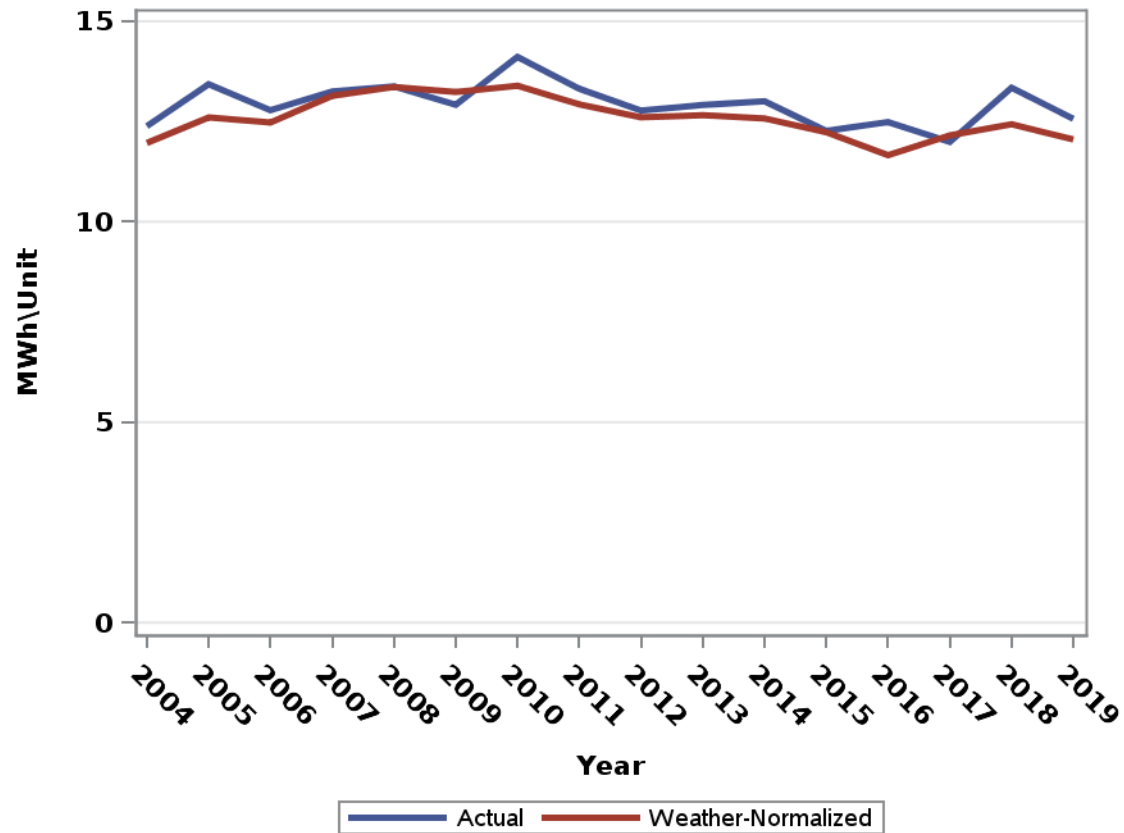


Chapter 3 – Appendix A

Annual Historical Actual and Weather-Normalized Energy Use per Customer by Class (2004 - 2019*)¹

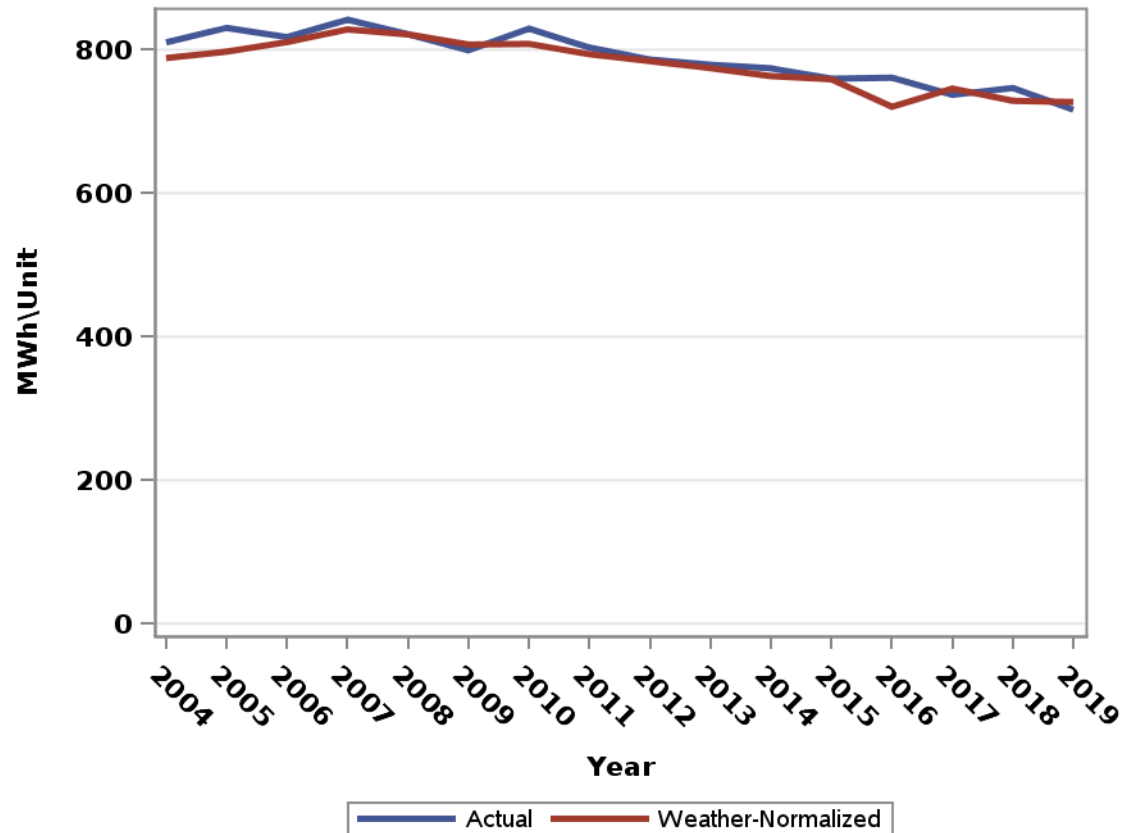
Annual Residential Use per Customer at Meter



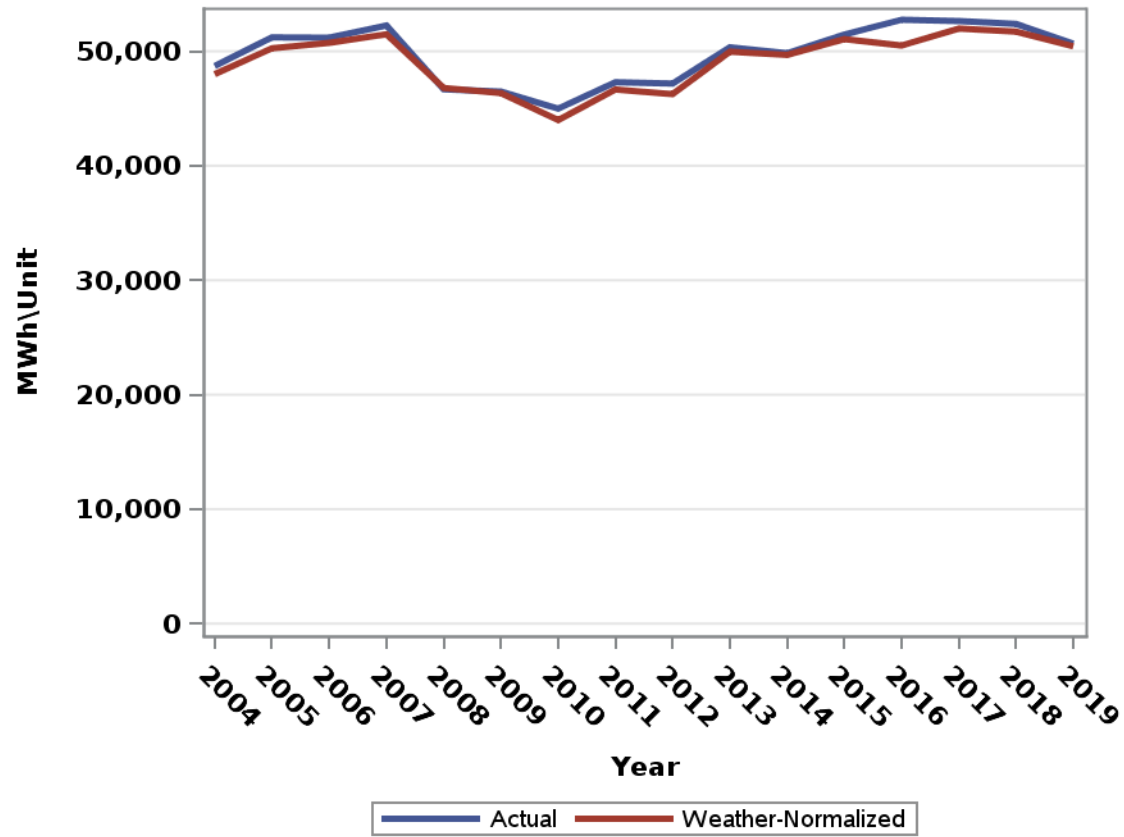
¹20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

