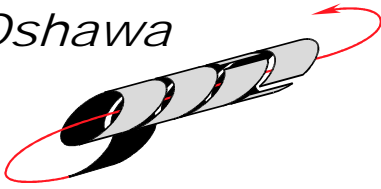


Oshawa



*PUC Networks Inc.*

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100 Simcoe Street South, Oshawa, Ontario L1H 7M7 • Tel. (905) 723-4623 • Fax (905) 723-7947 • E-mail [contactus@opuc.on.ca](mailto:contactus@opuc.on.ca)

September 26, 2012

Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
27<sup>th</sup> Floor 2300 Yonge Street  
Toronto, Ontario  
M4P 1E4

Dear Ms. Walli:

**Re: Oshawa PUC Networks Inc. (ED-2002-0560)**  
**Response to Interrogatories (EB-2012-0157)**

Enclosed with this letter are OPUCN's responses to the interrogatories received as part of the above mentioned rate case. The responses have been filed using the RESS online submission system. Copies of the electronic files have been sent to Board Staff and the intervenors of record. Two (2) paper copies of these responses will be delivered to your office shortly.

If you have any questions about this submission please contact the undersigned.

Yours truly,

Philip Martin, VP Finance and Regulatory Compliance  
Email: [pmartin@opuc.on.ca](mailto:pmartin@opuc.on.ca)  
(905) 723-4626 ext 5250

## **Response to Board Staff Interrogatories**

**1. Ref: 2012 IRM3 Tax Savings Work Form, page 5**  
**Ref: Revenue Requirement Work Form EB-2011-0073**

Board Staff notes some discrepancies in the tax rates entered into the 2013 Tax Savings Work form.

- Please confirm that Oshawa's 2012 rates were set on the basis of a 20.16% tax rate.
- Please provide an explanation of the 2012 tax rate of 23.63% entered in the tax savings work form with the 2012 approved rate being 20.16%. If this is an error Board Staff will update your work form.



**REVENUE REQUIREMENT WORK FORM**

Version: 2.1

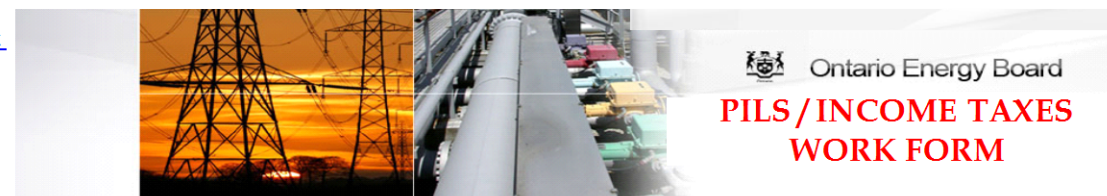
Name of LDC: Oshawa PUC Networks  
File Number: EB-2011-0073  
Rate Year: 2012

**Taxes/PILs**

| Line No.                                   | Particulars  | Application        | Settlement Agreement | Per Board Decision |
|--|--|--------------------|----------------------|--------------------|
| <u>Determination of Taxable Income</u>     |  |                    |                      |                    |
| 1  | Utility net income before taxes                                | \$3,141,852        | \$3,045,203          | \$3,045,203        |
| 2  | Adjustments required to arrive at taxable utility income       | \$455,587          | (\$1,756,692)        | \$455,587          |
| 3  | Taxable income   | <u>\$3,597,438</u> | <u>\$1,288,510</u>   | <u>\$3,500,789</u> |
| <u>Calculation of Utility income Taxes</u> |  |                    |                      |                    |
| 4  | Income taxes   | \$922,017          | \$259,774            | \$259,774          |
| 5  | Capital taxes  | \$ - (1)           | \$ - (1)             | \$ -               |
| 6  | Total taxes  | <u>\$922,017</u>   | <u>\$259,774</u>     | <u>\$259,774</u>   |
| 7  | Gross-up of Income Taxes                                       | <u>\$317,750</u>   | <u>\$65,598</u>      | <u>\$65,598</u>    |
| 8  | Grossed-up Income Taxes  | <u>\$1,239,766</u> | <u>\$325,371</u>     | <u>\$325,371</u>   |
| 9  | PILs / tax Allowance (Grossed-up Income taxes + Capital taxes) | <u>\$1,239,766</u> | <u>\$325,371</u>     | <u>\$325,371</u>   |
| 10   | Other tax Credits  | \$ -               | \$ -                 | \$ -               |
| <u>Tax Rates</u>                           |  |                    |                      |                    |
| 11   | Federal tax (%)  | 14.38%             | 11.53%               | 11.53%             |
| 12   | Provincial tax (%)   | 11.25%             | 8.63%                | 8.63%              |
| 13   | Total tax rate (%)   | <u>25.63%</u>      | <u>20.16%</u>        | <u>20.16%</u>      |

## OPUCN Response:

a)&b) The 20.16% is a derived rate based on an input rate of 23.63% combined with tax credits of \$56,000 – see table below. The 23.63% entered is correct.

|  |                                  |  |                               |
|--|----------------------------------|--|-------------------------------|
|  |                                  | <b>PILS / INCOME TAXES<br/>WORK FORM</b> |                               |
| <b>Oshawa PUC Networks Inc.<br/>PILs Tax Provision - Test Year</b>                 |                                  |  |                               |
| <b>Regulatory Taxable Income</b>   |                                  |  | <b>\$1,288,510 A</b>          |
| <b>Ontario Income Taxes</b>  |                                  |  |                               |
| <i>Income tax payable</i>  | <b>Ontario Income Tax</b>        | 11.25% B \$144,957 C = A * B             |                               |
| <i>Small business credit</i>   | Ontario Small Business Threshold | \$500,000 D                              |                               |
|  | Rate reduction                   | -6.75% E -\$33,750 F = D * E             |                               |
| <b>Ontario Income tax</b>  |                                  |  | <b>\$111,207 J = C + F</b>    |
| <b>Combined Tax Rate and PILs</b>  |                                  |  |                               |
|  | Effective Ontario Tax Rate       | 8.63% K = J / A                          |                               |
|  | Federal tax rate                 | 15.00% L                                 |                               |
|  | Combined tax rate                |  | <b>23.63% M = L + L</b>       |
| <b>Total Income Taxes</b>  |                                  |  | <b>\$304,484 N = A * M</b>    |
|  | Investment Tax Credits           |  | <b>O</b>                      |
|  | Miscellaneous Tax Credits        | \$56,000 P                               |                               |
| <b>Total Tax Credits</b>   |                                  |  | <b>\$56,000 Q = O + P</b>     |
| <b>Corporate PILs/Income Tax Provision for Test Year</b>                           |                                  |  | <b>\$248,484 R = N - Q</b>    |
| <b>Corporate PILs/Income Tax Provision Gross Up <sup>1</sup></b>                   |                                  | 76.37% S = 1 - M                         | <b>\$76,888 T = R / S - N</b> |
| <b>Income Tax (grossed-up)</b>   |                                  |  | <b>\$325,371 U = R + T</b>    |

**Note:**

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

**2. Ref: 2012 IRM3 RTSR Work form, page 4**

- a) Please confirm that the amounts entered into the columns “Non-Loss Adjusted Metered kWh” and “Non-Loss Adjusted Metered kW” have not been adjusted by Oshawa’s Board-approved loss factor.

| Rate Class   | Unit | Non-Loss<br>Adjusted Metered<br>kWh | Non-Loss<br>Adjusted Metered<br>kW | Applicable<br>Loss<br>Factor | Load<br>Factor | Loss Adjusted<br>Billed kWh | Billed kW |
|--|------|-------------------------------------|------------------------------------|------------------------------|----------------|-----------------------------|-----------|
| Residential  | kWh  | 484,617,834                         |                                    | 1.0487                       |                | 508,218,723                 | -         |
| General Service Less Than 50 kW                    | kWh  | 135,695,878                         |                                    | 1.0487                       |                | 142,304,267                 | -         |
| General Service 50 to 999 kW                       | kW   | 161,366,304                         | 414,036                            |                              | 53.42%         | 161,366,304                 | 414,036   |
| General Service 50 to 999 kW -<br>Interval Metered | kW   | 198,168,071                         | 453,034                            |                              | 59.95%         | 198,168,071                 | 453,034   |
| General Service 1,000 to 4,999 kW                  | kW   | 79,908,016                          | 192,700                            |                              | 56.84%         | 79,908,016                  | 192,700   |
| Large Use  | kW   | 37,740,699                          | 83,704                             |                              | 61.80%         | 37,740,699                  | 83,704    |
| Unmetered Scattered Load                           | kWh  | 2,769,028                           |                                    | 1.0487                       |                | 2,903,880                   | -         |
| Sentinel Lighting                                  | kW   | 38,567                              | 115                                |                              | 45.97%         | 38,567                      | 115       |
| Street Lighting                                    | kW   | 10,214,450                          | 27,715                             |                              | 50.51%         | 10,214,450                  | 27,715    |

- b) Please confirm Sentinel Lighting and Street Lighting Non-Loss adjusted Metered kWh are correct, as they do not reconcile to RRR 2.1.5. If confirmed, please provide an explanation for the differences in the RRR data.

| Non-Loss Adjusted Metered kWh | RTSR Work Form Data | 2.1.5 RRR Data |
|-------------------------------|---------------------|----------------|
| Sentinel Lighting             | 38,567              | -              |
| Street Lighting               | 10,214,450          | 10,253,017     |
| Total                         | 10,253,017          | 10,253,017     |

**OPUCN Response:**

- a) Confirmed.
- b) The Sentinel Lighting and Street Lighting Non-Loss adjusted Metered kWh as entered in the RTSR Work Form are correct. The RRR submission consolidated both under street lighting. OPUCN will correct it's RRR reporting.

### **3. Ref: 2012 IRM3 Rate Generator Version 2.1**

Please update your 2012 IRM3 Rate Generator Model to version 2.3 located on the Board's website at:

<http://www.ontarioenergyboard.ca/OEB/Industry/Regulatory%20Proceedings/Applications%20Before%20the%20Board/Electricity%20Distribution%20Rates/2013%20Electricity%20Distribution%20Rate%20Applications>

#### **OPUCN Response:**

Updated and filed via RESS.

#### 4. Ref: 2012 IRM3 Rate Generator Sheet 5 2013 Continuity Schedule

##### Ref: Oshawa\_Draft Rate Order\_20111213.pdf

Board staff is not able to reconcile accounts 1586 Retail Transmission Connection Charge, 1588 Power excluding Global Adjustment and 1588 Power Sub Account Global Adjustment with Oshawa's Draft Rate Order that was approved by the Board in Oshawa's 2012 rate proceeding (see first table below). Please explain the omission of this data in columns "Principal Disposition during 2012 – instructed by Board" and "Interest Disposition during 2012 – instructed by Board" in the second table below. Please make any updates required to the continuity schedule.

#### Rate Riders Calculation

| Deferral and Variance Accounts:                | Disposition Amount | Allocator   |
|--|--------------------|-------------|
| WMSC - Account 1580                            | (1,195,583)        | kWh         |
| One-Time WMSC - Account 1582                   | 63,623             | kWh         |
| Network - Account 1584                         | 1,369,978          | kWh         |
| Connection - Account 1586                      | (153,887)          | kWh         |
| Power - Account 1588 (excl Global Adjustment)  | 49,496             | kWh         |
| Power - Account 1588 subAcct Global Adjustment | (468,212)          | non RPP kWh |
| RARA - Account 1590                            | 6,114              | kWh         |
| <b>Subtotal - RSVA</b>                         | <b>(328,470)</b>   |             |

| Account Descriptions                                | Principal Disposition during 2012 - instructed by Board | Interest Disposition during 2012 - instructed by Board | Closing Principal Balances as of Dec 31-11 Adjusted for Dispositions during 2012 | Closing Interest Balances as of Dec 31-11 Adjusted for Dispositions during 2012 |
|---|---|--|--|---|
| Group 1 Accounts                                    |   |  |  |   |
| LV Variance Account                                 |   |  | 0  | 0   |
| 1580 RSVA - Wholesale Market Service Charge         | -1,178,621  | - 16,962   | -1,126,739   | - 25,866  |
| 1584 RSVA - Retail Transmission Network Charge      | 1,355,700   | 14,278   | 1,285,242  | 39,858  |
| 1586 RSVA - Retail Transmission Connection Charge   |   |  | - 875,077  | - 20,027  |
| 1588 RSVA - Power (excluding Global Adjustment)     |   |  | 155,491  | - 8,892   |
| 1588 RSVA - Power - Sub-account - Global Adjustment |   |  | - 45,787   | - 18,622  |

**OPUCN Response:**

The missing data in columns “Principal Disposition during 2012 – instructed by Board” and “Interest Disposition during 2012 – instructed by Board” in the second table above has been added to the continuity schedule.

