 | 0.0 | 352.0 | 1,490 | 573,740 | 102,718,456 | 102,718,456 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31.0 | 0.0 | 320.0 | 1,490 | 574,819 | 97,687,496 | 97,687,496 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30.0 | 1.0 | 336.0 | 1,489 | 575,897 | 92,784,121 | 92,784,121 |  |
| 2015 | Oct-15 |  | 238.3 | 3.4 | 120.52\% | 31.0 | 1.0 | 336.0 | 1,488 | 576,976 | 93,235,932 | 93,235,932 |  |
| 2015 | Nov-15 |  | 408.5 | 0.0 | 120.77\% | 30.0 | 1.0 | 336.0 | 1,488 | 578,054 | 95,295,019 | 95,295,019 |  |
| 2015 | Dec-15 |  | 615.7 | 0.0 | 121.02\% | 31.0 | 0.0 | 352.0 | 1,487 | 579,133 | 101,072,507 | 101,072,507 |  |
|  |  |  | Weather Nor | alized |  |  |  |  |  |  |  |  |  |

Regression Model for General Service $>50 \mathrm{~kW}$
cooling Degree ontario Real Negression Not Days in
Purchased
Heating Dearcee Davs
$\frac{\text { Cooing Degree }}{\text { Davs }}$ app Monithly \% $\frac{\text { Number onaysin }}{\text { Month }}$ Sorina Fall Flaq $\frac{\text { Nember ot }}{\text { Peak Hours }} \frac{\text { Number or }}{\text { Customers }}$

|  | Actual | Predicted | Variance (kWh) | Variace \% |
| :---: | :---: | :---: | :---: | :---: |
| $2002$ |  |  |  |  |
|  |  |  |  |  |
| 2004 | 1,082,795,918 | 1,094,584,988 | -11,789,070 | -1.0888\% |
| 2005 | 1,121,685,603 | 1,119,552,124 | 2,133,479 | 0.1902\% |
| 2006 | 1,126,508,218 | 1,121,931,555 | 4,576,663 | 0.4063\% |
| 2007 | 1,149,393,919 | 1,145,223,564 | 4,170,355 | 0.3628\% |
| 2008 | 1,152,460,872 | 1,146,010,617 | 6,450,255 | 0.5597\% |
| 2009 | 1,119,431,579 | 1,121,017,326 | -1,585,747 | -0.1417\% |
| 2010 | 1,127,753,323 | 1,122,282,489 | 5,470,834 | 0.4851\% |
| 2011 | 1,138,858,244 | 1,136,515,602 | 2,342,642 | 0.2057\% |
| 2012 | 1,140,450,085 | 1,139,113,453 | 1,336,632 | 0.1172\% |
| 2013 | 1,122,807,291 | 1,135,913,333 | -13,106,042 | -1.1673\% |
| 2014 |  | 1,143,112,457 |  |  |
| 2015 |  | 1,157,617,410 |  |  |


| Total | $11,282,145,052$ | $11,282,145,052$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |


| Regression Statistics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiple R | 76.58\% |  |  |  |  |  |  |  |
| R Square | 58.64\% |  |  |  |  |  |  |  |
| Adjusted R Square | 55.66\% |  |  |  |  |  |  |  |
| Standard Error | 3,364,234.86 |  |  |  |  |  |  |  |
| Observations | 120 |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | df | SS | MS | F | Significance $F$ |  |  |  |
| Regression | ${ }^{8}$ | ${ }^{1.78153 \mathrm{E}+15}$ | $2.22691 \mathrm{E}+14$ | 19.68 |  |  |  |  |
| Residual | 111 | 1.25631E+15 | 1.13181E+13 |  |  |  |  |  |
| Total | 119 | $3.03783 \mathrm{E}+15$ |  |  |  |  |  |  |
|  | Coefficients | Standard Error | $t$ Stat | P-value | Lower 95\% | Upper 95\% | Lower 95.0\% | Upper 95.0\% |
| Intercept | (30,785,616.75) | 25,509,520.62 | (1.2068) | 0.2301 | -81334433.24 | 19763199.74 | -81334433.24 | 19763199.74 |
| Heating Degree Days | 13,952.00 | 2,091.89 | 6.6696 | 0.0000 | 9806.781473 | 18097.22733 | 9806.781473 | 18097.22733 |
| Cooling Degree Days | 77,167.28 | 12,153.59 | 6.3493 | 0.0000 | 53084.12556 | 101250.4326 | 53084.12556 | 101250.4326 |
| Ontario Real GDP Monthly , | 72,189,418.11 | 19,943,415.31 | 3.6197 | 0.0004 | 32670210.54 | 111708625.7 | 32670210.54 | 111708625.7 |
| Number of Days in Month | 168,490.03 | 423,554.92 | 0.3978 | 0.6915 | -670812.2888 | 1007792.356 | -670812.2888 | 1007792.356 |
| Spring Fall Flag | $(1,287,461.22)$ | 886,464.13 | (1.4524) | 0.1492 | -3044049.018 | 469126.5764 | -3044049.018 | 469126.5764 |
| Number of Peak Hours | 82,384.95 | 19,250.19 | 4.2797 | 0.0000 | 44239.42041 | 120530.4724 | 44239.42041 | 120530.4724 |
| Number of Customers | 20,554.39 | 9,589.79 | 2.1434 | 0.0343 | 1551.577596 | 39557.205 | 1551.577596 | 39557.205 |
| Population | (49.87) | 19.38 | (2.5730) | 0.0114 | -88.27094511 | -11.46256872 | -88.27094511 | -11.46256872 |

