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Load and Revenue Forecast

Ex.3/Tab 1/Sch.1 - Introduction

The evidence presented in this exhibit provides information supporting the revenues derived from activities regulated by the Ontario Energy Board. Actual operating revenues from regulated operations are derived mainly from fixed and variable tariff charges as well as pass through charges and specific service charges. Wellington North Power (WNP) revenues are collected from seven (7) customer classes:

1. Residential;
2. General Service less than 50 kW;
3. General Service 50 - 999 kW;
4. General Service 1,000 – 4,999 kW;
5. Unmetered Scattered Load (USL);
6. Sentinel Lighting; and
7. Street Lighting.

WNP does not anticipate any changes in its customer classes.

This exhibit also describes WNP's load and customer forecasts. The load forecast methodology and assumptions are described in detail within this Exhibit.

The evidence herein is organized according into the following topics;

- 1) Revenue and Load Forecast;
- 2) Accuracy of Load Forecast and Variance Analysis, and
- 3) Other Revenues.

Ex.3/Tab 1/Sch.2 - Overview of Revenue Forecast

Table 3.1 below shows estimated revenues from WNP's current 2015 distribution charges applying the 2016 Test Year load forecast. Distribution Revenues are derived through a combination of fixed monthly charges and volumetric charges applied to the utility's proposed Load Forecast. Fixed rate revenues are determined by applying the current fixed monthly charge to the number of customers or connections in each of the customer classes in each month. Variable rate revenue is based on a volumetric rate applied to metered consumption or demand volume. WNP's 2016 forecasted revenues recovered through its currently approved distribution rates are projected at \$2,333,709 (exclusive of all rate riders). The revenues at proposed distribution rates are presented at Exhibit 6 (Exhibit 6 / Tab 1 / Schedule 6.)

Table 3.1: Revenues at Current Rates

Test Year								
Test Year Projected Revenue from Existing Variable Charges								
Customer Class Name	Variable Distribution Rate	per	Test Year Volume	Gross Variable Revenue	Transform. Allowance Rate	Transform. Allowance kW's	Transform. Allowance \$'s	Net Variable Revenue
Residential	\$0.0185	kWh	26,005,466	\$481,101.12			\$0.00	\$481,101.12
General Service < 50 kW	\$0.0168	kWh	11,855,213	\$199,167.57			\$0.00	\$199,167.57
General Service > 50 to 999 kW	\$3.6643	kW	41,588	\$152,390.66	\$0.60	12,855	\$7,713.06	\$144,677.60
General Service 1,000 to 4,999kW	\$1.8921	kW	108,301	\$204,916.39			\$0.00	\$204,916.39
Unmetered Scattered Load	\$0.0146	kWh	3,024	\$44.16			\$0.00	\$44.16
Sentinel Lighting	\$19.3776	kW	65	\$1,260.07			\$0.00	\$1,260.07
Street Lighting	\$7.9283	kW	1,995	\$15,815.97			\$0.00	\$15,815.97
Total Variable Revenue			38,015,652	\$1,054,695.94	\$0.60	12,855	\$7,713.06	\$1,046,982.88
Test Year								
Test Year Projected Revenue from Current Fixed Charges								
Customer Class Name	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue
Residential	\$18.49	3,251	\$721,297	\$481,101	\$1,202,398	59.99%	40.01%	51.52%
General Service < 50 kW	\$39.25	476	\$223,972	\$199,168	\$423,140	52.93%	47.07%	18.13%
General Service > 50 to 999 kW	\$275.90	38	\$126,012	\$144,678	\$270,690	46.55%	53.45%	11.60%
General Service 1,000 to 4,999kW	\$2,254.94	5	\$135,296	\$204,916	\$340,213	39.77%	60.23%	14.58%
Unmetered Scattered Load	\$18.09	1	\$217	\$44	\$261	83.10%	16.90%	0.01%
Sentinel Lighting	\$5.24	29	\$1,839	\$1,260	\$3,099	59.34%	40.66%	0.13%
Street Lighting	\$7.12	914	\$78,092	\$15,816	\$93,908	83.16%	16.84%	4.02%
Total Fixed Revenue		4,713	\$1,286,726	\$1,046,983	\$2,333,709			

WNP is proposing a total Service Revenue Requirement of \$2,743,188 for the 2016 Test Year. This amount includes a Base Revenue Requirement of \$2,592,599 plus revenue offsets of \$150,588 to be recovered through Other Distribution Revenue.

Table 3.2 below summarizes WNP distribution revenue, by rate class and Other Operating Revenue from the 2012 Board Approved amounts through to the 2016 Test Year:

Table 3.2: Distribution Revenues – Actual and Projected

Distribution Revenue	2012 Board Approved	2012 Actual	2013 Actual	2014 Actual	2015 Bridge Year	2016 Test Year
Residential	\$1,130,849	\$1,204,974	\$1,197,086	\$1,216,804	\$1,202,398	\$1,409,206
General Service < 50 kW	\$400,036	\$423,367	\$484,205	\$472,915	\$423,140	\$420,001
General Service > 50 to 999 kW	\$298,107	\$328,058	\$310,308	\$294,553	\$270,690	\$235,377
General Service 1,000 to 4,999kW	\$295,993	\$217,008	\$341,406	\$364,426	\$340,213	\$461,076
Unmetered Scattered Load	\$181	\$241	\$332	\$351	\$261	\$256
Sentinel Lighting	\$88,595	\$8,683	\$3,121	\$3,079	\$3,099	\$5,560
Street Lighting	\$2,548	\$73,220	\$93,334	\$94,101	\$93,908	\$61,123
Base Revenue	\$2,216,309	\$2,255,551	\$2,429,792	\$2,446,230	\$2,333,709	\$2,592,599
Other Distribution Revenue						
Specific Service Charges	\$57,043	\$55,389	\$52,799	\$52,388	\$58,115	\$60,474
Late Payment Charges	\$26,047	\$28,204	\$26,086	\$26,748	\$27,012	\$27,012
Other Distribution/Operating Revenues	\$49,937	\$49,043	\$48,873	\$48,162	\$60,751	\$62,102
Other Income or Deductions	\$16,965	\$23,963	\$326	\$27,459	\$2,000	\$1,000
Total Other Operating Revenue	\$149,992	\$156,599	\$128,084	\$154,757	\$147,878	\$150,588
Service Revenue	\$2,366,301	\$2,412,150	\$2,557,876	\$2,600,987	\$2,481,587	\$2,743,188

In the above table the Base Revenue amounts for 2012 Board Approved, 2015 Bridge Year and 2016 Test Year are based on weather normalized load forecasts based upon the methodology described within this rate application and WNP's 2012 Cost of Service rate application (EB-2011-0249). For the 2012 Actual, 2013 Actual and 2014 Actual, the revenue is derived from the actual energy consumption for each class and is not weather-normalized. WNP does not have a process to weather normalize actual data since the Applicant is not aware that a Board approved method has been established.

Ex.3/Tab 1/Sch.3 - Proposed Load Forecast

The following section of the application covers the approach taken to determine the Load Forecast. This section also covers economic assumptions and data sources for customer and load forecasts. It explains wholesale purchases and subsequent adjustments to the wholesale purchases. It also provides the rationale behind each variable used in the regression analysis. Lastly, it presents the regression results and explains how they were used to determine the forecast for the 2015 Bridge Year and the 2016 Test Year.

Table 3.3 below presents the actual and forecast trends for customer/connection counts, kWh consumption and billed kW demand.

Table 3.3: Customer and Volume Trend Table

Wellington North Power Inc. Weather Normal Load Forecast for 2016 Rate Application EB-2015-0110												
	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Weather Normal	2016 Weather Normal
Actual kWh Purchases	99,177,535	99,726,775	101,905,199	100,510,261	93,415,382	102,608,265	105,625,698	108,411,817	110,314,060	112,420,512		
Predicted kWh Purchases	101,022,119	100,486,424	102,018,514	99,854,869	95,318,000	100,819,380	104,006,389	104,474,814	111,813,624	114,301,367	111,314,900	111,517,168
% Difference	1.9%	0.8%	0.1%	-0.7%	2.0%	-1.7%	-1.5%	-3.6%	1.4%	1.7%		
CDM Purchase Adjustment						0	0	0	0	0	(698,121)	(1,748,974)
Predicted kWh Purchases after CDM											110,616,779	109,768,194
Billed kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	103,509,409	102,715,347
By Class												
Residential												
Customers	2,869	2,923	2,959	3,002	3,037	3,073	3,103	3,126	3,161	3,190	3,220	3,251
kWh	25,217,181	25,227,824	25,023,794	25,142,788	25,158,787	25,200,723	25,802,534	24,795,447	25,357,835	25,941,256	25,595,036	26,005,466
General Service < 50 kW												
Customers	462	455	455	464	468	479	478	478	474	473	474	476
kWh	12,036,675	11,886,853	11,930,026	11,678,034	11,573,828	11,323,787	11,781,553	11,710,253	12,012,886	11,877,868	11,693,697	11,855,213
General Service 50 to 999 kW												
Customers	40	38	39	41	43	40	38	38	39	38	38	38
kWh	30,016,678	29,919,925	24,233,832	25,169,769	20,973,876	20,890,084	21,438,642	21,823,125	17,140,222	15,634,133	14,360,704	13,489,914
kW	45,546	51,134	72,261	73,818	64,960	62,105	65,571	67,391	53,734	47,684	44,272	41,588
General Service 1000 to 4,999 kW												
Customers	5	5	4	4	5	5	5	5	5	5	5	5
kWh	24,099,432	25,721,661	33,212,587	30,725,657	27,961,217	37,885,731	39,368,359	42,470,244	48,528,024	51,432,197	51,108,488	50,613,209
kW	86,247	90,065	68,832	67,494	72,545	83,945	85,844	89,307	103,015	110,732	109,361	108,301
Street Lights												
Customers	942	942	942	942	900	900	899	898	900	905	905	905
kWh	728,596	731,832	727,707	748,942	738,099	720,757	713,439	715,663	718,528	720,704	723,044	725,392
kW	1,998	2,010	2,007	2,048	2,026	1,981	1,964	1,963	1,978	1,983	1,988	1,995
Sentinel Lights												
Customers	23	23	24	34	31	28	28	28	28	28	29	29
kWh	39,379	38,909	38,081	36,606	33,138	31,636	28,024	26,093	26,093	25,478	24,275	23,128
kW	109	108	106	103	93	88	82	72	72	71	68	65
Unmetered Loads												
Connections	13	13	10	3	2	1	1	1	2	1	1	1
kWh	101,904	101,877	82,586	20,724	7,536	9,732	7,536	7,563	5,733	5,733	4,164	3,024
Total												
Customer/Connections	4,354	4,400	4,432	4,490	4,486	4,526	4,553	4,574	4,607	4,641	4,672	4,704
kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	103,509,409	102,715,347
kW from applicable classes	133,901	143,317	143,206	143,463	139,624	148,119	153,460	158,734	158,799	160,470	155,690	151,949

Ex.3/Tab 1/Sch.4 - Overview of Load Forecast Methodology

The load forecast presented in this application uses a similar approach as was used in WNP's last Cost of Service application (EB-2011-0249). WNP's forecast is based on a regression model developed based on monthly wholesale purchased kWh from January 2005 to December 2014 as measured at the wholesale point of delivery (exclusive of losses; i.e., not loss adjusted).

While it may sometimes be desirable to isolate demand determinants related to individual rate classes, it is not always possible nor is it necessary to do so especially for smaller utilities such as WNP. In WNP's case, "Metered" or monthly class consumption measured at the retail meter is not available therefore the decision was made to continue working with the same approach as the last cost of service, thus using total monthly wholesale purchases. Many other Distribution Rate Applications considered by the Board have also used this approach and have been approved by the Board in the past.

The methodology proposed in this application predicts wholesale consumption using a regression analysis that relates historical monthly wholesale kWh usage to monthly historical heating degree days and cooling degree days. Heating degree-day provides a measure of how much (in degrees), and for how long (in days), the outside temperature was below that base temperature. The most readily available heating degree days come with a base temperature of 18°C. Cooling degree-day figures also come with a base temperature, and provide a measure of how much, and for how long, the outside temperature was above that base temperature. For degree days, daily observations as reported at Environment Canada's weather station at Mount Forest (*latitude: 43°59'00.000" N; longitude: 80°45'00.000" W, elevation 414.50 metres*) are used. For employment levels, monthly full-time employment for the Kitchener-Waterloo-Barrie area, as reported in Statistics Canada's Monthly Labour Force Survey (CANSIM) has been used. The regression model also uses other variables which are tested to see their relationship and contribution to the fluctuating wholesale purchases. Each variable is discussed in detail later in this section.

Ex.3/Tab 1/Sch.5 - Load Forecast Details

The following section outlines details of the proposed Load Forecast:

Ex.3/Tab 1/Sch.6 - Economic Overview

WNP is projecting customer numbers to steadily increase (growth) in the residential class and virtually no change in all customer classes as illustrated in the table below:

Table 3.4: Customer / Connection Projections

Yearly Average Customer / Connection Count									
Customer Class		2010	2011	2012	2013	2014	5 year Average	2015	2016
Residential	Account	Actual 3,073	Actual 3,103	Actual 3,126	Actual 3,161	Actual 3,190	3,131	Forecast 3,220	Forecast 3,251
General Service < 50 kW	Account	479	478	478	474	473	476	474	476
General Service 50 to 999 kW	Account	40	38	38	39	38	39	38	38
General Service 1000 to 4,999 kW	Account	5	5	5	5	5	5	5	5
Street Lights	Connections	900	899	898	900	905	900	905	905
Sentinel Lights	Connections	28	28	28	28	28	28	29	29
Unmetered Loads	Connections	1	1	1	2	1	1	1	1
Year-over Year Change by Percentage									
Customer Class		2010	2011	2012	2013	2014	5 year Average	2015	2016
Residential	Account		0.99%	0.74%	1.09%	0.95%	0.94%	0.94%	0.94%
General Service < 50 kW	Account		-0.26%	0.00%	-0.73%	-0.25%	-0.31%	0.26%	0.26%
General Service 50 to 999 kW	Account		-3.36%	-1.74%	2.21%	-0.43%	-0.83%	-0.36%	-0.36%
General Service 1000 to 4,999 kW	Account		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Street Lights	Connections		-0.11%	-0.11%	0.17%	0.61%	0.14%	0.00%	0.00%
Sentinel Lights	Connections		0.00%	0.00%	0.00%	0.00%	0.00%	2.21%	2.21%
Unmetered Loads	Connections		13.33%	-11.76%	26.67%	-26.32%	0.48%	-23.50%	-23.50%

WNP operates within the Township of Wellington North, servicing 3 urban communities of Arthur, Holstein and Mount Forest. Economic conditions in the Township of Wellington North remain relatively unchanged over the past five years. Upon reviewing the latest Census data (2011), Statistics Canada notes the following about the Township of Wellington North:

- "In 2011, Wellington North (Township) had a population of 11,477, representing a percentage change of 2.7% from 2006. This compares to the national average growth of 5.9%."*
- "In 2011, the percentage of the population aged 65 and over in Wellington North, was 18.9%, compared with a national percentage of 14.8%. The percentage of the working age population (15 to 64) was 62.7% and the percentage of children aged 0 to 14 was 18.4%. In comparison, the national percentages were 68.5% for the population aged 15 to 64 and 16.7% for the population aged 0 to 14."*

Source: Statistics Canada

1 The above comments suggest that in Township of Wellington North there has been smaller
2 population growth, has a higher percentage of people over the age of 64, a lower percentage of
3 people of working age (15 to 64) and lower percentage of children (aged 14 or under) when
4 compared to the national average. WNP believes this population composite is a fair reflection in
5 the service territory that the utility manages within the Township of Wellington North.

6 Housing market activity will largely reflect economic conditions and population growth. Low
7 mortgage rates are expected during the forecast period and will underpin housing sales and
8 housing prices. Housing sales are forecast to slide lower while the average MLS® sale price
9 holds near current levels. In February 2015, it was reported that in the Township of Wellington
10 North, fewer building permits had been issued (at that time) when compared to 2014; however
11 since that date, it has been noted that the number of permits issued has returned to a similar
12 amount comparable to that of 2014.

13 The above information above supports WNP's outlook and reinforces the Applicant's view that
14 customer numbers to steadily increase in the Residential Class. Table 3.4 showed that this
15 customer class has seen an average increase of just below 1% (0.94%) from 2010 to 2014.

16 The region's manufacturing base, in terms of number of companies, has declined over the past
17 decade, reflecting a broader industry trend evident in other Ontario regions. It also reflects the
18 challenges faced in most parts of rural Ontario and Canada with its relatively narrow economic
19 base and concentration in slow growing or declining industries. Its younger residents are
20 increasingly drawn to larger urban centers leaving a relatively older population. In WNP's
21 opinion, the service area has seen the customer base for General Service 50-999 kW and
22 General Service 1,000 to 4,999 kW remaining steady over the past few years, as reflected in
23 Table 3.4. The three manufacturing customers (consisting of 5 accounts in Table 3.4) in the
24 General Service 1,000 to 4,999 kW were affected by the 2008/2009 Economic downturn in the
25 global economy, affecting their production levels and shift-patterns. WNP has observed these
26 customers load patterns steadily increasing, to the extent that one of the customers is seeking
27 an increase in their kW demand at their plant. This customer's specific demand increase is
28 referenced in a letter to the utility and included in WNP's 2015 Distribution System Plan in
29 Exhibit 2 as Appendix 2A: "Stakeholder Letters supporting the second feeder" to the town of
30 Mount Forest (Appendix 5E of the DSP).

1 The Township of Wellington North Economic Development Committee continues to promote
2 and look for opportunities to encourage new businesses to the area. Regrettably, there has
3 been a reduction of small business (General Services <50kW) over the past five years and this
4 is also reflected in Table 3.4. WNP has projected a steady customer count for this rate class
5 over the forecast period.

6

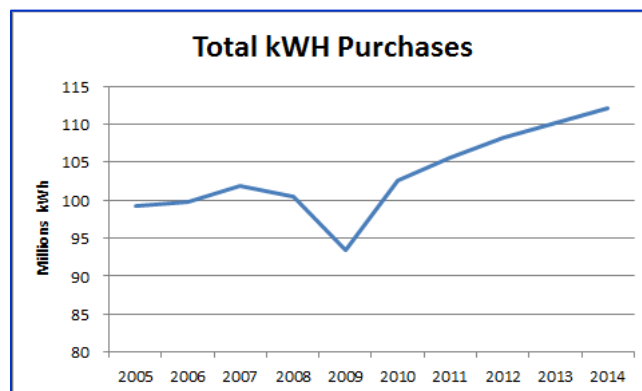
Ex.3/Tab 1/Sch.7 - Overview of Wholesale Purchases

WNP purchases its power from the Independent Electricity Systems Operator (IESO). The following tables summarize the unadjusted monthly kWh wholesale purchases:

Table 3.5: Unadjusted Wholesale kWh Purchases 2004-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	9,511,622	9,308,926	9,471,440	9,724,722	8,778,546	9,555,507	9,903,507	9,969,659	10,228,961	10,799,725
February	8,356,417	8,675,458	8,867,908	9,282,696	7,661,282	8,513,222	9,130,223	9,266,795	9,383,922	9,710,845
March	8,891,064	9,235,190	9,202,851	9,335,764	8,189,544	8,793,380	9,825,256	9,409,618	9,829,034	10,397,444
April	7,665,148	7,771,829	8,276,828	8,210,709	7,376,418	7,779,667	8,000,503	8,519,455	8,360,602	9,186,100
May	7,570,243	8,018,637	8,110,169	7,883,595	6,711,504	8,100,891	7,972,210	8,612,164	8,890,829	9,013,757
June	7,982,091	7,829,938	8,194,020	7,787,375	6,849,734	7,984,499	7,947,472	8,638,914	8,539,244	8,560,168
July	7,604,890	7,512,883	7,703,200	7,815,607	6,821,425	8,350,976	8,282,741	8,769,534	8,808,585	8,459,289
August	8,306,210	7,987,541	8,380,226	7,810,492	7,581,948	8,692,122	8,881,989	9,201,513	8,890,441	8,922,514
September	7,686,742	7,570,669	7,710,376	7,677,287	7,570,598	8,099,924	8,383,667	8,451,029	8,502,958	8,881,019
October	8,151,171	8,459,920	8,336,948	8,247,980	8,346,682	8,501,568	8,946,252	9,155,016	9,300,423	9,391,767
November	8,457,765	8,646,179	8,743,245	8,166,427	8,386,159	8,832,882	8,876,428	9,016,280	9,558,856	9,369,360
December	8,994,173	8,709,606	8,907,988	8,567,606	9,141,543	9,403,627	9,391,756	9,266,738	9,800,086	9,427,476
Total	99,177,535	99,726,775	101,905,199	100,510,261	93,415,382	102,608,265	105,542,005	108,276,715	110,093,942	112,119,465
Change year-over-year		0.6%	2.2%	-1.4%	-7.1%	9.8%	2.9%	2.6%	1.7%	1.8%

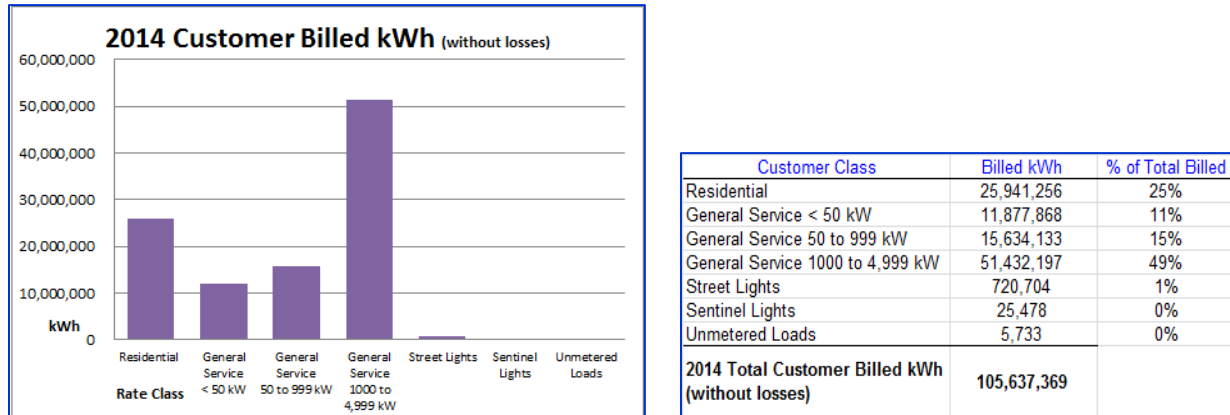
Table 3.6: Trend of Unadjusted Wholesale kWh Purchases 2004-2013



WNP's load has been steadily rising over the ten year period (2005 - 2014) with wholesale purchases increasing by 13% between 2005 to 2014. This rise is due to the increase in energy consumption by the General Service 1000 to 4999 kW customer class, particularly since 2011. This class alone, with 5 accounts, makes up 49% of the WNP's annual kWh billed quantity.

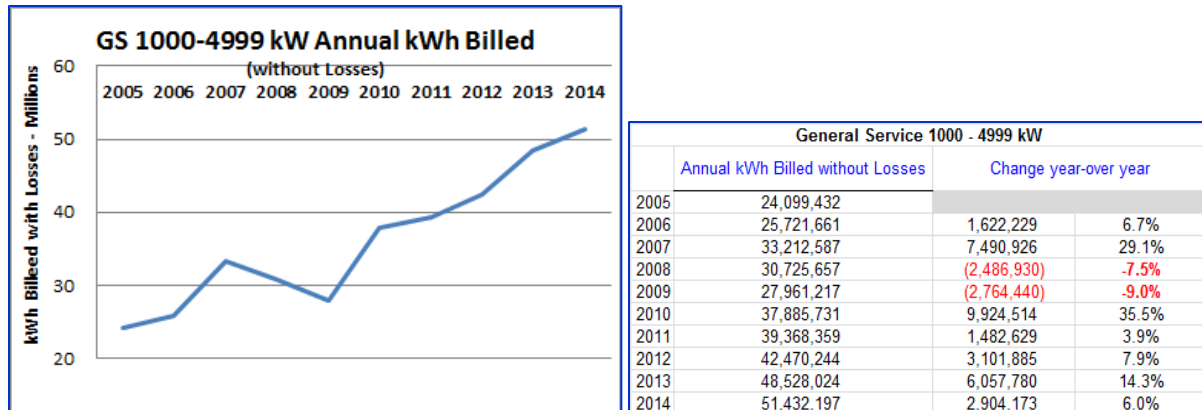
Table 3.7 below illustrates WNP's billed kWh energy volume (without losses) by customer class for 2014:

Table 3.7: 2014 Customer Billed kWh (without Losses)



The reduction in the kWh purchases shown in table 3.6 between the years of 2008 and 2009 reflects the Economic Downturn as a result of the Global Recession between these years. During this time, the General Service 1,000 – 4999kW customer class reduced by nearly 10% per year compared to prior years as shown below:

Table 3.8: General Service 1000 – 4999kW – Impact of Global Recession



To better represent the trend in wholesale purchases, WNP has adjusted its base wholesale purchases prior to running the regression analysis. The purpose of the adjustment was to normalize the data as best as possible. The following adjustment was made to the wholesale purchases:

- WNP adjusted the wholesale purchases to add back all MicroFIT and FIT (Feed-in tariff) generation kWh data. This adjustment was made because the generated kWh volume is

consumed within the utility's service territory. If there was no generation activity, then the WNP's wholesale purchases would have been higher in order to customer demand. Therefore, generation data is "added-back" to the IESO kWh wholesale purchases to reflect energy demand of WNP's territory.

- WNP has no (0) Wholesale Market Participant (WMP) customers so there were no wholesale adjustments required for this customer class

Table 3.9 below summarizes the kWh generated from WNP's MicroFIT and FIT customers:

Table 3.9: MicroFIT / FIT Generated kWh Volumes

	MicroFIT / FIT Generated kWh	MicroFIT accounts	FIT accounts
2011	83,693	7	
2012	135,101	12	
2013	220,117	18	
2014	301,047	18	1

The adjustments that were added to the actual wholesale purchases by month to reflect the adding back of kWh generated volume is illustrated in Table 3.10 below:

Table 3.10: MicroFIT / FIT Generated kWh Volumes

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January							65	2,638	4,706	2,439
February							1,664	4,659	2,407	2,992
March							5,312	10,173	15,410	13,924
April							7,099	13,281	23,775	25,104
May							6,194	16,576	33,327	32,010
June							9,229	16,383	31,146	48,617
July							22,629	16,817	24,908	52,243
August							10,674	20,048	30,729	46,971
September							8,059	16,364	25,519	39,980
October							6,054	8,530	17,141	20,846
November							4,891	6,433	8,804	7,638
December							1,825	3,199	2,247	8,282
Total kWh Adjustment	0	0	0	0	0	0	83,693	135,101	220,117	301,047

The final results for WNP's Adjusted Wholesale Purchased are summarized below in Table 3.11.
The "Adjusted kWh Wholesale Purchases" represented in the this table were used in WNP's regression analysis

Table 3.11: Adjusted kWh Wholesale Purchases for 2005 to 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	9,511,622	9,308,926	9,471,440	9,724,722	8,778,546	9,555,507	9,903,572	9,972,298	10,233,667	10,802,165
February	8,356,417	8,675,458	8,867,908	9,282,696	7,661,282	8,513,222	9,131,887	9,271,454	9,386,329	9,713,837
March	8,891,064	9,235,190	9,202,851	9,335,764	8,189,544	8,793,380	9,830,569	9,419,790	9,844,444	10,411,368
April	7,665,148	7,771,829	8,276,828	8,210,709	7,376,418	7,779,667	8,007,602	8,532,736	8,384,378	9,211,204
May	7,570,243	8,018,637	8,110,169	7,883,595	6,711,504	8,100,891	7,978,404	8,628,741	8,924,156	9,045,768
June	7,982,091	7,829,938	8,194,020	7,787,375	6,849,734	7,984,499	7,956,701	8,655,297	8,570,390	8,608,785
July	7,604,890	7,512,883	7,703,200	7,815,607	6,821,425	8,350,976	8,305,370	8,786,351	8,833,492	8,511,532
August	8,306,210	7,987,541	8,380,226	7,810,492	7,581,948	8,692,122	8,892,663	9,221,561	8,921,170	8,969,486
September	7,686,742	7,570,669	7,710,376	7,677,287	7,570,598	8,099,924	8,391,725	8,467,393	8,528,477	8,920,999
October	8,151,171	8,459,920	8,336,948	8,247,980	8,346,682	8,501,568	8,952,307	9,163,547	9,317,564	9,412,613
November	8,457,765	8,646,179	8,743,245	8,166,427	8,386,159	8,832,882	8,881,318	9,022,713	9,567,660	9,376,999
December	8,994,173	8,709,606	8,907,988	8,567,606	9,141,543	9,403,627	9,393,581	9,269,936	9,802,333	9,435,758
Total kWh Adjustment	99,177,535	99,726,775	101,905,199	100,510,261	93,415,382	102,608,265	105,625,698	108,411,817	110,314,060	112,420,512

The "Adjusted kWh Wholesale Purchases" represented in the above table were used in WNP's regression analysis.

