CUSTOMER AND LOAD FORECAST

1. INTRODUCTION

This exhibit presents Elexicon's customer, consumption, and billed demand forecasts by rate class for the 2025 and 2026 bridge years and 2027 to 2031 test years. Elexicon is seeking OEB approval for 2027-2031 charge determinants in this proceeding. These charge determinants will be used in cost allocation and to establish the proxy rate for 2026 and will form the basis for rates in the 2027 test year and each year of the forecast period as further described in Exhibit 7 – Tab 1 – Schedule 1 (Cost Allocation) and Exhibit 8 – Tab 1 – Schedule 1 (Rate Design). Elexicon engaged Power Advisory to develop weather-normal customer and load forecasts for the 2025 to 2031 period for each of its rate zones. Power Advisory's report is attached as Appendix A to this Schedule. The load forecast model is Attachment 1 to this Schedule.

Table 1 provides an overall summary of forecast consumption, billed demand, and metered customers from 2024 through 2031.

Table 1: Forecast Consumption, Demand, and Customers

	Consumption (kWh)	Increase (%)	Demand (kW)	Increase (%)	Metered Customers	Increase (%)
2024 Actual	3,649,851,710		3,919,823		177,967	
2025 Forecast	3,747,675,435	2.7%	4,088,703	4.3%	181,188	1.8%
2026 Forecast	3,918,946,572	4.6%	4,404,873	7.7%	184,644	1.9%
2027 Forecast	4,074,560,286	4.0%	4,677,734	6.2%	188,190	1.9%
2028 Forecast	4,229,958,890	3.8%	4,935,858	5.5%	191,668	1.8%
2029 Forecast	4,347,847,114	2.8%	5,124,558	3.8%	195,231	1.9%
2030 Forecast	4,422,917,143	1.7%	5,219,742	1.9%	198,915	1.9%
2031 Forecast	4,494,068,849	1.6%	5,310,696	1.7%	202,661	1.9%

The consumption forecast in the 2027 to 2031 test years is provided in Table 2.

Table 2: kWh Forecast by Class 2027-2031[1]

kWh	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	1,578,573,635	1,610,606,554	1,641,331,700	1,680,304,198	1,718,981,173
Res. Seasonal	13,651,253	14,035,998	14,476,769	14,995,359	15,451,103
GS<50	376,280,208	375,831,277	376,353,639	377,216,432	379,702,547
GS 50 - 2,999	1,365,439,860	1,383,877,948	1,391,494,950	1,389,411,604	1,394,637,849
GS 3,000 - 4,999	308,941,637	321,145,353	329,918,802	342,231,262	355,799,332
Large Use	408,628,327	501,277,599	570,944,946	595,286,466	605,876,118
Street Light	16,417,838	16,610,959	16,806,468	17,004,396	17,204,774
Sentinel Light	237,983	234,924	231,930	229,000	226,132
USL	6,389,545	6,338,278	6,287,909	6,238,426	6,189,820
Total kWh	**4,074,560,286**	**4,229,958,890**	**4,347,847,114**	**4,422,917,143**	**4,494,068,849**

Table 3 provides a summary of the billed kW demands by rate class from 2027 to 2031.

Table 3: kW Forecast by Class 2027-2031[1]

kW	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
GS 50 - 2,999	3,298,053	3,360,200	3,398,325	3,414,386	3,447,628
GS 3,000 - 4,999	634,867	663,860	685,952	714,882	746,468
Large Use	700,460	866,937	994,909	1,044,584	1,070,184
Street Light	43,690	44,204	44,724	45,250	45,783
Sentinel Light	665	657	649	641	633
Total kW	**4,677,734**	**4,935,858**	**5,124,558**	**5,219,742**	**5,310,696**

Table 4 provides a summary of the fixed charge billing determinant (the customer, light, or connection count) by rate class from 2027 to 2031.

[1] Numbers may not sum due to rounding.

Table 4: Forecast Customers / Lights / Connections 2027-2031[2]

Customers / Devices	Units	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	Customers	172,854	176,219	179,671	183,244	186,877
Res. Seasonal	Customers	1,552	1,549	1,545	1,542	1,539
GS<50	Customers	12,257	12,365	12,474	12,585	12,696
GS 50 - 2,999	Customers	1,501	1,508	1,513	1,517	1,521
GS 3,000 - 4,999	Customers	18	19	19	19	19
Large Use	Customers	7	8	9	9	9
Street Light	Lights	48,136	48,721	49,313	49,913	50,521
Sentinel Light	Lights	274	270	267	264	261
USL	Connections	1,114	1,106	1,099	1,091	1,083
Total		**237,713**	**241,765**	**245,910**	**250,183**	**254,526**

The load forecast is used in cost allocation and rate design for each class, and used to calculate the cost of power.

Elexicon has completed OEB Appendix 2-IB, which is attached to Exhibit 3, Tab 1, Schedule 2 in Excel format as Attachment 1.

2. LIST OF ATTACHMENTS

- Appendix A: Elexicon 2027-2031 Customer and Load Forecast (Power Advisory)
- Attachment 1 (Excel): Elexicon Load Forecast Model

[2] Numbers may not sum due to rounding.

EXHIBIT 3 - TAB 1 - SCHEDULE 1: APPENDIX A
"ELEXICON 2027-2031 CUSTOMER AND LOAD FORECAST (POWER ADVISORY REPORT)"

POWER ADVISORY

Elexicon Energy 2027-2031 Customer and Load Forecast

November 12, 2022

Power Advisory · 55 University Avenue Suite 700, PO Box 32 · Toronto, Ontario M5J 2H7

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1. INTRODUCTION

1.1 Load Forecast Summary

Power Advisory was retained to prepare a 2025 to 2031 customer and load forecast for Elexicon Energy Inc. ("Elexicon") for its 2027 to 2031 rebasing application. This report provides the methodology and resulting forecast of Elexicon's customer/connection/device counts, consumption, and billed demand forecasts by rate class and rate zone for the 2025 and 2026 bridge years and 2027 to 2031 test years.

Elexicon's service territory includes many growing communities and this growth is reflected in the customer and load forecast. Residential customer counts are forecast to increase at a higher rate than its historic growth rate, particularly in the Veridian rate zone where Residential customer growth is forecast to be twice the historic rate of growth. The forecast includes additional loads from EVs and electric heating that are incremental to the forecasts based on historic volumes and load growth. The load forecast also includes additional General Service and Large Use customers and load based on ongoing discussions with customers intending to connect. The additional customers and load are incremental to the forecasts based on historic growth and represent a significant portion of Elexicon's total forecast loads throughout the rate period. By 2031, the additional customers are responsible for 15% of total kWh consumption and 25% of total billed kW demand.

Table 1 provides an overall summary of forecast consumption, demand, and metered customers from 2024 through 2031.

Table 1 – Forecast Consumption, Demand, and Customers

	kWh Consumption	% Increase	kW Demand	% Increase	Metered Customers	% Increase
2024 Actual	3,649,851,710		3,919,823		177,967	
2025 Forecast	3,747,675,435	2.7%	4,088,703	4.3%	181,188	1.8%
2026 Forecast	3,918,946,572	4.6%	4,404,873	7.7%	184,644	1.9%
2027 Forecast	4,074,560,286	4.0%	4,677,734	6.2%	188,190	1.9%
2028 Forecast	4,229,958,890	3.8%	4,935,858	5.5%	191,668	1.8%
2029 Forecast	4,347,847,114	2.8%	5,124,558	3.8%	195,231	1.9%
2030 Forecast	4,422,917,143	1.7%	5,219,742	1.9%	198,915	1.9%
2031 Forecast	4,494,068,849	1.6%	5,310,696	1.7%	202,661	1.9%

Table 2 demonstrates the material increases in the growth rates of consumption, billed demand, and customer counts embedded in the 2025 to 2031 forecast relative to the historic 2015 to 2024 period.

Table 2 – Total and Average Increases

	kWh Consumption		kW Demand		Metered Customers	
	Total Increase	Average Annual Increase	Total Increase	Average Annual Increase	Total Increase	Average Annual Increase
2015 to 2024	12.0%	1.3%	2.3%	0.3%	10.8%	1.1%
2024 to 2031	23.1%	3.0%	35.5%	4.4%	13.9%	1.9%

1.2 Methodology Overview

This schedule outlines the results of, and methodology used to derive, Elexicon's weather normal load forecast for the 2027 to 2031 rebasing period. Elexicon's Veridian and Whitby rate zones are forecast separately and the sum of these two forecasts forms its 2027 to 2031 load and customer forecast.

The load forecast methodology has been refined since the 2014 Veridian Connections and 2010 Whitby Hydro load forecasts were prepared. Those load forecasts used multivariate regressions to forecasts total wholesale purchases that were then allocated to rate classes. The 2025 to 2031 load forecast uses separate multivariate regressions for each Residential and General Service rate class. The forecasts for unmetered rate classes are based on average use per connection or device. This forecast also introduces manual adjustments for additional loads related to anticipated customer growth, electric vehicles, and electric heating.

The regression equations used to normalize and forecast Elexicon's weather sensitive load use monthly heating degree days and cooling degree days as measured at Environment Canada's Oshawa[1] weather station to take into account temperature sensitivity. Elexicon typically experiences relatively large cooling loads in the summer and smaller heating loads in the winter so its peak load is generally in the summer. Environment Canada defines heating degree days and cooling degree days as the difference between the average daily temperature and 18°C for each day (below for heating, above for cooling). Heating and cooling degree days with base temperatures other than 18°C have also been considered.

To isolate the impact of CDM, persisting CDM as measured by the IESO is added back to rate class consumption to simulate the rate class consumption had there been no CDM program delivery. This is labelled as "Actual No CDM" throughout the model. The effect is to remove the impact of CDM from any explanatory variables, which may capture a trend, and focus on the external factors. A weather normalized forecast is produced first based on no CDM delivery, and then persisting CDM savings of historic programs are subtracted off to reflect the actual normal forecast.

CDM data beyond 2018 is based on limited data in the IESO Participant and Cost Report. As per the updated CDM Guidelines, forecast CDM/eDSM is based on a forecast of Elexicon's share of provincial energy savings.

While statistical regression is appropriate for estimating a relationship between explanatory variables and energy use, in the case of CDM, an independent measurement is available providing a greater level of accuracy than could be obtained through regression.

[1] "Oshawa" operated by NAVCAN, Latitude:43°55'22" N, Longitude:78°53'00" W, Elevation:139.90 m

Elexicon's loads are expected to increase above what would be forecast using only weather-normalized historic volumes due to electrification and known large loads that are growing faster than its historic experience. To isolate the impact of electric vehicles (EVs) and electric heating, estimated EV and electric heating loads are subtracted from "Actual No CDM", which is denoted "Actual No CDM AL" (additional loads) throughout the model. The weather normalized forecasts are produced without the additional loads from electrification, and those loads are added back to produce the normalized forecast. In the forecast years, cumulative EV and electric heating loads are added to normal weather.

Overall economic activity also impacts energy consumption. There is no known agency that publishes monthly economic accounts on a regional basis for Ontario. However, regional employment levels are available. Specifically, the monthly full-time equivalent (FTE) employment levels for Oshawa, Belleville, and Ontario, as reported in Statistics Canada's Monthly Labour Force Survey[2] are considered. The Ontario GDP is available from Ontario Economic Accounts[3] on a quarterly basis and Overall GDP is available from Statistics Canada on an annual basis.[4] Overall provincial GDP, Services GDP, Manufacturing GDP, and Transportation & Warehousing GDP measures from Statistics Canada and Overall GDP, Manufacturing GDP, Transportation Equipment, Services GDP, and Transportation & Warehousing GDP measures from Ontario Economic Accounts sources were tested.

In order to isolate demand determinants at the class specific level, equations to weather normalize and forecast kWh consumption for the Residential, General Service < 50 kW, General Service 50 to 2,999 kW, General Service 3,000 to 4,999 kW, and Large Use classes have been estimated.

In addition to the weather and economic variables, a time trend variable, number of days and number of working days in each month, number of customers, and month of year variables have been examined for all weather-sensitive rate classes. More details on the individual class specifications are provided in the next section.

A range of COVID variables were considered to account for the impacts triggered by the COVID-19 pandemic. These variables have been included in load forecasts used to set electricity distribution rates in Ontario.[5] COVID flag variables were tested and found to be statistically significant for some classes. The following COVID flag variables were considered:

A "COVID" variable equal to 0 in all months prior to March 2020, 1 in all months from March 2020 to December 2021, and 0.5 from January 2022 to December 2022, and 0 thereafter.

A "COVID_AM" variable equal to 0 in all months prior to March 2020, equal to 0.5 in March 2020, equal to 1 in April and May 2020, 0.5 in each month from June 2020 to December 2021, 0.25 each month from January 2022 to December 2022, and 0 thereafter. This variable accounts for the relatively larger impact of COVID in the first two and a half months following the first lockdowns in March 2020.

A "COVID_WFH" variable equal to 0 in all months prior to March 2020, equal to 0.5 in March 2020, equal to 1 each month from April 2020 to December 2020, 0.75 from January 2021 to December 2021, 0.5 from

[2] Statistics Canada Table 14-10-0380-01

[3] Ontario Economic Accounts (https://data.ontario.ca/dataset/ontario-economic-accounts)

[4] Statistics Canada Table 36-10-0402-01

[5] Grimsby Power Inc. (EB-2021-0027), Bluewater Power Distribution Corporation (EB-2022-0016), EPCOR Electricity Distribution Ontario Inc. (EB-2022-0028), Kingston Hydro (EB-2022-0044), Milton Hydro Distribution Inc. (EB-2022-0049), and Synergy North Corporation (EB-2023-0052).

January 2022 to December 2022, and 0.25 from January 2023 to December 2024. This variable is intended to reflect the shift to "Work from Home", which had larger impacts through the summer of 2020 and continues to reflect ongoing impacts.

A "COVID2020" variable equal to 0 in all months prior to March 2020, equal to 0.5 in March 2020, equal to 1 in April and May 2020, equal to 0.5 in June 2020, and equal to 0 in July 2020 and each month thereafter. This variable reflects the temporary impacts experienced by some customers, particularly larger customers.

The extent to which consumption from March 2020 onward differed from typical consumption was tested with a set of COVID/weather interaction variables. The "HDD COVID" and "CDD COVID" variables are equal to the relevant HDD and CDD variables since March 2020, and 0 in all earlier months. The coefficients reflect incremental heating and cooling load consumed as people stayed home during the pandemic. These variables continue to December 2021 but are reduced to 50% of HDD and CDD in all months in 2022 and to 0 in 2023 and 2024.

The "CWFH HDD" and "CWFH CDD" variables are COVID/weather interaction variables that are equal to the relevant HDD and CDD variables applied to the COVID_WFH ("work from home"). The variables are 0 in all months prior to March 2020, 50% of weather variables in March 2020, 100% of weather variables in April 2020 to December 2020, 75% of weather variables in 2021, and 25% of weather variables in 2022 and thereafter.

Each of the COVID variables were tested for each of the Residential, General Service < 50 kW, General Service 50 to 2,999 kW, General Service 3,000 to 4,999 kW, and Large Use rate classes.

Table 3 and Table 4 summarize the variables that are used for each rate class in the Veridian and Whitby rate zones, respectively.

Table 3 – Variables used in Veridian Regression Models

Residential	Seasonal Residential	GS < 50 kW	GS 50 to 2,999 kW	GS 3,000 to 4,999 kW	Large Use
HDD20 & CDD16	HDD20 & CDD14	HDD20 & CDD14	HDD20 & CDD12		
Trend	Trend	Seasonally-Adjusted Ontario FTEs	GDP (OEA) & Trend	GDP (OEA)	GDP (OEA)
Shoulder Months Binary	Shoulder Months Binary		Shoulder Months Binary		Spring Months Binary
# of Days in the Month	# of Days in the Month	# of Days in the Month	# of Days in the Month	# of Non-Holiday Weekdays in the Month	# of Non-Holiday Weekdays in the Month
CovHDD20 & COVCDD16	CovHDD18	COVID_AM			COVID_AM

Table 4 – Variables used in Whitby Regression Models

Residential	GS < 50 kW	GS 50 to 2,999 kW	GS 3,000 to 4,999 kW
HDD18 & CDD14	HDD20 & CDD12	HDD14 & CDD12	
Trend	Seasonally-Adjusted Oshawa FTEs		Customer Count
Shoulder Months Binary	Fall Months Binary	Fall Months Binary	December Binary
# of Days in the Month	# of Days in the Month	# of Days in the Month	# of Days in the Month
CovHDD18 & COVCDD14	COVID_AM	COVID_AM	

For classes with demand charges, an annual kW to kWh ratio is calculated using actual observations for each historical year and applied to the normalized kWh to derive a weather normal kW observation.

1.3 Summarized Results

1.3.1 *Veridian Summarized Results*

The following tables summarize the historic and forecast kWh in the Veridian rate zone from 2017 to 2031.

Table 5 – Veridian Actual kWh by Class 2017-2021

kWh	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	901,971,744	979,700,024	955,759,610	1,034,148,021	1,026,240,018
Res. Seasonal	9,912,684	10,517,338	10,858,189	12,379,583	12,593,975
GS<50	273,963,830	280,954,110	289,308,516	266,656,242	265,709,797
GS 50 - 2,999	944,651,265	966,857,797	943,844,508	894,106,942	916,418,749
GS 3,000 - 4,999	90,758,853	83,863,298	93,267,622	89,415,661	98,129,912
Large Use	223,859,611	250,221,085	259,592,384	264,242,586	284,809,431
Street Light	20,460,692	16,161,423	13,788,944	11,924,084	11,682,342
Sentinel Light	311,450	247,862	229,776	229,650	227,251
USL	4,919,673	4,890,679	4,846,041	4,814,697	4,782,282
Total kWh	2,470,809,803	2,593,413,616	2,571,495,591	2,577,917,466	2,620,593,757

Table 6 – Veridian Actual/Forecast kWh by Class 2022-2026

kWh	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	1,017,709,391	1,008,624,980	1,052,968,776	1,095,125,273	1,117,090,361
Res. Seasonal	12,600,241	12,172,614	12,230,714	12,768,207	13,188,722
GS<50	278,598,121	276,211,527	257,530,701	282,974,392	283,200,048
GS 50 - 2,999	931,880,225	927,766,309	965,931,354	941,797,562	978,135,427
GS 3,000 - 4,999	108,822,585	109,703,301	98,198,227	124,237,376	164,781,984
Large Use	289,202,901	303,910,759	321,893,042	331,686,368	361,053,716
Street Light	11,643,673	11,868,527	12,144,395	12,269,224	12,395,337
Sentinel Light	216,445	218,811	216,726	213,059	209,454
USL	4,773,215	4,755,033	4,744,114	4,568,421	4,505,369
Total kWh	2,655,446,797	2,655,231,862	2,725,858,049	2,805,639,883	2,934,560,418

Table 7 - Veridian kWh Forecast by Class 2027-2031

kWh	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	1,139,476,592	1,163,690,317	1,185,325,146	1,212,339,801	1,240,553,461
Res. Seasonal	13,651,253	14,035,998	14,476,769	14,995,359	15,451,103
GS<50	284,059,625	283,704,088	284,076,999	284,658,182	286,717,312
GS 50 - 2,999	1,009,573,025	1,024,897,888	1,027,303,092	1,023,350,447	1,028,125,625
GS 3,000 - 4,999	187,457,996	195,309,210	199,992,566	203,774,004	207,751,810
Large Use	408,628,327	501,277,599	570,944,946	595,286,466	605,876,118
Street Light	12,522,746	12,651,464	12,781,506	12,912,884	13,045,613
Sentinel Light	205,910	202,426	199,001	195,634	192,324
USL	4,443,188	4,381,864	4,321,387	4,261,745	4,202,925
Total kWh	3,060,018,661	3,200,150,854	3,299,421,413	3,351,774,522	3,401,916,292

The following tables summarize the historic and forecast kW in the Veridian rate zone from 2017 to 2031.

Table 8 – Veridian Actual kW by Class 2017-2021

kW	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
GS 50 - 2,999	2,295,184	2,313,760	2,245,850	2,160,161	2,190,090
GS 3,000 - 4,999	200,190	189,119	195,386	192,684	216,388
Large Use	382,866	423,038	433,414	453,257	481,567
Street Light	54,833	43,115	36,691	31,667	31,122
Sentinel Light	967	720	629	642	632
Total kW	2,934,039	2,969,752	2,911,971	2,838,411	2,919,799

Table 9 – Veridian Actual kW by Class 2022-2026

kW	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
GS 50 - 2,999	2,248,197	2,217,563	2,202,593	2,256,585	2,352,103
GS 3,000 - 4,999	228,647	234,048	215,660	269,030	358,543
Large Use	490,452	518,389	532,510	562,103	614,338
Street Light	31,017	31,561	32,174	32,695	33,031
Sentinel Light	601	608	602	591	581
Total kW	2,998,914	3,002,170	2,983,539	3,121,003	3,358,595

Table 10 - Veridian kW Forecast by Class 2027-2031

kW	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
GS 50 - 2,999	2,439,391	2,488,400	2,507,289	2,511,445	2,536,588
GS 3,000 - 4,999	409,834	429,042	441,641	452,488	463,838
Large Use	700,460	866,937	994,909	1,044,584	1,070,184
Street Light	33,370	33,713	34,060	34,410	34,763
Sentinel Light	571	562	552	543	533
Total kW	3,583,626	3,818,653	3,978,451	4,043,470	4,105,906

The following tables summarize the historic and forecast customer/light counts in the Veridian rate zone from 2017 to 2031.

Table 11 – Veridian Actual Customers / Lights / Connections 2017-2021

Customers / Devices	Units	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	Customers	108,365	109,470	110,961	112,218	113,059
Res. Seasonal	Customers	1,577	1,571	1,565	1,561	1,559
GS<50	Customers	9,015	9,090	9,207	9,278	9,315
GS 50 - 2,999	Customers	1,068	1,060	1,029	1,032	1,052
GS 3,000 - 4,999	Customers	5	4	4	5	6
Large Use	Customers	3	4	4	4	4
Street Light	Lights	30,412	30,898	31,143	31,415	31,679
Sentinel Light	Lights	439	439	342	255	249
USL	Connections	826	818	809	802	802
Total		151,710	153,353	155,064	156,570	157,724

Table 12 – Veridian Actual/Forecast Customers / Lights / Connections 2022-2026

Customers / Devices	Units	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	Customers	114,161	115,689	117,456	119,658	122,102
Res. Seasonal	Customers	1,559	1,563	1,562	1,559	1,555
GS<50	Customers	9,413	9,487	9,502	9,544	9,614
GS 50 - 2,999	Customers	1,037	1,030	1,059	1,080	1,090
GS 3,000 - 4,999	Customers	5	5	5	7	10
Large Use	Customers	4	5	5	5	6
Street Light	Lights	31,795	32,132	32,717	33,054	33,393
Sentinel Light	Lights	246	243	238	234	230
USL	Connections	801	798	770	741	731
Total		159,022	160,951	163,315	165,883	168,732

Table 13 - Veridian Forecast Customers / Lights / Connections 2027-2031

Customers / Devices	Units	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	Customers	124,619	127,084	129,594	132,210	134,871
Res. Seasonal	Customers	1,552	1,549	1,545	1,542	1,539
GS<50	Customers	9,685	9,757	9,829	9,902	9,975
GS 50 - 2,999	Customers	1,094	1,096	1,097	1,098	1,098
GS 3,000 - 4,999	Customers	12	12	12	12	12
Large Use	Customers	7	8	9	9	9
Street Light	Lights	33,737	34,083	34,434	34,788	35,145
Sentinel Light	Lights	226	223	219	215	211
USL	Connections	721	711	701	692	682
Total		171,654	174,523	177,440	180,467	183,543

1.3.2 *Whitby Summarized Results*

The following tables summarize the historic and forecast kWh in the Whitby rate zone from 2017 to 2031.

Table 14 – Whitby Actual kWh by Class 2017-2021

kWh	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	342,395,881	368,689,347	353,188,014	393,916,007	395,025,788
GS<50	87,028,897	90,146,108	89,224,579	81,674,845	82,555,808
GS 50 - 2,999	343,423,307	350,668,948	339,922,011	322,964,212	317,381,494
GS 3,000 - 4,999	61,143,400	72,194,608	79,821,855	85,368,173	88,615,341
Street Light	4,989,079	3,813,017	3,495,126	3,375,507	3,254,529
Sentinel Light	30,331	29,986	29,641	24,816	25,473
USL	597,300	604,470	597,885	1,852,577	1,969,677
Total kWh	839,608,194	886,146,483	866,279,112	889,176,137	888,828,109

Table 15 – Whitby Actual/Forecast kWh by Class 2022-2026

kWh	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	393,586,008	392,504,226	410,753,367	420,868,871	429,484,099
GS<50	87,488,274	88,772,163	88,408,718	91,865,098	91,880,261
GS 50 - 2,999	327,733,926	328,654,263	336,698,540	333,000,011	347,810,939
GS 3,000 - 4,999	88,680,038	85,763,218	82,433,193	90,574,521	109,411,112
Street Light	3,584,407	3,668,424	3,708,103	3,769,413	3,831,738
Sentinel Light	30,996	31,197	29,866	31,238	31,653
USL	1,956,354	1,961,564	1,961,875	1,926,400	1,936,353
Total kWh	903,060,002	901,355,054	923,993,661	942,035,552	984,386,154

Table 16 - Whitby kWh Forecast by Class 2027-2031

kWh	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	439,097,043	446,916,237	456,006,554	467,964,397	478,427,713
GS<50	92,220,583	92,127,189	92,276,640	92,558,250	92,985,235
GS 50 - 2,999	355,866,836	358,980,061	364,191,858	366,061,157	366,512,224
GS 3,000 - 4,999	121,483,641	125,836,143	129,926,236	138,457,258	148,047,522
Street Light	3,895,092	3,959,495	4,024,962	4,091,511	4,159,161
Sentinel Light	32,072	32,498	32,929	33,366	33,808
USL	1,946,357	1,956,413	1,966,522	1,976,682	1,986,895
Total kWh	1,014,541,625	1,029,808,035	1,048,425,701	1,071,142,620	1,092,152,557

The following tables summarize the historic and forecast kW in the Whitby rate zone from 2017 to 2031.

Table 17 – Whitby Actual kW by Class 2017-2021

kW	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
GS 50 - 2,999	816,193	835,853	811,487	783,042	760,128
GS 3,000 - 4,999	90,337	114,914	147,600	146,756	151,780
Street Light	12,797	9,791	8,981	9,314	9,362
Sentinel Light	88	87	86	72	71
Total kW	919,416	960,645	968,154	939,184	921,341

Table 18 – Whitby Actual kW by Class 2022-2026

kW	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
GS 50 - 2,999	795,164	773,424	765,937	792,039	834,734
GS 3,000 - 4,999	164,455	160,651	160,378	165,582	201,298
Street Light	9,581	9,810	9,886	9,987	10,152
Sentinel Light	95	92	83	92	93
Total kW	969,295	943,978	936,284	967,700	1,046,277

Table 19 - Whitby kW Forecast by Class 2027-2031

kW	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
GS 50 - 2,999	858,662	871,800	891,036	902,940	911,040
GS 3,000 - 4,999	225,033	234,818	244,310	262,393	282,630
Street Light	10,320	10,491	10,664	10,840	11,020
Sentinel Light	94	95	97	98	99
Total kW	1,094,109	1,117,204	1,146,107	1,176,272	1,204,789

The following tables summarize the historic and forecast customer/light counts in the Whitby rate zone from 2017 to 2031.

Table 20 – Whitby Actual Customers / Lights / Connections 2017-2021

Customers / Devices	Units	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	Customers	39,752	40,097	40,903	41,881	42,898
GS<50	Customers	2,230	2,247	2,261	2,284	2,327
GS 50 - 2,999	Customers	368	373	377	382	391
GS 3,000 - 4,999	Customers	2	3	3	3	3
Street Light	Lights	11,891	12,054	12,408	12,708	13,024
Sentinel Light	Lights	38	37	37	37	42
USL	Connections	371	377	384	389	392
Total		54,651	55,187	56,374	57,684	59,076

Table 21 – Whitby Actual/Forecast Customers / Lights / Connections 2022-2026

Customers / Devices	Units	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	Customers	44,014	44,945	45,521	46,437	47,324
GS<50	Customers	2,384	2,435	2,465	2,500	2,535
GS 50 - 2,999	Customers	386	383	389	394	401
GS 3,000 - 4,999	Customers	3	3	3	4	6
Street Light	Lights	13,343	13,555	13,708	13,935	14,165
Sentinel Light	Lights	46	46	45	46	47
USL	Connections	393	401	396	389	391
Total		60,569	61,769	62,527	63,704	64,869

Table 22 - Whitby Forecast Customers / Lights / Connections 2027-2031

Customers / Devices	Units	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	Customers	48,234	49,135	50,077	51,033	52,005
GS<50	Customers	2,572	2,608	2,645	2,683	2,721
GS 50 - 2,999	Customers	407	412	416	419	423
GS 3,000 - 4,999	Customers	6	6	6	7	7
Street Light	Lights	14,399	14,637	14,879	15,125	15,375
Sentinel Light	Lights	47	48	49	49	50
USL	Connections	393	395	397	399	401
Total		66,059	67,242	68,470	69,716	70,983

1.3.3 *Elexicon Summarized Results*

The following tables summarize total Elexicon historic and forecast kWh from 2017 to 2031.

Table 23 – Elexicon Actual kWh by Class 2017-2021

kWh	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	1,244,367,625	1,348,389,371	1,308,947,624	1,428,064,028	1,421,265,806
Res. Seasonal	9,912,684	10,517,338	10,858,189	12,379,583	12,593,975
GS<50	360,992,727	371,100,217	378,533,095	348,331,086	348,265,605
GS 50 - 2,999	1,288,074,573	1,317,526,745	1,283,766,519	1,217,071,154	1,233,800,243
GS 3,000 - 4,999	151,902,254	156,057,905	173,089,478	174,783,834	186,745,254
Large Use	223,859,611	250,221,085	259,592,384	264,242,586	284,809,431
Street Light	25,449,771	19,974,440	17,284,071	15,299,590	14,936,872
Sentinel Light	311,450	247,862	229,776	229,650	252,724
USL	5,516,973	5,495,149	5,443,927	6,667,275	6,751,959
Total kWh	3,310,387,667	3,479,530,113	3,437,745,062	3,467,068,787	3,509,421,867

Table 24 – Elexicon Actual/Forecast kWh by Class 2022-2026

kWh	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	1,411,295,398	1,401,129,206	1,463,722,143	1,515,994,144	1,546,574,460
Res. Seasonal	12,600,241	12,172,614	12,230,714	12,768,207	13,188,722
GS<50	366,086,395	364,983,690	345,939,418	374,839,490	375,080,309
GS 50 - 2,999	1,259,614,150	1,256,420,572	1,302,629,894	1,274,797,573	1,325,946,366
GS 3,000 - 4,999	197,502,624	195,466,520	180,631,421	214,811,898	274,193,096
Large Use	289,202,901	303,910,759	321,893,042	331,686,368	361,053,716
Street Light	15,228,080	15,536,950	15,852,497	16,038,637	16,227,074
Sentinel Light	247,441	250,008	246,592	244,297	241,107
USL	6,729,569	6,716,598	6,705,989	6,494,821	6,441,722
Total kWh	3,558,506,799	3,556,586,916	3,649,851,710	3,747,675,435	3,918,946,572

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Table 25 - Elexicon kWh Forecast by Class 2027-2031

kWh	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	1,578,573,635	1,610,606,554	1,641,331,700	1,680,304,198	1,718,981,173
Res. Seasonal	13,651,253	14,035,998	14,476,769	14,995,359	15,451,103
GS<50	376,280,208	375,831,277	376,353,639	377,216,432	379,702,547
GS 50 - 2,999	1,365,439,860	1,383,877,948	1,391,494,950	1,389,411,604	1,394,637,849
GS 3,000 - 4,999	308,941,637	321,145,353	329,918,802	342,231,262	355,799,332
Large Use	408,628,327	501,277,599	570,944,946	595,286,466	605,876,118
Street Light	16,417,838	16,610,959	16,806,468	17,004,396	17,204,774
Sentinel Light	237,983	234,924	231,930	229,000	226,132
USL	6,389,545	6,338,278	6,287,909	6,238,426	6,189,820
Total kWh	4,074,560,286	4,229,958,890	4,347,847,114	4,422,917,143	4,494,068,849

The following tables summarize total Elexicon historic and forecast kW from 2017 to 2031.

