RESOLUTION NO. 2673

May 14, 2024

A RESOLUTION OF THE COMMISSION OF
PUBLIC UTILITY DISTRICT NO. 1 OF BENTON COUNTY, WASHINGTON
APPROVING THE 2024 LOAD FORECAST FOR 2024-2034

WHEREAS, the 2024 Load Forecast for 2024-2034 (Load Forecast) has been prepared by District staff and reflects customer load information; AND

WHEREAS, information contained in the Load Forecast is updated annually and is necessary for the District's revenue forecasting, for Bonneville Power Administration planning, and for the regional load forecast prepared by Pacific Northwest Utilities Conference Committee; AND

WHEREAS, the Load Forecast is used in conjunction with other fiscal planning tools including, but not limited to, the Cost-of-Service Analysis, the Resource Plan, the Power Supply Plan, the Five-Year Capital Plan and the annual budget.

NOW, THEREFORE BE IT HEREBY RESOLVED that the Commission of Public Utility District No. 1 of Benton County approves and adopts the attached 2024 Load Forecast for 2024-2034.

BE IT FURTHER RESOLVED that this Resolution supersedes Resolution No. 2639 dated June 13, 2023.

APPROVED AND ADOPTED by the Commission of Public Utility District No. 1 of Benton County at an open public meeting as required by law, this 14th day of May 2024.

DocuSigned by:
69B2EED7B19E4CC...
Jeff Hall, Vice-President

ATTEST:
DocuSigned by:
D78F52D0FB34436...
Lori Kays-Sanders, Secretary

Public Utility District No. 1 of Benton County

2024 Load Forecast for 2024-2034

Tables

Figures

1. Executive Summary

The 2024 Load Forecast for 2024-2034 (Forecast) provides an estimate of the District's annual and monthly loads and customer counts for each customer class and the total system. The Forecast is developed annually and used as critical input to several analyses and processes including the Cost-of-Service Analysis, the Resource Plan, the Power Supply Plan, the Five-Year Capital Plan, and the annual budget.

The Forecast expects the total annual retail load to be 207.0 aMW in 2025, increasing by 3.3 aMW, to 210.3 aMW in 2034, as shown below in **Figure 1-1.** The 5-year (2024-2029) and 10-year (2024-2034) annual average rates of growth are 0.13% and 0.16%, respectively. This Forecast is about 1.6 aMW higher in calendar year 2025 than was estimated by the 2023 forecast.

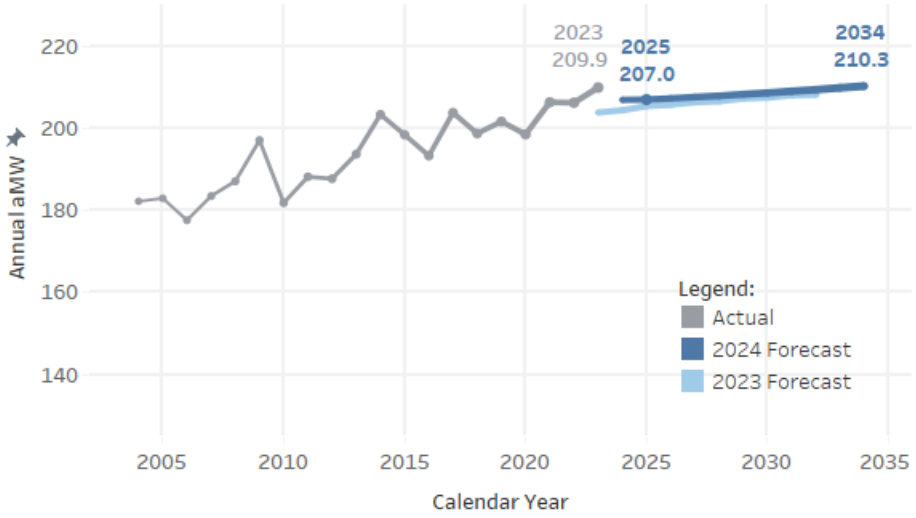

Figure 1-1 – Forecast of annual retail load

The Forecast expects continued growth in the District's total number of customers, with the count expected to increase by 663 customers per year, as shown below in **Figure 1-2**. The Forecast assumes 600 residential customers added annually and includes the March 2024 transfer of 87 residential customers to the City of Richland.

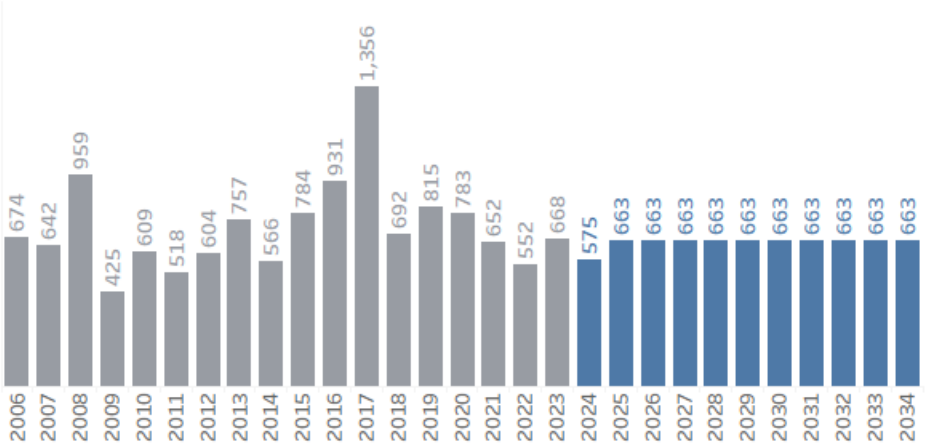

Figure 1-2 – Forecast of annual increase in customers

As shown below in **Figure 1-3**, the forecast includes 11.2 aMW of cumulative conservation over the forecast period, which is comprised of 2.0 aMW of residential and 9.2 aMW of non-residential conservation. For additional information about conservation, refer to **Section 2.5.**

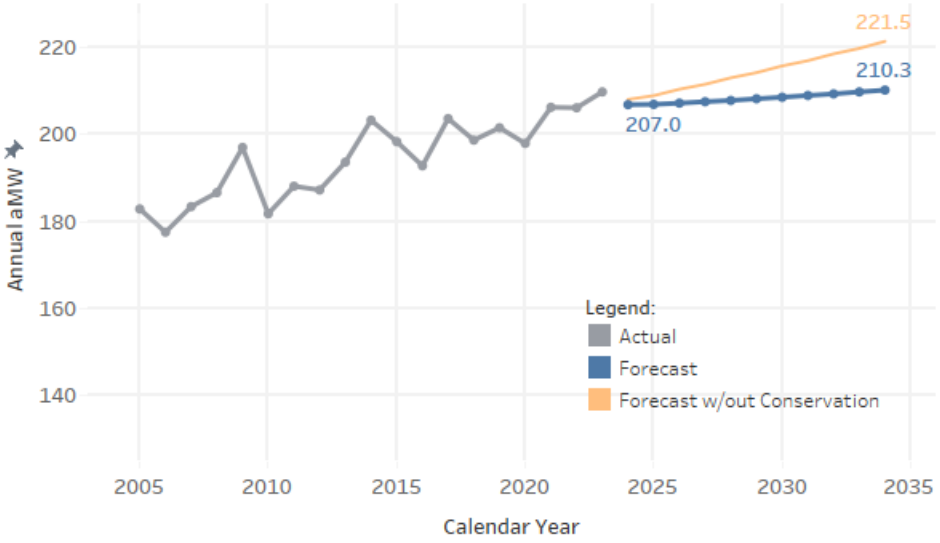

Figure 1-3 – Forecast annual retail load without conservation

Figure 1-4 below shows that residential load is growing (annual growth rate of 1.05%) while non-residential load is declining, primarily due to conservation.

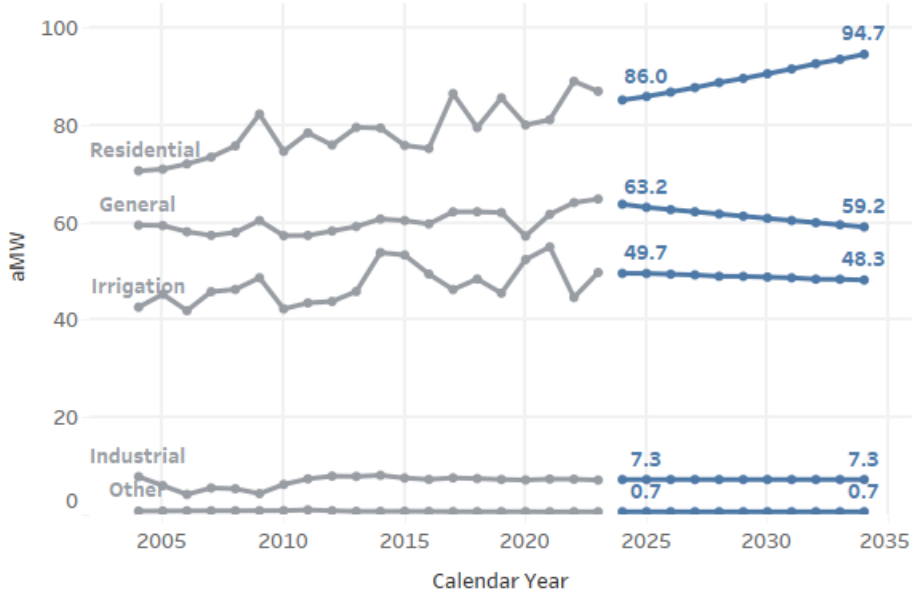

Figure 1-4 – Forecast of annual retail load by customer class

Overall, the Forecast reflects the continuing trend of a growing customer count, but a relatively low rate of retail load growth, primarily due to declining trends in energy usage per customer because of energy efficiency and conservation. For details about the trends of each customer class, refer to **Section 5.**

This Forecast will be an input to the revenue forecast for the District's 2025 budget. **Figure 1-5** below shows the estimated monthly shape of retail load, by customer class, for calendar year 2025.

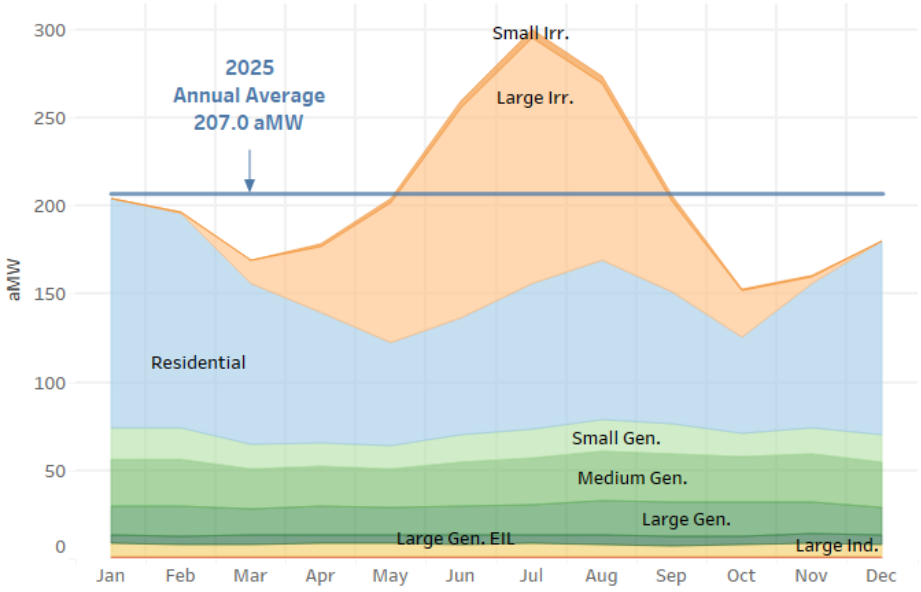

Figure 1-5 – Forecast of monthly retail load by customer class

This Forecast will also be an input to the Power Supply Plan for the District's 2025 budget. The Forecast of wholesale load, as seen by Bonneville Power Administration, is shown below in **Figure 1-6**, including annual average demand (aMW) and annual peak demand (MW). Wholesale load is equal to retail load plus the District's transmission and distribution system losses of 3.28%. For additional information on system losses and the peak forecast, refer to **Sections 2.7 and 2.8**.

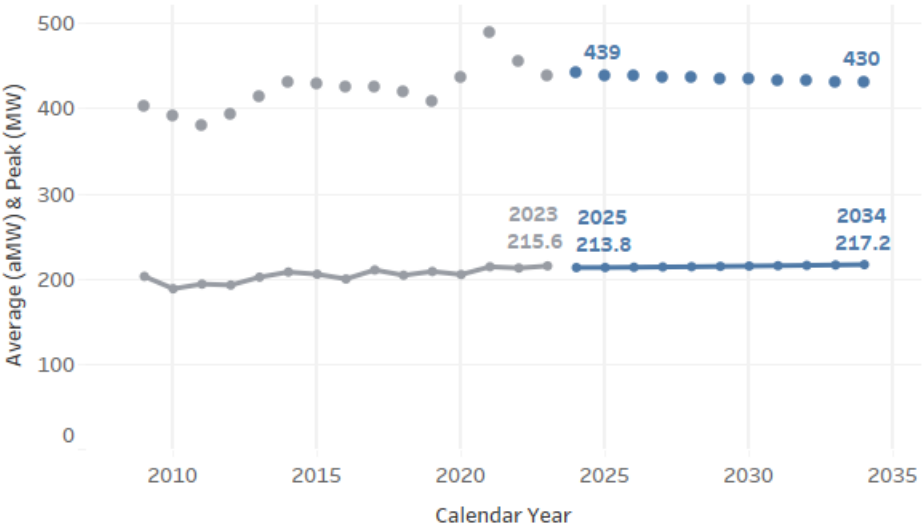

Figure 1-6 – Forecast of annual wholesale load

2. Forecast Methodology

2.1 Overview

The Load Forecast (Forecast) is a forecast of the District's total system and customer class annual and monthly energy (MWh), average demand (aMW), peak demand (MW) and number of customers. The Forecast inputs include historical monthly loads and monthly customer counts by customer class as well as a conservation forecast and manual adjustments as determined by District staff. Additional details of the forecast methodology and assumptions are provided in the following sections.

2.2 Customer Classes

The Forecast results include a total system forecast that is a summation of the forecasts for each customer class. **Table 2-1** below summarizes the relationship of the District's customer classes (i.e. revenue classes) to its rate schedules. Refer to the District's website for detailed descriptions of the rate schedules.

Table 2-1 – District customer class relationship to rate schedules

Customer Class	Rate Schedule(s)
Total System	All
Residential	11, 12
Small General	21, 90
Medium General	22
Large General	23, 24
Large Industrial	34
Small Irrigation	71
Large Irrigation	72, 73, 74, 75, 76
Street Lights	51
Security Lights	61
Unmetered Flats	85

2.3 Historical Data

Key inputs to the Forecast include historical monthly billed retail energy sales (MWh) and monthly customer counts (i.e. distinct count of billed services) as reported by the District's Billed Usage Data Mart[1]. The Forecast also utilizes the historical monthly energy (MWh) and peak demand (MW) values reported by the Bonneville Power Administration (BPA) Meter Data Management Reporting (MDMR2) system for the District's total system wholesale load as measured at the BPA point-of-deliveries.

2.4 Monthly Shaping

The initial year of the Forecast (2024) is set equal to the annual summation of the 3-year average (2021-2023) of historical monthly billed energy for each customer class. For example, residential load in January 2024 is assumed equal to the 3-year average of historical January billed load. The 3-year average is applied for each month and then the months are summed to get the calendar year total by

[1] The "Billed Usage Data Mart" is the District's business intelligence reporting tool containing monthly billed energy usage since March 2017. The "actuals" of monthly energy and customer counts in this Forecast may differ slightly from the energy statistics reported within the District's monthly financial statements.

revenue class. For the wholesale load forecast the annual retail forecast is shaped to the calendar months using the 3-year average (2021-2023) of the proportion of monthly to annual wholesale load.

2.5 Conservation

The District considers its historical conservation and its latest Conservation Potential Assessment (CPA) as inputs to the Forecast. **Figure 2-1** below shows the historical annual conservation by sector.[2]

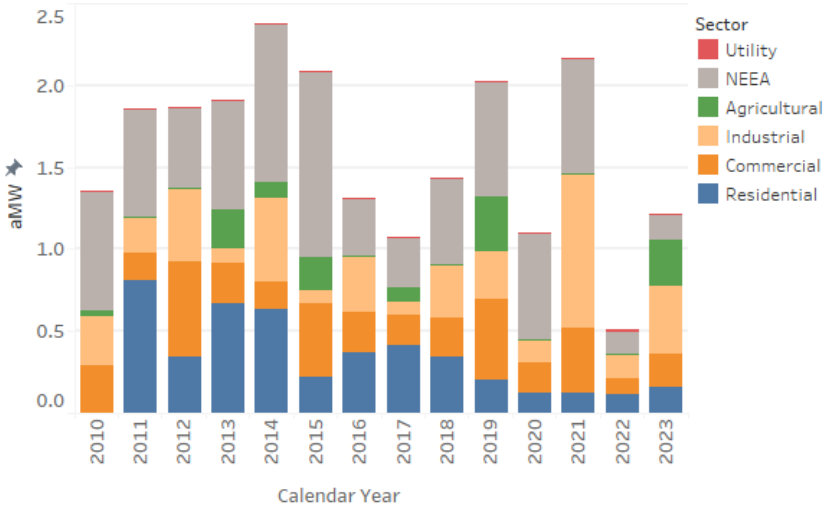

Figure 2-1 – Historical annual conservation by sector

The latest CPA[3] indicates a 10-year cost-effective savings potential of 8.36 aMW, however, the District frequently exceeds its CPA targets, therefore, the Forecast assumes 2.0 aMW of conservation to be achieved every two years, resulting in slightly higher savings than the CPA target. The Forecast includes the District's practice of targeting to achieve 60% of its biennium target in the first year and 40% in the second year. In total, the Forecast includes 11.2 aMW of cumulative conservation through 2034, as shown below, by revenue class, in **Figure 2-2**.