On reviewing WNP's "Adjusted kWh Wholesale Purchases" for the latest five-year period 2011 to 2014, there are external factors that have influenced the kWh values for some of the months.

Table 3.12: Adjusted kWh Wholesale Purchases by Month for 2010 - 2014

kWh Purchased	2010	2011	2012	2013	2014
Jan	9,555,507	9,903,572	9,972,298	10,233,667	10,802,165
Feb	8,513,222	9,131,887	9,271,454	9,386,329	9,713,837
Mar	8,793,380	9,830,569	9,419,790	9,844,444	10,411,368
Apr	7,779,667	8,007,602	8,532,736	8,384,378	9,211,204
May	8,100,891	7,978,404	8,628,741	8,924,156	9,045,768
Jun	7,984,499	7,956,701	8,655,297	8,570,390	8,608,785
Jul	8,350,976	8,305,370	8,786,351	8,833,492	8,511,532
Aug	8,692,122	8,892,663	9,221,561	8,921,170	8,969,486
Sep	8,099,938	8,391,725	8,467,393	8,528,477	8,920,999
Oct	8,501,578	8,952,307	9,163,547	9,317,564	9,412,613
Nov	8,832,882	8,881,318	9,022,713	9,567,660	9,376,999
Dec	9,403,627	9,393,581	9,269,936	9,802,333	9,435,758
Total	102,608,289	105,625,698	108,411,817	110,314,060	112,420,512

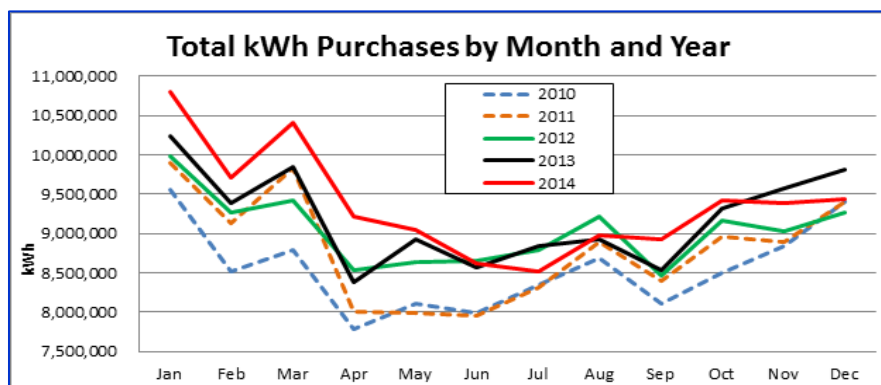
Note: The monthly kWh purchases above include the addition of generation data

In the above table, the shaded months represent events that contributed to the continual increase in the WNP's kWh IESO energy purchases:

- 2011 Jan – Mar: kWh purchases for these months are 4%, 7% and 12% higher than the same months of the previous year. WNP noted that in the service area, three manufacturing customers' energy usage was steadily increasing and indicating signs of recovery from the 2008/2009 Global Recession – such customers had reduced shift patterns resulting in lower usage since October 2008.
- 2012 Apr – Aug: WNP noted that these months recorded higher than normal weather temperatures and assumes that air-conditioning and cooling units were running earlier and longer than under “normal conditions” weather conditions. Also, WNP observed that during this period, the manufacturing customers in the area energy usage had increased, again a further sign of post-Global recession recovery.
- 2013 Jan - Mar & Nov – Dec: Seasonal weather temperatures were lower than normal averages. On April 12th and 13th, a major Ice Storm caused power outages in WNP's service area of Mount Forest and Holstein with an outage from 3:00am to 9:20pm (18 hours) due to downed Hydro One 44KV power line that supplies these communities. There were numerous tree related issues in WNP's system, largely on the secondary side; however, WNP was fairly fortunate given the severity of the storm. There was another power outage on December 22nd in WNP's service area of Arthur caused by another winter ice-storm – this outage lasted three hours.
- 2014 Jan – Apr: WNP noted that temperatures for these months were lower than normal, particularly March and April.

The chart below illustrates the monthly kWh purchases and shows the variances month-by-month over the 5-year period:

Table 3.13: Adjusted kWh Wholesale Purchases by Month for 2010 - 2014



Ex.3/Tab 1/Sch.8 - Overview of Variables Used

In WNP's situation, variation in monthly electricity consumption is influenced by five main factors:

- a) Weather (e.g. heating and cooling) which is by far the most dominant effect for most systems;
- b) Number of days per month;
- c) Number of Peak Hours;
- d) Employment factors (increases or decreases in economic activity leads to changes in employment); and
- e) Sensitive customers – these are the large manufacturing customers (5 accounts) in the General Service 1000 – 4999 kW class who account for nearly 50% of WNP's load and in the past, have been "sensitive" to external conditions. For example, these customers altered their shift pattern as a consequence of the 2008/2009 Global Recession which in-turn affected WNP's IESO kWh wholesale purchases.

Specifics relating to each variable used in the regression analysis are presented at the next section.

a) Heating and Cooling:

In order to determine the relationship between observed weather and energy consumption, monthly weather observations describing the extent of heating or cooling required within the month are necessary. Environment Canada publishes monthly observations on heating degree days (HDD) and cooling degree days (CDD) for selected weather stations across Canada. Heating degree-days for a given day are the number of Celsius degrees that the mean temperature is below 18°C. Cooling degree-days for a given day are the number of Celsius degrees that the mean temperature is above 18°C. For WNP, the monthly HDD and CDD as reported at Environment Canada's weather station at Mount Forest (*latitude: 43°59'00.000" N; longitude: 80°45'00.000" W, elevation 414.50 metres*) was used.

WNP has adopted the 10 year average from 2005 to 2014 as the definition of weather normal. WNP's view is that a ten-year average based on the most recent ten calendar years available is a reasonable compromise that likely reflects the "average" weather experienced in recent years. This is consistent with the Board's filing requirements for weather normalization methodology as

described in Chapter 2 Cost of Service filing requirements (page 30) and many other LDCs have also adopted this definition for the purposes of cost-of-service rebasing.

The following table outlines the monthly weather data used in the regression analysis. WNP's regression analysis was performed over 10 year period of 2005 to 2014 and therefore the data for 1995 to 2004 (shown below) was not used in the regression analysis; however, the 20-year data was used to determine the 20-year forecast as represented in table 3.24.

Table 3.14: HDD and CDD as reported at Mount Forest, ON. Weather Station

Heating Degree Day (HDD)												
Heating Degree Days	January	February	March	April	May	June	July	August	September	October	November	December
1995	721.40	790.10	591.50	500.50	221.40	50.70	33.70	14.00	185.80	289.00	596.80	797.50
1996	860.60	767.60	733.90	482.10	266.80	53.64	25.60	23.70	136.00	331.07	584.60	649.53
1997	831.26	685.93	686.20	409.33	332.20	33.37	30.00	69.58	126.53	295.88	515.00	645.60
1998	670.20	576.06	569.03	298.27	77.79	106.72	42.79	33.90	101.13	298.97	452.80	586.36
1999	797.42	599.10	619.57	354.30	143.53	90.11	19.23	61.83	84.11	333.55	437.63	671.50
2000	800.40	673.60	493.17	413.13	196.00	78.40	50.80	42.80	165.90	280.20	506.57	845.01
2001	754.00	679.70	681.30	369.90	172.20	79.00	51.40	17.00	165.80	298.22	387.70	568.27
2002	722.56	663.30	625.77	390.73	297.70	69.20	16.68	26.90	67.37	371.10	531.60	701.30
2003	902.08	798.60	661.20	420.64	239.47	81.70	25.70	24.60	111.30	333.00	447.90	649.40
2004	913.20	701.70	575.90	377.40	221.70	104.15	30.60	71.90	83.90	290.60	445.90	729.10
2005	829.30	691.00	708.10	357.60	244.50	26.90	13.60	11.80	68.20	273.60	445.50	721.80
2006	626.30	693.70	613.60	328.40	176.50	59.70	8.60	39.90	145.00	351.80	420.90	569.80
2007	729.30	793.80	593.10	424.30	170.30	55.50	34.00	26.30	83.90	189.20	525.90	696.20
2008	693.80	736.00	698.00	299.10	263.10	50.30	19.40	32.23	98.80	329.80	516.60	733.60
2009	901.40	679.40	597.00	361.70	219.60	99.10	61.20	43.00	110.20	345.30	396.20	698.60
2010	791.50	680.10	504.70	273.20	148.20	55.23	12.70	19.30	137.00	301.00	439.27	744.30
2011	866.50	720.40	660.10	379.30	168.10	64.10	3.70	13.60	106.33	276.60	399.40	609.80
2012	694.60	611.40	388.70	399.00	123.80	56.40	0.40	22.50	134.70	292.20	505.72	590.90
2013	703.37	699.60	649.00	414.20	160.67	67.40	19.60	33.90	133.10	270.69	557.37	767.20
2014	899.70	820.97	767.16	423.07	185.60	36.00	59.10	40.50	117.20	292.40	548.07	623.73
10 - Year Average	773.58	712.64	617.95	365.99	186.04	57.06	23.23	28.30	113.44	292.26	475.49	675.59
20 - Year Average	785.44	703.10	620.85	383.81	201.46	65.88	27.94	33.46	118.11	302.21	483.07	679.98
20 Year Trend	790.89	716.34	608.20	357.33	170.46	59.71	22.54	28.68	108.24	289.86	465.89	669.63

Cooling Degree Day (HDD)												
Cooling Degree Days	January	February	March	April	May	June	July	August	September	October	November	December
1995	0.00	0.00	0.00	0.00	0.00	49.20	66.70	68.70	4.30	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00	5.80	21.00	24.40	31.90	7.70	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	25.50	52.60	19.24	3.30	0.60	0.00	0.00
1998	0.00	0.00	0.00	0.00	18.73	32.78	34.27	42.10	5.56	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	6.80	49.24	88.10	13.13	20.51	2.70	0.00	0.00
2000	0.00	0.00	0.00	0.00	10.90	19.80	22.60	39.62	13.80	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	4.50	37.60	44.80	56.50	13.40	0.00	0.00	0.00
2002	0.00	0.00	0.00	5.00	3.90	43.30	91.52	44.60	43.17	3.70	0.00	0.00
2003	0.00	0.00	0.00	0.30	0.00	17.60	40.00	54.40	9.50	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	7.50	15.70	35.30	24.40	20.40	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.20	0.60	98.50	85.30	62.10	22.60	9.40	0.00	0.00
2006	0.00	0.00	0.00	0.00	21.20	29.30	96.50	35.30	2.80	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	16.10	46.30	43.40	57.20	29.40	15.20	0.00	0.00
2008	0.00	0.00	0.00	1.40	0.30	44.80	55.10	28.40	4.50	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	2.00	15.50	10.30	48.10	7.50	0.00	0.00	0.00
2010	0.00	0.00	0.00	1.00	24.00	18.70	89.70	82.00	15.50	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	12.80	16.40	104.30	53.30	20.70	0.30	0.00	0.00
2012	0.00	0.00	3.40	0.00	17.40	57.10	94.00	50.70	15.30	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	18.70	35.00	75.90	34.50	17.20	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	7.60	44.00	25.70	32.40	12.40	0.00	0.00	0.00
10 - Year Average	0.00	0.00	0.34	0.26	12.07	40.56	68.02	48.40	14.79	2.49	0.00	0.00
20 - Year Average	0.00	0.00	0.17	0.40	8.94	35.87	59.02	43.93	14.48	1.60	0.00	0.00
20 Year Trend	0.00	0.00	0.53	0.36	14.26	37.36	70.35	48.59	17.56	1.82	0.00	0.00

b) Number of days per month:

WNP also used a “Days per month” variable because this identifies seasonal peaks and less/more days in calendar months.

c) Number of Peak Hours:

Peak hours refers to the times highest electricity use over the course of the day. WNP calculated this by multiplying 16 hours by the number of business day in any given month (excluding weekends and holidays.)

d) Employment Factor:

In order to measure the change in economic activity, a data series must be chosen which represents, as much as possible, regional economic activity. WNP used the monthly full-time employment levels for the economic region of Kitchener-Waterloo-Barrie in Ontario as reported in Statistics Canada’s Monthly Labour Force Survey (CANSIM). This variable was included because, as per the Economic Outlook in Exhibit 3 / Tab 1 Schedule 6, the Township of Wellington North has a lower percentage of people of working age (15 to 64) when compared to the national average and the level of employment is a good indicator of growth in a region.

The table below outlines the full-time employment levels for the WNP’s economic region which were used in the regression analysis to predict WNP’s load forecast.

Table 3.15: Full-Time Employment Levels for the WNP’s Economic Region

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2005	629.8	631.3	628.7	631.7	639.3	648.6	653.6	655.8	652.3	649.7	643.8	644.5
2006	643.2	642.4	640.8	643.5	652.4	659.9	664.5	666.4	663.9	666.2	665.4	666.5
2007	660.7	654.8	650.2	645.1	644.4	649.6	657.2	659.2	657.8	659.2	662.8	664.0
2008	656.3	651.2	642.3	642.3	642.5	648.2	653.5	656.2	658.8	661.5	664.7	662.1
2009	651.4	639.4	627.6	623.9	622.7	632.1	637.9	643.0	643.3	644.9	642.2	639.1
2010	633.6	630.5	627.5	631.6	641.5	657.2	669.8	672.0	665.1	657.2	655.2	653.3
2011	649.3	651.2	657.1	666.4	671.5	681.8	691.5	694.9	688.6	682.2	677.0	676.6
2012	670.9	668.7	666.0	667.4	672.1	678.4	682.0	678.5	671.9	672.8	676.8	682.7
2013	681.6	682.6	683.6	685.4	690.3	696.7	702.8	701.4	698.4	698.4	700.0	695.4
2014	689.4	682.3	680.2	679.4	690.0	704.4	715.1	718.7	719.3	723.5	721.0	714.3

e) Sensitive customers:

Lastly, WNP also used a “Sensitive Customers” variable which consists of the two manufacturing customers comprising of three accounts (in the rate class of GS 1000-4999kW.) These customers energy usage make-up a significant portion of WNP’s total annual billed volumes; for example these accounts in 2014 kWh billed (without losses) was 38,287,673 with WNP’s 2014 kWh billed for the whole year being 104,009,438, meaning these customers accounted for 37% of the annual kWh total.) These customers are also “sensitive” to economic climate, as demonstrated in the 2008/2009 Global Recession when they altered their load and shift patterns.

In WNP’s 2012 Cost of Service rate application (EB-2011-0249), Exhibit 3 / Tab 2 / Schedule 1 described how the utility “*removed data for three specific accounts from the analysis due to their negative effect on the results of the regression analysis. All three accounts are in the GS>1000-4999KW customer class and Wellington North Power Inc. used experience and knowledge of these customers’ historical loads to predict their usage for the [2011] Bridge and [2012] Test Years*”.

In this rate application, WNP has included the two customers in the regression analysis and created a variable based on their monthly billed kWh (without losses) as shown in the table below:

Table 3.16: Two “Sensitive” Customers Monthly Billed kWh (without losses)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	2,182,080	2,472,594	2,589,945	2,456,376	1,386,993	2,212,167	2,435,984	2,658,660	2,663,297	3,591,070
February	1,993,852	2,310,391	2,252,054	2,386,869	1,278,828	1,973,695	2,335,707	2,606,186	2,593,943	3,355,559
March	2,205,155	1,992,557	2,516,372	2,419,561	1,599,507	2,333,570	2,656,454	2,834,712	3,306,865	3,697,222
April	2,114,232	2,226,306	2,339,264	2,444,892	1,681,721	2,176,410	2,129,747	2,633,018	3,534,195	3,495,243
May	2,253,270	2,485,845	1,984,082	2,238,851	1,481,789	2,343,664	2,308,697	2,706,007	3,535,885	3,735,523
June	2,281,684	2,396,646	2,548,910	2,213,271	1,480,618	2,300,956	2,359,470	2,685,183	3,252,316	3,380,284
July	2,007,717	1,843,099	2,218,405	1,931,221	1,533,239	2,325,624	2,118,772	2,558,193	3,233,446	3,371,786
August	2,642,122	2,395,515	2,709,924	2,204,584	1,842,378	2,526,908	2,641,948	2,997,632	3,561,255	3,631,166
September	2,443,235	2,221,638	2,380,021	1,694,540	2,152,613	2,397,724	2,553,255	2,565,639	3,380,657	3,632,294
October	2,551,307	2,363,022	2,409,927	2,236,506	2,250,006	2,469,206	2,742,886	2,767,217	3,717,267	3,765,533
November	2,348,015	2,449,494	2,296,536	1,816,146	2,214,423	2,399,219	2,504,779	2,460,499	3,481,017	2,869,684
December	1,979,574	2,072,506	1,866,638	1,318,681	1,953,857	2,171,049	2,369,547	2,224,568	3,058,379	2,503,707
Total kWh Adjustment	27,002,242	27,229,613	28,112,078	25,361,499	20,855,974	27,630,193	29,157,246	31,697,514	39,318,522	41,029,070

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

of the correlation analysis for each scenario can also be found at Tab 6.1 entitled Regression Scenarios.

To project the adjusted wholesale purchases for the 2015 Bridge Year and 2016 Test Year, the model uses for the following mathematical conventions:

Variable	Convention Applied to 2015 Bridge and 2016 Test Years
a) Heating and Cooling:	Used 10-year monthly average applied to both 2015 and 2016
b) Number of days per month:	Identifies seasonal peaks and less/more days in calendar months
c) Number of Peak Hours:	16 hours x number of business days in any given month excluding weekends and holidays
d) Employment Factor:	Used the average based on 2013 and 2014 actuals. (Using an average of three or more years distorts the figures to below 2014 actuals, largely because of the years 2008 & 2009 due to the recession, and steady recovery in years 2010 & 2011)
e) Sensitive customers:	Used a 10-year trend on the actual monthly billed kWh (without losses) values. A 10-year trend was used rather than a 10 year average as per note below.

Note:

Regarding variable (e) Sensitive customers, WNP used a 10 year trend of the actual monthly billed kWh (without losses) data for 2005 to 2014 for the two “sensitive” customers. By using the trending method, this lessened the impact of historic recession data (2008 to 2010) influencing the predicted purchases for the Bridge Year of 2015 and Test Year of 2016.

The table below shows the implications of applying a 10 year average to the actual monthly billed kWh (without losses) data for 2005 to 2014 for the two “sensitive” customers. Using the 10-year average, the predicted kWh purchases are 105,761,910 kWh and 105,964,177 kWh for 2015 Bridge Year and 2016 Test Year which, in WNP’s is a low and unreasonable forecast. By applying the 10 year trend, the forecast is more reasonable and acceptable.

Table 3.17: Comparison of applying 10-year Trend and 10-year Average to Two “Sensitive” Customers Purchased kWh Purchased Variable

	Heating Degree Day	Cooling Degree Day	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased kWh)	Predicted Purchases	
Jan-15	170.30	16.10	31	352	653.50	1,931,221.32	9,786,540	
Feb-15	55.50	46.30	31	320	656.20	2,204,584.23	8,974,531	
Mar-15	34.00	43.40	30	336	658.80	1,694,540.21	9,492,505	
Apr-15	26.30	57.20	31	352	661.50	2,236,505.91	8,504,754	
May-15	83.90	29.40	30	304	664.70	1,816,145.52	8,321,963	
Jun-15	189.20	15.20	31	336	662.10	1,318,681.40	8,289,130	
Jul-15	525.90	0.00	31	336	651.40	1,386,993.43	8,412,349	
Aug-15	696.20	0.00	28	304	639.40	1,278,827.90	8,459,016	
Sep-15	693.80	0.00	31	352	627.60	1,599,507.15	8,238,816	
Oct-15	736.00	0.00	30	320	623.90	1,681,721.41	8,869,351	
Nov-15	698.00	0.00	31	320	622.70	1,481,788.71	8,967,661	2015 Total
Dec-15	299.10	1.40	30	352	632.10	1,480,617.89	9,445,293	105,761,910
Jan-16	170.30	16.10	31	352	637.90	1,533,239.47	9,711,536	
Feb-16	55.50	46.30	31	320	643.00	1,842,378.49	9,176,798	
Mar-16	34.00	43.40	30	336	643.30	2,152,613.22	9,417,501	
Apr-16	26.30	57.20	31	336	644.90	2,250,006.43	8,579,758	
May-16	83.90	29.40	30	320	642.20	2,214,423.39	8,396,967	
Jun-16	189.20	15.20	31	352	639.10	1,953,856.93	8,289,130	
Jul-16	525.90	0.00	31	320	633.60	2,212,166.71	8,337,345	
Aug-16	696.20	0.00	28	304	630.50	1,973,695.14	8,609,025	
Sep-16	693.80	0.00	31	368	627.50	2,333,569.57	8,238,816	
Oct-16	736.00	0.00	30	320	631.60	2,176,410.28	8,794,346	
Nov-16	698.00	0.00	31	320	641.50	2,343,664.32	9,042,666	2016 Total
Dec-16	299.10	1.40	30	352	657.20	2,300,956.26	9,370,289	105,964,177
						10 yr Average		
	Heating Degree Day	Cooling Degree Day	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased kWh)	Predicted Purchases	
Jan-15	43.00	48.10	31	320	657.20	1,984,082.33	10,199,223	
Feb-15	110.20	7.50	30	336	655.20	2,548,909.59	9,498,732	
Mar-15	345.30	0.00	31	368	653.30	2,218,405.13	9,864,342	
Apr-15	396.20	0.00	31	336	649.30	2,709,923.62	8,938,138	
May-15	698.60	0.00	28	304	651.20	2,380,020.99	8,745,562	
Jun-15	791.50	0.00	31	368	657.10	2,409,926.87	8,735,200	
Jul-15	680.10	0.00	30	320	666.40	2,296,535.83	8,984,058	
Aug-15	504.70	0.00	31	336	671.50	1,866,637.68	8,779,174	
Sep-15	273.20	1.00	30	352	681.80	2,456,376.39	8,687,029	
Oct-15	148.20	24.00	31	320	691.50	2,386,869.04	9,211,344	
Nov-15	55.23	18.70	31	368	694.90	2,419,561.23	9,482,811	2015 Total
Dec-15	12.70	89.70	30	336	688.60	2,444,891.81	10,189,287	111,314,900
Jan-16	43.00	48.10	31	320	682.20	1,984,082.33	10,124,219	
Feb-16	110.20	7.50	30	352	677.00	2,548,909.59	9,701,000	
Mar-16	345.30	0.00	31	336	676.60	2,218,405.13	9,789,338	
Apr-16	396.20	0.00	31	336	670.90	2,709,923.62	9,013,142	
May-16	698.60	0.00	29	304	668.70	2,380,020.99	8,820,566	
Jun-16	791.50	0.00	31	352	666.00	2,409,926.87	8,735,200	
Jul-16	680.10	0.00	30	304	667.40	2,296,535.83	8,909,054	
Aug-16	504.70	0.00	31	352	672.10	1,866,637.68	8,929,183	
Sep-16	273.20	1.00	30	336	678.40	2,456,376.39	8,687,029	
Oct-16	148.20	24.00	31	336	682.00	2,386,869.04	9,136,339	
Nov-16	55.23	18.70	31	352	678.50	2,419,561.23	9,557,815	2016 Total
Dec-16	12.70	89.70	30	304	671.90	2,444,891.81	10,114,283	111,517,168
						10 yr Trend		

1 The table below shows the sources of data used for the variables used in WNP's Load
2 Forecast:

3 **Table 3.18: Origin of Variables:**

Variable	Contention Applied to Bridge and Test Year
a) Heating and Cooling Days:	Environment Canada (http://climate.weather.gc.ca/) for Mount Forest weather station
b) Number of days per month:	Used actual count of days per month for 2015 and 2016
c) Number of Peak Hours:	Used actual count of days per month for 2015 and 2016
d) Employment Factor:	Stats Canada (http://www5.statcan.gc.ca/cansim/a47) using CANSIM Table 282-01222 for the region of "Kitchener-Waterloo-Barrie, Ontario"
e) Sensitive customers:	Used utility actual data

4 In preparing its Load Forecast, WNP also considered but rejected the following variables:

- 5 a) Customer / Connection Count – this was excluded because the variable did not yield
6 particularly significant results although it did slightly improve the R Square [*Scenario 5*];
7 b) GDP this was also excluded because the variable did not yield particularly significant results
8 although it did slightly improve the R Square [*Scenario 6*]; and
9 c) CDM - this was excluded because the variable a positive coefficient of 0.78; this variable
10 should yield a negative coefficient since CDM should reduce usage [*Scenario 7*].

11 The eight scenarios tested by the WNP and their outcomes can be found in Appendix 3B –
12 "Regression Scenarios Performed."

13

Ex.3/Tab 1/Sch.9 - Regression Results

Table 3.19 below presents the regression results used to determine the load forecast:

Table 3.19: Correlation/Regression Results

<i>Regression Statistics</i>						
Multiple R	94.47%					
R Square	89.25%					
Adjusted R Square	88.68%					
Standard Error	255610.2042					
Observations	120					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	6	6.13268E+13	1.02211E+13	156.4380253	2.46941E-52	
Residual	113	7.38303E+12	65336576513			
Total	119	6.87098E+13				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	(3588861.8441)	1277978.547	(2.808233247)	0.005870299	-6120767.841	-1056955.847
Heating Degree Da	2626.8640	117.5957243	22.338091051	2.92267E-43	2393.885657	2859.842336
Cooling Degree Da	8088.4261	1264.580622	6.396133201	3.72007E-09	5583.06381	10593.78839
Number of Days in	127263.5509	31975.41157	3.980044185	0.00012212	63914.49348	190612.6083
Number of Peak Hc	4687.7598	1425.236522	3.289110037	0.001340451	1864.109145	7511.410357
Regional Employm	6161.9666	1586.58174	3.883800247	0.00017364	3018.661971	9305.271134
Sensitive Customer	0.6487	0.065218188	9.946886171	4.01315E-17	0.519508898	0.777926884

The resulting regression equation yields an adjusted R-squared of 88.68%. When actual annual wholesale values are compared to annual values predicted by the regression equation, the mean absolute percentage error (MAPE) is 1.54%.

The prediction formula has the following statistical results:

Table 3.20: Regression Results

Statistic	Value
R Square	89.25%
Adjusted R Sq	88.68%
F Test	156.44
T-stats by Coefficient:	
a) Intercept	(2.808)
b) Heating Degree Days	22.338
c) Colling Degree Days	6.396
d) Number of Days in Month	3.980
e) Number of Peak Hours	3.289
f) Regional Employment	3.884
g) Sensitive Customers	9.947

Once WNP calculated its preferred Regression Results, the Load Forecast model then uses the coefficients from the regression results to adjust the wholesale purchases. Table 3.21 provides a graph illustrating the difference between Actual Purchased kWh versus Adjusted kWh and indicates the resulting prediction equation to be reasonable:

Table 3.21: Actual Purchased kWh versus Adjusted kWh

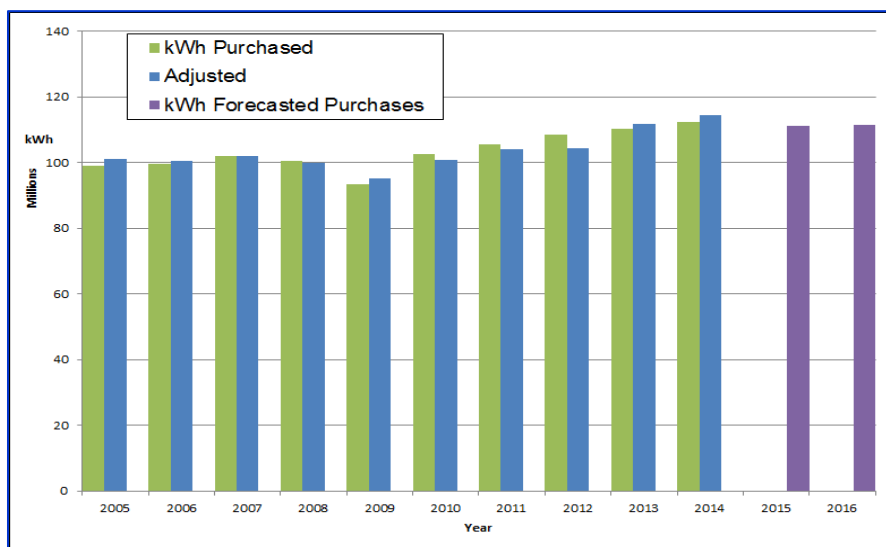


Table 3.22 below, demonstrates the results of this adjustment comparing the Actual Purchased kWh and the Adjusted kWh wholesale purchases:

Table 3.22: Actual Purchased kWh versus Adjusted kWh

Year	kWh Purchased	Predicted	Difference
2005	99,177,534.70	101,022,119.00	1.86%
2006	99,726,774.81	100,486,423.95	0.76%
2007	101,905,199.30	102,018,514.07	0.11%
2008	100,510,260.57	99,854,869.43	0.65%
2009	93,415,381.52	95,317,999.79	2.04%
2010	102,608,264.83	100,819,380.40	1.74%
2011	105,625,698.07	104,006,389.36	1.53%
2012	108,411,816.52	104,474,814.18	3.63%
2013	110,314,059.50	111,813,624.29	1.36%
2014	112,420,511.95	114,301,367.31	1.67%
2015 Weather Normal		111,314,900.28	
2016 Weather Normal		111,517,167.98	
2016 Weather Normal - 10 year average		111,517,167.98	
2016 Weather Normal - 20 year average		111,554,925.00	
2016 Weather Normal - 20 year trend		111,460,019.00	

The weather normalized amount for 2016 is determined by using 2016 dependent variables in the prediction formula on a monthly basis together with the average monthly heating degree days and cooling degree days that occurred from January 2005 to December 2014 (i.e. ten years). The 2016 weather normalized 10 year average value represents the average heating degree days and cooling degree days that occurred from January 2005 to December 2014. The 2016 weather normalized 20 year trend value reflects the average in monthly heating degree days and cooling degree days that occurred from January 1995 to December 2014.

