MILTON HYDRO DISTRIBUTION INC.

EXHIBIT 3

OPERATING REVENUE

1 **EXHIBIT 3 – OPERATING REVENUE**

2

3 ## Table of Contents

8   ## LIST OF ATTACHMENTS

1   **3.1.   Load and Revenue Forecast Overview**

2

3   This Exhibit provides the details of Milton Hydro Distribution Inc.'s ("Milton Hydro") operating

4   revenue for 2016 OEB Approved, 2017 Actual, 2018 Actual, 2019 Actual, 2020 Actual, 2021

5   Actual, the 2022 Bridge Year and the 2023 Test Year. This Exhibit also provides a detailed

6   variance analysis by rate classification of the operating revenue components. Distribution

7   revenue excludes revenue from commodity sales.

8

9   Milton Hydro is proposing a total Service Revenue Requirement of $26,972,710 for the 2023

10   Test Year. This amount includes a Base Revenue Requirement of $24,771,346 plus revenue

11   offsets of $2,201,364 to be recovered through Other Revenue.

12

13   Other Revenue include Late Payment charges, Specific Service charges, Rent from Electric

14   Property, Miscellaneous Service revenues, Standard Supply Service ("SSS") Administrative

15   charges and Interest. A summary of these operating revenues together with a materiality

16   analysis of variances is presented in Table 3-17.

17

18   The following Table 3-1 summarizes Milton Hydro's total operating revenue. Revenue for each

19   of the actual years is from Milton Hydro's audited Financial Statements which reconcile to the

20   annual filings with the OEB. The 2023 Test Year distribution revenue is provided on the basis of

21   both existing and proposed distribution rates. Revenue for the General Service >50 kW, the

22   General Service 50 – 999 kW, General Service 1000 – 4999 and Large User customer classes

23   are net of transformer allowance credits to eligible customers within these customer classes.

Table 3-1 Summary of Operating Revenue

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2

Description	2016 OEB Approved	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Bridge Year Existing Rates	2023 Test Year Proposed Rates
Distribution Revenues										
Residential	$10,962,581	$10,817,313	$11,053,396	$11,827,463	$12,341,528	$12,778,343	$13,031,628	$14,066,040	$13,637,656	$17,438,099
GS 50 kW	$2,107,774	$2,045,993	$2,020,057	$2,079,617	$2,077,545	$2,042,490	$2,162,445	$2,312,148	$2,240,937	$2,867,163
GS >50 to 999 kW	$1,896,274	$1,664,418	$2,038,882	$2,110,995	$2,130,941	$2,119,117	$2,163,286	$2,218,292	$2,190,283	$2,807,879
GS >1000 to 4999 kW	$477,716	$689,705	$536,218	$589,401	$605,906	$600,857	$567,995	$510,521	$609,960	$619,279
Large Use	$468,598	$626,197	$422,444	$493,050	$518,604	$516,826	$526,971	$522,350	$506,404	$633,637
Sentinel Lights	$20,653	$17,280	$25,289	$25,960	$32,185	$31,082	$31,025	$32,128	$31,152	$36,528
Street Lighting	$337,478	$290,658	$335,823	$332,168	$302,102	$268,321	$248,133	$259,036	$251,190	$315,727
Unmetered and Scattered	$35,003	$38,934	$39,350	$39,930	$36,571	$40,323	$41,580	$42,654	$41,312	$52,561
Total Distribution Revenue	**$16,306,077**	**$16,190,498**	**$16,471,459**	**$17,498,584**	**$18,045,382**	**$18,397,359**	**$18,773,063**	**$19,963,169**	**$19,508,894**	**$24,770,873**
Other Revenue										
Specific Service Charges	$22,399	$625,491	$494,734	$543,266	$390,345	$301,466	$329,937	$314,675	$321,846	$321,846
Late Payment Charges	$177,995	$246,978	$287,540	$296,551	$304,211	$333,754	$375,100	$220,869	$226,280	$226,280
Other Operating Revenues	$1,630,024	$490,875	$681,517	$681,098	$749,686	$853,502	$818,044	$966,937	$1,119,716	$1,119,716
Other Income	$100,417	$650,133	$444,555	$1,381,136	$899,831	$360,455	$687,233	$611,247	$533,522	$533,522
Total Other Revenue	**$1,930,835**	**$2,013,477**	**$1,908,346**	**$2,902,051**	**$2,344,073**	**$1,849,177**	**$2,210,314**	**$2,113,728**	**$2,201,364**	**$2,201,364**
Total Operating Revenue	**$18,236,912**	**$18,203,975**	**$18,379,805**	**$20,400,635**	**$20,389,455**	**$20,246,536**	**$20,983,377**	**$22,076,897**	**$21,710,258**	**$26,972,237**

1   **3.2.   Summary of Load and Customer/Connection Forecast**
2
3   The purpose of this evidence is to present the process used by Milton Hydro to prepare the
4   weather normalized load and customer/connection forecast used to design the proposed 2023
5   Test Year distribution rates.
6
7   In summary, as a starting point Milton Hydro has used the same regression analysis
8   methodology approved by the Ontario Energy Board (the "OEB") and accepted by intervenors in
9   Milton Hydro's 2011 and 2016 COS Applications (EB-2010-0137 and EB-2015-0089,
10   respectively). Milton Hydro has updated the analysis for actual power consumed by each
11   customer class to December 2021.
12
13   The overall process of the load forecast is to conduct a regression analysis on historical
14   electricity consumption for the individual customer classes to produce an equation that will
15   predict purchases. As Milton Hydro bills 100% of its customers monthly, the monthly
16   consumption data for the amount of kilowatt hours consumed by customers in the respective
17   class is known. With a regression analysis, the customer class consumption can be related to
18   other monthly explanatory variables such as heating degree days and cooling degree days
19   which occur in the same month. The results of the regression analysis produces an equation
20   that predicts the class consumption based on the explanatory variables. This prediction model is
21   then used as the basis to forecast the total level of weather normalized class consumption for
22   the 2022 Bridge Year and the 2023 Test Year. A detailed explanation of the process is provided
23   later in this evidence.
24
25   Milton Hydro's load forecast methodology used in its 2011 and 2016 COS applications was
26   tested by intervenors with different variables. In each case it was determined that the variables
27   used by Milton Hydro resulted in the most accurate load forecast and was agreed to by all
28   intervenors as part of the Settlement Agreements. As described later in this exhibit, the variables
29   have been revised to consider historic CDM, a wider range of weather variables, and the impact
30   of the COIVID-19 pandemic.
31
32   Milton Hydro has considered actual heating degree days ("HDD") and cooling degree days
33   ("CDD") in the load forecast up to December 2021, calculated for a range of base degree days
34   from 8°C to 22°C rather than the default base temperature of 18°C. The variables used are: the
35   ten (10) year average for heating and cooling degree days for the period January 2012 to
36   December 2021; the number of days in the month; spring, fall, and spring/fall flags; a time trend,

1   full-time equivalent ("FTE") statistics, the number of Milton Hydro customers, and the number of

2   peak days (non-holiday weekdays). Additionally, a series of COVID variables were considered to

3   account for the impacts of the ongoing COVID-19 pandemic on class consumption.

4

5   Table 3-2 provides a summary of the actual and the weather normalized load and customer/

6   connection forecast results from the regression analysis.

1
2
3

Table 3-2 Summary of Load and Customer/Connection Forecast

Description	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year Weather Normal	2023 Test Year Weather Normal
Billed kWh	873,235,928	859,270,211	909,512,509	907,143,690	907,891,653	936,433,541	892,702,087	903,810,994
By Class								
Residential								
Customers	33,533	34,343	35,796	37,001	37,706	38,491	39,229	40,088
kWh	310,749,016	294,253,406	323,623,192	316,413,176	353,805,931	360,408,160	354,121,184	353,525,758
General Service < 50 kW								
Customers	2,603	2,646	2,686	2,692	2,725	2,876	2,943	2,990
kWh	88,749,928	82,899,472	86,093,745	83,808,651	79,694,765	85,479,170	85,722,746	87,960,137
General Service 50 to 999kW								
Customers	298	319	330	342	353	345	333	344
kWh	204,715,590	213,633,992	221,806,793	220,154,820	209,733,280	214,209,552	211,868,876	221,296,244
kW	559,204	577,938	598,252	592,126	567,109	580,242	569,878	595,236
General Service < 1000 to 4999 kW								
Customers	14	15	14	14	15	14	12	12
kWh	119,969,236	121,918,932	130,413,204	134,423,431	128,841,062	132,400,892	103,617,411	103,617,411
kW	271,131	279,303	289,804	295,909	278,402	266,215	225,594	225,594
Large User								
Customers	3	3	3	3	3	3	3	3
kWh	140,016,226	137,562,122	138,505,562	144,434,637	129,179,341	137,730,888	131,131,300	131,131,300
kW	259,410	263,695	268,937	282,022	268,251	279,213	260,034	260,034
Street lights								
Customers	3,165	3,231	3,262	3,279	3,218	2,892	2,905	2,919
kWh	7,791,989	7,758,775	7,837,155	6,707,353	5,438,441	5,029,763	5,051,906	5,077,522
kW	21,693	21,901	21,867	18,723	15,143	14,019	14,108	14,179
Sentinel Lights								
Customers	247	244	241	238	236	237	234	231
kWh	143,845	142,198	140,551	138,905	137,567	138,218	136,514	134,831
kW	410	405	399	393	387	384	383	378
Unmetered Loads								
Customers	222	216	219	217	216	216	220	223
kWh	1,100,097	1,101,316	1,092,306	1,062,718	1,061,267	1,036,897	1,052,149	1,067,791
Total of Above								
Customers / Connections	40,084	41,017	42,551	43,786	44,470	45,074	45,878	46,810
kWh	873,235,928	859,270,211	909,512,509	907,143,690	907,891,653	936,433,541	892,702,087	903,810,994
kW	1,111,848	1,143,241	1,179,259	1,189,173	1,129,292	1,140,073	1,069,996	1,095,421
Total from Model								
Customers / Connections	40,084	41,017	42,551	43,786	44,470	45,074	45,878	46,810
kWh	873,235,928	859,270,211	909,512,509	907,143,690	907,891,653	936,433,541	892,702,087	903,810,994
kW	1,111,848	1,143,241	1,179,259	1,189,173	1,129,292	1,140,073	1,069,996	1,095,421
Average metered customers	36,450	37,327	38,829	40,052	40,801	41,729	42,520	43,436
Average metered customers / connections	40,084	41,017	42,551	43,786	44,470	45,074	45,878	46,810

1 In the above Table 3-2, 2016 to 2021 kWh and kW are actual data based on customer class

2 consumption. Customer counts and connections are annual average values and street lights,

3 sentinel lights and unmetered loads are measured as connections.

4
5 **3.3. Multivariate Regression Model**

6 **3.3.1. Regression Forecast Methodology**

7 Milton Hydro has determined that the Residential, General Service < 50 kW, and General

8 Service > 50 kW customer classes are weather sensitive therefore Milton Hydro has run

9 independent regression analysis for each customer class.

10
11 The weather normalized load forecast regressions use actual customer class kWh billed by

12 month, plus persisting CDM, as the dependent variable in the regression models. Persisting

13 CDM as measured by the IESO is added back to rate class consumption to simulate class

14 consumption had there been no CDM program delivery. This is labeled as "No CDM" throughout

15 the Load Forecast model. The effect is to remove the impact of CDM from any explanatory

16 variables, which may capture a trend, and focus on the external factors. A weather normalized

17 forecast is produced first based on no CDM delivery, and then persisting CDM savings of

18 historic programs are subtracted from the "No CDM" forecast to determine a weather normalized

19 forecast including the impact of CDM.

20
21 A range of weather variables were considered for each regression to determine which average

22 monthly temperatures cause a class to increase heating or cooling loads. The default base

23 value of 18°C implies that a class increases air cooling consumption at average daily

24 temperatures above 18°C and increases heating consumption as average daily temperatures

25 move below 18°C. Using a wider range of weather variables improved the statistical results,

26 such as the t-ratios for each weather variable and the overall R-squared.

