# Exhibit 3:

# Customer and Load Forecast

## Table Of Contents

Exhibit 3: Customer And Load Forecast

# Tab 1 (of 2): Load Forecast

# LOAD FORECAST OVERVIEW

NOW Inc. engaged Elenchus to complete a 2025 Load Forecast. The approach used is included in their report at E3/T1/S1/Att1. The results are documented in the Elenchus report, and in Appendix 2-IB, included as Attachment 2 to this schedule.

The trend in load is a modest increase to recent volumes – attributable primarily to the Residential rate class. The GS < 50 kW rate class has experienced no significant load growth or decline. The GS > 50 kW rate class has had somewhat lower volumes since 2020 and that is expected to continue to the test year. Loads of the USL and Street Light rate classes have been stable following NOW Inc.'s LED lighting conversion that completed in 2017.

**Table 1** below summarizes kWh consumption by rate class since 2017.

***Table 1: Load Forecast kWh Volumes***

| kWh | 2017 Approved | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual |
|---|---|---|---|---|---|---|
| Residential | 41,624,801 | 37,483,079 | 38,878,731 | 38,802,690 | 40,126,981 | 39,104,541 |
| GS < 50 | 19,759,776 | 17,706,302 | 17,940,823 | 17,709,286 | 16,586,733 | 17,080,206 |
| GS > 50 | 62,140,492 | 59,958,733 | 59,526,842 | 60,254,777 | 57,599,230 | 57,309,861 |
| Street Light | 556,610 | 513,973 | 517,432 | 524,449 | 526,417 | 531,088 |
| USL | 165,218 | 164,178 | 164,178 | 164,178 | 164,178 | 164,159 |
| **Total** | **124,246,897** | **115,826,265** | **117,028,006** | **117,455,380** | **115,003,539** | **114,189,855** |

| kWh | 2022 Actual | 2023 Actual | *2023 Normal* | 2024 Bridge | 2025 Test |
|---|---|---|---|---|---|
| Residential | 39,671,263 | 39,128,268 | *39,893,974* | 41,263,111 | 41,340,698 |
| GS < 50 | 17,769,474 | 17,511,886 | *17,765,151* | 17,775,995 | 17,945,241 |
| GS > 50 | 56,933,855 | 56,007,213 | *56,570,018* | 56,718,182 | 56,240,557 |
| Street Light | 492,972 | 491,060 | *491,060* | 491,060 | 491,060 |
| USL | 163,953 | 163,953 | *163,953* | 163,953 | 163,953 |
| **Total** | **115,031,517** | **113,302,381** | ***114,884,156*** | **117,199,405** | **116,181,510** |

**Table 2** below summarizes kW demand by rate class since 2017.

***Table 2: Load Forecast kWh Volumes***

| kW | 2017 Approved | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual |
|---|---|---|---|---|---|---|
| GS > 50 | 181,679 | 171,236 | 183,205 | 171,055 | 161,087 | 156,227 |
| Street Light | 1,576 | 1,392 | 1,421 | 1,463 | 1,500 | 1,532 |
| **Total** | **183,255** | **172,628** | **184,626** | **172,518** | **162,587** | **157,759** |

| kW | 2022 Actual | 2023 Actual | *2023 Normal* | 2024 Bridge | 2025 Test |
|---|---|---|---|---|---|
| GS > 50 | 155,849 | 151,260 | 156,129 | 156,537 | 155,213 |
| Street Light | 1,517 | 1,425 | 1,464 | 1,468 | 1,468 |
| **Total** | **157,366** | **152,685** | **157,593** | **158,005** | **156,681** |

**Table 3** below summarizes customer/connection counts by rate class since 2017. Customer counts provided in this table and in the Load Forecast report are monthly average counts. The customer counts in Appendix 2-IB are year-end values.

***Table 3: Forecast Customers/Connections***

| kWh | 2017 Approved | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2022 Actual | 2023 Actual | 2024 Bridge | 2025 Test |
|---|---|---|---|---|---|---|---|---|---|---|
| Residential | 5,216 | 5,202 | 5,157 | 5,107 | 5,155 | 5,166 | 5,161 | 5,194 | 5,187 | 5,179 |
| GS < 50 | 784 | 747 | 713 | 743 | 717 | 706 | 712 | 716 | 711 | 707 |
| GS > 50 | 71 | 54 | 69 | 69 | 72 | 71 | 68 | 69 | 69 | 69 |
| Street Light | 1,650 | 1,650 | 1,660 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 |
| USL | 23 | 23 | 23 | 23 | 23 | 23 | 22 | 22 | 22 | 22 |
| **Total** | **7,744** | **7,676** | **7,622** | **7,651** | **7,677** | **7,675** | **7,673** | **7,711** | **7,699** | **7,687** |

# *Attachment 1 (of 2):*

# *Load Forecast Report*

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Elenchus.ca

# Weather Normalized Distribution System Load Forecast: 2025 Cost of Service

**Report prepared by**
**Andrew Blair**
**Elenchus Research Associates Inc.**

**Prepared for:**
**Northern Ontario Wires Inc.**

**9 August 2024**

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# 1 INTRODUCTION

This report outlines the results of, and methodology used to derive, the weather normal load forecast prepared for Northern Ontario Wires Inc. ("NOWI") for its Cost of Service application for 2025 rates.

The regression equations used to normalize and forecast NOWI's weather sensitive load use monthly heating degree days and cooling degree days as measured at Environment Canada's Kapuskasing CDA[1] weather station to take into account temperature sensitivity. NOWI typically experiences relatively large heating loads in the summer and low cooling loads in the winter so its peak load is in the winter. 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 is based on a forecast of NOWI'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.

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 Ontario, as reported in Statistics Canada's Monthly Labour

[1] "Kapuskasing CDA" operated by ECCC - MSC, Latitude:49°24'23" N, Longitude:82°26'37" W, Elevation:218.00 m

Force Survey[2] is considered. 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] The GDP of specific industries relevant to NOWI's service territories are also considered. Statistics Canada GDP data considered includes Total Ontario GDP, Agriculture General GDP, Mining General GDP, Oil & Gas GDP, Oil & Gas Support GDP, Forestry & Logging GDP, Forestry Support GDP, Wood Product Manufacturing GDP, and Paper Manufacturing GDP. Ontario Economic Accounts data considered includes total Ontario GDP, Agriculture, Forestry, Fishing & Hunting GDP, Wood Products and Furniture GDP, and Paper Products & Printing GDP.

In order to isolate demand determinants at the class specific level, equations to weather normalize and forecast kWh consumption for the Residential, GS < 50 kW, and GS > 50 kW 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.

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[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).

- 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 January 2022 to December 2022, and 0.25 thereafter. 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 has been found to be related to the weather variables in those months for certain classes, particularly the Residential class. A set of COVID/weather interaction variables were considered to capture the incremental consumption caused by people staying at home due to lockdowns and from the increase in people working from home, which has persisted after the prevalence of direct COVID impacts have subsided.

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.

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.

COVID variables were tested for each of the Residential, General Service < 50 kW, and General Service > 50 kW rate classes. The COVID variables were not found to be statistically significant for any rate class.

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.

## 1.1 SUMMARIZED RESULTS

The following table summarizes the historic and forecast kWh for 2017 to 2025:

**Normal Forecast**

| kWh | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2022 Actual | 2023 Actual | *2023 Normal* | 2024 Forecast | 2025 Forecast |
|---|---|---|---|---|---|---|---|---|---|---|
| **Residential** | 37,483,079 | 38,878,731 | 38,802,690 | 40,126,981 | 39,104,541 | 39,671,263 | 39,128,268 | *39,893,974* | *41,354,798* | *41,554,215* |
| **GS < 50** | 17,706,302 | 17,940,823 | 17,709,286 | 16,586,733 | 17,080,206 | 17,769,474 | 17,511,886 | *17,765,151* | *17,874,083* | *18,174,621* |
| **GS > 50** | 59,958,733 | 59,526,842 | 60,254,777 | 57,599,230 | 57,309,861 | 56,933,855 | 56,007,213 | *56,570,018* | *57,315,510* | *57,543,051* |
| **Street Light** | 513,973 | 517,432 | 524,449 | 526,417 | 531,088 | 492,972 | 491,060 | *491,060* | *491,060* | *491,060* |
| **USL** | 164,178 | 164,178 | 164,178 | 164,178 | 164,159 | 163,953 | 163,953 | *163,953* | *163,953* | *163,953* |
| **Total** | **115,826,265** | **117,028,006** | **117,455,380** | **115,003,539** | **114,189,855** | **115,031,517** | **113,302,381** | ***114,884,156*** | **117,199,405** | **117,926,900** |

Table 1 kWh Forecast by Class

The following table summarizes the 2025 CDM Adjusted kWh Load Forecast. Details for this calculation can be found in Schedule 7 of this report.

**CDM Adjusted**

| kWh | 2025 Weather Normal Forecast | CDM Adjustment | 2025 CDM Adjusted Forecast |
|---|---|---|---|
| **Residential** | 41,554,215 | 213,517 | 41,340,698 |
| **GS < 50** | 18,174,621 | 229,380 | 17,945,241 |
| **GS > 50** | 57,543,051 | 1,302,494 | 56,240,557 |
| **Street Light** | 491,060 | | 491,060 |
| **USL** | 163,953 | | 163,953 |
| **Total** | **117,926,900** | **1,745,391** | **116,181,510** |

Table 2 CDM Adjusted kWh Forecast

The following table summarizes the historic and forecast kW for 2017 to 2025:

**Normal Forecast**

| kW | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2022 Actual | 2023 Actual | *2023 Normal* | 2024 Forecast | 2025 Forecast |
|---|---|---|---|---|---|---|---|---|---|---|
| **GS > 50** | 171,236 | 183,205 | 171,055 | 161,087 | 156,227 | 155,849 | 151,260 | 156,129 | 158,187 | 158,815 |
| **Street Light** | 1,392 | 1,421 | 1,463 | 1,500 | 1,532 | 1,517 | 1,425 | 1,464 | 1,468 | 1,468 |
| **Total** | **172,628** | **184,626** | **172,518** | **162,587** | **157,759** | **157,366** | **152,685** | **157,593** | **159,655** | **160,283** |

Table 3 kW Forecast by Class

The following table summarizes the 2025 CDM Adjusted kW Load Forecast. Details for this calculation can be found at the end of in Schedule 7 of this report.

**CDM Adjusted**

| kW | 2025 Weather Normal | CDM Adjustment | 2025 CDM Adjusted Forecast |
|---|---|---|---|
| **GS > 50** | 158,815 | 3,601 | 155,213 |
| **Street Light** | 1,468 | | 1,468 |
| **Total** | **160,283** | **3,601** | **156,681** |

Table 4 CDM Adjusted kW Forecast

The following table summarizes the historic and forecast customer/connection counts for 2017 to 2025:

**Customers / Devices**

| Customers | 2017 Actual | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2022 Actual | 2023 Actual | *2024 Forecast* | 2025 Forecast |
|---|---|---|---|---|---|---|---|---|---|
| **Residential** | 5,202 | 5,157 | 5,107 | 5,155 | 5,166 | 5,161 | 5,194 | 5,187 | 5,179 |
| **GS < 50** | 747 | 713 | 743 | 717 | 706 | 712 | 716 | 711 | 707 |
| **GS > 50** | 54 | 69 | 69 | 72 | 71 | 68 | 69 | 69 | 69 |
| **Street Light** | 1,650 | 1,660 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 |
| **USL** | 23 | 23 | 23 | 23 | 23 | 22 | 22 | 22 | 22 |
| **Total** | **7,676** | **7,622** | **7,651** | **7,677** | **7,675** | **7,673** | **7,711** | ***7,699*** | **7,687** |

Table 5 Customer / Connections Forecast for 2017-2025

Finally, a summary of billing determinants is provided in Table 6.

| 2025 | kWh | kW | Customers/ Connection |
|---|---|---|---|
| **Residential** | 41,340,698 | | 5,179 |
| **GS < 50** | 17,945,241 | | 707 |
| **GS > 50** | 56,240,557 | 155,213 | 69 |
| **Street Light** | 491,060 | 1,468 | 1,710 |
| **USL** | 163,953 | | 22 |
| **Total** | **116,181,510** | **156,681** | **7,687** |

Table 6 Billing Determinant Summary

## 1.2 LOAD FACTOR INFLUENCES

Table 7 below provides a summary of NOWI's total system consumption and the key factors that influence its load. HDD and CDD figures represent the differences between actual weather-related loads and 10-year normalized weather-related loads.

| Year | Total kWh | kWh Growth | HDD | CDD | Metered Cust. | Metered Customer Growth |
|---|---|---|---|---|---|---|
| 2017 | 115,826,265 | | -2.3% | -54.5% | 7,676 | |
| 2018 | 117,028,006 | 1.04% | 5.1% | 53.8% | 7,622 | -0.71% |
| 2019 | 117,455,380 | 0.37% | 6.6% | -13.0% | 7,651 | 0.38% |
| 2020 | 115,003,539 | -2.09% | -1.6% | 59.1% | 7,677 | 0.34% |
| 2021 | 114,189,855 | -0.71% | -7.7% | 11.2% | 7,675 | -0.02% |
| 2022 | 115,031,517 | 0.74% | 0.0% | -37.9% | 7,673 | -0.03% |
| 2023 | 113,302,381 | -1.50% | -7.6% | 13.3% | 7,711 | 0.49% |
| ***Avg. Growth 2017-2023*** | | ***-0.37%*** | | | | ***0.08%*** |
| 2024 | 117,199,405 | 3.44% | *0.0%* | *0.0%* | 7,699 | -0.16% |
| 2025 | 116,181,510 | -0.87% | *0.0%* | *0.0%* | 7,687 | -0.16% |
| ***Avg. Growth 2017-2025*** | | ***0.04%*** | | | | ***0.02%*** |

Table 7 Load Influence Summary

NOWI Power's consumption decreased by -2.18% since 2017, or -0.37% per year. On a weather-normalized basis, consumption decreased by -0.81% from 2017 to 2023. The consumption growth rate is forecast to increase in 2024 due to a forecast return to average weather from 2023 mild weather and increased electrification (EVs and heat pumps).

| Year | Residential | | | | GS < 50 and GS > 50 | | | |
|---|---|---|---|---|---|---|---|---|
| | Cust. | Cust. Growth % | kWh | kWh Growth % | Cust. | Cust. Growth % | kWh | kWh Growth % |
| 2017 | 5,202 | | 37,483,079 | | 801 | | 77,665,035 | |
| 2018 | 5,157 | -0.86% | 38,878,731 | 3.72% | 782 | -2.40% | 77,467,665 | -0.25% |
| 2019 | 5,107 | -0.98% | 38,802,690 | -0.20% | 811 | 3.73% | 77,964,063 | 0.64% |
| 2020 | 5,155 | 0.93% | 40,126,981 | 3.41% | 789 | -2.69% | 74,185,963 | -4.85% |
| 2021 | 5,166 | 0.22% | 39,104,541 | -2.55% | 777 | -1.61% | 74,390,067 | 0.28% |
| 2022 | 5,161 | -0.09% | 39,671,263 | 1.45% | 780 | 0.44% | 74,703,329 | 0.42% |
| 2023 | 5,194 | 0.64% | 39,128,268 | -1.37% | 785 | 0.62% | 73,519,100 | -1.59% |
| ***Avg. 2017-23*** | | ***-0.02%*** | | ***0.72%*** | | ***-0.34%*** | | ***-0.91%*** |
| 2024 | 5,187 | -0.15% | 41,263,111 | 5.46% | 780 | -0.56% | 74,494,177 | 1.33% |
| 2025 | 5,179 | -0.15% | 41,340,698 | 0.19% | 776 | -0.56% | 74,185,798 | -0.41% |
| ***Avg. 2017-25*** | | ***-0.05%*** | | ***1.23%*** | | ***-0.40%*** | | ***-0.57%*** |

Table 8 Residential and Commercial/Industrial Loads

# 2 CLASS SPECIFIC KWH REGRESSION

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

## 2.1 RESIDENTIAL

For Residential kWh consumption the equation was estimated using 120 observations from 2014:01-2023:12. 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 above 10°C increases at lower average temperatures. HDD relative to 10°C and no CDD variable were found to provide the strongest results. No CDD variable was found to be statistically significant.