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

The tables below illustrate the effect on the 2016 Test Year Load Forecast by using a 10 year average, a 20 year average and a 20-year trend to weather normalized wholesale purchases is presented in the Tables below:

Table 3.23: Forecast using a Ten-Year average Weather Normalization

	Heating Degree Days (10 year average)	Cooling Degree Days (10 year average)	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased kWh)	Adjusted Wholesale kWh
Jan-15	773.58	0.00	31	336	685.50	3,101,068.16	10,199,223
Feb-15	712.64	0.00	28	304	682.45	3,116,766.49	9,498,732
Mar-15	617.95	0.34	31	352	681.90	3,129,385.76	9,864,342
Apr-15	365.99	0.26	30	320	682.40	3,145,564.35	8,938,138
May-15	186.04	12.07	31	320	690.15	3,160,340.31	8,745,562
Jun-15	57.06	40.56	30	352	700.55	3,177,551.19	8,735,200
Jul-15	23.23	68.02	31	336	708.95	3,195,440.15	8,984,058
Aug-15	28.30	48.40	31	320	710.05	3,208,867.76	8,779,174
Sep-15	113.44	14.79	30	336	708.85	3,233,083.89	8,687,029
Oct-15	292.26	2.49	31	336	710.95	3,254,470.74	9,211,344
Nov-15	475.49	0.00	30	320	710.50	3,278,085.23	9,482,811
Dec-15	675.59	0.00	31	336	704.85	3,298,717.81	10,189,287
2015 Total							111,314,900
Jan-16	773.58	0.00	31	320	685.50	3,101,068.16	10,124,219
Feb-16	712.64	0.00	29	320	682.45	3,116,766.49	9,701,000
Mar-16	617.95	0.34	31	336	681.90	3,129,385.76	9,789,338
Apr-16	365.99	0.26	30	336	682.40	3,145,564.35	9,013,142
May-16	186.04	12.07	31	336	690.15	3,160,340.31	8,820,566
Jun-16	57.06	40.56	30	352	700.55	3,177,551.19	8,735,200
Jul-16	23.23	68.02	31	320	708.95	3,195,440.15	8,909,054
Aug-16	28.30	48.40	31	352	710.05	3,208,867.76	8,929,183
Sep-16	113.44	14.79	30	336	708.85	3,233,083.89	8,687,029
Oct-16	292.26	2.49	31	320	710.95	3,254,470.74	9,136,339
Nov-16	475.49	0.00	30	336	710.50	3,278,085.23	9,557,815
Dec-16	675.59	0.00	31	320	704.85	3,298,717.81	10,114,283
2016 Total							111,517,168

Table 3.24: Forecast Using a Twenty-Year Weather Normalization

	Heating Degree Days (20 year average)	Cooling Degree Days (20 year average)	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased kWh)	Adjusted Wholesale kWh
Jan-15	785.44	0.00	31	336	685.50	3,101,068.16	10,230,396
Feb-15	703.10	0.00	28	304	682.45	3,116,766.49	9,473,688
Mar-15	620.85	0.17	31	352	681.90	3,129,385.76	9,870,595
Apr-15	383.81	0.40	30	320	682.40	3,145,564.35	8,986,047
May-15	201.46	8.94	31	320	690.15	3,160,340.31	8,760,766
Jun-15	65.88	35.87	30	352	700.55	3,177,551.19	8,720,399
Jul-15	27.94	59.02	31	336	708.95	3,195,440.15	8,923,670
Aug-15	33.46	43.93	31	320	710.05	3,208,867.76	8,756,572
Sep-15	118.11	14.48	30	336	708.85	3,233,083.89	8,696,765
Oct-15	302.21	1.60	31	336	710.95	3,254,470.74	9,230,243
Nov-15	483.07	0.00	30	320	710.50	3,278,085.23	9,502,720
Dec-15	679.98	0.00	31	336	704.85	3,298,717.81	10,200,797
2015 Total							111,352,657
Jan-16	785.44	0.00	31	320	685.50	3,101,068.16	10,155,392
Feb-16	703.10	0.00	29	320	682.45	3,116,766.49	9,675,956
Mar-16	620.85	0.17	31	336	681.90	3,129,385.76	9,795,591
Apr-16	383.81	0.40	30	336	682.40	3,145,564.35	9,061,051
May-16	201.46	8.94	31	336	690.15	3,160,340.31	8,835,770
Jun-16	65.88	35.87	30	352	700.55	3,177,551.19	8,720,399
Jul-16	27.94	59.02	31	320	708.95	3,195,440.15	8,848,666
Aug-16	33.46	43.93	31	352	710.05	3,208,867.76	8,906,580
Sep-16	118.11	14.48	30	336	708.85	3,233,083.89	8,696,765
Oct-16	302.21	1.60	31	320	710.95	3,254,470.74	9,155,239
Nov-16	483.07	0.00	30	336	710.50	3,278,085.23	9,577,724
Dec-16	679.98	0.00	31	320	704.85	3,298,717.81	10,125,793
2016 Total							111,554,925

Table 3.25: Forecast Using a Twenty Year Trend Weather Normalization

	Heating Degree Day	Cooling Degree Day	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased kWh)	Adjusted Wholesale (kWh)
Jan-16	790.89	0.00	31	320	685.50	3,101,068.16	10,169,685
Feb-16	716.34	0.00	29	320	682.45	3,116,766.49	9,710,731
Mar-16	608.20	0.53	31	336	681.90	3,129,385.76	9,765,316
Apr-16	357.33	0.36	30	336	682.40	3,145,564.35	8,991,222
May-16	170.46	14.26	31	336	690.15	3,160,340.31	8,797,391
Jun-16	59.71	37.36	30	352	700.55	3,177,551.19	8,716,254
Jul-16	22.54	70.35	31	320	708.95	3,195,440.15	8,926,110
Aug-16	28.68	48.59	31	352	710.05	3,208,867.76	8,931,707
Sep-16	108.24	17.56	30	336	708.85	3,233,083.89	8,695,737
Oct-16	289.86	1.82	31	320	710.95	3,254,470.74	9,124,649
Nov-16	465.89	0.00	30	336	710.50	3,278,085.23	9,532,594
Dec-16	669.63	0.00	31	320	704.85	3,298,717.81	10,098,621
2016 Total							111,460,019

Ex.3/Tab 1/Sch.10 - Determination of Customer Forecast

WNP has used a simple geometric mean function to determine the forecasted number of customers of the 2015 Bridge Year and 2016 Test Year. The geometric mean is more appropriate to use when dealing with percentages and rates of change. Although the formula is somewhat simplistic, it is reasonably representative of WNP's steady customer growth. The geometric mean results were analyzed by WNP and then further adjusted for known particulars. Historic customer counts and projected customer counts for the 2015 Bridge Year and the 2016 Test Year are presented in Table 3.26 below.

Table 3.26: Customer Forecast

Date	Residential		General Service < 50 kW		General Service > 50 kW - 999 kW		General Service > 1000 kW - 4999 kW		Street Lights		Sentinel Lights		Unmetered Scattered Load		Total Customers	
	Customers	Growth Rate	Customers	Growth Rate	Customers	Growth Rate	Customers or Connections	Growth Rate	Connections	Growth Rate	Connections	Growth Rate	Connections	Growth Rate	Customers & Connections	Growth Rate
2005	2,869		462		40		5		942		23		13		4,354	
2006	2,923	1.0191	455	0.9845	38	0.9705	5	1.0000	942	1.0000	23	1.0000	13	0.9936	4,400	1.0106
2007	2,959	1.0121	455	1.0004	39	1.0087	4	0.8833	942	1.0000	24	1.0290	10	0.7355	4,432	1.0074
2008	3,002	1.0147	464	1.0183	41	1.0581	4	0.9057	942	1.0000	34	1.4472	3	0.3333	4,490	1.0130
2009	3,037	1.0117	468	1.0101	43	1.0508	5	1.2500	900	0.9554	31	0.8905	2	0.6842	4,486	0.9991
2010	3,073	1.0117	479	1.0230	40	0.9207	5	1.0000	900	1.0000	28	0.9180	1	0.5769	4,526	1.0088
2011	3,103	1.0099	478	0.9974	38	0.9664	5	1.0000	899	0.9989	28	1.0000	1	1.1333	4,553	1.0059
2012	3,126	1.0074	478	1.0000	38	0.9826	5	1.0000	898	0.9989	28	1.0000	1	0.8824	4,574	1.0047
2013	3,161	1.0109	474	0.9927	39	1.0221	5	1.0000	900	1.0017	28	1.0000	2	1.2667	4,607	1.0073
2014	3,190	1.0095	473	0.9975	38	0.9957	5	1.0000	905	1.0061	28	1.0000	1	0.7368	4,641	1.0073
Geomean		1.0119		1.0026		0.9964		1.0000		0.9956		1.0221		0.7650		1.0071
2015	3,228		474		38		5		901		29		1		4,647	
2016	3,267		476		38		5		897		29		1		4,682	
In the section below, LDCs can adjust the computed customer count for the Bridge and Test Year for special circumstance such as new subdivision or loss of customer or other utility specific reasons.																
Adjusted															Adjusted	
2015	3,220	1.0093		0.0000		0.0000			905	1.0000	29	1.0357		0.0000	4,154	0.8951
2016	3,251	1.0096		0.0000		0.0000			905	1.0000	29	1.0000		0.0000	4,185	1.0075
Note: The model computes an average customer count. Utility may chose to overwrite the customer/connection count if a year end count is more appropriate.																
FINAL ADJUSTED NUMBERS																
2015	3,220	1.0093	474	1.0026	38	0.9964	5	1.0000	905	1.0000	29	1.0357	1	0.7650	4,671	0.8951
2016	3,251	1.0096	476	1.0026	38	0.9964	5	1.0000	905	1.0000	29	1.0000	1	0.7650	4,704	1.0075

Note:

Number of customers / connections is based on the count at the year-end (i.e. 31st December)

Residential Customers:

WNP have observed that that customer numbers in the Residential class steadily increasing at an average of just below 1% (0.94%) from 2010 to 2014, as illustrated in the above Table 3.4 “Customer / Connection Projections”. However, in the table above, Table 3.26, “Customer Forecast”, using the 10-tyear geomean of 1.0194 would result in customer projections of 3,228 and 3,267 for the 2015 Bridge Year and 2016 Test Year respectively, an increase of 1.19%. In WNP’s opinion, this increase is slightly high and therefore WNP proposes that the geomean for the last four years, 2010 to 2014 (not ten years – 2005-2014) which results in Residential customer projections of 3,220 and 3,251 in 2015 and 2016 respectively. WNP has used these revised growth numbers in its Load Forecast.

General Service <50kW:

WNP has used the geomean average of 1.0026 derived from the ten year actuals (2005 to 2014) and proposes no revisions to the customer growth projections shown in Table 3.26 above for this customer class.

General Service 50-999kW:

WNP has used the geomean average of 0.9964 derived from the ten year actuals (2005 to 2014) and proposes no revisions to the customer growth projections shown in Table 3.26 above for this customer class.

General Service 1000-4999kW:

WNP has used the geomean average of 1.0000 derived from the ten year actuals (2005 to 2014) and proposes no revisions to the customer growth projections shown in Table 3.26 above for this customer class.

Street Lights:

In the above table, applying the geomean of 0.9956 results to a reduction of connections; i.e. to 901 connections and 897 connections for the 2015 Bridge Year and 2016 Test Year respectively. In WNP’s opinion, the number of connections is not forecast to reduce and therefore has applied the 2014 actual of 905 connections for its projection for 2015 Bridge Year and 2016 Test Year for this rate class.

Sentinel Lights:

WNP has used the geomean average of 1.0221 derived from the ten year actuals (2005 to 2014) and proposes no revisions to the customer growth projections shown in Table 3.26 above for this customer class.

Unmetered Scattered Load:

WNP has used the geomean average of 0.7650 derived from the ten year actuals (2005 to 2014) and proposes no revisions to the customer growth projections shown in Table 3.26 above for this customer class.

Ex.3/Tab 1/Sch.11 - Determination of Weather Normalized Forecast

The difference between non-normalized and normalized forecast is assumed to be the amount related to moving the forecast to a weather normal basis. This difference will be assigned to those rate classes that are weather sensitive. WNP used the weather normalization work completed by Hydro One for WNP for its' 2007 Cost Allocation Study as a starting point and has shown its weather sensitivity by rate class below in Table 3-27. WNP has applied a weather sensitivity factor of 83%, which is the mid-point between the 100% HONI reported for these two classes and the GS 50-999KW sensitivity factor of 65%. None of the other rate classes were assumed to be weather sensitive.

Table 3.27: Weather Sensitive Customers

Weather Sensitivity						
Residential	General Service < 50 kW	General Service 50 to 999 kW	General Service 1000 to 4,999 kW	Street Lights	Sentinel Lights	Unmetered Loads
82.5%	82.5%	65%	0%	0%	0%	0%

Table 3-28 outlines how the weather sensitive rate classes have been adjusted to align the non-normalized forecast with the normalized forecast.

Table 3.28: Alignment of Non-Normalized Forecast to Weather Normalized Forecast

Non-Normalized Weather Billed Energy Forecast (kWh)							
	Residential	General Service < 50 kW	General Service 50 to 999 kW	General Service 1000 to 4999 kW	Street Lights	Sentinel Lights	Unmetered Scattered Load
2015 Bridge Yr	25,959,809	11,860,353	14,541,100	51,432,197	723,044	24,275	4,164
2016 Test Yr	25,978,376	11,842,863	13,524,485	51,432,197	725,392	23,128	3,024
Adjustment for Weather (kWh)							
	Residential	General Service < 50 kW	General Service 50 to 999 kW	General Service 1000 to 4999 kW	Street Lights	Sentinel Lights	Unmetered Scattered Load
2015 Bridge Yr	(201,385)	(92,008)	(88,876)	0	0	0	0
2016 Test Yr	440,760	200,931	180,788	0	0	0	0
Weather Normalized Weather Billed Energy Forecast (kWh)							
	Residential	General Service < 50 kW	General Service 50 to 999 kW	General Service 1000 to 4999 kW	Street Lights	Sentinel Lights	Unmetered Scattered Load
2015 Bridge Yr	25,758,424	11,768,345	14,452,224	51,432,197	723,044	24,275	4,164
2016 Test Yr	26,419,136	12,043,794	13,705,273	51,432,197	725,392	23,128	3,024

Ex.3/Tab 1/Sch.12 - Load Forecast by Class.

There are four rate classes that charge volumetric distribution on per a kW basis. These include GS >50-999 kW, GS >1000-4999 kW, Street Lighting, and Sentinel Lighting. As a result, the energy forecast for these classes needs to be converted to a kW basis for rate setting purposes. The forecast of kW for these rate classes is based on an average analysis of the historical ratio of kW to kWhs and applying this ratio to the forecasted kWh to produce the required KW. Table 3-29 summarizes the historical annual demand units by applicable rate class:

Table 3.29: Historic Annual kW by Class

	Year	General Service 50 to 999 kW	General Service 1000 to 4,999 kW	Street Lights	Sentinel Lights	Total
kW	2005	45,546	86,247	1,998	109	133,901
	2006	51,134	90,065	2,010	108	143,317
	2007	72,261	68,832	2,007	106	143,206
	2008	73,818	67,494	2,048	103	143,463
	2009	64,960	72,545	2,026	93	139,624
	2010	62,105	83,945	1,981	88	148,119
	2011	65,571	85,844	1,964	82	153,460
	2012	67,391	89,307	1,963	72	158,734
	2013	53,734	103,015	1,978	72	158,799
	2014	47,684	110,732	1,983	71	160,470

WNP has adopted the average analysis approach to provide a forecast of kW for the applicable rate classes as shown in Table 3-30:

Table 3.30: kW / kWh Ratio based on 4-Year Average

	Year	General Service 50 to 999 kW	General Service 1000 to 4,999 kW	Street Lights	Sentinel Lights	Total
kW	2005	45,546	86,247	1,998	109	133,901
	2006	51,134	90,065	2,010	108	143,317
	2007	72,261	68,832	2,007	106	143,206
	2008	73,818	67,494	2,048	103	143,463
	2009	64,960	72,545	2,026	93	139,624
	2010	62,105	83,945	1,981	88	148,119
	2011	65,571	85,844	1,964	82	153,460
	2012	67,391	89,307	1,963	72	158,734
	2013	53,734	103,015	1,978	72	158,799
	2014	47,684	110,732	1,983	71	160,470
kWh	2005	30,016,678	24,099,432	728,596	39,379	54,884,085
	2006	29,919,925	25,721,661	731,832	38,909	56,412,327
	2007	24,233,832	33,212,587	727,707	38,081	58,212,207
	2008	25,169,769	30,725,657	748,942	36,606	56,680,974
	2009	20,973,876	27,961,217	738,099	33,138	49,706,330
	2010	20,890,084	37,885,731	720,757	31,636	59,528,208
	2011	21,438,642	39,368,359	713,439	28,024	61,548,464
	2012	21,823,125	42,470,244	715,663	26,093	65,035,125
	2013	17,140,222	48,528,024	718,528	26,093	66,412,867
	2014	15,634,133	51,432,197	720,704	25,478	67,812,512
kW / kWh	2005	0.15%	0.36%	0.27%	0.28%	
	2006	0.17%	0.35%	0.27%	0.28%	
	2007	0.30%	0.21%	0.28%	0.28%	
	2008	0.29%	0.22%	0.27%	0.28%	
	2009	0.31%	0.26%	0.27%	0.28%	
	2010	0.30%	0.22%	0.27%	0.28%	
	2011	0.31%	0.22%	0.28%	0.29%	
	2012	0.31%	0.21%	0.27%	0.28%	
	2013	0.31%	0.21%	0.28%	0.28%	
	2014	0.31%	0.22%	0.28%	0.28%	
10 year Average		0.28%	0.25%	0.27%	0.28%	
4 year Average		0.31%	0.21%	0.28%	0.28%	
2015 Bridge Yr	kWh	14,360,704	51,108,488	723,044	24,275	
2016 Test Year	kWh	13,489,914	50,613,209	725,392	23,128	

WNP divided the historical (10 years) actual kW demand by the kWh for each rate class to give a kW to kWh ratio as illustrated in the above table. Upon reviewing the 10-year average kW to kWh ratios for each rate class, WNP elected to adopt a ratio based an average of the most recent 4 years (i.e. 2010 to 2014 data) because this reflects reduced kW demand due to CDM programs delivered and implemented during this period. The table below illustrates the 2015 Bridge Year and 2016 Test Year kW volumes for the four rate classes as derived from using the 4-year average;

Table 3.31: kW / kWh Ratio based on 4-Year Average

Year	Unit	General Service 50 to 999 kW	General Service 1000 to 4,999 kW	Street Lights	Sentinel Lights
2015 Bridge Year	kWh	14,360,704	51,108,488	723,044	24,275
2016 Test Year	kWh	13,489,914	50,613,209	725,392	23,128
4 year Average (kW/kWh ratio)		0.31%	0.21%	0.28%	0.28%
2015 Bridge Year	kW	44,272	109,361	1,988	68
2016 Test Year	kW	41,588	108,301	1,995	65

Note: As the CDM Adjustment has been applied to kWh and the kWh is then being converted to kW, the kW already reflects the CDM Adjustment and therefore, the utility has not applied any additional CDM adjustments to its forecasted kW. Ex.3/Tab 2/Sch.2 explains the allocation of CDM energy volumes.

Ex.3/Tab 1/Sch.13 - Final Normalized Load Forecast

Table 3.32 below illustrates the historical and projected weather normalized Load Forecast by customer class.

Table 3.32: Final Load Forecast (not CDM adjusted)

Wellington North Power Inc. Weather Normal Load Forecast for 2016 Rate Application EB-2015-0110												
	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Weather Normal	2016 Weather Normal
Actual kWh Purchases	99,177,535	99,726,775	101,905,199	100,510,261	93,415,382	102,608,265	105,625,698	108,411,817	110,314,060	112,420,512		
Predicted kWh Purchases	101,022,119	100,486,424	102,018,514	99,854,869	95,318,000	100,819,380	104,006,389	104,474,814	111,813,624	114,301,367	111,314,900	111,517,168
% Difference	1.9%	0.8%	0.1%	-0.7%	2.0%	-1.7%	-1.5%	-3.6%	1.4%	1.7%		
CDM Purchase Adjustment						0	0	0	0	0	0	0
Predicted kWh Purchases after CDM											111,314,900	111,517,168
Billed kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	104,162,674	104,351,946
By Class												
Residential												
Customers	2,869	2,923	2,959	3,002	3,037	3,073	3,103	3,126	3,161	3,190	3,220	3,251
kWh	25,217,181	25,227,824	25,023,794	25,142,788	25,158,787	25,200,723	25,802,534	24,795,447	25,357,835	25,941,256	25,758,424	26,419,136
General Service < 50 kW												
Customers	462	455	455	464	468	479	478	478	474	473	474	476
kWh	12,036,675	11,886,853	11,930,026	11,678,034	11,573,828	11,323,787	11,781,553	11,710,253	12,012,886	11,877,868	11,768,345	12,043,794
General Service 50 to 999 kW												
Customers	40	38	39	41	43	40	38	38	39	38	38	38
kWh	30,016,678	29,919,925	24,233,832	25,169,769	20,973,876	20,890,084	21,438,642	21,823,125	17,140,222	15,634,133	14,452,224	13,705,273
kW	45,546	51,134	72,261	73,818	64,960	62,105	65,571	67,391	53,734	47,684	44,555	42,252
General Service 1000 to 4,999 kW												
Customers	5	5	4	4	5	5	5	5	5	5	5	5
kWh	24,099,432	25,721,661	33,212,587	30,725,657	27,961,217	37,885,731	39,368,359	42,470,244	48,528,024	51,432,197	51,432,197	51,432,197
kW	86,247	90,065	68,832	67,494	72,545	83,945	85,844	89,307	103,015	110,732	110,053	110,053
Street Lights												
Customers	942	942	942	942	900	900	899	898	900	905	905	905
kWh	728,596	731,832	727,707	748,942	738,099	720,757	713,439	715,663	718,528	720,704	723,044	725,392
kW	1,998	2,010	2,007	2,048	2,026	1,981	1,964	1,963	1,978	1,983	1,988	1,995
Sentinel Lights												
Customers	23	23	24	34	31	28	28	28	28	28	29	29
kWh	39,379	38,909	38,081	36,606	33,138	31,636	28,024	26,093	26,093	25,478	24,275	23,128
kW	109	108	106	103	93	88	82	72	72	71	68	65
Unmetered Loads												
Connections	13	13	10	3	2	1	1	1	2	1	1	1
kWh	101,904	101,877	82,586	20,724	7,536	9,732	7,536	7,563	5,733	5,733	4,164	3,024
Total												
Customer/Connections	4,354	4,400	4,432	4,490	4,486	4,526	4,553	4,574	4,607	4,641	4,672	4,704
kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	104,162,674	104,351,946
kW from applicable classes	133,901	143,317	143,206	143,463	139,624	148,119	153,460	158,734	158,799	160,470	156,665	154,365

Impact and Persistence from Historical CDM Programs

Ex.3/Tab 2/Sch.1 - Load Forecast CDM Adjustment Work Form

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

The schedule to achieve CDM targets are presented in the Tables below:

Table 3.33: Utility specific 2011-2014 CDM target
[OEB Appendix App_2-LF_CDM]

4 Year (2011-2014) kWh Target:					
100,000					
	2011	2012	2013	2014	Total
2011 CDM Programs	3.43%	3.43%	3.43%	2.87%	13.15%
2012 CDM Programs		14.81%	14.81%	14.81%	44.42%
2013 CDM Programs			4.28%	4.25%	8.53%
2014 CDM Programs				7.15%	7.15%
Total in Year	3.43%	18.23%	22.51%	29.07%	73.24%
kWh					
2011 CDM Programs	154,847.62	154,847.62	154,847.62	129,790.46	594,333.32
2012 CDM Programs		669,219.89	669,219.89	669,219.89	2,007,659.66
2013 CDM Programs			193,560.28	191,919.94	385,480.22
2014 CDM Programs				323,197.12	323,197.12
Total in Year	154,847.62	824,067.51	1,017,627.79	1,314,127.40	3,310,670.31

Table 3.34: 2015-2020 CDM Program: 2015 - First year of the current CDM plan

6 Year (2015-2020) kWh Target:							
5,900,000							
	2015	2016	2017	2018	2019	2020	Total
%							
2015 CDM Programs	16.67%						16.67%
2016 CDM Programs		16.67%					16.67%
2017 CDM Programs			16.67%				16.67%
2018 CDM Programs				16.67%			16.67%
2019 CDM Programs					16.67%		16.67%
2020 CDM Programs						16.67%	16.67%
Total in Year	16.67%	16.67%	16.67%	16.67%	16.67%	16.67%	100.00%
kWh							
2015 CDM Programs	983,333.33	983,333.33					1,966,666.67
2016 CDM Programs		983,333.33					983,333.33
2017 CDM Programs			983,333.33				983,333.33
2018 CDM Programs				983,333.33			983,333.33
2019 CDM Programs					983,333.33		983,333.33
2020 CDM Programs						983,333.33	983,333.33
Total in Year	983,333.33	1,966,666.67	983,333.33	983,333.33	983,333.33	983,333.33	5,900,000.00

Table 3.35: Weight Factor Applied to 2014 due to CDM

Weight Factor for Inclusion in CDM Adjustment to 2014 Load Forecast						
	2011	2012	2013	2014	2015	2016
Weight Factor for each year's CDM program impact on 2014 load forecast	0	0	0	0.5	1	0.5
Default Value	Full year persistence of 2011 CDM programs on 2015 load forecast. Full impact assumed because of 50% impact in 2011 (first year) but full year persistence impact on 2012 and 2013, and thus reflected in	Full year persistence of 2012 CDM programs on 2015 load forecast. Full impact assumed because of 50% impact in 2012 (first year) but full year persistence impact on 2013, and thus reflected in	Default is 0, but one option is for full year persistence of 2013 CDM programs on 2015 load forecast, but 50% impact in (first year) impact of 2013 CDM programs on 2013 load forecast, which is part	Default is 0, but one option is for full year persistence of 2014 CDM programs on 2014 load forecast, but 50% impact in (first year) impact of 2014 CDM programs on 2014 actuals, which is part	Full year impact of 2015 programs on 2015 CDM program impacts are not in the base forecast.	Only 50% of 2016 CDM programs are assumed to impact the 2016 load forecast based on the "half-year" rule.
selection rationale.						

Distributor can select "0", "0.5", or "1" from drop-down list

Table 3.36: Effect of CDM Activity to be accounted for in 2016 Load Forecast

	2011 kWh	2012	2013	2014	2015	2016	Total for 2016
Amount used for CDM threshold for LRAMVA (2014)				323,197.12			323,197.12
CDM adjustment for test year forecast (per Board Decision in distributor's most recent Cost of Service Application) (enter as negative)		(904,000.00)	(904,000.00)	(904,000.00)			(2,712,000.00)
Amount used for CDM threshold for LRAMVA (2016)				323,197.12	983,333.33	983,333.33	2,289,863.78
Manual Adjustment for 2016 Load Forecast (billed basis)	-	-	-	161,598.56	983,333.33	491,666.67	1,636,598.56
Proposed Loss Factor (TLF)	6.56%						
Manual Adjustment for 2016 Load Forecast (system purchased basis)	-	-	-	172,199.76	1,047,842.03	523,921.02	1,743,962.81

1 The values entered in the 2011-2014 report originates from the OPA's issued report; 2011-2014
2 Final OPA CDM Results. The report provides a portfolio-level summary of the annual resource
3 savings (demand and energy, net and gross for each) for the 2011–2014 program portfolios for
4 WNP. WNP used the most recent annual results from the IESO (*formerly the OPA*) CDM “Final
5 Results Report for Wellington North Power Inc.” issued on September 2nd 2015 and the Q4
6 results are presented as an appendix to this Exhibit.

7
8 The values entered in the 2015 - 2020 originate from the “Conservation First Framework LDC
9 Tool Kit” published July 1, 2014 which shows WNP's target to be 5.90 GWh.

Ex.3/Tab 2/Sch.2 – Allocation of CDM Results

WNP's CDM target is 5,900,000 between 2015 to 2020 which at a 16.67 target rate per year which equates to annual CDM energy savings of 983,333 kWh.