27
28 Milton Hydro's customer count forecasts are generally calculated using the geometric mean of

29 customer growth, with the exception of the Residential class. Customer count growth in the

30 Residential class is based on the Growth Projection Analysis study filed as part of the

31 Distribution System Plan ("DSP"). In cases in which the year-end 2021 customer count is

32 materially different from the 2021 monthly average customer count, the geometric mean growth

33 rate is applied to the December 2021 customer count.

1 Milton Hydro does not expect any growth in the number of customers or connections for the
2 General Service 1000 – 4999 kW and Large Users customer classes and therefore Milton Hydro
3 has held the number of customers/connections constant for the purposes of this load forecast.

5 For those rate classes that use kW for the distribution volumetric billing determinant, a kW/kWh
6 ratio is applied to the class energy forecast based on the historical relationship between kW and
7 kWh.

3.3.2. Load Forecast

11 As discussed above, Milton Hydro used the following variables in the regression model: the ten
12 (10) year average for heating and cooling degree days for the period January 2012 to December
13 2021 as actual heating and cooling days use up to an including December 2021; the number of
14 days in the month; spring, fall, and combined spring/fall flags; a time trend; full-time equivalent
15 ("FTE") statistics; and the number of Milton Hydro customers for calculating the forecast for the
16 Residential, General Service <50 kW, and General Service 50 – 999 kW customer classes. An
17 explanation of the variables is provided below.

19 Milton Hydro has relied on monthly data from to 2012 to 2021 for each customer class in this
20 regression model providing 120 monthly data points for each weather sensitive customer class.

3.3.3. Variables

24 **The Heating and Cooling Degree Days** ("HDD" & "CDD") are derived from the average daily
25 temperatures provided by the Government of Canada's Climate Daily Data Reports for each
26 month as read at the Toronto International Airport. The HDD for a given day are the number of
27 degree Celsius that the mean temperature is below a range of base temperatures. The CDD for
28 a given day are the number of degrees Celsius that the mean temperature is above a range of
29 base temperatures. Milton Hydro has derived two forecasts, one for ten years average HDD &
30 CDD from January 2012 to December 2021; and one for the twenty years trend HDD & CDD
31 from January 2002 to December 2021 as required in the Filing Guidelines. A comparison of the
32 forecast results are set out in Table 3-8 below.

34 The number of days in the month are based on the calendar days including leap years and the
35 number of days in a month impacts the consumption for a particular month, the more days in a
36 month the potential for more actual kWh consumption and vice versa.

1   **The spring flag, fall flag, and combined spring/fall flag** is used to separate the seasons with

2   a "1" representing the identified season and "0" in all other months. The spring, fall, and spring/

3   fall flags are used to differentiate the actual consumption over the season change.

4

5   **The number of peak days** was considered for general service and large use classes. Peak

6   days are determined from the calendar and exclude weekends and statutory holidays.

7

8   A range of **economic variables** provided by Statistics Canada were considered. These

9   variables include Ontario GDP, Ontario FTEs, Ontario FTEs (seasonally adjusted), Toronto

10 FTEs, Toronto FTEs (seasonally adjusted), Hamilton FTEs, and Hamilton FTEs (seasonally

11 adjusted).

12

13 A range of **COVID variables** were considered to account for the impacts of the ongoing COVID-

14 19 pandemic. The extent to which to consumption since March 2020 differed from typical

15 consumption was found to be related to the weather variables in those months. A set of

16 COVID/weather interaction variables were considered to capture the incremental consumption

17 caused by people working from home and generally staying at home due to lockdowns. These

18 variables, **"HDD COVID"** and **"CDD COVID"** are equal to the relevant HDD and CDD variables

19 since March 2020. The coefficients reflect incremental heating and cooling load consumed in

20 2020 and 2021. These variables continue to December 2022 but are reduced to 75% of HDD

21 and CDD in all months in 2023. A **COVID flag** variable equal, to 1 from March 2020 to

22 December 2021, was tested found to be statistically significant for the General Service < 50 kW

23 and General Service > 50 kW classes.

24

25 ### 3.3.4.   Approach to Kilowatt Demand Forecast

26

27 Milton Hydro has five customer classes that are billed on kW demand for variable distribution

28 charges. These customer classes are the General Service 50 – 999 kW, General Service 1000

29 – 4999 kW, Large Users, Street Lights and Sentinel Lights. The kW forecast for these customer

30 classes is based on the conversion of the customer class forecast for kWh consumption to kW

31 demand. Milton Hydro has used the historical ratio of kW demand to kWh consumption and

32 applied the average of the ratios to the forecasted customer class kWh consumption data for the

33 2022 Bridge Year and the 2023 Test Year to forecast the respective kW demand. The ratios

34 applicable by class have changed materially over time so averages of different time frames were

35 used for different classes. The General Service 50 to 999 kW forecast, Streetlight forecast, and

1 Sentinel forecast are based on the 10-year average ratio from 2012 to 2021. The ratios applied

2 for General Service 1,000 to 4,999 kW and Large User classes is a 5-year average.

3
4 **3.4.   Customer/Connection Forecast**

5
6 Table 3-3 provides monthly-average customer/connection counts for each year from 2012 to

7 2021.

8
9 **Table 3-3 Historic Customer/Connection Count**
10
11

Year	Residential	GS < 50 kW	GS 50 to 999 kW	GS 1000 to 4999 kW	Large User	Streetlights	Sentinel Lights	USL
2012	28,838	2,402	271	12	2	2,946	265	190
2013	30,731	2,458	272	12	3	3,019	261	192
2014	31,707	2,510	280	12	3	3,072	254	191
2015	32,718	2,552	291	13	3	3,128	249	207
2016	33,533	2,603	298	14	3	3,165	247	222
2017	34,343	2,646	319	15	3	3,231	244	216
2018	35,796	2,686	330	14	3	3,262	241	219
2019	37,001	2,692	342	14	3	3,279	238	217
2020	37,706	2,725	353	15	3	3,218	236	216
2021	38,491	2,876	345	14	3	2,892	237	216

12
13 Though customer counts are general forecast using geometric mean ("geomean") growth rates,

14 the exact methodology differs by class. The Residential class is the only exception, which relies

15 on the Growth Projection Analysis study filed as part of the DSP. Following many years of high

16 Residential customer growth, customer growth has been lower than 5% each year since 2014.

17 Milton Hydro's Residential customer growth forecast is based on Table 4 of the GSAI Projected

18 Growth Analysis Study. This Study is Appendix G to the DSP which is filed as Attachment 2-2 of

19 Exhibit 2. The projection is primarily based on Glen Schnarr & Associates Inc.'s ("GSAI") review

20 of development applications and employment growth in Milton. GSAI also considered approvals

21 of new Secondary Plan areas, reviewed Halton Region forecasts, and conducted interviews with

22 developers and Town of Milton planning staff. Based on its analysis, GSAI forecasts 750 new

23 housing units in 2022 and 950 new housing units in 2023 within the Town of Milton.

24
25 Due to the COVID-19 pandemic, many General Service customers reduced demands resulting

26 in reclassifications in August and September 2021. Since growth rates in 2021 reflect these

1   reclassifications rather than ongoing trends, a 2012-2020 geometric mean growth rate is applied

2   to December 2021 customer counts (rather than 2021 monthly average counts) for the GS<50

3   kW and GS 50 to 999 kW rate classes. The GS 1,000 to 4,999 kW class customer count

4   declined from 15 in January 2021 to 12 in December 2021. The average growth rate for the

5   class is 2.5%, which does not impact the number of customers after rounding, so the customer

6   forecast for 2022 and 2023 is held constant at 12. The Large Use class has had 3 customers

7   since 2013 and this is expected to continue through the test year.

8

9   In 2021 many streetlighting fixtures were moved behind-the-meter. This caused a 10.1%

10 reduction in Streetlight connection counts. This shift to behind-the-meter is not forecast to

11 continue in 2023 and beyond so 2021 is excluded from the geometric mean growth rate applied

12 to the Streetlight class. Sentinel Lights and Unmetered Scattered Load customer forecasts are

13 based on the the 10-year 2012-2021 geometric mean growth rate applied to monthly average

14 2021 connection counts.

15

16 **Table 3-4 Connection Count Forecast**

17
18

Year	Residential	GS < 50 kW	GS 50 to 999 kW	GS 1000 to 4999 kW	Large User	Streetlights	Sentinel Lights	USL
Geomean 2012 to 2021	103.3%	102.0%	102.7%	101.7%	104.6%	99.8%	98.8%	101.5%
Basis for Forecast	Growth Study	2012-2020 Geomean from Dec 2021	2012-2020 Geomean from Dec 2021	Constant from Dec 2021	Constant	2012-2020 Geomean from Dec 2021	2012-2021 Geomean	2012-2021 Geomean
Forecast								
2022	39,229	2,943	333	12	3	2,905	234	220
2023	40,088	2,990	344	12	3	2,919	231	223
Forecast Growth Rates								
2021 to 2022	101.9%	102.3%	96.6%	86.2%	100.0%	100.4%	98.8%	101.5%
2022 to 2023	102.2%	101.6%	103.3%	100.0%	100.0%	101.1%	98.8%	101.5%

19

20 Forecast connection counts are monthly-average figures. Please see calculations made in tab

21 'Rate Class Customer Model' of the load forecast model.

22
23 **3.5.   CDM Adjustment**

24

25 On December 20, 2021, the OEB issued a report *Conservation and Demand Management*

26 *Guidelines for Electricity Distributors* which provided updated guidance on the role of CDM for

27 rate-regulated LDCs. Milton Hydro has reviewed these guidelines as it derived a manual

28 adjustment to the load forecast. This CDM adjustment has been made to reflect the impact of

29 CDM activities that are expected to be implemented through the 2023-2027 rate period. Milton

1   Hydro has forecasted average CDM activities from 2023 to 2027 within its service territory

2   based on its share of customers within the province, the IESO's 2021-2024 Conservation and

3   Demand Management Framework, and 2019 Conservation Achievable Potential Study.

4

5   The IESO's 2021-2024 CDM Framework and other IESO materials, such as the 2019

6   Conservation Achievable Potential Study, indicate that conservation activities will continue to be

7   implemented following Milton Hydro's 2023 Test Year. These programs will put downward

8   pressure on its billing determinants for the General Service < 50 kW, General Service 50-999

9   kW, General Service 1,000-4,999 kW, and Large Use classes. In absence of a lost revenue

10   adjustment mechanism, such as the LRAMVA workform, it is appropriate to consider CDM

11   impacts throughout the 5-year rate period in its 2023 COS load forecast.

12

13   Average cumulative CDM savings from programs implemented in 2021 to 2024 persisting to

14   each year from 2023 to 2027 are calculated for each 2021-2024 CDM Framework program.

15   Annualized cumulative savings are half of savings in current year, plus cumulative savings from

16   previous years. Savings for programs implemented each year from 2025 to 2027 are estimated

17   based on CDM growth rates used in the IESO and OEB joint 2019 Conservation Achievable

18   Potential Study applied to forecast 2024 savings in the 2021-2024 CDM Framework.

19

20   Average provincial cumulative CDM savings in 2023 to 2027 is then attributed to rate classes

21   based on Milton Hydro's historic allocation of the 2021-2024 CDM Framework programs and

22   similar programs, and the judgement of Milton Hydro's consultants IndEco and Elenchus. The

23   share of each GS<50 kW, GS 50-999 kW, GS>1,000 kW, and Large Use rate class's customers

24   within Milton Hydro's service territory for each program is then allocated to Milton Hydro. The

25   Residential class share of Energy Affordability Program is based on the share of Ontario

26   households below the after-tax Low Income Measure (LIM-AT) within Milton, as measured by

27   Statistics Canada.

1 **Table 3-5 Allocation of Total 2021-2024 Framework Programs**
2
3

2021-2024 CDM Framework Program	Province GWh	Residential	GS<50	GS 50-999	GS>=1000	Large
Retrofit	1,258.96		20%	40%	30%	10%
Small Business	107.73		100%			
Energy Performance Program	130.66			70%	20%	10%
Energy Management	364.35			70%	20%	10%
Customer Solutions	850.02		20%	40%	30%	10%
Local Initiatives	268.96					
Energy Affordability Program	237.30	100%				
First Nations Program	36.65					

4

Milton Hydro Share %		1%	1%	1%	1%	2%

5

6 Milton Hydro is not aware of any Local Initiative programs in its service territory so this program
7 has not been allocated to rate classes. Table 3-6 below provides a summary of average
8 cumulative 2023-2027 savings attributed to each class by program, and the sum of program
9 savings which represents the CDM adjustment. Detailed calculations of the CDM adjustment are
10 made in the 'CDM Forecast' tab of the Load Forecast filed as part of this application.