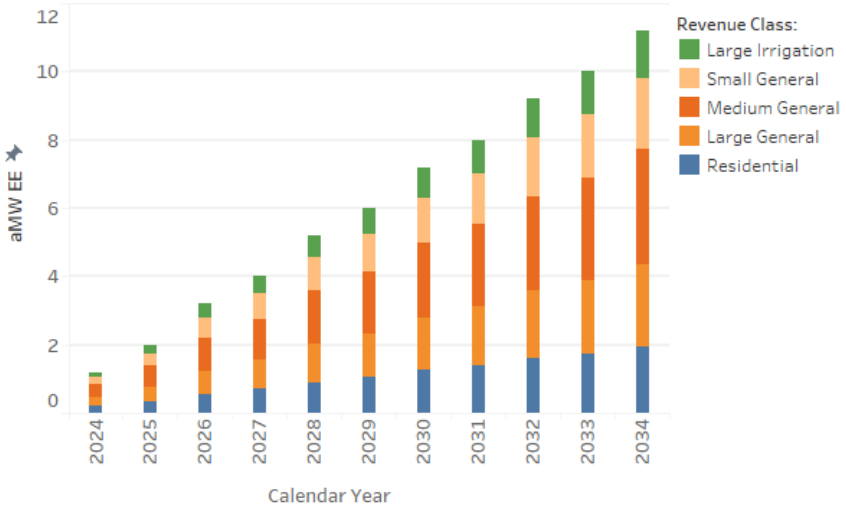

Figure 2-2 – Forecast of annual cumulative conservation by customer class

[2] Historical conservation for 2023 assumes an estimate for NEEA savings, which are not yet final.
[3] Resolution No. 2670 adopted in April 2024.

2.6 Manual Adjustment

Staff uses professional judgement to implement manual adjustments to the forecast to increase/decrease revenue class load growth and customer counts. Consideration is given to historical and expected load growth and usage per customer trends. In general, it is preferred to make as few adjustments as possible. **Table 2-2** summarizes the manual adjustments utilized for the Forecast.

Table 2-2 – Manual adjustments applied to the forecast

Customer Class	Adjustment Type	Adjustment Description
Residential	Customer & Load	1) Add 50 customers per month, and 2) Grow load by the 3-year average usage/customer; 3) Remove 87 customers in March 2024 due to transfer to City of Richland and reduce energy by 0.244 annual aMW
Small General	Customer & Load	4) Add 6 customers per month, and 5) Grow load by the 3-year average usage/customer;
Medium General	Customer & Load	6) Add 1 customer per year, and 7) Grow load by the 3-year average usage/customer; 8) Add 0.033 annual aMW for service that was previously not being billed (missing from historical data)
Large General	Customer & Load	9) No new customers or load; 10) Assume 5.0 aMW of existing Electricity Intensive Load; 11) Remove 1 customer, 0.626 annual aMW, starting in May 2024, for Lineage Logistics facility destroyed by fire
Large Industrial	Customer & Load	12) No new customers or load
Small Irrigation	Customer & Load	13) Remove 1 customer per year and reduce load slightly
Large Irrigation	Customer & Load	14) No new customers or load
Streetlights	Customer & Load	15) No new customers or load
Security Lights	Customer & Load	16) Remove 1 customer per month and reduce load slightly
Unmetered Flats	Customer & Load	17) Add 3 customers per year and increase load slightly

2.7 System Losses

The historical customer class load data used for the Forecast is based on the District's billed load, which includes both District metered and unmetered loads. The unmetered loads (street lighting, security lighting and flats) utilize estimates for monthly energy consumption. The aggregation of District billed load is referred to as "retail load" and this term implies the exclusion of losses associated with serving this load over the District's transmission and distribution system or the BPA system. Refer to the following paragraphs for additional background.

BPA separately meters the District's load. The District's contract with BPA defines both a "point-of-delivery" and a "point-of-metering". The aggregation of load measured by BPA's points-of-metering will include the District's entire retail load, as defined above, but only a portion of the losses associated with the District's transmission and distribution system, because not all of BPA's meters are physically positioned to measure 100% of the losses at their locations. For example, BPA metering is typically installed on the low voltage side of a substation power transformer and therefore does not measure the losses associated with the District's power transformer. Another example is when BPA metering is installed at the substation, but the point-of-delivery is defined at a point upstream where the District's

transmission line taps BPA's line. For billing, BPA estimates the losses associated with the difference between the point-of-metering and the point-of-delivery. BPA's billed aggregate load at the point-of-delivery, also referred to as the District's "wholesale load", is inclusive of the District's entire retail load and the District's entire transmission and distribution system losses.

The difference between BPA's wholesale load and the District's billed retail load is equal to the District's transmission and distribution system losses. These losses are typically represented as a percentage of the wholesale load. The Forecast assumes that the District's transmission and distribution system losses are 3.28%, which is the average of the last 3 years of historical annual losses.

2.8 Peak Forecast

To calculate a monthly peak forecast, a 3-year monthly average load factor was calculated using the historical relationship between the BPA wholesale monthly average energy and monthly peak demand. The average load factor was then applied to the monthly wholesale load forecast to derive peak demands for every month. The peak forecast includes reductions in demand from conservation.

3. Forecast Considerations

3.1 Forecast History

Figure 3-1 shows the forecast history versus actuals for the total system retail load. Recent forecasts have all been very similar, with annual average growth rates averaging about 0.28% for the 2017-2023 vintage forecasts. Past forecast growth rates averaged 0.54% for 2010-2016 forecasts and 1.65% for 2003-2009 forecasts.

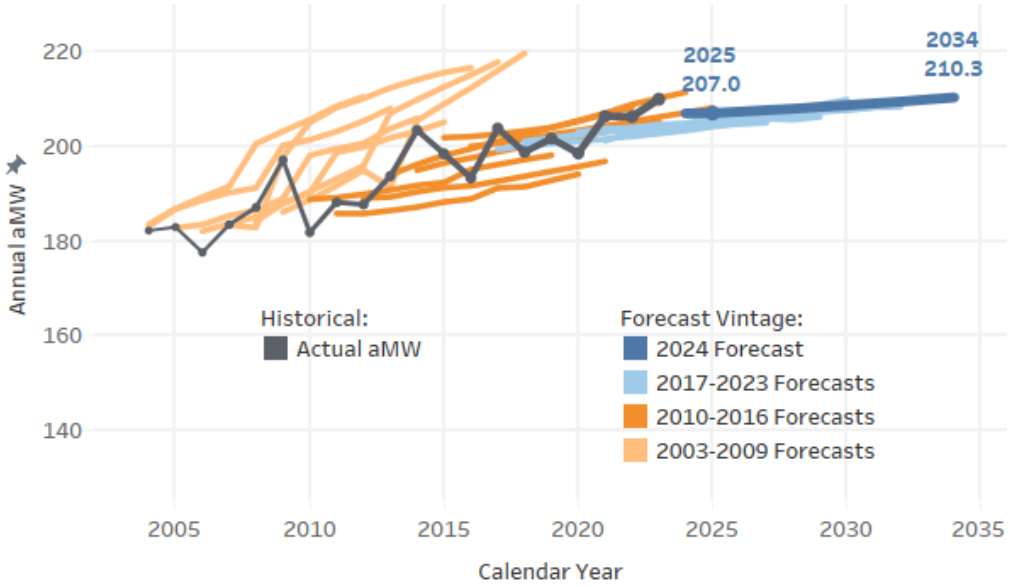

Figure 3-1 – Forecast history

3.2 Forecast Variance

Several factors can cause variation of actuals from the Forecast, including weather, large irrigation customer crop rotations, and unforeseen new loads or loss of loads. The most common driver of the variance is weather, given that the Forecast is based on average load. **Figure 3-2** below shows the variance of actuals versus the prior year's forecast of total system retail load (e.g. the 2016 variance is based on the 2016 actual vs. the 2015 forecast for calendar year 2016). Positive numbers indicate actuals were higher than forecast and negative numbers indicate actuals were lower than forecast.

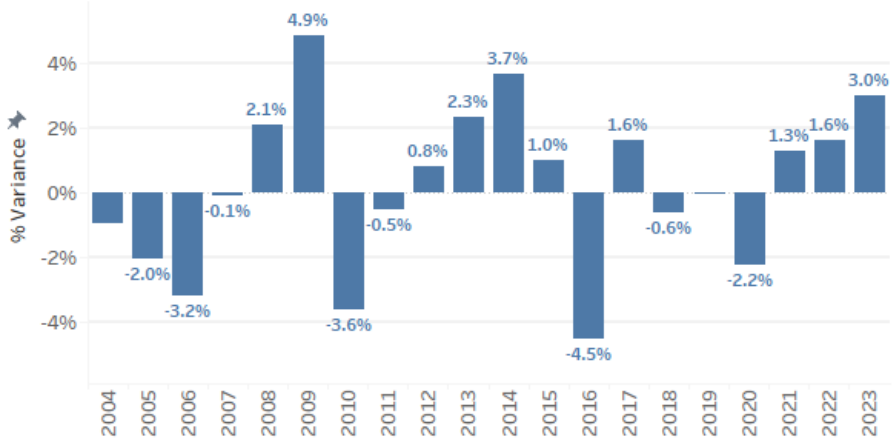

Figure 3-2 – Forecast variance

3.3 Forecast High & Low Case

The Forecast assumes high and low cases that are +/- 5%, which is representative of typical annual forecast variances that can be expected going forward, including due to above or below average weather. **Figure 3-3** below shows forecast for the base, high, and low case.

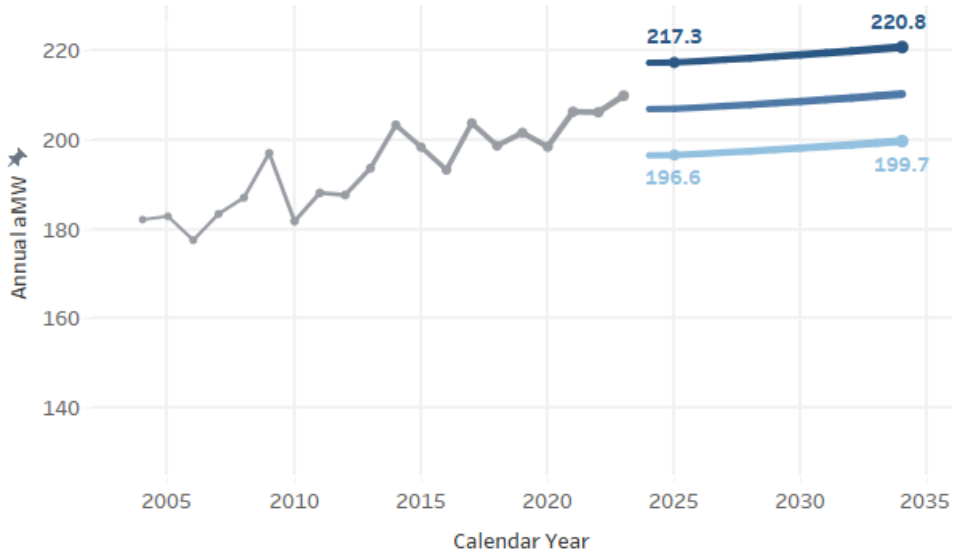

Figure 3-3 – Forecast high and low cases

3.4 Customer Generation

The impact of customer generation reducing load has not been explicitly modeled in the Forecast, however, staff routinely monitors the growth. The District ended calendar year 2023 with 1,074 customer generation services (production meters), an increase of 164 for the year, as shown below in **Figure 3-4**. The federal Inflation Reduction Act (IRA) includes solar Investment Tax Credits (ITC) of 30% through 2032, 26% in 2033 and 22% in 2034. Despite the availability of the ITC, the District expects a slowdown in new solar installations going forward.

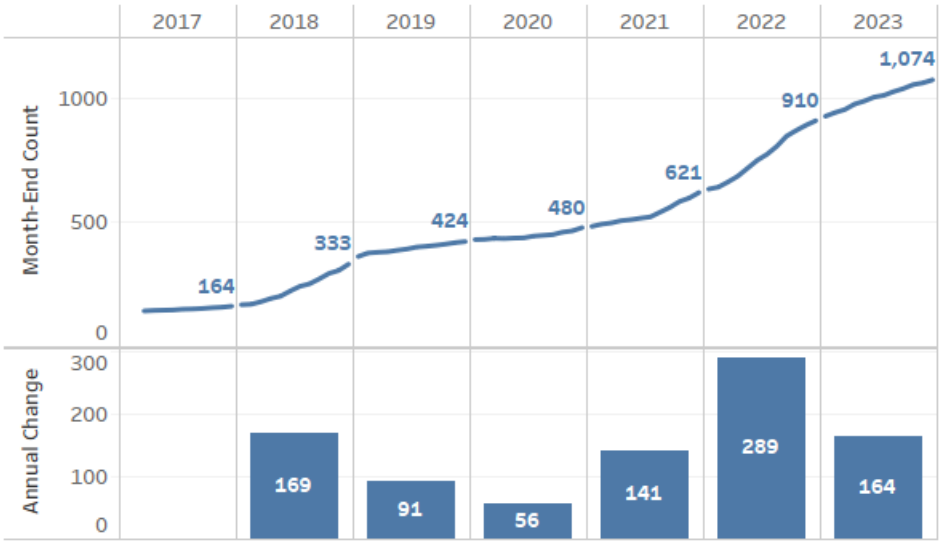

Figure 3-4 – Count of customer generation services

The net metering services are predominantly roof top solar, with only a few services being wind generators. In addition to its net metered customers, the District has 154 customers that funded the construction of two community solar projects, the 74.8 kW Ely Community Solar Project in Kennewick, WA (commissioned July 1, 2015) and the 24.6 kW Old Inland Empire (OIE) Community Solar Project in Prosser, WA (commissioned March 4, 2016).

The aggregate production of the District's customer generation, including the District's community solar projects, was about 1.4 aMW (11,932 MWh) in 2023 (about 1.6% of annual residential load in 2023), an increase of 0.4 aMW over 2022. The single hour maximum, aggregate generation was 7.2 MW from 12:00-1:00 p.m. on June 14, 2023.

3.5 Electricity Intensive Load

The District has assigned the term "Electricity Intensive Load" (EIL) for the emergence of new loads such as data centers and cryptocurrency mining. As of April 2024, the District has 7 customers operating a total of 11 EIL services across multiple customer classes: 2 residential, 2 small general, 1 medium general, and 6 large general. The EIL services in the large general class represent most of the EIL load; therefore, these loads have been separated out for historical analysis and forecasting. Elsewhere in the report, the EIL loads are included within their respective customer classes, unless otherwise noted.

The annual load of only the large general EIL customers was about 4.9 aMW (43,089 MWh) in 2023, an increase of 1.0 aMW over 2022. The District's single largest EIL service accounted for about 1.6 aMW in 2023. The Forecast assumes that the existing large general EIL loads will continue at 5.0 aMW annually, as shown below in **Figure 3-5**.

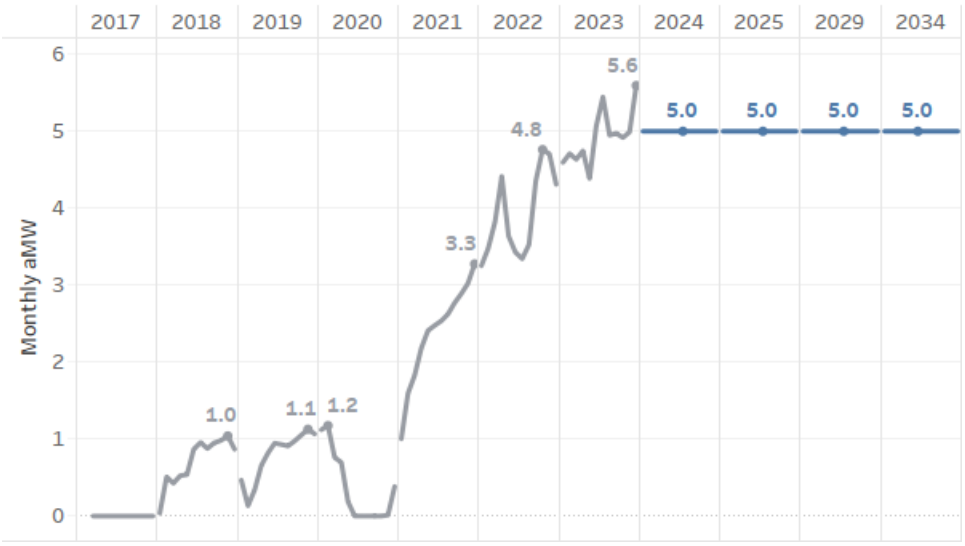

Figure 3-5 – Forecast of large general Electricity Intensive Load

3.6 Electric Vehicles

Another possible source of load growth is electric vehicles (EVs). Due to their current slow adoption rate, the impacts of EV growth are not explicitly included within this Forecast, however, the District continues monitoring, as described below. The 2022 Forecast included an in-depth analysis of EV growth scenarios.[4]

[4] For the 2022 Forecast, refer to Resolution No. 2600 – April 26, 2022

The Washington State Department of Licensing (WA DOL) maintains a database and website of electric vehicles registered in Washington State[5]. The data set includes both plug-in hybrid electric vehicles (PHEV) and battery electric vehicles (BEV). District staff is monitoring this data, particularly the adoption rate and total count of BEVs. BEVs are the predominant focus and long-term direction of the EV industry and have greater charging load impact than PHEV technology. According to WA DOL data[6], the Benton County EV adoption rate was 1.48% through December 2023, up from 1.04% in December 2022. Benton County ended 2023 with 1,422 BEVs, an increase of 482 for the year, as shown below in **Figure 3-6**.