The revised total for the Group 1 Accounts of \$68,516 does not meet the threshold test, and therefore does not impact the application as originally submitted.

| Account Descriptions                              | Principal Disposition during 2012 instructed by Board | Interest Disposition during 2012 instructed by Board | Closing Principal Balances as of Dec 31-11 Adjusted for Dispositions during 2012 | Closing Interest Balances as of Dec 31-11 Adjusted for Dispositions during 2012 |
|---|---|--|--|---|
| Group 1 Accounts                                  |   |  |  |   |
| LV Variance Account                               |   |  |  |   |
| 1580 RSVA - Wholesale Market Service Charge       | (1,178,621)   | (16,962)   | (1,126,739)  | (25,866)  |
| 1584 RSVA - Retail Transmission Network Charge    | 1,355,700   | 14,278   | 1,285,242  | 39,858  |
| 1586 RSVA - Retail Transmission Connection Charge | (156,491)   | 2,604  | (718,586)  | (22,631)  |
| 1588 RSVA - Power (excluding Global Adjustment)   | 45,682  | 3,815  | 109,809  | (12,707)  |
| 1588 RSVA - Power - Sub-account - Global Adjustme | (448,598)   | (19,613)   | 402,811  | 991   |



**5. Ref: Manager's Summary, Page 7-8 of 9, LRAM**

Oshawa has requested an LRAM recovery for a total amount of \$281,835.83 for lost revenues incurred in 2010 and 2011 from CDM programs implemented between 2006 and 2010.

- a) Please confirm that Oshawa has used final 2010 program evaluation results from the OPA to calculate its LRAM amount.
- b) If Oshawa did not use final 2010 program evaluation results from the OPA, please explain why and update the LRAM amount accordingly.
- c) Please confirm that Oshawa has not received any of the lost revenues requested in this application in the past. If Oshawa has collected lost revenues related to programs applied for in this application, please discuss the appropriateness of this request.
- d) Please discuss why there are still remaining lost revenues from historical programs (i.e. 2006-2009) that Oshawa is seeking to recover at this time. Please reconcile this with the LRAM claim Oshawa received in its 2012 COS application (EB-2011-0073).
- e) Please provide a table that shows the LRAM amounts requested in this application by the year they are associated with and the year the lost revenues took place. Please provide separate tables for each rate class. Use the table below as an example and continue for all the years LRAM is requested:

| Program Years | Years that lost revenues took place |       |       |       |       |       |
|---------------|-------------------------------------|-------|-------|-------|-------|-------|
|               | 2006                                | 2007  | 2008  | 2009  | 2010  | 2011  |
| 2006          | \$xxx                               | \$xxx | \$xxx | \$xxx | \$xxx | \$xxx |
| 2007          |                                     | \$xxx | \$xxx | \$xxx | \$xxx | \$xxx |
| 2008          |                                     |       | \$xxx | \$xxx | \$xxx | \$xxx |
| 2009          |                                     |       |       | \$xxx | \$xxx | \$xxx |
| 2010          |                                     |       |       |       | \$xxx | \$xxx |

- f) Please provide a table similar to the one above that shows the LRAM amounts Oshawa has collected in the past.

- g) Please discuss if Oshawa is applying for recovery of any carrying charges related to its LRAM amount.
- h) If Oshawa is applying for carrying charges, please provide a table that shows the monthly LRAM balances, the Board-approved carrying charge rate and the total carrying charges by month for the duration of this LRAM request to support your request for carrying charges. Use the table below as an example:

| Year | Month | Monthly Lost Revenue | Closing Balance | Interest Rate | Interest \$ |
|------|-------|----------------------|-----------------|---------------|-------------|
|      |       |                      |                 |               |             |
|      |       |                      |                 |               |             |

**OPUCN Response:**

- a) Confirmed. All OPA program KWh savings used in the LRAM recovery calculations were taken from the “2006-2010 Final OPA CDM Results Oshawa PUC Networks Inc” report issued by the OPA.
- b) Not applicable, see a).
- c) Confirmed. Only lost revenues for years not claimed previously have been included in this request.
- d) Oshawa has only claimed lost revenues up to 2010 for 2006-2009 programs in previous claims therefore is seeking to recover only the 2011 lost revenue for 2006-2009 programs in this claim. The LRAM claim that Oshawa received in its 2012 COS application (EB-2011-0073) was only for 2010 lost revenue for 2006-2009 programs; the 2011 lost revenue was not applied for at that time. See tables in responses e) and f) for clarification on the lost revenues by year claimed in this and all previous applications.

**Oshawa PUC Networks Inc**  
**2013 IRM Rate Application**  
**EB-2012-0157**

**Response to Board Staff Interrogatories**

August 26, 2012

Page 9 of 14

- e) Tables below show LRAM amounts requested in 2013 IRM Rate Application by the year they are associated with and the year the lost revenues took place, by rate class.

| Program Years | Years that lost revenues took place |      |      |      |      |      | Total |
|---------------|-------------------------------------|------|------|------|------|------|-------|
|               | 2006                                | 2007 | 2008 | 2009 | 2010 | 2011 |       |

**Rate Class: Residential**

|       |     |     |     |     |          |          |           |
|-------|-----|-----|-----|-----|----------|----------|-----------|
| 2006  |     |     |     |     |          | \$10,007 | \$10,007  |
| 2007  |     |     |     |     |          | \$25,819 | \$25,819  |
| 2008  |     |     |     |     |          | \$29,627 | \$29,627  |
| 2009  |     |     |     |     |          | \$14,939 | \$14,939  |
| 2010  |     |     |     |     | \$16,438 | \$15,826 | \$32,264  |
| Total | \$0 | \$0 | \$0 | \$0 | \$16,438 | \$96,218 | \$112,656 |

**Rate Class: Commercial**

|       |     |     |     |     |          |           |           |
|-------|-----|-----|-----|-----|----------|-----------|-----------|
| 2006  |     |     |     |     |          |           | \$0       |
| 2007  |     |     |     |     |          |           | \$0       |
| 2008  |     |     |     |     |          | \$43,927  | \$43,927  |
| 2009  |     |     |     |     |          | \$60,358  | \$60,358  |
| 2010  |     |     |     |     | \$17,947 | \$18,615  | \$36,562  |
| Total | \$0 | \$0 | \$0 | \$0 | \$17,947 | \$122,900 | \$140,846 |

**Rate Class: GS >50KW-200**

|       |     |     |     |     |         |         |         |
|-------|-----|-----|-----|-----|---------|---------|---------|
| 2006  |     |     |     |     |         |         | \$0     |
| 2007  |     |     |     |     |         |         | \$0     |
| 2008  |     |     |     |     |         | \$2,641 | \$2,641 |
| 2009  |     |     |     |     |         | \$544   | \$544   |
| 2010  |     |     |     |     | \$4,377 | \$129   | \$4,507 |
| Total | \$0 | \$0 | \$0 | \$0 | \$4,377 | \$3,314 | \$7,691 |

**Rate Class: GS 200KW-1000**

|       |     |     |     |     |         |         |         |
|-------|-----|-----|-----|-----|---------|---------|---------|
| 2006  |     |     |     |     |         |         | \$0     |
| 2007  |     |     |     |     |         |         | \$0     |
| 2008  |     |     |     |     |         | \$2,413 | \$2,413 |
| 2009  |     |     |     |     |         | \$177   | \$177   |
| 2010  |     |     |     |     | \$4,362 | \$114   | \$4,476 |
| Total | \$0 | \$0 | \$0 | \$0 | \$4,362 | \$2,703 | \$7,066 |

**Rate Class: Unmetered Scattered Load**

|       |     |     |     |     |     |          |          |
|-------|-----|-----|-----|-----|-----|----------|----------|
| 2006  |     |     |     |     |     |          | \$0      |
| 2007  |     |     |     |     |     | \$13,576 | \$13,576 |
| 2008  |     |     |     |     |     |          | \$0      |
| 2009  |     |     |     |     |     |          | \$0      |
| 2010  |     |     |     |     |     |          | \$0      |
| Total | \$0 | \$0 | \$0 | \$0 | \$0 | \$13,576 | \$13,576 |

**Total of all Rate Classes**

|       |     |     |     |     |          |           |           |
|-------|-----|-----|-----|-----|----------|-----------|-----------|
| 2006  | \$0 | \$0 | \$0 | \$0 | \$0      | \$10,007  | \$10,007  |
| 2007  | \$0 | \$0 | \$0 | \$0 | \$0      | \$39,395  | \$39,395  |
| 2008  | \$0 | \$0 | \$0 | \$0 | \$0      | \$78,607  | \$78,607  |
| 2009  | \$0 | \$0 | \$0 | \$0 | \$0      | \$76,017  | \$76,017  |
| 2010  | \$0 | \$0 | \$0 | \$0 | \$43,125 | \$34,684  | \$77,809  |
| Total | \$0 | \$0 | \$0 | \$0 | \$43,125 | \$238,711 | \$281,836 |

- f) Tables below show LRAM amounts collected in the past by the year they are associated with and the year the lost revenues took place, by rate class.

**2009 IRM Rate Application**

| Program<br>Years | Years that lost revenues took place |      |      |      |      |      | Total |
|------------------|-------------------------------------|------|------|------|------|------|-------|
|                  | 2006                                | 2007 | 2008 | 2009 | 2010 | 2011 |       |

**Rate Class: Residential**

|       |          |           |     |     |     |     |           |
|-------|----------|-----------|-----|-----|-----|-----|-----------|
| 2006  | \$67,298 | \$67,927  |     |     |     |     | \$135,225 |
| 2007  |          | \$48,610  |     |     |     |     | \$48,610  |
| 2008  |          |           |     |     |     |     | \$0       |
| 2009  |          |           |     |     |     |     | \$0       |
| 2010  |          |           |     |     |     |     | \$0       |
| Total | \$67,298 | \$116,537 | \$0 | \$0 | \$0 | \$0 | \$183,835 |

**Rate Class: Unmetered Scattered Load**

|       |     |         |     |     |     |     |         |
|-------|-----|---------|-----|-----|-----|-----|---------|
| 2006  |     |         |     |     |     |     | \$0     |
| 2007  |     | \$8,186 |     |     |     |     | \$8,186 |
| 2008  |     |         |     |     |     |     | \$0     |
| 2009  |     |         |     |     |     |     | \$0     |
| 2010  |     |         |     |     |     |     | \$0     |
| Total | \$0 | \$8,186 | \$0 | \$0 | \$0 | \$0 | \$8,186 |

**Total of all Rate Classes**

|       |          |           |     |     |     |     |           |
|-------|----------|-----------|-----|-----|-----|-----|-----------|
| 2006  | \$67,298 | \$67,927  | \$0 | \$0 | \$0 | \$0 | \$135,225 |
| 2007  | \$0      | \$56,796  | \$0 | \$0 | \$0 | \$0 | \$56,796  |
| 2008  | \$0      | \$0       | \$0 | \$0 | \$0 | \$0 | \$0       |
| 2009  | \$0      | \$0       | \$0 | \$0 | \$0 | \$0 | \$0       |
| 2010  | \$0      | \$0       | \$0 | \$0 | \$0 | \$0 | \$0       |
| Total | \$67,298 | \$124,723 | \$0 | \$0 | \$0 | \$0 | \$192,021 |

## 2010 IRM Rate Application

| Program<br>Years | Years that lost revenues took place |      |      |      |      |      |       |
|------------------|-------------------------------------|------|------|------|------|------|-------|
|                  | 2006                                | 2007 | 2008 | 2009 | 2010 | 2011 | Total |

**Rate Class: Residential**

|       |     |     |          |     |     |     |          |
|-------|-----|-----|----------|-----|-----|-----|----------|
| 2006  |     |     | \$6,901  |     |     |     | \$6,901  |
| 2007  |     |     |          |     |     |     | \$0      |
| 2008  |     |     | \$18,356 |     |     |     | \$18,356 |
| 2009  |     |     |          |     |     |     | \$0      |
| 2010  |     |     |          |     |     |     | \$0      |
| Total | \$0 | \$0 | \$25,258 | \$0 | \$0 | \$0 | \$25,258 |