11
12 **Table 3-6 CDM Adjustment**
13
14

2021-2024 CDM Framework Program	Residential	GS<50	GS 50-999	GS>=1000	Large
Retrofit		1,569,795	3,485,196	2,613,897	3,070,627
Small Business		671,646			
Energy Performance Program			632,992	180,855	318,684
Energy Management			1,765,133	504,324	888,667
Customer Solutions		1,059,897	2,353,141	1,764,856	2,073,231
Local Initiatives					
Energy Affordability Program	1,186,507				
First Nations Program					

15

CDM Adjustment	1,186,507	3,301,338	8,236,461	5,063,931	6,351,210

1   **3.6.   Analysis Results**

2

3   As noted in Table 3-7 there is very little difference between the 2022 Bridge Year and 2023 Test

4   Year forecasts using a ten year HDD and CDD average and a twenty year HDD and CDD trend.

5   Remaining consistent with its 2011 and 2016 forecasts, Milton Hydro has performed the

6   regression analysis for its 2021 Bridge Year and 2022 Test Year based on the average of ten

7   years of HDD and CDD.

8

9   **Table 3-7 HDD & CDD – 10 Year and 20 Year Forecasts**

10
11

Customer Class		2022 Bridge Year		2023 Test Year	
		10 Year HDD & CDD	20 Year HDD & CDD	10 Year HDD & CDD	20 Year HDD & CDD
Residential	kWh	354,121,184	355,191,394	353,525,758	354,725,354
General Service < 50 kW	kWh	85,722,746	85,691,079	87,960,137	87,933,821
General Service > 50 kW	kWh	211,868,876	211,834,809	221,296,244	221,271,043

12

13   The following Table 3-8 provides the HDD and CDD data with a base of 18°C. The full set of

14   HDD and CDD data for base degrees of 8°C to 22°C is provided in the 'Weather' tab of the Load

15   Forecast Model. The HDD and CDD are derived from the Government of Canada's Climate

16   Daily Data Reports for each month as read at the Toronto International Airport. This average

17   was developed by Milton Hydro from the climate data.

1 **Table 3-8 HDD & CDD Ten Year Average**
2
3

HDD	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10 Year Avg
Jan	775.3	611.1	624.5	825.9	792.4	670.4	608.9	732.3	764.5	605.0	640.0	695.5
Feb	654.2	531.7	631.5	737.1	856.8	588.4	510.4	555.0	621.7	611.8	653.7	632.0
Mar	572.8	349.4	554.8	690.6	615.5	476.1	574.0	554.0	593.9	458.7	460.7	536.4
Apr	332.3	321.7	358.6	356.9	313.7	394.8	257.5	437.2	346.8	362.3	302.4	344.0
May	134.1	80.7	109.1	132.1	89.3	142.5	177.0	75.3	193.0	208.1	164.2	136.9
Jun	19.0	23.2	33.0	14.1	33.8	24.2	26.7	14.8	35.5	23.8	7.0	23.2
Jul	—	—	1.3	4.0	4.0	—	—	—	—	—	4.4	1.2
Aug	—	2.0	4.4	8.8	4.4	—	11.6	1.2	0.9	0.8	—	3.1
Sep	48.0	85.0	90.0	69.7	31.1	25.9	49.1	46.6	38.4	69.1	35.6	53.5
Oct	235.4	242.5	223.7	224.3	249.8	194.2	154.0	289.4	236.5	270.3	145.2	224.1
Nov	341.9	434.0	478.2	482.1	345.0	337.8	429.4	494.1	513.3	334.8	413.7	418.6
Dec	534.0	533.5	687.9	557.3	429.7	608.0	718.5	563.6	582.4	567.3	505.4	571.6

4

CDD	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10 Year Avg
Jan	—	—	—	—	—	—	—	—	—	—	—	—
Feb	—	—	—	—	—	—	—	—	—	—	—	—
Mar	—	—	—	—	—	—	—	—	—	—	0.2	—
Apr	8.3	2.4	—	—	—	—	—	1.2	—	—	—	1.1
May	7.8	—	8.6	0.8	26.0	22.4	2.5	6.9	45.7	13.0	36.7	15.5
Jun	70.0	52.9	31.6	146.3	73.6	99.2	71.5	34.2	58.7	52.2	101.6	72.0
Jul	192.4	118.3	86.4	188.7	167.3	106.1	111.0	43.7	164.9	198.3	195.4	143.0
Aug	142.7	128.0	59.6	140.7	101.6	141.0	64.0	91.0	138.8	122.2	112.1	112.9
Sep	87.6	24.0	41.2	52.1	12.9	47.5	26.7	20.9	31.5	39.3	35.6	38.1
Oct	10.0	—	1.5	7.6	1.1	19.8	—	—	—	2.4	1.1	4.0
Nov	—	—	—	—	—	—	—	—	—	—	—	—
Dec	—	—	—	—	—	—	—	—	—	—	—	—

5
6 Milton Hydro updated the regression model with HDD and CDD variables for each of the
7 weather sensitive customer classes beginning with January 2022. The results by customer class
8 are provided in Section 3.7.

9
10 **3.7. Weather-Sensitive Class Forecasts**

11 **3.7.1. Residential Customer Class**

12 Milton Hydro has provided the results from the Residential customer class regression analysis in
13 the following Table 3-9. The regression statistics for the R-Square and Adjusted R-Square are
14 0.938 and 0.934, respectively, indicating a strong relationship between the actual monthly load
15 and the chosen variables. The statistics for the variables used provides a strong correlation for
16 all variables as each variable t-rate well-above 2 which means that they are all statistically
17 significant to the load forecast.

1 **Table 3-9 Regression Analysis Results – Residential Customer Class**
2
3

Model: Prais-Winsten, using observations 2011:01-2021:12 (T = 132)			
Dependent variable: Res_NoCDM			
rho = -0.082067			

4

	coefficient	std. error	t-ratio	p-value
const	(18,893,263)	5,185,236	(3.64)	—
HDD16	8,736	955	9.15	—
CDD16	52,933	3,454	15.33	—
MonthDays	700,140	167,155	4.19	—
Shoulder	(2,872,241)	364,282	(7.88)	—
Sep	1,706,351	497,364	3.43	0.001
Residential_count	588	38	15.46	—
COVIDHDD16	3,576	1,129	3.17	0.002
COVIDCDD16	24,535	3,131	7.84	—

5

Statistics based on the rho-differenced data			
Mean dependent var	26,318,648	S.D. dependent var	5,379,029
Sum squared residual	233,371,000,000,000	S.E. of regression	1,377,433
R-squared	0.938	Adjusted R-squared	0.934
F(7, 117)	263	P-value(F)	—
rho	(0.004)	Durbin-Watson	1.997

6

7 <u>**3.7.2.**</u> <u>**General Service <50 kW Customer Class**</u>
8

9 Milton Hydro has provided the results from the General Service <50 kW customer class

10 regression analysis in the following Table 3-10. The regression statistics for the R-Square and

11 Adjusted R-Square are 0.688 and 0.673 respectively indicating a relatively strong relationship

12 between the actual monthly load and the chosen variables. The statistics for the variables used

13 provides a strong correlation for each variable as the *t-Stat* greater than the absolute value of 2.

1   **Table 3-10 Regression Analysis Results – General Service <50 kW Customer Class**

2
3

Model: Prais-Winsten, using observations 2011:01-2021:12 (T = 132)
Dependent variable: GSlt50_NoCDM
rho = -0.0967591

4

	coefficient	std. error	t-ratio	p-value
const	(5,916,374)	2,782,066	(2.13)	0.035
HDD14	3,440	285	12.08	—
CDD14	4,965	609	8.15	—
Fall	(287,028)	97,598	(2.94)	0.004
GSlt50_count	5,095	1,194	4.27	—
Trend	(12,670)	4,812	(2.63)	0.010
COVID_AM	(677,886)	213,280	(3.18)	0.002

5
6

Statistics based on the rho-differenced data			
Mean dependent var	7,439,770	S.D. dependent var	772,807
Sum squared residual	2438180000000	S.E. of regression	441,650
R-squared	0.688	Adjusted R-squared	0.673
F(7, 117)	53	P-value(F)	—
rho	(0.003)	Durbin-Watson	1.958

7

8   **3.7.3.   General Service 50 – 999 kW Customer Class**

9

10   Milton Hydro has provided the results from the General Service 50 – 999 kW customer class

11   regression analysis in the following Table 3-11. The regression statistics for the R-Square and

12   Adjusted R-Square are 0.886 and 0.881 respectively indicating a strong relationship between

13   the actual monthly load and the chosen variables. The statistics for the variables used provides

14   a strong correlation for each variable as the *t-Stat* greater than the absolute value of 3.5.

Table 3-11 Regression Analysis Results – General Service >50 kW Customer Class

Model: Prais-Winsten, using observations 2011:01-2021:12 (T = 132)
Dependent variable: GSgt50_NoCDM
rho = 0.294698

	coefficient	std. error	t-ratio	p-value
const	(14,427,970)	2,078,231	(6.94)	—
HDD10	5,198	434	11.97	—
CDD12	6,628	599	11.06	—
MonthDays	353,725	50,248	7.04	—
GS50to999_count	23,628	4,035	5.86	—
TorontoFTEAdj	4,218	694	6.08	—
COVID_AM	(1,350,054)	376,734	(3.58)	—

Statistics based on the rho-differenced data			
Mean dependent var	18,097,771	S.D. dependent var	1,551,141
Sum squared residual	4020000000000	S.E. of regression	583,451
R-squared	0.865	Adjusted R-squared	0.859
F(7, 117)	81	P-value(F)	—
rho	(0.020)	Durbin-Watson	2.020

3.8. Non-Weather Sensitive Customer Classes

Milton Hydro determined in its 2011 and 2016 COS applications that the General Service 1000 – 4999 kW, Large Users, Street Lights, Sentinel Lights and the Unmetered/Scattered Load customer classes are not weather sensitive. Forecast consumption for General Service 1000 – 4999 kW and Large Users is based on 5-year average consumption per customer applied to forecast 2022 and 2023 customer counts. Forecast consumption of the Street Light, Sentinel Light, and USL classes are based on average consumption per connection in 2021 applied to forecast 2022 and 2023 connection counts, which is calculated in Table 3-12 below.

1 **Table 3-12 Consumption per Customer/Connection**
2
3

	Residential	GS < 50 kW	GS 50 to 999 kW	GS 1,000 to 4,999 kW	Large Use	Street Lights	Sentinel	USL
2012	9,752	35,046	715,749	10,748,321	43,277,313	2,320	588	7,008
2013	9,349	35,401	746,526	8,752,406	51,172,566	2,345	588	6,962
2014	9,165	35,212	733,183	9,600,973	44,475,967	2,357	596	7,033
2015	9,045	34,616	707,025	8,978,119	45,535,432	2,432	583	4,880
2016	9,267	34,096	687,734	8,886,610	46,672,075	2,462	583	4,946
2017	8,568	31,326	669,175	8,127,929	45,854,041	2,401	583	5,109
2018	9,041	32,054	672,821	9,205,638	46,168,521	2,403	583	4,986
2019	8,551	31,136	643,101	9,601,674	48,144,879	2,045	583	4,905
2020	9,383	29,247	594,566	8,834,816	43,059,780	1,690	583	4,919
2021	9,363	29,724	621,648	9,513,837	45,910,296	1,739	583	4,791
			5-Year Average =	9,056,779	45,827,503			

4

5 Total class consumption of the non-weather sensitive classes is provided below in Table 3-13.

6 The figures are calculated by multiplying average consumption per customer/connection count

7 from Table 3-12 by the forecast connection counts in Table 3-4.

