

September 21, 2018

Kirsten Walli
Board Secretary
Ontario Energy Board,
2300 Yonge St.
Suite 2700, P.O. Box 2319
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: OEB File No. EB-2018-0036
Guelph Hydro Electric Systems Inc. (Guelph Hydro) Responses to Board Staff
Questions**

Please find enclosed with this letter Guelph Hydro's responses to Board Staff interrogatories received by email on September 10, 2018.

Guelph Hydro has filed an electronic version of its responses via RESS along with the following live Excel files:

- Updated 2019IRM Rate Generator model
- Updated LRAMVA work-form

Should there be any questions, please do not hesitate to contact the undersigned.

Respectfully submitted,



Cristina Birceanu

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**Guelph Hydro Responses
Board Staff Questions
Guelph Hydro Electric Systems Inc.
EB-2018-0036**

Staff Question – 1

Ref: Guelph Hydro's response dated August 30 2018 to staff preliminary question #3

In responding to staff's question related to the allocation of Account 1595 -2016 residual balance of \$744,342, Guelph Hydro proposes to use a proportion based on calculated variance (\$) in 1595 for each rate class. Staff notes that the allocated balances of Account 1595, are to be included in the derivation of the DVA rate riders in the rate generator model.

- a. Why Guelph Hydro thinks it appropriate to allocate GA related costs to all customers, when only the non-RPP customers caused the variance since they are the ones who pay the GA. Please propose another approach that allocates the balances to the customers that caused the variance.

Guelph Hydro's Response:

Guelph Hydro appreciates Board Staff's consideration, and has proposed another approach that allocates the 1595 (2016) balance to only Non-RPP customers as follows:

Guelph Hydro proposes to exclude 1595 (2016) recovery amounts from the derivation of the DVA rate riders and calculate separate rate riders for 1595 (2016) disposition, applicable to only Non-RPP customers.

To accommodate the 2019 IRM model for the disposition to be applicable to only Non-RPP customers, Guelph Hydro unchecked the box to dispose the account 1595 (2016) in Tab. 3 Continuity Schedule and added the proposed rates in Tab. 18 Additional Rates.

The following table illustrates the proposed 1595 (2016) rate riders derivation:

Table 1: Proposed 1595 (2016) Rate Riders:

| Customer Class | Calculated variance - 1595 Workform, Tab 1595 2016, Cells J95 to J115 [\$] | Proposed proportions for 1595 (2016) disposition [%] | 1595 (2016) balance allocation [\$] | Metered Consumption for Customers who were in Class B classification as at December 31, 2016, and for Non- Wholesale Market Participants [kWh] | Rate Rider for Disposition and Recovery/Refund of Regulatory Balances Control Account (2016) Applicable only for Customers who were in Class B classification as at December 31, 2016 [\$/kWh] |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | A | B = A/\$720,773 | C=B x \$744,342 | D | E=C/D |
| Residential - Applicable only for Non_RPP Customers | \$22,189 | 3.08% | \$22,914.46 | 12,421,581 | \$0.0018 |
| General Service Less than 50 kW - Applicable only for Non-RPP customers | \$13,677 | 1.90% | \$14,124.75 | 24,815,969 | \$0.0006 |
| General Service 50 to 999 kW - Applicable only for Customers who were in Class B classification as at December 31, 2016, and for Non-Wholesale Market Participants | (\$66,672) | -9.25% | (\$68,852.05) | 354,253,587 | (\$0.0002) |
| General Service 1,000 to 4,999 kW - Applicable only for Customers who were in Class B classification as at December 31, 2016 | \$753,524 | 104.54% | \$778,163.90 | 315,404,292 | \$0.0025 |
| Large Use (*) | \$0 | 0.00% | \$0.00 | 22,613,123 | N/A |
| Unmetered Scattered Load (**) | (\$2) | 0.00% | (\$2.43) | 380,988 | (\$0.0000) |
| Sentinel Lighting - Applicable only for Non-RPP Customers | (\$0) | 0.00% | (\$0.26) | 669 | (\$0.0004) |
| Street Lighting - Applicable only to Non-RPP Customers | (\$1,943) | -0.27% | (\$2,006.37) | 10,236,100 | (\$0.0002) |
| Total (***) | \$720,773 | 100.00% | \$744,342 | 740,126,309 | |

Note: (*) Large Use consumption is presented in the above table only to reconcile with the consumption presented in 2019 IRM Rate Generator model, Tab 6.1 GA, cells G26 plus I26;

Note: (**) No rate rider is proposed for Unmetered Scattered Load class

Note (***) 2017 transitioning customers had Class B classification in 2016.

If approved, the rate riders presented above are effective until December 31, 2019.

Guelph Hydro updated the 2019 IRM Rate Generator model to reflect the above approach (please see Guelph_updated_2019IRM-Model_20180921).

Staff Question -2

Ref: Tab 6.a GA Allocation – cell D20 Total Non-RPP Class B consumption

Staff notes that the total non-RPP Class B consumption on Tab 6.a of the IRM rate model is 376,753,694 kWhs. Staff performed a reconciliation for the total non-RPP class B consumption used in the 2019 IRM rate models with the consumptions calculated based on the RRR reporting. Staff notes a discrepancy for 2017 consumption figure that is used in GA allocation of 2019 IRM rate model as below.

| | Metered Consumption As per RRR 2.1.5 |
|--------------------------------------------------|-----------------------------------------|
| | 2017 |
| Non-RPP (kWhs) | 921,412,855 |
| Retail customers (kWhs) | 197,114,360 |
| Total Non-RPP excluding the WMP | 1,118,527,215 |
| Less: Class A consumption | 562,293,628 |
| Total Non-RPP Class B (A) | 556,233,587 |
| | As per 2019 IRM rate models Tab 6.1 |
| | 2017 |
| Total Non-RPP Class B Consumption (B) | 376,753,694 |
| | |
| Variance (B-A) | (179,479,893) |
| | -32% |

- a. Please provide the explanation of the discrepancy noted as above.