*Usage and Customer Count for 2019 are through November

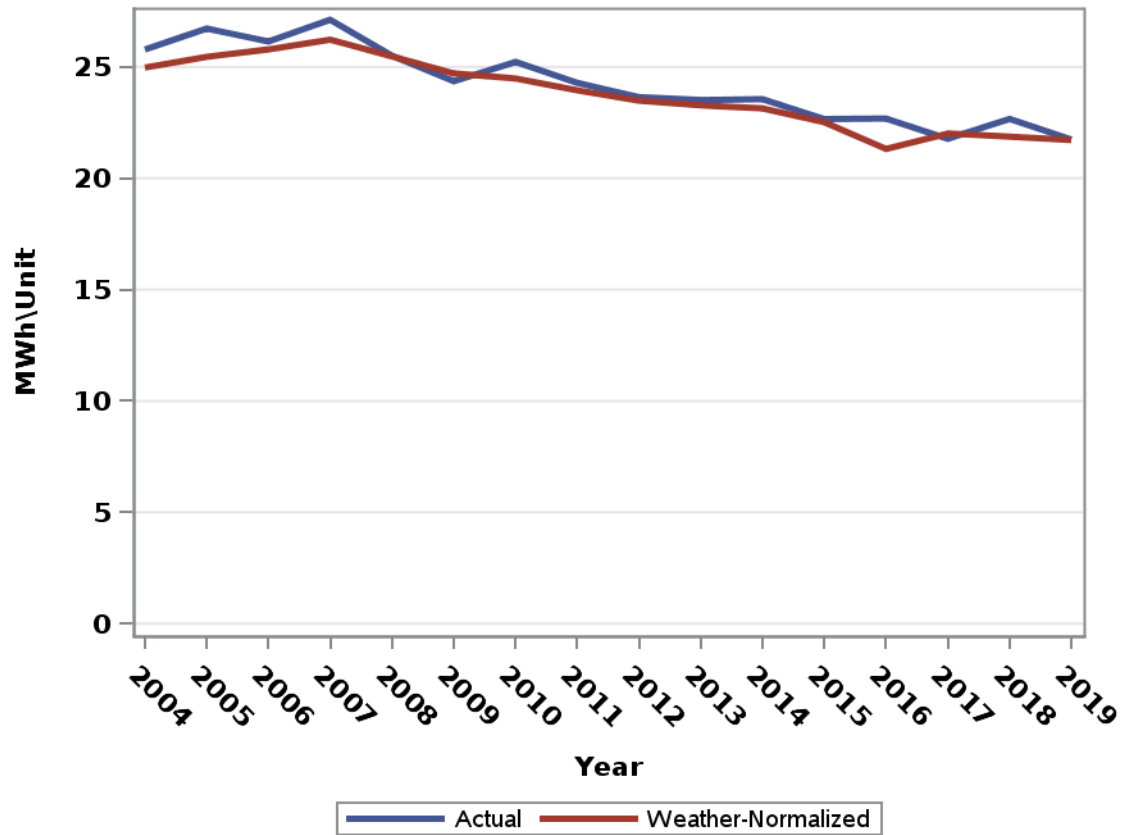
Annual Commercial LGS Use per Customer at Meter



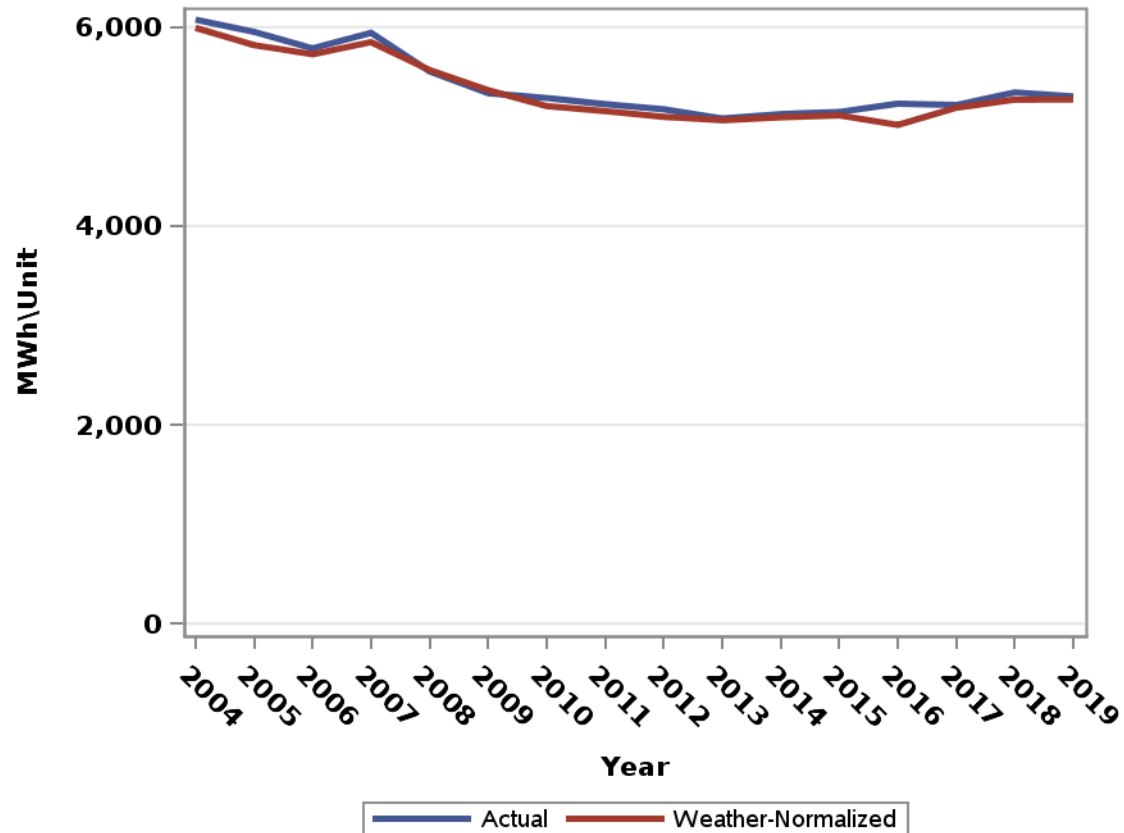
Annual Commercial LPS Use per Customer at Meter



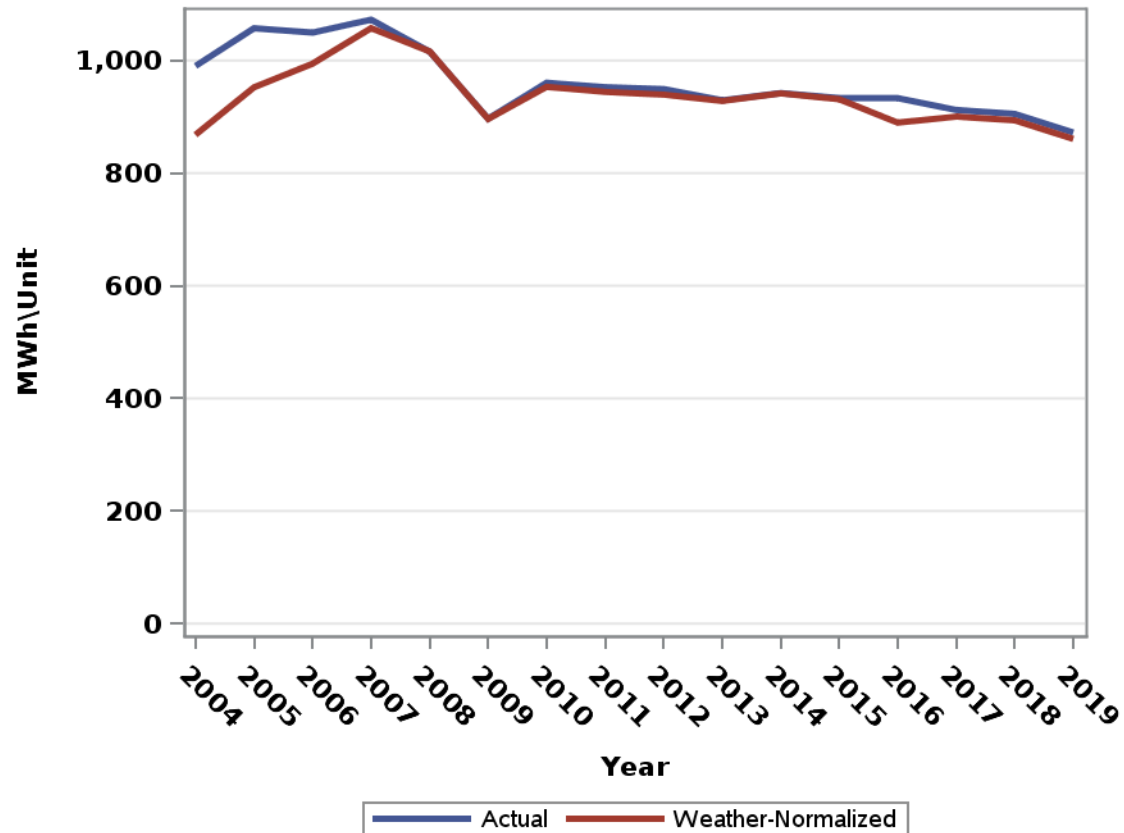
Annual Commercial SGS Use per Customer at Meter



