

1 **LOAD, CUSTOMERS, AND REVENUE**

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3 Toronto Hydro's total load, customer, and distribution revenue forecast is summarized
 4 in Table 1. The revenue forecast is calculated based on proposed distribution rates,
 5 excluding commodity, rate riders, and all other non-distribution rates.

6

7 **Table 1: Total Load, Revenues, and Customers**

Year		Total Normalized GWh	Total Normalized MVA	Total Distribution Revenue (\$M)	Total Customers
2013	Actual	25,245.1	42,737.5	531.9	724,144
2014	Actual	25,132.0	41,866.4	536.6	735,262
2015	Actual	25,031.1	41,320.7	628.0	747,811
2016	Actual	24,909.3	41,335.6	661.4	759,031
2017	Actual	24,427.6	40,731.3	693.6	765,559
2018	Bridge	24,378.2	40,925.0	740.7	771,079
2019	Bridge	24,123.8	40,761.1	771.5	776,786
2020	Forecast	24,036.0	40,408.1	796.9	784,330
2021	Forecast	23,818.0	40,275.5	824.2	790,944
2022	Forecast	23,651.8	40,200.6	846.8	798,591
2023	Forecast	23,475.3	40,104.6	885.2	806,238
2024	Forecast	23,396.7	40,166.6	924.2	813,886

Notes:

1. Total Normalized GWh are purchased GWh (before losses), and are weather normalized to the Test Year heating and cooling degree day assumptions.
2. Total Normalized MVA are weather normalized MVA.
3. Total Distribution Revenue is weather normalized and includes an adjustment for the Transformer Allowance.
4. Total Customers are as of mid-year and exclude street lighting devices and unmetered load connections.

1 Toronto Hydro's detailed load forecasts by rate class, customer forecast by rate class
2 and forecast of distribution revenues by rate class (OEB Appendix 2-IB) are shown in
3 Exhibit 3, Tab 1, Schedule 2.

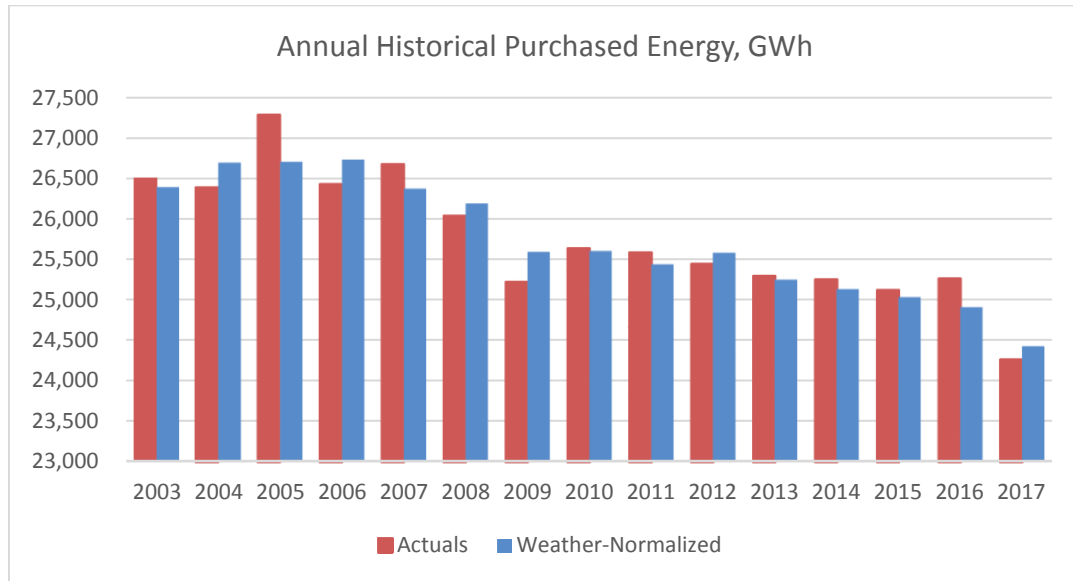
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5 The information provided for the Load, Customers, and Revenue exhibit has been
6 prepared according to the Board's Filing Requirements for Electricity Distribution Rate
7 Applications (July 12, 2018).

8

9 **1. HISTORICAL LOADS**

10 Toronto Hydro's historical total system load (actual and weather-normalized) is
11 illustrated in Figure 1 below.

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Figure 1: Historical Purchased Energy

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15 Since 2006, Toronto Hydro has experienced a significant decrease in total energy
16 consumption. Essentially flat growth over the 2004-2006 period has been replaced by

1 declining loads over the 2007-2017 period. The utility believes that conservation
 2 activities – both program driven and naturally occurring – continue to have a significant
 3 impact on the overall load change. Table 2, below, shows a summary of the total
 4 historical normalized annual loads and growth.

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Table 2: Historical Annual Load

Year	Total Normalized GWh	Growth GWh	Percentage Change (%)
2003	26,383.5		
2004	26,686.7	303	1.1%
2005	26,697.1	10	0.0%
2006	26,721.5	24	0.1%
2007	26,368.4	(353)	-1.3%
2008	26,186.4	(182)	-0.7%
2009	25,587.8	(599)	-2.3%
2010	25,599.2	11	0.0%
2011	25,435.4	(164)	-0.6%
2012	25,578.6	143	0.6%
2013	25,245.1	(334)	-1.3%
2014	25,132.0	(113)	-0.4%
2015	25,031.1	(101)	-0.4%
2016	24,909.3	(122)	-0.5%
2017	24,427.6	(482)	-1.9%

7

8 **2. LOAD AND CUSTOMER FORECAST METHODOLOGY**

9 Toronto Hydro’s load and customer forecast methodologies are unchanged from those
 10 approved by the OEB in the utility’s 2015-2019 Rate Application.¹ Forecasting models
 11 have been updated to reflect the most recently available information.

1 EB-2014-0116, Toronto Hydro-Electric System Limited Decision and Order (December 29, 2015).

1 Toronto Hydro’s load forecast methodology consists of a three-step process which
2 explicitly takes into account historical and forecast Conservation and Demand
3 Management (“CDM”) impacts. First, the actual historical cumulative CDM impacts are
4 added to metered loads. Second, the load (gross of CDM) is forecasted based on
5 multifactor regression techniques. Third, the cumulative forecast CDM impacts are
6 deducted from the gross load forecast to derive the load forecast (net of CDM).

7

8 Toronto hydro has developed separate energy forecasts for each rate class; total system
9 load is a summation of the individual rate class loads. For rate classes whose billing
10 units are monthly peak demand, the forecasted monthly non-coincident peak by class is
11 forecast based on historical relationships between energy and demand. The forecast of
12 customers by rate class is determined using time-series econometric methodologies.
13 Revenues are determined by applying the proposed distribution rates to the rate class
14 billing determinants for the forecast period.

15

16 **3. kWh LOAD FORECAST**

17 **3.1 Multivariate Regression Model**

18 Toronto Hydro’s process of developing a model of energy usage for each rate class
19 involves estimating multifactor models using different input variables to determine the
20 best fit. Different models were fit based on *a priori* assumptions about which input
21 variables impact energy use. Using stepwise regression techniques, numerous
22 explanatory variables were tested with the ultimate model being determined based on
23 model statistics and judgment.

24

25 Models are developed separately for each rate class; this methodology allows for
26 greater detail in modelling loads and allows for the different interactions to be modelled

1 independently. All of Toronto Hydro’s regression models use monthly kWh per day as
2 the dependent variable and monthly values of independent variables from July, 2002
3 through to the latest actual values (December 2017) to determine the monthly
4 regression coefficients.

5 The main drivers of energy consumption over time are weather and energy conservation
6 activities – both program and naturally occurring, as well as calendar, economic, and
7 demographic conditions. While load impacts related to the CDM program activities are
8 explicitly taken into account prior to and after the modelling (see section below on CDM
9 forecast), the remainder of the effects are captured through the multivariate regression
10 model.

11

12 The primary driver of consumption variance between years is weather. Weather
13 impacts on load are apparent in both the winter heating season and in the summer
14 cooling season. For that reason, both Heating Degree Days (“HDD” – a measure of
15 coldness in winter) and Cooling Degree Days (“CDD” – a measure of summer heat) are
16 captured in the multifactor regression model. In previous rate filings, Toronto Hydro
17 had indicated that the standard definition of HDD, which uses 18 degrees Celsius as the
18 point at which loads start to be impacted by temperature, was not as effective as a
19 measure which uses 10 degrees Celsius as the “balance point” for the HDD measure.
20 Figure 2, below, shows the relationship between temperatures and loads for the period
21 of July 2002 to December 2017. It is clear that the relationship between heating loads
22 and temperature changes at 10 degrees Celsius. Toronto Hydro uses this 10 degrees
23 Celsius “balance point” for construction of its HDD measure.

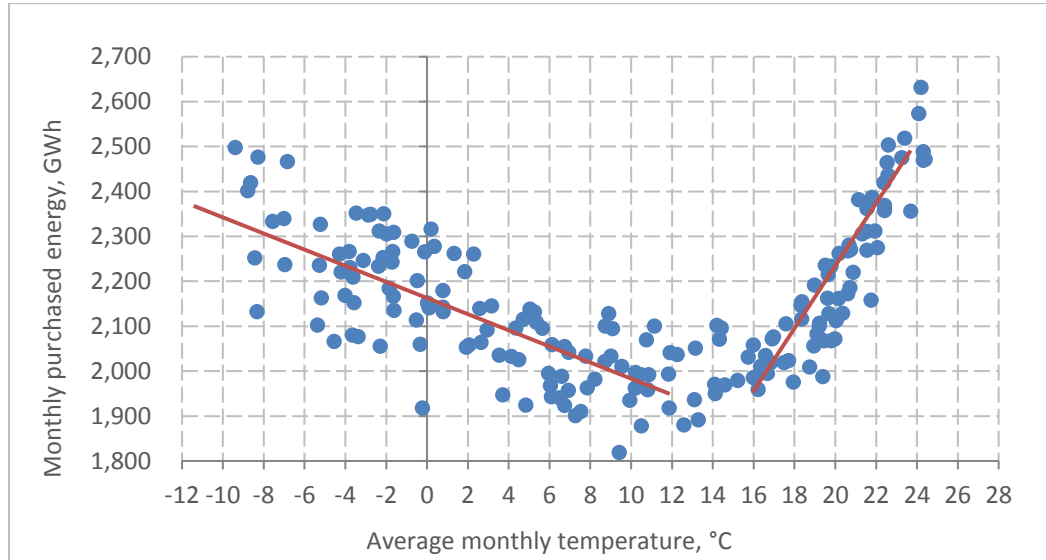


Figure 2: Purchased Energy versus Average Temperature

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Dew point temperature is another type of weather factor, included as an explanatory variable for the Competitive Sector Multi-unit Residential (“CSMUR”), General Service (“GS”) 50-999 kW, GS 1000-4999 kW, and Large Use customer classes. This variable captures the impact of humidity on consumption and shows the positive impact of temperature on loads during summer months and negative impact during winter months.

Demographic, economic conditions, and naturally occurring conservation activities are captured within the model by customer, Toronto Gross Domestic Product (“GDP”), and Toronto unemployment rate and time trend variables. The Toronto unemployment rate and Toronto GDP reflect the level of economic fluctuations, and were found to be statistically significant in the GS <50 kW, GS 50-999 kW, GS 1000-4999 kW, and Large Use class models. Customer variables capture overall levels of demographic

1 fluctuations, and were found to be statistically significant in the CSMUR, GS <50 kW, GS
2 50-999 kW, and Large Use class models.

3

4 The time trend variables used in the models are intended to capture trends which are
5 not otherwise explained by the other driver variables. The Residential model uses a
6 simple time trend variable which captures an increase in downward trend in
7 consumption over the historical period from 2008 onward. The model is based on
8 consumption with approved CDM loads “added back” to loads. Approved CDM
9 activities alone do not account for additional natural conservation which seems most
10 apparent in 2008 and onward. The GS<50 kW and GS 50-999 kW models use simple
11 time trends over historical 2002 to 2017 in order to help account for trending that other
12 driver variables and CDM adjustments do not fully speak to, as well as to improve
13 overall model fit over the period.

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15 For the Large Use customers, a clear change in trend has occurred. For this class,
16 Toronto Hydro has incorporated a linear spline time trend. Consumption for this class
17 displays a change in trend in the 2010 to 2017 period, which is captured by this type of
18 time trend.

19

20 One additional factor determining energy use in the monthly model can be classified as
21 “calendar factors.” For example, the number of business days in a month will impact
22 total monthly load. To capture the different number of days in the calendar months,
23 the modelling of purchased energy was performed on a per-day basis. To reflect
24 different numbers of business days in the month and, consequently, different number of
25 peak hours, business day percentage was used in those class models. A dummy variable
26 was also included to reflect the impact of the 2003 August blackout on energy use in

1 that month. Lastly, in several models a variable has been used to indicate shoulder
2 months where electricity usage is typically the lowest and most difficult to forecast
3 using other variables alone.

4

5 Exhibit 3, Tab 1, Schedule 1, Appendix A-1 contains the historical and forecast load and
6 input variable details. The model statistics for each class model are shown in Exhibit 3,
7 Tab 1, Schedule 1, Appendix A-2.

8

9 From the regression models, the forecast of energy usage is determined by applying the
10 model coefficients to forecasts of the input variables.

11

12 The forecast for heating and cooling degree-days, and dew-point temperature inputs is
13 based on a ten-year historical average of HDD, CDD, and Dew. A ten-year average was
14 chosen over the 20-year average based on analysis of the annual HDD and CDD data
15 that shows a definite trend in HDD and CDD (see Figure 3, below). Using an average
16 over the longer time period would therefore be less reflective of the most recent data
17 and an inferior forecast of HDD and CDD. Toronto Pearson International Airport station
18 was used as the climatological measurement point for establishing monthly HDD and
19 CDD.

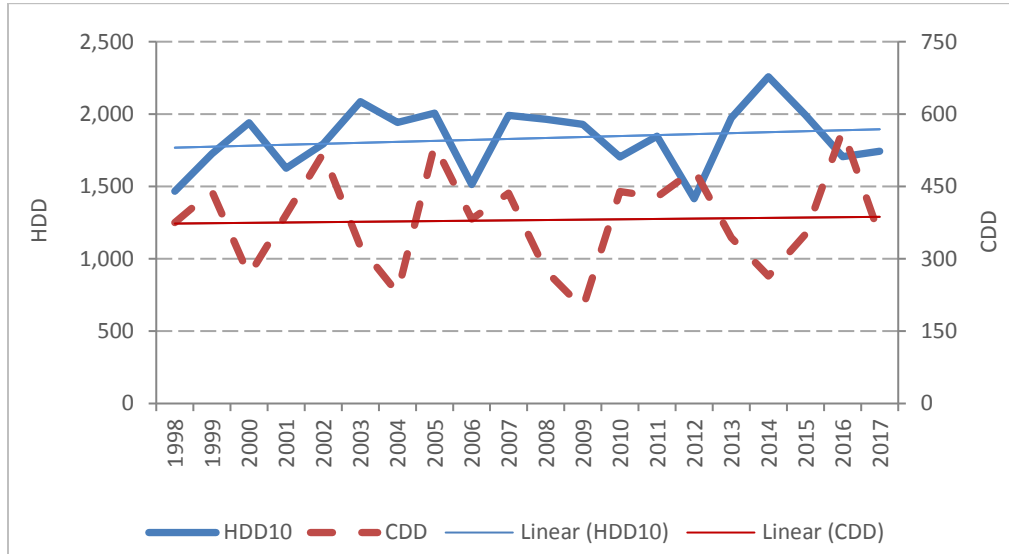


Figure 3: Historical CDD and HDD

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As per The OEB Filing Requirements, a comparison of load forecasts based on ten-year average and 20-year trends in HDD and CDD can be found in Exhibit 3, Tab 1, Schedule 1, Appendix B.