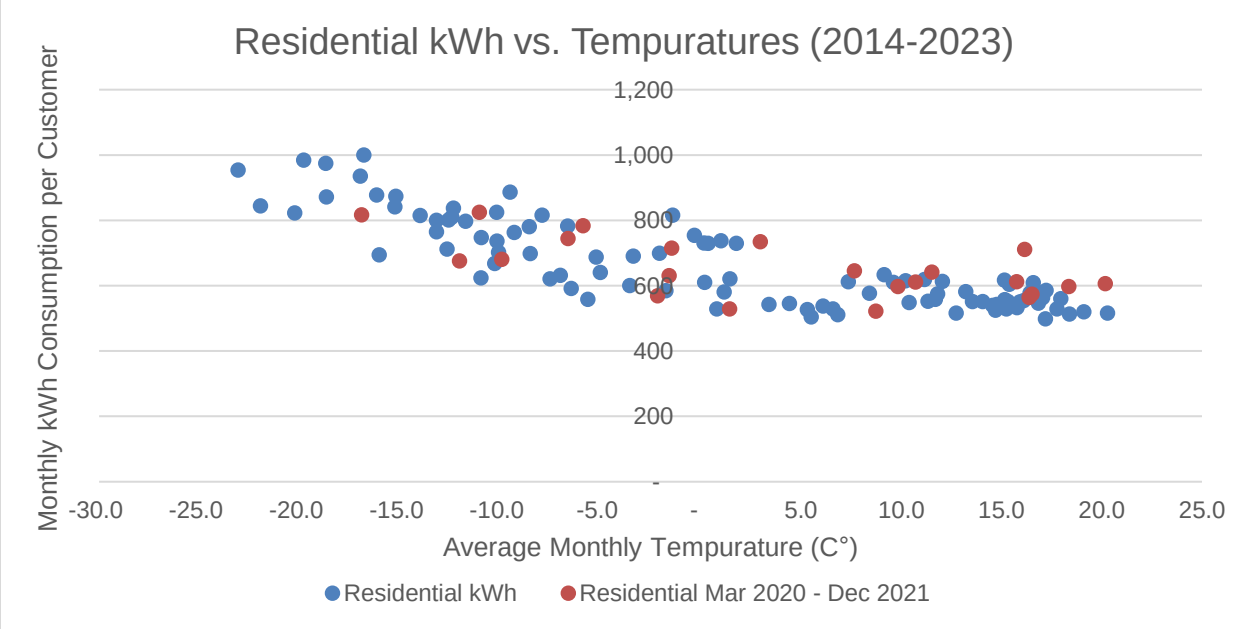



Figure 1 Residential kWh and Average Temperature

Economic variables, such as Ontario employment and various GDP measures, were tested but not found to be statistically significant variables.

The COVID variables were not found to be statistically significant.

A fall variable, equal to 1 in October and November and 0 in all other months, is used and found to be statistically significant. A December flag variable equal to 1 in December and 0 in all other months is also used.

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, time trends, 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:

| Model 1: Prais-Winsten, using observations 2014:01-2023:12 (T = 120)<br>Dependent variable: Res_NoCDM<br>rho = 0.0526304 | | | | |
|---|---|---|---|---|
| | coefficient | std. error | t-ratio | p-value |
| const | 2,970,658 | 35,847 | 82.871 | 0.0000 |
| HDD10 | 1,936 | 82 | 23.613 | 0.0000 |
| Fall | -615,785 | 62,194 | -9.901 | 0.0000 |
| Dec | -641,340 | 85,722 | -7.482 | 0.0000 |
| | | | | |
| Statistics based on the rho-differenced data | | | | |
| Mean dependent var | 6.98E+12 | S.E. of regression | 245,381 | |
| Sum squared resid | 0.86 | Adjusted R-squared | 0.8564 | |
| R-squared | 220.34 | P-value(F) | 9.91E-48 | |
| F(7, 112) | -0.01 | Durbin-Watson | 1.96867 | |
| rho | 6.98E+12 | S.E. of regression | 245,381 | |

Table 9 Residential Regression Model

Using the above model coefficients, we derive the following:

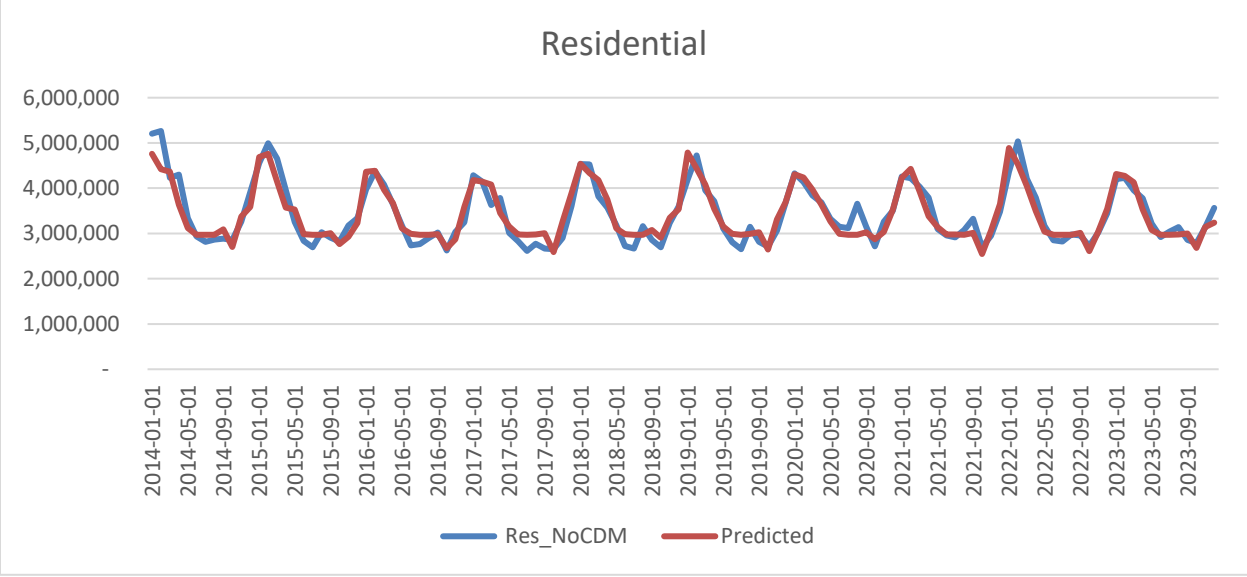



Figure 2 Residential Predicted vs Actual Observations

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 2.4%. The MAPE calculated monthly over the period is 5.4%.

| | Residential kWh | | Absolute |
|---|---|---|---|
| Year | CDM Added Back | Predicted | Error (%) |
| 2014 | 43,864,777 | 41,964,105 | 4.3% |
| 2015 | 42,224,314 | 41,546,671 | 1.6% |
| 2016 | 39,576,590 | 40,553,752 | 2.5% |
| 2017 | 38,896,696 | 40,687,215 | 4.6% |
| 2018 | 40,576,332 | 41,707,904 | 2.8% |
| 2019 | 40,576,642 | 41,624,937 | 2.6% |
| 2020 | 41,866,581 | 40,810,763 | 2.5% |
| 2021 | 40,792,580 | 40,301,947 | 1.2% |
| 2022 | 41,368,004 | 41,129,586 | 0.6% |
| 2023 | 40,838,255 | 40,296,647 | 1.3% |
| **Total** | **410,580,771** | **410,623,527** | **0.0%** |
| | | | |
| Mean Absolute Percentage Error (Annual) | | | 2.4% |
| Mean Absolute Percentage Error (Monthly) | | | 5.4% |

Table 10 Residential model error

## 2.2 GS < 50

For the GS < 50 class, the regression equation was estimated using 120 observations from 2014:01-2023:12. 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 above 10°C increases at lower average temperatures. HDD relative to 10°C and no CDD variable were found to provide the strongest results. No CDD variable was found to be statistically significant.

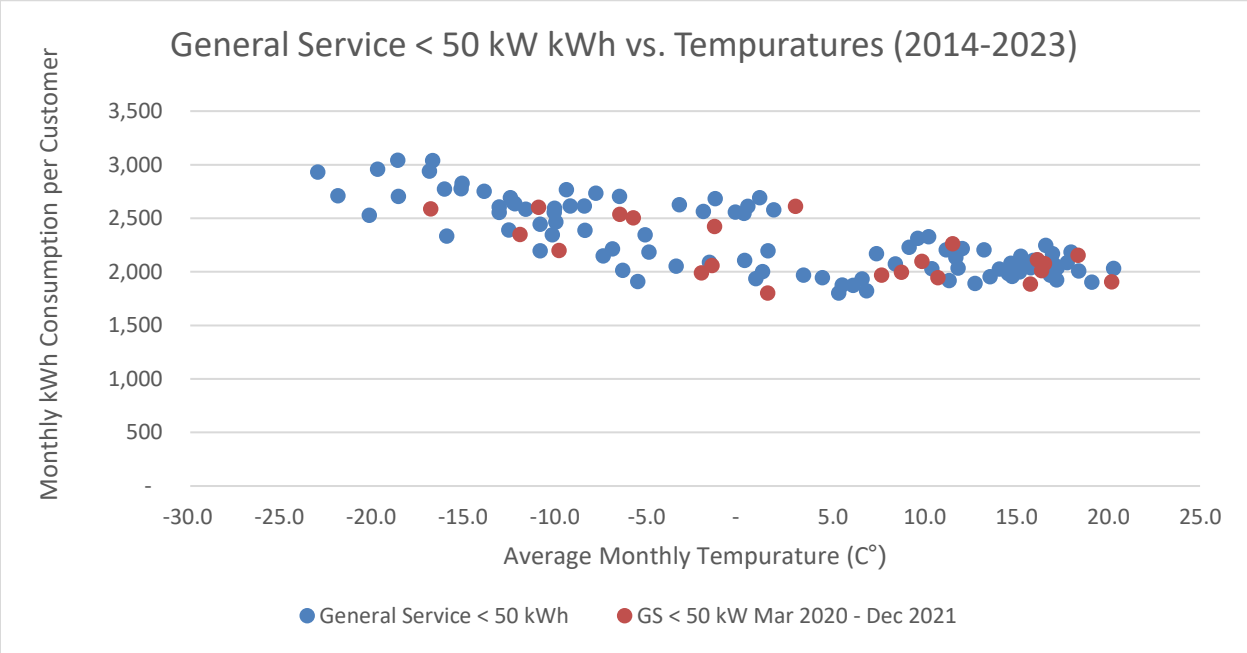



**Figure 3 GS<50 kWh and Average Temperature**

The number of GS < 50 kW customers was found to be statistically significant so it is used in the model.

Economic variables, such as Ontario employment and various GDP measures, were tested but not found to be statistically significant variables.

The fall and December variables were found to be statistically significant and were used in the GS < 50 model.

The COVID variables were tested and not found to have statistical significance so these variables are not used in the GS < 50 model.

The time trend and other calendar variables were tested but found to not have statistically significant relationships to energy usage.

