**Veridian Responses to OEB Staff Questions**

**for Veridian Connections’ 2019 IRM Application**

**(EB-2018-0072)**

# **Staff-1**

**Ref:    2018 IRM Decision (EB-2017-0078) re: improvements to accounting processes to minimize unbilled to billed revenue true-ups**

Pre-amble

In the 2018 Decision, the OEB expressed concern with Veridian Connections’ accounting practices. The OEB noted that Veridian Connections should consider further enhancements to its accounting processes relating to unbilled revenue to minimize balances in Accounts 1588 and 1589.

Based on last year’s decision, Veridian Connections was asked to report on any improvements with respect to unbilled to billed revenue true-ups in your next application.

Questions

1. Please explain why Veridian Connections has not provided such reporting as part of the current proceeding.
2. Please provide the required update on enhancements made to unbilled revenue processes.

Veridian Response:

1. Veridian continues to work towards improving processes relating to unbilled and undertook an extensive review of such processes. At the time of filing Veridian’s 2019 IRM application, the process review had not been completed and therefore not included in the application. The review is now complete and the enhancements to unbilled revenue processes have been implemented.
2. Veridian has reviewed the detail components of unbilled calculations and implemented refinement of processes as follows:
	* 1. Developed a query for subsequent billing information related to unbilled for the prior year. This information is available by the end of the 2nd month after year end and provides information to reconcile unbilled with subsequent billing.
		2. Reviewed all data inputs and included the use of actual data when available to improve the accuracy of unbilled revenue.
		3. A detailed review of inputs to the unbilled spreadsheet for completeness was performed. Veridian determined for some components of unbilled, the losses were not applied. Veridian has corrected this issue on a go forward basis.

# **Staff-2**

**Ref:   DVA Continuity Schedule, Account 1588**

Veridian Connections is presenting a credit balance of approximately $1.2 million in account 1588.

Given that the variance between RPP revenue and the cost of energy attributable to its RPP customers is settled with the IESO on a monthly basis, and Veridian Connections has indicated that all required true-ups have been made and included within their December 31, 2017 balance in Account 1588, the expectation is that any remaining amounts in the account would be relatively small and close to zero (primarily comprised of the difference between amounts billed at the approved total loss factor versus actual system losses for the year).

1. Please explain what comprises Veridian Connections’ December 31, 2017 balance in account 1588.

Veridian Response:

The 1588 December 2017 balance is comprised of the following:

1. 2016 Unbilled understated and adjusted in 2017 $1,580,623 (credit in 2017)
	1. $720,335 (difference in loss portion not included in unbilled) See question 1b) iii) Veridian response.
	2. $860,288 (difference related to proration and consumption estimate)
2. 2017 Unbilled understated and adjusted in 2018 $769,739 (debit in 2017)
	1. $614,326 (difference in loss portion not included in unbilled) See question 1b) iii) Veridian response.
	2. $155,413 (difference related to proration and consumption estimate)
3. 2016 true up accrual overstated and adjusted in 2017 $127 (debit in 2017)
4. 2016 LTLT overstated and adjusted in 2017 $6,378 (debit in 2017)
5. Unresolved difference of $(350,527) due to difference in billing proration of period and consumption for all power. The difference is 0.25% of the total Power billed.

# **Staff-3**

**Ref: Appendix A Responses to GA Methodology**

In regards to the recording and true-up of CT1142, please confirm the following:

1. The utility initially performs its monthly RPP settlement based on actual metered RPP consumption for the month and therefore the only true-up that would be required to the resulting CT 1142 is for the GA rate and HOEP price that is used for settlement purposes since they are both initially based on estimates.
2. In the response provided to Questions 2 b of the Appendix A questions, Veridian Connections indicates that the settlement month is trued-up two- calendar months post settlement month.

Please confirm that this means, for example, December 2017 consumption was settled with the IESO on January 4th, and then that January 4th settlement was trued-up to actual as part of the utility’s February 4th settlement with the IESO.