The forecast of the City of Toronto’s unemployment rate and population was derived based on the Conference Board of Canada forecast of the Toronto Census Metropolitan Area (“CMA”) unemployment rate and population using a pair regression model.

Table 3 summarizes the variables included in each of the rate class energy models.

1 **Table 3: Regression Variables by Rate Class**

Residential	Competitive Sector Multi-unit Residential	General Service <50 kW	General Service 50-999 kW	General Service 1,000-4,999 kW	Large Use	Street Lighting	Unmetered Load
HDD 10 per day	HDD 10 per day	HDD 10 per day	HDD 10 per day	HDD 10 per day	HDD 10 per day	Average use per device	Simple extrapolation
CDD per day	CDD per day	CDD per day	CDD per day	CDD per day	CDD per day		
Blackout dummy	Dew point temp.	Business days percent	Dew point temp.	Dew point temp.	Dew point temp.		
Time trend	Number of CSMUR customers	GDP	Business days percent	Business days percent	Business days percent		
Shoulder month	Intercept term	Black out dummy	GDP	GDP	GDP		
Intercept term		Time trend	Black out dummy	Toronto Unemployment Rate	Black out dummy		
		Shoulder month	Shoulder month	Black out dummy	Time trend		
		Number of GS<50 kW customers	Number of GS 50-999 kW customers	Time trend	Numbers of LU customers		
		Intercept term	Intercept term	Intercept term	Intercept term		

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3 **3.2 Electric Vehicles and Distributed Generation**

4 The markets for Electric Vehicles (“EVs”) and widespread Distributed Generation (“DG”) are fairly new in Ontario. To date, any impacts on overall loads and demands on the
 5 Toronto Hydro system have not been determined to be material. Government policy in these areas has the potential to increase the amounts of loads associated with EVs and
 6 DG, including over the 2020-2024 forecast period.

7

8 Toronto Hydro does not have enough information about these markets to be able to
 9 confidently include any impacts on loads or demands at the time of filing. There has
 10
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1 been no explicit incorporation of the potential load impacts into the load forecast, other
2 than trends that would be part of measured loads to date, and would be captured in the
3 multivariate regression models.

4 5 **4. CLASS DEMAND (kVA) FORECAST**

6 Toronto Hydro's forecast of monthly peak demand by customer class, which is used to
7 determine revenue for those customers billed on a demand basis (GS 50-999 kW, GS
8 1000-4999 kW, Large User, and Street Lighting), is established using historical
9 relationships between energy and demand. The utility uses the latest three-year
10 average of this relationship for forecasting purposes. The resulting kW demand forecast
11 is explicitly adjusted to reflect the impacts from the cumulative estimated CDM activities
12 and subsequently converted based on the latest three-year average power factors to
13 the peak kVA demand forecast (net of CDM). The cumulative CDM demand forecast
14 consists of the incremental CDM forecast as well as persistence of historical CDM
15 demand savings.

16 17 **5. CDM FORECAST**

18 Toronto Hydro confirms that it has explicitly included the impacts of CDM into its load
19 forecast, consistent with the Board's CDM Guidelines (EB-2012-0003). The cumulative
20 CDM forecast deducted from the gross load (step three of the three-step process
21 described previously) includes the CDM savings for programs delivered in each year.

22
23 Toronto Hydro's actual and forecasted CDM savings for the 2006 to 2024 period can be
24 separated into three separate components:

- 25 1) 2006 to 2016 verified historical savings;

- 1 2) 2017 to 2020 forecast savings under the existing Conservation First Framework
- 2 (“CFF”); and
- 3 3) 2021 to 2024 forecast savings beyond the CFF.

5 **5.1 2006 to 2016 Verified Historical Savings**

6 Toronto Hydro’s CDM forecast includes the impacts of historical CDM achievement. The
7 annual impacts of CDM completed between 2006 and 2016 have been verified by the
8 Independent Electricity System Operator (“IESO”), and represent the full suite of energy
9 efficiency and demand response programs offered to Toronto Hydro’s residential and
10 business customer segments. For each year, and for each program, impacts are
11 allocated to the appropriate rate classes. Where program-level data is available, rate
12 class allocations are estimated based on best available knowledge of the program
13 participant profile. Where project-level detail is available, rate class allocation estimates
14 improve based on the ability to assign a rate class to each contribution of program
15 savings.

16 17 **5.2 2017 to 2020 Forecasted Savings**

18 The second component of Toronto Hydro’s CDM forecast includes unverified 2017 and
19 2018 achievement as well as the remaining forecasted savings through 2020. This
20 contribution toward the load forecast is consistent with the utility’s recently approved
21 2015 to 2020 CDM Plan and represents the full suite of energy efficiency programs, both
22 local and provincial, currently being offered to Toronto Hydro customers, as well as
23 planned program offerings.

24
25 The 2017 and 2018 savings are based on completed projects, where the savings remain
26 subject to third-party evaluation and subsequent IESO verification. The forecasted

1 portion of 2018 savings, as well as the 2019 and 2020 forecasted impacts are based on a
2 combination of projects already pre-approved and scheduled for completion within this
3 timeframe as well as the application of historical trends and anticipated future
4 penetration for programs without natural funnels. At this time, Toronto Hydro forecasts
5 a moderate reduction in annual savings in future years to account for common measure
6 saturation, such as LED lighting. However, the total forecast currently surpasses
7 Toronto Hydro's 2015 to 2020 CFF-assigned target of 1,556 GWh.

8
9 The 2017 to 2020 forecasted savings include a higher degree of accuracy with respect to
10 rate class allocation as rate class forecasting has been integrated within internal CDM
11 reporting. Each month, project-level detail is matched against billing system data to
12 ensure all savings are allocated correctly.

14 **5.3 2021 to 2024 Forecasted Savings**

15 Toronto Hydro's annual forecasted savings for 2021 to 2024 were developed based on
16 the assumption that there will be a continuation of CDM programs. However, in the
17 absence of a new framework, the projected impact is based on the anticipated "status
18 quo" CDM delivery objectives and expectations assigned for the post 2020 conservation
19 planning period. In terms of estimating impact, the effects of the 2011 to 2020 program
20 build-up and the expected market saturation determined the basic assignment of
21 annual savings. This is demonstrated by the fact that 2020 forecast CDM savings, and
22 the subsequent consistent application of the same level of annual savings beyond 2020,
23 are lower than current realized savings. Due to the absence of conservation planning
24 detail, Toronto Hydro has determined this to be the best estimate at this time given the
25 absence of conservation planning detail for this period; this method is consistent with
26 other CDM forecasts used internally and externally for other planning objectives.

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Historical and estimated CDM savings used in Toronto Hydro’s load forecast are “gross” numbers and hence, include “free riders”. Toronto Hydro believes that “gross” CDM savings are the correct values to apply to the load forecast used to determine billing units. The OEB approved this treatment in its EB-2011-0116 decision. In regard to the Future Lost Revenue Adjustment Mechanism Variance Account (“LRAMVA”) however, Toronto Hydro agrees that the CDM applied in this forecast will be the basis for the LRAMVA, and Toronto Hydro’s LRAMVA balance will reflect the difference between estimated and actual CDM savings on a net basis. Exhibit 3, Tab1, Schedule 1, Appendix C has been created as an alternative to the OEB’s Appendix 2-I, and provides a reconciliation between gross CDM used for load forecast purposes and net CDM used for LRAMVA proposes.

Tables 4 and 5 represent the summaries of the cumulative forecast CDM consumption and demand impacts by class used for establishing the load forecast (net of CDM).

Table 4: Cumulative Forecast CDM Consumption Impacts, MWh (Gross)

MWh	Residential	CSMUR	GS <50 kW	GS 50-999 kW	GS 1000-4999 kW	Large Use	Total
2017	596,898	6,010	438,492	923,127	553,270	451,787	2,969,583
2018	638,045	10,300	460,258	1,114,418	632,036	499,874	3,354,930
2019	659,746	16,846	482,220	1,260,549	719,557	565,421	3,704,337
2020	670,817	23,205	502,468	1,383,783	790,685	624,077	3,995,036
2021	680,526	29,504	521,954	1,504,060	859,429	654,166	4,249,639
2022	690,234	35,804	541,440	1,624,336	928,173	684,255	4,504,242
2023	699,943	42,103	560,926	1,744,613	996,916	714,344	4,758,845
2024	709,651	48,403	580,411	1,864,890	1,065,660	744,433	5,013,449

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Table 5: Cumulative Forecast CDM Demand Impacts, MW (Gross)

MW	GS 50-999 kW	GS 1000-4999 kW	Large Use	Total
2017	1,879	1,132	1,096	4,107
2018	2,178	1,212	1,159	4,549
2019	2,402	1,306	1,263	4,971
2020	2,594	1,379	1,354	5,328
2021	2,781	1,451	1,404	5,636
2022	2,969	1,523	1,454	5,945
2023	3,156	1,595	1,503	6,254
2024	3,344	1,666	1,553	6,563

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3 Tables 6 and 7 include the 2020-2024 total net forecast CDM consumption and demand
 4 impacts per year with no prior persistence, which correspond to the gross cumulative
 5 numbers above, and will be used for future LRAMVA filings. Please refer to Exhibit 3,
 6 Tab 1, Schedule 1, Appendix C for a breakdown by class.

7

8 **Table 6: 2020-2024 Total Net Forecast CDM Consumption Impact, MWh**

CDM Forecast Year	2020	2021	2022	2023	2024	Total
2020	144,167					144,167
2021	140,936	144,167				285,104
2022	140,833	140,936	144,167			425,936
2023	140,564	140,833	140,936	144,167		566,500
2024	140,046	140,564	140,833	140,936	144,167	706,547

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10 **Table 7: 2020-2024 Total Net Forecast CDM Demand Impact, MW**

CDM Forecast Year	2020	2021	2022	2023	2024	Total
2020	233.58					233.58
2021	229.17	233.58				462.76
2022	229.03	229.17	233.58			691.78
2023	228.93	229.03	229.17	233.58		920.72
2024	228.89	228.93	229.03	229.17	233.58	1,149.61

1 **6. CUSTOMER FORECAST**

2 Customer additions in Toronto Hydro’s service territory have been fairly steady over the
 3 recent period, driven mainly by Residential and CSMUR customer additions, while
 4 General Service classes remain more flat year over year. The utility’s forecast of new
 5 customers is primarily based on extrapolation models for each rate class with the
 6 exception of the CSMUR rate class (implemented on June 1, 2013), whose forecast
 7 customer additions are based on market knowledge of suite metering and multi-unit
 8 dwelling construction in Toronto Hydro’s service area, as well as an application of expert
 9 judgement.

10
 11 Toronto Hydro’s detailed forecast of customers by rate class is found in Exhibit 3, Tab 1,
 12 Schedule 2 (OEB Appendix 2-IB).

13
 14 **7. ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSES**

15 Table 8 summarizes the variances between Toronto Hydro’s actual loads and the last
 16 OEB-approved loads (filed in Toronto Hydro’s EB-2014-0116 rate filing).

17
 18 **Table 8: Forecast versus Actual Purchased Energy**

Year	Board-Approved Load Forecast	Actual Load		Weather Normalized Actual	
	GWh	GWh	Variance	GWh	Variance
2015	25,018.45	25,122.15	0.41%	25,031.07	0.05%
2016	24,993.28	25,265.00	1.09%	24,909.27	-0.34%
2017	25,027.38	24,268.56	-3.03%	24,427.62	-2.40%

19
 20 Year to year variances in Toronto Hydro’s historical loads reflect the impacts of weather,
 21 economic conditions, CDM, and normal customer growth. For the forecast periods, year

- 1 to year variances in loads reflect the impact of model driver variables and CDM
- 2 assumptions.
- 3
- 4 Tables showing Toronto Hydro's year-over-year actual versus Board-approved loads and
- 5 customers can be found in Exhibit 3, Tab 1, Schedule 2 (OEB Appendix 2-IB).

