

Ottawa River Power Corporation

Exhibit 3

Response to Interrogatories

Operating Revenues

3-Staff-44

Ref: Exhibit 3, Tables 3-2

Please update Table 3-2 with 2015 actuals.

Response:

Ottawa River Power provides a revised Table 3-2 including 2015 unaudited numbers as follows:

	Year	2010	2011	2012	2013	2014	2015 Preliminary	2015 Bridge Year	2016
Residential	Cust/Conn	8,955	9,030	9,087	9,195	9,305	9,399	9,384	9,463
	kWh	75,301,012	79,270,520	78,553,744	80,138,214	79,483,998	77,182,680	82,752,527	81,190,920
	kW	-	-	-	-	-	-	-	-
General Service < 50 kW	Cust/Conn	1,372	1,370	1,362	1,333	1,318	1,306	1,300	1,281
	kWh	33,358,217	32,279,016	31,948,521	31,708,039	31,649,726	30,383,789	32,951,221	32,329,405
	kW	-	-	-	-	-	-	-	-
Unmetered Scattered Load	Cust/Conn	20	20	20	20	20	20	20	20
	kWh	458,526	469,307	448,159	453,471	454,406	454,185	453,036	444,487
	kW	-	-	-	-	-	-	-	-
General Service > 50 kW - 4999 kW	Cust/Conn	148	145	145	146	147	155	146	148
	kWh	76,510,235	74,853,997	74,516,293	73,596,923	72,512,849	73,372,645	72,294,221	70,929,970
	kW	202,775	203,575	207,916	216,501	206,399	218,080	198,904	195,150
Streetlighting	Cust/Conn	2,713	2,769	2,775	2,787	2,803	2,820	2,825	2,849
	kWh	2,383,707	2,458,955	2,432,690	2,424,249	2,439,792	2,419,856	2,432,436	1,250,197
	kW	6,766	6,840	6,768	6,766	6,770	6,799	6,772	3,481
Sentinel Lighting	Cust/Conn	216	209	209	207	204	198	199	195
	kWh	233,686	270,899	243,747	270,899	245,570	239,440	244,830	240,210
	kW	766	734	713	700	684	671	698	685
Total	Cust/Conn	13,424	13,543	13,596	13,687	13,796	13,898	13,874	13,956
	kWh	188,245,383	189,602,695	188,143,155	188,591,795	186,786,342	184,052,595	191,128,272	186,385,189

3-Staff-45

Ref: Exhibit 3, p. 12 – 17 of 71

On page 17 of 71, ORPC states that it did not use number of customers as a variable because monthly historical counts were not readily available until 2011.

On page 14, ORPC used economic data for the Kingston-Pembroke economic region as reported in Statistic Canada's Monthly Labour Force Survey (CANSIM). ORPC noted that this variable was rejected due to a negative correlation and coefficient.

On page 15, ORPC notes that a March monthly variable is used to account for higher load due to the school break during that month.

- a) Please a further explanation why ORPC is not able to obtain monthly historical customer data.

Response:

Ottawa River Power Corporation only started collecting monthly numbers after its 2010 Cost of Service Application when it was realized this was a requirement. ORPC uses the Northstar customer information system where customer count is available in real time.

- b) Please confirm that annual customer data is available in aggregate.
 - i) If so, please provide an alternative model using pro-rated monthly data derived from the yearly data to include customer numbers in the regression analysis and provide the resulting load forecast.

Response:

Ottawa River Power confirms that annual customer data is available in aggregate.

- c) Please state what other economic data was considered (e.g. housing sales, new housing development, manufacturing statistics, or municipal statistics for the communities covered by ORPC's service territory).
 - i) If no other data was considered, please explain why.

Response:

Ottawa River Power confirms that aside from using Stats Canada Labour force by region, it tested the Load forecast using most_of the groupings in CANSIM table 03260020 which included;

All items / Food / Rented & Owned accommodations / Property Taxes / Water, fuel and electricity and so on)

The utility ran dozens of iterations of the load forecast before it settled on a final set of variables.

- ii) It is not clear as to why the school break in March would lead to higher system consumption, as higher residential consumption would be offset, at least in part, by lower consumption in schools. Please provide further explanation as to why a binary variable for March is justified to explain higher consumption what would be accounted for by other factors, such as HDD.

Response:

It is OPRCs understanding that schools' consumptions do not decrease as a result of the school being closed. Other than classroom lighting being turned off, the rest of the school functions as if it was open. Therefore there would be no offsetting of increased residential consumption.

- d) Please provide further information on alternative model specifications (model form, alternative exogenous variables) attempted, and the reasons why ORPC prefers its proposed model rather than an alternative.

Response:

The Load Forecast model was developed by a CHEC working group which involved 4 utilities, a CHEC member, Tandem Energy Services as well as Dave Proctor (involved in the initial stages of development). The idea behind developing a CHEC specific model was to take the industry's best practices to come up with a model which was easy to populate, and easy to follow and update. As mentioned in response to C) i) above, the utility ran many iterations of the study before it settled on the final load forecast.

3-Staff-46 Ref: Load forecast model – Tab 10, CDM adjustment

ORPC provided the following CDM adjustment:

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

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

The table above shows CDM adjustment on the 2015 load forecast.

- Please update the table to show persistence of 2014 and 2015 programs on the 2016 load forecast and explain the 50% impact of 2013 programs. Please use Appendix 2-I from the Chapter 2 Appendix of the Filing Requirements for 2016 Cost of Service Distribution Rate Applications, and file in working excel format.