Regression Model for General Service > 700 kW

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 75,545,057 | 849.1 | 0.0 | 101.59\% | 31.0 | 0.0 | 336.0 | 132 | 373,417 | 76,343,901 | 798,844 | 1.06\% |
| 2004 | Feb-04 | 76,861,304 | 631.7 | 0.0 | 101.81\% | 29.0 | 0.0 | 320.0 | 135 | 374,833 | 76,687,866 | -173,438 | -0.23\% |
| 2004 | Mar-04 | 83,084,710 | 487.3 | 0.0 | 102.02\% | 31.0 | 1.0 | 368.0 | 134 | 376,250 | 84,249,271 | 1,164,561 | 1.40\% |
| 2004 | Apr-04 | 77,984,403 | 331.5 | 0.0 | 102.24\% | 30.0 | 1.0 | 336.0 | 136 | 377,667 | 82,622,779 | 4,678,376 | 6.00\% |
| 2004 | May-04 | 79,444,523 | 158.9 | 8.6 | 102.45\% | 31.0 | 1.0 | 320.0 | 118 | 379,083 | 78,327,155 | -1,117,368 | -1.41\% |
| 2004 | Jun-04 | 81,505,361 | 44.2 | 31.6 | 102.67\% | 30.0 | 0.0 | 352.0 | 118 | 380,500 | 80,746,280 | -759,081 | -0.93\% |
| 2004 | Jul-04 | 81,500,275 | 3.6 | 86.4 | 102.89\% | 31.0 | 0.0 | 336.0 | 118 | 381,917 | 82,244,532 | 744,257 | 0.91\% |
| 2004 | Aug-04 | 83,973,529 | 12.8 | 59.6 | 103.11\% | 31.0 | 0.0 | 336.0 | 119 | 383,333 | 81,293,302 | -2,680,227 | -3.19\% |
| 2004 | Sep-04 | 81,507,868 | 30.0 | 41.2 | 103.32\% | 30.0 | 1.0 | 336.0 | 118 | 384,750 | 82,185,810 | 677,942 | 0.83\% |
| 2004 | Oct-04 | 80,622,707 | 226.3 | 1.5 | 103.54\% | 31.0 | 1.0 | 320.0 | 122 | 386,167 | 78,970,905 | $-1,651,802$ | -2.05\% |
| 2004 | Nov-04 | 79,746,480 | 379.1 | 0.0 | 103.76\% | 30.0 | 1.0 | 352.0 | 121 | 387,583 | 80,593,447 | 846,967 | 1.06\% |
| 2004 | Dec-04 | 72,917,915 | 643.4 | 0.0 | 103.98\% | 31.0 | 0.0 | 336.0 | 121 | 389,000 | 75,611,498 | 2,693,583 | 3.69\% |
| 2005 | Jan-05 | 77,480,062 | 770.0 | 0.0 | 104.22\% | 31.0 | 0.0 | 320.0 | 125 | 391,000 | 74,421,925 | -3,058,137 | -3.95\% |
| 2005 | Feb-05 | 75,061,439 | 616.4 | 0.0 | 104.45\% | 28.0 | 0.0 | 320.0 | 126 | 393,000 | 75,155,862 | 94,423 | 0.13\% |
| 2005 | Mar-05 | 80,246,233 | 608.6 | 0.0 | 104.69\% | 31.0 | 1.0 | 352.0 | 120 | 395,000 | 79,294,638 | -951,595 | -1.19\% |
| 2005 | Apr-05 | 78,782,812 | 306.8 | 0.0 | 104.93\% | 30.0 | 1.0 | 336.0 | 120 | 397,000 | 79,506,800 | 723,988 | 0.92\% |
| 2005 | May-05 | 81,279,928 | 189.4 | 0.8 | 105.17\% | 31.0 | 1.0 | 336.0 | 120 | 399,000 | 80,432,393 | -847,535 | -1.04\% |
| 2005 | Jun-05 | 87,324,678 | 8.9 | 146.3 | 105.41\% | 30.0 | 0.0 | 352.0 | 120 | 401,000 | 87,316,309 | -8,369 | -0.01\% |
| 2005 | Jul-05 | 85,317,095 | 0.0 | 188.7 | 105.65\% | 31.0 | 0.0 | 320.0 | 120 | 403,000 | 86,553,975 | 1,236,880 | 1.45\% |
| 2005 | Aug-05 | 90,944,824 | 0.2 | 140.7 | 105.89\% | 31.0 | 0.0 | 352.0 | 120 | 405,000 | 87,336,544 | -3,608,280 | -3.97\% |
| 2005 | Sep-05 | 83,218,076 | 22.6 | 52.1 | 106.13\% | 30.0 | 1.0 | 336.0 | 120 | 407,000 | 83,745,859 | 527,783 | 0.63\% |
| 2005 | Oct-05 | 86,950,902 | 220.2 | 7.6 | 106.37\% | 31.0 | 1.0 | 320.0 | 120 | 409,000 | 79,262,028 | -7,688,874 | -8.84\% |
| 2005 | Nov-05 | 84,977,960 | 388.4 | 0.0 | 106.61\% | 30.0 | 1.0 | 352.0 | 117 | 411,000 | 79,974,262 | -5,003,698 | -5.89\% |
| 2005 | Dec-05 | 75,197,933 | 665.3 | 0.0 | 106.85\% | 31.0 | 0.0 | 320.0 | 118 | 413,000 | 73,661,918 | -1,536,015 | -2.04\% |
| 2006 | Jan-06 | 83,131,132 | 551.8 | 0.0 | 107.07\% | 31.0 | 0.0 | 336.0 | 119 | 414,667 | 76,102,800 | -7,028,332 | -8.45\% |
| 2006 | Feb-06 | 77,355,926 | 604.3 | 0.0 | 107.29\% | 28.0 | 0.0 | 320.0 | 118 | 416,333 | 73,649,671 | -3,706,255 | -4.79\% |
| 2006 | Mar-06 | 83,056,099 | 516.6 | 0.0 | 107.50\% | 31.0 | 1.0 | 368.0 | 118 | 418,000 | ${ }^{81,252,879}$ | -1,803,220 | -2.17\% |
| 2006 | Apr-06 | 74,907,080 | 293.3 | 0.0 | 107.72\% | 30.0 | 1.0 | 304.0 | 118 | 419,667 | 76,606,735 | 1,699,655 | 2.27\% |
| 2006 | May-06 | 86,276,259 | 136.9 | 26.0 | 107.94\% | 31.0 | 1.0 | 352.0 | 118 | 421,333 | 83,329,128 | -2,947,131 | -3.42\% |
| 2006 | Jun-06 | 87,499,488 | 19.5 | 73.6 | 108.15\% | 30.0 | 0.0 | 352.0 | 118 | 423,000 | 83,923,641 | -3,575,847 | -4.09\% |
| 2006 | Jul-06 | 86,664,714 | 0.0 | 167.3 | 108.37\% | 31.0 | 0.0 | 320.0 | 119 | 424,667 | 85,824,873 | -839,841 | -0.97\% |
| 2006 | Aug-06 | 90,066,987 | 4.2 | 101.6 | 108.59\% | 31.0 | 0.0 | 352.0 | 119 | 426,333 | 85,790,609 | -4,276,378 | -4.75\% |
| 2006 | Sep-06 | 82,773,189 | 80.9 | 12.9 | 108.81\% | 30.0 | 1.0 | 320.0 | 120 | 428,000 | 80,667,318 | -2,105,871 | -2.54\% |
| 2006 | Oct-06 | 82,641,310 | 288.3 | 1.1 | 109.03\% | 31.0 | 1.0 | 336.0 | 119 | 429,667 | 80,311,147 | -2,330,163 | -2.82\% |
| 2006 | Nov-06 | 80,819,324 | 382.2 | 0.0 | 109.25\% | 30.0 | 1.0 | 352.0 | 119 | 431,333 | 81,061,298 | 241,974 | 0.30\% |
| 2006 | Dec-06 | 74,207,988 | 500.5 | 0.0 | 109.47\% | 31.0 | 0.0 | 304.0 | 119 | 433,000 | 73,990,440 | -217,548 | -0.29\% |
| 2007 | Jan-07 | 80,523,623 | 647.1 | 0.0 | 109.65\% | 31.0 | 0.0 | 352.0 | 119 | 434,417 | 77,548,799 | -2,974,824 | -3.69\% |
| 2007 | Feb-07 | 75,623,989 | 740.1 | 0.0 | 109.82\% | 28.0 | 0.0 | 320.0 | 120 | 435,833 | 73,874,920 | -1,749,069 | -2.31\% |
| 2007 | Mar-07 | 82,488,199 | 546.7 | 0.0 | 110.00\% | 31.0 | 1.0 | 352.0 | 119 | 437,250 | 80,377,656 | -2,110,543 | -2.56\% |
| 2007 | Apr-07 | 77,898,878 | 356.4 | 0.0 | 110.18\% | 30.0 | 1.0 | 320.0 | 118 | 438,667 | 78,205,188 | 306,310 | 0.39\% |
| 2007 | May-07 | 85,082,328 | 136.4 | 22.4 | 110.36\% | 31.0 | 1.0 | 352.0 | 117 | 440,083 | 83,411,369 | -1,670,959 | -1.96\% |
| 2007 | Jun-07 | 86,489,557 | 16.5 | 99.2 | 110.53\% | 30.0 | 0.0 | 336.0 | 117 | 441,500 | 83,869,127 | -2,620,430 | -3.03\% |
| 2007 | Jul-07 | 81,749,324 | 3.2 | 106.1 | 110.71\% | 31.0 | 0.0 | 336.0 | 117 | 442,917 | 84,451,011 | 2,701,687 | 3.30\% |
| 2007 | Aug-07 | 91,472,984 | 5.2 | 141.0 | 110.89\% | 31.0 | 0.0 | 352.0 | 117 | 444,333 | 87,529,270 | -3,943,714 | -4.31\% |
| 2007 | Sep-07 | 82,351,307 | 36.9 | 47.5 | 111.07\% | 30.0 | 1.0 | 304.0 | 115 | 445,750 | 80,221,428 | -2,129,879 | -2.59\% |
| 2007 | Oct-07 | 84,408,372 | 137.7 | 19.8 | 111.25\% | 31.0 | 1.0 | 352.0 | 115 | 447,167 | 82,949,863 | -1,458,509 | -1.73\% |
| 2007 | Nov-07 | 80,153,652 | 462.5 | 0.0 | 111.43\% | 30.0 | 1.0 | 352.0 | 115 | 448,583 | 79,986,939 | -166,713 | -0.21\% |
| 2007 | Dec-07 | 66,413,810 | 630.7 | 0.0 | 111.61\% | 31.0 | 0.0 | 304.0 | 113 | 450,000 | 72,101,328 | 5,687,518 | 8.56\% |
| 2008 | Jan-08 | 75,130,167 | 623.5 | 0.0 | 111.55\% | 31.0 | 0.0 | 352.0 | 113 | 451,250 | 76,352,759 | 1,222,592 | 1.63\% |
| 2008 | Feb-08 | 70,308,075 | 674.7 | 0.0 | 111.49\% | 29.0 | 0.0 | 320.0 | 113 | 452,500 | 72,606,839 | 2,298,764 | 3.27\% |
| 2008 | Mar-08 | 73,432,083 | 610.2 | 0.0 | 111.43\% | 31.0 | 1.0 | 304.0 | 113 | 453,750 | 73,806,234 | 374,151 | 0.51\% |
| 2008 | Apr-08 | 77,881,226 | 253.9 | 0.0 | 111.37\% | 30.0 | 1.0 | 352.0 | 114 | 455,000 | 80,239,011 | 2,357,785 | 3.03\% |
| 2008 | May-08 | 76,239,429 | 193.5 | 2.5 | 111.31\% | 31.0 | 1.0 | 336.0 | 116 | 456,250 | 79,708,889 | 3,469,460 | 4.55\% |
| 2008 | Jun-08 | 78,009,331 | 22.7 | 71.5 | 111.25\% | 30.0 | 0.0 | 336.0 | 117 | 457,500 | 81,607,109 | 3,597,778 | 4.61\% |
| 2008 | Jul-08 | 80,324,227 | 1.0 | 111.0 | 111.19\% | 31.0 | 0.0 | 352.0 | 117 | 458,750 | 84,964,041 | 4,639,814 | 5.78\% |
| 2008 | Aug-08 | 79,809,855 | 12.7 | 64.0 | 111.13\% | 31.0 | 0.0 | 320.0 | 117 | 460,000 | 79,624,413 | -185,442 | -0.23\% |
| 2008 | Sep-08 | 77,905,174 | 59.0 | 26.7 | 111.08\% | 30.0 | 1.0 | 336.0 | 117 | 461,250 | 80,933,208 | 3,028,034 | 3.89\% |
| 2008 | Oct-08 | 75,562,641 | 278.6 | 0.0 | 111.02\% | 31.0 | 1.0 | 352.0 | 117 | 462,500 | 79,834,166 | 4,271,525 | 5.65\% |
| 2008 | Nov-08 | 71,241,915 | 451.6 | 0.0 | 110.96\% | 30.0 | 1.0 | 304.0 | 117 | 463,750 | 74,048,501 | 2,806,586 | 3.94\% |
| 2008 | Dec-08 | 63,765,403 | 654.6 | 0.0 | 110.90\% | 31.0 | 0.0 | 336.0 | 117 | 465,000 | 73,566,470 | 9,801,067 | 15.37\% |
| 2009 | Jan-09 | 64,638,066 | 830.2 | 0.0 | 110.59\% | 31.0 | 0.0 | 336.0 | 116 | 467,667 | 71,670,004 | 7,031,938 | 10.88\% |
| 2009 | Feb-09 | 61,977,206 | 606.4 | 0.0 | 110.29\% | 28.0 | 0.0 | 304.0 | 116 | 470,333 | 69,010,482 | 7,033,276 | 11.35\% |
| 2009 | Mar-09 | 69,267,888 | 533.8 | 0.0 | 109.99\% | 31.0 | 1.0 | 352.0 | 115 | 473,000 | 75,632,590 | 6,364,702 | 9.19\% |
| 2009 | Apr-09 | 64,782,071 | 305.8 | 1.2 | 109.69\% | 30.0 | 1.0 | 320.0 | 115 | 475,667 | 73,364,901 | 8,582,830 | 13.25\% |
| 2009 | May-09 | 67,024,095 | 158.8 | 6.9 | 109.39\% | 31.0 | 1.0 | 320.0 | 116 | 478,333 | 74,315,723 | 7,291,628 | 10.88\% |
| 2009 | Jun-09 | 68,548,339 | 49.3 | 34.2 | 109.09\% | 30.0 | 0.0 | 352.0 | 114 | 481,000 | 75,733,197 | 7,184,858 | 10.48\% |
| 2009 | Jul-09 | 71,748,553 | 6.2 | 43.7 | 108.79\% | 31.0 | 0.0 | 352.0 | 114 | 483,667 | 75,987,089 | 4,238,536 | 5.91\% |
| 2009 | Aug-09 | 73,562,457 | 9.8 | 91.0 | 108.49\% | 31.0 | 0.0 | 320.0 | 114 | 486,333 | 74,593,719 | 1,031,262 | 1.40\% |
| 2009 | Sep-09 | 72,344,176 | 55.2 | 20.9 | 108.20\% | 30.0 | 1.0 | 336.0 | 113 | 489,000 | 73,767,764 | 1,423,588 | 1.97\% |
| 2009 | Oct-09 | 70,496,839 | 287.8 | 0.0 | 107.90\% | 31.0 | 1.0 | 336.0 | 113 | 491,667 | 70,992,846 | 496,007 | 0.70\% |
| 2009 | Nov-09 | 68,320,139 | 361.2 | 0.0 | 107.60\% | 30.0 | 1.0 | 320.0 | 110 | 494,333 | 67,590,573 | -729,566 | -1.07\% |
| 2009 | Dec-09 | 62,873,698 | 631.3 | 0.0 | 107.31\% | 31.0 | 0.0 | 352.0 | 111 | 497,000 | 66,565,568 | 3,691,870 | 5.87\% |