Model Input Data

Month	Purchased Energy per day, kWh (by customer class)								Cumulative CDM Impacts per day, kWh						HDD10 per day	CDD18 per day	GDP	Time Trend			Blackout Dummy	DewPoint Temperature	Business Days Percent	Shoulder Flag	Toronto Unemployment Rate	Customer Numbers		
	Competitive Sector (CSMUR)								Residential	CSMUR	GS<50 kW	GS 50-999 kW	GS 1000-4999 kW	Large Use				Residential	GS<50 kW & GS 1,000-4,999 kW	Large Use						CSMUR	GS<50 kW (excluding FIT)	GS 50-999 kW
Residential	Multi-Unit Residential	GS<50 kW	GS 50-999 kW	GS 1000-4999 kW	Large Use	Street lighting	Unmetered Scattered Load	Residential							CSMUR	GS<50 kW	GS 50-999 kW				GS 1000-4999 kW	Large Use	Residential	GS<50 kW & GS 1,000-4,999 kW	Large Use			
Jul 2002	19,204,876		8,649,128	31,276,255	16,527,279	8,820,370	256,949	166,002							0.00	6.21	241,881	0	1	1	0	15.57	71.0	1	7.8	66,908	10,576	46
Aug 2002	18,511,523		8,183,954	29,604,261	15,721,190	8,346,209	246,772	159,547							0.00	4.60	242,337	0	2	2	0	22.06	67.7	1	9.6	66,827	10,586	46
Sep 2002	16,114,720		7,687,179	28,298,565	14,984,372	7,895,845	269,652	158,251							0.00	2.92	242,794	0	3	3	0	13.55	67.7	1	8.7	66,826	10,619	46
Oct 2002	14,513,865		6,947,084	25,956,564	13,645,056	7,127,650	306,016	155,740							2.96	0.32	243,074	0	4	4	0	4.79	71.0	0	8.5	66,859	10,669	46
Nov 2002	15,395,003		7,232,335	27,256,662	13,902,998	7,204,315	363,235	158,333							7.14	0.00	243,354	0	5	5	0	-0.53	70.0	0	7.8	66,838	10,680	46
Dec 2002	17,264,325		7,335,346	28,296,964	13,783,673	7,157,154	373,118	162,451							11.98	0.00	243,634	0	6	6	0	-5.56	64.5	1	8.7	66,934	10,708	46
Jan 2003	18,311,915		7,916,178	30,509,950	14,995,396	7,598,243	403,495	163,775							18.27	0.00	244,287	0	7	7	0	-11.63	71.0	1	9.4	66,987	10,732	46
Feb 2003	17,946,872		8,123,903	30,717,592	14,953,503	7,633,376	371,971	162,553							16.96	0.00	244,940	0	8	8	0	-11.31	71.4	1	8.4	67,139	10,786	46
Mar 2003	16,306,690		7,612,193	28,018,838	14,110,408	7,296,898	339,070	159,786							10.79	0.00	245,594	0	9	9	0	-5.52	67.7	1	7.4	67,113	10,794	46
Apr 2003	14,622,587		7,121,777	26,707,917	13,805,589	7,149,673	288,109	160,638							5.34	0.08	245,594	0	10	10	0	-1.84	66.7	0	8.7	67,040	10,809	46
May 2003	13,572,543		6,652,815	24,857,765	13,226,484	7,017,781	236,326	153,861							0.17	0.00	245,594	0	11	11	0	6.50	67.7	0	9.1	67,126	10,828	46
Jun 2003	14,771,959		7,206,195	27,040,865	14,519,362	7,638,136	232,369	158,462							0.00	1.76	245,595	0	12	12	0	11.94	70.0	1	8.8	66,958	10,845	46
Jul 2003	16,298,890		7,827,787	29,154,832	15,538,655	7,771,092	252,559	163,533							0.00	3.82	245,389	0	13	13	0	14.71	71.0	1	9.6	67,046	10,848	46
Aug 2003	15,735,506		7,524,161	27,792,398	14,449,168	7,483,754	238,901	159,766							0.00	4.13	245,182	0	14	14	1	16.04	64.5	1	9.0	67,040	10,850	46
Sep 2003	14,015,178		6,905,035	26,228,274	14,274,728	7,348,513	279,868	157,630							0.04	0.80	244,976	0	15	15	0	11.65	70.0	1	9.3	66,964	10,851	46
Oct 2003	13,928,118		6,717,373	25,744,347	13,778,426	6,912,996	326,382	159,766							2.26	0.00	246,159	0	16	16	0	4.73	71.0	0	8.2	67,018	10,892	46
Nov 2003	15,092,616		6,999,278	26,923,503	13,922,169	7,029,585	383,778	161,194							5.35	0.00	247,341	0	17	17	0	1.60	66.7	0	8.6	66,892	10,874	46
Dec 2003	16,844,234		7,272,589	27,677,189	13,794,288	6,932,811	400,325	161,702							10.11	0.00	248,524	0	18	18	0	-3.98	67.7	1	7.6	67,064	10,908	47
Jan 2004	17,978,692		7,904,747	30,816,801	15,143,333	8,177,818	405,204	167,312							19.39	0.00	248,793	0	19	19	0	-13.06	67.7	1	8.6	66,973	10,939	47
Feb 2004	17,170,190		7,700,344	29,663,529	14,662,859	7,211,845	356,252	163,516							13.78	0.00	249,603	0	20	20	0	-8.28	69.0	1	7.8	67,046	10,971	47
Mar 2004	15,629,667		7,263,222	27,958,514	14,414,022	7,168,856	341,915	162,663							7.90	0.00	249,333	0	21	21	0	-2.07	74.2	1	8.5	67,001	10,986	47
Apr 2004	14,026,791		6,860,879	26,007,834	13,599,975	7,142,223	284,717	160,004							3.88	0.00	250,426	0	22	22	0	0.57	66.7	0	8.1	66,920	11,007	47
May 2004	13,190,260		6,697,193	25,467,554	13,536,594	6,883,795	236,779	158,600							0.61	0.28	251,519	0	23	23	0	7.92	64.5	0	8.8	66,875	11,018	47
Jun 2004	13,682,848		6,996,090	26,877,869	14,725,457	7,501,466	230,928	161,946							0.00	1.05	252,612	0	24	24	0	11.15	73.3	1	8.2	66,789	11,038	47
Jul 2004	14,728,572		7,410,303	28,203,152	15,202,716	7,789,243	247,688	164,679							0.00	2.79	253,259	0	25	25	0	15.50	70.0	1	8.7	66,753	11,045	47
Aug 2004	14,329,725		7,313,804	27,625,836	14,779,013	7,491,884	232,359	160,171							0.00	1.92	253,906	0	26	26	0	14.06	67.7	1	8.2	66,715	11,076	47
Sep 2004	13,952,065		7,074,372	27,537,276	15,242,637	7,559,001	287,188	163,732							0.00	1.37	254,553	0	27	27	0	12.85	70.0	1	8.2	66,658	11,104	47
Oct 2004	13,466,693		6,596,275	25,678,284	13,594,246	6,960,710	322,754	159,158							0.83	0.05	255,037	0	28	28	0	6.00	64.5	0	9.0	66,496	11,097	47
Nov 2004	14,734,158		6,925,586	26,942,928	14,049,875	7,104,274	380,877	161,489							4.67	0.00	255,522	0	29	29	0	0.48	73.3	0	8.1	66,585	11,119	47
Dec 2004	16,962,969		7,498,072	29,200,693	14,274,620	7,287,318	393,686	167,781							12.75	0.00	256,006	0	30	30	0	-6.05	67.7	1	8.7	66,505	11,146	47
Jan 2005	17,644,488		7,884,202	31,067,950	14,884,092	7,502,345	415,029	163,047							16.84	0.00	256,735	0	31	31	0	-10.68	64.5	1	8.0	66,464	11,167	47
Feb 2005	16,986,994		7,790,034	29,965,306	14,769,846	7,412,682	380,503	159,982							14.01	0.00	257,464	0	32	32	0	-7.08	71.4	1	9.1	66,628	11,184	47
Mar 2005	15,704,996		7,441,105	28,955,758	14,554,549	7,319,912	357,292	157,327							11.65	0.00	258,194	0	33	33	0	-6.16	67.7	1	8.3	66,630	11,198	47
Apr 2005	13,765,854		6,766,118	26,139,356	13,762,751	6,903,337	296,587	153,933							2.77	0.00	258,554	0	34	34	0	-0.56	70.0	0	8.8	66,556	11,426	48
May 2005	13,739,592		6,518,052	25,117,342	13,271,845	6,822,412	231,600	149,054							0.92	0.03	258,914	0	35	35	0	4.06	67.7	0	8.2	66,482	11,185	47
Jun 2005	17,351,693		7,803,803	30,831,062	16,622,447	8,214,883	239,904	151,947							0.00	4.88	259,274	0	36	36	0	15.35	73.3	1	8.6	66,668	11,214	47
Jul 2005	18,839,649		8,166,152	31,728,614	16,122,802	7,757,701	249,964	158,882							0.00	6.09	260,122	0	37	37	0	15.96	64.5	1	7.9	66,741	11,233	47
Aug 2005	17,458,775		7,764,782	30,245,916	16,074,354	7,559,624	245,451	155,642							0.00	4.54	260,970	0	38	38	0	15.82	71.0	1	7.9	66,807	11,242	47
Sep 2005	14,755,814		7,084,612	28,045,770	15,354,144	7,374,681	280,008	153,375							0.00	1.74	261,817	0	39	39	0	12.99	70.0	1	7.4	66,885	11,255	47
Oct 2005	13,612,493		6,553,620																									

Month	Purchased Energy per day, KWH (by customer class)								Cumulative CDM impacts per day, KWH						HDD10 per day	CDD18 per day	GDP	Time Trend			Blackout Dummy	DewPoint Temperature	Business Days Percent	Shoulder Flag	Toronto Unemployment Rate	Customer Numbers			
	Competitive Sector								Residential	CSMUR	GS<50 kW	GS 50-999 kW	GS 1000-4999 kW	Large Use				Residential	GS<50 kW & GS 1,000-4,999 kW	Large Use						CSMUR	GS<50 kW (excluding FIT)	GS 50-999 kW	Large Use
	Residential	Multi-Unit Residential (CSMUR)	GS<50 kW	GS 50-999 kW	GS 1000-4999 kW	Large Use	Street lighting	Unmetered Scattered Load																					
Jan 2018	2,097,174	31,193	1,416,876	3,357,672	1,788,067	1,391,046	14.86	0.00	343,312	121	187	90	0	-8.71	71.0	1	6.9	73,641	70,709	10,401	44								
Feb 2018	2,042,179	30,351	1,426,308	3,404,158	1,832,153	1,429,352	14.60	0.00	343,614	122	188	90	0	-8.81	67.9	1	6.9	74,093	70,717	10,400	44								
Mar 2018	1,813,589	27,681	1,332,030	3,159,133	1,762,695	1,380,929	9.59	0.00	343,917	123	189	90	0	-5.37	67.7	1	6.9	74,434	70,725	10,399	44								
Apr 2018	1,583,291	24,823	1,203,908	2,908,372	1,698,133	1,336,897	3.31	0.00	344,604	124	190	90	0	-0.33	66.7	0	6.9	74,760	70,733	10,398	44								
May 2018	1,520,218	25,565	1,191,824	2,887,590	1,726,202	1,350,735	0.35	0.71	345,292	125	191	90	0	6.91	71.0	0	6.9	75,090	70,741	10,397	44								
Jun 2018	1,767,503	28,027	1,280,074	3,113,130	1,819,695	1,413,156	0.00	2.11	345,979	126	192	90	0	12.27	70.0	1	6.9	75,371	70,749	10,396	44								
Jul 2018	2,073,907	31,235	1,394,712	3,353,277	1,871,390	1,435,285	0.00	4.30	346,654	127	193	90	0	14.92	67.7	1	6.9	75,651	70,757	10,395	44								
Aug 2018	1,990,230	31,053	1,349,571	3,317,001	1,873,311	1,452,417	0.00	3.43	347,328	128	194	90	0	15.01	71.0	1	6.9	75,932	70,766	10,394	44								
Sep 2018	1,676,988	29,994	1,248,767	3,104,753	1,808,454	1,401,155	0.01	1.45	348,003	129	195	90	0	12.66	63.3	1	6.9	76,213	70,774	10,393	44								
Oct 2018	1,481,142	27,724	1,165,028	2,891,702	1,731,327	1,359,997	1.49	0.06	348,672	130	196	90	0	5.95	71.0	0	6.8	76,494	70,782	10,392	44								
Nov 2018	1,675,199	29,212	1,253,214	3,039,462	1,769,885	1,398,024	5.79	0.00	349,341	131	197	90	0	0.08	73.3	0	6.8	76,774	70,790	10,391	44								
Dec 2018	1,883,766	31,771	1,323,065	3,198,685	1,716,641	1,370,650	11.37	0.00	350,009	132	198	90	0	-5.16	61.3	1	6.8	77,055	70,798	10,391	44								
Jan 2019	2,168,501	51,019	1,484,483	3,797,957	2,035,669	1,573,449	14.86	0.00	350,629	133	199	90	0	-8.71	71.0	1	6.8	77,336	70,806	10,390	44								
Feb 2019	2,111,636	49,642	1,494,365	3,850,537	2,085,860	1,616,778	14.60	0.00	351,248	134	200	90	0	-8.81	67.9	1	6.8	77,622	70,814	10,389	44								
Mar 2019	1,875,271	45,274	1,395,589	3,573,383	2,006,783	1,562,006	9.59	0.00	351,867	135	201	90	0	-5.37	67.7	1	6.8	78,023	70,822	10,388	44								
Apr 2019	1,637,140	40,600	1,261,353	3,289,741	1,933,281	1,512,200	3.31	0.00	352,553	136	202	90	0	-0.33	66.7	0	6.8	78,429	70,830	10,387	44								
May 2019	1,571,922	41,814	1,248,693	3,266,234	1,965,238	1,527,852	0.35	0.71	353,239	137	203	90	0	6.91	71.0	0	6.8	78,870	70,838	10,386	44								
Jun 2019	1,827,617	45,841	1,341,153	3,521,348	2,071,677	1,598,458	0.00	2.11	353,925	138	204	90	0	12.27	66.7	1	6.8	79,347	70,846	10,385	44								
Jul 2019	2,144,442	51,087	1,461,261	3,792,985	2,130,530	1,623,489	0.00	4.30	354,614	139	205	90	0	14.92	71.0	1	6.8	79,860	70,854	10,384	44								
Aug 2019	2,057,920	50,789	1,413,967	3,751,952	2,132,717	1,642,868	0.00	3.43	355,303	140	206	90	0	15.01	67.7	1	6.8	80,373	70,862	10,383	44								
Sep 2019	1,734,024	49,058	1,308,353	3,511,872	2,058,879	1,584,884	0.01	1.45	355,992	141	207	90	0	12.66	66.7	1	6.8	80,886	70,870	10,382	44								
Oct 2019	1,531,517	45,344	1,220,618	3,270,885	1,971,072	1,538,329	1.49	0.06	356,695	142	208	90	0	5.95	71.0	0	6.7	81,398	70,878	10,381	44								
Nov 2019	1,732,174	47,779	1,313,012	3,438,020	2,014,969	1,581,342	5.79	0.00	357,397	143	209	90	0	0.08	70.0	0	6.7	81,911	70,886	10,380	44								
Dec 2019	1,947,835	51,963	1,386,196	3,618,122	1,954,353	1,550,379	11.37	0.00	358,099	144	210	90	0	-5.16	64.5	1	6.7	82,424	70,894	10,380	44								
Jan 2020	2,204,891	70,278	1,546,817	4,169,252	2,236,896	1,736,678	14.86	0.00	358,831	145	211	90	0	-8.71	71.0	1	6.7	82,937	70,902	10,379	44								
Feb 2020	2,073,035	66,024	1,503,421	4,081,216	2,213,012	1,722,968	14.60	0.00	359,563	146	212	90	0	-8.81	65.5	1	6.6	83,430	70,910	10,378	44								
Mar 2020	1,906,741	62,365	1,454,190	3,922,724	2,205,155	1,724,048	9.59	0.00	360,296	147	213	90	0	-5.37	71.0	1	6.6	83,922	70,918	10,377	44								
Apr 2020	1,664,514	55,927	1,314,318	3,611,352	2,124,387	1,660,075	3.31	0.00	361,025	148	214	90	0	-0.33	66.7	0	6.6	84,335	70,926	10,376	44								
May 2020	1,598,301	57,598	1,301,126	3,585,547	2,159,502	1,686,351	0.35	0.71	361,756	149	215	90	0	6.91	64.5	0	6.6	84,758	70,934	10,375	44								
Jun 2020	1,858,287	63,145	1,397,469	3,865,602	2,276,463	1,764,282	0.00	2.11	362,486	150	216	90	0	12.27	73.3	1	6.6	85,161	70,942	10,374	44								
Jul 2020	2,180,429	70,372	1,522,620	4,163,794	2,341,134	1,791,909	0.00	4.30	363,213	151	217	90	0	14.92	71.0	1	6.6	85,544	70,950	10,373	44								
Aug 2020	2,092,455	69,961	1,473,340	4,118,750	2,343,537	1,813,298	0.00	3.43	363,940	152	218	90	0	15.01	64.5	1	6.6	85,927	70,958	10,372	44								
Sep 2020	1,763,123	67,577	1,363,291	3,855,200	2,262,400	1,749,299	0.01	1.45	364,666	153	219	90	0	12.66	70.0	1	6.5	86,310	70,966	10,371	44								
Oct 2020	1,557,218	62,461	1,271,872	3,590,653	2,165,914	1,697,915	1.49	0.06	365,399	154	220	90	0	5.95	73.3	0	6.5	86,693	70,974	10,370	44								
Nov 2020	1,761,243	65,815	1,368,146	3,774,128	2,214,149	1,745,391	5.79	0.00	366,132	155	221	90	0	0.08	70.0	0	6.5	87,076	70,982	10,369	44								
Dec 2020	1,980,522	71,579	1,444,403	3,971,837	2,147,542	1,711,215	11.37	0.00	366,865	156	222	90	0	-5.16	67.7	1	6.5	87,459	70,990	10,369	44								
Jan 2021	2,236,802	89,357	1,606,803	4,531,639	2,431,376	1,820,409	14.86	0.00	367,598	157	223	90	0	-8.71	64.5	1	6.5	87,842	70,998	10,368	44								
Feb 2021	2,178,146	86,945	1,617,499	4,594,377	2,491,323	1,870,540	14.60	0.00	368,332	158	224	90	0	-8.81	67.9	1	6.5	88,241	71,006	10,367	44								
Mar 2021	1,934,337	79,296	1,510,584	4,263,683	2,396,875	1,807,171	9.59	0.00	369,066	159	225	90	0	-5.37	74.2	1	6.5	88,667	71,014	10,366	44								
Apr 2021	1,698,705	71,109	1,365,288	3,925,246	2,309,086	1,749,547	3.31	0.00	369,822	160	226	90	0	-0.33	66.7	0	6.5	89,109	71,022	10,365	44								
May 2021	1,621,433	73,235	1,351,584	3,897,198	2,347,254	1,767,656	0.35	0.71	370,578	161	227	90	0	6.91	64.5	0	6.5	89,569	71,031	10,364	44								
Jun 2021	1,885,181	80,288	1,451,663	4,201,595	2,474,383	1,849,345	0.00	2.11	371,334	162	228	90	0	12.27	73.3	1	6.5	90,045	71,039	10,363	44								
Jul 2021	2,211,986	89,477	1,581,668	4,525,706	2,544,676	1,878,303	0.00	4.30	372,088	163	229	90	0	14.92	67.7	1	6.5	90,538	71,047	10,362	44								
Aug 2021	2,122,738	88,954	1,530,476	4,476,747	2,547,289	1,900,724	0.00	3.43	372,842	164	230	90	0	15.01	67.7	1	6.5	91,031	71,055	10,361	44								
Sep 2021	1,788,640	85,922	1,416,160	4,190,289	2,459,098	1,833,639	0.01	1.45	373,597	165	231	90	0	12.66	70.0	1	6.5	91,524	71,063	10,360	44								
Oct 2021	1,579,755	79,418	1,321,195	3,902,748	2,354,222	1,779,778	1.49	0.06	374,359	166	232	90	0																