Response:

The Load Forecast model entitled EB-2014-0105 2016 ORPC_Load Forecast_Wholesale_Jan 27 2016 has been update to include a new worksheet (10. CDM Adjustment V2) which shows the revised CDM Adjustments using Appendix 2-I from the Chapter 2 Appendix of the Filing Requirements for 2016 Cost of Service Distribution Rate Applications. A print screen of Appendix 2-I is shown at the next page.

- Please update the CDM allocation to the 2016 load forecast accordingly.

Response:

A revised set of models is being filed along with these responses.

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

These factors do not mean that CDM programs are excluded, but the assumption that impacts of previous year CDM programs are already implicitly reflected in the actual data for the historical years that are the basis for the load forecast prior to any manual CDM adjustment for the 2016 test year.

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	0.5	0	Distributor can select "0", "0.5", or "1" from drop-down list
Default Value selection rationale.	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 base forecast before the CDM adjustment.	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 base forecast before the CDM adjustment.	Default is 0, but one option is for full year impact of 2013 CDM programs on 2015 load forecast, but 50% impact in base forecast (first year impact of 2013 CDM programs on 2013 load forecast, which is part of the data for the load forecast.	Default is 0, but one option is for full year impact of 2014 CDM programs on 2014 load forecast, but 50% impact in base forecast (first year impact of 2014 CDM programs on 2014 actuals, which is part of the data for the load forecast.	Full year impact of 2015 programs on 2015 load forecast. 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.	

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

One manual adjustment for CDM impacts to the 2015 load forecast is made. However, the distributor will have two associated annualized CDM impacts, one for the 2011-2014 CDM program and the second for the 2015-2020 CDM plan. In addition, the distributor needs to reflect the CDM adjustment that was explicitly factored into its 2011 load forecast in its 2011 cost of service application (assuming that it rebased in that year). This amount, and equal persistence for 2012, 2013 and 2014 is used as an offset to determine what the net balance of the 2011-2014 LRAMVA balance should be for disposition.

The Amount used for the CDM threshold of the LRAMVA is the kWh that will be used to determine the base amount for the LRAMVA balance for 2014, for assessing performance against the four-year target. The base amount for 2011-2013 is 0 (zero) for 2014 Cost of Service applications, as the utility rebased prior to the 2011-2014 CDM programs, and there was no adjustment to reflect the impacts of the 2011-2014 programs on the load forecast used to determine their last cost of service-based rates.

The proposed loss factor should correspond with the loss factor calculated in Appendix 2-R

The Manual Adjustment for the 2016 Load Forecast is the amount manually subtracted from the load forecast derived from the base forecast from historical data.

If the distributor has developed their load forecast on a system purchased basis, then the manual adjustment should be on system purchased basis, including the adjustment for losses. If the load forecast has been developed on a billed basis, either on a system basis or on a class-specific basis, the manual adjustment should be on a billed basis, excluding losses.

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

	2011	2012	2013	2014	2015	2016	Total for 2016
	kWh						
Amount used for CDM threshold for LRAMVA (2014)	701,000.00	771,000.00	728,000.00	1,772,000.00			
CDM adjustment for test year forecast (per Board Decision in distributor's most recent Cost of Service Application) (enter as negative)	-	-	-	-			
Amount used for CDM threshold for LRAMVA (2016)				1,559,360.00	1,666,666.67	1,666,666.67	4,892,693.33
Manual Adjustment for 2016 Load Forecast (billed basis)	-	-	-	886,000.00	833,333.33	-	1,719,333.33
Proposed Loss Factor (TLF)	4.57%	Format: X.XX%					
Manual Adjustment for 2016 Load Forecast (system purchased basis)	-	-	-	926,490.20	871,416.67	-	1,797,906.87

Manual adjustment uses "gross" versus "net" (i.e. numbers multiplied by (1 + g). The Weight factor is also used calculate the impact of each year's program on the CDM adjustment to the 2016 load forecast.

3-Staff-47

Ref: Exhibit 3, p. 50 of 71 and Appendix 2-H

Please provide Appendix 2-H including a column showing other revenues for the 2015 bridge year (unaudited) and compare to 2014 year-end actuals.

Response:

Appendix 2-H has been updated.

3-Staff-48

Ref: Exhibit 3, p. 50 – 57 of 71 and Appendix 2-H

On p. 55 of 71, ORPC notes that during 2014 it saw a large decrease in contract work of close to \$60K and expects this decline to continue. Please provide further detail and reasoning for this decline in contract work and why ORPC expects the decline to continue into the future.

Response:

Ottawa River Power does expect the decline in contract work to continue. Prior to 2014 Ottawa River Power was doing considerable contract work for its affiliate Ottawa River Energy Solutions Inc. (ORES). After 2013, the telecommunications portion of ORES declined and with that the need for work from ORPC.

Additionally, ORES has had to look at other contractors due cost management. Ottawa River Power has also been more focused on asset management, it's ageing infrastructure and working on the distribution system.

Further to this, the City of Pembroke has converted its streetlights to LED in late 2015. This will mean considerably less maintenance costs in the future. The affiliate ORES was the contractor for this maintenance work which it turn will affect Ottawa River Power's future contract work.

3-Staff-49

Ref: Exhibit 3, p. 50 – 57 and Appendix 2-H

In Appendix 2-H, ORPC is showing moderate growth in Account 4210-Rent from Electric Property. During ORPC's community day presentation, ORPC discussed the rental of land to solar installations. Please provide further detail and a breakdown of this revenues flowing into this account. In particular, please discuss the rental of land for the purpose of installing solar panels, parties involved and relevant contracts.

Response:

It is correct that part of the Solar Panel projects being undertaken by the affiliate ORES will result in rental income for Ottawa River Power. Ottawa River Power is renting property at eight of its substations for these installations.

The revenues that will flow to Ottawa River Power equates to 7% of the contracted generation price paid to ORES with its contract with the IESO. During 2015 this totalled just over \$2,000.