8
9 **Table 3-13 Forecast of Non-Weather Sensitive Classes**
10
11

	GS 1,000 to 4,999 kW	Large	Street Lights	Sentinel	USL
Basis	5-Year Average	5-Year Average	2021	2021	2021
Average Consumption	9,056,779	45,827,503	1,739	583	4,791
Customer/Connection Count					
2022	12	3	2,905	234	220
2023	12	3	2,919	231	223
Consumption Forecast					
2022	108,681,342	137,482,510	5,051,906	136,514	1,052,149
2023	1,304,176,107	412,447,530	5,077,522	134,831	1,067,791

12

13 **3.9. Billed Demand Forecast**

14

15 As mentioned above, the calculation of the kW demand is based on a ratio of historic kW to

16 historic kWh and averaged to forecast the kW demand for the 2022 Bridge Year and the 2023

17 Test Year. Average 10-year and 5-year ratios were considered for each class. The ratio that

18 better-aligned with recent ratios was selected for each class.

1 **Table 3-14 kW/kWh Ratios**
2
3

Year	GS 50 to 999 kW	GS 1000 to 4999 kW	Large User	Streetlights	Sentinel Lights
2012	0.00268	0.00223	0.00208	0.00278	0.00265
2013	0.00267	0.00231	0.00193	0.00279	0.00278
2014	0.00262	0.00220	0.00190	0.00279	0.00278
2015	0.00269	0.00226	0.00186	0.00281	0.00286
2016	0.00273	0.00226	0.00185	0.00278	0.00285
2017	0.00271	0.00229	0.00192	0.00282	0.00285
2018	0.00270	0.00222	0.00194	0.00279	0.00284
2019	0.00269	0.00220	0.00195	0.00279	0.00283
2020	0.00270	0.00216	0.00208	0.00278	0.00281
2021	0.00271	0.00201	0.00203	0.00279	0.00278
5-Year Average	0.00270	**0.00218**	**0.00198**	0.00280	0.00282
10-Year Average	**0.00269**	0.00221	0.00195	**0.00279**	**0.00280**

4

5 In each applicable customer class, Milton Hydro has adjusted the forecasted kWh for the impact
6 of CDM as discussed above by making a manual adjustment to the annual kWhs for those
7 classes. The selected kW/kWh ratio is multiplied by the CDM-adjusted consumption for each
8 class.

9
10 **Table 3-15 kW Forecast**
11
12

	GS 50 to 999 kW	GS 1,000 to 4,999 kW	Large	Street Lights	Sentinel
Basis	10-Year Average	5-Year Average	5-Year Average	10-Year Average	10-Year Average
Average Consumption	**0.00269**	**0.00218**	**0.00198**	**0.00279**	**0.00218**
Consumption Forecast (CDM-Adjusted)					
2022	220,105,337	108,681,342	137,482,510	5,051,906	136,514
2023	229,532,705	108,681,342	137,482,510	5,077,522	134,831
kW Demand Forecast					
2022	569,878	225,594	260,034	14,108	383
2023	595,236	225,594	260,034	14,179	378

1   **3.10.   Accuracy of Load Forecast and Variance Analysis**

2   **3.10.1 Variance Analysis of Billing Determinants**

3   The following discussion provides a year over year variance analysis on Milton Hydro's

4   distribution revenue and billing determinants. The variance analysis will compare 2016 Actual to

5   2016 Board Approved; 2017 Actual to 2016 Actual; 2018 Actual to 2017 Actual; 2019 Actual to

6   2018 Actual; 2020 Actual to 2019 Actual; 2021 Actual to 2020 Actual; 2022 Bridge Year to 2021

7   Actual and 2023 Test Year to 2022 Bridge Year.

8

9   A summary of consumption, demand, and customer count variances from 2016 Approved to the

10   2023 Test Year is provided in Table 3-16.

11

12   **Table 3-16 Summary & Variances of Actual & Forecast Data**

13
14

	2016 OEB Approved	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
Residential								
# of Customers	33,533	34,343	35,796	37,001	37,706	38,491	39,229	40,088
kWh	310,749,016	294,253,406	323,623,192	316,413,176	353,805,931	360,408,160	354,121,184	353,525,758
kW								
Variance Analysis								
# of Customers		2.42%	4.23%	3.37%	1.91%	2.08%	1.92%	2.19%
kWh		(5.31%)	9.98%	(2.23%)	11.82%	1.87%	(1.74%)	(0.17%)
kW								
GS < 50 kW								
# of Customers	2,603	2,646	2,686	2,692	2,725	2,876	2,943	2,990
kWh	88,749,928	82,899,472	86,093,745	83,808,651	79,694,765	85,479,170	85,722,746	87,960,137
kW								
Variance Analysis								
# of Customers		1.65%	1.51%	0.22%	1.23%	5.54%	2.33%	1.60%
kWh		(6.59%)	3.85%	(2.65%)	(4.91%)	7.26%	0.28%	2.61%
kW								
GS > 50 to 999 kW								
# of Customers	298	319	330	342	353	345	333	344
kWh	204,715,590	213,633,992	221,806,793	220,154,820	209,733,280	214,209,552	211,868,876	221,296,244
kW	559,204	577,938	598,252	592,126	567,109	580,242	569,878	595,236

1

	2016 OEB Approved	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
Variance Analysis								
# of Customers		7.05%	3.45%	3.64%	3.22%	(2.27%)	(3.48%)	3.30%
kWh		4.36%	3.83%	(0.74%)	(4.73%)	2.13%	(1.09%)	4.45%
kW		3.35%	3.51%	(1.02%)	(4.22%)	2.32%	(1.79%)	4.45%
GS > 1000 to 4999 kW								
# of Customers	14	15	14	14	15	14	12	12
kWh	119,969,236	121,918,932	130,413,204	134,423,431	128,841,062	132,400,892	103,617,411	103,617,411
kW	271,131	279,303	289,804	295,909	278,402	266,215	225,594	225,594
Variance Analysis								
# of Customers		7.14%	(6.67%)	—%	7.14%	(6.67%)	(14.29%)	—%
kWh		1.63%	6.97%	3.08%	(4.15%)	2.76%	(21.74%)	—%
kW		3.01%	3.76%	2.11%	(5.92%)	(4.38%)	(15.26%)	—%
Large User								
# of Customers	3	3	3	3	3	3	3	3
kWh	140,016,226	137,562,122	138,505,562	144,434,637	129,179,341	137,730,888	131,131,300	131,131,300
kW	259,410	263,695	268,937	282,022	268,251	279,213	260,034	260,034
Variance Analysis								
# of Customers		—%	—%	—%	—%	—%	—%	—%
kWh		(1.75%)	0.69%	4.28%	(10.56%)	6.62%	(4.79%)	—%
kW		1.65%	1.99%	4.87%	(4.88%)	4.09%	(6.87%)	—%
Streetlights								
# of Customers	3,165	3,231	3,262	3,279	3,218	2,892	2,905	2,919
kWh	7,791,989	7,758,775	7,837,155	6,707,353	5,438,441	5,029,763	5,051,906	5,077,522
kW	21,693	21,901	21,867	18,723	15,143	14,019	14,108	14,179
Variance Analysis								
# of Customers		2.09%	0.96%	0.52%	(1.86%)	(10.13%)	0.45%	0.48%
kWh		(0.43%)	1.01%	(14.42%)	(18.92%)	(7.51%)	0.44%	0.51%
kW		0.96%	(0.16%)	(14.38%)	(19.12%)	(7.42%)	0.63%	0.50%
Sentinel Lights								
# of Customers	247	244	241	238	236	237	234	231
kWh	143,845	142,198	140,551	138,905	137,567	138,218	136,514	134,831
kW	410	405	399	393	387	384	383	378
Variance Analysis								
# of Customers		(1.21%)	(1.23%)	(1.24%)	(0.84%)	0.42%	(1.27%)	(1.28%)
kWh		(1.14%)	(1.16%)	(1.17%)	(0.96%)	0.47%	(1.23%)	(1.23%)

1

	2016 OEB Approved	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
kW		(1.22%)	(1.48%)	(1.50%)	(1.53%)	(0.78%)	(0.26%)	(1.31%)
Unmetered Loads								
# of Customers	222	216	219	217	216	216	220	223
kWh	1,100,097	1,101,316	1,092,306	1,062,718	1,061,267	1,036,897	1,052,149	1,067,791
kW								
Variance Analysis								
# of Customers				(0.91%)	(0.46%)	—%	1.85%	1.36%
kWh				(2.71%)	(0.14%)	(2.30%)	1.47%	1.49%
kW								

2

3   ### 3.10.2.   Variance Analysis of Distribution Revenue
4

5   The distribution revenue variance analysis is based on information provided in Table 3-17. The

6   billing determinant variance analysis is based on data outlined in Table 3-15. The overall

7   variance analysis has been provided based on Milton Hydro's materiality of $123,857 noted

8   earlier in Exhibit 1.

9

10   This Exhibit provides the details of Milton Hydro's total operating revenue for 2016 Board-

11   Approved, 2016 Actual, 2017 Actual, 2018 Actual, 2019 Actual, 2020 Actual, 2021 Actual, the

12   2022 Bridge Year, and the 2023 Test Year. This Exhibit also provides a detailed variance

13   analysis by rate class of the operating revenue components. Each variance that is above the

14   materiality threshold is highlighted and a summary for this variance is provided below in Table 3-

15   17.