The overall CDM adjustment is shown in Table 3.36 in Exhibit 3 / Tab 2 / Schedule 1 and is calculated by:

- 2015 Bridge Year CDM reduction of 653,265 kWh based on $\frac{1}{2}$ x actual kWh savings achieved in 2014 plus $\frac{1}{2}$ of 2015's CDM target.
[$\frac{1}{2}$ x 323,197kWh + $\frac{1}{2}$ x 983,333 = 653,265 kWh].
- 2016 Test Year CDM reduction of 1,636,599 kWh based on $\frac{1}{2}$ x actual kWh savings achieved in 2014 plus 100% of 2015's CDM target plus $\frac{1}{2}$ of 2016's CDM target.
[$\frac{1}{2}$ x 323,197kWh + 983,333 + $\frac{1}{2}$ x 983,333 = 1,636,599 kWh]

The manual adjustment used for the load forecast is allocated on pro-rata basis using the 2016 kWh forecast provided in Table 3.36 of Exhibit 3 / Tab1 /Schedule 1) per class. Table 3.37 below presents the pro-rata share and corresponding CDM reduction in consumption by rate class.

Table 3.37: CDM adjustments to Load Forecast

2015 Bridge Year CDM Adjustment to Load Forecast				
	Share	CDM kWh Target	Adjusted kWh	Final Adjusted kWh
Residential	25%	163,388	25,758,424	25,595,036
General Service < 50 kW	11%	74,648	11,768,345	11,693,697
General Service 50 to 999 kW	14%	91,520	14,452,224	14,360,704
General Service 1000 to 4,999 kW	50%	323,709	51,432,197	51,108,488
Street Lights	0%	0	723,044	723,044
Sentinel Lights	0%	0	24,275	24,275
Unmetered Loads	0%	0	4,164	4,164
Total	100%	653,265	104,162,674	103,509,409
2016 Test Year CDM Adjustment to Load Forecast				
	Share	CDM kWh Target	Adjusted kWh	Final Adjusted kWh
Residential	25%	413,670	26,419,136	26,005,466
General Service < 50 kW	12%	188,581	12,043,794	11,855,213
General Service 50 to 999 kW	13%	215,359	13,705,273	13,489,914
General Service 1000 to 4,999 kW	50%	818,988	51,432,197	50,613,209
Street Lights	0%	0	725,392	725,392
Sentinel Lights	0%	0	23,128	23,128
Unmetered Loads	0%	0	3,024	3,024
Total	100%	1,636,599	104,351,946	102,715,347

Ex.3/Tab 2/Sch.3 - Final Weather Adjusted Load Forecast

Table 3.38 below provides details of the Final Customer and Volume Load Forecast for each of the years. This summary of the billing determinants by rate class will be used to develop WNP's proposed rates.

Table 3.38: Final Customer and Volume Load Forecast

Wellington North Power Inc. Weather Normal Load Forecast for 2016 Rate Application EB-2015-0110												
	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Weather Normal	2016 Weather Normal
Actual kWh Purchases	99,177,535	99,726,775	101,905,199	100,510,261	93,415,382	102,608,265	105,625,698	108,411,817	110,314,060	112,420,512	111,314,900	111,517,168
Predicted kWh Purchases	101,022,119	100,486,424	102,018,514	99,854,869	95,318,000	100,819,380	104,006,389	104,474,814	111,813,624	114,301,367		
% Difference	1.9%	0.8%	0.1%	-0.7%	2.0%	-1.7%	-1.5%	-3.6%	1.4%	1.7%		
CDM Purchase Adjustment						0	0	0	0	0	(698,121)	(1,748,974)
Predicted kWh Purchases after CDM											110,616,779	109,768,194
Billed kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	103,509,409	102,715,347
By Class												
Residential												
Customers	2,869	2,923	2,959	3,002	3,037	3,073	3,103	3,126	3,161	3,190	3,220	3,251
kWh	25,217,181	25,227,824	25,023,794	25,142,788	25,158,787	25,200,723	25,802,534	24,795,447	25,357,835	25,941,256	25,595,036	26,005,466
General Service < 50 kW												
Customers	462	455	455	464	468	479	478	478	474	473	474	476
kWh	12,036,675	11,886,853	11,930,026	11,678,034	11,573,828	11,323,787	11,781,553	11,710,253	12,012,886	11,877,868	11,693,697	11,855,213
General Service 50 to 999 kW												
Customers	40	38	39	41	43	40	38	38	39	38	38	38
kWh	30,016,678	29,919,925	24,233,832	25,169,769	20,973,876	20,890,084	21,438,642	21,823,125	17,140,222	15,634,133	14,360,704	13,489,914
kW	45,546	51,134	72,261	73,818	64,960	62,105	65,571	67,391	53,734	47,684	44,272	41,588
General Service 1000 to 4,999 kW												
Customers	5	5	4	4	5	5	5	5	5	5	5	5
kWh	24,099,432	25,721,661	33,212,587	30,725,657	27,961,217	37,885,731	39,368,359	42,470,244	48,528,024	51,432,197	51,108,488	50,613,209
kW	86,247	90,065	68,832	67,494	72,545	83,945	85,844	89,307	103,015	110,732	109,361	108,301
Street Lights												
Customers	942	942	942	942	900	900	899	898	900	905	905	905
kWh	728,596	731,832	727,707	748,942	738,099	720,757	713,439	715,663	718,528	720,704	723,044	725,392
kW	1,998	2,010	2,007	2,048	2,026	1,981	1,964	1,963	1,978	1,983	1,988	1,995
Sentinel Lights												
Customers	23	23	24	34	31	28	28	28	28	28	29	29
kWh	39,379	38,909	38,081	36,606	33,138	31,636	28,024	26,093	26,093	25,478	24,275	23,128
kW	109	108	106	103	93	88	82	72	72	71	68	65
Unmetered Loads												
Connections	13	13	10	3	2	1	1	1	2	1	1	1
kWh	101,904	101,877	82,586	20,724	7,536	9,732	7,536	7,563	5,733	5,733	4,164	3,024
Total												
Customer/Connections	4,354	4,400	4,432	4,490	4,486	4,526	4,553	4,574	4,607	4,641	4,672	4,704
kWh	92,239,845	93,628,881	95,248,613	93,522,520	86,446,481	96,062,450	99,140,087	101,548,388	103,789,320	105,637,369	103,509,409	102,715,347
kW from applicable classes	133,901	143,317	143,206	143,463	139,624	148,119	153,460	158,734	158,799	160,470	155,690	151,949

Accuracy of Load Forecast and Variance Analysis

Ex.3/Tab 3/Sch.1 - Variance Analysis of Load Forecast

As per section 2.3.2 of the OEB filing requirements Applicants must demonstrate the historical accuracy of the load forecast approach. WNP has provided revenue, customer/connection count by rate class and total system load in kWh and variances.

Distribution Revenues:

The table below shows the 2016 Test Year Revenue on existing rates:

Table 3.39: 2016 Test Year Revenue on Existing Rates

Rate Class	Customers/ Connections	Number of			Test Year Consumption		Existing Rates			Revenues at Existing Rates Rates
		Start of Test Year	End of Test Year	Average	kWh	kW	Monthly Service Charge	Volumetric		
								kWh	kW	
Residential	kWh	3,248	3,254	3,250.85	26,005,466		\$18.49	\$0.0185		\$1,202,399.72
General Service < 50 kW	kWh	474	477	475.52	11,855,213		\$39.25	\$0.0168		\$423,135.14
General Service > 50 to 999 kW	kW	38	38	38.00	13,489,914	41,588	\$275.90		\$3.6643	\$278,201.06
General Service 1,000 to 4,999kW	kW	5	5	5.00	50,613,209	108,301	\$2,254.94		\$1.8921	\$340,212.79
Unmetered Scattered Load	kWh	1	1	1.00	3,024		\$18.09	\$0.0146		\$261.24
Sentinel Lighting	kW	29	29	29.00	23,128	65	\$5.24		\$19.3776	\$3,083.59
Street Lighting	kW	905	905	905.00	725,392	1,995	\$7.12		\$7.9283	\$93,139.17
Total										\$ 2,340,433

The table below shows the 2016 Test Year Revenue on proposed rates:

Table 3.40: 2016 Test Year Revenue on Proposed Rates

Rate Class	Customers/ Connections	Number of			Test Year Consumption		Proposed Rates			Revenues at Proposed Rates
		Start of Test Year	End of Test Year	Average	kWh	kW	Monthly Service Charge	Volumetric		
								kWh	kW	
Residential	kWh	3,248	3,254	3,250.85	26,005,466		\$25.28	\$0.0163		\$1,409,208.58
General Service < 50 kW	kWh	474	477	475.52	11,855,213		\$47.14	\$0.0127		\$419,995.45
General Service > 50 to 999 kW	kW	38	38	38.00	13,489,914	41,588	\$275.90		\$2.8152	\$242,888.24
General Service 1,000 to 4,999kW	kW	5	5	5.00	50,613,209	108,301	\$2,254.94		\$3.0081	\$461,076.13
Unmetered Scattered Load	kWh	1	1	1.00	3,024		\$20.35	\$0.0296		\$333.78
Sentinel Lighting	kW	29	29	29.00	23,128	65	\$12.05		\$ 20.4588	\$5,523.78
Street Lighting	kW	905	905	905.00	725,392	1,995	\$4.30		\$ 7.2310	\$61,122.99
Total										\$ 2,600,149

Table 3.41 below compares the customer / connection numbers, kWh and kW volumes as well as distribution revenue from the 2012 Board Approved date through to the 2016 Test Year.

Table 3.41: Historical Analysis of Energy Volume, Customers/Connections and Distribution Revenue

		2012 Board Approved	2012 Actual	Variance between 2012 Actual versus Board Approved		2013 Actual	Variance between 2013 Actual versus 2012 Actual	2014 Actual	Variance between 2014 Actual versus 2013 Actual		2015 Bridge Year	Variance between 2015 Bridge Year versus 2014 Actual		2016 Test Year	Variance between 2016 Test Year versus 2015 Bridge		
Residential	Customers	3,160	3,126	(34)	-1.1%	3,161	34	1.1%	3,190	30	0.9%	3,220	30	0.9%	3,251	30	0.9%
	kWh	24,876,519	24,795,447	(81,072)	-0.3%	25,357,835	562,388	2.3%	25,941,256	583,421	2.3%	25,595,036	(346,220)	-1.3%	26,005,466	410,430	1.6%
	Distribution Revenue	\$1,130,849	\$1,204,974	74,125	6.6%	\$1,197,086	(7,888)	-0.7%	\$1,216,804	19,718	1.6%	\$1,202,398	(14,406)	-1.2%	\$1,376,020	173,622	14.4%
General Service < 50 kW	Customers	489	478	(11)	-2.2%	474	(4)	-0.7%	473	(1)	-0.2%	474	1	0.3%	476	1	0.3%
	kWh	10,703,832	11,710,253	1,006,421	9.4%	12,012,886	302,634	2.6%	11,877,868	(135,018)	-1.1%	11,693,697	(184,171)	-1.6%	11,855,213	161,515	1.4%
	Distribution Revenue	\$400,036	\$423,367	23,331	5.8%	\$484,205	60,838	14.4%	\$472,915	(11,290)	-2.3%	\$423,140	(49,775)	-10.5%	\$453,186	30,046	7.1%
General Service 50 to 999 kW	Customers	40	38	(2)	-6.0%	39	1	1.3%	38	(0)	-0.4%	38	(0)	-0.4%	38	(0)	-0.4%
	kWh	19,816,501	21,823,125	2,006,624	10.1%	17,140,222	(4,682,903)	-21.5%	15,634,133	(1,506,089)	-8.8%	14,360,704	(1,273,429)	-8.1%	13,489,914	(870,790)	-6.1%
	kW	50,979	67,391	16,412	32.2%	53,734	(13,657)	-20.3%	47,684	(6,049)	-11.3%	44,272	(3,412)	-7.2%	41,588	(2,685)	-6.1%
	Distribution Revenue	\$298,107	\$328,058	29,951	10.0%	\$310,308	(17,750)	-5.4%	\$294,553	(15,755)	-5.1%	\$270,690	(23,863)	-8.1%	\$235,377	(35,313)	-13.0%
General Service 1000 to 4,999 kW	Customers	4	5	1	14.0%	5	0	0.0%	5	0	0.0%	5	0	0.0%	5	0	0.0%
	kWh	42,769,242	42,470,244	(298,997)	-0.7%	48,528,024	6,057,780	14.3%	51,432,197	2,904,173	6.0%	51,108,488	(323,709)	-0.6%	50,613,209	(495,279)	-1.0%
	kW	97,926	89,307	(8,619)	-8.8%	103,015	13,708	15.3%	110,732	7,717	7.5%	109,361	(1,371)	-1.2%	108,301	(1,060)	-1.0%
	Distribution Revenue	\$295,993	\$217,008	(78,985)	-26.7%	\$341,406	124,398	57.3%	\$364,426	23,020	6.7%	\$340,213	(24,213)	-6.6%	\$461,076	120,863	35.5%
Street Lights	Customers	886	898	12	1.3%	900	2	0.2%	905	6	0.6%	905	0	0.0%	905	0	0.0%
	kWh	711,946	715,663	3,717	0.5%	718,528	2,865	0.4%	720,704	2,176	0.3%	723,044	2,340	0.3%	725,392	2,348	0.3%
	kW	1,925	1,963	38	2.0%	1,978	15	0.8%	1,983	5	0.2%	1,988	5	0.3%	1,995	6	0.3%
	Distribution Revenue	\$88,595	\$73,220	(15,375)	-17.4%	\$93,334	20,114	27.5%	\$94,101	767	0.8%	\$93,908	(193)	-0.2%	\$61,123	(32,785)	-34.9%
Sentinel Lights	Customers	17	28	11	66.6%	28	0	0.0%	28	0	0.0%	29	1	2.2%	29	1	2.2%
	kWh	29,261	26,093	(3,168)	-10.8%	26,093	0	0.0%	25,478	(615)	-2.4%	24,275	(1,203)	-4.7%	23,128	(1,146)	-4.7%
	kW	80	72	(8)	-10.0%	72	0	0.7%	71	(2)	-2.4%	68	(3)	-3.6%	65	(3)	-4.7%
	Distribution Revenue	\$2,548	\$8,683	6,135	240.8%	\$3,121	(5,562)	-64.1%	\$3,079	(42)	-1.3%	\$3,099	20	0.6%	\$5,560	2,461	79.4%
Unmetered Loads	Connections	1	1	0	0.0%	2	1	58.3%	1	(0)	-26.3%	1	(0)	-23.5%	1	(0)	-23.5%
	kWh	3,969	7,563	3,594	90.5%	5,733	(1,830)	-24.2%	5,733	0	0.0%	4,164	(1,569)	-27.4%	3,024	(1,140)	-27.4%
	Distribution Revenue	\$181	\$241	60	33.1%	\$332	91	37.8%	\$351	19	5.7%	\$261	(90)	-25.6%	\$256	(5)	-1.8%
Total																	
	Customer/Connections	4,598	4,574	(24)	-0.5%	4,607	33	0.7%	4,641	34	0.7%	4,672	31	0.7%	4,704	32	0.7%
	kWh	98,911,269	101,548,388	2,637,118	2.7%	103,789,320	2,240,933	2.2%	105,637,369	1,848,049	1.8%	103,509,409	(2,127,960)	-2.0%	102,715,347	(794,062)	-0.8%
	kW from applicable classes	150,910	158,734	7,824	5.2%	158,799	66	0.0%	160,470	1,671	1.1%	155,690	(4,780)	-3.0%	151,949	(3,741)	-2.4%
	Distribution Revenue	\$2,216,309	\$2,255,551	39,242	1.8%	\$2,429,792	\$174,241	7.7%	\$2,446,229	\$16,437	0.7%	\$2,333,709	-\$112,520	-4.6%	\$2,592,599	\$258,890	11.1%

Notes:

- 2012 Board approved forecast (kWh/kW) reflect values that include CDM adjustment and are weather normalized.
- 2012, 2013 and 2014 kWh/kW volumes are weather actual.
- Chapter 2 filing requirements require a schedule of revenue for “at least the past 5 years”. Because WNP last Cost of Service rate application was approved in 2012, the Applicant has provided information back to this particular year (i.e. 3 years of actual data).

The information below provides an overview of this information for each rate class.

Table 3.42 below shows the yearly change in consumption and distribution revenue for the Residential class.

Table 3.42: Residential Variance

Residential Class								
Year	Customers	# Change	% Change	kWh	% Change	Average kWh per Customer per month	Distribution Revenue	% Change
2005	2,869			25,217,181		733		
2006	2,923	55	1.91%	25,227,824	0.04%	719		
2007	2,959	35	1.21%	25,023,794	-0.81%	705		
2008	3,002	43	1.47%	25,142,788	0.48%	698		
2009	3,037	35	1.17%	25,158,787	0.06%	690		
2010	3,073	36	1.17%	25,200,723	0.17%	683		
2011	3,103	30	0.99%	25,802,534	2.39%	693		
2012	3,126	23	0.74%	24,795,447	-3.90%	661	\$1,204,974	
2013	3,161	34	1.09%	25,357,835	2.27%	669	\$1,197,086	-0.7%
2014	3,190	30	0.95%	25,941,256	2.30%	678	\$1,216,804	1.6%
2015 - Bridge Year	3,220	30	0.94%	25,595,036	-1.33%	662	\$1,202,398	-1.2%
2016 - Test Year	3,251	30	0.94%	26,005,466	1.60%	667	\$1,376,020	14.4%

The residential customer class has been growing slowly but steadily since 2005. The class has grown approximately 1% per year since 2010, which is a lower growth rate compared to 2005 to 2009.

As discussed in Exhibit 3 / Tab 1 / Schedule 6, the area has a higher percentage of people over the age of 64, a lower percentage of people of working age (15 to 64) and lower percentage of children (aged 14 or under) when compared to the national average. WNP believes this population composite is a fair reflection in the service territory that the utility manages within the Township of Wellington North. Over the past five years, there has been an increase in the number of private gated retirement communities and fewer new-build residential properties on vacant land. There is anticipation of growth and new sub-divisions being planned as discussed in Exhibit 2 Appendix 2A - WNP's 2015 Distribution System Plan – section 5.2.2.4: "Consultations with Municipal Planning Office" whose reports suggest the area will see population growth between now and 2041. Residential customer count is expected to grow by 30 in 2015 and 30 in 2016.

Total Residential kWh consumption between 2005 and 2014 has increased by 2.9%; however the average kWh consumer per customer per month has reduced by 7.5% (55 kWh). Energy conservation programs promoted by the utility as well as time-of-use pricing have been a major contributing factor to the average usage reduction. The total kWh consumption and average kWh per customer per month increased in 2013 and 2014 compared to 2012 as a result of a colder and longer winter periods as illustrated in Table 3.12 and discussed on pages 13 and 14.

Distribution Revenue between 2012 to 2014 has been fairly constant at approximately \$1.2 million and this trend continues into the 2015 Bridge Year. There is a noticeable increase to just over \$1.4 million in the 2016 Test Year and this is predominately due to updating the cost-to-revenue ratios for this customer class (as discussed in Exhibit 7) as well as projected additional 30 residential customers in this year.

Table 3.43 below shows the yearly change in consumption and distribution revenue for the General Service <50 kW class.

Table 3.43: General Service <50kW Variance

General Service <50kW								
Year	Customers	# Change	% Change	kWh	% Change	Average kWh per Customer per month	Distribution Revenue	% Change
2005	462			12,036,675		2,170		
2006	455	-7	-1.55%	11,886,853	-1.24%	2,177		
2007	455	0	0.04%	11,930,026	0.36%	2,184		
2008	464	8	1.83%	11,678,034	-2.11%	2,099		
2009	468	5	1.01%	11,573,828	-0.89%	2,060		
2010	479	11	2.30%	11,323,787	-2.16%	1,970		
2011	478	-1	-0.26%	11,781,553	4.04%	2,055		
2012	478	0	0.00%	11,710,253	-0.61%	2,043	\$423,367	
2013	474	-4	-0.73%	12,012,886	2.58%	2,111	\$484,205	14.4%
2014	473	-1	-0.25%	11,877,868	-1.12%	2,092	\$472,915	-2.3%
2015 - Bridge Year	474	1	0.26%	11,693,697	-1.55%	2,055	\$423,140	-10.5%
2016 - Test Year	476	1	0.26%	11,855,213	1.38%	2,078	\$453,186	7.1%

The number of customers in the GS<50 kW class have been steadily increasing over the past ten years. A portion of the difference is attributable to reclassification of customers from GS<50 to GS>50 and vice versa. A primary reason for this is customers that are just either slightly over the demand requirements or slightly below. Conservation initiatives are having an impact on the change in reclassification and in 2010, the effect of the 2008/2009 Global Recession may have attributed to three customers moving from GS 50-999kW into this rate class.

Total kWh consumption between 2005 and 2014 has decreased by 1.3% and the average kWh consumer per customer per month has reduced by 3.6% (78 kWh). Energy conservation programs promoted by the utility as well as time-of-use pricing have been a major contributing factor to the average usage reduction which has resulted in reduced distribution revenue for this class. Average kWh usage per customer has declined since 2011, with the notable exception of 2013 when there was a slight increase. The total kWh consumption and average kWh per

customer per month increased in 2013 and 2014 compared to 2012 as a result of a colder and longer winter periods as illustrated in Table 1.12 and discussed on pages 13 and 14.

Distribution Revenue for the General Service <50kW class has fluctuated from 2012 to 2014. WNP is projecting distribution revenue of circa \$453,186 in the 2016 Test Year which is at a similar level to 2012. This revenue projection is lower than 2013 and 2014 due to reducing average usage per customer per month.

Table 3.44 below shows the yearly change in consumption and distribution revenue for the General Service 50-999kW class.

Table 3.44: General Service 50-999kW Variance

General Service 50 - 999kW										
Year	Customers	# Change	% Change	kWh	% Change	Average kWh per Customer per month	kW	Average kW per Customer	Distribution Revenue	% Change
2005	40			30,016,678		63,193	45,546	1,151		
2006	38	-1	-2.95%	29,919,925	-0.32%	64,902	51,134	1,331		
2007	39	0	0.87%	24,233,832	-19.00%	52,116	72,261	1,865		
2008	41	2	5.81%	25,169,769	3.86%	51,158	73,818	1,800		
2009	43	2	5.08%	20,973,876	-16.67%	40,568	64,960	1,508		
2010	40	-3	-7.93%	20,890,084	-0.40%	43,887	62,105	1,566		
2011	38	-1	-3.36%	21,438,642	2.63%	46,606	65,571	1,711		
2012	38	-1	-1.74%	21,823,125	1.79%	48,281	67,391	1,789	\$328,058	
2013	39	1	2.21%	17,140,222	-21.46%	37,100	53,734	1,396	\$310,308	-5.4%
2014	38	0	-0.43%	15,634,133	-8.79%	33,987	47,684	1,244	\$294,553	-5.1%
2015 - Bridge Year	38	0	-0.36%	14,360,704	-8.15%	31,330	44,272	1,159	\$270,690	-8.1%
2016 - Test Year	38	0	-0.36%	13,489,914	-6.06%	29,536	41,588	1,093	\$235,377	-13.0%

The customer count for the GS>50 kW class has seen little change over the last 10 years. The reasons for the slow growth are the same as indicated in the GS<50 section above. WNP projects no increase or decrease in customer numbers in 2015 or 2016.

Total kWh consumption between 2005 and 2014 has decreased by 47.9% and the average kWh consumption per customer per month has reduced by 46% (29,206 kWh). Energy conservation programs promoted by the utility have been a major contributing factor to the average usage reduction.

Distribution revenue for this class has continued to decline from 2013 onwards which relates to reduced total annual kW demand and average kW per customer. This kW reduction is predominately due to customers participating in CDM programs and energy savings initiatives. WNP expects this trend to continue hence the reduced kW demand per customer projection in the 2016 Test Year and corresponding reduction in distribution revenue.

Table 3.45 below shows the yearly change in consumption and distribution revenue for the General Service 1000-4999kW class.

Table 3.45: General Service 1000-4999kW Variance

General Service 1000 - 4999kW										
Year	Customers	# Change	% Change	kWh	% Change	Average kWh per Customer per month	kW	Average kW per Customer	Distribution Revenue	% Change
2005	5			24,099,432		401,657	86,247	17,249		
2006	5	0	0.00%	25,721,661	6.73%	428,694	90,065	18,013		
2007	4	-1	-11.67%	33,212,587	29.12%	626,653	68,832	15,585		
2008	4	0	-9.43%	30,725,657	-7.49%	640,118	67,494	16,874		
2009	5	1	25.00%	27,961,217	-9.00%	466,020	72,545	14,509		
2010	5	0	0.00%	37,885,731	35.49%	631,429	83,945	16,789		
2011	5	0	0.00%	39,368,359	3.91%	656,139	85,844	17,169		
2012	5	0	0.00%	42,470,244	7.88%	707,837	89,307	17,861	\$217,008	
2013	5	0	0.00%	48,528,024	14.26%	808,800	103,015	20,603	\$341,406	57.3%
2014	5	0	0.00%	51,432,197	5.98%	857,203	110,732	22,146	\$364,426	6.7%
2015 - Bridge Year	5	0	0.00%	51,108,488	-0.63%	851,808	109,361	21,872	\$340,213	-6.6%
2016 - Test Year	5	0	0.00%	50,613,209	-0.97%	843,553	108,301	21,660	\$461,076	35.5%

Although there has been negligible change in the number of customers in this rate class over the ten-year period of 2005 to 2014, the total consumption has more than doubled over the same period – a 113% increase. This is most noticeable in 2012 onwards when the three manufacturing customers increased plant production, indicating signs of recovery from the 2008/2009 Global Recession. Customers in this rate class have also worked with WNP in energy conservation programs, particularly since 2012.

WNP has observed these customers load patterns steadily increasing, to the extent that one of the customers is seeking an increase in their kW demand at their plant. This customer's specific demand increase is referenced in a letter to the utility and included in WNP's 2015 Distribution System Plan in Exhibit 2 - Appendix 2A, "Stakeholder Letters supporting the second feeder" to the town of Mount Forest.

Distribution revenue since 2013 has continued to increase in-line with kW energy demand. The 2016 Test Year increase is due to updating the cost-to-revenue ratios for this customer class (as discussed in Exhibit 7).

Street Lighting and Sentinel Lighting rate class show that connections have also been historically stable as depicted in the tables below, with WNP predicting no connection growth for these classes:

Table 3.46: Street Lights Variance

Street Lights										
Year	Connection	# Change	% Change	kWh	% Change	Average kWh per Month	kW		Distribution Revenue	% Change
2005	942			728,596		60,716	1,998			
2006	942	0	0.00%	731,832	0.44%	60,986	2,010			
2007	942	0	0.00%	727,707	-0.56%	60,642	2,007			
2008	942	0	0.00%	748,942	2.92%	62,412	2,048			
2009	900	-42	-4.46%	738,099	-1.45%	61,508	2,026			
2010	900	0	0.00%	720,757	-2.35%	60,063	1,981			
2011	899	-1	-0.11%	713,439	-1.02%	59,453	1,964			
2012	898	-1	-0.11%	715,663	0.31%	59,639	1,963		\$73,220	
2013	900	2	0.17%	718,528	0.40%	59,877	1,978		\$93,334	27.5%
2014	905	6	0.61%	720,704	0.30%	60,059	1,983		\$94,101	0.8%
2015 - Bridge Year	905	0	0.00%	723,044	0.32%	60,254	1,988		\$93,908	-0.2%
2016 - Test Year	905	0	0.00%	725,392	0.32%	60,449	1,995		\$61,123	-34.9%

Distribution revenue in 2012 is lower than compared to 2013 due to WNP's 2012 Cost of Service applications rates being implemented on October 1st 2012 (EB-2011-0249) therefore this year did not reflect a complete 12 months on the revised rates. The 2016 Test Year decrease is due to updating the cost-to-revenue ratios for this customer class (as discussed in Exhibit 7).

Table 3.47: Sentinel Lights Variance

Sentinel Lights										
Year	Connection	# Change	% Change	kWh	% Change	Average kWh per Month	kW		Distribution Revenue	% Change
2005	23			39,379		3,282	1,998			
2006	23	0	0.00%	38,909	-1.19%	3,242	2,010			
2007	24	1	2.90%	38,081	-2.13%	3,173	2,007			
2008	34	11	44.72%	36,606	-3.87%	3,050	2,048			
2009	31	-4	-10.95%	33,138	-9.47%	2,761	2,026			
2010	28	-3	-8.20%	31,636	-4.53%	2,636	1,981			
2011	28	0	0.00%	28,024	-11.42%	2,335	1,964			
2012	28	0	0.00%	26,093	-6.89%	2,174	1,963		\$3,963	
2013	28	0	0.00%	26,093	0.00%	2,174	1,978		\$3,121	-21.2%
2014	28	0	0.00%	25,478	-2.36%	2,123	1,983		\$3,079	-1.3%
2015 - Bridge Year	29	1	2.21%	24,275	-4.72%	2,023	1,988		\$3,099	0.7%
2016 - Test Year	29	1	2.21%	23,128	-4.72%	1,927	1,995		\$5,560	79.4%

The 2016 Test Year increase is due to updating the cost-to-revenue ratios for this customer class (as discussed in Exhibit 7).

1 The Unmetered Scattered Load connection count has been steadily declining over the past 10
2 years as shown in Table 3.47 below.