Guelph Hydro's Response:

Tab 6.1 GA, cell I26 of the 2019 IRM Rate Generator Model excludes kWh consumption for Wholesale Market Participants, Class A customers for the entire year, and Class A transition customers (full year consumption, including the period the transition customers were Class B) to establish GA rate riders for Non-RPP Class B customer rate classes (excluding Class A transition customers). Tab 6.1a GA Allocation establishes a monthly GA payment for the 44 Class A Transition customers. The variance of 179,479,893 kWh pertains to the period in 2017 when the 44 Class A

Transition customers were Class B. Therefore, a discrepancy does not exist. The correct reconciliation is as follows:

| Table 2: Tab 6.1 Reconciliation to RRR 2.1.5.4 | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------|
| | 2017 RRR 2.1.5.4 | Tab 6.1 of 2019 IRM Rate Generator Model |
| Non-RPP (kWh) | 921,412,855 | |
| Retail Customers (kWh) | 197,114,360 | |
| Total Non-RPP excluding WMP | 1,118,527,215 | 1,118,527,215 |
| Less: Class A consumption | 562,293,628 | |
| Less: Class A consumption for customers that were Class A for entire year (Tab 6.1, cell E26) | | 378,400,906 |
| Less: Class A consumption for Class A Transition Customers (Tab 6.1, cell E26 minus Tab 6.1a GA Allocation, cell D184) | | 183,892,722 |
| Total Non-RPP Class B (kWh) | 556,233,587 | 556,233,587 |

b. Please update the respective evidence/model accordingly if applicable.

Guelph Hydro's Response:

N/A

Staff Question – 3

Ref: Page 50-51 of the Application; Appendix 7_Guelph_Reconciling Item_GA Analysis.xls, Tab.1 GA Detailed Analysis;

In explaining the reconciling item #4 Billed GA difference, Guelph stated in the Application that

The GA analysis model assumes that Distributor bills customers on a calendar month basis. Guelph Hydro does not bill most of its customers on a calendar month basis. For those customers with billing cycles bridging two calendar months, the CIS system bills a weighted average GA 1st Estimate rate. This analysis is presented in Tab 1. GA Detailed Analysis columns O to R with column S demonstrating the monthly average GA rate billed to customers in 2017. Based on this analysis, the GA Analysis model expectation (cell K26) is greater than the GA amount Guelph Hydro collected (cell O26) by \$896,689.38.

Guelph provided the supporting calculation for the Billing GA difference of \$896,689.38 in the Appendix 7 of the Application:

| | |
|------------------------------------------------------------|-----------------|
| Calculated 2017 GA revenues per the GA Analysis Workform | \$55,966,564.00 |
| 2017 GA revenues per Guelph (billed adjusted for unbilled) | \$55,069,874.70 |
| Billing GA difference (reconciling item #4) | \$896,689.38 |

- a. Please provide the 2017 year-to-date balances in the global adjustment sub-accounts for USoA 4006 to 4055 and compare the sum to the 2017 GA revenue figure of \$55,069,874.70 (Excluding any transfers to Account 1589 RSVA GA). Please explain variances if any.

Guelph Hydro's Response:

Please see Guelph Hydro's reconciliation between USoA 4006 to 4055 and the expected GA revenue per the GA analysis workform \$55,069,874.70 (excluding any transfers to Account 1589 RSVA GA) below:

| | |
|----------------------------------------------------------------------|--------------|
| Sum of GA sub accounts in USoA 4006 to 4055 (RRR 2.1.7) ¹ | \$95,168,122 |
| Less: IESO 147 Class A | \$39,979,145 |
| USoA 4006 to 4055 Class B Non RPP-GA | \$55,188,977 |
| 2017 GA revenues per Guelph (billed adjusted for unbilled) | \$55,069,875 |
| Difference | \$119,102 |

| | |
|-----------------|--------|
| Difference as % | 0.216% |
|-----------------|--------|

1 At year end for 2.1.7. purposes, USoA 4006 to 4055 accounts are created via journal entry into manual trial balance from the 1588 & 1589 RSVA tracking accounts. The only subaccounts Guelph Hydro uses for USoA 4006 to 4055 are for RPP GA components. No subaccounts are created to isolate the Non-RPP Class A or Non-RPP Class B portions of GA separate from Power.

The difference above is expected to be related to inherent UBR factors such as item #10 in the reconciling items referenced in the GA_Analysis Workform.

Staff Question – 4

Ref: Guelph Hydro's response dated August 30 2018 to staff preliminary question #4

Guelph Hydro provided an example to illustrate the calculation of the weighted average GA rate to bill the customers without interval meters. The calculation is copied as below:

| Select Date Range for Average Calculation | |
|-------------------------------------------|--------------------|
| Type information, press Enter. | |
| Date range from | 6/14/18 To 7/19/18 |
| Cumulative cost from 7/19/18 (A) | 450,245,581.0844 |
| Cumulative cost from 6/14/18 (B) | 441,606,141.9244 |
| Cumulative consumption from 7/19/18 (C) | 10,259,222,522.00 |
| Cumulative consumption from 6/14/18 (D) | 10,177,442,876.00 |
| Average ((A - B) / (C - D)) | .105600 |
| F12=Cancel | |

- a. The information provided on the print screen for the calculation of the weighted average GA rate is unclear to OEB Staff:
 - Please indicate the starting point of the cumulative costs, and the cumulative consumption.
 - How are the cumulative costs and consumption values derived, and what is the source of the values used?
 - What customer groups are included in the cumulative costs and consumption?