Residential Model

Dependent Variable: RES_DAY

Method: Least Squares

Date: 04/19/18 Time: 13:45

Sample: 2002M07 2017M12

Included observations: 186

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLACKOUT	(1,368,157)	104,109	-13.14	0.000
CDD18_DAY	945,817	36,776	25.72	0.000
HDD10_DAY	283,397	8,639	32.81	0.000
SHOULDER_FLAG	278,374	89,156	3.12	0.002
TREND_2008	(6,174)	860	-7.18	0.000
C	12,919,065	64,713	199.64	0.000
R-squared	93.1%	Mean dependent var		15307812.02
Adjusted R-squared	93.0%	S.D. dependent var		1731532.16
S.E. of regression	459,496.5	Akaike info criterion		28.95
Sum squared resid	38,004,671,942,128.3	Schwarz criterion		29.05
Log likelihood	(2,685.9)	Hannan-Quinn criter.		28.99
F-statistic	489.4	Durbin-Watson stat		1.23
Prob(F-statistic)	0.0			

CSMUR Model

Dependent Variable: CSMUR_PERDAY

Method: Least Squares

Date: 04/19/18 Time: 13:49

Sample: 2013M05 2017M12

Included observations: 56

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CUST_NUM	9	0	51.56	0.000
DEW	5,010	898	5.58	0.000
CDD18_DAY	17,297	2,262	7.65	0.000
HDD10_DAY	13,907	1,257	11.06	0.000
C	(66,858)	13,530	(4.94)	0.000
R-squared	98.1%	Mean dependent var		568796.79
Adjusted R-squared	98.0%	S.D. dependent var		125885.39
S.E. of regression	17,911.5	Akaike info criterion		22.51
Sum squared resid	16,361,900,917.6	Schwarz criterion		22.69
Log likelihood	(625.3)	Hannan-Quinn criter.		22.58
F-statistic	666.4	Durbin-Watson stat		1.33
Prob(F-statistic)	0.0			

GS <50 kW Model

Dependent Variable: LESS50_DAY

Method: Least Squares

Date: 05/15/18 Time: 12:40

Sample: 2002M07 2017M12

Included observations: 186

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLACKOUT	(279,127)	39,936	(6.99)	0.000
CDD18_DAY	274,086	10,648	25.74	0.000
BUS_DAYS_PERCENT	9,277	3,330	2.79	0.006
HDD10_DAY	78,282	3,059	25.59	0.000
NUMCUSTNETFIT	344	15	22.48	0.000
GDP	8	2	3.65	0.000
SHOULDER_FLAG	168,473	30,534	5.52	0.000
TREND_JUL2002	(9,274)	919	(10.09)	0.000
C	(19,083,862)	751,889	(25.38)	0.000
R-squared	95.1%	Mean dependent var		7126026.75
Adjusted R-squared	94.9%	S.D. dependent var		680626.33
S.E. of regression	154,047.1	Akaike info criterion		26.78
Sum squared resid	4,200,299,243,690.2	Schwarz criterion		26.93
Log likelihood	(2,481.1)	Hannan-Quinn criter.		26.83833286
F-statistic	429.3	Durbin-Watson stat		1.126856313
Prob(F-statistic)	0.0			

GS 50-999kW model**Dependent Variable: GS350_DAY**

Method: Least Squares

Date: 05/15/18 Time: 12:14

Sample: 2002M07 2017M12

Included observations: 186

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLACKOUT	(1,619,190)	88,796	(18.23)	0.000
BUS_DAYS_PERCENT	40,283	7,792	5.17	0.000
CDD18_DAY	925,140	28,836	32.08	0.000
CUST_NUMBERS	371	35	10.67	0.000
DEW	75,495	14,310	5.28	0.000
GDP	30	1	29.20	0.000
HDD10_DAY	384,292	19,463	19.74	0.000
SHOULDER_FLAG	394,315	85,109	4.63	0.000
C	10,108,937	823,806	12.27	0.000
R-squared	96.8%	Mean dependent var		28958549.08
Adjusted R-squared	96.7%	S.D. dependent var		2003070.55
S.E. of regression	366,324.8	Akaike info criterion		28.51
Sum squared resid	23,752,319,343,272.3	Schwarz criterion		28.66
Log likelihood	(2,642.2)	Hannan-Quinn criter.		28.57085727
F-statistic	669.3	Durbin-Watson stat		1.382071664
Prob(F-statistic)	0.0			

GS 1000-4999kW Model**Dependent Variable: GS450_DAY**

Method: Least Squares

Date: 03/28/18 Time: 18:26

Sample: 2002M07 2017M12

Included observations: 186

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLACKOUT	(921,318)	69,526	(13.25)	0.000
BUS_DAYS_PERCENT	51,112	6,835	7.48	0.000
DEW	85,824	10,758	7.98	0.000
GDP	17	5	3.42	0.001
HDD10_DAY	154,397	12,559	12.29	0.000
UNEMPL_RATE	(61,364)	29,726	(2.06)	0.040
TREND_JUL2002	(7,190)	2,395	(3.00)	0.003
CDD18_DAY	282,486	30,037	9.40	0.000
C	6,071,213	1,528,203	3.97	0.000
R-squared	83.4%	Mean dependent var		14494483.10
Adjusted R-squared	82.6%	S.D. dependent var		772304.11
S.E. of regression	321,838.8	Akaike info criterion		28.25
Sum squared resid	18,333,698,235,852.4	Schwarz criterion		28.40
Log likelihood	(2,618.1)	Hannan-Quinn criter.		28.31191789
F-statistic	111.0	Durbin-Watson stat		1.0499286
Prob(F-statistic)	0.0			

Large Use Model**Dependent Variable: LU_DAY**

Method: Least Squares

Date: 03/28/18 Time: 18:43

Sample: 2002M07 2017M12

Included observations: 186

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLACKOUT	(386,736)	60,953	(6.34)	0.000
BUS_DAYS_PERCENT	16,141	5,325	3.03	0.003
CDD18_DAY	152,034	25,373	5.99	0.000
CUST	38,289	9,321	4.11	0.000
DEW	33,479	9,481	3.53	0.001
GDP	6	1	4.82	0.000
HDD10_DAY	62,120	10,565	5.88	0.000
TREND_SPLINE_2010	(8,899)	1,172	(7.59)	0.000
C	2,525,042	785,144	3.22	0.002
R-squared	71.6%	Mean dependent var		7160800.52
Adjusted R-squared	70.3%	S.D. dependent var		430957.28
S.E. of regression	234,983.7	Akaike info criterion		27.62
Sum squared resid	9,773,466,740,053.2	Schwarz criterion		27.78
Log likelihood	(2,559.6)	Hannan-Quinn criter.		27.68284833
F-statistic	55.7	Durbin-Watson stat		1.243705295
Prob(F-statistic)	0.0			

Table 1: Alternative Weather Forecast - 20-Year Trend

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
1					
2					
3		<u>Heating Degree Days 10</u>		<u>Cooling Degree Days</u>	
4	Year	10-Year Average	20-Year Trend	10-Year Average	20-Year Trend
5	2018	1,849.5	1,898.4	370.0	388.0
6	2019	1,849.5	1,905.2	370.0	388.8
7	2020	1,864.1	1,928.0	370.0	389.6
8	2021	1,849.5	1,918.8	370.0	390.5
9	2022	1,849.5	1,925.6	370.0	391.3
10	2023	1,849.5	1,932.4	370.0	392.1
11	2024	1,864.1	1,955.8	370.0	392.9
12	Notes:				
13	1. 10-Year Average calculated over 2008-2017				
14	2. Trend forecast based on linear trend from 1998-2017				
15					

Table 2: Alternative Weather Forecast - Load Forecast

	Col. 1	Col. 2	Col. 3	Col. 4
1				
2				
3		Assuming 10-Year	Assuming 20-Year	
4		Average HDD & CDD	Trend HDD & CDD	Variance
5	Year	GWh	GWh	%
6	2018	24,378.2	24,472.7	0.4%
7	2019	24,123.8	24,227.1	0.4%
8	2020	24,036.0	24,149.5	0.5%
9	2021	23,818.0	23,938.9	0.5%
10	2022	23,651.8	23,781.5	0.5%
11	2023	23,475.3	23,613.8	0.6%
12	2024	23,396.7	23,545.9	0.6%
13				

Load Forecast Energy Impacts

	A	B	C	D D=B+C	E	F F=D+E	G	H H=FxG	I	J	K	L	M	N	O
RESIDENTIAL															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
1	2020 CDM Forecast	670,817	(665,659)	5,157.64	4,550.86	9,709	84.7%	8,221	2020 CDM Forecast	8,221					8,221
2	2021 CDM Forecast	680,526	(665,659)	14,866.15	4,550.86	19,417	84.7%	16,443	2021 CDM Forecast	8,221	8,221				16,443
3	2022 CDM Forecast	690,234	(665,659)	24,574.65	4,550.86	29,126	84.7%	24,664	2022 CDM Forecast	8,221	8,221	8,221			24,664
4	2023 CDM Forecast	699,943	(665,659)	34,283.16	4,550.86	38,834	84.7%	32,886	2023 CDM Forecast	8,221	8,221	8,221	8,221		32,886
5	2024 CDM Forecast	709,651	(665,659)	43,991.66	4,550.86	48,543	84.7%	41,107	2024 CDM Forecast	8,221	8,221	8,221	8,221	8,221	41,107
6									Total	41,107	32,886	24,664	16,443	8,221	123,322
CSMUR															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
7	2020 CDM Forecast	23,205	(19,858)	3,347	2,952.91	6,300	101.2%	6,378	2020 CDM Forecast	6,378					6,378
8	2021 CDM Forecast	29,504	(19,858)	9,646	2,952.91	12,599	101.2%	12,755	2021 CDM Forecast	6,378	6,378				12,755
9	2022 CDM Forecast	35,804	(19,858)	15,946	2,952.91	18,899	101.2%	19,133	2022 CDM Forecast	6,378	6,378	6,378			19,133
10	2023 CDM Forecast	42,103	(19,858)	22,245	2,952.91	25,198	101.2%	25,510	2023 CDM Forecast	6,378	6,378	6,378	6,378		25,510
11	2024 CDM Forecast	48,403	(19,858)	28,545	2,952.91	31,498	101.2%	31,888	2024 CDM Forecast	6,378	6,378	6,378	6,378	6,378	31,888
12									Total	31,888	25,510	19,133	12,755	6,378	95,663
GS<50															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
13	2020 CDM Forecast	502,468	(492,116)	10,352	9,133.97	19,486	83.95%	16,358	2020 CDM Forecast	16,358					16,358
14	2021 CDM Forecast	521,954	(492,116)	29,838	7,883.62	37,721	83.95%	31,667	2021 CDM Forecast	15,309	16,358				31,667
15	2022 CDM Forecast	541,440	(492,116)	49,323	6,580.08	55,904	83.95%	46,931	2022 CDM Forecast	15,264	15,309	16,358			46,931
16	2023 CDM Forecast	560,926	(492,116)	68,809	5,011.79	73,821	83.95%	61,973	2023 CDM Forecast	15,042	15,264	15,309	16,358		61,973
17	2024 CDM Forecast	580,411	(492,116)	88,295	2,874.18	91,169	83.95%	76,537	2024 CDM Forecast	14,564	15,042	15,264	15,309	16,358	76,537
18									Total	76,537	61,973	46,931	31,667	16,358	233,466
GS 50-1000kW															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
19	2020 CDM Forecast	1,383,783	(1,319,886)	63,897	56,379.70	120,277	75.5%	90,777	2020 CDM Forecast	90,777					90,777
20	2021 CDM Forecast	1,504,060	(1,319,886)	184,174	54,099.14	238,273	75.5%	179,833	2021 CDM Forecast	89,056	90,777				179,833
21	2022 CDM Forecast	1,624,336	(1,319,886)	304,450	51,800.60	356,251	75.5%	268,875	2022 CDM Forecast	89,042	89,056	90,777			268,875
22	2023 CDM Forecast	1,744,613	(1,319,886)	424,727	49,474.59	474,202	75.5%	357,896	2023 CDM Forecast	89,021	89,042	89,056	90,777		357,896
23	2024 CDM Forecast	1,864,890	(1,319,886)	545,004	47,097.50	592,101	75.5%	446,879	2024 CDM Forecast	88,983	89,021	89,042	89,056	90,777	446,879
24									Total	446,879	357,896	268,875	179,833	90,777	1,344,259
GS1-5MW															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
25	2020 CDM Forecast	790,685	(754,165)	36,520	32,223.61	68,744	75.8%	52,090	2020 CDM Forecast	52,090					52,090
26	2021 CDM Forecast	859,429	(754,165)	105,264	113,774.95	219,039	75.8%	165,264	2021 CDM Forecast	51,013	52,090				103,103
27	2022 CDM Forecast	928,173	(754,165)	174,007	29,364.48	203,372	75.8%	154,104	2022 CDM Forecast	51,001	51,013	52,090			154,104
28	2023 CDM Forecast	996,916	(754,165)	242,751	27,918.89	270,670	75.8%	205,099	2023 CDM Forecast	50,995	51,001	51,013	52,090		205,099
29	2024 CDM Forecast	1,065,660	(754,165)	311,495	26,469.02	337,964	75.8%	256,090	2024 CDM Forecast	50,992	50,995	51,001	51,013	52,090	256,090
30									Total	256,090	205,099	154,104	103,103	52,090	770,486
LARGE USE															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
31	2020 CDM Forecast	624,077	(608,092)	15,985	14,104.21	30,089	74.6%	22,433	2020 CDM Forecast	22,433					22,433
32	2021 CDM Forecast	654,166	(608,092)	46,074	14,486.80	59,561	74.6%	44,406	2021 CDM Forecast	21,973	22,433				44,406
33	2022 CDM Forecast	684,255	(608,092)	76,163	12,808.40	88,971	74.6%	66,333	2022 CDM Forecast	21,927	21,973	22,433			66,333
34	2023 CDM Forecast	714,344	(608,092)	106,252	12,095.95	118,348	74.6%	88,235	2023 CDM Forecast	21,902	21,927	21,973	22,433		88,235
35	2024 CDM Forecast	744,433	(608,092)	136,341	11,381.68	147,722	74.6%	110,136	2024 CDM Forecast	21,901	21,902	21,927	21,973	22,433	110,136
36									Total	110,136	88,235	66,333	44,406	22,433	331,544
Total															
			Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MWh	2020	2021	2022	2023	2024	Total
37	2020 CDM Forecast	3,995,036	(3,859,778)	135,258	119,345.26	254,603	77.1%	196,258	2020 CDM Forecast	144,167					144,167
38	2021 CDM Forecast	4,249,639	(3,859,778)	389,861	113,774.95	503,636	77.1%	388,206	2021 CDM Forecast	140,936	144,167				285,104
39	2022 CDM Forecast	4,504,242	(3,859,778)	644,464	75,522.33	719,986	77.1%	580,040	2022 CDM Forecast	140,833	140,936	144,167			425,936
40	2023 CDM Forecast	4,758,845	(3,859,778)	899,068	102,005.00	1,001,073	77.1%	771,599	2023 CDM Forecast	140,564	140,833	140,936	144,167		566,500
41	2024 CDM Forecast	5,013,449	(3,859,778)	1,153,671	95,326.16	1,248,997	77.1%	962,637	2024 CDM Forecast	140,046	140,564	140,833	140,936	144,167	706,547