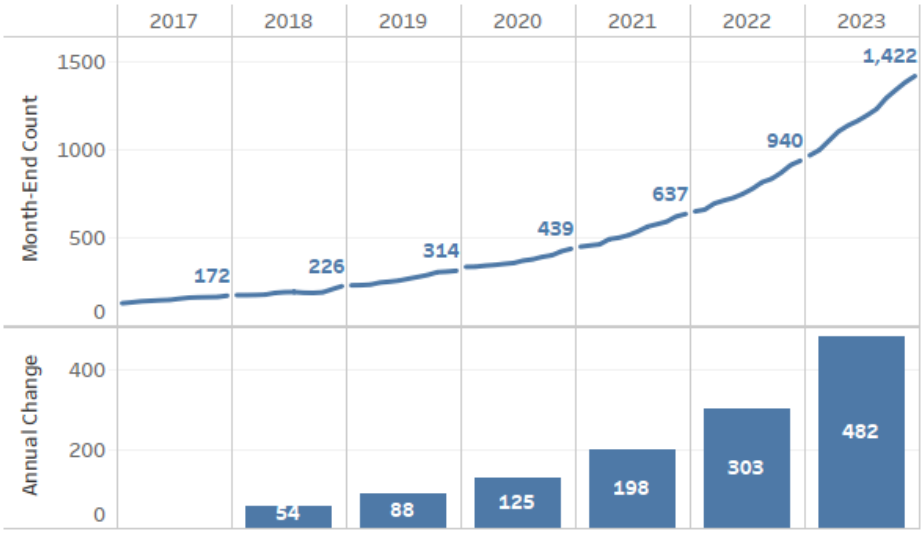

Figure 3-6 – Battery electric vehicles registered in Benton County

Assuming a single BEV uses 2,800 kWh annually–based on a Chevy Bolt at 28 kWh/100 miles driven 10,000 miles per year–1,422 BEV's would add about 0.45 aMW of annual load. If all 1,422 BEV's charged at the same time using a level 2 charger (240-volt, 40 amp) it would add about 14 MW of peak demand. These calculations are for "book-end" reference only, given that the District would not be serving 100% of BEV loads within Benton County.

In addition to monitoring the WA DOL data, the District tracks its EV rebate program. The District passed Resolution No. 2521 on November 12, 2019 to create an Electrification of Transportation Plan that allows the District to offer incentives/rebates, advertise, and promote the adoption of EV's. Following the adoption of Resolution No. 2521, the District began promoting the benefits of owning an electric vehicle by offering a $250 rebate to customers who purchase or lease a new electric vehicle. Since adopting the Resolution, the District has provided a total of 56 EV rebates through April 2024, with 24 of those rebates being issued in 2023.

3.7 Natural Gas/Electrification

Load growth for the District could come in the form of natural gas transition and electrification due to current climate initiatives and political decisions in the state of Washington. In-depth scenarios of natural gas to electric conversion were analyzed by the 2022 Forecast, but the impacts have not been explicitly included within this Forecast.

[5] https://data.wa.gov/Transportation/Electric-Vehicle-Population-Data/f6w7-q2d2
[6] https://data.wa.gov/Transportation/Monthly-Electric-Vehicle-Adoption-Rate-by-County/crrp-awfs

4. Forecast for Total System

See **Figure 4-1** and **Table 4-1** for details of the total system forecast.

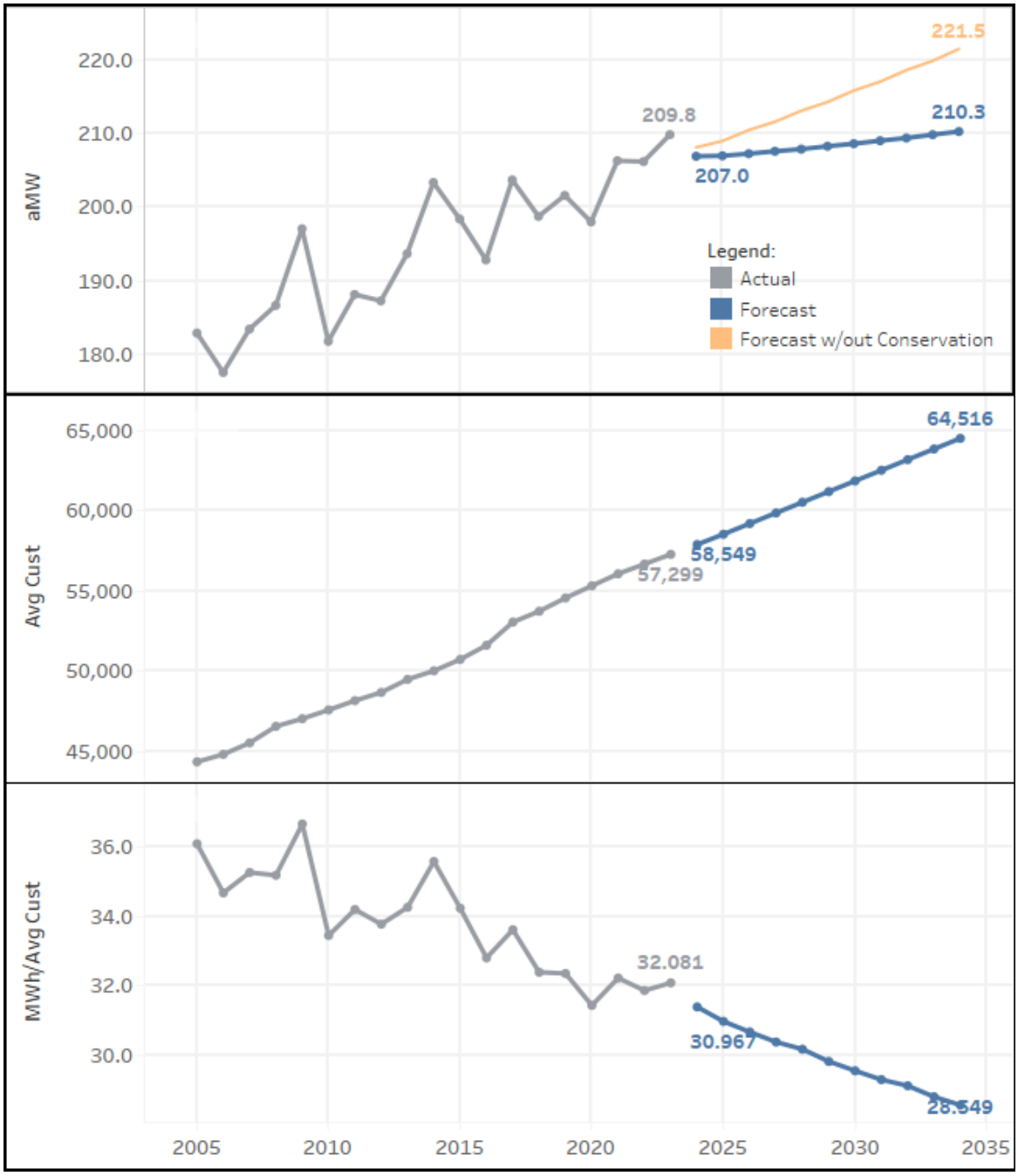

Figure 4-1 – Total System forecast of retail load, customers and usage per customer

Table 4-1 – Total System forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	182.9			1,602,508	44,389	36.101	44,628	0		
2006	177.6	-5.342	-2.92%	1,555,710	44,856	34.682	45,302	674	1.51%	
2007	183.5	5.885	3.31%	1,607,265	45,569	35.271	45,944	642	1.42%	
2008	186.7	3.209	1.75%	1,639,856	46,600	35.190	46,903	959	2.09%	
2009	197.1	10.384	5.56%	1,726,341	47,074	36.673	47,328	425	0.91%	
2010	181.8	-15.244	-7.74%	1,592,802	47,617	33.450	47,937	609	1.29%	
2011	188.2	6.342	3.49%	1,648,362	48,197	34.201	48,455	518	1.08%	
2012	187.3	-0.865	-0.46%	1,645,277	48,710	33.777	49,059	604	1.25%	
2013	193.7	6.392	3.41%	1,696,774	49,520	34.264	49,816	757	1.54%	
2014	203.3	9.652	4.98%	1,781,322	50,053	35.589	50,382	566	1.14%	
2015	198.4	-4.943	-2.43%	1,738,022	50,762	34.239	51,166	784	1.56%	
2016	192.9	-5.545	-2.79%	1,694,078	51,643	32.804	52,097	931	1.82%	
2017	203.7	10.844	5.62%	1,784,439	53,082	33.617	53,453	1,356	2.60%	
2018	198.8	-4.944	-2.43%	1,741,130	53,759	32.388	54,145	692	1.29%	
2019	201.6	2.838	1.43%	1,765,993	54,586	32.352	54,960	815	1.51%	
2020	198.0	-3.591	-1.78%	1,739,290	55,340	31.429	55,743	783	1.42%	
2021	206.3	8.292	4.19%	1,807,175	56,089	32.220	56,395	652	1.17%	
2022	206.2	-0.110	-0.05%	1,806,209	56,694	31.859	56,947	552	0.98%	
2023	209.8	3.656	1.77%	1,838,233	57,299	32.081	57,615	668	1.17%	
2024	206.9	-2.934	-1.40%	1,817,495	57,908	31.386	58,190	575	1.00%	1.200
2025	207.0	0.066	0.03%	1,813,109	58,549	30.967	58,853	663	1.14%	2.000
2026	207.3	0.279	0.13%	1,815,550	59,212	30.662	59,516	663	1.13%	3.200
2027	207.6	0.332	0.16%	1,818,458	59,875	30.371	60,179	663	1.11%	4.000
2028	207.9	0.290	0.14%	1,825,992	60,538	30.163	60,842	663	1.10%	5.200
2029	208.3	0.389	0.19%	1,824,408	61,201	29.810	61,505	663	1.09%	6.000
2030	208.6	0.349	0.17%	1,827,466	61,864	29.540	62,168	663	1.08%	7.200
2031	209.0	0.401	0.19%	1,830,982	62,527	29.283	62,831	663	1.07%	8.000
2032	209.4	0.367	0.18%	1,839,221	63,190	29.106	63,494	663	1.06%	9.200
2033	209.8	0.455	0.22%	1,838,184	63,853	28.788	64,157	663	1.04%	10.000
2034	210.3	0.421	0.20%	1,841,871	64,516	28.549	64,820	663	1.03%	11.200

5. Forecast by Customer Class

5.1 Residential

See **Figure 5-1** and **Table 5-1** for details of the residential forecast.

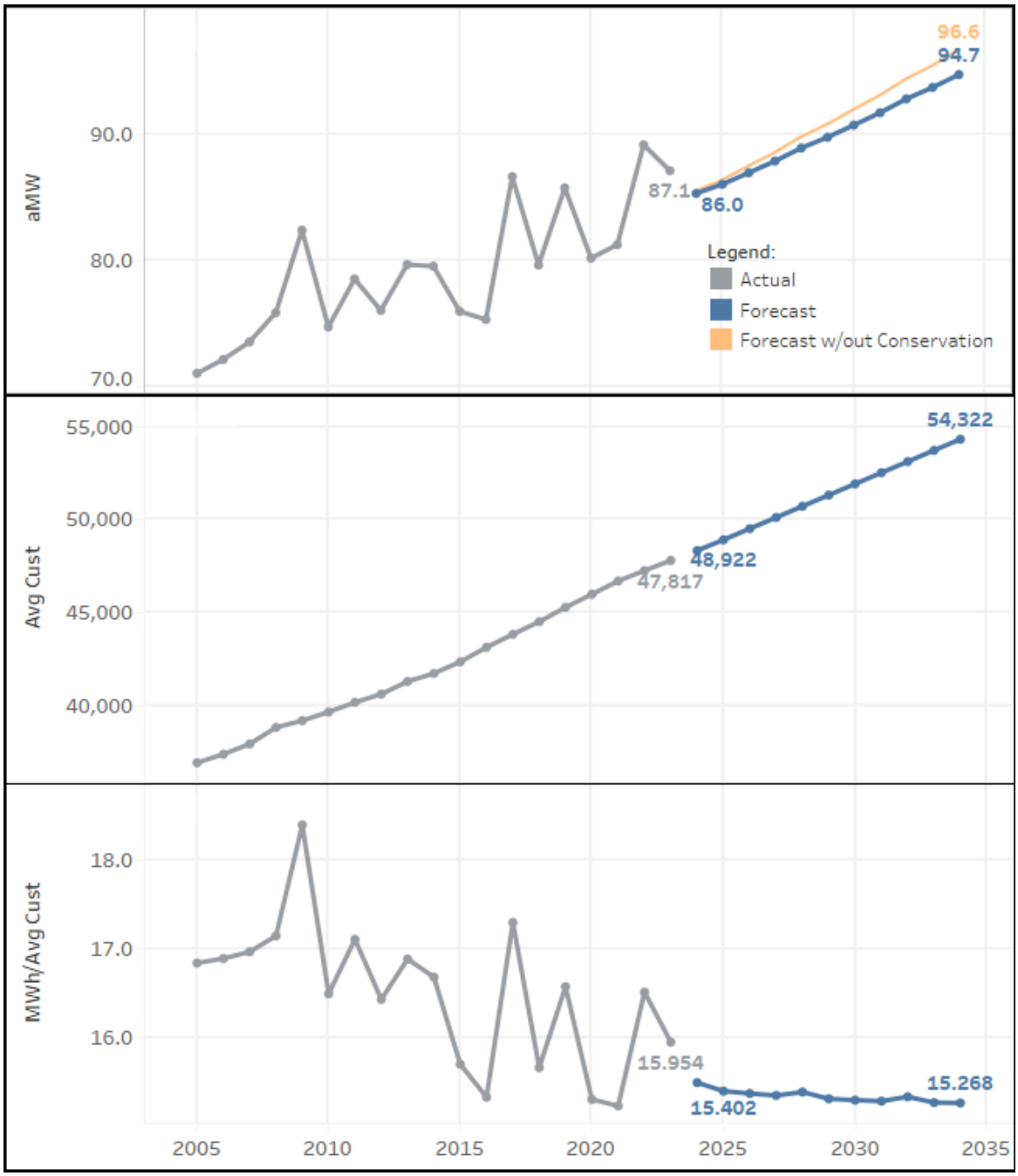

Figure 5-1 – Residential forecast of retail load, customers and usage per customer

Table 5-1 – Residential forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	71.1			622,639	36,963	16.845	37,236			
2006	72.2	1.093	1.54%	632,213	37,418	16.896	37,802	566	1.52%	
2007	73.6	1.390	1.93%	644,392	37,969	16.972	38,285	483	1.28%	
2008	75.9	2.306	3.14%	666,418	38,855	17.151	39,095	810	2.12%	
2009	82.4	6.521	8.60%	721,719	39,220	18.402	39,430	335	0.86%	
2010	74.7	-7.642	-9.28%	654,775	39,687	16.498	39,973	543	1.38%	
2011	78.5	3.787	5.07%	687,953	40,201	17.113	40,432	459	1.15%	
2012	76.0	-2.484	-3.16%	668,018	40,645	16.435	40,955	523	1.29%	
2013	79.7	3.618	4.76%	697,887	41,321	16.889	41,561	606	1.48%	
2014	79.5	-0.124	-0.16%	696,804	41,758	16.687	42,039	478	1.15%	
2015	76.0	-3.573	-4.49%	665,505	42,375	15.705	42,724	685	1.63%	
2016	75.3	-0.636	-0.84%	661,742	43,157	15.333	43,574	850	1.99%	
2017	86.6	11.283	14.98%	758,774	43,853	17.303	44,194	620	1.42%	
2018	79.6	-6.989	-8.07%	697,552	44,528	15.665	44,917	723	1.64%	
2019	85.7	6.100	7.66%	750,989	45,298	16.579	45,667	750	1.67%	
2020	80.2	-5.555	-6.48%	704,249	46,003	15.309	46,370	703	1.54%	
2021	81.2	1.067	1.33%	711,675	46,713	15.235	46,983	613	1.32%	
2022	89.1	7.893	9.72%	780,818	47,270	16.518	47,523	540	1.15%	
2023	87.1	-2.049	-2.30%	762,871	47,817	15.954	48,084	561	1.18%	
2024	85.3	-1.794	-2.06%	749,203	48,344	15.497	48,597	513	1.07%	0.209
2025	86.0	0.723	0.85%	753,489	48,922	15.402	49,197	600	1.23%	0.349
2026	86.9	0.905	1.05%	761,413	49,522	15.375	49,797	600	1.22%	0.558
2027	87.8	0.924	1.06%	769,508	50,122	15.353	50,397	600	1.20%	0.698
2028	88.9	1.034	1.18%	780,698	50,722	15.392	50,997	600	1.19%	0.907
2029	89.7	0.849	0.96%	786,003	51,322	15.315	51,597	600	1.18%	1.046
2030	90.7	0.960	1.07%	794,409	51,922	15.300	52,197	600	1.16%	1.256
2031	91.7	0.980	1.08%	802,991	52,522	15.289	52,797	600	1.15%	1.395
2032	92.8	1.096	1.20%	814,815	53,122	15.339	53,397	600	1.14%	1.604
2033	93.7	0.901	0.97%	820,483	53,722	15.273	53,997	600	1.12%	1.744
2034	94.7	1.017	1.09%	829,395	54,322	15.268	54,597	600	1.11%	1.953

5.2 Small General

See **Figure 5-2** and **Table 5-2** for details of the Small General Service forecast.