**Rate Class: Commercial**

|       |     |     |         |     |     |     |         |
|-------|-----|-----|---------|-----|-----|-----|---------|
| 2006  |     |     |         |     |     |     | \$0     |
| 2007  |     |     |         |     |     |     | \$0     |
| 2008  |     |     | \$1,378 |     |     |     | \$1,378 |
| 2009  |     |     |         |     |     |     | \$0     |
| 2010  |     |     |         |     |     |     | \$0     |
| Total | \$0 | \$0 | \$1,378 | \$0 | \$0 | \$0 | \$1,378 |

**Rate Class: GS >50KW-200**

|       |     |     |         |     |     |     |         |
|-------|-----|-----|---------|-----|-----|-----|---------|
| 2006  |     |     |         |     |     |     | \$0     |
| 2007  |     |     |         |     |     |     | \$0     |
| 2008  |     |     | \$1,673 |     |     |     | \$1,673 |
| 2009  |     |     |         |     |     |     | \$0     |
| 2010  |     |     |         |     |     |     | \$0     |
| Total | \$0 | \$0 | \$1,673 | \$0 | \$0 | \$0 | \$1,673 |

**Rate Class: GS 200KW-1000**

|       |     |     |       |     |     |     |       |
|-------|-----|-----|-------|-----|-----|-----|-------|
| 2006  |     |     |       |     |     |     | \$0   |
| 2007  |     |     |       |     |     |     | \$0   |
| 2008  |     |     | \$397 |     |     |     | \$397 |
| 2009  |     |     |       |     |     |     | \$0   |
| 2010  |     |     |       |     |     |     | \$0   |
| Total | \$0 | \$0 | \$397 | \$0 | \$0 | \$0 | \$397 |

**Rate Class: Unmetered Scattered Load**

|       |     |     |          |     |     |     |          |
|-------|-----|-----|----------|-----|-----|-----|----------|
| 2006  |     |     |          |     |     |     | \$0      |
| 2007  |     |     | \$14,780 |     |     |     | \$14,780 |
| 2008  |     |     |          |     |     |     | \$0      |
| 2009  |     |     |          |     |     |     | \$0      |
| 2010  |     |     |          |     |     |     | \$0      |
| Total | \$0 | \$0 | \$14,780 | \$0 | \$0 | \$0 | \$14,780 |

**Total of all Rate Classes**

|       |     |     |          |     |     |     |          |
|-------|-----|-----|----------|-----|-----|-----|----------|
| 2006  | \$0 | \$0 | \$6,901  | \$0 | \$0 | \$0 | \$6,901  |
| 2007  | \$0 | \$0 | \$14,780 | \$0 | \$0 | \$0 | \$14,780 |
| 2008  | \$0 | \$0 | \$21,805 | \$0 | \$0 | \$0 | \$21,805 |
| 2009  | \$0 | \$0 | \$0      | \$0 | \$0 | \$0 | \$0      |
| 2010  | \$0 | \$0 | \$0      | \$0 | \$0 | \$0 | \$0      |
| Total | \$0 | \$0 | \$43,486 | \$0 | \$0 | \$0 | \$43,486 |

## 2011 IRM Rate Application

| Program<br>Years | Years that lost revenues took place |      |      |      |      |      |       |
|------------------|-------------------------------------|------|------|------|------|------|-------|
|                  | 2006                                | 2007 | 2008 | 2009 | 2010 | 2011 | Total |

**Rate Class: Residential**

|       |     |     |     |           |     |     |           |
|-------|-----|-----|-----|-----------|-----|-----|-----------|
| 2006  |     |     |     | \$56,781  |     |     | \$56,781  |
| 2007  |     |     |     | \$27,074  |     |     | \$27,074  |
| 2008  |     |     |     | \$31,065  |     |     | \$31,065  |
| 2009  |     |     |     | \$16,004  |     |     | \$16,004  |
| 2010  |     |     |     |           |     |     | \$0       |
| Total | \$0 | \$0 | \$0 | \$130,923 | \$0 | \$0 | \$130,923 |

**Rate Class: Commercial**

|       |     |     |     |           |     |     |           |
|-------|-----|-----|-----|-----------|-----|-----|-----------|
| 2006  |     |     |     |           |     |     | \$0       |
| 2007  |     |     |     |           |     |     | \$0       |
| 2008  |     |     |     | \$44,607  |     |     | \$44,607  |
| 2009  |     |     |     | \$64,307  |     |     | \$64,307  |
| 2010  |     |     |     |           |     |     | \$0       |
| Total | \$0 | \$0 | \$0 | \$108,914 | \$0 | \$0 | \$108,914 |

**Rate Class: GS >50KW-200**

|       |     |     |     |         |     |     |         |
|-------|-----|-----|-----|---------|-----|-----|---------|
| 2006  |     |     |     |         |     |     | \$0     |
| 2007  |     |     |     |         |     |     | \$0     |
| 2008  |     |     |     | \$3,594 |     |     | \$3,594 |
| 2009  |     |     |     | \$4,106 |     |     | \$4,106 |
| 2010  |     |     |     |         |     |     | \$0     |
| Total | \$0 | \$0 | \$0 | \$7,700 | \$0 | \$0 | \$7,700 |

**Rate Class: GS 200KW-1000**

|       |     |     |     |         |     |     |         |
|-------|-----|-----|-----|---------|-----|-----|---------|
| 2006  |     |     |     |         |     |     | \$0     |
| 2007  |     |     |     |         |     |     | \$0     |
| 2008  |     |     |     | \$3,459 |     |     | \$3,459 |
| 2009  |     |     |     | \$3,745 |     |     | \$3,745 |
| 2010  |     |     |     |         |     |     | \$0     |
| Total | \$0 | \$0 | \$0 | \$7,204 | \$0 | \$0 | \$7,204 |

**Rate Class: Unmetered Scattered Load**

|       |     |     |     |          |     |     |          |
|-------|-----|-----|-----|----------|-----|-----|----------|
| 2006  |     |     |     |          |     |     | \$0      |
| 2007  |     |     |     | \$17,325 |     |     | \$17,325 |
| 2008  |     |     |     |          |     |     | \$0      |
| 2009  |     |     |     |          |     |     | \$0      |
| 2010  |     |     |     |          |     |     | \$0      |
| Total | \$0 | \$0 | \$0 | \$17,325 | \$0 | \$0 | \$17,325 |

**Total of all Rate Classes**

|       |     |     |     |           |     |     |           |
|-------|-----|-----|-----|-----------|-----|-----|-----------|
| 2006  | \$0 | \$0 | \$0 | \$56,781  | \$0 | \$0 | \$56,781  |
| 2007  | \$0 | \$0 | \$0 | \$44,399  | \$0 | \$0 | \$44,399  |
| 2008  | \$0 | \$0 | \$0 | \$82,724  | \$0 | \$0 | \$82,724  |
| 2009  | \$0 | \$0 | \$0 | \$88,162  | \$0 | \$0 | \$88,162  |
| 2010  | \$0 | \$0 | \$0 | \$0       | \$0 | \$0 | \$0       |
| Total | \$0 | \$0 | \$0 | \$272,066 | \$0 | \$0 | \$272,066 |

**Oshawa PUC Networks Inc**  
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**2012 Cost of Service Rate Application**

| Program<br>Years | Years that lost revenues took place |      |      |      |      |      | Total |
|------------------|-------------------------------------|------|------|------|------|------|-------|
|                  | 2006                                | 2007 | 2008 | 2009 | 2010 | 2011 |       |

**Rate Class: Residential**

|       |     |     |     |     |          |     |          |
|-------|-----|-----|-----|-----|----------|-----|----------|
| 2006  |     |     |     |     | \$10,240 |     | \$10,240 |
| 2007  |     |     |     |     | \$26,435 |     | \$26,435 |
| 2008  |     |     |     |     | \$30,331 |     | \$30,331 |
| 2009  |     |     |     |     | \$15,302 |     | \$15,302 |
| 2010  |     |     |     |     |          |     | \$0      |
| Total | \$0 | \$0 | \$0 | \$0 | \$82,308 | \$0 | \$82,308 |

**Rate Class: Commercial**

|       |     |     |     |     |           |     |           |
|-------|-----|-----|-----|-----|-----------|-----|-----------|
| 2006  |     |     |     |     |           |     | \$0       |
| 2007  |     |     |     |     |           |     | \$0       |
| 2008  |     |     |     |     | \$42,662  |     | \$42,662  |
| 2009  |     |     |     |     | \$58,619  |     | \$58,619  |
| 2010  |     |     |     |     |           |     | \$0       |
| Total | \$0 | \$0 | \$0 | \$0 | \$101,281 | \$0 | \$101,281 |

**Rate Class: GS >50KW-200**

|       |     |     |     |     |         |     |         |
|-------|-----|-----|-----|-----|---------|-----|---------|
| 2006  |     |     |     |     |         |     | \$0     |
| 2007  |     |     |     |     |         |     | \$0     |
| 2008  |     |     |     |     | \$3,704 |     | \$3,704 |
| 2009  |     |     |     |     | \$534   |     | \$534   |
| 2010  |     |     |     |     |         |     | \$0     |
| Total | \$0 | \$0 | \$0 | \$0 | \$4,238 | \$0 | \$4,238 |

**Rate Class: GS 200KW-1000**

|       |     |     |     |     |         |     |         |
|-------|-----|-----|-----|-----|---------|-----|---------|
| 2006  |     |     |     |     |         |     | \$0     |
| 2007  |     |     |     |     |         |     | \$0     |
| 2008  |     |     |     |     | \$3,459 |     | \$3,459 |
| 2009  |     |     |     |     | \$174   |     | \$174   |
| 2010  |     |     |     |     |         |     | \$0     |
| Total | \$0 | \$0 | \$0 | \$0 | \$3,632 | \$0 | \$3,632 |

**Rate Class: Unmetered Scattered Load**

|       |     |     |     |     |          |     |          |
|-------|-----|-----|-----|-----|----------|-----|----------|
| 2006  |     |     |     |     |          |     | \$0      |
| 2007  |     |     |     |     | \$13,492 |     | \$13,492 |
| 2008  |     |     |     |     |          |     | \$0      |
| 2009  |     |     |     |     |          |     | \$0      |
| 2010  |     |     |     |     |          |     | \$0      |
| Total | \$0 | \$0 | \$0 | \$0 | \$13,492 | \$0 | \$13,492 |

**Total of all Rate Classes**

|       |     |     |     |     |           |     |           |
|-------|-----|-----|-----|-----|-----------|-----|-----------|
| 2006  | \$0 | \$0 | \$0 | \$0 | \$10,240  | \$0 | \$10,240  |
| 2007  | \$0 | \$0 | \$0 | \$0 | \$39,927  | \$0 | \$39,927  |
| 2008  | \$0 | \$0 | \$0 | \$0 | \$80,155  | \$0 | \$80,155  |
| 2009  | \$0 | \$0 | \$0 | \$0 | \$74,629  | \$0 | \$74,629  |
| 2010  | \$0 | \$0 | \$0 | \$0 | \$0       | \$0 | \$0       |
| Total | \$0 | \$0 | \$0 | \$0 | \$204,951 | \$0 | \$204,951 |

- g) Oshawa is applying for recovery of carrying charges for revenue lost throughout 2011 to be collected throughout 2013.