Load Forecast Demand Impacts

	A	B	C	D D=(B+C)	E	F F=D+E	G	H H=FxG	I	J	K	L	M	N	O
	GS 50-1000MW		Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MW	2020	2021	2022	2023	2024	Total
1	2020 CDM Forecast	2,594	(2,492)	102	86	188	75.59%	142	2020 CDM Forecast	141.76					141.76
2	2021 CDM Forecast	2,781	(2,492)	289	83	372	75.59%	281	2021 CDM Forecast	139.20	141.76				280.96
3	2022 CDM Forecast	2,969	(2,492)	477	79	556	75.59%	420	2022 CDM Forecast	139.15	139.20	141.76			420.11
4	2023 CDM Forecast	3,156	(2,492)	664	76	740	75.59%	559	2023 CDM Forecast	139.11	139.15	139.20	141.76		559.23
5	2024 CDM Forecast	3,344	(2,492)	852	72	924	75.59%	698	2024 CDM Forecast	139.07	139.11	139.15	139.20	141.76	698.30
6									Total	698.30	559.23	420.11	280.96	141.76	2,100.36
	GS1-5MW		Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MW	2020	2021	2022	2023	2024	Total
7	2020 CDM Forecast	1,379	(1,341)	39	33	72	76.07%	55	2020 CDM Forecast	54.59					54.59
8	2021 CDM Forecast	1,451	(1,341)	111	31	142	76.07%	108	2021 CDM Forecast	53.51	54.59				108.10
9	2022 CDM Forecast	1,523	(1,341)	182	30	212	76.07%	162	2022 CDM Forecast	53.49	53.51	54.59			161.59
10	2023 CDM Forecast	1,595	(1,341)	254	29	283	76.07%	215	2023 CDM Forecast	53.48	53.49	53.51	54.59		215.07
11	2024 CDM Forecast	1,666	(1,341)	326	27	353	76.07%	269	2024 CDM Forecast	53.47	53.48	53.49	53.51	54.59	268.54
12									Total	268.54	215.07	161.59	108.10	54.59	807.89
	LARGE USE		Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MW	2020	2021	2022	2023	2024	Total
13	2020 CDM Forecast	1,354	(1,328)	27	23	50	75.02%	37	2020 CDM Forecast	37.23					37.23
14	2021 CDM Forecast	1,404	(1,328)	76	22	98	75.02%	74	2021 CDM Forecast	36.47	37.23				73.69
15	2022 CDM Forecast	1,454	(1,328)	126	21	147	75.02%	110	2022 CDM Forecast	36.39	36.47	37.23			110.08
16	2023 CDM Forecast	1,503	(1,328)	176	19	195	75.02%	146	2023 CDM Forecast	36.34	36.39	36.47	37.23		146.42
17	2024 CDM Forecast	1,553	(1,328)	225	18	244	75.02%	183	2024 CDM Forecast	36.34	36.34	36.39	36.47	37.23	182.76
18									Total	182.76	146.42	110.08	73.69	37.23	550.19
	Total		Cumulative 2019 Persistence	Cumulative Incremental Gross (For Load Forecast)	2020-2024 Load Forecast/LRAM Methodology Variance	Cumulative Incremental Gross (For LRAM)	Gross to Net Ratio	Net Cumulative	MW	2020	2021	2022	2023	2024	Total
19	2020 CDM Forecast	5,328	(5,160)	167	142	309	75.61%	234	2020 CDM Forecast	233.58					233.58
20	2021 CDM Forecast	5,636	(5,160)	476	136	612	75.61%	463	2021 CDM Forecast	229.17	233.58				462.76
21	2022 CDM Forecast	5,945	(5,160)	785	130	915	75.61%	692	2022 CDM Forecast	229.03	229.17	233.58			691.78
22	2023 CDM Forecast	6,254	(5,160)	1,094	124	1,218	75.61%	921	2023 CDM Forecast	228.93	229.03	229.17	233.58		920.72
23	2024 CDM Forecast	6,563	(5,160)	1,403	117	1,520	75.61%	1,150	2024 CDM Forecast	228.89	228.93	229.03	229.17	233.58	1,149.61
24									Total	1,149.61	920.72	691.78	462.76	233.58	3,458.44

OEB Appendix 2-IB
 Customer, Connections, Load Forecast and Revenues Data and Analysis

This sheet is to be filled in accordance with the instructions documented in section 2.3.2 of Chapter 2 of the Filing Requirements for Distribution Rate Applications, in terms of one set of tables per customer class.

Color coding for Cells: Data input Drop-down List
 No data entry required Blank or calculated value

Distribution System (Total)

	Calendar Year (for 2020 Cost of Service)	Consumption (kWh) ⁽²⁾		
			Actual (Weather actual)	Weather-normalized Weather-normalized
Historical	2013	Actual	24,602,483,277	24,549,317,998
Historical	2014	Actual	24,558,531,773	24,438,073,165
Historical	2015	Actual	24,428,042,829	24,339,499,672
Historical	2016	Actual	24,567,033,429	24,221,254,752
Historical	2017	Actual	23,598,825,424	23,753,435,105
Bridge Year	2018	Forecast		23,704,588,481
Bridge Year	2019	Forecast		23,456,901,501
Test Year	2020	Forecast		23,371,287,137
Test Year	2021	Forecast		23,159,331,182
Test Year	2022	Forecast		22,997,724,093
Test Year	2023	Forecast		22,826,104,359
Test Year	2024	Forecast		22,749,647,312

Variance Analysis	Year	Year-over-year		Versus Board-approved
	2013			
	2014	-0.2%	-0.5%	
	2015	-0.5%	-0.4%	
	2016	0.6%	-0.5%	
	2017	-3.9%	-1.9%	
	2018		-0.2%	
	2019		-1.0%	
	2020		-0.4%	
	2021		-0.9%	
	2022		-0.7%	
	2023		-0.7%	
	2024		-0.3%	
	Geometric Mean	-1.4%	-0.8%	

Customer Class Analysis (one for each Customer Class, excluding MicroFIT and Standby)

1 Customer Class: Residential Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer						
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized				
Historical	2013	Actual	606,350		Actual	4,988,814,386	4,578,747,000		Actual	8,228	8,211			
Historical	2014	Actual	609,928		Actual	4,879,959,207	4,864,760,386		Actual	8,001	7,976			
Historical	2015	Actual	610,961	Board-approved	612,985	Actual	4,807,191,038	4,785,012,315	Board-approved	4,909,898,145	7,868	7,832	Board-approved	8,010
Historical	2016	Actual	611,021		Actual	4,903,931,991	4,786,987,170		Actual	8,026	7,802			
Historical	2017	Actual	611,660		Actual	4,464,337,173	4,513,182,843		Actual	7,299	7,379			
Bridge Year	2018	Forecast	612,675		Forecast		4,579,985,785		Forecast		7,475			
Bridge Year	2019	Forecast	614,320		Forecast		4,532,014,707		Forecast		7,377			
Test Year	2020	Forecast	615,965		Forecast		4,510,636,914		Forecast		7,323			
Test Year	2021	Forecast	617,509		Forecast		4,458,695,848		Forecast		7,219			
Test Year	2022	Forecast	619,254		Forecast		4,422,717,979		Forecast		7,142			
Test Year	2023	Forecast	620,899		Forecast		4,386,740,109		Forecast		7,065			
Test Year	2024	Forecast	622,544		Forecast		4,366,437,563		Forecast		7,014			

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	0.2%		2014	-2.2%	-2.3%	2014	-2.8%	-2.9%
	2015	0.0%		2015	-1.5%	-1.6%	2015	-1.7%	-1.8%
	2016	0.1%		2016	2.0%	-0.4%	2016	2.0%	-0.4%
	2017	0.2%		2017	-9.0%	-5.3%	2017	-9.1%	-5.4%
	2018	0.3%		2018		1.5%	2018		1.3%
	2019	0.3%		2019		-1.0%	2019		-1.3%
	2020	0.3%		2020		-0.5%	2020		-0.7%
	2021	0.3%		2021		-1.2%	2021		-1.4%
	2022	0.3%		2022		-0.8%	2022		-1.1%
	2023	0.3%		2023		-0.8%	2023		-1.1%
	2024	0.3%	0.5%	2024		-0.5%	2024		-0.7%
	Geometric Mean	0.3%		Geometric Mean	-3.6%	-1.3%	Geometric Mean	-3.9%	-1.6%

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual		
Historical	2013	Actual	\$ 211,842,738	
Historical	2014	Actual	\$ 213,303,103	
Historical	2015	Actual	\$ 250,146,122	Board-approved \$ 252,506,394
Historical	2016	Actual	\$ 262,006,434	
Historical	2017	Actual	\$ 273,565,974	
Bridge Year	2018	Forecast	\$ 291,916,203	
Bridge Year	2019	Forecast	\$ 305,001,252	
Test Year	2020	Forecast	\$ 315,807,309	
Test Year	2021	Forecast	\$ 326,944,706	
Test Year	2022	Forecast	\$ 335,877,177	
Test Year	2023	Forecast	\$ 351,046,981	
Test Year	2024	Forecast	\$ 365,837,982	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved		
				2013	
Note 2	2014	0.7%		2014	
	2015	17.3%		2015	
	2016	4.7%		2016	
	2017	4.4%		2017	
	2018	6.7%		2018	
	2019	4.5%		2019	
	2020	3.5%		2020	
	2021	3.5%		2021	
	2022	2.7%		2022	
	2023	4.5%		2023	
	2024	4.2%	25.1%	2024	
	Geometric Mean	5.6%		Geometric Mean	

2 Customer Class: CSMUR Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer			
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	2013	Actual	36,156		Actual	133,317,285	130,463,404		Actual	3,687	3,608
Historical	2014	Actual	43,022		Actual	158,440,481	154,703,464		Actual	3,683	3,596
Historical	2015	Actual	54,516	Board-approved	Actual	203,724,686	202,105,727	Board-approved	Actual	3,737	3,707
Historical	2016	Actual	65,685		Actual	231,489,091	230,324,614		Actual	3,524	3,507
Historical	2017	Actual	71,041		Actual	243,307,958	245,098,022		Actual	3,425	3,450
Bridge Year	2018	Forecast	75,371		Forecast	256,193,965	256,193,965		Forecast	3,399	3,399
Bridge Year	2019	Forecast	79,347		Forecast	263,912,886	263,912,886		Forecast	3,326	3,326
Test Year	2020	Forecast	85,161		Forecast	277,127,203	277,127,203		Forecast	3,254	3,254
Test Year	2021	Forecast	90,045		Forecast	286,903,886	286,903,886		Forecast	3,186	3,186
Test Year	2022	Forecast	95,962		Forecast	300,278,055	300,278,055		Forecast	3,129	3,129
Test Year	2023	Forecast	101,879		Forecast	313,817,857	313,817,857		Forecast	3,080	3,080
Test Year	2024	Forecast	107,796		Forecast	328,419,229	328,419,229		Forecast	3,047	3,047

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
Note 3	2014	19.0%		2014	18.8%	18.6%	2014	-0.1%	-0.3%
Note 3	2015	26.7%		2015	28.6%	30.6%	2015	1.5%	3.1%
	2016	20.5%		2016	13.6%	14.0%	2016	-5.7%	-5.4%
	2017	8.2%		2017	5.1%	6.4%	2017	-2.8%	-1.6%
	2018	6.1%		2018		4.5%	2018		-1.5%
	2019	5.3%		2019		3.0%	2019		-2.1%
	2020	7.3%		2020		5.0%	2020		-2.2%
	2021	5.7%		2021		3.5%	2021		-2.1%
	2022	6.6%		2022		4.7%	2022		-1.8%
	2023	6.2%		2023		4.5%	2023		-1.6%
	2024	5.8%	57.4%	2024		4.7%	2024		-1.1%
	Geometric Mean	11.5%		Geometric Mean	22.2%	9.7%	Geometric Mean	-2.4%	-1.7%

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual		
Historical	2013	Actual	\$ 11,000,234	
Historical	2014	Actual	\$ 13,227,973	
Historical	2015	Actual	\$ 17,829,628	Board-approved
Historical	2016	Actual	\$ 21,941,819	\$ 18,002,535
Historical	2017	Actual	\$ 25,460,359	
Bridge Year	2018	Forecast	\$ 28,744,247	
Bridge Year	2019	Forecast	\$ 31,732,336	
Test Year	2020	Forecast	\$ 34,606,592	
Test Year	2021	Forecast	\$ 37,785,433	
Test Year	2022	Forecast	\$ 41,260,781	
Test Year	2023	Forecast	\$ 45,664,205	
Test Year	2024	Forecast	\$ 50,218,024	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
Note 3	2014	20.3%	
Note 3	2015	34.8%	
Note 3	2016	23.1%	
Note 3	2017	16.0%	
Note 3	2018	12.9%	
Note 3	2019	10.4%	
	2020	9.1%	178.9%
	2021	9.2%	
	2022	9.2%	
Note 3	2023	10.7%	
Note 3	2024	10.0%	
	Geometric Mean	16.4%	

3 Customer Class: GS < 50 kW Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽⁹⁾			Consumption (kWh) per Customer			
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	2013	Actual	68,312		Actual	2,171,642,035	2,169,187,101		Actual	31,790.1	31,754
Historical	2014	Actual	69,078		Actual	2,253,840,657	2,250,960,065		Actual	32,627.5	32,586
Historical	2015	Actual	70,628	Board-approved	Actual	2,366,876,161	2,360,983,568	Board Approved	Actual	33,511.9	33,428
Historical	2016	Actual	70,499		Actual	2,371,216,399	2,330,941,187		Actual	33,634.8	33,063
Historical	2017	Actual	71,116		Actual	2,306,089,650	2,319,849,458		Actual	32,427.2	32,621
Bridge Year	2018	Forecast	71,306		Forecast	2,307,381,246	2,307,381,246		Forecast	32,359	32,359
Bridge Year	2019	Forecast	71,403		Forecast	2,281,497,648	2,281,497,648		Forecast	31,952	31,952
Test Year	2020	Forecast	71,499		Forecast	2,267,636,936	2,267,636,936		Forecast	31,716	31,716
Test Year	2021	Forecast	71,596		Forecast	2,238,780,453	2,238,780,453		Forecast	31,270	31,270
Test Year	2022	Forecast	71,692		Forecast	2,214,262,866	2,214,262,866		Forecast	30,886	30,886
Test Year	2023	Forecast	71,788		Forecast	2,187,481,667	2,187,481,667		Forecast	30,471	30,471
Test Year	2024	Forecast	71,885		Forecast	2,169,915,395	2,169,915,395		Forecast	30,186	30,186

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	1.1%		2014	3.8%	3.8%	2014	2.6%	2.6%
	2015	2.2%		2015	5.0%	4.9%	2015	2.7%	2.6%
	2016	-0.2%		2016	0.2%	-1.3%	2016	0.4%	-1.1%
	2017	0.9%		2017	-2.7%	-0.5%	2017	-3.6%	-1.3%
	2018	0.3%		2018		-0.5%	2018		-0.8%
	2019	0.1%		2019		-1.1%	2019		-1.3%
	2020	0.1%		2020		-0.6%	2020		-0.7%
	2021	0.1%		2021		-1.3%	2021		-1.4%
	2022	0.1%		2022		-1.1%	2022		-1.2%
	2023	0.1%		2023		-1.2%	2023		-1.3%
	2024	0.1%	3.4%	2024		-0.8%	2024		-5.5%
	Geometric Mean	0.5%		Geometric Mean	2.0%	0.0%	Geometric Mean	0.7%	-0.5%