Table 26 – Elexicon Actual kW by Class 2017-2021

kW	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
GS 50 - 2,999	3,111,377	3,149,613	3,057,338	2,943,203	2,950,219
GS 3,000 - 4,999	290,527	304,033	342,987	339,440	368,168
Large Use	382,866	423,038	433,414	453,257	481,567
Street Light	67,630	52,906	45,672	40,981	40,484
Sentinel Light	1,055	807	715	714	703
Total kW	3,853,455	3,930,397	3,880,125	3,777,595	3,841,140

Table 27 – Elexicon Actual kW by Class 2022-2026

kW	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
GS 50 - 2,999	3,043,361	2,990,987	2,968,530	3,048,624	3,186,837
GS 3,000 - 4,999	393,102	394,700	376,038	434,612	559,841
Large Use	490,452	518,389	532,510	562,103	614,338
Street Light	40,598	41,371	42,060	42,681	43,183
Sentinel Light	696	700	685	683	674
Total kW	3,968,209	3,946,148	3,919,823	4,088,703	4,404,873

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Table 28 - Elexicon kW Forecast by Class 2027-2031

kW	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
GS 50 - 2,999	3,298,053	3,360,200	3,398,325	3,414,386	3,447,628
GS 3,000 - 4,999	634,867	663,860	685,952	714,882	746,468
Large Use	700,460	866,937	994,909	1,044,584	1,070,184
Street Light	43,690	44,204	44,724	45,250	45,783
Sentinel Light	665	657	649	641	633
Total kW	4,677,734	4,935,858	5,124,558	5,219,742	5,310,696

The following tables summarize total Elexicon historic and forecast customer/light counts from 2017 to 2031.

Table 29 – Elexicon Actual Customers / Lights / Connections 2017-2021

Customers / Devices	Units	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Residential	Customers	148,116	149,567	151,864	154,099	155,957
Res. Seasonal	Customers	1,577	1,571	1,565	1,561	1,559
GS<50	Customers	11,245	11,336	11,468	11,562	11,641
GS 50 - 2,999	Customers	1,436	1,433	1,406	1,414	1,443
GS 3,000 - 4,999	Customers	7	7	7	8	9
Large Use	Customers	3	4	4	4	4
Street Light	Lights	42,303	42,951	43,551	44,123	44,703
Sentinel Light	Lights	477	476	379	292	291
USL	Connections	1,196	1,195	1,193	1,191	1,193
Total		206,361	208,540	211,438	214,253	216,800

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Table 30 – Elexicon Actual/Forecast Customers / Lights / Connections 2022-2026

Customers / Devices	Units	2022 Actual	2023 Actual	2024 Actual	2025 Forecast	2026 Forecast
Residential	Customers	158,174	160,635	162,977	166,095	169,426
Res. Seasonal	Customers	1,559	1,563	1,562	1,559	1,555
GS<50	Customers	11,797	11,923	11,967	12,044	12,150
GS 50 - 2,999	Customers	1,424	1,414	1,448	1,474	1,491
GS 3,000 - 4,999	Customers	8	8	8	11	16
Large Use	Customers	4	5	5	5	6
Street Light	Lights	45,138	45,687	46,425	46,988	47,559
Sentinel Light	Lights	292	289	284	280	277
USL	Connections	1,194	1,198	1,166	1,130	1,122
Total		219,591	222,720	225,842	229,587	233,601

Table 31 - Elexicon Forecast Customers / Lights / Connections 2027-2031

Customers / Devices	Units	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	Customers	172,854	176,219	179,671	183,244	186,877
Res. Seasonal	Customers	1,552	1,549	1,545	1,542	1,539
GS<50	Customers	12,257	12,365	12,474	12,585	12,696
GS 50 - 2,999	Customers	1,501	1,508	1,513	1,517	1,521
GS 3,000 - 4,999	Customers	18	19	19	19	19
Large Use	Customers	7	8	9	9	9
Street Light	Lights	48,136	48,721	49,313	49,913	50,521
Sentinel Light	Lights	274	270	267	264	261
USL	Connections	1,114	1,106	1,099	1,091	1,083
Total		237,713	241,765	245,910	250,183	254,526

2. CLASS SPECIFIC KWH REGRESSIONS

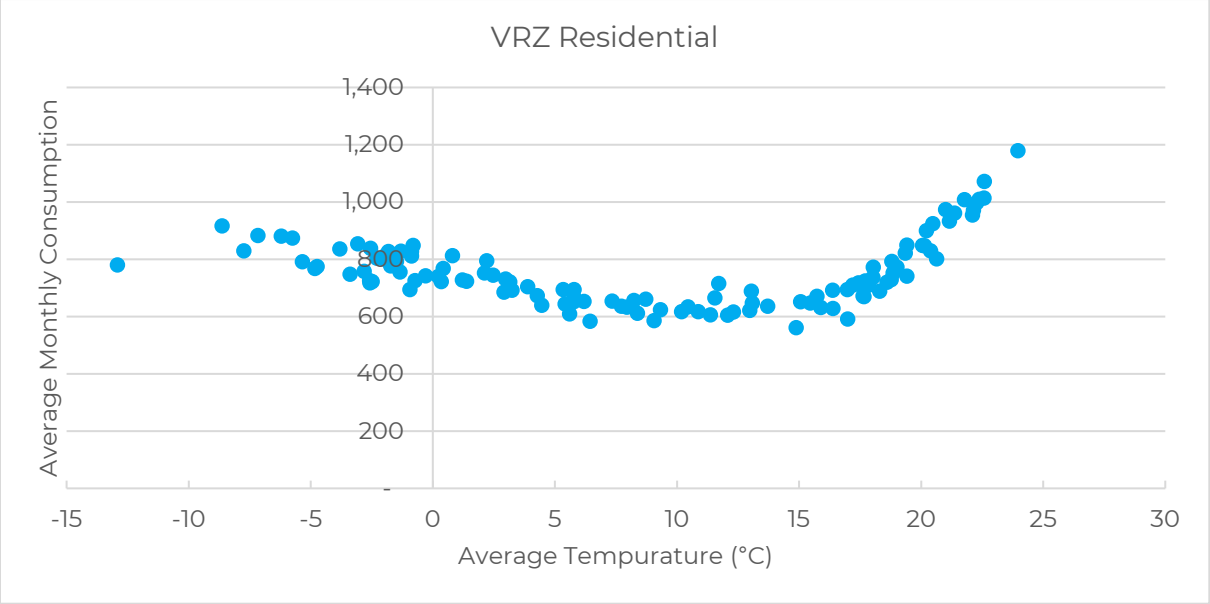
Consumption for the Residential, GS < 50 kW, and GS 50 to 2,999 kW, GS 3,000 to 4,999 kW, and Large Use rate classes were forecast with multivariate regressions. Regressions were not used for the Street Light, Sentinel Light, and USL rate classes as these classes do not exhibit sensitivity to the explanatory variables available for a statistical regression approach.

2.1 Veridian Rate Zone

2.1.1 *VRZ Residential*

For Residential kWh consumption the equation was estimated using 120 observations from January 2015 to December 2024. Multiple heating degree day and cooling degree day thresholds were considered in the Residential regression. Consumption is relatively stable when the average monthly temperature is between 16°C and 20°C and increases as average temperatures deviate from that range. HDD relative to 20°C and CDD relative to 16°C were found to provide the strongest results. HDD and CDD measures near 20°C and 16°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 1 VRZ Residential kWh and Average Temperature



Economic variables, such as Oshawa employment and various GDP measures, were tested but not found to be statistically significant variables. The COVID HDD and CDD variables were found to be statistically significant and more significant than other COVID variables. A time trend variable, equal to 1 in January 2015 and increasing by 1 in each subsequent month was found to be statistically significant and is used in the model. This variable was found to be more statistically significant than other trending variables such as economic variables and the Residential customer count. A shoulder variable representing the spring and fall months, equal to 1 in March, April, May, September, October, and November and 0 in all other months, was found to be statistically significant. A variable representing the number of days in the month is also used as it is statistically significant.

Several other variables were examined and found to not show a statistically significant relationship to energy usage, or a weaker relationship than similar variables that are included. Those included customer counts, employment, GDP, and other calendar variables.

A time-series autoregressive model using the Prais-Winsten estimation was used for the Residential class to account for autocorrelation.

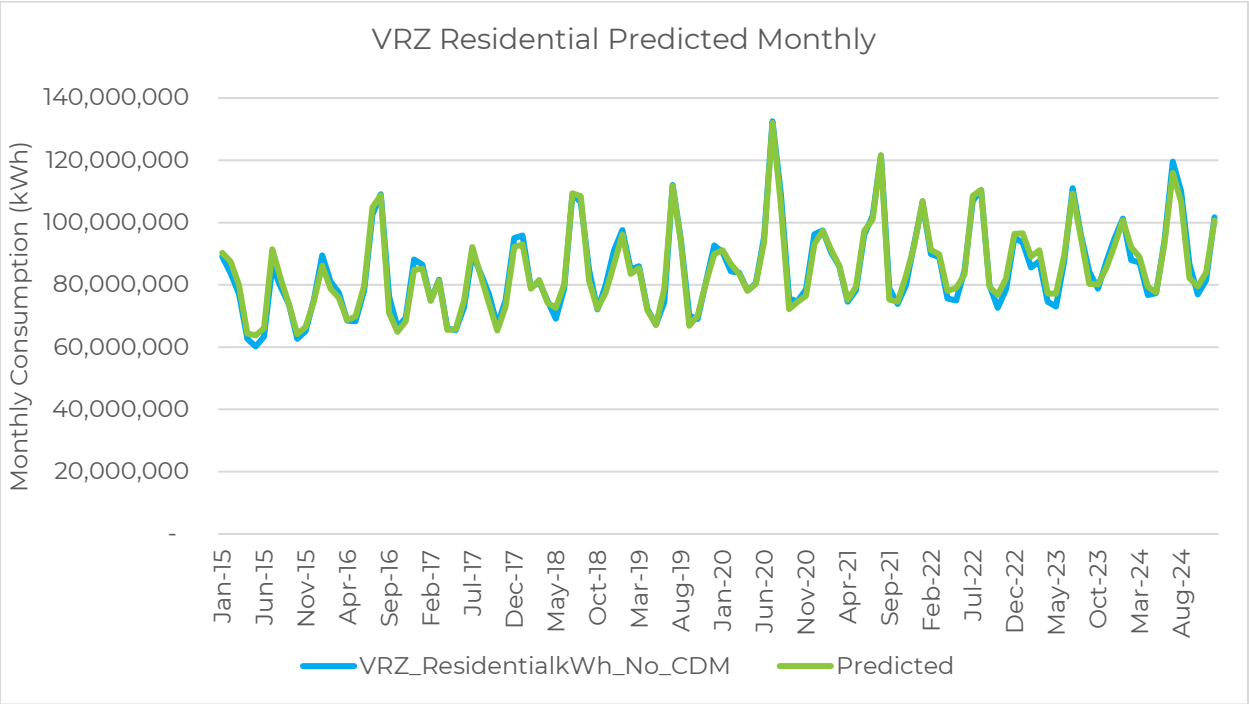
The following table outlines the resulting regression model:

Table 32 - VRZ Residential Regression Model

Model 1: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_ResidentialkWh_No_CDM_AL				
rho = 0.448988				
	coefficient	std. error	t-ratio	p-value
const	-11,095,338	5,843,237	-1.90	0.060
HDD20	46,971	1,580	29.73	0.000
CDD16	275,328	7,404	37.19	0.000
CovHDD20	8,277	3,288	2.52	0.013
CovCDD16	41,146	16,484	2.50	0.014
Shoulder	-3,105,221	507,336	-6.12	0.000
MonthDays	1,960,831	197,276	9.94	0.000
Trend	133,957	10,144	13.21	0.000
Statistics based on the rho-differenced data				
Sum squared resid	4.93E+14	S.E. of regression		2,098,686
R-squared	0.9779	Adjusted R-squared		0.9766
F(7, 112)	578.96	P-value(F)		0.0000
rho	-0.0234	Durbin-Watson		2.0350

Using the above model coefficients, we derive the following:

Figure 2 VRZ Residential Predicted vs Actual Observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.0%. The MAPE calculated monthly over the period is 2.8%.

Table 33 - VRZ Residential Model Error

	VRZ Residential		Absolute
Year	Actual	Predicted	Error (%)
2015	878,094,131	904,732,394	3.0%
2016	974,889,837	961,872,791	1.3%
2017	935,011,269	927,286,403	0.8%
2018	1,022,506,393	1,016,089,982	0.6%
2019	1,001,595,945	995,817,359	0.6%
2020	1,080,125,964	1,068,144,810	1.1%
2021	1,072,364,553	1,074,840,454	0.2%
2022	1,063,884,143	1,082,204,018	1.7%
2023	1,054,812,662	1,063,949,994	0.9%
2024	1,101,179,120	1,100,949,200	0.0%
Total	**10,184,464,018**	**10,195,887,406**	**0.1%**
Mean Absolute Percentage Error (Annual)			1.0%
Mean Absolute Percentage Error (Monthly)			2.8%

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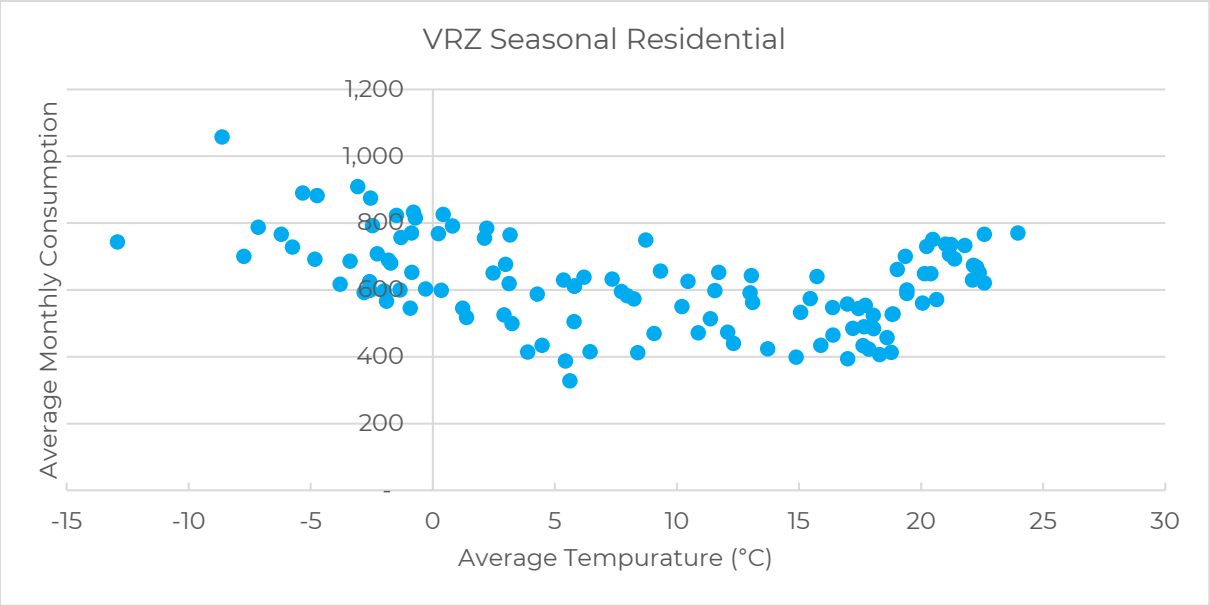
2.1.2 *VRZ Seasonal Residential*

For Residential kWh consumption the equation was estimated using 120 observations from January 2015 to December 2024. Multiple heating degree day and cooling degree day thresholds were considered in the Seasonal Residential regression. Consumption is relatively stable when the average monthly temperature is between 14°C and 20°C and increases as average temperatures deviate from that range. HDD relative to 14°C and CDD relative to 20°C were found to provide the strongest results. HDD and CDD measures near 14°C and 20°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 3 VRZ Seasonal Residential kWh and Average Temperature



Economic variables, such as Oshawa and Belleville employment and various GDP measures, were tested but not found to be statistically significant variables. The COVID HDD variable was found to be statistically significant and more significant than other COVID variables. The COVID CDD variable was not found to be statistically significant. A time trend variable, equal to 1 in January 2015 and increasing by 1 in each subsequent month was found to be statistically significant and is used in the model. This variable was found to be more statistically significant than other trending variables such as economic variables and the Seasonal Residential customer count. The shoulder and month days variables were also found to be statistically significant.

Several other variables were examined and found to not show a statistically significant relationship to energy usage, or a weaker relationship than similar variables that are included. Those included customer counts, employment, GDP, and other calendar variables.

A time-series autoregressive model using the Prais-Winsten estimation was used for the Residential class to account for autocorrelation.

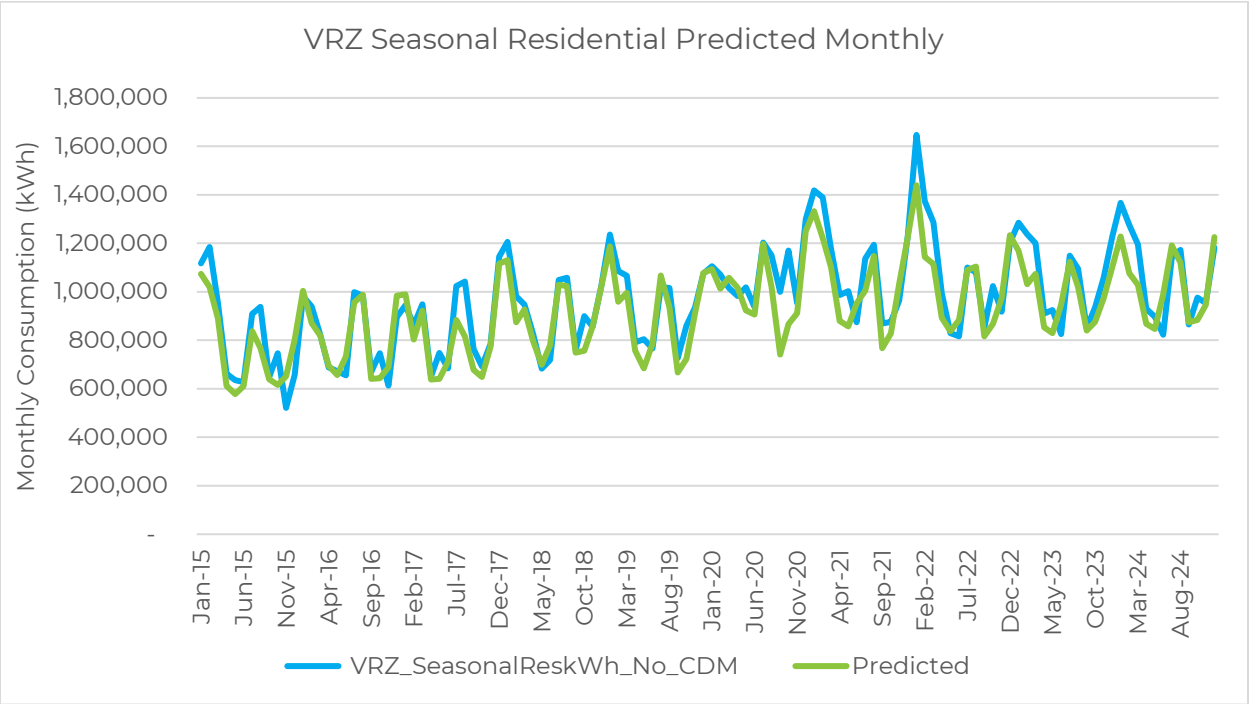
The following table outlines the resulting regression model:

Table 34 - VRZ Seasonal Regression Model

Model 2: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_SeasonalReskWh_No_CDM_AL				
rho = 0.312908				
	coefficient	std. error	t-ratio	p-value
const	-769,716	238,149	-3.23	0.0016
HDD20	834	69	12.16	0.0000
CDD14	1,984	226	8.78	0.0000
Shoulder	-56,026	21,028	-2.66	0.0088
Trend	2,667	311	8.59	0.0000
MonthDays	37,920	8,065	4.70	0.0000
CovHDD18	574	125	4.60	0.0000
Statistics based on the rho-differenced data				
Sum squared resid	7.19E+11	S.E. of regression		79,751
R-squared	0.8497	Adjusted R-squared		0.8417
F(7, 112)	75.80	P-value(F)		0.0000
rho	0.0327	Durbin-Watson		1.9164

Using the above model coefficients, we derive the following:

Figure 4 VRZ Seasonal Residential Predicted vs Actual Observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 4.2%. The MAPE calculated monthly over the period is 7.6%.

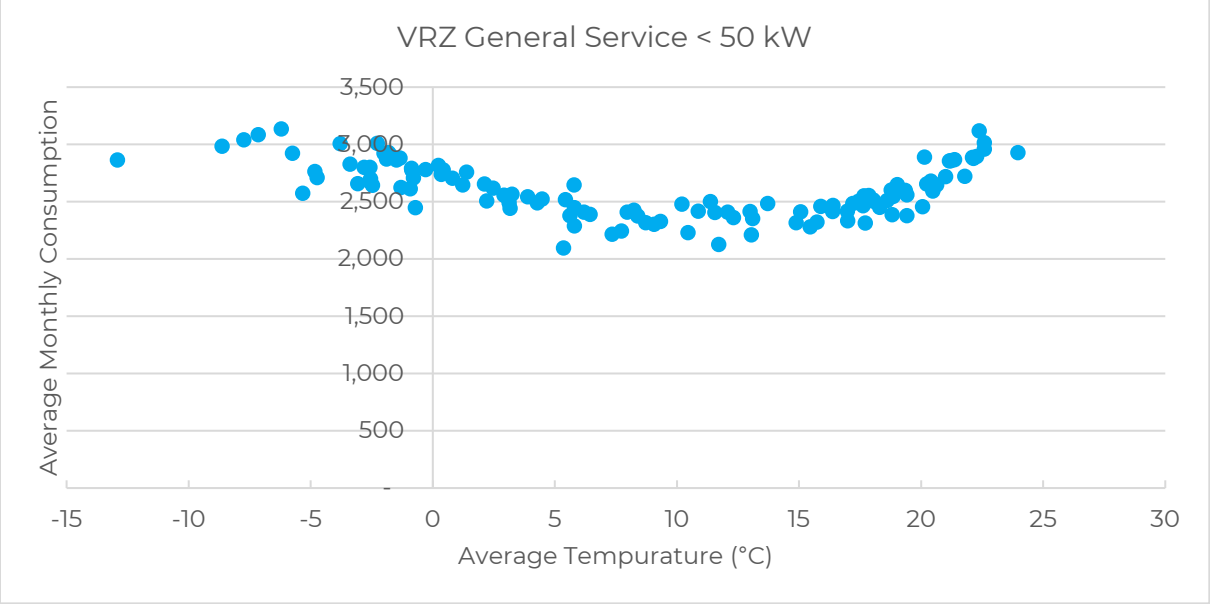
Table 35 - VRZ Seasonal Residential Model Error

	VRZ Seasonal Residential		Absolute
Year	Actual	Predicted	Error (%)
2015	9,601,462	9,099,774	5.2%
2016	9,667,322	9,679,219	0.1%
2017	10,291,112	9,624,838	6.5%
2018	11,007,634	10,660,636	3.2%
2019	11,383,189	10,790,387	5.2%
2020	12,906,205	12,077,097	6.4%
2021	13,122,277	12,476,257	4.9%
2022	13,129,117	12,587,899	4.1%
2023	12,701,637	12,101,626	4.7%
2024	12,782,899	12,630,705	1.2%
Total	**116,592,854**	**111,728,437**	**4.2%**
	Mean Absolute Percentage Error (Annual)		4.2%
	Mean Absolute Percentage Error (Monthly)		7.6%

2.1.3 *VRZ GS < 50 kW*

For the GS < 50 kW class, the regression equation was estimated using 120 observations from January 2015 to December 2024. Consumption for this class is relatively stable when the average monthly temperature is between 14°C and 20°C and increases as average temperatures deviate from that range. HDD relative to 20°C and CDD relative to 14°C were found to provide the strongest results. HDD and CDD measures near 20°C and 14°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 5 VRZ GS<50 kWh and Average Temperature



Seasonally-adjusted FTEs has been included as an indicator of economic activity. Measures for Ontario GDP were also tested but found to be statistically less significant than Ontario FTEs. The number of days in each month was found to be statistically significant and was used in the GS < 50 kW model. The COVID_AM variable was found to be statistically significant and more significant than other COVID variables. The GS < 50 kW customer count and time trend variables were not found to be statistically significant.

Other calendar variables were tested but found to not have statistically significant relationships to energy usage.

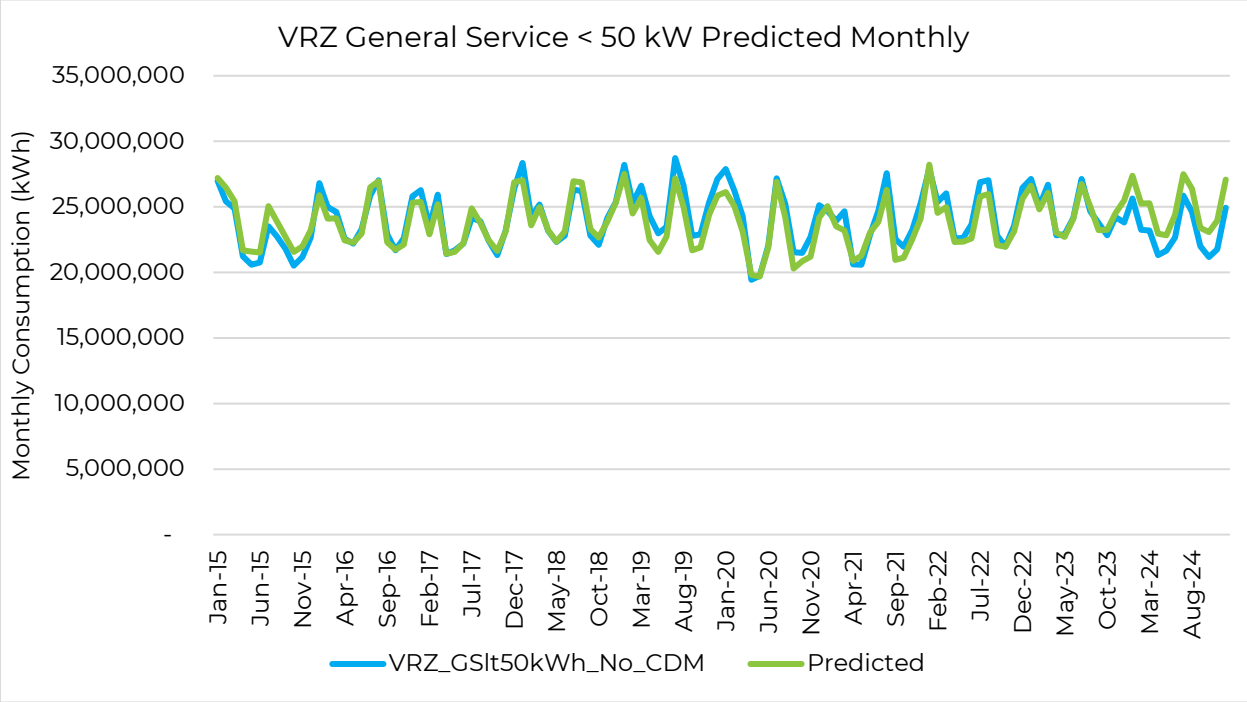
The following table outlines the resulting regression model:

Table 36 - VRZ GS < 50 Regression Model

Model 3: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_GSlt50kWh_No_CDM_AL				
rho = 0.810988				
	coefficient	std. error	t-ratio	p-value
const	-4,083,957	4,062,698	-1.01	0.3169
HDD20	11,146	459	24.26	0.0000
CDD14	34,554	1,178	29.33	0.0000
COVID_AM	-2,450,397	647,594	-3.78	0.0002
ON_FTEAdj	1,012	519	1.95	0.0536
MonthDays	476,717	44,272	10.77	0.0000
Statistics based on the rho-differenced data				
Sum squared resid	4.08E+13	S.E. of regression		597,992
R-squared	0.9229	Adjusted R-squared		0.9195
F(7, 112)	323.42	P-value(F)		0.0000
rho	-0.1514	Durbin-Watson		2.2983

Using the above model coefficients we derive the following:

Figure 6 VRZ GS<50 Predicted vs Actual Observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 2.6%. The MAPE calculated monthly over the period is 3.9%.

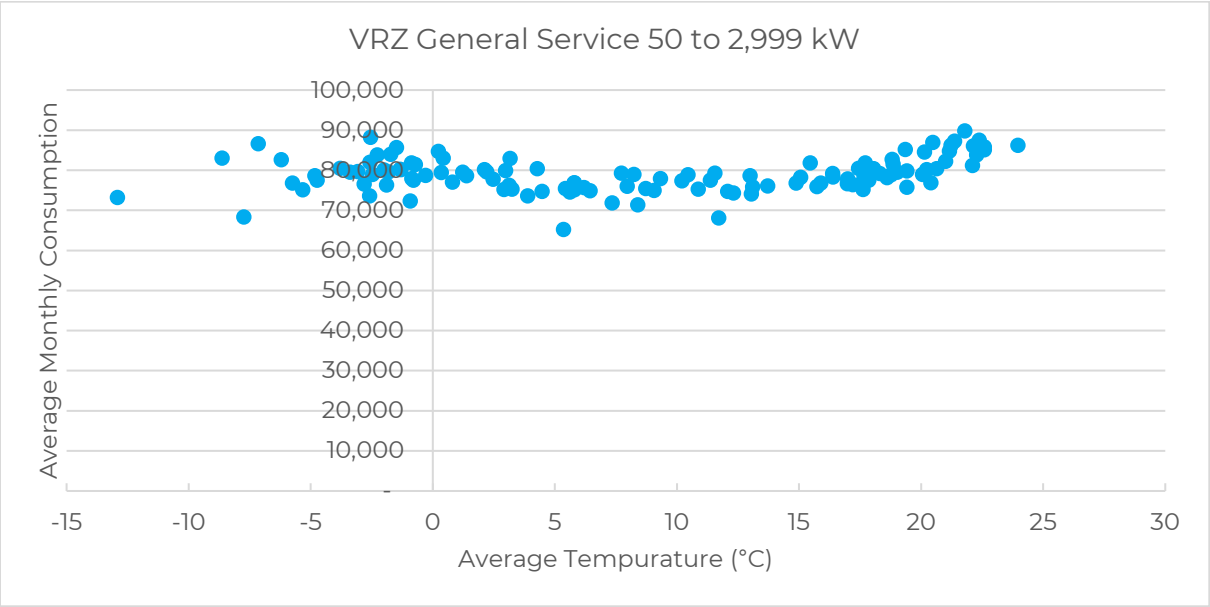
Table 37 - VRZ GS < 50 Model Error

	VRZ GS < 50 kWh		Absolute
Year	Actual	Predicted	Error (%)
2015	272,272,005	282,269,537	3.7%
2016	290,368,097	286,676,838	1.3%
2017	282,359,272	281,440,660	0.3%
2018	292,989,511	293,289,802	0.1%
2019	304,389,877	290,463,597	4.6%
2020	282,865,051	273,356,079	3.4%
2021	282,636,504	275,842,029	2.4%
2022	296,928,609	289,555,172	2.5%
2023	295,206,528	295,573,217	0.1%
2024	278,064,928	299,466,512	7.7%
Total	**2,878,080,382**	**2,867,933,443**	**0.4%**
Mean Absolute Percentage Error (Annual)			2.6%
Mean Absolute Percentage Error (Monthly)			3.9%

2.1.4 *VRZ GS 50 to 2,999 kW*

For the GS 50 to 2,999 kW class, the regression equation was estimated using 120 observations from January 2015 to December 2024. GS 50 to 2,999 kW consumption is relatively flat when the average monthly temperature is between 12°C and 20°C and increases as average temperatures deviate from that range. Consumption does not vary significantly at lower temperatures but there is a stronger relationship between consumption and high temperatures. HDD relative to 20°C and CDD relative to 12°C were found to provide the strongest results. HDD and CDD measures near 20°C and 12°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 7 VRZ GS 50 to 2,999 kW kWh and Average Temperature



Total Ontario GDP from Ontario Economic Accounts has been included as an indicator of economic activity. Measures for Ontario employment and other measures of GDP were also tested but found to be statistically less significant than Ontario GDP. The shoulder variable and number of days in each month were found to be statistically significant and were used in the GS 50 to 2,999 kW model. A time trend variable is also included in the model.