3-Staff-50

Ref: Exhibit 3, p. 50 – 57 of 71 and Appendix 2-H

On p. 56 of 71, ORPC states that it no longer has any short term investment, which led to a decline of \$55K in Account 4405 – Interest and Dividend Income. Please provide further detail.

Response:

During its 2010 Cost of Service application Ottawa River Power applied for the disposition of deferral and variance accounts of over \$4 million. This was repaid to customers over a twenty eight month period beginning January 1, 2011 and ending on April 30, 2013.

The following table shows the principal and interest on it short term investments since 2010.

	2010	2011	2012	2013	2014	2015	2016
Principal	5,272,692	5,347,497	5,452,564	3,721,787	768,971	-	-
Interest Earned	74,805	105,067	101,787	79,126	16,185	-	-

3.0 –VECC -15

Reference: E3/pages 4-5

- a) Please confirm that the title in the second part of Table 3.1 (and Table 6.1) should read “Test Year Projected Revenue from Existing Fixed Charges”.

Response:

Yes, the title of table 3.1 should have read “Test Year Projected Revenue from Existing Fixed Charges”

- b) The customer/connection counts used in Tables 3.1 and 3.2 are not the same. Please reconcile and provide corrected tables as needed.

Response:

VECC is correct, the table was not updated to reflect a 2016 test year. The revised table is shown below.

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	\$0.0150	kWh	81190920	\$1,217,863.79			\$0.00	\$1,217,863.79
General Service < 50 kW	\$0.0105	kWh	32329405	\$339,458.75			\$0.00	\$339,458.75
General Service > 50 to 4999 kW	\$0.6489	kW	195150	\$126,633.11	-0.60	37083	-\$22,249.80	\$104,383.31
Sentinel Ligthing	\$7.8817	kW	685	\$5,395.03			\$0.00	\$5,395.03
Streetlights	\$12.1768	kW	3481	\$42,383.49			\$0.00	\$42,383.49
Unmetered Scattered Load	\$0.0020	kWh	444487	\$888.97			\$0.00	\$888.97
other classes	\$0.0000	0	1	\$0.00			\$0.00	\$0.00
other classes	\$0.0000	0	1	\$0.00			\$0.00	\$0.00
other classes	\$0.0000	0	1	\$0.00			\$0.00	\$0.00
Total Variable Revenue			114,164,130	\$1,732,623.15	-0.6	37083	-\$22,249.80	\$1,710,373.35

Test Year

Test Year Projected Revenue from Proposed Fixed Charges								
Customer Class Name	Fixed Rate	Customers (Connections)	Fixed Charge Revenue	Variable Revenue	TOTAL	% Fixed Revenue	% Variable Revenue	% Total Revenue
Residential	\$10.9900	9,463	\$1,248,013.13	\$1,217,863.79	\$2,465,876.92	50.61%	49.39%	60.62%
General Service < 50 kW	\$22.9700	1,281	\$353,209.06	\$339,458.75	\$692,667.81	50.99%	49.01%	17.03%
General Service > 50 to 4999 kW	\$378.7200	148	\$672,606.72	\$104,383.31	\$776,990.03	86.57%	13.43%	19.10%
Sentinel Ligthing	\$2.6000	195	\$6,083.60	\$5,395.03	\$11,478.62	53.00%	47.00%	0.28%
Streetlights	\$2.2200	2,849	\$75,887.42	\$42,383.49	\$118,270.90	64.16%	35.84%	2.91%
Unmetered Scattered Load	\$6.2500	20	\$1,500.00	\$888.97	\$2,388.97	62.79%	37.21%	0.06%
other classes	\$0.0000	0	\$0.00	\$0.00	\$0.00			
other classes	\$0.0000	0	\$0.00	\$0.00	\$0.00			
other classes	\$0.0000	0	\$0.00	\$0.00	\$0.00			
Total Fixed Revenue		13,956	\$2,357,299.92	\$1,710,373.35	\$4,067,673.27			

- c) Are the customer counts reported here (and in Table 3.15) average annual or year-end values?

Response:

The Customer counts reported throughout the application is based on an average for beginning and end of year values.

- d) The total revenues for 2016 at existing rates differ as between the following three sources:

- Exhibit 3, Table 3.1 and Exhibit 6, Table 6.1 (\$4,052,633.97)
- Exhibit 6, Table 6.7 (\$4,125,223)
- Cost Allocation Model, Tab I6.1 (\$4,058,617)

Please reconcile the results and provide updated exhibits/models as required.

Response:

The discrepancy in revenues for 2016 have been rectified.

- Exhibit 3, Table 3.1 and Exhibit 6, Table 6.1 (\$4,052,633.97)
 - i. Revised to \$4,067,673 (updated customer count)
- Exhibit 6, Table 6.7 (\$4,125,223)
 - i. Revised to \$4,067,691 (updated customer count)
- Cost Allocation Model, Tab I6.1 (\$4,058,617)
 - i. Revised to \$4,067,691 (updated customer count)

The difference of \$13 between the revenues shown at Exhibit 3 and Exhibit 6 and the CA is due to rounding.

3.0 –VECC -16

Reference: E3/page 7 (lines 3-4 & 28-29); page 8 (lines 1-2) and page 27 (Table 3.15)

- a) Can Ottawa River explain why the customer count for GS<50 is declining while the customer count for both Residential and GS>50 is increasing?

Response:

Ottawa River Power operates in four small communities in Ontario. Like many others, small businesses are closing. The downtown of Pembroke specifically has substantially fewer businesses than it did a few years ago while just outside Ottawa River Power's boundaries big box stores are opening.