3.11. Operating Revenue

Table 3-17 Summary of Operating Revenue & Variances

1
2

	2016 OEB Approved	2016 Actual	2016 Actual vs. 2016 OEB Approved	2017 Actual	2017 Actual vs. 2016 Actual	2018 Actual	2018 Actual vs. 2017 Actual	2019 Actual	2019 Actual vs. 2018 Actual	2020 Actual	2020 Actual vs. 2019 Actual	2021 Actual	2021 Actual vs. 2020 Actual	2022 Bridge Year	2022 Bridge Year vs. 2021 Actual	2023 Test Year	2023 vs. 2022
Distribution Revenues																	
Residential	$10,962,581	$10,817,313	($145,268)	$11,053,396	$236,083	$11,827,463	$236,083	$12,341,528	$236,083	$12,778,343	$236,083	$13,031,628	$236,083	$14,066,040	$236,083	$17,438,099	$236,083
GS < 50 kW	$2,107,774	$2,045,993	($61,781)	$2,020,057	($25,936)	$2,079,617	($25,936)	$2,077,545	($25,936)	$2,042,490	($25,936)	$2,162,445	($25,936)	$2,312,148	($25,936)	$2,867,163	($25,936)
GS >50 to 999 kW	$1,896,274	$1,664,418	($231,856)	$2,038,882	$374,464	$2,110,995	$374,464	$2,130,941	$374,464	$2,119,117	$374,464	$2,163,286	$374,464	$2,218,292	$374,464	$2,807,879	$374,464
GS >1000 to 4999 kW	$477,716	$689,705	$211,989	$536,218	($153,487)	$589,401	($153,487)	$605,906	($153,487)	$600,857	($153,487)	$567,995	($153,487)	$510,521	($153,487)	$619,279	($153,487)
Large Use	$468,598	$626,197	$157,599	$422,444	($203,753)	$493,050	($203,753)	$518,604	($203,753)	$516,826	($203,753)	$526,971	($203,753)	$522,350	($203,753)	$633,637	($203,753)
Sentinel Lights	$20,653	$17,280	($3,373)	$25,289	$8,009	$25,960	$8,009	$32,185	$8,009	$31,082	$8,009	$31,025	$8,009	$32,128	$8,009	$36,528	$8,009
Street Lighting	$337,478	$290,658	($46,820)	$335,823	$45,165	$332,168	$45,165	$302,102	$45,165	$268,321	$45,165	$248,133	$45,165	$259,036	$45,165	$315,727	$45,165
Unmetered and Scattered	$35,003	$38,934	$3,931	$39,350	$416	$39,930	$416	$36,571	$416	$40,323	$416	$41,580	$416	$42,654	$416	$52,561	$416
Total Distribution Revenue	$16,306,077	$16,190,498	($115,579)	$16,471,459	$280,961	$17,498,584	$280,961	$18,045,382	$280,961	$18,397,359	$280,961	$18,773,063	$280,961	$19,963,169	$280,961	$24,770,873	$280,961
Other Revenue																	
Specific Service Charges	$22,399	$625,491	$603,092	$494,734	($108,358)	$543,266	$651,624	$390,345	($261,279)	$301,466	$562,745	$329,937	($232,808)	$314,675	$547,483	$321,846	($225,637)
Late Payment Charges	$177,995	$246,978	$68,983	$287,540	$218,557	$296,551	$77,994	$304,211	$226,217	$333,754	$107,537	$375,100	$267,563	$220,869	($46,694)	$226,280	$272,974
Other Operating Revenues	$1,630,024	$490,875	($1,139,149)	$681,517	$1,820,666	$681,098	($1,139,568)	$749,686	$1,889,254	$853,502	($1,035,752)	$818,044	$1,853,796	$966,937	($886,859)	$1,119,716	$2,006,575
Other Income	$100,417	$650,133	$549,716	$444,555	($105,161)	$1,381,136	$1,486,297	$899,831	($586,466)	$360,455	$946,921	$687,233	($259,688)	$611,247	$870,935	$533,522	($337,413)
Total Other Revenue	$1,930,835	$2,013,477	($29,006)	$1,908,346	$2,107,081	$2,902,051	$2,104,052	$2,344,073	$1,811,165	$1,849,177	$937,180	$2,210,314	$2,005,824	$2,113,728	$1,676,045	$2,201,364	$6,534,110
Total Operating Revenue	$18,236,912	$18,203,975	($144,585)	$18,379,805	$2,388,042	$20,400,635	$2,413,404	$20,389,455	$2,357,963	$20,246,536	$1,289,157	$20,983,377	$2,381,528	$22,076,897	$2,866,151	$26,972,237	$11,341,814
% Distribution Revenue	89.41%	88.94%		89.62%		85.77%		88.50%		90.87%		89.47%		90.43%		91.84%	
% Other Revenue	10.59%	11.06%		10.38%		14.23%		11.50%		9.13%		10.53%		9.57%		8.16%	

1 **3.11.1.** **Variance Analysis**
2
3 *3.11.1.1* *Distribution Revenue and Billing Determinants - 2016 Actual vs 2016 Board*
4 *Approved*
5
6 **Table 3-18 Distribution Revenue - 2016 Actual vs 2016 Board Approved**
7
8

Description	2016 Actual	2016 OEB Approved	2016 Actual vs. 2016 OEB Approved
Distribution Revenues			
Residential	$10,817,313	$10,962,581	($145,268)
GS < 50 kW	$2,045,993	$2,107,774	($61,781)
GS >50 to 999 kW	$1,664,418	$1,896,274	($231,856)
GS >1000 to 4999 kW	$689,705	$477,716	$211,989
Large Use	$626,197	$468,598	$157,599
Sentinel Lights	$17,280	$20,653	($3,373)
Street Lighting	$290,658	$337,478	($46,820)
Unmetered and Scattered	$38,934	$35,003	$3,931
Total Distribution Revenue	**$16,190,498**	**$16,306,077**	**($115,579)**

9
10 **Table 3-19 Billing Determinants - 2016 Actual vs 2016 Board Approved**
11
12

Billing Determinants	Customer / Connections			kWh		kW			
	2016 OEB Approved	2016 Actual	Actual vs. 2016 OEB Approved	2016 OEB Approved	2016 Actual	2016 OEB Approved	2016 Actual	Volume Difference	%
Residential	34,501	33,533	(968)	311,504,507	310,749,016			(755,491)	(0.2%)
GS < 50 kW	2,559	2,603	44	91,412,832	88,749,928			(2,662,904)	(2.9%)
GS >50 to 999 kW	297	298	1			555,651	559,204	3,553	0.6%
GS >1000 to 4999 kW	13	14	1			245,808	271,131	25,323	10.3%
Large Use	3	3	—			260,162	259,410	(752)	(0.3%)
Sentinel Lights	244	247	3			404	410	6	1.5%
Street Lighting	3,199	3,165	(34)			23,291	21,693	(1,598)	(6.9%)
USL	178	222	44	1,096,423	1,100,097			3,674	0.3%
Total	**40,994**	**40,085**	**(909)**	**404,013,762**	**400,599,041**	**1,085,316**	**1,111,848**	**(3,388,189)**	

13
14 There are two significant drivers of the variance between 2016 OEB Approved distribution
15 revenue and 2016 Actual; volumetric and customer/connection count variances and the
16 assumption of a full year of revenue at the OEB Approved rates set in the 2016 COS.
17
18 Residential and Streetlight revenues are lower than forecast as those classes did not add as
19 many customers as approved in 2016.

1   The GS 50 to 999 kW class 2016 distribution revenue was lower than 2016 Board Approved by

2   $231,856, due to volumetric rate differences from four months of revenue at 2015 variable rates.

3   This driver has a similar impact on other classes, however, those variances were largely offset

4   by lower billing determinants.

5

6   The GS 1,000 to 4,999 kW and Large Use classes had material rate decreases in 2016 so the

7   impact of four months of revenue at 2015 rates had the opposite impact for these classes. The

8   GS 1,000 to 4,999 kW 2016 distribution revenue was higher than 2016 Board Approved by

9   $211,989, due to the revenue at 2015 rates and 2016 billed demand that is 10.3% higher than

10   approved. Billed demand and revenues were higher than forecast as the customer count

11   increased from 13 to 14 in 2016.

12

13   All remaining Distribution Revenue variances are below materiality.

14

15   ***3.11.1.2   Distribution Revenue and Billing Determinants - 2017 Actual vs 2016 Actual***

16

17   **Table 3-20 Distribution Revenue - 2017 Actual vs 2016 Actual**

18
19

Description	2017 Actual	2016 Actual	2017 Actual vs. 2016 Actual
Distribution Revenues			
Residential	$11,053,396	$10,913,738	$139,658
GS < 50 kW	$2,020,057	$2,053,160	($33,103)
GS >50 to 999 kW	$2,038,882	$1,665,177	$373,705
GS >1000 to 4999 kW	$536,218	$689,742	($153,524)
Large Use	$422,444	$626,206	($203,762)
Sentinel Lights	$25,289	$17,280	$8,009
Street Lighting	$335,823	$290,667	$45,156
Unmetered and Scattered	$39,350	$39,467	($117)
Total Distribution Revenue	**$16,471,459**	**$16,295,437**	**$176,022**

1 **Table 3-21 Billing Determinants - 2017 Actual vs 2016 Actual**
2

Billing Determinants	Customer / Connections			kWh		kW			
	2016	2017	Diff.	2016	2017	2016	2017	Vol. Diff.	Vol. Diff. %
Residential	33,533	34,343	810	310,749,010	294,253,400			(16,495,610)	(5.3%)
GS < 50 kW	2,603	2,646	43	88,749,928	82,899,472			(5,850,456)	(6.6%)
GS >50 to 999 kW	298	319	21			559,204	577,938	18,734	3.4%
GS >1000 to 4999	14	15	1			271,131	279,303	8,172	3.0%
Large Use	3	3	—			259,410	263,695	4,285	1.7%
Sentinel Lights	247	244	(3)			410	405	(5)	(1.2%)
Street Lighting	3,165	3,231	66			21,693	21,901	208	1.0%
USL	222	216	(6)	1,100,097	1,101,316			1,219	0.1%
Total	**40,085**	**41,017**	**932**	**400,599,045**	**378,254,188**	**1,111,848**	**1,143,242**	**(22,313,453)**	

3
4 The Residential class 2017 distribution revenue was higher than 2016 by $139,658, due to the
5 increase in customer count year over year. This was offset by lower kWh consumption, however,
6 Milton Hydro had nearly completed the transition to fully fixed Residential rates so there was a
7 smaller impact on variable revenues.

8
9 Residential and GS < 50 kW consumption declined in 2017 due to a mild 2017 summer (349
10 CDD in 2017 relative to 566 CDD in 2016).

11
12 The GS 50 - 999 kW class 2017 distribution revenue was higher than 2016 by $373,705, due to
13 increased variable rates compared to those in effect in the 2016 Actual, an increase in customer
14 count, and an increase in demand which corresponds to the increase in customers. .

15
16 GS 1,000 to 4,999 kW and Large Use revenue declined in 2017 relative to 2016 due to higher
17 revenues in the first four months of 2016 at 2015, as explained above.

18
19 All remaining Distribution Revenue variances are below materiality.

1   *3.11.1.3.*   *Distribution Revenue and Billing Determinants - 2018 Actual vs 2017 Actual*

2

3   **Table 3-22 Distribution Revenue - 2018 Actual vs 2017 Actual**

4
5

Description	2018 Actual	2017 Actual	2018 Actual vs. 2017 Actual
Distribution Revenues			
Residential	$11,827,463	$11,053,396	$774,067
GS < 50 kW	$2,079,617	$2,020,057	$59,560
GS >50 to 999 kW	$2,110,995	$2,038,882	$72,113
GS >1000 to 4999 kW	$589,401	$536,218	$53,183
Large Use	$493,050	$422,444	$70,606
Sentinel Lights	$25,960	$25,289	$671
Street Lighting	$332,168	$335,823	($3,655)
Unmetered and Scattered	$39,930	$39,350	$580
Total Distribution Revenue	**$17,498,584**	**$16,471,459**	**$1,027,125**

6

7   **Table 3-23 Billing Determinants - 2018 Actual vs 2017 Actual**

8
9

Billing Determinants	Customer / Connections			kWh		kW			Vol.
	2017	2018	Diff.	2017	2018	2017	2018	Vol. Diff.	Diff. %
Residential	34,343	35,796	1,453	294,253,406	323,623,192			29,369,786	10.0%
GS < 50 kW	2,646	2,686	40	82,899,472	86,093,745			3,194,273	3.9%
GS >50 to 999 kW	319	330	11			577,938	598,252	20,314	3.5%
GS >1000 to 4999 kW	15	14	(1)			279,303	289,804	10,501	3.8%
Large Use	3	3	—			263,695	268,937	5,242	2.0%
Sentinel Lights	244	241	(3)			405	399	(6)	(1.5%)
Street Lighting	3,231	3,262	31			21,901	21,867	(34)	(0.2%)
USL	216	219	3	1,101,316	1,092,306			(9,010)	(0.8%)
Total	**41,017**	**42,551**	**1,534**	**378,254,194**	**410,809,243**	**1,143,242**	**1,179,259**	**32,591,066**	

10

11   The Residential class 2018 distribution revenue was higher than 2017 by $774,067, due to the

12   increased customer counts, and to a lesser extent, higher volumetric kWh which were up 10%

13   from 2017 volumes. Residential, GS < 50 kW, and GS 1,000 to 4,999 kW class volumes

14   increased as a result of higher heating and cooling loads. Heating loads were 7% higher in 2018

15   (3,764 HDD in 2018 relative to 3,517 HDD in 2017) and cooling loads were 49% higher in 2018

16   (519 CDD in 2018 relative to 349 CDD in 2017).