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h) Table below shows carrying charges by month for this LRAM request.

| Carrying charges by month  |           |                          |                 |                              |                                    |                     |
|--|-----------|--------------------------|-----------------|------------------------------|------------------------------------|---------------------|
| a  | b         | c                        | d               | e                            | f                                  | g                   |
| Year   | Month     | Monthly Lost Revenue (1) | Closing Balance | Prescribed Interest Rate (2) | Prescribed Interest Rate (monthly) | Interest \$ (d x f) |
| 2011   | January   | \$19,324.47              | \$19,324.47     | 1.470%                       | 0.123%                             | \$23.67             |
|  | February  | \$19,324.47              | \$38,648.93     | 1.470%                       | 0.123%                             | \$47.34             |
|  | March     | \$19,324.47              | \$57,973.40     | 1.470%                       | 0.123%                             | \$71.02             |
|  | April     | \$19,324.47              | \$77,297.87     | 1.470%                       | 0.123%                             | \$94.69             |
|  | May       | \$19,324.47              | \$96,622.34     | 1.470%                       | 0.123%                             | \$118.36            |
|  | June      | \$19,324.47              | \$115,946.80    | 1.470%                       | 0.123%                             | \$142.03            |
|  | July      | \$19,324.47              | \$135,271.27    | 1.470%                       | 0.123%                             | \$165.71            |
|  | August    | \$19,324.47              | \$154,595.74    | 1.470%                       | 0.123%                             | \$189.38            |
|  | September | \$19,324.47              | \$173,920.21    | 1.470%                       | 0.123%                             | \$213.05            |
|  | October   | \$19,324.47              | \$193,244.67    | 1.470%                       | 0.123%                             | \$236.72            |
|  | November  | \$19,324.47              | \$212,569.14    | 1.470%                       | 0.123%                             | \$260.40            |
|  | December  | \$19,324.47              | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
| 2012   | January   |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | February  |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | March     |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | April     |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | May       |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | June      |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | July      |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | August    |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | September |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | October   |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | November  |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
|  | December  |                          | \$231,893.61    | 1.470%                       | 0.123%                             | \$284.07            |
| 2013   | January   | (\$19,324.47)            | \$212,569.14    | 1.470%                       | 0.123%                             | \$260.40            |
|  | February  | (\$19,324.47)            | \$193,244.67    | 1.470%                       | 0.123%                             | \$236.72            |
|  | March     | (\$19,324.47)            | \$173,920.21    | 1.470%                       | 0.123%                             | \$213.05            |
|  | April     | (\$19,324.47)            | \$154,595.74    | 1.470%                       | 0.123%                             | \$189.38            |
|  | May       | (\$19,324.47)            | \$135,271.27    | 1.470%                       | 0.123%                             | \$165.71            |
|  | June      | (\$19,324.47)            | \$115,946.80    | 1.470%                       | 0.123%                             | \$142.03            |
|  | July      | (\$19,324.47)            | \$96,622.34     | 1.470%                       | 0.123%                             | \$118.36            |
|  | August    | (\$19,324.47)            | \$77,297.87     | 1.470%                       | 0.123%                             | \$94.69             |
|  | September | (\$19,324.47)            | \$57,973.40     | 1.470%                       | 0.123%                             | \$71.02             |
|  | October   | (\$19,324.47)            | \$38,648.93     | 1.470%                       | 0.123%                             | \$47.34             |
|  | November  | (\$19,324.47)            | \$19,324.47     | 1.470%                       | 0.123%                             | \$23.67             |
|  | December  | (\$19,324.47)            | \$0.00          | 1.470%                       | 0.123%                             | \$0.00              |
| Total  |           |                          |                 |                              |                                    | \$6,817.67          |
| add carrying charges for 2010 lost revenues for 2010 programs not claimed in previous applications |           |                          |                 |                              |                                    | \$171.81            |
| Total carrying charges claimed in 2013 IRM   |           |                          |                 |                              |                                    | <u>\$6,989.48</u>   |

(1) The lost revenue claimed is for revenue lost in 2011. Revenue was assumed to be lost evenly throughout 2011 and subsequently collected (through rate riders) evenly throughout 2013.

(2) The interest rate used is the average of the OEB prescribed interest rates for deferral and variance accounts from Q1 2011 to Q3 2012.



## **Response to VECC Interrogatories**

## **VECC Question # 1**

**Reference:** Manager's Summary, Page 7 LRAM/SSM Recovery Rate Adder

Preamble: Oshawa indicates that for the reasons presented in its 2012 rate application it has included its request to recover LRAM and SSM amounts, as applicable, in this application.

- a) Please include specific reference(s) to the evidence or an agreement/decision in EB-2011-0073 to support the above statement.
- b) Please summarize the reasons presented in Oshawa's 2012 COS rate application for Oshawa to include its LRAM request in this application.
- c) Please confirm the scope of the LRAM recovery approved in Oshawa's 2012 COS rate application.

## **OPUCN Response:**

- a) In Oshawa's 2012 rate application filing dated May 31, 2012 it was noted that "As the 2010 OPA final program results are not yet available, only the 2010 savings from previously confirmed programs have been included", ref EB-2011-0073, Exhibit 8, Page 13 of 35.  
Further, VECC interrogatory # 31 ( b ) regarding Oshawa's 2012 COS rate application asked to "Please indicate when the final results will be available and how this will be dealt with". The response given was "OPA have not confirmed when 2010 will be available. OPUCN will apply for recovery at the next available opportunity".
- b) See above response.
- c) The LRAM recovery approved in Oshawa's 2012 COS rate application covered lost revenue in 2010 arising from various programs initiated between 2006 and 2009.

## **VECC Question # 2**

**Reference:** Manager's Summary, Page 7 LRAM/SSM Recovery Rate Adder

Preamble: Oshawa indicates that this application includes an application for LRAM Recovery Rate Riders to be effective from January 1, 2013 through December 31, 2013 to recover revenue lost in 2010 from programs implemented in 2010 and revenue lost in 2011 from programs implemented up to the end of 2010. VECC notes that the LRAM Calculation Worksheet includes revenue lost in 2010 from programs implemented between 2006 and 2010.

- a) VECC is unclear of the scope of the LRAM claim in this application. Please confirm.
- b) Please provide the program results and evaluation reports that Oshawa has received from the OPA that supports this LRAM request.
- c) Please confirm that the LRAM amounts Oshawa is seeking to recover in this application are new amounts not included in past LRAM claims.
- d) Please summarize all prior LRAM claims.
- e) Please discuss why Oshawa did not retain a 3<sup>rd</sup> party to verify its CDM results.

## **OPUCN Response:**

- a) The LRAM recovery claimed in Oshawa's rate application covers lost revenue in 2011 arising from various programs initiated between 2006 and 2010, and lost revenue in 2010 arising from various programs initiated between 2006 and 2010 that was not claimed in Oshawa's 2012 COS rate application as final program results for 2010 had not been released by the OPA at the time of filing.
- b) See file "2006-2010 Final OPA CDM Results Oshawa PUC Networks Inc" received from the OPA and used for the KWh savings calculations in this claim.
- c) Confirmed. Lost revenue requested in this application is only for 2010 and 2011 lost revenue not previously claimed.
- d) See Oshawa response 5. f) to Board Staff Interrogatories.
- e) Oshawa is claiming LRAM principally for OPA programs and relies on the analyses, evaluations, and assessments performed by the OPA in their process of identifying program initiatives. The non-OPA programs for which LRAM is

being claimed are continuing from 2006 and 2007 and have previously been approved. In Oshawa's opinion the amounts involved do not warrant another third party review.

### VECC Question # 3

**Reference:** Application, Page 8

Preamble: The Table on Page 8 includes 2010 program amounts pertaining to 2010 (not previously claimed) and 2011.

a) Please reproduce the Table to show 2011 separately.

### OPUCN Response:

a) Lost revenue is shown separately below for years 2011 and 2010.

**2011 lost revenue amounts**

| Total Net KWh Saved      | Year (start of program) |           |            |           |           | Grand Total |
|--------------------------|-------------------------|-----------|------------|-----------|-----------|-------------|
|                          | 2006                    | 2007      | 2008       | 2009      | 2010      |             |
| Rate Class               |                         |           |            |           |           |             |
| Residential              | 816,921                 | 2,107,712 | 2,418,521  | 1,219,530 | 1,291,938 | 7,854,621   |
| Commercial               |                         |           | 2,452,430  | 3,369,772 | 1,039,262 | 6,861,464   |
| GS >50KW-200             |                         |           | 3,411,434  | 671,432   | 118,111   | 4,200,977   |
| GS 200KW-1000            |                         |           | 3,561,589  | 211,996   | 107,554   | 3,881,139   |
| Unmetered Scattered Load |                         | 757,957   |            |           |           | 757,957     |
| Grand Total              | 816,921                 | 2,865,669 | 11,843,974 | 5,472,730 | 2,556,865 | 23,556,158  |

| Total LRAM               | Year (start of program) |          |          |          |          | Grand Total |
|--------------------------|-------------------------|----------|----------|----------|----------|-------------|
|                          | 2006                    | 2007     | 2008     | 2009     | 2010     |             |
| Rate Class               |                         |          |          |          |          |             |
| Residential              | \$10,007                | \$25,819 | \$29,627 | \$14,939 | \$15,826 | \$96,218    |
| Commercial               |                         |          | \$43,927 | \$60,358 | \$18,615 | \$122,900   |
| GS >50KW-200             |                         |          | \$2,641  | \$544    | \$129    | \$3,314     |
| GS 200KW-1000            |                         |          | \$2,413  | \$177    | \$114    | \$2,703     |
| Unmetered Scattered Load |                         | \$13,576 |          |          |          | \$13,576    |
| Grand Total              | \$10,007                | \$39,395 | \$78,607 | \$76,017 | \$34,684 | \$238,711   |

**2010 lost revenue amounts**

| Total Net KWh Saved      | Year (start of program) |      |      |      |           | Grand Total |
|--------------------------|-------------------------|------|------|------|-----------|-------------|
|                          | 2006                    | 2007 | 2008 | 2009 | 2010      |             |
| Rate Class               |                         |      |      |      |           |             |
| Residential              |                         |      |      |      | 1,320,389 | 1,320,389   |
| Commercial               |                         |      |      |      | 1,039,262 | 1,039,262   |
| GS >50KW-200             |                         |      |      |      | 674,146   | 674,146     |
| GS 200KW-1000            |                         |      |      |      | 723,900   | 723,900     |
| Unmetered Scattered Load |                         |      |      |      |           | 0           |
| Grand Total              | 0                       | 0    | 0    | 0    | 3,757,698 | 3,757,698   |

| Total LRAM               | Year (start of program) |      |      |      |          | Grand Total |
|--------------------------|-------------------------|------|------|------|----------|-------------|
|                          | 2006                    | 2007 | 2008 | 2009 | 2010     |             |
| Rate Class               |                         |      |      |      |          |             |
| Residential              |                         |      |      |      | \$16,438 | \$16,438    |
| Commercial               |                         |      |      |      | \$17,947 | \$17,947    |
| GS >50KW-200             |                         |      |      |      | \$4,377  | \$4,377     |
| GS 200KW-1000            |                         |      |      |      | \$4,362  | \$4,362     |
| Unmetered Scattered Load |                         |      |      |      |          | \$0         |
| Grand Total              | \$0                     | \$0  | \$0  | \$0  | \$43,125 | \$43,125    |

**VECC Question # 4**

**Reference:** LRAM Calculation Worksheet

- a) Please provide a summary explanation of the Sheets provided in the LRAM excel worksheet filed on July 27, 2012.
- b) Please provide the LRAM amounts for 2011 separately.
- c) List and confirm OPA's input assumptions for Every Kilowatt Counts (EKC) 2006 to 2010 including the measure life, unit kWh savings and free ridership for Compact Fluorescent Lights (CFLs) and Seasonal Light Emitting Diodes (LED). Confirm some of these assumptions were changed in 2007 and again in 2009 and compare the values.
- d) Adjust the LRAM claim as necessary to reflect the measure lives and unit savings for any/all measures that have expired starting in 2010.
- e) Demonstrate that savings for EKC 2006 Mass Market measures 13-15 W Energy Star CFLs & Seasonal LEDs have been removed from the LRAM claim in 2010.
- f) Adjust the LRAM claim as necessary to reflect the measure lives and unit savings for any/all measures that have expired in 2010.