Residential growth is attributed to the growth in The Town of Mississippi Mills (Almonte Ward) because of its geographical closeness to Ottawa.

General Service customers increased by less than five customers since 2008. These are all new builds in the community including a school, a college and a seniors residence.

- b) The application states that "total employment is forecast to edge lower in 2014 to hold slow but steady through 2015. However, sluggishness will persist through 2016". It also states that "Population growth is expected to remain low in 2015 and 2016". What and/or who is the source of these forecasts and when were the forecasts produced/published?

Response:

The regional economic outlook is presented by the Greater Kingston Chamber of Commerce, in partnership with the Credit Unions of Ontario and the Ontario Chamber of Commerce. The utility updated the outlook to reflect preliminary view on the economic outlook for 2016.

http://business.kingstoncanada.com/en/about-us/resources/Reports_and_Studies/KingstonChamberRegionalEconomicOutlookKingston-Pembroke.pdf

3.0 –VECC -17

Reference: E3/pages 10 and 27

- a) Do the customer count values set out in Table 3.15 include or exclude the one large GS>50 customer lost in early 2010?

Response:

The customer count values set out in Table 3.15 include the customer up to 2010 and then exclude this customer after.

- b) Were any adjustments for losses made to the GS>50 customer's load when it was "removed" from wholesale purchases?

Response:

Adjustments made to the GS>50 customer's load included losses.

3.0 –VECC -18

Reference: E3/pages 12-19

- a) Please provide the results of the regression analysis (i.e. the equivalent of Table 3.9) when full-time employment levels are also included as an explanatory variable as discussed on page 14 (lines 10-13).

Response:

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.92456875							
R Square	0.854827374							
Adjusted R Square	0.851072909							
Standard Error	932949.5288							
Observations	120							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	5.94522E+14	1.98174E+14	227.6829036	1.96263E-48			
Residual	116	1.00966E+14	8.70395E+11					
Total	119	6.95488E+14						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	27405041.4	5484598.949	4.99672659	2.08283E-06	16542102.11	38267980.69	16542102.11	38267980.69
HDD	9245.142971	376.6561702	24.54531136	9.39912E-48	8499.127966	9991.157975	8499.127966	9991.157975
CDD	31256.21874	2992.836167	10.4436785	2.12004E-18	25328.5296	37183.90787	25328.5296	37183.90787
Employment Stats	-40150.24033	14981.64574	-2.679961937	0.008434562	-69823.27744	-10477.20323	-69823.27744	-10477.20323
	<i>Revised Wholesale Purchases</i>	<i>HDD</i>	<i>CDD</i>	<i>Employment Stats</i>				
Revised Wholesale Purchases	1							
HDD	0.841886153	1						
CDD	-0.279573562	-0.661769061	1					
Employment Stats	-0.163232746	-0.078137957	0.045765911	1				

- b) Please explain how the analysis in Table 3.7 supports the inclusion of a “Winter Flag” as indicated on page 15 (lines 19-20).

Response:

The basis for using a Winter Flag is similar to the basis for using a “Spring and Fall” dummy flag which has been widely used and approved in previous Load Forecast. Consumers normally use higher levels of power during summer because of air

conditioning and winter months due to heating. To prove whether the flag would be applicable in ORPCs case, the utility sorted its wholesale consumption from largest to smallest. The utility found that the consumption in the winter was higher but that the summer consumption was in line with spring and fall.

- c) Given that the coefficients for “Holiday Months” and “Days in the Months” are not statistically significant, please undertake the following:
- Re-do the regression analysis excluding these two variables and provide the results (i.e., equivalent to Table 3.9).

Response: Find the requested results below.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.921868							
R Square	0.84984							
Adjusted R Square	0.845957							
Standard Error	932292.4							
Observations	120							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	5.71E+14	1.9E+14	218.8365	1.39E-47			
Residual	116	1.01E+14	8.69E+11					
Total	119	6.71E+14						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	13076379	233096.3	56.09862	6.68E-86	12614703	13538056	12614703	13538056
HDD	7140.586	589.8764	12.10522	2.62E-22	5972.261	8308.91	5972.261	8308.91
CDD	27517.33	3226.896	8.527492	6.48E-14	21126.06	33908.6	21126.06	33908.6
Winter Flag	1474948	325482	4.531582	1.43E-05	830290.2	2119606	830290.2	2119606

- Using this regression model provide a forecast of purchases for 2015 and 2016 (i.e. equivalent of Table 3.13).

Response:

As explained at Ex.3/Tab 2/Sch.2 - Overview of Variables Used, “Although the variables did not yield particularly significant results, it did slightly improve the R-Square

and therefore ORPC opted to keep it as a variable” The utility It is ORPC’s opinion that the point of the exercise is to improve the R-Square therefore the utility sees no reason to remove the two variables. That said, in the interest of cooperation, the utility has filed an alternate model using HDD, CDD and Winter Flag. This model is being filed along with these responses.

3.0 –VECC -19

Reference: E3/pages 28-33

- a) For the weather sensitive classes, why were the 2014 shares (%) used – per page 28, lines 5-6) – as opposed to historical averages that would reflect the average values based on 10 years of weather-driven results?

Response:

ORPC acknowledges that the formula error in the model mostly occurred when the applicant transitioned from a 2015 test year to a 2016 test year. A revised version of the model with a corrected formula is being filed in conjunction with this application.

- b) Why weren't the 2014 shares used to determine the forecast 2015 and 2016 usage for Sentinel Lighting, USL and Streetlighting?

Response:

Same answer as above. ORPC acknowledges that the formula error in the model mostly occurred when the applicant transitioned from a 2015 test year to a 2016 test year. A revised version of the model with a corrected formula is being filed in conjunction with this application.