Regression Model for General Service > 700 kW

|  |  | Purchased | Heating Degree Davs | $\frac{\text { Cooling Degree }}{\text { Days }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Soring Fall Fiag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 68,584,311 | 720.0 | 0.0 | 107.57\% | 31.0 | 0.0 | 320.0 | 112 | 497,583 | 63,557,306 | -5,027,005 | -7.33\% |
| 2010 | Feb-10 | 65,298,733 | 598.3 | 0.0 | 107.83\% | 28.0 | 0.0 | 304.0 | 112 | 498,167 | 62,557,639 | $-2,741,094$ | -4.20\% |
| 2010 | Mar-10 | 73,701,778 | 422.8 | 0.0 | 108.09\% | 31.0 | 1.0 | 368.0 | 113 | 498,750 | 72,565,996 | -1,135,782 | -1.54\% |
| 2010 | Apr-10 | 70,921,401 | 225.1 | 0.0 | 108.35\% | 30.0 | 1.0 | 320.0 | 114 | 499,333 | 69,647,774 | -1,273,627 | -1.80\% |
| 2010 | May-10 | 74,412,376 | 107.9 | 45.7 | 108.62\% | 31.0 | 1.0 | 320.0 | 114 | 499,917 | 72,792,665 | -1,619,711 | -2.18\% |
| 2010 | Jun-10 | 77,275,125 | 21.7 | 58.7 | 108.88\% | 30.0 | 0.0 | 352.0 | 115 | 500,500 | 74,974,082 | -2,301,043 | -2.98\% |
| 2010 | Jul-10 | 77,664,019 | 1.8 | 164.9 | 109.15\% | 31.0 | 0.0 | 336.0 | 115 | 501,083 | 78,826,432 | 1,162,413 | 1.50\% |
| 2010 | Aug-10 | 79,409,768 | 2.1 | 138.8 | 109.41\% | 31.0 | 0.0 | 336.0 | 115 | 501,667 | 77,846,579 | -1,563,189 | -1.97\% |
| 2010 | Sep-10 | 73,607,827 | 78.2 | 31.5 | 109.68\% | 30.0 | 1.0 | 336.0 | 115 | 502,250 | 74,727,421 | 1,119,594 | 1.52\% |
| 2010 | Oct-10 | 72,158,302 | 241.6 | 0.0 | 109.94\% | 31.0 | 1.0 | 320.0 | 115 | 502,833 | 71,216,231 | -942,071 | -1.31\% |
| 2010 | Nov-10 | 71,308,110 | 405.3 | 0.0 | 110.21\% | 30.0 | 1.0 | 336.0 | 115 | 503,417 | 71,763,199 | 455,089 | 0.64\% |
| 2010 | Dec-10 | 64,718,078 | 676.2 | 0.0 | 110.48\% | 31.0 | 0.0 | 368.0 | 113 | 504,000 | 70,780,800 | 6,062,722 | 9.37\% |
| 2011 | Jan-11 | 70,600,457 | 775.3 | 0.0 | 110.64\% | 31.0 | 0.0 | 320.0 | 112 | 505,659 | 65,527,409 | -5,073,048 | -7.19\% |
| 2011 | Feb-11 | 64,290,730 | 654.2 | 0.0 | 110.80\% | 28.0 | 0.0 | 304.0 | 112 | 507,319 | 64,310,341 | 19,611 | 0.03\% |
| 2011 | Mar-11 | 73,411,616 | 572.8 | 0.0 | 110.97\% | 31.0 | 1.0 | 368.0 | 112 | 508,978 | 73,291,365 | -120,251 | -0.16\% |
| 2011 | Apr-11 | 67,236,116 | 332.3 | 0.0 | 111.13\% | 30.0 | 1.0 | 304.0 | 112 | 510,637 | 68,695,602 | 1,459,486 | 2.17\% |
| 2011 | May-11 | 72,168,904 | 134.1 | 13.0 | 111.30\% | 31.0 | 1.0 | 336.0 | 112 | 512,296 | 73,555,525 | 1,386,621 | 1.92\% |
| 2011 | Jun-11 | 74,558,415 | 19.0 | 52.2 | 111.47\% | 30.0 | 0.0 | 352.0 | 111 | 513,956 | 74,917,662 | 359,247 | 0.48\% |
| 2011 | Jul-11 | 75,283,856 | 0.0 | 198.6 | 111.63\% | 31.0 | 0.0 | 320.0 | 112 | 515,615 | 79,162,775 | 3,878,919 | 5.15\% |
| 2011 | Aug-11 | 78,330,646 | 0.0 | 122.2 | 111.80\% | 31.0 | 0.0 | 352.0 | 112 | 517,274 | 78,613,191 | 282,544 | 0.36\% |
| 2011 | Sep-11 | 73,171,489 | 48.2 | 39.7 | 111.96\% | 30.0 | 1.0 | 336.0 | 112 | 518,933 | 75,105,769 | 1,934,280 | 2.64\% |
| 2011 | Oct-11 | 72,309,859 | 235.5 | 2.4 | 112.13\% | 31.0 | 1.0 | 336.0 | 112 | 520,593 | $72,438,263$ | 128,404 | 0.18\% |
| 2011 | Nov-11 | 72,434,837 | 342.1 | 0.0 | 112.30\% | 30.0 | 1.0 | 352.0 | 112 | 522,252 | 72,999,588 | 564,751 | 0.78\% |
| 2011 | Dec-11 | 65,582,119 | 534.0 | 0.0 | 112.46\% | 31.0 | 0.0 | 336.0 | 112 | 523,911 | 68,370,344 | 2,788,225 | 4.25\% |
| 2012 | Jan-12 | 71,463,456 | 611.1 | 0.0 | 112.60\% | 31.0 | 0.0 | 336.0 | 113 | 525,085 | 68,179,444 | -3,284,012 | -4.60\% |
| 2012 | Feb-12 | 68,820,363 | 531.7 | 0.0 | 112.74\% | 29.0 | 0.0 | 320.0 | 112 | 526,259 | 66,643,647 | $-2,176,716$ | -3.16\% |
| 2012 | Mar-12 | 74,099,511 | 349.4 | 0.2 | 112.88\% | 31.0 | 1.0 | 352.0 | 112 | 527,433 | 73,172,182 | -927,329 | -1.25\% |
| 2012 | Apr-12 | 71,232,903 | 321.7 | 0.0 | 113.02\% | 30.0 | 1.0 | 320.0 | 112 | 528,606 | 70,257,342 | -975,560 | -1.37\% |
| 2012 | May-12 | 78,011,621 | 80.7 | 36.7 | 113.16\% | 31.0 | 1.0 | 352.0 | 112 | 529,780 | 76,478,125 | -1,533,496 | -1.97\% |
| 2012 | Jun-12 | 77,719,610 | 23.2 | 101.6 | 113.30\% | 30.0 | 0.0 | 336.0 | 112 | 530,954 | 76,008,085 | -1,711,525 | -2.20\% |
| 2012 | Jul-12 | 79,043,409 | 0.0 | 195.4 | 113.45\% | 31.0 | 0.0 | 352.0 | 112 | 532,128 | 82,060,697 | 3,017,287 | 3.82\% |
| 2012 | Aug-12 | 79,320,369 | 2.0 | 112.1 | 113.59\% | 31.0 | 0.0 | 352.0 | 112 | 533,302 | 78,275,427 | -1,044,942 | -1.32\% |
| 2012 | Sep-12 | 73,342,838 | 85.0 | 35.6 | 113.73\% | 30.0 | 1.0 | 304.0 | 111 | 534,476 | 71,672,760 | -1,670,078 | -2.28\% |
| 2012 | Oct-12 | 75,252,998 | 242.5 | 1.1 | 113.87\% | 31.0 | 1.0 | 352.0 | 110 | 535,649 | 73,488,240 | -1,764,758 | -2.35\% |
| 2012 | Nov-12 | 73,966,462 | 434.0 | 0.0 | 114.01\% | 30.0 | 1.0 | 352.0 | 110 | 536,823 | 72,159,458 | -1,807,004 | -2.44\% |
| 2012 | Dec-12 | 65,633,764 | 533.5 | 0.0 | 114.15\% | 31.0 | 0.0 | 304.0 | 110 | 537,997 | 65,172,369 | -461,395 | -0.70\% |
| 2013 | Jan-13 | 73,889,328 | 624.4 | 0.0 | 114.27\% | 31.0 | 0.0 | 352.0 | 110 | 539,268 | 69,023,417 | $-4,865,911$ | -6.59\% |
| 2013 | Feb-13 | 66,923,174 | 631.5 | 0.0 | 114.40\% | 28.0 | 0.0 | 304.0 | 111 | 540,539 | 64,354,855 | -2,568,319 | -3.84\% |
| 2013 | Mar-13 | 73,178,412 | 554.8 | 0.0 | 114.52\% | 31.0 | 1.0 | 320.0 | 111 | 541,809 | 68,903,432 | $-4,274,979$ | -5.84\% |
| 2013 | Apr-13 | 75,474,725 | 358.6 | 0.0 | 114.64\% | 30.0 | 1.0 | 352.0 | 111 | 543,080 | 72,847,156 | -2,627,570 | -3.48\% |
| 2013 | May-13 | 76,962,450 | 109.1 | 23.1 | 114.77\% | 31.0 | 1.0 | 352.0 | 117 | 544,351 | 77,042,368 | 79,918 | 0.10\% |
| 2013 | Jun-13 | 77,594,548 | 33.4 | 59.3 | 114.89\% | 30.0 | 0.0 | 320.0 | 117 | 545,622 | 73,878,787 | -3,715,761 | -4.79\% |
| 2013 | Jul-13 | 79,680,984 | 1.4 | 133.3 | 115.01\% | 31.0 | 0.0 | 352.0 | 117 | 546,892 | 80,522,192 | 841,207 | 1.06\% |
| 2013 | Aug-13 | 80,424,494 | 4.6 | 93.2 | 115.14\% | 31.0 | 0.0 | 336.0 | 117 | 548,163 | 77,201,552 | -3,222,941 | -4.01\% |
| 2013 | Sep-13 | 70,923,892 | 89.6 | 28.0 | 115.26\% | 30.0 | 1.0 | 320.0 | 117 | 549,434 | 74,259,897 | 3,336,005 | 4.70\% |
| 2013 | Oct-13 | 78,150,760 | 224.2 | 0.0 | 115.39\% | 31.0 | 1.0 | 352.0 | 118 | 550,705 | 75,514,624 | -2,636,136 | -3.37\% |
| 2013 | Nov-13 | 76,142,644 | 478.3 | 0.0 | 115.51\% | 30.0 | 1.0 | 336.0 | 118 | 551,975 | 72,366,421 | -3,776,223 | -4.96\% |
| 2013 | Dec-13 | 69,073,080 | 687.7 | 0.0 | 115.64\% | 31.0 | 0.0 | 320.0 | 118 | 553,246 | 67,630,084 | -1,442,996 | -2.09\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31.0 | 0.0 | 352.0 | 118 | 554,325 | 70,461,763 | 70,461,763 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 116.04\% | 28.0 | 0.0 | 304.0 | 117 | 555,403 | 65,991,113 | 65,991,113 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31.0 | 1.0 | 320.0 | 117 | 556,482 | 70,711,993 | 70,711,993 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30.0 | 1.0 | 352.0 | 116 | 557,561 | 74,734,093 | 74,734,093 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31.0 | 1.0 | 336.0 | 116 | 558,639 | 75,238,096 | 75,238,096 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 116.84\% | 30.0 | 0.0 | 336.0 | 115 | 559,718 | 76,046,189 | 76,046,189 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31.0 | 0.0 | 352.0 | 115 | 560,797 | 80,824,922 | 80,824,922 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31.0 | 0.0 | 320.0 | 114 | 561,875 | 76,333,647 | 76,333,647 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30.0 | 1.0 | 336.0 | 114 | 562,954 | 76,152,654 | 76,152,654 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31.0 | 1.0 | 352.0 | 113 | 564,033 | 75,298,596 | 75,298,596 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30.0 | 1.0 | 320.0 | 113 | 565,111 | 71,013,862 | 71,013,862 |  |
| 2014 | Dec-14 |  | 615.7 | 0.0 | 118.06\% | 31.0 | 0.0 | 336.0 | 112 | 566,190 | $69,208,281$ | $69,208,281$ |  |
| 2015 | Jan-15 |  | 700.3 | 0.0 | 118.31\% | 31.0 | 0.0 | 336.0 | 113 | 567,269 | 68,929,730 | 68,929,730 |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28.0 | 0.0 | 304.0 | 113 | 568,347 | $66,181,877$ 74,09334 | 66,181,877 |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31.0 | 1.0 | 352.0 | 113 | 569,426 | 74,093,334 | 74,093,334 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30.0 | 1.0 | 336.0 | 114 | 570,504 | $73,968,053$ 74727 | $73,968,053$ 74727 |  |
| 2015 | May-15 Jun-15 |  | $\begin{array}{r}140.6 \\ 25.8 \\ \hline 1\end{array}$ | 18.6 728 | 119.28\% | 31.0 300 | 1.0 0.0 | 320.0 352.0 | 114 114 | 571,583 572.662 | $74,727,705$ 78,726853 | $74,727,705$ 78,726853 |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31.0 | 0.0 | 352.0 | 115 | 573,740 | 82,293,932 | 82,293,932 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31.0 | 0.0 | 320.0 | 115 | 574,819 | 78,058,785 | 78,058,785 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30.0 | 1.0 | 336.0 | 116 | 575,897 | 78,134,083 | 78,134,083 |  |
| 2015 | Oct-15 |  | 238.3 4085 | 3.4 | 120.52\% | 31.0 | 1.0 | 336.0 | 116 | 576,976 | 76,068,854 | 76,068,854 |  |
| 2015 2015 | Nov-15 Dec-15 |  | 408.5 615.7 | 0.0 0.0 | 120.77\% $121.02 \%$ | 30.0 31.0 | 1.0 0.0 | 336.0 352.0 | 116 | 578,054 579,133 | $74,975,981$ $73,427,177$ | $74,975,981$ $73,427,177$ |  |
|  |  |  | Weather Norm | alized |  |  |  |  |  |  |  |  |  |

Regression Model for General Service > 700 kW
$\frac{\text { Cooling Dogrree }}{\text { Days }} \frac{\text { Ontario Real }}{\text { copp Montiviv\% }} \% \frac{\text { Number of Days in }}{\text { Month }}$
$\frac{\text { Number of }}{} \quad \frac{\text { Number of }}{\text { eak Hours }}$
Population Predicted Purchases Variances (kWh) \% Variance

|  | Actual | Predicted | Variance (kWh) | Variace \% |
| :---: | :---: | :---: | :---: | :---: |
| 2001 |  |  |  |  |
| 2003 |  |  |  |  |
| 2004 | 954,694,132 | 959,916,746 | -5,222,614 | -0.55\% |
| 2005 | 986,781,942 | 966,662,513 | 20,119,429 | 2.04\% |
| 2006 | 989,399,496 | 962,510,540 | 26,888,956 | 2.72\% |
| 2007 | 974,656,023 | 964,526,899 | 10,129,124 | 1.04\% |
| 2008 | 899,609,526 | 937,291,640 | -37,682,114 | -4.19\% |
| 2009 | 815,583,527 | 869,224,457 | -53,640,930 | -6.58\% |
| 2010 | 869,059,828 | 861,256,125 | 7,803,703 | 0.90\% |
| 2011 | 859,379,044 | 866,987,834 | -7,608,790 | -0.89\% |
| 2012 | 887,907,305 | 873,567,776 | 14,339,529 | 1.61\% |
| 2013 | 898,418,491 | 873,544,785 | 24,873,707 | 2.77\% |
| 2014 |  | 882,015,210 |  |  |
| 2015 |  | 899,586,366 |  |  |


| Total $9,135,489,315$ | $9,135,489,315$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |


| Regression Statistics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiple R | 87.02\% |  |  |  |  |  |  |  |
| R Square | 75.72\% |  |  |  |  |  |  |  |
| Adjusted R Square | 73.98\% |  |  |  |  |  |  |  |
| Standard Error | 3,300,722.18 |  |  |  |  |  |  |  |
| Observations | 120 |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | df | SS | MS | F | Significance $F$ |  |  |  |
| Regression | ${ }^{8}$ | 3.77238E+15 | 4.71548E+14 | 43.28 | 0.0000 |  |  |  |
| Residual | 111 | $1.20932 \mathrm{E}+15$ | $1.08948 \mathrm{E}+13$ |  |  |  |  |  |
| Total $119 \quad 4.9817 \mathrm{E}+15$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Coefficients | Standard Error | $t$ Stat | P-value | Lower 95\% | Upper 95\% | Lower 95.0\% | Upper 95.0\% |
| Intercept | (52,147,717.57) | 24,367,691.45 | (2.1400) | 0.0345 | -100433923.4 | -3861511.753 | -100433923.4 | -3861511.753 |
| Heating Degree Days | $(5,973.83)$ | 2,043.26 | (2.9237) | 0.0042 | -10022.6812 | -1924.981727 | -10022.6812 | -1924.981727 |
| Cooling Degree Days | 45,537.55 | 11,708.97 | 3.8891 | 0.0002 | 22335.44182 | 68739.64977 | 22335.44182 | 68739.64977 |
| Ontario Real GDP Monthly , | 102,937,256.59 | 17,607,436.40 | 5.8462 | 0.0000 | 68046947.02 | 137827566.2 | 68046947.02 | 137827566.2 |
| Number of Days in Month | 155,197.66 | 415,617.74 | 0.3734 | 0.7096 | -668376.6125 | 978771.9408 | -668376.6125 | 978771.9408 |
| Spring Fall Flag | 2,165,696.55 | 858,672.73 | 2.5221 | 0.0131 | 464179.2586 | 3867213.836 | 464179.2586 | 3867213.836 |
| Number of Peak Hours | 91,726.47 | 18,859.48 | 4.8637 | 0.0000 | 54355.1453 | 129097.7959 | 54355.1453 | 129097.7959 |
| Number of Customers | 250,980.23 | 94,062.34 | 2.6682 | 0.0088 | 64589.42607 | 437371.0321 | 64589.42607 | 437371.0321 |
| Population | (106.51) | 12.52 | (8.5096) | 0.0000 | -131.3097194 | -81.7064643 | -131.3097194 | $\underline{-81.7064643}$ |