**OPUCN Response:**

- a) The table below shows summary explanation of the Sheets provided in the LRAM excel worksheet filed.

| worksheet   | Explanation  |
|-------------|--|
| Rate Rider  | Calculation of proposed rate rider based on Lost Revenue calculated on LRAM worksheets, and Volume per consumption from 2012 Cost of Service application. Rate Rider calculation is calculated as Lost Revenue / Volume. |
| Mgr Summary | Summary of KWh and Lost Revenues by Rate Class and program year. Table includes data from the "LRAM" and "LRAM prior year" sheets.   |

| worksheet                | Explanation  |
|--------------------------|--|
| LRAM                     | Calculation of lost revenue by program, for the current year claimed (2011). Total Net KWh Saved for OPA programs are per the OPA's "2006-2010 Final OPA CDM Results" report. Other Programs are per Oshawa's internal 3rd Tranche MARR program details. Programs are organized by rate class, and lost revenue is calculated by multiplying the volumes saved by the rate in effect for each rate class. Carrying charges are added for the period of time from when revenues were lost to proposed collection through rate riders. |
| LRAM prior year          | Same calculations as the "LRAM" sheet except calculations are for 2010 lost revenues not previously claimed. Programs listed are 2010 programs only, which were not available on the previous Final OPA CDM Report.  |
| Other Program detail     | Calculations of lost revenue for Oshawa's 3rd Tranche MARR 2006 and 2007 programs. Calculations are based on technology and # of units for each program. Effective useful life and savings per unit are updated for the current year per latest OPA assumption reports.  |
| ERIP assumptions         | Energy Retrofit Incentive Program (ERIP) volume breakdown by customer type per Oshawa program records. Breakdown is used to apply to Final OPA CDM Results report ERIP volume to get volumes by rate class in order to calculate lost revenue.   |
| C&I load assumptions     | Commercial and Industrial billed volume breakdown, used to apply to Final OPA CDM Results report Total High Performance New Construction and Other Customer Based Generation programs to get volumes by rate class in order to calculate lost revenue.   |
| Prescribed Interest Rate | OEB Prescribed Interest rates by quarter for use in carrying charge calculations.  |

- b) Please refer to the first "Lost Revenues and Load by Class and Program Summary" table provided in the application for the 2011 LRAM amount calculations.
- c) OPA's input assumptions for Every Kilowatt Counts (EKC) 2006 to 2010 including the measure life, unit kWh savings and free ridership for Compact Fluorescent Lights (CFLs) and Seasonal Light Emitting Diodes (LED) are shown below. The table below confirms the assumptions have changed. Oshawa notes that the total lost revenue in this application pertaining to these measures for these programs totals \$22,062, which is not significant enough to impact the residential LRAM rate rider in this claim.

**OPA Conservation & Demand Management Programs  
Measure Results at End-User Level**

**For: Oshawa PUC Networks Inc**

| Program Year | Measure Name   | Unit Savings Assumptions          |                                 |   |                             |
|--------------|--|-----------------------------------|---------------------------------|---|-----------------------------|
|              |  | Gross Annual Energy Savings (kWh) | Net Annual Energy Savings (kWh) | Aggregate Net-to-Gross Adjustment (%) *** | Effective Useful Life (EUL) |
| 2006         | Energy Star® Compact Fluorescent Light Bulb - Spring Campaign  | 104.40                            | 93.96                           | 90.00                                     | 4.00                        |
| 2006         | Seasonal Light Emitting Diode Light String - Autumn Campaign   | 30.75                             | 27.68                           | 90.00                                     | 30.00                       |
| 2007         | 15 W CFL   | 43.00                             | 33.54                           | 78.00                                     | 8.00                        |
| 2007         | 20+ W CFL  | 62.10                             | 48.44                           | 78.00                                     | 8.00                        |
| 2008         | Energy Star® Qualified Compact Fluorescent Light Bulbs   | 52.96                             | 27.67                           | 52.26                                     | 8.00                        |
| 2009         | Energy Star Qualified Compact Fluorescent - Spring Campaign - Participant Rebated                                    | 23.17                             | 15.92                           | 68.73                                     | 8.00                        |
| 2009         | Installed CFLs - Spring Campaign - Participant Spillover   | 101.42                            | 13.30                           | 13.11                                     | 8.00                        |
| 2009         | Energy Star Qualified Compact Fluorescent - Spring Campaign - Non-Participant Rebated                                | 22.41                             | 7.79                            | 34.77                                     | 8.00                        |
| 2009         | Energy Star Qualified Compact Fluorescent - Autumn Campaign - Participant Rebated                                    | 25.50                             | 17.69                           | 69.39                                     | 8.00                        |
| 2009         | Energy Star Qualified Compact Fluorescent - Autumn Campaign - Non-Participant Rebated                                | 23.68                             | 3.25                            | 13.71                                     | 8.00                        |
| 2009         | Installed Energy Star® CFL Bulbs - Rewards for Recycling Campaign - Spillover  | 44.57                             | 8.22                            | 18.44                                     | 8.00                        |
| 2010         | Installed compact fluorescents that were not rebated-Spillover Actions - Spring                                      | 0.00                              | 5.75                            | 0.00                                      | 8.00                        |
| 2010         | Installed compact fluorescent lights that were not those rebated by the Power Savings Event-Spillover Actions - Fall | 0.00                              | 7.95                            | 0.00                                      | 8.00                        |

\*\*\* Net after free ridership adjustment

- d) Oshawa has reviewed the data and confirms no adjustment to the LRAM claim is necessary for OPA programs. No savings have been claimed for expired programs beyond the expiry dates.
- e) No 2006 programs have been included in this application for 2010 lost revenue.
- f) Oshawa has reviewed the data and confirms no adjustment to the LRAM claim is necessary for OPA programs. No savings have been claimed for expired programs beyond the expiry dates.



## VECC Question # 5

### Reference: LRAM Calculation Worksheet

- a) Identify all Mass Market measures (CFLs etc) installed in 2006 with measure lives of 4 years or less for which savings have been claimed in a prior LRAM claim.
- b) Please provide the input assumptions for the Third Tranche CDM Programs included in prior LRAM claims.
- c) Adjust the current Third Tranche LRAM claim as necessary to reflect the measure lives (and unit savings) for any/all measures that have expired in 2010.

### **OPUCN Response:**

- a) Mass Market measures installed in 2006 with measure lives of 4 years or less claimed in prior LRAM claims is shown below.

| Source           | Initiative Name             | Program Year | Measure Name  | Effective Useful Life (EUL) | LRAM claims                                      |
|------------------|-----------------------------|--------------|---|-----------------------------|--|
| 3rd Tranche MARR | Retrofit Non-Profit Housing | 2006         | 15 W CFL Socket Replace                                       | 3                           | 2006-2008 revenue (2009 IRM, 2010 IRM)           |
| OPA              | Every Kilowatt Counts       | 2006         | Energy Star® Compact Fluorescent Light Bulb - Spring Campaign | 4                           | 2006-2009 revenue (2009 IRM, 2010 IRM, 2011 IRM) |
| OPA              | Every Kilowatt Counts       | 2006         | Energy Star® Compact Fluorescent Light Bulb - Autumn Campaign | 4                           | 2006-2009 revenue (2009 IRM, 2010 IRM, 2011 IRM) |

- b) See file "LRAM\_VECC Interrogatories 5b detail.xls" for Third Tranche CDM Program calculations as included in prior LRAM claims.
- c) See file "LRAM\_VECC Interrogatories 5c detail.xls" for a revised lost revenue calculation that removes the Christmas Light Retrofit 2006 program which has a 5 year useful life. Lost revenue impact for this program is \$146.11, which reduces the total lost revenue from \$281,835.83 to \$281,689.72. This change does not impact the rate rider, therefore Oshawa proposes to not make an adjustment to its claim.

**LRAM VECC Interrogatories 5b detail.xlsx**

# VECC Information Requests

## #5 b) Input assumptions for Third Tranche CDM programs

### 2012 Cost of Service Application

| Rate Class  | Program   | Technology               | Year (start of program) | # of Units | Effective Useful Life | Energy Savings per unit (kWh) before FR | Total Energy Savings (kWh) before FR with # Units | Free Ridership | Net kWh Saved (After FR) | Rate/ kWh | Lost Revenue |
|---|---|--------------------------|-------------------------|------------|-----------------------|---|---|----------------|--------------------------|-----------|--------------|
| Residential   | Library Watt- Reader Program                    | CFL 15 w Screw in        | 2006                    | 140        | 8                     | 44.4                                    | 6,209   | 10%            | 5,588                    | \$ 0.0124 | \$ 69.29     |
|   |   |                          |                         |            |                       |   | 6,209   |                | 5,588                    |           | \$ 69.29     |
| Residential   | Residential Replace Bulk with Individual Meters | Individual Meters        | 2006                    | 8          | 20                    | 600.0                                   | 4,800 (1)   | 0%             | 4,800                    | \$ 0.0124 | \$ 59.52     |
|   |   |                          |                         |            |                       |   | 4,800   |                | 4,800                    |           | \$ 59.52     |
| Residential   | Retrofit Non-Profit Housing                     | T8s                      | 2006                    | 143        | 18                    | 32.9                                    | 4,698   | 0%             | 4,698                    | \$ 0.0124 | \$ 58.25     |
| Residential   | Retrofit Non-Profit Housing                     | CFLs                     | 2006                    | 610        | 8                     | 44.4                                    | 27,054  | 10%            | 24,348                   | \$ 0.0124 | \$ 301.92    |
| Residential   | Retrofit Non-Profit Housing                     | Exit Lights              | 2006                    | 60         | 10                    | 148.9                                   | 8,935   | 10%            | 8,042                    | \$ 0.0124 | \$ 99.72     |
| Residential   | Retrofit Non-Profit Housing                     | Christmas Light Retrofit | 2006                    | 900        | 5                     | 13.5                                    | 12,150  | 5%             | 11,543                   | \$ 0.0124 | \$ 143.13    |
|   |   |                          |                         |            |                       |   | 52,836  |                | 48,630                   |           | \$ 603.01    |
| <b>Total Residential</b>  |   |                          |                         |            |                       |   | 63,845  |                | 59,018                   |           | \$ 731.82    |
|   |   |                          |                         |            |                       |   |   |                |                          |           |              |
| Unmetered Scattered Retro Fit Traffic Signal Lights with LED Fixtures |   |                          |                         |            |                       |   | LED Fixtures (Note 1)                             | 2007           | 156                      | 10        | 6,941.0 (1)  |
|   |   |                          |                         |            |                       |   |   |                | 1,082,796                | 30% (2)   | 757,957      |
| <b>Total Unmetered Scattered Load</b>                                 |   |                          |                         |            |                       |   |   |                | 1,082,796                |           | \$ 13,340.05 |
|   |   |                          |                         |            |                       |   |   |                | 757,957                  |           | \$ 13,340.05 |
| <b>Total Other Programs</b>   |   |                          |                         |            |                       |   | 1,146,641   |                | 816,975                  |           | \$ 14,071.87 |

(1) no OPA inputs found, previous inputs used.

(2) Freerider rate of 30% was based on Toronto Hydro decision.

VECC Information Requests

#5 b) Input assumptions for Third Tranche CDM programs

2011 IRM

| Rate Class  | Program   | Technology               | Funding Mechanism | Year (start of program) | # of Units | Effective Useful Life | Energy Savings per unit (kWh) before FR | Total Energy Savings (kWh) before FR with # Units | Free Riders hip | Net kWh Saved (After FR) | Rate/ kWh or KW 2009 | Lost Revenue 2009   |
|---|---|--------------------------|-------------------|-------------------------|------------|-----------------------|---|---|-----------------|--------------------------|----------------------|---------------------|
| Residential   | Library Watt- Reader Program                    | CFL 15 w Screw in        | 3rd Tranche MA    | 2006                    | 140        | 8                     | 44.4                                    | 6,209   | 10%             | 5,588                    | \$ 0.0127            | \$ 70.97            |
| Residential   | Residential Replace Bulk with Individual Meters | Individual Meters        | 3th Tranche MAI   | 2006                    | 8          | 20                    | 600.0                                   | 4,800   | 0%              | 4,800                    | \$ 0.0127            | \$ 60.96            |
| Residential   | Retrofit Non-Profit Housing                     | T8s                      | 3rd Tranche MA    | 2006                    | 143        | 18                    | 32.9                                    | 4,698   | 0%              | 4,698                    | \$ 0.0127            | \$ 59.66            |
| Residential   | Retrofit Non-Profit Housing                     | CFLs                     | 3rd Tranche MA    | 2006                    | 610        | 8                     | 44.4                                    | 27,054  | 10%             | 24,348                   | \$ 0.0127            | \$ 309.22           |
| Residential   | Retrofit Non-Profit Housing                     | Exit Lights              | 3rd Tranche MA    | 2006                    | 60         | 10                    | 148.9                                   | 8,935   | 10%             | 8,042                    | \$ 0.0127            | \$ 102.13           |
| Residential   | Retrofit Non-Profit Housing                     | Christmas Light Retrofit | 3rd Tranche MA    | 2006                    | 900        | 5                     | 13.5                                    | 12,150  | 5%              | 11,543                   | \$ 0.0127            | \$ 146.59           |
| <b>Residential Total</b>  |   |                          |                   |                         |            |                       |   | <b>63,845</b>                                     |                 | <b>59,018</b>            |                      | <b>\$ 749.53</b>    |
| Unmetered Scatter Retro Fit Traffic Signal Lights with LED Fixtures |   |                          | 3rd Tranche MA    | 2007                    | 156        | 10                    | 6,941.0                                 | 1,082,796   | 30%             | 757,957                  | \$ 0.0226            | \$ 17,129.83        |
| <b>Unmetered Scattered Load Total</b>                               |   |                          |                   |                         |            |                       |   | <b>1,082,796</b>                                  |                 | <b>757,957</b>           |                      | <b>\$ 17,129.83</b> |
| <b>Grand Total</b>  |   |                          |                   |                         |            |                       |   | <b>1,146,641</b>                                  |                 | <b>816,975</b>           |                      | <b>\$ 17,879.36</b> |

Note 1: Freerider rate of 30% used in SSM and LRAM was based on Toronto Hydro decision. No OPA inputs found, previous inputs used.

