GMP-LD-RB-4

GREEN MOUNTAIN POWER FALL 2025 UPDATE FORECAST

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1 2026 FY FORECAST UPDATE

The FY 2026 forecast was completed in March 2025 with data through December of 2024. This is an update of that forecast with sales and customer data through September 2025. The Update forecast is used in the 2026 rate filing. Overall, weather-normal sales have come in higher than March 2025 forecast; weather-normal sales are 1.6% higher than initially forecasted. Table 3 compares weather-normal sales and the FY 2026 forecast (completed in March).

TABLE 1: FY 2026 COMPARISON WITH WEATHER-NORMAL SALES (JANUARY -SEPTEMBER 2025)

Class	WthrNrm MWh	FY 2026 Fcst	Difference	Pct
Residential	1,250,093	1,172,633	77,460	6.6%
Small Commercial	1,128,842	1,123,745	5,097	0.5%
Large C&I	755,440	789,646	(34,206)	-4.3%
Total	**3,134,375**	**3,086,024**	**48,351**	**1.6%**

The primary contributor is the residential sales; weather-normal residential sales are 6.6% higher than forecasted through September. It is primarily the winters where the gap is the largest. This is likely to reflect higher heat pump use than initially assumed. Small commercial sales are slightly above the forecast. Large C&I sales are 4.3% below the forecast. The lower Large C&I sales can be attributed to a loss of load in 2024 that we assumed would bounce back in 2025; the load did not bounce back.

While we expect to continue to see relatively strong sales growth, the Update forecast is lower in the near-term because of fewer electric vehicle and heat pump unit sales. Heat pump average use is also much lower than what has been assumed in prior forecasts; the recent State heat pump study found that the average heat pump uses approximately 30% less electricity than has been previously assumed (*Vermont Heat Pump Evaluation, July 11, 025 Presentation, Ridgeline Energy Analytics)* Table 2 compares the March FY2026 and September Update forecasts.

TABLE 2: FORECAST COMPARISON (MWH)

	Residential		Small Commercial		Large C&I		Total	
Year	FY2026	Update	FY2026	Update	FY2026	Update	FY2026	Update
2026	1,647,446	1,646,776	1,483,391	1,474,805	730,377	689,204	3,864,834	3,814,468
2027	1,669,620	1,665,795	1,481,430	1,472,463	730,708	696,666	3,885,377	3,838,607
2028	1,701,131	1,698,871	1,486,125	1,483,884	731,633	702,843	3,922,508	3,889,281
2029	1,739,755	1,736,993	1,494,037	1,504,069	731,774	703,612	3,969,186	3,948,357
2030	1,779,684	1,774,430	1,501,462	1,524,444	731,973	706,404	4,016,738	4,008,961
2031	1,828,436	1,811,389	1,509,455	1,545,890	730,904	709,397	4,072,415	4,070,359

- Large C&I excludes Global Foundries

By 2031, the Update forecast is just slightly lower than the FY2026 forecast as the updated baseline forecast (before technology adjustments) increases at a somewhat faster than the FY2026 forecast due to stronger economic growth projections and slower energy intensity declines in the commercial sector. EV sales also pick up after 2026 as we assume that the 2030 mandate (68% of vehicle purchases must be electric) is still in place.

In addition to new EV, heat pump, and solar load forecasts, the Update forecast incorporates Moody Analytics September 2025 economic outlook and updated end-use intensities based on The Energy Information Administration (EIA) 2025 Annual Energy Outlook (AEO) for New England.

The overall forecast approach is unchanged; we first develop a baseline sales forecast that captures customer and economic growth, heating and cooling trends, and energy efficiency. The baseline forecast is then adjusted for future solar generation, heat pump adoption, and EV purchases. Table 3 shows the annual Adjusted sales forecast on a fiscal year basis (Oct through September).

TABLE 3: UPDATE SALES FORECAST (MWH)

Year	Residential	Chg	Small C&I	Chg	Large C&I	Chg	Other	Chg	Total	Chg
2025	1,620,525		1,476,264		1,008,908		3,675		4,109,373	
2026	1,646,776	1.6%	1,474,805	-0.1%	1,020,278	1.1%	3,683	0.2%	4,145,542	0.9%
2027	1,665,795	1.2%	1,472,463	-0.2%	696,666	-31.7%	3,683	0.0%	3,838,607	-7.4%
2028	1,698,871	2.0%	1,483,884	0.8%	702,843	0.9%	3,683	0.0%	3,889,281	1.3%
2029	1,736,993	2.2%	1,504,069	1.4%	703,612	0.1%	3,683	0.0%	3,948,357	1.5%
2030	1,774,430	2.2%	1,524,444	1.4%	706,404	0.4%	3,683	0.0%	4,008,961	1.5%
2031	1,811,389	2.1%	1,545,890	1.4%	709,397	0.4%	3,683	0.0%	4,070,359	1.5%
2032	1,852,893	2.3%	1,567,608	1.4%	712,371	0.4%	3,683	0.0%	4,136,555	1.6%
2033	1,898,375	2.5%	1,586,987	1.2%	711,407	-0.1%	3,683	0.0%	4,200,451	1.5%
2034	1,947,041	2.6%	1,604,601	1.1%	710,775	-0.1%	3,683	0.0%	4,266,101	1.6%
2035	1,997,276	2.6%	1,621,326	1.0%	709,710	-0.1%	3,683	0.0%	4,331,995	1.5%
25-30		1.8%		0.6%		-5.8%		0.0%		-0.4%
30-35		2.4%		1.2%		0.1%		0.0%		1.6%

Total sales decline 0.4% annually, but this is due to the loss of GlobalFoundries in 2027. GlobalFoundries has been removed from the sales forecast for 2027 as they leave GMP's service territory and commence operations as their own electric utility, consistent with the Vermont Public Utility Commission's Order in Case Nos. 21-1107-PET and 21-1109-PET. Excluding GlobalFoundries, sales average 1.2% annual increase over the first five years and 1.6% average annual growth between 2025 and 2030.

The revenue forecast is developed using a set of rate schedule and billing determinant models. The revenue models allocate class sales forecast (i.e., Residential, Small Commercial, and Large C&I) to rate schedules and then billing determinants (e.g., on and off-peak sales, billing demand, demand blocks). Revenues are then calculated by multiplying the billing determinant forecast with the current rates (*Revenues = Billing Determinants * Rates*). Revenues are calculated at the rate schedule level and then rolled up to customer classes. Table 4 shows the revenue forecast by customer class.

TABLE 4: FISCAL YEAR REVENUE FORECAST ($)

ear	Residential	Chg	Small C&I	Chg	Large C&I	Chg	Other	Chg	Total	Chg
2025	370,675,992		292,007,899		112,629,108		3,041,923		778,354,921	
2026	403,157,029	8.8%	313,452,325	7.3%	122,090,273	8.4%	3,046,047	0.1%	841,745,674	8.1%
2027	406,700,342	0.9%	313,073,937	-0.1%	105,841,094	-13.3%	3,046,047	0.0%	828,661,420	-1.6%
2028	412,952,791	1.5%	315,295,277	0.7%	106,682,154	0.8%	3,046,047	0.0%	837,976,268	1.1%
2029	419,531,305	1.6%	319,560,166	1.4%	106,893,300	0.2%	3,046,047	0.0%	849,030,817	1.3%
2030	425,857,939	1.5%	323,736,043	1.3%	107,316,963	0.4%	3,046,047	0.0%	859,956,992	1.3%
2031	431,952,571	1.4%	328,144,638	1.4%	107,771,055	0.4%	3,046,047	0.0%	870,914,310	1.3%
2032	438,910,976	1.6%	332,462,146	1.3%	108,126,608	0.3%	3,046,047	0.0%	882,545,776	1.3%
2033	446,160,522	1.7%	336,618,956	1.3%	108,075,899	0.0%	3,046,047	0.0%	893,901,423	1.3%
2034	454,073,488	1.8%	340,261,345	1.1%	107,979,981	-0.1%	3,046,047	0.0%	905,360,861	1.3%
2035	462,292,917	1.8%	343,713,607	1.0%	107,818,426	-0.1%	3,046,047	0.0%	916,870,996	1.3%
25-30		2.9%		2.1%		-0.7%		0.0%		2.1%
30-35		1.7%		1.2%		0.1%		0.0%		1.3%

2 BASELINE FORECAST

Baseline Sales Forecast. The forecast starts with the *baseline* sales and customers for each of the primary customer classes. The baseline forecast represents expected sales before adjustments for additional solar, heat pumps, and electric vehicles. The forecast is derived from a set of monthly customer class regression models that relate customer use (average use in the residential class and total sales in the commercial class) to economic activity, price, weather, and end-use energy intensity trends. The residential sales forecast is a product of the average use forecast and monthly customer forecast.

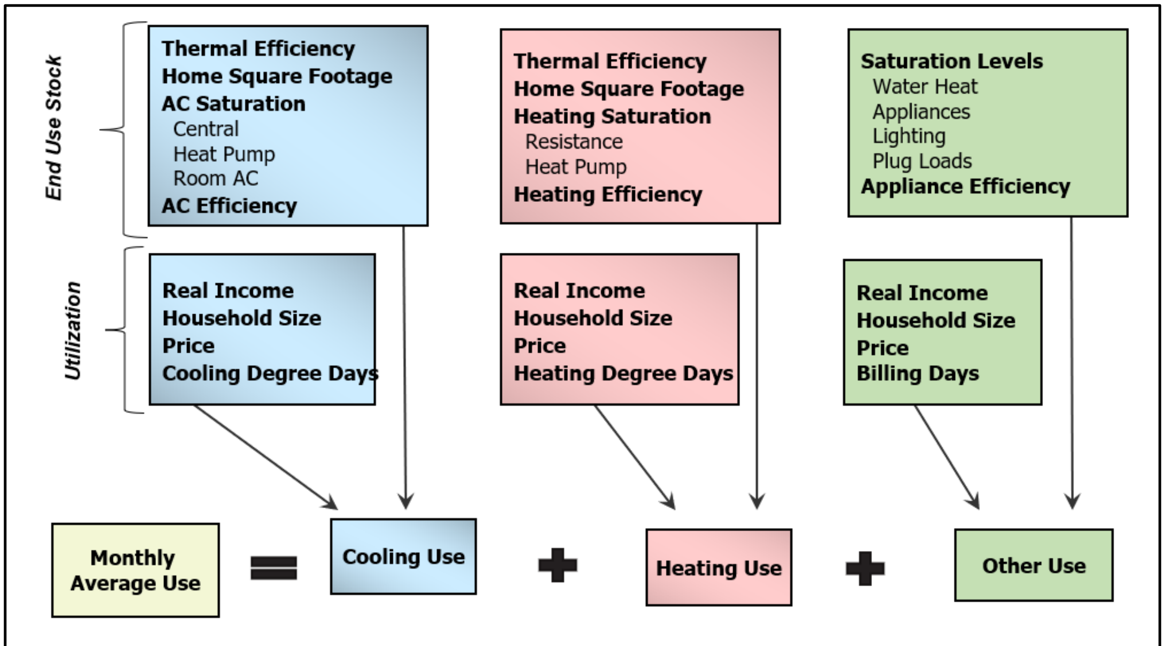
Models are estimated over the period January 2015 to September 2025. Separate forecasts are derived for four customer classes that include Residential, Small Commercial and Industrial, Large Commercial and Industrial, and Other Sales; Other is primarily street lighting. The forecast includes sales, customer, and revenue projections through 2035.

Adjusted Forecast. The Adjusted Forecast is discussed in Section 3.1. The forecast entails adjusting the baseline forecast for projected behind-the-meter (BTM) solar, heat pumps, and electric vehicles. The solar and heat pump forecast assumptions are from the GMP Resource Planning Group. The EV forecast is based on a stock accounting model updated to incorporate recent changes in the state EV sales mandate; car dealerships in Vermont will not have to meet the 2026 mandate which required that 26 percent of all sales were electric. Most of the adjustments impact residential sales. Most of the heat pump sales are for residential customers, Light duty EV sales are primarily for residential transportation, and solar has little impact on commercial billed sales and revenues as most of the commercial solar generation is treated as a power purchase cost.

RESIDENTIAL BASELINE FORECAST

The residential forecast is derived as the product of the customer forecast and average use forecast. The average use model is based on a Statistically Adjusted End-Use (SAE) specification that defines average monthly use in terms of heating requirements (XHeat), cooling requirements (XCool), and other use (XOther). The SAE model integrates end-use saturation and efficiency trends with weather conditions, price, and economic activity. Figure 1 shows the model framework.

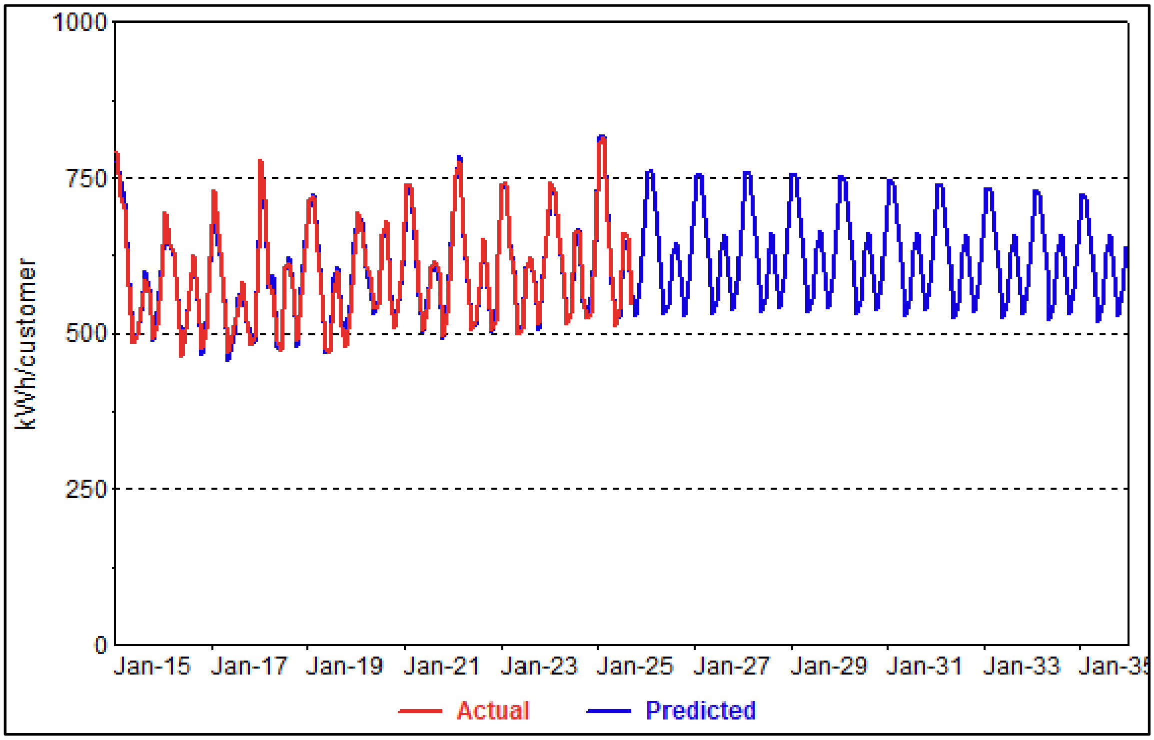
FIGURE 1: RESIDENTIAL SAE AVERAGE USE MODEL



$$AvgUse_m = a + b_c \times XCool_m + b_h \times XHeat_m + b_o \times XOther_m + b_e \times EE_m$$

Linear regression is used to estimate the model coefficients – b_c, b_h, and b_0. Forecasts of cooling, heating, and base usage then drive the monthly average use forecast. The model is estimated with sales data that includes own-use solar generation (reconstituted sales) as we want to model customer total use, not just what is purchased from the utility. Billed sales (what is purchased from the utility) are then derived by subtracting out the solar adjustment. Figure 2Figure 2: Residential average use Model (kWh) shows the estimated baseline residential average use model.