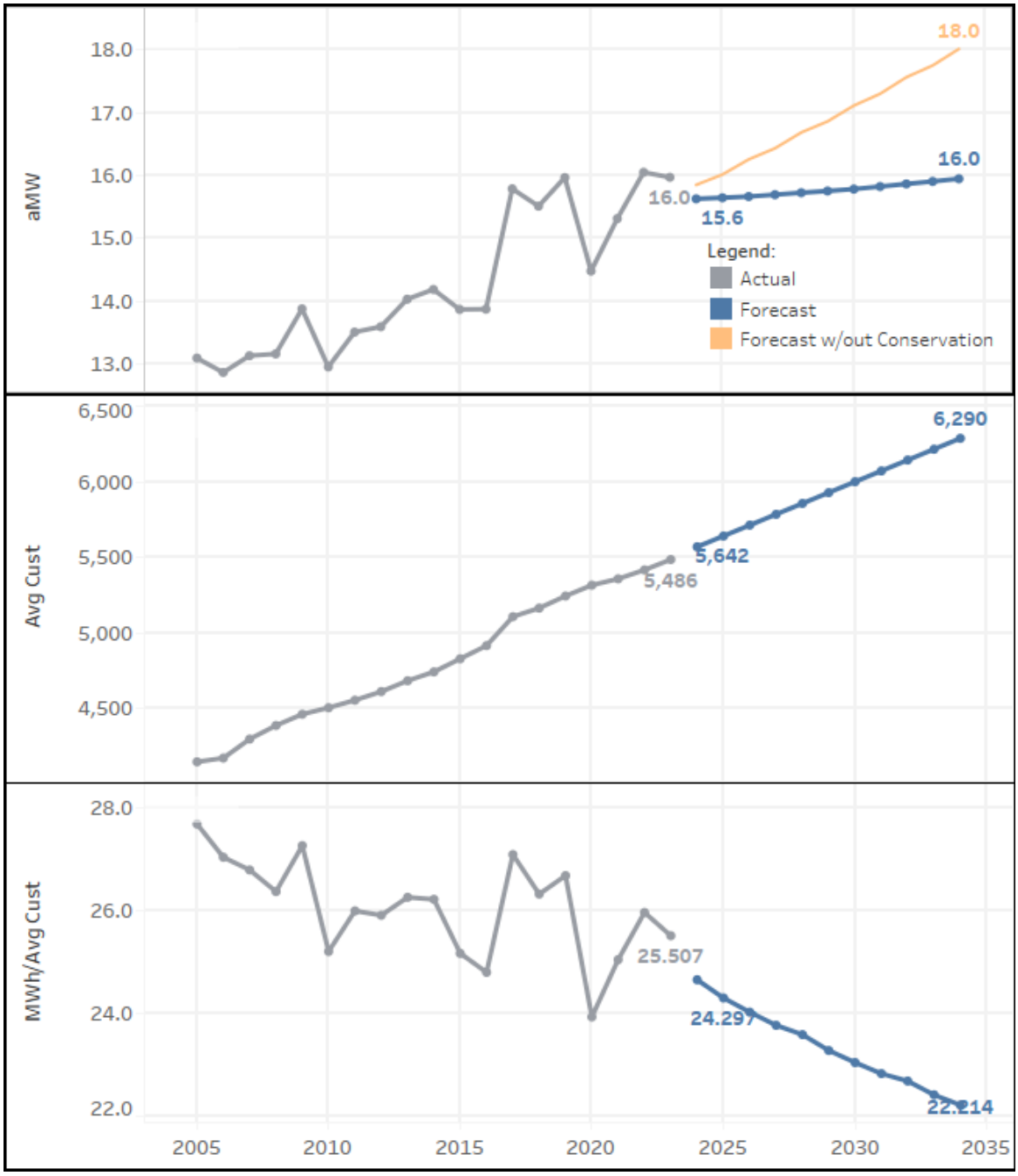

Figure 5-2 – Small General forecast of retail load, customers and usage per customer

Table 5-2 – Small General forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	13.1			114,710	4,144	27.681	4,128			
2006	12.9	-0.229	-1.75%	112,705	4,169	27.034	4,232	104	2.52%	
2007	13.1	0.268	2.08%	115,049	4,295	26.787	4,324	92	2.17%	
2008	13.2	0.029	0.22%	115,616	4,385	26.366	4,445	121	2.80%	
2009	13.9	0.717	5.45%	121,580	4,460	27.260	4,484	39	0.88%	
2010	13.0	-0.924	-6.66%	113,483	4,503	25.202	4,528	44	0.98%	
2011	13.5	0.554	4.28%	118,338	4,553	25.991	4,576	48	1.06%	
2012	13.6	0.086	0.64%	119,421	4,610	25.905	4,652	76	1.66%	
2013	14.0	0.438	3.22%	122,928	4,682	26.255	4,709	57	1.23%	
2014	14.2	0.155	1.10%	124,285	4,741	26.215	4,784	75	1.59%	
2015	13.9	-0.318	-2.24%	121,498	4,828	25.165	4,883	99	2.07%	
2016	13.9	0.004	0.03%	121,868	4,915	24.795	4,949	66	1.35%	
2017	15.8	1.917	13.82%	138,330	5,107	27.086	5,174	225	4.55%	
2018	15.5	-0.277	-1.75%	135,903	5,164	26.317	5,168	-6	-0.12%	
2019	16.0	0.456	2.94%	139,894	5,244	26.677	5,278	110	2.13%	
2020	14.5	-1.489	-9.32%	127,202	5,316	23.928	5,350	72	1.36%	
2021	15.3	0.836	5.77%	134,175	5,358	25.042	5,382	32	0.60%	
2022	16.1	0.737	4.81%	140,627	5,417	25.960	5,427	45	0.84%	
2023	16.0	-0.079	-0.49%	139,934	5,486	25.507	5,531	104	1.92%	
2024	15.6	-0.343	-2.15%	137,305	5,570	24.651	5,603	72	1.30%	0.222
2025	15.6	0.018	0.11%	137,085	5,642	24.297	5,675	72	1.29%	0.369
2026	15.7	0.019	0.12%	137,255	5,714	24.021	5,747	72	1.27%	0.591
2027	15.7	0.029	0.18%	137,507	5,786	23.765	5,819	72	1.25%	0.738
2028	15.7	0.031	0.20%	138,156	5,858	23.584	5,891	72	1.24%	0.960
2029	15.8	0.028	0.18%	138,024	5,930	23.276	5,963	72	1.22%	1.108
2030	15.8	0.030	0.19%	138,291	6,002	23.041	6,035	72	1.21%	1.329
2031	15.8	0.040	0.25%	138,641	6,074	22.825	6,107	72	1.19%	1.477
2032	15.9	0.042	0.27%	139,393	6,146	22.680	6,179	72	1.18%	1.698
2033	15.9	0.039	0.25%	139,358	6,218	22.412	6,251	72	1.17%	1.846
2034	16.0	0.042	0.26%	139,726	6,290	22.214	6,323	72	1.15%	2.068

5.3 Medium General

See **Figure 5-3** and **Table 5-3** for details of the Medium General Service forecast.

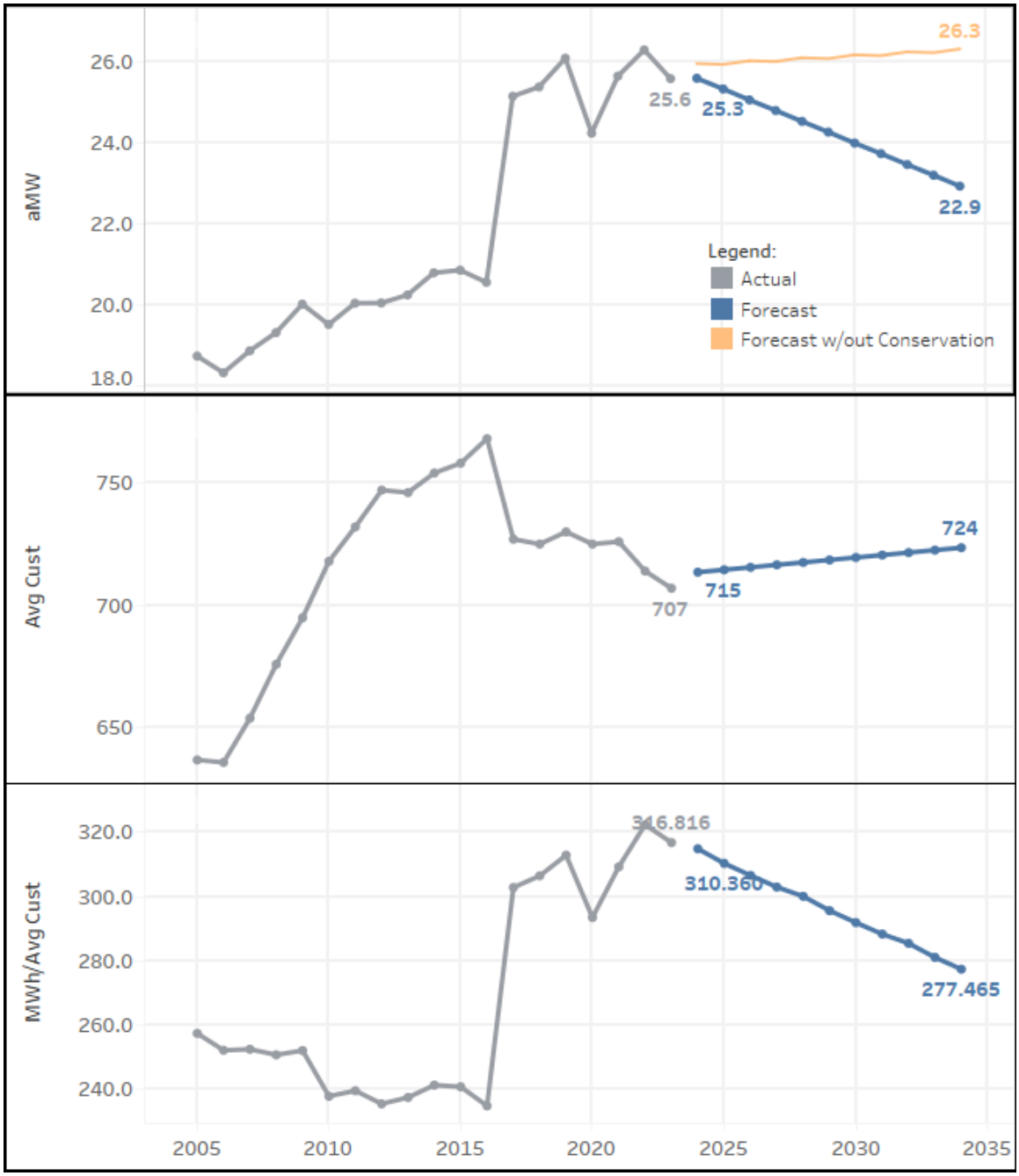

Figure 5-3 – Medium General forecast of retail load, customers and usage per customer

Table 5-3 – Medium General forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	18.7			164,043	637	257.524	627			
2006	18.3	-0.411	-2.20%	160,440	636	252.263	641	14	2.23%	
2007	18.9	0.542	2.96%	165,186	654	252.577	665	24	3.74%	
2008	19.3	0.448	2.37%	169,571	676	250.845	683	18	2.71%	
2009	20.0	0.703	3.64%	175,265	695	252.179	707	24	3.51%	
2010	19.5	-0.502	-2.51%	170,868	718	237.977	725	18	2.55%	
2011	20.0	0.525	2.69%	175,463	732	239.704	747	22	3.03%	
2012	20.0	0.006	0.03%	175,999	747	235.607	742	-5	-0.67%	
2013	20.2	0.198	0.99%	177,250	746	237.601	750	8	1.08%	
2014	20.8	0.547	2.70%	182,044	754	241.437	758	8	1.07%	
2015	20.8	0.065	0.31%	182,610	758	240.911	762	4	0.53%	
2016	20.5	-0.301	-1.44%	180,467	768	234.983	775	13	1.71%	
2017	25.1	4.590	22.34%	220,184	727	302.866	717	-58	-7.48%	
2018	25.4	0.231	0.92%	222,208	725	306.494	729	12	1.67%	
2019	26.1	0.707	2.79%	228,405	730	312.883	726	-3	-0.41%	
2020	24.2	-1.848	-7.09%	212,801	725	293.518	730	4	0.55%	
2021	25.6	1.407	5.81%	224,549	726	309.296	724	-6	-0.82%	
2022	26.3	0.645	2.51%	230,195	714	322.402	707	-17	-2.35%	
2023	25.6	-0.709	-2.70%	223,989	707	316.816	713	6	0.85%	
2024	25.6	0.010	0.04%	224,688	714	314.891	714	1	0.14%	0.363
2025	25.3	-0.264	-1.03%	221,765	715	310.360	715	1	0.14%	0.604
2026	25.0	-0.271	-1.07%	219,387	716	306.603	716	1	0.14%	0.967
2027	24.8	-0.261	-1.04%	217,105	717	302.990	717	1	0.14%	1.209
2028	24.5	-0.269	-1.08%	215,340	718	300.108	718	1	0.14%	1.571
2029	24.3	-0.263	-1.07%	212,446	719	295.663	719	1	0.14%	1.813
2030	24.0	-0.271	-1.12%	210,070	720	291.950	720	1	0.14%	2.175
2031	23.7	-0.261	-1.09%	207,787	721	288.376	721	1	0.14%	2.417
2032	23.5	-0.268	-1.13%	206,000	722	285.499	722	1	0.14%	2.780
2033	23.2	-0.263	-1.12%	203,132	723	281.135	723	1	0.14%	3.021
2034	22.9	-0.271	-1.17%	200,757	724	277.465	724	1	0.14%	3.384

5.4 Large General

See **Figure 5-4** and **Table 5-4** for details of the Large General Service forecast.

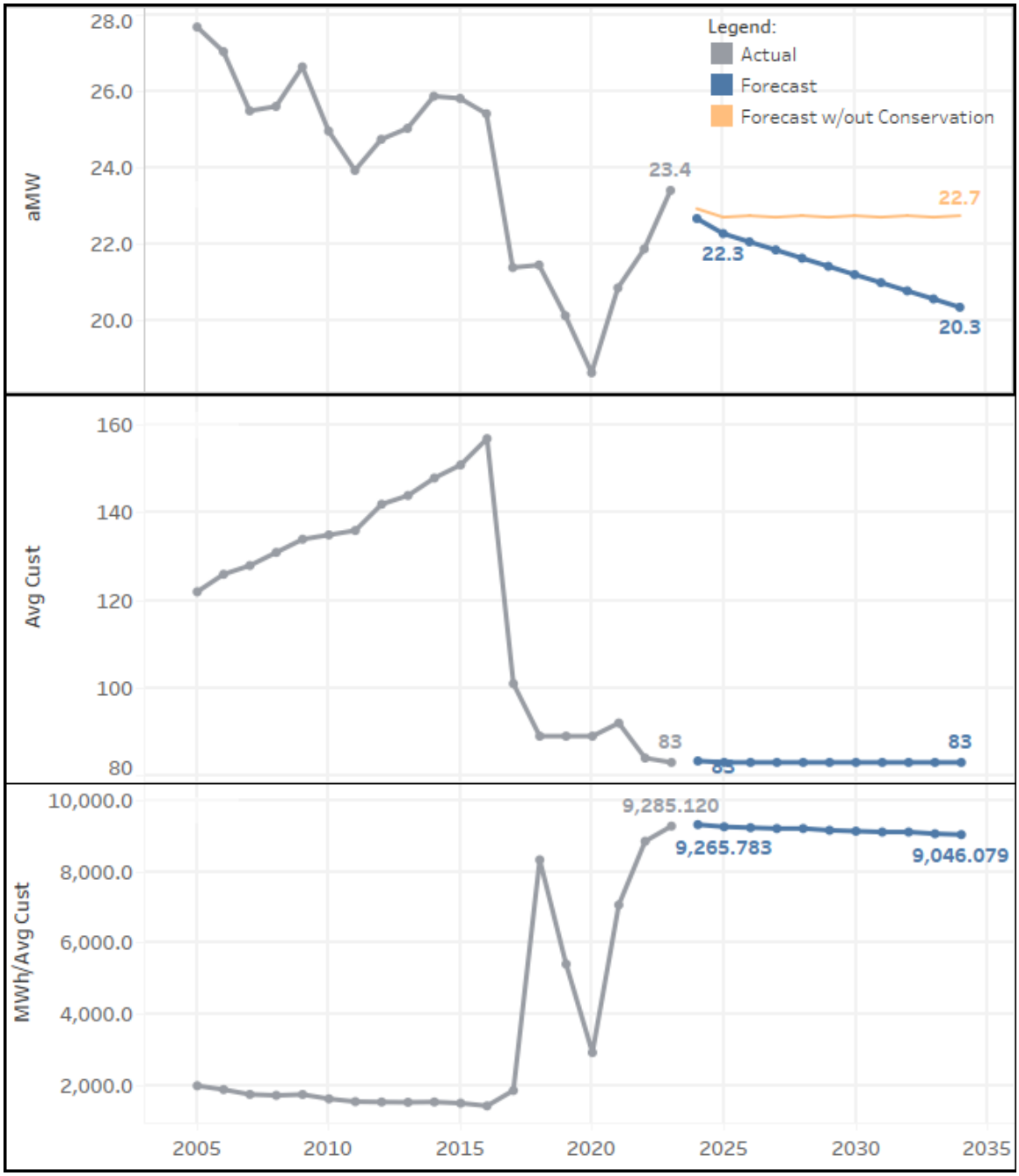

Figure 5-4 – Large General forecast of retail load, customers and usage per customer

Table 5-4 – Large General forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	27.7			242,555	122	1,988.160	123			
2006	27.0	-0.645	-2.33%	236,908	126	1,880.220	127	4	3.25%	
2007	25.5	-1.552	-5.74%	223,317	128	1,744.660	131	4	3.15%	
2008	25.6	0.117	0.46%	224,958	131	1,717.234	132	1	0.76%	
2009	26.6	1.035	4.04%	233,410	134	1,741.869	135	3	2.27%	
2010	25.0	-1.681	-6.31%	218,686	135	1,619.899	135	0	0.00%	
2011	23.9	-1.029	-4.12%	209,669	136	1,541.682	141	6	4.44%	
2012	24.7	0.812	3.39%	217,377	142	1,530.826	143	2	1.42%	
2013	25.0	0.289	1.17%	219,315	144	1,523.024	146	3	2.10%	
2014	25.9	0.841	3.36%	226,679	148	1,531.617	151	5	3.42%	
2015	25.8	-0.058	-0.22%	226,175	151	1,497.847	153	2	1.32%	
2016	25.4	-0.401	-1.56%	223,268	157	1,422.089	160	7	4.58%	
2017	21.4	-4.027	-15.84%	187,380	101	1,855.247	88	-72	-45.00%	
2018	21.5	0.065	0.30%	187,948	89	8,336.891	90	2	2.27%	
2019	20.1	-1.328	-6.19%	176,318	89	5,407.983	87	-3	-3.33%	
2020	18.6	-1.494	-7.43%	163,673	89	2,920.476	93	6	6.90%	
2021	20.9	2.223	11.93%	182,699	92	7,070.731	84	-9	-9.68%	
2022	21.9	1.020	4.89%	191,630	84	8,859.244	84	0	0.00%	
2023	23.4	1.534	7.01%	205,066	83	9,285.120	84	0	0.00%	
2024	22.7	-0.736	-3.14%	199,162	83	9,327.436	83	-1	-1.19%	0.257
2025	22.3	-0.394	-1.74%	195,165	83	9,265.783	83	0	0.00%	0.428
2026	22.1	-0.218	-0.98%	193,256	83	9,240.989	83	0	0.00%	0.685
2027	21.9	-0.210	-0.95%	191,412	83	9,217.044	83	0	0.00%	0.857
2028	21.6	-0.216	-0.99%	190,035	83	9,217.601	83	0	0.00%	1.114
2029	21.4	-0.212	-0.98%	187,660	83	9,168.314	83	0	0.00%	1.285
2030	21.2	-0.218	-1.02%	185,751	83	9,143.520	83	0	0.00%	1.542
2031	21.0	-0.210	-0.99%	183,909	83	9,119.594	83	0	0.00%	1.713
2032	20.8	-0.217	-1.03%	182,510	83	9,119.865	83	0	0.00%	1.970
2033	20.6	-0.212	-1.02%	180,157	83	9,070.874	83	0	0.00%	2.142
2034	20.3	-0.218	-1.06%	178,248	83	9,046.079	83	0	0.00%	2.399

5.5 Large Industrial

See **Figure 5-5** and **Table 5-5** for details of the Large Industrial forecast.