Guelph Hydro's Response:

- The starting point of the cumulative costs, and the cumulative consumption is May 1, 2004, the date Global Adjustment came into effect.
- The cumulative consumption values are derived based on the cumulative daily Net System Load Shape (NSLS) calculation in accordance with the Retail Settlement Code, Section 3.4 Determining the Net System Load Shape, Equation 3.4 (a).

- The cumulative costs are derived based on cumulative daily NSLS multiplied by the daily Global Adjustment rate (i.e. first estimate GA rate).
- The cumulative consumption is the cumulative daily NSLS (as per example provided: (C) is total cumulative NSLS from May 1, 2004 to July 19, 2018 and (D) is the total cumulative NSLS from May 1, 2004 to June 14, 2018)
- The system determines the cost and consumption accumulated during the specific billing period of a bill and derives the weighted average GA rate for this specific period. For example, the screenshot above reflects a billing period of June 14 to July 19, 2018.
- In accordance with the Retail Settlement Code, Section 3.4, the cumulative costs and consumption pertain to all system load (i.e. all customers) minus interval-meter consumption, minus street lighting consumption; Guelph Hydro does not have load transfers, neither embedded distributors.

The weighted average GA rate is applicable to non-interval-metered consumers; smart meters are not considered interval meters.

- b. Please confirm that the weighted average GA rate is only billed to the customers with non-interval meters.

Guelph Hydro's Response:

Guelph Hydro confirms that weighted average GA rate is only billed to customers with non-interval meters.

- c. Please provide the ratio of non-interval vs interval metered consumption for the total non-RPP class B consumption and its calculation.

Guelph Hydro's Response:

Guelph Hydro calculated the ratio of non-interval vs. interval metered consumption for non-RPP Class B consumption as illustrated in the below table:

Table 3: Non-Interval vs. Interval Metered Consumption for Non-RPP Class B

| Total Class B excluding WMP Consumption | Total Interval-Meter 2017 Metered Consumption | Total Interval- Meter 2017 Metered Consumption for Class A Customers that were Class A for the entire period GA blance accumulated | Total Interval-Meter 2017 Metered Consumption for Customers that Transitioned from Class B to Class A (only Class A consumption) | Total Interval-Meter 2017 Metered Class B Consumption | Ratio Non-Interval vs. Interval Metered Consumption |
|-----------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|
| A | B | C | D | E = B -(C+D) | F = 1- E/A |
| 556,233,587 | 874,432,699 | 378,400,906 | 183,892,722 | 312,139,071 | 43.88% |

Staff Question – 5

Ref: Appendix 7_Guelph_Reconciling Item_GA Analysis.xls, Tab.2 RPP True-up

Staff compared the total RPP consumption volume per Guelph's settlements in 2017 after the true-up for 2017 to the reported consumption in the RRR and noted the following difference:

| | |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Total 2017 kWh Actual per Guelph's settlements with the IESO including true-ups – Cell D51 of Appendix 7 Tab.2 RPP True-up (A) | 457,636,230 |
| Total metered Consumption - RPP Per RRR (B) | 477,444,083 |
| Difference (C=A-B) | (19,807,851) |
| | -4.3% |

- Please explain the above volume difference.

Guelph Hydro's Response:

The difference in volumes is due to different uses and sources of data. For RRR 2.1.5.4, the OEB requires distributors to include unbilled revenue estimates in the calculation of annual kWh consumption. For IESO RPP Settlement purposes, Guelph Hydro uses actual billed kWh consumption data. The column title in cell C38 of Appendix 7, Tab 2. RPP True-up is not reflective of the data within the column. A more reflective description is "Actual Billed kWh (latter half of load month)" to capture calendar month actual billed load applicable to the GA 1st estimate rate.

In summary, the RPP kWh reported in RRR 2.1.5.4 captures unbilled revenue estimated kWh, whereas the IESO RPP Settlement captures actual billed kWh.

Staff Question – 6

Ref: Appendix 7_GA Analysis Workform; RRR 2.1.7

Staff compared the GA costs per the GA analysis workform and the GA costs per the reported balance in USoA 4707 Global adjustment and noted the following difference:

| | |
|-------------------------------------------------------------------------------------------------------------------------|--------------|
| The expected GA costs per the GA analysis workform (Non-RPP class B consumption adjusted for unbilled X Actual GA rate) | \$56,931,768 |
| The reported balance in USoA 4707 (RRR 2.1.7) | \$44,780,581 |
| Difference | \$12,151,187 |

- a. Please explain the difference between the reported balance in USoA 4707 and the expected GA costs per the GA analysis workform (excluding any transfers to Account 1589 RSVA GA).

Guelph Hydro's Response:

Please see Guelph Hydro's reconciliation between USoA 4707 and the expected GA costs per the GA analysis workform (excluding any transfers to Account 1589 RSVA GA) below:

| | |
|-------------------------------------------------------------------------------------------------------------------------|--------------|
| The reported balance in USoA 4707 (RRR 2.1.7) | \$44,780,581 |
| Misallocation of RPP GA to USoA 4705 vs. USoA 4707 ¹ | \$50,387,541 |
| Adjusted USoA 4707 balance | \$95,168,122 |
| Less: IESO 147 Class A | \$39,979,145 |
| USoA 4707 Class B GA | \$55,188,977 |
| Billed GA to customers lower than IESO invoice charges - COP Adjustment ² | \$2,918,422 |
| IESO Charged Class B GA | \$58,107,399 |
| The expected GA costs per the GA analysis workform (Non-RPP class B consumption adjusted for unbilled X Actual GA rate) | \$56,931,768 |
| Difference | \$1,175,631 |

¹ At year end for 2.1.7. purposes, USoA 4707 and 4705 accounts are created via journal entry into manual trial balance from the 1588 & 1589 RSVA tracking accounts. The misallocation was the result of a formula error where the \$50.4M RPP GA was removed twice from the total combined GA of \$145.5M to result in an overstatement of 4705 vs. an understatement of 4707. The balances in both 1588 and 1589 were correctly reported.