The following table outlines the resulting regression model:

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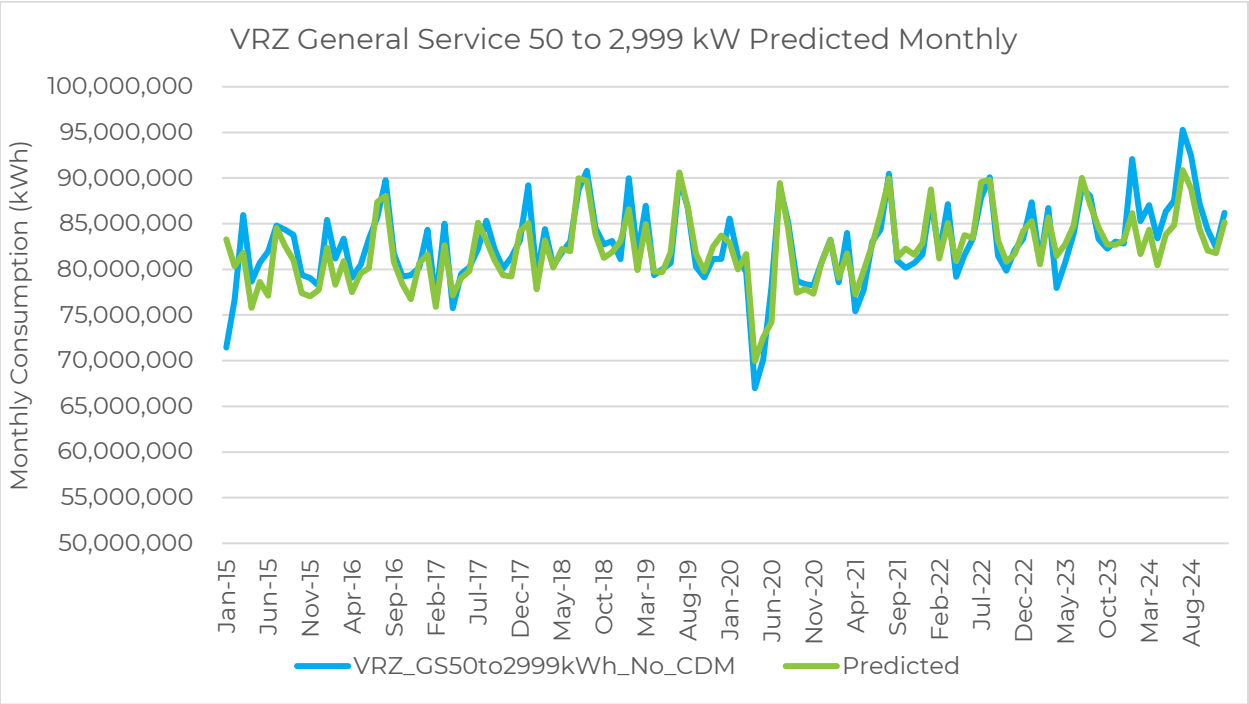
Table 38 - VRZ GS 50 to 2,999 kW Regression Model

Model 4: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_GS50to2999kWh_No_CDM_AL				
rho = 0.27399				
	coefficient	std. error	t-ratio	p-value
const	-37,534,700	11,244,653	-3.34	0.0011
HDD20	17,716	2,145	8.26	0.0000
CDD12	57,726	5,529	10.44	0.0000
Shoulder	1,538,400	593,075	2.59	0.0106
MonthDays	1,322,247	224,526	5.89	0.0000
OEA_GDP	90.65	13.18	6.88	0.0000
Trend	-80,571	19,525	-4.13	0.0001
Statistics based on the rho-differenced data				
Sum squared resid	5.34E+14	S.E. of regression		2,173,705
R-squared	0.7666	Adjusted R-squared		0.7542
F(7, 112)	50.93	P-value(F)		0.0000
rho	-0.0255	Durbin-Watson		1.7882

Using the above model coefficients we derive the following:

Figure 8 VRZ GS 50 to 2,999 kW Predicted vs Actual observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.0%. The MAPE calculated monthly over the period is 2.8%.

Table 39 - VRZ GS 50 to 2,999 kW Model Error

	VRZ GS 50-2,999 kWh		Absolute
Year	Actual	Predicted	Error (%)
2015	964,961,706	957,243,853	0.8%
2016	988,864,474	970,830,635	1.8%
2017	975,660,839	968,234,875	0.8%
2018	1,009,073,271	1,000,241,973	0.9%
2019	997,005,195	997,963,689	0.1%
2020	952,250,075	948,686,044	0.4%
2021	980,354,847	988,007,959	0.8%
2022	1,005,336,735	1,012,299,700	0.7%
2023	1,005,880,548	1,010,776,174	0.5%
2024	1,049,632,146	1,014,462,509	3.4%
Total	**9,929,019,836**	**9,868,747,411**	**0.6%**
Mean Absolute Percentage Error (Annual)			1.0%
Mean Absolute Percentage Error (Monthly)			2.8%

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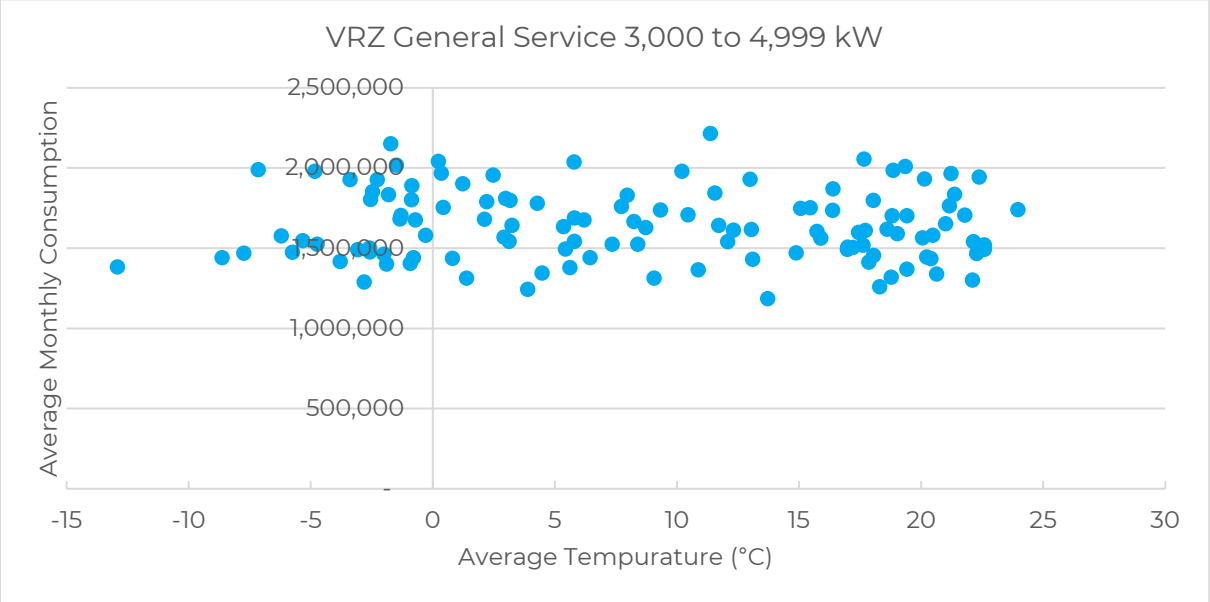
2.1.5 *VRZ GS 3,000 to 4,999 kW*

For the GS 3,000 to 4,999 kW class, the regression equation was estimated using 120 observations from January 2015 to December 2024. GS 3,000 to 4,999 kW consumption is not correlated with weather and no weather variables were found to be statistically significant.

Figure 9 VRZ GS 3,000 to 4,999 kWh and Average Temperature



Total GDP from Ontario Economic Accounts has been included as an indicator of economic activity. Measures for employment and other measures of GDP were also tested but found to be statistically less significant than the OEA GDP. The number of peak days in each month, representing the number of non-holiday weekdays, was found to be statistically significant and more statistically significant than the overall number of days in the month. The COVID variables and other binary calendar variables representing seasons and months were tested but found to not have a significant relationship to energy use.

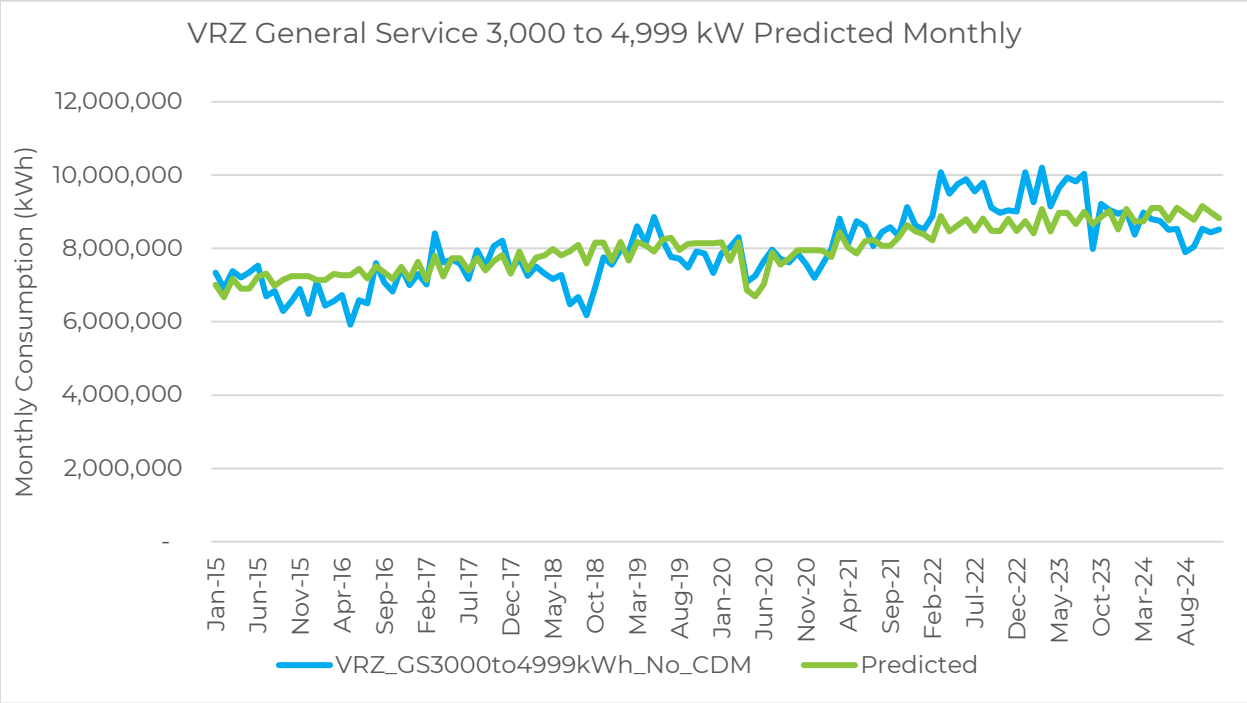
The following table outlines the resulting regression model:

Table 40 - VRZ GS 3,000 to 4,999 kW Regression Model

Model 5: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_GS3000to4999kWh_No_CDM_AL				
rho = 0.735428				
	coefficient	std. error	t-ratio	p-value
const	-5,284,416	1,850,569	-2.86	0.0051
OEA_GDP	12.21	2.23	5.48	0.0000
PeakDays	167,534	23,328	7.18	0.0000
Statistics based on the rho-differenced data				
Sum squared resid	2.07E+13	S.E. of regression		420,841
R-squared	0.8224	Adjusted R-squared		0.8194
F(7, 112)	63.24	P-value(F)		0.0000
rho	-0.1538	Durbin-Watson		2.3045

Using the above model coefficients we derive the following:

Figure 10 VRZ GS 3,000 to 4,999 kW Predicted vs Actual observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 4.5%. The MAPE calculated monthly over the period is 6.3%.

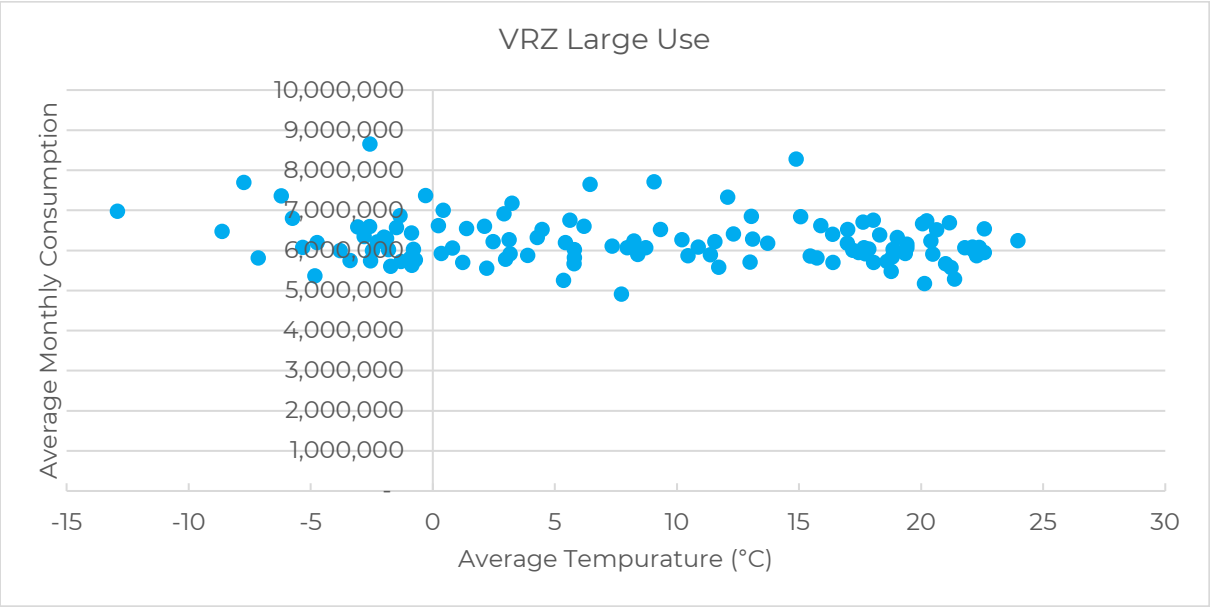
Table 41 - VRZ GS 3,000 to 4,999 kW Model Error

	VRZ GS 3,000-4,999		Absolute
Year	Actual	Predicted	Error (%)
2015	83,209,872	85,043,268	2.2%
2016	81,776,858	87,440,501	6.9%
2017	91,924,306	90,611,202	1.4%
2018	85,850,729	94,290,579	9.8%
2019	95,790,916	97,064,477	1.3%
2020	92,144,168	91,600,780	0.6%
2021	101,045,231	98,036,924	3.0%
2022	112,112,282	102,915,842	8.2%
2023	113,345,272	105,367,079	7.0%
2024	102,416,485	107,316,693	4.8%
Total	**959,616,119**	**959,687,345**	**0.0%**
Mean Absolute Percentage Error (Annual)			4.5%
Mean Absolute Percentage Error (Monthly)			6.3%

2.1.6 *VRZ Large Use*

For the Large Use class, the regression equation was estimated using 120 observations from January 2015 to December 2024. Large Use consumption is not correlated with weather and no weather variables were found to be statistically significant.

Figure 11 VRZ Large Use kWh and Average Temperature



Ontario GDP from Ontario Economic Accounts has been included as an indicator of economic activity. Measures for Ontario employment and other measures of GDP were also tested but found to be statistically less significant than Ontario GDP. The peak days shoulder variables were found to be statistically significant and are used in the Large Use model. The COVID_AM variable was found to be statistically significant and more significant than other COVID variables.

Other binary calendar variables representing other seasons and months were tested but found to not have a statistically significant relationship to energy use.

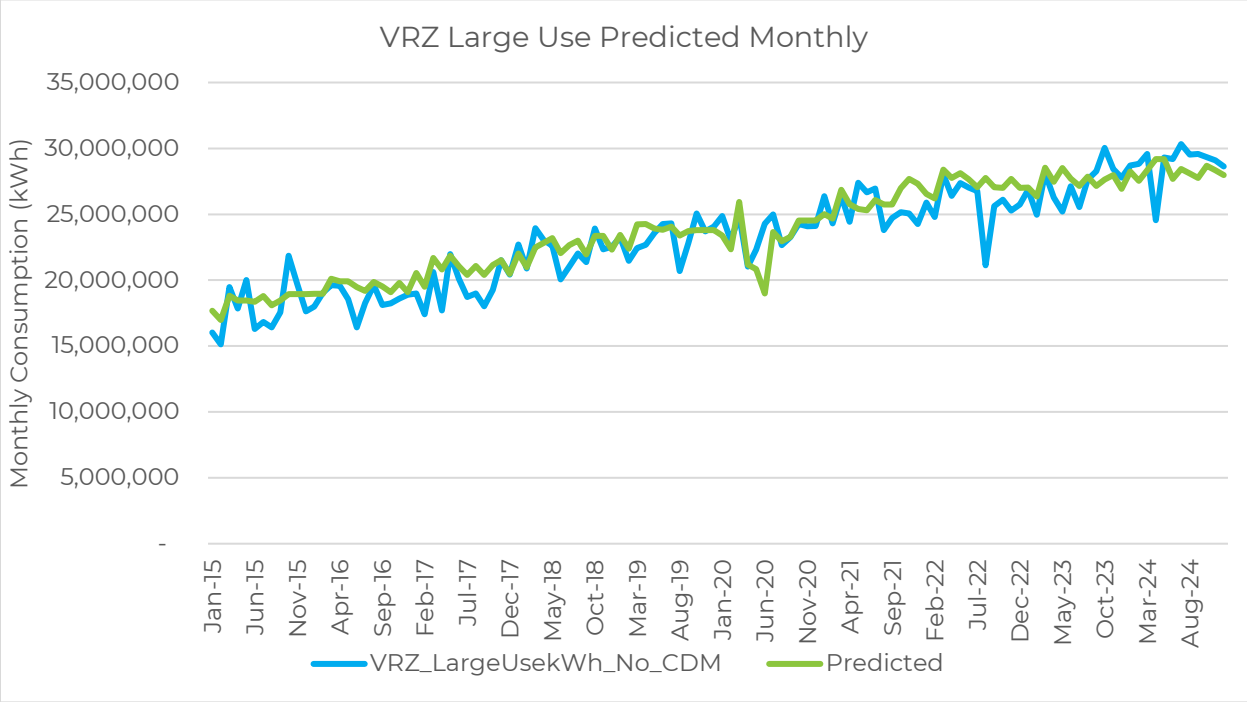
The following table outlines the resulting regression model:

Table 42 - VRZ Large Use Regression Model

Model 6: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: VRZ_LargeUsekWh_No_CDM_AL				
rho = 0.34967				
	coefficient	std. error	t-ratio	p-value
const	-37,483,827	3,805,691	-9.85	0.0000
PeakDays	348,239	102,611	3.39	0.0009
OEA_GDP	65.91	3.94	16.75	0.0000
Spring	793,455	368,217	2.15	0.0333
COVID_AM	3,508,715	879,344	3.99	0.0001
Statistics based on the rho-differenced data				
Sum squared resid	2.45E+14	S.E. of regression		1,458,610
R-squared	0.8578	Adjusted R-squared		0.8529
F(7, 112)	71.57	P-value(F)		0.0000
rho	-0.0031	Durbin-Watson		1.9995

Using the above model coefficients we derive the following:

Figure 12 VRZ Large Use Predicted vs Actual observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 3.3%. The MAPE calculated monthly over the period is 5.5%.

Table 43 – VRZ Large Use Model Error

	VRZ Large Use		Absolute
Year	Actual	Predicted	Error (%)
2015	214,801,968	220,911,578	2.8%
2016	222,929,336	233,856,154	4.9%
2017	233,715,443	250,408,889	7.1%
2018	266,466,614	270,234,553	1.4%
2019	278,341,289	284,615,656	2.3%
2020	283,776,483	276,141,611	2.7%
2021	305,489,306	312,525,377	2.3%
2022	310,171,781	328,255,228	5.8%
2023	326,291,976	330,259,709	1.2%
2024	346,655,983	339,476,594	2.1%
Total	2,788,640,180	2,846,685,349	2.1%
Mean Absolute Percentage Error (Annual)			3.3%
Mean Absolute Percentage Error (Monthly)			5.5%

2.2 Whitby Rate Zone

2.2.1 *WRZ Residential*

The Whitby rate zone Residential kWh consumption equation was estimated using 120 observations from January 2015 to December 2024. Multiple heating degree day and cooling degree day thresholds were considered in the Residential regression. Consumption is relatively stable when the average monthly temperature is between 14°C and 18°C and increases as average temperatures deviate from that range. HDD relative to 14°C and CDD relative to 18°C were found to provide the strongest results. HDD and CDD measures near 18°C and 14°C, respectively, were also considered but found to be less predictive of monthly consumption.

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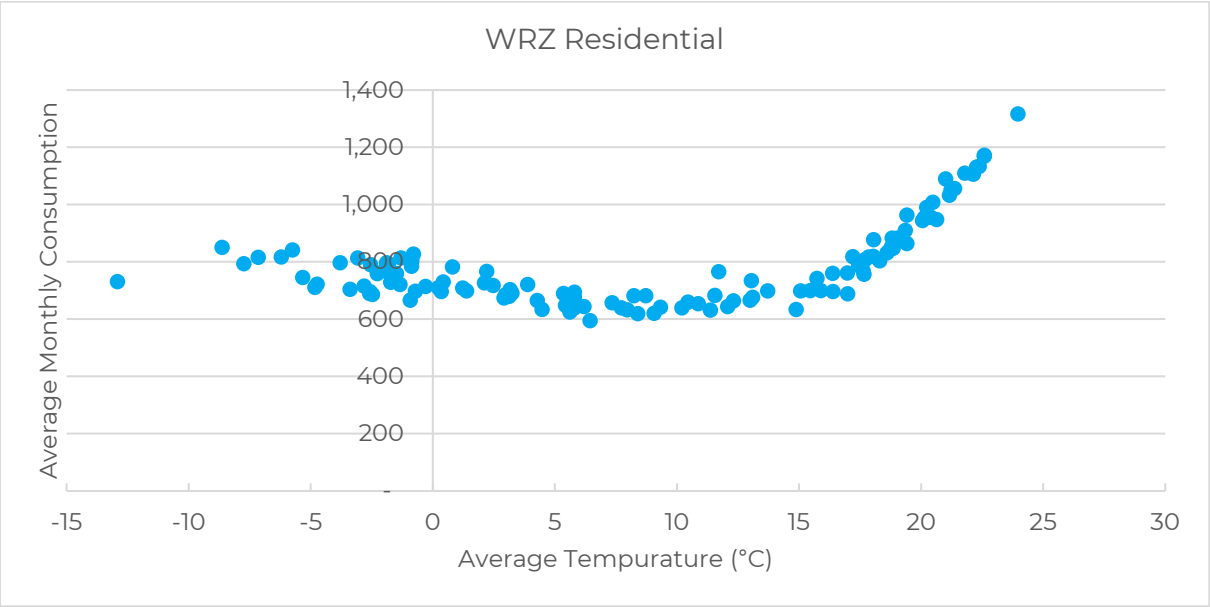
Figure 13 WRZ Residential kWh and Average Temperature



Economic variables, such as Oshawa employment and various GDP measures, were tested but not found to be statistically significant variables. The COVID HDD and CDD variables were found to be statistically significant and more significant than other COVID variables. The time trend variable and number of days in the month variables were found to be statistically significant and are used in the model. This variable was found to be more statistically significant than other trending variables such as economic variables and the Residential customer count.

Several other variables were examined and found to not show a statistically significant relationship to energy usage, or a weaker relationship than similar variables that are included. Those included customer counts, employment, GDP, and other calendar variables.

A time-series autoregressive model using the Prais-Winsten estimation was used for the Residential class to account for autocorrelation.

The following table outlines the resulting regression model:

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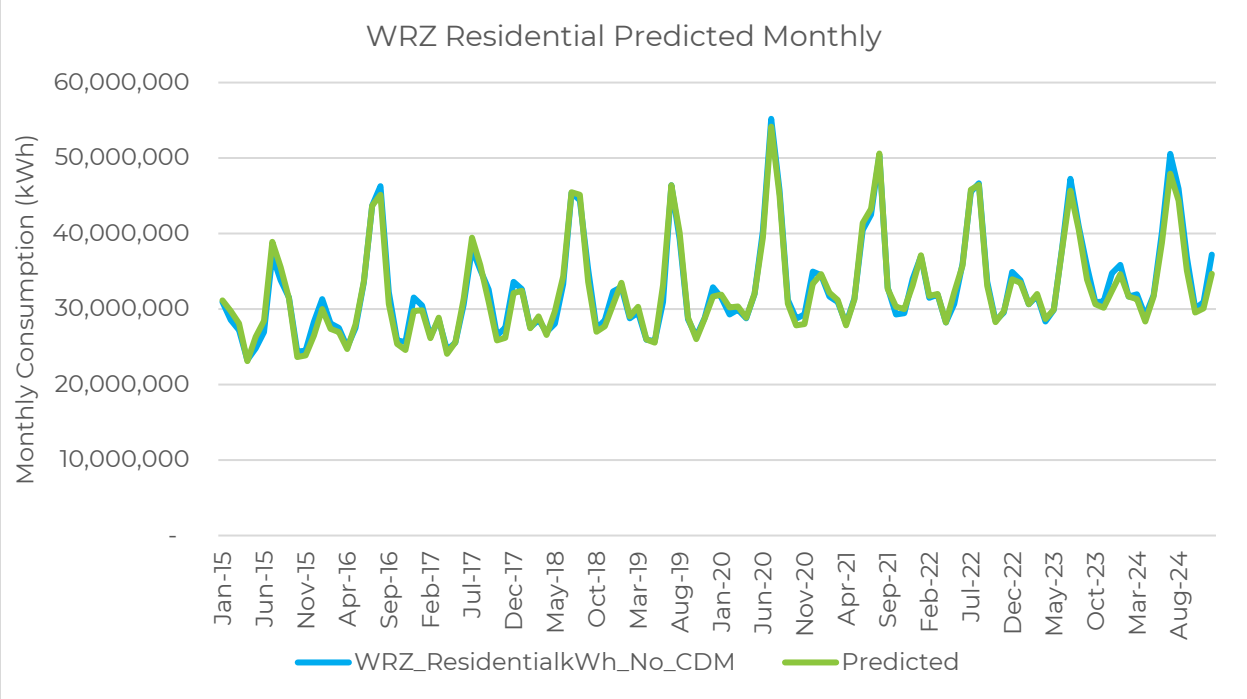
Table 44 – WRZ Residential Regression Model

Model 7: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: WRZ_ResidentialkWh_No_CDM_AL				
rho = 0.45106				
	coefficient	std. error	t-ratio	p-value
const	-6,000,765	2,372,755	-2.53	0.0128
HDD18	14,572	737	19.76	0.0000
CDD14	92,328	2,402	38.44	0.0000
CovHDD18	4,698	1,517	3.10	0.0025
CovCDD14	16,615	5,063	3.28	0.0014
Shoulder	-815,230	216,651	-3.76	0.0003
Trend	53,863	4,162	12.94	0.0000
MonthDays	821,592	80,238	10.24	0.0000
Statistics based on the rho-differenced data				
Sum squared resid	8.23E+13	S.E. of regression		857,143
R-squared	0.9831	Adjusted R-squared		0.9820
F(7, 112)	636.87	P-value(F)		0.0000
rho	-0.0334	Durbin-Watson		2.0487

Using the above model coefficients, we derive the following:

Figure 14 WRZ Residential Predicted vs Actual Observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.1%. The MAPE calculated monthly over the period is 2.3%.

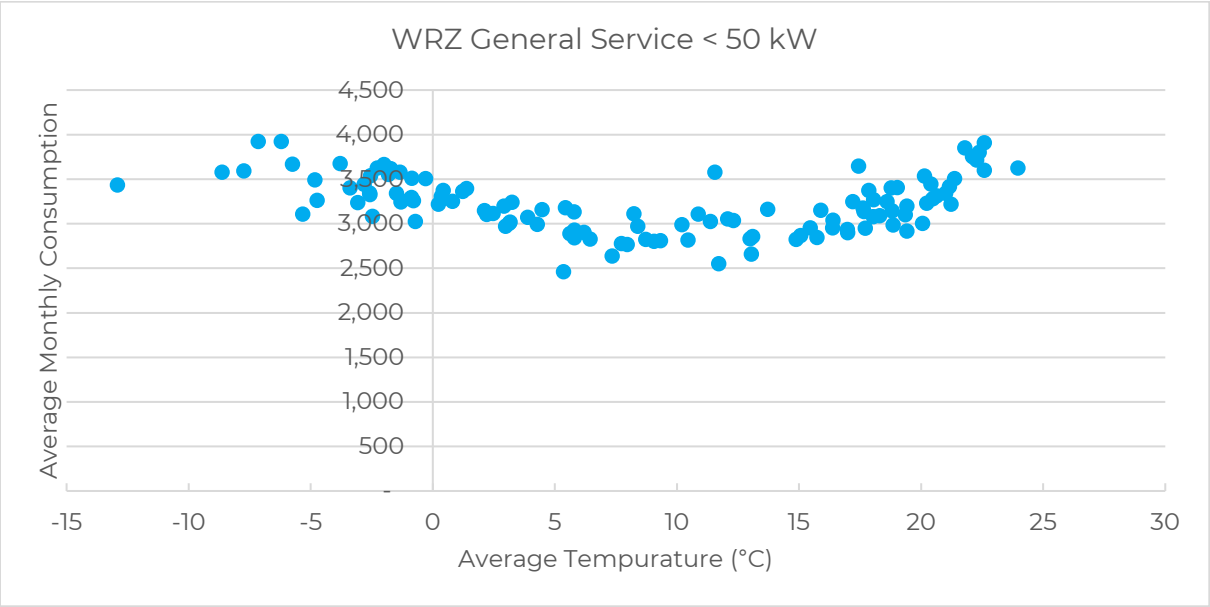
Table 45 – WRZ Residential Model Error

	WRZ Residential		Absolute
Year	Actual	Predicted	Error (%)
2015	341,230,563	346,682,335	1.6%
2016	378,173,307	369,877,850	2.2%
2017	359,527,894	356,304,440	0.9%
2018	390,439,562	389,240,906	0.3%
2019	376,217,358	380,152,082	1.0%
2020	416,955,297	413,990,777	0.7%
2021	415,398,277	421,975,818	1.6%
2022	414,003,896	420,131,194	1.5%
2023	412,979,207	413,876,078	0.2%
2024	432,055,275	428,723,018	0.8%
Total	3,936,980,636	3,940,954,498	0.1%
Mean Absolute Percentage Error (Annual)			1.1%
Mean Absolute Percentage Error (Monthly)			2.3%

2.2.2 *WRZ GS < 50 kW*

For the GS < 50 kW class, the regression equation was estimated using 120 observations from January 2015 to December 2024. Consumption for this class is relatively stable when the average monthly temperature is between 20°C and 12°C and increases as average temperatures deviate from that range. HDD relative to 20°C and CDD relative to 12°C were found to provide the strongest results. HDD and CDD measures near 20°C and 12°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 15 WRZ GS<50 kWh and Average Temperature



The seasonally-adjusted Oshawa employment measure was found to be statistically significant, and more statistically significant than other employment of GDP measures. The number of days in each month and fall variable were found to be statistically significant and were used in the GS < 50 kW model. The COVID_AM variable was found to be statistically significant and more significant than other COVID variables.

Other calendar variables were tested but found to not have statistically significant relationships to energy usage.

The following table outlines the resulting regression model:

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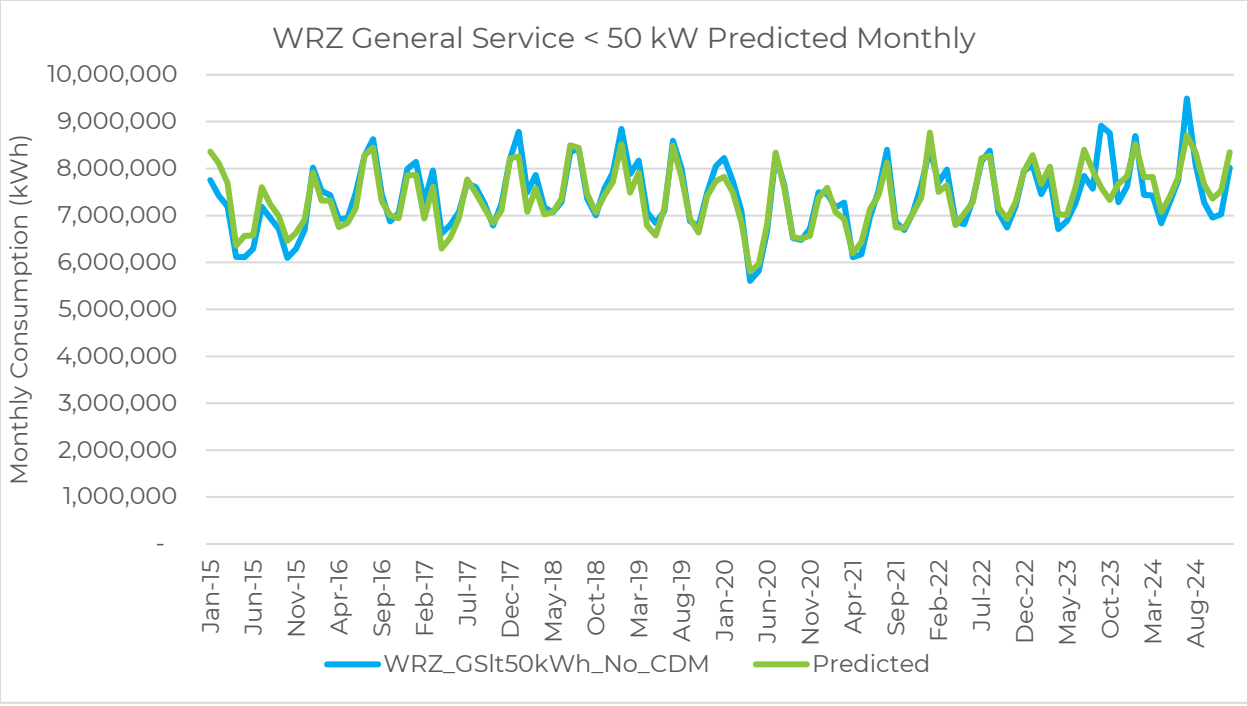
Table 46 - WRZ GS < 50 Regression Model

Model 8: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: WRZ_GSlt50kWh_No_CDM_AL				
rho = 0.466848				
	coefficient	std. error	t-ratio	p-value
const	-2,747,300	1,044,719	-2.63	0.0097
HDD20	3,926	258	15.21	0.0000
CDD12	10,176	600	16.96	0.0000
MonthDays	159,104	26,063	6.10	0.0000
Osh_FTEAdj	13,953	3,055	4.57	0.0000
COVID_AM	-798,081	201,782	-3.96	0.0001
Fall	193,845	84,555	2.29	0.0237
Statistics based on the rho-differenced data				
Sum squared resid	9.37E+12	S.E. of regression		288,008
R-squared	0.8427	Adjusted R-squared		0.8344
F(7, 112)	92.29	P-value(F)		0.0000
rho	0.0754	Durbin-Watson		1.8174

Using the above model coefficients we derive the following:

Figure 16 WRZ GS<50 Predicted vs Actual Observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.8%. The MAPE calculated monthly over the period is 3.2%.