FIGURE 2: RESIDENTIAL AVERAGE USE MODEL (KWH)

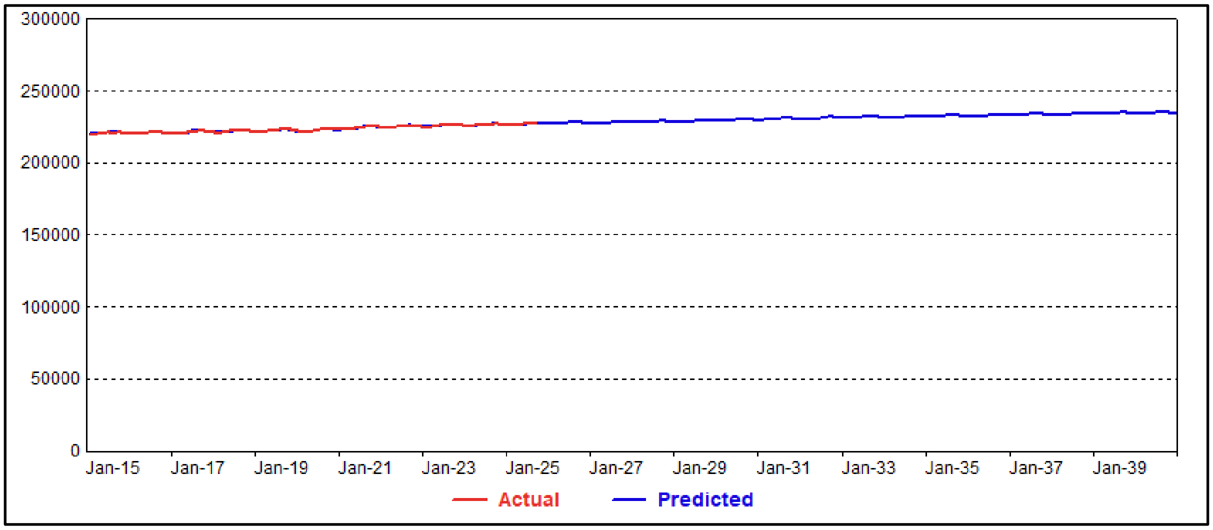


The model explains historical usage well with an Adjusted R-Squared of 0.98 and a Mean Absolute Percent Error of 1.59%. The heating, cooling, and other use variables are highly statistically significant. Model statistics are included in Appendix A.

A couple of load shifts can be seen in the data. First there is a positive shift in usage in 2020 because of the Covid work at home mandate. The other is that there has been a relatively strong growth in average use when solar generation impacts are taken out of sales. The recent increase in usage is largely due to the strong growth of heat pump adoptions. The baseline average use forecast declines 0.27% per year as heat pump saturation and resulting heat pump sales are held constant; a separate adjustment is made for new heat pump sales that are added to the baseline forecast.

The customer forecast is derived from a monthly regression model that relates customers to the customer variable (*CustVar*) that combines household and GDP. GDP helps account for the second-home customer growth; nearly 20% of residential electric customers are second homes. Figure 3 shows the residential customer model.

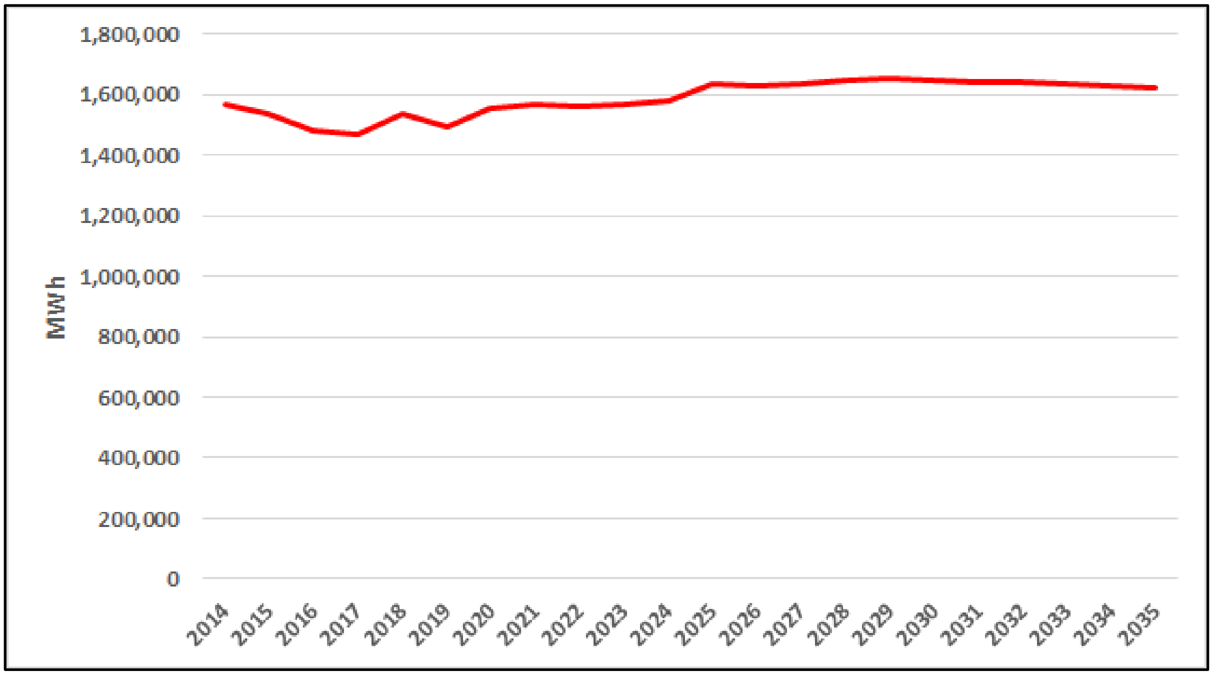
FIGURE 3: RESIDENTIAL CUSTOMER MODEL



The annual customer forecast growth over the next five years is 0.2% per year; this translates into approximately 500 new customers each year. This is slightly slower than historical average customer growth rate of 0.3% per year.

With positive customer growth roughly the same as baseline average use decline, holding heat pump saturation constant, residential baseline sales are effectively flat. Figure 4 shows the residential baseline sales forecast.

FIGURE 4: BASELINE RESIDENTIAL SALES

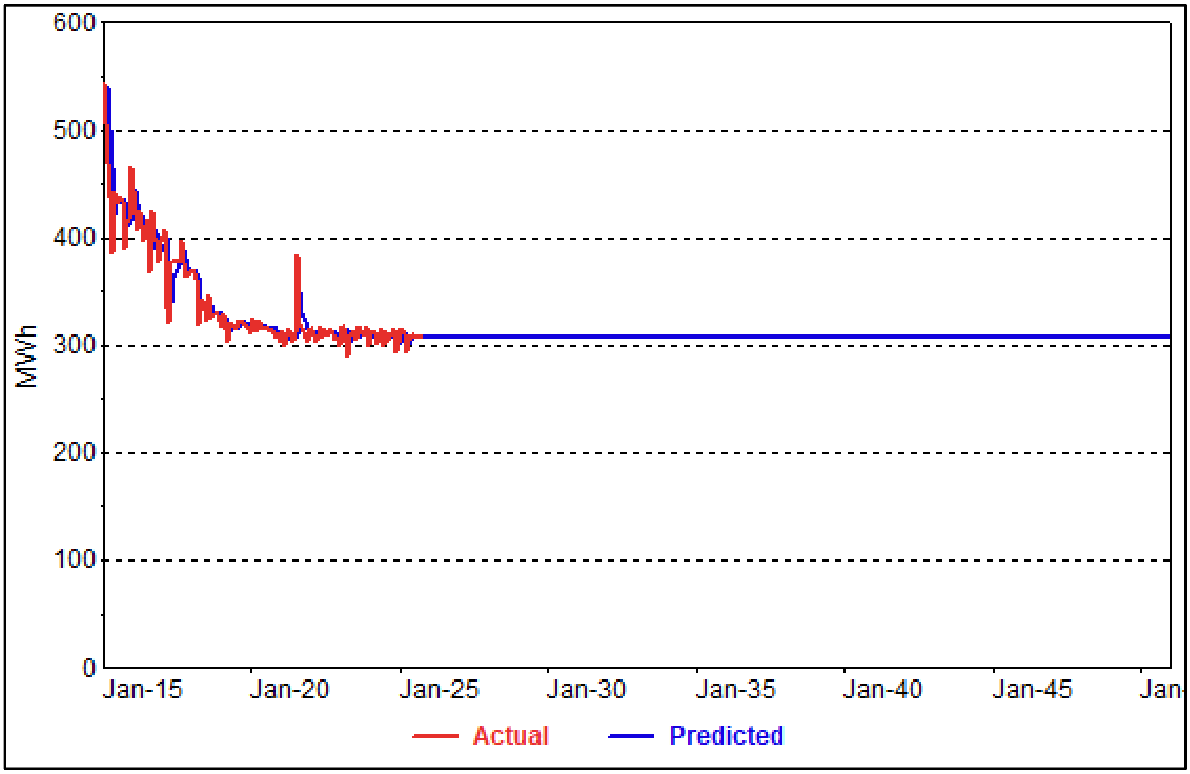


COMMERCIAL AND INDUSTRIAL BASELINE SALES FORECAST

Separate sales forecast models are estimated for the Small and Large C&I customers. Small commercial sales are also based on an SAE specification, while Large commercial sales are derived from a generalized econometric model.

Other Use is primarily street lighting which have basically been flat since 2021. Sales are forecasted using an exponential smoothing model that bases the forecast on past and current trends. Figure 5 shows actual and predicted Other Use.

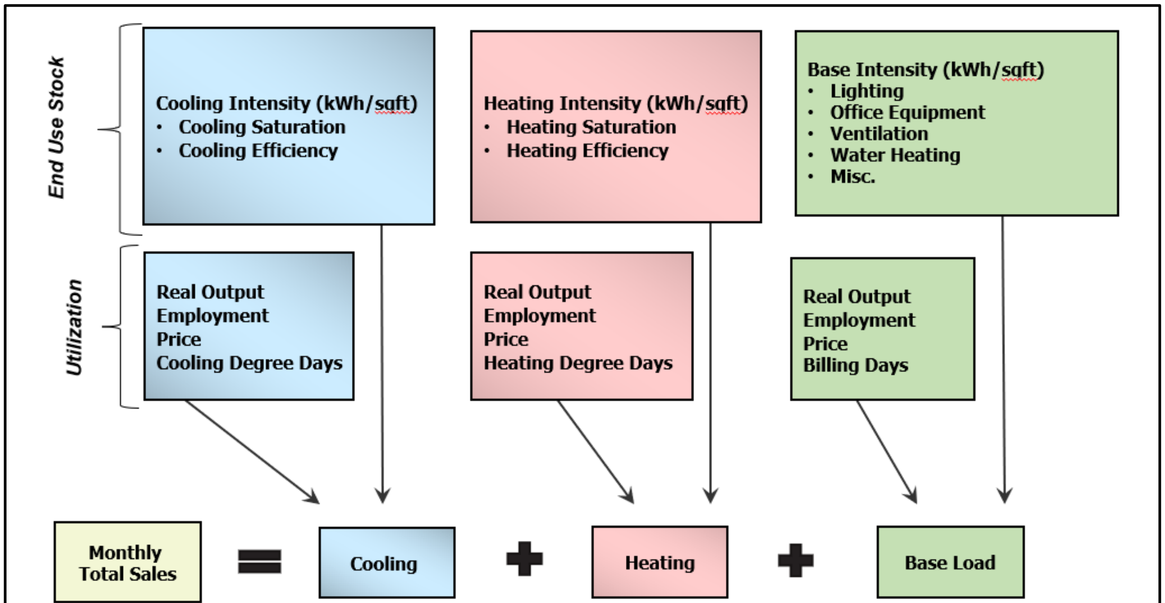
FIGURE 5: OTHER USE FORECAST



Between 2013 and 2019, there was a significant decline in street lighting sales as lamps were upgraded with LEDs. This work has largely been completed.

Figure 6 shows the Small Commercial sales modeling framework.