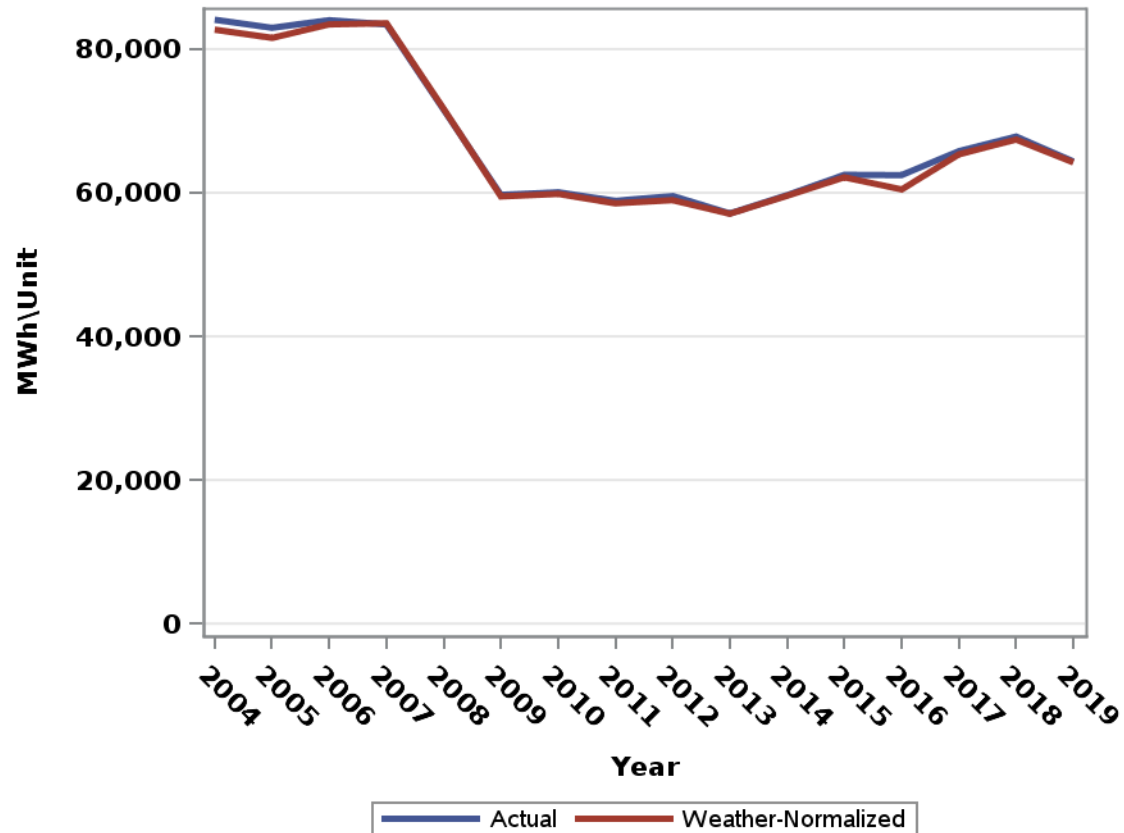
Annual Commercial SPS Use per Customer at Meter



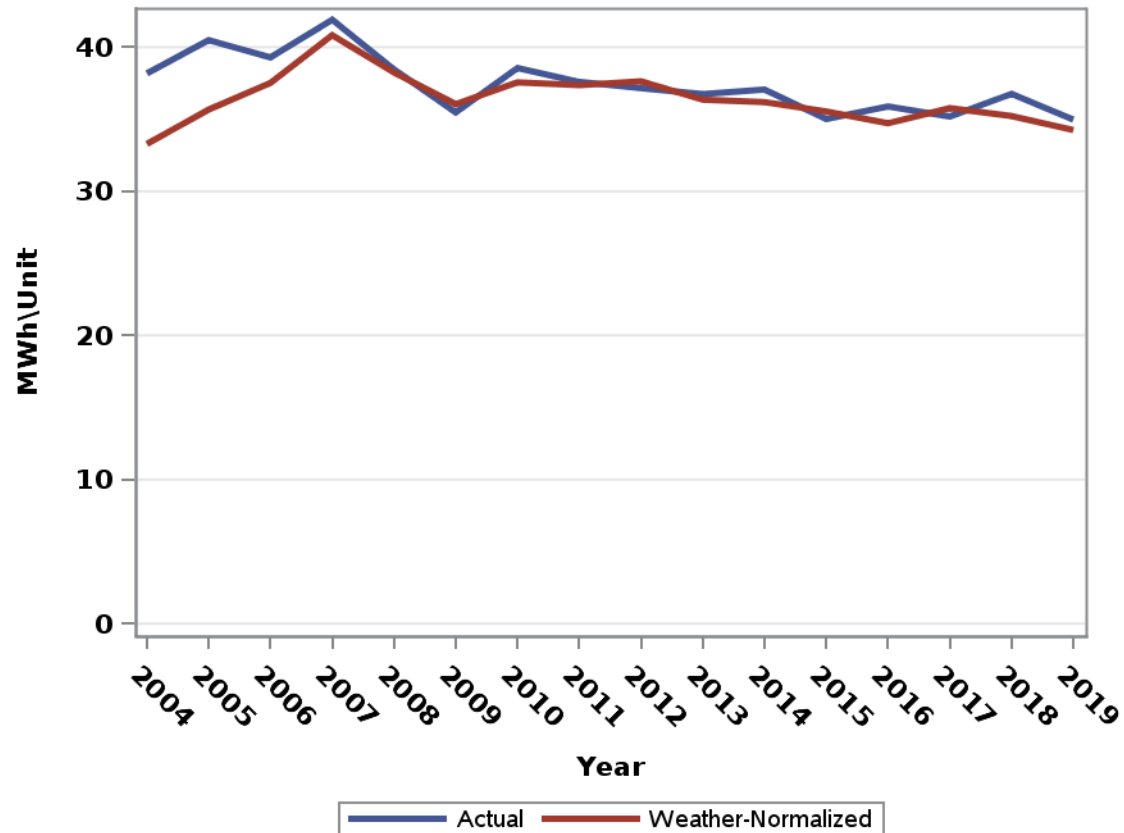
Annual Industrial LGS Use per Customer at Meter