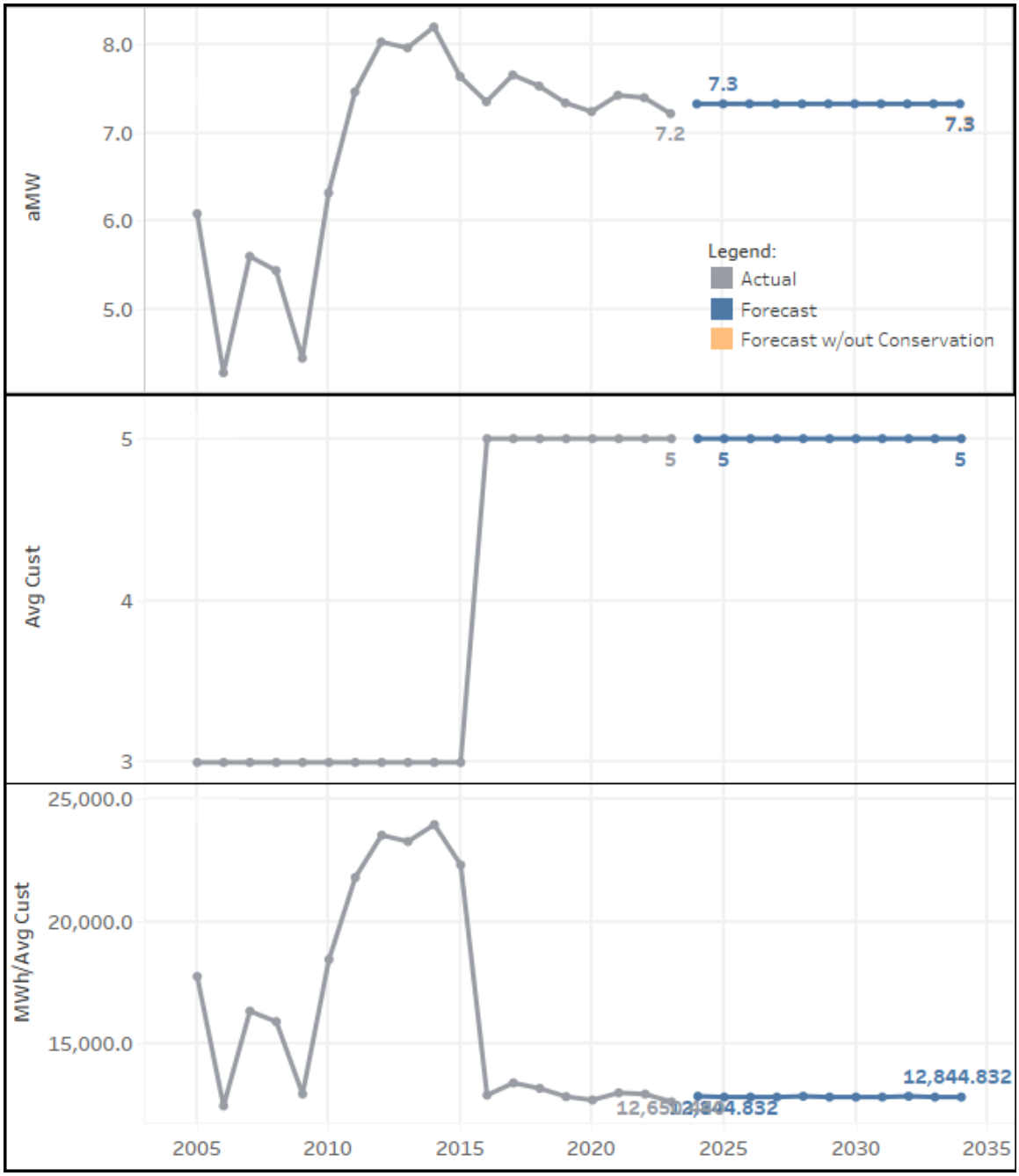

Figure 5-5 – Large Industrial forecast of retail load, customers and usage per customer

Table 5-5 – Large Industrial forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	6.1			53,286	3	17,761.932	3			
2006	4.3	-1.807	-29.71%	37,456	3	12,485.305	3	0	0.00%	
2007	5.6	1.323	30.94%	49,045	3	16,348.383	3	0	0.00%	
2008	5.4	-0.162	-2.89%	47,760	3	15,920.098	3	0	0.00%	
2009	4.4	-0.996	-18.31%	38,909	3	12,969.692	3	0	0.00%	
2010	6.3	1.878	42.29%	55,365	3	18,454.887	3	0	0.00%	
2011	7.5	1.147	18.15%	65,411	3	21,803.603	3	0	0.00%	
2012	8.0	0.568	7.60%	70,575	3	23,525.055	3	0	0.00%	
2013	8.0	-0.066	-0.82%	69,803	3	23,267.593	3	0	0.00%	
2014	8.2	0.236	2.96%	71,869	3	23,956.495	3	0	0.00%	
2015	7.6	-0.563	-6.86%	66,942	3	22,313.962	3	0	0.00%	
2016	7.4	-0.286	-3.74%	64,612	5	12,922.450	5	2	66.67%	
2017	7.7	0.304	4.14%	67,101	5	13,420.262	5	0	0.00%	
2018	7.5	-0.126	-1.65%	65,997	5	13,199.344	5	0	0.00%	
2019	7.3	-0.192	-2.54%	64,318	5	12,863.616	5	0	0.00%	
2020	7.2	-0.099	-1.35%	63,625	5	12,725.056	5	0	0.00%	
2021	7.4	0.186	2.57%	65,084	5	13,016.760	5	0	0.00%	
2022	7.4	-0.028	-0.38%	64,835	5	12,967.032	5	0	0.00%	
2023	7.2	-0.181	-2.44%	63,252	5	12,650.440	5	0	0.00%	
2024	7.3	0.110	1.52%	64,391	5	12,878.216	5	0	0.00%	0.000
2025	7.3	0.001	0.01%	64,224	5	12,844.832	5	0	0.00%	0.000
2026	7.3	0.000	0.00%	64,224	5	12,844.832	5	0	0.00%	0.000
2027	7.3	0.000	0.00%	64,224	5	12,844.832	5	0	0.00%	0.000
2028	7.3	-0.001	-0.01%	64,391	5	12,878.216	5	0	0.00%	0.000
2029	7.3	0.001	0.01%	64,224	5	12,844.832	5	0	0.00%	0.000
2030	7.3	0.000	0.00%	64,224	5	12,844.832	5	0	0.00%	0.000
2031	7.3	0.000	0.00%	64,224	5	12,844.832	5	0	0.00%	0.000
2032	7.3	-0.001	-0.01%	64,391	5	12,878.216	5	0	0.00%	0.000
2033	7.3	0.001	0.01%	64,224	5	12,844.832	5	0	0.00%	0.000
2034	7.3	0.000	0.00%	64,224	5	12,844.832	5	0	0.00%	0.000

5.6 Small Irrigation

See **Figure 5-6** and **Table 5-6** for details of the Small Irrigation forecast.

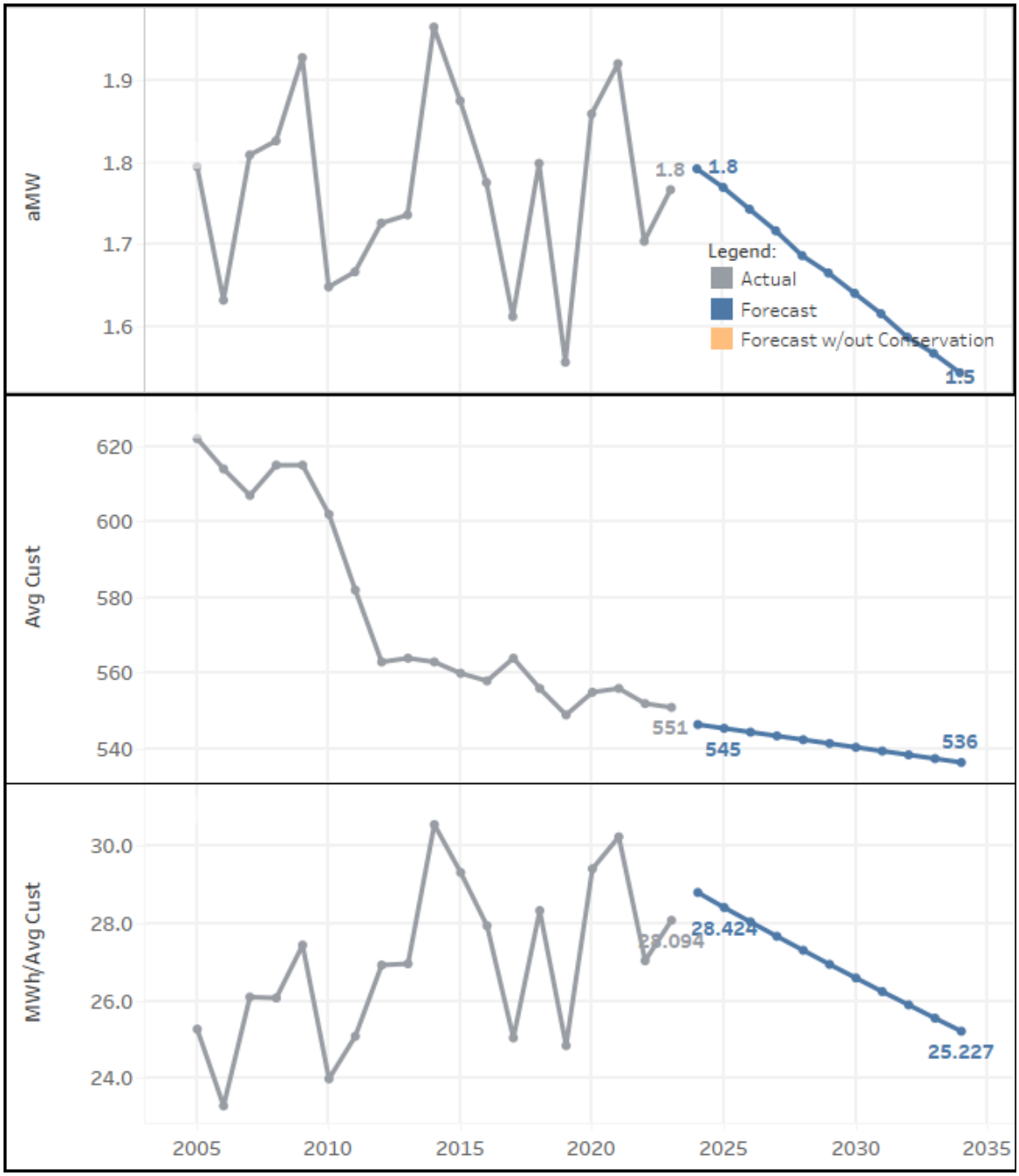

Figure 5-6 – Small Irrigation forecast of retail load, customers and usage per customer

Table* 5-6 – *Small Irrigation forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	1.8			15,724	622	25.280	619			
2006	1.6	-0.162	-9.03%	14,305	614	23.298	602	-17	-2.75%	
2007	1.8	0.176	10.79%	15,849	607	26.110	609	7	1.16%	
2008	1.8	0.017	0.95%	16,043	615	26.086	615	6	0.99%	
2009	1.9	0.101	5.53%	16,884	615	27.453	610	-5	-0.81%	
2010	1.6	-0.278	-14.44%	14,446	602	23.997	594	-16	-2.62%	
2011	1.7	0.018	1.11%	14,607	582	25.097	573	-21	-3.54%	
2012	1.7	0.059	3.54%	15,165	563	26.936	555	-18	-3.14%	
2013	1.7	0.010	0.58%	15,211	564	26.970	563	8	1.44%	
2014	2.0	0.228	13.13%	17,209	563	30.566	559	-4	-0.71%	
2015	1.9	-0.090	-4.56%	16,425	560	29.330	558	-1	-0.18%	
2016	1.8	-0.099	-5.30%	15,597	558	27.952	556	-2	-0.36%	
2017	1.6	-0.162	-9.15%	14,131	564	25.055	564	8	1.44%	
2018	1.8	0.186	11.52%	15,759	556	28.344	552	-12	-2.13%	
2019	1.6	-0.241	-13.41%	13,645	549	24.855	539	-13	-2.36%	
2020	1.9	0.301	19.35%	16,330	555	29.424	556	17	3.15%	
2021	1.9	0.061	3.27%	16,819	556	30.250	551	-5	-0.90%	
2022	1.7	-0.216	-11.23%	14,931	552	27.049	549	-2	-0.36%	
2023	1.8	0.063	3.67%	15,480	551	28.094	547	-2	-0.36%	
2024	1.8	0.025	1.44%	15,745	546	28.813	546	-1	-0.18%	0.000
2025	1.8	-0.023	-1.26%	15,504	545	28.424	545	-1	-0.18%	0.000
2026	1.7	-0.026	-1.49%	15,273	544	28.051	544	-1	-0.18%	0.000
2027	1.7	-0.026	-1.51%	15,043	543	27.680	543	-1	-0.18%	0.000
2028	1.7	-0.030	-1.75%	14,819	542	27.319	542	-1	-0.18%	0.000
2029	1.7	-0.021	-1.25%	14,595	541	26.954	541	-1	-0.18%	0.000
2030	1.6	-0.025	-1.48%	14,378	540	26.603	540	-1	-0.18%	0.000
2031	1.6	-0.025	-1.51%	14,161	539	26.251	539	-1	-0.19%	0.000
2032	1.6	-0.028	-1.76%	13,950	538	25.908	538	-1	-0.19%	0.000
2033	1.6	-0.020	-1.24%	13,740	537	25.564	537	-1	-0.19%	0.000
2034	1.5	-0.024	-1.50%	13,533	536	25.227	536	-1	-0.19%	0.000

5.7 Large Irrigation

See **Figure 5-7** and **Table 5-7** for the details of the Large Irrigation forecast.

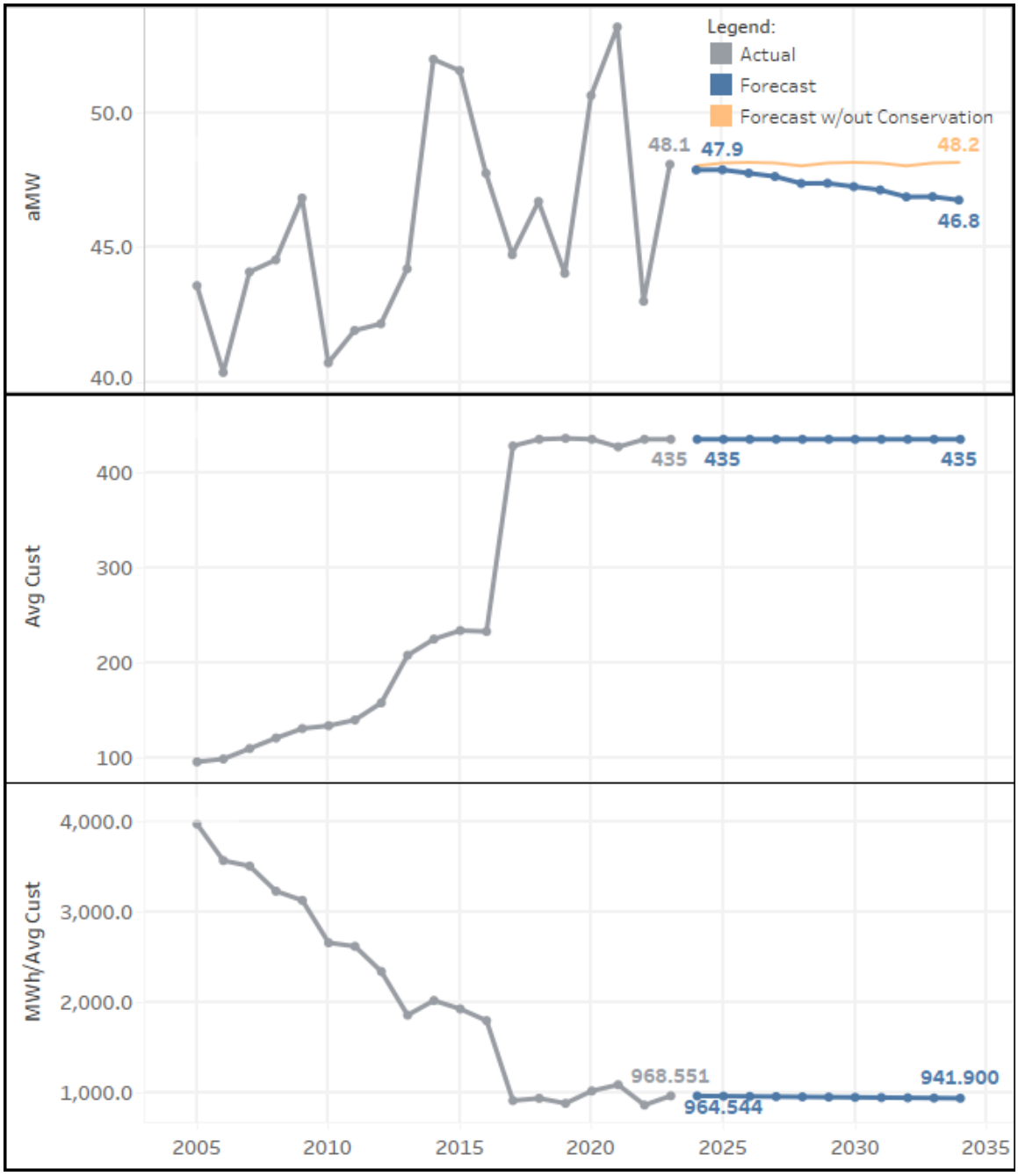

Figure 5-7 – Large Irrigation forecast of retail load, customers and usage per customer