The following table outlines the resulting regression model:

| Model 2: Prais-Winsten, using observations 2014:01-2023:12 (T = 120)<br>Dependent variable: GSlt50_NoCDM<br>rho = 0.12276 | | | | |
|---|---|---|---|---|
| | coefficient | std. error | t-ratio | p-value |
| const | 223,673 | 322,894 | 0.693 | 0.4899 |
| HDD10 | 640 | 36 | 17.987 | 0.0000 |
| Fall | -261,118 | 26,377 | -9.899 | 0.0000 |
| GSlt50Count | 1,780 | 442 | 4.022 | 0.0001 |
| Dec | -215,622 | 34,840 | -6.189 | 0.0000 |
| | | | | |
| Statistics based on the rho-differenced data | | | | |
| Mean dependent var | 1.165E+12 | S.E. of regression | 100,661 | |
| Sum squared resid | 8.30E-01 | Adjusted R-squared | 0.8238 | |
| R-squared | 117.55 | P-value(F) | 0.0000 | |
| F(5, 115) | -0.02 | Durbin-Watson | 2.02E+00 | |
| rho | 1.165E+12 | S.E. of regression | 100,661 | |

Table 11 GS < 50 Regression Model

Using the above model coefficients we derive the following:

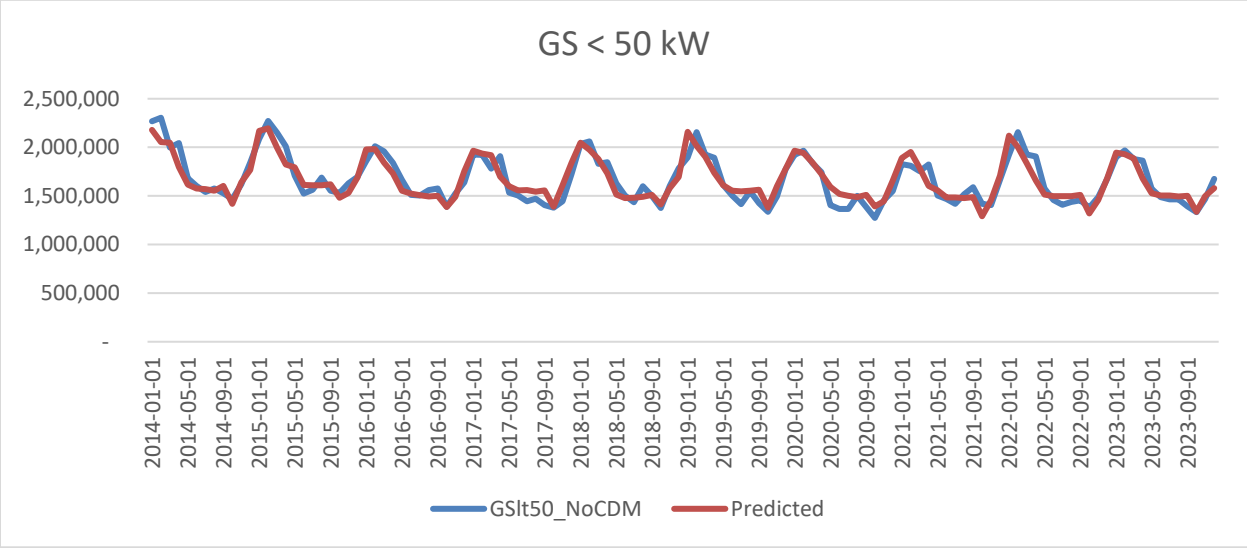



Figure 4 GS<50 Predicted vs Actual Observations

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 2.0%. The MAPE calculated monthly over the period is 4.7%.

| | GS<50 kWh | | Absolute |
|---|---|---|---|
| Year | CDM Added Back | Predicted | Error (%) |
| 2014 | 21,470,123 | 20,832,292 | 3.0% |
| 2015 | 21,418,851 | 21,128,420 | 1.4% |
| 2016 | 20,043,153 | 19,751,876 | 1.5% |
| 2017 | 19,451,380 | 20,185,732 | 3.8% |
| 2018 | 20,203,394 | 19,799,077 | 2.0% |
| 2019 | 19,979,092 | 20,398,019 | 2.1% |
| 2020 | 18,776,778 | 19,591,314 | 4.3% |
| 2021 | 19,205,970 | 19,177,447 | 0.1% |
| 2022 | 19,792,479 | 19,586,439 | 1.0% |
| 2023 | 19,475,025 | 19,391,014 | 0.4% |
| **Total** | **199,816,247** | **199,841,632** | **0.0%** |
| | | | |
| Mean Absolute Percentage Error (Annual) | | | 2.0% |
| Mean Absolute Percentage Error (Monthly) | | | 4.7% |

Table 12 GS < 50 model error

## 2.3 GS > 50

For the GS > 50 class, the regression equation was estimated using 120 observations from 2014:01-2023:12. Consumption is relatively stable when the average monthly temperature is above 10°C increases at lower average temperatures. HDD relative to 10°C and no CDD variable were found to provide the strongest results. No CDD variable was found to be statistically significant.

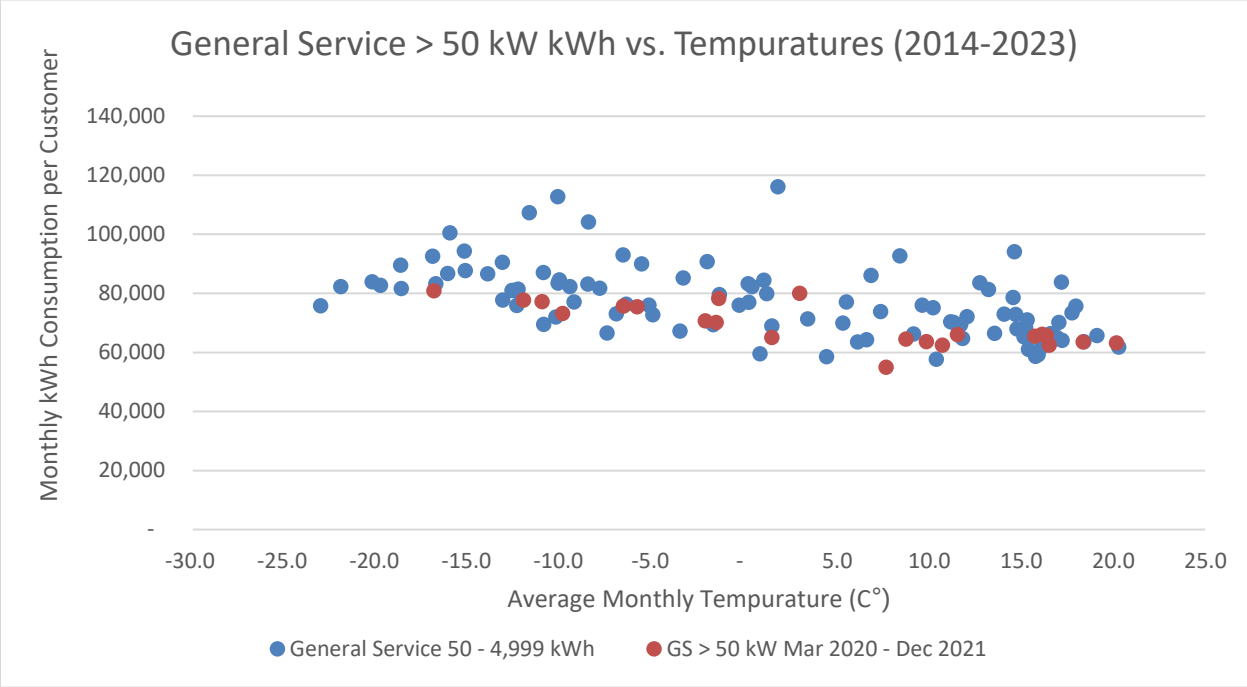



Figure 5 GS>50 kWh and Average Temperature

Economic variables, such as Ontario employment and various GDP measures, were tested but not found to be statistically significant variables.

The COVID variables were tested and the COVID_AM variable provided the most statistically significant results. This variable is used in the GS > 50 kW model.

The fall and December variables were found to be statistically significant and were used in the GS < 50 model.

The customer count, time trend variables, and 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:

| Model 3: Prais-Winsten, using observations 2014:01-2023:12 (T = 120)<br>Dependent variable: GSgt50_NoCDM<br>rho = 0.290157 | | | | |
|---|---|---|---|---|
| | coefficient | std. error | t-ratio | p-value |
| const | 4,606,298 | 63,282 | 72.790 | 0.0000 |
| HDD10 | 1,380 | 125 | 11.005 | 0.0000 |
| Spring | 148,048 | 78,477 | 1.887 | 0.0617 |
| Fall | - 264,108 | 86,351 | -3.059 | 0.0028 |
| | | | | |
| Statistics based on the rho-differenced data | | | | |
| Mean dependent var | 1.12E+13 | S.E. of regression | 313,748 | |
| Sum squared resid | 0.71 | Adjusted R-squared | 0.7022 | |
| R-squared | 45.40 | P-value(F) | 1.38E-25 | |
| F(5, 114) | - 0.05 | Durbin-Watson | 2.08351 | |
| rho | 1.12E+13 | S.E. of regression | 313,748 | |

Table 13 GS>50 Regression Model

Using the above model coefficients we derive the following:

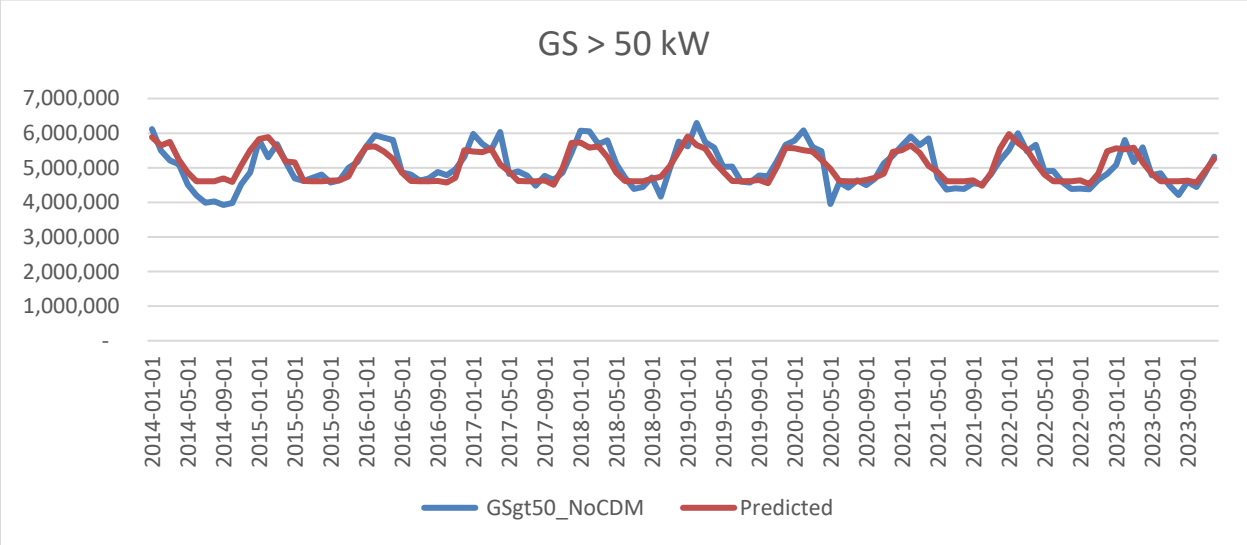



Figure 6 GS>50 Predicted vs Actual Observations

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 2.4%. The MAPE calculated monthly over the period is 5.1%.

| | GS>50 kWh | | Absolute |
|---|---|---|---|
| Year | CDM Added Back | Predicted | Error (%) |
| 2014 | 55,925,468 | 61,028,971 | 9.1% |
| 2015 | 60,145,601 | 60,731,411 | 1.0% |
| 2016 | 62,123,388 | 60,023,626 | 3.4% |
| 2017 | 61,877,747 | 60,118,763 | 2.8% |
| 2018 | 61,856,847 | 60,846,343 | 1.6% |
| 2019 | 62,832,835 | 60,787,201 | 3.3% |
| 2020 | 60,174,451 | 60,206,832 | 0.1% |
| 2021 | 59,993,612 | 59,844,132 | 0.2% |
| 2022 | 59,661,276 | 60,434,100 | 1.3% |
| 2023 | 59,147,737 | 59,840,354 | 1.2% |
| **Total** | **603,738,963** | **603,861,732** | **0.0%** |
| | | | |
| Mean Absolute Percentage Error (Annual) | | | 2.4% |
| Mean Absolute Percentage Error (Monthly) | | | 5.1% |

Table 14 GS>50 model error

# 3 WEATHER NORMALIZATION AND ECONOMIC FORECAST

It is not possible to accurately forecast weather for months or years in advance. Therefore, future weather expectations can be based only on what has happened in the past. Individual years may experience unusual spells of weather (unusually cold winter, unusually warm summer, etc.). However, over time, these unusual spells “average” out. While there may be trends over several years (e.g., warmer winters for example), using several years of data rather than one particular year filters out the extremes of any particular year. While there are several different approaches to determining an appropriate weather normal, NOWI has adopted the most recent 10-year monthly degree day average as the definition of weather normal.

## 3.1 10-YEAR AVERAGE

The table below displays the most recent 10-year average of heating degree days and cooling degree days for a number of temperature thresholds based on temperatures reported by Environment Canada for Kapuskasing CDA Climate, which is used as the weather station for NOWI.

In a few instances in the 2014 to 2023 period, daily Kapuskasing CDA Climate data was not available. If data was not available from the Kapuskasing CDA Climate weather station, data from the Kapuskasing Airport or Lake Bonner weather stations were used.

| | 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 | 731 | 0 | 793 | 0 | 855 | 0 | 917 | 0 | 979 | 0 | 1,041 | - | 1,103 | - |
| February | 680 | 0 | 736 | 0 | 793 | 0 | 849 | 0 | 905 | 0 | 962 | - | 1,018 | - |
| March | 515 | 0 | 577 | 0 | 639 | 0 | 701 | 0 | 763 | 0 | 825 | - | 887 | - |
| April | 250 | 3 | 307 | 0 | 367 | 0 | 427 | 0 | 487 | 0 | 547 | - | 607 | - |
| May | 71 | 93 | 103 | 63 | 143 | 40 | 188 | 24 | 240 | 14 | 295 | 6 | 353 | 2 |
| June | 2 | 224 | 6 | 168 | 14 | 117 | 32 | 74 | 61 | 44 | 100 | 23 | 146 | 9 |
| July | 0 | 307 | 0 | 246 | 1 | 185 | 6 | 128 | 19 | 79 | 44 | 42 | 82 | 18 |
| August | 0 | 259 | 2 | 198 | 6 | 141 | 17 | 89 | 39 | 50 | 75 | 24 | 122 | 8 |
| September | 13 | 139 | 28 | 95 | 54 | 60 | 89 | 36 | 133 | 19 | 183 | 9 | 237 | 3 |
| October | 129 | 34 | 178 | 20 | 230 | 11 | 287 | 5 | 346 | 2 | 407 | 1 | 468 | 0 |
| November | 345 | 2 | 404 | 1 | 463 | 1 | 523 | 0 | 583 | 0 | 643 | - | 703 | - |
| December | 568 | 0 | 630 | 0 | 692 | 0 | 754 | 0 | 816 | 0 | 878 | - | 940 | - |

Table 15 - 10 Year Average HDD and CDD

## 3.2 ECONOMIC FORECAST

GDP and employment forecasts are based on the mean forecasts of four major Canadian banks TD, BMO, Scotiabank, RBC as of July 2024. Average forecast rates are applied to the most recent GDP and Labour Force Survey monthly data available.

| Report Date | TD<br>19-Jun-24 | BMO<br>19-Jul-24 | Scotia<br>18-Jul-24 | RBC<br>12-Jun-24 | Average |
|---|---|---|---|---|---|
| FTE (Employment growth % YoY) | | | | | |
| 2023 | 1.6% | 1.4% | 1.2% | 1.6% | 1.45% |
| 2024 | 0.8% | 1.3% | 1.1% | 0.5% | 0.93% |
| 2025 | 1.5% | 2.3% | 2.0% | 1.9% | 1.93% |
| GDP (Real GDP % YoY) | | | | | |
| 2023 | 2.4% | 2.4% | 2.4% | 2.4% | 2.40% |
| 2024 | 1.3% | 1.4% | 1.3% | 0.9% | 1.23% |
| 2025 | 0.9% | 2.0% | 1.2% | 1.8% | 1.48% |

Table 16 Economic Forecasts

Economic data was tested for each weather-sensitive class but no economic variables were used.