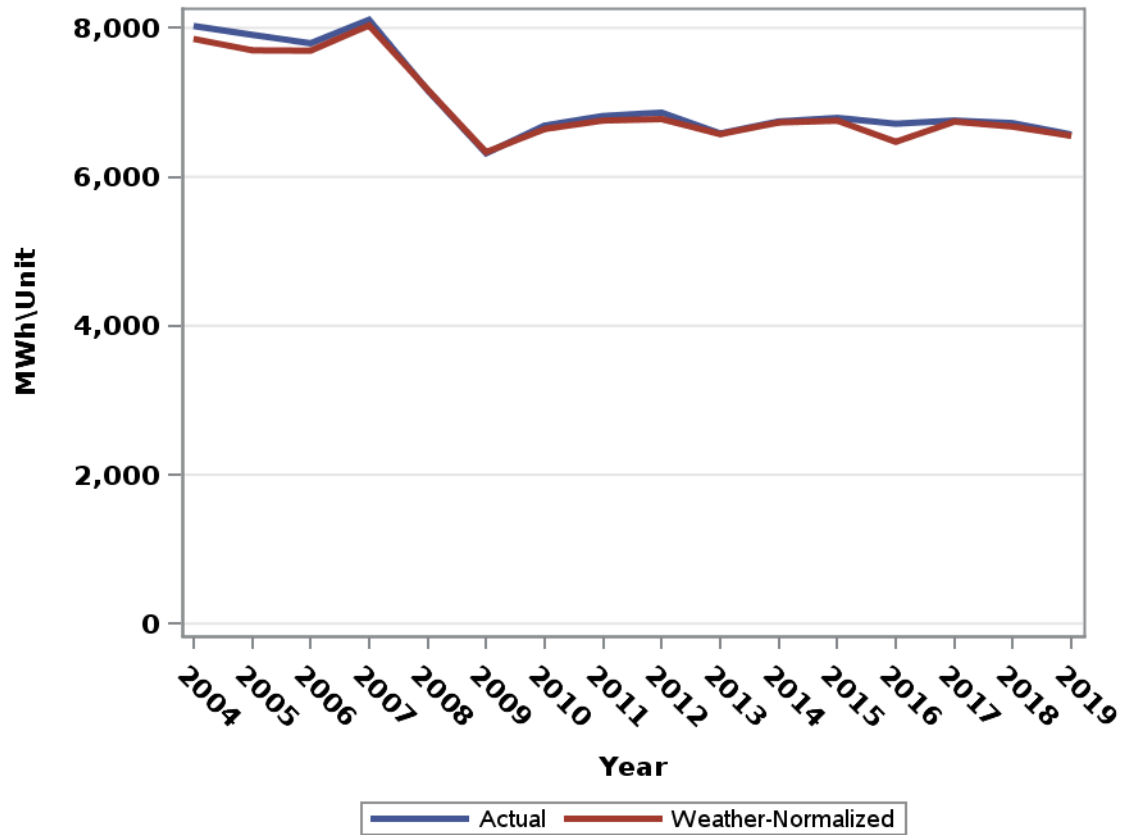
Annual Industrial LPS Use per Customer at Meter



Annual Industrial SGS Use per Customer at Meter

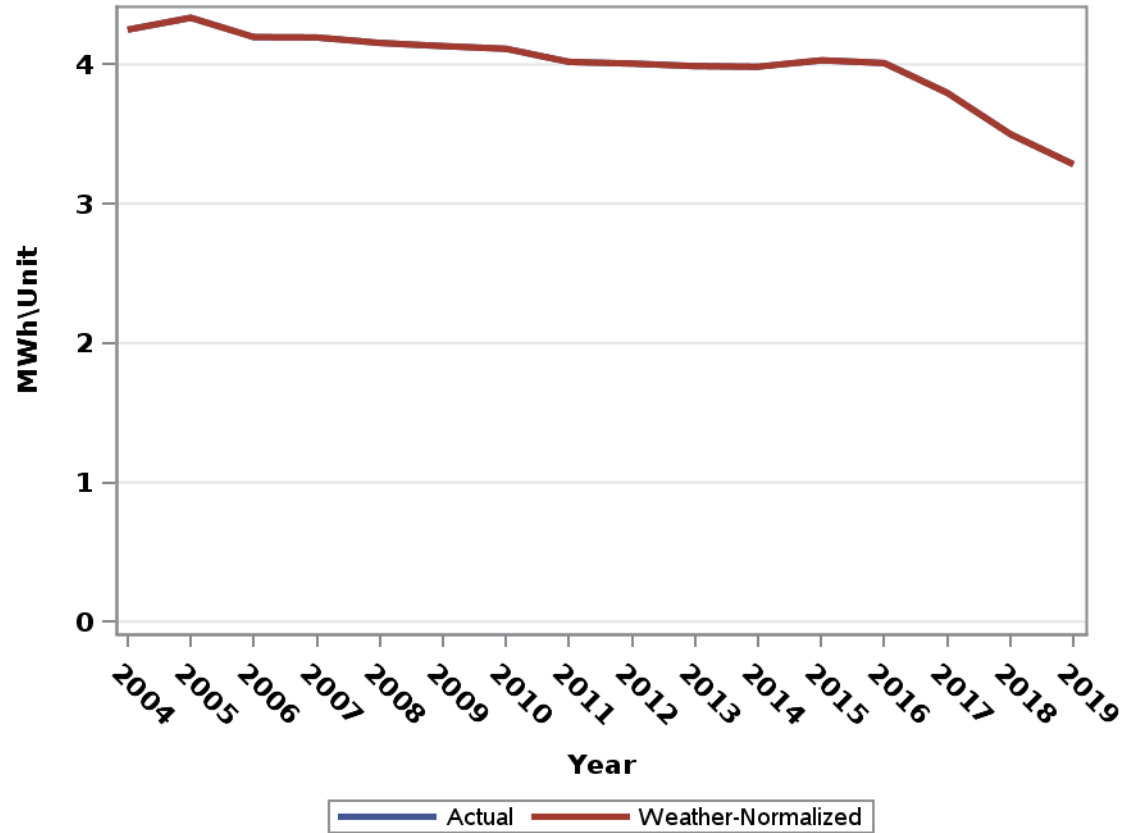


Annual Industrial SPS Use per Customer at Meter



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Annual Lighting Use per Customer at Meter

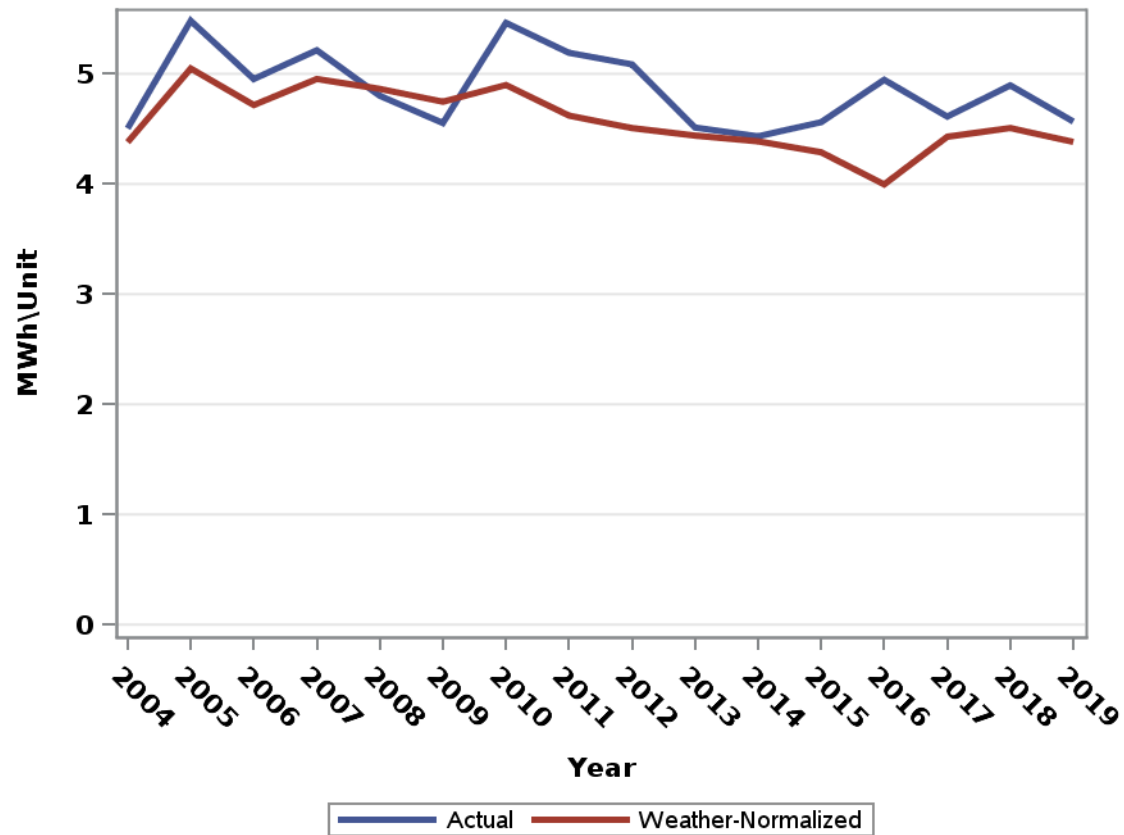


**THIS PAGE IS
CONFIDENTIAL
IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Historical Actual and Weather-Normalized Energy Use per Customer for Summer and Non-Summer (2004 - 2019*)²