FIGURE 6: COMMERCIAL SALES MODEL

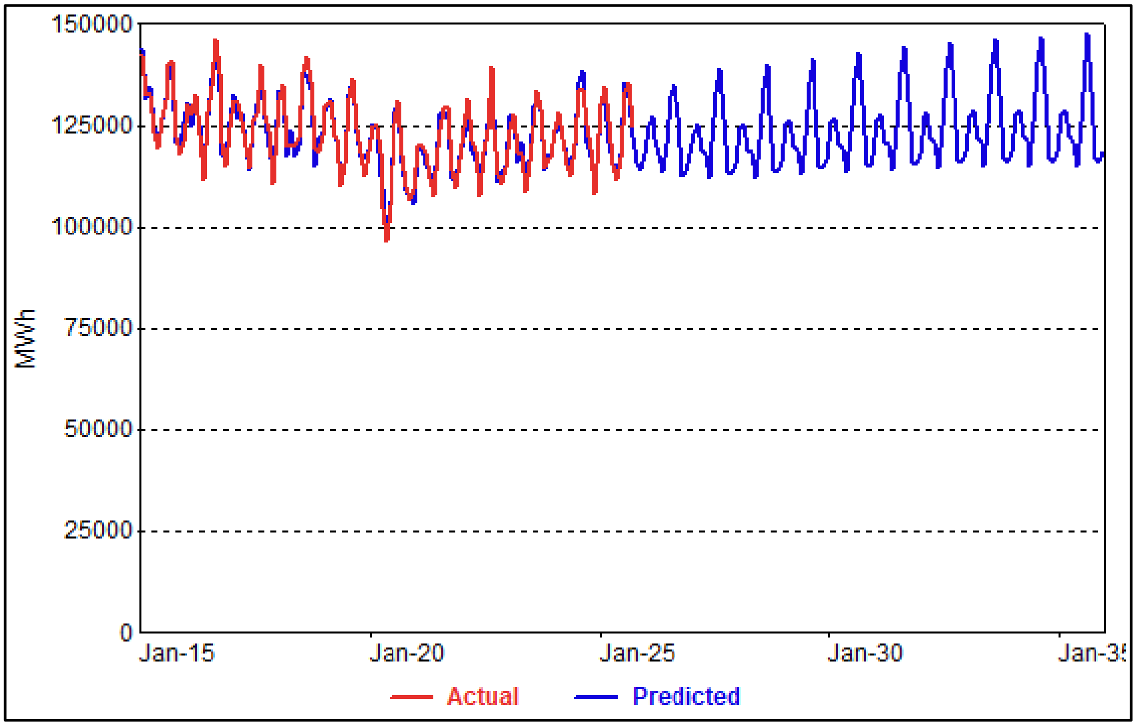


$$MWh_m = \quad a + b_c \times XCool_m + b_h \times XHeat_m + b_o \times XOther_m + b_e \times EE_m$$

Small commercial sales are estimated as a function of monthly commercial heating (XHeat), cooling (XCool), and other non-weather sensitive use (XOther). The end-use model variables are on a kWh per sq foot basis; the estimated variable coefficients calibrating/statistically adjust the end-use variables to monthly billed sales. XHeat, XCool, and XOther are generated by combining commercial end-use intensity projections with weather (for XHeat and XCool), number of billing days (for XOther), price, and economic drivers.

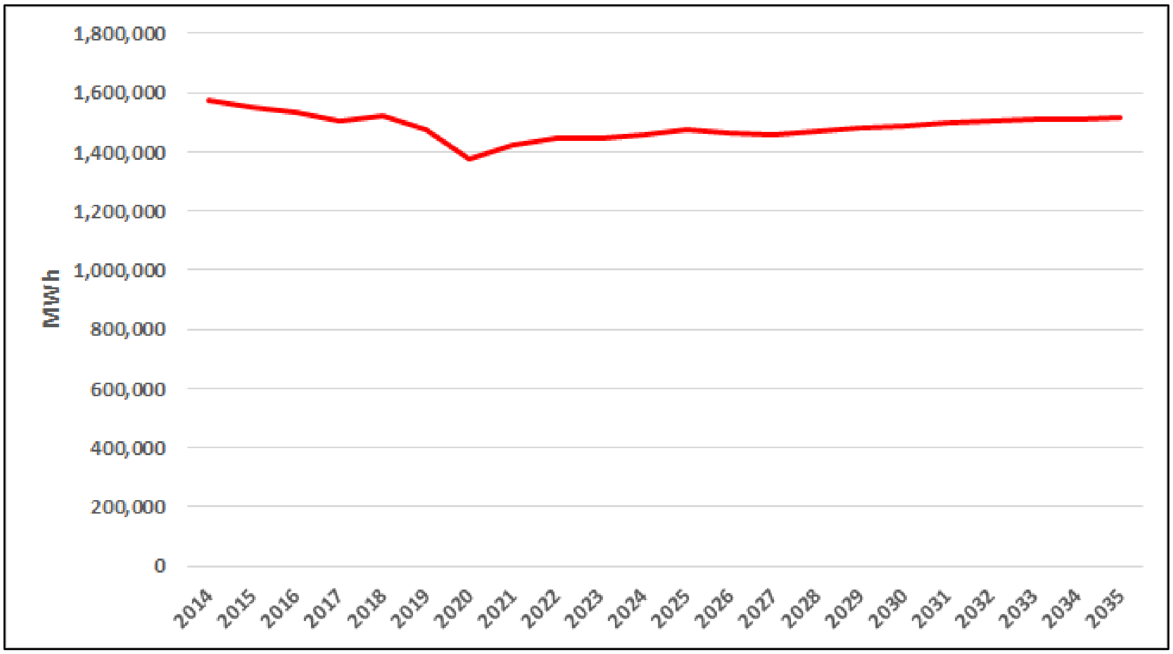
Small Commercial sales are modeled with billed sales data from January 2015 to September 2025. Figure 7 shows the estimated commercial sales model.

FIGURE 7: COMMERCIAL BASELINE SALES MODEL



In 2020, there was a large drop in commercial sales. This is accounted for in the model with a COVID impact variable. There is strong growth coming out of COVID which is captured by the GDP variable. Sales flattened out in 2022 as the new normal settled in; a large share of the workforce continues to work at home.

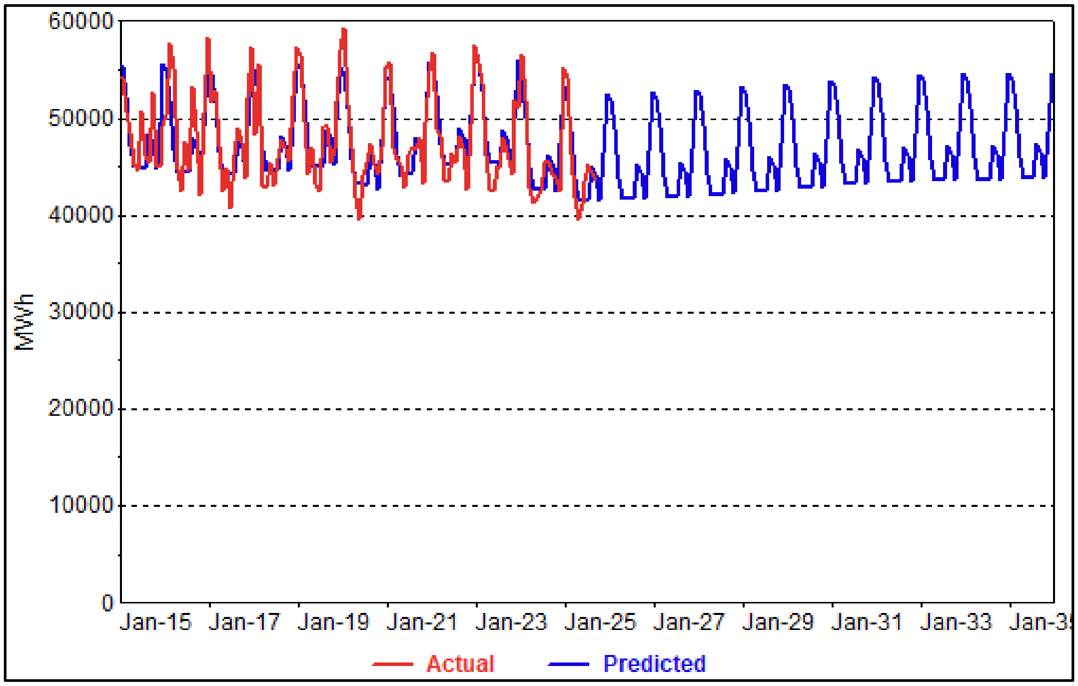
FIGURE 8: COMMERCIAL BASELINE SALES



Small Commercial baseline sales forecast averages 0.3% annual growth. This compares with a minus 0.2% in the FY2026 forecast. Both a higher GDP growth forecast (1.8% vs 1.5% over the next five years) and slower decline in building energy intensity (-1.1 vs -2.1%) contribute to the difference in baseline sales growth.

Large C&I includes GMP's largest commercial and industrial customers; there are 73 Large C&I customers. The Large C&I sales forecast is based on a generalized econometric model that relates monthly consumption to economic activity, weather, and seasonal use captured by monthly binary variables. The model is estimated over the period January 2015 through September 2025. The model excludes GMP's two largest customers. Figure 9 shows the Large C&I model.

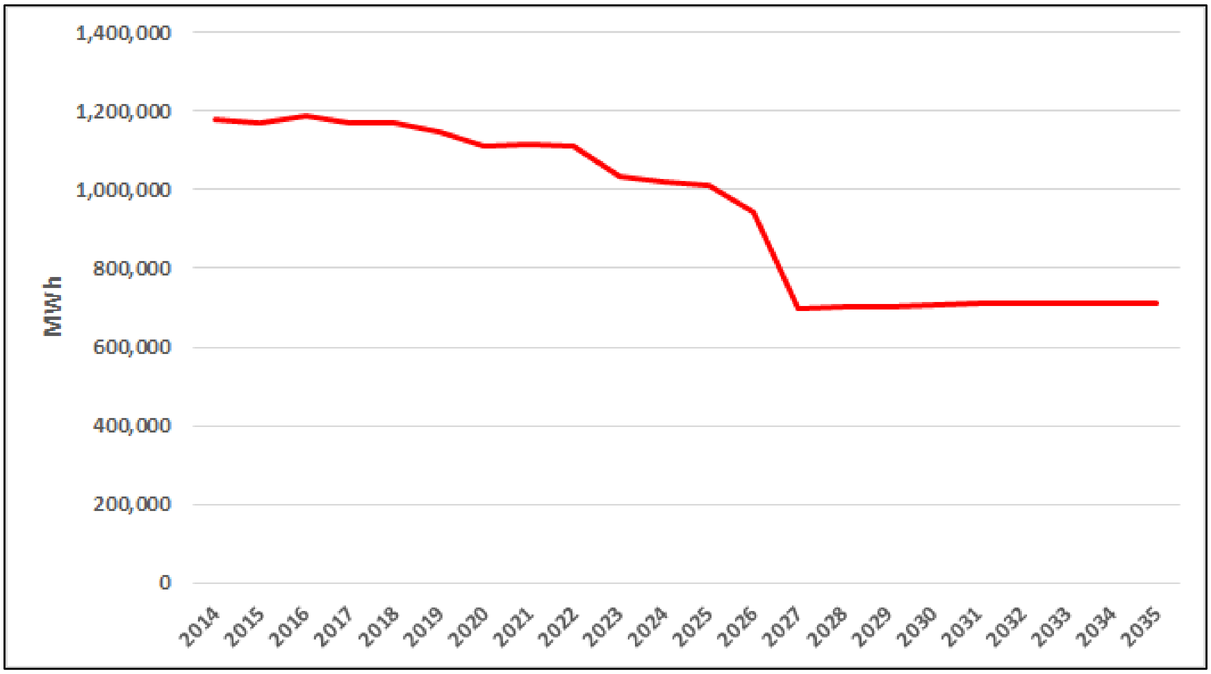
FIGURE 9: LARGE C&I MODEL



The model fit as indicated by the Adjusted R-Squared (0.70) is not nearly as strong as that in the Small Commercial or Residential models. This is largely due to the "noise" in the monthly billing data. The primary model variable, IndVar, is highly significant with a t-statistic of 122, indicating that the primary model variable is a strong predictor of future sales growth. IndVar is an economic driver that is equally weighted between state GDP and manufacturing employment. Large C&I customers also saw a drop in sales in 2020, but it was not nearly as severe as Small Commercial sales. The forecast is largely driven by moderate state GDP growth.

In 2027 there is a significant drop in Large C&I sales as GMP's largest customer has received PUC approval to become a self-managed utility. There is also a small increase in loads in October 2025 (10,380 MWh) resulting from expected customer onsite expansion activity. Baseline Large C&I sales are largely flat after 2027. Figure 10 shows the Large C&I baseline sales forecast.

FIGURE 10: BASELINE LARGE C&I FORECAST



BASELINE FORECAST DRIVERS

The baseline models reflect the current level of embedded technologies (i.e., solar generation and heat pumps), current and expected changes in end-use intensities/efficiency, economic outlook, expected weather conditions, and price.

Economic Forecast

The Update forecast is based on Moody's Analytics' September 2025 state economic projections. The earlier FY2026 forecast was based on Moody's January 2025 forecast. The primary economic drivers include households, real personal income, GDP, and in past forecasts employment. Table 5 shows the state economic forecast.

TABLE 5: VERMONT ECONOMIC PROJECTIONS (SEPTEMBER 2025)

Year	Households (Thou)	Chg	RPI (Mil $)	Chg	GDP (Mil $)	Chg	Emp (Thou)	Chg
2015	269.3		31,425		32,090		312.1	
2016	270.5	0.4%	31,632	0.7%	32,296	0.6%	313.3	0.4%
2017	271.8	0.5%	31,921	0.9%	32,586	0.9%	315.0	0.5%
2018	272.8	0.4%	32,524	1.9%	32,846	0.8%	316.1	0.3%
2019	273.7	0.3%	33,647	3.5%	33,202	1.1%	315.4	-0.2%
2020	271.6	-0.8%	35,860	6.6%	32,389	-2.5%	289.3	-8.3%
2021	272.9	0.5%	35,855	0.0%	33,690	4.0%	294.5	1.8%
2022	274.6	0.6%	35,393	-1.3%	34,664	2.9%	304.2	3.3%
2023	274.6	0.0%	35,996	1.7%	35,219	1.6%	309.7	1.8%
2024	274.8	0.1%	36,826	2.3%	36,005	2.2%	311.7	0.6%
2025	276.0	0.4%	37,620	2.2%	36,547	1.5%	313.7	0.6%
2026	276.5	0.2%	38,189	1.5%	36,959	1.1%	314.0	0.1%
2027	276.6	0.0%	38,777	1.5%	37,395	1.2%	313.7	-0.1%
2028	276.5	0.0%	39,334	1.4%	37,964	1.5%	314.1	0.1%
2029	276.5	0.0%	40,052	1.8%	38,663	1.8%	314.9	0.3%
2030	276.7	0.1%	40,902	2.1%	39,474	2.1%	316.2	0.4%
2031	277.1	0.1%	41,779	2.1%	40,310	2.1%	317.4	0.4%
2032	277.4	0.1%	42,651	2.1%	41,080	1.9%	317.7	0.1%
2033	277.5	0.1%	43,454	1.9%	41,780	1.7%	317.2	-0.2%
2034	277.5	0.0%	44,120	1.5%	42,396	1.5%	316.3	-0.3%
2035	277.4	0.0%	44,694	1.3%	42,973	1.4%	315.5	-0.3%
15-24		**0.2%**		**1.8%**		**1.3%**		**0.0%**
25-35		**0.1%**		**1.7%**		**1.6%**		**0.1%**

Over the long-term, the September economic forecast is slightly stronger than the January forecast with long-term GDP growth averaging 1.6% vs 1.5% in the January forecast. The state economic growth projections are roughly the same as those experienced over the last ten years.