Veridian Response:

1. Veridian confirms that under usual circumstances the only true up to CT 1142 is for the GA rate and HOEP pricing. Occasionally minor differences occur such as:
* change from preliminary to final settlement statement HOEP.
* contributing data sets to the initial 1598 submission may include estimated data; the data may be unavailable due to meter communication issues which may be resolved after the fact.
1. Using the example above, Veridian’s true process is as follows: December 2017 consumption was settled with the IESO on January 4th, and then that January 4th settlement was trued-up to actual as part of the utility’s March 4th settlement with the IESO. As previously stated; this is the two calendar month post settlement date.

# **Staff-4**

**Ref:   Appendix A responses to GA Methodology; DVA continuity schedule; 2017 GA Analysis Workform re: true-up adjustments in a/c 1588 and 1589**

Questions

1. Response to Questions 4 b and d

Veridian Connections stated that it did not quantify the principal difference in the 2018 proceeding for unbilled differences, as it required significant work to do so.

Veridian Connections also notes that it did not have any principal adjustments for unbilled revenue included in the DVA continuity schedule for the current proceeding.

1. Do adjustments 2a and 2b on the GA Analysis Workform represent adjustments for unbilled differences? If yes, please explain why you stated above “you did not quantify the principal difference in the 2018 proceeding for unbilled differences”. If no, please explain what the adjustments in 2a and 2b are.
2. Please discuss in greater detail why it requires a significant amount of work to quantify the principal differences in the 2018 proceeding for unbilled differences.

Veridian Response:

Yes, adjustments 2a and 2b represent adjustments for unbilled differences.

The principal adjustment for 2a, listed on the GA analysis workform represent unbilled differences from 2016 and included in 2017 balances. The principal adjustment 2 b. listed on the GA analysis workform represent 2017 unbilled adjustment that is included in 2018 balances.

When responding to questions 4 b and d, Veridian understood these questions to be related to principal adjustments already approved in Veridian’s 2018 IRM Application (EB-2017-0078) filed on October 16, 2017. Veridian did quantify the 2016 adjustment relating to 2015 unbilled in the GA Analysis workform for the current proceeding (EB-2018-0072). However Veridian was unable to quantify the difference in the previous proceeding (EB-2017-0078). Veridian was able to quantify the 2017 adjustment in the GA Analysis workform for the current proceeding. ii. Veridian’s billing system is quite complex and required significant work to build a query to provide the correct data. Earlier this year, Veridian was able to create this query for Global Adjustment. The Power query required testing to ensure the data in the query was accurate for subsequent billed revenue. Limited resources also were a factor in the delay of this information.

# **Staff-5**

**Ref: 2017 GA analysis workform (reconciliation items)**

Questions

1. For each of the reconciling items in the 2017 GA analysis workform, please indicate the year the entry went through the G/L.
2. For each adjustment provided in Note 5, please add additional explanation that supports the direction of each (debit or credit). For example, for adjustment 2b, indicate whether the unbilled accrual was over or understated compared to the actual billings made subsequently.
3. Please explain why the reconciling items listed on the 2017 GA analysis workform have not been included in the DVA continuity schedule in the principal adjustment column.

Veridian Response:

 a and b. Reconciling item:

* + 1a) Adjustment went through the GL 1589 in 2017 as a credit. The true up accrual was understated in 2016.
	+ 2a) Adjustment went through the GL 1589 in 2017 as a debit. The unbilled accrual was overstated in 2016.
	+ 2b) Adjustment went through the GL 1589 in 2018 as a credit. The unbilled was understated in 2017.
	+ 3a) Adjustment went through the GL 1589 in 2017 as a credit. The accrual was understated in 2016.

c. The reconciling items listed on the 2017 GA analysis workform were not included in the DVA continuity schedule in the principal adjustment column for the following reasons:

* ..The subsequent adjustments in Note 5 of the 2017 GA analysis workform are due to timing and Veridian didn’t consider this as a principal adjustment.
* . Veridian found no reference in the filing guidelines that would direct the inclusion of these reconciling items in the principal adjustment column of the DVA continuity schedule.
	+ 1a) 2a) and 3a) Adjustments went through the GL 1589 in 2017 and were included in the Transactions Debit/Credit during 2017 column. Veridian misunderstood that adjustments of this type were to be recorded in the principal adjustment column.
	+ 2b) Adjustment went through the GL 1589 in 2018 and was not included in the 2017 continuity schedule balance for 1589.