- c) It is noted that for Streetlighting an adjustment of 1,156,000 kWh is made for 2016.
- i. Please confirm that this is to reflect the City of Pembroke Streetlights conversion per Exhibit 3, page 44.

Response:

Ottawa River Power confirms that this is to reflect the City of Pembroke Streetlights.

- ii. What proportion of Ottawa River's Streetlights connections are in the City of Pembroke?

Response:

Approximately 80% of streetlights are in the Pembroke service area.

- iii. Please provide the derivation of the 1,156,000 kWh adjustment.

Response:

The street lighting derivation was calculated using the number of lights and the wattages being replaced by the load profile.

- iv. Is this retrofit being undertaken through an IESO funded CDM program? If so, why is the impact not accounted for as a CDM adjustment and provision made for an LRAMVA value?

Response:

Yes the retrofit is being undertaken through an IESO funded CDM program. This will be an ongoing decrease in consumption and load so Ottawa River Power felt the Load Forecast was the appropriate spot.

- d) Please provide a revised version of Table 3.22 that includes additional rows setting out total purchases (with the one GS>50 customer removed). For the years with actual data please included both the actual and weather-normalized values.

Ottawa River Power Corporation
EB-2014-0105
Response to Interrogatories
January 28, 2016

Response:

(Revised)

	Year	2010	2011	2012	2013	2014	2015	2016
Residential-WN	Cust/Conn	8,955	9,030	9,087	9,195	9,305	9,384	9,463
	kWh	75,301,012	79,270,520	78,553,744	80,138,214	79,483,998	78,438,793	77,245,367
	kW	-	-	-	-	-	-	-
General Service < 50 kW-WN	Cust/Conn	1,372	1,370	1,362	1,333	1,318	1,300	1,281
	kWh	33,358,217	32,279,016	31,948,521	31,708,039	31,649,726	34,953,792	34,421,978
	kW	-	-	-	-	-	-	-
Unmetered Scattered Load-Non-WN/kW	Cust/Conn	20	20	20	20	20	20	20
	kWh	458,526	469,307	448,159	453,471	454,406	453,036	446,143
	kW	-	-	-	-	-	-	-
General Service > 50 kW – 4999 kW-Non-WN/kW	Cust/Conn	148	145	145	146	147	146	148
	kWh	76,510,235	74,853,997	74,516,293	73,596,923	72,512,849	72,294,221	71,194,283
	kW	202,775	203,575	207,916	216,501	206,399	198,904	195,878
Streetlighting-Non-WN/kW	Cust/Conn	2,713	2,769	2,775	2,787	2,803	2,825	2,849
	kWh	2,383,707	2,458,955	2,432,690	2,424,249	2,439,792	2,432,436	1,254,856
	kW	6,766	6,840	6,768	6,766	6,770	6,772	3,494
Sentinel Lighting-Non-WN/kW	Cust/Conn	216	209	209	207	204	199	195
	kWh	233,686	270,899	243,747	270,899	245,570	244,830	241,105
	kW	766	734	713	700	684	698	687
Total	Cust/Conn	13,424	13,543	13,596	13,687	13,796	13,874	13,956
	kWh	188,245,383	189,602,695	188,143,155	188,591,795	186,786,342	188,817,108	184,803,733
	kW	210,307	211,149	215,397	223,967	213,852	206,374	200,058
Wholesale purchases (adjusted for GS<50)		197,081,317	199,623,009	194,771,161	198,259,056	191,637,148.36		

3.0 –VECC -20

Reference: E3/pages 34-38

Load Forecast Model, Tab 10 - CDM Adjustment

- a) Please provide a copy of Ottawa River's 2015-2020 CDM plan as submitted to the IESO setting out its planned CDM savings over the period.

Response:

The 2015-2020 CDM plan is being filed in conjunction with these responses

- b) Please provide a copy of the IESO's Final 2014 CDM Report for Ottawa River and update Table 3.23 as required.

Response:

The IESO's Final 2014 CDM Report for Ottawa River is being filed with these responses. The revised table can be found in the response to question 3-Staff-46.

- c) Please provide the IESO's estimates of the persisting effects in 2015 and 2016 from CDM programs implemented in each of 2011, 2012, 2013 and 2014.

Response:

4 Year (2011-2014) kWh Target:						Persistence of 2014 CDM Program into 2015 and 2016	
8,970,000							
	2011	2012	2013	2014	Total	2015	2016
2011 CDM Programs	8.47%	8.47%	8.38%	7.44%	32.76%		
2012 CDM Programs		8.24%	8.24%	8.19%	24.66%		
2013 CDM Programs			7.73%	7.73%	15.46%		
2014 CDM Programs				18.81%	18.81%		
Total in Year	8.47%	16.71%	24.34%	42.17%	91.70%		
kWh						1,754,280.00	1,559,360.00
2011 CDM Programs	798,000.00	798,000.00	789,000.00	701,000.00	3,086,000.00		
2012 CDM Programs	- 16,000.00	776,000.00	776,000.00	771,000.00	2,307,000.00		
2013 CDM Programs	-	101,000.00	728,000.00	728,000.00	1,557,000.00		
2014 CDM Programs	-	326,000.00	371,000.00	1,772,000.00	2,469,000.00		
Total in Year	782,000.00	2,001,000.00	2,664,000.00	3,972,000.00	9,419,000.00		

- d) With respect to page 36, the Tables provided appear to be based on those in Appendix 2-I from the 2015 Filing Requirements. Please update using the Appendix 2-I from the 2016 Filing Requirements.

Response:

The revised table can be found in the response to question 3-Staff-46.

- e) With respect to pages 36-37, please address the following:
- i. The weighting factors by year set out on page 36 differ from those in Tab 10 of the Load Forecast Model. Please reconcile.