VECC Information Requests

#5 b) Input assumptions for Third Tranche CDM programs

2010 IRM

| Rate Class                            | Program   | Technology               | Funding Mechanism | Year (start of program) | # of Units | Effective Useful Life | Total Energy Savings (kWh) before FR | Total Energy Savings (kWh) before FR with # Units | Free Riders | Net kWh or kW Saved (After FR) | Rate/ kWh or KW 2008 | Lost Revenue 2008   | Total Lost Revenue |
|---------------------------------------|---|--------------------------|-------------------|-------------------------|------------|-----------------------|--------------------------------------|---|-------------|--------------------------------|----------------------|---------------------|--------------------|
| Residential                           | Library Watt- Reader Program                        | CFL 15 w Screw in        | 3rd Tranche MARR  | 2006                    | 140        | 8                     | 43.0                                 | 6,020   | 10%         | 5,418                          | \$ 0.0119            | \$ 64.47            | \$ 64.47           |
| Residential                           | Residential Replace Bulk with Individual Meters     | Individual Meters        | 3th Tranche MARR  | 2006                    | 8          | 20                    | 600.0                                | 4,800   | 0%          | 4,800                          | \$ 0.0119            | \$ 57.12            | \$ 57.12           |
| Residential                           | Retrofit Non-Profit Housing                         | T8s                      | 3rd Tranche MARR  | 2006                    | 143        | 16                    | 37.2                                 | 5,320   | 0%          | 5,320                          | \$ 0.0119            | \$ 63.30            | \$ 63.30           |
| Residential                           | Retrofit Non-Profit Housing                         | CFLs                     | 3rd Tranche MARR  | 2006                    | 610        | 8                     | 43.0                                 | 26,230  | 10%         | 23,607                         | \$ 0.0119            | \$ 280.92           | \$ 280.92          |
| Residential                           | Retrofit Non-Profit Housing                         | 15 W CFL Socket Replace  | 3rd Tranche MARR  | 2006                    | 56         | 3                     | 174.0                                | 9,744   | 10%         | 8,770                          | \$ 0.0119            | \$ 104.36           | \$ 104.36          |
| Residential                           | Retrofit Non-Profit Housing                         | Exit Lights              | 3rd Tranche MARR  | 2006                    | 60         | 10                    | 149.0                                | 8,940   | 10%         | 8,046                          | \$ 0.0119            | \$ 95.75            | \$ 95.75           |
| Residential                           | Retrofit Non-Profit Housing                         | Christmas Light Retrofit | 3rd Tranche MARR  | 2006                    | 900        | 5                     | 13.7                                 | 12,330  | 5%          | 11,714                         | \$ 0.0119            | \$ 139.39           | \$ 139.39          |
| <b>Residential Total</b>              |   |                          |                   |                         |            |                       |                                      | <b>73,384</b>                                     |             | <b>67,674</b>                  |                      | <b>\$ 805.32</b>    |                    |
| Unmetered Scattered Load              | L Retro Fit Traffic Signal Lights with LED Fixtures | LED Fixtures (Note 1)    | 3rd Tranche MARR  | 2007                    | 156        | 10                    | 6,941.0                              | 1,082,796   | 30%         | 757,957                        | \$ 0.0195            | \$ 14,780.17        | \$ 14,780.17       |
| <b>Unmetered Scattered Load Total</b> |   |                          |                   |                         |            |                       |                                      | <b>1,082,796</b>                                  |             | <b>757,957</b>                 |                      | <b>\$ 14,780.17</b> |                    |
| <b>Grand Total</b>                    |   |                          |                   |                         |            |                       |                                      | <b>1,156,180</b>                                  |             | <b>825,631</b>                 |                      | <b>\$ 15,585.48</b> |                    |

Note 1: Freerider rate of 30% used in SSM and LRAM was based on Toronto Hydro decision.

#5 b) Input assumptions for Third Tranche CDM programs

2009 IRM

|                   |   |   |                          |                   |                  |            |                     |              |                                      |                                     |   |                |                                | LRAM           |                   |                |                   |                    |
|-------------------|---|---|--------------------------|-------------------|------------------|------------|---------------------|--------------|--------------------------------------|-------------------------------------|---|----------------|--------------------------------|----------------|-------------------|----------------|-------------------|--------------------|
| Rate Class        | Source (including Life/ Energy Savings) | Program   | Technology               | Funding Mechanism | Year Implemented | # of Units | Duration of Program | Measure Life | Total Energy Savings (kWh) before FR | Total Energy Savings (kW) before FR | Total Energy Savings (kWh) before FR with # Units | Free Ridership | Net kWh or kW Saved (After FR) | Rate/ kWh 2006 | Lost Revenue 2006 | Rate/ kWh 2007 | Lost Revenue 2007 | Total Lost Revenue |
| Residential       | OEB Web Site                            | Library Watt- Reader Program                      | CFL 15 w Screw in        | 3rd Tranche MARR  | 2006             | 140        | 6 Month             | 4            | 104                                  | 3                                   | 14,560  | 10%            | 13,104                         | \$ 0.0107      | \$ 140.21         | 0.0108         | \$ 141.52         | \$ 281.74          |
| Residential       | OEB Web Site                            | Retrofit Non-Profit Housing                       | T8s                      | 3rd Tranche MARR  | 2006             | 143        | 1 Month             | 5            | 288                                  | 11                                  | 41,184  | 0%             | 41,184                         | \$ 0.0107      | \$ 440.67         | 0.0108         | \$ 444.79         | \$ 885.46          |
| Residential       | OEB Web Site                            | Retrofit Non-Profit Housing                       | CFLs                     | 3rd Tranche MARR  | 2006             | 610        | 1 Month             | 4            | 104                                  | 21                                  | 63,440  | 10%            | 57,096                         | \$ 0.0107      | \$ 610.93         | 0.0108         | \$ 616.64         | \$ 1,227.56        |
| Residential       | EnerSpectrum Group Report               | Retrofit Non-Profit Housing                       | 15 W CFL Socket Replace  | 3rd Tranche MARR  | 2006             | 56         | 1 Month             | 2.5          | 174                                  | 2                                   | 9,744   | 10%            | 8,770                          | \$ 0.0107      | \$ 93.83          | 0.0108         | \$ 94.71          | \$ 188.55          |
| Residential       | OEB Web Site                            | Retrofit Non-Profit Housing                       | Exit Lights              | 3rd Tranche MARR  | 2006             | 60         | 1 Month             | 25           | 237                                  | 1                                   | 14,220  | 10%            | 12,798                         | \$ 0.0107      | \$ 136.94         | 0.0108         | \$ 138.22         | \$ 275.16          |
| Residential       | OEB Web Site                            | Retrofit Non-Profit Housing                       | Christmas Light Retrofit | 3rd Tranche MARR  | 2006             | 900        | 1 Month             | 30           | 19                                   | 2                                   | 17,100  | 5%             | 16,245                         | \$ 0.0107      | \$ 173.82         | 0.0108         | \$ 175.45         | \$ 349.27          |
| Residential       | EnerSpectrum Group Report               | Residential Replace Bulk with Individual Meters   | Individual Meters        | 3th Tranche MARR  | 2006             | 8          | 1 Month             | 20           | 240                                  | 2                                   | 4,800   | 0%             | 4,800                          | \$ 0.0107      | \$ 51.36          | 0.0108         | \$ 51.84          | \$ 103.20          |
| Unmetered Scatter | EnerSpectrum Group Report               | Retro Fit Traffic Signal Lights with LED Fixtures | LED Fixtures (Note 1)    | 3rd Tranche MARR  | 2007             | 156        | 4 Months (Estimate) | 10           | 6941                                 | 87                                  | 1,082,796   | 30%            | 757,957                        | \$ -           | \$ -              | 0.0108         | \$ 8,185.94       | \$ 8,185.94        |
| Totals            |   |   |                          |                   |                  |            |                     |              |                                      |                                     | 1,247,844   |                | 911,954                        |                | \$ 1,647.76       |                | \$ 9,849.10       | \$ 11,496.86       |

Note 1: Freerider rate of 30% used in SSM and LRAM was based on Toronto Hydro decision.

**LRAM VECC Interrogatories 5c detail.xlsx**

**LRAM Total Amounts and Rate Rider by Class**

| <b>Customer Class</b>     | <b>Lost Revenue<br/>including Carrying<br/>Charges</b> | <b>Volume</b> | <b>Metric</b> | <b>Proposed Rate<br/>Rider</b> |
|---------------------------|--|---------------|---------------|--------------------------------|
| Residential               | \$ 112,510.21  | 496,447,375   | kWh           | \$0.0002                       |
| GS < 50 kW                | \$ 140,846.34  | 132,319,612   | kWh           | \$0.0011                       |
| GS 50 to 999 kW (I1 & I4) | \$ 14,756.98   | 917,360       | kW            | \$0.0161                       |
| Unmetered Scattered Load  | \$ 13,576.20   | 3,208,502     | kWh           | \$0.0042                       |
| <b>TOTALS</b>             | \$ 281,689.72  |               |               |                                |



| <b>Total Net KWh Saved</b> | <b>Year (start of program)</b> |           |            |           |                     |             |
|----------------------------|--------------------------------|-----------|------------|-----------|---------------------|-------------|
| Rate Class                 | 2006                           | 2007      | 2008       | 2009      | 2010 <sup>(1)</sup> | Grand Total |
| Residential                | 804,993                        | 2,107,712 | 2,418,521  | 1,219,530 | 2,612,326           | 9,163,082   |
| Commercial                 |                                |           | 2,452,430  | 3,369,772 | 2,078,525           | 7,900,726   |
| GS >50KW-200               |                                |           | 3,411,434  | 671,432   | 792,257             | 4,875,124   |
| GS 200KW-1000              |                                |           | 3,561,589  | 211,996   | 831,454             | 4,605,040   |
| Unmetered Scattered Load   |                                | 757,957   |            |           |                     | 757,957     |
| Grand Total                | 804,993                        | 2,865,669 | 11,843,974 | 5,472,730 | 6,314,563           | 27,301,929  |

| <b>Total LRAM</b>        | <b>Year (start of program)</b> |          |          |          |                     |             |
|--------------------------|--------------------------------|----------|----------|----------|---------------------|-------------|
| Rate Class               | 2006                           | 2007     | 2008     | 2009     | 2010 <sup>(1)</sup> | Grand Total |
| Residential              | \$9,861                        | \$25,819 | \$29,627 | \$14,939 | \$32,264            | \$112,510   |
| Commercial               |                                |          | \$43,927 | \$60,358 | \$36,562            | \$140,846   |
| GS >50KW-200             |                                |          | \$2,641  | \$544    | \$4,507             | \$7,691     |
| GS 200KW-1000            |                                |          | \$2,413  | \$177    | \$4,476             | \$7,066     |
| Unmetered Scattered Load |                                | \$13,576 |          |          |                     | \$13,576    |
| Grand Total              | \$9,861                        | \$39,395 | \$78,607 | \$76,017 | \$77,809            | \$281,690   |

<sup>(1)</sup> Includes 2010 program amounts pertaining to 2010 (not previously claimed) and 2011