² As required by Entry #3 of the Accounting Procedures Handbook, Article 490, the Adjusted USoA 4707 as stated above of \$95.2M has picked up the lower of the Billed GA and the IESO(Cost) invoiced GA. Since we are comparing the "Expected GA cost" from the

GA analysis workform with the USoA 4707, we need to add to USoA 4707 the \$2.9M cost which was included in 1589 and not included in USoA 4707.

The difference above is expected to be related to reconciling items referenced in the GA_Analysis Workform.

As the misallocation between USoA 4707 and 4705 of \$50,387,541 for 2017 does not have any net income impact and is only an income statement account correction, Guelph Hydro does not propose to correct the 2.1.7. filing for 2017.

Staff Question – 7

Ref: Page 51 of the Application; Appendix 7_Guelph_Reconciling Item_GA Analysis.xls, Tab.3 IESO Invoice Analysis

The reconciling item #5 on the GA Analysis workform is -\$543,557.63, being the IESO Invoice Adjustment to Charge Type 148. Guelph stated on the page 51 of the Application that

Throughout 2017, the IESO made numerous adjustments to the amount charged to Guelph Hydro for charge type 148 Class B Global Adjustment Settlement Amount. Adjustments of \$2,398,010.50 throughout 2017 were made in the IESO preliminary statement and an almost offsetting amount of \$(2,932,568.13) adjustments were made to the final statement. The overall impact is \$(534,557.63) in adjustments to charge type 148 during 2017.

The Tab 3 of Appendix 7 reconciling items spreadsheet shows that the net impact of \$(534,557.63) is the total difference between the CT 148 of IESO invoices and the preliminary statements for the year of 2017.

- a. Please explain why 100% of the net adjustment of CT 148 (for both RPP & non-RPP Customers) from the IESO is shown as a reconciling item in the GA Analysis workform, when the GA Analysis Workform should only be accumulating the Account 1589 balances which is for Non-RPP class B customers.

Guelph Hydro's Response:

As stated on page 67 of the Application,

Guelph Hydro maintains separate General Ledger accounts to track the RPP settlement and GA settlement portions...

Since the GA portion pertaining to RPP customers is known at the time of submitting the RPP and GA settlements with the IESO on the fourth business day, Guelph Hydro has allocated 100% of the net adjustment of \$(534,557.63) in CT 148 to Non-RPP Class B customers.

100% of the net adjustment of CT 148 (for both RPP & non-RPP Customers) from the IESO is shown as a reconciling item in the GA Analysis workform because it is offset by the known GA portion pertaining to RPP customers in the 1589 variance account, and therefore, the difference (CT 148 minus GA portion relating to RPP consumption) pertains to non-RPP customers/consumption.

Adjustments to Global Adjustment are shown on monthly settlement statements (both preliminary and final) received from the IESO. In an effort to describe the level of detail provided by the IESO on such statements, a sampling has been provided below. Tables 4 and 5 list all Global Adjustment adjustments received on Guelph Hydro's preliminary statements for April 2017 and January 2018. Each adjustment may or may not state the specific period of time it relates to, and this period of time may be several months or several years in the past. Guelph Hydro's treatment of adjustments to Global Adjustment, as described above, is appropriate given the limited amount of detail available about the nature of these adjustments.

Table 4: Adjustments to Charge Type 148 on Guelph Hydro's Preliminary Statement for April 2017

| Record Type | Charge Type | Trade Date | Trade Hour | Trade Interval | Adjustment Amount | Zone ID | Settlement Type | Billable Quantity | Tax Rate | Tax Amount | Adjustment Comment |
|-------------|-------------|------------|------------|----------------|-------------------|---------|-----------------|-------------------|----------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP | 148 | 30-Apr-17 | 0 | 0 | -5746.82 | ONZN | P | 95635.542 | 0.13 | -747.09 | Adjustment of Global Adjustment, Total Adjusted Amount - \$-482131.07, Total Distribution (MWh) - 8023376.929 |
| MP | 148 | 30-Apr-17 | 0 | 0 | -1730.88 | ONZN | P | 2025.34 | 0.13 | -225.01 | Adjustment of Global Adjustment for 12/2011, Total Adjusted Amount - \$-8832076.95, Total Distribution (MWh) - 10334585.022 (Guelph Hydro - Rockwood Div.) |
| MP | 148 | 30-Apr-17 | 0 | 0 | -104188.96 | ONZN | P | 121913.529 | 0.13 | -13544.56 | Adjustment of Global Adjustment for 12/2011, Total Adjusted Amount - \$-8832076.95, Total Distribution (MWh) - 10334585.022 |