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual		
Historical	2013	Actual	\$ 69,640,444	
Historical	2014	Actual	\$ 72,523,701	
Historical	2015	Actual	\$ 89,457,689	Board-approved \$ 82,174,475
Historical	2016	Actual	\$ 93,027,753	
Historical	2017	Actual	\$ 97,989,286	
Bridge Year	2018	Forecast	\$ 103,423,556	
Bridge Year	2019	Forecast	\$ 106,600,964	
Test Year	2020	Forecast	\$ 110,004,699	
Test Year	2021	Forecast	\$ 112,620,337	
Test Year	2022	Forecast	\$ 114,543,206	
Test Year	2023	Forecast	\$ 118,435,994	
Test Year	2024	Forecast	\$ 122,461,164	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved			
				2013		
Note 2	2014	4.1%		2014		
	2015	23.3%		2015		
	2016	4.0%		2016		
	2017	5.3%		2017		
	2018	5.5%		2018		
	2019	3.1%		2019		
	2020	3.2%		2020		
	2021	2.4%		2021		
	2022	1.7%		2022		
	2023	3.4%		2023		
	2024	3.4%	33.9%	2024		
	Geometric Mean	5.8%		Geometric Mean		

4 Customer Class: GS 50-999 kW Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kVA

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽⁹⁾			Consumption (kWh) per Customer			
		Actual	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	2013	Actual	11,885		Actual	9,901,798,273	9,879,064,931	Actual	833,134	831,221	
Historical	2014	Actual	11,852		Actual	10,026,512,948	9,969,187,148	Actual	845,976	841,140	
Historical	2015	Actual	10,364	Board-approved	12,054	Actual	9,931,112,876	9,894,525,368	Actual	958,232	954,701
Historical	2016	Actual	10,475			Actual	9,975,508,523	9,858,005,611	Actual	952,316	941,098
Historical	2017	Actual	10,407			Actual	9,672,125,164	9,730,910,630	Actual	929,386	935,035
Bridge Year	2018	Forecast	10,396			Forecast	9,654,315,225	9,654,315,225	Forecast	928,657	928,657
Bridge Year	2019	Forecast	10,395			Forecast	9,589,676,796	9,589,676,796	Forecast	923,416	923,416
Test Year	2020	Forecast	10,374			Forecast	9,587,728,582	9,587,728,582	Forecast	924,207	924,207
Test Year	2021	Forecast	10,363			Forecast	9,526,101,781	9,526,101,781	Forecast	919,242	919,242
Test Year	2022	Forecast	10,352			Forecast	9,482,679,716	9,482,679,716	Forecast	916,024	916,024
Test Year	2023	Forecast	10,341			Forecast	9,432,138,729	9,432,138,729	Forecast	912,111	912,111
Test Year	2024	Forecast	10,330			Forecast	9,419,379,152	9,419,379,152	Forecast	911,847	911,847

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2013			2013			2013		
	2014	-0.3%		2014	1.3%	0.9%	2014	1.5%	1.2%
	2015	-12.6%		2015	-1.0%	-0.7%	2015	13.3%	13.5%
	2016	1.1%		2016	0.4%	-0.4%	2016	-0.6%	-1.4%
	2017	-0.6%		2017	-3.0%	-1.3%	2017	-2.4%	-0.6%
	2018	-0.1%		2018		-0.8%	2018		-0.7%
	2019	-0.1%		2019		-0.7%	2019		-0.6%
	2020	-0.1%		2020		0.0%	2020		0.1%
	2021	-0.1%		2021		-0.6%	2021		-0.5%
	2022	-0.1%		2022		-0.5%	2022		-0.4%
	2023	-0.1%		2023		-0.5%	2023		-0.4%
	2024	-0.1%	-13.9%	2024		-0.1%	2024		0.0%
	Geometric Mean	-1.4%		Geometric Mean	-0.8%	-0.5%	Geometric Mean	3.7%	0.9%

	Calendar Year (for 2020 Cost of Service)	Transformer Allowance kVA		
		Actual	Weather-normalized	Weather-normalized
Historical	2013	Actual	5,677,788	
Historical	2014	Actual	6,043,033	
Historical	2015	Actual	6,255,491	
Historical	2016	Actual	6,426,851	
Historical	2017	Actual	6,387,212	
Bridge Year	2018	Forecast	6,347,645	
Bridge Year	2019	Forecast	6,339,037	
Test Year	2020	Forecast	6,256,401	
Test Year	2021	Forecast	6,244,728	
Test Year	2022	Forecast	6,242,577	
Test Year	2023	Forecast	6,235,946	
Test Year	2024	Forecast	6,250,759	

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual	Weather-normalized	Weather-normalized
Historical	2013	Actual	\$ 150,194,118	
Historical	2014	Actual	\$ 150,772,038	
Historical	2015	Actual	\$ 172,375,420	Board-approved \$ 180,346,188
Historical	2016	Actual	\$ 181,645,882	
Historical	2017	Actual	\$ 188,108,963	
Bridge Year	2018	Forecast	\$ 202,001,465	
Bridge Year	2019	Forecast	\$ 209,647,074	
Test Year	2020	Forecast	\$ 213,897,609	
Test Year	2021	Forecast	\$ 220,563,142	
Test Year	2022	Forecast	\$ 226,003,812	
Test Year	2023	Forecast	\$ 235,495,164	
Test Year	2024	Forecast	\$ 245,490,240	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	25,788,227	25,679,509	
Actual	25,388,280	25,324,534	Board-approved 26,395,826
Actual	25,684,305	25,373,258	
Actual	24,821,587	24,967,767	
Forecast		25,259,133	
Forecast		25,224,716	
Forecast		24,899,249	
Forecast		24,848,478	
Forecast		24,840,867	
Forecast		24,813,648	
Forecast		24,875,671	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	2176	2167	
Actual	2450	2444	Board-approved 2,190
Actual	2452	2422	
Actual	2385	2399	
Forecast		2430	
Forecast		2429	
Forecast		2400	
Forecast		2398	
Forecast		2400	
Forecast		2400	
Forecast		2408	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2013		
	2014	0.4%	
	2015	14.3%	
	2016	5.4%	
	2017	3.6%	
	2018	7.4%	
	2019	3.8%	
	2020	2.0%	
	2021	3.1%	
	2022	2.5%	
	2023	4.2%	
	2024	4.2%	18.6%
	Geometric Mean	5.0%	

Year	Year-over-year	Test Year Versus Board-approved
2014	-0.6%	-0.8%
2015	-1.6%	-1.4%
2016	1.2%	0.2%
2017	-3.4%	-1.6%
2018		1.2%
2019		-0.1%
2020		-1.3%
2021		-0.2%
2022		0.0%
2023		-0.1%
2024		0.2%
Geometric Mean	-1.5%	-0.4%

Year	Year-over-year	Test Year Versus Board-approved
2014	-0.3%	-0.5%
2015	12.6%	12.8%
2016	0.1%	-0.9%
2017	-2.7%	-1.0%
2018		1.3%
2019		0.0%
2020		-1.2%
2021		-0.1%
2022		0.1%
2023		0.0%
2024		0.4%
Geometric Mean	3.0%	1.0%

5 Customer Class: GS 1000-4999 kW

Is the customer class billed on consumption (kWh) or demand (kW or kVA)?

kVA

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾				Consumption (kWh) per Customer			
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized		
Historical	2013	Actual	516		Actual	4,933,804,263	4,922,403,921		Actual	9,561,636	9,539,542	
Historical	2014	Actual	447		Actual	4,882,286,646	4,850,090,381		Actual	10,922,341	10,850,314	
Historical	2015	Actual	432	Board-approved	Actual	4,807,842,082	4,791,516,663	Board-approved	Actual	11,129,264	11,091,474	Board-approved
Historical	2016	Actual	443		Actual	4,753,125,810	4,722,938,583		Actual	10,729,404	10,661,261	
Historical	2017	Actual	431		Actual	4,608,797,465	4,630,556,212		Actual	10,693,266	10,743,750	
Bridge Year	2018	Forecast	430		Forecast		4,660,641,682		Forecast		10,838,702	
Bridge Year	2019	Forecast	430		Forecast		4,591,708,574		Forecast		10,678,392	
Test Year	2020	Forecast	430		Forecast		4,561,528,177		Forecast		10,608,205	
Test Year	2021	Forecast	430		Forecast		4,500,819,338		Forecast		10,467,022	
Test Year	2022	Forecast	430		Forecast		4,444,016,815		Forecast		10,334,923	
Test Year	2023	Forecast	430		Forecast		4,387,143,302		Forecast		10,202,659	
Test Year	2024	Forecast	430		Forecast		4,351,721,474		Forecast		10,120,282	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
Note 4	2013			2013			2013		
	2014	-13.4%		2014	-1.0%	-1.5%	2014	14.2%	13.7%
	2015	-3.4%		2015	-1.5%	-1.2%	2015	1.9%	2.2%
	2016	2.5%		2016	-1.1%	-1.4%	2016	-3.6%	-3.9%
	2017	-2.7%		2017	-3.0%	-2.0%	2017	-0.3%	0.8%
	2018	-0.2%		2018		0.6%	2018		0.9%
	2019	0.0%		2019		-1.5%	2019		-1.5%
	2020	0.0%		2020		-0.7%	2020		-0.7%
	2021	0.0%		2021		-1.3%	2021		-1.3%
	2022	0.0%		2022		-1.3%	2022		-1.3%
	2023	0.0%		2023		-1.3%	2023		-1.3%
	2024	0.0%	-2.3%	2024		-0.8%	2024		-0.8%
	Geometric Mean	-1.8%		Geometric Mean	-2.2%	-1.2%	Geometric Mean	3.8%	0.6%

	Calendar Year (for 2020 Cost of Service)	Transformer Allowance kVa		
		Actual		
Historical	2013	Actual	8,869,214	
Historical	2014	Actual	8,796,124	
Historical	2015	Actual	8,758,785	
Historical	2016	Actual	8,807,222	
Historical	2017	Actual	8,576,556	
Bridge Year	2018	Forecast	8,677,265	
Bridge Year	2019	Forecast	8,628,165	
Test Year	2020	Forecast	8,635,125	
Test Year	2021	Forecast	8,596,979	
Test Year	2022	Forecast	8,545,146	
Test Year	2023	Forecast	8,502,657	
Test Year	2024	Forecast	8,498,730	

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual		
Historical	2013	Actual	\$ 49,204,688	
Historical	2014	Actual	\$ 47,856,241	
Historical	2015	Actual	\$ 55,006,263	Board-approved \$ 55,588,622
Historical	2016	Actual	\$ 57,374,752	
Historical	2017	Actual	\$ 59,842,095	
Bridge Year	2018	Forecast	\$ 64,459,918	
Bridge Year	2019	Forecast	\$ 66,800,371	
Test Year	2020	Forecast	\$ 69,156,857	
Test Year	2021	Forecast	\$ 71,212,854	
Test Year	2022	Forecast	\$ 72,765,117	
Test Year	2023	Forecast	\$ 75,726,989	
Test Year	2024	Forecast	\$ 78,883,982	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	11,071,372	11,046,389	
Actual	10,765,500	10,703,390	
Actual	10,620,705	10,591,944	Board-approved 10,671,871
Actual	10,586,541	10,515,476	
Actual	10,256,881	10,303,604	
Forecast		10,442,958	
Forecast		10,383,836	
Forecast		10,392,864	
Forecast		10,334,297	
Forecast		10,285,783	
Forecast		10,232,645	
Forecast		10,228,471	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	21,456	21,408	
Actual	24,064	23,945	
Actual	24,585	24,518	Board-approved 24,254
Actual	23,897	23,737	
Actual	23,798	23,906	
Forecast		24,286	
Forecast		24,148	
Forecast		24,169	
Forecast		24,033	
Forecast		23,916	
Forecast		23,797	
Forecast		23,787	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
Note 2	2013			2013			2013		
	2014	-2.7%		2014	-2.8%	-3.1%	2014	12.2%	11.9%
	2015	14.9%		2015	-1.3%	-1.0%	2015	2.1%	2.4%
	2016	4.3%		2016	-0.3%	-0.7%	2016	-2.8%	-3.2%
	2017	4.3%		2017	-3.1%	-2.0%	2017	-0.4%	0.7%
	2018	7.7%		2018		1.4%	2018		1.6%
	2019	3.6%		2019		-0.6%	2019		-0.6%
	2020	3.5%		2020		0.1%	2020		0.1%
	2021	3.0%		2021		-0.6%	2021		-0.6%
	2022	2.2%		2022		-0.5%	2022		-0.5%
	2023	4.1%		2023		-0.5%	2023		-0.5%
	2024	4.2%	24.4%	2024		0.0%	2024		0.0%
	Geometric Mean	4.8%		Geometric Mean	-2.5%	-0.8%	Geometric Mean	3.5%	1.1%

6 Customer Class: Large Use Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kVA

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer			
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	2013	Actual	52		Actual	2,317,813,992	2,314,156,707		Actual	44,573,346	44,503,052
Historical	2014	Actual	47		Actual	2,202,455,832	2,193,335,719		Actual	46,860,762	46,666,717
Historical	2015	Actual	44	Board-approved	Actual	2,156,018,802	2,150,078,846	Board-approved	Actual	49,000,427	48,865,428
Historical	2016	Actual	42		Actual	2,175,392,445	2,155,688,415		Actual	51,795,058	51,325,915
Historical	2017	Actual	44		Actual	2,148,489,979	2,158,159,906		Actual	48,829,318	49,049,089
Bridge Year	2018	Forecast	44		Forecast	2,090,235,503			Forecast	47,505,352	
Bridge Year	2019	Forecast	44		Forecast	2,042,069,343			Forecast	46,410,667	
Test Year	2020	Forecast	44		Forecast	2,009,923,443			Forecast	45,680,078	
Test Year	2021	Forecast	44		Forecast	1,991,635,383			Forecast	45,264,441	
Test Year	2022	Forecast	44		Forecast	1,977,187,697			Forecast	44,936,084	
Test Year	2023	Forecast	44		Forecast	1,962,015,257			Forecast	44,591,256	
Test Year	2024	Forecast	44		Forecast	1,956,322,242			Forecast	44,461,869	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	-9.6%		2014	-5.0%	-5.2%	2014	5.1%	4.9%
	2015	-6.4%		2015	-2.1%	-2.0%	2015	4.6%	4.7%
	2016	-4.5%		2016	0.9%	0.3%	2016	5.7%	5.0%
	2017	4.8%		2017	-1.2%	0.1%	2017	-5.7%	-4.4%
	2018	0.0%		2018		-3.1%	2018		-3.1%
	2019	0.0%		2019		-2.3%	2019		-2.3%
	2020	0.0%		2020		-1.6%	2020		-1.6%
	2021	0.0%		2021		-0.9%	2021		-0.9%
	2022	0.0%		2022		-0.7%	2022		-0.7%
	2023	0.0%		2023		-0.8%	2023		-0.8%
	2024	0.0%	-10.2%	2024		-0.3%	2024		-0.3%
	Geometric Mean	-1.7%		Geometric Mean	-2.5%	-1.7%	Geometric Mean	3.1%	0.0%

	Calendar Year (for 2020 Cost of Service)	Transformer Allowance kVa		
		Actual		
Historical	2013	Actual	5,297,793	
Historical	2014	Actual	5,037,229	
Historical	2015	Actual	4,961,605	
Historical	2016	Actual	5,040,441	
Historical	2017	Actual	4,991,727	
Bridge Year	2018	Forecast	4,775,971	
Bridge Year	2019	Forecast	4,706,855	
Test Year	2020	Forecast	4,670,713	
Test Year	2021	Forecast	4,646,513	
Test Year	2022	Forecast	4,630,773	
Test Year	2023	Forecast	4,613,066	
Test Year	2024	Forecast	4,616,690	