# **Staff-6**

**Ref: GA Analysis Workform, Note 5**

In regards to GA related to Class A customers, please confirm that Veridian Connections has recorded an accrual at year-end to eliminate the timing difference between when the Class A GA is billed from the IESO and when that cost actually gets billed by the utility to its Class A customer.

1. If in the above, Veridian Connections confirms that they have made the necessary accrual at year-end, please confirm that as a result of that accrual there are no amounts related to Class A customers that are included in the 2017 ending balance of Account 1589.

Veridian Response:

Confirmed.

# **Staff-7**

If Veridian Connections made any changes to its IRM Rate Generator and GA Analysis Workform as a result of its responses to these questions, please file an updated IRM Rate Generator and GA Analysis Workform.

Veridian Response:

The adjustments identified for 1588 Power and 1589 GA related to 2017 unbilled differences have not been included in the continuity schedule for the current proceeding. These adjustments are not included in Veridian’s RRR 2.1.7 Trial Balance reporting for 2017.

Veridian has updated the IRM rate generator model to include the 2017 unbilled adjustment to the principal adjustments column of the DVA continuity schedule. The 2016 unbilled adjustments originally included in the Transactions Debit/Credit during 2017 column have been moved to the principal adjustment column. The inclusion of the 2017 unbilled adjustments to the DVA continuity schedule shows that the threshold for disposition of Group 1 accounts is now met.

The updated IRM rate generator model is included as attachment A. The GA analysis workform has been updated and included as attachment B.

# **Staff-8**

**Ref: Tab 2 (LRAMVA Threshold) of LRAMVA workform**

 **Application, p. 17**

Pre-amble

In Veridian Connections’ 2014 cost of service application (EB-2013-0174), Veridian Connections was approved an LRAMVA threshold of 31,633,297 kWh. In tab 2 of the LRAMVA workform, it is noted as the revised manual adjustment.

Questions

1. Please explain the inputs and approach used to calculate 6,838,758 kWh as the 2012 threshold value, noted in cell C60 of tab 2.
2. Please confirm whether the original threshold of 46,026,655 kWh represents the annualized equivalent of the “revised threshold” of 44,457,315 kWh noted in tab 2.
3. Please update tab 2 to include calculations of the rate class breakdown of 46,026,655 kWh as the LRAMVA threshold.
4. Given there is no regulatory precedent on approving a variant of the LRAMVA threshold modified to include a half years’ savings for programs in place for the first year, please discuss in more detail the benefits of using this calculated threshold value.

Answers

1. The 6,838,758 kWh is calculated from the results reported on the filed Chapter 2-I appendix workform, the weighting factors used there, and the revised manual adjustment on p. 38 of 54 of the settlement agreement. The total manual adjustment in the settlement agreement is 31,633,297. The manual adjustments for 2013 and 2014 are 18,809,279 and 9,404,639 respectively from the chapter 2-I appendix. The 2012 manual adjustment is thus (31,633,297-18,809,279-9,404,639=) 3,419,379. The manual adjustment was calculated using a weighting factor of 0.5 for 2012. Working backwards, the 2012 threshold is therefore (3,419,379 /0.5=) 6,838,758. The calculation is further described in the following table:



1. The threshold is revised solely to reflect the change made to the manual adjustment. Both the LRAMVA threshold and the manual adjustment are based on a consideration of anticipated (or actual) CDM results and persistence and are calculated in the work form for Chapter 2 Appendices on Tab I. In the EB-2013-0174 case, that work form was filed with the application on 2013-10-31 at [APPL\_Veridian\_Chapter2\_Appendices\_for 2014\_20131031\_xlsm\_20131031](http://www.rds.oeb.ca/HPECMWebDrawer/Record/415309/File/document). The original threshold is the sum of cells E31:E33 on that tab and totals 46,026,655 – the same as reported in cell F59 of the LRAMVA workform. That threshold includes 8,408,098 kWh for 2012 persistence, as shown on Cells E30 and C71 of Tab I of the Chapter 2 submission. That number in turn is multiplied by 0.5 (at C55 of 2-I) to get the manual adjustment of 4,204,049 (Cell C73, App 2-I). The settlement agreement (p.38 of p.54) notes that the manual adjustment was revised based on an update to 2012 values. The updated 2012 values are not explicitly reported in the evidence, but implicitly since the manual adjustment is 0.5 times the estimated results, then the estimated results must be 2 times the manual adjustment. Further since the adjustments were to 2012 values (not 2013 and 2014), the 2012 revised results and threshold can be calculated.
2. Tab 2 has been updated to illustrate what the distribution would have been with the original threshold. These values are not used in the calculation of LRAMVA results.
3. This is *not* a variant of the LRAMVA threshold modified to include a half years’ savings for programs in place for the first year. Rather, it is a correction to the LRAMVA threshold to be consistent with a correction made to the 2012 results. As mentioned the correction to the results is not presented in the COS evidence, but the implication of that correction on the manual adjustment is presented, and from that change in the manual adjustment value, the change in the 2012 results can be calculated.

# **Staff-9**

**Ref: Tab 5 (2015-2020) of LRAMVA workform**

Pre-amble

Actual savings are allocated across customer classes and are compared against forecast savings by customer class to determine lost revenue amounts.

Questions

1. Please discuss the appropriateness of the rate class percentage allocation of savings for the 2016 retrofit program, as the total allocation of savings across the customer classes exceed 100% (tab 5, cell BI 235).
2. Please discuss how the rate class allocation of savings were determined for C&I programs in 2015 and 2016.

Answers

1. In 2016 and 2017, IESO provided project specific data, including net first year energy savings and net peak demand reductions for each retrofit project. Veridian identified which rate class customers responsible for each project were within. In the case of GS<50, the sum of the first year energy savings for projects by customers in that rate class were compared to the total energy savings reported by IESO for the program, and the allocation was calculated. In the case of GS>50, the sum of the first year peak demand savings for projects by customers in that rate class were compared to the total peak demand savings reported by IESO for the program, and the allocation was calculated. That the total of the two does not exactly equal 100% is not surprising, as the ratio of kW/kWh varies from project to project.
2. The allocations in 2016 and 2017 were calculated as described above in answer Staff 9a. For 2015 results, IESO did not provide project specific net energy and demand results. The same process was followed, except that Veridian used gross energy and demand data from project databases: the best information available.

# **Staff-10**

**Ref: Tab 8 of LRAMVA workform**

Pre-amble

Three streetlighting project upgrades are included for recovery in the LRAMVA. This includes the Port Hope and Gravenhurst projects from 2014, whose persistence of savings is claimed in 2015 and 2016. In addition, the savings realized from the Pickering project in 2017 is claimed in 2017.

It is noted in tab 8 of the LRAMVA workform that the data is based on billed amounts from actual bills to customers.

Questions

1. Please confirm the number of streetlights that were confirmed for conversion, and whether IESO funding was used to incent higher efficiency bulbs that included LED and non-LED lights.
2. Please discuss the base case used for streetlight upgrades. In your response, indicate what, if any, efficiency standard of streetlights Veridian relied on when making more efficient upgrades.
3. Please explain how the monthly demand billed kW amounts were determined. For each project, please provide the detailed calculations in excel format to estimate monthly demand billed kW, including the number of monthly installations and replacements and the change in kW billed, pre- and post-installation, in order to determine the baseline kW and demand billed kW.
4. For each of the streetlighting projects, please confirm whether you have received reports from municipalities that confirm the number of lightbulbs replaced.
5. Please indicate if any of the streetlighting savings are from new, incremental streetlight installations. If there are any new, incremental, non-replacement streetlight installations, please indicate how Veridian determined the level of efficiency of the new streetlights.
6. For the Port Hope and Gravenhurst projects, please discuss the appropriateness of claiming persistence of streetlight savings at 100% for 12 months into 2015 and 2016.
7. For certain months for the Gravenhurst and Pickering projects, no CDM was claimed because CDM and natural growth could not be separated. Please discuss how this was determined.