Table 5: Adjustments to Charge Type 148 on Guelph Hydro's Preliminary Statement for January 2018

| Record Type | Charge Type | Trade Date | Trade Hour | Trade Interval | Adjustment Amount | Zone ID | Settlement Type | Billable Quantity | Tax Rate | Tax Amount | Adjustment Comment |
|-------------|-------------|------------|------------|----------------|-------------------|---------|-----------------|-------------------|----------|------------|----------------------------------------------------------------------------------------------------------------------------|
| MP | 148 | 31-Jan-18 | 0 | 0 | -6698.96 | ONZN | P | 101894.7 | 0.13 | -870.86 | Adjustment of Global Adjustment for 10/2016, Total Adjusted Amount - \$-551217.59, Total Distribution (MWh) - 8384313.564 |
| MP | 148 | 31-Jan-18 | 0 | 0 | 9.71 | ONZN | P | 102790.27 | 0.13 | 1.26 | Adjustment of Global Adjustment for 10/2015, Total Adjusted Amount - \$815.29, Total Distribution (MWh) - 8628399.29 |
| MP | 148 | 31-Jan-18 | 0 | 0 | 17149.75 | ONZN | P | 104705.22 | 0.13 | 2229.47 | Adjustment of Global Adjustment for 12/2015, Total Adjusted Amount - \$1520573.83, Total Distribution (MWh) - 9283635.217 |
| MP | 148 | 31-Jan-18 | 0 | 0 | 2536.69 | ONZN | P | 113750.29 | 0.13 | 329.77 | Adjustment of Global Adjustment for 01/2016, Total Adjusted Amount - \$228327.97, Total Distribution (MWh) - 10238681.478 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -3741.18 | ONZN | P | 106277.19 | 0.13 | -486.35 | Adjustment of Global Adjustment for 02/2016, Total Adjusted Amount - \$-333610.22, Total Distribution (MWh) - 9476993.419 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4725.51 | ONZN | P | 106970.51 | 0.13 | -614.32 | Adjustment of Global Adjustment for 03/2016, Total Adjusted Amount - \$-409704.41, Total Distribution (MWh) - 9274395.494 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4970.85 | ONZN | P | 100318.1 | 0.13 | -646.21 | Adjustment of Global Adjustment for 04/2016, Total Adjusted Amount - \$-426214.56, Total Distribution (MWh) - 8601557.64 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -511.75 | ONZN | P | 87155.863 | 0.13 | -66.53 | Adjustment of Global Adjustment, Total Adjusted Amount - \$-57213.28, Total Distribution (MWh) - 9743882.265 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4217.16 | ONZN | P | 104740.24 | 0.13 | -548.23 | Adjustment of Global Adjustment for 06/2016, Total Adjusted Amount - \$-370511.89, Total Distribution (MWh) - 9202274.086 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -6268.65 | ONZN | P | 103713.92 | 0.13 | -814.92 | Adjustment of Global Adjustment for 11/2016, Total Adjusted Amount - \$-518482.14, Total Distribution (MWh) - 8578212.921 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4440.43 | ONZN | P | 109545.66 | 0.13 | -577.26 | Adjustment of Global Adjustment for 12/2016, Total Adjusted Amount - \$-398278.58, Total Distribution (MWh) - 9825550.081 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4667.64 | ONZN | P | 100634.75 | 0.13 | -606.79 | Adjustment of Global Adjustment for 05/2016, Total Adjusted Amount - \$-401311.77, Total Distribution (MWh) - 8652317.796 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -5982.58 | ONZN | P | 106859.27 | 0.13 | -777.74 | Adjustment of Global Adjustment for 09/2016, Total Adjusted Amount - \$-503428.28, Total Distribution (MWh) - 8992096.573 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4077.76 | ONZN | P | 122058.53 | 0.13 | -530.11 | Adjustment of Global Adjustment for 08/2016, Total Adjusted Amount - \$-366044.01, Total Distribution (MWh) - 10956699.077 |
| MP | 148 | 31-Jan-18 | 0 | 0 | -4239.96 | ONZN | P | 113189.32 | 0.13 | -551.19 | Adjustment of Global Adjustment for 07/2016, Total Adjusted Amount - \$-393133.45, Total Distribution (MWh) - 10495041.213 |
| MP | 148 | 31-Jan-18 | 0 | 0 | 19352.17 | ONZN | P | 102668.71 | 0.13 | 2515.78 | Adjustment of Global Adjustment for 11/2015, Total Adjusted Amount - \$1636248.71, Total Distribution (MWh) - 8680759.324 |

Staff Question – 8

**Ref: Page 59 of the Application; 2019 IRM Rate Generator Tab. 3 DVA
Continuity Schedule**

Question b. and c. of the staff preliminary questions on GA in the application asked for the reversal of the principle adjustments made in last year. Guelph stated that the principal adjustments of \$(2,089,987) and \$2,089,987 in accounts 1588 and 1589 respectively due a misallocation between the accounts for GA related to Non-RPP accounts were not one-time adjustments and were not required to be reversed.

- a. Please explain when the adjustments of \$2,089,987 were made into accounts 1588 and 1589 in the general ledger? If it was made in 2017 and included in the net principle transactions of the accounts, why it was not required to be adjusted?

Guelph Hydro's Response:

Guelph Hydro stated "...The other adjustments were one-time adjustments and were not required to be reversed." (emphasis added)

Guelph Hydro processed the general ledger adjustments of \$2,089,987 and (\$2,089,987) in the 1588 and 1589 accounts respectively in June 2017. For 2.1.7. and IR Rate Generator Tab 3 DVA Continuity purposes, the correction was reflected in 2016 but the general ledger for financial reporting purposes was closed and the adjustment could not be reflected until 2017 at which point the general ledger realigned with the RRR dollar balances. Please see Guelph Follow Up IRRs_Nov24 and Guelph Follow Up IRRs_Nov30 from Guelph Hydro's 2018 IRM EB-2017-0044 for full background and final treatment.

No further adjustment was required as the \$2,089,987 and (\$2,089,987) general ledger adjustments recorded in June 2017 were not included in the net principle transactions for 2.1.7. and 2.1.1. reporting purposes in 2017, since they had previously been adjusted in 2016 for RRR purposes, and thus did not need to be reversed.