	Calendar Year (for 2020 Cost of Service)	Revenues		
		Actual		
Historical	2013	Actual	\$ 25,251,423	
Historical	2014	Actual	\$ 23,989,999	
Historical	2015	Actual	\$ 27,721,865	Board-approved \$ 29,054,341
Historical	2016	Actual	\$ 29,318,163	
Historical	2017	Actual	\$ 31,351,056	
Bridge Year	2018	Forecast	\$ 31,915,699	
Bridge Year	2019	Forecast	\$ 32,812,359	
Test Year	2020	Forecast	\$ 33,795,038	
Test Year	2021	Forecast	\$ 34,823,821	
Test Year	2022	Forecast	\$ 35,638,447	
Test Year	2023	Forecast	\$ 37,139,549	
Test Year	2024	Forecast	\$ 38,741,455	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	5,177,346	5,159,660	
Actual	5,080,547	5,080,088	Board-approved 5,305,030
Actual	5,170,992	5,122,203	
Actual	5,113,057	5,134,769	
Forecast		4,897,235	
Forecast		4,826,374	
Forecast		4,789,334	
Forecast		4,764,614	
Forecast		4,748,366	
Forecast		4,730,195	
Forecast		4,733,922	

	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	110,156	109,780	
Actual	115,694	115,457	Board-approved 108,268
Actual	123,119	121,957	
Actual	116,206	116,699	
Forecast		111,301	
Forecast		109,690	
Forecast		108,849	
Forecast		108,287	
Forecast		107,917	
Forecast		107,504	
Forecast		107,589	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved			
				2013		
	2014	-5.0%		2014	-5.8%	-5.9%
	2015	15.6%		2015	-1.7%	-1.5%
	2016	5.8%		2016	1.6%	0.8%
	2017	6.9%		2017	-1.1%	0.2%
	2018	1.8%		2018		-4.6%
	2019	2.8%		2019		-1.4%
	2020	3.0%		2020		-0.8%
	2021	3.0%		2021		-0.5%
	2022	2.3%		2022		-0.3%
	2023	4.2%		2023		-0.4%
	2024	4.3%	16.3%	2024		0.1%
	Geometric Mean	4.4%		Geometric Mean	-2.4%	-1.5%

Year	Year-over-year	Test Year Versus Board-approved
2014	-5.8%	-5.9%
2015	-1.7%	-1.5%
2016	1.6%	0.8%
2017	-1.1%	0.2%
2018		-4.6%
2019		-1.4%
2020		-0.8%
2021		-0.5%
2022		-0.3%
2023		-0.4%
2024		0.1%
Geometric Mean	-2.4%	-1.5%

Year	Year-over-year	Test Year Versus Board-approved
2014	4.3%	4.1%
2015	5.0%	5.2%
2016	6.4%	5.6%
2017	-5.6%	-4.3%
2018		-4.6%
2019		-1.4%
2020		-0.8%
2021		-0.5%
2022		-0.3%
2023		-0.4%
2024		0.1%
Geometric Mean	3.2%	0.2%

7 Customer Class: Street Lighting Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kVA

	Calendar Year (for 2020 Cost of Service)	Connections				Consumption (kWh) ⁽³⁾				Consumption (kWh) per Connection					
		Actual		Board-approved		Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized			
Historical	2013	Actual	163,426			Actual	114,205,296	114,205,296		Actual	699	699			
Historical	2014	Actual	163,810			Actual	114,087,684	114,087,684		Actual	696	696			
Historical	2015	Actual	164,008	Board-approved	164,098	Actual	114,178,674	114,178,674	Board-approved	114,092,929	Actual	696	696	Board-approved	695
Historical	2016	Actual	164,296			Actual	114,988,504	114,988,504		Actual	700	700			
Historical	2017	Actual	164,537			Actual	114,477,435	114,477,435		Actual	696	696			
Bridge Year	2018	Forecast	164,756			Forecast	114,634,473	114,634,473		Forecast	696	696			
Bridge Year	2019	Forecast	165,024			Forecast	114,820,346	114,820,346		Forecast	696	696			
Test Year	2020	Forecast	165,292			Forecast	115,390,403	115,390,403		Forecast	698	698			
Test Year	2021	Forecast	165,560			Forecast	115,193,891	115,193,891		Forecast	696	696			
Test Year	2022	Forecast	165,828			Forecast	115,380,364	115,380,364		Forecast	696	696			
Test Year	2023	Forecast	166,096			Forecast	115,566,836	115,566,836		Forecast	696	696			
Test Year	2024	Forecast	166,364			Forecast	116,138,779	116,138,779		Forecast	698	698			

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	0.2%		2014	-0.1%		2014	-0.3%	
	2015	0.1%		2015	0.1%		2015	0.0%	
	2016	0.2%		2016	0.7%		2016	0.5%	
	2017	0.1%		2017	-0.4%		2017	-0.6%	
	2018	0.1%		2018	0.1%		2018	0.0%	
	2019	0.2%		2019	0.2%		2019	0.0%	
	2020	0.2%		2020	0.5%		2020	0.3%	
	2021	0.2%		2021	-0.2%		2021	-0.3%	
	2022	0.2%		2022	0.2%		2022	0.0%	
	2023	0.2%		2023	0.2%		2023	0.0%	
	2024	0.2%	0.7%	2024	0.5%	1.1%	2024	0.3%	0.4%
	Geometric Mean	0.2%		Geometric Mean	0.1%	0.2%	Geometric Mean	-0.1%	0.0%

	Calendar Year (for 2020 Cost of Service)	Revenues				Demand (kVA)				Demand (kVA) per Connection					
		Actual		Board-approved		Actual (Weather actual)	Weather-normalized	Weather-normalized		Actual (Weather actual)	Weather-normalized	Weather-normalized			
Historical	2013	Actual	\$ 12,108,215			Actual	323,205	323,205		Actual	2.0	2.0			
Historical	2014	Actual	\$ 12,259,078			Actual	323,887	323,887		Actual	2.0	2.0			
Historical	2015	Actual	\$ 12,269,663	Board-approved	\$ 12,281,306	Actual	324,136	324,136	Board-approved	324,479	Actual	2.0	2.0	Board-approved	2.0
Historical	2016	Actual	\$ 12,793,477			Actual	324,629	324,629		Actual	2.0	2.0			
Historical	2017	Actual	\$ 13,706,308			Actual	325,116	325,116		Actual	2.0	2.0			
Bridge Year	2018	Forecast	\$ 14,472,669			Forecast	325,652	325,652		Forecast	2.0	2.0			
Bridge Year	2019	Forecast	\$ 15,053,396			Forecast	326,138	326,138		Forecast	2.0	2.0			
Test Year	2020	Forecast	\$ 15,570,015			Forecast	326,622	326,622		Forecast	2.0	2.0			
Test Year	2021	Forecast	\$ 16,093,607			Forecast	327,106	327,106		Forecast	2.0	2.0			
Test Year	2022	Forecast	\$ 16,510,255			Forecast	327,591	327,591		Forecast	2.0	2.0			
Test Year	2023	Forecast	\$ 17,227,775			Forecast	328,076	328,076		Forecast	2.0	2.0			
Test Year	2024	Forecast	\$ 17,928,726			Forecast	328,561	328,561		Forecast	2.0	2.0			

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	1.2%		2014	0.2%		2014	0.0%	
	2015	0.1%		2015	0.1%		2015	0.0%	
	2016	4.3%		2016	0.2%		2016	0.0%	
	2017	7.1%		2017	0.1%		2017	0.0%	
	2018	5.6%		2018	0.2%		2018	0.0%	
	2019	4.0%		2019	0.1%		2019	0.0%	
	2020	3.4%		2020	0.1%		2020	0.0%	
	2021	3.4%		2021	0.1%		2021	0.0%	
	2022	2.6%		2022	0.1%		2022	0.0%	
	2023	4.3%		2023	0.1%		2023	0.0%	
	2024	4.1%	26.8%	2024	0.1%	0.7%	2024	0.0%	-0.1%
	Geometric Mean	4.0%		Geometric Mean	0.2%	0.2%	Geometric Mean	0.0%	0.0%

8 Customer Class: Unmetered Scattered Load Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2020 Cost of Service)	Customers			Consumption (kWh) ⁽¹⁾			Consumption (kWh) per Customer			
		Actual			Actual (Weather actual)	Weather-normalized	Weather-normalized	Actual (Weather actual)	Weather-normalized	Weather-normalized	
Historical	2013	Actual	873		Actual	41,087,638	41,087,638		Actual	47,065	47,065
Historical	2014	Actual	888		Actual	40,948,317	40,948,317		Actual	46,113	46,113
Historical	2015	Actual	866	Board-approved	Actual	41,098,509	41,098,509	Board-approved	Actual	47,458	47,458
Historical	2016	Actual	866		Actual	41,380,666	41,380,666		Actual	47,784	47,784
Historical	2017	Actual	860		Actual	41,200,600	41,200,600		Actual	47,908	47,908
Bridge Year	2018	Forecast	857		Forecast	41,200,600	41,200,600		Forecast	48,075	48,075
Bridge Year	2019	Forecast	857		Forecast	41,200,600	41,200,600		Forecast	48,075	48,075
Test Year	2020	Forecast	857		Forecast	41,313,479	41,313,479		Forecast	48,207	48,207
Test Year	2021	Forecast	857		Forecast	41,200,600	41,200,600		Forecast	48,075	48,075
Test Year	2022	Forecast	857		Forecast	41,200,600	41,200,600		Forecast	48,075	48,075
Test Year	2023	Forecast	857		Forecast	41,200,600	41,200,600		Forecast	48,075	48,075
Test Year	2024	Forecast	857		Forecast	41,313,479	41,313,479		Forecast	48,207	48,207

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2014	1.7%		2014	-0.3%	-0.3%	2014	-2.0%	-2.0%
	2015	-2.5%		2015	0.4%	0.4%	2015	2.9%	2.9%
	2016	0.0%		2016	0.7%	0.7%	2016	0.7%	0.7%
	2017	-0.7%		2017	-0.4%	-0.4%	2017	0.3%	0.3%
	2018	-0.3%		2018	0.0%	0.0%	2018	0.4%	0.4%
	2019	0.0%		2019	0.0%	0.0%	2019	0.0%	0.0%
	2020	0.0%		2020	0.3%	0.3%	2020	0.3%	0.3%
	2021	0.0%		2021	-0.3%	-0.3%	2021	-0.3%	-0.3%
	2022	0.0%		2022	0.0%	0.0%	2022	0.0%	0.0%
	2023	0.0%		2023	0.0%	0.0%	2023	0.0%	0.0%
	2024	0.0%	-4.6%	2024	0.3%	0.3%	2024	0.3%	5.2%
	Geometric Mean	-0.2%		Geometric Mean	0.1%	0.1%	Geometric Mean	0.6%	0.2%

	Calendar Year (for 2020 Cost of Service)	Connections		
		Actual		
Historical	2013	Actual	11,784	
Historical	2014	Actual	11,754	
Historical	2015	Actual	11,942	Board-approved
Historical	2016	Actual	12,056	
Historical	2017	Actual	12,196	
Bridge Year	2018	Forecast	12,272	
Bridge Year	2019	Forecast	12,272	
Test Year	2020	Forecast	12,272	
Test Year	2021	Forecast	12,272	
Test Year	2022	Forecast	12,272	
Test Year	2023	Forecast	12,272	
Test Year	2024	Forecast	12,272	

	Consumption (kWh) per Connection		
	Actual (Weather actual)	Weather-normalized	Weather-normalized
Actual	3,487	3,487	
Actual	3,484	3,484	
Actual	3,442	3,442	Board-approved
Actual	3,432	3,432	
Actual	3,378	3,378	
Forecast	3,357	3,357	
Forecast	3,357	3,357	
Forecast	3,366	3,366	
Forecast	3,357	3,357	
Forecast	3,357	3,357	
Forecast	3,366	3,366	

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved
	2014	-0.3%	
	2015	1.6%	
	2016	1.0%	
	2017	1.2%	
	2018	0.6%	
	2019	0.0%	
	2020	0.0%	
	2021	0.0%	
	2022	0.0%	
	2023	0.0%	
	2024	0.0%	4.7%
	Geometric Mean	0.4%	

Year	Year-over-year	Test Year Versus Board-approved
2014	-0.1%	-0.1%
2015	-1.2%	-1.2%
2016	-0.3%	-0.3%
2017	-1.6%	-1.6%
2018	-0.6%	-0.6%
2019	0.0%	0.0%
2020	0.3%	0.3%
2021	-0.3%	-0.3%
2022	0.0%	0.0%
2023	0.0%	0.0%
2024	0.3%	-4.1%
0	-1.0%	-0.4%

	Calendar Year (for 2020 Cost of Service)	Revenues			
Historical	2013	Actual	\$ 2,616,211		
Historical	2014	Actual	\$ 2,651,624		
Historical	2015	Actual	\$ 3,170,482	Board-approved	\$ 3,173,355
Historical	2016	Actual	\$ 3,314,179		
Historical	2017	Actual	\$ 3,541,144		
Bridge Year	2018	Forecast	\$ 3,734,078		
Bridge Year	2019	Forecast	\$ 3,878,054		
Test Year	2020	Forecast	\$ 4,022,917		
Test Year	2021	Forecast	\$ 4,143,657		
Test Year	2022	Forecast	\$ 4,246,058		
Test Year	2023	Forecast	\$ 4,425,373		
Test Year	2024	Forecast	\$ 4,610,813		

Variance Analysis	Year	Year-over-year	Test Year
			Versus Board-approved
Note 2	2013		
	2014	1.7%	
	2015	19.1%	
	2016	4.5%	
	2017	6.8%	
	2018	5.4%	
	2019	3.9%	
	2020	3.7%	
	2021	3.0%	
	2022	2.5%	
	2023	4.2%	26.8%
	2024	4.2%	
Geometric Mean	5.6%		

Notes:

- 1 2015 Revenues are calculated on the rates that would have been applied if test year rate implementation was January 1, 2015.
- 2 Variances due to 2015 test year rate increases
- 3 CSMUR variances driven mainly strong rate of growth in number of customer and resulting electricity sales to the class.
- 4 Variance driven mainly by customer rate-class reclassification

1 **OTHER REVENUE**

2

3 **1. INTRODUCTION**

4 In addition to revenues recovered through distribution rates, Toronto Hydro earns other
 5 revenue from non-distribution related services, property and facility rentals, Specific
 6 Service Charges, and short-term investments. Toronto Hydro also receives income and
 7 recoveries from shared services that it provides to its affiliates. Together, these
 8 revenues constitute Toronto Hydro’s Other Revenue and reduce the costs recovered
 9 through distribution rates. The Other Revenues are broken out into the sub-categories
 10 as summarized in Table 1, below.

11

12 **Table 1: Other Revenue Summary**

Description	Actual Year 2015	Actual Year 2016	Actual Year 2017	Bridge Year 2018	Bridge Year 2019	Test Year 2020
Specific Service Charges	\$6.8	\$9.5	\$7.2	\$6.5	\$6.5	\$6.6
Late Payment Charge	\$4.1	\$4.5	\$3.7	\$3.7	\$3.7	\$3.8
Other Operating Revenues	\$10.8	\$12.0	\$13.4	\$12.3	\$12.4	\$12.0
Other Income or Deductions	\$16.1	\$18.7	\$21.4	\$21.4	\$24.0	\$25.4
Total Revenue Offset	\$37.8	\$44.7	\$45.7	\$43.9	\$46.7	\$47.7

13

14 A complete breakdown of the Other Revenue accounts is shown in OEB Appendix 2-H –
 15 Other Operating Revenue (Exhibit 3, Tab 2, Schedule 2).

16

17 **2. REVENUE FROM SPECIFIC SERVICE CHARGES**

18 Toronto Hydro charges user fees for certain services. Some of these services, such as
 19 account setup, are provided at the customer’s request. Other fees result from Toronto
 20 Hydro’s business operations, such as customers’ non-payment of bills.