Response:

VECC is correct in that the table at page 36 was not updated. The utility has updated its weight factor to reflect the default values of “1” for 2015 and “0.5” for 2016.

- ii. The 3,225,333.33 kWh value appears to be for 2015. There is no manual adjustment derivation provided as part of either the Application or the Load Forecast Model for the 2016 Load Forecast. Please provide and indicate how was calculated.

Response:

The manual adjusted for the Load Forecast of 3,225,333.33 (now revised to 2,500,000) is calculated as part of App_2_I LF_CDM. See Chapter 2 Appendices or the Load Forecast model for details.

- iii. If not addressed in response to part (ii), please explain why the weights for 2014, 2015 and 2016 should not be 0.5, 1.0 and 0.5 respectively.

Response:

See response to e) i) above. Note that the utility followed instructions embedded in Appendix 2-I from the Chapter 2 Appendix of the Filing Requirements for 2016 Cost of Service Distribution Rate Applications.

- iv. There is no value provided for the 2016 LRAMVA. What is Ottawa River’s proposed value and how was it determined?

Response:

The proposed LRAMVA amount is shown at Ex.4/Tab 6/Sch. 2 and supported by a model entitled “EB-2014-0105 2016 ORPC LRAMVA Aug 28 2015” filed in conjunction with the August 28th application. See response to Staff-67 for specifics about the LRAMVA value (both as field and revised)

f) Please provide a revised version of Table 3.24 as needed.

Response:

kWh	Year	2015	2016
Residential	kWh	78,438,793	78,290,332
General Service < 50 kW	kWh	34,953,792	34,887,634
Unmetered Scattered Load	kWh	453,036	452,179
General Service > 50 kW - 4999 kW	kWh	72,294,221	72,157,390
Streetlighting	kWh	2,432,436	1,271,832
Sentinel Lighting	kWh	244,830	244,367
	kWh	-	-
Total		188,817,108	187,303,733

Share	Target	Adjusted (kWh)	Manual Reallocation	Final Adjusted (kWh)
41.80%	1,044,965	77,245,367		77,245,367
18.63%	465,656	34,421,978		34,421,978
0.24%	6,035	446,143		446,143
38.52%	963,107	71,194,283		71,194,283
0.68%	16,976	1,254,856		1,254,856
0.13%	3,262	241,105		241,105
0.00%	0	0		0
100.00%	2,500,000	184,803,733	0	184,803,733

	Year	2015	2016
Residential	kW	-	-
General Service < 50 kW	kW	-	-
Unmetered Scattered Load	kW	-	-
General Service > 50 kW - 4999 kW	kW	198,904	198,527
Streetlighting	kW	6,772	3,541
Sentinel Lighting	kW	698	696
	kW	-	-
Total		206,374	202,765

Adjusted (kWh)	Manual Reallocation	Final Adjusted (kWh)
0	0	0
0	0	0
0	0	0
195,878	0	195,878
3,494	0	3,494
687	0	687
0	0	0
200,058	0	200,058

g) How was the allocation of the 2016 manual CDM adjustment to customer classes determined?

Response:

ORPC used the 2016 kWh per class share.

- h) Please provide a breakdown, by customer class, of Ottawa River's proposed 2016 LRAMVA (kWh) amount. For the demand billed customer classes, please provide the comparable kW values.

Response:

The LRAMVA amount has been recalculated to use the total metered kWh as a billing determinant. (see Tab 4 of the EDDVAR model for details)

3.0 –VECC -21

Reference: E3/pages 41-47

- a) With respect to page 42, between 2005 and 2014 how many GS<50 customers were reclassified to the GS>50 customer class?

Response:

Approximately twenty-five customers were reclassified to GS>50 from 2005 to 2014.

- b) For the GS<50, Streetlight and Sentinel classes the customer count changes for 2015 and 2016 set out in their respective tables do not match the numbers use in the text. Please reconcile/explain.

Response:

The numbers in the Load Forecast are correct.

3.0 –VECC -22

Reference: E3/pages 50-57

- a) Using the same format as Table 3.35, please provide the actual Other Revenue for 2015 up to the most recent month available and provide the 2014 values for the same period.

Response:

Ottawa River Power has updated Appendix 2-H

- b) What types of contract work (Account 4325) were undertaken in the past and in what areas has this work been: i) declining since 2013 and ii) forecast to decline in 2015 and 2016?

Response:

Ottawa River Power has completed work, specifically telecommunications (stringing of fibre wire) for its affiliate Ottawa River Energy Solutions Inc. (ORES). This project is now complete. Additionally ORES does street lighting maintenance for its shareholder's by contracting with ORPC. With the conversion of street lights to LED by the shareholder, maintenance needs will be reduced.

- c) Where are the expenses associated with the revenues reported in Account 4325 accounted for?

Response:

The revenues in account 4325 above were recorded at the net amount.

- d) Does the interest and dividend income reported for Account 4405 include interest related to regulatory accounts? If so, what are the associated values for 2015 and 2016?

Response:

Ottawa River Power confirms that interest on its regulatory accounts were recorded in account 4405. A large portion of this was derived from the interest on account 1555 and 1556 (Smart Meters). With the disposition of Smart Meters with this application ORPC has estimated the carrying charge at \$10,000 for each of 2015 and 2016.

3.0 –VECC -23

Reference: E3/page 60

- a) Will the customer be charged if the Meter Technician/Customer Service Representative explains the “smart meter” operations and no meter change is subsequently requested?

Response:

Ottawa River Power confirms that this charge is intended to charge those customers when a Meter Technician physically visits the premise, checks the meter and find no fault with the meter.

- b) If not, why should the time required for such explanations be included in the basis for the charge when a meter change is subsequently requested?