# 4 CLASS SPECIFIC NORMALIZED FORECASTS

## 4.1 RESIDENTIAL

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

| Residential kWh | | | | | | |
|---|---|---|---|---|---|---|
| Year | Actual<br>A | Cumulative Persisting CDM<br>B | Actual No CDM<br>C = A + B | Normalized No CDM<br>D | Cumulative Persisting CDM<br>E = B | Normalized<br>F = D - E |
| 2014 | 43,480,804 | 383,973 | 43,864,777 | 42,963,025 | 383,973 | 42,579,052 |
| 2015 | 41,684,696 | 539,618 | 42,224,314 | 41,739,996 | 539,618 | 41,200,378 |
| 2016 | 38,772,515 | 804,075 | 39,576,590 | 40,085,191 | 804,075 | 39,281,116 |
| 2017 | 37,483,079 | 1,413,617 | 38,896,696 | 39,271,833 | 1,413,617 | 37,858,217 |
| 2018 | 38,878,731 | 1,697,601 | 40,576,332 | 39,930,781 | 1,697,601 | 38,233,180 |
| 2019 | 38,802,690 | 1,773,952 | 40,576,642 | 40,014,058 | 1,773,952 | 38,240,106 |
| 2020 | 40,126,981 | 1,739,600 | 41,866,581 | 42,118,170 | 1,739,600 | 40,378,571 |
| 2021 | 39,104,541 | 1,688,039 | 40,792,580 | 41,552,985 | 1,688,039 | 39,864,946 |
| 2022 | 39,671,263 | 1,696,741 | 41,368,004 | 41,300,771 | 1,696,741 | 39,604,029 |
| 2023 | 39,128,268 | 1,709,987 | 40,838,255 | 41,603,961 | 1,709,987 | 39,893,974 |
| 2024 | | | | 42,935,262 | 1,689,591 | 41,245,671 |
| 2025 | | | | 42,935,262 | 1,660,007 | 41,275,255 |

Table 17 Actual vs Normalized Residential kWh

Additional loads, as described further in Section 6 below, to account for increased loads from electric vehicles and heat pumps are forecast and added to the weather normalized forecasts for 2024 and 2025. These loads are from emerging technologies so they wouldn't be reflected in a forecast based only on historic loads.

| | Normalized Forecast | Additional Loads | Total kWh Forecast |
|---|---|---|---|
| 2024 | 41,245,671 | 109,127 | 41,354,798 |
| 2025 | 41,275,255 | 278,959 | 41,554,215 |

Table 18 Additional Residential kWh Consumption

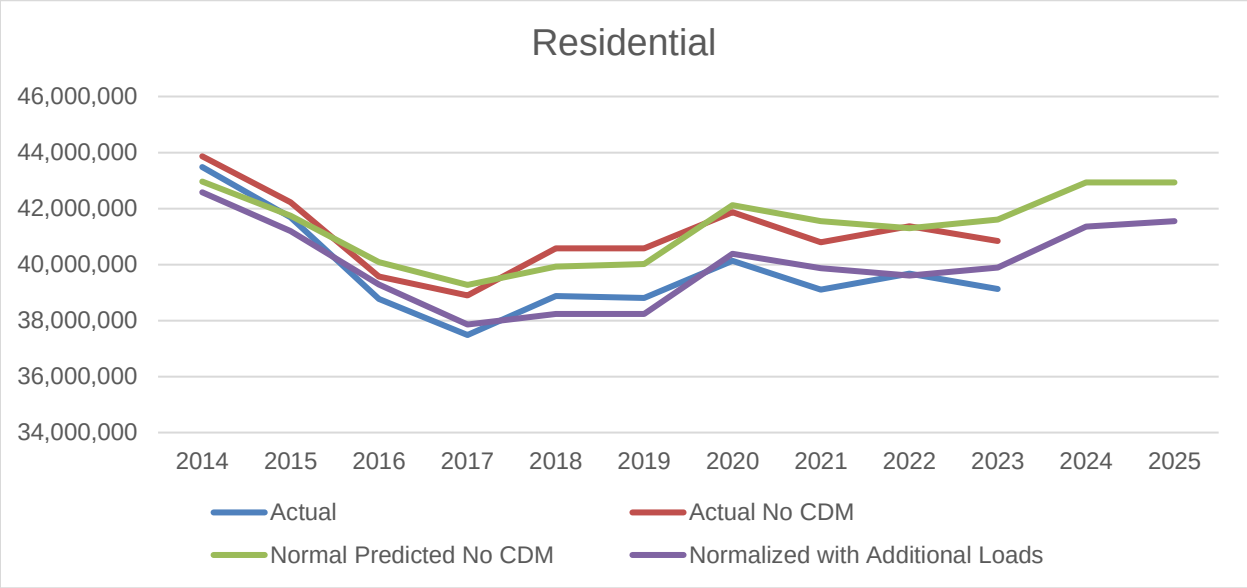



Figure 7 Actual vs Normalized Residential kWh

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. The Geometric mean of the annual growth from 2014 to 2023 was used to forecast the growth rate from 2023 to 2025.

| Year | Residential Customers | Percent of Prior Year |
|---|---|---|
| 2014 | 5,263 | |
| 2015 | 5,233 | 99.43% |
| 2016 | 5,208 | 99.52% |
| 2017 | 5,202 | 99.88% |
| 2018 | 5,157 | 99.14% |
| 2019 | 5,107 | 99.02% |
| 2020 | 5,155 | 100.93% |
| 2021 | 5,166 | 100.22% |
| 2022 | 5,161 | 99.91% |
| 2023 | 5,194 | 100.64% |
| 2024 | 5,186.5 | 99.85% |
| 2025 | 5,178.9 | 99.85% |

Table 19 Forecasted Residential Customer Count

## 4.2 GS < 50

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

| | GS < 50 kWh | | | | | |
|---|---|---|---|---|---|---|
| Year | Actual | Cumulative Persisting CDM | Actual No CDM | Normalized No CDM | Cumulative Persisting CDM | Normalized |
| | A | B | C = A + B | D | E = B | F = D - E |
| 2014 | 20,165,300 | 1,304,823 | 21,470,123 | 21,171,860 | 1,304,823 | 19,867,037 |
| 2015 | 19,810,828 | 1,608,023 | 21,418,851 | 21,258,658 | 1,608,023 | 19,650,635 |
| 2016 | 18,349,612 | 1,693,541 | 20,043,153 | 20,211,378 | 1,693,541 | 18,517,837 |
| 2017 | 17,706,302 | 1,745,078 | 19,451,380 | 19,575,460 | 1,745,078 | 17,830,383 |
| 2018 | 17,940,823 | 2,262,571 | 20,203,394 | 19,989,872 | 2,262,571 | 17,727,301 |
| 2019 | 17,709,286 | 2,269,806 | 19,979,092 | 19,793,012 | 2,269,806 | 17,523,206 |
| 2020 | 16,586,733 | 2,190,045 | 18,776,778 | 18,859,993 | 2,190,045 | 16,669,949 |
| 2021 | 17,080,206 | 2,125,764 | 19,205,970 | 19,457,482 | 2,125,764 | 17,331,717 |
| 2022 | 17,769,474 | 2,023,005 | 19,792,479 | 19,770,241 | 2,023,005 | 17,747,236 |
| 2023 | 17,511,886 | 1,963,139 | 19,475,025 | 19,728,289 | 1,963,139 | 17,765,151 |
| 2024 | | | | 19,548,550 | 1,716,180 | 17,832,370 |
| 2025 | | | | 19,453,360 | 1,375,005 | 18,078,355 |

Table 20 Actual vs Normalized GS < 50 kWh

Additional loads, as described further in Section 6 below, to account for a modest amount of increased loads from electric vehicles and heat pumps are forecast and added to the weather normalized forecasts for 2024 and 2025. These loads are from emerging technologies so they wouldn't be reflected in a forecast based only on historic loads.

| | Normalized Forecast | Additional Loads | Total kWh Forecast |
|---|---|---|---|
| 2024 | 17,832,370 | 41,714 | 17,874,083 |
| 2025 | 18,078,355 | 96,266 | 18,174,621 |

Table 21 Additional GS<50 kWh Consumption

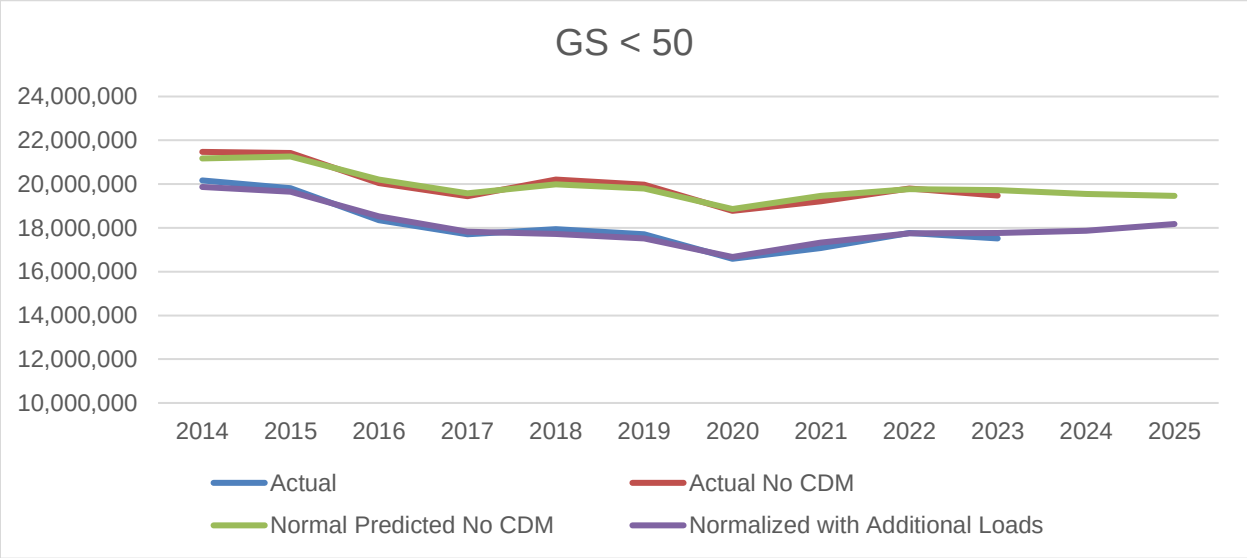



Figure 8 Actual vs Normalized GS<50 kWh

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 2014 to 2023 was used to forecast the growth rate from 2023 to 2025.

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

| GS < 50 | | Percent of Prior Year |
|---|---|---|
| Year | Customers | |
| 2014 | 758 | |
| 2015 | 778 | 102.68% |
| 2016 | 729 | 93.69% |
| 2017 | 747 | 102.50% |
| 2018 | 713 | 95.46% |
| 2019 | 743 | 104.11% |
| 2020 | 717 | 96.61% |
| 2021 | 706 | 98.40% |
| 2022 | 712 | 100.90% |
| 2023 | 716 | 100.53% |
| 2024 | 711.4 | 99.37% |
| 2025 | 707.0 | 99.37% |

Table 22 Forecasted GS<50 Customer Count

## 4.3 GS > 50

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

| GS < 50 kWh | | | | | | |
|---|---|---|---|---|---|---|
| Year | Actual<br>A | Cumulative Persisting CDM<br>B | Actual No CDM<br>C = A + B | Normalized No CDM<br>D | Cumulative Persisting CDM<br>E = B | Normalized<br>F = D - E |
| 2014 | 55,514,123 | 411,345 | 55,925,468 | 55,282,670 | 411,345 | 54,871,325 |
| 2015 | 59,448,871 | 696,730 | 60,145,601 | 59,800,364 | 696,730 | 59,103,633 |
| 2016 | 60,749,110 | 1,374,278 | 62,123,388 | 62,485,935 | 1,374,278 | 61,111,657 |
| 2017 | 59,958,733 | 1,919,014 | 61,877,747 | 62,145,157 | 1,919,014 | 60,226,143 |
| 2018 | 59,526,842 | 2,330,005 | 61,856,847 | 61,396,678 | 2,330,005 | 59,066,672 |
| 2019 | 60,254,777 | 2,578,058 | 62,832,835 | 62,431,807 | 2,578,058 | 59,853,749 |
| 2020 | 57,599,230 | 2,575,221 | 60,174,451 | 60,353,793 | 2,575,221 | 57,778,571 |
| 2021 | 57,309,861 | 2,683,751 | 59,993,612 | 60,535,653 | 2,683,751 | 57,851,902 |
| 2022 | 56,933,855 | 2,727,421 | 59,661,276 | 59,613,350 | 2,727,421 | 56,885,929 |
| 2023 | 56,007,213 | 3,140,523 | 59,147,737 | 59,693,556 | 3,140,523 | 56,553,033 |
| 2024 | | | | 60,386,173 | 3,084,013 | 57,302,160 |
| 2025 | | | | 60,386,173 | 2,886,318 | 57,499,856 |

Table 23 Actual vs Normalized GS>50 kWh

Additional loads, as described further in Section 6 below, to account for increased loads from electric vehicles and heat pumps are forecast and added to the weather normalized forecasts for 2024 and 2025. These loads are from emerging technologies so they wouldn't be reflected in a forecast based only on historic loads.

| | Normalized Forecast | Additional Loads | Total kWh Forecast |
|---|---|---|---|
| 2024 | 57,302,160 | 13,350 | 57,315,510 |
| 2025 | 57,499,856 | 43,195 | 57,543,051 |

Table 24 Additional GS>50 kWh Consumption

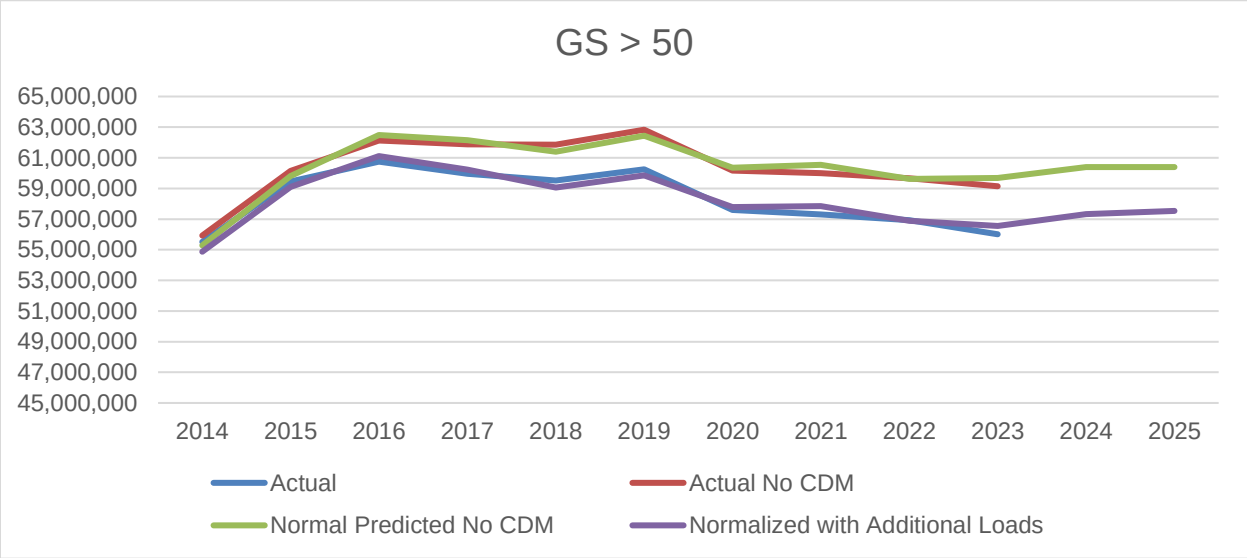



Figure 9 Actual vs Normalized GS>50 kWh

The Geometric mean of the annual growth from 2014 to 2023 was used to forecast the customer count growth rate from 2023 to 2025.