1 Variance Explanation

2 The historical variance between Toronto Hydro's 2015 and 2016 actuals from \$6.8
3 million to \$9.5 million is primarily due to the implementation in 2016 of Specific Service
4 Charges approved as part of the utility's 2015-2019 Rate Application.¹ The historical
5 variance between 2016 and 2017 actuals from \$9.5 million to \$7.1 million is primarily
6 due to lower collection service charges due to the Winter Reconnection initiative which
7 suspended disconnections for customers in arrears during winter time.

8

9 **3. LATE PAYMENT CHARGES**

10 Toronto Hydro applies late payment charges on overdue customer balances in
11 accordance with all applicable regulations.

12

13 Variance Explanation

14 The historical variance between 2016 and 2017 actuals from \$4.5 million to \$3.7 million
15 is primarily due to lower average electricity bill partly due to Ontario Fair Hydro Plan.

16

17 The annual late payment charges for 2020 are expected to be stable and remain
18 generally consistent with 2017 amounts.

19

20 **4. OTHER OPERATING REVENUES**

21 Other Operating Revenue includes revenues from Standard Supply Service ("SSS")
22 Administration Charges, Retail Service Charges, and Maintenance of third-party facilities
23 located within Toronto Hydro. It also includes revenues allocated from Toronto Hydro's
24 contract with the City of Toronto for the maintenance of street-lighting assets which

¹ EB-2014-0116, Toronto Hydro-Electric System Limited Decision and Order (December 29, 2015).

1 were moved into Toronto Hydro rate base as a result of the Decision from the utility's
2 2015-2019 Rate Application.²

3
4 Variance Explanation

5 The historical variance between 2015 and 2016 actuals from \$10.8 million to \$12.0
6 million and 2016 and 2017 actuals from \$12.0 million to \$13.4 million are primarily due
7 to an increase in the revenues related to street-lighting assets as a result of incremental
8 operating costs. The forecast for 2020 is expected to be in line with historical revenues.

9
10 **5. OTHER INCOME OR DEDUCTIONS**

11 Toronto Hydro earns revenue by providing services to customers and third parties,
12 through gains on the sale of scrap metal, and gains on the disposal of utility property.
13 Toronto Hydro also earns income and recoveries by providing shared services to its
14 affiliates and through interest income from the short-term investment of idle cash
15 balances.

16
17 Toronto Hydro divides its Other Income into the following four categories:

- 18
- 19 • Merchandise and Jobbing;
 - 20 • Gains from Sale of Utility Properties;
 - 21 • Shared Services Income and Recoveries; and
 - 22 • Interest Income from Short-Term Investment.

23 Variance Explanation

24 The historical variance for Other Income program between 2015 and 2016 actuals from
25 \$16.1 million to \$18.7 million is due to an increase in the pole attachment program

² Ibid.

1 offset by lower gain on sale of properties. The historical variance between 2016 and
2 2017 actuals from \$18.7 million to \$21.4 million is due to an increase in pole attachment
3 program and shared service recovery offset by lower gain on sale of properties. The
4 variance from 2017 to 2020 is due to higher revenues from the pole attachment
5 program.

7 **5.1 Merchandise and Jobbing**

8 Toronto Hydro offers some services to customers and third parties for a fee. These
9 services generally exclude those covered by the various OEB-approved Specific Service
10 Charges, and are comprised of the following activities:

- 11 • Customer requests for isolation, protection, and temporary removals of lines to
12 allow work on customer equipment;
- 13 • Repair of damaged distribution plant to be reimbursed by third parties;
- 14 • Rental income charged for pole attachments;
- 15 • Rental income derived from Toronto Hydro properties such as ducts;
- 16 • Gains on sale of scrap metal; and
- 17 • Revenues from sale of inventory to third parties.

18
19 The revenues and expenses from Merchandise and Jobbing vary significantly from year
20 to year, depending on the number and type of activities requested by customers. As
21 such, forecast of the activities, revenues and expenses from 2018 to 2020 are based
22 primarily on historical trends.

23
24 For 2020, Toronto Hydro proposes an increase to its current pole attachment rental fee
25 from \$42.00 to \$44.15, in accordance with the OEB's EB-2015-0304 decision, and as
26 further detailed in Exhibit 8, Tab 2, Schedule 1.

1 Toronto Hydro also generates income from the sale of scrap metal materials. Scrap
2 metals are sold at market rates and any revenue depends on the strength of the market
3 at the time of disposition and the volume of scrap that is available for processing.

4 Toronto Hydro currently outsources the processing and selling of scrap metal materials
5 to a third party. Proceeds of the sale net of the vendor's cost of disposing the scrap
6 metal materials are remitted to Toronto Hydro.

7

8 **5.2 Gains from Sale of Utility Properties**

9 Toronto Hydro disposes of surplus facilities and equipment on a periodic basis. Over the
10 2015 to 2017 period, total net gains on sale was \$6.7 million. For the forecast period
11 2018-2020, Toronto Hydro does not forecast any additional sales, with the exceptions
12 noted below.

13

14 In 2017 Toronto Hydro sold its property located at 50/60 Eglinton Ave. W. Net after tax
15 gains on this sale has been proposed to be returned to customers through a rate rider,
16 further explained in Exhibit 8, Tab 1, Schedule 1.

17

18 In 2018 Toronto Hydro sold its property at 5800 Yonge St. The sale of this property was
19 contemplated in the utility's 2015-2019 Rate Application, and forecasted gains were
20 included in a rate rider approved for disposition over the 2016-18 period. The variance
21 between the forecasted amount and the final after-tax gains has been recorded in the
22 variance account. Further details can be found in Exhibit 9, Tab 1, Schedule 1.

23

24 Neither of the 5800 Yonge St. or 50/60 Eglinton Ave. W sales have been reflected in the
25 Other Revenue tables, since they are being disposed of through separate rate riders.

1 **5.3 Shared Services Income and Recoveries**

2 Toronto Hydro provides shared services to its affiliates and receives income and
3 recoveries through transfer prices determined based on Affiliate Relationship Code
4 ("ARC") requirements. Details on shared services are further provided in Exhibit 4A, Tab
5 5, Schedule 1.

6
7 **5.4 Interest Income from Short-Term Investment**

8 Toronto Hydro invests its working capital cash balances at a competitive market rate
9 with its cash management bank to generate additional interest income. The interest
10 earned from these short-term investment activities are an offset to Toronto Hydro's
11 interest expense, which reduce the overall distribution revenue requirement and result
12 in lower distribution rates, benefitting ratepayers.

**OEB Appendix 2-H
Other Operating Revenue**

USoA #	USoA Description	2015 Actual	2016 Actual	2017 Actual	Bridge Year	Bridge Year	Test Year
		2015	2016	2017	2018	2019	2020
	<i>Reporting Basis</i>	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	Specific Service Charges	\$6,786,826	\$9,497,848	\$7,186,822	\$6,508,368	\$6,544,885	\$6,581,270
4225	Late Payment Charges	\$4,126,310	\$4,540,398	\$3,696,196	\$3,714,184	\$3,732,947	\$3,751,641
4082	Retailers' Fixed charge	\$5,320	\$5,280	\$5,520	\$5,420	\$5,420	\$5,420
4082	Retailers' Variable Charge	\$257,269	\$225,343	\$178,662	\$181,017	\$171,386	\$162,420
4082	Distributor Consolidated Billing (DCB) Charges	\$143,718	\$125,603	\$106,118	\$104,725	\$99,207	\$94,067
4082	Retail Consolidated Billing (RCB) Credit	-\$9,072	-\$8,351	-\$635	\$0	\$0	\$0
4084	Retailer Service Transaction Request	\$13,764	\$12,656	\$10,350	\$9,780	\$9,282	\$8,816
4084	Retailer Service Transaction Processing	\$6,344	\$5,722	\$4,485	\$4,474	\$4,271	\$4,081
4090/4086	SSS Admin Charge	\$2,196,126	\$2,317,539	\$2,269,960	\$2,370,591	\$2,389,560	\$2,407,409
4210	Parking Rental	\$3,790	\$1,200	\$1,200	\$0	\$0	\$0
4210	Property Rental	\$41,516	\$46,854	\$53,414	\$0	\$0	\$0
4215	TTC Rectification	\$253,250	\$303,900	\$303,900	\$303,900	\$303,900	\$303,900
4215	Settlement Discounts Taken	\$404,384	\$381,359	\$523,847	\$389,382	\$389,382	\$389,382
4215	Stale Dated Cheques	\$453,706	\$417,078	\$736,416	\$533,368	\$533,368	\$533,368
4220	Street Lighting	\$7,055,723	\$8,200,259	\$9,229,601	\$8,368,642	\$8,536,375	\$8,076,074
4325	Merchandise and Jobbing Revenue	\$23,108,588	\$32,769,384	\$45,929,144	\$34,458,054	\$36,014,502	\$37,732,615
4330	Merchandise and Jobbing Costs	-\$14,047,565	-\$19,805,704	-\$29,913,621	-\$18,641,067	-\$17,651,688	-\$17,991,088
4335	Gain/Loss on disposals	\$211,338	\$0	\$0	\$0	\$0	\$0
4375	Shared Services Recovery ¹	\$2,927,027	\$3,212,613	\$4,829,010	\$5,430,108	\$5,494,615	\$5,507,706
4355	Gain on Disposition of Utility and Other Property	\$4,062,681	\$2,132,160	\$515,158	\$0	\$0	\$0
4398	Foreign Exchange Gain/(Loss)	-\$1,500,430	\$162,383	\$54,784	\$0	\$0	\$0
4405	Investment Interest Income	\$1,298,537	\$186,388	\$9	\$120,000	\$120,000	\$120,000
Specific Service Charges		\$6,786,826	\$9,497,848	\$7,186,822	\$6,508,368	\$6,544,885	\$6,581,270
Late Payment Charges		\$4,126,310	\$4,540,398	\$3,696,196	\$3,714,184	\$3,732,947	\$3,751,641
Other Operating Revenues		\$10,825,837	\$12,034,443	\$13,422,839	\$12,271,299	\$12,442,150	\$11,984,936
Other Income or Deductions		\$16,060,177	\$18,657,224	\$21,414,483	\$21,367,095	\$23,977,430	\$25,369,233
Total		\$37,799,149	\$44,729,912	\$45,720,340	\$43,860,946	\$46,697,412	\$47,687,080

Description

Specific Service Charges:

Late Payment Charges:

Other Distribution Revenues:

Other Income and Expenses:

Account(s)

4235

4225

4080, 4082, 4084, 4090, 4205, 4210, 4215, 4220, 4240, 4245

4305, 4310, 4315, 4320, 4325, 4330, 4335, 4340, 4345, 4350, 4355, 4360, 4365, 4370, 4375, 4380, 4385, 4390, 4395, 4398, 4405, 4415

Account Breakdown Details

Account 4235 -Specific Service Charges

	2015 Actual	2016 Actual	2017 Actual	Bridge Year	Bridge Year	Test Year
				2018	2019	2020
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Account Set Up Charge	\$3,163,196	\$3,315,852	\$3,132,490	\$2,994,278	\$3,010,922	\$3,027,508
NSF Collection Charges	\$59,445	\$111,704	\$106,825	\$107,417	\$107,980	\$108,541
Collection Service Charges	\$2,986,342	\$5,165,058	\$3,130,010	\$2,859,179	\$2,875,286	\$2,891,331
Connection-Reconnection Charge	\$554,565	\$873,835	\$644,708	\$547,494	\$550,698	\$553,890
Easement Letter	\$24,978	\$29,773	\$39,955	\$0	\$0	\$0
Misc Revenue	-\$1,700	\$1,625	\$132,834	\$0	\$0	\$0
Total	\$6,786,826	\$9,497,848	\$7,186,822	\$6,508,368	\$6,544,885	\$6,581,270

Account 4325 -Merchandise and Jobbing Revenue

	2015 Actual	2016 Actual	2017 Actual	Bridge Year	Bridge Year	Test Year
				2018	2019	2020
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Inventory Sales	\$88,900	\$1,722,500	\$5,447,129	\$2,200,000	\$2,200,000	\$2,200,000
Isolation	\$425,900	\$723,600	\$3,245,726	\$1,317,200	\$1,326,800	\$1,336,600
Customer and Temp Services	\$4,787,700	\$5,712,240	\$4,771,188	\$6,692,200	\$6,344,800	\$6,528,800
MicroFIT	\$93,500	\$71,060	\$157,066	\$40,000	\$50,000	\$62,500
Scrap Sales	\$2,351,600	\$3,264,400	\$3,198,906	\$2,930,000	\$2,988,600	\$3,048,400
Accident Claims	\$2,422,022	\$1,683,500	\$3,281,539	\$2,450,900	\$2,502,500	\$2,562,600
Pole & Duct Rental	\$11,145,300	\$18,051,800	\$23,106,399	\$17,465,700	\$19,236,165	\$20,624,017
Streetlighting ¹	\$520,678	\$459,415	\$332,279	\$669,103	\$669,103	\$669,103
Other ²	\$1,272,988	\$1,080,868	\$2,388,913	\$692,951	\$696,534	\$700,595
Total	\$23,108,588	\$32,769,384	\$45,929,144	\$34,458,054	\$36,014,502	\$37,732,615

Account 4330 -Merchandise and Jobbing Costs

	2015 Actual	2016 Actual	2017 Actual	Bridge Year	Bridge Year	Test Year
				2018	2019	2020
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Inventory Sales	-\$110,700	-\$1,661,500	-\$5,240,465	-\$2,000,000	-\$2,000,000	-\$2,000,000
Isolation	-\$393,900	-\$611,300	-\$3,681,121	-\$1,779,600	-\$1,793,200	-\$1,806,800
Customer and Temp Services	-\$3,907,893	-\$4,675,909	-\$3,751,142	-\$6,205,000	-\$5,930,600	-\$6,108,600
MicroFIT	-\$47,007	-\$78,191	-\$25,354	-\$40,000	-\$50,000	-\$62,500
Scrap Sales	-\$1,131,000	-\$863,200	-\$1,048,740	-\$1,275,000	-\$1,300,500	-\$1,326,500
Accident Claims	-\$2,267,530	-\$2,321,000	-\$3,026,630	-\$2,218,200	-\$2,265,600	-\$2,320,800
Pole & Duct Rental	-\$4,771,400	-\$8,416,600	-\$10,670,064	-\$4,317,900	-\$3,502,950	-\$3,553,027
Streetlighting ¹	-\$476,270	-\$380,939	-\$302,663	-\$569,180	-\$569,180	-\$569,180
Other ²	-\$941,865	-\$797,065	-\$2,167,443	-\$236,187	-\$239,658	-\$243,681
Total	-\$14,047,565	-\$19,805,704	-\$29,913,621	-\$18,641,067	-\$17,651,688	-\$17,991,088

Account 4405 - Investment Interest Income

	2015 Actual	2016 Actual	2017 Actual	Bridge Year	Bridge Year	Test Year
				2018	2019	2020
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Investment Interest Income	\$1,298,537	\$0	\$9	\$120,000	\$120,000	\$120,000
Regulated Assets Charges-Revenue	\$0	\$186,388	\$0	\$0	\$0	\$0
Total	\$1,298,537	\$186,388	\$9	\$120,000	\$120,000	\$120,000

Notes

- The amounts reported as shared services recovery in account 4375 do not include the cost recovery associated with fleet, occupancy and IT services provided by THESL to THESI, THESU and THC presented as part of Appenix 2N. The recovery of these costs is included in the OM&A evidence as part of the Allocation and Recoveries program for an average annual value of \$1.1M for the period 2015-2020.
Streetlighting recoveries and costs related to emergency response, engineering and planning included in Appendix 2N are shown under the merchandising and jobbing section (4325 & 4330).
- The "Other" category is composed of IT services related to Hydro One Telecom and other various adhoc services.