Response:

This charge is for the actual physical visit to the customer premise when in fact the meter is working.

3.0 –VECC -24

Reference: E3/pages 65-67

- a) Please update the Commodity Price calculations for the most recent RPP Report (October 2015).

Response:

Determination of Commodity

		Last Actual kWh's		
Customer Class Name		Last Actual kWh's	non-RPP	RPP
Residential		79,483,998	3,415,188	76,068,810
General Service < 50 kW		31,649,726	2,656,020	28,993,706
General Service > 50 to 4999 kW		72,512,849	62,009,680	10,503,169
Sentinel Lighting		245,570	5,184	240,386
Streetlighting		2,439,792	2,377,067	62,725
Unmetered Scattered Load		454,406	25,008	429,398
other		-	-	0
other		-	-	0
other		-	-	0
TOTAL		186,786,342	70,488,147	116,298,195
%		100.00%	37.74%	62.26%

Forecast Price

HOEP (\$/MWh)				\$20.57	
Global Adjustment (\$/MWh)				\$87.92	
Adjustments					
TOTAL (\$/MWh)				\$108.49	\$107.28
\$/kWh				\$0.10849	\$0.10728
%				37.74%	62.26%
WEIGHTED AVERAGE PRICE		\$0.1077		\$0.0409	\$0.0668

- b) Please update for the recently approved change to the Wholesale Market Service Rate (EB-2015-0294).

Response:

Both the Wholesale Market Service Rate and Rural Rate Protection were updated to reflect EB-2015-0294. A revised Cost of Power is presented at the next page.

Power Supply Expense

Determination of Commodity

Customer Class Name	Last Actual kWh's	non-RPP	RPP
Residential	79,483,998	3,415,188	76,068,810
General Service < 50 kW	31,649,726	2,656,020	28,993,706
General Service > 50 to 4999 kW	72,512,849	62,009,680	10,503,169
Sentinel Lighting	245,570	5,184	240,386
Streetlighting	2,439,792	2,377,067	62,725
Unmetered Scattered Load	454,406	25,008	429,398
other	-	-	0
other	-	-	0
other	-	-	0
TOTAL	186,786,342	70,488,147	116,298,195
%	100.00%	37.74%	62.26%

Forecast Price

HOEP (\$/MWh)		\$20.57		Note: Table ES-1 from current RPP report - Load Weighted price for RPP Consumers
Global Adjustment (\$/MWh)		\$87.92		Note: Table ES-1 from current RPP report - Impact of Global Adjustment
Adjustments				
TOTAL (\$/MWh)		\$108.49	\$107.28	Note: Table ES-1 from current RPP report - AVG supply cost for RPP Consumers
\$/kWh		\$0.10849	\$0.10728	
%		37.74%	62.26%	
WEIGHTED AVERAGE PRICE	\$0.1077	\$0.0409	\$0.0668	

Electricity Projections

(volumes for the bridge and test year are automatically loss adjusted)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4006	4705					Volume	rate (\$/kWh):
General Service < 50 kW	kWh	4010	4705					85,979,876	0.0796
General Service > 50 to 4999 kW	kWh	4035	4705					34,236,319	0.0796
Sentinel Lighting	kWh	4010	4705					75,113,696	0.0796
Streetlighting	kWh	4025	4705					254,378	0.0796
Unmetered Scattered Load	kWh	4025	4705					2,527,301	0.0796
other	kWh	4025	4705					470,705	0.0796
other	kWh	4025	4705					0	0.0796
other	kWh	4025	4705					0	0.0796
other	kWh	4025	4705					0	0.0796
TOTAL				0	0	0	0	\$198,582,275	\$15,807,149

Transmission - Network

(volumes for the bridge and test year are automatically loss adjusted)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4066	4714					Volume	Rate
General Service < 50 kW	kWh	4066	4714					85,979,876	0.0063
General Service > 50 to 4999 kW	kWh	4066	4714					34,236,319	0.0058
Sentinel Lighting	kWh	4066	4714					75,113,696	2.3883
Streetlighting	kWh	4066	4714					254,378	1.7951
Unmetered Scattered Load	kWh	4066	4714					2,527,301	6.7722
other	kWh	4066	4714					470,705	0.0058
other	kWh	4066	4714					0	1.0000
other	kWh	4066	4714					0	1.0000
other	kWh	4066	4714					0	1.0000
TOTAL				0	908,359	951,056	1,100,144	1,178,943	121,146,957

Transmission - Connection

(volumes for the bridge and test year are automatically loss adjusted)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4068	4716					Volume	Rate
General Service < 50 kW	kWh	4068	4716					85,979,876	0.0045
General Service > 50 to 4999 kW	kWh	4068	4716					34,236,319	0.0040
Sentinel Lighting	kWh	4068	4716					75,113,696	1.5969
Streetlighting	kWh	4068	4716					254,378	1.2596
Unmetered Scattered Load	kWh	4068	4716					2,527,301	6.7722
other	kWh	4068	4716					470,705	0.0040
other	kWh	4068	4716					0	1.0000
other	kWh	4068	4716					0	1.0000
other	kWh	4068	4716					0	1.0000
TOTAL				0	\$454,767	\$631,138	\$783,744	\$820,000	\$121,146,957

Wholesale Market Service

(volumes for the bridge and test year are automatically loss adjusted)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4062	4708					Volume	rate (\$/kWh):
General Service < 50 kW	kWh	4062	4708					85,979,876	0.0044
General Service > 50 to 4999 kW	kWh	4062	4708					34,236,319	0.0040
Sentinel Lighting	kWh	4062	4708					75,113,696	0.0040
Streetlighting	kWh	4062	4708					254,378	0.0040
Unmetered Scattered Load	kWh	4062	4708					2,527,301	0.0040
other	kWh	4062	4708					470,705	0.0040
other	kWh	4062	4708					0	1.0000
other	kWh	4062	4708					0	1.0000
other	kWh	4062	4708					0	1.0000
TOTAL				0	\$454,767	\$631,138	\$783,744	\$820,000	\$121,146,957