Table 5-7 – Large Irrigation forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	43.6			381,927	96	3,978.407	96			
2006	40.4	-3.217	-7.38%	353,743	99	3,573.162	101	5	5.21%	
2007	44.1	3.728	9.23%	386,402	110	3,512.746	116	15	14.85%	
2008	44.6	0.447	1.01%	391,389	121	3,234.619	124	8	6.90%	
2009	46.8	2.291	5.14%	410,386	131	3,132.715	133	9	7.26%	
2010	40.7	-6.108	-13.04%	356,875	134	2,663.248	130	-3	-2.26%	
2011	41.9	1.201	2.95%	367,393	140	2,624.234	142	12	9.23%	
2012	42.2	0.248	0.59%	370,573	158	2,345.402	163	21	14.79%	
2013	44.2	2.037	4.83%	387,408	208	1,862.539	218	55	33.74%	
2014	52.0	7.766	17.56%	455,435	225	2,024.154	229	11	5.05%	
2015	51.6	-0.418	-0.80%	451,777	234	1,930.671	232	3	1.31%	
2016	47.8	-3.805	-7.38%	419,588	233	1,800.809	230	-2	-0.86%	
2017	44.7	-3.020	-6.32%	391,987	428	915.857	432	202	87.83%	
2018	46.7	1.973	4.41%	409,269	435	940.848	435	3	0.69%	
2019	44.1	-2.663	-5.70%	385,942	436	885.187	436	1	0.23%	
2020	50.7	6.594	14.97%	444,919	435	1,022.801	435	-1	-0.23%	
2021	53.2	2.538	5.01%	465,935	427	1,091.183	436	1	0.23%	
2022	43.0	-10.168	-19.12%	376,866	435	866.358	434	-2	-0.46%	
2023	48.1	5.075	11.80%	421,320	435	968.551	435	1	0.23%	
2024	47.9	-0.207	-0.43%	420,660	435	967.034	435	0	0.00%	0.150
2025	47.9	0.008	0.02%	419,577	435	964.544	435	0	0.00%	0.249
2026	47.8	-0.127	-0.26%	418,465	435	961.990	435	0	0.00%	0.399
2027	47.6	-0.122	-0.26%	417,393	435	959.525	435	0	0.00%	0.499
2028	47.4	-0.257	-0.54%	416,278	435	956.961	435	0	0.00%	0.648
2029	47.4	0.008	0.02%	415,207	435	954.499	435	0	0.00%	0.748
2030	47.3	-0.127	-0.27%	414,097	435	951.947	435	0	0.00%	0.898
2031	47.1	-0.123	-0.26%	413,024	435	949.479	435	0	0.00%	0.998
2032	46.9	-0.257	-0.55%	411,896	435	946.886	435	0	0.00%	1.147
2033	46.9	0.008	0.02%	410,838	435	944.455	435	0	0.00%	1.247
2034	46.8	-0.127	-0.27%	409,727	435	941.900	435	0	0.00%	1.397

5.8 Street Lighting

See **Figure 5-8** and **Table 5-8** for the details of the Street Lighting forecast.

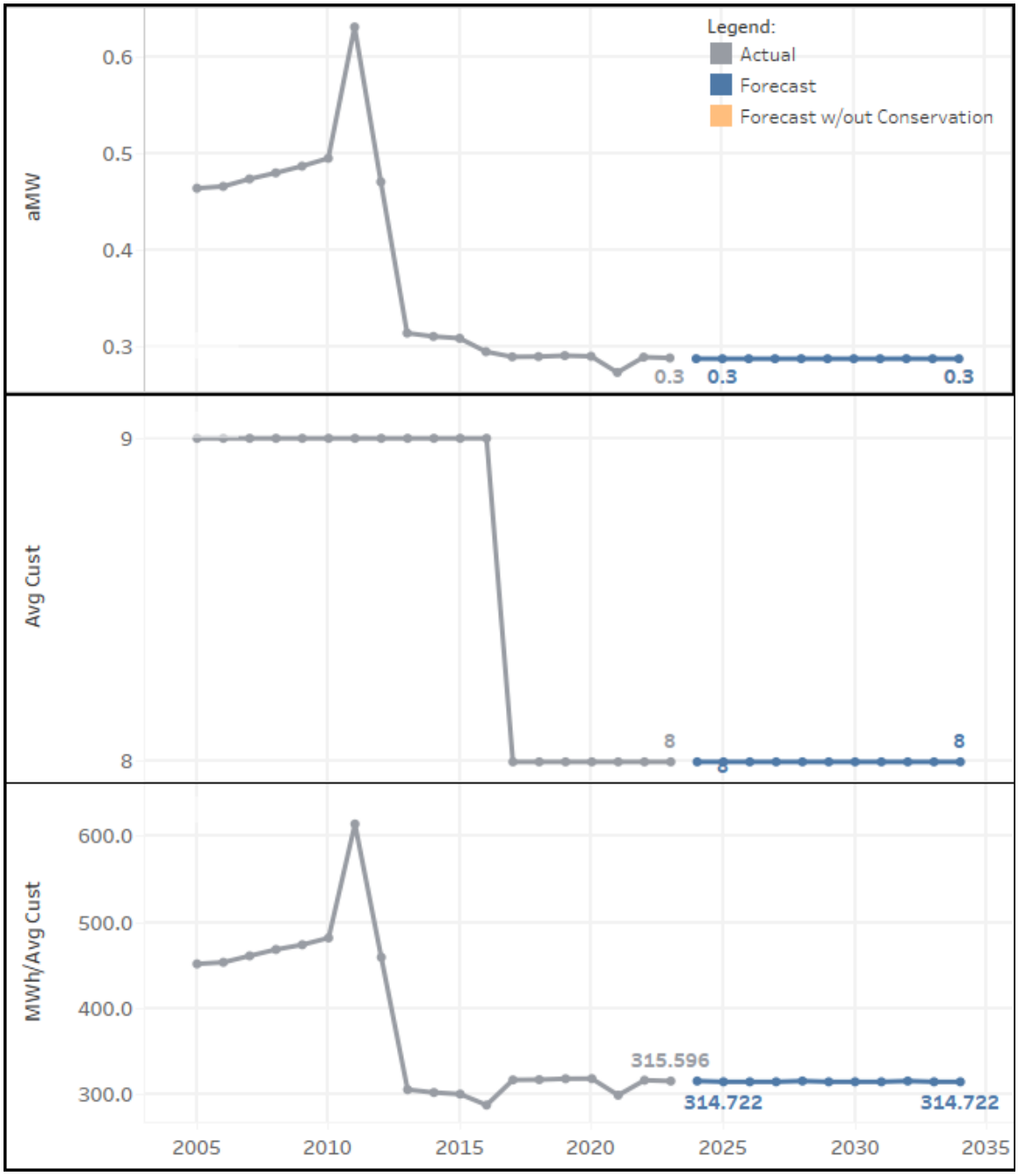

Figure 5-8 – Street Lighting forecast of retail load, customers and usage per customer

Table 5-8 – Street Lighting forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	0.5			4,067	9	451.882	9			
2006	0.5	0.002	0.41%	4,084	9	453.740	9	0	0.00%	
2007	0.5	0.008	1.66%	4,151	9	461.266	9	0	0.00%	
2008	0.5	0.006	1.33%	4,218	9	468.669	9	0	0.00%	
2009	0.5	0.007	1.46%	4,268	9	474.203	9	0	0.00%	
2010	0.5	0.008	1.68%	4,339	9	482.159	9	0	0.00%	
2011	0.6	0.136	27.48%	5,532	9	614.671	9	0	0.00%	
2012	0.5	-0.161	-25.43%	4,136	9	459.597	9	0	0.00%	
2013	0.3	-0.157	-33.31%	2,751	9	305.647	9	0	0.00%	
2014	0.3	-0.003	-1.10%	2,721	9	302.278	9	0	0.00%	
2015	0.3	-0.002	-0.62%	2,704	9	300.405	9	0	0.00%	
2016	0.3	-0.014	-4.50%	2,589	9	287.682	9	0	0.00%	
2017	0.3	-0.005	-1.81%	2,535	8	316.902	8	-1	-11.11%	
2018	0.3	0.000	0.10%	2,538	8	317.219	8	0	0.00%	
2019	0.3	0.001	0.34%	2,546	8	318.288	8	0	0.00%	
2020	0.3	-0.001	-0.23%	2,547	8	318.421	8	0	0.00%	
2021	0.3	-0.017	-5.80%	2,393	8	299.130	8	0	0.00%	
2022	0.3	0.016	5.82%	2,532	8	316.554	8	0	0.00%	
2023	0.3	-0.001	-0.30%	2,525	8	315.596	8	0	0.00%	
2024	0.3	-0.001	-0.26%	2,525	8	315.628	8	0	0.00%	0.000
2025	0.3	0.000	-0.01%	2,518	8	314.722	8	0	0.00%	0.000
2026	0.3	0.000	0.00%	2,518	8	314.722	8	0	0.00%	0.000
2027	0.3	0.000	0.00%	2,518	8	314.722	8	0	0.00%	0.000
2028	0.3	0.000	0.01%	2,525	8	315.628	8	0	0.00%	0.000
2029	0.3	0.000	-0.01%	2,518	8	314.722	8	0	0.00%	0.000
2030	0.3	0.000	0.00%	2,518	8	314.722	8	0	0.00%	0.000
2031	0.3	0.000	0.00%	2,518	8	314.722	8	0	0.00%	0.000
2032	0.3	0.000	0.01%	2,525	8	315.628	8	0	0.00%	0.000
2033	0.3	0.000	-0.01%	2,518	8	314.722	8	0	0.00%	0.000
2034	0.3	0.000	0.00%	2,518	8	314.722	8	0	0.00%	0.000

5.9 Security Lighting

See **Figure 5-9** and **Table 5-9** for details of the Security Lighting forecast.

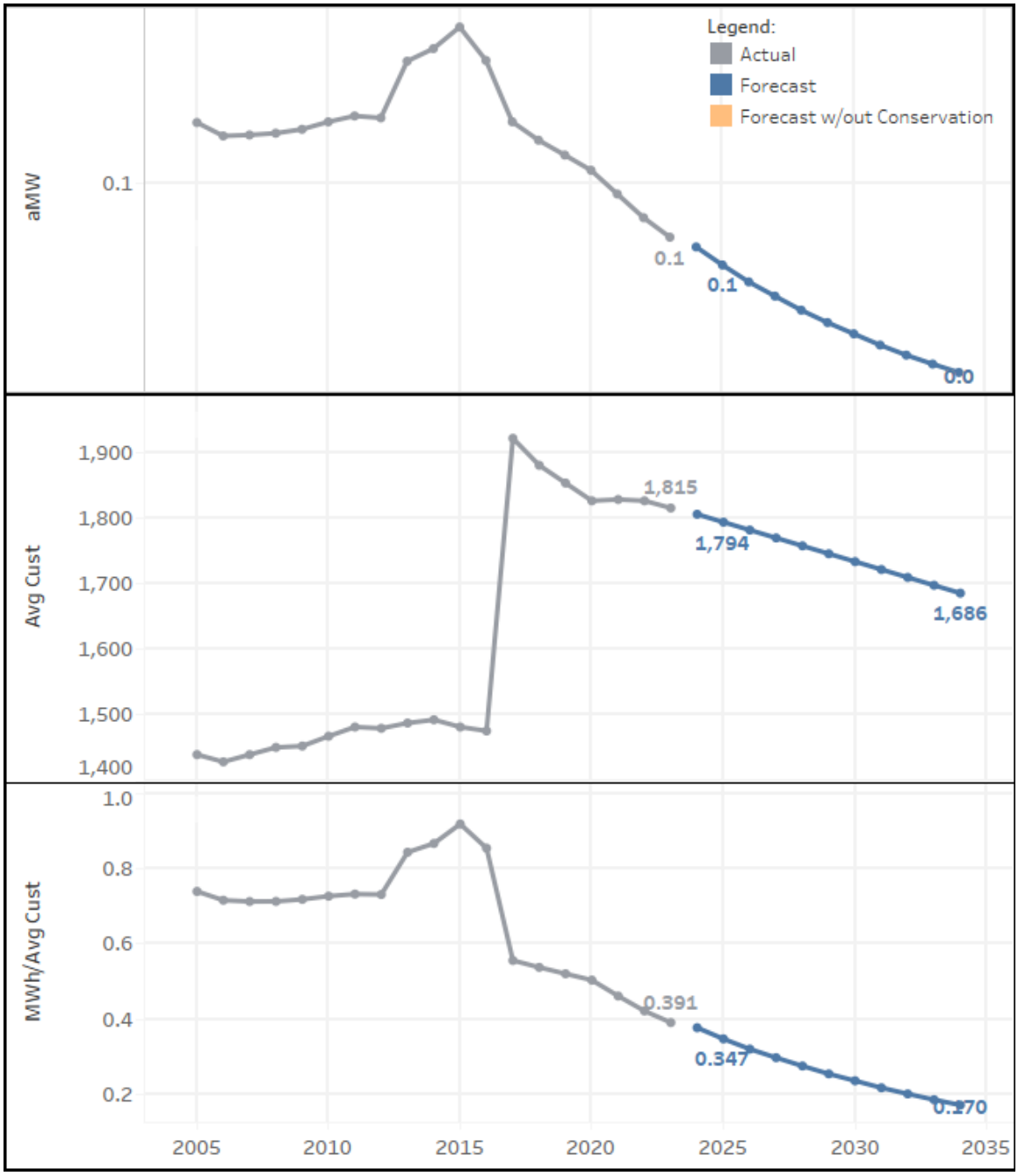

Figure 5-9 – Security Lighting forecast of retail load, customers and usage per customer

Table 5-9 – Security Lighting forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	0.1			1,066	1,440	0.741	1,435			
2006	0.1	-0.005	-3.92%	1,025	1,429	0.717	1,431	-4	-0.28%	
2007	0.1	0.000	0.29%	1,028	1,440	0.714	1,448	17	1.19%	
2008	0.1	0.001	0.52%	1,036	1,451	0.714	1,443	-5	-0.35%	
2009	0.1	0.001	1.19%	1,045	1,453	0.719	1,462	19	1.32%	
2010	0.1	0.003	2.22%	1,068	1,468	0.728	1,478	16	1.09%	
2011	0.1	0.002	1.72%	1,087	1,482	0.733	1,481	3	0.20%	
2012	0.1	-0.001	-0.56%	1,084	1,480	0.732	1,483	2	0.14%	
2013	0.1	0.020	16.34%	1,257	1,488	0.845	1,500	17	1.15%	
2014	0.1	0.004	3.12%	1,297	1,493	0.869	1,489	-11	-0.73%	
2015	0.2	0.008	5.19%	1,364	1,482	0.920	1,478	-11	-0.74%	
2016	0.1	-0.012	-7.64%	1,263	1,476	0.856	1,473	-5	-0.34%	
2017	0.1	-0.022	-15.17%	1,069	1,921	0.556	1,904	431	29.26%	
2018	0.1	-0.007	-5.37%	1,011	1,880	0.538	1,871	-33	-1.73%	
2019	0.1	-0.005	-4.58%	965	1,853	0.521	1,837	-34	-1.82%	
2020	0.1	-0.005	-4.92%	920	1,826	0.504	1,815	-22	-1.20%	
2021	0.1	-0.008	-8.07%	844	1,828	0.461	1,840	25	1.38%	
2022	0.1	-0.008	-8.75%	770	1,826	0.422	1,824	-16	-0.87%	
2023	0.1	-0.007	-7.89%	709	1,815	0.391	1,812	-12	-0.66%	
2024	0.1	-0.003	-4.29%	680	1,806	0.377	1,800	-12	-0.66%	0.000
2025	0.1	-0.006	-8.29%	622	1,794	0.347	1,788	-12	-0.67%	0.000
2026	0.1	-0.006	-8.45%	570	1,782	0.320	1,776	-12	-0.67%	0.000
2027	0.1	-0.005	-7.81%	525	1,770	0.297	1,764	-12	-0.68%	0.000
2028	0.1	-0.005	-8.32%	483	1,758	0.275	1,752	-12	-0.68%	0.000
2029	0.1	-0.004	-8.03%	443	1,746	0.254	1,740	-12	-0.68%	0.000
2030	0.0	-0.004	-7.91%	408	1,734	0.235	1,728	-12	-0.69%	0.000
2031	0.0	-0.004	-8.59%	373	1,722	0.217	1,716	-12	-0.69%	0.000
2032	0.0	-0.004	-8.41%	342	1,710	0.200	1,704	-12	-0.70%	0.000
2033	0.0	-0.003	-8.14%	314	1,698	0.185	1,692	-12	-0.70%	0.000
2034	0.0	-0.003	-8.38%	287	1,686	0.170	1,680	-12	-0.71%	0.000

5.10 Unmetered Flats

See **Figure 5-10** and **Table 5-10** for details of the Unmetered Flats forecast.