End-Use Intensity Projections

End-use intensities were updated to reflect the most recent Annual Energy Outlook (AEO 2025) for New England. The 2025 forecast was a major update with both residential and commercial energy intensities updated to new base years.

Residential. The residential base-year moved from 2015 to 2020, and the commercial base-year from 2013 to 2019. The residential intensities include the impact of new efficiency standards for water heaters, room air conditioners, dish washers, and dryers, but these do not have a significant impact until 2030. The AEO 2025 includes much stronger miscellaneous sales growth contributing to positive total intensity growth through 2028. After 2030, total intensity declines 0.8% per year compared with AEO 2023 forecast of a 0.4% annual decline. The average over the 10-year period is unchanged with a 0.4% per year decline. End-use intensities are calibrated to past state appliance surveys and to much higher heat pump saturation than that for New England. For the forecast, however, the heat pump saturation is held constant as heat pumps are modeled separately.

Figure 11 compares the total residential intensities.

FIGURE 11: RESIDENTIAL TOTAL INTENSITY PROJECTION

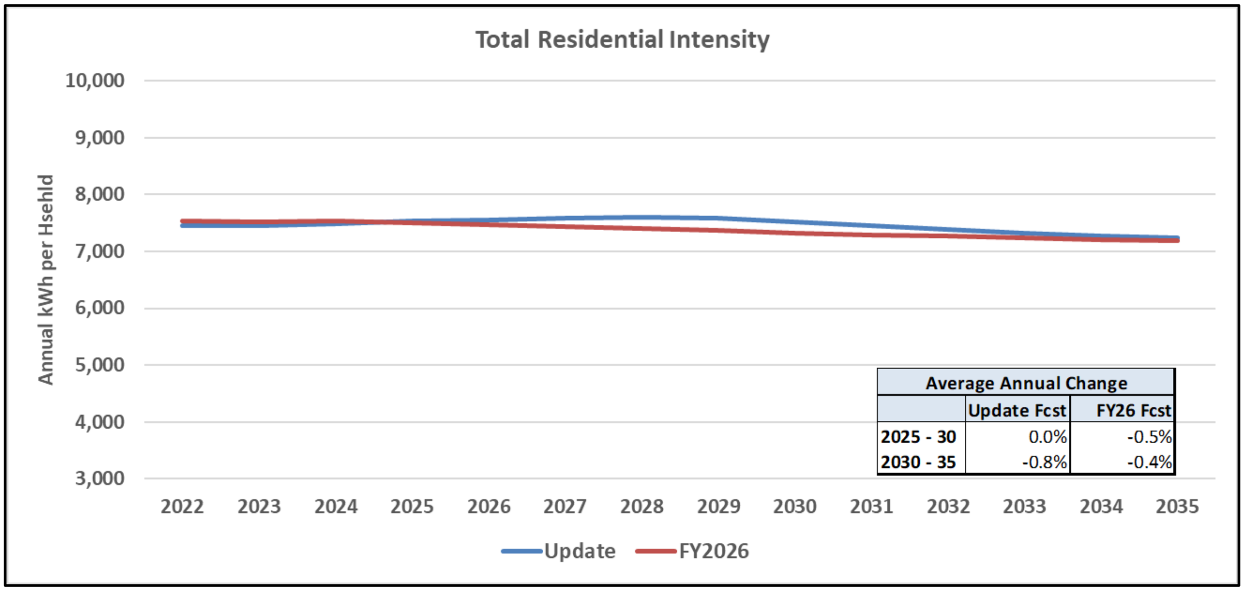
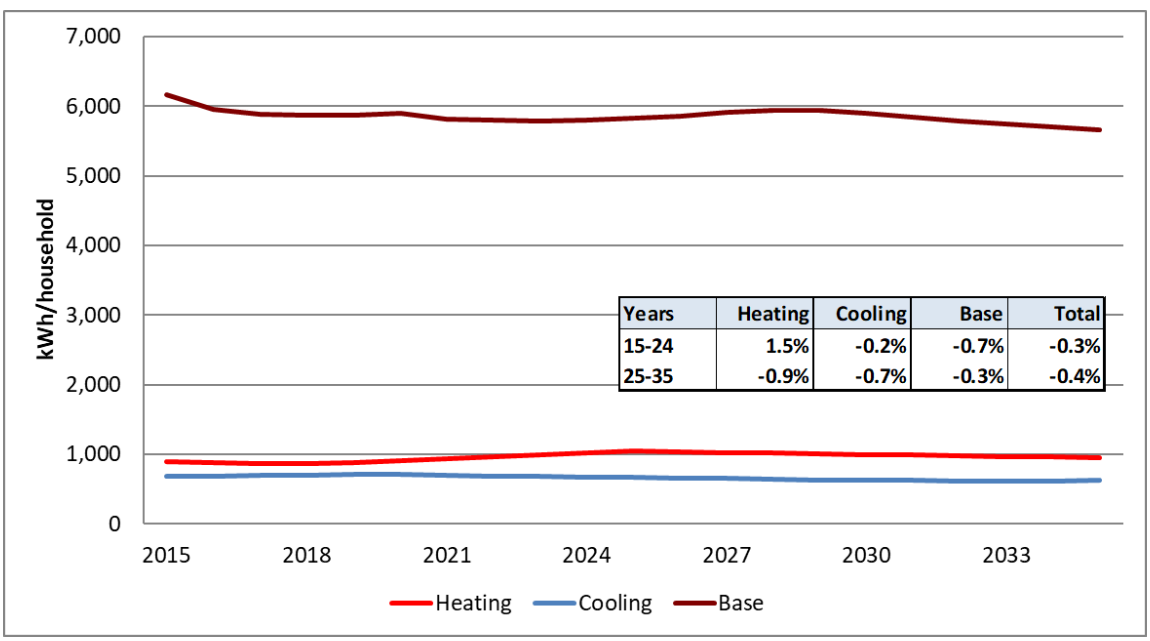


Figure 12 shows the updated end-use intensities by primary end-uses.

FIGURE 12: UPDATE RESIDENTIAL INTENSITY FORECASTS

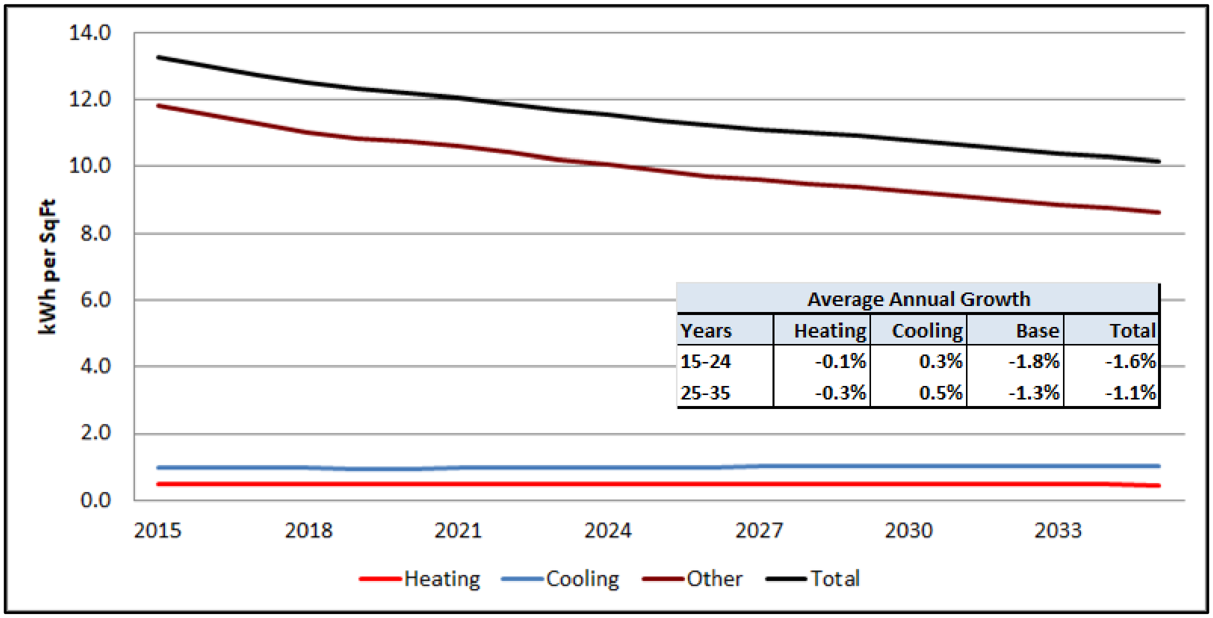


The increase in heating intensity between 2015 and 2024 reflects growth in heat pumps. In the forecast period, heating intensity declines as additional heat pump growth is treated separately in development of the *Adjusted* sales forecast. Cooling intensity declines at faster rate in the forecast largely because of higher air conditioning efficiency projections because of new room air conditioning standards and higher saturation of more efficient heat pumps. The base use decline slows largely because of much higher miscellaneous sales growth. In the later years, intensities decline because of new efficiency standards for water heaters, dryers, and dish washers.

Commercial. Commercial end-use intensities are measured on a kWh per square foot basis. There are nine commercial end-uses that are mapped to heating, cooling, and base use. Intensities are weighed across ten building types based on building square footage. Intensity projections are based on the Energy Information Administration 2025 New England Census Division forecast. Commercial intensities are calibrated to Vermont specific estimates from the NREL (National Renewable Energy Laboratory) commercial building simulation data set for Vermont. Intensities are also adjusted for VEIC current end-use efficiency savings projections.

Over the last ten years, Commercial building intensity has averaged 1.6% annual decline when adjusted for EE program savings. Total intensity is projected to decline at an average 1.1% rate for the next ten years. The rate of decline is lower is lower than that of the FY2026 forecast as the AEO25 forecast has a much slower decline in ventilation intensity and stronger computer related intensities due to growth in data centers and on-premises computing. Figure 13 shows commercial building intensity trend.

FIGURE 13: COMMERCIAL BUILDING INTENSITY



The slower decline in commercial intensity results in slightly stronger commercial baseline seals forecast.

Weather

Temperatures are the primary factor that drives month-to-month sales variation; typically heating loads are captured with heating degree-days (HDD), and cooling loads with cooling degree-days (CDD). HDD and CDD are known as spline variables as they only take on a positive value when conditions are met and are zero otherwise. For example, HDD with a 65-degree temperature base is calculated as:

HDD65 = 65 - temperature if temperatures < 65, and 0 if temperatures > =65

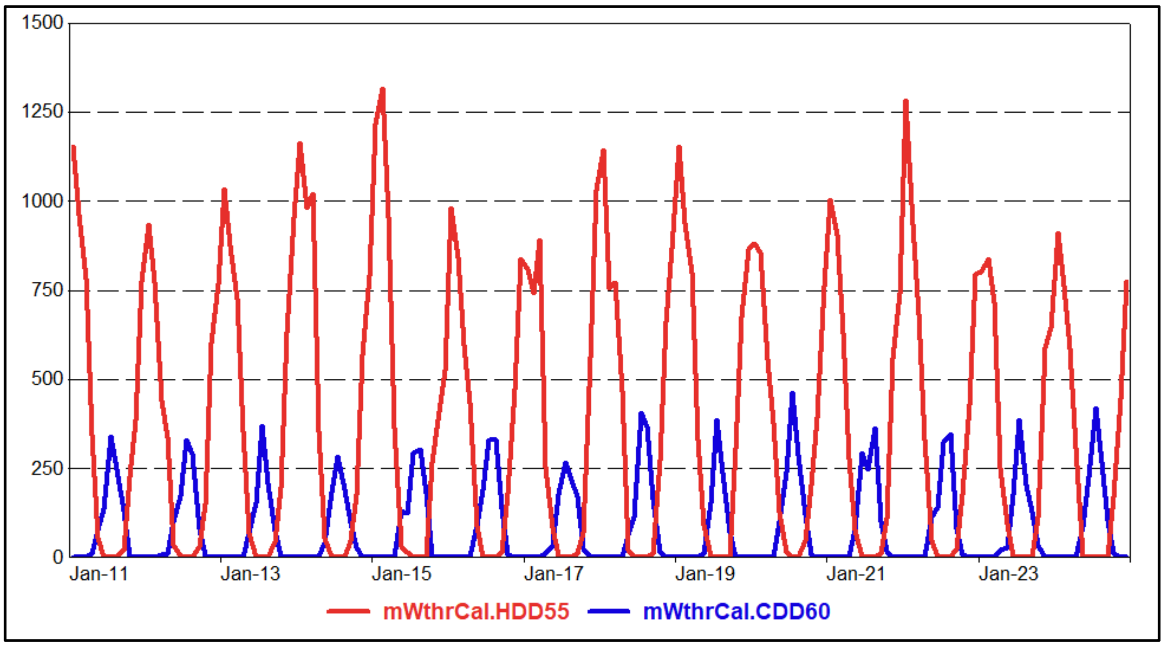
A CDD with 65-degree base only takes on a positive value when the average temperature is above 65 degrees:

CDD5 = temperature – 65 if temperatures > 65, and 0 if temperatures < =65

IN GMP SALES MODEL, WE FOUND WE COULD IMPROVE ON THE MODEL FIT USING HDD WITH 55-DEGREE BASE TEMPERATURE AND CDD WITH A 60-DEGREE BASE TEMPERATURE.