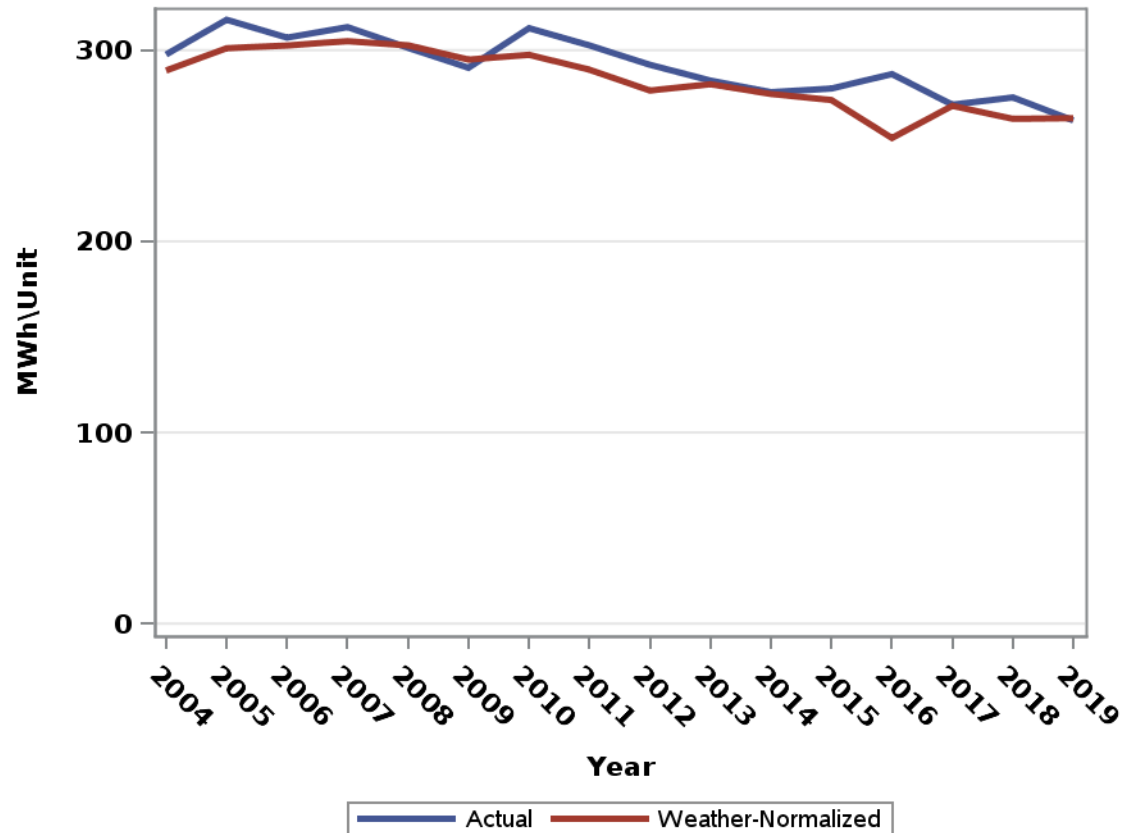
Summer Residential Use per Customer at Meter



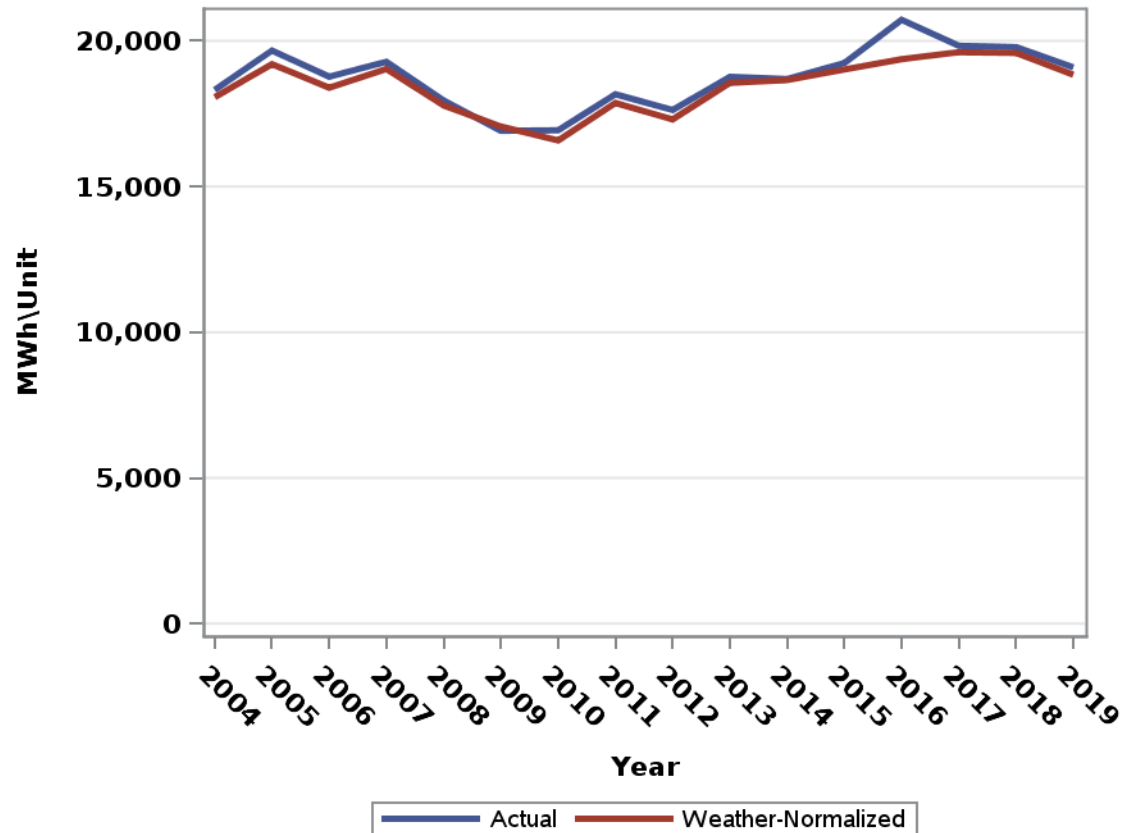
²20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

*Usage and Customer Count for 2019 are through November

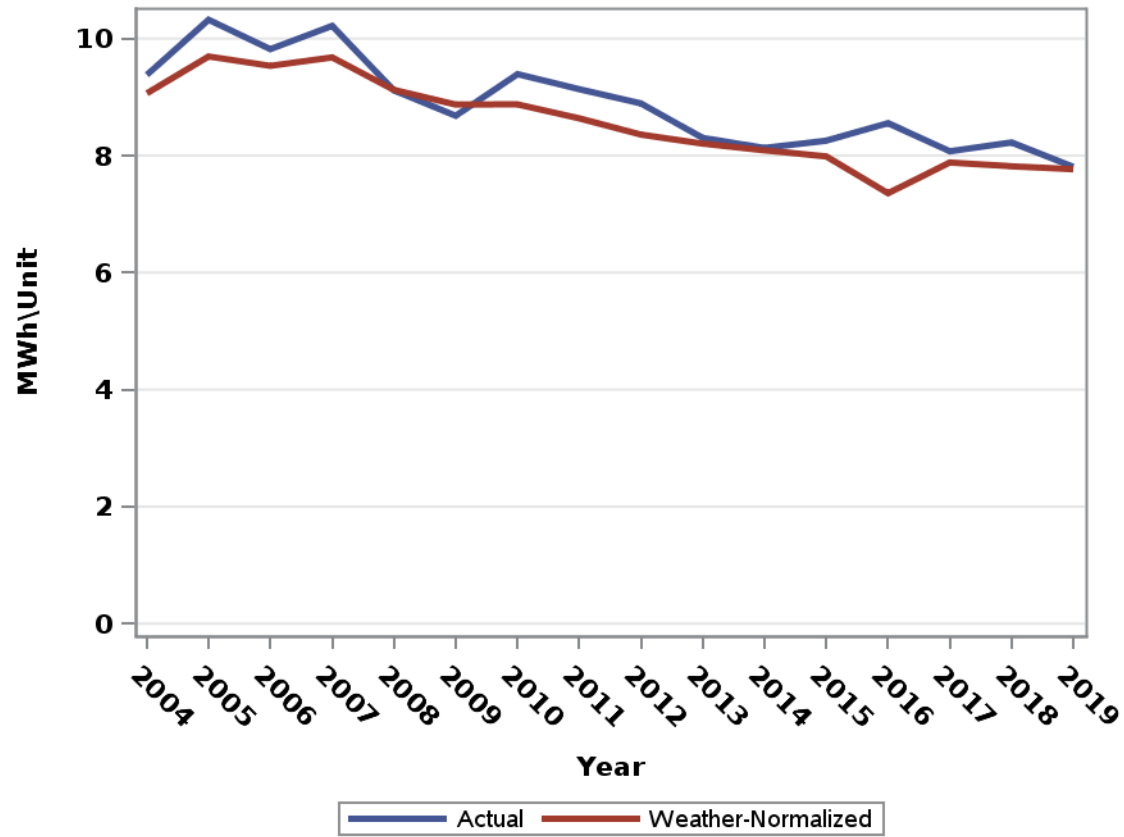
Summer Commercial LGS Use per Customer at Meter



