

**London Hydro Inc.
IRM Application (EB-2018-0051)
OEB Staff Questions**

Staff Question #1

Ref: IRM Model, Sheet 3, Cells BM25 and BN25 (Account 1580)

In London Hydro's previous application (EB-2017-0059), the OEB approved disposition of its Group 1 accounts as of December 31, 2017. The approved disposition for Account 1580 (sub account CBR class B) was a credit of \$133,414.

Please reconcile the amounts in the referenced cells above with the OEB approved amounts in EB-2017-0059. Please update the IRM Rate Generator Model as required.

London Hydro Response

The amount approved for disposition in the 2018 IRM proceeding consists of:

1580 Variance WMS – Sub-account CBR Class B Balance allocated to Billing Class Group	Principal Amount	Interest	Total Amount
Class B Customers - Note 1.	\$ (128,765.32)	\$ (3,369.41)	\$ (132,134.73)
Transitional Customers - Note 2.	\$ (1,246.89)	\$ (32.63)	\$ (1,279.52)
Total = Cells BM25 and BN25 in Cont. Sch.	\$ (130,012.21)	\$ (3,402.04)	\$ (133,414.25)

Ref.: Decision and Rate Order EB-2017-0059, dated March 22, 2018,
UPDATEDLondon_Hydro_2018 IRM Rate Generator Model_20180322.XLSB, Tab 6.2
CBR B

Note 1.: The Class B amount of 1580 Variance WMS – Sub-account CBR Class B Balance was not significant enough to produce rate riders, therefore, London Hydro transferred the entire OEB-approved CBR Class B amount into account 1595 for disposition at a later date according to the direction in the Decision and Rate Order, EB-2017-0059 and the Accounting Guidance, Capacity Based Recovery July 25, 2016.

Note 2. The amount allocated to Transitional Customers has been disposed and refunded to customers via direct settlement payments.

Cells BM25 and BN25 have been updated in the Continuity Schedule to reflect both the Class B portion and the Transitional Customers portion of the 1580 Variance WMS – Sub-account CBR amount to match the disposition amounts reflected in Table 6-2: Group 1 Deferral and Variance Account Balances on Page 8 of the 2018 IRM Decision and Rate Order. Please note that the Class B portion of \$132,134.73 has not been disposed to customers, since no rate riders were generated in the 2018 IRM Rate Model, and is being held in a sub-account of 1595 for future disposition, as directed.

Staff Question #2

**Ref: IRM Model, Sheet 3, Cells BE29 and BJ29 (Account 1589)
Decision and Order, EB-2016-0091**

In the referenced decision, the approved disposition for Account 1589 was a total credit of \$766,420 (principal) and \$45,593 (interest).

Please reconcile the amounts in the referenced cells above with the approved disposition.

London Hydro Response

Cells BE29 and BJ29 represent the approved disposition amounts in Account 1589 RSVA GA to Class B customers and to transitional (new Class A) customers, who contributed to the GA variance while they were Class B during the first six months of Year 2015.

References: Decision and Rate Order EB-2016-0091, dated March 23, 2017, Schedule A Settlement Proposal, Tab 1 of 1 Settlement Agreement, Pages 44-48, London Hydro_Settlement Proposal_2017 DVA Continuity Schedule_20170209.XLSM and London Hydro_Settlement Proposal_2017 DVA Class A B_20170209.XLSX.

1589 RSVA GA Balance allocated to Billing Class Group	Principal Amount	Interest	Total Amount
Class B Customers <i>Ref: London Hydro_Settlement Proposal_2017 DVA Continuity Schedule_20170209.XLSM</i>	\$ (766,420.13)	\$ (45,593.26)	\$ (812,013.39)
Transitional (New Class A) Customers <i>Ref: London Hydro_Settlement Proposal_2017 DVA Class A B_20170209.XLSX</i>	\$ 272,957.24	\$ 5,660.07	\$ 278,617.31
Total = Cells BE29 and BJ29 in Cont. Sch.	\$ (493,462.89)	\$ (39,933.19)	\$ (533,396.08)

Staff Question #3

Ref: 2019 IRM Rate Generator Model, Tab 3 Continuity Schedule, Projected Interest on December 31, 2017 Balances

Column BQ of the 2019 IRM Rate Generator Model has applied the OEB-prescribed interest rates in 2018 to the closing principal balances on December 31, 2017 adjusted for 2018 dispositions. However, the formulae in this column also appear to add four months of carrying charges from 2017 applied to the 2018 principal dispositions (column BM).

Specifically, the formula (in row 22) includes the following amounts:

$+ROUND(+BM22*1.5%*(31+28+31)/365+BM22*1.89%*30/365,2)$

- a) Please explain why London Hydro has included an amount of carrying charges applied to amounts in column BM, as column BO already has subtracted the 2018 dispositions from the principal balances on which projected carrying charges are to be calculated on.
- b) If London Hydro agrees that this aspect of the formula should be removed, please update column BQ, accordingly.