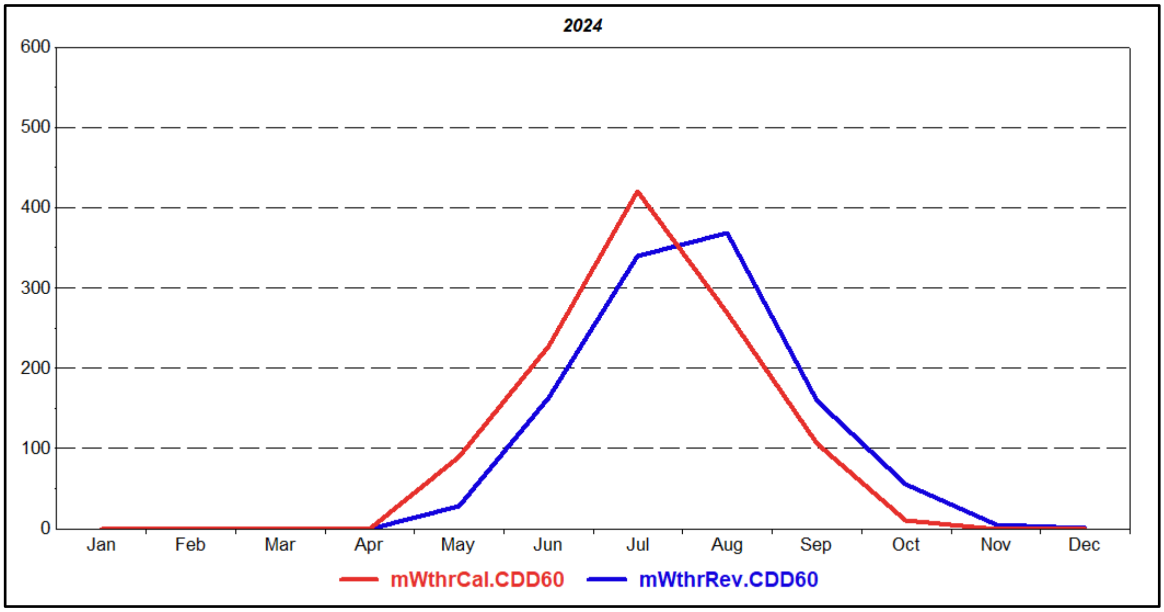
Figure 14 shows monthly HDD and CDD.

FIGURE 14: COOLING AND HEATING DEGREE-DAYS



One of the complicating factors in modeling customer billing data is that reported sales in any given month include sales from the first half of the current month and second half of the prior month. Cycle-weighted or revenue-month degree-days are generated so that the degree-days align with the billed sales. Cycle-weighted degrees are calculated by combining daily degrees with the meter read schedule and then summing over the month. Figure 15 compares calendar month HDD (in red) with cycle-weighted or revenue-month CDD (in blue).

FIGURE 15: MONTHLY CDD (2024)



Calendar CDD peaks in July while the revenue-month CDD peaks in August; the revenue month CDD aligns with reported sales. The sum of the calendar-month and revenue-month HDD over the year will be about the same; there will be some differences in that a revenue-month calendar often has slightly more or less than 365 days.

Normal CDD and HDD drive the forecast; normal degree-days represent expected weather conditions in the forecast period. Typically, normal degree-days are calculated by averaging degree-days over a defined historical period. Most utilities use either a 30-year or 20-year period. The problem, however, is averages based on a long history miss the temperature trend; average temperature has been increasing. This is depicted in Figure 16 which shows a trend model of average annual temperature for Burlington International Airport.

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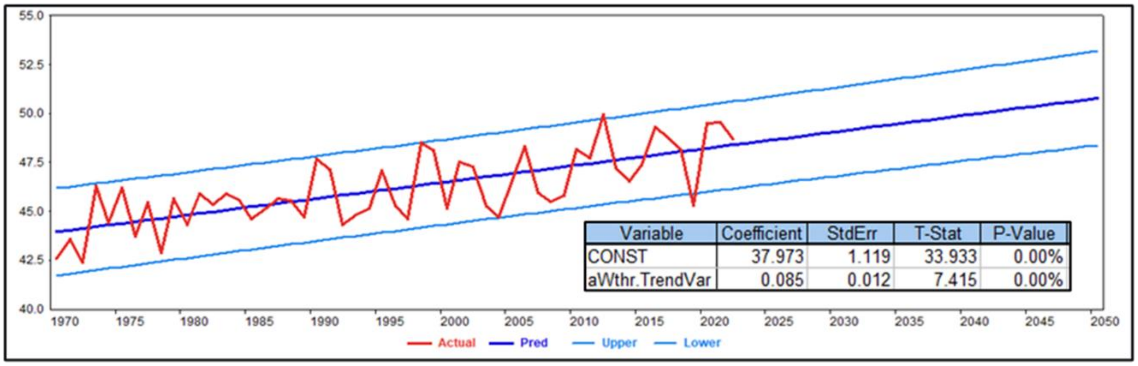
FIGURE 16: AVERAGE ANNUAL TEMPERATURE TREND BURLINGTON INTERNATIONAL AIRPORT



The model shows that since 1970, the average annual temperature has been increasing .085 degrees per year or 0.85 degrees per decade; the trend variable is highly statistically significant. Basing the forecast on a 30-year and even a 20-year normal will overestimate winter heating use and underestimate summer cooling loads. To address this issue, the forecast incorporates trended normal HDD and CDD that are derived from the predicted temperature trend. Figure 17 and Figure 18 show historical actual degree-days with trended normal degree-days.

FIGURE 17: HISTORICAL AND TRENDED MONTHLY NORMAL HDD

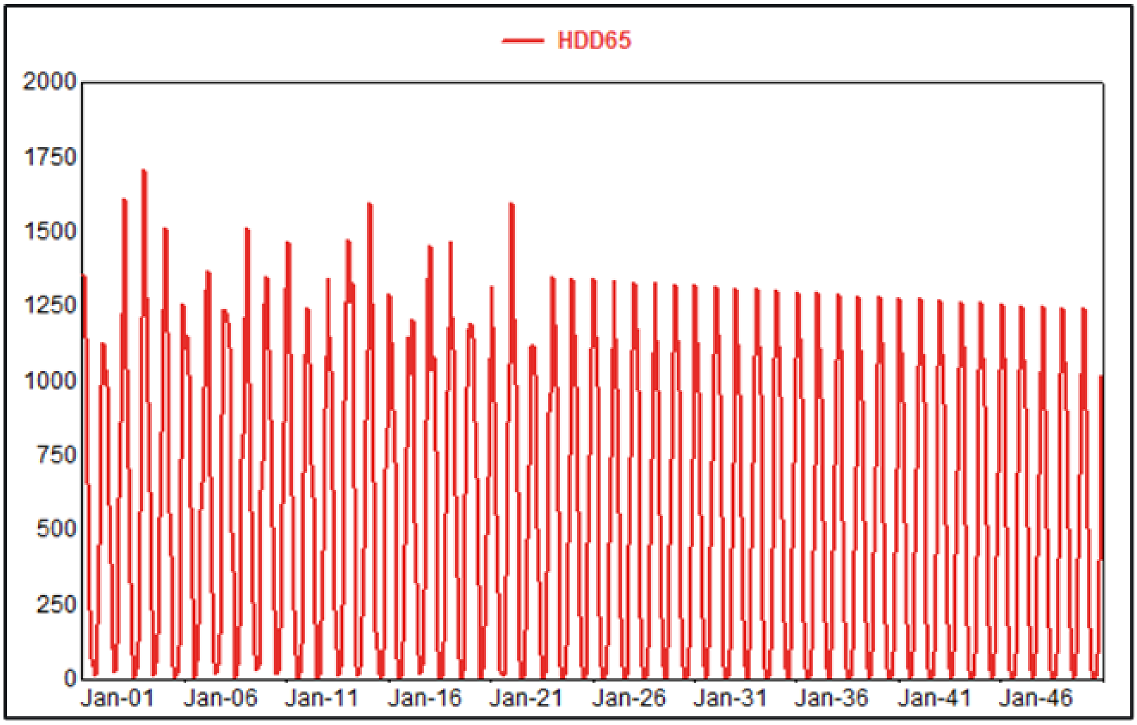
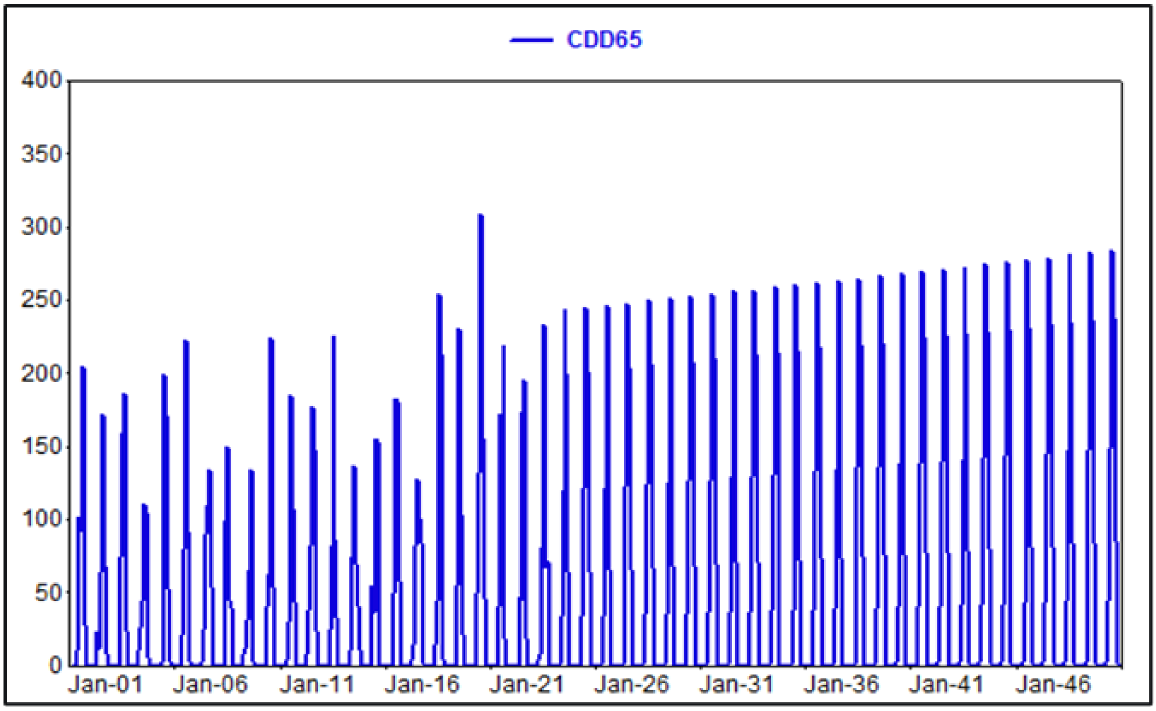


FIGURE 18: HISTORICAL AND TRENDED MONTHLY NORMAL CDD

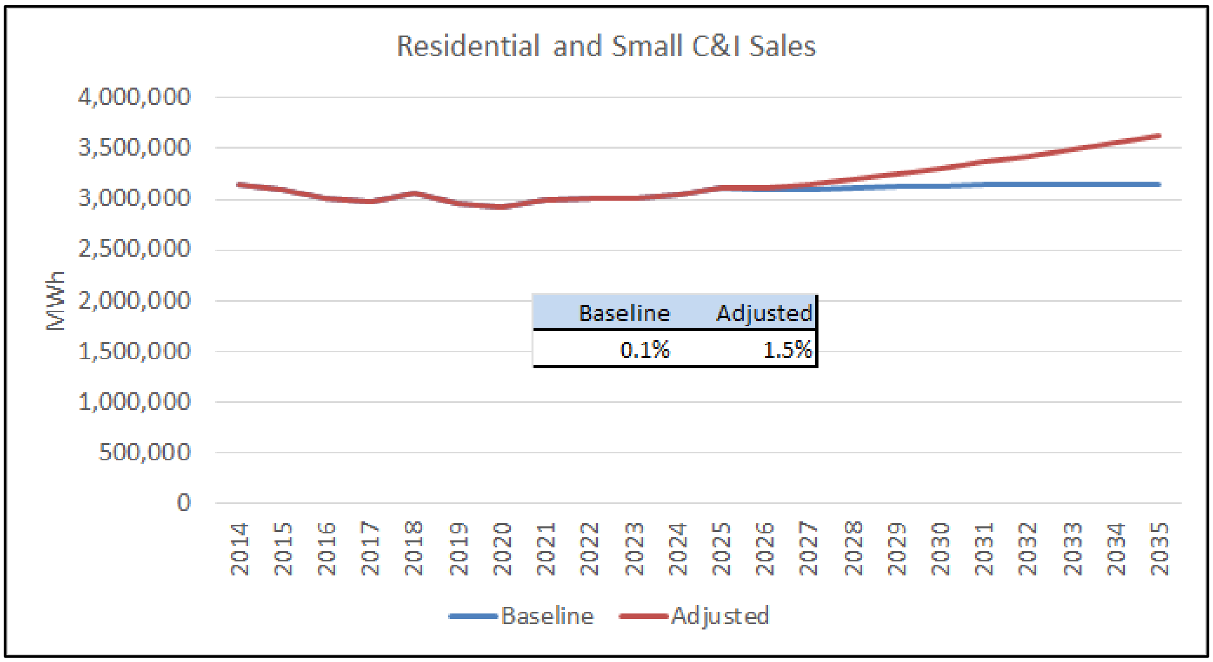


The degree-day trends contribute to a decline in heating requirements and an increase in cooling requirements.

3 ADJUSTED SALES FORECAST

Baseline sales increase on average 0.1% over the next ten years; moderate customer and economic growth is countered by new standards and improving efficiency due to state energy efficiency program activity. The forecast is largely driven by the adoption of electric vehicles and heat pumps that are somewhat mitigated by continuing adoption of behind-the meter (BTM) solar. Figure 19 compares baseline and adjusted sales excluding Large C&I.

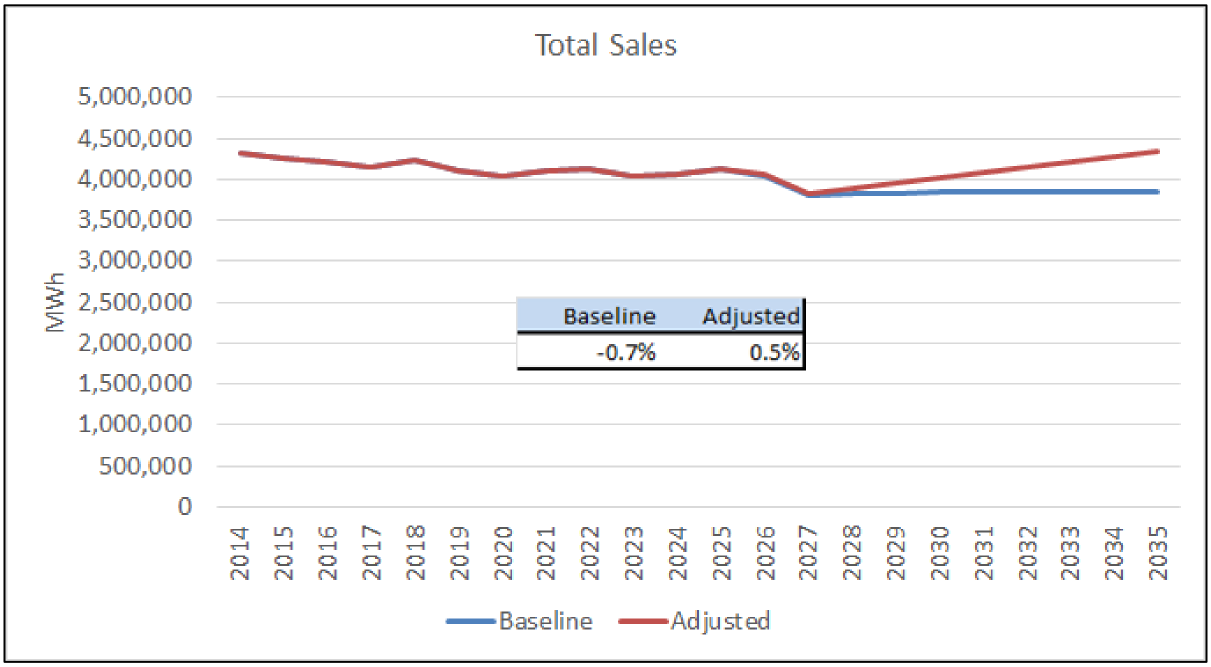
FIGURE 19: BASELINE AND ADJUSTED FORECAST COMPARISON



As depicted, most of the sales growth comes from heat pump and EV sales. With most of the heat pump and EV sales in the residential customer class.