17

18   All remaining Distribution Revenue variances are below materiality.

1   ***3.11.1.4.   Distribution Revenue and Billing Determinants - 2019 Actual vs 2018 Actual***

2

3   **Table 3-24 Distribution Revenue - 2019 Actual vs 2018 Actual**

4
5

Description	2019 Actual	2018 Actual	2019 Actual vs. 2018 Actual
Distribution Revenues			
Residential	$12,341,528	$11,827,463	$514,065
GS < 50 kW	$2,077,545	$2,079,617	($2,072)
GS >50 to 999 kW	$2,130,941	$2,110,995	$19,946
GS >1000 to 4999 kW	$605,906	$589,401	$16,505
Large Use	$518,604	$493,050	$25,554
Sentinel Lights	$32,185	$25,960	$6,225
Street Lighting	$302,102	$332,168	($30,066)
Unmetered and Scattered	$36,571	$39,930	($3,359)
Total Distribution Revenue	**$18,045,382**	**$17,498,584**	**$546,798**

6

7   **Table 3-25 Billing Determinants - 2019 Actual vs 2018 Actual**

8
9

Billing Determinants	Customer / Connections			kWh		kW		Vol. Diff.	Vol. Diff. %
	2018	2019	Difference	2018	2019	2018	2019		
Residential	35,796	37,001	1,205	323,623,192	316,413,176			(7,210,016)	(2.2%)
GS < 50 kW	2,686	2,692	6	86,093,745	83,808,651			(2,285,094)	(2.7%)
GS >50 to 999 kW	330	342	12			598,252	592,126	(6,126)	(1.0%)
GS >1000 to 4999 kW	14	14	—			289,804	295,909	6,105	2.1%
Large Use	3	3	—			268,937	282,022	13,085	4.9%
Sentinel Lights	241	238	(3)			399	393	(6)	(1.5%)
Street Lighting	3,262	3,279	17			21,867	18,723	(3,144)	(14.4%)
USL	219	217	(2)	1,092,306	1,062,718			(29,588)	(2.7%)
Total	**42,551**	**43,786**	**1,235**	**410,809,243**	**401,284,545**	**1,179,259**	**1,189,173**	**(9,514,784)**	

10

11   The Residential class 2019 distribution revenue was higher than 2018 by $514,065, due to the

12   increased customer counts. Though volumetric kWh declined, Milton Hydro completed its

13   transition to fully fixed Residential rates in 2019.

14
15   Street Lighting demand declined materially as a result of Milton Hydro's LED conversion

16   program.

17
18   All remaining Distribution Revenue variances are below materiality.

1   *3.11.1.5.*   *Distribution Revenue and Billing Determinants - 2020 Actual vs 2019 Actual*

2

3   **Table 3-26 Distribution Revenue - 2020 Actual vs 2019 Actual**

4
5

Description	2020 Actual	2019 Actual	2020 Actual vs. 2019 Actual
Distribution Revenues			
Residential	$12,778,343	$12,341,528	$436,815
GS < 50 kW	$2,042,490	$2,077,545	($35,055)
GS >50 to 999 kW	$2,119,117	$2,130,941	($11,824)
GS >1000 to 4999 kW	$600,857	$605,906	($5,049)
Large Use	$516,826	$518,604	($1,778)
Sentinel Lights	$31,082	$32,185	($1,103)
Street Lighting	$268,321	$302,102	($33,781)
Unmetered and Scattered	$40,323	$36,571	$3,752
Total Distribution Revenue	**$18,397,359**	**$18,045,382**	**$351,977**

6

7   **Table 3-27 Billing Determinants - 2020 Actual vs 2019 Actual**
8

Billing Determinants	Customer / Connections			kWh		kW		Vol. Diff.	Vol. Diff. %
	2019	2020	Diff.	2019	2020	2019	2020		
Residential	37,001	37,706	705	316,413,170	353,805,930			37,392,755	11.8%
GS < 50 kW	2,692	2,725	33	83,808,651	79,694,765			(4,113,886)	(4.9%)
GS >50 to 999 kW	342	353	11			592,126	567,109	(25,017)	(4.2%)
GS >1000 to 4999 kW	14	15	1			295,909	278,402	(17,507)	(5.9%)
Large Use	3	3	—			282,022	268,251	(13,771)	(4.9%)
Sentinel Lights	238	236	(2)			393	387	(6)	(1.5%)
Street Lighting	3,279	3,218	(61)			18,723	15,143	(3,580)	(19.1%)
USL	217	216	(1)	1,062,718	1,061,267			(1,451)	(0.1%)
Total	**43,786**	**44,472**	**686**	**401,284,539**	**434,561,962**	**1,189,173**	**1,129,292**	**33,217,537**	

9
10   The Residential class 2020 distribution revenue was higher than 2019 by $436,815, due to the
11   customer count year over year. Consumption and demand shifted from General Service classes
12   to the Residential class due to the COVID-19 pandemic. Additionally, cooling load increased by
13   45% (498 CDD in 2020 relative to 342 CDD in 2019) which caused a further increase to
14   Residential load. Street Light demand decreased by 19.1% as Milton Hydro continued its LED
15   replacement program.

16
17   All remaining Distribution Revenue variances are below materiality.

1 ***3.11.1.6.   Distribution Revenue and Billing Determinants - 2021 Actual vs 2020 Actual***

2

3 **Table 3-28 Distribution Revenue - 2021 Actual vs 2020 Actual**

4
5

Description	2021 Actual	2020 Actual	2021 Actual vs. 2020 Actual
Distribution Revenues			
Residential	$13,031,628	$12,778,343	$253,285
GS < 50 kW	$2,162,445	$2,042,490	$119,955
GS >50 to 999 kW	$2,163,286	$2,119,117	$44,169
GS >1000 to 4999 kW	$567,995	$600,857	($32,862)
Large Use	$526,971	$516,826	$10,145
Sentinel Lights	$31,025	$31,082	($57)
Street Lighting	$248,133	$268,321	($20,188)
Unmetered and Scattered	$41,580	$40,323	$1,257
Total Distribution Revenue	**$18,773,063**	**$18,397,359**	**$375,704**

6

7 **Table 3-29 Billing Determinants - 2021 Actual vs 2020 Actual**

8
9

Billing Determinants	Customer / Connections			kWh		kW		Vol. Diff.	Vol. Diff. %
	2020	2021	Diff.	2020	2021	2020	2021		
Residential	37,706	38,491	785	353,805,931	360,408,160			6,602,229	1.9%
GS < 50 kW	2,725	2,876	151	79,694,765	85,479,170			5,784,405	7.3%
GS >50 to 999 kW	353	345	(8)			567,109	580,242	13,133	2.3%
GS >1000 to 4999 kW	15	14	(1)			278,402	266,215	(12,187)	(4.4%)
Large Use	3	3	—			268,251	279,213	10,962	4.1%
Sentinel Lights	236	237	1			387	384	(3)	(0.8%)
Street Lighting	3,218	2,892	(326)			15,143	14,019	(1,124)	(7.4%)
USL	216	216	—	1,061,267	1,036,897			(24,370)	(2.3%)
Total	**44,472**	**45,074**	**602**	**434,561,963**	**446,924,227**	**1,129,292**	**1,140,073**	**12,373,045**	

10

11 The Residential class 2021 distribution revenue was higher than 2020 by $253,285, due to the

12 continued increase in customer count.

13

14 GS < 50 kW and GS 50 to 999 kW loads increase as COVID-19 restrictions eased relative to

15 2020. There was a larger impact for the GS < 50 kW class because of a reclassification of

16 customers from the GS 50 to 999 kW class to the GS < 50 kW class in the summer of 2021.

17

18 In 2021 approximately 10% of Milton Hydro's Street Lighting connections were moved behind

19 the meter, causing a material reduction in Street Light connection counts and demand.

1   All remaining Distribution Revenue variances are below materiality.

2

3   ***3.11.1.7.   Distribution Revenue and Billing Determinants - 2022 Bridge Year vs 2021***

4   ***Actual***

5

6   **Table 3-30 Distribution Revenue - 2022 Bridge Year vs 2021 Actual**

7
8

Description	2022 Bridge Year	2021 Actual	2022 Bridge Year vs. 2021 Actual
Distribution Revenues			
Residential	$14,066,040	$13,031,628	$1,034,412
GS < 50 kW	$2,312,148	$2,162,445	$149,703
GS >50 to 999 kW	$2,218,292	$2,163,286	$55,006
GS >1000 to 4999 kW	$510,521	$567,995	($57,474)
Large Use	$522,350	$526,971	($4,621)
Sentinel Lights	$32,128	$31,025	$1,103
Street Lighting	$259,036	$248,133	$10,903
Unmetered and Scattered	$42,654	$41,580	$1,074
Total Distribution Revenue	**$19,963,169**	**$18,773,063**	**$1,190,106**

9

10   **Table 3-31 Billing Determinants - 2022 Bridge Year Actual vs 2021 Actual**

11
12

Billing Determinants	Customer / Connections			kWh		kW		Vol. Diff.	Vol. Diff. %
	2021	2022	Diff.	2021	2022	2021	2022		
Residential	38,491	39,229	738	360,408,160	354,121,184			(6,286,976)	(1.7%)
GS < 50 kW	2,876	2,943	67	85,479,170	85,722,746			243,576	0.3%
GS >50 to 999 kW	345	333	(12)			580,242	569,878	(10,364)	(1.8%)
GS >1000 to 4999 kW	14	12	(2)			266,215	225,594	(40,621)	(15.3%)
Large Use	3	3	—			279,213	260,034	(19,179)	(6.9%)
Sentinel Lights	237	234	(3)			384	383	(1)	(0.3%)
Street Lighting	2,892	2,905	13			14,019	14,108	89	0.6%
USL	216	220	4	1,036,897	1,052,149			15,252	1.5%
Total	**45,074**	**45,879**	**805**	**446,924,227**	**440,896,079**	**1,140,073**	**1,069,997**	**(6,098,224)**	

13

14   The Residential class 2022 Bridge Year distribution revenue is forecast to be higher than 2021

15   by $1,034,412, due to a customer count increase and a rate period shift from May-April to

16   January-December. Prior to this shift Milton Hydro's annual revenues reflected 4 months of rates

17   from the previous year and 8 months of rates with inflationary increases. After the rate period

18   shift Milton Hydro's annual revenues reflect 12 months at the higher rate.

1 The GS < 50 kW class 2022 Bridge Year distribution revenue is forecast to be higher than 2021
2 by $149,703, due to a forecasted increase in GS < 50 kW customers and billed kWh. The
3 increase in GS >< 50 kW customers and load is partially caused by the customer reclassification
4 that occurred in the summer of 2021.

5
6 GS 1,000 to 4,999 kW demand is forecast to decline due to the loss of two customers at the end
7 of 2021.

8
9 ***3.11.1.8.*** ***Distribution Revenue and Billing Determinants - 2023 Test Year vs 2022***
10 ***Bridge Year***

11
12 **Table 3-32 Distribution Revenue - 2023 Test Year vs 2022 Bridge Year**
13
14

Description	2023 Test Year	2022 Bridge Year	2023 Test Year vs. 2022 Bridge Year
Distribution Revenues			
Residential	$17,438,099	$14,066,040	$3,372,059
GS < 50 kW	$2,867,163	$2,312,148	$555,015
GS >50 to 999 kW	$2,807,879	$2,218,292	$589,587
GS >1000 to 4999 kW	$619,279	$510,521	$108,758
Large Use	$633,637	$522,350	$111,287
Sentinel Lights	$36,528	$32,128	$4,400
Street Lighting	$315,727	$259,036	$56,691
Unmetered and Scattered	$52,561	$42,654	$9,907
Total Distribution Revenue	**$24,770,873**	**$19,963,169**	**$4,807,704**

15
16 **Table 3-33 Billing Determinants - 2023 Test Year vs 2022 Bridge Year**
17
18

Billing Determinants	Customer / Connections			kWh		kW		Vol. Diff.	Vol. Diff. %
	2022	2023	Diff.	2022	2023	2022	2023		
Residential	39,229	40,088	859	354,121,184	353,525,758			(595,426)	(0.2%)
GS < 50 kW	2,943	2,990	47	85,722,746	87,960,137			2,237,391	2.6%
GS >50 to 999 kW	333	344	11			569,878	595,236	25,358	4.4%
GS >1000 to 4999 kW	12	12	—			225,594	225,594	—	—%
Large Use	3	3	—			260,034	260,034	—	—%
Sentinel Lights	234	231	(3)			383	378	(5)	(1.3%)
Street Lighting	2,905	2,919	14			14,108	14,179	71	0.5%
USL	220	223	3	1,052,149	1,067,791			15,642	1.5%
Total	**45,879**	**46,810**	**931**	**440,896,079**	**442,553,686**	**1,069,997**	**1,095,421**	**1,683,031**	

1 All rate classes are forecast to increase revenue in 2023 due to proposed rate increases to meet
2 the revenue requirement. Customer counts are generally forecast to increase at the same pace
3 as recent growth. GS < 50 kW and GS 50 to 999 kW consumption and demand are forecast to
4 increase as customer counts increase.