London Hydro Response

- a. In summary, the Continuity Schedule columns E – BP allow for entering actual transactions in Regulatory Accounts up to the end of Year 2017. Current year disposition columns BM and BN include amounts up to April 30, 2018. The four months of interest in disposition has not been offset with actual transactions in the Continuity Schedule. This is the interest that the formula in question represents.

Otherwise, the Total Claim amount would be the principal for disposition plus related carrying charges to the date of disposition less carrying charges for the previous disposition in the current year. This difference would not clear from the RSVAs until the next disposition, which may or may not occur in the following year.

The Continuity Schedule list the principal amounts accumulated over the years along with dispositions and related interest.

London Hydro validates the accuracy of the "total claim" proposed for disposition. This analysis is presented in the enclosed Excel file titled "Att G - Reconcile interest calculation on RSVAs in Cont Sch.xlsx". Explanations provided on the SUM Tab.

The principal amount has been audited by this time. The validation is done by completing a schedule only for the year when the principal accumulated, and adding carrying charges up to the day of the disposition. This is the Total Claim proposed for disposition.

On "Tab 1 - 2018 DISP" in columns A-L the Group 1 RSVA amounts (excluding 1551 SME Variance) approved for disposition in Year 2018 are calculated:

Principal accumulated through Year 2016	\$ (4,097,169.96)
Carrying Charges Year 2016 (12 mths)	\$ 153.12
Carrying Charges Year 2017 (12 mths)	\$ (49,199.77)
Carrying Charges Year 2018 (4 mths up to April 30)	\$ (20,205.25)
Total Claim Approved for Disposition	\$ (4,166,421.86)

Cell L10 shows that the amount approved for disposition equals with the validated amount.

This validation method has proved to be a reliable check to ensure the disposition calculations are accurate.

To illustrate why the carrying charges calculated in the Continuity Schedule as submitted, London Hydro included a copy of the 2019 IRM Continuity Schedule ("Tab2-Cont Sch for 2018DISP only") completed for only the 2016 principal and associated interest (\$4,166K credit as above) and its disposition in Year 2018.

The 2016 RSVA principal amounts were approved for disposition with carrying charges from Jan 1, 2016 to April 30, 2018. The Continuity Schedule has the principal amount entered in Year 2016 with interest, Year 2017 interest. There is no column to enter the interest for Jan 1 - April 30, 2018.

The disposition amount in Column BM represents the 2016 principal. The disposition amount in Column BN represents the related interest from Jan 1, 2016 to April 30, 2018.

The Closing Principal and Closing Interest values in Columns BO and BP, respectively, should be zero, since only the 2016 principal was included on this page that was approved for disposition with the associated interest. Therefore, the Total Claim amount should be zero, as well.

Principal accumulated through Year 2016	\$ (4,097,169.96)
Carrying Charges Year 2016 (12 mths)	\$ 153.12
Carrying Charges Year 2017 (12 mths)	\$ (49,199.77)
Carrying Charges Year 2018 (4 mths up to April 30) - no column is available to enter this value	
Total	\$ (4,146,216.61)
Total Claim Approved for Disposition	\$ (4,166,421.86)
Total Claim (should be zero)	\$ 20,205.25

The \$20,205.25 in Column BT Total Claim represents the carrying charges in Year 2018 on the 2016 principal balance. This interest value will be included in or deducted from the disposition proposed in the application, depending on whether the RSVA has a debit or credit balance.

In the 2019 IRM application, the G1 principal accumulated during 2017 would be proposed for disposition. The Continuity Schedule results in a \$932,081.20 Total Claim for the Group 1 RSVAs, excluding 1551 SME Variance, 1595 Residual balances, if the formula is constructed in column BQ to project interest on the Dec 31, 2017 balance adjusted for disposition during 2018 for the period of Jan 1, 2018 to Dec 31, 2018, as requested.

London Hydro validated the total claim value by performing a calculation for the 2017 accumulated principal only with carrying charges on Tab 3- 2019 DISP. This calculation results in \$952,286.47 total claim.

The \$20,205.25 difference between the two calculations is the 2018 carrying charges on the disposition in 2018. Refer to Tab 3 - 2019 DISP, cells A3 - L10, and the 2019 IRM Continuity Schedule.

Principal accumulated through Year 2017	\$	(966,332.52)
Carrying Charges Year 2017 (12 mths)	\$	38,956.51
Carrying Charges Year 2018 (12 mths)	\$	(18,016.40)
Carrying Charges Year 2019 (4 mths up to April 30)	\$	(6,894.06)
Total Claim (<i>Tab 3 - 2019 DISP, Cell H10</i>)	\$	(952,286.47)
Total Claim in 2019 IRM Continuity Schedule - Group 1 RSVA amounts (excluding 1551 SME Variance, 1595 Residual balances)	\$	(932,081.20)
Difference	\$	(20,205.27)

London Hydro entered the 2018 carrying charges on the disposition balance in Column BQ of the Continuity Schedule in its 2019 IRM application to ensure the correct value for interest was included in the Total Claim.