Figure 20 shows total sales comparison which also includes Large C&I and street lighting.

FIGURE 20: BASELINE VS ADJUSTED SALES



Total baseline sales declines 0.7% per year largely as result of the sharp drop in Large C&I sales in 2027. Adjusted sales growth averages 0.5% per year. On a total sales basis, the technology adjustments contribute 1.2% to annual sales growth.

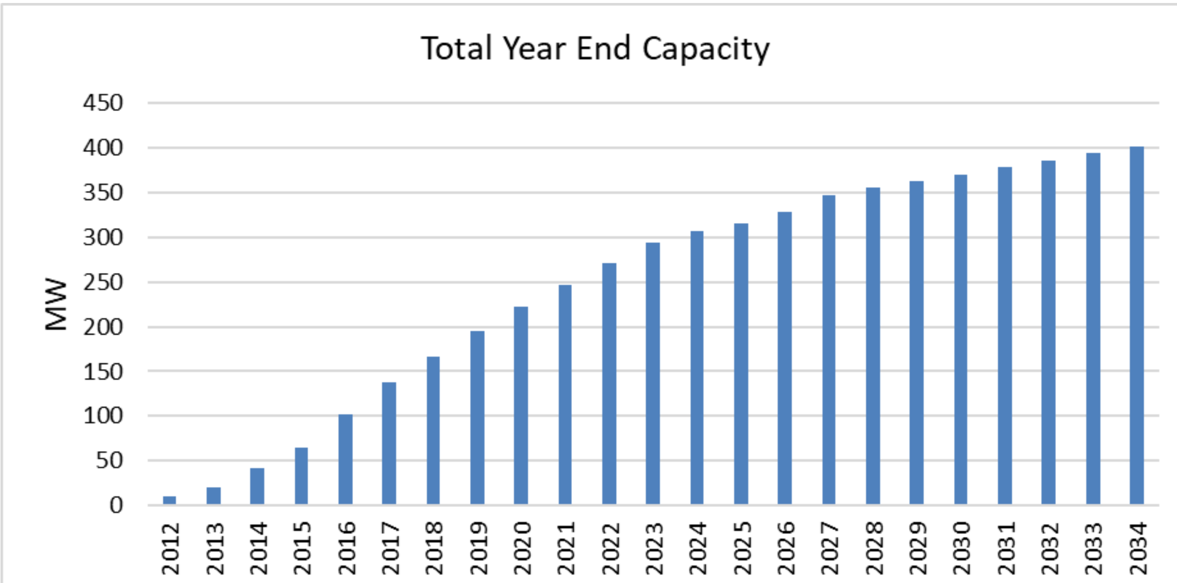
TECHNOLOGY FORECAST

GMP provided a forecast of solar capacity and expected heat pump sales. Itron adjusted the EV forecast based on changes/relaxation of the 2026 EV mandate. Forecasts include solar capacity, expected new electric vehicle adoptions and charging requirements, and heat pump adoption.

Behind the Meter Solar

Solar Capacity Forecast. Behind the meter (BTM) solar capacity forecast is developed by GMP based on interconnection application queues and historical trends. As of July 2025, there was 312 MW of installed solar capacity; this is slightly lower than the 319 MW forecasted at the beginning of the year. Solar capacity includes traditional, customer owned or leased roof-top systems, and larger community/group-based systems. Figure 21 shows total solar capacity forecast. Solar capacity continues to increase but at slower rate. By 2034 GMP projects year-end capacity close to 400 MW.

FIGURE 21: SOLAR CAPACITY FORECAST



In the Update forecast GMP expects to see solar capacity addition to slow to 7.7 MW per year after 2027 compared with the FY2026 forecast of 11.1 MW per year. The lower capacity forecast translates into lower long-term own-use solar generation and as a result higher electricity use (primarily residential).

Solar Generation. Solar generation (MWh) is derived by applying monthly solar load factors to the capacity forecast; load factors are based on typical solar generation patterns developed by GMP. Table 6 shows the solar generation load factors.

TABLE 6: SOLAR LOAD FACTORS

Month	Load Factor
Jan	7.7%
Feb	10.8%
Mar	14.1%
Apr	18.8%
May	19.5%
Jun	20.6%
Jul	20.3%
Aug	19.5%
Sep	15.7%
Oct	12.5%
Nov	8.4%
Dec	5.7%

Solar Own-Use. Solar generation is either consumed by the customer (*own-use*) or returned to the connected power-grid (*excess*); own-use reduces billed revenues, while excess is treated as power purchase cost. Solar own-use negatively impacts billed sales; new solar own-use is subtracted from the baseline sales forecast. The share of own-use generation (vs what is delivered back to the grid) varies by revenue class and month. Own-use generation is typically smaller in the summer months with a larger percentage of the generation sent to the grid (excess generation. One reason is that most of small C&I solar generation are purchases from large offsite solar installations that do not directly impact the customer's usage.

The baseline forecast is adjusted beginning in November 2025. (the first month of the forecast). Table 7 shows the incremental solar adjustments beginning in 2026. Capacity is shown on a year-end basis with generation estimates on a calendar-year basis.

TABLE 7: SOLAR GENERATION FORECAST

Year	Capacity (MW)	Generation (MWh)	Own-Use (MWh)	Excess (MWh)
2026	12.6	21,787.8	8,675.1	13,112.7
2027	22.8	36,498.8	12,573.0	23,925.8
2028	32.1	49,943.6	16,161.4	33,782.2
2029	39.8	60,121.9	18,838.1	41,283.9
2030	47.5	69,903.7	21,434.4	48,469.3
2031	55.2	79,685.6	24,030.8	55,654.7
2032	63.0	90,433.5	26,906.9	63,526.6
2033	70.7	99,249.2	29,223.6	70,025.6
2034	78.4	109,031.0	31,820.0	77,211.0
2035	86.1	118,812.8	34,416.4	84,396.4

Over 90% of the own-use generation is residential and reduces residential billed sales and associated revenues. In commercial, own use is relatively small (and has a small impact on revenues) as most commercial solar generation is treated as a power purchase cost; commercial customers receive a credit on their bill for their solar generation.

Heat Pumps

While still significant, the Update Heat Pump forecast is reduced to reflect expected lower number of heat pump unit sales and lower heat pump usage based on the State's recent heat pump study. Overall, the heat pump program has been a success with the number of heat pumps in the state increasing from approximately 10,000 units in 2018 to over 77,000 units through September 2025. Heat pump saturation has increased from around 2 percent in 2018 to an expected 15% saturation in 2025. Figure 22 shows heat pump saturation trend.

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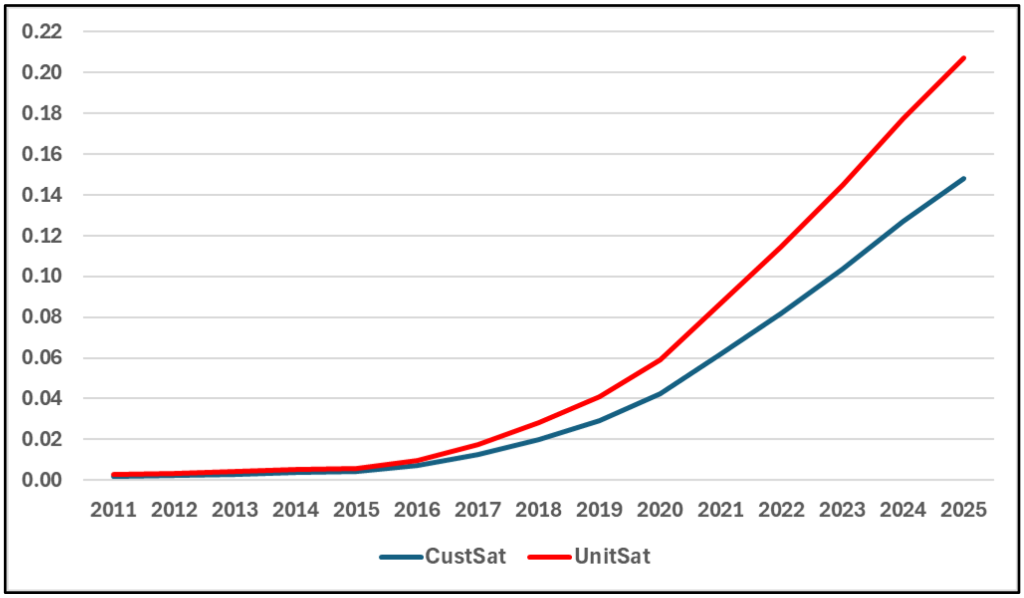
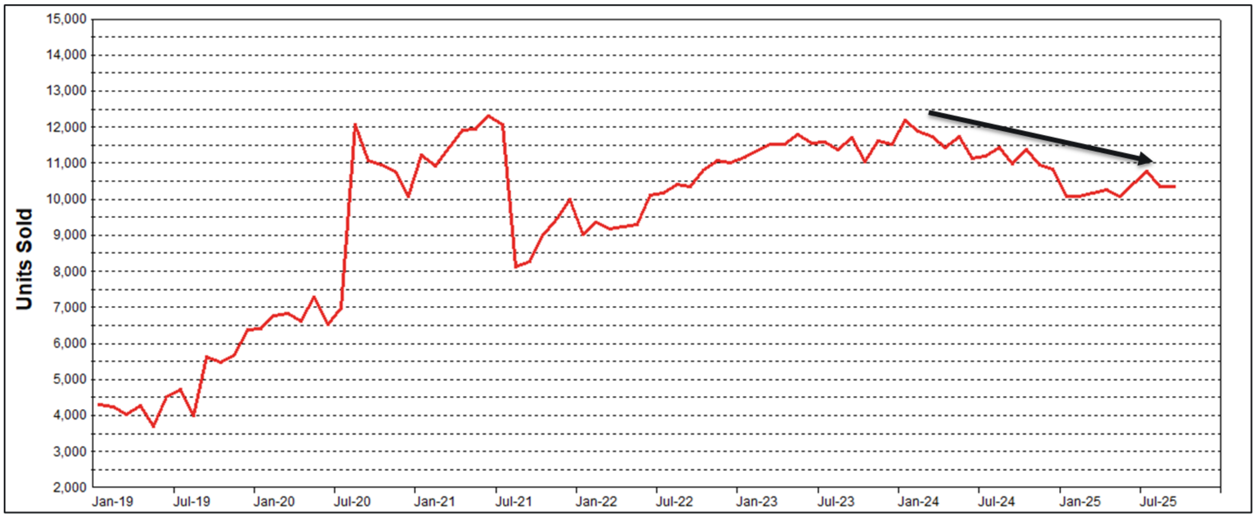
FIGURE 22: HEAT PUMP SATURATION (BASED ON VEIC DATA)



Unit saturation is calculated by dividing the number of units by customers. Customer saturation is calculated by dividing the number of customers that have installed heat pumps by the number of customers; on average there are 1.4 heat pump units installed per customer.

While there has been strong heat pump growth, heat pump sales are slowing. Figure 23 shows 12-moving average of reported VEIC sales on an annualized basis.

FIGURE 23: ANNUALIZED HEAT PUMP SALES

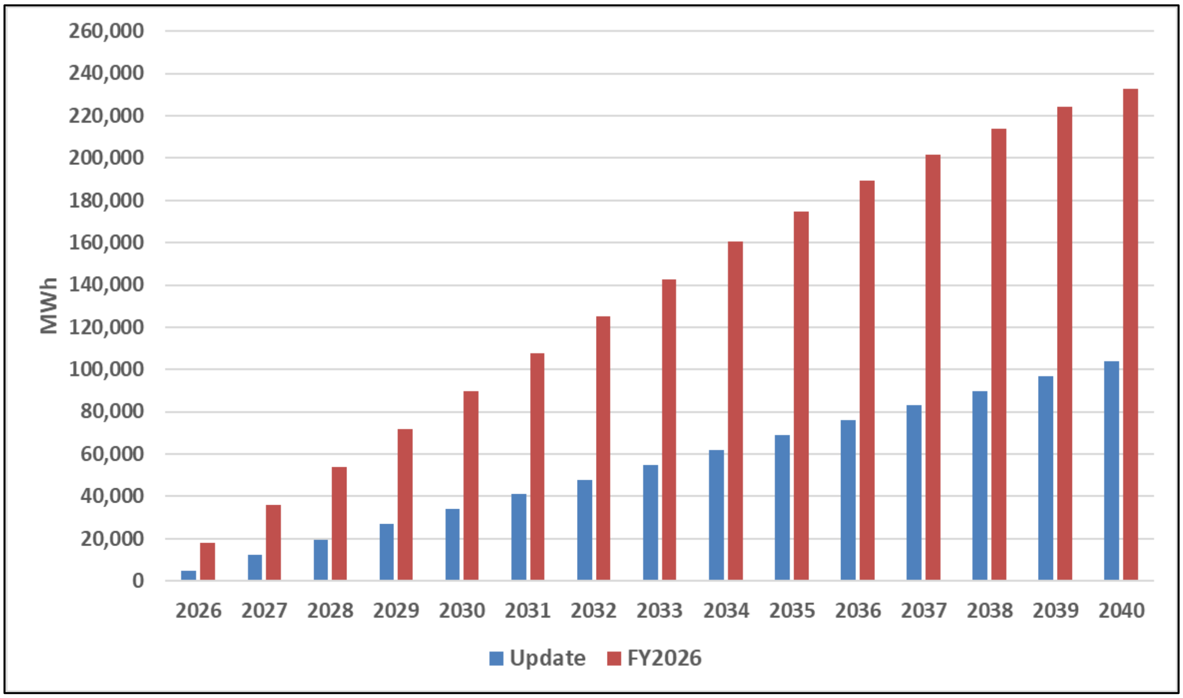


Further, both VEIC and GMP staff expect to see a sharp reduction in 2026 sales due to the loss of the federal tax credit that covered 30% of the heat pump total cost (unit plus installation) up to $2,000.