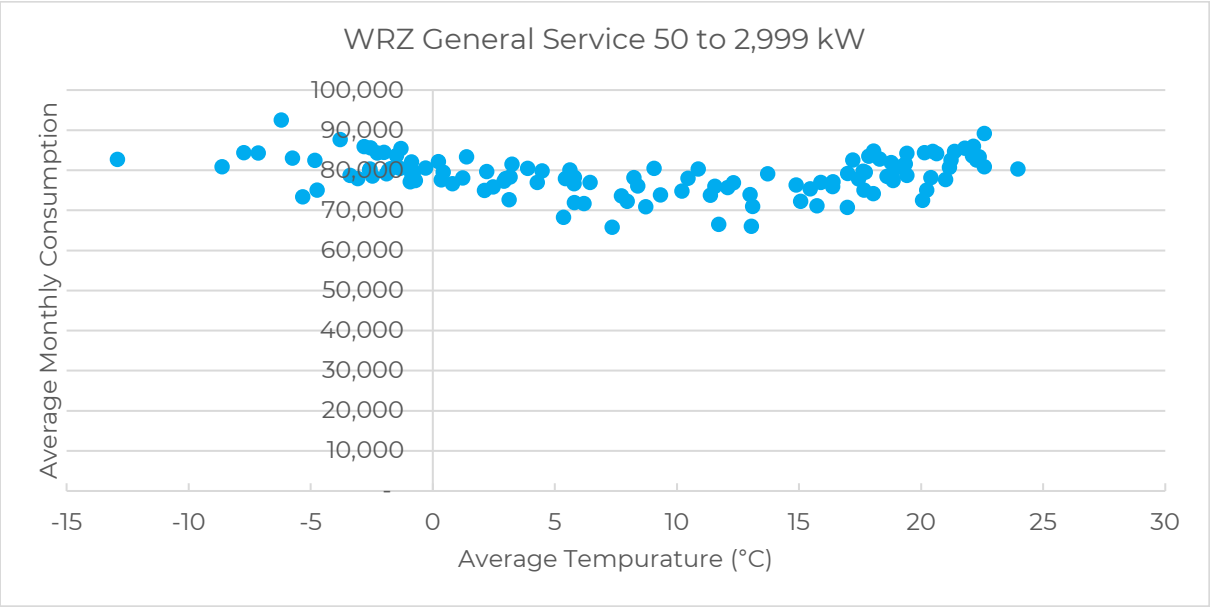
Table 47 - WRZ GS < 50 Model Error

	WRZ GS < 50 kW		Absolute
Year	Actual	Predicted	Error (%)
2015	80,816,258	85,511,416	5.8%
2016	90,604,839	89,149,764	1.6%
2017	88,683,309	86,749,802	2.2%
2018	92,324,973	90,992,960	1.4%
2019	91,697,787	89,460,136	2.4%
2020	84,284,806	83,657,352	0.7%
2021	85,338,794	84,816,936	0.6%
2022	90,650,270	90,875,253	0.2%
2023	92,174,874	92,434,117	0.3%
2024	92,286,826	94,393,736	2.3%
Total	888,862,734	888,041,473	0.1%
Mean Absolute Percentage Error (Annual)			1.8%
Mean Absolute Percentage Error (Monthly)			3.2%

2.2.3 *WRZ GS 50 to 2,999 kW*

For the GS 50 to 2,999 kW class, the regression equation was estimated using 120 observations from January 2015 to December 2024. GS 50 to 2,999 kW consumption is relatively flat when the average monthly temperature is between 12°C and 14°C and increases as average temperatures deviate from that range. Consumption does not vary significantly at lower temperatures but there is a stronger relationship between consumption and high temperatures. HDD relative to 14°C and CDD relative to 12°C were found to provide the strongest results. HDD and CDD measures near 14°C and 12°C, respectively, were also considered but found to be less predictive of monthly consumption.

Figure 17 WRZ GS 50 to 2,999 kW kWh and Average Temperature



The number of days in each month was found to be statistically significant and was used in the GS 50 to 2,999 kW model. The COVID_AM variable was found to be statistically significant and more significant than other COVID variables. Measures for Ontario employment and GDP were tested but not found to be statistically significant. The number of days in the month and the fall variable are used in the GS 50 to 2,999 kW model.

Other binary calendar variables representing other seasons and months were tested but found to not have a statistically significant relationship to energy use.

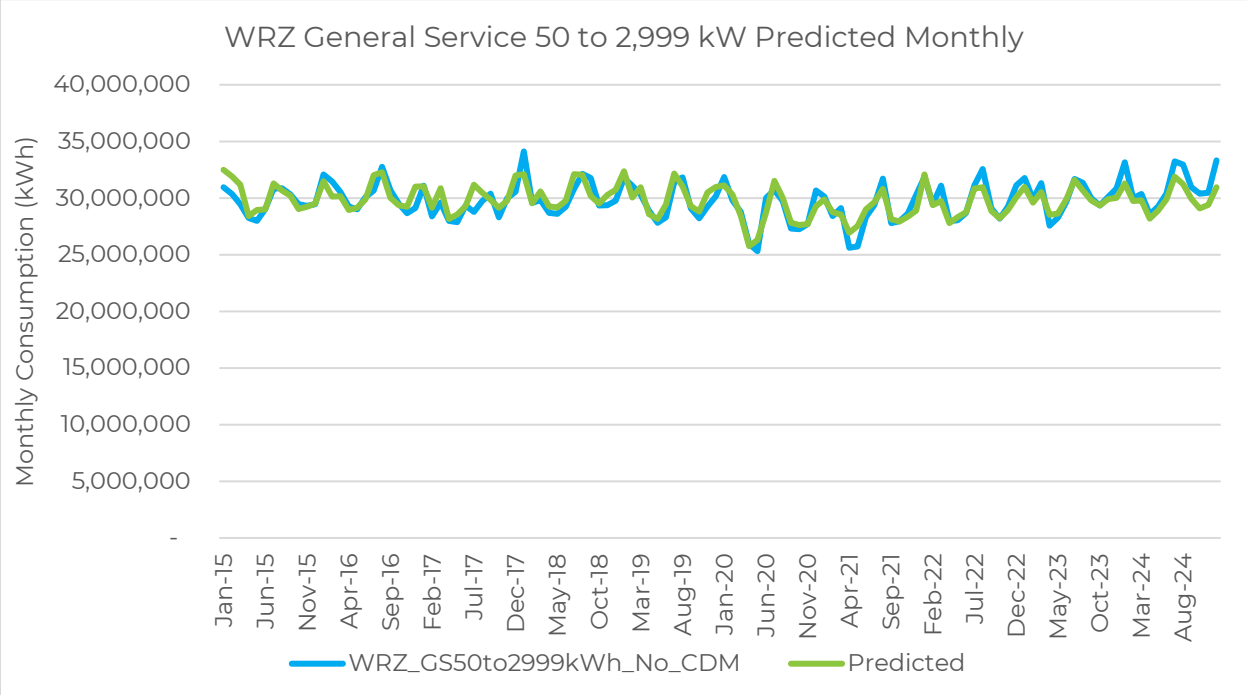
The following table outlines the resulting regression model:

Table 48 - WRZ GS 50 to 2,999 kW Regression Model

Model 9: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: WRZ_GS50to2999kWh_No_CDM_AL				
rho = 0.285875				
	coefficient	std. error	t-ratio	p-value
const	14,171,159	2,671,483	5.30	0.0000
HDD14	8,269	747	11.06	0.0000
CDD12	16,319	1,414	11.54	0.0000
MonthDays	411,350	86,373	4.76	0.0000
COVID_AM	-2,916,763	482,130	-6.05	0.0000
Fall	581,324	241,977	2.40	0.0179
const	14,171,159	2,671,483	5.30	0.0000
Statistics based on the rho-differenced data				
Sum squared resid	8.52E+13	S.E. of regression		864,710
R-squared	0.7268	Adjusted R-squared		0.7148
F(7, 112)	65.63	P-value(F)		0.0000
rho	-0.0388	Durbin-Watson		1.9988

Using the above model coefficients we derive the following:

Figure 18 WRZ GS 50 to 2,999 kW Predicted vs Actual Observations



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Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.1%. The MAPE calculated monthly over the period is 2.3%.

Table 49 - WRZ GS 50 to 2,999 kW Model Error

	WRZ GS 50-2,999 kW		Absolute
Year	Actual	Predicted	Error (%)
2015	356,280,750	361,926,434	1.6%
2016	363,869,602	363,665,598	0.1%
2017	352,034,152	359,429,312	2.1%
2018	363,238,682	365,353,753	0.6%
2019	358,131,146	362,310,288	1.2%
2020	345,109,125	344,598,110	0.1%
2021	343,070,591	344,438,631	0.4%
2022	358,448,136	353,891,439	1.3%
2023	361,788,715	359,464,821	0.6%
2024	373,054,127	360,281,042	3.4%
Total	**3,575,025,025**	**3,575,359,429**	**0.0%**
		Mean Absolute Percentage Error (Annual)	1.1%
		Mean Absolute Percentage Error (Monthly)	2.3%

2.2.4 *WRZ GS 3,000 to 4,999 kW*

The three Whitby GS > 50 kW customers with volumes greater than 3,000 kW are forecast as the Whitby GS 3,000 to 4,999 kW class, using 120 observations from January 2015 to December 2024. GS 3,000 to 4,999 kW consumption is not correlated with weather and the weather variables were not found to be statistically significant.

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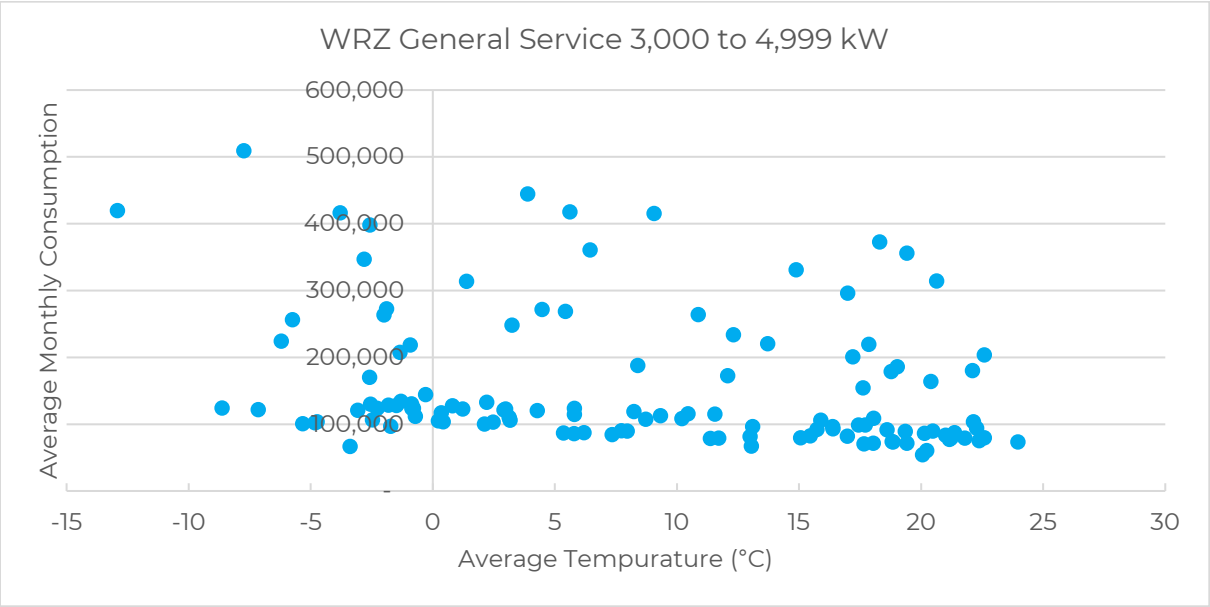
Figure 19 WRZ GS 3,000 to 4,999 kWh and Average Temperature



The number of customers was found to be statistically significant as the number of customers increased from 2 to 3 in 2018. The number of days in each month and December binary variable were found to be statistically significant and were used in the GS 3,000 to 4,999 kW model.

Economic variables, COVID variables, and other binary calendar variables representing seasons and months were tested but found to not have a significant relationship to energy use.

The following table outlines the resulting regression model:

Table 50 - WRZ GS 3,000 to 4,999 kW Regression Model

Model 10: Prais-Winsten, using observations 2015:01-2024:12 (T = 120)				
Dependent variable: WRZ_GS3000to4999kWh_No_CDM_AL				
rho = 0.809402				
	coefficient	std. error	t-ratio	p-value
const	-4,783,589	831,906	-5.75	0.0000
MonthDays	196,036	19,917	9.84	0.0000
WRZ_GS30004999Customers	2,088,947	198,904	10.50	0.0000
Dec	-252,015	68,756	-3.67	0.0004
Statistics based on the rho-differenced data				
Sum squared resid	8.48E+12	S.E. of regression		270,371
R-squared	0.9488	Adjusted R-squared		0.9475
F(7, 112)	73.87	P-value(F)		0.0000
rho	0.0209	Durbin-Watson		1.8270

Using the above model coefficients we derive the following:

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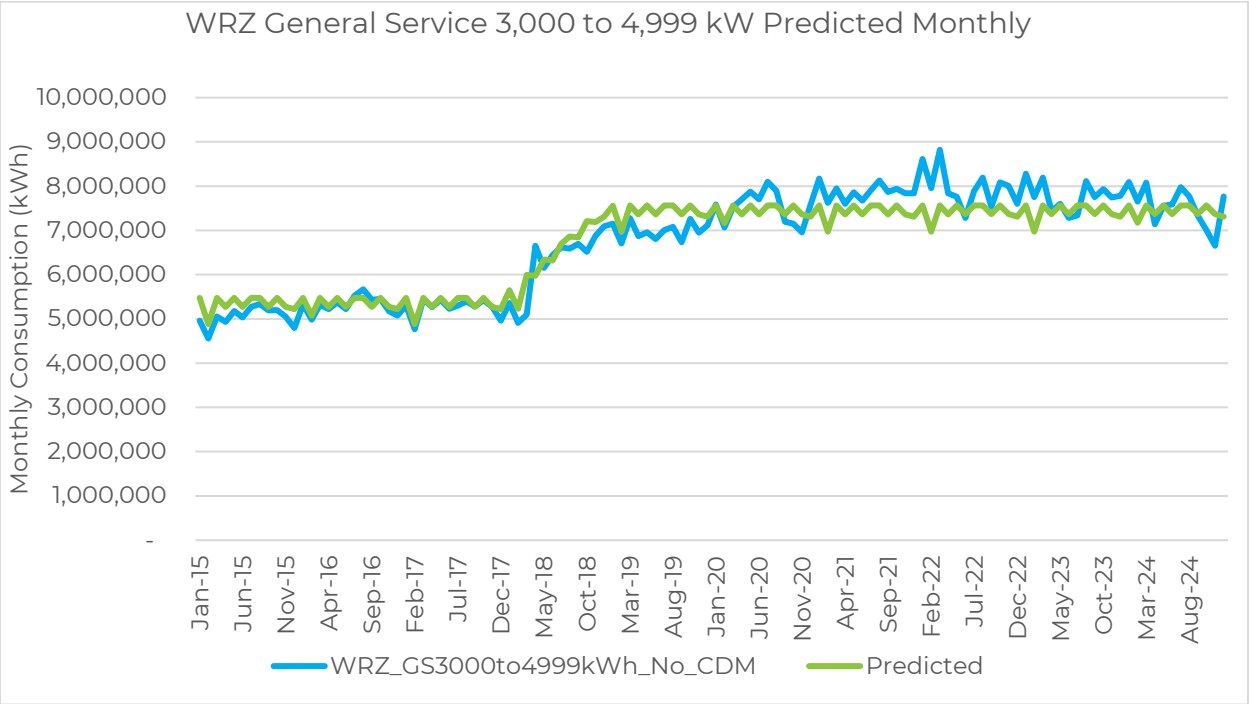
Figure 20 WRZ GS 3,000 to 4,999 kW Predicted vs Actual observations



Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 3.7%. The MAPE calculated monthly over the period is 4.7%.

Table 51 - WRZ GS 3,000 to 4,999 kW Model Error

	WRZ GS 3,000-4,999 kW		Absolute
Year	Actual	Predicted	Error (%)
2015	60,550,882	64,032,949	5.8%
2016	63,772,064	64,228,985	0.7%
2017	63,079,309	64,034,037	1.5%
2018	75,020,562	77,614,441	3.5%
2019	83,915,672	89,105,499	6.2%
2020	90,346,841	89,303,191	1.2%
2021	94,391,042	89,109,640	5.6%
2022	95,586,055	89,115,698	6.8%
2023	93,213,906	89,126,935	4.4%
2024	90,609,120	89,345,385	1.4%
Total	**810,485,453**	**805,016,759**	**0.7%**
		Mean Absolute Percentage Error (Annual)	3.7%
		Mean Absolute Percentage Error (Monthly)	4.7%

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3. WEATHER NORMALIZATION AND ECONOMIC FORECAST

3.1 Normal Weather

Average monthly heading degree days and cooling degree days in the 10-year period from 2015 to 2024 are used as "normal weather". Heating degree days and cooling degree days were calculated on a daily basis using temperatures reported by Environment Canada for Oshawa, which is used as the weather station for both of Elexicon's rate zones. Heating degree days reflect the number of degrees the average daily temperate is below a base temperature. Cooling degree days reflect the number of degrees the average daily temperate is above a base temperature. Environment Canada provides heating and cooling degree day statistics using a base of 18°C but a wider range of base temperatures were considered. The monthly heating and cooling degree days are a sum of the respective values within each month.

The table below displays the 10-year average (2015 to 2024) of heating degree days and cooling degree days for a range of base temperatures.

Table 52 – 10 Year Average HDD and CDD

	8°C		10°C		12°C		14°C		16°C		18°C		20°C	
	HDD	CDD	HDD	CDD	HDD	CDD	HDD	CDD	HDD	CDD	HDD	CDD	HDD	CDD
January	387	0	449	0	511	0	573	0	635	0	697	0	759	0
February	341	0	398	0	454	0	511	0	568	0	624	0	681	0
March	239	2	299	1	360	0	422	0	484	0	546	0	608	0
April	80	28	125	13	178	6	235	2	293	0	352	0	412	0
May	7	181	18	130	36	86	64	52	103	29	150	14	203	5
June	0	314	0	255	1	195	3	138	12	86	33	47	66	21
July	0	422	0	360	0	298	0	236	0	174	2	114	10	60
August	0	397	0	335	0	273	0	211	1	150	6	93	21	46
September	0	276	1	217	3	159	10	106	26	62	55	31	97	13
October	25	99	50	62	86	35	130	18	181	7	238	2	298	0
November	140	13	192	6	249	2	307	1	367	0	427	0	487	0
December	269	1	330	0	392	0	454	0	516	0	578	0	640	0

Historic consumption data is weather-normalized by replacing actual heating and cooling degree days with the average values as provided in the above table.

3.2 Economic Forecast

GDP and employment forecasts for 2024 to 2026 are based on the mean forecasts of four major Canadian banks TD, BMO, Scotiabank, RBC as of August 2025. Publicly available forecasts are not available after 2026 from these sources. The Ontario Budget released on May 15, 2025 includes GDP and employment forecasts for the 2027 and 2028. The forecast figures for 2027 to 2028 from the Ontario Budget are used for the remaining of the rate period to 2031.

Table 53 - Economic Forecasts

Source Report Date	BMO 15-Aug-25	RBC 13-Jun-25	Scotiabank 17-Jun-25	TD 18-Jun-25	ON Budget 15-May-25	Average
GDP Forecast (Real GDP % Year-over-Year)						
2023	1.7%	1.7%	1.7%			1.70%
2024	1.4%	1.2%	1.2%	1.4%	1.5%	1.30%
2025	0.9%	1.3%	1.1%	0.6%	0.8%	0.98%
2026	1.1%	1.1%	0.9%	0.9%	1.0%	1.00%
2027					1.9%	1.90%
2028					1.9%	1.90%
2029						1.90%
2030						1.90%
2031						1.90%
FTE Forecast (% Year-over-Year)						
2023	3.1%	3.1%	3.1%			3.10%
2024	1.7%	1.7%	1.7%	1.7%	1.7%	1.70%
2025	0.9%	0.9%	0.8%	0.7%	0.9%	0.83%
2026	1.0%	0.0%	0.2%	0.4%	0.4%	0.40%
2027					0.9%	0.90%
2028					0.9%	0.90%
2029						0.90%
2030						0.90%
2031						0.90%

Average forecast rates are applied to the most recent GDP and Labour Force Survey monthly data available. For example, the 2025 forecast FTE growth rate, 0.83%, is applied to the number of January 2024 FTEs to forecast the number of FTEs in January 2025. The January 2026 FTE forecast is then determined by applying 0.4%, the 2026 FTE forecast growth rate, to the January 2025 forecast.

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4. CLASS SPECIFIC NORMALIZED FORECASTS

4.1 Veridian Rate Zone

4.1.1 *VRZ Residential*

Incorporating the forecast economic variables, 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 54 Actual vs Normalized VRZ Residential kWh

VRZ Residential kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	870,387,179	7,706,953	878,094,131	916,973,139	7,706,953	909,266,186
2016	959,221,389	15,668,448	974,889,837	938,223,821	15,668,448	922,555,373
2017	901,971,744	33,039,525	934,766,398	955,797,712	33,039,525	922,758,187
2018	979,700,024	42,806,369	1,021,402,864	975,946,221	42,806,369	933,139,852
2019	955,759,610	45,836,335	998,784,214	996,944,275	45,836,335	951,107,940
2020	1,034,148,021	45,977,943	1,074,448,829	1,048,600,450	45,977,943	1,002,622,507
2021	1,026,240,018	46,124,535	1,063,178,254	1,070,303,863	46,124,535	1,024,179,328
2022	1,017,709,391	46,174,753	1,048,977,488	1,081,094,598	46,174,753	1,034,919,845
2023	1,008,624,980	46,187,682	1,034,333,081	1,091,771,529	46,187,682	1,045,583,847
2024	1,052,968,776	48,210,343	1,073,489,953	1,120,231,798	48,210,343	1,072,021,454
2025				1,148,261,884	47,340,362	1,100,921,522
2026				1,178,048,344	47,092,785	1,130,955,559
2027				1,208,839,412	46,690,164	1,162,149,248
2028				1,242,326,215	46,387,183	1,195,939,032
2029				1,273,974,582	46,101,197	1,227,873,384
2030				1,309,083,067	43,156,994	1,265,926,073
2031				1,345,137,094	39,220,819	1,305,916,275

Column D in this table is calculated by applying normal (10-year average) heating and cooling degree days, as well as the remaining variables, to the regression coefficients from Table 32. From 2025 onwards the regression coefficients are applied to forecast values, including the same normal heating and cooling degree days. The calculations are detailed in the load forecast model.

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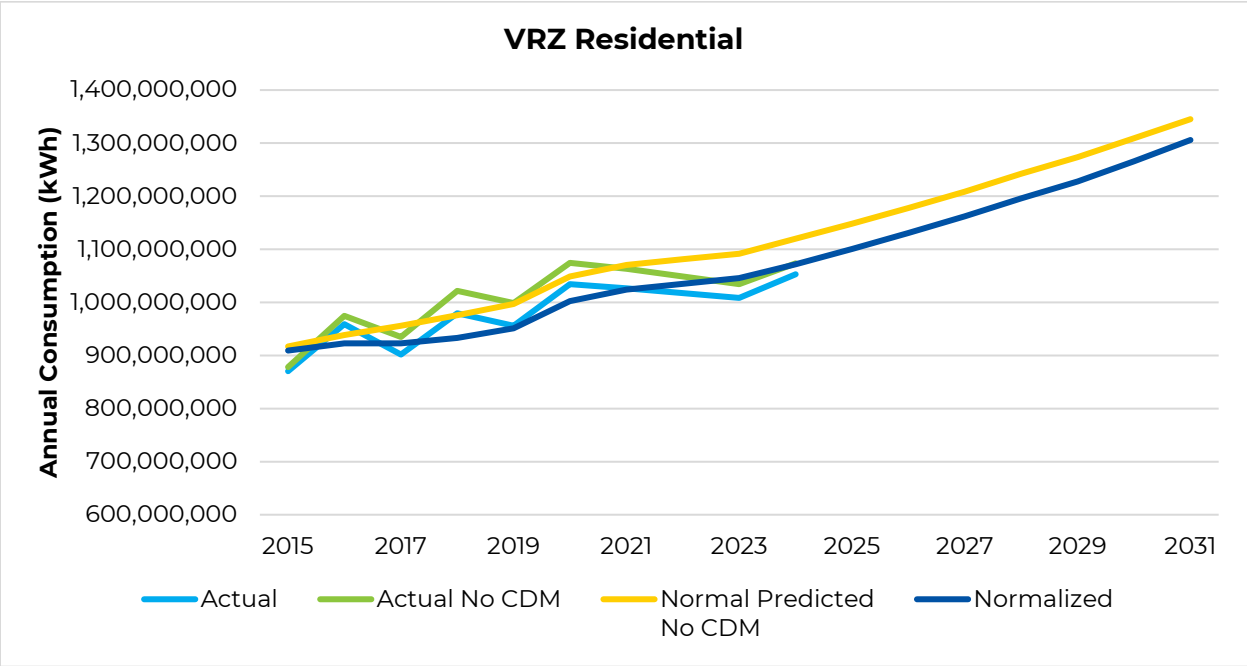
Figure 21 Actual vs Normalized VRZ Residential kWh



Note that the vertical intercept does not begin at 0 in any figure in this section. While Residential customer counts are not a component of the regression model, they are forecasted for the purpose of rate setting. Elexicon expects that the Residential customer count will increase at a faster rate in 2025 to 2031 than the historic growth rate. External sources of household and population growth were analysed to produce the Residential customer count forecast. The Residential growth rate is calculated as the average of (1) the average growth rate of municipalities in the Veridian rate zone from municipal and regional plans, (2) the Ministry of Finance population forecasts for the region of Durham, and (3) the class's historic growth rate. The source of municipal growth rates is the Envision Durham regional plan, the Monitoring of Growth Rates report from the Region of Durham, the City of Bellville Official Plan, and the Port Hope Master Plan. The average forecast growth rate is 2.0%, twice the average historic growth rate from 2015 to 2024 of 1.0%.

Table 55 - Forecasted VRZ Residential Customer Count

VRZ Residential		Percent of Prior Year
Year	Customers	
2015	107,216	
2016	107,448	100.22%
2017	108,365	100.85%
2018	109,470	101.02%
2019	110,961	101.36%
2020	112,218	101.13%
2021	113,059	100.75%
2022	114,161	100.97%
2023	115,689	101.34%
2024	117,456	101.53%
2025	119,658	101.87%
2026	122,102	102.04%
2027	124,619	102.06%
2028	127,084	101.98%
2029	129,594	101.97%
2030	132,210	102.02%
2031	134,871	102.01%

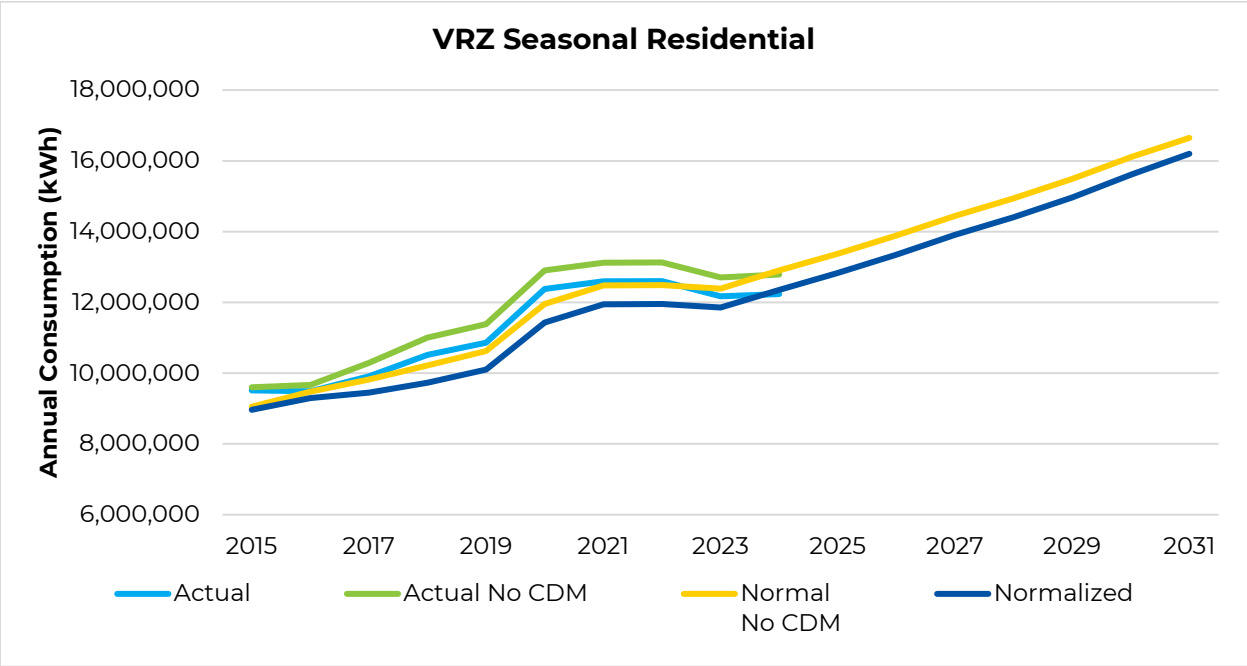
4.1.2 *VRZ Seasonal Residential*

Incorporating the forecast economic variables, 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 56 Actual vs Normalized VRZ Seasonal Residential kWh

VRZ Seasonal Residential kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	9,513,188	88,274	9,601,462	9,053,226	88,274	8,964,952
2016	9,487,859	179,463	9,667,322	9,475,222	179,463	9,295,759
2017	9,912,684	378,428	10,291,112	9,824,709	378,428	9,446,281
2018	10,517,338	490,296	11,007,634	10,220,466	490,296	9,730,171
2019	10,858,189	525,000	11,383,189	10,628,168	525,000	10,103,168
2020	12,379,583	526,622	12,906,205	11,954,245	526,622	11,427,623
2021	12,593,975	528,301	13,122,277	12,478,143	528,301	11,949,842
2022	12,600,241	528,877	13,129,117	12,484,763	528,877	11,955,886
2023	12,172,614	529,024	12,701,637	12,388,460	529,024	11,859,436
2024	12,230,714	552,185	12,782,899	12,900,972	552,185	12,348,787
2025				13,376,795	542,221	12,834,574
2026				13,886,860	539,385	13,347,474
2027				14,445,621	534,774	13,910,847
2028				14,936,537	531,304	14,405,234
2029				15,491,958	528,028	14,963,930
2030				16,103,207	494,306	15,608,901
2031				16,648,704	449,222	16,199,482

Figure 22 Actual vs Normalized VRZ Seasonal Residential kWh



While Residential customer counts are not a component of the regression model, they are forecasted for the purpose of rate setting. The geometric mean of the annual growth from 2015 to 2024 was used to forecast the growth rate from 2024 to 2031.