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

| Year | GS > 50 Customers | Percent of Prior Year |
|---|---|---|
| 2014 | 68 | |
| 2015 | 69 | 101.71% |
| 2016 | 63 | 90.49% |
| 2017 | 54 | 86.17% |
| 2018 | 69 | 127.16% |
| 2019 | 69 | 99.76% |
| 2020 | 72 | 104.87% |
| 2021 | 71 | 98.38% |
| 2022 | 68 | 95.87% |
| 2023 | 69 | 101.60% |
| 2024 | 68.9 | 100.12% |
| 2025 | 69.0 | 100.12% |

Table 25 Forecasted GS>50 Customer Count

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 2019-2023. A 10-year average was considered, however, the kW/kWh ratio changed from the 2014-2018 period to the 2019-2023 period. From 2014 to 2023, class consumption increased by 1% and

billed demands decreased by 12%. Over the shorter 5-year time period, consumption decreased by 7% and billed demands declined by 12%. This narrower divergence in the 5-year time frame is used because it better reflects recent ratios. Additionally, the 10-year average would produce a ratio that is higher than any year since 2019.

| | | GS > 50 | |
|---|---|---|---|
| | kWh | kW | Ratio |
| | A | B | C = B / A |
| 2014 | 55,514,123 | 140,477 | 0.00253 |
| 2015 | 59,448,871 | 174,544 | 0.00294 |
| 2016 | 60,749,110 | 171,062 | 0.00282 |
| 2017 | 59,958,733 | 171,236 | 0.00286 |
| 2018 | 59,526,842 | 183,205 | 0.00308 |
| 2019 | 60,254,777 | 171,055 | 0.00284 |
| 2020 | 57,599,230 | 161,087 | 0.00280 |
| 2021 | 57,309,861 | 156,227 | 0.00273 |
| 2022 | 56,933,855 | 155,849 | 0.00274 |
| 2023 | 56,007,213 | 151,260 | 0.00270 |

| | kWh Normalized | kW Normalized | Average | Additional Load | Total |
|---|---|---|---|---|---|
| | E | F = E * G | G | H | I = E + H |
| 2022 | 57,315,510 | 158,187 | 0.00276 | 91 | 158,278 |
| 2023 | 57,543,051 | 158,815 | 0.00276 | 296 | 159,111 |

Table 26 Forecasted GS>50 kW

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

# 5 STREET LIGHT, SENTINEL LIGHT, AND USL FORECAST

The Street Lighting and Unmetered Scattered Load classes are non-weather sensitive classes. Connection counts are forecasted to be the same in 2024 and 2025 as it was in 2023 for both classes. The Street Light class has had no change in the number of connections since 2019 and the USL class has had 22 or 23 connections in each year in the past ten years. Energy volumes for these classes are forecasted on the basis of average energy per connection.

## 5.1 STREET LIGHT

The table below summarizes the historic and forecast annual energy consumption for the Street Light class. NOWI underwent a LED conversion from 2015 to 2017, which saw a 64% reduction in consumption per connection. The 2023 average consumption per connection is used as the average consumption per connection in 2024 and 2025.

| Year | Streetlight kWh Actual A | Connections B | Average / Connection C = A / B | Normalized D = C * B |
|---|---|---|---|---|
| 2014 | 1,444,270 | 1,650 | 875 | 1,444,270 |
| 2015 | 664,378 | 1,650 | 403 | 664,378 |
| 2016 | 607,008 | 1,650 | 368 | 607,008 |
| 2017 | 513,973 | 1,650 | 311 | 513,973 |
| 2018 | 517,432 | 1,660 | 312 | 517,432 |
| 2019 | 524,449 | 1,710 | 307 | 524,449 |
| 2020 | 526,417 | 1,710 | 308 | 526,417 |
| 2021 | 531,088 | 1,710 | 311 | 531,088 |
| 2022 | 492,972 | 1,710 | 288 | 492,972 |
| 2023 | 491,060 | 1,710 | 287 | 491,060 |
| 2024 | | 1,710 | 287 | 491,060 |
| 2025 | | 1,710 | 287 | 491,060 |

Table 27 Street Light Consumption Forecast

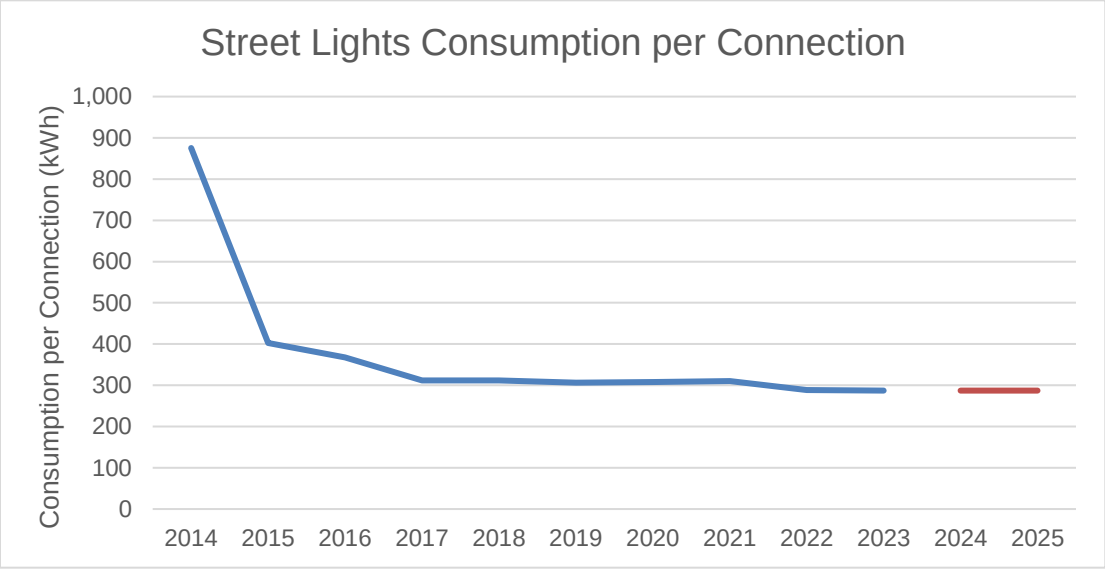



Figure 10 Street Light kWh per Connection

The Street Light connection count has been stable since 2019 so this count is carried forward to 2024 and 2025.

| Year | Street Light Connections | Percent of Prior Year |
|---|---|---|
| 2014 | 1,650 | |
| 2015 | 1,650 | 100.00% |
| 2016 | 1,650 | 100.00% |
| 2017 | 1,650 | 100.00% |
| 2018 | 1,660 | 100.58% |
| 2019 | 1,710 | 103.04% |
| 2020 | 1,710 | 100.00% |
| 2021 | 1,710 | 100.00% |
| 2022 | 1,710 | 100.00% |
| 2023 | 1,710 | 100.00% |
| 2024 | 1,710 | 100.00% |
| 2025 | 1,710 | 100.00% |

Table 28 Forecasted Street Light Connection Count

The kW/kWh ratio has increased in the last two years so a 2-year average of the ratio in 2022 and 2023 is applied to normalized consumption to forecast kW demand.

| | Street Lights | | |
|---|---|---|---|
| | kWh | kW | Ratio |
| | A | B | C = B / A |
| 2014 | 1,444,270 | 2,715 | 0.00188 |
| 2015 | 664,378 | 1,980 | 0.00298 |
| 2016 | 607,008 | 1,503 | 0.00248 |
| 2017 | 513,973 | 1,392 | 0.00271 |
| 2018 | 517,432 | 1,421 | 0.00275 |
| 2019 | 524,449 | 1,463 | 0.00279 |
| 2020 | 526,417 | 1,500 | 0.00285 |
| 2021 | 531,088 | 1,532 | 0.00288 |
| 2022 | 492,972 | 1,517 | 0.00308 |
| 2023 | 491,060 | 1,425 | 0.00290 |
| | kWh Normalized | kW Normalized | Average |
| | E | F = E * G | G |
| 2024 | 491,060 | 1,468 | 0.00299 |
| 2025 | 491,060 | 1,468 | 0.00299 |

Table 29 Forecasted Street Light kW

## 5.2 USL

The following table summarizes historic and forecast annual energy consumption for NOWI's USL class. Consumption in 2024 and 2025 has been forecasted based on 2023 consumption per connection and 2023 connection counts.

| | USL | | | |
|---|---|---|---|---|
| Year | Actual A | Conn. B | Average / Connection C = A / B | Normal Forecast D = C * B |
| 2014 | 157,125 | 22 | 7,035 | 157,125 |
| 2015 | 164,178 | 23 | 7,138 | 164,178 |
| 2016 | 164,178 | 23 | 7,138 | 164,178 |
| 2017 | 164,178 | 23 | 7,138 | 164,178 |
| 2018 | 164,178 | 23 | 7,138 | 164,178 |
| 2019 | 164,178 | 23 | 7,138 | 164,178 |
| 2020 | 164,178 | 23 | 7,138 | 164,178 |
| 2021 | 164,159 | 23 | 7,137 | 164,159 |
| 2022 | 163,953 | 22 | 7,452 | 163,953 |
| 2023 | 163,953 | 22 | 7,452 | 163,953 |
| 2024 | | 22 | 7,452 | 163,953 |
| 2025 | | 22 | 7,452 | 163,953 |

Table 30 USL Consumption Forecast

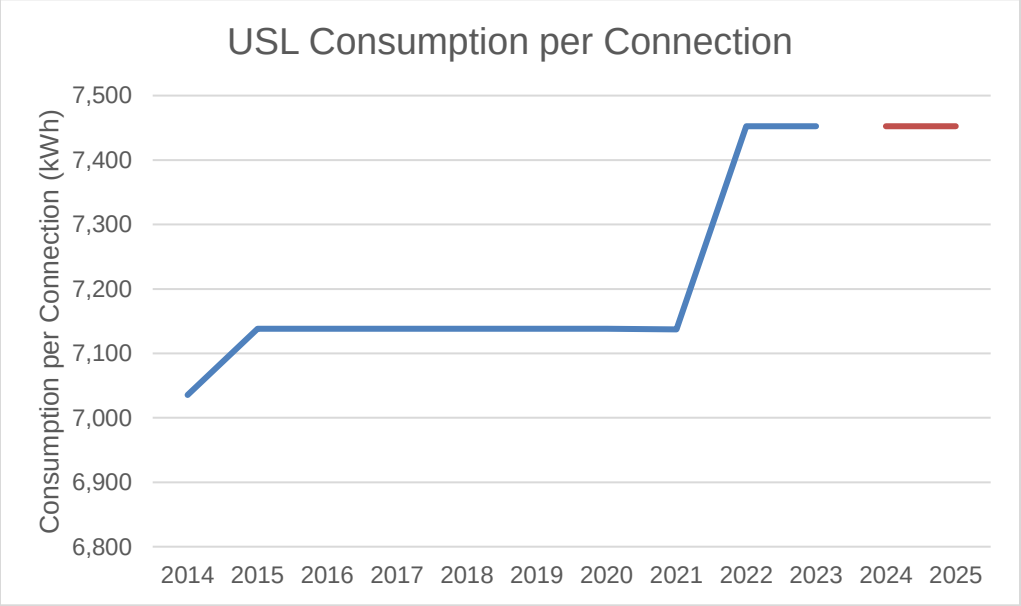



Figure 11 USL kWh per Connection

The number of USL connections has been 22 or 23 in each year over the last 10 years. There were 22 connections in 2022 and 2023 so this number is used as the forecast for 2024 and 2025.

| Year | USL Connections | Percent of Prior Year |
|---|---|---|
| 2014 | 22 | |
| 2015 | 23 | 102.99% |
| 2016 | 23 | 100.00% |
| 2017 | 23 | 100.00% |
| 2018 | 23 | 100.00% |
| 2019 | 23 | 100.00% |
| 2020 | 23 | 100.00% |
| 2021 | 23 | 100.00% |
| 2022 | 22 | 95.65% |
| 2023 | 22 | 100.00% |
| 2024 | 22 | 100.00% |
| 2025 | 22 | 100.00% |

Table 31 Forecasted USL Connections

# 6 ADDITIONAL LOADS

NOWI'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 and layered onto the top-down forecast that is based on historic loads.

## 6.1 ELECTRIC VEHICLES

Electric vehicle consumption is forecast based on Canada's zero-emission vehicle sales target to reach 20% by 2026, estimated consumption per type of EV, EV statistics from Statistics Canada, and population data from the 2016 and 2021 Canadian Census. The data from Statistics Canada includes the total number of EVs sold in Cochrane, Iroquois Falls, and Kapuskasing, and the number of EVs sold in Ontario by type of vehicle.

Statistics Canada provides data for the total number of zero-emission vehicles by municipality, but this data does not provide a breakdown between type of vehicle at the municipal level. This data by type of vehicle is available at the provincial level so it is assumed that the number of the number of each type of EV as a share of total EVs in Ontario is the same as the share in NOWI's service area.

The total number of EVs in NOWI's area and the number of EVs in Ontario by type are provided in the table below.