3 **Table 3.48: Unmetered Scattered Load**

Unmetered Scattered Load									
Year	Connection	# Change	% Change	kWh	% Change	Average kWh per Connection	Distribution Revenue	% Change	
2005	13			101,904		7,839			
2006	13	0	-0.64%	101,877	-0.03%	7,887			
2007	10	-3	-26.45%	82,586	-18.94%	8,693			
2008	3	-6	-66.67%	20,724	-74.91%	6,544			
2009	2	-1	-31.58%	7,536	-63.64%	3,478			
2010	1	-1	-53.85%	9,732	29.14%	9,732			
2011	1	0	0.00%	7,536	-22.56%	7,536			
2012	1	0	0.00%	7,563	0.36%	7,563	\$241		
2013	2	1	58.33%	5,733	-24.20%	3,621	\$332	38.0%	
2014	1	-1	-36.84%	5,733	0.00%	5,733	\$351	5.9%	
2015 - Bridge Year	1	0	0.00%	4,164	-27.37%	4,164	\$261	-25.7%	
2016 - Test Year	1	0	0.00%	3,024	-27.37%	3,024	\$256	-1.9%	

4
5 WNP agrees with the model projections which predict no growth in connections for either the
6 2015 Bridge Year of 2016 Test Year. Distribution revenues for this rate class have been
7 inconsistent between 2012 to 2014 corresponding fluctuations in energy consumption. The 2016
8 Test Year decrease is due to updating the cost-to-revenue ratios for this customer class (as
9 discussed in Exhibit 7).

10

In summary, WNP anticipates a slight increase in customer numbers Residential rate class and all other classes to remain constant when compared to the latest actuals of 2014. The increase in customers in this rate class however is being off-set by reduced average consumption (referred to as "baseload" energy consumption) is often offset by the additional transitioning to energy efficient lighting, appliances and other energy efficient changes.

WNP anticipates the General Service 1000-4999kW class energy consumption to level-out as customers and not to increase at the dramatic rate experienced in 2012 and 2013. WNP is engaged with the customers concerning future energy conservation (CDM) programs which support the slight reduction in kWh in the 2016 Test Year when compared to the 2015 Bridge Year.

Table 3.49 below provides details of the variances by rate class.

Table 3.49: Variance Analysis by Class

		2015 Bridge Year	2016 Test Year	% Change
Residential Class	Customers	3,220	3,251	0.94%
	kWh	25,595,036	26,005,466	1.60%
General Service <50kW	Customers	474	476	0.26%
	kWh	11,693,697	11,855,213	1.38%
General Service 50 - 999kW	Customers	38	38	-0.36%
	kWh	14,360,704	13,489,914	-6.06%
	kW	44,272	41,588	-6.06%
General Service 1000 - 4999kW	Customers	5	5	0.00%
	kWh	51,108,488	50,613,209	-0.97%
	kW	109,361	108,301	-0.97%
Street Lights	Connections	905	905	0.00%
	kWh	723,044	725,392	0.32%
	kW	1,988	1,995	0.32%
Sentinel Lights	Connections	29	29	2.21%
	kWh	24,275	23,128	-4.72%
	kW	68	65	-4.72%
Unmetered Scattered Load	Connections	1	1	0.00%
	kWh	4,164	3,024	-27.37%
Total	Customers /	4,673	4,705	0.69%
	kWh	103,509,409	102,715,347	-0.77%
	kW	155,690	151,949	-2.40%

Table 3.50 below presents the actual average use per customer, by customer class, showing the historical and adjusted forecast average use per customer generated from using the load forecast. The average kWh per customer for the period 2005 to 2014 is based on actual weather; whereas the 2015 Bridge Year and 2016 Test Year is based on the weather normalized forecast. As can be seen from the results below, the predicted use per customer follows the trend created from its historical usage per customer.

Table 3.50: Average per Customer / Connection

	Residential Class		General Service <50kW		General Service 50 - 999kW		General Service 1000 - 4999kW		Street Lights		Sentinel Lights		Unmetered Scattered Load	
	per Customer per month kWh	per Customer kW	per Customer per month kWh	per Customer kW	per Customer per month kWh	per Customer kW	per Customer per month kWh	per Customer kW	Average kWh per month	kW	Average kWh per month	kW	per Connection kWh	per Connection kW
2005	733		2,170		63,193	1,151	401,657	17,249	60,716	1,998	3,282	1,998	7,839	
2006	719		2,177		64,902	1,331	428,694	18,013	60,986	2,010	3,242	2,010	7,887	
2007	705		2,184		52,116	1,865	626,653	15,585	60,642	2,007	3,173	2,007	8,693	
2008	698		2,099		51,158	1,800	640,118	16,874	62,412	2,048	3,050	2,048	6,544	
2009	690		2,060		40,568	1,508	466,020	14,509	61,508	2,026	2,761	2,026	3,478	
2010	683		1,970		43,887	1,566	631,429	16,789	60,063	1,981	2,636	1,981	9,732	
2011	693		2,055		46,606	1,711	656,139	17,169	59,453	1,964	2,335	1,964	7,536	
2012	661		2,043		48,281	1,789	707,837	17,861	59,639	1,963	2,174	1,963	7,563	
2013	669		2,111		37,100	1,396	808,800	20,603	59,877	1,978	2,174	1,978	3,621	
2014	678		2,092		33,987	1,244	857,203	22,146	60,059	1,983	2,123	1,983	5,733	
2015	662		2,055		31,330	1,159	851,808	21,872	60,254	1,988	2,023	1,988	4,164	
2016	667		2,078		29,536	1,093	843,553	21,660	60,449	1,995	1,927	1,995	3,024	

Table 3.50 on the following page is an extract from the Board's Chapter 2 Filing Requirements - Appendix 2-IA and highlights the variances between Actual and Forecast data.

1 **Table 3.51: OEB Appendix 2-IA Summary and Variances of Actual and Forecast Data**

Appendix 2-IA Summary and Variances of Actual and Forecast Data						
	2012 Board Approved	2012	2013	2014	2015 Bridge	2016 Test
Rate Class - Residential						
# of Customers	3,160	3,126	3,161	3,190	3,220	3,251
kWh	24,876,519	24,795,447	25,357,835	25,941,256	25,595,036	26,005,466
kW						
Variance Analysis						
# of Customers		-1.07%	0.02%	0.96%	1.91%	2.87%
kWh		-0.33%	1.93%	4.28%	2.89%	4.54%
kW		0.00%	0.00%	0.00%	0.00%	0.00%
Rate Class - General Service <50 kW						
# of Customers	489	478	474	473	474	476
kWh	10,703,832	11,710,253	12,012,886	11,877,868	11,693,697	11,855,213
kW						
Variance Analysis						
# of Customers		-2.30%	-3.02%	-3.25%	-3.01%	-2.76%
kWh		9.40%	12.23%	10.97%	9.25%	10.76%
kW		0.00%	0.00%	0.00%	0.00%	0.00%
Rate Class - General Service 50 - 999 kW						
# of Customers	40	38	39	38	38	38
kWh	19,816,501	21,823,125	17,140,222	15,634,133	14,360,704	13,489,914
kW	50,979	67,391	53,734	47,684	44,272	41,588
Variance Analysis						
# of Customers		-5.83%	-3.75%	-4.17%	-4.51%	-4.85%
kWh		10.13%	-13.51%	-21.11%	-27.53%	-31.93%
kW		32.19%	5.40%	-6.46%	-13.16%	-18.42%
Rate Class - General Service 1000 - 4999 kW						
# of Customers	4	5	5	5	5	5
kWh	42,769,242	42,470,244	48,528,024	51,432,197	51,108,488	50,613,209
kW	97,926	89,307	103,015	110,732	109,361	108,301
Variance Analysis						
# of Customers		25.00%	25.00%	25.00%	25.00%	25.00%
kWh		-0.70%	13.46%	20.26%	19.50%	18.34%
kW		-8.80%	5.20%	13.08%	11.68%	10.59%
Rate Class - Street Lights						
# of Connections	886	898	900	905	905	905
kWh	711,946	715,663	718,528	720,704	723,044	725,392
kW	1,925	1,963	1,978	1,983	1,988	1,995
Variance Analysis						
# of Connections		1.35%	1.52%	2.14%	2.14%	2.14%
kWh		0.52%	0.92%	1.23%	1.56%	1.89%
kW		1.98%	2.76%	3.02%	3.29%	3.63%
Rate Class - Sentinel Lights						
# of Connections	17	28	28	28	29	29
kWh	29,261	26,093	26,093	25,478	24,275	23,128
kW	80	72	72	71	68	65
Variance Analysis						
# of Connections		64.71%	64.71%	64.71%	68.35%	72.07%
kWh		-10.83%	-10.83%	-12.93%	-17.04%	-20.96%
kW		-9.40%	-9.40%	-11.53%	-14.69%	-18.72%
Rate Class - Unmetered Scattered Load						
# of Connections	1	1	2	1	1	1
kWh	3,969	7,563	5,733	5,733	4,164	3,024
kW						
Variance Analysis						
# of Connections		25.00%	58.33%	16.67%	-10.75%	-31.72%
kWh		90.55%	44.44%	44.44%	4.91%	-23.80%
kW		0.00%	0.00%	0.00%	0.00%	0.00%
Totals						
Customers / Connections	4,597	4,574	4,607	4,641	4,672	4,704
kWh	98,911,270	101,548,388	103,789,320	105,637,369	103,509,409	102,715,347
kW from applicable classes	150,910	158,734	158,799	160,470	155,690	151,949
Totals - Variance						
Customers / Connections		-0.50%	0.22%	0.96%	1.64%	2.34%
kWh		2.67%	4.93%	6.80%	4.65%	3.85%
kW from applicable classes		5.18%	5.23%	6.34%	3.17%	0.69%

2

Other Revenues

Ex.3/Tab 5/Schedule 1 - Overview of Other Revenue

Other Distribution Revenues are revenues that are distribution related but are sourced from means other than distribution rates. For this reason, other revenues are deducted from WNP's proposed Revenue Requirement. Further details on the derivation of the Revenue Requirement are presented at Exhibit 6.

Other Distribution Revenues includes items such as:

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

OEB Appendix 2-F Other Operating Revenues

A detailed breakdown of Other Operating Revenue by USoA account is shown in Table 3.52 below (derived from the Board's Filing Requirements Chapter 2 model Appendix 2-H)

Table 3.52: Other Operating Revenue (Chapter 2 Filing Requirements - Appendix 2-H)

Appendix 2-H Other Operating Revenue							
USoA #	USoA Description	2012 Board Appr. 2012	2012 Actual CGAAP	2013 Actual¹ 2013 CGAAP	Actual Year² 2014 CGAAP	Bridge Year² 2015 MIFRS	Test Year 2016 MIFRS
	Reporting Basis						
4235	Specific Service Charges	-\$ 57,043	-\$ 55,389	-\$ 52,799	-\$ 52,388	-\$ 58,115	-\$ 60,474
4225	Late Payment Charges	-\$ 26,047	-\$ 28,204	-\$ 26,086	-\$ 26,748	-\$ 27,012	-\$ 27,012
4082	Retail Services Revenues	-\$ 8,679	-\$ 6,867	-\$ 6,317	-\$ 5,960	-\$ 5,943	-\$ 5,948
4084	4084-Service Transaction Requests (STR) Revenues	-\$ 199	-\$ 113	-\$ 49	-\$ 72	-\$ 55	-\$ 49
4086	4086-SSS Administration Revenue	-\$ 13,792	-\$ 13,722	-\$ 13,822	-\$ 13,923	-\$ 14,017	-\$ 14,113
4205	4205-Interdepartmental Rents	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4210	4210-Rent from Electric Property	-\$ 27,267	-\$ 28,341	-\$ 28,685	-\$ 28,208	-\$ 27,870	-\$ 27,826
4245	4245-Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -	\$ -	-\$ 12,865	-\$ 14,165
4325	4325-Revenues from Merchandise Jobbing, Etc.	-\$ 26,527	-\$ 31,749	-\$ 50	\$ -	\$ -	\$ -
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	\$ 21,928	\$ 19,730	-\$ 185	\$ -	\$ -	\$ -
4355	4355-Gain on Disposition of Utility and Other Property	\$ -	-\$ 123	-\$ 5,000	-\$ 17,500	-\$ 2,500	-\$ 2,000
4360	4360-Loss on Disposition of Utility and Other Property	\$ -	\$ 5,076	\$ 21,426	\$ 17,006	\$ 12,000	\$ 12,500
4375	4375-Revenues from Non-Utility Operations	-\$ 141,661	-\$ 22,691	-\$ 40,716	-\$ 133,253	-\$ 135,000	-\$ 140,000
4380	4380-Expenses of Non-Utility Operations	\$ 139,262	\$ 34,732	\$ 42,658	\$ 128,838	\$ 130,000	\$ 134,000
4390	4390-Miscellaneous Non-Operating Income	-\$ 150	-\$ 7,459	-\$ 135	-\$ 1,512	-\$ 1,500	-\$ 1,500
4405	4405-Interest and Dividend Income	-\$ 9,818	-\$ 21,481	-\$ 18,325	-\$ 21,037	-\$ 5,000	-\$ 4,000
Specific Service Charges		-\$ 57,043	-\$ 55,389	-\$ 52,799	-\$ 52,388	-\$ 58,115	-\$ 60,474
Late Payment Charges		-\$ 26,047	-\$ 28,204	-\$ 26,086	-\$ 26,748	-\$ 27,012	-\$ 27,012
Other Operating Revenues		-\$ 49,937	-\$ 49,043	-\$ 48,873	-\$ 48,162	-\$ 60,751	-\$ 62,102
Other Income or Deductions		-\$ 16,965	-\$ 23,963	-\$ 326	-\$ 27,459	-\$ 2,000	-\$ 1,000
Total		-\$ 149,992	-\$ 156,599	-\$ 128,084	-\$ 154,757	-\$ 147,878	-\$ 150,588
Accounts 4082, 4084, 4086, 4210 4245 Revenue							
		2012 Board Appr. 2012	2012 Actual CGAAP	2013 Actual¹ 2013 CGAAP	Actual Year² 2014 CGAAP	Bridge Year² 2015 MIFRS	Test Year 2016 MIFRS
	Reporting Basis						
	4082-Retail Service Revenues	-\$ 8,679	-\$ 6,867	-\$ 6,317	-\$ 5,960	-\$ 5,943	-\$ 5,948
	4084-Service Transaction Requests (STR) Revenues	-\$ 199	-\$ 113	-\$ 49	-\$ 72	-\$ 55	-\$ 49
	4086-SSS Administration Revenue	-\$ 13,792	-\$ 13,722	-\$ 13,822	-\$ 13,923	-\$ 14,017	-\$ 14,113
	4210-Rent from Electrical Property	-\$ 27,267	-\$ 28,341	-\$ 28,685	-\$ 28,208	-\$ 27,870	-\$ 27,826
	4245-Gov't and Other Assistance Directly Credited to Income	\$ -	\$ -	\$ -	\$ -	-\$ 12,865	-\$ 14,165
	Total (Other Distribution/Operating Revenues)	-\$ 49,937	-\$ 49,043	-\$ 48,873	-\$ 48,162	-\$ 60,751	-\$ 62,102
Account 4360,4365 Gains and Losses							
		2012 Board Appr. 2012	2012 Actual CGAAP	2013 Actual¹ 2013 CGAAP	Actual Year² 2014 CGAAP	Bridge Year² 2015 MIFRS	Test Year 2016 MIFRS
	Reporting Basis						
	4360-Loss on Disposition of Assets	\$ -	-\$ 123	-\$ 5,000	-\$ 17,500	-\$ 2,500	-\$ 2,000
	4365-Gains from Disposition of Assets	\$ -	\$ 5,076	\$ 21,426	\$ 17,006	\$ 12,000	\$ 12,500
	Total	\$ -	\$ 4,953	\$ 16,426	-\$ 494	\$ 9,500	\$ 10,500
Account 4405 - Interest and Dividend Income							
		2012 Board Appr. 2012	2012 Actual CGAAP	2013 Actual¹ 2013 CGAAP	Actual Year² 2014 CGAAP	Bridge Year² 2015 MIFRS	Test Year 2016 MIFRS
	Reporting Basis						
	Short-term Investment Interest	\$ -	-\$ 359	-\$ 359	-\$ 269	-\$ 270	-\$ 270
	Bank Deposit Interest	\$ -	-\$ 6,848	-\$ 9,210	-\$ 13,511	-\$ 3,780	-\$ 2,500
	Miscellaneous Interest Revenue	\$ -	-\$ 14,275	-\$ 8,756	-\$ 7,257	-\$ 950	-\$ 1,230
	Total	-\$ 9,818	-\$ 21,481	-\$ 18,325	-\$ 21,038	-\$ 5,000	-\$ 4,000

Table 3.52 / continued: Other Operating Revenue (Chapter 2 Filing Requirements - Appendix 2-H

Appendix 2-H Other Operating Revenue						
Account 4390 - Misc Non-operating Income						
	2012 Board Appr.	2012 Actual	2013 Actual ²	Actual Year ²	Bridge Year ²	Test Year
	2012	2012	2013	2014	2015	2016
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS
4390 - Misc Non-operating Income	-\$ 150	-\$ 7,459	-\$ 135	-\$ 1,512	-\$ 1,500	-\$ 1,500
Total	-\$ 150	-\$ 7,459	-\$ 135	-\$ 1,512	-\$ 1,500	-\$ 1,500
Account 4375 - Non Rate Regulated Revenue						
	2012 Board Appr.	2012 Actual	2013 Actual ²	Actual Year ²	Bridge Year ²	Test Year
	2012	2012	2013	2014	2015	2016
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS
Outside Jobs	\$ -	\$ 19,983	\$ 37,060	\$ 47,822	\$ 48,000	\$ 52,000
Water & Sewer Billing	\$ -	\$ 82,675	\$ 89,527	\$ 85,431	\$ 87,000	\$ 88,000
Total	-\$ 141,661	-\$ 102,658	-\$ 126,587	-\$ 133,253	-\$ 135,000	-\$ 140,000
Account 4380 - Non Rate Regulated Expenses						
	2012 Board Appr.	2012 Actual	2013 Actual ²	Actual Year ²	Bridge Year ²	Test Year
	2012	2012	2013	2014	2015	2016
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS
Job Labour	\$ -	\$ 9,321	\$ 28,879	\$ 32,351	\$ 27,500	\$ 30,000
Materials & Equipment	\$ -	\$ 24,225	\$ 11,533	\$ 10,860	\$ 15,000	\$ 15,000
W & S Billing Labour	\$ -	\$ 60,513	\$ 63,886	\$ 61,970	\$ 62,000	\$ 62,000
Materials, Support & Admin	\$ -	\$ 20,639	\$ 22,097	\$ 20,918	\$ 21,000	\$ 22,000
Contract Labour	\$ -	\$ -	\$ 2,133	\$ 2,739	\$ 4,500	\$ 5,000
Total	\$ 139,262	\$ 114,699	\$ 128,529	\$ 128,838	\$ 130,000	\$ 134,000
Account 4325,4330 Revenue & Expenses						
	2012 Board Appr.	2012 Actual	2013 Actual ²	Actual Year ²	Bridge Year ²	Test Year
	2012	2012	2013	2014	2015	2016
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS
4325-Revenues from Merchandice Jobbing Etc.	-\$ 26,527	-\$ 31,749	-\$ 50	\$ -	\$ -	\$ -
4330-Expenses of Merchandice Jobbing Etc.	\$ 21,928	\$ 19,730	\$ 185	\$ -	\$ -	\$ -
Total	-\$ 4,599	-\$ 12,019	-\$ 235	\$ -	\$ -	\$ -

Ex.3/Tab 4/Sch.2 - Other Revenue Variance Analysis

Tables 3.53 to 3.57 below presents year over year variances of other operating revenues:

**Table 3.53: Variance Analysis of Other Operating Revenues:
– 2012 Board Approved to 2012 Actual**

Reporting Basis	CGAAP	CGAAP	Var Analysis	Var Analysis
	2012	2012	\$	%
USoA Description	Board Approved			
4235 4235-Miscellaneous Service Revenues	-\$57,043	-\$55,389	\$1,654	2.90%
4225 4225-Late Payment Charges	-\$26,047	-\$28,204	-\$2,157	8.28%
4082 4082-Retail Services Revenues	-\$8,679	-\$6,867	\$1,813	20.88%
4084 4084-Service Transaction Requests (STR) Revenues	-\$199	-\$113	\$86	43.19%
4086 4086-SSS Administration Revenue	-\$13,792	-\$13,722	\$70	0.51%
4205 4205-Interdepartmental Rents	\$0	\$0	\$0	
4210 4210-Rent from Electric Property	-\$27,267	-\$28,341	-\$1,074	3.94%
4215 4215-Other Utility Operating Income	\$0	\$0	\$0	
4220 4220-Other Electric Revenues	\$0	\$0	\$0	
4240 4240-Provision for Rate Refunds	\$0	\$0	\$0	
4245 4245-Government Assistance Directly Credited to Income	\$0	\$0	\$0	
	\$0	\$0	\$0	
4305 4305-Regulatory Debits	\$0	\$0	\$0	
4310 4310-Regulatory Credits	\$0	\$0	\$0	
4315 4315-Revenues from Electric Plant Leased to Others	\$0	\$0	\$0	
4320 4320-Expenses of Electric Plant Leased to Others	\$0	\$0	\$0	
4324 4324-Special Purpose Charge Recovery	\$0	\$0	\$0	
4325 4325-Revenues from Merchandise Jobbing, Etc.	-\$26,527	-\$31,749	-\$5,221	19.68%
4330 4330-Costs and Expenses of Merchandising Jobbing, Etc.	\$21,928	\$19,730	-\$2,198	10.02%
4335 4335-Profits and Losses from Financial Instrument Hedges	\$0	\$0	\$0	
4340 4340-Profits and Losses from Financial Instrument Investments	\$0	\$0	\$0	
4345 4345-Gains from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4350 4350-Losses from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4355 4355-Gain on Disposition of Utility and Other Property	\$0	-\$123	-\$123	
4360 4360-Loss on Disposition of Utility and Other Property	\$0	\$5,076	\$5,076	
4365 4365-Gains from Disposition of Allowances for Emission	\$0	\$0	\$0	
4370 4370-Losses from Disposition of Allowances for Emission	\$0	\$0	\$0	
4375 4375-Revenues from Non-Utility Operations	-\$141,661	-\$22,691	\$118,970	83.98%
4375 4375-Sub-account Generation Facility Revenues	\$0	\$0	\$0	
4380 4380-Expenses of Non-Utility Operations	\$139,262	\$34,732	-\$104,530	75.06%
4380 4380-Sub-account Generation Facility Expenses	\$0	\$0	\$0	
4385 4385-Non-Utility Rental Income	\$0	\$0	\$0	
4390 4390-Miscellaneous Non-Operating Income	-\$150	-\$7,459	-\$7,309	4872.45%
4395 4395-Rate-Payer Benefit Including Interest	\$0	\$0	\$0	
4398 4398-Foreign Exchange Gains and Losses, Including Amortization	\$0	\$0	\$0	
4405 4405-Interest and Dividend Income	-\$9,818	-\$21,481	-\$11,663	118.80%
Total	-\$149,992	-\$156,599	-\$6,606	4.40%
Specific Service Charges	-\$57,043	-\$55,389	\$1,654	2.90%
Late Payment Charges	-\$26,047	-\$28,204	-\$2,157	8.28%
Other Distribution/Operating Revenues	-\$49,937	-\$49,043	\$895	1.79%
Other Income or Deductions	-\$16,965	-\$23,963	-\$6,998	41.25%
Total	-\$149,992	-\$156,599	-\$6,606	4.40%

Between 2012 Board Approved and 2012 Actual, Account 4082 and 4084 show a decrease of 21% and 43% respectively. This reflects a decrease in the number of retailer contracts.

For 4325, and 4330 there are also large variations. Some confusion existed as to what was to be allocated to these accounts and the 4375 and 4380 accounts. As a result, in 2013 and onward all revenue was allocated to the 4375 and 4380 accounts. When a temporary

1 contracted person was in place to cover for a maternity leave, an anomaly occurred in 2012 and
2 2013 with the 4375 and 4380 accounts. Instead of expenses to earn the Non-Utility income
3 being allocated to 4380, some were assigned directly to the 4375 income accounts. This left the
4 balances in these accounts very low. The correct values are recorded in the detailed
5 breakdown of the 4375 and 4380 accounts in table 3.48 and the difference between income and
6 expenses is equal.

7 The 4390 account is the income from scrap sales, which saw a very large increase in 2012.
8 Interest revenue from account 4405 was also high due to bank and regulatory account balances.

Table 3.54: Variance Analysis of Other Operating Revenues – 2013 to 2012

Reporting Basis		CGAAP	CGAAP	Var Analysis	Var Analysis
		2012	2013	\$	%
USoA Description					
4235	4235-Miscellaneous Service Revenues	-\$55,389	-\$52,799	\$2,590	4.68%
4225	4225-Late Payment Charges	-\$28,204	-\$26,086	\$2,118	7.51%
4082	4082-Retail Services Revenues	-\$6,867	-\$6,317	\$550	8.01%
4084	4084-Service Transaction Requests (STR) Revenues	-\$113	-\$49	\$64	56.64%
4086	4086-SSS Administration Revenue	-\$13,722	-\$13,822	-\$100	0.73%
4205	4205-Interdepartmental Rents	\$0	\$0	\$0	
4210	4210-Rent from Electric Property	-\$28,341	-\$28,685	-\$344	1.22%
4215	4215-Other Utility Operating Income	\$0	\$0	\$0	
4220	4220-Other Electric Revenues	\$0	\$0	\$0	
4240	4240-Provision for Rate Refunds	\$0	\$0	\$0	
4245	4245-Government Assistance Directly Credited to Income	\$0	\$0	\$0	
		\$0	\$0	\$0	
4305	4305-Regulatory Debits	\$0	\$0	\$0	
4310	4310-Regulatory Credits	\$0	\$0	\$0	
4315	4315-Revenues from Electric Plant Leased to Others	\$0	\$0	\$0	
4320	4320-Expenses of Electric Plant Leased to Others	\$0	\$0	\$0	
4324	4324-Special Purpose Charge Recovery	\$0	\$0	\$0	
4325	4325-Revenues from Merchandise Jobbing, Etc.	-\$31,749	-\$50	\$31,699	99.84%
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	\$19,730	-\$185	-\$19,915	100.94%
4335	4335-Profits and Losses from Financial Instrument Hedges	\$0	\$0	\$0	
4340	4340-Profits and Losses from Financial Instrument Investments	\$0	\$0	\$0	
4345	4345-Gains from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4350	4350-Losses from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4355	4355-Gain on Disposition of Utility and Other Property	-\$123	-\$5,000	-\$4,877	3965.04%
4360	4360-Loss on Disposition of Utility and Other Property	\$5,076	\$21,426	\$16,350	322.07%
4365	4365-Gains from Disposition of Allowances for Emission	\$0	\$0	\$0	
4370	4370-Losses from Disposition of Allowances for Emission	\$0	\$0	\$0	
4375	4375-Revenues from Non-Utility Operations	-\$22,691	-\$40,716	-\$18,025	79.44%
4375	4375-Sub-account Generation Facility Revenues	\$0	\$0	\$0	
4380	4380-Expenses of Non-Utility Operations	\$34,732	\$42,658	\$7,926	22.82%
4380	4380-Sub-account Generation Facility Expenses	\$0	\$0	\$0	
4385	4385-Non-Utility Rental Income	\$0	\$0	\$0	
4390	4390-Miscellaneous Non-Operating Income	-\$7,459	-\$135	\$7,323	98.19%
4395	4395-Rate-Payer Benefit Including Interest	\$0	\$0	\$0	
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	\$0	\$0	\$0	
4405	4405-Interest and Dividend Income	-\$21,481	-\$18,325	\$3,156	14.69%
	Total	-\$156,599	-\$128,084	\$28,514	18.21%
	Specific Service Charges	-\$55,389	-\$52,799	\$2,590	4.68%
	Late Payment Charges	-\$28,204	-\$26,086	\$2,118	7.51%
	Other Distribution/Operating Revenues	-\$49,043	-\$48,873	\$170	0.35%
	Other Income or Deductions	-\$23,963	-\$326	\$23,637	98.64%
	Total	-\$156,599	-\$128,084	\$28,514	18.21%

- Between 2012 and 2013 retailer contracts decreased and resulted in an 8% decrease in 4082 revenue.
- The amounts in 4084 are very small which result in large percentage changes, even though the dollar amounts are negligible.
- For 4325, and 4330 there are also large variations due to the fact that the 4375 and 4380 accounts are being used instead. As a result of fixed asset purchases and retirements there was very large variations in the 4355 and 4360 accounts, but this income and expense are not controllable.
- When a temporary contracted person was in place to cover for a maternity leave, an anomaly occurred in 2012 and 2013 with the 4375 and 4380 accounts. Instead of expenses

1 to earn the Non-Utility income being allocated to 4380, they were assigned directly to the
2 4375 income accounts. This left the balances in these accounts very low. The correct
3 values are recorded in the detailed breakdown of the 4375 and 4380 accounts in table 3.49
4 and the difference between income and expenses is equal so there is no net effect because
5 of this problem.