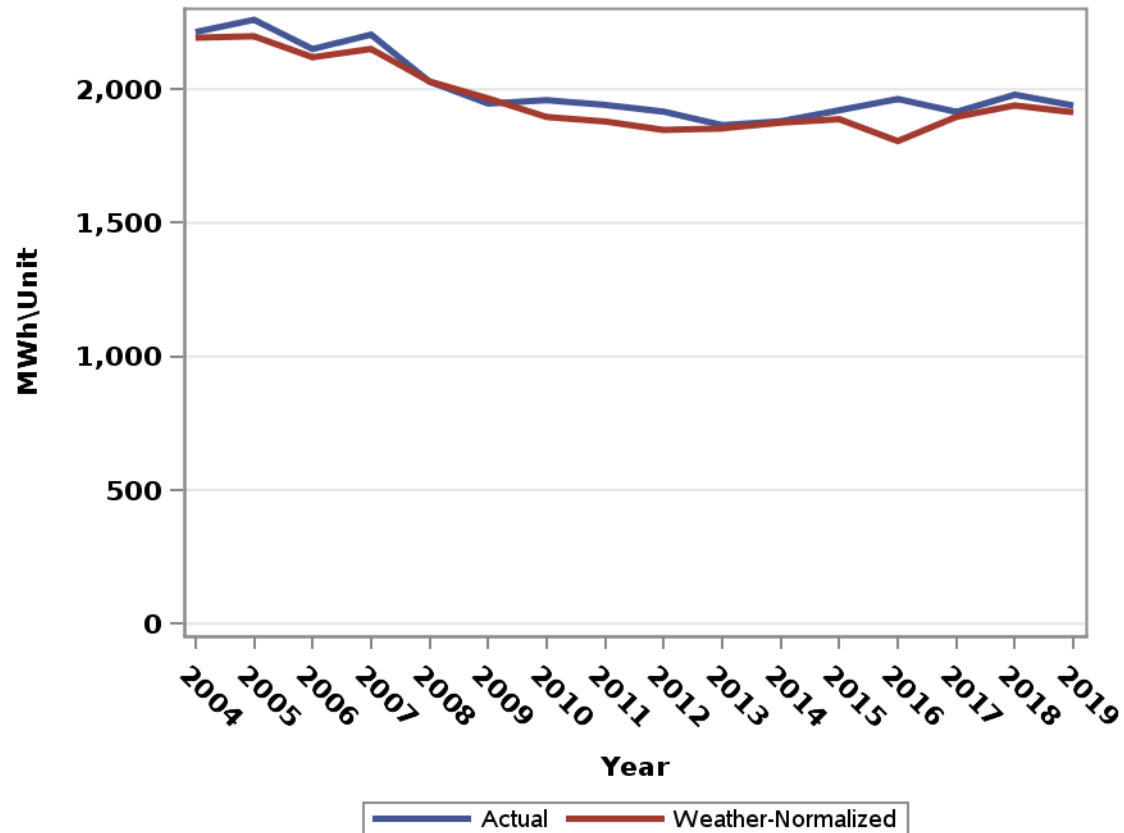
Summer Commercial LPS Use per Customer at Meter



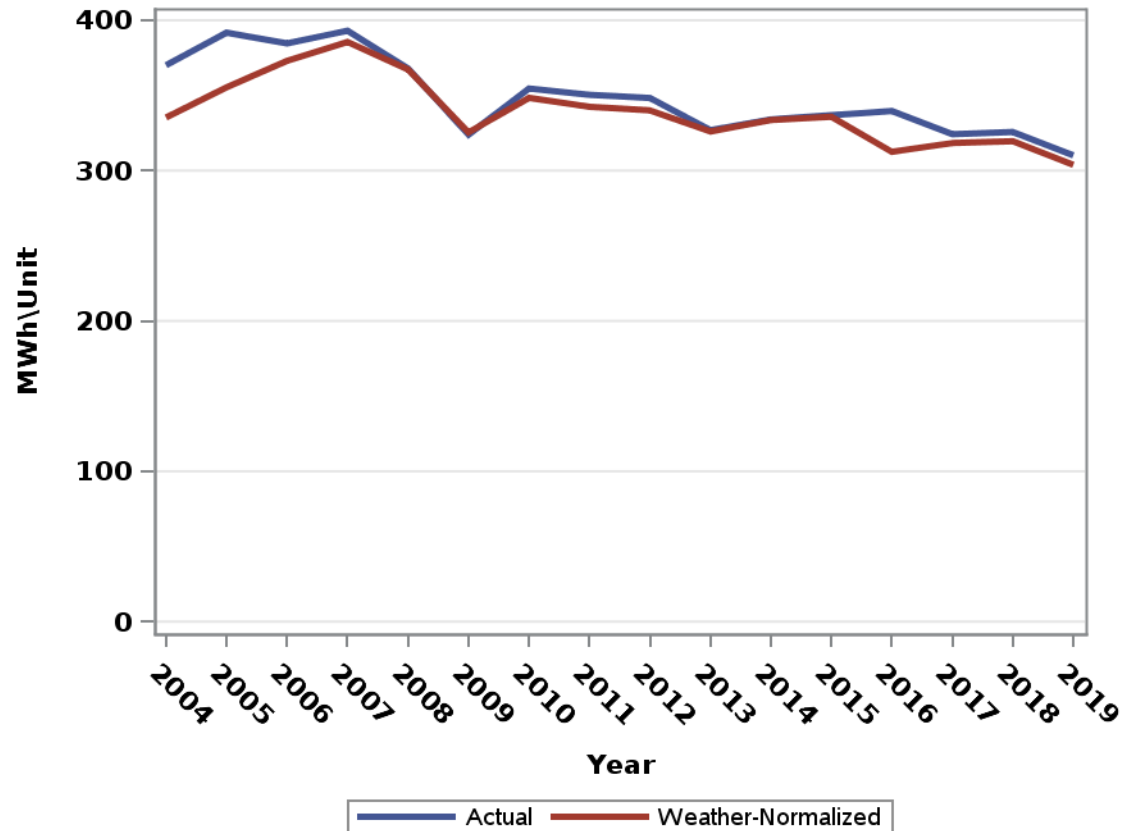
Summer Commercial SGS Use per Customer at Meter