Rural Rate Protection

(volumes for the bridge and test year are automatically loss adjusted)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4062	4730					Volume	rate (\$/kWh):
General Service < 50 kW	kWh	4062	4730					85,979,876	0.0012
General Service > 50 to 4999 kW	kWh	4062	4730					34,236,319	0.0012
Sentinel Lighting	kWh	4062	4730					75,113,696	0.0012
Streetlighting	kWh	4062	4730					254,378	0.0012
Unmetered Scattered Load	kWh	4062	4730					2,527,301	0.0012
other	kWh	4062	4730					470,705	0.0012
other	kWh	4062	4730					0	1.0012
other	kWh	4062	4730					0	1.0012
other	kWh	4062	4730					0	1.0012
TOTAL				0	\$252,044	\$220,700	\$245,761	\$121,146,957	\$145,376

Smart Meter Entity Charge

(per customer)

Customer	Revenue	Expense	2010	2011	2012	2013	2014	2015	2016
Class Name	USA #	USA #							
Residential	kWh	4062	4730					Volume	rate (\$/kWh):
General Service < 50 kW	kWh	4062	4730					85,979,876	0.79000
General Service > 50 to 4999 kW	kWh	4062	4730					34,236,319	0.79000
Sentinel Lighting	kWh	4062	4730					75,113,696	0.79000
Streetlighting	kWh	4062	4730					254,378	0.79000
Unmetered Scattered Load	kWh	4062	4730					2,527,301	0.79000
other	kWh	4062	4730					470,705	0.79000
other	kWh	4062	4730					0	0.79000
other	kWh	4062	4730					0	0.79000
other	kWh	4062	4730					0	0.79000
TOTAL				0	\$65,791	\$101,036	\$10,829	\$8,555	\$10,893

Low Voltage Charges - Historical and Proposed LV Charges

				2010	2011	2012	2013	2014	2015	2016
4075-Billed - LV				-189,060	-205,210	-202,887	-206,776	-202,825	-205,000	-205,000
4750-Charges - LV				0	0	0	65,791	167,195	205,000	205,000

Low Voltage Charges - Allocation of LV Charges based on Transmission Connection Revenues

(volumes are not loss adjusted)

ALLOCATION BASED ON TRANSMISSION-CONNECTION REVENUE					
Customer Class Name		RTSR Rate	Uplifted Volumes	Revenue	% Alloc
Residential	kWh	\$0.0046	84,357,365	\$388,002	33.13%
General Service < 50 kW	kWh	\$0.0041	33,590,252	\$137,332	11.73%
General Service > 50 to 4999 kW	kW	\$1.6312	195,150	\$318,327	27.18%
Sentinel Lighting	kWh	\$1.2875	249,578	\$321,321	27.43%
Streetlighting	kW	\$1.2611	3,481	\$4,389	0.37%
Unmetered Scattered Load	kWh	\$0.0041	461,822	\$1,888	0.16%
other	0	\$0.0000	1	\$0	0.00%
other	0	\$0.0000	1	\$0	0.00%
other	0	\$0.0000	1	\$0	0.00%
TOTAL			118,857,651	\$1,171,261	100%

Low Voltage Charges Rate Rider Calculations

(volumes are not loss adjusted)

PROPOSED LOW VOLTAGE CHARGES & RATES					
Customer Class Name	% Allocation	Charges	Not Uplifted Volumes	Rate	per
Residential	33.13%	67,910	84,357,365	\$0.0008	kWh
General Service < 50 kW	11.73%	24,037	33,590,252	\$0.0007	kWh
General Service > 50 to 4999 kW	27.18%	35,715	195,150	\$0.2855	kW
Sentinel Lighting	27.43%	36,239	249,578	\$0.2253	kWh
Streetlighting	0.37%	788	3,481	\$0.2207	kW
Unmetered Scattered Load	0.16%	330	461,822	\$0.0007	kWh
other	0.00%	0	1	\$0.0000	0
other	0.00%	0	1	\$0.0000	0
other	0.00%	0	1	\$0.0000	0
TOTAL	99.84%	205,000	118,857,651		

Low Voltage Charges to be added to power supply expense for bridge and test year.

(volumes are not loss adjusted)

Customer		Revenue	Expense	2015		2016	
Class Name	USA #	USA #	Volume	Rate	Amount	Volume	Rate
Residential	4075	4750	82,752,527	\$0.0011	\$91,028	84,357,365	\$0.0008
General Service < 50 kW	4075	4750	32,951,221	\$0.0010	\$32,951	33,590,252	\$0.0007
General Service > 50 to 4999 kW	4075	4750	198,904	\$0.3954	\$78,647	195,150	\$0.2855
Sentinel Lighting	4075	4750	244,830	\$0.3121	\$76,411	249,578	\$0.2253
Streetlighting	4075	4750	6,772	\$0.3057	\$2,070	3,481	\$0.2207
Unmetered Scattered Load	4075	4750	2,432,436	\$0.0010	\$2,432	461,822	\$0.0007
other	0	4075	4750	\$0.0000	\$0	1	\$0.0000
other	0	4075	4750	\$0.0000	\$0	1	\$0.0000
other	0	4075	4750	\$0.0000	\$0	1	\$0.0000
TOTAL		0	0	118,586,693	\$283,540	118,857,651	\$204,035.93

Projected Power Supply Expense				\$19,632,374		\$24,500,017
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