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | |
|---|---|---|---|---|---|---|---|---|
| NOWI New EVs | 3 | 6 | 3 | 1 | 7 | 16 | 15 | A |
| ON New EVs | 8,180 | 16,758 | 9,762 | 10,515 | 19,726 | 38,655 | 49,810 | B |
| NOWI % of ON EVs | 0.04% | 0.04% | 0.03% | 0.01% | 0.04% | 0.04% | 0.03% | C = A / B |
| **EVs by Type in Ontario** | | | | | | | | |
| Passenger EVs | 6,191 | 12,828 | 7,124 | 5,699 | 8,035 | 13,160 | 10,992 | D |
| Multi-Purp. EVs | 1,467 | 3,055 | 2,546 | 4,681 | 11,410 | 23,927 | 35,877 | E |
| Vans EVs | 522 | 875 | 92 | 135 | 281 | 695 | 1,126 | F |
| Pickup Truck EVs | - | - | - | - | - | 873 | 1,808 | G |
| **EV Types as % of Total EVs** | | | | | | | | |
| Passenger EVs | 75.7% | 76.5% | 73.0% | 54.2% | 40.7% | 34.0% | 22.1% | H = D / B |
| Multi-Purp. EVs | 17.9% | 18.2% | 26.1% | 44.5% | 57.8% | 61.9% | 72.0% | I = E / B |
| Vans EVs | 6.4% | 5.2% | 0.9% | 1.3% | 1.4% | 1.8% | 2.3% | J = F / B |
| Pickup Truck EVs | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.3% | 3.6% | K = G / B |

Table 32 Ontario and NOWI EV Statistics

These values are used to estimate the number of EVs by type in NOWI's service territory based on the actual total number of EVs. Passenger EVs and Multi-Purpose Vehicle EVs, which are SUVs and crossovers, are combined. Those vehicle types are assumed to have the same annual consumption. The share of Passenger and Multi-Purpose Vehicles have each changed significantly over the past seven years, but jointly the share has been reasonably consistent over time.

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | |
|---|---|---|---|---|---|---|---|---|
| **New Vehicles in NOWI** | | | | | | | | |
| Total (Actual) | **3** | **6** | **3** | **1** | **7** | **16** | **15** | L = A |
| Passenger & Multi-Purpose EVs | 3 | 6 | 3 | 1 | 7 | 15 | 14 | M = L * (H + I) |
| Van EVs | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | N = L * J |
| Pickup Truck EVs | - | - | - | - | - | 0.4 | 0.5 | O = L * K |

Table 33 Estimate of NOWI EVs by Type

The total number of EVs in NOWI's service area in the bridge and test years is forecast based on the number of vehicles sold in Ontario, the share of Ontario EVs sold in NOWI, and the target number of EVs sold in Canada. The most recent actual year is included as a reference and 2026 is included to show the trajectory to 2026, which is the next year with a specific EV sales target.

| | ***2023*** | **2024** | **2025** | ***2026*** | |
|---|---|---|---|---|---|
| All Vehicles in Ontario | *677,031* | *699,326* | *699,326* | *699,326* | P |
| New EV Target | *7.4%* | 11.6% | 15.8% | *20.0%* | Q |
| NOWI % of ON EVs | *0.03%* | 0.03% | 0.03% | *0.03%* | R |
| **Total New NOWI EVs** | **15** | **24** | **33** | **42** | **S = P * Q * R** |
| Passenger & Multi-Purp. | 14.1 | 22.9 | 31.3 | 39.6 | T = S * (H + I) |
| Van | 0.3 | 0.6 | 0.8 | 1.0 | U = S * J |
| Pickup Truck | 0.5 | 0.9 | 1.2 | 1.5 | V = S * K |

Table 34 Initial Forecast of EVs NOWI EVs by Type 2023-2026

Recognizing that EV adoption in NOWI's service area has been low, Elenchus expects for the trajectory of zero-emission EVs to 2026 will be slower than for the province as a whole. The Passenger & Multi-Purpose EV forecast is adjusted to be the average of EVs forecasted assuming Ontario EV sales will reach 20% in 2026 and the average number of EVs sold in 2022 and 2023. The number of Vans and Pickup Trucks is set at 0.5 in each year.

| | **2022/23 Average** | **2024 (Above)** | **2024 Forecast** | **2022/23 Average** | **2025 (Above)** | **2025 Forecast** |
|---|---|---|---|---|---|---|
| Passenger & Multi-Purp. | 14.7 | 22.9 | **18.8** | 14.7 | 31.3 | **23.0** |
| Van | 0.3 | 0.6 | ***0.5*** | 0.3 | 0.8 | ***0.5*** |
| Pickup Truck | 0.5 | 0.9 | ***0.5*** | 0.5 | 1.2 | ***0.5*** |
| **Total** | **15.5** | **24.4** | **19.8** | **15.5** | **33.2** | **24.0** |

Table 35 Adjusted Forecast of EVs NOWI EVs by Type 2023-2026

Table 36 provides a summary of the assumptions used to forecast EV sales in NOWI.

| **Metric** | **Basis of 2024/2025 Forecast** |
|---|---|
| All Vehicles in Ontario | Average 2017-2023 |
| New EV Target | Trajectory to 2026 Target & 2022/23 Average |
| NOWI % of ON EVs | 2024 equal to 2022/2023 share<br>2025 midpoint between 2024 and 2026<br>2026 NOWI share of Ontario EVs |
| Total New NOWI EVs | Total vehicles times share of EVs times NOWI share of EVs |
| Passenger & Multi-Purp. | Total NOWI EVs times 2023 share of vehicle type |
| Van | Total NOWI EVs times 2023 share of vehicle type |
| Pickup Truck | Total NOWI EVs times 2023 share of vehicle type |

Table 36 Basis of Forecast Elements

The total number of total Ontario vehicle sales as fluctuated in recent years, primarily due to COVID-19 and associated supply chain issues. The number of vehicles sold in 2024 and 2025 is assumed to be the average of the number of vehicles sold from 2017 to 2023. There are no specific targets for 2024 and 2025 so EV sales as a share of total vehicle sales targets are equal annual increases (4.2%/year) from the actual 7.4% to the 20%

2026 target. The share of total Ontario EVs sold in NOWI is based on the actual share of 0.03% in 2023 persisting. The forecast share of EVs in NOWI beginning in 2026 is assumed to be its share of EVs in Ontario. The total number of EVs sold in NOWI in each year is calculated as the total number of vehicles sold in Ontario multiplied by the target share of EVs sold multiplied by NOWI's share of total EVs, adjusted by NOWI's historic actual EV sales.

Calculations for the average consumption per type of vehicle is provided in Table 37. The average distance is based on the average distance driven each day from the "EV Charging Performances Requirement Study" prepared by AES Engineering.[6] This study does not include NOWI's service area so the highest distance was used as it is more likely to align with NOWI's service areas than the other, more urban, areas included in the study. The average efficiency per type of vehicle is based on a review of efficiency ratings from NRCan's Fuel Consumption Guides[7], Plug n' Drive's summary of EVs available in Canada, and the share of "zero-emission" EVs that are full battery EVs compared to plug-in hybrid EVs.

| | Avg. Distance | Battery EVs | | PHEV | | Avg. Efficiency | Total Consumption per Vehicle |
|---|---|---|---|---|---|---|---|
| | km | kWh /100km | % Share | kWh /100km | % Share | kWh/100 km | kWh |
| | A = 70km * 365 | B | C | D | E | F = (B * C) + (D * E) | G = A * F |
| Passenger | 25,550 | 20 | 77.2% | 12 | 22.8% | 18.17 | 4,643 |
| Multi-purpose vehicles | 25,550 | 20 | 71.8% | 12 | 28.2% | 17.74 | 4,534 |
| Van | 25,550 | 25 | 19.0% | 15 | 81.0% | 16.90 | 4,318 |
| Pickup Truck | 25,550 | 30 | 100.0% | 18 | 0.00% | 30.00 | 7,665 |

Table 37 Consumption by EV Type

Cumulative and incremental kWh from EVs are calculated based on the number of EVs multiplied by the average consumption per vehicle. A half-year adjustment is included for new 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.

| | 2023 | 2024 | 2025 | 2026 | |
|---|---|---|---|---|---|
| **Pass. & MP EVs** | 14 | 19 | 23 | 28 | A |
| Cumulative EVs | 49 | 68 | 91 | 119 | B |
| Cumulative kWh | 193,905 | 270,390 | 367,519 | 486,055 | $C = (B^{t-1} + A/2) * 4,643$ |
| Incremental kWh | | 76,484 | 97,129 | 118,536 | $D = C - C^{t-1}$ |
| **Van EVs** | 0 | 1 | 1 | 1 | E |
| Cumulative EVs | 1.3 | 1.8 | 2.3 | 2.8 | F |
| Cumulative kWh | 4,762 | 6,574 | 8,733 | 10,892 | $G = (F^{t-1} + E/2) * 4,318$ |
| Incremental kWh | | 1,812 | 2,159 | 2,159 | $H = G - G^{t-1}$ |
| **Pickup Truck EVs** | 1 | 1 | 1 | 1 | I |
| Cumulative EVs | 1 | 1 | 2 | 2 | J |
| Cumulative kWh | 4,856 | 8,859 | 12,692 | 16,524 | $K = (J^{t-1} + I/2) * 7,665$ |
| Incremental kWh | | 4,003 | 3,833 | 3,833 | $L = K - K^{t-1}$ |

Table 38 Forecast EVs and kWh Consumption by EV Type

The allocation of incremental consumption is estimated based on judgement as NOWI does not have these details by rate class. The allocations and allocated incremental consumption by EV type to each class is provided in Table 39.

| | Allocations | | | 2024 kWh | | | 2025 kWh | | |
|---|---|---|---|---|---|---|---|---|---|
| | Pass/ Multi | Van | Pick-up Truck | Pass/ Multi | Van | Pick-up Truck | Pass/ Multi | Van | Pick-up Truck |
| Res. | 70% | 20% | 33% | 53,539 | 362 | 1,334 | 67,990 | 432 | 1,278 |
| GS<50 | 15% | 50% | 33% | 11,473 | 906 | 1,334 | 14,569 | 1,080 | 1,278 |
| GS>50 | 15% | 30% | 33% | 11,473 | 543 | 1,334 | 14,569 | 648 | 1,278 |
| **Total** | **100%** | **100%** | **100%** | **76,484** | **1,812** | **4,003** | **97,129** | **2,159** | **3,833** |

Table 39 Allocations to Rate Classes

Finally, Table 40 provides a summary of EV consumption and demand by rate class. Incremental 2024 consumption is added to class loads in the 2024 bridge year and 2025 incremental loads, plus twice the 2024 incremental load (to account for the half-year rule) is added to class loads in the 2025 test year. Incremental billed demands are forecast using an estimated 20% load factor.

| Rate Class | 2024 Incremental kWh | 2025 Incremental kWh | 2025 Incremental + 2024 Full kWh |
|---|---|---|---|
| Residential | 55,236 | 69,700 | 180,171 |
| GS<50 | 13,713 | 16,926 | 44,352 |
| GS>50 | 13,350 | 16,495 | 43,195 |
| **Total** | **82,299** | **103,121** | **267,718** |
| | **2024 Incremental kW** | **2025 Incremental kW** | **2025 Incremental + 2024 Full kW** |
| GS>50[8] | 91 | 113 | 296 |

Table 40 EV Forecast Summary

## 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 and GS<50 kW classes.

### 6.2.1 RESIDENTIAL AND GENERAL SERVICE < 50 KW

Average kWh per 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. The electricity heating consumption per customer is then adjusted according to the delivered heat kWh-equivalent to kWh ratio as per Natural Resources Canada.

| | Residential | GS<50 | Unit | Calculation / Source |
|---|---|---|---|---|
| Consumption per Year | 1,788 | 6,955 | $m^3$/year | Typical Enbridge Customer |
| Convert $m^3$ to GJ | 0.0343 | 0.0343 | GJ/$m^3$ | From NRCan |
| Convert GJ to kWh | 277 | 277 | kWh/GJ | From NRCan |
| Convert $m^3$ to kWh | 9.5011 | 9.5011 | kWh/$m^3$ | GJ/$m^3$ times kWh/$m^3$ |
| kWh per Customer | **16,988** | **66,080** | kWh/Customer | Avg. consumption per year times kWh/$m^3$ |
| Heat Pump Efficiency | 2.582 | 2.582 | Heat kWh-equivalent/kWh | NRCan Efficiency Ratings |
| Adj. Consumption | **6,579** | **25,593** | kWh/Customer | kWh per Customer times efficiency rating |

Table 41 Heating Consumption per Customer

Residential and GS<50 kW heating loads are forecast for both existing connections and new customers. It is assumed that 0.1% of existing customers will convert from natural gas to electricity heating each year and that 5% of new customers will have electric

[8] kW demand = [ ( kWh consumption / 20% load factor) / 8,760 hours ] times 12 months

heating. It is also assumed that 80% of new electric heating will use heat pumps. Annual forecast heating loads for the Residential and GS<50 kW class are provided in Table 42 and Table 43, respectively.

| **Residential** | **2022** | **2023** | **2024** | **2025** |
|---|---|---|---|---|
| Customer Count | 5,161 | 5,194 | 5,187 | 5,179 |
| Increase in customers/year | - | 33 | - | - |
| Conversions of Existing Connections % | 0.1% | 0.1% | 0.1% | 0.1% |
| New Connections with Electric Heating % | 5% | 5% | 5% | 5% |
| Existing Connections # | 5 | 5 | 5 | 5 |
| New Connections # | - | 2 | - | - |
| Total Connections | 5 | 7 | 5 | 5 |
| kWh/Customer | 8,661 | 8,661 | 8,661 | 8,661 |
| **Total kWh** | **44,701** | **59,028** | **44,921** | **44,855** |

Table 42 Residential Heating Summary

| **GS < 50 kW** | **2022** | **2023** | **2024** | **2025** |
|---|---|---|---|---|
| Customer Count | 712 | 716 | 711 | 707 |
| Increase in customers/year | 6 | 4 | - | - |
| Conversions of Existing Connections % | 0.1% | 0.1% | 0.1% | 0.1% |
| New Connections with Electric Heating % | 5% | 5% | 5% | 5% |
| Existing Connections # | 1 | 1 | 1 | 1 |
| New Connections # | 0 | 0 | - | - |
| Total Connections | 1 | 1 | 1 | 1 |
| kWh/Customer | 33,690 | 33,690 | 33,690 | 33,690 |
| **Total kWh** | **34,448** | **30,310** | **23,968** | **23,818** |