Regression Model for Large User

|  |  | Purchased | Heating Dearee Davs | Cooling Degree | Ontario Real GDP Monthly $\%$ | Number of Days in Month | Spring Fall Fiag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Jan-04 | 24,892,586 | 849.1 | 0.0 | 101.59\% | 31.0 | 0.0 | 336.0 | 4 | 373,417 | 24,100,332 | -792,254 | -3.18\% |
| 2004 | Feb-04 | 22,068,450 | 631.7 | 0.0 | 101.81\% | 29.0 | 0.0 | 320.0 | 3 | 374,833 | 22,429,013 | 360,563 | 1.63\% |
| 2004 | Mar-04 | 24,448,459 | 487.3 | 0.0 | 102.02\% | 31.0 | 1.0 | 368.0 | 3 | 376,250 | 24,230,879 | -217,580 | -0.89\% |
| 2004 | Apr-04 | 24,079,178 | 331.5 | 0.0 | 102.24\% | 30.0 | 1.0 | 336.0 | 3 | 377,667 | 23,916,901 | -162,277 | -0.67\% |
| 2004 | May-04 | 25,510,716 | 158.9 | 8.6 | 102.45\% | 31.0 | 1.0 | 320.0 | 3 | 379,083 | 24,423,235 | -1,087,481 | -4.26\% |
| 2004 | Jun-04 | 24,937,299 | 44.2 | 31.6 | 102.67\% | 30.0 | 0.0 | 352.0 | 3 | 380,500 | 25,022,003 | 84,704 | 0.34\% |
| 2004 | Jul-04 | 24,346,794 | 3.6 | 86.4 | 102.89\% | 31.0 | 0.0 | 336.0 | 3 | 381,917 | 25,759,870 | 1,413,076 | 5.80\% |
| 2004 | Aug-04 | 26,610,716 | 12.8 | 59.6 | 103.11\% | 31.0 | 0.0 | 336.0 | 3 | 383,333 | 25,537,373 | -1,073,343 | -4.03\% |
| 2004 | Sep-04 | 25,146,986 | 30.0 | 41.2 | 103.32\% | 30.0 | 1.0 | 336.0 | 3 | 384,750 | 25,404,113 | 257,127 | 1.02\% |
| 2004 | Oct-04 | 24,567,521 | 226.3 | 1.5 | 103.54\% | 31.0 | 1.0 | 320.0 | 3 | 386,167 | 24,639,244 | 71,723 | 0.29\% |
| 2004 | Nov-04 | 24,564,743 | 379.1 | 0.0 | 103.76\% | 30.0 | 1.0 | 352.0 | 3 | 387,583 | 24,668,119 | 103,376 | 0.42\% |
| 2004 | Dec-04 | 23,075,329 | 643.4 | 0.0 | 103.98\% | 31.0 | 0.0 | 336.0 | 3 | 389,000 | 23,956,799 | 881,470 | 3.82\% |
| 2005 | Jan-05 | 25,439,201 | 770.0 | 0.0 | 104.22\% | 31.0 | 0.0 | 320.0 | 3 | 391,000 | 23,543,111 | -1,896,090 | -7.45\% |
| 2005 | Feb-05 | 23,052,705 | 616.4 | 0.0 | 104.45\% | 28.0 | 0.0 | 320.0 | 3 | 393,000 | 23,275,550 | 222,845 | 0.97\% |
| 2005 | Mar-05 | 24,861,118 | 608.6 | 0.0 | 104.69\% | 31.0 | 1.0 | 352.0 | 3 | 395,000 | 24,782,281 | -78,837 | -0.32\% |
| 2005 | Apr-05 | 24,344,420 | 306.8 | 0.0 | 104.93\% | 30.0 | 1.0 | 336.0 | 3 | 397,000 | 25,016,946 | 672,526 | 2.76\% |
| 2005 | May-05 | 25,511,916 | 189.4 | 0.8 | 105.17\% | 31.0 | 1.0 | 336.0 | 3 | 399,000 | 25,578,565 | 66,649 | 0.26\% |
| 2005 | Jun-05 | 27,919,256 | 8.9 | 146.3 | 105.41\% | 30.0 | 0.0 | 352.0 | 3 | 401,000 | 27,394,892 | -524,364 | -1.88\% |
| 2005 | Jul-05 | 24,682,647 | 0.0 | 188.7 | 105.65\% | 31.0 | 0.0 | 320.0 | 3 | 403,000 | 27,693,632 | 3,010,985 | 12.20\% |
| 2005 | Aug-05 | 28,680,113 | 0.2 | 140.7 | 105.89\% | 31.0 | 0.0 | 352.0 | 3 | 405,000 | 27,758,450 | -921,663 | -3.21\% |
| 2005 | Sep-05 | 26,843,059 | 22.6 | 52.1 | 106.13\% | 30.0 | 1.0 | 336.0 | 3 | 407,000 | 26,615,102 | -227,957 | -0.85\% |
| 2005 | Oct-05 | 26,830,506 | 220.2 | 7.6 | 106.37\% | 31.0 | 1.0 | 320.0 | 3 | 409,000 | 25,801,462 | -1,029,044 | -3.84\% |
| 2005 | Nov-05 | 26,025,348 | 388.4 | 0.0 | 106.61\% | 30.0 | 1.0 | 352.0 | 3 | 411,000 | 25,738,883 | -286,465 | -1.10\% |
| 2005 | Dec-05 | 24,384,954 | 665.3 | 0.0 | 106.85\% | 31.0 | 0.0 | 320.0 | 3 | 413,000 | 24,761,525 | 376,571 | 1.54\% |
| 2006 | Jan-06 | 26,409,471 | 551.8 | 0.0 | 107.07\% | 31.0 | 0.0 | 336.0 | 3 | 414,667 | 25,321,668 | -1,087,803 | -4.12\% |
| 2006 | Feb-06 | 27,446,019 | 604.3 | 0.0 | 107.29\% | 28.0 | 0.0 | 320.0 | 4 | 416,333 | 25,887,006 | -1,559,013 | -5.68\% |
| 2006 | Mar-06 | 29,912,132 | 516.6 | 0.0 | 107.50\% | 31.0 | 1.0 | 368.0 | 4 | 418,000 | 27,795,503 | -2,116,629 | -7.08\% |
| 2006 | Apr-06 | 28,505,284 | 293.3 | 0.0 | 107.72\% | 30.0 | 1.0 | 304.0 | 4 | 419,667 | 27,124,778 | -1,380,506 | -4.84\% |
| 2006 | May-06 | 30,307,281 | 136.9 | 26.0 | 107.94\% | 31.0 | 1.0 | 352.0 | 4 | 421,333 | 28,769,903 | -1,537,378 | -5.07\% |
| 2006 | Jun-06 | 30,614,279 | 19.5 | 73.6 | 108.15\% | 30.0 | 0.0 | 352.0 | 4 | 423,000 | 29,146,125 | -1,468,154 | -4.80\% |
| 2006 | Jul-06 | 26,990,378 | 0.0 | 167.3 | 108.37\% | 31.0 | 0.0 | 320.0 | 4 | 424,667 | 30,013,924 | 3,023,546 | 11.20\% |
| 2006 | Aug-06 | 31,350,848 | 4.2 | 101.6 | 108.59\% | 31.0 | 0.0 | 352.0 | 4 | 426,333 | 29,872,064 | -1,478,784 | -4.72\% |
| 2006 | Sep-06 | 29,125,981 | 80.9 | 12.9 | 108.81\% | 30.0 | 1.0 | 320.0 | 4 | 428,000 | 28,363,745 | -762,236 | -2.62\% |
| 2006 | Oct-06 | 27,553,611 | 288.3 | 1.1 | 109.03\% | 31.0 | 1.0 | 336.0 | 4 | 429,667 | 28,368,982 | 815,371 | 2.96\% |
| 2006 | Nov-06 | 26,855,914 | 382.2 | 0.0 | 109.25\% | 30.0 | 1.0 | 352.0 | 4 | 431,333 | 28,274,153 | 1,418,239 | 5.28\% |
| 2006 | Dec-06 | 25,818,150 | 500.5 | 0.0 | 109.47\% | 31.0 | 0.0 | 304.0 | 4 | 433,000 | 27,365,614 | 1,547,464 | 5.99\% |
| 2007 | Jan-07 | 24,097,074 | 647.1 | 0.0 | 109.65\% | 31.0 | 0.0 | 352.0 | 4 | 434,417 | 27,874,269 | 3,777,195 | 15.67\% |
| 2007 | Feb-07 | 25,690,526 | 740.1 | 0.0 | 109.82\% | 28.0 | 0.0 | 320.0 | 4 | 435,833 | 26,590,635 | 900,109 | 3.50\% |
| 2007 | Mar-07 | 30,547,353 | 546.7 | 0.0 | 110.00\% | 31.0 | 1.0 | 352.0 | 5 | 437,250 | 29,957,521 | -589,832 | -1.93\% |
| 2007 | Apr-07 | 27,869,840 | 356.4 | 0.0 | 110.18\% | 30.0 | 1.0 | 320.0 | 5 | 438,667 | 29,696,831 | 1,826,991 | 6.56\% |
| 2007 | May-07 | 32,187,239 | 136.4 | 22.4 | 110.36\% | 31.0 | 1.0 | 352.0 | 5 | 440,083 | 31,170,603 | -1,016,636 | -3.16\% |
| 2007 | Jun-07 | 33,241,475 | 16.5 | 99.2 | 110.53\% | 30.0 | 0.0 | 336.0 | 5 | 441,500 | 31,605,807 | -1,635,668 | -4.92\% |
| 2007 | Jul-07 | 32,395,607 | 3.2 | 106.1 | 110.71\% | 31.0 | 0.0 | 336.0 | 5 | 442,917 | 31,999,476 | -396,131 | -1.22\% |
| 2007 | Aug-07 | 27,649,753 | 5.2 | 141.0 | 110.89\% | 31.0 | 0.0 | 352.0 | 5 | 444,333 | 32,687,806 | 5,038,053 | 18.22\% |
| 2007 | Sep-07 | 31,444,726 | 36.9 | 47.5 | 111.07\% | 30.0 | 1.0 | 304.0 | 5 | 445,750 | 30,957,077 | -487,649 | -1.55\% |
| 2007 | Oct-07 | 31,681,938 | 137.7 | 19.8 | 111.25\% | 31.0 | 1.0 | 352.0 | 5 | 447,167 | 31,483,867 | -198,071 | -0.63\% |
| 2007 | Nov-07 | 30,556,407 | 462.5 | 0.0 | 111.43\% | 30.0 | 1.0 | 352.0 | 5 | 448,583 | 30,455,274 | -101,133 | -0.33\% |
| 2007 | Dec-07 | 32,575,406 | 630.7 | 0.0 | 111.61\% | 31.0 | 0.0 | 304.0 | 6 | 450,000 | 30,934,434 | -1,640,972 | -5.04\% |
| 2008 | Jan-08 | 32,990,709 | 623.5 | 0.0 | 111.55\% | 31.0 | 0.0 | 352.0 | 6 | 451,250 | 31,652,159 | -1,338,550 | -4.06\% |
| 2008 | Feb-08 | 32,870,790 | 674.7 | 0.0 | 111.49\% | 29.0 | 0.0 | 320.0 | 6 | 452,500 | 30,573,127 | -2,297,663 | -6.99\% |
| 2008 | Mar-08 | 32,220,491 | 610.2 | 0.0 | 111.43\% | 31.0 | 1.0 | 304.0 | 6 | 453,750 | 31,106,852 | -1,113,639 | -3.46\% |
| 2008 | Apr-08 | 31,299,525 | 253.9 | 0.0 | 111.37\% | 30.0 | 1.0 | 352.0 | 6 | 455,000 | 32,311,028 | 1,011,503 | 3.23\% |
| 2008 | May-08 | 32,077,608 | 193.5 | 2.5 | 111.31\% | 31.0 | 1.0 | 336.0 | 6 | 456,250 | 32,402,288 | 324,680 | 1.01\% |
| 2008 | Jun-08 | 35,047,709 | 22.7 | 71.5 | 111.25\% | 30.0 | 0.0 | 336.0 | 6 | 457,500 | 32,998,723 | -2,048,986 | -5.85\% |
| 2008 | Jul-08 | 33,674,468 | 1.0 | 111.0 | 111.19\% | 31.0 | 0.0 | 352.0 | 6 | 458,750 | 33,903,895 | 229,427 | 0.68\% |
| 2008 | Aug-08 | 35,996,673 | 12.7 | 64.0 | 111.13\% | 31.0 | 0.0 | 320.0 | 6 | 460,000 | 32,843,812 | -3,152,861 | -8.76\% |
| 2008 | Sep-08 | 34,472,066 | 59.0 | 26.7 | 111.08\% | 30.0 | 1.0 | 336.0 | 6 | 461,250 | 32,571,550 | -1,900,516 | -5.51\% |
| 2008 | Oct-08 | 32,721,930 | 278.6 | 0.0 | 111.02\% | 31.0 | 1.0 | 352.0 | 6 | 462,500 | 32,270,439 | -451,491 | -1.38\% |
| 2008 | Nov-08 | 30,831,140 | 451.6 | 0.0 | 110.96\% | 30.0 | 1.0 | 304.0 | 6 | 463,750 | 30,920,986 | 89,846 | 0.29\% |
| 2008 | Dec-08 | 28,080,667 | 654.6 | 0.0 | 110.90\% | 31.0 | 0.0 | 336.0 | 6 | 465,000 | 30,950,758 | 2,870,091 | 10.22\% |
| 2009 | Jan-09 | 30,653,309 | 830.2 | 0.0 | 110.59\% | 31.0 | 0.0 | 336.0 | 6 | 467,667 | 30,439,313 | -213,996 | -0.70\% |
| 2009 | Feb-09 | 27,925,468 | 606.4 | 0.0 | 110.29\% | 28.0 | 0.0 | 304.0 | 6 | 470,333 | 29,577,673 | 1,652,205 | 5.92\% |
| 2009 | Mar-09 | 30,503,252 | 533.8 | 0.0 | 109.99\% | 31.0 | 1.0 | 352.0 | 6 | 473,000 | 31,218,273 | 715,021 | 2.34\% |
| 2009 | Apr-09 | 27,639,678 | 305.8 | 1.2 | 109.69\% | 30.0 | 1.0 | 320.0 | 6 | 475,667 | 30,825,586 | 3,185,908 | 11.53\% |
| 2009 | May-09 | 21,988,204 | 158.8 | 6.9 | 109.39\% | 31.0 | 1.0 | 320.0 | 6 | 478,333 | 31,256,472 | 9,268,268 | 42.15\% |
| 2009 | Jun-09 | 25,690,773 | 49.3 | 34.2 | 109.09\% | 30.0 | 0.0 | 352.0 | 6 | 481,000 | 31,653,006 | 5,962,233 | 23.21\% |
| 2009 | Jul-09 | 29,193,321 | 6.2 | 43.7 | 108.79\% | 31.0 | 0.0 | 352.0 | 6 | 483,667 | 31,914,463 | 2,721,142 | 9.32\% |
| 2009 | Aug-09 | 31,958,533 | 9.8 | 91.0 | 108.49\% | 31.0 | 0.0 | 320.0 | 6 | 486,333 | 31,774,131 | -184,402 | -0.58\% |
| 2009 | Sep-09 | 30,977,444 | 55.2 | 20.9 | 108.20\% | 30.0 | 1.0 | 336.0 | 6 | 489,000 | 31,033,165 | 55,721 | 0.18\% |
| 2009 | Oct-09 | 31,028,269 | 287.8 | 0.0 | 107.90\% | 31.0 | 1.0 | 336.0 | 6 | 491,667 | 30,406,500 | -621,769 | -2.00\% |
| 2009 | Nov-09 | 28,030,347 | 361.2 | 0.0 | 107.60\% | 30.0 | 1.0 | 320.0 | 6 | 494,333 | 29,636,859 | 1,606,512 | 5.73\% |
| 2009 | Dec-09 | 31,222,652 | 631.3 | 0.0 | 107.31\% | 31.0 | 0.0 | 352.0 | 6 | 497,000 | 29,415,334 | -1,807,318 | -5.79\% |