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Table 57 - Forecasted VRZ Seasonal Residential Customer Count

VRZ Seasonal Residential		Percent of Prior Year
Year	Customers	
2015	1,592	
2016	1,586	99.61%
2017	1,577	99.45%
2018	1,571	99.61%
2019	1,565	99.63%
2020	1,561	99.74%
2021	1,559	99.86%
2022	1,559	100.02%
2023	1,563	100.22%
2024	1,562	99.95%
2025	1,559	99.79%
2026	1,555	99.79%
2027	1,552	99.79%
2028	1,549	99.79%
2029	1,545	99.79%
2030	1,542	99.79%
2031	1,539	99.79%

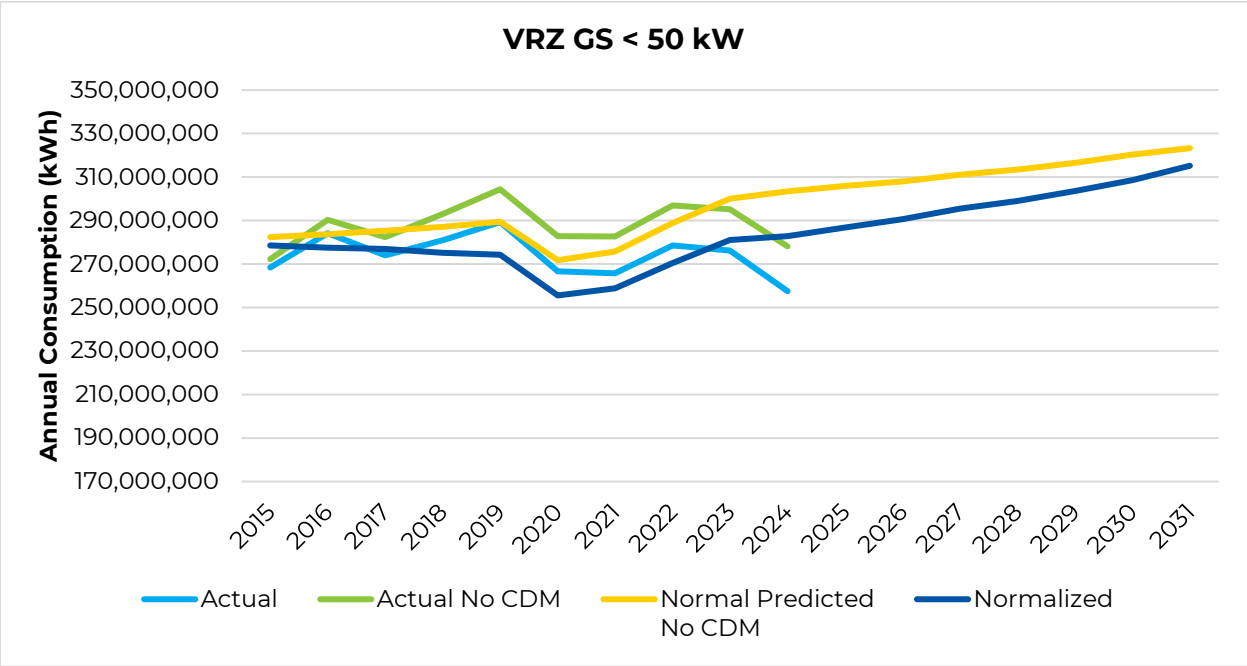
4.1.3 *VRZ GS < 50 kW*

Incorporating the forecast economic variables, 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 58 - Actual vs Normalized VRZ GS < 50 kWh

VRZ GS<50 kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	268,409,343	3,862,662	272,272,005	282,431,103	3,862,662	278,568,441
2016	284,102,094	6,266,004	290,368,097	283,748,232	6,266,004	277,482,229
2017	273,963,830	8,395,442	282,359,272	285,325,900	8,395,442	276,930,458
2018	280,954,110	12,035,401	292,989,511	287,154,505	12,035,401	275,119,103
2019	289,308,516	15,081,361	304,389,877	289,415,982	15,081,361	274,334,621
2020	266,656,242	16,208,809	282,865,051	271,776,990	16,208,809	255,568,181
2021	265,709,797	16,926,707	282,636,504	275,778,162	16,926,707	258,851,456
2022	278,598,121	18,330,489	296,928,609	288,859,012	18,330,489	270,528,524
2023	276,211,527	18,995,001	295,206,528	300,050,493	18,995,001	281,055,492
2024	257,530,701	20,534,227	278,064,928	303,393,064	20,534,227	282,858,837
2025				305,942,236	19,185,957	286,756,279
2026				307,974,910	17,320,822	290,654,087
2027				311,142,762	15,732,811	295,409,951
2028				313,468,693	14,401,490	299,067,203
2029				316,563,217	12,927,193	303,636,023
2030				320,341,038	11,751,203	308,589,835
2031				323,302,778	8,104,464	315,198,314

Figure 23 Actual vs Normalized VRZ GS<50 kWh



While GS < 50 customer counts are not a component of the regression model, they are forecasted for the purpose of rate setting. The Geometric mean of the annual growth from 2015 to 2024 was used to forecast the growth rate from 2024 to 2031.

The following table includes the customer Actual / Forecast customer count on this basis:

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Table 59 - Forecasted VRZ GS<50 kW Customer Count

VRZ GS < 50 kW		Percent of Prior Year
Year	Customers	
2015	8,893	
2016	8,953	100.68%
2017	9,015	100.69%
2018	9,090	100.82%
2019	9,207	101.29%
2020	9,278	100.77%
2021	9,315	100.40%
2022	9,413	101.06%
2023	9,487	100.79%
2024	9,502	100.15%
2025	9,544	100.74%
2026	9,614	100.74%
2027	9,685	100.74%
2028	9,757	100.74%
2029	9,829	100.74%
2030	9,902	100.74%
2031	9,975	100.74%

4.1.4 *VRZ GS 50 to 2,999 kW*

Incorporating the 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

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Table 60 - Actual vs Normalized VRZ GS 50 to 2,999 kWh

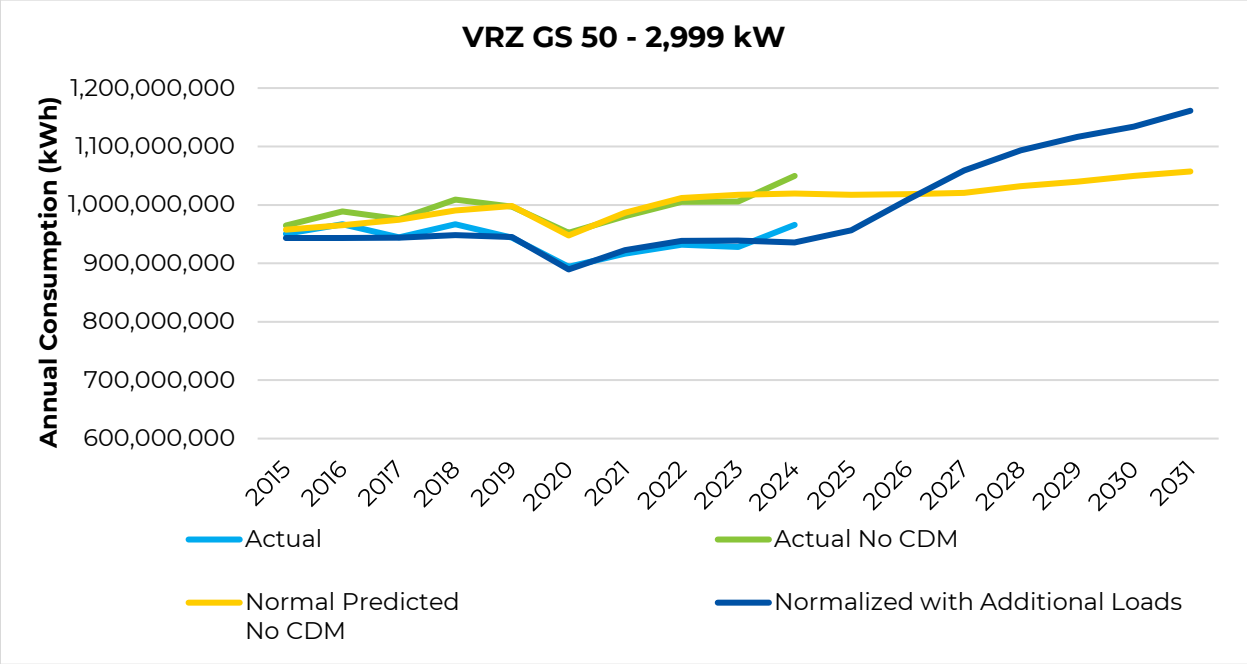
VRZ Residential kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	950,526,711	14,434,995	964,961,706	957,755,232	14,434,995	943,320,237
2016	966,717,855	22,146,620	988,864,474	965,278,695	22,146,620	943,132,075
2017	944,651,265	31,009,574	975,660,839	974,655,440	31,009,574	943,645,866
2018	966,857,797	42,215,474	1,009,073,271	990,370,521	42,215,474	948,155,047
2019	943,844,508	53,160,687	997,005,195	998,237,758	53,160,687	945,077,071
2020	894,106,942	58,143,132	952,250,075	947,685,255	58,143,132	889,542,122
2021	916,418,749	63,936,098	980,354,847	986,593,555	63,936,098	922,657,457
2022	931,880,225	73,456,511	1,005,336,735	1,011,660,609	73,456,511	938,204,098
2023	927,766,309	78,114,239	1,005,880,548	1,017,247,501	78,114,239	939,133,262
2024	965,931,354	83,700,791	1,049,632,146	1,019,262,845	83,700,791	935,562,054
2025				1,017,477,272	80,397,620	937,079,652
2026				1,018,281,256	77,276,692	941,004,564
2027				1,020,471,640	72,642,010	947,829,630
2028				1,031,973,820	68,459,277	963,514,543
2029				1,039,957,127	60,897,440	979,059,687
2030				1,049,706,438	55,454,862	994,251,576
2031				1,057,230,262	36,896,814	1,020,333,448

Additional loads, as described further in Section 6.3 below are forecast and added to the weather normalized forecasts for 2025 to 2031.

Table 61 - Additional VRZ GS 50 to 2,999 kWh Consumption

Year	Normalized	Additional Loads	Normalized with Additional Loads
	F	G	H = F + G
2025	937,079,652	19,650,769	956,730,421
2026	941,004,564	68,270,017	1,009,274,580
2027	947,829,630	110,997,669	1,058,827,299
2028	963,514,543	130,123,374	1,093,637,918
2029	979,059,687	137,454,982	1,116,514,669
2030	994,251,576	139,743,251	1,133,994,827
2031	1,020,333,448	140,830,616	1,161,164,064

Figure 24 Actual vs Normalized VRZ GS 50 to 2,999 kWh



The Geometric mean of the annual growth from 2015 to 2024 was used to forecast a customer count growth rate from 2024 to 2031. Additional customers, as described further Section 6.3 are added to the initial forecast customer count resulting in a forecast that is greater than historic customer count growth.

The following table includes the customer Actual / Forecast customer count on this basis:

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Table 62 - Forecasted VRZ GS 50 to 2,999 kW Customer Count

VRZ GS 50-2,999 kW		Percent of Prior Year	Known Additions	Total Customers
Year	Customers			
2015	1,054			
2016	1,056	100.22%		
2017	1,068	101.16%		
2018	1,060	99.24%		
2019	1,029	97.06%		
2020	1,032	100.28%		
2021	1,052	101.96%		
2022	1,037	98.58%		
2023	1,030	99.35%		
2024	1,059	102.81%		
2025	1,075	100.06%	5.0	1,080
2026	1,076	100.06%	8.6	1,090
2027	1,077	100.06%	4.1	1,094
2028	1,077	100.06%	1.0	1,096
2029	1,078	100.06%	0.3	1,097
2030	1,079	100.06%	0.1	1,098
2031	1,079	100.06%	0.2	1,098

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The ratio is calculated as the 10-year average kW/kWh ratio from 2015-2024.

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Table 63 - Forecasted VRZ GS 50 to 2,999 kW

	VRZ GS 50-2,999 kW				
	Actual kWh	Actual kW	Ratio		
	A	B	C = B / A		
2015	950,526,711	2,278,207	0.002397		
2016	966,717,855	2,342,970	0.002424		
2017	944,651,265	2,295,184	0.002430		
2018	966,857,797	2,313,760	0.002393		
2019	943,844,508	2,245,850	0.002379		
2020	894,106,942	2,160,161	0.002416		
2021	916,418,749	2,190,090	0.002390		
2022	931,880,225	2,248,197	0.002413		
2023	927,766,309	2,217,563	0.002390		
2024	965,931,354	2,202,593	0.002280		
	kWh Normalized	kW Normalized	10-Year Avg. Ratio	Additional kW Loads	Total Forecast
	D	E = D * F	F	G	H = E + G
2024	935,562,054	2,237,068	0.002391	-	2,237,068
2025	937,079,652	2,240,697	0.002391	50,862	2,291,559
2026	941,004,564	2,250,082	0.002391	171,442	2,421,525
2027	947,829,630	2,266,402	0.002391	278,417	2,544,819
2028	963,514,543	2,303,907	0.002391	329,303	2,633,210
2029	979,059,687	2,341,078	0.002391	353,267	2,694,345
2030	994,251,576	2,377,404	0.002391	366,006	2,743,410
2031	1,020,333,448	2,439,769	0.002391	376,351	2,816,120

4.1.5 *VRZ GS 3,000 to 4,999 kW*

Incorporating the 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 64 - Actual vs Normalized VRZ GS 3,000 to 4,999 kW

VRZ GS 3,000-4,999 kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	83,062,700	147,172	83,209,872	85,043,268	147,172	84,896,096
2016	81,278,309	498,550	81,776,858	87,440,501	498,550	86,941,951
2017	90,758,853	1,165,453	91,924,306	90,611,202	1,165,453	89,445,749
2018	83,863,298	1,987,431	85,850,729	94,290,579	1,987,431	92,303,148
2019	93,267,622	2,523,294	95,790,916	97,064,477	2,523,294	94,541,183
2020	89,415,661	2,728,507	92,144,168	91,600,780	2,728,507	88,872,272
2021	98,129,912	2,915,319	101,045,231	98,036,924	2,915,319	95,121,605
2022	108,822,585	3,289,697	112,112,282	102,915,842	3,289,697	99,626,145
2023	109,703,301	3,641,971	113,345,272	105,367,079	3,641,971	101,725,108
2024	98,198,227	4,218,257	102,416,485	107,316,693	4,218,257	103,098,436
2025				107,721,709	4,113,673	103,608,036
2026				107,939,891	4,070,738	103,869,153
2027				107,660,288	3,882,778	103,777,510
2028				110,335,737	3,635,483	106,700,253
2029				112,907,386	3,157,981	109,749,405
2030				115,536,067	2,960,085	112,575,981
2031				118,218,660	1,860,600	116,358,059

Additional loads, as described further in Section 6.3 below are forecast and added to the weather normalized forecasts for 2025 to 2031.

Table 65 - Additional VRZ GS 3,000 to 4,999 kWh Consumption

Year	Normalized	Additional Loads	Normalized with Additional Loads
	F	G	H = F + G
2025	103,608,036	21,674,772	125,282,808
2026	103,869,153	63,151,967	167,021,119
2027	103,777,510	87,281,170	191,058,679
2028	106,700,253	93,713,639	200,413,892
2029	109,749,405	96,944,177	206,693,582
2030	112,575,981	99,586,991	212,162,972
2031	116,358,059	101,562,290	217,920,350

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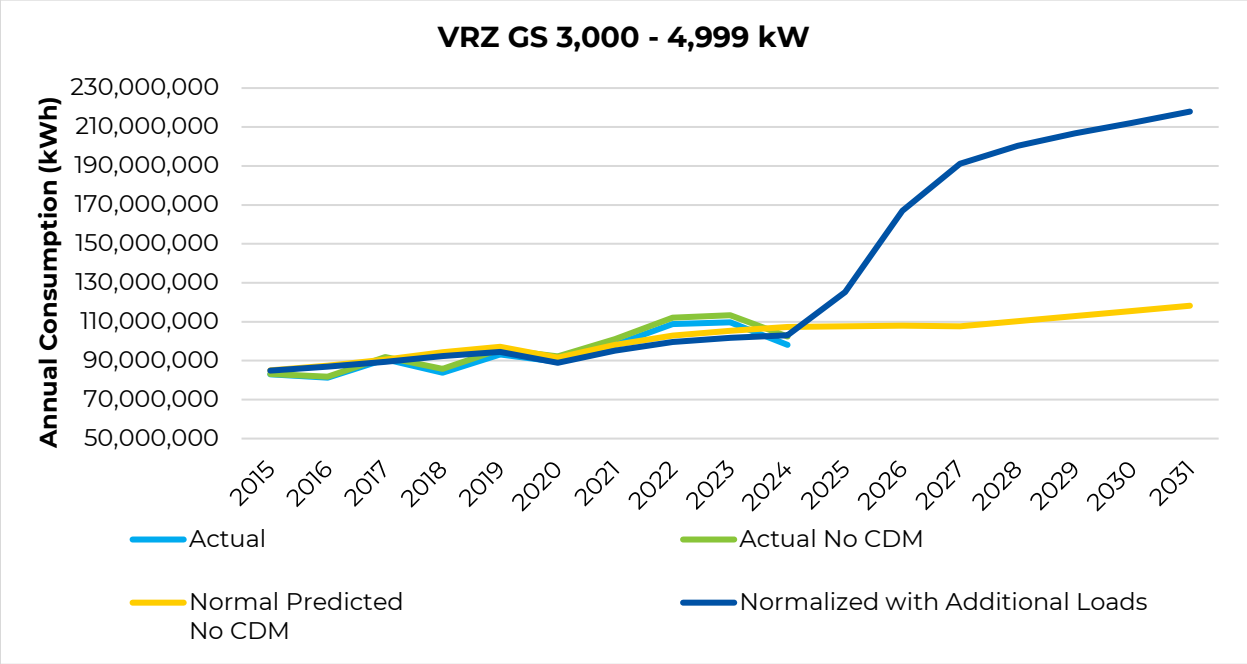
Figure 25 Actual vs Normalized VRZ GS 3,000 to 4,999 kWh



There have been 5 GS 3,000 to 4,999 kW customers since 2022. As described further Section 6.3, additional customers are forecast based on ongoing discussions with customers intending to connect are added to the existing customer count to produce a total forecast of 12 customers in 2027, more than twice the number of customers in 2024. A half-year adjustment is applied to these additional customers to reflect that they are expected to connect throughout the year.

The following table includes the customer Actual / Forecast customer count on this basis:

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Table 66 - Forecasted VRZ GS 3,000 to 4,999 kW Customer Count

VRZ GS 3,000-4,999 kW		Percent of Prior Year	Known Additions	Total Customers
Year	Customers			
2015	5			
2016	5	100.00%		
2017	5	100.00%		
2018	4	89.17%		
2019	4	89.72%		
2020	5	113.54%		
2021	6	122.02%		
2022	5	98.50%		
2023	5	91.60%		
2024	5	100.00%		
2025	5	100.00%	3.6	7
2026	5	100.00%	3.3	10
2027	5	100.00%	0.4	12
2028	5	100.00%	-	12
2029	5	100.00%	-	12
2030	5	100.00%	-	12
2031	5	100.00%	-	12

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The ratio is calculated as the 5-year average kW/kWh ratio from 2020-2024. A shorter period was used because the kW/kWh ratio has declined over time and the shorter period better reflects the current ratio of the class.

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Table 67 - Forecasted VRZ GS 3,000 to 4,999 kW

	VRZ GS 3,000-4,999 kW				
	Actual kWh	Actual kW	Ratio		
	A	B	C = B / A		
2015	83,062,700	194,668	0.002344		
2016	81,278,309	223,616	0.002751		
2017	90,758,853	200,190	0.002206		
2018	83,863,298	189,119	0.002255		
2019	93,267,622	195,386	0.002095		
2020	89,415,661	192,684	0.002155		
2021	98,129,912	216,388	0.002205		
2022	108,822,585	228,647	0.002101		
2023	109,703,301	234,048	0.002133		
2024	98,198,227	215,660	0.002196		
	kWh Normalized	kW Normalized	5-Year Avg. Ratio	Additional kW Loads	Total Forecast
	D	E = D * F	F	G	H = E + G
2024	103,098,436	222,502	0.002158	-	222,502
2025	103,608,036	223,602	0.002158	47,293	270,896
2026	103,869,153	224,166	0.002158	137,382	361,548
2027	103,777,510	223,968	0.002158	190,087	414,055
2028	106,700,253	230,276	0.002158	204,632	434,907
2029	109,749,405	236,856	0.002158	212,464	449,320
2030	112,575,981	242,956	0.002158	219,139	462,095
2031	116,358,059	251,119	0.002158	224,437	475,555

Additional billed demand loads are calculated separately as described in Section 6.

4.1.6 *VRZ Large Use*

Incorporating the 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 68 - Actual vs Normalized VRZ Large Use kWh

Year	VRZ Large Use kWh					
	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	210,460,829	4,341,139	214,801,968	220,911,578	4,341,139	216,570,439
2016	215,800,519	7,128,817	222,929,336	233,856,154	7,128,817	226,727,336
2017	223,859,611	9,855,832	233,715,443	250,408,889	9,855,832	240,553,058
2018	250,221,085	16,245,529	266,466,614	270,234,553	16,245,529	253,989,024
2019	259,592,384	18,748,905	278,341,289	284,615,656	18,748,905	265,866,751
2020	264,242,586	19,533,897	283,776,483	276,141,611	19,533,897	256,607,714
2021	284,809,431	20,679,876	305,489,306	312,525,377	20,679,876	291,845,501
2022	289,202,901	20,968,880	310,171,781	328,255,228	20,968,880	307,286,348
2023	303,910,759	22,381,217	326,291,976	330,259,709	22,381,217	307,878,493
2024	321,893,042	24,762,942	346,655,983	339,476,594	24,762,942	314,713,653
2025				341,988,102	23,553,829	318,434,273
2026				342,344,698	22,625,563	319,719,134
2027				341,658,103	19,408,459	322,249,644
2028				355,245,112	16,253,142	338,991,970
2029				368,736,845	13,611,951	355,124,894
2030				382,486,378	12,575,353	369,911,026
2031				396,498,641	9,139,421	387,359,220

Additional loads, as described further in Section 6.3 below are forecast and added to the weather normalized forecasts for 2025 to 2031.

Table 69 - Additional VRZ Large Use kWh Consumption

Year	Normalized	Additional Loads	Normalized with Additional Loads
	F	G	H = F + G
2025	318,434,273	19,570,667	338,004,940
2026	319,719,134	53,851,782	373,570,916
2027	322,249,644	106,673,548	428,923,192
2028	338,991,970	191,849,664	530,841,633
2029	355,124,894	255,361,703	610,486,597
2030	369,911,026	275,605,894	645,516,919
2031	387,359,220	280,147,343	667,506,562

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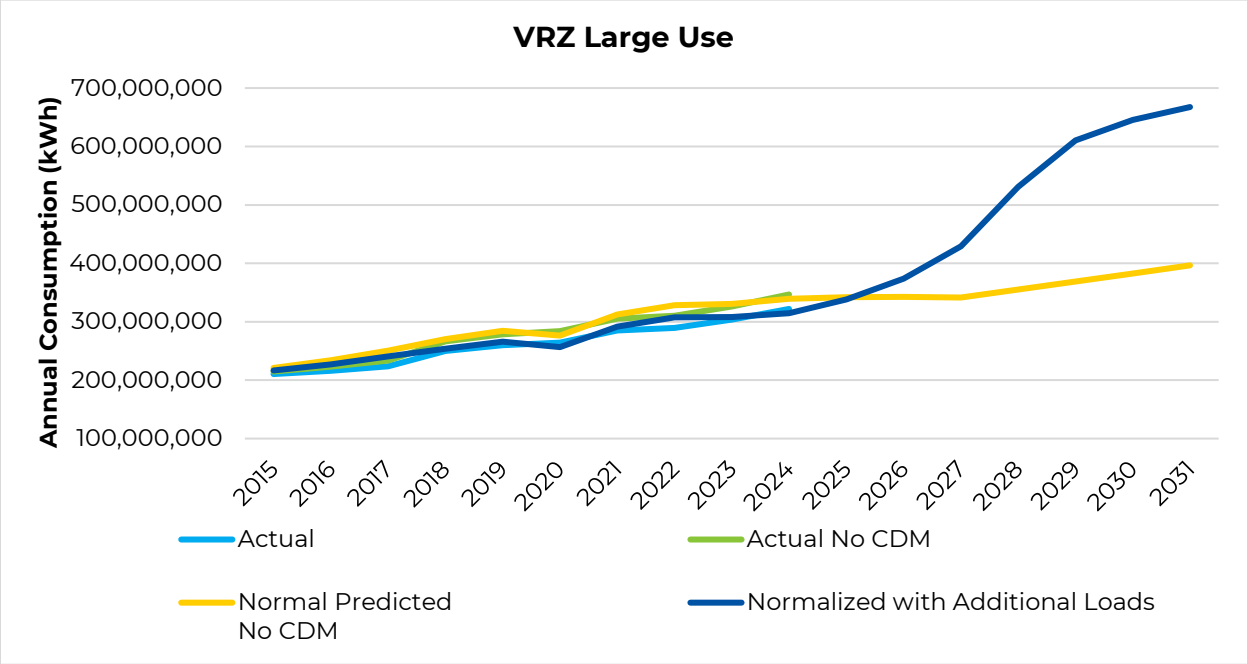
Figure 26 Actual vs Normalized VRZ Large Use kWh



The Large Use rate class has had five customers since 2023. Additional customers, as described further Section 6.3 are added to the existing customer count. There are probability weighting and connection timing adjustments assigned to the additional customers and loads so the customer additions are not necessarily whole numbers. A half-year adjustment is applied to these additional customers to reflect that they are expected to connect throughout the year.

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Table 70 - Forecasted VRZ Large Use Customer Count

VRZ Large Use		Percent of Prior Year	Known Additions	Total Customers
Year	Customers			
2015	3			
2016	3			
2017	3	100.00%		
2018	4	118.06%		
2019	4	112.94%		
2020	4	100.00%		
2021	4	100.00%		
2022	4	100.00%		
2023	5	113.54%		
2024	5	110.09%		
2025	5	100.00%	0.8	5
2026	5	100.00%	0.5	6
2027	5	100.00%	1.5	7
2028	5	100.00%	0.8	8
2029	5	100.00%	0.1	9
2030	5	100.00%	0.1	9
2031	5	100.00%	0.0	9

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The ratio is calculated as the 5-year average kW/kWh ratio from 2020-2024. A shorter period was used because the kW/kWh ratio has declined over time and the shorter period better reflects the current ratio of the class.

Table 71 - Forecasted VRZ Large Use kW

	VRZ Large Use				
	Actual kWh	Actual kW	Ratio		
	A	B	C = B / A		
2015	210,460,829	361,255	0.001716		
2016	215,800,519	421,758	0.001954		
2017	223,859,611	382,866	0.001710		
2018	250,221,085	423,038	0.001691		
2019	259,592,384	433,414	0.001670		
2020	264,242,586	453,257	0.001715		
2021	284,809,431	481,567	0.001691		
2022	289,202,901	490,452	0.001696		
2023	303,910,759	518,389	0.001706		
2024	321,893,042	532,510	0.001654		
	kWh Normalized	kW Normalized	5-Year Avg. Ratio	Additional kW Loads	Total Forecast
	D	E = D * F	F	G	H = E + G
2024	314,713,653	532,625	0.001692	-	532,625
2025	318,434,273	538,922	0.001692	33,255	572,177
2026	319,719,134	541,096	0.001692	91,372	632,468
2027	322,249,644	545,379	0.001692	180,886	726,265
2028	338,991,970	573,714	0.001692	325,175	898,889
2029	355,124,894	601,017	0.001692	432,820	1,033,837
2030	369,911,026	626,042	0.001692	467,258	1,093,299
2031	387,359,220	655,571	0.001692	475,141	1,130,712

4.2 Whitby Rate Zone

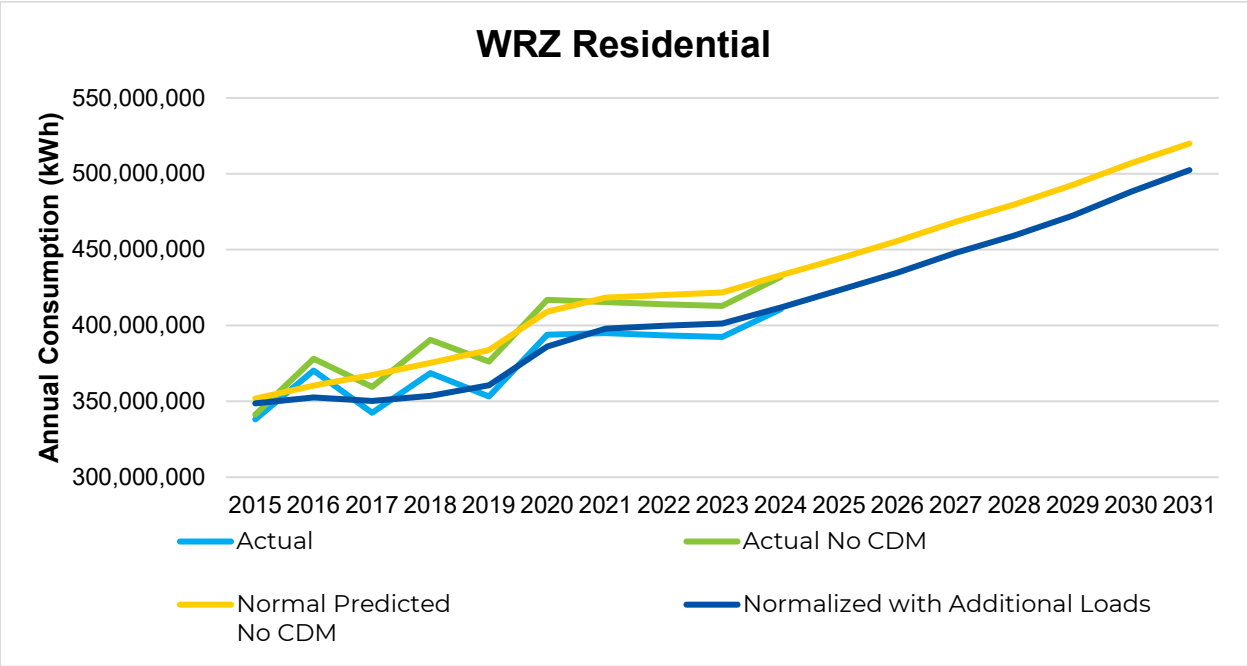
4.2.1 *WRZ Residential*

Incorporating the forecast economic variables, 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 72 - Actual vs Normalized WRZ Residential kWh

Year	WRZ Residential kWh					
	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	338,114,810	3,115,752	341,230,563	351,788,029	3,115,752	348,672,277
2016	370,346,014	7,827,293	378,173,307	360,365,829	7,827,293	352,538,537
2017	342,395,881	17,132,013	359,527,894	367,379,438	17,132,013	350,247,425
2018	368,689,347	21,750,215	390,439,562	375,377,118	21,750,215	353,626,902
2019	353,188,014	23,029,345	376,217,358	383,697,572	23,029,345	360,668,227
2020	393,916,007	23,039,290	416,955,297	409,060,431	23,039,290	386,021,141
2021	395,025,788	20,372,489	415,398,277	418,323,950	20,372,489	397,951,462
2022	393,586,008	20,417,888	414,003,896	420,171,715	20,417,888	399,753,827
2023	392,504,226	20,474,982	412,979,207	421,728,985	20,474,982	401,254,004
2024	410,753,367	21,301,908	432,055,275	433,061,430	21,301,908	411,759,522
2025				444,099,919	20,963,709	423,136,210
2026				455,673,578	20,818,156	434,855,421
2027				468,402,942	20,541,188	447,861,754
2028				479,840,998	20,464,127	459,376,871
2029				492,727,272	20,426,023	472,301,249
2030				506,979,081	18,885,927	488,093,153
2031				519,908,671	17,518,141	502,390,530

Figure 27 Actual vs Normalized WRZ Residential kWh



Like the Veridian Residential customer count, Elexicon expects the Whitby Residential customer count will increase at a faster rate in 2025 to 2031 than the historic growth rate. External sources of household and population growth were analysed to produce the Residential customer count forecast. The Residential growth rate is calculated as the average of (1) the forecast average growth rate of Whitby in the Envision Durham regional plan and Monitoring of Growth Rates report from the Region of Durham, (2) the Ministry of Finance population forecasts for the region of Durham, and (3) the class's historic growth rate. The average forecast growth rate is 1.9%, higher than the average historic growth rate of 1.7%.