Lost Revenues and Load by Class and Program Summary

| Rate Class                                   |                   |                         | LRAM           |                     |                    |           |                      | Carrying Charges (6) | Total LRAM including Carrying Charges |
|--|-------------------|-------------------------|----------------|---------------------|--------------------|-----------|----------------------|----------------------|---------------------------------------|
| Program                                      | Funding Mechanism | Year (start of program) | Results Status | Total Net KWh Saved | Total Net KW Saved | Rate      | Lost Revenue         |                      |                                       |
| <b>OPA PROGRAMS:</b>                         |                   |                         |                |                     |                    |           |                      |                      |                                       |
| Every Kilowatt Counts                        | OPA 2006          | 2006                    | Final          | 533,464             |                    | \$ 0.0119 | \$ 6,348.22          | \$ 186.64            | \$ 6,534.86                           |
| Secondary Refrigerator Retirement Pilot      | OPA 2006          | 2006                    | Final          | 64,595              |                    | \$ 0.0119 | \$ 768.68            | \$ 22.60             | \$ 791.28                             |
| Cool & Hot Savings Rebate                    | OPA 2006          | 2006                    | Final          | 159,459             |                    | \$ 0.0119 | \$ 1,897.56          | \$ 55.79             | \$ 1,953.34                           |
| Great Refrigerator Roundup                   | OPA 2007          | 2007                    | Final          | 144,654             |                    | \$ 0.0119 | \$ 1,721.38          | \$ 50.61             | \$ 1,771.99                           |
| Cool & Hot Savings Rebate                    | OPA 2007          | 2007                    | Final          | 262,935             |                    | \$ 0.0119 | \$ 3,128.93          | \$ 91.99             | \$ 3,220.92                           |
| Every Kilowatt Counts                        | OPA 2007          | 2007                    | Final          | 1,556,871           |                    | \$ 0.0119 | \$ 18,526.76         | \$ 544.69            | \$ 19,071.45                          |
| Social Housing Pilot                         | OPA 2007          | 2007                    | Final          | 143,252             |                    | \$ 0.0119 | \$ 1,704.70          | \$ 50.12             | \$ 1,754.81                           |
| OPA Peaksaver Total                          | OPA2008           | 2008                    | Final          | 2,476 (1)           |                    | \$ 0.0119 | \$ 29.46             | \$ 0.87              | \$ 30.33                              |
| OPA Refrigerator Roundup Total               | OPA2008           | 2008                    | Final          | 320,170             |                    | \$ 0.0119 | \$ 3,810.02          | \$ 112.01            | \$ 3,922.03                           |
| Cool Savings Rebate                          | OPA2008           | 2008                    | Final          | 283,867             |                    | \$ 0.0119 | \$ 3,378.02          | \$ 99.31             | \$ 3,477.33                           |
| Every Kilowatt Counts Power Savings Event    | OPA2008           | 2008                    | Final          | 1,434,711           |                    | \$ 0.0119 | \$ 17,073.06         | \$ 501.95            | \$ 17,575.01                          |
| Summer Sweepstakes                           | OPA2008           | 2008                    | Final          | 377,298             |                    | \$ 0.0119 | \$ 4,489.84          | \$ 132.00            | \$ 4,621.85                           |
| OPA Peaksaver Total                          | OPA 2009          | 2009                    | Final          | 130 (1)             |                    | \$ 0.0119 | \$ 1.55              | \$ 0.05              | \$ 1.59                               |
| OPA Refrigerator Roundup Total               | OPA 2009          | 2009                    | Final          | 266,038             |                    | \$ 0.0119 | \$ 3,165.85          | \$ 93.08             | \$ 3,258.93                           |
| Cool Savings Rebate                          | OPA 2009          | 2009                    | Final          | 357,507             |                    | \$ 0.0119 | \$ 4,254.33          | \$ 125.08            | \$ 4,379.41                           |
| Every Kilowatt Counts Power Savings Event    | OPA 2009          | 2009                    | Final          | 595,854             |                    | \$ 0.0119 | \$ 7,090.67          | \$ 208.47            | \$ 7,299.13                           |
| OPA Peaksaver Total                          | OPA2010           | 2010                    | Final          | 1,019 (1)           |                    | \$ 0.0119 | \$ 12.13             | \$ 0.36              | \$ 12.48                              |
| OPA Refrigerator Roundup Total               | OPA2010           | 2010                    | Final          | 288,399             |                    | \$ 0.0119 | \$ 3,431.95          | \$ 100.90            | \$ 3,532.85                           |
| Cool Savings Rebate                          | OPA2010           | 2010                    | Final          | 423,668             |                    | \$ 0.0119 | \$ 5,041.65          | \$ 148.22            | \$ 5,189.87                           |
| Every Kilowatt Counts Power Savings Event    | OPA2010           | 2010                    | Final          | 206,540             |                    | \$ 0.0119 | \$ 2,457.82          | \$ 72.26             | \$ 2,530.08                           |
| Multi-Family Energy Efficiency Rebates       | OPA2010           | 2010                    | Final          | 372,312             |                    | \$ 0.0119 | \$ 4,430.51          | \$ 130.26            | \$ 4,560.77                           |
| <b>Residential Total</b>                     |                   |                         |                | <b>7,795,218</b>    |                    |           | <b>\$ 92,763.09</b>  | <b>\$ 2,727.23</b>   | <b>\$ 95,490.33</b>                   |
| OPA Direct Install/Power Savings Blitz Total | OPA2008           | 2008                    | Final          | 22,768              |                    | \$ 0.0174 | \$ 396.16            | \$ 11.65             | \$ 407.81                             |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA2008           | 2008                    | Final          | 70,589              |                    | \$ 0.0174 | \$ 1,228.25          | \$ 36.11             | \$ 1,264.36                           |
| High Performance New Construction            | OPA2008           | 2008                    | Final          | 639 (3)             |                    | \$ 0.0174 | \$ 11.12             | \$ 0.33              | \$ 11.45                              |
| Other Customer Based Generation              | OPA2008           | 2008                    | Final          | 2,358,434 (3)       |                    | \$ 0.0174 | \$ 41,036.75         | \$ 1,206.48          | \$ 42,243.23                          |
| OPA Direct Install/Power Savings Blitz Total | OPA 2009          | 2009                    | Final          | 2,825,559           |                    | \$ 0.0174 | \$ 49,164.73         | \$ 1,445.44          | \$ 50,610.17                          |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2009          | 2009                    | Final          | 524,624 (2)         |                    | \$ 0.0174 | \$ 9,128.46          | \$ 268.38            | \$ 9,396.83                           |
| High Performance New Construction            | OPA 2009          | 2009                    | Final          | 19,589 (3)          |                    | \$ 0.0174 | \$ 340.85            | \$ 10.02             | \$ 350.87                             |
| OPA Direct Install/Power Savings Blitz Total | OPA 2010          | 2010                    | Final          | 957,718             |                    | \$ 0.0174 | \$ 16,664.29         | \$ 489.93            | \$ 17,154.22                          |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2010          | 2010                    | Final          | 16,325 (2)          |                    | \$ 0.0174 | \$ 284.06            | \$ 8.35              | \$ 292.41                             |
| High Performance New Construction            | OPA 2010          | 2010                    | Final          | 65,220 (3)          |                    | \$ 0.0174 | \$ 1,134.82          | \$ 33.36             | \$ 1,168.19                           |
| <b>Commercial Total</b>                      |                   |                         |                | <b>6,861,464</b>    |                    |           | <b>\$ 119,389.47</b> | <b>\$ 3,510.05</b>   | <b>\$ 122,899.52</b>                  |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA2008           | 2008                    | Final          | 420,199 (2)         | 115 (4)            | \$ 3.5657 | \$ 411.62            | \$ 12.10             | \$ 423.72                             |
| High Performance New Construction            | OPA2008           | 2008                    | Final          | 810 (3)             | 1 (5)              | \$ 3.5657 | \$ 2.60              | \$ 0.08              | \$ 2.68                               |
| Other Customer Based Generation              | OPA2008           | 2008                    | Final          | 2,990,425 (3)       | 767 (5)            | \$ 3.5657 | \$ 2,151.65          | \$ 63.26             | \$ 2,214.91                           |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2009          | 2009                    | Final          | 646,594 (2)         | 178 (4)            | \$ 3.5657 | \$ 498.53            | \$ 14.66             | \$ 513.19                             |
| High Performance New Construction            | OPA 2009          | 2009                    | Final          | 24,838 (3)          | 11 (5)             | \$ 3.5657 | \$ 29.53             | \$ 0.87              | \$ 30.39                              |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2010          | 2010                    | Final          | 35,414 (2)          | 10 (4)             | \$ 3.5657 | \$ 27.30             | \$ 0.80              | \$ 28.11                              |
| High Performance New Construction            | OPA 2010          | 2010                    | Final          | 82,697 (3)          | 35 (5)             | \$ 3.5657 | \$ 98.30             | \$ 2.89              | \$ 101.19                             |
| <b>GS &gt;50KW-200 Total</b>                 |                   |                         |                | <b>4,200,977</b>    |                    |           | <b>\$ 3,219.54</b>   | <b>\$ 94.65</b>      | <b>\$ 3,314.20</b>                    |

# **Lost Revenues and Load by Class and Program Summary**

| Rate Class  |                   |                         | LRAM           |                     |                    |           |                      | Carrying Charges (6) | Total LRAM including Carrying Charges |
|---|-------------------|-------------------------|----------------|---------------------|--------------------|-----------|----------------------|----------------------|---------------------------------------|
| Program   | Funding Mechanism | Year (start of program) | Results Status | Total Net KWh Saved | Total Net KW Saved | Rate      | Lost Revenue         |                      |                                       |
| OPA Energy Retrofit Incentive Program (ERIP)      | OPA2008           | 2008                    | Final          | 245,910 (2)         | 68 (4)             | \$ 3.5657 | \$ 189.60            | \$ 5.57              | \$ 195.17                             |
| High Performance New Construction                 | OPA2008           | 2008                    | Final          | 898 (3)             | 1 (5)              | \$ 3.5657 | \$ 2.60              | \$ 0.08              | \$ 2.68                               |
| Other Customer Based Generation                   | OPA2008           | 2008                    | Final          | 3,314,781 (3)       | 767 (5)            | \$ 3.5657 | \$ 2,151.65          | \$ 63.26             | \$ 2,214.91                           |
| OPA Energy Retrofit Incentive Program (ERIP)      | OPA 2009          | 2009                    | Final          | 184,464 (2)         | 51 (4)             | \$ 3.5657 | \$ 142.22            | \$ 4.18              | \$ 146.41                             |
| High Performance New Construction                 | OPA 2009          | 2009                    | Final          | 27,532 (3)          | 11 (5)             | \$ 3.5657 | \$ 29.53             | \$ 0.87              | \$ 30.39                              |
| OPA Energy Retrofit Incentive Program (ERIP)      | OPA 2010          | 2010                    | Final          | 15,888 (2)          | 4 (4)              | \$ 3.5657 | \$ 12.25             | \$ 0.36              | \$ 12.61                              |
| High Performance New Construction                 | OPA 2010          | 2010                    | Final          | 91,666 (3)          | 35 (5)             | \$ 3.5657 | \$ 98.30             | \$ 2.89              | \$ 101.19                             |
| <b>GS 200KW-1000 Total</b>                        |                   |                         |                | <b>3,881,139</b>    |                    |           | <b>\$ 2,626.16</b>   | <b>\$ 77.21</b>      | <b>\$ 2,703.36</b>                    |
| <b>Subtotal OPA programs</b>                      |                   |                         |                | <b>22,738,798</b>   |                    |           | <b>\$ 217,998.26</b> | <b>\$ 6,409.15</b>   | <b>\$ 224,407.41</b>                  |
| <b>OTHER PROGRAMS</b>                             |                   |                         |                |                     |                    |           |                      |                      |                                       |
| Library Watt- Reader Program Total                | 3rd Tranche MARR  | 2006                    |                | 5,588               |                    | \$ 0.0119 | \$ 66.50             | \$ 1.96              | \$ 68.45                              |
| Residential Replace Bulk with Individual Meters   | 3rd Tranche MARR  | 2006                    |                | 4,800               |                    | \$ 0.0119 | \$ 57.12             | \$ 1.68              | \$ 58.80                              |
| Retrofit Non-Profit Housing                       | 3rd Tranche MARR  | 2006                    |                | 37,087              |                    | \$ 0.0119 | \$ 441.34            | \$ 12.98             | \$ 454.32                             |
| <b>Residential Total</b>                          |                   |                         |                | <b>47,475</b>       |                    |           | <b>\$ 564.96</b>     | <b>\$ 16.61</b>      | <b>\$ 581.57</b>                      |
| Retro Fit Traffic Signal Lights with LED Fixtures | 3rd Tranche MARR  | 2007                    |                | 757,957             |                    | \$ 0.0174 | \$ 13,188.46         | \$ 387.74            | \$ 13,576.20                          |
| <b>Unmetered Scattered Load Total</b>             |                   |                         |                | <b>757,957</b>      |                    |           | <b>\$ 13,188.46</b>  | <b>\$ 387.74</b>     | <b>\$ 13,576.20</b>                   |
| <b>Subtotal other programs</b>                    |                   |                         |                | <b>805,433</b>      |                    |           | <b>\$ 13,753.41</b>  | <b>\$ 404.35</b>     | <b>\$ 14,157.76</b>                   |
| <b>Grand Total</b>                                |                   |                         |                | <b>23,544,231</b>   |                    |           | <b>\$ 231,751.67</b> | <b>\$ 6,813.50</b>   | <b>\$ 238,565.17</b>                  |

(1) Assumed all Peaksaver KWh's per OPA to be for the Residential Rate Class.