5
6 **3.12.   OTHER REVENUE**

7
8 **3.12.1. Summary of Other Revenue**
9

10 Table 3-16 below provides details on the other revenue included in Milton Hydro's operating
11 revenue which is consistent with the other revenue data provided in Table 3-1 above. Specific
12 service charges revenues in the Test Year were forecast with consideration of specific service
13 charges included in the proposed tariff of rates and charges. Therefore, the specific service
14 charges correspond with the Operating Revenue evidence. The revenues or costs (including
15 interest) associated with deferral accounts, variance accounts and regulatory assets are
16 included in account USoA 4405 for 2016 to 20201 historical years, but were not included for the
17 2022 Bridge and 2023 Test Years. Proposed other revenue for the 2022 Bridge Year and the
18 2023 Test Year has been calculated based on historical experience, other than the exception
19 noted regarding interest on deferral and variance accounts. Milton Hydro has provided its Other
20 Operating Revenue and Account Summary breakdown (Appendix 2-H) in the following Table 3-
21 34.

1
2
3

Table 3-34 Appendix 2-H - Other Operating Revenue

USoA #	USoA Description	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
4082	Retail Services Revenues	$19,449	$17,422	$15,313	$21,651	$24,541	$21,706	$25,131	$25,747
4084	Service Transaction Requests (STR) Revenues	$350	$214	$215	$262	$278	$205	$273	$280
4086	SSS Administration Revenue	$104,940	$108,084	$112,956	$117,429	$120,204	$123,436	$122,374	$125,833
4210	Rent from Electric Property	$151,974	$260,595	$183,640	$179,053	$224,033	$124,101	$199,784	$279,444
4225	Late Payment Charges	$246,978	$287,540	$296,551	$304,211	$333,754	$375,100	$220,869	$226,280
4235	Miscellaneous Service Revenues	$625,491	$494,734	$543,266	$390,345	$301,466	$329,937	$314,675	$321,846
4245	Government and Other Assistance Directly Credited to Income	$214,162	$295,202	$368,974	$431,291	$484,446	$548,596	$619,375	$688,413
4305	Regulatory Debits	$—	$—	$—	$—	$—	($66,775)	$—	$—
4355	Gain on Disposition of Utility and Other Property	$4,305	$103,951	$—	$26,549	$—	$72,072	$—	$—
4357	Gain from Retirement of Utility and Other Property	$3	$154	$65,061	$—	$114	$—	$—	$—
4362	Loss from Retirement of Utility and Other Property	($148,481)	($463,209)	($91,026)	($73,258)	($484,856)	($213,081)	($350,000)	($350,000)
4375	Revenues from Non Rate-Regulated Utility Operations	$1,306,454	$1,922,546	$3,809,452	$503,434	$1,120,312	$473,478	$—	$—
4380	Expenses of Non Rate-Regulated Utility Operations	($1,306,454)	($1,936,468)	($3,282,013)	($503,434)	($1,120,312)	($473,478)	$—	$—
4390	Miscellaneous Non-Operating Income	$696,592	$668,233	$697,169	$751,650	$760,809	$845,205	$952,247	$872,522
4405	Interest and Dividend Income	$97,714	$149,348	$182,493	$197,472	$84,388	$49,812	$9,000	$11,000
	Miscellaneous Service Revenues	$625,491	$494,734	$543,266	$390,345	$301,466	$329,937	$314,675	$321,846
	Late Payment Charges	$246,978	$287,540	$296,551	$304,211	$333,754	$375,100	$220,869	$226,280
	Other Operating Revenues	$490,875	$681,517	$681,098	$749,686	$853,502	$818,044	$966,937	$1,119,716
	Other Income or Deductions	$650,133	$444,555	$1,381,136	$899,831	$360,455	$687,233	$611,247	$533,522
Total		**$2,013,477**	**$1,908,346**	**$2,902,051**	**$2,344,073**	**$1,849,177**	**$2,210,314**	**$2,113,727**	**$2,201,364**

1 **Table 3-35 Miscellaneous Service Revenues**

2
3

Miscellaneous Service Revenues Account 4235	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
COLLECTION CHARGE	$291,450	$185,880	$185,430	$48,330	$—	$—	$—	$—
RECONNECTION CHARGE	$11,625	$6,655	$5,120	$7,530	$1,235	$3,120	$788	$807
OCCUPANCY CHARGE	$201,660	$197,850	$227,550	$203,190	$182,910	$217,020	$195,000	$199,778
LAWYER'S CERTIFICATE	$754	$847	$842	$1,221	$911	$898	$1,062	$1,088
OFF CYCLE METER READ	$2,070	$3,780	$3,360	$2,640	$1,830	$1,260	$1,843	$1,888
INTERVAL METER READ	$85,633	$64,065	$80,730	$86,790	$75,175	$69,919	$78,102	$80,015
MICROFIT CUSTOMER CHARGES	$32,299	$35,657	$40,234	$40,644	$38,829	$37,720	$37,881	$38,270
Total	**$625,491**	**$494,734**	**$543,266**	**$390,345**	**$300,891**	**$329,937**	**$314,676**	**$321,846**

4

5 The lower collection charges of in 2019 is a result of OEB Rate Order EB-2017-0183 which eliminated the Collection of Account

6 Charge that was being applied by most electricity distributors.

7
8 **Table 3-36 Rent from Electric Property**

9
10

Rent from Electric Property Account 4210	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
COGECO POLE RENTAL	$38,386	$38,386	$44,194	$79,668	$80,793	$85,751	$45,600	$66,774
COGECO 1508	$0			$(42,341)		$(96,374)		
ROGERS POLE RENTAL	$63,680	$60,149	$68,128	$117,676	$119,804	$111,161	$74,693	$91,284
ROGERS 1508	$0			$(57,843)	$(55,309)	$(55,725)		
BELL POLE RENTAL	$49,908	$65,284	$71,318	$145,811	$149,475	$150,009	$75,470	$117,176
BELL 1508	$0			$(71,118)	$(74,402)	$(74,668)		
Bell Retroactive billing (2010-2015)		$96,776						
MAGE POLE Rental	$0	$0	$0	$0	$0	$401	$201	$313
MAGE 1508	$0					$(200)		
CHISHOLM ROOF RENTAL	$0	$0	$0	$7,200	$3,672	$3,745	$3,820	$3,897
Total	**$151,974**	**$260,595**	**$183,640**	**$179,053**	**$224,033**	**$124,101**	**$199,784**	**$279,444**

11

12 In 2020 there was an error in recording pole rental revenue to USoA 1508 DVA, the correction was made in 2021.

1 **Table 3-37 Miscellaneous Non-Operating Income**
2
3

Miscellaneous Non-Operating Income Account 4390	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Bridge Year	2023 Test Year
SALE OF SCRAP MATERIAL	$50,445	$19,751	$17,287	$12,936	$1,727	$54,571	$3,283	$3,283
MISCELLANEOUS REVENUE	$32,296	$5,432	$3,038	$14,473	$1,796	($86)	$126,000	$10,000
NSF CHARGE	$3,480	$2,835	$2,550	$2,760	$2,772	$2,085	$2,910	$2,981
SENTINEL LIGHT BILLING FEE	$3,828	$3,828	$3,828	$3,828	$3,828	$3,828	$—	$—
STATEMENT OF ACCOUNT CHARGE	$293	$285	$242	$90	$315	$—	$100	$102
WATER BILLING FEE - MEGS	$606,250	$636,101	$670,225	$717,563	$750,371	$784,807	$819,954	$856,155
Total	**$696,591**	**$668,233**	**$697,169**	**$751,650**	**$760,809**	**$845,205**	**$952,247**	**$872,521**

4

5 Milton Hydro identified that it had been recording affiliate Water billing fees and affiliate Sentinel light billing fees in account 4390 as

6 opposed to 4375 as recommended by the Accounting Procedures Handbook. Milton Hydro will follow up and make the necessary

7 RRR adjustments to historical years as required by the OEB. Milton Hydro will correct the accounting treatment from 2022 onwards.

8
9 **Table 3-38 Revenue & Expense from Non Rate-Regulated Utility Operations**
10
11

Revenue & expenses from Non Rate-regulated utility operations Account 4375 & 4380	2016	2017	2018	2019	2020	2021	2022	2023
Revenue from Non-regulated utility	$1,306,454	$1,922,546	$3,809,452	$503,434	$1,120,312	$473,478	$—	$—
Expenses from Non-regulated utility	($1,306,454)	($1,936,468)	($3,282,013)	($503,434)	($1,120,312)	($473,478)	$—	$—
Total	$—	($13,922)	$527,439	$—	$—	$—	$—	$—

12

13 For historical years from 2016 to 2021 Milton Hydro has been recording only revenue and expenses related to the CDM programs in

14 accounts 4375 and 4380. Milton Hydro previously accrued the revenue expected from the IESO. In 2018, the IESO paid Milton Hydro

15 $527,438 as part of their incentive for achieving their targets related to the CDM program. As noted above in Table 3-37, Milton Hydro

16 have recorded affiliate revenue in account 4390, leaving the associated costs in relevant Operating, Maintenance, and Administrative

17 accounts. Milton Hydro will follow up and make the necessary RRR adjustments to historical years as required by the OEB. Milton

18 Hydro will correct the accounting treatment from 2022 onwards.

1 **3.12.2. Variance Analysis of Other Revenue**

2

3 The Tables below provide the quantitative details regarding the variance analysis for other

4 revenue included in Milton Hydro's operating revenue as well as the explanations for the

5 variances for each of the respective periods being compared.

6

7 **Table 3-39 Other Revenue 2017 Actual vs. 2016 Actual**

8
9

USoA #	USoA Description	2017 Actual	2016 Actual	2017 Actual vs. 2016 Actual
4082	Retail Services Revenues	$17,422	$19,449	($2,027)
4084	Service Transaction Requests (STR) Revenues	$214	$350	($136)
4086	SSS Administration Revenue	$108,084	$104,940	$3,144
4210	Rent from Electric Property	$260,595	$151,974	$108,621
4225	Late Payment Charges	$287,540	$246,978	$40,562
4235	Miscellaneous Service Revenues	$494,734	$625,491	($130,757)
4245	Government and Other Assistance Directly Credited to Income	$295,202	$214,162	$81,040
4305	Regulatory Debits	$—	$—	$—
4355	Gain on Disposition of Utility and Other Property	$103,951	$4,305	$99,646
4357	Gain from Retirement of Utility and Other Property	$154	$3	$151
4362	Loss from Retirement of Utility and Other Property	($463,209)	($148,481)	($314,728)
4375	Revenues from Non Rate-Regulated Utility Operations	$1,922,546	$1,306,454	$616,092
4380	Expenses of Non Rate-Regulated Utility Operations	($1,936,468)	($1,306,454)	($630,014)
4390	Miscellaneous Non-Operating Income	$668,233	$696,592	($28,359)
4405	Interest and Dividend Income	$149,348	$97,714	$51,634
	SubTotal	**$1,908,346**	**$2,013,477**	**($105,131)**

10

11 2017 Miscellaneous Service Revenue was lower than 2016 as a result of: (i) lower collection

12 charges of $105,570 as a result of improved management of overdue accounts; and (ii) lower

13 interval meter reads of $21,568; due to cellular modems.