Staff Question – 9

Ref: Tab 5 of LRAMVA workform (Table 5-c)

LRAMVA Workform, Tab 5, EB-2017-0044

Consistent with the LRAMVA disposition in 2018 rates, the LRAMVA threshold established in Guelph Hydro's 2016 cost of service application is applied against actual savings in this year's LRAMVA claim. It was determined from the last disposition that the 2011 to 2013 persisting savings were already included in the base load forecast in 2016.

- a. Please confirm appropriateness of claiming persistence of 2011 to 2013 programs in 2017.

Guelph Hydro's Response:

Guelph Hydro has revised the LRAMVA model to exclude 2011 to 2013 persistence in 2017.

- b. If Guelph agrees that 2014 to 2016 savings persistence in 2017 are eligible to be included in the LRAMVA, please remove the rate class specific 2011, 2012 and 2013 savings persistence from Table 5-c.

Guelph Hydro's Response:

Guelph Hydro agrees that 2014 to 2016 savings persistence in 2017 are eligible to be included in the LRAMVA and has removed 2011, 2012, and 2013 savings persistence from Table 5-c.

Staff Question -10

Ref: Tab 5 of LRAMVA workform (Table 5-c)

- a. Please confirm whether the project was undertaken as part of an IESO CDM program (for example, the Business Retrofit Program)

Guelph Hydro's Response:

Guelph Hydro has confirmed with OEB Staff that Staff Question - 10 is related to the Village of Rockwood street lighting project described in Tab 8 of the LRAMVA Work Form.

Guelph Hydro confirms that the project was undertaken as part of the IESO's Save On Energy Business Retrofit Program, as a Prescriptive Exterior Lighting project.

- b. If no to a) above, please confirm appropriateness of claiming demand savings from the streetlight project in 2017.

Guelph Hydro's Response:

N/A

- c. If yes to a) above, please confirm whether the energy savings for the streetlight project were accordingly reduced from the IESO CDM program for the year in which the streetlighting savings are requested to be claimed.

Guelph Hydro's Response:

As described in Guelph Hydro's LRAMVA Work Form Tab 8, the IESO's Prescriptive Measures and Assumptions List (MAL) used in conjunction with the project Worksheet calculate the project's estimated gross annual energy savings. The IESO's annual Evaluation, Measurement and Verification (EM&V) exercise calculates the net verified annual energy savings attributed to the project, as reported in Guelph Hydro's 2017 Final Verified Results Report. This is to confirm that the project was included in Guelph Hydro's 2017 Final Verified Results, but with reduced energy savings. The IESO reported 114,558 kWh of net first year energy but 0 kW in demand savings.

- d. If the energy savings from the streetlight program are removed from the IESO CDM program, please confirm the energy savings to be claimed on the IESO CDM program. Staff would like to ensure there is double counting of savings from the streetlighting project.

Guelph Hydro's Response:

Guelph Hydro has confirmed with Board Staff that Staff Question - 10 d) intended to read as follows:

“...Staff would like to ensure there is **not** double counting of savings from the streetlighting project.” *[emphasis added]*

Guelph Hydro's LRAMVA submission included 24.0 kW of demand savings from this project.

Staff Question – 11

Ref: Tab 8 of LRAMVA workform

- a. Please confirm the period over which savings are calculated (for example, from January to December 2017).

Guelph Hydro's Response:

The energy savings are calculated on an annual basis.

- b. Please confirm whether a monthly breakdown of streetlight savings can be provided from Guelph's billing data which reconciles with annual savings requested for approval.

Guelph Hydro's Response:

The annual energy savings for this project were calculated as described in the LRAMVA Work Form Tab 8 table for the 340 luminaires converted to LED. The conversion project was completed in November 2017, with the corresponding street light billing adjustment effective December 2017. Screen captures of the pre- and post-conversion billing information (Figures 1 and 2) demonstrates an overall demand reduction of 22.81 kW (58.78-35.97). However, Guelph Hydro notes that the street light luminaire billing quantities increased from 517 to 523 luminaires post-conversion, and submits that the Work Form Tab 8 calculation is appropriate for the LRAMVA claim, as it is based on the actual project conversion quantities, and not billing records of all street light luminaires in Rockwood. The demand reduction will persist for the life of the LED luminaires, with an effective impact of 24*12 monthly billings on an annual basis.