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Table 73 - Forecasted WRZ Residential Customer Count

WRZ Residential		Percent of Prior Year
Year	Customers	
2015	39,119	
2016	39,434	100.80%
2017	39,752	100.81%
2018	40,097	100.87%
2019	40,903	102.01%
2020	41,881	102.39%
2021	42,898	102.43%
2022	44,014	102.60%
2023	44,945	102.12%
2024	45,521	101.28%
2025	46,437	102.01%
2026	47,324	101.91%
2027	48,234	101.92%
2028	49,135	101.87%
2029	50,077	101.92%
2030	51,033	101.91%
2031	52,005	101.90%

4.2.2 *WRZ GS < 50 kW*

Incorporating the forecast economic variables, 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 74 - Actual vs Normalized WRZ GS < 50 kWh

WRZ GS<50 kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	79,714,048	1,102,210	80,816,258	85,363,020	1,102,210	84,260,809
2016	89,219,217	1,385,622	90,604,839	88,258,734	1,385,622	86,873,112
2017	87,028,897	1,654,412	88,683,309	87,872,987	1,654,412	86,218,574
2018	90,146,108	2,178,865	92,324,973	89,132,615	2,178,865	86,953,750
2019	89,224,579	2,473,208	91,697,787	89,213,014	2,473,208	86,739,806
2020	81,674,845	2,609,961	84,284,806	83,529,639	2,609,961	80,919,678
2021	82,555,808	2,782,986	85,338,794	84,780,450	2,782,986	81,997,463
2022	87,488,274	3,161,995	90,650,270	90,732,947	3,161,995	87,570,952
2023	88,772,163	3,402,711	92,174,874	93,878,947	3,402,711	90,476,236
2024	88,408,718	3,878,108	92,286,826	95,659,540	3,878,108	91,781,432
2025				96,086,663	3,190,079	92,896,584
2026				96,798,732	2,876,705	93,922,027
2027				97,925,079	2,587,210	95,337,869
2028				98,790,897	2,429,928	96,360,969
2029				99,905,288	2,249,741	97,655,548
2030				101,255,110	2,172,825	99,082,286
2031				102,340,431	1,686,033	100,654,398

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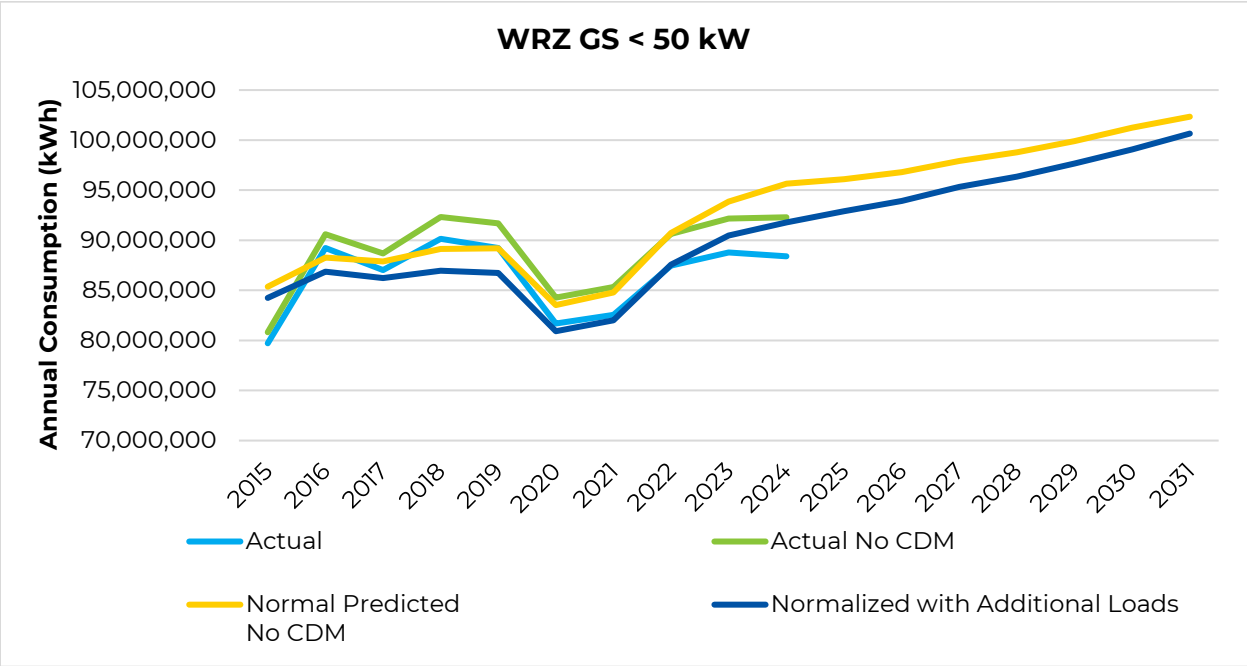
Figure 28 Actual vs Normalized WRZ GS<50 kWh



The Geometric mean of the annual growth from 2015 to 2024 was used to forecast the customer count growth rate from 2024 to 2031.

The following table includes the customer Actual / Forecast customer count on this basis:

73

Table 75 - Forecasted WRZ GS<50 kW Customer Count

WRZ GS < 50 kW		Percent of Prior Year
Year	Customers	
2015	2,168	
2016	2,201	101.51%
2017	2,230	101.30%
2018	2,247	100.76%
2019	2,261	100.64%
2020	2,284	101.03%
2021	2,327	101.85%
2022	2,384	102.45%
2023	2,435	102.17%
2024	2,465	101.21%
2025	2,500	101.42%
2026	2,535	101.42%
2027	2,572	101.42%
2028	2,608	101.42%
2029	2,645	101.42%
2030	2,683	101.42%
2031	2,721	101.42%

4.2.3 *WRZ GS 50 to 2,999 kW*

Incorporating the 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

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Table 76 - Actual vs Normalized WRZ GS 50 to 2,999 kWh

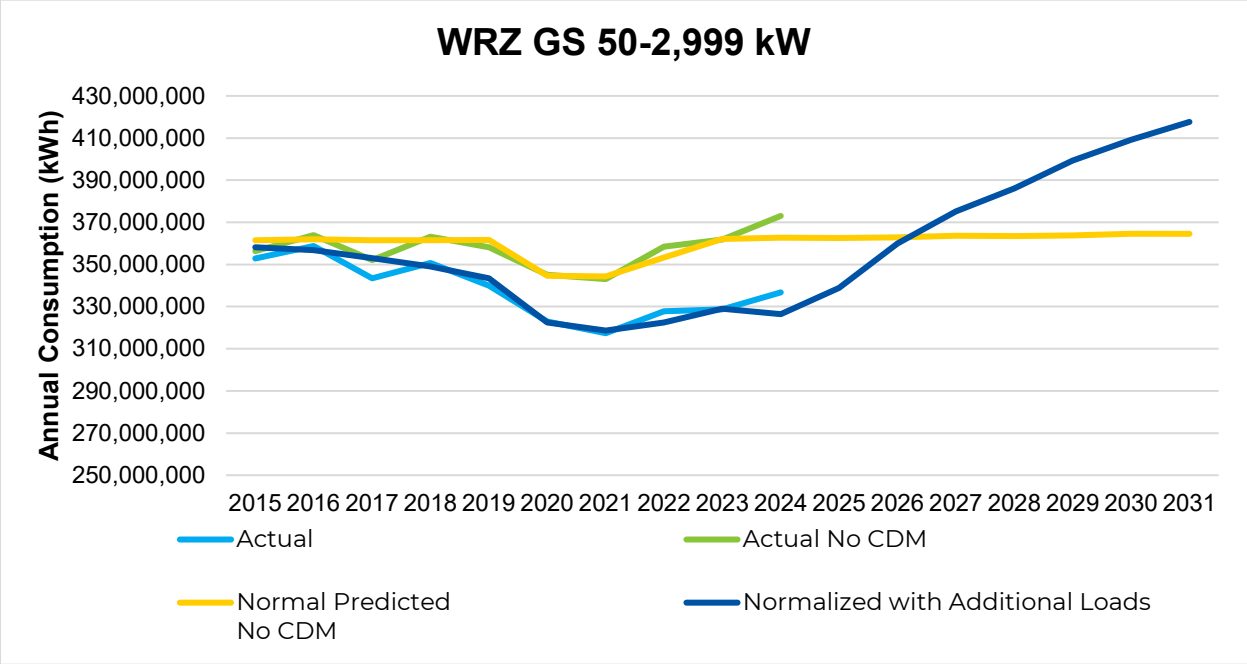
Year	VRZ GS 50-2,999 kWh					
	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	352,899,431	3,381,319	356,280,750	361,553,861	3,381,319	358,172,543
2016	358,773,984	5,095,617	363,869,602	361,965,211	5,095,617	356,869,594
2017	343,423,307	8,610,844	352,034,152	361,558,929	8,610,844	352,948,084
2018	350,668,948	12,569,734	363,238,682	361,572,893	12,569,734	349,003,159
2019	339,922,011	18,209,135	358,131,146	361,622,440	18,209,135	343,413,305
2020	322,964,212	22,144,913	345,109,125	344,634,904	22,144,913	322,489,991
2021	317,381,494	25,689,097	343,070,591	344,331,082	25,689,097	318,641,985
2022	327,733,926	30,714,210	358,448,136	353,248,703	30,714,210	322,534,493
2023	328,654,263	33,134,453	361,788,715	362,132,437	33,134,453	328,997,984
2024	336,698,540	36,355,587	373,054,127	362,738,968	36,355,587	326,383,381
2025				362,631,272	35,655,243	326,976,028
2026				362,888,388	34,169,499	328,718,890
2027				363,576,619	32,298,361	331,278,258
2028				363,465,105	30,915,246	332,549,859
2029				363,801,912	27,630,079	336,171,834
2030				364,580,753	26,126,764	338,453,988
2031				364,557,393	21,133,229	343,424,165

Additional loads, as described further in Section 6.3 below are forecast and added to the weather normalized forecasts for 2025 to 2031.

Table 77 - Additional WRZ GS 50 to 2,999 kWh Consumption

Year	Normalized	Additional Loads	Normalized with Additional Loads
	F	G	H = F + G
2025	326,976,028	11,937,883	338,913,912
2026	328,718,890	31,288,963	360,007,852
2027	331,278,258	43,922,554	375,200,812
2028	332,549,859	53,555,995	386,105,855
2029	336,171,834	63,151,747	399,323,581
2030	338,453,988	70,744,819	409,198,808
2031	343,424,165	74,231,638	417,655,802

Figure 29 Actual vs Normalized WRZ GS 50 to 2,999 kWh



The Geometric mean of the annual growth from 2015 to 2024 was used to forecast a customer count growth rate from 2024 to 2031. Additional customers, as described further Section 6.3 are added to the initial forecast customer count resulting in a forecast that is greater than historic customer count growth. A half-year adjustment is applied to these additional customers to reflect that they are expected to connect throughout the year.

The following table includes the customer Actual / Forecast customer count on this basis:

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Table 78 - Forecasted WRZ GS 50 to 2,999 kW Customer Count

WRZ GS 50-2,999 kW		Percent of Prior Year	Known Additions	Total Customers
Year	Customers			
2015	366			
2016	367	100.17%		
2017	368	100.25%		
2018	373	101.32%		
2019	377	101.11%		
2020	382	101.29%		
2021	391	102.36%		
2022	386	98.84%		
2023	383	99.22%		
2024	389	101.38%		
2025	391	100.65%	5.7	394
2026	394	100.65%	3.8	401
2027	396	100.65%	2.8	407
2028	399	100.65%	1.7	412
2029	402	100.65%	0.7	416
2030	404	100.65%	0.7	419
2031	407	100.65%	0.7	423

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The ratio is calculated as the 10-year average kW/kWh ratio from 2015-2024.

Table 79 - Forecasted WRZ GS 50 to 2,999 kW

	WRZ GS 50-2,999 kW				
	Actual kWh	Actual kW	Ratio		
	A	B	C = B / A		
2015	352,899,431	823,988	0.002335		
2016	358,773,984	847,806	0.002363		
2017	343,423,307	816,193	0.002377		
2018	350,668,948	835,853	0.002384		
2019	339,922,011	811,487	0.002387		
2020	322,964,212	783,042	0.002425		
2021	317,381,494	760,128	0.002395		
2022	327,733,926	795,164	0.002426		
2023	328,654,263	773,424	0.002353		
2024	336,698,540	765,937	0.002275		
	kWh Normalized	kW Normalized	10-Year Avg. Ratio	Additional kW Loads	Total Forecast
	D	E = D * F	F	G	H = E + G
2024	326,383,381	774,163	0.002372	-	774,163
2025	326,976,028	775,569	0.002372	30,004	805,572
2026	328,718,890	779,702	0.002372	81,448	861,150
2027	331,278,258	785,773	0.002372	113,379	899,152
2028	332,549,859	788,789	0.002372	138,427	927,217
2029	336,171,834	797,380	0.002372	163,808	961,188
2030	338,453,988	802,794	0.002372	184,777	987,571
2031	343,424,165	814,583	0.002372	196,207	1,010,789

Additional billed demand loads are calculated separately as described in Section 6.

4.2.4 *WRZ GS 3,000 to 4,999 kW*

Incorporating the 10-year weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Table 80 - Actual vs Normalized WRZ GS 3,000 to 4,999 kW

WZR GS 3,000-4,999 kWh						
Year	Actual	Cumulative Persisting CDM	Actual No CDM	Normal Predicted No CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2015	59,790,687	760,195	60,550,882	64,032,949	760,195	63,272,753
2016	62,626,456	1,145,608	63,772,064	64,228,985	1,145,608	63,083,377
2017	61,143,400	1,935,909	63,079,309	64,034,037	1,935,909	62,098,128
2018	72,194,608	2,825,955	75,020,562	77,614,441	2,825,955	74,788,486
2019	79,821,855	4,093,817	83,915,672	89,105,499	4,093,817	85,011,682
2020	85,368,173	4,978,667	90,346,841	89,303,191	4,978,667	84,324,524
2021	88,615,341	5,775,700	94,391,042	89,109,640	5,775,700	83,333,939
2022	88,680,038	6,906,017	95,586,055	89,115,698	6,906,017	82,209,681
2023	85,763,218	7,450,688	93,213,906	89,126,935	7,450,688	81,676,247
2024	82,433,193	8,175,927	90,609,120	89,345,385	8,175,927	81,169,458
2025				89,428,143	8,018,474	81,409,668
2026				89,452,573	7,684,418	81,768,155
2027				89,675,452	7,263,712	82,411,740
2028				89,510,764	6,952,727	82,558,036
2029				89,547,893	6,214,103	83,333,790
2030				89,785,511	5,876,088	83,909,423
2031				89,635,149	4,753,363	84,881,786

Additional loads, as described further in Section 6.3 below are forecast and added to the weather normalized forecasts for 2025 to 2031.

Table 81 - Additional WRZ GS 3,000 to 4,999 kWh Consumption

Year	Normalized	Additional Loads	Normalized with Additional Loads
	F	G	H = F + G
2025	81,409,668	10,497,453	91,907,121
2026	81,768,155	30,392,669	112,160,823
2027	82,411,740	43,431,080	125,842,820
2028	82,558,036	49,394,271	131,952,307
2029	83,333,790	54,513,896	137,847,686
2030	83,909,423	64,274,571	148,183,994
2031	84,881,786	74,697,758	159,579,544

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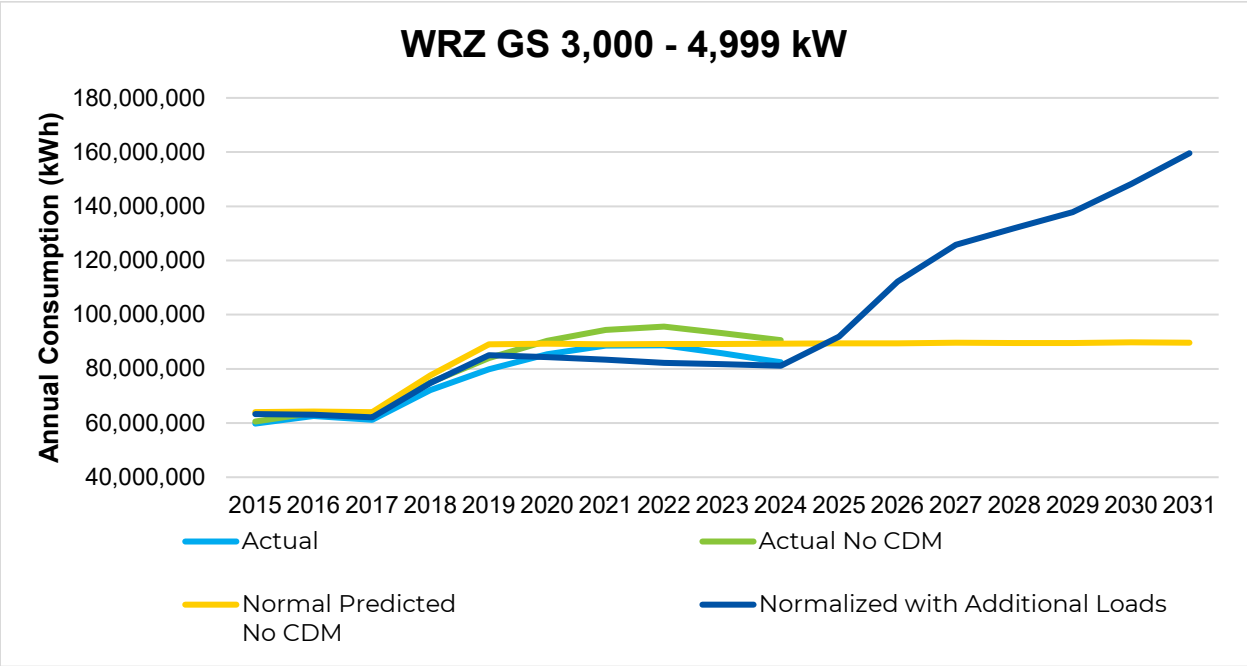
Figure 30 Actual vs Normalized WRZ GS 3,000 to 4,999 kWh



There have been three Whitby GS < 50 kW customers with volumes greater than 3,000 kW since 2018. Additional customers, as described further Section 6.3 are added to the initial forecast customer count. A half-year adjustment is applied to these additional customers to reflect that they are expected to connect throughout the year.

The following table includes the customer Actual / Forecast customer count on this basis:

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Table 82 - Forecasted WRZ GS 3,000 to 4,999 kW Customer Count

WRZ GS 3,000-4,999 kW		Percent of Prior Year	Known Additions	Total Customers
Year	Customers			
2015	2			
2016	2	100.00%		
2017	2	100.00%		
2018	3	127.08%		
2019	3	118.03%		
2020	3	100.00%		
2021	3	100.00%		
2022	3	100.00%		
2023	3	100.00%		
2024	3	100.00%		
2025	3	100.00%	1.9	4
2026	3	100.00%	1.4	6
2027	3	100.00%	0.3	6
2028	3	100.00%	-	6
2029	3	100.00%	-	6
2030	3	100.00%	0.6	7
2031	3	100.00%	0.2	7

The 5-year average of the kW/kWh ratio from 2020 to 2024 is applied to normalized consumption to forecast kW demand. A shorter period was used because the kW/kWh ratio has increased over time and the shorter period better reflects the current ratio of the class.

Table 83 - Forecasted WRZ GS 3,000 to 4,999 kW

	VRZ GS 50-2,999 kW				
	Actual kWh	Actual kW	Ratio		
	A	B	C = B / A		
2015	59,790,687	90,012	0.001505		
2016	62,626,456	93,877	0.001499		
2017	61,143,400	90,337	0.001477		
2018	72,194,608	114,914	0.001592		
2019	79,821,855	147,600	0.001849		
2020	85,368,173	146,756	0.001719		
2021	88,615,341	151,780	0.001713		
2022	88,680,038	164,455	0.001854		
2023	85,763,218	160,651	0.001873		
2024	82,433,193	160,378	0.001946		
	kWh Normalized	kW Normalized	5-Year Avg. Ratio	Additional kW Loads	Total Forecast
	D	E = D * F	F	G	H = E + G
2024	81,169,458	147,811	0.001821	-	147,811
2025	81,409,668	148,249	0.001821	19,483	167,732
2026	81,768,155	148,902	0.001821	56,047	204,949
2027	82,411,740	150,074	0.001821	80,158	230,232
2028	82,558,036	150,340	0.001821	91,447	241,787
2029	83,333,790	151,753	0.001821	101,278	253,031
2030	83,909,423	152,801	0.001821	119,622	272,423
2031	84,881,786	154,572	0.001821	139,229	293,800

Additional billed demand loads are calculated separately as described in Section 6.

5. STREET LIGHT, SENTINEL LIGHT, AND USL FORECAST

The Street Lighting, Sentinel Light, and Unmetered Scattered Load classes are non-weather sensitive classes. Device counts for each class are forecasted on the geometric mean growth rate from 2016 to 2024, with the exception of the Sentinel Lighting class which is forecast to continue at the same device count it has had since 2019. Energy volumes for these classes are forecasted on the basis of average energy per device over the last three years.

5.1 Veridian Rate Zone

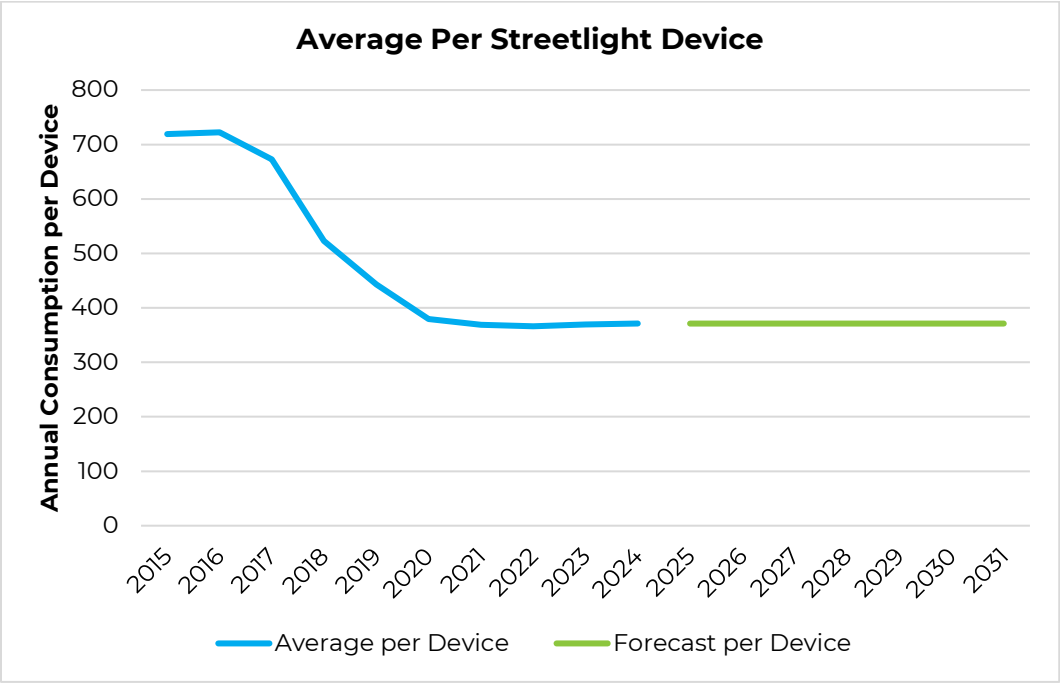
5.1.1 *VRZ Street Light*

The table below summarizes the historic and forecast annual energy consumption for the Street Light class. The Veridian rate zone underwent a LED conversion ending in 2020, which saw a 48% reduction in consumption per device. The 2024 consumption per device is used as the average consumption per device from 2025 to 2031.

Table 84 - VRZ Street Light Consumption Forecast

VRZ Street Light				
Year	Actual	Lights / Devices	Average per Device	Normal Forecast
	A	B	C = A / B	D = B * C
2015	21,466,090	29,841	719	21,466,090
2016	21,694,275	30,031	722	21,694,275
2017	20,460,692	30,412	673	20,460,692
2018	16,161,423	30,898	523	16,161,423
2019	13,788,944	31,143	443	13,788,944
2020	11,924,084	31,415	380	11,924,084
2021	11,682,342	31,679	369	11,682,342
2022	11,643,673	31,795	366	11,643,673
2023	11,868,527	32,132	369	11,868,527
2024	12,144,395	32,717	371	12,144,395
2025		33,054	371	12,269,224
2026		33,393	371	12,395,337
2027		33,737	371	12,522,746
2028		34,083	371	12,651,464
2029		34,434	371	12,781,506
2030		34,788	371	12,912,884
2031		35,145	371	13,045,613

Figure 31 VRZ Street Light kWh per Device



The Geometric mean of the annual growth from 2016 to 2024 is used to forecast the growth rate from 2024 to 2031.

Table 85 - VRZ Forecasted Street Light Device Count

VRZ Street Lights		Percent of Prior Year
Year	Lights	
2015	29,841	
2016	30,031	100.64%
2017	30,412	101.27%
2018	30,898	101.60%
2019	31,143	100.79%
2020	31,415	100.87%
2021	31,679	100.84%
2022	31,795	100.37%
2023	32,132	101.06%
2024	32,717	101.82%
2025	33,054	101.03%
2026	33,393	101.03%
2027	33,737	101.03%
2028	34,083	101.03%
2029	34,434	101.03%
2030	34,788	101.03%
2031	35,145	101.03%

The 10-year average of the kW/kWh ratio from 2015 to 2024 is applied to normalized consumption to forecast kW demand.

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Table 86 - VRZ Forecasted Street Light kW

	VRZ Street Lights		
	Actual kWh	Actual kW	Ratio
	A	B	C = B / A
2015	21,466,090	57,817	0.002693
2016	21,694,275	57,565	0.002653
2017	20,460,692	54,833	0.002680
2018	16,161,423	43,115	0.002668
2019	13,788,944	36,691	0.002661
2020	11,924,084	31,667	0.002656
2021	11,682,342	31,122	0.002664
2022	11,643,673	31,017	0.002664
2023	11,868,527	31,561	0.002659
2024	12,144,395	32,174	0.002649
	kWh Normalized	kW Normalized	Avg. Ratio
	D	E = D * F	F
2024	12,144,395	32,362	0.002665
2025	12,269,224	32,695	0.002665
2026	12,395,337	33,031	0.002665
2027	12,522,746	33,370	0.002665
2028	12,651,464	33,713	0.002665
2029	12,781,506	34,060	0.002665
2030	12,912,884	34,410	0.002665
2031	13,045,613	34,763	0.002665

5.1.2 *VRZ Sentinel Lighting*

The table below summarizes the historic and forecast annual energy consumption for the Sentinel Lighting class. Consumption per Sentinel Lighting device increase in 2020 following a decline in the number of Sentinel Lighting devices. The 2024 consumption per device is used as the average consumption per device from 2025 to 2031.

Table 87 - VRZ Sentinel Lighting Consumption Forecast

VRZ Sentinel Light				
Year	Actual	Lights / Devices	Average per Device	Normal Forecast
	A	B	C = A / B	D = B * C
2015	116,055	443	262	116,055
2016	156,262	439	356	156,262
2017	311,450	439	709	311,450
2018	247,862	439	565	247,862
2019	229,776	342	672	229,776
2020	229,650	255	900	229,650
2021	227,251	249	913	227,251
2022	216,445	246	880	216,445
2023	218,811	243	901	218,811
2024	216,726	238	909	216,726
2025		234	909	213,059
2026		230	909	209,454
2027		226	909	205,910
2028		223	909	202,426
2029		219	909	199,001
2030		215	909	195,634
2031		211	909	192,324

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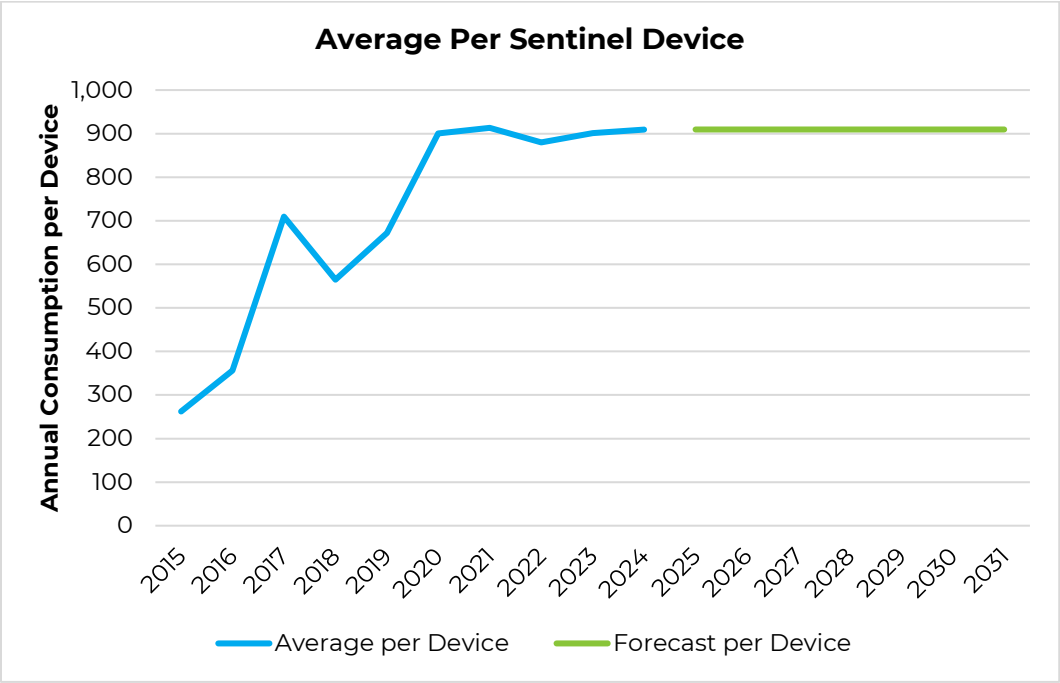
Figure 32 VRZ Sentinel Lighting kWh per Device



The 5-year average of the kW/kWh ratio from 2020 to 2024 is applied to normalized consumption to forecast kW demand. A shorter period was used because the kW/kWh ratio has increased over time and the shorter period better reflects the current ratio of the class.

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Table 88 - Forecasted VRZ Sentinel Lighting Device Count

VRZ Sentinel Lights		Percent of Prior Year
Year	Lights	
2015	443	
2016	439	99.17%
2017	439	100.00%
2018	439	100.00%
2019	342	77.91%
2020	255	74.59%
2021	249	97.53%
2022	246	98.83%
2023	243	98.75%
2024	238	98.13%
2025	234	98.31%
2026	230	98.31%
2027	226	98.31%
2028	223	98.31%
2029	219	98.31%
2030	215	98.31%
2031	211	98.31%

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The 5-year average kW/kWh ratio from 2020-2024 was used.

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Table 89 - Forecasted VRZ Sentinel Lighting kW

	VRZ Sentinel Lights		
	Actual kWh	Actual kW	Ratio
	A	B	C = B / A
2015	116,055	1,014	0.008737
2016	156,262	1,014	0.006489
2017	311,450	967	0.003105
2018	247,862	720	0.002905
2019	229,776	629	0.002737
2020	229,650	642	0.002796
2021	227,251	632	0.002781
2022	216,445	601	0.002777
2023	218,811	608	0.002779
2024	216,726	602	0.002778
	kWh Normalized	kW Normalized	Avg. Ratio
	D	E = D * F	F
2024	216,726	601	0.002774
2025	213,059	591	0.002774
2026	209,454	581	0.002774
2027	205,910	571	0.002774
2028	202,426	562	0.002774
2029	199,001	552	0.002774
2030	195,634	543	0.002774
2031	192,324	533	0.002774

5.1.3 *VRZ USL*

The following table summarizes historic and forecast annual energy consumption for the Veridian rate zone USL class. Consumption from 2025 to 2031 has been forecasted based on the average consumption per device in 2024 and forecast device counts.

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Table 90 - VRZ USL Consumption Forecast

VRZ USL				
Year	Actual	Connections	Average per Connection	Normal Forecast
	A	B	C = A / B	D = B * C
2015	5,083,750	873	5,827	5,083,750
2016	4,975,743	837	5,942	4,975,743
2017	4,919,673	826	5,959	4,919,673
2018	4,890,679	818	5,981	4,890,679
2019	4,846,041	809	5,990	4,846,041
2020	4,814,697	802	6,005	4,814,697
2021	4,782,282	802	5,966	4,782,282
2022	4,773,215	801	5,960	4,773,215
2023	4,755,033	798	5,959	4,755,033
2024	4,744,114	770	6,162	4,744,114
2025		741	6,162	4,568,421
2026		731	6,162	4,505,369
2027		721	6,162	4,443,188
2028		711	6,162	4,381,864
2029		701	6,162	4,321,387
2030		692	6,162	4,261,745
2031		682	6,162	4,202,925

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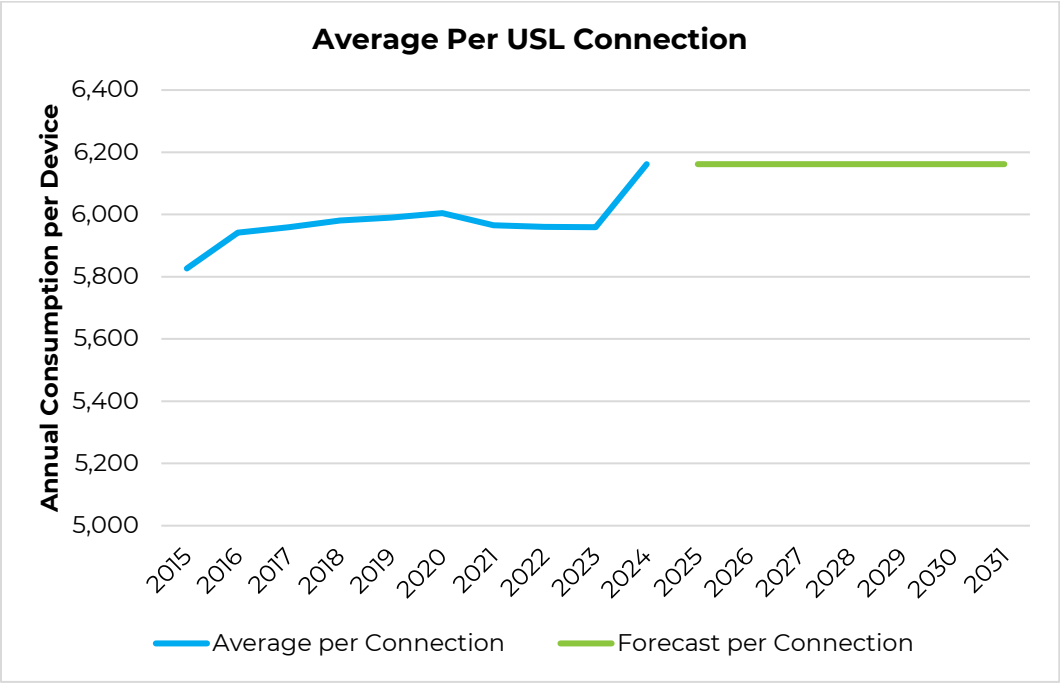
Figure 33 VRZ USL kWh per Device



The Geometric mean of the annual growth from 2016 to 2024 is used to forecast the USL device growth rate from 2024 to 2031.