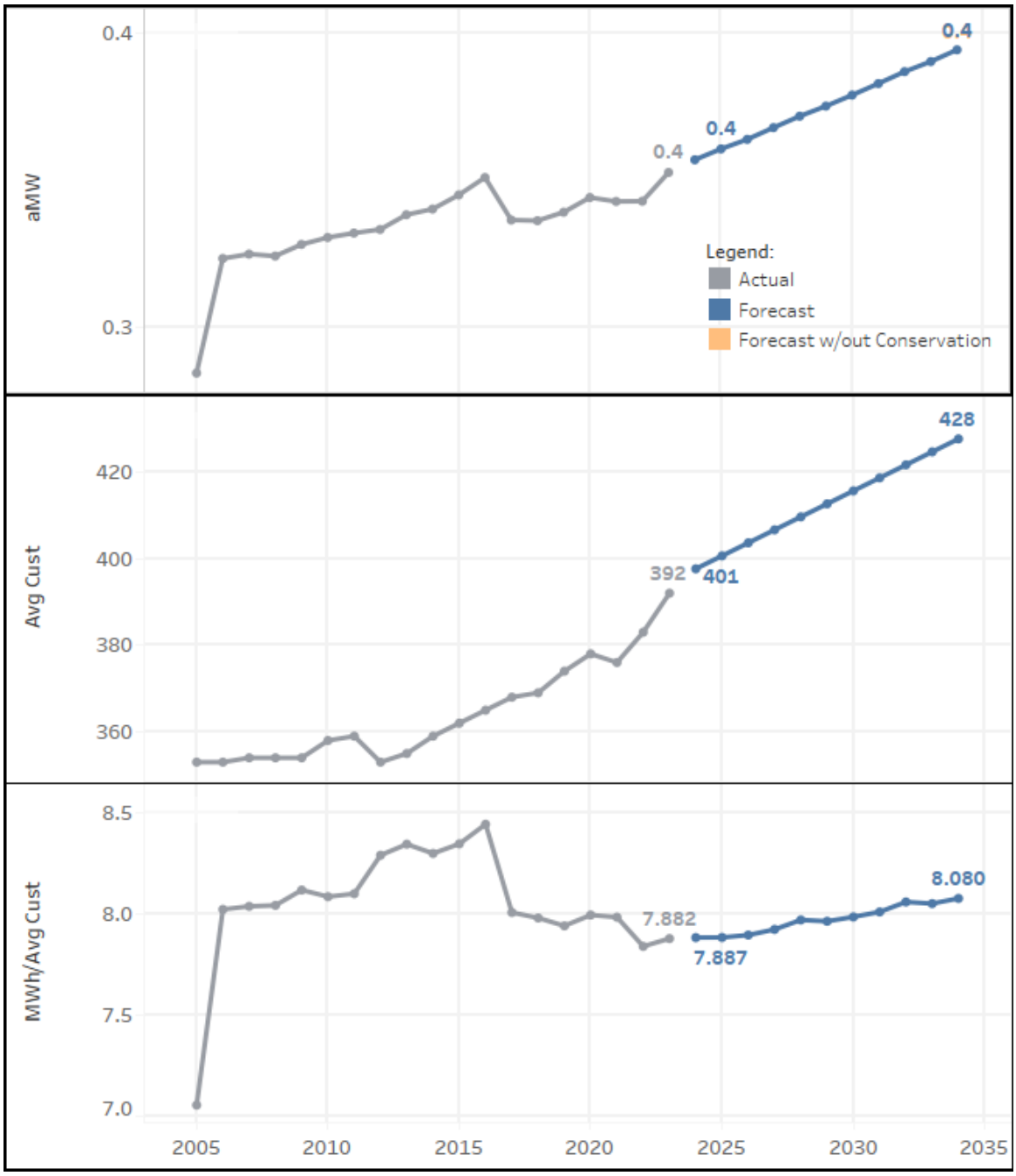

Figure 5-10 – Unmetered Flats forecast of retail load, customers and usage per customer

Table 5-10 – Unmetered Flats forecast of retail load, customers and usage per customer

Calendar Year	aMW	aMW Change	aMW Change %	MWh	Avg Cust Count	MWh / Avg Cust Count	Year-End Cust Count	Year-End Cust Count Change	Year-End Cust Count Change %	aMW EE
2005	0.3			2,492	353	7.059	352			
2006	0.3	0.039	13.70%	2,833	353	8.026	354	2	0.57%	
2007	0.3	0.002	0.47%	2,846	354	8.041	354	0	0.00%	
2008	0.3	-0.001	-0.21%	2,848	354	8.046	354	0	0.00%	
2009	0.3	0.004	1.22%	2,875	354	8.122	355	1	0.28%	
2010	0.3	0.002	0.72%	2,896	358	8.089	362	7	1.97%	
2011	0.3	0.002	0.46%	2,909	359	8.103	351	-11	-3.04%	
2012	0.3	0.001	0.36%	2,928	353	8.294	354	3	0.85%	
2013	0.3	0.005	1.50%	2,964	355	8.348	357	3	0.85%	
2014	0.3	0.002	0.57%	2,981	359	8.302	361	4	1.12%	
2015	0.3	0.005	1.41%	3,023	362	8.350	364	3	0.83%	
2016	0.4	0.006	1.72%	3,083	365	8.447	366	2	0.55%	
2017	0.3	-0.014	-4.12%	2,948	368	8.011	367	1	0.27%	
2018	0.3	0.000	-0.07%	2,946	369	7.984	370	3	0.82%	
2019	0.3	0.003	0.86%	2,971	374	7.944	377	7	1.89%	
2020	0.3	0.005	1.47%	3,023	378	7.998	381	4	1.06%	
2021	0.3	-0.001	-0.39%	3,003	376	7.987	382	1	0.26%	
2022	0.3	0.000	0.02%	3,004	383	7.843	386	4	1.05%	
2023	0.4	0.010	2.85%	3,090	392	7.882	396	10	2.59%	
2024	0.4	0.004	1.22%	3,136	398	7.887	399	3	0.76%	0.000
2025	0.4	0.004	1.04%	3,160	401	7.887	402	3	0.75%	0.000
2026	0.4	0.003	0.90%	3,188	404	7.899	405	3	0.75%	0.000
2027	0.4	0.004	1.10%	3,223	407	7.927	408	3	0.74%	0.000
2028	0.4	0.004	1.06%	3,266	410	7.974	411	3	0.74%	0.000
2029	0.4	0.003	0.92%	3,287	413	7.967	414	3	0.73%	0.000
2030	0.4	0.004	1.00%	3,320	416	7.989	417	3	0.72%	0.000
2031	0.4	0.004	1.03%	3,355	419	8.013	420	3	0.72%	0.000
2032	0.4	0.004	1.06%	3,399	422	8.063	423	3	0.71%	0.000
2033	0.4	0.003	0.89%	3,420	425	8.055	426	3	0.71%	0.000
2034	0.4	0.004	1.02%	3,455	428	8.080	429	3	0.70%	0.000

6. Appendix A – Summary Tables

Table 6-1 – Total system historical and forecast of annual load, losses and peak demand

Calendar Year	BPUD Retail Sales (aMW)			+ BPUD T&D[1] Losses (aMW)	(%)	= BPA Wholesale Load (aMW)			BPA Peak Demand (MW)		
2005	182.9			4.54	2.42%	187.5			366.5		
2006	177.6			5.34	2.92%	182.9			373.3		
2007	183.5			6.71	3.53%	190.2			384.3		
2008	186.7			7.29	3.76%	194.0			396.9		
2009	197.1			6.25	3.07%	203.3			402.1		
2010	181.8			7.03	3.72%	188.9			392.1		
2011	188.2			6.16	3.17%	194.3			379.5		
2012	187.3			5.84	3.02%	193.1			394.0		
2013	193.7			8.75	4.32%	202.4			414.5		
2014	203.3			5.07	2.43%	208.4			430.5		
2015	198.4			7.47	3.63%	205.9			429.5		
2016	192.9			7.43	3.71%	200.3			425.1		
2017	203.7			7.18	3.41%	210.9			426.0		
2018	198.8			5.90	2.88%	204.7			419.0		
2019	201.6			7.49	3.58%	209.1			407.7		
2020	198.0			7.48	3.64%	205.5			437.0		
2021	206.3			8.34	3.89%	214.6			489.6		
2022	206.2			6.95	3.26%	213.1			454.9		
2023	209.8			5.78	2.68%	215.6			438.4		
Forecast	**Low**	**Base**	**High**	**aMW**	**%**	**Low**	**Base**	**High**	**Low**	**Base**	**High**
2024	196.6	206.9	217.3	6.79	3.28%	203.0	213.7	224.4	419.7	441.8	463.9
2025	196.6	207.0	217.3	6.79	3.28%	203.1	213.8	224.5	417.1	439.1	461.0
2026	196.9	207.3	217.6	6.80	3.28%	203.3	214.1	224.8	416.0	437.9	459.8
2027	197.2	207.6	218.0	6.81	3.28%	203.7	214.4	225.1	415.1	437.0	458.8
2028	197.5	207.9	218.3	6.82	3.28%	204.0	214.7	225.4	415.2	437.0	458.9
2029	197.9	208.3	218.7	6.83	3.28%	204.3	215.1	225.9	413.3	435.0	456.8
2030	198.2	208.6	219.0	6.84	3.28%	204.7	215.5	226.2	412.3	434.0	455.7
2031	198.6	209.0	219.5	6.86	3.28%	205.1	215.9	226.7	411.5	433.2	454.9
2032	198.9	209.4	219.9	6.87	3.28%	205.4	216.3	227.1	411.8	433.4	455.1
2033	199.3	209.8	220.3	6.88	3.28%	205.9	216.7	227.6	410.0	431.5	453.1
2034	199.7	210.3	220.8	6.90	3.28%	206.3	217.2	228.0	408.9	430.4	451.9

1) BPUD T&D = Benton PUD Transmission & Distribution; Forecast loss factor is equal to the 3-year historical average.

Table 6-2 – Historical & BASE case forecast of annual retail load (aMW) by customer class

Calendar Year	Residential	Small General	Medium General	Large General	Large Industrial	Small Irrigation	Large Irrigation	Street Lights	Security Lights	Unmetered Flats	Total System	Annual % Change
2005	71.077	13.095	18.726	27.689	6.083	1.795	43.599	0.464	0.122	0.284	182.935	0.62%
2006	72.170	12.866	18.315	27.044	4.276	1.633	40.382	0.466	0.117	0.323	177.592	-2.92%
2007	73.561	13.133	18.857	25.493	5.599	1.809	44.110	0.474	0.117	0.325	183.478	3.31%
2008	75.867	13.162	19.305	25.610	5.437	1.826	44.557	0.480	0.118	0.324	186.687	1.75%
2009	82.388	13.879	20.007	26.645	4.442	1.927	46.848	0.487	0.119	0.328	197.071	5.56%
2010	74.746	12.955	19.505	24.964	6.320	1.649	40.739	0.495	0.122	0.331	181.827	-7.74%
2011	78.533	13.509	20.030	23.935	7.467	1.667	41.940	0.632	0.124	0.332	188.169	3.49%
2012	76.049	13.595	20.036	24.747	8.035	1.726	42.187	0.471	0.123	0.333	187.304	-0.46%
2013	79.667	14.033	20.234	25.036	7.968	1.736	44.225	0.314	0.144	0.338	193.696	3.41%
2014	79.544	14.188	20.781	25.877	8.204	1.964	51.990	0.311	0.148	0.340	203.347	4.98%
2015	75.971	13.870	20.846	25.819	7.642	1.875	51.573	0.309	0.156	0.345	198.404	-2.43%
2016	75.335	13.874	20.545	25.418	7.356	1.776	47.767	0.295	0.144	0.351	192.860	-2.79%
2017	86.618	15.791	25.135	21.390	7.660	1.613	44.747	0.289	0.122	0.337	203.703	5.62%
2018	79.629	15.514	25.366	21.455	7.534	1.799	46.720	0.290	0.115	0.336	198.759	-2.43%
2019	85.729	15.970	26.074	20.128	7.342	1.558	44.057	0.291	0.110	0.339	201.597	1.43%
2020	80.174	14.481	24.226	18.633	7.243	1.859	50.651	0.290	0.105	0.344	198.007	-1.78%
2021	81.241	15.317	25.633	20.856	7.430	1.920	53.189	0.273	0.096	0.343	206.298	4.19%
2022	89.134	16.053	26.278	21.876	7.401	1.704	43.021	0.289	0.088	0.343	206.188	-0.05%
2023	87.086	15.974	25.569	23.409	7.221	1.767	48.096	0.288	0.081	0.353	209.844	1.77%
2024	85.292	15.631	25.579	22.673	7.330	1.792	47.889	0.287	0.077	0.357	206.910	-1.40%
2025	86.015	15.649	25.316	22.279	7.332	1.770	47.897	0.287	0.071	0.361	206.976	0.03%
2026	86.919	15.668	25.044	22.061	7.332	1.743	47.770	0.287	0.065	0.364	207.255	0.13%
2027	87.843	15.697	24.784	21.851	7.332	1.717	47.648	0.287	0.060	0.368	207.587	0.16%
2028	88.877	15.728	24.515	21.634	7.330	1.687	47.390	0.287	0.055	0.372	207.877	0.14%
2029	89.726	15.756	24.252	21.422	7.332	1.666	47.398	0.287	0.051	0.375	208.266	0.19%
2030	90.686	15.787	23.981	21.204	7.332	1.641	47.271	0.287	0.047	0.379	208.615	0.17%
2031	91.666	15.827	23.720	20.994	7.332	1.617	47.149	0.287	0.043	0.383	209.016	0.19%
2032	92.761	15.869	23.452	20.778	7.330	1.588	46.892	0.287	0.039	0.387	209.383	0.18%
2033	93.662	15.908	23.189	20.566	7.332	1.568	46.899	0.287	0.036	0.390	209.838	0.22%
2034	94.680	15.950	22.918	20.348	7.332	1.545	46.772	0.287	0.033	0.394	210.259	0.20%
AARG %[1] 2024-2029	**1.02%**	**0.16%**	**-1.06%**	**-1.13%**	**0.00%**	**-1.45%**	**-0.21%**	**0.00%**	**-8.18%**	**1.00%**	**0.13%**	
AARG %[1] 2024-2034	**1.05%**	**0.20%**	**-1.09%**	**-1.08%**	**0.00%**	**-1.48%**	**-0.24%**	**0.00%**	**-8.23%**	**1.00%**	**0.16%**	

1) AARG % = Annual Average Rate of Growth Percentage

Table 6-3 – Total System Historical BASE case forecast of MONTHLY and annual retail load (aMW)

Calendar Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2005	188.8	165.8	163.5	168.1	177.3	229.3	255.6	251.2	170.2	124.0	134.7	164.2	182.9
2006	167.3	162.9	155.4	151.7	177.2	221.6	250.4	233.4	171.8	131.1	135.0	171.0	177.6
2007	182.2	185.4	148.3	155.5	187.7	235.0	254.1	236.0	187.5	127.6	143.7	158.6	183.5
2008	176.4	188.5	147.5	182.2	191.7	228.2	262.4	234.6	177.5	149.1	127.3	174.0	186.7
2009	201.8	185.2	161.9	172.6	209.5	258.3	267.4	250.3	187.6	144.4	142.3	181.6	197.1
2010	191.9	157.1	150.6	180.6	175.6	204.6	253.5	250.5	167.1	133.4	129.5	183.6	181.8
2011	186.4	180.8	156.1	173.6	174.5	221.0	247.3	253.8	209.0	136.1	136.1	182.3	188.2
2012	190.0	188.1	145.8	165.4	205.4	207.7	245.0	258.7	197.4	141.2	146.8	155.2	187.3
2013	185.8	187.3	150.1	167.3	206.6	234.1	274.0	249.5	186.1	148.6	148.8	184.3	193.7
2014	194.0	207.4	161.0	184.7	210.4	265.2	283.5	255.1	199.3	161.9	145.4	172.1	203.3
2015	178.8	178.2	148.2	181.5	201.0	288.8	296.2	248.9	197.7	154.4	136.6	168.9	198.4
2016	191.6	175.0	145.0	193.5	205.2	257.1	258.1	249.9	190.4	143.8	135.2	168.4	192.9
2017	228.0	221.2	168.4	161.9	191.3	266.4	288.7	262.4	193.4	148.1	147.2	167.7	203.7
2018	194.6	178.3	163.2	170.4	209.9	260.7	285.1	263.1	191.1	146.0	148.8	171.1	198.8
2019	177.9	215.8	192.3	168.6	193.8	271.3	259.8	257.0	195.7	151.0	160.2	176.8	201.6
2020	178.9	180.9	163.8	194.3	188.1	242.8	274.6	277.4	201.9	152.4	149.3	170.4	198.0
2021	179.4	195.6	169.1	197.2	227.1	283.6	313.8	260.4	195.1	153.6	145.6	153.9	206.3
2022	214.4	202.5	164.0	164.8	165.9	206.5	275.6	298.2	231.6	161.2	178.8	209.0	206.2
2023	213.2	206.4	172.4	171.8	218.8	287.3	309.8	261.3	192.0	147.2	157.9	178.7	209.8
19-Year Min.	**167.3**	**157.1**	**145.0**	**151.7**	**165.9**	**204.6**	**245.0**	**233.4**	**167.1**	**124.0**	**127.3**	**153.9**	**177.6**
19-Year Avg.	**190.6**	**187.5**	**159.3**	**174.0**	**195.6**	**245.8**	**271.3**	**255.4**	**191.7**	**145.0**	**144.7**	**173.2**	**194.6**
19-Year Max	**228.0**	**221.2**	**192.3**	**197.2**	**227.1**	**288.8**	**313.8**	**298.2**	**231.6**	**161.9**	**178.8**	**209.0**	**209.8**
2024	204.3	196.3	169.8	178.6	204.3	259.1	299.4	272.8	205.3	153.0	159.6	179.1	206.9
2025	204.1	196.0	169.2	178.0	204.1	259.0	299.6	273.2	205.6	153.0	160.0	179.9	207.0
2026	205.2	196.9	169.7	178.2	204.0	259.1	299.8	273.5	205.6	152.7	160.1	180.3	207.3
2027	206.0	197.6	170.0	178.3	203.9	259.1	300.1	273.9	205.9	152.7	160.6	181.2	207.6
2028	207.1	198.6	170.4	178.5	203.9	259.1	300.3	274.2	206.0	152.5	160.7	181.6	207.9
2029	207.9	199.3	170.7	178.6	203.8	259.2	300.6	274.7	206.3	152.6	161.2	182.5	208.3
2030	209.0	200.3	171.3	178.9	203.8	259.2	300.9	275.1	206.4	152.3	161.3	183.0	208.6
2031	209.9	201.1	171.6	179.0	203.7	259.3	301.3	275.6	206.8	152.4	161.8	183.9	209.0
2032	211.1	202.2	172.2	179.3	203.7	259.4	301.6	276.0	207.0	152.2	162.0	184.5	209.4
2033	212.0	203.0	172.5	179.4	203.7	259.5	302.0	276.5	207.3	152.3	162.6	185.5	209.8
2034	213.3	204.1	173.1	179.7	203.7	259.7	302.3	277.0	207.5	152.2	162.8	186.1	210.3

Table 6-4 – 2025 BASE case forecast of MONTHLY and annual retail load (aMW) by customer class