Answers

1. The number of streetlights that were converted in each municipality is as follows:

Port Hope 1,533

Gravenhurst 794

Pickering 7,142

Veridian confirms that IESO funding was used to incent higher efficiency bulbs and/or ballasts and included LED and non-LED lights.

1. In the case of these municipal streetlight retrofits, the base case represented the measures that were removed. Veridian only provided incentives if the new measures were more efficient that the products being removed, and ensured that all retrofits followed the IESO program rules. Veridian took spot measurements on the base case and energy efficient case, performed pre and post-project QA/QC audits, each municipality signed off on an Advanced Evaluation & Incentive Report, and Final Evaluation & Incentive Report. Pre and Post-Measurement and Verification reports were provided by the municipalities.

1. Veridian’s streetlight billing determinants, including kWh and demand kW are based upon Veridian’s OEB approved streetlight load profile. The streetlight load profile monthly magnitude (demand kW) is based upon the sum of contributing luminaires demand kW which is provided monthly by Veridian’s Geographic Information System (“GIS”). Each streetlight is tracked separately within the GIS, and as changes are made to the each streetlight in the GIS, these changes are reflected in the monthly bill to the municipality. Both Port Hope and Gravenhurst submitted a final report of all conversions, which lead to a one-time persisting bill reduction. However, Pickering submitted bi-weekly reports of the changes to Veridian, so Veridian was able to update the GIS as the reports were received, leading to cumulative monthly billing reductions for the duration of the project.

Veridian has included an excel file (attachment C) showing how the monthly streetlighting bills for each municipality were calculated, and how they changed as a result of the retrofit savings being claimed.

1. Veridian confirms that it received reports from the municipalities that confirm the number of lightbulbs replaced. As previously mentioned, Pickering submitted bi-weekly reports to Veridian as their streetlights were retrofitted; Port Hope and Gravenhurst submitted a final report when the streetlight conversion was completed.
2. None of the streetlight savings claimed are from any new, incremental, non-replacement streetlight installations.
3. LED streetlights have an anticipated lifespan of 10-15 years. IESO reports indicate 100% persistence for streetlighting project energy savings for 10 years after the initial year (total 11 years). Thus the savings from the 2014 program in Port Hope are expected to persist at 100% from 2015 through 2017 (and beyond). In the case of Gravenhurst, billed amounts were adjusted in September 2016, so there are no savings claimed for 2015, and only 4 months of savings are claimed for 2016, but 12 months for 2017.
4. The premise of the question is incorrect. CDM savings *are* claimed but may be underestimated because of natural growth. The impact on bills of the streetlighting projects is calculated by comparing the bill in month n+1 to month n. For some months for those projects, bills were adjusted to account for natural growth *and* CDM. Natural growth increases the load to be billed for, CDM decreases the load to be billed for. So the bill in month n+1 where there was an adjustment would be:

$$B\_{n+1}=B\_{n}+A\_{ng}- A\_{CDM}$$

 Where: Bn+1 is the billed kW in month n+1

 Bn is the billed kW in month n (the previous month)

 Ang is the adjustment for natural growth, and

 ACDM is the adjustment for CDM

We were unable to distinguish between Ang and ACDM so assumed Ang was zero. This underestimates the amount of CDM by whatever Ang was.

# **Staff-11**

**Ref: LRAMVA workform**

Questions

1. If Veridian Connections made any changes to the LRAMVA work form as a result of its responses to these questions, please file an updated LRAMVA work form.
2. Please confirm any changes to the LRAMVA workform in response to these LRAMVA questions, in “Table A-2. Updates to LRAMVA Disposition (Tab 2)”.

Answers

1. As requested in Question in Staff 8c, we have included the estimated allocation of the original threshold calculation on Tab 2 of the workform, and have attached the updated workform. There are no changes to the calculation of the LRAMVA as a result of presenting this (unused) allocation. In double checking the threshold calculation, it was noted that a value from the settlement agreement for the manual adjustment for the Intermediate class had been improperly transcribed. This was corrected and does have an impact on the LRAMVA claim. A revised LRAMVA workform has been included as Attachment D.
2. The changes mentioned in the answer Staff-11a are referenced in the list of changes.