London Hydro discussed and illustrated the same issue in its 2017 COS application interrogatories – 9-Staff-58 b). The carrying charges were accurately calculated in the 2017 COS and the 2018 IRM applications.

The issue described in here occurs only when there was a disposition in the previous year.

London Hydro realizes that some differences will occur and require update in the year-to-date balances, and the Continuity Schedule is built to assist such updates. For example, the interest rate is assumed at the time of the rate application is prepared to be the latest Board prescribed interest rate. The actual Board prescribed interest rate might differ, therefore the actual carrying charge could slightly differ from what was included in the disposition. This is illustrated on "Tab 1 - 2018 DISP" in columns N-Y. Such insignificant amounts would automatically be updated in the Continuity Schedule in the following year when

the disposition year becomes a historical (audited) year and the actual transactions are entered.

- b. London Hydro confirms that by changing the formulas in column BQ would result in a value that excludes interest, equivalent with the 2018 carrying charge of the previous disposition, from the “Total Claim” amounts listed in column BT for each of those accounts that had a disposition during 2018.

No disposition of the RSVA principal values listed in the Continuity Schedule was proposed in the 2019 IRM application.

London Hydro updated the formulas, as requested in column BQ of the Continuity Schedule.

Staff Question #4

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

- a. Please discuss the nature of the project(s) undertaken, type of customers involved, and what project(s) the verified savings results and adjustments totaling monthly demand savings of 566 kW from the 2016 Process and systems upgrades initiatives (PSUI) project relate to.
 - i. If available, please provide the detailed program evaluation reports from the 2016 PSUI projects.
- b. Please discuss how 47% of the 2015 Energy Audit Initiative savings were determined to be attributable to customers in Co-Generation 1,000 - 4,999 kW class.
- c. Please discuss how 2.8% of the 2016 Energy Retrofit program savings were determined to be attributable to customers in Co-Generation 1,000 - 4,999 kW class.

London Hydro Response

- a. The Final Verified 2016 Annual Results Project List for London Hydro included one compressed air system upgrade project under the Process and System Upgrades Initiative (PSUI) with the participation of one cogeneration customer. This project is listed under Current year savings in the Savings Persistence Report.

The 2017 Final Verified Annual Project List for London Hydro included one air conditioning system upgrade project under the PSUI with the participation of one cogeneration customer with a 2016 completion date. This project is listed under the "2017 Verified 2016 Results Adjustments" in the Savings Persistence Report within the "2017 Final Verified Annual Program Results_London Hydro Inc_20180629.xlsx" file submitted with the 2019 IRM application.

Save on Energy Process & Systems Upgrades Program details:

Report	Persistence	Co. Name	Rate Class	Project Description	Project Completion Date	Project Entered By	1st yr Energy (kWh)	1st yr Peak Demand (kW)
Final Verified 2016 Annual Results_Project List_London Hydro Inc._20170630 - summed.xlsx	2016 Results Persistence - Current year savings	Co. A	COGEN	Compressed Air System Upgrade	2016/2/9	IESO	439,257.26	38.15
2017 Final Verified Annual_London Hydro Inc._Project List_20170629.xlsx	2017 Results Persistence - Prior Year Adjustment	Co. B	COGEN	Chillers / Air conditioning Upgrades	2016/12/31	IESO	1,433,063.11	527.68
							1,872,320.37	565.83

- b. The rate class allocation for each year is based on customer participation from each rate class in the specific CDM program. London Hydro was able to obtain more detailed information of the programs conducted in 2016 and reflected the proper allocation of savings based on that information.

The Energy Audit Initiative program had three participants in 2015. The first year Peak Demand kW Savings attributable to the customers participating in the individual projects were evaluated and allocated to their respective rate classes expressed in a percentage value.

Energy Audit Initiative Savings	GS>50	COGEN	TOTAL
Sum of 1st yr PeakDemand(kW)	18	16	34
Allocation to Rate Class	53%	47%	100%

- c. The rate class allocation for each year is based on customer participation from each rate class in the specific CDM program as described in b).

The Save on Energy Retrofit Program had numerous participants in 2016. The first year Peak Demand kW Savings attributable to the customers participating in the individual projects were evaluated and allocated to their respective rate classes expressed in a percentage value.

Save on Energy Retrofit Program Savings	GS<50	GS>50	COGEN	STRL	TOTAL
Sum of 1st yr PeakDemand(kW)	601	711	38	-	1,350
Allocation to Rate Class	44.6%	52.7%	2.8%	0.0%	100%

Staff Question #5

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

London Hydro Response

- a. London Hydro did not make any changes to the LRAMVA work form as a result of its responses to the LRAMVA questions.
- b. N/A