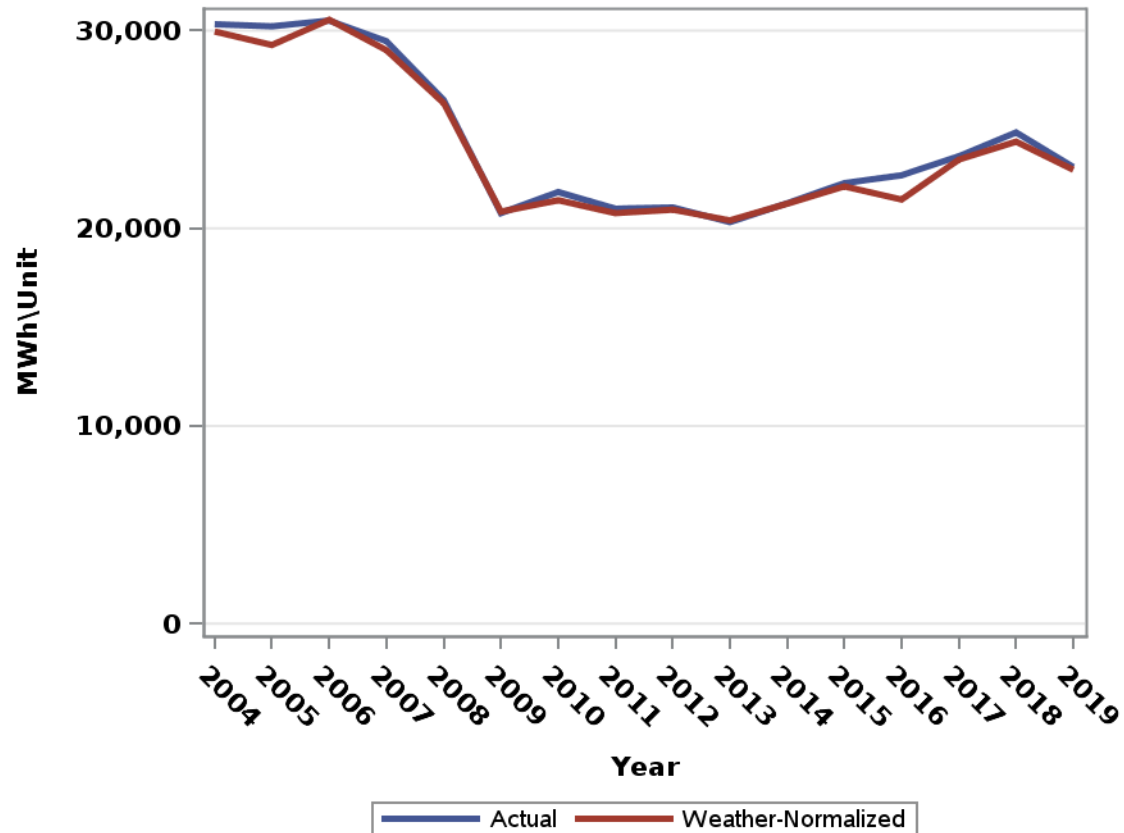
Summer Commercial SPS Use per Customer at Meter



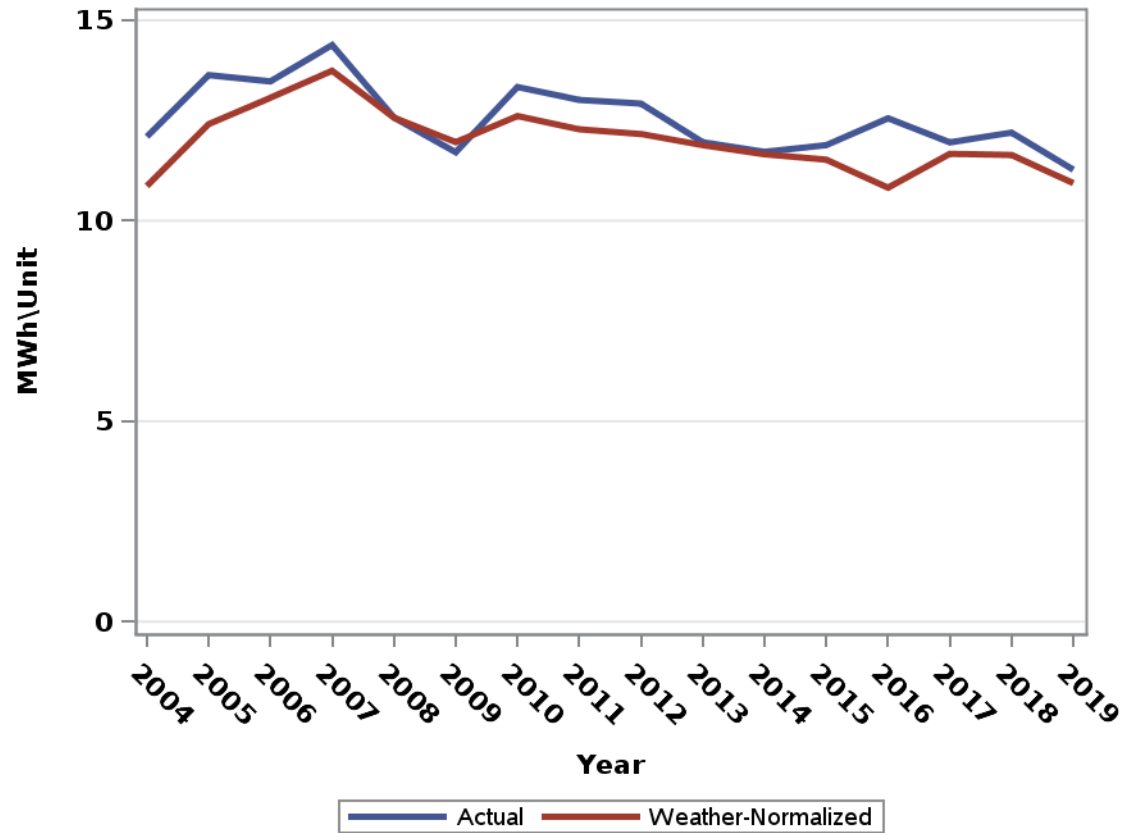
Summer Industrial LGS Use per Customer at Meter



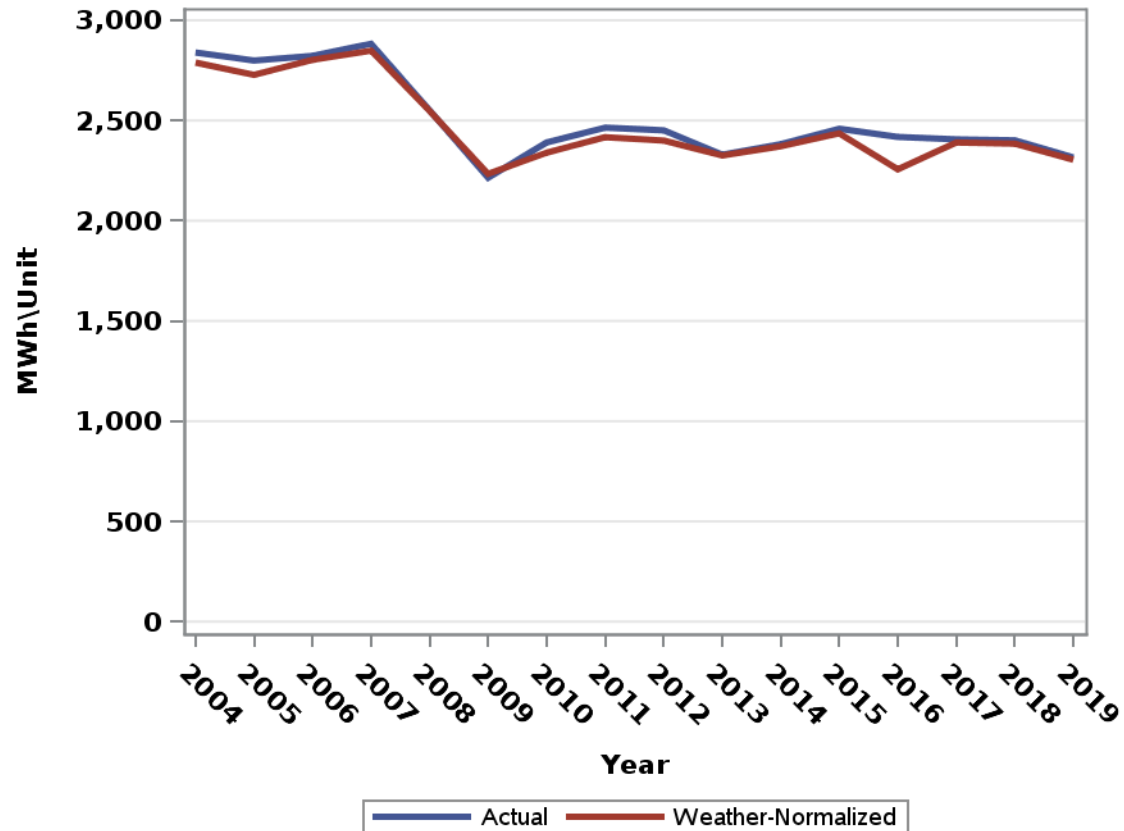
Summer Industrial LPS Use per Customer at Meter