Regression Model for Large User

|  |  | Purchased | Heating Decree Davs | $\frac{\text { Cooling Degree }}{\text { Davs }}$ | Ontario Real GDP Monthly \% | Number of Days in Month | Spring Fall Flag | Number of Peak Hours | Number of Customers | Population | Predicted Purchases | Variances (kWh) | \% Variance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | Jan-10 | 29,895,628 | 720.0 | 0.0 | 107.57\% | 31.0 | 0.0 | 320.0 | $6_{6}$ | 497,583 | 28,853,565 | -1,042,063 | -3.49\% |
| 2010 | Feb-10 | 29,558,707 | 598.3 | 0.0 | 107.83\% | 28.0 | 0.0 | 304.0 | 6 | 498,167 | 28,296,052 | -1,262,655 | -4.27\% |
| 2010 | Mar-10 | 30,869,642 | 422.8 | 0.0 | 108.09\% | 31.0 | 1.0 | 368.0 | 6 | 498,750 | 30,657,483 | -212,159 | -0.69\% |
| 2010 | Apr-10 | 30,387,116 | 225.1 | 0.0 | 108.35\% | 30.0 | 1.0 | 320.0 | 6 | 499,333 | 30,209,223 | -177,893 | -0.59\% |
| 2010 | May-10 | 31,789,215 | 107.9 | 45.7 | 108.62\% | 31.0 | 1.0 | 320.0 | 6 | 499,917 | 31,277,176 | -512,039 | -1.61\% |
| 2010 | Jun-10 | 30,789,397 | 21.7 | 58.7 | 108.88\% | 30.0 | 0.0 | 352.0 | 6 | 500,500 | 31,736,839 | 947,442 | 3.08\% |
| 2010 | Jul-10 | 29,820,209 | 1.8 | 164.9 | 109.15\% | 31.0 | 0.0 | 336.0 | 6 | 501,083 | 33,015,376 | 3,195,167 | 10.71\% |
| 2010 | Aug-10 | 34,963,264 | 2.1 | 138.8 | 109.41\% | 31.0 | 0.0 | 336.0 | 6 | 501,667 | 32,845,658 | -2,117,606 | -6.06\% |
| 2010 | Sep-10 | 32,693,393 | 78.2 | 31.5 | 109.68\% | 30.0 | 1.0 | 336.0 | 6 | 502,250 | 31,658,686 | -1,034,707 | -3.16\% |
| 2010 | Oct-10 | 30,885,469 | 241.6 | 0.0 | 109.94\% | 31.0 | 1.0 | 320.0 | 6 | 502,833 | 31,076,640 | 191,171 | 0.62\% |
| 2010 | Nov-10 | 27,720,331 | 405.3 | 0.0 | 110.21\% | 30.0 | 1.0 | 336.0 | 6 | 503,417 | 30,880,665 | 3,160,334 | 11.40\% |
| 2010 | Dec-10 | 28,388,785 | 676.2 | 0.0 | 110.48\% | 31.0 | 0.0 | 368.0 | 6 | 504,000 | 30,922, 165 | 2,533,380 | 8.92\% |
| 2011 | Jan-11 | 32,200,859 | 775.3 | 0.0 | 110.64\% | 31.0 | 0.0 | 320.0 | 6 | 505,659 | 30,042,413 | $-2,158,446$ | -6.70\% |
| 2011 | Feb-11 | 30,726,042 | 654.2 | 0.0 | 110.80\% | 28.0 | 0.0 | 304.0 | 6 | 507,319 | 29,432,936 | -1,293,106 | -4.21\% |
| 2011 | Mar-11 | 33,739,196 | 572.8 | 0.0 | 110.97\% | 31.0 | 1.0 | 368.0 | 6 | 508,978 | 31,552,133 | -2,187,063 | -6.48\% |
| 2011 | Apr-11 | 32,062,516 | 332.3 | 0.0 | 111.13\% | 30.0 | 1.0 | 304.0 | 6 | 510,637 | 30,893,535 | -1,168,981 | -3.65\% |
| 2011 | May-11 | 34,848,440 | 134.1 | 13.0 | 111.30\% | 31.0 | 1.0 | 336.0 | 6 | 512,296 | 32,213,900 | -2,634,540 | -7.56\% |
| 2011 | Jun-11 | 35,528,790 | 19.0 | 52.2 | 111.47\% | 30.0 | 0.0 | 352.0 | 6 | 513,956 | 32,717,883 | -2,810,907 | -7.91\% |
| 2011 | Jul-11 | 36,767,313 | 0.0 | 198.6 | 111.63\% | 31.0 | 0.0 | 320.0 | 6 | 515,615 | 34,131,343 | $-2,635,970$ | -7.17\% |
| 2011 | Aug-11 | 35,953,367 | 0.0 | 122.2 | 111.80\% | 31.0 | 0.0 | 352.0 | 6 | 517,274 | 33,859,155 | -2,094,212 | -5.82\% |
| 2011 | Sep-11 | 31,553,102 | 48.2 | 39.7 | 111.96\% | 30.0 | 1.0 | 336.0 | 6 | 518,933 | 32,698,809 | 1,145,707 | 3.63\% |
| 2011 | Oct-11 | 33,497,181 | 235.5 | 2.4 | 112.13\% | 31.0 | 1.0 | 336.0 | 6 | 520,593 | 32,199,594 | -1,297,587 | -3.87\% |
| 2011 | Nov-11 | 32,094,802 | 342.1 | 0.0 | 112.30\% | 30.0 | 1.0 | 352.0 | 6 | 522,252 | 32,041,448 | -53,354 | -0.17\% |
| 2011 | Dec-11 | 30,521,363 | 534.0 | 0.0 | 112.46\% | 31.0 | 0.0 | 336.0 | 6 | 523,911 | 31,452,277 | 930,914 | 3.05\% |
| 2012 | Jan-12 | 33,211,776 | 611.1 | 0.0 | 112.60\% | 31.0 | 0.0 | 336.0 | 6 | 525,085 | 31,348,696 | -1,863,080 | -5.61\% |
| 2012 | Feb-12 | 30,909,977 | 531.7 | 0.0 | 112.74\% | 29.0 | 0.0 | 320.0 | 6 | 526,259 | 30,870,402 | -39,575 | -0.13\% |
| 2012 | Mar-12 | 33,762,212 | 349.4 | 0.2 | 112.88\% | 31.0 | 1.0 | 352.0 | 6 | 527,433 | 32,473,599 | -1,288,613 | -3.82\% |
| 2012 | Apr-12 | 32,032,356 | 321.7 | 0.0 | 113.02\% | 30.0 | 1.0 | 320.0 | 6 | 528,606 | 31,865,271 | -167,085 | -0.52\% |
| 2012 | May-12 | 35,432,369 | 80.7 | 36.7 | 113.16\% | 31.0 | 1.0 | 352.0 | 6 | 529,780 | 33,521,407 | -1,910,962 | -5.39\% |
| 2012 | Jun-12 | 35,750,162 | 23.2 | 101.6 | 113.30\% | 30.0 | 0.0 | 336.0 | 6 | 530,954 | 33,686,094 | $-2,064,068$ | -5.77\% |
| 2012 | Jul-12 | 34,932,252 | 0.0 | 195.4 | 13.45\% | 31.0 | 0.0 | 352.0 | 6 | 532,128 | 35,270,651 | 338,399 | 0.97\% |
| 2012 | Aug-12 | 38,510,852 | 2.0 | 112.1 | 113.59\% | 31.0 | 0.0 | 352.0 | 6 | 533,302 | 34,419,684 | -4,091,168 | -10.62\% |
| 2012 | Sep-12 | 35,110,511 | 85.0 | 35.6 | 13.73\% | 30.0 | 1.0 | 304.0 | 6 | 534,476 | 32,753,313 | $-2,357,198$ | -6.71\% |
| 2012 | Oct-12 | 34,797,105 | 242.5 | 1.1 | 113.87\% | 31.0 | 1.0 | 352.0 | 6 | 535,649 | 33,076,112 | -1,720,993 | -4.95\% |