Figure 1: Rockwood Street Light Billing Data: Pre-LED Conversion

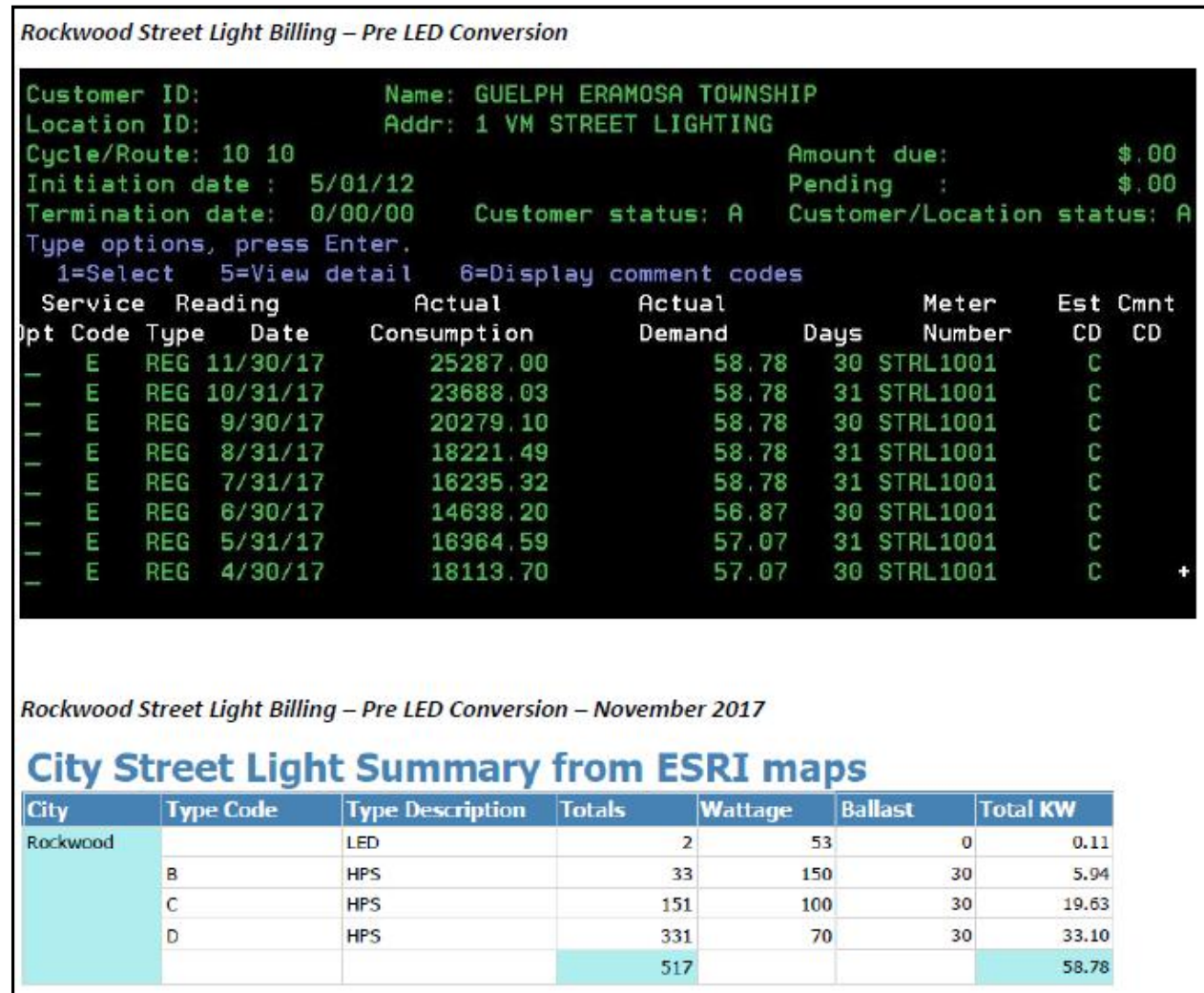


Figure 2: Rockwood Street Light Billing Data: Post-LED Conversion

Rockwood Street Light Billing – Post LED Conversion

```

Customer ID:          Name: GUELPH ERAMOSIA TOWNSHIP
Location ID:          Addr: 1 VM STREET LIGHTING
Cycle/Route: 10 10
Initiation date : 5/01/12
Termination date: 0/00/00
Customer status: A
Customer/Location status: A
Type options, press Enter.
1=Select 5=View detail 6=Display comment codes
Service Reading      Actual      Actual      Meter      Est  Cmnt
pt Code Type      Date      Consumption Demand      Days      Number  CD  CD
_ E REG 7/31/18      9935.19      35.97      31 STRL1001  C
_ E REG 6/30/18      9258.60      35.97      30 STRL1001  C
_ E REG 5/31/18     10314.01      35.97      31 STRL1001  C
_ E REG 4/30/18     11416.80      35.97      30 STRL1001  C
_ E REG 3/31/18     13380.53      35.97      31 STRL1001  C
_ E REG 2/28/18     13596.52      35.97      28 STRL1001  C
_ E REG 1/31/18     16357.77      35.97      31 STRL1001  C
_ E REG 12/31/17    16815.02      35.97      31 STRL1001  C
  
```

Rockwood Street Light Billing – Post LED Conversion – December 2017

City Street Light Summary from ESRI maps

| City | Type Code | Type Description | Totals | Wattage | Ballast | Total KW |
|----------|-----------|------------------|--------|---------|---------|----------|
| Rockwood | C | HPS | 136 | 100 | 30 | 17.68 |
| | D | HPS | 35 | 70 | 30 | 3.50 |
| | RC | LED | 269 | 37.5 | 0 | 10.09 |
| | RF | LED | 66 | 52.5 | 0 | 3.47 |
| | RJ | LED | 17 | 72.5 | 0 | 1.23 |
| | | | 523 | | | 35.97 |

- c. Please confirm that Guelph has used the same persistence savings factor from the energy retrofit program and applied this persistence factor against streetlight savings.

Guelph Hydro's Response:

Guelph Hydro confirms that the IESO persistence factors for the Retrofit program were applied to this street lighting project.

- d. Please confirm appropriateness of the net-to-gross factor (i.e., 1.01) applied to 2017 streetlighting savings to reduce for the potential for free riders. For example, is the net-to-gross (NTG) factor applied reflective of a similar project undertaken by the IESO in order to appropriately apply to streetlight savings? Based on past applications, Staff has seen NTG ranges between 60-80%.

Guelph Hydro's Response:

As this project was commissioned in 2017, Guelph Hydro has relied on the IESO's 2017 Final Verified Results (FVR) Report for this project's inclusion in the LRAMVA submission. As this project was a Save On Energy Business Retrofit Program project, Guelph Hydro applied the IESO's Retrofit program Net to Gross (NTG) parameters. For 2017 Retrofit projects, a 1.01 ratio was applied, as per the FVR Report extraction below in Figure 3. This NTG demand adjustment is an average for the Retrofit program, and can be found at cell FT16 on the "LDC Progress" Tab of Guelph Hydro's 2017 FVR Report.