VEIC and GMP expect to see a 20 to 30% reduction in heat pump sales because of the federal tax credit loss. For GMP this results in expected annual heat pump unit sales of 5,075 units per year down from nearly 7,000 units expected by year-end 2025.

The Update forecast also has a much lower heat pump unit usage. A recent study by the state showed that on average heat pump units are using 1,350 kWh per installed unit. This compares to a little over 2,000 kWh per year based on an earlier Cadmus state study. GMP average heat pump use is higher than the state as GMP has a higher share of ducted heat pump systems. Based on the study, average heat use is 1,500 kWh per unit compared with 2,200 kWh per unit used in FY2026 forecast. Figure 24 compares FY2026 and Update forecast heat pump sales.

FIGURE 24: HEAT PUMP SALES PROJECTION



With significantly fewer expected unit sales and 35% lower heat pump use, the 2031 Update forecast is nearly 40% lower than the FY2026 forecast.

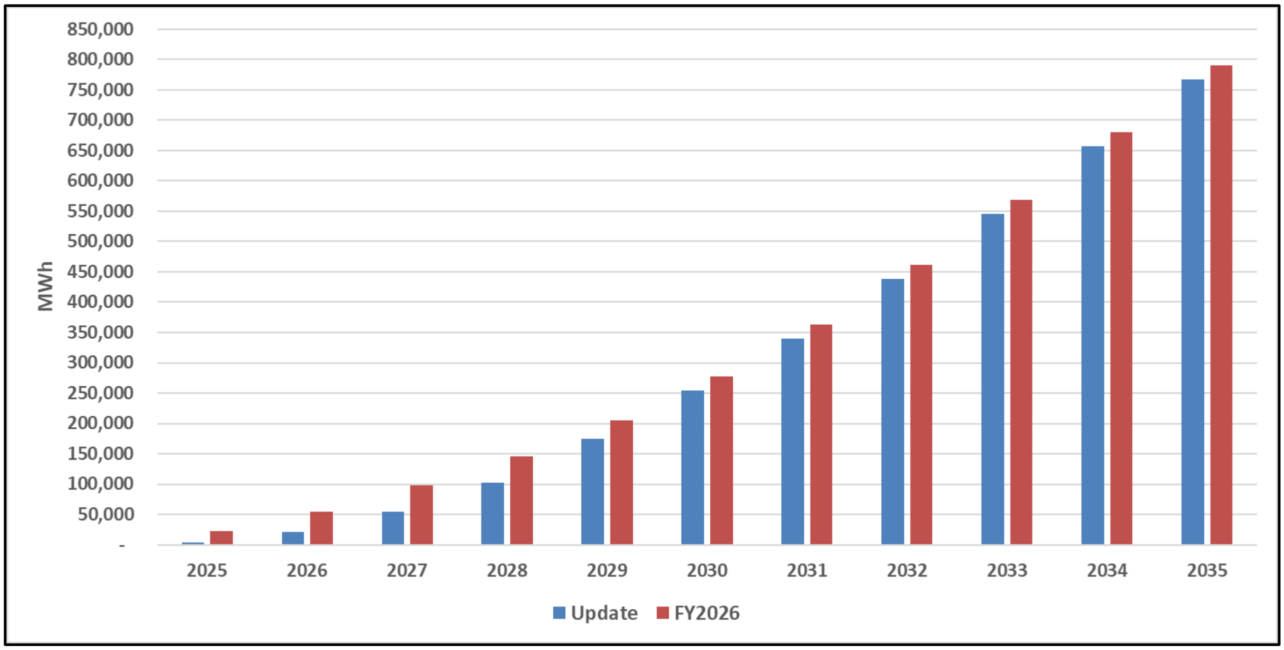
Electric Vehicles

According to Drive Electric Vermont, there are over 18,000 electric vehicles on Vermont roads. This up 40% over 2023 representing close to 5% of total vehicle stock. The number of new EV vehicles in the first three quarters of this year, however, is down; new registered EVs are 35% lower than in 2024. Furthermore, it's unlikely there will be a strong uptake in EV purchases as the Federal EV tax credit has been eliminated. Based on data through the first three quarters, we estimate a little over 9% of vehicle purchases will be all or partial electric vehicles.

The EV forecast has been based on state EV purchase mandates; Vermont, like 17 other states and the District of Columbia, adopted the California mandate that requires 35% of all new vehicles to be electric in 2026, 68% in 2030, and 100% in 2035.

Recognizing the lack of EV infrastructure and impact on dealerships that would have to take a large number of EVs from the manufacturers, Governor Scott postponed the 2026 mandate. The forecast assumes that the 2030 and 2035 mandates will be met. EV percent of new vehicles increases from 9% in 2025 to 68% in 2030 and 100% in 2035. While the 2030 and 2035 mandates are the same as that in the FY2026 forecast, there are significantly fewer EVs in the near term resulting in lower EV sales. Figure 25 compares the Update EV forecast with the FY2026 EV forecast.

FIGURE 25: EV CHARGING SALES



In 2027, The Update EV charging loads are half of that in the FY2026 forecast (50,000 MWh vs 100,00 MWh). The Update forecast eventually catches up with the FY2026 forecast as the 2030 and 2035 mandate are still in place.

Based on studies by NREL, 80% of the charging load will be at home, impacting residential sales, and 20% will be away from home, adding to commercial sales.

Other Load Adjustments

The Large C&I customer class is also adjusted for large load changes due to customer-specific business activity that would not necessarily be captured by the sales regression model. Customer-specific adjustments are made based on discussions with GMP C&I business team. There is a positive adjustment of 10,380 MWh for expected expansion at one of the Large C&I customer location.

Load Adjustments Summary

Table 8 shows a breakdown of the forecast by load adjustments. out of the summarizes load adjustments applied to the baseline forecast. Electrification programs and increasing penetration of electric vehicles outweigh efficiency and solar impacts after 2026. The large drop in 2027 sales reflects the loss of a large customer to transmission only service.

TABLE 8: ADJUSTMENTS SUMMARY

	NoEE(1)	EE(2)	Solar(3)	Tier3(4)	EV(5)	SpotLds(6)	TtlAdj	Forecast
2026	4,120,335	-3,759	-2,223	10,353	10,456	10,380	25,207	4,145,542
2027	3,809,174	-18,610	-6,054	19,034	24,683	10,380	29,433	3,838,607
2028	3,842,270	-33,498	-9,373	30,070	49,432	10,380	47,011	3,889,281
2029	3,876,328	-52,790	-12,288	41,009	85,719	10,380	72,029	3,948,357
2030	3,919,136	-86,534	-14,839	51,871	128,946	10,380	89,824	4,008,961
2031	3,964,278	-125,306	-17,367	62,671	175,703	10,380	106,081	4,070,359
2032	4,008,328	-163,907	-19,940	73,428	228,266	10,380	128,228	4,136,555
2033	4,042,741	-200,984	-22,422	84,201	286,534	10,380	157,710	4,200,451
2034	4,074,270	-236,775	-24,949	94,957	348,218	10,380	191,831	4,266,101
2035	4,102,283	-269,064	-27,477	105,693	410,180	10,380	229,712	4,331,995

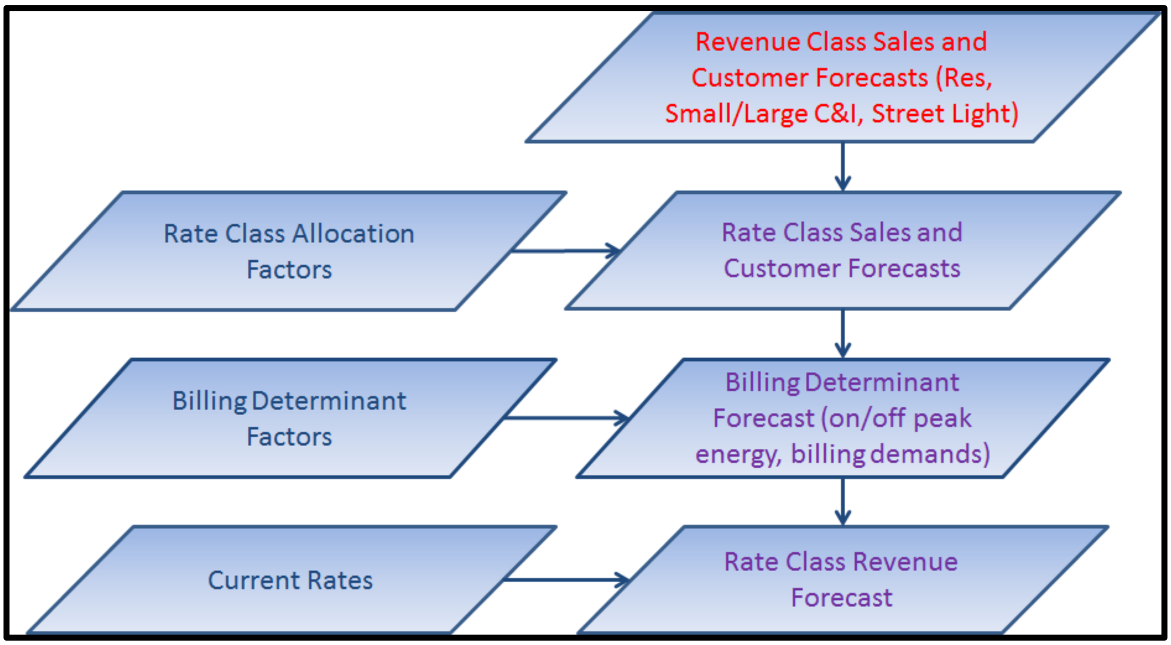
1. No EE forecast assumes no efficiency improvements after 2025.
2. Efficiency includes impacts of new standards, naturally occurring, and EE program-based efficiency improvements.
3. Solar is derived from GMP solar capacity forecast and is allocated to classes.
4. Tier 3 heat pump forecast includes residential CCHP forecast and commercial building electrification projections.

5. GMP IRP EV forecast.
6. Customer specific spot load adjustments.

4 REVENUE FORECAST

The revenue forecast is derived at the rate schedule level. The billed sales forecasts are allocated to rate schedules and within rate schedules to billing determinants (i.e., customer, on and off-peak use, and billing demands). Revenues are then generated by multiplying rate schedule billing determinants by the current tariff rates. Figure 26 provides an overview of the revenue model.

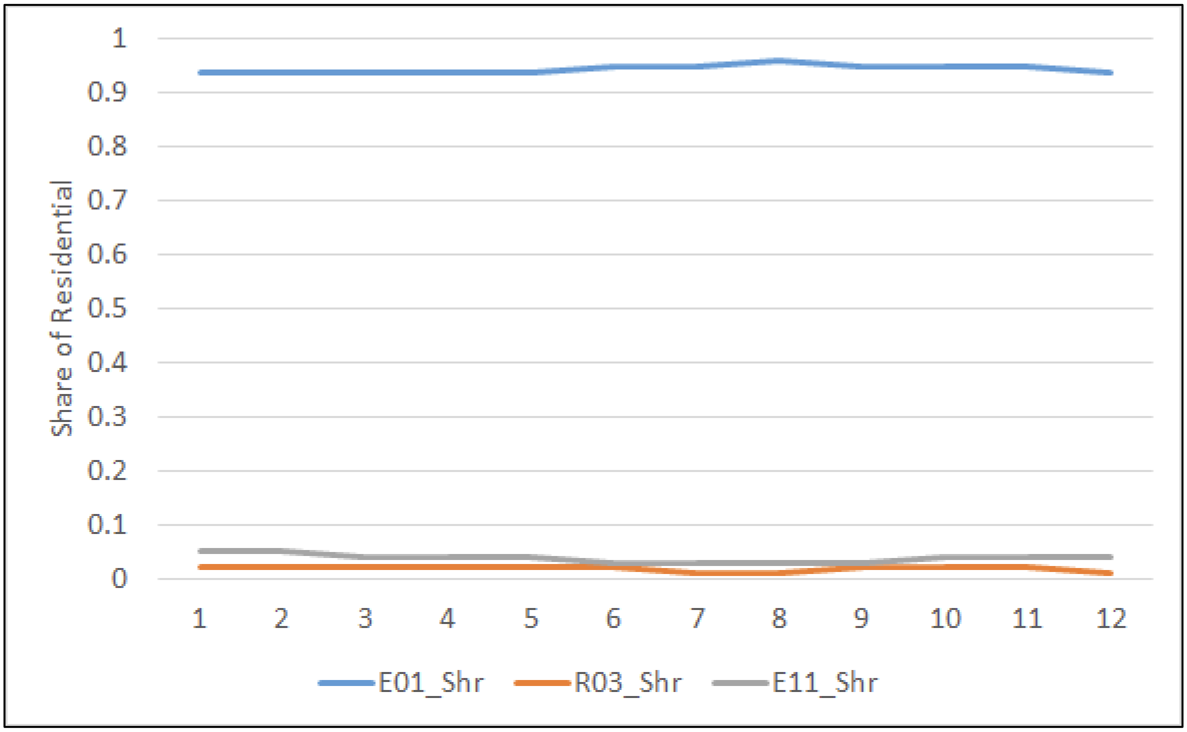
FIGURE 26: REVENUE MODEL



Derive Rate Class Monthly Sales Forecast

Revenue class sales and customer forecasts are allocated to the underlying rate schedules based on projected monthly allocation factors. The allocation factors are derived from historical billing data and simple regression models that capture any share trends and seasonal variation. Residential class sales, for example, are allocated to rate schedules - E01, RE03, and E11 rate classes. Figure 27 shows 2024 historical and forecasted residential rate class sales shares.