| 2012 | Nov-12 | 32,840,888 | 434.0 | 0.0 | 114.01\% | 30.0 | 1.0 | 352.0 | 6 | 536,823 | 32,505,469 | -335,419 | ${ }^{-1.02 \%}$ |
| 2012 | Dec-12 | 30,112,897 | 533.5 | 0.0 | 114.15\% | 31.0 | 0.0 | 304.0 | 6 | 537,997 | ${ }^{31,603,918}$ | 1,491,021 | 4.95\% |
| 2013 | Jan-13 | 32,033,367 | 624.4 | 0.0 | 114.27\% | 31.0 | 0.0 | 352.0 | 6 | 539,268 | 32,202,956 | 169,589 <br> 90593 | 0.53\% |
| 2013 | Feb-13 | 29,919,580 | 631.5 | 0.0 | 14.40\% | 28.0 | 0.0 | 304.0 | 6 | 540,539 | 30,824,773 | 905,193 | 3.03\% |
| 2013 | Mar-13 | $31,979,964$ 304185 | 554.8 | 0.0 | 114.52\% | 31.0 | 1.0 | 320.0 | 6 | 541,809 | 32,180,039 | 200,075 | 0.63\% |
| 2013 | Apr-13 | 30,418,582 | 358.6 | 0.0 | 114.64\% | 30.0 | 1.0 | 352.0 | 6 | 543,080 | 32,893,344 | 2,474,762 | 8.14\% |
| 2013 | May-13 | 33,755,959 | 109.1 | 23.1 | 114.77\% | 31.0 | 1.0 | 352.0 | 6 | 544,351 | 33,918,995 | 163,036 | 0.48\% |
| 2013 | Jun-13 | 33,333,094 | 33.4 | 59.3 | 114.89\% | 30.0 | 0.0 | 320.0 | 6 | 545,622 | 33,555,912 | 222,818 | 0.67\% |
| 2013 | Jul-13 | 32,386,352 | 1.4 | 133.3 | 115.01\% | 31.0 | 0.0 | 352.0 | 6 | 546,892 | 35,182,325 | 2,795,973 | 8.63\% |
| 2013 | Aug-13 | 35,003,472 | 4.6 | 93.2 | 115.14\% | 31.0 | 0.0 | 336.0 | 6 | 548,163 | 34,541,467 | -462,005 | -1.32\% |
| 2013 | Sep-13 | 32,196,570 | 89.6 | 28.0 | 115.26\% | 30.0 | 1.0 | 320.0 | 6 | 549,434 | 33,477,467 | 1,280,897 | 3.98\% |
| 2013 | Oct-13 | 32,247,765 | 224.2 | 0.0 | 115.39\% | 31.0 | 1.0 | 352.0 | 6 | 550,705 | 33,662,548 | 1,414,783 | 4.39\% |
| 2013 | Nov-13 | 31,816,461 | 478.3 | 0.0 | 115.51\% | 30.0 | 1.0 | 336.0 | 6 | 551,975 | 32,721,954 | 905,493 | 2.85\% |
| 2013 | Dec-13 | 30,229,872 | 687.7 | 0.0 | 115.64\% | 31.0 | 0.0 | 320.0 | 6 | 553,246 | 32,081,173 | 1,851,301 | 6.12\% |
| 2014 | Jan-14 |  | 700.3 | 0.0 | 115.84\% | 31.0 | 0.0 | 352.0 | 6 | 554,325 | 32,629,035 | 32,629,035 |  |
| 2014 | Feb-14 |  | 628.9 | 0.0 | 16.04\% | 28.0 | 0.0 | 304.0 | 6 | 555,403 | 31,446,179 | 31,446,179 |  |
| 2014 | Mar-14 |  | 520.3 | 0.0 | 116.24\% | 31.0 | 1.0 | 320.0 | 6 | 556,482 | 32,902,564 | 32,902,564 |  |
| 2014 | Apr-14 |  | 308.5 | 0.1 | 116.44\% | 30.0 | 1.0 | 352.0 | 6 | 557,561 | 33,684,666 | 33,684,666 |  |
| 2014 | May-14 |  | 140.6 | 18.6 | 116.64\% | 31.0 | 1.0 | 336.0 | 6 | 558,639 | 34,284,194 | 34,284,194 |  |
| 2014 | Jun-14 |  | 25.8 | 72.8 | 116.84\% | 30.0 | 0.0 | 336.0 | 6 | 559,718 | 34,724,420 | 34,724,420 |  |
| 2014 | Jul-14 |  | 1.7 | 139.5 | 117.05\% | 31.0 | 0.0 | 352.0 | 6 | 560,797 | 36,046,206 | 36,046,206 |  |
| 2014 | Aug-14 |  | 5.4 | 106.4 | 117.25\% | 31.0 | 0.0 | 320.0 | 6 | ${ }_{561,875}$ | 35,270,120 | 35,270,120 |  |
| 2014 | Sep-14 |  | 58.6 | 33.6 | 117.45\% | 30.0 | 1.0 | 336.0 | 6 | 562,954 | 34,717,591 | 34,717,591 |  |
| 2014 | Oct-14 |  | 238.3 | 3.4 | 117.66\% | 31.0 | 1.0 | 352.0 | 6 | 564,033 | $34,576,918$ 33561174 | 34,576,918 |  |
| 2014 | Nov-14 |  | 408.5 | 0.0 | 117.86\% | 30.0 | 1.0 | 320.0 | 6 | 565,111 | ${ }^{33,561,174}$ | ${ }^{33,561,174}$ |  |
| 2014 | Dec-14 |  | 615.7 | 0.0 | 118.06\% | 31.0 | 0.0 | 336.0 | 6 | 566, 190 | 33,454,151 | 33,454,151 |  |
| 2015 | Jan-15 |  | 700.3 | 0.0 | 118.31\% | 31.0 | 0.0 | 336.0 | 6 | 567,269 | 33,382,093 | 33,382,093 |  |
| 2015 | Feb-15 |  | 628.9 | 0.0 | 118.55\% | 28.0 | 0.0 | 304.0 | 6 | 568,347 | $32,464,528$ $34,43,538$ | $32,464,528$ $34,43,538$ |  |
| 2015 | Mar-15 |  | 520.3 | 0.0 | 118.79\% | 31.0 | 1.0 | 352.0 | 6 | 569,426 | 34,432,538 | 34,432,538 |  |
| 2015 | Apr-15 |  | 308.5 | 0.1 | 119.04\% | 30.0 | 1.0 | 336.0 | 6 | 570,504 | 34,495,002 | 34,495,002 |  |
| 2015 2015 | May-15 Jun-15 |  | 140.6 25.8 | 18.6 <br> 72.8 <br> 1 | 119.28\% $119.53 \%$ | 31.0 30.0 | 1.0 0.0 | 320.0 352.0 | 6 6 | 571,583 572,662 | $35,113,760$ $36,065,816$ | $35,113,760$ $36,065,816$ |  |
| 2015 | Jul-15 |  | 1.7 | 139.5 | 119.78\% | 31.0 | 0.0 | 352.0 | 6 | 573,740 | 37,160,704 | 37,160,704 |  |
| 2015 | Aug-15 |  | 5.4 | 106.4 | 120.02\% | 31.0 | 0.0 | 320.0 | 6 | 574,819 | 36,404,054 | 36,404,054 |  |
| 2015 | Sep-15 |  | 58.6 | 33.6 | 120.27\% | 30.0 | 1.0 | 336.0 | 6 | 575,897 | 35,871,031 | 35,871,031 |  |
| 2015 | Oct-15 |  | 238.3 | 3.4 | 120.52\% | 31.0 | 1.0 | 336.0 | 6 | 576,976 | 35,503,668 | 35,503,668 |  |
| 2015 | Nov-15 |  | 408.5 | 0.0 | 120.77\% | 30.0 | 1.0 | 336.0 | ${ }_{6}$ | 578,054 579,133 | $35,000,102$ $34,912,794$ | $35,000,102$ 34,912 |  |
| 2015 | Dec-15 |  | $\begin{array}{r}615.7 \\ \hline \text { Weather Norm }\end{array}$ | alized $\quad 0.0$ | 121.02\% | 31.0 | 0.0 | 352.0 | 6 | 579,133 | 34,912,794 | 34,912,794 |  |
|  |  |  | Weather Norm | lized |  |  |  |  |  |  |  |  |  |