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Table 91 - VRZ Forecasted USL Connections

VRZ USL		Percent of Prior Year
Year	Connections	
2015	873	
2016	837	95.98%
2017	826	98.59%
2018	818	99.05%
2019	809	98.94%
2020	802	99.11%
2021	802	99.97%
2022	801	99.90%
2023	798	99.64%
2024	770	96.49%
2025	741	98.62%
2026	731	98.62%
2027	721	98.62%
2028	711	98.62%
2029	701	98.62%
2030	692	98.62%
2031	682	98.62%

5.2 Whitby Rate Zone

5.2.1 *WRZ Street Light*

The table below summarizes the historic and forecast annual energy consumption for the Street Light class. Consumption per device in 2024 is used as the average consumption per device from 2025 to 2031.

Table 92 - WRZ Street Light Consumption Forecast

WRZ Street Light				
Year	Actual	Lights / Devices	Average per Device	Normal Forecast
	A	B	C = A / B	D = B * C
2015	9,273,959	11,827	784	9,273,959
2016	6,314,647	11,857	533	6,314,647
2017	4,989,079	11,891	420	4,989,079
2018	3,813,017	12,054	316	3,813,017
2019	3,495,126	12,408	282	3,495,126
2020	3,375,507	12,708	266	3,375,507
2021	3,254,529	13,024	250	3,254,529
2022	3,584,407	13,343	269	3,584,407
2023	3,668,424	13,555	271	3,668,424
2024	3,708,103	13,708	271	3,708,103
2025		13,935	271	3,769,413
2026		14,165	271	3,831,738
2027		14,399	271	3,895,092
2028		14,637	271	3,959,495
2029		14,879	271	4,024,962
2030		15,125	271	4,091,511
2031		15,375	271	4,159,161

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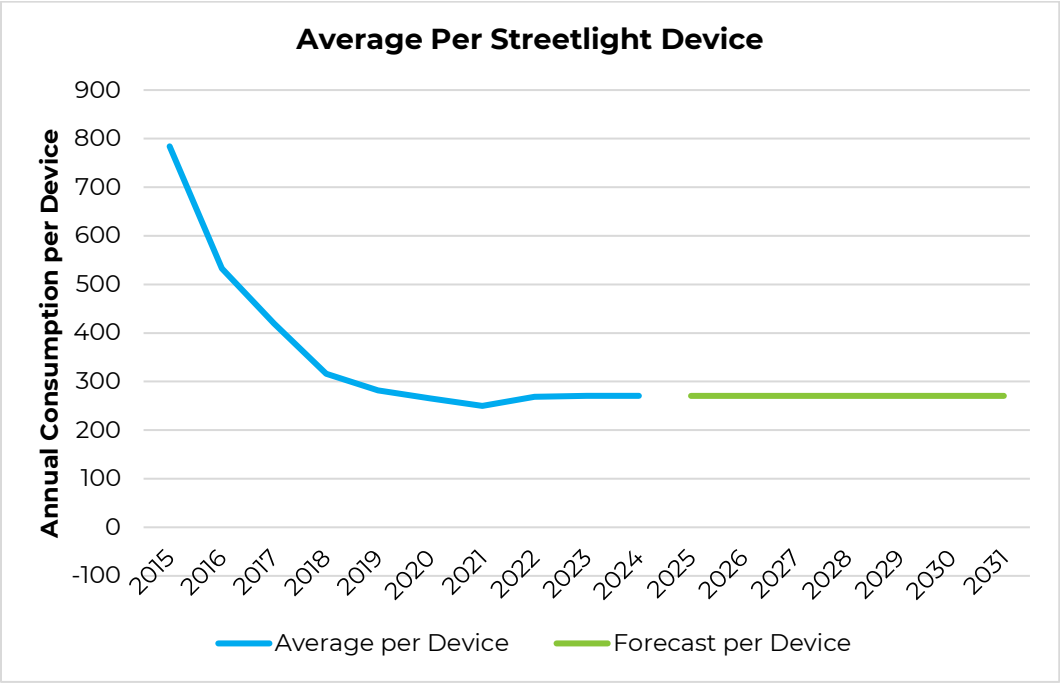
Figure 34 WRZ Street Light kWh per Device



The Geometric mean of the annual growth from 2016 to 2024 is used to forecast the Street Lighting device growth rate from 2024 to 2031.

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Table 93 - Forecasted WRZ Street Light Device Count

WRZ Street Lights		Percent of Prior Year
Year	Lights	
2015	11,827	
2016	11,857	100.26%
2017	11,891	100.28%
2018	12,054	101.37%
2019	12,408	102.94%
2020	12,708	102.41%
2021	13,024	102.49%
2022	13,343	102.45%
2023	13,555	101.59%
2024	13,708	101.13%
2025	13,935	101.65%
2026	14,165	101.65%
2027	14,399	101.65%
2028	14,637	101.65%
2029	14,879	101.65%
2030	15,125	101.65%
2031	15,375	101.65%

The 10-year average of the ratio from 2015 to 2024 is applied to normalized consumption to forecast kW demand.

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Table 94 - WRZ Forecasted Street Light kW

	WRZ Street Lights		
	Actual kWh	Actual kW	Ratio
	A	B	C = B / A
2015	9,273,959	23,991	0.002587
2016	6,314,647	16,142	0.002556
2017	4,989,079	12,797	0.002565
2018	3,813,017	9,791	0.002568
2019	3,495,126	8,981	0.002569
2020	3,375,507	9,314	0.002759
2021	3,254,529	9,362	0.002877
2022	3,584,407	9,581	0.002673
2023	3,668,424	9,810	0.002674
2024	3,708,103	9,886	0.002666
	kWh Normalized	kW Normalized	Avg. Ratio
	D	E = D * F	F
2024	3,708,103	9,825	0.002649
2025	3,769,413	9,987	0.002649
2026	3,831,738	10,152	0.002649
2027	3,895,092	10,320	0.002649
2028	3,959,495	10,491	0.002649
2029	4,024,962	10,664	0.002649
2030	4,091,511	10,840	0.002649
2031	4,159,161	11,020	0.002649

5.2.2 *WRZ Sentinel Lighting*

The table below summarizes the historic and forecast annual energy consumption for the Whitby Sentinel Lighting class. The 2023 average consumption per device is used as the average consumption per device from 2025 to 2031.

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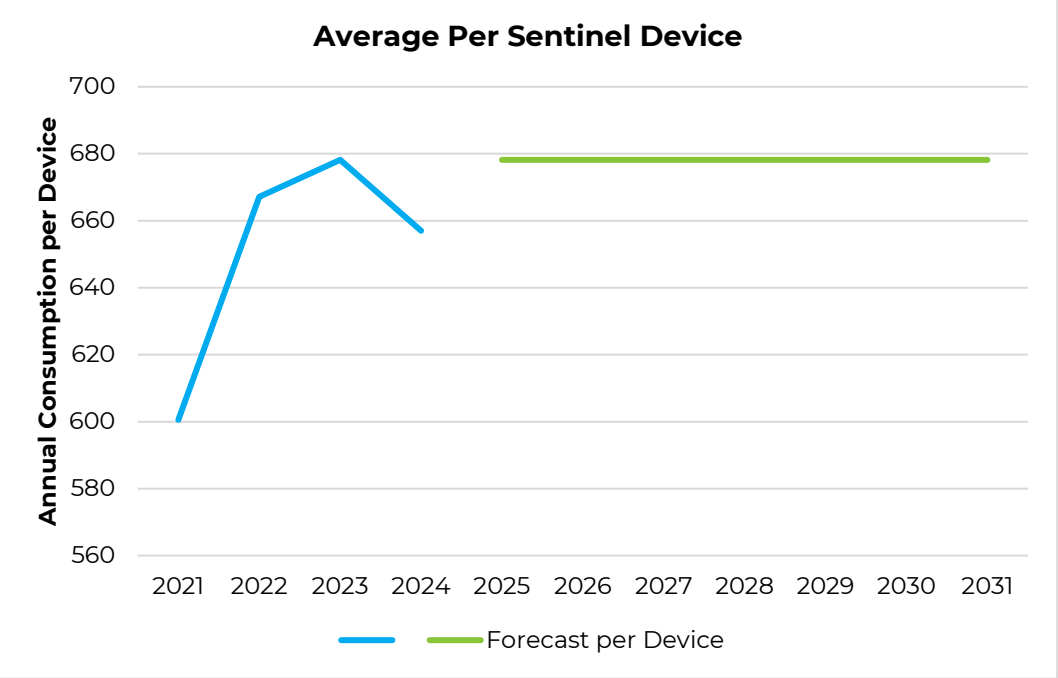
Table 95 - WRZ Sentinel Lighting Consumption Forecast

WRZ Sentinel Light				
Year	Actual	Lights / Devices	Average per Device	Normal Forecast
	A	B	C = A / B	D = B * C
2021	25,473	42	601	25,473
2022	30,996	46	667	30,996
2023	31,197	46	678	31,197
2024	29,866	45	657	29,866
2025		46	678	31,238
2026		47	678	31,653
2027		47	678	32,072
2028		48	678	32,498
2029		49	678	32,929
2030		49	678	33,366
2031		50	678	33,808

Figure 35 WRZ Sentinel Lighting kWh per Device



The Geometric mean of the annual growth from 2016 to 2024 is used to forecast the Sentinel Lighting device growth rate from 2024 to 2031.

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Table 96 - Forecasted WRZ Sentinel Lighting Device Count

WRZ Sentinel Lights		Percent of Prior Year
Year	Lights	
2015	40	
2016	39	96.59%
2017	38	98.61%
2018	37	97.40%
2019	37	98.78%
2020	37	100.00%
2021	42	114.64%
2022	46	109.53%
2023	46	99.01%
2024	45	98.82%
2025	46	101.33%
2026	47	101.33%
2027	47	101.33%
2028	48	101.33%
2029	49	101.33%
2030	49	101.33%
2031	50	101.33%

The 4-year average of the kW/kWh ratio from 2021 to 2024 is applied to normalized consumption to forecast kW demand.

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Table 97 - Forecasted WRZ Sentinel Lighting kW

WRZ Sentinel Lights			
	Actual kWh	Actual kW	Ratio
	A	B	C = B / A
2021	25,473	71	0.002787
2022	30,996	95	0.003065
2023	31,197	92	0.002949
2024	29,866	83	0.002779
	kWh Normalized	kW Normalized	Avg. Ratio
	D	E = D * F	F
2024	29,866	88	0.002934
2025	31,238	92	0.002934
2026	31,653	93	0.002934
2027	32,072	94	0.002934
2028	32,498	95	0.002934
2029	32,929	97	0.002934
2030	33,366	98	0.002934
2031	33,808	99	0.002934

5.2.3 *WRZ USL*

The following table summarizes historic and forecast annual energy consumption for the Whitby rate zone USL class. Consumption from 2025 to 2031 has been forecasted based on the average consumption per device in 2024 and forecast device counts.

Table 98 - WRZ USL Consumption Forecast

WRZ USL				
Year	Actual	Connections	Average per Connection	Normal Forecast
	A	B	C = A / B	D = B * C
2015	632,882	378	1,673	632,882
2016	598,540	372	1,608	598,540
2017	597,300	371	1,612	597,300
2018	604,470	377	1,604	604,470
2019	597,885	384	1,556	597,885
2020	1,852,577	389	4,760	1,852,577
2021	1,969,677	392	5,031	1,969,677
2022	1,956,354	393	4,977	1,956,354
2023	1,961,564	401	4,898	1,961,564
2024	1,961,875	396	4,951	1,961,875
2025		389	4,951	1,926,400
2026		391	4,951	1,936,353
2027		393	4,951	1,946,357
2028		395	4,951	1,956,413
2029		397	4,951	1,966,522
2030		399	4,951	1,976,682
2031		401	4,951	1,986,895

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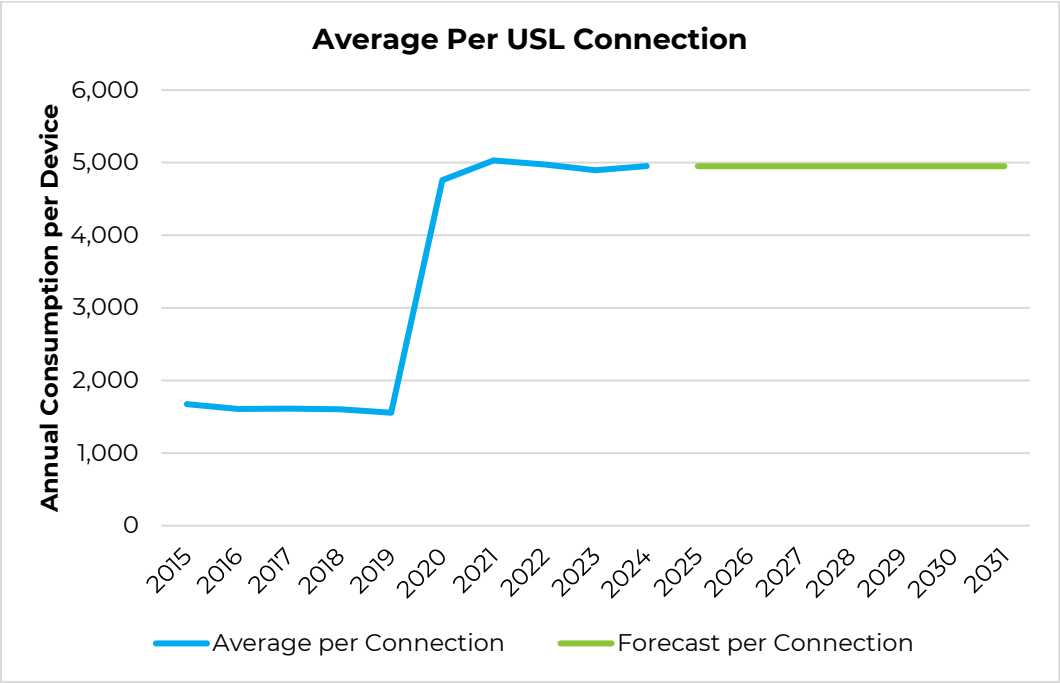
Figure 36 WRZ USL kWh per Device



The Geometric mean of the annual growth from 2016 to 2024 is used to forecast the USL connection growth rate from 2024 to 2031.

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Table 99 - Forecasted WRZ USL Devices

WRZ USL		Percent of Prior Year
Year	Connections	
2015	378	
2016	372	98.39%
2017	371	99.57%
2018	377	101.69%
2019	384	101.96%
2020	389	101.28%
2021	392	100.61%
2022	393	100.39%
2023	401	101.89%
2024	396	98.94%
2025	389	100.52%
2026	391	100.52%
2027	393	100.52%
2028	395	100.52%
2029	397	100.52%
2030	399	100.52%
2031	401	100.52%

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6. ADDITIONAL LOADS

Elexicon's loads are expected to increase above what would be forecast using only weather-normalized historic averages and trends from increased electrification. These loads are estimated using a bottom-up approach in which the specific sources of incremental loads are forecast separately. The estimate of these amounts in historic years is removed the purpose of predicting monthly consumption. Forecast amounts are layered onto the top-down forecast that is based on historic loads.

A forecast of loads from expected large new customers are added to the forecast for the General Service 50 to 2,999 kW, General Service 3,000 to 4,999 kW, and Large Use rate classes. This addition represents a material increase to Elexicon's billed volumes.

6.1 Electric Vehicles

Electric vehicle consumption is forecast based on delayed Canada's zero-emission vehicle sales targets, estimated consumption per type of EV, and EV statistics from Statistics Canada. The data from Statistics Canada includes the total number of EVs sold in Elexicon's service area and the number of EVs sold in Ontario by type of vehicle. Statistics Canada provides data for the type of vehicle at the municipal level. EVs are forecast separately for the Veridian and Whitby rate zone and separately by battery EVs and plug-in hybrid EVs.

The total number of battery EVs in the Veridian service area and by type and the number of battery EVs in Ontario are provided in the table below.

Table 100 - Ontario and Veridian Battery EV Statistics

	2019	2020	2021	2022	2023	2024
VRZ BEVs	186	233	443	1,066	1,248	1,474
ON BEVs	6,562	8,161	14,821	32,783	38,635	41,659
VRZ % of ON BEVs	2.83%	2.86%	2.99%	3.25%	3.23%	3.54%
ON Passenger BEVs	186	233	443	1,050	1,205	1,376
ON Vans BEVs	-	-	-	2	1	6
ON Pickup Truck BEVs	-	-	-	14	42	92
Passenger BEV %	100.0%	100.0%	100.0%	99.3%	98.3%	96.9%
Van BEV %	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
Pickup Truck BEV %	0.0%	0.0%	0.0%	0.6%	1.6%	3.0%

The Veridian service area includes EVs in Belleville, Port Hope, Clarington, Pickering, Ajax, Uxbridge, Scugog, Gravenhurst, and Parry Sound. Passenger EVs includes what is labeled by Statistics Canada as "Passenger" and "Multi-Purpose Vehicle" EVs. Multi-Purpose Vehicles are vehicles such as SUVs and crossovers. The share of Passenger and Multi-Purpose Vehicles have each changed significantly over the past eight years, but jointly the share has been reasonably consistent over time.

The total number of battery EVs in the Veridian service area from 2025 to 2031 is forecast based on the number of vehicles sold in Ontario, the share of Ontario battery EVs sold in the Veridian service area, and the delayed target number of EVs sold in Canada. Actual EV sales in Ontario have lagged behind a trajectory from the share of EVs sold then the Federal EV sales targets were set to 20% EV sales in Ontario

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by 2026, and the Federal Government has announced a one year delay to the 2026 target and a review of the policy. The EV target is pushed by five years to 2031.

Table 101 - Forecast of EVs Veridian Battery EVs by Type 2025-2031

	2025	2026	2027	2028	2029	2030	2031
All Vehicles in Ontario	713,248	727,513	742,063	756,905	772,043	787,484	803,233
New Battery EV Target	7.2%	8.5%	9.7%	11.0%	12.2%	13.5%	14.7%
VRZ EVs as % of Ontario EVs	3.34%	3.34%	3.34%	3.34%	3.34%	3.34%	3.34%
Total New VRZ BEVs	**1,718**	**2,056**	**2,408**	**2,772**	**3,151**	**3,543**	**3,950**
Passenger BEVs	1,664	1,992	2,332	2,685	3,052	3,432	3,826
Van BEVs	3	4	4	5	6	6	7
Pickup Truck BEVs	51	61	71	82	93	105	117

The number of vehicles sold is assumed to grow by 2% each year based on Ontario population growth targets. The share of total Ontario battery EVs sold in the Veridian service area is first based on the three-year average share of 3.34% from 2022 to 2024 persisting to 2031. The total number of battery EVs sold in the Veridian service area in each year is calculated as the total number of vehicles sold in Ontario multiplied by the target share of battery EVs sold multiplied by the Veridian service area share of total battery EVs. The forecast of new EVs by type is calculated based on the total new battery EVs in the Veridian service area multiplied by the 2024 share of each type from Table 101.

The same method to forecast Veridian battery EVs is used to forecast Veridian plug-in hybrid EVs, Whitby battery EVs, and Whitby plug-in hybrid EVs.

Table 102 - Ontario and Veridian Plug-in Hybrid EV Statistics

	2019	2020	2021	2022	2023	2024
VRZ PHEVs	71	52	129	178	349	434
ON PHEVs	3,083	2,356	4,989	5,879	11,497	14,934
VRZ % of ON PHEVs	2.30%	2.21%	2.59%	3.03%	3.04%	2.91%
ON Passenger PHEVs	70	50	121	167	328	427
ON Vans PHEVs	1	2	8	11	21	7
ON Pickup Truck PHEVs	-	-	-	-	-	-
Passenger PHEV %	91.6%	92.1%	92.4%	92.7%	93.1%	94.5%
Van PHEV %	8.4%	7.9%	7.6%	7.3%	6.9%	5.5%
Pickup Truck PHEV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 103 - Forecast of EVs Veridian Plug-in Hybrid EVs by Type 2025-2031

	2025	2026	2027	2028	2029	2030	2031
All Vehicles in Ontario	713,248	727,513	742,063	756,905	772,043	787,484	803,233
New Plug-in Hybrid EV Target	2.6%	3.0%	3.5%	3.9%	4.4%	4.8%	5.3%
VRZ EVs as % of Ontario EVs	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
Total New VRZ PHEVs	**551**	**660**	**773**	**890**	**1,011**	**1,137**	**1,267**
Passenger PHEVs	521	624	730	841	955	1,074	1,198
Van PHEVs	30	36	42	49	56	62	70
Pickup Truck PHEVs	-	-	-	-	-	-	-

Table 104 - Ontario and Whitby Battery EV Statistics

	2019	2020	2021	2022	2023	2024
WRZ BEVs	70	80	155	298	408	539
ON BEVs	6,562	8,161	14,821	32,783	38,635	41,659
WRZ % of ON BEVs	1.07%	0.98%	1.05%	0.91%	1.06%	1.29%
ON Passenger BEVs	70	80	155	288	391	468
ON Vans BEVs	-	-	-	1	-	2
ON Pickup Truck BEVs	-	-	-	9	17	69
Passenger BEV %	100.0%	100.0%	100.0%	98.6%	97.6%	94.1%
Van BEV %	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
Pickup Truck BEV %	0.0%	0.0%	0.0%	1.3%	2.3%	5.7%

Table 105 - Forecast of EVs Whitby Battery EVs by Type 2025-2031

	2025	2026	2027	2028	2029	2030	2031
All Vehicles in Ontario	713,248	727,513	742,063	756,905	772,043	787,484	803,233
New Battery EV Target	6.9%	8.5%	9.7%	11.0%	12.2%	13.5%	14.7%
WRZ EVs as % of Ontario EVs	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%
Total New WRZ BEVs	**533**	**669**	**783**	**902**	**1,025**	**1,152**	**1,285**
Passenger BEVs	501	629	737	848	964	1,084	1,208
Van BEVs	1	1	1	2	2	2	2
Pickup Truck BEVs	31	38	45	52	59	66	74

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Table 106 - Ontario and Whiby Plug-in Hybrid EV Statistics

	2019	2020	2021	2022	2023	2024
WRZ PHEVs	20	17	43	73	130	208
ON PHEVs	3,083	2,356	4,989	5,879	11,497	14,934
WRZ % of ON PHEVs	0.65%	0.72%	0.86%	1.24%	1.13%	1.39%
ON Passenger PHEVs	20	14	43	69	127	206
ON Vans PHEVs	-	3	-	4	3	2
ON Pickup Truck PHEVs	-	-	-	-	-	-
Passenger PHEV %	90.6%	89.6%	92.0%	92.7%	94.4%	96.0%
Van PHEV %	9.4%	10.4%	8.0%	7.3%	5.6%	4.0%
Pickup Truck PHEV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 107 - Forecast of EVs Whitby Plug-in Hybrid EVs by Type 2025-2031

	2025	2026	2027	2028	2029	2030	2031
All Vehicles in Ontario	713,248	727,513	742,063	756,905	772,043	787,484	803,233
New Plug-in Hybrid EV Target	3.1%	3.0%	3.5%	3.9%	4.4%	4.8%	5.3%
WRZ EVs as % of Ontario EVs	1.26%	1.26%	1.26%	1.26%	1.26%	1.26%	1.26%
Total New WRZ PHEVs	**273**	**277**	**324**	**373**	**424**	**477**	**532**
Passenger PHEVs	262	266	311	358	407	458	511
Van PHEVs	11	11	13	15	17	19	21
Pickup Truck PHEVs	-	-	-	-	-	-	-

Calculations for the average consumption per type of vehicle is provided in Table 108. The average distance is based on the average vehicle kilometers traveled per day in the Durham region as provided by the AES Engineering report on EV Charging Performance.[6] The average efficiency per type of vehicle is based on a review of efficiency ratings from NRCan's Fuel Consumption Guides[7] and Plug n' Drive's summary of EVs available in Canada. This figure as adjusted to account for the difference between battery electric vehicles and plug-in hybrid electric vehicles.

[6] https://council.cleanairpartnership.org/wp-content/uploads/2021/11/2-21-050-EV-Charging-Performance-Requirements-in-GTHA.pdf

[7] https://natural-resources.canada.ca/sites/nrcan/files/files/pdf/2024_Fuel_Consumption_Guide.pdf
Please note that Statistics Canada no longer tracks these figures.

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Table 108 - Consumption by EV Type

Vehicle Type	Average Distance	Average Efficiency	Total Consumption per Vehicle	
	km	kWh/100 km	Battery EV	Plug-in Hybrid
Passenger	16,790	20	3,358	2,015
Van	20,000	25	5,000	3,000
Pick-Up Truck	20,000	30	6,000	3,600

Cumulative and incremental kWh from EVs are calculated based on the number of EVs multiplied by the average consumption per vehicle.

Table 109 – Veridian Forecast EVs and MWh Consumption by EV Type

	2025	2026	2027	2028	2029	2030	2031
Passenger EVs							
New EVs	2,185	2,615	3,062	3,526	4,007	4,506	5,024
Cumulative EVs	8,571	11,186	14,036	17,044	20,796	25,019	29,479
Cumulative MWh	22,707	29,998	38,063	46,670	57,347	69,395	82,139
Incremental MWh	6,059	7,290	8,065	8,608	10,677	12,048	12,744
Van EVs							
New EVs	33	40	47	54	61	69	77
Cumulative EVs	131	171	207	233	293	360	429
Cumulative MWh	365	482	587	663	844	1,045	1,253
Incremental MWh	79	117	105	76	180	201	208
Pickup Truck EVs							
New EVs	51	61	71	82	93	105	117
Cumulative EVs	199	259	330	412	505	610	727
Cumulative MWh	1,040	1,374	1,770	2,228	2,753	3,346	4,010
Incremental MWh	428	334	395	459	525	593	664

Table 110 – Whitby Forecast EVs and MWh Consumption by EV Type

	2025	2026	2027	2028	2029	2030	2031
Passenger EVs							
New EVs	764	895	1,048	1,207	1,371	1,542	1,719
Cumulative EVs	2,894	3,789	4,775	5,844	7,126	8,574	10,095
Cumulative MWh	7,487	9,917	12,627	15,587	19,126	23,139	27,357
Incremental MWh	2,099	2,430	2,709	2,960	3,539	4,014	4,218
Van EVs							
New EVs	12	12	14	17	19	21	24
Cumulative EVs	39	51	57	70	89	107	131
Cumulative MWh	106	144	160	201	258	313	385
Incremental MWh	27	39	16	41	57	55	72
Pickup Truck EVs							
New EVs	31	38	45	52	59	66	74
Cumulative EVs	126	164	209	261	320	386	460
Cumulative MWh	662	869	1,119	1,409	1,741	2,116	2,536
Incremental MWh	299	207	250	290	332	375	420

The allocation of incremental consumption is estimated based on the customer counts in each rate class and a review of allocations used by other LDCs. Judgement is required as Elexicon does not have these details by rate class. The allocations and allocated incremental consumption by EV type to each class is provided in Table 111.

Table 111 – Veridian Allocations to Rate Classes

Rate Class	Passenger	Van	Pick-up Truck
Residential	83.9%	64.1%	59.2%
Residential Seasonal	1.1%	0.9%	0.8%
GS<50	10.0%	20.0%	20.0%
GS 50 - 2,999	4.5%	10.0%	15.0%
GS 3,000 - 4,999	0.5%	5.0%	2.5%
Large Use	0.0%	0.0%	2.5%
Total	**100.0%**	**100.0%**	**100.0%**

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Table 112 – Whitby Allocations to Rate Classes

Rate Class	Passenger	Van	Pick-up Truck
Residential	85.0%	65.0%	60.0%
GS<50	10.0%	20.0%	25.0%
GS 50 - 2,999	4.5%	10.0%	10.0%
GS 3,000 - 4,999	0.5%	5.0%	5.0%
Total	**100.0%**	**100.0%**	**100.0%**

Finally, Table 113 and Table 114 provide summaries of EV consumption and demand by rate class. The volumes reflect cumulative EV loads since 2017. Incremental billed demands are forecast using an estimated 10% load factor.

Table 113 – Veridian EV Forecast Summary

	2025	2026	2027	2028	2029	2030	2031
Cumulative MWh							
Residential	19,892	26,278	33,343	40,882	50,262	60,845	72,058
Res. Seasonal	271	358	454	556	684	828	980
GS<50	2,552	3,371	4,278	5,245	6,454	7,818	9,266
GS 50 - 2,999	1,214	1,604	2,037	2,501	3,078	3,729	4,423
GS 3,000 - 4,999	158	208	264	322	398	483	574
Large Use	26	34	44	56	69	84	100
Cumulative kW							
GS 50 - 2,999	4,722	5,341	5,928	6,353	7,907	8,921	9,504
GS 3,000 - 4,999	615	694	760	799	1,034	1,166	1,243
Large Use	147	114	135	157	180	203	227

Table 114 – Whitby EV Forecast Summary

	2025	2026	2027	2028	2029	2030	2031
Cumulative MWh							
Residential	6,830	9,045	11,508	14,225	17,469	21,142	25,025
GS<50	935	1,238	1,574	1,951	2,399	2,906	3,447
GS 50 - 2,999	414	548	696	862	1,061	1,284	1,523
GS 3,000 - 4,999	76	100	127	158	196	237	283
Cumulative kW							
GS 50 - 2,999	5,667	7,501	9,536	11,814	14,528	17,592	20,865
GS 3,000 - 4,999	1,039	1,373	1,741	2,170	2,679	3,249	3,874

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6.2 Electric Heating

The forecast of additional loads from electric heating are based on assumptions of heating loads of new customers and customer conversions for the Residential, Seasonal Residential, GS<50 kW, and GS 50-2,999 kW classes.

Average kWh per Residential, Seasonal Residential and General Service customer are calculated using the consumption of average Enbridge customers multiplied by m^3/kWh conversion factors as per Natural Resources Canada.

Table 115 - Heating Consumption per Customer

	Residential/ Seasonal	GS<50	Measure	Source
Consumption per Year	2,263	6,955	m^3/year	Typical Enbridge Customer
Convert m3 to GJ	0.0343	0.0343	GJ/m^3	From NRCan
Convert GJ to kWh	277	277	kWh/GJ	From NRCan
Convert m3 to kWh	9.5011	9.5011	kWh/m^3	GJ/m^3 times kWh/m^3
kWh per Customer	21,501	66,080	kWh/Customer	Avg. Consumption per year times kWh/m^3
Heat Pump Efficiency	2.55	2.55	Heat Pump Efficiency	Delivered heat kWh-equivalent/kWh
Heat Pump Utilization	50%	50%	% Customers	Assumed Share of Energy from Heat Pump vs. Natural Gas
Adj. Consumption	4,216	12,957	Adjusted Consumption	kWh/Customer divided by Heat Pump Efficiency times Heat Pump Utilization

Residential and GS<50 kW heating loads are forecast in each rate zone for both existing connections and new customers. The share of new customers that are estimated to have electric heat pumps is based on data from NRCan of the share of new home heating stock that is heat pump equipment. This data is available up to 2022 and forecasts for 2023 to 2031 are calculated based on a continuation of the upward trend from 2019 to 2022. This produces a forecast of 12.7% of new Residential and GS<50 kW customers having heat pumps in 2027 growing to 14.7% of new customers in 2031. The share of existing customers converting from natural gas to electric heat pumps is forecast is 5% (1/20th) of the share of new customers. The 5% factor is based on the typical useful life of a natural gas home heating system. Annual forecast heating loads for the Residential, Seasonal Residential, and GS<50 kW classes are provided below for each rate zone.

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Table 116 – VRZ Residential Heating Summary

Residential	2027	2028	2029	2030	2031
Forecast Customer Count	124,619	127,084	129,594	132,210	134,871
Increase in customers/year	2,517	2,465	2,510	2,616	2,661
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
New Connection %	12.7%	13.2%	13.7%	14.2%	14.7%
Existing Connections #	776	823	871	920	972
New Connections #	320	326	344	372	391
Total Connections	1,096	1,148	1,215	1,292	1,363
kWh/Customer	4,216	4,216	4,216	4,216	4,216
Total kWh	**4,619,417**	**4,841,248**	**5,120,933**	**5,445,671**	**5,745,527**

Table 117 – VRZ Seasonal Residential Heating Summary

Seasonal Residential	2027	2028	2029	2030	2031
Forecast Customer Count	1,552	1,549	1,545	1,542	1,539
Increase in customers/year	(3)	(3)	(3)	(3)	(3)
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
New Connection %	13%	13%	14%	14%	15%
Existing Connections #	10	10	11	11	11
New Connections #	-	-	-	-	-
Total Connections	10	10	11	11	11
kWh/Customer	4,216	4,216	4,216	4,216	4,216
Total kWh	**41,659**	**43,199**	**44,733**	**46,259**	**47,780**

Table 118 – VRZ GS<50 kW Heating Summary

GS<50 kW	2027	2028	2029	2030	2031
Forecast Customer Count	9,685	9,757	9,829	9,902	9,975
Increase in customers/year	71	72	72	73	73
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
New Connection %	13%	13%	14%	14%	15%
Existing Connections #	61	64	67	70	73
New Connections #	9	9	10	10	11
Total Connections	70	73	77	80	84
kWh/Customer	12,957	12,957	12,957	12,957	12,957
Total kWh	**908,440**	**951,004**	**994,147**	**1,037,876**	**1,082,196**

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Table 119 – WRZ Residential Heating Summary

Residential	2027	2028	2029	2030	2031
Forecast Customer Count	48,234	49,135	50,077	51,033	52,005
Increase in customers/year	911	901	942	957	972
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
New Connection %	13%	13%	14%	14%	15%
Existing Connections #	301	318	337	356	375
New Connections #	116	119	129	136	143
Total Connections	416	437	466	491	518
kWh/Customer	4,216	4,216	4,216	4,216	4,216
Total kWh	**1,755,480**	**1,844,051**	**1,963,422**	**2,071,790**	**2,183,617**

Table 120 – WRZ GS<50 kW Heating Summary

GS<50 kW	2027	2028	2029	2030	2031
Forecast Customer Count	2,572	2,608	2,645	2,683	2,721
Increase in customers/year	36	37	37	38	38
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
New Connection %	13%	13%	14%	14%	15%
Existing Connections #	16	17	18	19	20
New Connections #	5	5	5	5	6
Total Connections	21	22	23	24	25
kWh/Customer	12,957	12,957	12,957	12,957	12,957
Total kWh	**268,160**	**282,633**	**297,464**	**312,659**	**328,228**

The majority of new GS 50-2,999 kW customers have provided estimates of their loads, so no incremental heating load is added for these customers. The increase in consumption for customers that convert is difficult to predict as it can vary significantly based on the type of customer within the rate class. Despite the lack of specific information of electric heating conversions, it is reasonable to expect that there will be some incremental consumption within the GS 50-2,999 kW class. The incremental consumption for these conversions is estimated to be equal to the average heating (HDD-related) load of customers in the rate class.