14

15 2017 Losses of $314,728 from retirement are higher due to removal of assets.

16

17 The increase in 2017 revenue (4375) and expenses (4380) from Non rate regulated utility

18 operations are largely due to: (i) increase of $163,245 in new home construction rebates in 2017

19 compared to $402,021 in 2016; and (ii) other ERII retrofit incentives.

1   **Table 3-40 Other Revenue 2018 Actual vs. 2017 Actual**
2
3

USoA #	USoA Description	2018 Actual	2017 Actual	2018 Actual vs. 2017 Actual
4082	Retail Services Revenues	$15,313	$17,422	($2,109)
4084	Service Transaction Requests (STR) Revenues	$215	$214	$1
4086	SSS Administration Revenue	$112,956	$108,084	$4,872
4210	Rent from Electric Property	$183,640	$260,595	($76,955)
4225	Late Payment Charges	$296,551	$287,540	$9,011
4235	Miscellaneous Service Revenues	$543,266	$494,734	$48,532
4245	Government and Other Assistance Directly Credited to Income	$368,974	$295,202	$73,772
4305	Regulatory Debits	$—	$—	$—
4355	Gain on Disposition of Utility and Other Property	$—	$103,951	($103,951)
4357	Gain from Retirement of Utility and Other Property	$65,061	$154	$64,907
4362	Loss from Retirement of Utility and Other Property	($91,026)	($463,209)	$372,183
4375	Revenues from Non Rate-Regulated Utility Operations	$3,809,452	$1,922,546	$1,886,906
4380	Expenses of Non Rate-Regulated Utility Operations	($3,282,013)	($1,936,468)	($1,345,545)
4390	Miscellaneous Non-Operating Income	$697,169	$668,233	$28,936
4405	Interest and Dividend Income	$182,493	$149,348	$33,145
	SubTotal	**$2,902,051**	**$1,908,346**	**$993,705**

4

5   In 2018 lower losses of $372,183 from retirement are due to less removal of assets.

6

7   The increase in 2018 Revenue (4375) from Non rate regulated utility operations are largely due

8   to (i) $1,462,689 in ERII retrofit incentives; (ii) $512,952 advance funding for the Halton Health

9   care retrofit; partially offset by (ii) $160,298 decrease in new home construction rebates in 2018

10   compared to 2017.

11

12   The increase in 2018 expenses (4380) from Non rate regulated utility operations are largely due

13   to: (i) $1,462,689 in ERII retrofit incentives expenses; partially offset by (ii) a $160,298 decrease

14   in new home construction rebates in 2018 compared to 2017.

1   **Table 3-41 Other Revenue 2019 Actual vs. 2018 Actual**
2
3

USoA #	USoA Description	2019 Actual	2018 Actual	2019 Actual vs. 2018 Actual
4082	Retail Services Revenues	$21,651	$15,313	$6,338
4084	Service Transaction Requests (STR) Revenues	$262	$215	$47
4086	SSS Administration Revenue	$117,429	$112,956	$4,473
4210	Rent from Electric Property	$179,053	$183,640	($4,587)
4225	Late Payment Charges	$304,211	$296,551	$7,660
4235	Miscellaneous Service Revenues	$390,345	$543,266	($152,921)
4245	Government and Other Assistance Directly Credited to Income	$431,291	$368,974	$62,317
4305	Regulatory Debits	$—	$—	$—
4355	Gain on Disposition of Utility and Other Property	$26,549	$—	$26,549
4357	Gain from Retirement of Utility and Other Property	$—	$65,061	($65,061)
4362	Loss from Retirement of Utility and Other Property	($73,258)	($91,026)	$17,768
4375	Revenues from Non Rate-Regulated Utility Operations	$503,434	$3,809,452	($3,306,018)
4380	Expenses of Non Rate-Regulated Utility Operations	($503,434)	($3,282,013)	$2,778,579
4390	Miscellaneous Non-Operating Income	$751,650	$697,169	$54,481
4405	Interest and Dividend Income	$197,472	$182,493	$14,979
	SubTotal	**$2,346,655**	**$2,902,051**	**($555,396)**

4

5   In 2019 Miscellaneous service revenue is lower resulting from lower collection charges of

6   $137,100, effective July 1, 2019 collection charges were no longer recoverable from customers.

7

8   The decrease in 2019 Revenue (4375) from Non rate regulated utility operations are largely due

9   to: (i) higher ERII retrofit incentives of $2,562,867 in 2018; and (ii) a $512,952 advance funding

10 for the Halton Health care retrofit in 2018.

11

12 The increase in 2019 expenses (4380) from Non rate regulated utility operations are largely due

13 to higher other ERII retrofit incentives of $2,562,867.

1 **Table 3-42 Other Revenue 2020 Actual vs. 2019 Actual**
2
3

USoA #	USoA Description	2020 Actual	2019 Actual	2020 Actual vs. 2019 Actual
4082	Retail Services Revenues	$24,541	$21,651	$2,890
4084	Service Transaction Requests (STR) Revenues	$278	$262	$16
4086	SSS Administration Revenue	$120,204	$117,429	$2,775
4210	Rent from Electric Property	$224,033	$179,053	$44,980
4225	Late Payment Charges	$333,754	$304,211	$29,543
4235	Miscellaneous Service Revenues	$301,466	$390,345	($88,879)
4245	Government and Other Assistance Directly Credited to Income	$484,446	$431,291	$53,155
4305	Regulatory Debits	$—	$—	$—
4355	Gain on Disposition of Utility and Other Property	$—	$26,549	($26,549)
4357	Gain from Retirement of Utility and Other Property	$114	$—	$114
4362	Loss from Retirement of Utility and Other Property	($484,856)	($73,258)	($411,598)
4375	Revenues from Non Rate-Regulated Utility Operations	$1,120,312	$503,434	$616,878
4380	Expenses of Non Rate-Regulated Utility Operations	($1,120,312)	($503,434)	($616,878)
4390	Miscellaneous Non-Operating Income	$760,809	$751,650	$9,159
4405	Interest and Dividend Income	$84,388	$197,472	($113,084)
	SubTotal	**$1,849,177**	**$2,346,655**	**($497,478)**

4

5 In 2020 higher losses from retirement of $411,598 are due to an increase in removal of assets.

6

7 The increase in 2020 Revenue (4375) and expenses (4380) from Non rate regulated utility

8 operations are largely due to: (i) higher new home construction rebates of $327,673; and (ii)

9 higher other ERII retrofit incentives of $289,204.

1 **Table 3-43 Other Revenue 2021 Actual vs. 2020 Actual**
2
3

USoA #	USoA Description	2021 Actual	2020 Actual	2021 Actual vs. 2020 Actual
4082	Retail Services Revenues	$21,706	$24,541	($2,835)
4084	Service Transaction Requests (STR) Revenues	$205	$278	($73)
4086	SSS Administration Revenue	$123,436	$120,204	$3,232
4210	Rent from Electric Property	$124,101	$224,033	($99,932)
4225	Late Payment Charges	$375,100	$333,754	$41,346
4235	Miscellaneous Service Revenues	$329,937	$301,466	$28,471
4245	Government and Other Assistance Directly Credited to Income	$548,596	$484,446	$64,150
4305	Regulatory Debits	($66,775)	$—	($66,775)
4355	Gain on Disposition of Utility and Other Property	$72,072	$—	$72,072
4357	Gain from Retirement of Utility and Other Property	$—	$114	($114)
4362	Loss from Retirement of Utility and Other Property	($213,081)	($484,856)	$271,775
4375	Revenues from Non Rate-Regulated Utility Operations	$473,478	$1,120,312	($646,834)
4380	Expenses of Non Rate-Regulated Utility Operations	($473,478)	($1,120,312)	$646,834
4390	Miscellaneous Non-Operating Income	$845,205	$760,809	$84,396
4405	Interest and Dividend Income	$49,812	$84,388	($34,576)
	SubTotal	**$2,210,314**	**$1,849,177**	**$361,137**

4

5 In 2021 lower losses from retirement of $271,775 are due to decreases in removal of assets.

6

7 The decrease in 2021 Revenue (4375) and expenses (4380) from Non rate regulated utility

8 operations are largely due to: (i) lower new home construction rebates of $509,804; (ii) lower

9 other ERII retrofit incentives of $430,735; partially offset by (iii) higher CHP incentive of

10 $293,406.

1 **Table 3-44 Other Revenue 2022 Actual vs. 2021 Actual**

2
3

USoA #	USoA Description	2022 Bridge Year	2021 Actual	2021 Actual vs. 2020 Actual
4082	Retail Services Revenues	$25,131	$21,706	$3,425
4084	Service Transaction Requests (STR) Revenues	$273	$205	$68
4086	SSS Administration Revenue	$122,374	$123,436	($1,062)
4210	Rent from Electric Property	$199,784	$124,101	$75,683
4225	Late Payment Charges	$220,869	$375,100	($154,231)
4235	Miscellaneous Service Revenues	$314,675	$329,937	($15,262)
4245	Government and Other Assistance Directly Credited to Income	$619,375	$548,596	$70,779
4305	Regulatory Debits	$—	($66,775)	$66,775
4355	Gain on Disposition of Utility and Other Property	$—	$72,072	($72,072)
4357	Gain from Retirement of Utility and Other Property	$—	$—	$—
4362	Loss from Retirement of Utility and Other Property	($350,000)	($213,081)	($136,919)
4375	Revenues from Non Rate-Regulated Utility Operations	$—	$473,478	($473,478)
4380	Expenses of Non Rate-Regulated Utility Operations	$—	($473,478)	$473,478
4390	Miscellaneous Non-Operating Income	$952,247	$845,205	$107,042
4405	Interest and Dividend Income	$9,000	$49,812	($40,812)
	SubTotal	**$2,113,728**	**$2,210,314**	**($96,586)**

4

5 2022 Late payment charges are lower as a result of (i) $113,781 of late payment charges

6 related to water and sewage late billings allocated to the non-regulated affiliate (MEGS); and (ii)

7 higher 2021 late payment charges of $40,450 due to the ongoing pandemic.

8

9 Higher losses variance from retirement of utility and other property are a result of lower asset

10 retirements in 2021.

11

12 Lower Revenue (4375) and expenses (4380) of $473,478 from non rate regulated utility

13 operations is a result from the end of the CDM program administered by the Milton Hydro.

1   **Table 3-45 Other Revenue 2023 Bridge Year vs. 2022 Actual**
2
3

USoA #	USoA Description	2023 Test Year	2022 Bridge Year	vs. 2022 Test Year
4082	Retail Services Revenues	$25,747	$25,131	$616
4084	Service Transaction Requests (STR) Revenues	$280	$273	$7
4086	SSS Administration Revenue	$125,833	$122,374	$3,459
4210	Rent from Electric Property	$279,444	$199,784	$79,660
4225	Late Payment Charges	$226,280	$220,869	$5,411
4235	Miscellaneous Service Revenues	$321,846	$314,675	$7,171
4245	Government and Other Assistance Directly Credited to Income	$688,413	$619,375	$69,038
4305	Regulatory Debits	$—	$—	$—
4355	Gain on Disposition of Utility and Other Property	$—	$—	$—
4357	Gain from Retirement of Utility and Other Property	$—	$—	$—
4362	Loss from Retirement of Utility and Other Property	($350,000)	($350,000)	$—
4375	Revenues from Non Rate-Regulated Utility Operations	$—	$—	$—
4380	Expenses of Non Rate-Regulated Utility Operations	$—	$—	$—
4390	Miscellaneous Non-Operating Income	$872,522	$952,247	($79,725)
4405	Interest and Dividend Income	$11,000	$9,000	$2,000
	SubTotal	**$2,201,365**	**$2,113,728**	**$87,637**

4

5   No significant variances.