(2) Total ERIP KWh's per the OPA were allocated to the Commercial, GS >50-200KW, and GS 200-1000KW Rate Classes based on the KWh savings by customer per OPUC ERIP project breakdown.

(3) Total High Performance New Construction and Other Customer Based Generation KWh's per the OPA were allocated to the Commercial, GS >50-200KW, and GS 200-1000KW Rate Classes according to 2008 billed load, consistent with OPA allocation methodology to LDC's.

(4) ERIP KW calculated based on KWh divided by 3640 hours assumed for industrial measures based on 14 hrs per day, M-F.

(5) High Performance New Construction and Other Customer Based Generation KW calculated based on net summer peak KW savings per OPA final report.

(6) Carrying charges are calculated for two years, representing revenue lost throughout 2011 to be recovered throughout 2013. The interest rate used is the average of the OEB prescribed interest rates for deferral and variance accounts from Q1 2011 to Q3 2012 (1.47%). Interest is not compounded.

# **Lost Revenues and Load by Class and Program Summary**

| Rate Class                                   |                   |                         | LRAM           |                     |                    |           |                     | Carrying Charges (6) | Total LRAM including Carrying Charges |
|--|-------------------|-------------------------|----------------|---------------------|--------------------|-----------|---------------------|----------------------|---------------------------------------|
| Program                                      | Funding Mechanism | Year (start of program) | Results Status | Total Net KWh Saved | Total Net KW Saved | Rate      | Lost Revenue        |                      |                                       |
| <b>OPA PROGRAMS:</b>                         |                   |                         |                |                     |                    |           |                     |                      |                                       |
| OPA Peaksaver Total                          | OPA2010           | 2010                    | Final          | 1,019 (1)           |                    | \$ 0.0124 | \$ 12.64            | \$ 0.05              | \$ 12.69                              |
| OPA Refrigerator Roundup Total               | OPA2010           | 2010                    | Final          | 288,399             |                    | \$ 0.0124 | \$ 3,576.15         | \$ 14.30             | \$ 3,590.45                           |
| Cool Savings Rebate                          | OPA2010           | 2010                    | Final          | 423,668             |                    | \$ 0.0124 | \$ 5,253.48         | \$ 21.01             | \$ 5,274.50                           |
| Every Kilowatt Counts Power Savings Event    | OPA2010           | 2010                    | Final          | 234,991             |                    | \$ 0.0124 | \$ 2,913.89         | \$ 11.66             | \$ 2,925.55                           |
| Multi-Family Energy Efficiency Rebates       | OPA2010           | 2010                    | Final          | 372,312             |                    | \$ 0.0124 | \$ 4,616.67         | \$ 18.47             | \$ 4,635.13                           |
| <b>Residential Total</b>                     |                   |                         |                | <b>1,320,389</b>    |                    |           | <b>\$ 16,372.82</b> | <b>\$ 65.49</b>      | <b>\$ 16,438.31</b>                   |
| OPA Direct Install/Power Savings Blitz Total | OPA 2010          | 2010                    | Final          | 957,718             |                    | \$ 0.0172 | \$ 16,472.74        | \$ 65.89             | \$ 16,538.63                          |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2010          | 2010                    | Final          | 16,325 (2)          |                    | \$ 0.0172 | \$ 280.79           | \$ 1.12              | \$ 281.92                             |
| High Performance New Construction            | OPA 2010          | 2010                    | Final          | 65,220 (3)          |                    | \$ 0.0172 | \$ 1,121.78         | \$ 4.49              | \$ 1,126.27                           |
| <b>Commercial Total</b>                      |                   |                         |                | <b>1,039,262</b>    |                    |           | <b>\$ 17,875.31</b> | <b>\$ 71.50</b>      | <b>\$ 17,946.82</b>                   |
| Demand Response 2                            | OPA 2010          | 2010                    | Final          | 537,003 (3)         | 484 (5)            | \$ 3.7467 | \$ 1,359.25         | \$ 5.44              | \$ 1,364.68                           |
| Demand Response 3                            | OPA 2010          | 2010                    | Final          | 19,033 (3)          | 1,024 (5)          | \$ 3.7467 | \$ 2,874.98         | \$ 11.50             | \$ 2,886.48                           |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2010          | 2010                    | Final          | 35,414 (2)          | 10 (4)             | \$ 3.7467 | \$ 27.30            | \$ 0.11              | \$ 27.41                              |
| High Performance New Construction            | OPA 2010          | 2010                    | Final          | 82,697 (3)          | 35 (5)             | \$ 3.7467 | \$ 98.30            | \$ 0.39              | \$ 98.70                              |
| <b>GS &gt;50KW-200 Total</b>                 |                   |                         |                | <b>674,146</b>      |                    |           | <b>\$ 4,359.83</b>  | <b>\$ 17.44</b>      | <b>\$ 4,377.27</b>                    |
| Demand Response 2                            | OPA 2010          | 2010                    | Final          | 595,249 (3)         | 484 (5)            | \$ 3.7467 | \$ 1,359.25         | \$ 5.44              | \$ 1,364.68                           |
| Demand Response 3                            | OPA 2010          | 2010                    | Final          | 21,097 (3)          | 1,024 (5)          | \$ 3.7467 | \$ 2,874.98         | \$ 11.50             | \$ 2,886.48                           |
| OPA Energy Retrofit Incentive Program (ERIP) | OPA 2010          | 2010                    | Final          | 15,888 (2)          | 4 (4)              | \$ 3.7467 | \$ 12.25            | \$ 0.05              | \$ 12.30                              |
| High Performance New Construction            | OPA 2010          | 2010                    | Final          | 91,666 (3)          | 35 (5)             | \$ 3.7467 | \$ 98.30            | \$ 0.39              | \$ 98.70                              |
| <b>GS 200KW-1000 Total</b>                   |                   |                         |                | <b>723,900</b>      |                    |           | <b>\$ 4,344.77</b>  | <b>\$ 17.38</b>      | <b>\$ 4,362.15</b>                    |
| <b>Subtotal OPA programs</b>                 |                   |                         |                | <b>3,757,698</b>    |                    |           | <b>\$ 42,952.74</b> | <b>\$ 171.81</b>     | <b>\$ 43,124.55</b>                   |
| <b>OTHER PROGRAMS</b>                        |                   |                         |                |                     |                    |           |                     |                      |                                       |
| <b>Subtotal other programs</b>               |                   |                         |                | <b>-</b>            |                    |           | <b>\$ -</b>         | <b>\$ -</b>          | <b>\$ -</b>                           |
| <b>Grand Total</b>                           |                   |                         |                |                     |                    |           |                     | <b>\$ 171.81</b>     | <b>\$ 43,124.55</b>                   |

(1) Assumed all Peaksaver KWh's per OPA to be for the Residential Rate Class.

(2) Total ERIP KWh's per the OPA were allocated to the Commercial, GS >50-200KW, and GS 200-1000KW Rate Classes based on the KWh savings by customer per OPUC ERIP project breakdown.

(3) Total High Performance New Construction, Other Customer Based Generation and Demand Response program KWh's per the OPA were allocated to the Commercial, GS >50-200KW, and GS 200-1000KW Rate Classes according to 2008 billed load, consistent with OPA allocation methodology to LDC's.

(4) ERIP KW calculated based on KWh divided by 3640 hours assumed for industrial measures based on 14 hrs per day, M-F.

(5) High Performance New Construction, Other Customer Based Generation and Demand Response program KW calculated based on net summer peak KW savings per OPA final report.

(6) Carrying charges are calculated for a half year, representing revenue lost throughout 2010 to be recovered throughout 2013. (Carrying charges starting 2011 are included in the 2011 LRAM calculation.) The interest rate used is the average of the OEB prescribed interest rates for deferral and variance accounts from Q1 2010 to Q4 2010 (0.80%). Interest is not compounded.

Other Program calculationsOshawa PUC Networks IncFile Number EB-2012-0157

| Rate Class                            | Program   | Technology            | Funding Mechanism | Year (start of program) | # of Units | Effective Useful Life (1) | Energy Savings per unit (kWh) before FR (1) | Total Energy Savings (kWh) before FR with # Units | Free Ridership | Net kWh Saved (After FR) | Rate/ kWh | Lost Revenue        |
|---------------------------------------|---|-----------------------|-------------------|-------------------------|------------|---------------------------|---|---|----------------|--------------------------|-----------|---------------------|
| Residential                           | Library Watt- Reader Program                    | CFL 15 w Screw in     | 3rd Tranche MARR  | 2006                    | 140        | 8                         | 44.4  | 6,209   | 10%            | 5,588                    | \$ 0.0119 | \$ 66.50            |
|                                       |   |                       |                   |                         |            |                           |   | <u>6,209</u>                                      |                | <u>5,588</u>             |           | <u>\$ 66.50</u>     |
| Residential                           | Residential Replace Bulk with Individual Meters | Individual Meters     | 3th Tranche MARR  | 2006                    | 8          | 20                        | 600.0 (2)                                   | 4,800   | 0%             | 4,800                    | \$ 0.0119 | \$ 57.12            |
|                                       |   |                       |                   |                         |            |                           |   | <u>4,800</u>                                      |                | <u>4,800</u>             |           | <u>\$ 57.12</u>     |
| Residential                           | Retrofit Non-Profit Housing                     | T8s                   | 3rd Tranche MARR  | 2006                    | 143        | 18                        | 32.9  | 4,698   | 0%             | 4,698                    | \$ 0.0119 | \$ 55.90            |
| Residential                           | Retrofit Non-Profit Housing                     | CFLs                  | 3rd Tranche MARR  | 2006                    | 610        | 8                         | 44.4  | 27,054  | 10%            | 24,348                   | \$ 0.0119 | \$ 289.74           |
| Residential                           | Retrofit Non-Profit Housing                     | Exit Lights           | 3rd Tranche MARR  | 2006                    | 60         | 10                        | 148.9                                       | 8,935   | 10%            | 8,042                    | \$ 0.0119 | \$ 95.70            |
|                                       |   |                       |                   |                         |            |                           |   | <u>40,686</u>                                     |                | <u>37,087</u>            |           | <u>\$ 441.34</u>    |
| <b>Total Residential</b>              |   |                       |                   |                         |            |                           |   | <b>51,695</b>                                     |                | <b>47,475</b>            |           | <b>\$ 564.96</b>    |
| <u>Unmetered Scattered Load</u>       |   |                       |                   |                         |            |                           |   |   |                |                          |           |                     |
|                                       | Unmetered Scattered Load                        | LED Fixtures (Note 1) | 3rd Tranche MARR  | 2007                    | 156        | 10                        | 6,941.0 (2)                                 | 1,082,796   | 30% (3)        | 757,957                  | \$ 0.0174 | \$ 13,188.46        |
| <b>Total Unmetered Scattered Load</b> |   |                       |                   |                         |            |                           |   | <b>1,082,796</b>                                  |                | <b>757,957</b>           |           | <b>\$ 13,188.46</b> |
| <b>Total Other Programs</b>           |   |                       |                   |                         |            |                           |   | <b>1,134,491</b>                                  |                | <b>805,433</b>           |           | <b>\$ 13,753.41</b> |

**Notes**

- (1) Assumptions per 2011 OPA Prescriptive and Quasi Prescriptive Measures and Assumptions reports except where noted.  
(2) no OPA inputs found, previous inputs used.  
(3) Freerider rate of 30% was based on Toronto Hydro decision.

Removed; assume technology expired end of 2010.

|             |                             |                          |                  |      |     |   |      |        |    |        |           |           |
|-------------|-----------------------------|--------------------------|------------------|------|-----|---|------|--------|----|--------|-----------|-----------|
| Residential | Retrofit Non-Profit Housing | Christmas Light Retrofit | 3rd Tranche MARR | 2006 | 900 | 5 | 14.0 | 12,555 | 5% | 11,927 | \$ 0.0119 | \$ 141.93 |
|-------------|-----------------------------|--------------------------|------------------|------|-----|---|------|--------|----|--------|-----------|-----------|