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Table 121 – VRZ GS 50-2,999 kW Heating Summary

GS 50-2,999 kW	2027	2028	2029	2030	2031
Forecast Customer Count	1,077	1,077	1,078	1,079	1,079
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
Existing Connections #	7	7	7	8	8
kWh/Customer	65,347	65,308	65,269	65,230	65,191
Total kWh	**446,752**	**464,255**	**481,758**	**499,261**	**516,764**

Table 122 – WRZ GS 50-2,999 kW Heating Summary

GS 50-2,999 kW	2027	2028	2029	2030	2031
Forecast Customer Count	396	399	402	404	407
Existing Conversions %	0.6%	0.7%	0.7%	0.7%	0.7%
Existing Connections #	3	3	3	3	3
kWh/Customer	52,651	52,308	51,968	51,630	51,294
Total kWh	**131,716**	**136,877**	**142,037**	**147,197**	**152,358**

Rather than apply a half-year adjustment, incremental annual loads are adjusted by relative HDD in each season. This seasonal calculation is detailed below.

Table 123 - Seasonal Heating Calculation

Heating Profile			
January	697.3	18.8%	
February	624.3	16.8%	
March	546.1	14.7%	
April	352.4	9.5%	64.85%
May	150.1	4.0%	
June	32.5	0.9%	
July	1.6	0.0%	
August	5.7	0.2%	
September	55.0	1.5%	
October	237.9	6.4%	35.15%
November	426.6	11.5%	
December	577.9	15.6%	
Total	**3,707.5**	**100.0%**	

Consumption from August to December is added in the first year and consumption from January to July is added in the following year. The total Residential heating consumption in 2027, for example, is 64.85% of 2026 consumption plus 35.15% of 2027 consumption.

Table 124 and Table 125 summarize the seasonally additional heating loads added to the forecast for each rate class in each rate zone.

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Table 124 - VRZ Seasonally Adjusted kWh

	2027	2028	2029	2030	2031
Residential kWh	4,619,417	4,841,248	5,120,933	5,445,671	5,745,527
Winter	2,813,069	2,995,834	3,139,698	3,321,082	3,531,684
Summer	1,623,583	1,701,550	1,799,851	1,913,986	2,019,377
Seasonally Adjusted kWh	4,436,652	4,697,384	4,939,549	5,235,068	5,551,061
Residential Seasonal kWh	41,659	43,199	44,733	46,259	47,780
Winter	26,014	27,017	28,016	29,011	30,001
Summer	14,642	15,183	15,722	16,259	16,793
Seasonally Adjusted kWh	40,656	42,200	43,738	45,269	46,794
GS < 50 kWh	908,440	951,004	994,147	1,037,876	1,082,196
Winter	561,919	589,151	616,755	644,735	673,094
Summer	319,289	334,249	349,412	364,782	380,359
Seasonally Adjusted kWh	881,208	923,400	966,168	1,009,517	1,053,453
GS 50-2,999 kWh	446,752	464,255	481,758	499,261	516,764
Winter	278,381	289,732	301,084	312,435	323,786
Summer	157,020	163,171	169,323	175,475	181,627
Seasonally Adjusted kWh	435,401	452,904	470,407	487,910	505,413

Table 125 – WRZ Seasonally Adjusted kWh

	2027	2028	2029	2030	2031
Residential kWh	1,755,480	1,844,051	1,963,422	2,071,790	2,183,617
Winter	1,071,306	1,138,483	1,195,924	1,273,339	1,343,620
Summer	616,997	648,127	690,082	728,171	767,475
Seasonally Adjusted kWh	1,688,303	1,786,610	1,886,006	2,001,510	2,111,094
GS < 50 kWh	268,160	282,633	297,464	312,659	328,228
Winter	164,751	173,910	183,296	192,914	202,769
Summer	94,250	99,337	104,549	109,890	115,362
Seasonally Adjusted kWh	259,001	273,246	287,845	302,804	318,131
GS 50-2,999 kWh	131,716	136,877	142,037	147,197	152,358
Winter	82,075	85,422	88,769	92,115	95,462
Summer	46,294	48,108	49,922	51,735	53,549
Seasonally Adjusted kWh	128,369	133,530	138,690	143,851	149,011

6.3 Forecast Large Additions

Elexicon is forecasting significant growth its General Service classes and Large Use rate class in the 2027 to 2031 rate period. Elexicon has estimated a material increase in billed loads from new customers additions beyond what is forecast based on historical volumes and trends. The estimated loads of these customers are added to the rate class forecasts that are produced based on historic loads as described in Section 4. The additional customers represent a significant portion of Elexicon's total forecast loads throughout the rate period. By 2031, the additional customers are responsible for 15% of total kWh consumption and 25% of total billed kW demand.

A summary of forecast new connection customer counts and loads is provided in Table 126.

Table 126 – New Connection Forecast Summary

Year	Incremental			Cumulative		
	Customers	kWh	Billed kW	Customers	kWh	Billed kW
2025	9	83,331,544	174,319	9	83,331,544	174,319
2026	17	163,623,852	345,917	26	246,955,396	520,236
2027	13	145,350,625	297,348	39	392,306,021	817,584
2028	6	126,330,922	237,477	45	518,636,943	1,055,061
2029	3	88,789,563	164,075	48	607,426,506	1,219,136
2030	1	42,529,020	81,222	49	649,955,526	1,300,358
2031	1	21,514,119	41,800	50	671,469,645	1,342,158

The additional large loads are forecast based the anticipated volumes of committed and non-committed connection requests. The forecast includes a pro-ration of forecast load based on an assessment of the likelihood that each project materializes.

A summary of the customer and load additions is provided below by rate class.

Table 127 – GS 50 – 2,999 kW Addition Summary

Year	Incremental			Cumulative		
	Customers	kWh	Billed kW	Customers	kWh	Billed kW
2025	5	31,588,652	75,304	5	31,588,652	75,304
2026	12	67,970,327	162,155	17	99,558,979	237,459
2027	10	55,361,245	132,135	27	154,920,224	369,594
2028	4	28,759,146	68,582	31	183,679,370	438,176
2029	2	16,927,359	40,292	33	200,606,729	478,468
2030	1	9,881,341	23,482	34	210,488,070	501,950
2031	1	4,574,184	10,870	35	215,062,254	512,820

Table 128 – GS 3,000 – 4,999 kW Addition Summary

Year	Incremental			Cumulative		
	Customers	kWh	Billed kW	Customers	kWh	Billed kW
2025	3	32,172,225	65,894	3	32,172,225	65,894
2026	5	61,372,410	125,743	8	93,544,635	191,637
2027	2	37,167,614	75,818	10	130,712,249	267,455
2028	1	12,395,660	24,742	11	143,107,909	292,197
2029	-	8,350,165	16,294	11	151,458,074	308,491
2030	-	12,403,488	23,478	11	163,861,562	331,969
2031	-	12,398,486	23,244	11	176,260,048	355,213

Table 129 – GS 3,000 – 4,999 kW Addition Summary

Year	Incremental			Cumulative		
	Customers	kWh	Billed kW	Customers	kWh	Billed kW
2025	-	19,570,667	33,122	0	19,570,667	33,122
2026	1	34,281,115	58,017	1	53,851,782	91,139
2027	1	52,821,766	89,397	2	106,673,548	180,536
2028	1	85,176,116	144,153	3	191,849,664	324,689
2029	1	63,512,039	107,488	4	255,361,703	432,177
2030	-	20,244,191	34,262	4	275,605,894	466,439
2031	-	4,541,449	7,686	4	280,147,343	474,125

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7. EDSM ADJUSTMENT TO LOAD FORECAST

On January 23, 2025, the IESO released the 2025-2027 Electricity Demand Side Management (eDSM) Program Plan. eDSM programs undertaken as part of the 2025-2027 plan will put downward pressure on Elexicon's billing determinants for the General Service < 50 kW, and General Service 50 to 2,999 kW, General Service 3,000 to 4,999 kW, and Large Use rate classes. An eDSM adjustment has been made to reflect the impact of planned eDSM activities that are expected to be implemented through from 2025 to 2027 and a forecast of eDSM activities that will take place from 2028 to 2031.

eDSM activities have been forecast based on Elexicon's share of consumption within the province and planned kWh savings from the 2025-2027 plan. eDSM activities from 2028 to 2031 are forecast based on the trend of savings from the 2025 to 2027 years. The table below provides a summary of eDSM savings and Elexicon's allocation of savings.

Table 130 – 2025-2027 eDSM, 2028-2031 Forecast and Elexicon Allocation

Program	2025-27 eDSM Plan			Estimated Future eDSM				VRZ Share	WRZ Share
	2025	2026	2027	2028	2029	2030	2031		
Retrofit	446	519	476	480	480	480	480	2.34%	0.82%
Small Business	14	15	16	17	18	19	20	2.08%	0.65%
Energy Performance				0	0	0	0	3.00%	0.81%
Energy Management	52	59	64	70	76	82	88	3.00%	0.81%
Industrial Energy Efficiency	133	160	195	225	256	287	318	3.12%	0.83%
New Construction			106	106	106	106	106	3.00%	0.81%
Home Renovation Savings	61	66	66	69	72	74	77	2.39%	0.90%
Local Initiatives	641	693	750	804	858	913	967	2.31%	0.79%
Energy Affordability Program	27	30	44	51	59	68	76	2.34%	0.97%
First Nations Program	1	1	1	1	1	1	1		
Total	1,375	1,543	1,718	1,823	1,927	2,030	2,134		

Elexicon's share of kWh is calculated as a 5-year average of Veridian and Whitby by the total provincial supplied kWh as per the OEB's open data source (2.1.5.4). The share is calculated separately for each rate class in each rate zone. The Energy Affordability Program allocation is based on the number of households in each service area as counted by Statistics Canada within the Low-Income Measure.

Total GWh savings figures are then adjusted by the share attributable to Elexicon, yearly weighting factors, and converted to kWh savings. Total eDSM savings by program are then allocated to Elexicon's rate classes in proportion to historic allocations for those programs. The percentages below reflect the typical share by class used in LRAMVA workforms. The kW share is used for demand-billed classes to better represent the impact of eDSM activities on the class's billing determinants.

The cumulative eDSM savings from 2024 to 2031 are summarized for each rate class in each rate zone in the following table. A half-year adjustment is applied to first-year savings. Cumulative savings begin with a half-year of forecast 2024 savings from the 2021-2024 CDM Framework as savings from 2024 programs are not fully realized in 2024 actual consumption figures.

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Table 131 – VRZ Cumulative 2024-2031 eDSM

	2027	2028	2029	2030	2031
kWh					
Residential	22,672,656	32,248,714	42,548,238	53,586,271	65,362,815
GS < 50	259,594	369,236	487,161	613,542	748,379
GS 50-2,999	11,350,326	15,363,115	19,559,024	23,931,653	28,481,002
GS 3,000-4,999	49,254,274	68,740,030	89,211,577	110,644,380	133,038,439
Large Use	3,600,683	5,104,682	6,701,016	8,388,969	10,168,540
Total kWh	**107,432,399**	**151,389,811**	**198,048,666**	**247,395,268**	**299,429,618**
kW					
GS 50-2,999	105,428	144,811	187,056	231,964	279,533
GS 3,000-4,999	4,221	5,865	7,679	9,607	11,718
Large Use	25,805	31,952	38,928	48,715	60,528
Total kW	**135,454**	**182,628**	**233,664**	**290,286**	**351,779**

Table 132 – WRZ Cumulative 2024-2031 eDSM

	2027	2028	2029	2030	2031
kWh					
Residential	8,764,711	12,460,635	16,294,696	20,128,757	23,962,818
GS < 50	3,117,286	4,233,780	5,378,908	6,524,036	7,669,164
GS 50-2,999	19,333,977	27,125,794	35,131,722	43,137,651	51,143,579
GS 3,000-4,999	4,359,179	6,116,164	7,921,450	9,726,736	11,532,022
Total kWh	**35,575,152**	**49,936,372**	**64,726,775**	**79,517,179**	**94,307,582**
kW					
GS 50-2,999	40,491	55,416	70,152	84,630	99,749
GS 3,000-4,999	5,199	6,968	8,721	10,030	11,170
Total kW	**45,689**	**62,385**	**78,873**	**94,660**	**110,919**

It should be noted that the load forecast methodology accounts for the loss of persistence of previous CDM programs. After historic cumulative CDM is added for the purpose of forecasting monthly rate class consumption, the amount of cumulative CDM that is removed is lower. Overall, approximately 110.9 GWh is added to the kWh load forecast in 2031 by accounting for the loss of persistence of historic CDM programs.

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EXHIBIT 3 - TAB 1 - SCHEDULE 1: ATTACHMENT 1
"ELEXICON LOAD FORECAST"
(REFER TO ATTACHMENT IN EXCEL FORMAT)

LOAD AND CUSTOMER VARIANCE ANALYSIS

1. INTRODUCTION

Elexicon has completed Appendix 2-IB - Load Forecast Analysis with the following inputs.

- 2015-2024 actual consumption, billed demand, average-year customer, device, and connection counts
- 2015-2024 Historical weather-normalized consumption and billed demand
- 2025-2026 Bridge Year forecasted consumption, billed demand and average-year customer, device, and connection counts
- 2027-2031 Proposed Test Year forecasted consumption, billed demand and average-year customer and connection counts.

Appendix 2-IB provides the values for Residential and Residential Seasonal together with the "Residential" rows and provides General Service 50 to 2,999 kW and General Service 3,000 to 4,999 kW together in the "General Service >= 50 kW" rows. Residential and Residential Seasonal are provided separately and General Service 50 to 2,999 kW and General Service 3,000 to 4,999 kW are provided separately in this schedule. Appendix 2-IB is provided in Excel format as Attachment 1 to Exhibit 3 - Tab 1 - Schedule 2.

2. CUSTOMER COUNT VARIANCES

The historical and forecast customer, light, and connection counts by rate class are provided in Tables 1 and 2. Customer, light, and connection counts are monthly average values. Year-over-year variances in those counts are provided in Tables 3 and 4.

Table 1: 2015 to 2024 Historical Customer / Light / Connection Counts[1]

Customers	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual
Residential	146,335	146,881	148,116	149,567	151,864	154,099	155,957	158,174	160,635	162,977
Res. Seasonal	1,592	1,586	1,577	1,571	1,565	1,561	1,559	1,559	1,563	1,562
GS<50	11,061	11,155	11,245	11,336	11,468	11,562	11,641	11,797	11,923	11,967
GS 50 - 2,999	1,420	1,423	1,436	1,433	1,406	1,414	1,443	1,424	1,414	1,448
GS 3,000 - 4,999	7	7	7	7	7	8	9	8	8	8
Large Use	3	3	3	4	4	4	4	4	5	5
Street Light	41,668	41,888	42,303	42,951	43,551	44,123	44,703	45,138	45,687	46,425
Sentinel Light	483	478	477	476	379	292	291	292	289	284
USL	1,251	1,210	1,196	1,195	1,193	1,191	1,193	1,194	1,198	1,166
Total	203,820	204,630	206,361	208,540	211,438	214,253	216,800	219,591	222,720	225,842

[1] Numbers may not sum due to rounding.

Table 2: 2025 to 2031 Forecast Customer / Light / Connection Counts[2]

Customers	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	166,095	169,426	172,854	176,219	179,671	183,244	186,877
Res. Seasonal	1,559	1,555	1,552	1,549	1,545	1,542	1,539
GS<50	12,044	12,150	12,257	12,365	12,474	12,585	12,696
GS 50 - 2,999	1,474	1,491	1,501	1,508	1,513	1,517	1,521
GS 3,000 - 4,999	11	16	18	19	19	19	19
Large Use	5	6	7	8	9	9	9
Street Light	46,988	47,559	48,136	48,721	49,313	49,913	50,521
Sentinel Light	280	277	274	270	267	264	261
USL	1,130	1,122	1,114	1,106	1,099	1,091	1,083
Total	229,587	233,601	237,713	241,765	245,910	250,183	254,526

[2] Numbers may not sum due to rounding.

Table 3: 2015 to 2024 Year-over-Year Customer / Light / Connection Variances

Customer	2015 to 2016	2016 to 2017	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023	2023 to 2024
Residential	0.4%	0.8%	1.0%	1.5%	1.5%	1.2%	1.4%	1.6%	1.5%
Res. Seasonal	-0.4%	-0.5%	-0.4%	-0.4%	-0.3%	-0.1%	0.0%	0.2%	-0.1%
GS<50	0.8%	0.8%	0.8%	1.2%	0.8%	0.7%	1.3%	1.1%	0.4%
GS 50 - 2,999	0.2%	0.9%	-0.2%	-1.9%	0.6%	2.1%	-1.4%	-0.7%	2.4%
GS 3,000 - 4,999	0.0%	0.0%	0.0%	0.0%	7.7%	13.3%	-1.0%	-5.4%	0.0%
Large Use	18.0%	0.0%	18.1%	12.9%	0.0%	0.0%	0.0%	13.5%	10.1%
Street Light	0.5%	1.0%	1.5%	1.4%	1.3%	1.3%	1.0%	1.2%	1.6%
Sentinel Light	-1.0%	-0.1%	-0.2%	-20.4%	-22.9%	-0.3%	0.4%	-1.2%	-1.8%
USL	-3.3%	-1.1%	-0.1%	-0.1%	-0.2%	0.2%	0.1%	0.4%	-2.7%
Total	0.4%	0.8%	1.1%	1.4%	1.3%	1.2%	1.3%	1.4%	1.4%

Table 4: 2024 to 2031 Year-over-Year Customer / Light / Connection Variances

Customer	2024 to 2025	2025 to 2026	2026 to 2027	2027 to 2028	2028 to 2029	2029 to 2030	2030 to 2031
Residential	1.9%	2.0%	2.0%	1.9%	2.0%	2.0%	2.0%
Res. Seasonal	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
GS<50	0.6%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
GS 50 - 2,999	1.8%	1.1%	0.7%	0.4%	0.3%	0.3%	0.3%
GS 3,000 - 4,999	34.1%	47.1%	16.6%	1.4%	-0.3%	1.6%	2.1%
Large Use	8.3%	12.7%	16.9%	16.5%	5.8%	1.2%	0.7%
Street Light	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Sentinel Light	-1.2%	-1.2%	-1.2%	-1.2%	-1.2%	-1.1%	-1.1%
USL	-3.1%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%
Total	1.7%	1.7%	1.8%	1.7%	1.7%	1.7%	1.7%

Growth in the Residential rate class has increased in the 2021 to 2024 period relative to the 2015 to 2021 period. Elexicon is forecasting this growth rate to increase in 2025 through to the end of the rate period in 2031 given the expected growth in its service area, particularly in the Durham region. The Residential Seasonal rate class has had declining customer counts in most years. This is generally due to the conversion of homes from seasonal properties to year-round homes.

Growth in the General Service < 50 kW and General Service 50 to 2,999 kW rate classes have fluctuated in the historical period and overall growth has been moderate. The General Service < 50 kW rate class customer count is forecast to grow at the average historical growth rate. The General Service 50 to 2,999 kW customer count is forecast to increase at a higher rate as Elexicon has seen an increase in potential customers looking to connect in the near term.

Customer counts in the General Service 3,000 to 4,999 kW and Large Use rate classes are low so each additional or lost customer cause high variances on a percentage basis. Overall, both classes have experienced moderate growth in the historical period. The customer counts of both classes are forecast to increase significantly in the rate period as there has been an increase in potential customers looking to connect.

The number of Street Lights has increased gradually in the historical period and this is forecast to continue to the end of the rate period. The number of Sentinel Lights decreased materially from 2018 to 2020 due to a decline in devices within the Veridian rate zone. Since 2020 there has been a more gradual decline in the number of Sentinel Lights and this more gradual decline is forecast to continue to 2031. The number of USL connections has also declined gradually over the historical period and this is forecast to continue through to the end of the rate period.

3. CONSUMPTION VARIANCES

Historical and forecast consumption by rate class are provided in Tables 5 and 6. Year-over-year variances in those consumption volumes are provided in Tables 7 and 8.

Table 5: 2015 to 2024 Historical Consumption[3]

kWh	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual
Residential	1,208,501,989	1,329,567,404	1,244,367,625	1,348,389,371	1,308,947,624	1,428,064,028	1,421,265,806	1,411,295,398	1,401,129,206	1,463,722,143
Res. Seasonal	9,513,188	9,487,859	9,912,684	10,517,338	10,858,189	12,379,583	12,593,975	12,600,241	12,172,614	12,230,714
GS<50	348,123,390	373,321,310	360,992,727	371,100,217	378,533,095	348,331,086	348,265,605	366,086,395	364,983,690	345,939,418
GS 50 - 2,999	1,303,426,142	1,325,491,839	1,288,074,573	1,317,526,745	1,283,766,519	1,217,071,154	1,233,800,243	1,259,614,150	1,256,420,572	1,302,629,894
GS 3,000 - 4,999	142,853,387	143,904,765	151,902,254	156,057,905	173,089,478	174,783,834	186,745,254	197,502,624	195,466,520	180,631,421
Large Use	210,460,829	215,800,519	223,859,611	250,221,085	259,592,384	264,242,586	284,809,431	289,202,901	303,910,759	321,893,042
Street Light	30,740,049	28,008,921	25,449,771	19,974,440	17,284,071	15,299,590	14,936,872	15,228,080	15,536,950	15,852,497
Sentinel Light	398,595	398,391	380,813	288,925	256,732	256,857	255,183	247,441	250,008	246,592
USL	5,716,632	5,574,283	5,516,973	5,495,149	5,443,927	6,667,275	6,751,959	6,729,569	6,716,598	6,705,989
Total kWh	3,259,734,201	3,431,555,291	3,310,457,030	3,479,571,176	3,437,772,017	3,467,095,994	3,509,424,326	3,558,506,799	3,556,586,916	3,649,851,710

[3] Numbers may not sum due to rounding.

Table 6: 2025 to 2031 Forecast Consumption[4]

kWh	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
Residential	1,515,994,144	1,546,574,460	1,578,573,635	1,610,606,554	1,641,331,700	1,680,304,198	1,718,981,173
Res. Seasonal	12,768,207	13,188,722	13,651,253	14,035,998	14,476,769	14,995,359	15,451,103
GS<50	374,839,490	375,080,309	376,280,208	375,831,277	376,353,639	377,216,432	379,702,547
GS 50 - 2,999	1,274,797,573	1,325,946,366	1,365,439,860	1,383,877,948	1,391,494,950	1,389,411,604	1,394,637,849
GS 3,000 - 4,999	214,811,898	274,193,096	308,941,637	321,145,353	329,918,802	342,231,262	355,799,332
Large Use	331,686,368	361,053,716	408,628,327	501,277,599	570,944,946	595,286,466	605,876,118
Street Light	16,038,637	16,227,074	16,417,838	16,610,959	16,806,468	17,004,396	17,204,774
Sentinel Light	244,297	241,107	237,983	234,924	231,930	229,000	226,132
USL	6,494,821	6,441,722	6,389,545	6,338,278	6,287,909	6,238,426	6,189,820
Total kWh	3,747,675,435	3,918,946,572	4,074,560,286	4,229,958,890	4,347,847,114	4,422,917,143	4,494,068,849

[4] Numbers may not sum due to rounding.

Table 7: 2015 to 2024 Year-over-Year Consumption Variances

kWh	2015 to 2016	2016 to 2017	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023	2023 to 2024
Residential	10.0%	-6.4%	8.4%	-2.9%	9.1%	-0.5%	-0.7%	-0.7%	4.5%
Res. Seasonal	-0.3%	4.5%	6.1%	3.2%	14.0%	1.7%	0.0%	-3.4%	0.5%
GS<50	7.2%	-3.3%	2.8%	2.0%	-8.0%	0.0%	5.1%	-0.3%	-5.2%
GS 50 - 2,999	1.7%	-2.8%	2.3%	-2.6%	-5.2%	1.4%	2.1%	-0.3%	3.7%
GS 3,000 - 4,999	0.7%	5.6%	2.7%	10.9%	1.0%	6.8%	5.8%	-1.0%	-7.6%
Large Use	2.5%	3.7%	11.8%	3.7%	1.8%	7.8%	1.5%	5.1%	5.9%
Street Light	-8.9%	-9.1%	-21.5%	-13.5%	-11.5%	-2.4%	1.9%	2.0%	2.0%
Sentinel Light	-0.1%	-4.4%	-24.1%	-11.1%	0.0%	-0.7%	-3.0%	1.0%	-1.4%
USL	-2.5%	-1.0%	-0.4%	-0.9%	22.5%	1.3%	-0.3%	-0.2%	-0.2%
Total kWh	5.3%	-3.5%	5.1%	-1.2%	0.9%	1.2%	1.4%	-0.1%	2.6%

Table 8: 2024 to 2031 Year-over-Year Consumption Variances

kWh	2024 to 2025	2025 to 2026	2026 to 2027	2027 to 2028	2028 to 2029	2029 to 2030	2030 to 2031
Residential	3.6%	2.0%	2.1%	2.0%	1.9%	2.4%	2.3%
Res. Seasonal	4.4%	3.3%	3.5%	2.8%	3.1%	3.6%	3.0%
GS<50	8.4%	0.1%	0.3%	-0.1%	0.1%	0.2%	0.7%
GS 50 - 2,999	-2.1%	4.0%	3.0%	1.4%	0.6%	-0.1%	0.4%
GS 3,000 - 4,999	18.9%	27.6%	12.7%	4.0%	2.7%	3.7%	4.0%
Large Use	3.0%	8.9%	13.2%	22.7%	13.9%	4.3%	1.8%
Street Light	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Sentinel Light	-0.9%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%
USL	-3.1%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%
Total kWh	2.7%	4.6%	4.0%	3.8%	2.8%	1.7%	1.6%

Year-over-year changes in consumption are generally caused by a combination of customer count changes and weather impacts. Variances in weather variables are provided in Table 9.

Table 9: Weather Variances

Time Frame	Heating Degree Days	Cooling Degree Days
2015 to 2016	-7.6%	76.1%
2016 to 2017	2.0%	-45.0%
2017 to 2018	5.4%	87.0%
2018 to 2019	4.7%	-34.9%
2019 to 2020	-10.4%	50.7%
2020 to 2021	-5.1%	-15.1%
2021 to 2022	10.1%	-14.4%
2022 to 2023	-11.1%	-13.4%
2023 to 2024	-3.3%	18.7%
2024 to Normal Weather	12.1%	3.6%

In general, cooling degree day variances influence consumption more than heating degree day variances. The impact of weather on consumption is higher in the Residential, Seasonal Residential, and General Service < 50 kW rate classes than the higher volume General Service rate classes. Consumption related to EVs and heat pumps cause forecasted consumption Increases through to 2031.

Consumption in 2020 of the Residential, Seasonal Residential, General Service < 50 kW and General Service 50 to 2,999 kW rate classes were materially impacted by the Covid-19 pandemic. Consumption of the Residential and Seasonal Residential classes increased as people worked from home and spent more time in their residences in accordance with stay at home mandates. Conversely, consumption among General Service < 50 kW and General Service 50 to 2,999 kW rate class customers decreased as workers stayed home and a lower level of economic activity. Variances in the 2021 and 2022 periods reflect a reversal of the impacts of Covid-19 as people returned to work and economic activity resumed. The Covid-19 pandemic did not significantly impact consumption in the General Service 3,000 to 4,999 kW or Large Use rate classes.

The 2025 to 2031 consumption forecasts of the General Service 50 to 2,999 kW, General Service 3,000 to 4,999 kW, and Large Use rate classes are significantly impacted by adjustments based on ongoing discussions with customers in these classes intending to connect.

Street Light and Sentinel Light consumption declined in the 2015 to 2020 period due to LED light conversions. Consumption of these classes is forecast to remain stable on a consumption per light basis and overall changes reflect forecast changes in light counts.

4. DEMAND VARIANCES

Historical and forecast billed demands by rate class, for those classes that are billed by demand, are provided in Tables 10 and 11. Year-over-year variances in those demands are provided in Tables 12 and 13.

The primary driver of variances in demand are the same drivers of consumption variances, customer counts and weather and the variances in Tables 12 and 13 are generally consistent with the variances in Tables 7 and 8. Demands of the General Service and Large Use classes generally increased over time, particularly in years with new customer additions. The demands of these classes are forecast to increase at a higher rate as additional loads are of larger customers looking to connect to Elexicon are included in the load forecast.

Demands of the Street Light and Sentinel Light rate class declined due to LED conversions from 2015 to 2020.

Table 10: 2015 to 2024 Historical Demand[5]

kW	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual
GS 50 - 2,999	3,102,195	3,190,776	3,111,377	3,149,613	3,057,338	2,943,203	2,950,219	3,043,361	2,990,987	2,968,530
GS 3,000 - 4,999	284,679	317,493	290,527	304,033	342,987	339,440	368,168	393,102	394,700	376,038
Large Use	361,255	421,758	382,866	423,038	433,414	453,257	481,567	490,452	518,389	532,510
Street Light	81,808	73,707	67,630	52,906	45,672	40,981	40,484	40,598	41,371	42,060
Sentinel Light	1,109	1,106	1,055	807	715	714	703	696	700	685
Total kW	3,831,046	4,004,840	3,853,455	3,930,397	3,880,125	3,777,595	3,841,140	3,968,209	3,946,148	3,919,823

Table 11: 2025 to 2031 Forecast Demand[5]

kW	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast
GS 50 - 2,999	3,048,624	3,186,837	3,298,053	3,360,200	3,398,325	3,414,386	3,447,628
GS 3,000 - 4,999	434,612	559,841	634,867	663,860	685,952	714,882	746,468
Large Use	562,103	614,338	700,460	866,937	994,909	1,044,584	1,070,184
Street Light	42,681	43,183	43,690	44,204	44,724	45,250	45,783
Sentinel Light	683	674	665	657	649	641	633
Total kW	4,088,703	4,404,873	4,677,734	4,935,858	5,124,558	5,219,742	5,310,696

[5] Numbers may not sum due to rounding.

Table 12: 2015 to 2024 Year-over-Year Demand Variances

kW	2015 to 2016	2016 to 2017	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023	2023 to 2024
GS 50 - 2,999	2.9%	-2.5%	1.2%	-2.9%	-3.7%	0.2%	3.2%	-1.7%	-0.8%
GS 3,000 - 4,999	11.5%	-8.5%	4.6%	12.8%	-1.0%	8.5%	6.8%	0.4%	-4.7%
Large Use	16.7%	-9.2%	10.5%	2.5%	4.6%	6.2%	1.8%	5.7%	2.7%
Street Light	-9.9%	-8.2%	-21.8%	-13.7%	-10.3%	-1.2%	0.3%	1.9%	1.7%
Sentinel Light	-0.3%	-4.6%	-23.5%	-11.4%	-0.1%	-1.5%	-1.0%	0.6%	-2.1%
Total kW	4.5%	-3.8%	2.0%	-1.3%	-2.6%	1.7%	3.3%	-0.6%	-0.7%

Table 13: 2024 to 2031 Year-over-Year Demand Variances

kW	2024 to 2025	2025 to 2026	2026 to 2027	2027 to 2028	2028 to 2029	2029 to 2030	2030 to 2031
GS 50 - 2,999	2.7%	4.5%	3.5%	1.9%	1.1%	0.5%	1.0%
GS 3,000 - 4,999	15.6%	28.8%	13.4%	4.6%	3.3%	4.2%	4.4%
Large Use	5.6%	9.3%	14.0%	23.8%	14.8%	5.0%	2.5%
Street Light	1.5%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Sentinel Light	-0.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.2%	-1.2%
Total kW	4.3%	7.7%	6.2%	5.5%	3.8%	1.9%	1.7%

5. LIST OF ATTACHMENTS

- Attachment 1 (Excel): OEB Appendix 2-IB Actual and Forecast Load

EXHIBIT 3 - TAB 1 - SCHEDULE 2: ATTACHMENT 1 "OEB APP.2-IB ACTUAL AND FORECAST LOAD" (REFER TO ATTACHMENT IN EXCEL FORMAT)