Figure 3: Extract from Guelph Hydro's 2017 Final Verified Results Report from the IESO indicating Net-to-Gross Parameters

| B | C | D | E | EN | EO | EP | EQ | ER | ES | ET | EU | FE | FM | FN | FO | FP | FQ | FR | FS | FT |
|-----------------------------------------|--------------------------------------|---|--------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|----|-------------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|-------------|
| Progress Report | | | Net to Gross Adjustment Energy | | | | | | | | | Net to Gross Adjustment Peak Demand | | | | | | | | |
| For: Guelph Hydro Electric Systems Inc. | | | Verified(%) | | | | | | | | | Verified(%) | | | | | | | | |
| # | Programs | | 2015 Verified Results | 2016 Verified Results | 2017 Verified Results | Total Verified Results | 2016 Verified Results | 2017 Verified Results | Total Verified Results | 2017 Verified Results | | 2015 Verified Results | 2016 Verified Results | 2017 Verified Results | Total Verified Results | 2016 Verified Results | 2017 Verified Results | Total Verified Results | 2017 Verified Results | |
| | | | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments |
| Business Province-Wide Programs | | | | | | | | | | | | | | | | | | | | |
| 5 | Save on Energy Audit Funding Program | | | | | | | | | | | | | | | | | | | |
| 7 | Save on Energy Retrofit Program | | | 34 | 32 | 83 | 79 | 79 | 79 | 95 | | | 37 | 31 | 83 | 80 | 80 | 80 | 101 | |

Staff Question – 12

Ref: Tab 2 of LRAMVA workform

- a. Please change cell D9 to indicate the year in which the LRAMVA threshold was established, rather than the year in which the threshold applies.

Guelph Hydro's Response:

Guelph Hydro changed cell D9 (Tab 2) to indicate 2016 year, the year in which the LRAMVA threshold was established (2016 COS, file EB-2015-0073).

Staff Question – 13

- a. Please confirm the revised LRAMVA amount requested for disposition.

Guelph Hydro's Response:

The revised LRAMVA amount requested for disposition is \$621,256.79 (\$606,814.60 in principal and \$14,442.19 in interest charges). Guelph Hydro has updated the 2019 IRM Rate Generator model to reflect the LRAMVA changes in Tab 3. Continuity Schedule and in Tab 4. Billing Det. For Def Var. The updated LRAMVA claim and rate riders are presented below:

Table 6: Updated LRAMVA claim and rate riders

| 1568 LRAMVA 2017 Balances Requested for Disposition | | | | | |
|-----------------------------------------------------|---------------------|----------------------------------|----------------------------------|------------------------------------------------|------------------------------------------------|
| Customer Classes | Principal | Interest Jan. 1 to Dec. 31, 2017 | Interest Jan. 1 to Dec. 31, 2018 | Total LRAMVA Claim for Disposition in 2018 IRM | 2019 Proposed LRAMVA Rate Riders by Rate Class |
| Residential | \$145,385.59 | \$854.14 | \$2,606.04 | \$148,845.77 | \$0.0004 \$/kWh |
| GS<50 kW | \$46,693.34 | \$274.32 | \$836.98 | \$47,804.64 | \$0.0004 \$/kWh |
| GS 50 to 999 kW | \$74,185.10 | \$435.84 | \$1,329.77 | \$75,950.70 | \$0.0696 \$/kW |
| GS 1000 to 4999 kW | \$79,126.67 | \$464.87 | \$1,418.35 | \$81,009.88 | \$0.0729 \$/kW |
| Large Users | \$281,680.95 | \$1,654.88 | \$5,049.13 | \$288,384.95 | \$0.7236 \$/kW |
| Unmetered Scattere | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.0000 \$/kWh |
| Sentinel Lighting | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.0000 \$/kW |
| Street Lighting | (\$20,257.04) | (\$119.01) | (\$363.11) | (\$20,739.16) | (\$0.7280) \$/kW |
| Total | \$606,814.60 | \$3,565.04 | \$10,877.15 | \$621,256.79 | |

Along with its responses, Guelph Hydro has filed Excel versions of the updated 2019IRM model and LRAMVA work-form.

- b. Please confirm any changes to the LRAMVA workform in "Table A-2. Updates to LRAMVA Disposition (Tab 2)".

Guelph Hydro's Response:

Guelph Hydro has updated Table A-2 on Tab 1. Summary of Changes to reflect two changes:

1. The removal of 2011-2013 persistence as reflected in Staff Question 9.
2. The revision of formulas located at Tab 5. cells Y575 to AF575. Guelph Hydro noted that these cells were not capturing two programs in the version of the LRAMVA model filed on August 9, 2018 and has corrected this error.

Table A-2. Updates to LRAMVA Disposition

Please document any changes related to interrogatories or questions during the application process that affect the LRAMVA amount.

| No. | Tab | Cell Reference | Description | Rationale |
|------|-------------------|----------------|---------------------------------------------------|--------------------------------------------------|
| 1 | S. 2015-2020 LRAM | Y579 to AM581 | Removal of 2011 to 2013 persistence in 2017 | As per Staff Question 9 |
| 2 | S. 2015-2020 LRAM | Y575 to AF575 | Revised formula to capture each line item in 2017 | Two programs were excluded from previous version |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| etc. | | | | |

- c. If LDC made any changes to the LRAMVA work form as a result of its responses to interrogatories, please file an updated LRAMVA work form.

Guelph Hydro's Response:

Guelph Hydro has filed an updated LRAMVA work form which includes the changes noted in Guelph Hydro's response to Staff Question 13-b.