- 6 • The 4390 account is the income from scrap sales, and returned to normal levels from the
7 high values of 2012.
- 8 • Interest revenue from account 4405 dropped almost 15% due to the disposition of regulatory
9 balances.

10

Table 3.55: Variance Analysis of Other Operating Revenues – 2014 to 2013

Reporting Basis		CGAAP	CGAAP	Var Analysis	Var Analysis
		2013	2014	\$	%
USoA Description					
4235	4235-Miscellaneous Service Revenues	-\$52,799	-\$52,388	\$411	0.78%
4225	4225-Late Payment Charges	-\$26,086	-\$26,748	-\$662	2.54%
4082	4082-Retail Services Revenues	-\$6,317	-\$5,960	\$357	5.65%
4084	4084-Service Transaction Requests (STR) Revenues	-\$49	-\$72	-\$23	45.92%
4086	4086-SSS Administration Revenue	-\$13,822	-\$13,923	-\$101	0.73%
4205	4205-Interdepartmental Rents	\$0	\$0	\$0	
4210	4210-Rent from Electric Property	-\$28,685	-\$28,208	\$478	1.66%
4215	4215-Other Utility Operating Income	\$0	\$0	\$0	
4220	4220-Other Electric Revenues	\$0	\$0	\$0	
4240	4240-Provision for Rate Refunds	\$0	\$0	\$0	
4245	4245-Government Assistance Directly Credited to Income	\$0	\$0	\$0	
		\$0	\$0	\$0	
4305	4305-Regulatory Debits	\$0	\$0	\$0	
4310	4310-Regulatory Credits	\$0	\$0	\$0	
4315	4315-Revenues from Electric Plant Leased to Others	\$0	\$0	\$0	
4320	4320-Expenses of Electric Plant Leased to Others	\$0	\$0	\$0	
4324	4324-Special Purpose Charge Recovery	\$0	\$0	\$0	
4325	4325-Revenues from Merchandise Jobbing, Etc.	-\$50	\$0	\$50	100.00%
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	-\$185	\$0	\$185	100.00%
4335	4335-Profits and Losses from Financial Instrument Hedges	\$0	\$0	\$0	
4340	4340-Profits and Losses from Financial Instrument Investments	\$0	\$0	\$0	
4345	4345-Gains from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4350	4350-Losses from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4355	4355-Gain on Disposition of Utility and Other Property	-\$5,000	-\$17,500	-\$12,500	250.00%
4360	4360-Loss on Disposition of Utility and Other Property	\$21,426	\$17,006	-\$4,420	20.63%
4365	4365-Gains from Disposition of Allowances for Emission	\$0	\$0	\$0	
4370	4370-Losses from Disposition of Allowances for Emission	\$0	\$0	\$0	
4375	4375-Revenues from Non-Utility Operations	-\$40,716	-\$133,253	-\$92,537	227.27%
4375	4375-Sub-account Generation Facility Revenues	\$0	\$0	\$0	
4380	4380-Expenses of Non-Utility Operations	\$42,658	\$128,838	\$86,179	202.02%
4380	4380-Sub-account Generation Facility Expenses	\$0	\$0	\$0	
4385	4385-Non-Utility Rental Income	\$0	\$0	\$0	
4390	4390-Miscellaneous Non-Operating Income	-\$135	-\$1,512	-\$1,377	1017.68%
4395	4395-Rate-Payer Benefit Including Interest	\$0	\$0	\$0	
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	\$0	\$0	\$0	
4405	4405-Interest and Dividend Income	-\$18,325	-\$21,037	-\$2,713	14.80%
	Total	-\$128,084	-\$154,757	-\$26,672	20.82%
	Specific Service Charges	-\$52,799	-\$52,388	\$411	0.78%
	Late Payment Charges	-\$26,086	-\$26,748	-\$662	2.54%
	Other Distribution/Operating Revenues	-\$48,873	-\$48,162	\$711	1.46%
	Other Income or Deductions	-\$326	-\$27,459	-\$27,132	8311.61%
	Total	-\$128,084	-\$154,757	-\$26,672	20.82%

- Between 2013 and 2014 retailer contracts decreased and resulted in a 5.7% decrease in 4082 revenue.
- The amounts in 4084 are very small which result in large percentage changes, even though the dollar amounts are negligible.
- The accounts 4235, 4225, 4086 and 4210 all remain quite stable from year to year. Accounts 4325 and 4330 are no longer used.
- As a result of fixed asset purchases and retirements there was very large variations in the 4355 and 4360 accounts, but this income and expense are not controllable.
- Losses on fixed assets are mostly due to the high rate of failure for smart meters.

- 1 • In 2014, Non-Utility Income and expenses (4375 and 4380) were recorded correctly and
2 though this represents a large increase in this year, the amounts are much more in line with
3 the board approved values for these accounts.
- 4 • The 4390 account is the income from scrap sales, and though the percentage increase is
5 large, it is not a controllable factor.
- 6 • Interest revenue from account 4405 increased almost 15% due to high bank balances
7 during the year. A couple of loans were received late in 2013 and the capital projects that
8 this money funded were not completed until late in 2014.

Table 3.56: Variance Analysis of Other Operating Revenues – 2015 Bridge Year to 2014

Reporting Basis		CGAAP	MIFRS	Var Analysis	Var Analysis
		2014	2015	\$	%
USoA Description					
4235	4235-Miscellaneous Service Revenues	-\$52,388	-\$58,115	-\$5,726	10.93%
4225	4225-Late Payment Charges	-\$26,748	-\$27,012	-\$265	0.99%
4082	4082-Retail Services Revenues	-\$5,960	-\$5,943	\$16	0.28%
4084	4084-Service Transaction Requests (STR) Revenues	-\$72	-\$55	\$17	23.78%
4086	4086-SSS Administration Revenue	-\$13,923	-\$14,017	-\$94	0.68%
4205	4205-Interdepartmental Rents	\$0	\$0	\$0	
4210	4210-Rent from Electric Property	-\$28,208	-\$27,870	\$337	1.20%
4215	4215-Other Utility Operating Income	\$0	\$0	\$0	
4220	4220-Other Electric Revenues	\$0	\$0	\$0	
4240	4240-Provision for Rate Refunds	\$0	\$0	\$0	
4245	4245-Government Assistance Directly Credited to Income	\$0	-\$12,865	-\$12,865	
		\$0	\$0	\$0	
4305	4305-Regulatory Debits	\$0	\$0	\$0	
4310	4310-Regulatory Credits	\$0	\$0	\$0	
4315	4315-Revenues from Electric Plant Leased to Others	\$0	\$0	\$0	
4320	4320-Expenses of Electric Plant Leased to Others	\$0	\$0	\$0	
4324	4324-Special Purpose Charge Recovery	\$0	\$0	\$0	
4325	4325-Revenues from Merchandise Jobbing, Etc.	\$0	\$0	\$0	
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	\$0	\$0	\$0	
4335	4335-Profits and Losses from Financial Instrument Hedges	\$0	\$0	\$0	
4340	4340-Profits and Losses from Financial Instrument Investments	\$0	\$0	\$0	
4345	4345-Gains from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4350	4350-Losses from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4355	4355-Gain on Disposition of Utility and Other Property	-\$17,500	-\$2,500	\$15,000	85.71%
4360	4360-Loss on Disposition of Utility and Other Property	\$17,006	\$12,000	-\$5,006	29.44%
4365	4365-Gains from Disposition of Allowances for Emission	\$0	\$0	\$0	
4370	4370-Losses from Disposition of Allowances for Emission	\$0	\$0	\$0	
4375	4375-Revenues from Non-Utility Operations	-\$133,253	-\$135,000	-\$1,747	1.31%
4375	4375-Sub-account Generation Facility Revenues	\$0	\$0	\$0	
4380	4380-Expenses of Non-Utility Operations	\$128,838	\$130,000	\$1,162	0.90%
4380	4380-Sub-account Generation Facility Expenses	\$0	\$0	\$0	
4385	4385-Non-Utility Rental Income	\$0	\$0	\$0	
4390	4390-Miscellaneous Non-Operating Income	-\$1,512	-\$1,500	\$12	0.79%
4395	4395-Rate-Payer Benefit Including Interest	\$0	\$0	\$0	
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	\$0	\$0	\$0	
4405	4405-Interest and Dividend Income	-\$21,037	-\$5,000	\$16,037	76.23%
	Total	-\$154,757	-\$147,878	\$6,879	4.45%
	Specific Service Charges	-\$52,388	-\$58,115	-\$5,726	10.93%
	Late Payment Charges	-\$26,748	-\$27,012	-\$265	0.99%
	Other Distribution/Operating Revenues	-\$48,162	-\$60,751	-\$12,589	26.14%
	Other Income or Deductions	-\$27,459	-\$2,000	\$25,459	92.72%
	Total	-\$154,757	-\$147,878	\$6,879	4.45%

- Between 2014 and 2015 Account 4235 is projected to increase 11% based on increased activity.
- The amounts in 4084 are very small which result in large percentage changes, even though the dollar amounts are negligible.
- The accounts 4082, 4225, 4086, and 4210 all remained quite stable from the previous year.
- Account 4245 is being used now to record the deferred revenue allocations. This is new for MIFRS.
- As a result of fixed asset purchases and retirements there were large variations in the 4355 and 4360 accounts, but this income and expense are not controllable. Losses on fixed

1 assets are mostly due to the high rate of failure for smart meters. Though it never is really
2 certain what chargeable jobs will occur.

- 3 • Non-Utility Income and expenses in 4375 and 4380 are relatively stable.
- 4 • Interest revenue from account 4405 is projected to decrease dramatically, due to much
5 lower bank and regulatory balances as well as a lower interest rate.

Table 3.57: Variance Analysis of Other Operating Revenues
– 2015 Bridge Year to 2016 Test Year

	Reporting Basis	MIFRS 2015	MIFRS 2016	Var Analysis \$	Var Analysis %
	USoA Description				
4235	4235-Miscellaneous Service Revenues	-\$58,115	-\$60,474	-\$2,360	4.06%
4225	4225-Late Payment Charges	-\$27,012	-\$27,012	\$0	0.00%
4082	4082-Retail Services Revenues	-\$5,943	-\$5,948	-\$5	0.08%
4084	4084-Service Transaction Requests (STR) Revenues	-\$55	-\$49	\$5	9.63%
4086	4086-SSS Administration Revenue	-\$14,017	-\$14,113	-\$96	0.68%
4205	4205-Interdepartmental Rents	\$0	\$0	\$0	
4210	4210-Rent from Electric Property	-\$27,870	-\$27,826	\$45	0.16%
4215	4215-Other Utility Operating Income	\$0	\$0	\$0	
4220	4220-Other Electric Revenues	\$0	\$0	\$0	
4240	4240-Provision for Rate Refunds	\$0	\$0	\$0	
4245	4245-Government Assistance Directly Credited to Income	-\$12,865	-\$14,165	-\$1,300	10.10%
		\$0	\$0	\$0	
4305	4305-Regulatory Debits	\$0	\$0	\$0	
4310	4310-Regulatory Credits	\$0	\$0	\$0	
4315	4315-Revenues from Electric Plant Leased to Others	\$0	\$0	\$0	
4320	4320-Expenses of Electric Plant Leased to Others	\$0	\$0	\$0	
4324	4324-Special Purpose Charge Recovery	\$0	\$0	\$0	
4325	4325-Revenues from Merchandise Jobbing, Etc.	\$0	\$0	\$0	
4330	4330-Costs and Expenses of Merchandising Jobbing, Etc.	\$0	\$0	\$0	
4335	4335-Profits and Losses from Financial Instrument Hedges	\$0	\$0	\$0	
4340	4340-Profits and Losses from Financial Instrument Investments	\$0	\$0	\$0	
4345	4345-Gains from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4350	4350-Losses from Disposition of Future Use Utility Plant	\$0	\$0	\$0	
4355	4355-Gain on Disposition of Utility and Other Property	-\$2,500	-\$2,000	\$500	20.00%
4360	4360-Loss on Disposition of Utility and Other Property	\$12,000	\$12,500	\$500	4.17%
4365	4365-Gains from Disposition of Allowances for Emission	\$0	\$0	\$0	
4370	4370-Losses from Disposition of Allowances for Emission	\$0	\$0	\$0	
4375	4375-Revenues from Non-Utility Operations	-\$135,000	-\$140,000	-\$5,000	3.70%
4375	4375-Sub-account Generation Facility Revenues	\$0	\$0	\$0	
4380	4380-Expenses of Non-Utility Operations	\$130,000	\$134,000	\$4,000	3.08%
4380	4380-Sub-account Generation Facility Expenses	\$0	\$0	\$0	
4385	4385-Non-Utility Rental Income	\$0	\$0	\$0	
4390	4390-Miscellaneous Non-Operating Income	-\$1,500	-\$1,500	\$0	0.00%
4395	4395-Rate-Payer Benefit Including Interest	\$0	\$0	\$0	
4398	4398-Foreign Exchange Gains and Losses, Including Amortization	\$0	\$0	\$0	
4405	4405-Interest and Dividend Income	-\$5,000	-\$4,000	\$1,000	20.00%
	Total	-\$147,878	-\$150,588	-\$2,710	1.83%
	Specific Service Charges	-\$58,115	-\$60,474	-\$2,360	4.06%
	Late Payment Charges	-\$27,012	-\$27,012	\$0	0.00%
	Other Distribution/Operating Revenues	-\$60,751	-\$62,102	-\$1,351	2.22%
	Other Income or Deductions	-\$2,000	-\$1,000	\$1,000	50.00%
	Total	-\$147,878	-\$150,588	-\$2,710	1.83%

- The amounts in 4084 are very small which result in large percentage changes, even though the dollar amounts are negligible.
- The accounts 4235, 4082, 4225, 4086, and 4210 all remained quite stable from the previous year.
- Account 4245 is being used now to record the deferred revenue allocations under MIFRS and this will change based on increases in deferred revenue received.
- As a result of fixed asset purchases and retirements there is some variations in the 4355 and 4360 accounts, but this income and expense are not controllable. Losses on fixed

1 assets are mostly due to the high rate of failure for smart meters. Though it never is really
2 certain what chargeable jobs will occur.

- 3 • Non-Utility Income and expenses in 4375 and 4380 are estimated to be relatively stable.
- 4 • Interest revenue from account 4405 is projected to stay low, due to much lower bank and
5 regulatory balances as well as a lower interest rate.

Ex.3/Tab 4/Sch.3 – Proposed Specific Service Charges

WNP proposes to change the current monthly Service Charge for the utility's MicroFIT customer class. WNP incurs a \$10.00 monthly fee per MicroFIT meter point from the utility's settlement provider, UtiliSmart. This \$10.00 per month per MicroFIT meter point settlement fee pays for the collation of daily interval 15-minute data and calculating the total kWh generated that needs to be deducted from IESO kWh purchases. WNP is invoiced each month for settlement calculation and validation activities performed by the provider; and one line item included in the invoice is represents the number of MicroFIT meters x \$10 per MicroFIT meter point.

As the settlement cost is a recoverable expense, in WNP's opinion, the cost for this specific charge associate with MicroFIT data should be recovered directly from the MicroFIT rate class.

Furthermore, in St. Thomas Energy Inc.'s Rate Order (reference EB-2014-0113) dated December 18th 2014, the Board approved the Applicant's request to adjust the MicroFIT service charge to \$10.00.

WNP proposes that this charge should be passed onto the utility's MicroFIT customers effective from May 1, 2016 or when the Applicant's 2016 distribution rates are approved by the Board. WNP has provided for this increase in revenue in the Applicant's 2016 revenue offsets.

With the exception of the MicroFIT monthly service charge described above, WNP proposes no other changes to the current Specific Service Charges.

Appendix

List of Appendices

Appendix 3A	Load Forecast – Predicted Purchases for 2005 to 2014
Appendix 3B	Regression Scenarios Performed
Appendix 3C	IESO Final Results Report for Wellington North Power Inc. (CDM) for 2011- 2014

Appendix 3A – Load Forecast – Predicted Purchases for 2005 to 2014

	Unadjusted Wholesale Purchases (kWh)	Generation (MicroFIT and FIT) kWh	Revised Wholesale Purchases kWh	Heating Degree Day	Cooling Degree Day	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased)	Predicted Purchases
Jan-05	9,511,622	0	9,511,622	829.30	0.00	31	320	629.80	2,182,079.51	9,331,210
Feb-05	8,356,417	0	8,356,417	691.00	0.00	28	320	631.30	1,993,852.22	8,473,261
Mar-05	8,891,064	0	8,891,064	708.10	0.00	31	352	628.70	2,205,155.03	9,171,034
Apr-05	7,665,148	0	7,665,148	357.60	0.20	30	336	631.70	2,114,231.86	8,009,171
May-05	7,570,243	0	7,570,243	244.50	0.60	31	336	639.30	2,253,270.25	7,979,599
Jun-05	7,982,091	0	7,982,091	26.90	98.50	30	352	648.60	2,281,683.61	8,223,329
Jul-05	7,604,890	0	7,604,890	13.60	85.30	31	320	653.60	2,007,717.02	7,911,963
Aug-05	8,306,210	0	8,306,210	11.80	62.10	31	352	655.80	2,642,121.67	8,294,697
Sep-05	7,686,742	0	7,686,742	68.20	22.60	30	336	652.30	2,443,235.02	7,770,504
Oct-05	8,151,171	0	8,151,171	273.60	9.40	31	320	649.70	2,551,306.60	8,309,640
Nov-05	8,457,765	0	8,457,765	445.50	0.00	30	352	643.80	2,348,014.98	8,539,677
Dec-05	8,994,173	0	8,994,173	721.80	0.00	31	320	644.50	1,979,573.80	9,008,034
Jan-06	9,308,926	0	9,308,926	626.30	0.00	31	336	643.20	2,472,593.80	9,143,993
Feb-06	8,675,458	0	8,675,458	693.70	0.00	28	320	642.40	2,310,390.59	8,754,095
Mar-06	9,235,190	0	9,235,190	613.60	0.00	31	368	640.80	1,992,557.34	8,934,443
Apr-06	7,771,829	0	7,771,829	328.40	0.00	30	304	643.50	2,226,305.74	7,926,256
May-06	8,018,637	0	8,018,637	176.50	21.20	31	352	652.40	2,485,845.04	8,274,195
Jun-06	7,829,938	0	7,829,938	59.70	29.30	30	352	659.90	2,396,645.86	7,993,880
Jul-06	7,512,883	0	7,512,883	8.60	96.50	31	320	664.50	1,843,098.63	7,949,793
Aug-06	7,987,541	0	7,987,541	39.90	35.30	31	350	666.40	2,395,514.72	8,047,705
Sep-06	7,570,669	0	7,570,669	145.00	2.80	30	320	663.90	2,221,638.26	7,664,817
Oct-06	8,459,920	0	8,459,920	351.80	0.00	31	336	666.20	2,363,022.39	8,493,563
Nov-06	8,646,179	0	8,646,179	420.90	0.00	30	352	665.40	2,449,494.29	8,673,986
Dec-06	8,709,606	0	8,709,606	569.80	0.00	31	304	666.50	2,072,506.43	8,729,597
Jan-07	9,471,440	0	9,471,440	729.30	0.00	31	352	660.70	2,589,945.47	9,673,527
Feb-07	8,867,908	0	8,867,908	793.80	0.00	28	320	654.80	2,252,054.43	9,055,609
Mar-07	9,202,851	0	9,202,851	593.10	0.00	31	352	650.20	2,516,371.78	9,203,319
Apr-07	8,276,828	0	8,276,828	424.30	0.00	30	320	645.10	2,339,264.04	8,336,313
May-07	8,110,169	0	8,110,169	170.30	16.10	31	352	644.40	1,984,082.33	7,841,859
Jun-07	8,194,020	0	8,194,020	55.50	46.30	30	336	649.60	2,548,909.59	7,980,754
Jul-07	7,703,200	0	7,703,200	34.00	43.40	31	336	657.20	2,218,405.13	7,860,510
Aug-07	8,380,226	0	8,380,226	26.30	57.20	31	352	659.20	2,709,923.62	8,358,088
Sep-07	7,710,376	0	7,710,376	83.90	29.40	30	304	657.80	2,380,020.99	7,709,621
Oct-07	8,336,948	0	8,336,948	189.20	15.20	31	352	659.20	2,409,926.87	8,251,677
Nov-07	8,743,245	0	8,743,245	525.90	0.00	30	352	662.80	2,296,535.83	8,834,559
Dec-07	8,907,988	0	8,907,988	696.20	0.00	31	304	664.00	1,866,637.68	8,912,677
Jan-08	9,724,722	0	9,724,722	693.80	0.00	31	352	656.30	2,456,376.39	9,466,512
Feb-08	9,282,696	0	9,282,696	736.00	0.00	29	320	651.20	2,386,869.04	9,096,313
Mar-08	9,335,764	0	9,335,764	698.00	0.00	31	304	642.30	2,419,561.23	9,142,382
Apr-08	8,210,709	0	8,210,709	299.10	1.40	30	352	642.30	2,444,891.81	8,220,031
May-08	7,883,595	0	7,883,595	263.10	0.30	31	336	642.50	2,238,850.97	8,036,396
Jun-08	7,787,375	0	7,787,375	50.30	44.80	30	336	648.20	2,213,271.07	7,728,600
Jul-08	7,815,607	0	7,815,607	19.40	55.10	31	352	653.50	1,931,221.32	7,782,696
Aug-08	7,810,492	0	7,810,492	32.23	28.40	31	320	656.20	2,204,584.23	7,644,411
Sep-08	7,677,287	0	7,677,287	98.80	4.50	30	336	658.80	1,694,540.21	7,258,846
Oct-08	8,247,980	0	8,247,980	329.80	0.00	31	352	661.50	2,236,505.91	8,399,742
Nov-08	8,166,427	0	8,166,427	516.60	0.00	30	304	664.70	1,816,145.52	8,285,187
Dec-08	8,567,606	0	8,567,606	733.60	0.00	31	336	662.10	1,318,681.40	8,793,753
Jan-09	8,778,546	0	8,778,546	901.40	0.00	31	336	651.40	1,386,993.43	9,212,923
Feb-09	7,661,282	0	7,661,282	679.40	0.00	28	304	639.40	1,278,827.90	7,953,848
Mar-09	8,189,544	0	8,189,544	597.00	0.00	31	352	627.60	1,599,507.15	8,479,517
Apr-09	7,376,418	0	7,376,418	361.70	0.00	30	320	623.90	1,681,721.41	7,614,678
May-09	6,711,504	0	6,711,504	219.60	2.00	31	320	622.70	1,481,788.71	7,247,747
Jun-09	6,849,734	0	6,849,734	99.10	15.50	30	352	632.10	1,480,617.89	7,120,311
Jul-09	6,821,425	0	6,821,425	61.20	10.30	31	352	637.90	1,533,239.47	7,175,833
Aug-09	7,581,948	0	7,581,948	43.00	48.10	31	320	643.00	1,842,378.49	7,515,728
Sep-09	7,570,598	0	7,570,598	110.20	7.50	30	336	643.30	2,152,613.22	7,514,707
Oct-09	8,346,682	0	8,346,682	345.30	0.00	31	336	644.90	2,250,006.43	8,271,923
Nov-09	8,386,159	0	8,386,159	396.20	0.00	30	320	642.20	2,214,423.39	8,163,642
Dec-09	9,141,543	0	9,141,543	698.60	0.00	31	352	639.10	1,953,856.93	9,047,142
Jan-10	9,555,507	0	9,555,507	791.50	0.00	31	320	633.60	2,212,166.71	9,274,848
Feb-10	8,513,222	0	8,513,222	680.10	0.00	28	304	630.50	1,973,695.14	8,351,618
Mar-10	8,793,380	0	8,793,380	504.70	0.00	31	368	627.50	2,333,569.57	8,787,644
Apr-10	7,779,667	0	7,779,667	273.20	1.00	30	320	631.60	2,176,410.28	7,758,650
May-10	8,100,891	0	8,100,891	148.20	24.00	31	320	641.50	2,343,664.32	7,913,093
Jun-10	7,984,499	0	7,984,499	55.23	18.70	30	352	657.20	2,300,956.26	7,717,796
Jul-10	8,350,976	0	8,350,976	12.70	89.70	31	336	669.80	2,325,624.35	8,326,248
Aug-10	8,692,122	0	8,692,122	19.30	82.00	31	336	672.00	2,526,907.88	8,425,437
Sep-10	8,099,924	0	8,099,924	137.00	15.50	30	336	665.10	2,397,723.77	7,943,153
Oct-10	8,501,568	0	8,501,568	301.00	0.00	31	320	657.20	2,469,206.23	8,298,540
Nov-10	8,832,882	0	8,832,882	439.27	0.00	30	336	655.20	2,399,218.98	8,551,763
Dec-10	9,403,627	0	9,403,627	744.30	0.00	31	368	653.30	2,171,049.35	9,470,590
Jan-11	9,903,507	65	9,903,572	866.50	0.00	31	336	649.30	2,435,983.55	9,788,804
Feb-11	9,130,223	1,664	9,131,887	720.40	0.00	28	304	651.20	2,335,707.17	8,819,877
Mar-11	9,825,256	5,312	9,830,569	660.10	0.00	31	368	657.10	2,656,453.53	9,587,714
Apr-11	8,000,503	7,099	8,007,602	379.30	0.00	30	320	666.40	2,129,747.43	8,213,437
May-11	7,972,210	6,194	7,978,404	168.10	12.80	31	336	671.50	2,308,697.27	8,111,957
Jun-11	7,947,472	9,229	7,956,701	64.10	16.40	30	352	681.80	2,359,470.27	7,912,028
Jul-11	8,282,741	22,629	8,305,370	3.70	104.30	31	320	691.50	2,118,772.13	8,345,219
Aug-11	8,881,989	10,674	8,892,663	13.60	53.30	31	368	694.90	2,641,947.90	8,544,072
Sep-11	8,383,667	8,059	8,391,725	106.33	20.70	30	336	688.60	2,553,254.91	8,150,358
Oct-11	8,946,252	6,054	8,952,307	276.60	0.30	31	320	682.20	2,742,885.93	8,568,461
Nov-11	8,876,428	4,891	8,881,318	399.40	0.00	30	352	677.00	2,504,778.86	8,724,852
Dec-11	9,391,756	1,825	9,393,581	609.80	0.00	31	336	676.60	2,369,546.70	9,239,611

1 Appendix 3A / Continued – Load Forecast – Predicted Purchases for 2005 to 2014

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	Unadjusted Wholesale Purchases (kWh)	Generation (MicroFIT and FIT) kWh	Revised Wholesale Purchases kWh	Heating Degree Day	Cooling Degree Day	Number of Days in Month	Number of Peak Hours	Regional Employment	Sensitive Customers (Purchased)	Predicted Purchases
Jan-12	9,969,659	2,638	9,972,298	694.60	0.00	31	336	670.90	2,658,660.21	9,614,799
Feb-12	9,266,795	4,659	9,271,454	611.40	0.00	29	304	668.70	2,606,185.77	8,944,111
Mar-12	9,409,618	10,173	9,419,790	388.70	3.40	31	352	666.00	2,834,712.33	8,997,761
Apr-12	8,519,455	13,281	8,532,736	399.00	0.00	30	304	667.40	2,633,017.88	8,522,825
May-12	8,612,164	16,576	8,628,741	123.80	17.40	31	352	672.10	2,706,007.48	8,369,237
Jun-12	8,638,914	16,383	8,655,297	56.40	57.10	30	336	678.40	2,685,182.69	8,336,340
Jul-12	8,769,534	16,817	8,786,351	0.40	94.00	31	336	682.00	2,558,192.63	8,554,765
Aug-12	9,201,513	20,048	9,221,561	22.50	50.70	31	352	678.50	2,997,631.91	8,601,099
Sep-12	8,451,029	16,364	8,467,393	134.70	15.30	30	304	671.90	2,565,639.12	7,936,316
Oct-12	9,155,016	8,530	9,163,547	292.20	0.00	31	352	672.80	2,767,217.13	8,714,884
Nov-12	9,016,280	6,433	9,022,713	505.72	0.00	30	336	676.80	2,460,499.18	8,899,184
Dec-12	9,266,738	3,199	9,269,936	590.90	0.00	31	304	682.70	2,224,568.01	8,983,493
Jan-13	10,228,961	4,706	10,233,667	703.37	0.00	31	352	681.60	2,663,296.85	9,781,773
Feb-13	9,383,922	2,407	9,386,329	699.60	0.00	28	304	682.60	2,593,943.36	9,126,246
Mar-13	9,829,034	15,410	9,844,444	649.00	0.00	31	320	683.60	3,306,865.10	9,918,769
Apr-13	8,360,602	23,775	8,384,378	414.20	0.00	30	336	685.40	3,534,194.59	9,408,286
May-13	8,890,829	33,327	8,924,156	160.67	18.70	31	352	690.30	3,535,885.33	9,127,100
Jun-13	8,539,244	31,146	8,570,390	67.40	35.00	30	320	696.70	3,252,316.21	8,592,151
Jul-13	8,808,585	24,908	8,833,492	19.60	75.90	31	352	702.80	3,233,445.78	9,100,022
Aug-13	8,890,441	30,729	8,921,170	33.90	34.50	31	336	701.40	3,561,254.67	8,931,750
Sep-13	8,502,958	25,519	8,528,477	133.10	17.20	30	320	698.40	3,380,656.66	8,714,494
Oct-13	9,300,423	17,141	9,317,564	270.69	0.00	31	352	698.40	3,717,267.32	9,432,438
Nov-13	9,558,856	8,804	9,567,660	557.37	0.00	30	272	700.00	3,481,016.53	9,539,816
Dec-13	9,800,086	2,247	9,802,333	767.20	0.00	31	320	695.40	3,058,379.41	10,140,778
Jan-14	10,799,725	2,439	10,802,165	899.70	0.00	31	352	689.40	3,591,070.46	10,947,441
Feb-14	9,710,845	2,992	9,713,837	820.97	0.00	28	304	682.30	3,355,558.67	9,937,285
Mar-14	10,397,444	13,924	10,411,368	767.16	0.00	31	336	680.20	3,697,221.50	10,536,432
Apr-14	9,186,100	25,104	9,211,204	423.07	0.00	30	320	679.40	3,495,242.65	9,294,333
May-14	9,013,757	32,010	9,045,768	185.60	7.60	31	336	690.00	3,735,523.09	9,155,471
Jun-14	8,560,168	48,617	8,608,785	36.00	44.00	30	336	704.40	3,380,283.50	8,787,929
Jul-14	8,459,289	52,243	8,511,532	59.10	25.70	31	352	715.10	3,371,786.38	8,963,280
Aug-14	8,922,514	46,971	8,969,486	40.50	32.40	31	320	718.70	3,631,166.43	9,009,052
Sep-14	8,881,019	39,980	8,920,999	117.20	12.40	30	336	719.30	3,632,293.75	9,000,933
Oct-14	9,391,767	20,846	9,412,613	292.40	0.00	31	352	723.50	3,765,533.17	9,675,446
Nov-14	9,369,360	7,638	9,376,999	548.07	0.00	30	304	721.00	2,869,683.61	9,398,213
Dec-14	9,427,476	8,282	9,435,758	623.73	0.00	31	336	714.30	2,503,707.24	9,595,551