[^0]:    ${ }^{1}$ For more details on the results presented in Table 5 refer to the Rate Class Energy Model \& Reg. Model (HDDCDD20) Tabs in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1.

[^1]:    ${ }^{2}$ For more details on the results presented in Table 6 refer to the Rate Class Energy Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^2]:    ${ }^{3}$ For more details on the results presented in Table 8 refer to the Rate Class Customer Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^3]:    ${ }^{4}$ For more details on the results presented in Table 9 refer to the Rate Class Customer Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1
    ${ }^{5}$ For more details on the results presented in Table 10 refer to the Rate Class Energy Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^4]:    ${ }^{6}$ For more details on the results presented in Tables $11 \& 12$ refer to the Rate Class Energy Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^5]:    ${ }^{7}$ For more details on the results presented in Tables 13, 14 \& 15 refer to the Rate Class Energy Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^6]:    ${ }^{8}$ For more details on the results presented in Table 16 refer to the "WH MRK PART". Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^7]:    ${ }^{9}$ For more details on the calculations presented in Tables $17 \& 18$ refer to the Tables 13-16 above.

[^8]:    ${ }^{10}$ For more details on the results presented in Tables 19 \& 20 refer to the Summary Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^9]:    ${ }^{11}$ For more details on the results presented in Tables 21 \& 22 refer to the Rate Class Load Model Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1
    ${ }^{12}$ Values in Tables 23A \& 23B are based on data presented in Tables 17, 18 \& 22

[^10]:    ${ }^{13}$ Refer to Exhibit 8 Tab 9 Schedule 1 Appendix 2 "2014 Hydro One Brampton Current Tariff and Rates
    ${ }^{14}$ Refer to Exhibit 8 Tab 9 Schedule 1 Appendix 3 "2015 Hydro One Brampton Proposed Tariff and Rates

[^11]:    ${ }^{15}$ For more details on the calculations presented in Table 33 refer to the Summary Tab in HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1 and Appendix 2 " 2014 HOBNI Current Tariff and Rates" in Exhibit 8 Tab 9 Schedule 1

[^12]:    ${ }^{16}$ For more details on the calculations presented in Table 34 refer to the Summary Tab in HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1 and Appendix 3 " 2015 HOBNI Proposed Tariff and Rates" in Exhibit 8 Tab 9 Schedule 1

[^13]:    ${ }^{17}$ For more details on the results presented in Table 3 refer to the Summary (Weather Normalized) Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^14]:    ${ }^{18}$ For more details on the results presented in Table 6 refer to the Summary Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^15]:    ${ }^{19}$ For more details on the results presented in Table 7 refer to the Summary (Weather Normalized) Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^16]:    ${ }^{20}$ For more details on the results presented in Table 8 refer to the Summary (Weather Normalized) Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^17]:    ${ }^{21}$ For more details on the results presented in Table 10 refer to the Summary Tab in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^18]:    ${ }^{22}$ For more details on the results presented in Tables 11 \& 12 refer to the Summary and Summary (Weather Normalized) Tabs in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

[^19]:    ${ }^{23}$ For more details on the results presented in Tables 13 refer to the Summary and Summary (Weather Normalized) Tabs in the HOBNI Multivariate Regression Model in Exhibit 3 Tab 4 Schedule 1