Revenue Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
RES	129.821	121.788	90.563	73.711	58.684	66.119	82.486	89.849	75.063	54.574	82.154	109.322	86.0
SGS	17.841	17.723	14.149	13.712	13.096	15.128	17.022	18.644	17.006	13.045	14.603	15.949	15.6
MGS	26.299	26.313	22.433	22.483	22.315	25.057	25.802	27.649	27.302	25.934	26.970	25.339	25.3
LGS	16.540	17.114	15.238	16.104	15.284	16.634	17.244	19.866	19.634	19.368	18.370	15.986	17.3
LGS-EIL	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.0
LIND	7.697	6.955	7.344	7.539	7.527	7.443	7.721	7.150	6.454	6.821	7.983	7.310	7.3
SIRR	0.107	0.091	0.230	1.287	2.603	3.669	4.366	4.023	2.877	1.472	0.276	0.108	1.8
LIRR	0.132	0.252	13.567	37.474	78.897	119.266	139.251	100.292	51.501	26.060	3.937	0.200	47.9
SECL	0.070	0.075	0.070	0.072	0.070	0.072	0.070	0.070	0.072	0.070	0.072	0.070	0.1
STRL	0.283	0.302	0.283	0.292	0.283	0.292	0.283	0.283	0.292	0.283	0.292	0.283	0.3
UNM	0.355	0.379	0.355	0.367	0.355	0.367	0.355	0.355	0.367	0.355	0.366	0.355	0.4
TOTAL	204.145	195.992	169.232	178.041	204.114	259.047	299.600	273.181	205.568	152.982	160.023	179.922	207.0

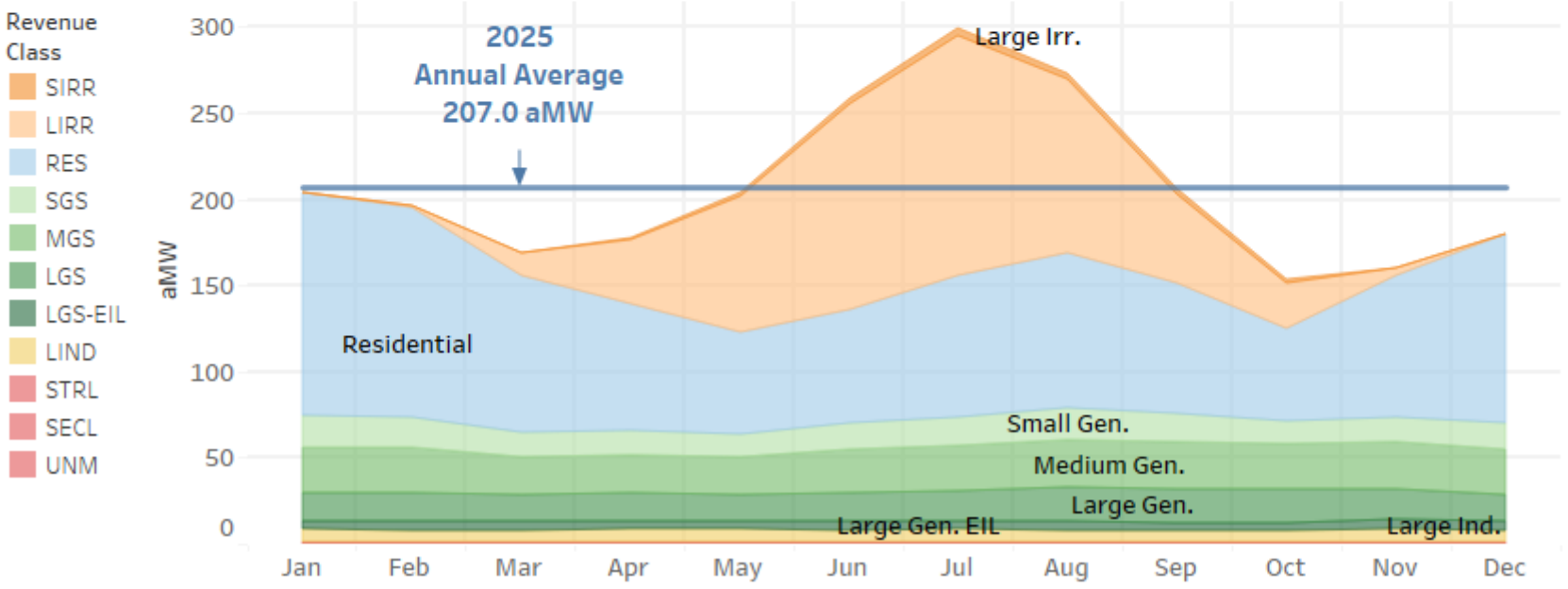

Table 6-5 – Historical and forecast of annual average number of customers by customer class

Calendar Year	Residential	Small General	Medium General	Large General	Large Industrial	Small Irrigation	Large Irrigation	Street Lights	Security Lights	Unmetered Flats	Total System	Annual % Change
2005	36,963	4,144	637	122	3	622	96	9	1,440	353	44,389	#N/A
2006	37,418	4,169	636	126	3	614	99	9	1,429	353	44,856	1.05%
2007	37,969	4,295	654	128	3	607	110	9	1,440	354	45,569	1.59%
2008	38,855	4,385	676	131	3	615	121	9	1,451	354	46,600	2.26%
2009	39,220	4,460	695	134	3	615	131	9	1,453	354	47,074	1.02%
2010	39,687	4,503	718	135	3	602	134	9	1,468	358	47,617	1.15%
2011	40,201	4,553	732	136	3	582	140	9	1,482	359	48,197	1.22%
2012	40,645	4,610	747	142	3	563	158	9	1,480	353	48,710	1.06%
2013	41,321	4,682	746	144	3	564	208	9	1,488	355	49,520	1.66%
2014	41,758	4,741	754	148	3	563	225	9	1,493	359	50,053	1.08%
2015	42,375	4,828	758	151	3	560	234	9	1,482	362	50,762	1.42%
2016	43,157	4,915	768	157	5	558	233	9	1,476	365	51,643	1.74%
2017	43,853	5,107	727	101	5	564	428	8	1,921	368	53,082	2.79%
2018	44,528	5,164	725	89	5	556	435	8	1,880	369	53,759	1.28%
2019	45,298	5,244	730	89	5	549	436	8	1,853	374	54,586	1.54%
2020	46,003	5,316	725	89	5	555	435	8	1,826	378	55,340	1.38%
2021	46,713	5,358	726	92	5	556	427	8	1,828	376	56,089	1.35%
2022	47,270	5,417	714	84	5	552	435	8	1,826	383	56,694	1.08%
2023	47,817	5,486	707	83	5	551	435	8	1,815	392	57,299	1.07%
2024	48,344	5,570	714	83	5	546	435	8	1,806	398	57,908	1.06%
2025	48,922	5,642	715	83	5	545	435	8	1,794	401	58,549	1.11%
2026	49,522	5,714	716	83	5	544	435	8	1,782	404	59,212	1.13%
2027	50,122	5,786	717	83	5	543	435	8	1,770	407	59,875	1.12%
2028	50,722	5,858	718	83	5	542	435	8	1,758	410	60,538	1.11%
2029	51,322	5,930	719	83	5	541	435	8	1,746	413	61,201	1.10%
2030	51,922	6,002	720	83	5	540	435	8	1,734	416	61,864	1.08%
2031	52,522	6,074	721	83	5	539	435	8	1,722	419	62,527	1.07%
2032	53,122	6,146	722	83	5	538	435	8	1,710	422	63,190	1.06%
2033	53,722	6,218	723	83	5	537	435	8	1,698	425	63,853	1.05%
2034	54,322	6,290	724	83	5	536	435	8	1,686	428	64,516	1.04%
AARG %[1] 2024-2029	**1.20%**	**1.26%**	**0.14%**	**-0.08%**	**0.00%**	**-0.18%**	**0.00%**	**0.00%**	**-0.67%**	**0.74%**	**1.11%**	
AARG %[1] 2024-2034	**1.17%**	**1.22%**	**0.14%**	**-0.04%**	**0.00%**	**-0.18%**	**0.00%**	**0.00%**	**-0.69%**	**0.73%**	**1.09%**	

Table 6-6 – Historical and BASE case forecast of annual usage per customer (kWh) by customer class

Calendar Year	Residential	Small General	Medium General	Large General	Large Industrial	Small Irrigation	Large Irrigation	Street Lights	Security Lights	Unmetered Flats	Total System	Annual % Change
2005	16,845	27,681	257,524	1,988,160	17,761,932	25,280	3,978,407	451,882	741	7,059	36,101	#N/A
2006	16,896	27,034	252,263	1,880,220	12,485,305	23,298	3,573,162	453,740	717	8,026	34,682	-3.93%
2007	16,972	26,787	252,577	1,744,660	16,348,383	26,110	3,512,746	461,266	714	8,041	35,271	1.70%
2008	17,151	26,366	250,845	1,717,234	15,920,098	26,086	3,234,619	468,669	714	8,046	35,190	-0.23%
2009	18,402	27,260	252,179	1,741,869	12,969,692	27,453	3,132,715	474,203	719	8,122	36,673	4.21%
2010	16,498	25,202	237,977	1,619,899	18,454,887	23,997	2,663,248	482,159	728	8,089	33,450	-8.79%
2011	17,113	25,991	239,704	1,541,682	21,803,603	25,097	2,624,234	614,671	733	8,103	34,201	2.24%
2012	16,435	25,905	235,607	1,530,826	23,525,055	26,936	2,345,402	459,597	732	8,294	33,777	-1.24%
2013	16,889	26,255	237,601	1,523,024	23,267,593	26,970	1,862,539	305,647	845	8,348	34,264	1.44%
2014	16,687	26,215	241,437	1,531,617	23,956,495	30,566	2,024,154	302,278	869	8,302	35,589	3.86%
2015	15,705	25,165	240,911	1,497,847	22,313,962	29,330	1,930,671	300,405	920	8,350	34,239	-3.79%
2016	15,333	24,795	234,983	1,422,089	12,922,450	27,952	1,800,809	287,682	856	8,447	32,804	-4.19%
2017	17,303	27,086	302,866	1,855,247	13,420,262	25,055	915,857	316,902	556	8,011	33,617	2.48%
2018	15,665	26,317	306,494	2,111,771	13,199,344	28,344	940,848	317,219	538	7,984	32,388	-3.66%
2019	16,579	26,677	312,883	1,981,102	12,863,616	24,855	885,187	318,288	521	7,944	32,352	-0.11%
2020	15,309	23,928	293,518	1,839,027	12,725,056	29,424	1,022,801	318,421	504	7,998	31,429	-2.85%
2021	15,235	25,042	309,296	1,985,854	13,016,760	30,250	1,091,183	299,130	461	7,987	32,220	2.52%
2022	16,518	25,960	322,402	2,281,315	12,967,032	27,049	866,358	316,554	422	7,843	31,859	-1.12%
2023	15,954	25,507	316,816	2,470,670	12,650,440	28,094	968,551	315,596	391	7,882	32,081	0.70%
2024	15,497	24,651	314,891	2,389,941	12,878,216	28,813	967,034	315,628	377	7,887	31,386	-2.17%
2025	15,402	24,297	310,360	2,351,389	12,844,832	28,424	964,544	314,722	347	7,887	30,967	-1.33%
2026	15,375	24,021	306,603	2,328,388	12,844,832	28,051	961,990	314,722	320	7,899	30,662	-0.99%
2027	15,353	23,765	302,990	2,306,174	12,844,832	27,680	959,525	314,722	297	7,927	30,371	-0.95%
2028	15,392	23,584	300,108	2,289,582	12,878,216	27,319	956,961	315,628	275	7,974	30,163	-0.69%
2029	15,315	23,276	295,663	2,260,966	12,844,832	26,954	954,499	314,722	254	7,967	29,810	-1.17%
2030	15,300	23,041	291,950	2,237,964	12,844,832	26,603	951,947	314,722	235	7,989	29,540	-0.91%
2031	15,289	22,825	288,376	2,215,768	12,844,832	26,251	949,479	314,722	217	8,013	29,283	-0.87%
2032	15,339	22,680	285,499	2,198,911	12,878,216	25,908	946,886	315,628	200	8,063	29,106	-0.60%
2033	15,273	22,412	281,135	2,170,570	12,844,832	25,564	944,455	314,722	185	8,055	28,788	-1.09%
2034	15,268	22,214	277,465	2,147,567	12,844,832	25,227	941,900	314,722	170	8,080	28,549	-0.83%
AARG %[1] 2024-2029	**-0.24%**	**-1.14%**	**-1.25%**	**-1.10%**	**-0.05%**	**-1.32%**	**-0.26%**	**-0.06%**	**-7.61%**	**0.20%**	**-1.02%**	
AARG %[1] 2024-2034	**-0.15%**	**-1.04%**	**-1.26%**	**-1.06%**	**-0.03%**	**-1.32%**	**-0.26%**	**-0.03%**	**-7.62%**	**0.24%**	**-0.94%**	

Table 6-7 – Historical and forecast annual year-end number of customers by customer class

Calendar Year	Residential	Small General	Medium General	Large General	Large Industrial	Small Irrigation	Large Irrigation	Street Lights	Security Lights	Unmetered Flats	Total System	Annual % Change
2005	37,236	4,128	627	123	3	619	96	9	1,435	352	44,628	#N/A
2006	37,802	4,232	641	127	3	602	101	9	1,431	354	45,302	1.51%
2007	38,285	4,324	665	131	3	609	116	9	1,448	354	45,944	1.42%
2008	39,095	4,445	683	132	3	615	124	9	1,443	354	46,903	2.09%
2009	39,430	4,484	707	135	3	610	133	9	1,462	355	47,328	0.91%
2010	39,973	4,528	725	135	3	594	130	9	1,478	362	47,937	1.29%
2011	40,432	4,576	747	141	3	573	142	9	1,481	351	48,455	1.08%
2012	40,955	4,652	742	143	3	555	163	9	1,483	354	49,059	1.25%
2013	41,561	4,709	750	146	3	563	218	9	1,500	357	49,816	1.54%
2014	42,039	4,784	758	151	3	559	229	9	1,489	361	50,382	1.14%
2015	42,724	4,883	762	153	3	558	232	9	1,478	364	51,166	1.56%
2016	43,574	4,949	775	160	5	556	230	9	1,473	366	52,097	1.82%
2017	44,194	5,174	717	88	5	564	432	8	1,904	367	53,453	2.60%
2018	44,917	5,168	729	90	5	552	435	8	1,871	370	54,145	1.29%
2019	45,667	5,278	726	87	5	539	436	8	1,837	377	54,960	1.51%
2020	46,370	5,350	730	93	5	556	435	8	1,815	381	55,743	1.42%
2021	46,983	5,382	724	84	5	551	436	8	1,840	382	56,395	1.17%
2022	47,523	5,427	707	84	5	549	434	8	1,824	386	56,947	0.98%
2023	48,084	5,531	713	84	5	547	435	8	1,812	396	57,615	1.17%
2024	48,597	5,603	714	83	5	546	435	8	1,800	399	58,190	1.00%
2025	49,197	5,675	715	83	5	545	435	8	1,788	402	58,853	1.14%
2026	49,797	5,747	716	83	5	544	435	8	1,776	405	59,516	1.13%
2027	50,397	5,819	717	83	5	543	435	8	1,764	408	60,179	1.11%
2028	50,997	5,891	718	83	5	542	435	8	1,752	411	60,842	1.10%
2029	51,597	5,963	719	83	5	541	435	8	1,740	414	61,505	1.09%
2030	52,197	6,035	720	83	5	540	435	8	1,728	417	62,168	1.08%
2031	52,797	6,107	721	83	5	539	435	8	1,716	420	62,831	1.07%
2032	53,397	6,179	722	83	5	538	435	8	1,704	423	63,494	1.06%
2033	53,997	6,251	723	83	5	537	435	8	1,692	426	64,157	1.04%
2034	54,597	6,323	724	83	5	536	435	8	1,680	429	64,820	1.03%
AARG %[1] 2024-2029	**1.21%**	**1.25%**	**0.14%**	**0.00%**	**0.00%**	**-0.18%**	**0.00%**	**0.00%**	**-0.68%**	**0.74%**	**1.11%**	
AARG %[1] 2024-2034	**1.17%**	**1.22%**	**0.14%**	**0.00%**	**0.00%**	**-0.18%**	**0.00%**	**0.00%**	**-0.69%**	**0.73%**	**1.08%**	

Table 6-8 – Historical and forecast annual change in number of customers by customer class

Calendar Year	Residential	Small General	Medium General	Large General	Large Industrial	Small Irrigation	Large Irrigation	Street Lights	Security Lights	Unmetered Flats	Total System	Annual % Change
2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2006	566	104	14	4	0	(17)	5	0	(4)	2	674	#N/A
2007	483	92	24	4	0	7	15	0	17	0	642	-4.75%
2008	810	121	18	1	0	6	8	0	(5)	0	959	49.38%
2009	335	39	24	3	0	(5)	9	0	19	1	425	-55.68%
2010	543	44	18	0	0	(16)	(3)	0	16	7	609	43.29%
2011	459	48	22	6	0	(21)	12	0	3	(11)	518	-14.94%
2012	523	76	(5)	2	0	(18)	21	0	2	3	604	16.60%
2013	606	57	8	3	0	8	55	0	17	3	757	25.33%
2014	478	75	8	5	0	(4)	11	0	(11)	4	566	-25.23%
2015	685	99	4	2	0	(1)	3	0	(11)	3	784	38.52%
2016	850	66	13	7	2	(2)	(2)	0	(5)	2	931	18.75%
2017	620	225	(58)	(72)	0	8	202	(1)	431	1	1,356	45.65%
2018	723	(6)	12	2	0	(12)	3	0	(33)	3	692	-48.97%
2019	750	110	(3)	(3)	0	(13)	1	0	(34)	7	815	17.77%
2020	703	72	4	6	0	17	(1)	0	(22)	4	783	-3.93%
2021	613	32	(6)	(9)	0	(5)	1	0	25	1	652	-16.73%
2022	540	45	(17)	0	0	(2)	(2)	0	(16)	4	552	-15.34%
2023	561	104	6	0	0	(2)	1	0	(12)	10	668	21.01%
2024	513	72	1	(1)	0	(1)	0	0	(12)	3	575	-13.92%
2025	600	72	1	0	0	(1)	0	0	(12)	3	663	15.30%
2026	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2027	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2028	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2029	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2030	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2031	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2032	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2033	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%
2034	600	72	1	0	0	(1)	0	0	(12)	3	663	0.00%