FIGURE 27: RESIDENTIAL RATE CLASS SHARE FORECAST



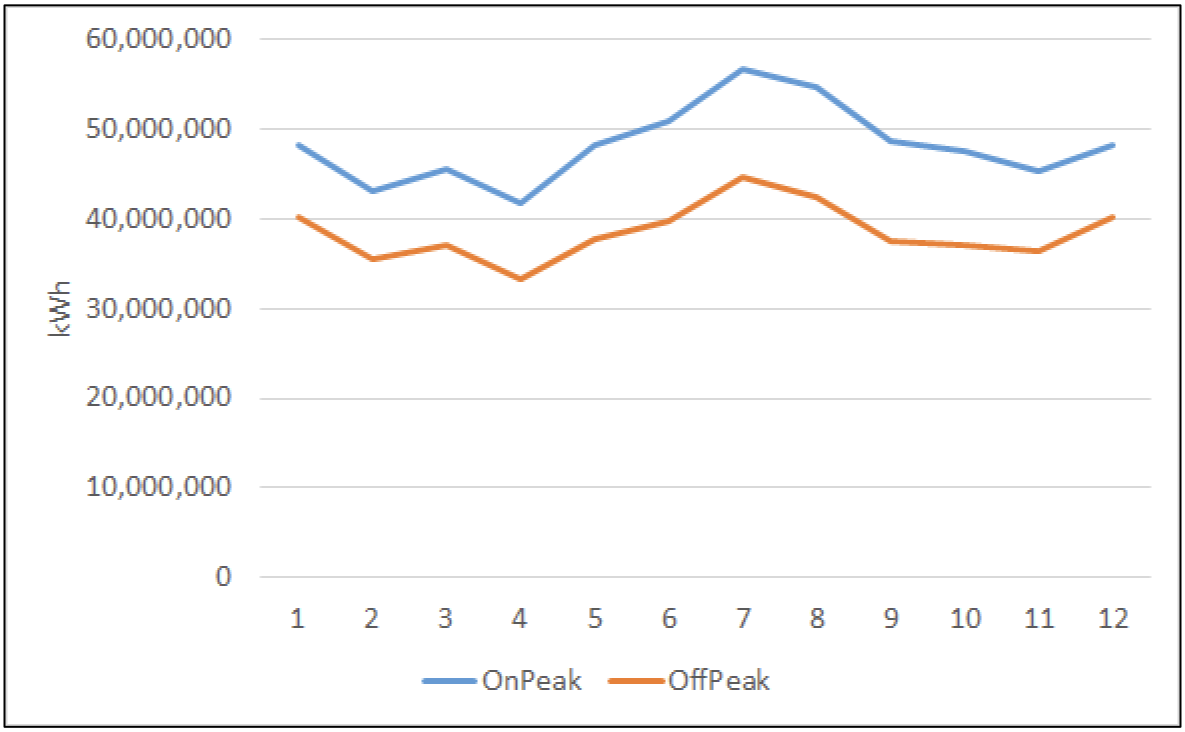
Approximately 95% of residential sales are billed under rate E01. The percentage is slightly lower in the winter months as the electric time-of-use rate (E11) is higher in these months.

Estimate Monthly Billing Determinants

In the next step, rate class sales (and customers counts for some rates) are allocated to billing blocks, time-of-use billing periods, and on and off-peak billing demand blocks. Billing block and demand factors are derived from historical billing data. For example, residential rate E11 has on peak and off-peak energy billing periods that are priced differently. Rate E11 monthly sales are allocated to TOU periods based on historical on-peak and off-peak sales data.

Some of the rates are complex. The small C&I rate E65, for example, includes non-demand and demand billed sales and customers, load factor kWh blocks (for demand customers), and different demand charges for demand for on/off peak, which are scheduled to replace block rates within the next two years. Figure 28 shows the resulting sales block 2025 forecasts for rate E65 Customers.

FIGURE 28: RATE E65 - SALES BILLING BLOCK FORECAST



Calculate Rate Schedule and Revenue Class Revenues

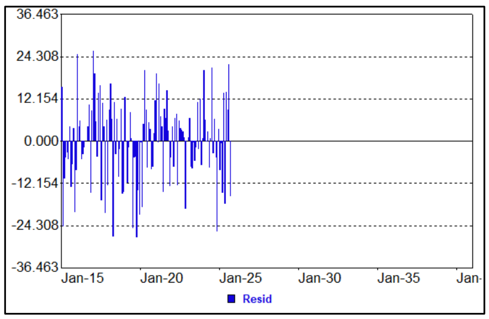
Once the billing determinants are derived, revenues are generated by multiplying the forecasted billing determinants by the current customer, energy, and demand charges. Revenues are aggregated by rate schedule and month. Rate schedule revenues are then mapped back to the customer classes residential, small C&I, large C&I, and street lighting as reported in the Summary Table 4.

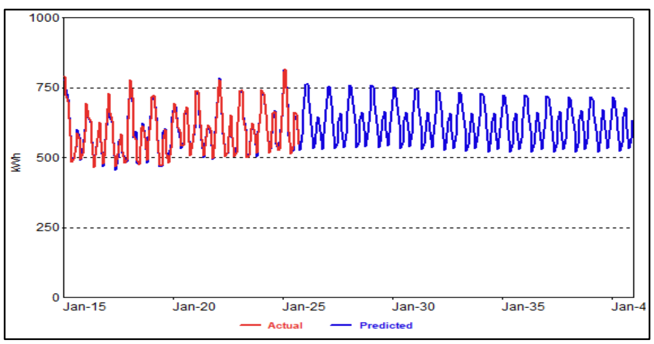
APPENDIX A

Residential Average Use Model Estimated January 2015 Through September 2025

Variable	Coefficient	StdErr	T-Stat	P-Value	Units	Definition
mStructRevRes.XHeat	1.561	0.039	40.037	0.00%		Residential Heating Component (Actual History with Normal Weather Forecast)
mStructRevRes.XCool	0.756	0.026	29.227	0.00%		Residential Cooling Component (Actual History with Normal Weather Forecast)
mStructRevRes.XOther	0.839	0.013	64.279	0.00%		Residential NonHVAC Component (Actual History with Normal Weather Forecast)
mBin.Feb	-35.863	4.846	-7.401	0.00%		
mBin.Mar	-35.399	5.321	-6.652	0.00%		
mBin.Apr	-24.435	4.885	-5.002	0.00%		
mBin.May	-18.137	5.200	-3.488	0.07%		
mBin.Jun	-16.650	4.305	-3.867	0.02%		
mBin.TrendVar_Const	3.940	0.507	7.765	0.00%		
MA(1)	0.517	0.085	6.106	0.00%		

Model Statistics	
Iterations	12
Adjusted Observations	129
Deg. of Freedom for Error	119
R-Squared	0.981
Adjusted R-Squared	0.979
AIC	5.070
BIC	5.291
F-Statistic	#NA
Prob (F-Statistic)	#NA
Log-Likelihood	-500.04
Model Sum of Squares	903,053.63
Sum of Squared Errors	17,579.21
Mean Squared Error	147.72
Std. Error of Regression	12.15
Mean Abs. Dev. (MAD)	9.32
Mean Abs. % Err. (MAPE)	1.59%
Durbin-Watson Statistic	1.988

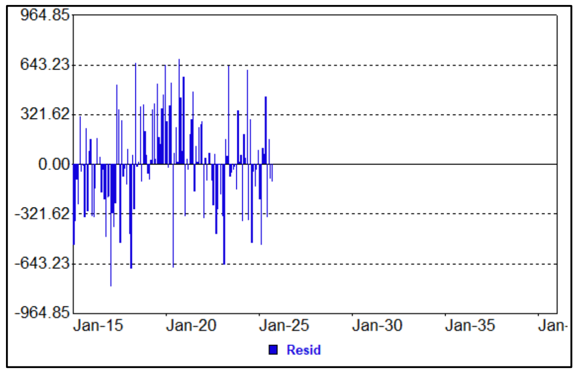


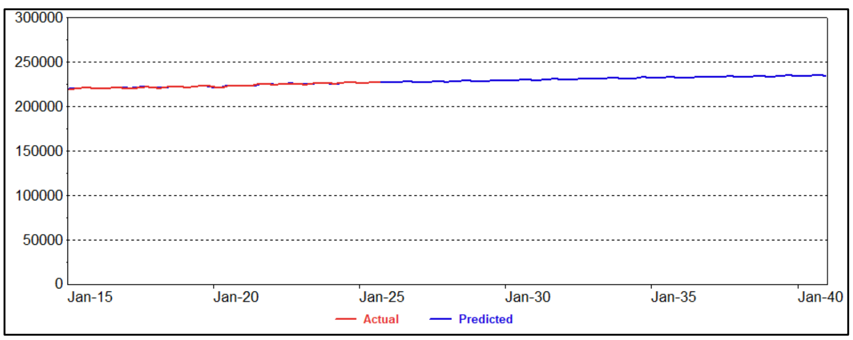


Residential Customer Model Estimated January 2015 Through September 2025

Variable	Coefficient	StdErr	T-Stat	P-Value	Units	Definition
CONST	148717.042	2926.263	50.821	0.00%		Constant term
mEcon.CustVar	71491.691	2887.149	24.762	0.00%		HH and GDP Weighted Economic Driver (GDP 0.4 weight Households 0.6 weight)
mBin.Jun	679.438	107.013	6.349	0.00%		
mBin.Jul	787.808	124.556	6.325	0.00%		
mBin.Aug	995.038	124.571	7.988	0.00%		
mBin.Sep	940.965	124.607	7.551	0.00%		
mBin.Oct	909.788	128.179	7.098	0.00%		
mBin.Nov	377.609	108.561	3.478	0.07%		
mBin.May20Plus	1620.055	125.647	12.894	0.00%		
MA(1)	0.538	0.080	6.683	0.00%		

Model Statistics	
Iterations	18
Adjusted Observations	129
Deg. of Freedom for Error	119
R-Squared	0.982
Adjusted R-Squared	0.981
AIC	11.621
BIC	11.843
F-Statistic	734.698
Prob (F-Statistic)	0.0000
Log-Likelihood	-922.60
Model Sum of Squares	683,959,352.48
Sum of Squared Errors	12,309,084.82
Mean Squared Error	103,437.69
Std. Error of Regression	321.62
Mean Abs. Dev. (MAD)	242.41
Mean Abs. % Err. (MAPE)	0.11%
Durbin-Watson Statistic	1.755

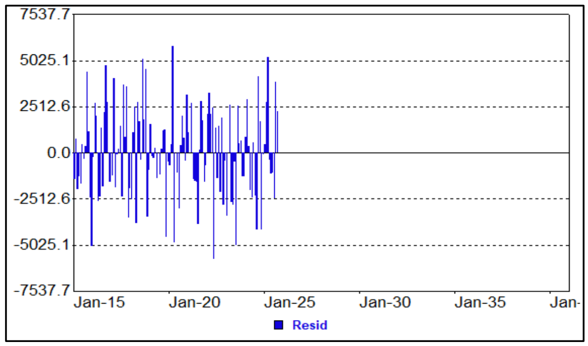


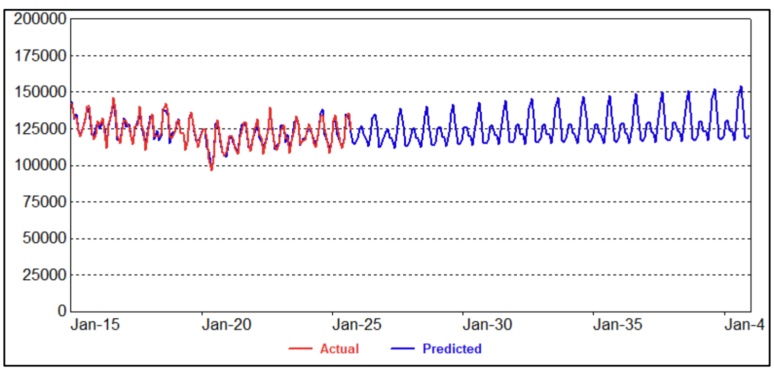


Small C&I Sales Model Estimated January 2015 Through September 2025

Variable	Coefficient	StdErr	T-Stat	P-Value	Units	Definition
mStructRevCom.XHeat	184557.467	10051.710	18.361	0.00%		Commercial Heating Use
mStructRevCom.XCool	75291.758	3106.145	24.240	0.00%		Commercial Cooling Use
mStructRevCom.XOther	9698.257	100.303	96.690	0.00%		Commercial Base Use
Covid.NResIndex	-5031.811	908.878	-5.536	0.00%		
mBin.May20	-7413.815	2682.039	-2.764	0.66%		
mBin.Jun20	-9457.486	2557.615	-3.698	0.03%		
mBin.TrendVar	245.812	116.610	2.108	3.71%		
MA(1)	0.377	0.089	4.227	0.00%		

Model Statistics	
Iterations	14
Adjusted Observations	129
Deg. of Freedom for Error	121
R-Squared	0.930
Adjusted R-Squared	0.926
AIC	15.718
BIC	15.895
F-Statistic	#NA
Prob (F-Statistic)	#NA
Log-Likelihood	-1,188.86
Model Sum of Squares	10,218,451,510.85
Sum of Squared Errors	763,871,482.75
Mean Squared Error	6,312,987.46
Std. Error of Regression	2,512.57
Mean Abs. Dev. (MAD)	1,970.71
Mean Abs. % Err. (MAPE)	1.61%
Durbin-Watson Statistic	2.040





Large C&I Sales Model Estimated January 2015 Through September 2025

Variable	Coefficient	StdErr	T-Stat	P-Value	Units	Definition
mEcon.IndVar	251.150	2.060	121.889	0.00%		GDP 0.5 Wt, Manufacturing Employment 0.5 Wt
mBin.Yr24Plus	-2297.395	785.818	-2.924	0.41%		
mBin.Yr25Plus	-955.126	1143.119	-0.836	40.51%		
mBin.Jan	10350.997	853.800	12.123	0.00%		
mBin.Feb	7313.009	853.793	8.565	0.00%		
mBin.Aug	3550.366	853.753	4.159	0.01%		
mBin.Sep	2732.202	853.754	3.200	0.18%		
mBin.Nov	4786.251	890.850	5.373	0.00%		
mBin.Dec	10853.519	890.846	12.183	0.00%		
mBin.Mar	2234.690	853.784	2.617	1.00%		

Model Statistics	
Iterations	1
Adjusted Observations	129
Deg. of Freedom for Error	119
R-Squared	0.722
Adjusted R-Squared	0.700
AIC	15.786
BIC	16.008
F-Statistic	#NA
Prob (F-Statistic)	#NA
Log-Likelihood	-1,191.23
Model Sum of Squares	2,053,321,164.18
Sum of Squared Errors	792,474,206.87
Mean Squared Error	6,659,447.12
Std. Error of Regression	2,580.59
Mean Abs. Dev. (MAD)	1,937.18
Mean Abs. % Err. (MAPE)	4.04%
Durbin-Watson Statistic	2.006