Table 43 GS<50 Heating Summary

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

| Heating Profile | | | |
|---|---|---|---|
| **Month** | **HDD** | **HDD %** | **Seasonal %** |
| January | 1,041.5 | 17.4% | 63.59% |
| February | 961.7 | 16.0% | |
| March | 825.2 | 13.8% | |
| April | 546.9 | 9.1% | |
| May | 294.9 | 4.9% | |
| June | 100.0 | 1.7% | |
| July | 44.5 | 0.7% | |
| August | 74.8 | 1.2% | 36.41% |
| September | 182.6 | 3.0% | |
| October | 406.6 | 6.8% | |
| November | 642.7 | 10.7% | |
| December | 877.7 | 14.6% | |
| **Total** | **5,999.1** | **100.0%** | **100%** |

Table 44 Seasonal Heating Calculation

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 2024, for example, is 63.6% of 2023 consumption plus 36.4% of 2024 consumption.

| | **2023** | **2024** | **2025** | **2026** |
|---|---|---|---|---|
| Residential kWh | 59,028 | 44,921 | 44,855 | |
| January to July | 28,424 | 37,535 | 28,565 | 28,523 |
| August to December | 21,493 | 16,357 | 16,333 | |
| **Seasonally Adj. kWh** | **49,917** | **53,891** | **44,897** | |
| GS < 50 kWh | 30,310 | 23,968 | 23,818 | |
| January to July | 21,905 | 19,274 | 15,241 | 15,145 |
| August to December | 11,036 | 8,727 | 8,673 | |
| **Seasonally Adj. kWh** | **32,941** | **28,001** | **23,914** | |

Table 45 Seasonally Adjusted kWh

Table 46 summarizes the additional heating loads added to the forecast for the Residential and GS<50 kW classes. The total amount added to the 2025 forecast is a sum of the 2024 and 2025 incremental loads.

| **Rate Class** | **2024 Incremental kWh** | **2025 Incremental kWh** | **2025 + 2024 kWh** |
|---|---|---|---|
| Residential | 53,891 | 44,897 | 98,788 |
| GS<50 | 28,001 | 23,914 | 51,914 |
| **Total** | **81,892** | **68,811** | **232,595** |

Table 46 Residential and GS<50 Heating Summary

### 6.3 ADDITIONAL LOADS SUMMARY

Incremental loads from EVs and heating are summarized in Table 47. For each type of new loads, a half-year rule or seasonal adjustment is made to new loads in 2024 and 2025.

| | | kWh | | kW | |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2024 | 2025 |
| EVs | Residential | 55,236 | 180,171 | | |
| | GS<50 | 13,713 | 44,352 | | |
| | GS>50 | 13,350 | 43,195 | 91 | 296 |
| | **Total** | **82,299** | **267,718** | **91** | **296** |
| Heating | Residential | 53,891 | 98,788 | | |
| | GS<50 | 28,001 | 51,914 | | |
| | GS>50 | | | | |
| | **Total** | **81,892** | **150,703** | **-** | **-** |
| **Total** | Residential | 109,127 | 278,959 | | |
| | GS<50 | 41,714 | 96,266 | | |
| | GS>50 | 13,350 | 43,195 | 91 | 296 |
| | **Total** | **164,191** | **418,421** | **91** | **296** |

Table 47 Additional Load Summary

# 7 CDM ADJUSTMENT TO LOAD FORECAST

On December 20, 2021, the OEB issued a report Conservation and Demand Management Guidelines for Electricity Distributors which provided updated guidance on the role of CDM for rate-regulated LDCs. Based on these guidelines, Elenchus has derived a manual adjustment to the load forecast. CDM programs undertaken as part of the 2021-2024 Conservation and Demand Management framework will put downward pressure on its billing determinants for the General Service < 50 kW, and General Service > 50 kW.

This CDM adjustment has been made to reflect the impact of CDM activities that are expected to be implemented through from 2023 to 2025.

CDM activities have been forecast based on NOWI's share of consumption within the province and the IESO's 2021-2024 Conservation and Demand Management Framework. The table below provides a summary of the 2021-2024 Framework and NOWI's allocation of savings. CDM savings in 2025 are not available so the savings are assumed to be the same as 2024 savings.

| Program | In year energy savings (GWh) | | | | Est. | NOWI Share % | Basis for NOWI % |
|---|---|---|---|---|---|---|---|
| | 2021 | 2022 | 2023 | 2024 | *2025* | | |
| Retrofit | 322 | 570 | 359 | 560 | *560* | 0.09% | % of provincial kWh |
| Small Business | 10 | 4 | 20 | 65 | *65* | 0.09% | % of provincial kWh |
| Energy Performance | 16 | 20 | 50 | 54 | *54* | 0.09% | % of provincial kWh |
| Energy Management | 1 | 15 | 29 | 96 | *96* | 0.09% | % of provincial kWh |
| Industrial Energy Efficiency | 0 | 0 | 165 | 165 | *165* | 0.09% | % of provincial kWh |
| Targeted Greenhouse | 0 | 0 | 333 | 333 | *333* | | |
| Local Initiatives | 0 | 61 | 161 | 181 | *181* | | |
| Residential Demand Response | 0 | 0 | 3 | 7 | *7* | | |
| Energy Affordability Program | 7 | 14 | 49 | 97 | *97* | 0.13% | % of prov. LIM |
| First Nations Program | 1 | 0 | 15 | 16 | *16* | | |

Table 48 2021-2024 CDM Framework and NOWI Allocation

NOWI's share of kWh is calculated with OEB Yearbook data as a 5-year average of NOWI's Total kWh Supplied divided by the sum of Total kWh Supplied of all Ontario LDCs.

| Year | Province kWh | NOWI kWh | NOWI % Share |
|---|---|---|---|
| 2018 | 132,430,891,804 | 117,028,006 | 0.09% |
| 2019 | 129,776,205,940 | 117,455,380 | 0.09% |
| 2020 | 128,180,478,159 | 115,003,539 | 0.09% |
| 2021 | 129,125,642,652 | 114,189,855 | 0.09% |
| 2022 | 130,831,607,587 | 115,031,517 | 0.09% |
| **5-Year Avg.** | **130,068,965,228** | **115,741,659** | **0.09%** |

Table 49 NOWI and Provincial kWh

NOWI's Energy Affordability Program allocation is based on the number of households in Cochrane, Iroquois Falls, and Kapuskasing within the Census Family Low-Income Measure as a share of all Ontario households, as per the 2016 and 2021 Censuses. In both years the combined population of Cochrane, Iroquois Falls, and Kapuskasing is 0.13% of Ontario's population.

NOWI is not aware of any Local Initiatives programs so no share of that program is attributed to NOWI.

Total GWh savings figures are then adjusted by the share attributable to NOWI, yearly weighting factors, and converted to kWh savings. Total CDM savings attributable to NOWI is provided in the following table.

| | In year energy savings (kWh) | | | |
|---|---|---|---|---|
| | **2023** | **2024** | **2025** | **Total CDM** |
| *Weighting Factor* | *0.5* | *1.0* | *0.5* | |
| | | | | |
| Retrofit | 159,728 | 498,315 | 249,158 | 907,200 |
| Small Business | 8,898 | 57,840 | 28,920 | 95,659 |
| Energy Performance | 22,246 | 48,052 | 24,026 | 94,324 |
| Energy Management | 12,903 | 85,425 | 42,713 | 141,041 |
| Industrial Energy Efficiency | 73,412 | 146,825 | 73,412 | 293,650 |
| Targeted Greenhouse | - | - | - | - |
| Local Initiatives | - | - | - | - |
| Residential Demand Response | - | - | - | - |
| Energy Affordability Program | 30,772 | 121,830 | 60,915 | 213,517 |
| First Nations Program | - | - | - | - |
| **Total CDM** | **307,959** | **958,288** | **479,144** | **1,745,391** |

Table 50 NOWI CDM

Total CDM savings by program are then allocated to NOWI'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 CDM activities on the class's billing determinants.

| Program | Residential | GS < 50 kW | GS > 50 kW |
|---|---|---|---|
| | | **Allocation %** | |
| Retrofit | | 14.7% | 85.3% |
| Small Business | | 100.0% | 0.0% |
| Energy Performance | | 0.0% | 100.0% |
| Energy Management | | 0.0% | 100.0% |
| Industrial Energy Efficiency | | 0.0% | 100.0% |
| Targeted Greenhouse | | | |
| Local Initiatives | | | |
| Residential Demand Response | | | |
| Energy Affordability Program | 100% | | |
| First Nations Program | | | |
| | | **CDM By Class** | |
| Retrofit | - | 133,721 | 773,479 |
| Small Business | - | 95,659 | - |
| Energy Performance | - | - | 94,324 |
| Energy Management | - | - | 141,041 |
| Industrial Energy Efficiency | - | - | 293,650 |
| Targeted Greenhouse | - | - | - |
| Local Initiatives | - | - | - |
| Residential Demand Response | - | - | - |
| Energy Affordability Program | 213,517 | - | - |
| First Nations Program | - | - | - |
| **2023-2025 Savings** | **213,517** | **229,380** | **1,302,494** |

Table 51 2021-2024 CDM Framework Adjustments

# *Attachment 2 (of 2):*

# *OEB Appendix 2-IB*

| | |
|---|---|
| File Number: | EB-2024-0046 |
| Exhibit: | 3 |
| Tab: | 1 |
| Schedule: | 1 |
| Page: | Attachment 2 |
| Date: | 30-Aug-24 |
| Customer Numbers | Year End |

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

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

### Customers/Connections

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | 5,165 | 5,150 | 5,158 | 5,159 | 5,187 | 5,183 | 5,175 |
| General Service < 50 kW | 742 | 706 | 709 | 715 | 714 | 709 | 705 |
| General Service >= 50 kW | 70 | 73 | 67 | 67 | 70 | 69 | 69 |
| Large User | - | - | - | - | | | |
| Unmetered Scattered Load Connections | 23 | 23 | 23 | 22 | 22 | 22 | 22 |
| Sentinel Lighting Connections | - | - | - | - | | | |
| Street Lighting Connections | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 | 1,710 |
| Wholesale Market Participants | - | - | - | - | | | |
| Embedded Distributor(s) | - | - | - | - | | | |
| Sub Transmission Customers | - | - | - | - | | | |

### Customers/Connections Variance Analysis

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | 0% | 0% | 0% | 1% | 0% | 0% |
| General Service < 50 kW | | -5% | 0% | 1% | 0% | -1% | -1% |
| General Service >= 50 kW | | 4% | -8% | 0% | 4% | -1% | 0% |
| Large User | | 0% | 0% | 0% | 0% | 0% | 0% |
| Unmetered Scattered Load Connections | | 0% | 0% | -4% | 0% | 0% | 0% |
| Sentinel Lighting Connections | | 0% | 0% | 0% | 0% | 0% | 0% |
| Street Lighting Connections | | 0% | 0% | 0% | 0% | 0% | 0% |
| Wholesale Market Participants | | 0% | 0% | 0% | 0% | 0% | 0% |
| Embedded Distributor(s) | | 0% | 0% | 0% | 0% | 0% | 0% |
| Sub Transmission Customers | | 0% | 0% | 0% | 0% | 0% | 0% |

### Consumption (Actual)

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | 38,802,690 | 40,126,981 | 39,104,541 | 39,671,263 | 39,128,268 | 41,263,111 | 41,340,698 |
| General Service < 50 kW | 17,709,286 | 16,586,733 | 17,080,206 | 17,769,474 | 17,511,886 | 17,775,995 | 17,945,241 |
| General Service >= 50 kW | 60,254,777 | 57,599,230 | 57,309,861 | 56,933,855 | 56,007,213 | 56,718,182 | 56,240,557 |
| Large User | - | - | - | - | | | |
| Unmetered Scattered Load Connections | 164,178 | 164,178 | 164,159 | 163,953 | 163,953 | 163,953 | 163,953 |
| Sentinel Lighting Connections | - | - | - | - | | | |
| Street Lighting Connections | 524,449 | 526,417 | 531,088 | 492,972 | 491,060 | 491,060 | 491,060 |
| Wholesale Market Participants | - | - | - | - | | | |
| Embedded Distributor(s) | - | - | - | - | | | |
| Sub Transmission Customers | - | - | - | - | | | |

### Consumption (Actual) Variance Analysis

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | 3% | -3% | 1% | -1% | 5% | 0% |
| General Service < 50 kW | | -6% | 3% | 4% | -1% | 2% | 1% |
| General Service >= 50 kW | | -4% | -1% | -1% | -2% | 1% | -1% |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | | 0% | 0% | 0% | 0% | 0% | 0% |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | | 0% | 1% | -7% | 0% | 0% | 0% |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |

### Demand (Actual)

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | - | - | - | - | | | |
| General Service < 50 kW | - | - | - | - | | | |
| General Service >= 50 kW | 171,055 | 161,087 | 156,227 | 155,849 | 151,260 | 156,537 | 155,213 |
| Large User | - | - | - | - | | | |
| Unmetered Scattered Load Connections | - | - | - | - | | | |
| Sentinel Lighting Connections | - | - | - | - | | | |
| Street Lighting Connections | 1,463 | 1,500 | 1,532 | 1,517 | 1,425 | 1,468 | 1,468 |
| Wholesale Market Participants | - | - | - | - | | | |
| Embedded Distributor(s) | - | - | - | - | | | |
| Sub Transmission Customers | - | - | - | - | | | |

### Demand (Actual) Variance Analysis

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | | | | | | |
| General Service < 50 kW | | | | | | | |
| General Service >= 50 kW | | -6% | -3% | 0% | -3% | 3% | -1% |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | | | | | | | |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | | 3% | 2% | -1% | -6% | 3% | 0% |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |

### Consumption (Weather Normalized)

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | 38,240,106 | 40,378,571 | 39,864,946 | 39,604,029 | 39,893,974 | 41,261,708 | 41,340,698 |
| General Service < 50 kW | 17,523,206 | 16,669,949 | 17,331,717 | 17,747,236 | 17,765,151 | 17,622,807 | 17,945,241 |
| General Service >= 50 kW | 59,841,270 | 57,784,152 | 57,868,770 | 56,884,437 | 56,570,018 | 56,718,182 | 56,240,557 |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | 164,178 | 164,178 | 164,159 | 163,953 | 163,953 | 163,953 | 163,953 |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | 524,449 | 526,417 | 531,088 | 492,972 | 491,060 | 491,060 | 491,060 |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |

### Consumption (Weather Normalized) Variance Analysis

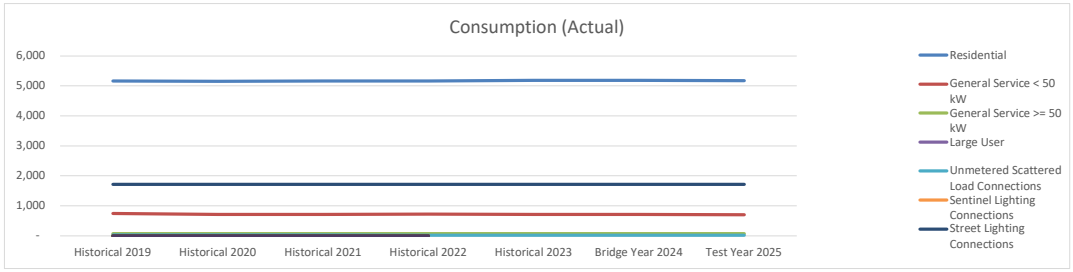
| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | 6% | -1% | -1% | 1% | 3% | 0% |
| General Service < 50 kW | | -5% | 4% | 2% | 0% | -1% | 2% |
| General Service >= 50 kW | | -3% | 0% | -2% | -1% | 0% | -1% |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | | 0% | 0% | 0% | 0% | 0% | 0% |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | | 0% | 1% | -7% | 0% | 0% | 0% |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |

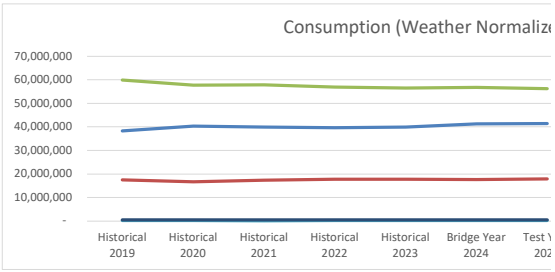
## Demand (Weather Normalized)

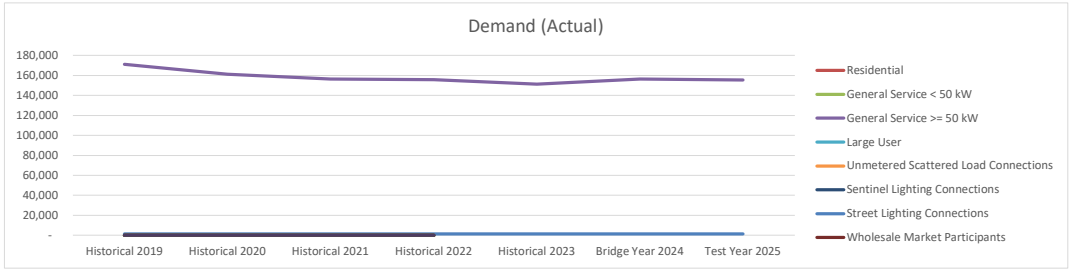
| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | | | | | | |
| General Service < 50 kW | | | | | | | |
| General Service >= 50 kW | 173,831 | 166,245 | 165,448 | 161,286 | 156,129 | 158,187 | 158,815 |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | | | | | | | |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | 1,463 | 1,500 | 1,532 | 1,517 | 1,425 | 1,468 | 1,468 |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |

## Demand (Weather Normalized) Variance Analysis

| Rate Class | Historical 2019 | Historical 2020 | Historical 2021 | Historical 2022 | Historical 2023 | Bridge Year 2024 | Test Year 2025 |
|---|---|---|---|---|---|---|---|
| Residential | | | | | | | |
| General Service < 50 kW | | | | | | | |
| General Service >= 50 kW | | -4% | 0% | -3% | -3% | 1% | 0% |
| Large User | | | | | | | |
| Unmetered Scattered Load Connections | | | | | | | |
| Sentinel Lighting Connections | | | | | | | |
| Street Lighting Connections | | 3% | 2% | -1% | -6% | 3% | 0% |
| Wholesale Market Participants | | | | | | | |
| Embedded Distributor(s) | | | | | | | |
| Sub Transmission Customers | | | | | | | |



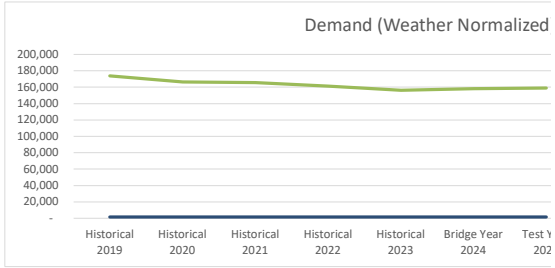



Exhibit 3: Customer And Load Forecast

# Tab 2 (of 2): Accuracy of Load Forecast and Variance Analysis

# VARIANCE ANALYSIS OF LOAD FORECAST

NOW Inc. has experienced negligible load growth or loss, and no significant changes are expected.

**Table 1**

**2017 Approved vs. 2017 Actual**

| | Customers/Devices | | | Volumes | | | |
|---|---|---|---|---|---|---|---|
| **Rate Class** | **2017 Approved** | **2017 Actual** | **Diff.** | **2017 Approved** | **2017 Actual** | **kWh / kW** | **Volumetric Difference** |
| Residential | 5,216 | 5,202 | -14 | 41,624,801 | 37,483,079 | kWh | -4,141,722 |
| GS < 50 kW | 784 | 747 | -37 | 19,759,776 | 17,706,302 | kWh | -2,053,474 |
| GS 50 - 4,999 kW | 71 | 54 | -17 | 181,679 | 171,236 | kW | -10,443 |
| Street Light | 1,650 | 1,650 | 0 | 1,576 | 1,392 | kW | -184 |
| USL | 23 | 23 | 0 | 165,218 | 164,178 | kWh | -1,040 |
| **Total** | **7,744** | **7,676** | **-68** | **61,733,050** | **55,526,188** | | |

Now Inc.'s 2017 actual billed loads and customer/device counts were lower than 2017 approved for each rate class. Actual 2017 heating degree days was approximately the same as forecast (the 2006 to 2015 average HDD). Actual cooling degree days were half of the weather-normal forecast, though cooling degree days have little impact on NOW Inc.'s loads. The lower billed loads are primarily attributable to lower customer counts, as described below, and greater CDM savings than forecast for 2017.

Residential, GS<50 kW, and GS 50 to 4,999 kW customer counts declined from 2015 (the most recent year of actuals in the 2017 forecast) to 2017, but were forecast to remain approximately the same given the 2009 to 2015 trends used in the 2017 forecast.

**Table 2**

**2017 Actual vs. 2018 Actual**

| | Customers/Devices | | | Volumes | | | |
|---|---|---|---|---|---|---|---|
| **Rate Class** | **2017 Actual** | **2018 Actual** | **Diff.** | **2017 Actual** | **2018 Actual** | **kWh / kW** | **Volumetric Difference** |
| Residential | 5,202 | 5,157 | -45 | 37,483,079 | 38,878,731 | kWh | 1,395,652 |
| GS < 50 kW | 747 | 713 | -34 | 17,706,302 | 17,940,823 | kWh | 234,521 |
| GS 50 - 4,999 kW | 54 | 69 | 15 | 171,236 | 183,205 | kW | 11,969 |
| Street Light | 1,650 | 1,660 | 10 | 1,392 | 1,421 | kW | 29 |
| USL | 23 | 23 | 0 | 164,178 | 164,178 | kWh | 0 |
| **Total** | **7,676** | **7,622** | **-54** | **55,526,188** | **57,168,358** | | |

Billed volumes increased marginally in 2018 due to higher heating loads (7.6% higher HDD) and higher cooling loads (238.4% higher CDD), despite lower Residential and GS<50 kW customer counts. GS 50 to 4,999 kW customer counts increased due to customer reclassifications in 2018.

**Table 3**

**2018 Actual vs. 2019 Actual**

| | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| Rate Class | 2018 Actual | 2019 Actual | Diff. | 2018 Actual | 2019 Actual | kWh / kW | |
| Residential | 5,157 | 5,107 | -50 | 38,878,731 | 38,802,690 | kWh | -76,041 |
| GS < 50 kW | 713 | 743 | 29 | 17,940,823 | 17,709,286 | kWh | -231,537 |
| GS 50 - 4,999 kW | 69 | 69 | 0 | 183,205 | 171,055 | kW | -12,150 |
| Street Light | 1,660 | 1,710 | 50 | 1,421 | 1,463 | kW | 42 |
| USL | 23 | 23 | 0 | 164,178 | 164,178 | kWh | 0 |
| **Total** | **7,622** | **7,651** | **29** | **57,168,358** | **56,848,672** | | |

Volume decreases in 2019 were marginal. NOW Inc. added 50 streetlight devices toward the end of 2018 and the start of 2019.

**Table 4**

**2019 Actual vs. 2020 Actual**

| | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| Rate Class | 2019 Actual | 2020 Actual | Diff. | 2019 Actual | 2020 Actual | kWh / kW | |
| Residential | 5,107 | 5,155 | 48 | 38,802,690 | 40,126,981 | kWh | 1,324,291 |
| GS < 50 kW | 743 | 717 | -25 | 17,709,286 | 16,586,733 | kWh | -1,122,553 |
| GS 50 - 4,999 kW | 69 | 72 | 3 | 171,055 | 161,087 | kW | -9,968 |
| Street Light | 1,710 | 1,710 | 0 | 1,463 | 1,500 | kW | 37 |
| USL | 23 | 23 | 0 | 164,178 | 164,178 | kWh | 0 |
| **Total** | **7,651** | **7,677** | **26** | **56,848,672** | **57,040,479** | | |

Residential volumes increased and General Service volumes decreased in 2020 mostly as a result of the COVID-19 pandemic in which residents worked from home and generally spend more time at home.

**Table 5**

**2020 Actual vs. 2021 Actual**

| Rate Class | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| | 2020 Actual | 2021 Actual | Diff. | 2020 Actual | 2021 Actual | kWh / kW | |
| Residential | 5,155 | 5,166 | 11 | 40,126,981 | 39,104,541 | kWh | -1,022,440 |
| GS < 50 kW | 717 | 706 | -12 | 16,586,733 | 17,080,206 | kWh | 493,473 |
| GS 50 - 4,999 kW | 72 | 71 | -1 | 161,087 | 156,227 | kW | -4,860 |
| Street Light | 1,710 | 1,710 | 0 | 1,500 | 1,532 | kW | 32 |
| USL | 23 | 23 | 0 | 164,178 | 164,159 | kWh | -19 |
| **Total** | **7,677** | **7,675** | **-1** | **57,040,479** | **56,506,665** | | |

Volume changes from 2020 to 2021 reflect a partial reversal of the 2020 COVID-19 impacts, though overall the changes were not material.

**Table 6**

**2021 Actual vs. 2022 Actual**

| Rate Class | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| | 2021 Actual | 2022 Actual | Diff. | 2021 Actual | 2022 Actual | kWh / kW | |
| Residential | 5,166 | 5,161 | -5 | 39,104,541 | 39,671,263 | kWh | 566,722 |
| GS < 50 kW | 706 | 712 | 6 | 17,080,206 | 17,769,474 | kWh | 689,268 |
| GS 50 - 4,999 kW | 71 | 68 | -3 | 156,227 | 155,849 | kW | -378 |
| Street Light | 1,710 | 1,710 | 0 | 1,532 | 1,517 | kW | -15 |
| USL | 23 | 22 | -1 | 164,159 | 163,953 | kWh | -206 |
| **Total** | **7,675** | **7,673** | **-2** | **56,506,665** | **57,762,056** | | |

Residential and GS<50 kW volumes increased in 2022 due to increased heating loads (8.4 increase in HDD).

**Table 7**

**2022 Actual vs. 2023 Actual**

| Rate Class | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| | 2022 Actual | 2023 Actual | Diff. | 2022 Actual | 2023 Actual | kWh / kW | |
| Residential | 5,161 | 5,194 | 33 | 39,671,263 | 39,128,268 | kWh | -542,995 |
| GS < 50 kW | 712 | 716 | 4 | 17,769,474 | 17,511,886 | kWh | -257,588 |
| GS 50 - 4,999 kW | 68 | 69 | 1 | 155,849 | 151,260 | kW | -4,589 |
| Street Light | 1,710 | 1,710 | 0 | 1,517 | 1,425 | kW | -92 |
| USL | 22 | 22 | 0 | 163,953 | 163,953 | kWh | 0 |
| **Total** | **7,673** | **7,711** | **38** | **57,762,056** | **56,956,792** | | |

Residential and GS<50 kW volumes decreased in 2023 due to decreased heating loads (7.6% decrease in HDD).

**Table 8**

**2023 Actual vs. 2024 Bridge Year**

| Rate Class | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| | 2023 Actual | 2024 Bridge | Diff. | 2023 Actual | 2024 Bridge | kWh / kW | |
| Residential | 5,194 | 5,187 | -8 | 39,128,268 | 41,263,111 | kWh | 2,134,843 |
| GS < 50 kW | 716 | 711 | -4 | 17,511,886 | 17,775,995 | kWh | 264,109 |
| GS 50 - 4,999 kW | 69 | 69 | 0 | 151,260 | 156,537 | kW | 5,277 |
| Street Light | 1,710 | 1,710 | 0 | 1,425 | 1,468 | kW | 43 |
| USL | 22 | 22 | 0 | 163,953 | 163,953 | kWh | 0 |
| **Total** | **7,711** | **7,699** | **-12** | **56,956,792** | **59,361,064** | | |

Volumes are forecast to increase in 2024 as a result a return to normal weather from low heating loads in 2023 (8.2% increase in HDD) and due to increased electrification. Customer counts are forecast to decline slightly in line with the 10-year average growth rate for each class.

**Table 9**

**2024 Bridge Year vs. 2025 Test Year**

| Rate Class | Customers/Devices | | | Volumes | | | Volumetric Difference |
|---|---|---|---|---|---|---|---|
| | 2024 Bridge | 2025 Test | Diff. | 2024 Bridge | 2025 Test | kWh / kW | |
| Residential | 5,187 | 5,179 | -8 | 41,263,111 | 41,340,698 | kWh | 77,587 |
| GS < 50 kW | 711 | 707 | -4 | 17,775,995 | 17,945,241 | kWh | 169,246 |
| GS 50 - 4,999 kW | 69 | 69 | 0 | 156,537 | 155,213 | kW | -1,324 |
| Street Light | 1,710 | 1,710 | 0 | 1,468 | 1,468 | kW | 0 |
| USL | 22 | 22 | 0 | 163,953 | 163,953 | kWh | 0 |
| **Total** | **7,699** | **7,687** | **-12** | **59,361,064** | **59,606,573** | | |

Residential and GS<50 kW volumes are forecast to increase in 2025 as a result in increased electrification and declining persistence of previous CDM programs. All volume and customer count changes from the 2024 Bridge Year to the 2025 Test Year are less than 1%.