INTERROGATORY RESPONSE - VECC-69

3.0-VECC-69

EXHIBIT REFERENCE:

Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 10 and 26-27

Updated Exhibit 3, Tab 1, Schedule 1, page 5

Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh

IESO Final 2015, 2016 and 2017 CDM Reports

IESO 2018 Participation and Cost Report

SUBJECT AREA: CDM

a) Please provide a revised version of Table 4 (page 10) with the forecast CDM broken out according to HOL's rate classes and that shows the total cumulative CDM for each year.

b) What is the base year from which the cumulative savings set out in Table 4 are calculated (i.e., in what year are the first savings assumed to occur)?

c) The 2020-2025 CDM forecast on page 10 (Table 4) is titled "Cumulative CDM savings". Please provide the historical values (up to the year 2019) for each customer class (per the response to part (a)) starting from the base year per the response to part (b).

d) Please provide a schedule/excel file for each customer class and for HOL in total that sets out the following:

Impact of Historical and Forecast CDM					
Calendar Year/ CDM Program Year	Base Year	Columns for Each Subsequent Year up to 2024			2025
Base Year CDM Impact					
Actual CDM impacts for each year to 2019 – one row per year					
Forecast 2020 CDM Impacts					
Forecast CDM impacts for each year to 2025 – one row per year					
Total (Matching Response to parts a) & c)					

If the totals do not reconcile with the responses to parts a) & c), please explain why.

e) Please explain and provide a working excel file that sets out the derivation of the monthly residential CDM values per customer used in Attachment 3-1-1(D) – Part 2 (Res-Data Tab) based on the response to parts (a) – (c).

f) Please provide (if not already on the record) the IESO reports used to determine the annual CDM savings by customer class set out in the response to part (d) for the years up to (and including) 2019.

g) Please explain how the values for each year (per part (d)) were derived from the IESO Reports for the program years up to and including 2019.

h) Please reconcile the annual cumulative savings provided in the response to part (d) with the CDM savings for GS50 as set out in Attachment 3-1-1(D) – Part 2 (GS50 - Data Tab).

i) Please reconcile the annual cumulative savings provided in the response to part (d) with the CDM savings for GS1000 as set out in Attachment 3-1-1(D) – Part 2 (GS1000 - Data Tab).

RESPONSE:

a) Table A provides a revised version of Table 4 from UPDATED Attachment 3-1-1(C): Hydro Ottawa Long-Term Electric Energy and Demand Forecast, with the forecast CDM broken out according to Hydro Ottawa's rate classes. The table presents the total cumulative CDM for each year.

Table A – CDM Forecast - Cumulative CDM Saving by Rate Class (MWh)

Year	Res	GS50	GS1000I	GS1000NI	GS1500	GS5000	Lrg Use	MU	StLight
2020	11,137	19,564	22,106	22,374	7,795	46,104	30,055	105	4,945
2021	14,747	23,948	26,312	26,827	9,316	51,093	30,911	122	5,756
2022	15,239	28,333	30,423	31,377	10,835	56,082	31,766	140	6,566
2023	15,731	32,717	34,440	36,027	12,349	61,070	32,622	157	7,377
2024	16,223	37,102	38,365	40,780	13,852	66,059	33,478	174	8,188
2025	16,715	41,486	42,200	45,636	15,340	71,048	34,333	191	8,999

b) The savings in Table 4 are cumulative starting in 2020.

c) Historical savings were not provided for GS < 5000, Large User, unmetered ("MU"), and Street Lighting classes. These rate class models did not contain CDM model variables. Other than these exclusions, the requested historical values are provided in Table B.

Table B – Cumulative Historical CDM (MWh)

Year	Res	GS50	GS1000I	GS1000NI	GS1500	GS5000	Lrg Use	MU	StLight
2011	9,192	3,980	11,934	8,072	2,920				
2012	15,123	7,345	27,629	19,174	6,979				
2013	20,616	7,385	47,039	33,534	12,260				
2014	34,044	16,012	67,531	49,837	18,105				
2015	53,784	18,991	95,230	71,799	26,356				
2016	88,655	18,991	120,755	93,396	34,269				
2017	158,441	19,433	145,260	115,081	42,151				
2018	176,154	26,677	157,673	126,569	46,280				
2019	177,626	34,829	172,112	140,543	51,232				
2020	188,763	54,393	194,218	162,917	59,028	46,104	30,055	105	4,945
2021	192,373	58,778	198,425	167,370	60,549	51,093	30,911	122	5,756
2022	192,865	63,162	202,535	171,920	62,068	56,082	31,766	140	6,566
2023	193,357	67,547	206,552	176,571	63,581	61,070	32,622	157	7,377
2024	193,849	71,931	210,477	181,323	65,084	66,059	33,478	174	8,188
2025	194,341	76,316	214,313	186,179	66,572	71,048	34,333	191	8,999

d) Please refer to excel Attachment VECC-69(A): Impact of Historical and Forecast CDM which provides the impact of historical and forecast CDM in the requested format.

e) Please refer to excel Attachment VECC-69(B): CDM Residential which provides the derivation of the monthly residential CDM values per customer.

f) For copies of the 2014-2017 IESO Final Verified CDM Reports, please refer to Attachments 4-5-1(A) through (D), as originally submitted on February 10, 2020. For the 2018 Participation and Cost Report, please refer to Attachment 4-5-1(E), as submitted in conjunction with Hydro Ottawa's updates to this Application on May 5, 2020. For the 2011-2014 Persistence Savings Report, please refer to excel Attachment OEB-175(A). Hydro Ottawa's understanding is that the IESO does not intend to provide a 2019 report.

Please refer to the response to interrogatory OEB-134 for more details regarding 2019 CDM activity.

g) For an explanation as to how the values for each year (per part (d)) were derived from the IESO Reports for the program years up to and including 2019, please refer to excel Attachment VECC-69(A): Impact of Historical and Forecast CDM and excel Attachment VECC-69(B): CDM Residential.

h) The CDM savings for GS < 50, as set out in Attachment 3-1-1(D) – Load Forecast Data - Part 2 (GS50 - Data Tab) are based on the cumulative annual savings, beginning in 2011. The annualized savings are then transformed into a monthly series. Annualized savings represent what savings would occur if all measures for that year were installed in the beginning of the year; it is not the actual sum of the monthly CDM savings.

i) The CDM savings for GS < 1000, as set out in Attachment 3-1-1(D) – Load Forecast Data - Part 2 (GS1000 - Data Tab) are based on the cumulative annual savings, beginning in 2011. The annualized savings are then transformed into a monthly series. Annualized savings represent what savings would occur if all measures for that year were installed in the beginning of the year; it is not the actual sum of the monthly CDM savings.