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Appendix 3B – Regression Scenarios Performed

Scenario 1 SUMMARY OUTPUT										Year			
Regression Statistics										kWh Purchased	Adjusted	Purch. VS Adj.	
Multiple R	66.99%									2005	99,177,534.70	104,297,613.24	5.16%
R Square	44.88%									2006	99,126,774.81	102,749,409.18	3.03%
Adjusted R Square	43.94%									2007	101,905,199.30	103,574,662.18	1.64%
Standard Error	569336.1071									2008	100,510,260.57	103,328,873.12	2.80%
Observations	120									2009	93,415,381.52	103,017,165.55	10.28%
ANOVA										2010	102,608,264.83	103,275,211.02	0.65%
	df	SS	MS	F	Significance F					2011	105,625,698.07	103,454,994.28	2.06%
Regression	2	3.08787E+13	1.54394E+13	47.63125815	7.35842E-16					2012	108,411,816.52	102,686,645.56	5.28%
Residual	117	3.79248E+13	3.24144E+11							2013	110,314,059.50	103,712,927.02	5.98%
Total	119	6.88035E+13								2014	112,475,947.06	104,074,436.74	7.47%
Coefficients										Mean Average Percentage Error (Mape) :			
Intercept		7692986.85	136291.5661	56.37	1.11634E-36	7413068.543	7952905.152	7413068.543	7952905.152	Median			4.44%
Heating Degree Day		2251.07	256.7685728	8.77	1.71151E-14	1742.553293	2759.586699	1742.553293	2759.586699	Year	kWh Forecasted Purchases	year over year	
Cooling Degree Day		7948.68	2764.310932	2.88	0.00479457	2474.105765	13423.25165	2474.105765	13423.25165	2015	126,830,075.87	12.77%	
										2016	128,629,728.10	1.41%	
Scenario 2 SUMMARY OUTPUT										Year			
Regression Statistics										kWh Purchased	Adjusted	Purch. VS Adj.	
Multiple R	70.64%									2005	99,177,534.70	104,195,103.23	5.08%
R Square	49.90%									2006	99,126,774.81	102,683,346.96	2.98%
Adjusted R Square	48.61%									2007	101,905,199.30	103,517,355.66	1.58%
Standard Error	545113.1195									2008	100,510,260.57	103,547,524.42	3.02%
Observations	120									2009	93,415,381.52	103,064,867.02	10.33%
ANOVA										2010	102,608,264.83	103,183,286.52	0.56%
	df	SS	MS	F	Significance F					2011	105,625,698.07	103,393,066.98	2.11%
Regression	3	3.43343E+13	1.14448E+13	38.51537089	2.39474E-17					2012	108,411,816.52	102,777,024.32	5.20%
Residual	116	3.44692E+13	2.97148E+11							2013	110,314,059.50	103,687,320.58	6.01%
Total	119	6.88035E+13								2014	112,475,947.06	104,122,041.19	7.43%
Coefficients										Mean Average Percentage Error (Mape) :			
Intercept		1239324.00	1894048.397	0.65	0.514197379	-2512077.507	4900725.504	-2512077.507	4900725.504	Median			4.43%
Heating Degree Day		2334.19	247.0493374	9.45	4.65287E-16	1844.874561	2823.499244	1844.874561	2823.499244	Year	kWh Forecasted Purchases	year over year	
Cooling Degree Day		7230.96	2655.055409	2.72	0.007458785	1972.285644	12489.62921	1972.285644	12489.62921	2015	103,374,870.99	8.09%	
Number of Days in Month		211113.51	61907.1923	3.41	0.000893962	88498.51742	333728.507	88498.51742	333728.507	2016	103,585,984.50	0.20%	
Scenario 3 SUMMARY OUTPUT										Year			
Regression Statistics										kWh Purchased	Adjusted	Purch. VS Adj.	
Multiple R	71.18%									2005	99,177,534.70	104,278,683.04	5.14%
R Square	50.66%									2006	99,126,774.81	102,736,921.10	3.02%
Adjusted R Square	48.95%									2007	101,905,199.30	103,647,985.69	1.71%
Standard Error	543294.1424									2008	100,510,260.57	103,509,061.14	2.98%
Observations	120									2009	93,415,381.52	103,056,286.53	10.32%
ANOVA										2010	102,608,264.83	103,245,726.04	0.62%
	df	SS	MS	F	Significance F					2011	105,625,698.07	103,585,625.72	1.93%
Regression	4	3.48592E+13	8.71479E+12	29.52479129	6.84804E-17					2012	108,411,816.52	102,601,234.41	5.36%
Residual	115	3.39444E+13	2.95169E+11							2013	110,314,059.50	103,438,117.58	6.23%
Total	119	6.88035E+13								2014	112,475,947.06	104,070,295.65	7.47%
Coefficients										Mean Average Percentage Error (Mape) :			
Intercept		1010415.35	1895517.804	0.53	0.595024101	-2744240.607	4765071.313	-2744240.607	4765071.313	Median			4.08%
Heating Degree Day		2376.21	248.2331631	9.57	2.56398E-16	1884.503229	2867.907472	1884.503229	2867.907472	Year	kWh Forecasted Purchases	year over year	
Cooling Degree Day		7397.07	2649.12642	2.79	0.006131398	2149.658371	12644.47755	2149.658371	12644.47755	2015	103,382,192.52	8.09%	
Number of Days in Month		174505.85	67532.72687	2.58	0.011017608	40736.51612	308275.1854	40736.51612	308275.1854	2016	103,585,698.37	0.17%	
Number of Peak Hours		3974.16	2980.394918	1.33	0.185024397	-1929.426378	9877.751082	-1929.426378	9877.751082				
Scenario 4 SUMMARY OUTPUT										Year			
Regression Statistics										kWh Purchased	Adjusted	Purch. VS Adj.	
Multiple R	89.67%									2005	99,177,534.70	98,246,626.42	0.94%
R Square	80.40%									2006	99,126,774.81	99,690,779.16	0.04%
Adjusted R Square	79.54%									2007	101,905,199.30	100,973,066.73	0.91%
Standard Error	343923.7135									2008	100,510,260.57	101,514,100.59	1.00%
Observations	120									2009	93,415,381.52	98,421,377.38	5.36%
ANOVA										2010	102,608,264.83	101,146,177.51	1.42%
	df	SS	MS	F	Significance F					2011	105,625,698.07	106,987,670.74	1.29%
Regression	5	5.53192E+13	1.10638E+13	93.53663995	1.09996E-38					2012	108,411,816.52	105,286,540.81	2.88%
Residual	114	1.34843E+13	1.18284E+11							2013	110,314,059.50	109,917,175.30	0.36%
Total	119	6.88035E+13								2014	112,475,947.06	111,987,422.24	0.43%
Coefficients										Mean Average Percentage Error (Mape) :			
Intercept		(9617408.80)	1446656.512	(6.65)	1.07067E-09	-12483224.2	6751593.389	-12483224.2	6751593.389	Median			1.46%
Heating Degree Day		2611.65	158.1564671	16.51	5.14366E-32	2298.341657	2924.955143	2298.341657	2924.955143	Year	kWh Forecasted Purchases	year over year	
Cooling Degree Day		6475.57	1678.450378	3.86	0.000189804	3150.572422	9800.566955	3150.572422	9800.566955	2015	111,552,566.75	-0.82%	
Number of Days in Month		116790.28	42975.16107	2.72	0.007601883	31656.8214	201923.7476	31656.8214	201923.7476	2016	113,467,673.71	1.72%	
Number of Peak Hours		6754.98	1898.502265	3.56	0.000545646	2994.063438	10515.90017	2994.063438	10515.90017				
Regional Employment		16951.59	1288.89975	13.15	1.3382E-24	14398.29029	19504.89125	14398.29029	19504.89125				

Appendix 3C – IESO Final Results Report for WNP (CDM)

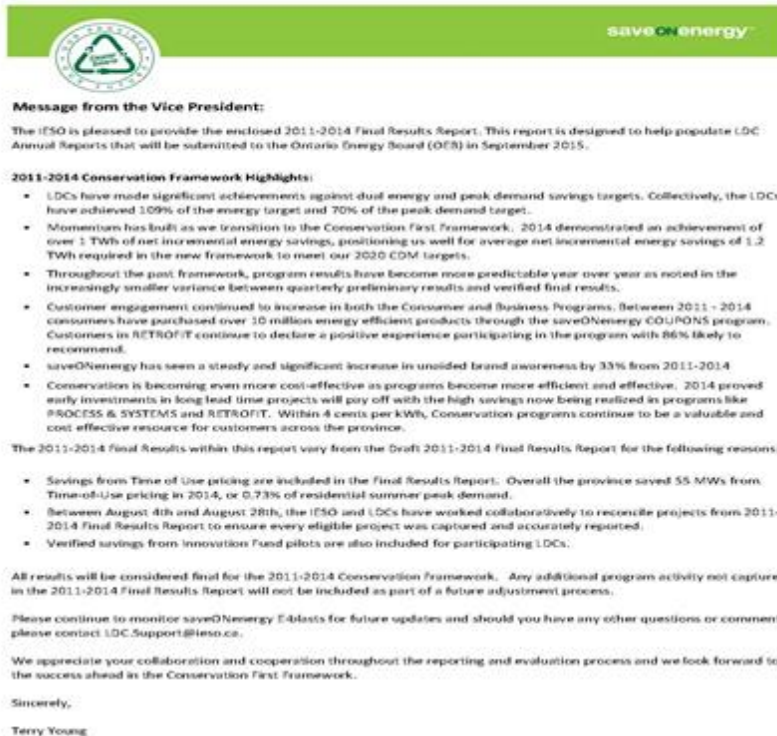


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IESO-Contracted Province-Wide CDM Programs: 2011-2014 Final Results Report

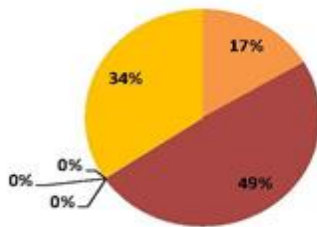
LDC: Wellington North Power Inc.

Final 2014 Achievement Against Targets	2014 Incremental	2011-2014	
		Achievement Against Target	% of Target Achieved
Net Annual Peak Demand Savings (MW)	0.2	0.5	51.7%
Net Energy Savings (GWh)	0.3	3.3	73.2%

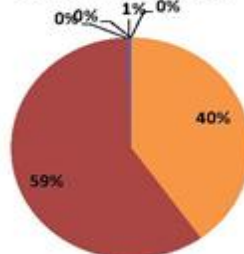
Unless otherwise noted, results are presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Achievement by Sector

2014 Incremental
Peak Demand Savings (MW)



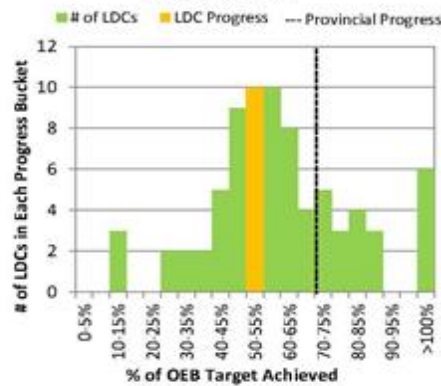
2014 Incremental
Energy Savings (GWh)



Consumer Business Industrial HAP ACP Other

Comparison: LDC Achievement vs. LDC Community Achievement (Progress to Target)

% of OEB Peak Demand Savings
Target Achieved



% of OEB Energy Savings Target Achieved



1

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program to Date Verified Progress to Target (includes 0-5)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Programs															
Appliance Retirement	Appliances	59	34	43	50	0	0	0	0	24,453	39,126	18,111	21,442	25	275,893
Appliance Exchange	Appliances	2	15	0	1	0	2	0	0	350	4,054	0	363	3	13,827
Appliance Rebate	Equipment	27	33	28	25	10	9	6	6	25,522	34,329	11,502	11,945	10	145,526
Conservation Instant Coupon Booklet	Items	319	20	210	474	1	0	0	1	11,756	884	4,875	18,352	3	75,776
Bi-Annual Retailer Event	Items	402	473	559	3,051	1	1	1	5	18,584	34,910	10,440	77,730	8	224,619
Retailer Co-op	Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	0	0	0	4	0	0	0	2	0	0	0	0	2	0
Residential Demand Response (DR)	Devices	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Program Total						15	12	10	10	75,866	79,312	45,573	129,730	41	754,836
Business Programs															
Net-Add	Projects	1	7	5	5	1	51	13	20	2,732	206,779	47,617	56,761	124	1,155,919
Direct Install Lighting	Projects	21	29	9	17	29	24	7	24	74,163	106,563	24,191	92,723	78	736,769
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Audit	Audits	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Commercial Dem and Response	Devices	0	0	0	1	0	0	0	1	0	0	0	0	1	0
Small Commercial Demand Response (DR)	Devices	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Program Total						29	112	21	55	77,275	413,362	91,878	249,483	213	1,899,659
Industrial Programs															
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retrofit	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industrial Program Total						0	0	0	0	0	0	0	0	0	0
Home Assistance Programs															
Home Assistance Program	Homes	0	0	57	0	0	1	5	0	0	5,013	55,434	1,076	6	140,297
Home Assistance Program Total						0	1	5	0	0	5,013	55,434	1,076	6	140,297
Other Programs															
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total						0	0	0	0	0	0	0	0	0	0
Other Programs															
Electricity Rebate Incentive Program	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Performance New Construction	Projects	0	0	0	0	0	0	0	0	277	89	0	0	0	1,138
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family Energy Efficiency Rebate	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDC Custom Program	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total						0	0	0	0	277	89	0	0	0	1,138
Other Programs															
Program Enabled Savings	Projects	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Time-of-Day Savings	Homes	0	0	0	n/a	0	0	0	10	0	0	0	0	10	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						0	0	0	10	0	0	0	0	10	0
Adjustments to 2011 Verified Results							0	0	0		1,339	0	0	0	5,330
Adjustments to 2012 Verified Results								26	2		168,936	8,726		28	389,867
Adjustments to 2013 Verified Results									1.75			526		135	3,851
Energy Efficiency Total						45	135	36	100	153,518	409,556	193,875	329,247	315	2,295,388
Demand Response Total (Scenario 1)						0	0	0	3	0	0	0	0	3	0
Adjustments to Previous Years' Verified Results Total						0	0	26	1.17	0	1,339	168,936	9,253	161	501,363
OPA Contracted LDC Portfolio Total (Inc. Adjustments)						45	136	62	103	153,518	580,886	353,871	337,451	491	3,396,671
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).															
*Includes adjustments after Peak Reports were issued.															
Results reported using scenario 1 which assumes that demand response resources have a persistence of 1 year.															
Full O&B Target:															930
% of Full O&B Target Achieved to Date (Scenario 1):															51.7%
Full O&B Target:															4,520,000
% of Full O&B Target Achieved to Date (Scenario 1):															73.2%

2

3

Table 2: Adjustments to Wellington North Power Inc. Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program to Date Verified Progress to Target (excludes DR)	
		2013*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2013
Consumer Programs															
Appliance Rebate/Incentive	Appliances	0	0	0		0	0	0		0	0	0		0	0
HEAC Incentives	Equipment	-2	0	1		-1	0	0		-1,010	5	515		0	-8,904
Conservation Incentive Coupon Booklet	Items	1	0	1		0	0	0		174	0	15		0	777
Bi-Annual Retailer Event	Items	52	0	0		0	0	0		1,381	0	0		0	5,524
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (DR)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Total						4	0	0		545	5	526		0	3,287
Commercial Programs															
Retrofits	Projects	0	1	0		0	26	0		0	254,211	0		26	462,330
Direct Install Lighting	Projects	1	1	0		0	2	0		765	6,820	0		2	23,599
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0
Energy Audit	Audits	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (DR)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Business Program Total						0	26	0		765	160,831	0		26	685,932
Industrial Programs															
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	0		0	0	0		0	0	0		0	0
Retrofits	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Industrial Program Total						0	0	0		0	0	0		0	0
Home Assistance Programs															
Home Assistance Program	Homes	0	0	0		0	2	0		0	6,729	0		2	25,164
Home Assistance Program Total						0	2	0		0	6,729	0		2	26,844
Aboriginal Programs															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						0	0	0		0	0	0		0	0
Pre-2011 Programs Completed in 2013															
Electrofit Retrofit Incentive Program	Projects	0	0	0		0	0	0		0	0	0		0	0
High Performance New Construction	Projects	0	0	0		0	0	0		0	0	0		0	0
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDI Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs Completed in 2013 Total						0	0	0		0	0	0		0	0
Other															
Program Enabled Savings	Projects	0	0	1		0	0	1.0%		0	0	0		1.0%	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LDI Pilot	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Total						0	0	1.0%		0	0	0		1.0%	0
Adjustments to 2011 Verified Results						0	0	0		1,300	0	0		0	5,328
Adjustments to 2012 Verified Results							26	1.0%			169,644	5.2%		26	588,992
Adjustments to 2013 Verified Results								1.0%				1.0%		1.0%	1,851
Total Adjustments to Previous Years' Verified Results						0	26	1.0%		1,300	169,644	5.2%		16.0	515,980

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above is presented in the implementation year. Adjustments in Table 1 reflect periodized savings in the year in which that adjustment is verified.

Table 3: Wellington North Power Inc. Realization Rate & NTG																
Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	n/a	n/a	0.52	0.47	0.42	0.42	1.00	1.00	n/a	n/a	0.52	0.47	0.44	0.44
Appliance Exchange	1.00	1.00	n/a	1.00	0.52	0.52	n/a	0.53	1.00	1.00	n/a	1.00	0.52	0.52	n/a	0.53
HVAC Incentives	1.00	1.00	n/a	1.00	0.60	0.49	0.48	0.51	1.00	1.00	n/a	1.00	0.60	0.48	0.48	0.51
Conservation Instant Coupon Booklet	1.00	1.00	1.00	1.00	1.14	1.00	1.11	1.68	1.00	1.00	1.00	1.00	1.11	1.05	1.13	1.71
Bi-Annual Retailer Event	1.00	1.00	1.00	1.00	1.13	0.91	1.04	1.74	1.00	1.00	1.00	1.00	1.10	0.92	1.04	1.75
Retailer Co-op	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential New Construction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Program																
Retrofit	0.93	0.93	1.02	1.03	0.75	0.70	0.72	0.72	1.35	0.96	1.11	0.99	0.76	0.70	0.72	0.72
Direct Install Lighting	1.08	0.68	0.81	0.78	0.93	0.94	0.94	0.94	0.90	0.85	0.84	0.83	0.93	0.94	0.94	0.94
Building Commissioning	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Construction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Energy Audit	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Commercial Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Commercial Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Demand Response 3	0.76	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Industrial Program																
Process & System Upgrades	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Monitoring & Targeting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Energy Manager	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Retrofit	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Demand Response 3	0.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Home Assistance Program																
Home Assistance Program	n/a	1.10	0.92	0.98	n/a	1.00	1.00	1.00	n/a	1.03	0.76	0.72	n/a	1.00	1.00	1.00
Aboriginal Program																
Home Assistance Program	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Direct Install Lighting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High Performance New Construction	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50
Toronto Comprehensive	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Multifamily Energy Efficiency Rebates	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Custom Programs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other																
Program Enabled Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Time-of-Use Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Pilots	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Summary Achievement Against CDM Targets

Results are recognized using current IESO reporting policies. Energy efficiency resources persist for the duration of the effective useful life. Any upcoming code changes are taken into account. Demand response resources persist for 1 year (Scenario 1). Please see methodology tab for more detailed information.

Table 4: Net Peak Demand Savings at the End User Level (MW) (Scenario 1)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.0	0.0	0.0	0.0
2012 - Verified†	0.0	0.1	0.1	0.1
2013 - Verified†	0.0	0.0	0.1	0.1
2014 - Verified†	0.0	0.0	0.1	0.2
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.5
Wellington North Power Inc. 2014 Annual CDM Capacity Target:				0.9
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				51.6%

Table 5: Net Energy Savings at the End User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	0.2	0.2	0.2	0.1	0.6
2012 - Verified†	0.0	0.5	0.5	0.5	1.5
2013 - Verified†	0.0	0.2	0.4	0.4	0.9
2014 - Verified†	0.0	0.0	0.01	0.3	0.4
Verified Net Cumulative Energy Savings 2011-2014:					3.3
Wellington North Power Inc. 2011-2014 Annual CDM Energy Target:					4.5
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					73.3%

†Includes adjustments to previous years' verified results

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Table 6: Province-Wide Initiatives and Program Level Net Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program to Date Verified Progress to Target (see Index B3)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total															
Appliance Retirement	Appliances	56,110	34,144	26,952	22,543	3,299	2,811	1,431	1,617	23,005,812	11,424,510	8,751,337	8,497,340	9,221	155,106,415
Appliance Exchange	Appliances	3,689	3,896	5,337	5,665	371	576	1,106	1,178	450,347	974,421	1,871,701	2,226,266	2,971	10,576,192
HVAC Incentives	Equipment	92,749	87,048	84,286	113,503	12,037	19,068	19,552	23,106	55,437,670	32,041,283	35,233,932	42,898,117	83,755	447,209,910
Conservation Incentive Coupon Booklet	Items	547,678	30,491	947,146	1,308,308	1,444	230	517	2,440	21,311,517	1,398,202	3,787,379	32,802,537	4,531	1,312,594,401
Subtotal Retailer Event	Items	952,149	1,043,905	944,772	4,624,751	3,483	1,480	1,184	8,243	19,387,468	26,791,674	17,179,846	122,901,769	12,389	155,517,348
Retailer On-Stop	Items	152	0	0	0	0	0	0	0	3,453	0	0	0	0	10,607
Residential Demand Response	Devices	18,550	38,388	175,793	241,281	10,947	49,038	93,576	117,519	24,870	354,408	196,383	8,379	11,553	782,948
Residential Demand Response (HSD)	Devices	0	49,689	131,457	188,577	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	27	21	279	3,367	0	2	18	369	743	17,152	143,696	1,330,865	395	2,712,676
Consumer Program Total						49,881	72,077	155,886	154,267	103,528,041	75,796,859	70,849,887	252,538,376	239,722	1,812,988,585
Industrial Program Total															
Rebates	Projects	2,828	4,481	8,746	19,925	26,467	63,147	59,678	79,642	136,022,258	314,922,468	345,346,008	462,903,521	213,439	2,431,401,273
Direct Install Lighting	Projects	20,741	18,492	17,839	23,788	23,724	15,264	16,708	25,419	41,076,702	57,345,790	64,315,550	84,503,302	71,356	654,136,658
Building Commissioning	Buildings	0	0	0	5	0	0	0	868	0	0	0	3,513,977	98	3,513,977
New Construction	Buildings	25	88	138	224	123	764	1,584	4,432	413,757	1,814,721	4,959,248	25,301,204	6,304	27,301,204
Energy Audit	Audits	222	357	589	471	0	1,450	2,811	6,323	0	7,045,351	15,455,795	30,874,199	13,581	82,734,042
Small Commercial Demand Response	Devices	172	294	1,211	3,652	84	167	779	2,314	157	1,068	373	819	2,114	1,914
Small Commercial Demand Response (HSD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	145	151	179	280	16,100	19,889	33,706	12,389	437,422	261,823	748,459	0	23,389	6,238,889
Industrial Program Total						44,617	98,221	107,248	133,319	186,124,253	388,415,238	436,473,650	608,376,325	332,748	3,858,699,887
Process & System Upgrade															
Process & System Upgrade	Projects	0	0	0	10	0	0	234	9,872	0	0	2,499,764	72,053,255	9,916	72,053,255
Monitoring & Targeting	Projects	0	0	0	5	0	0	0	103	0	0	0	902,517	183	902,517
Energy Manager	Projects	1	132	304	379	0	1,064	3,558	5,391	0	7,372,338	21,944,243	40,434,407	8,384	95,234,999
Rebates	Projects	403	0	0	0	4,615	0	0	0	28,844,840	0	0	0	4,613	155,461,292
Demand Response 3	Facilities	124	135	281	304	52,484	74,054	142,543	146,982	3,080,737	1,784,722	4,305,560	0	146,092	5,174,009
Industrial Program Total						57,090	75,441	146,395	181,066	11,947,577	6,156,800	70,987,187	112,992,199	189,148	297,725,188
Home Assistance Program Total															
Home Assistance Program	Homes	48	5,920	28,458	25,414	2	546	1,161	2,466	39,283	5,442,212	20,347,175	19,581,458	5,370	77,012,571
Home Assistance Program Total						2	546	2,361	2,466	39,283	5,442,212	20,347,175	19,581,458	5,370	77,012,571
Aboriginal Program Total															
Aboriginal Program	Projects	0	0	717	1,125	0	0	267	549	0	0	1,409,393	1,221,207	816	6,115,933
Aboriginal Program Total						0	0	267	549	0	0	1,409,393	1,221,207	816	6,115,933
Pre-2011 Programs Completed in 2011															
Electricity Rebate Incentive Program	Projects	2,828	0	0	0	21,442	0	0	0	121,138,219	0	0	0	21,442	494,551,676
High Performance New Construction	Projects	142	73	19	3	5,099	8,251	772	134	26,105,595	15,961,544	3,522,240	686,738	9,255	248,181,415
Toronto Comprehensive	Projects	577	35	4	5	15,095	0	0	281	84,944,884	0	0	2,475,640	16,046	356,139,345
Multi-Family Energy Efficiency Rebates	Projects	113	0	0	0	1,901	0	0	0	7,595,680	0	0	0	1,891	30,382,793
LDC Custom Programs	Projects	0	0	0	0	399	0	0	0	1,367,170	0	0	0	399	5,464,479
Pre-2011 Programs Completed in 2011 Total						44,945	3,250	772	415	243,258,598	15,961,544	3,522,240	6,168,578	49,382	1,818,805,088
Other															
Program Enabled Savings	Projects	33	71	46	43	0	2,304	4,632	5,500	0	1,188,362	4,075,392	15,935,337	11,436	55,715,197
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	54,795	0	0	0	0	54,795	0
LDC Rebates	Projects	0	0	0	1,174	0	0	0	1,170	0	0	0	5,041,523	1,170	5,041,523
Other Total						0	2,304	4,632	61,466	0	1,188,362	4,075,392	24,996,859	67,442	65,812,799
Adjustments to 2011 Verified Results															
Adjustments to 2012 Verified Results															
Adjustments to 2013 Verified Results															
Energy Efficiency Total						136,618	889,191	117,536	224,857	681,144,419	482,474,435	554,528,447	975,839,388	575,647	5,894,362,612
Demand Response Total (Scenario 1)						79,711	142,679	280,899	389,891	2,719,185	2,427,811	5,846,495	8,688	389,891	11,721,389
Adjustments to Previous Years' Verified Results Total						1,406	6,981	35,330	0	10,689,880	43,684,221	195,285,888	4,806	645,389,397	4,806
OPA Contracted LDC Portfolio Total (inc. Adjustments)						218,343	252,267	484,536	568,578	696,883,684	589,388,526	681,258,143	1,278,833,876	927,245	6,552,393,197
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).															
*Includes adjustments after Final Reports were issued.															
Results presented using scenario 1, which assumes the demand response resources have a persistence of 1 year.															
Full OEB Target:															
% of Full OEB Target Achieved to Date (Scenario 1):															
70% 102%															

Table 7: Adjustments to Province-Wide Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW)				Net Incremental Energy Savings (kWh)				Program to Date Verified Progress to Target (includes 545)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014		
Consumer Program Total															
Appliance Replacement	Appliances	0	0	0		0	0	0		0	0	0		0	0
Appliance Exchange	Appliances	0	0	0		0	0	0		0	0	0		0	0
WAC Program	Equipment	16,879	2,219	4,705		-5,170	470	1,037		-9,707,002	935,517	1,839,408		-8,774	-32,238,656
Conservation Incentive Program	Items	6,216	0	5,050		14	0	2		275,455	0	28,571		19	5,149,763
Business Refactor Event	Items	81,817	0	0		100	0	0		2,285,391	0	0		100	9,733,562
Retailer Coop	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (H2)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	20	3	193		1	1	72		16,617	993	441,938		74	945,437
Consumer Program Total						-5,145	480	1,111		-7,213,790	936,497	1,868,917		-8,555	-27,644,875
Business Program Total															
Retrofit	Projects	312	876	861		2,203	7,233	11,941		14,244,127	62,498,052	78,144,280		22,056	847,545,306
Direct Install Lighting	Projects	444	197	51		502	204	46		1,250,380	736,541	16,647		620	3,156,143
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	15	29	72		850	5,904	2,245		6,636,553	6,825,736	8,636,178		4,401	46,187,226
Energy Audit	Audits	119	77	270		404	479	2,183		2,945,189	2,145,367	11,101,435		3,404	44,413,129
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (H2)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Business Program Total						5,162	5,181	16,630		24,866,250	54,295,734	100,847,361		30,581	305,148,444
Industrial Program Total															
Process & System Upgrades	Projects	0	0	2		0	0	124		0	0	368,659		324	3,937,318
Monitoring & Targeting	Projects	0	1	3		0	0	54		0	526,000	439,340		54	2,842,696
Energy Manager	Projects	1	86	103		27	3,067	2,395		241,525	8,264,640	25,404,015		6,343	81,855,669
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Industrial Program Total						27	3,067	2,774		241,525	8,294,841	27,422,860		4,721	65,215,586
Home Assistance Program Total															
Home Assistance Program	Homes	0	807	3,898		0	222	791		0	1,525,749	4,121,294		1,805	12,513,108
Home Assistance Program Total						0	222	791		0	1,525,749	4,121,294		1,805	8,580,377
Aboriginal Program Total															
Home Assistance Program	Homes	0	0	103		0	0	134		0	0	565,725		134	3,227,409
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						0	0	134		0	0	565,725		134	3,227,409
Other Programs Total															
Electricity Retrofit Incentive Program	Projects	12	0	0		130	0	0		545,530	0	0		130	2,162,145
High Performance New Construction	Projects	37	4	15		1,507	243	-184		2,396,541	2,832,533	-993,594		2,466	16,336,176
Smart Community	Projects	0	15	4		0	672	125		0	4,515,517	1,324,888		857	16,219,337
Multi-family Energy Efficiency Rebate	Projects	0	0	0		0	0	0		0	0	0		0	0
LED Custom Program	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						1,645	1,875	2		2,944,477	7,354,850	-190,792		2,687	31,594,578
Other Programs Total															
Program Enabled Savings	Projects	33	55	39		1,776	5,712	9,029		7,727,572	11,481,487	10,448,544		7,509	86,792,481
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LED Pilot	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Programs Total						1,776	5,712	9,029		7,727,572	11,481,487	10,448,544		7,509	86,792,481
Adjustments to 2011 Verified Results						1,465				27,786,575				3,715	318,343,550
Adjustments to 2012 Verified Results							15,697				88,113,558			15,485	298,788,637
Adjustments to 2013 Verified Results								23,463				145,679,483		24,381	296,465,213
Adjustments to Previous Years' Verified Results Total						1,465	15,697	23,463		27,786,575	88,113,558	145,679,483		61,886	645,309,397

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 3 as the information presented above is presented in the implementation year. Adjustments in Table 1 reflect period savings in the year in which that adjustment is verified.

Initiative	Table 8: Province-Wide Realization Rate & NTG								Energy Savings							
	Peak Demand Savings								Realization Rate				Net-to-Gross Ratio			
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	1.00	1.00	0.51	0.46	0.42	0.45	1.00	1.00	1.00	1.00	0.46	0.47	0.44	0.47
Appliance Exchange	1.00	1.00	1.00	1.00	0.51	0.52	0.53	0.53	1.00	1.00	1.00	1.00	0.52	0.52	0.53	0.53
HVAC Incentives	1.00	1.00	1.00	1.00	0.60	0.50	0.48	0.48	1.00	1.00	1.00	1.00	0.50	0.49	0.48	0.48
Conservation Instant Coupon Booklet	1.00	1.00	1.00	1.00	1.14	1.00	1.11	1.69	1.00	1.00	1.00	1.00	1.00	1.05	1.13	1.73
Bi-Annual Retailer Event	1.00	1.00	1.00	1.00	1.12	0.91	1.04	1.74	1.00	1.00	1.00	1.00	0.91	0.92	1.04	1.75
Retailer Co-op	1.00	n/a	n/a	n/a	0.68	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential New Construction	1.00	3.65	0.78	1.03	0.41	0.49	0.63	0.63	3.65	7.17	3.09	0.62	0.49	0.49	0.63	0.63
Business Program																
Retrofit	1.06	0.93	0.92	0.84	0.72	0.75	0.73	0.71	0.93	1.05	1.01	0.98	0.75	0.76	0.73	0.72
Direct Install Lighting	1.08	0.69	0.82	0.78	1.08	0.94	0.94	0.94	0.69	0.85	0.84	0.83	0.94	0.94	0.94	0.94
Building Commissioning	n/a	n/a	n/a	1.97	n/a	n/a	n/a	1.00	n/a	n/a	n/a	1.16	n/a	n/a	n/a	1.00
New Construction	0.50	0.98	0.68	0.71	0.50	0.49	0.54	0.54	0.98	0.99	0.76	0.79	0.49	0.49	0.54	0.54
Energy Audit	n/a	n/a	1.02	0.96	n/a	n/a	0.66	0.68	n/a	n/a	0.97	1.00	n/a	n/a	0.66	0.67
Small Commercial Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Commercial Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Demand Response 3	0.76	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Industrial Program																
Process & System Upgrades	n/a	n/a	0.85	0.96	n/a	n/a	0.94	0.79	n/a	n/a	0.87	0.96	n/a	n/a	0.93	0.80
Monitoring & Targeting	n/a	n/a	n/a	0.59	n/a	n/a	n/a	1.00	n/a	n/a	n/a	0.36	n/a	n/a	n/a	1.00
Energy Manager	n/a	1.16	0.90	0.91	n/a	0.90	0.90	0.90	1.16	1.16	0.90	0.96	0.90	0.90	0.90	0.85
Retrofit	1.11	n/a	n/a	n/a	0.72	n/a	n/a	n/a	0.91	n/a	n/a	n/a	0.75	n/a	n/a	n/a
Demand Response 3	0.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Home Assistance Program																
Home Assistance Program	1.00	0.32	0.26	0.49	0.70	1.00	1.00	1.00	0.32	0.99	0.88	0.78	1.00	1.00	1.00	1.00
Aboriginal Program																
Home Assistance Program	n/a	n/a	0.05	0.15	n/a	n/a	1.00	1.00	n/a	n/a	0.95	0.97	n/a	n/a	1.00	1.00
Direct Install Lighting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	0.80	n/a	n/a	n/a	0.54	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High Performance New Construction	1.00	1.00	1.00	n/a	0.49	0.50	0.50	0.50	1.00	1.00	1.00	n/a	0.50	0.50	0.50	0.50
Toronto Comprehensive	1.13	n/a	n/a	n/a	0.50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Multifamily Energy Efficiency Rebates	0.93	n/a	n/a	n/a	0.78	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LED Custom Programs	1.00	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other																
Program Enabled Savings	n/a	1.06	1.00	0.86	n/a	1.00	1.00	1.00	n/a	2.26	1.00	0.98	n/a	1.00	1.00	1.00
Time-of-Use Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LED Pilots	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Summary Provincial Progress Towards CDM Targets

Table 9: Province-Wide Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012†	1.4	253.3	109.8	108.2
2013†	0.6	7.0	404.5	122.0
2014†	1.4	10.8	34.2	568.6
Verified Net Annual Peak Demand Savings in 2014:				927.7
2014 Annual CDM Capacity Target:				1,330
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				69.8%

Table 10: Province-Wide Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393.1
2012†	18.7	503.6	498.4	492.6	1,513.3
2013†	1.7	44.4	603.3	583.4	1,232.8
2014†	7.3	44.8	191.0	1,170.8	1,413.9
Verified Net Cumulative Energy Savings 2011-2014:					6,553.0
2011-2014 Cumulative CDM Energy Target:					6,000
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					109.2%

†Includes adjustments to previous years' verified results

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

METHODOLOGY

All results are at the end-user level (not including transmission and distribution losses)

EQUATIONS

Prescriptive Measures and Projects	Gross Savings = Activity * Per Unit Assumption Net Savings = Gross Savings * Net-to-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)
Engineered and Custom Projects	Gross Savings = Reported Savings * Realization Rate Net Savings = Gross Savings * Net-to-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)
Demand Response	Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)
Adjustments to Previous Years' Verified Results	All variances from the Final Annual Results Reports from prior years will be adjusted within this report. Any variances with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program			
Appliance Retirement	Includes both retail and home pickup stream. Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection.	Savings are considered to begin in the year the appliance is picked up.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year that the exchange event occurred.	
HVAC Incentives	Results directly attributed to LDC based on customer postal code.	Savings are considered to begin in the year that the installation occurred.	

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC. Otherwise results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year in which the coupon was redeemed.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year in which the event occurs.	
Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Residential Demand Response	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists.	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any "snapback" in energy consumption experienced after the event. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the iCon system. Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Business Program			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the iCon system. Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date in the iCON system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Additional Note: project counts were derived by filtering out invalid statuses (e.g. Post-Project Submission - Payment denied by LDC) and only including projects with an "Actual Project Completion Date" in 2014)			

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a result of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Industrial Program			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Home Assistance Program			
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Aboriginal Program			
Aboriginal Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Pre-2011 Programs completed in 2011			
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014 assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported. A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation.		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation.		

Consumer Program Allocation Methodology

Results can be allocated based on average of 2008 & 2009 residential throughput for each LDC (below) when additional information is not available. Source: OEB Yearbook Data 2008 & 2009

Local Distribution Company	Allocation
Algoma Power Inc.	0.2%
Atikokan Hydro Inc.	0.0%
Attawapiskat Power Corporation	0.0%
Bluewater Power Distribution Corporation	0.6%
Brant County Power Inc.	0.2%
Brantford Power Inc.	0.7%
Burlington Hydro Inc.	1.4%
Cambridge and North Dumfries Hydro Inc.	1.0%
Canadian Niagara Power Inc.	0.5%
Centre Wellington Hydro Ltd.	0.1%
Chapleau Public Utilities Corporation	0.0%
COLLUS Power Corporation	0.3%
Cooperative Hydro Embrun Inc.	0.0%
E.L.K. Energy Inc.	0.2%
Enersource Hydro Mississauga Inc.	3.9%
ENTEGRUS	0.6%
ENWIN Utilities Ltd.	1.6%
Erie Thames Powerlines Corporation	0.4%
Espanola Regional Hydro Distribution Corporation	0.1%
Essex Powerlines Corporation	0.7%
Festival Hydro Inc.	0.3%
Fort Albany Power Corporation	0.0%
Fort Frances Power Corporation	0.1%
Greater Sudbury Hydro Inc.	1.0%
Grimsby Power Inc.	0.2%
Guelph Hydro Electric Systems Inc.	0.9%
Haldimand County Hydro Inc.	0.4%
Halton Hills Hydro Inc.	0.5%
Hearst Power Distribution Company Limited	0.1%
Horizon Utilities Corporation	4.0%
Hydro 2000 Inc.	0.0%
Hydro Hawkesbury Inc.	0.1%
Hydro One Brampton Networks Inc.	2.8%
Hydro One Networks Inc.	30.0%
Hydro Ottawa Limited	5.6%
Innisfil Hydro Distribution Systems Limited	0.4%
Kashechewan Power Corporation	0.0%
Kenora Hydro Electric Corporation Ltd.	0.1%
Kingston Hydro Corporation	0.5%
Kitchener-Wilmot Hydro Inc.	1.6%
Lakefront Utilities Inc.	0.2%

Lakeland Power Distribution Ltd.	0.2%
London Hydro Inc.	2.7%
Middlesex Power Distribution Corporation	0.1%
Midland Power Utility Corporation	0.1%
Milton Hydro Distribution Inc.	0.6%
Newmarket - Tay Power Distribution Ltd.	0.7%
Niagara Peninsula Energy Inc.	1.0%
Niagara-on-the-Lake Hydro Inc.	0.2%
Norfolk Power Distribution Inc.	0.3%
North Bay Hydro Distribution Limited	0.5%
Northern Ontario Wires Inc.	0.1%
Oakville Hydro Electricity Distribution Inc.	1.5%
Orangeville Hydro Limited	0.2%
Orillia Power Distribution Corporation	0.3%
Oshawa PUC Networks Inc.	1.2%
Ottawa River Power Corporation	0.2%
Parry Sound Power Corporation	0.1%
Peterborough Distribution Incorporated	0.7%
PowerStream Inc.	6.6%
PUC Distribution Inc.	0.9%
Renfrew Hydro Inc.	0.1%
Rideau St. Lawrence Distribution Inc.	0.1%
Sioux Lookout Hydro Inc.	0.1%
St. Thomas Energy Inc.	0.3%
Thunder Bay Hydro Electricity Distribution Inc.	0.9%
Tillsonburg Hydro Inc.	0.1%
Toronto Hydro-Electric System Limited	12.8%
Veridian Connections Inc.	2.4%
Wasaga Distribution Inc.	0.2%
Waterloo North Hydro Inc.	1.0%
Welland Hydro-Electric System Corp.	0.4%
Wellington North Power Inc.	0.1%
West Coast Huron Energy Inc.	0.1%
Westario Power Inc.	0.5%
Whitby Hydro Electric Corporation	0.9%
Woodstock Hydro Services Inc.	0.3%

Reporting Glossary

Annual: the peak demand or energy savings that occur in a given year (includes resource savings from new program activity and resource savings persisting from previous years).

Cumulative Energy Savings: represents the sum of the annual energy savings that accrue over a defined period (in the context of this report the defined period is 2011 - 2014). This concept does not apply to peak demand savings.

End-User Level: resource savings in this report are measured at the customer level as opposed to the generator level (the difference being line losses).

Free-ridership: the percentage of participants who would have implemented the program measure or practice in the absence of the program.

Incremental: the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'.

Initiative: a Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup).

Net-to-Gross Ratio: The ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover

Net Energy Savings (MWh): energy savings attributable to conservation and demand management activities net of free-riders, etc.

Net Peak Demand Savings (MW): peak demand savings attributable to conservation and demand management activities net of free-riders, etc.

Program: a group of initiatives that target a particular market sector (e.g. Consumer, Industrial).

Realization Rate: A comparison of observed or measured (evaluated) information to original reported savings which is used to adjust the gross savings estimates.

Settlement Account: the grouping of demand response facilities (contributors) into one contractual agreement

Spillover: Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.

Unit: for a specific initiative the relevant type of activity acquired in the market place (i.e. appliances picked up, projects completed, coupons redeemed).

2011-2014 Final Results Report_LH Wellington North Power Inc.

Table 11: Wellington North Power Inc. Initiative and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (\$/kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (\$/kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Initiatives									
Appliance Rebate***	Appliances	7	5	6	7	45,282	38,126	39,059	45,546
Appliance Exchange**	Appliances	0	2	0	0	679	4,034	0	702
HVAC Incentives	Equipment	17	18	13	13	34,409	33,432	24,473	24,970
Conservation Instant Coupon Booklet	Items	3	0	0	3	10,449	839	4,327	10,427
Bi-annual Retailer Event	Items	3	1	1	3	17,022	16,481	18,390	44,432
Retailer Co-op	Items	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	0	0	0	2	0	0	0	0
Residential Demand Response (RDR)	Devices	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	0
Consumer Program Total		26	26	20	27	112,330	95,173	78,257	126,278
Business Initiatives									
Retrofit	Projects	3	136	20	42	2,921	452,004	86,729	134,423
Direct Install Lighting	Projects	27	35	0	25	80,720	128,559	25,725	98,237
Building Commissioning	Buildings	0	0	0	0	0	0	0	0
New Construction	Buildings	0	0	0	0	0	0	0	0
Energy Audit	Audits	0	0	0	0	0	0	0	0
Small Commercial Demand Response	Devices	0	0	0	1	0	0	0	0
Small Commercial Demand Response (RDR)	Devices	0	0	0	0	0	0	0	0
Demand Response B	Facilities	0	0	0	0	0	0	0	0
Business Program Total		28	171	20	68	83,641	580,569	124,454	232,660
Industrial Initiatives									
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	0	0	0	0	0	0	0
Retrofit	Projects	0	0	0	0	0	0	0	0
Demand Response B	Facilities	0	0	0	0	0	0	0	0
Industrial Program Total		0	0	0	0	0	0	0	0
Home Assistance Programs									
Home Assistance Program	Homes	0	1	5	0	0	9,542	55,484	5,976
Home Assistance Program Total		0	1	5	0	0	9,542	55,484	5,976
Aboriginal Initiatives									
Home Assistance Program	Homes	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0
Aboriginal Program Total		0	0	0	0	0	0	0	0
Pre-2011 Programs Completed in 2011									
Electricity Retrofit Incentive Program	Projects	0	0	0	0	0	0	0	0
High Performance New Construction	Projects	0	0	0	0	554	139	0	0
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0
Pre-2011 Programs Completed in 2011 Total		0	0	0	0	554	139	0	0
Other									
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	38	0	0	0	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0
Other Total		0	0	0	38	0	0	0	0
Adjustments to 2011 Verified Results			6	0	0		817	0	0
Adjustments to 2012 Verified Results				42	2		258,882	8,728	0
Adjustments to 2013 Verified Results					136				1,103
Energy Efficiency Total		53	198	53	130	136,316	685,413	258,194	361,113
Demand Response Total		0	0	0	3	0	0	0	0
Adjustments to Previous Years' Verified Results Total		0	6	42	137	0	817	258,882	9,830
OPA Contracted LDC Portfolio Total (inc. Adjustments)		53	197	95	270	136,316	686,230	257,876	370,943

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (in part simulated).

*Includes adjustments after Final Reports were issued.
Results presented using scenario 1 which assumes that demand response resources have a participation of 1 year.

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results.
*Input results substituted for gross results due to unavailability of data.

2011-2014 Final Results Report_HCI Wellington North Power Inc.

Table 12: Adjustments to Wellington North Power Inc. Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0	0		0	0	0	
Appliance Exchange	Appliances	0	0	0		0	0	0	
HVAC Incentives	Equipment	-1	0	1		-1,672	11	1,090	
Conservation Instant Coupon Booklet	Items	0	0	0		162	0	13	
Bi-Annual Retailer Event	Items	0	0	0		1,501	0	0	
Retailer Co-op	Items	0	0	0		0	0	0	
Residential Demand Response	Devices	0	0	0		0	0	0	
Residential Demand and Response (HDR)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	0	0	0		0	0	0	
Consumer Program Total		-1	0	1		-9	11	1,103	
Business Program									
Retrolit	Projects	0	40	0		0	251,632	0	
Direct Install Lighting	Projects	0	2	0		845	7,239	0	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	0	0	0		0	0	0	
Energy Audit	Audits	0	0	0		0	0	0	
Small Commercial Dem and Response	Devices	0	0	0		0	0	0	
Small Commercial Dem and Response (HDR)	Devices	0	0	0		0	0	0	
Dem and Response 3	Facilities	0	0	0		0	0	0	
Business Program Total		0	42	0		845	258,872	0	
Industrial Program									
Process & System Upgrades	Projects	0	0	0		0	0	0	
Monitoring & Targeting	Projects	0	0	0		0	0	0	
Energy Manager	Projects	0	0	0		0	0	0	
Retrolit	Projects	0	0	0		0	0	0	
Dem and Response 3	Facilities	0	0	0		0	0	0	
Industrial Program Total		0	0	0		0	0	0	
Home Assistance Program									
Home Assistance Program	Homes	0	0	0		0	8,728	0	
Home Assistance Program Total		0	0	0		0	8,728	0	
Aboriginal Program									
Home Assistance Program	Homes	0	0	0		0	0	0	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		0	0	0		0	0	0	
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	0	0	0		0	0	0	
High Performance New Construction	Projects	0	0	0		0	0	0	
Toronto Comprehensive	Projects	0	0	0		0	0	0	
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0	
LDC Custom Programs	Projects	0	0	0		0	0	0	
Pre-2011 Programs completed in 2011 Total		0	0	0		0	0	0	
Other									
Program Enabled Savings	Projects	0	0	135		0	0	0	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
LDC Pilots	Projects	0	0	0		0	0	0	
Other Total		0	0	135		0	0	0	
Adjustments to 2011 Verified Results		-1				837			
Adjustments to 2012 Verified Results			42				267,610		
Adjustments to 2013 Verified Results				136				1,103	
Total Adjustments to Previous Years' Verified Results		-1	42	136		837	267,610	1,103	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011. (reported cumulatively).

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results.

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Table 13: Province-Wide Initiatives and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (MW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (MWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Appliance Rebates**	Appliances	6,762	2,011	6,511	9,579	45,975,427	13,424,118	16,414,139	29,215,770
Appliance Exchange**	Appliances	719	556	2,331	2,239	879,533	974,431	3,746,326	8,988,372
SmartC Incentives	Equipment	53,209	38,546	40,418	40,467	35,413,400	46,925,313	73,235,037	92,274,814
Conservation Incentive Coupon Booklet	Item	1,384	233	464	1,482	13,152,463	3,325,889	6,843,344	19,000,254
Bi-Annual Retailer Event	Item	1,504	1,422	3,342	4,624	26,599,265	29,222,070	16,441,329	70,254,471
Retailer Co-op	Item	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	10,390	49,038	93,076	117,513	23,597	159,408	390,303	6,379
Residential Demand Response (H4C)	Devices	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	1	29	587	1,813	4,694	29,926	6,499,786
Business Program Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Energy Audit	Projects	14,311	79,943	82,496	91,449	184,870,263	167,817,248	476,402,896	641,515,421
Direct Install Lighting	Projects	22,155	26,463	19,807	24,794	65,777,297	68,896,046	68,340,249	69,514,509
Building Commissioning	Buildings	0	0	0	989	0	0	0	3,103,377
New Construction	Buildings	247	1,536	2,934	11,713	823,434	3,755,849	3,193,826	37,742,970
Energy Audit	Audits	0	1,490	4,293	6,367	0	1,049,351	23,368,238	46,811,517
Small Commercial Demand Response	Devices	95	187	779	2,514	131	1,048	279	313
Small Commercial Demand Response (H4C)	Devices	0	0	0	0	0	0	0	0
Small Commercial Demand Response	Facilities	21,999	18,989	23,706	23,908	639,433	381,423	346,639	0
Industrial Program Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Process & System Upgrades	Projects	0	0	153	12,297	0	0	2,739,746	30,461,617
Monitoring & Targeting	Projects	0	0	0	182	0	0	0	582,517
Energy Manager	Projects	0	1,014	3,353	5,767	0	1,047,535	24,408,070	44,575,364
Refunds	Projects	6,372	0	0	0	36,812,409	0	0	0
Small Commercial Demand Response	Facilities	176,148	74,094	142,540	164,292	6,743,970	3,786,712	4,209,340	0
Home Assistance Program Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Home Assistance Program	Homes	4	1,777	2,361	2,466	56,319	5,524,238	20,887,275	19,587,658
Other Programs Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Home Assistance Program	Homes	0	0	267	549	0	0	1,435,393	3,103,287
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0
Aboriginal Program Total		73,757	91,805	149,380	179,452	192,379,832	112,248,815	112,521,884	202,543,846
Electronics Recycling Incentive Program	Projects	40,458	0	0	0	213,956,090	0	0	0
High Performance New Construction	Projects	10,197	6,502	772	249	52,976,333	20,893,688	3,522,340	1,777,475
Toronto Comprehensive	Projects	13,467	0	0	882	174,870,574	0	0	7,095,257
Multi-Family Energy Efficiency Rebates	Projects	2,553	0	0	0	3,714,792	0	0	0
LED Custom Programs	Projects	534	0	0	0	649,140	0	0	0
Pre-2011 Programs completed in 2011 Total		87,369	6,500	772	1,870	400,822,879	21,883,688	3,522,340	8,862,733
Program Enabled Savings	Projects	0	2,177	3,492	5,500	0	525,051	4,375,382	13,035,337
Time-of-Use Savings	Homes	0	0	0	54,795	0	0	0	0
LED Pilot	Projects	0	0	0	1,370	0	0	0	5,761,522
Other Total		0	2,177	3,492	68,796	0	525,051	4,375,382	19,035,337
Adjustments to 2011 Verified Results			33,246	845	1,881		46,795,794	20,583	6,828
Adjustments to 2012 Verified Results				8,632	13,449			54,981,893	55,898,006
Adjustments to 2013 Verified Results					19,277				288,411,518
Energy Efficiency Total		21,533.5	156,735	148,261	289,384	947,317,338	616,228,385	751,683,866	1,739,825,694
Demand Response Total		200,815	142,678	280,899	389,893	4,981,187	2,427,881	5,846,495	8,496
Adjustments to Previous Years' Verified Results Total		0	33,246	8,277	49,277	0	46,795,794	54,982,474	265,518,125
ORA-Contracted LDC Portfolio Total (Inc. Adjustments)		421,538	332,659	437,958	648,752	947,218,646	667,452,660	813,852,814	1,476,452,324

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracts in place January 1, 2011 (reported cumulatively).

Gross results are presented for informational purposes only and are not considered official OPA Final Verified Results.

**Final results substituted for gross results due to unavailability of data.

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Table 14: Adjustments to Province Wide Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0	0		0	0	0	
Appliance Exchange	Appliances	0	0	0		0	0	0	
HVAC Incentives	Equipment	-8,759	1,091	2,157		-16,241,086	1,952,473	3,873,449	
Conservation Instant Coupon Booklet	Items	15	0	1		255,975	0	20,668	
Bi-Annual Retailer Event	Items	117	0	0		2,373,636	0	0	
Retailer Co-op	Items	0	0	0		0	0	0	
Residential Demand Response	Devices	0	0	0		0	0	0	
Residential Demand Response (HDR)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	1	1	115		335,093	2,009	701,488	
Consumer Program Total		-8,628	1,092	2,273		-13,281,402	1,954,483	4,595,606	
Business Program									
Retrofit	Projects	4,511	10,114	16,584		22,046,931	58,528,789	108,677,566	
Direct Install Lighting	Projects	541	217	49		1,946,638	781,858	174,460	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	3,287	2,673	4,155		11,323,593	9,884,305	15,992,924	
Energy Audit	Audits	656	488	3,631		2,393,744	2,386,374	18,822,524	
Small Commercial Demand Response	Devices	0	0	0		0	0	0	
Small Commercial Demand Response (HDR)	Devices	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Business Program Total		8,996	13,491	24,414		37,108,886	71,581,326	144,667,479	
Industrial Program									
Process & System Upgrades	Projects	0	0	426		0	0	1,232,785	
Monitoring & Targeting	Projects	0	0	54		0	528,000	639,348	
Energy Manager	Projects	29	1,071	2,687		0	8,968,007	28,893,396	
Retrofit	Projects	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Industrial Program Total		29	1,071	3,168		0	9,496,007	30,765,729	
Home Assistance Program									
Home Assistance Program	Homes	0	222	791		0	1,316,749	4,321,794	
Home Assistance Program Total		0	222	791		0	1,316,749	4,321,794	
Aboriginal Program									
Home Assistance Program	Homes	0	0	134		0	0	563,715	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		0	0	134		0	0	563,715	
New 2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	266	0	0		1,049,108	0	0	
High Performance New Construction	Projects	13,072	727	405		23,905,663	5,645,066	1,535,048	
Toronto Comprehensive	Projects	0	1,920	529		0	12,924,335	3,783,965	
Multi-Family Energy Efficiency Rebates	Projects	0	0	0		0	0	0	
LDC Custom Programs	Projects	0	0	0		0	0	0	
New 2011 Programs completed in 2011 Total		13,337	2,647	934		24,954,771	18,569,400	5,319,013	
Other									
Program Enabled Savings	Projects	1,776	3,712	2,820		1,673,712	11,481,687	10,688,564	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
LDC Pilots	Projects	0	0	0		0	0	0	
Other Total		1,776	3,712	2,820		1,673,712	11,481,687	10,688,564	
Adjustments to 2011 Verified Results		15,511				50,455,967			
Adjustments to 2012 Verified Results			22,296				114,419,652		
Adjustments to 2013 Verified Results				35,734				200,921,892	
Adjustments to Previous Years' Verified Results Total		15,511	22,296	35,734		50,455,967	114,419,652	200,921,892	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after final reports were issued.
Results presented using scenario 3 which assumes that demand response resources have a persistence of 3 year.

Gross results are presented for informational purposes only and are not considered official 2014 Peak Verified Results.