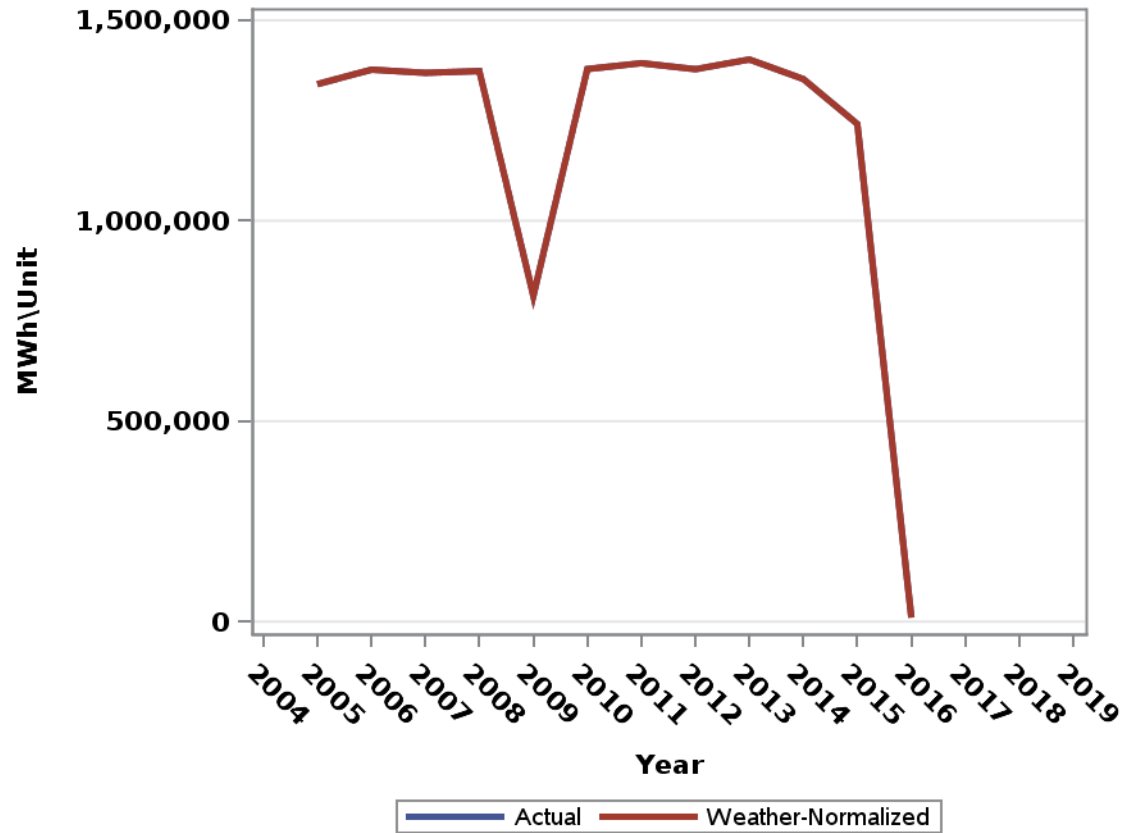
Summer Industrial SGS Use per Customer at Meter



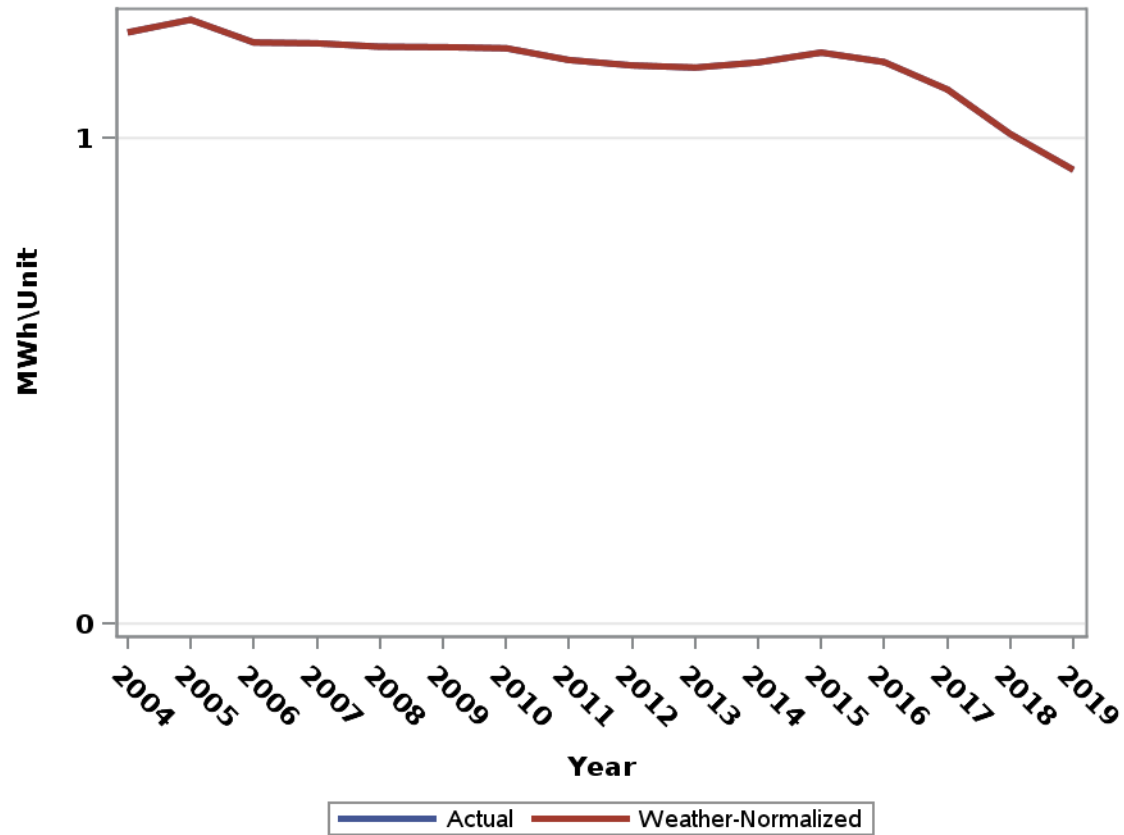
Summer Industrial SPS Use per Customer at Meter



Summer Large Transmission Service Use per Customer at Meter



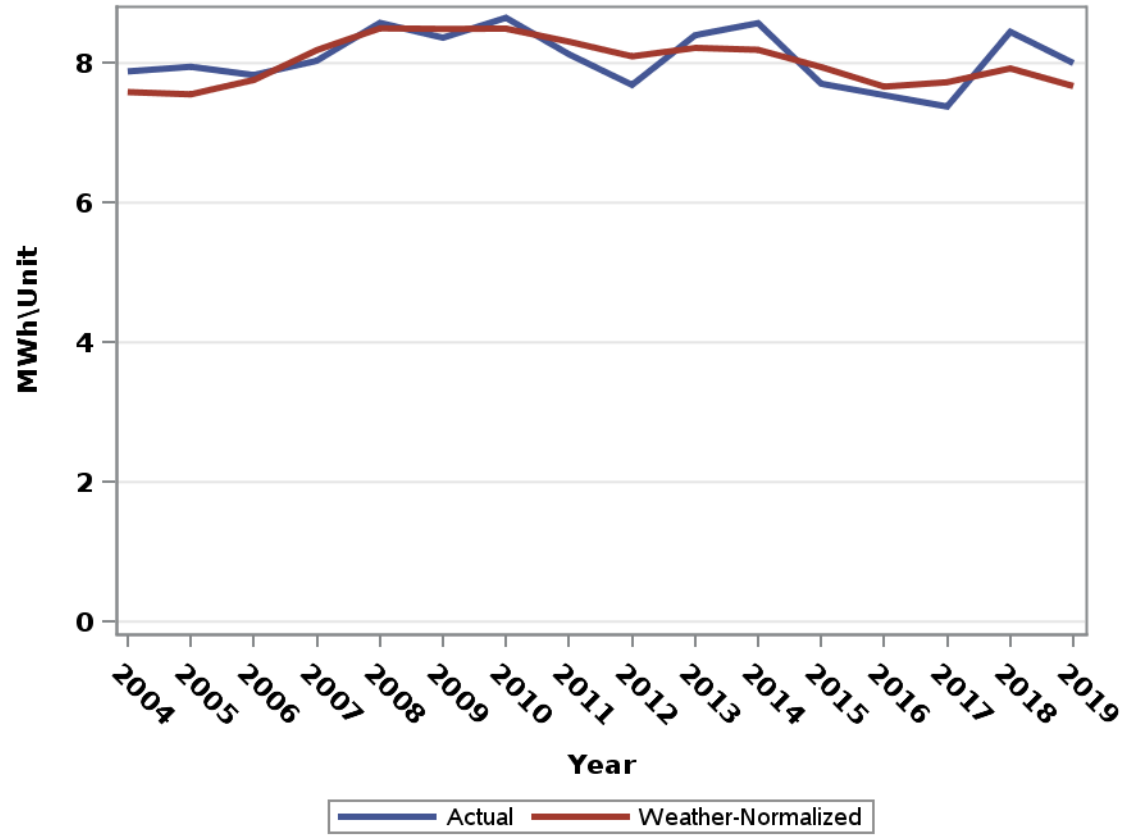
Summer Lighting Use per Customer at Meter



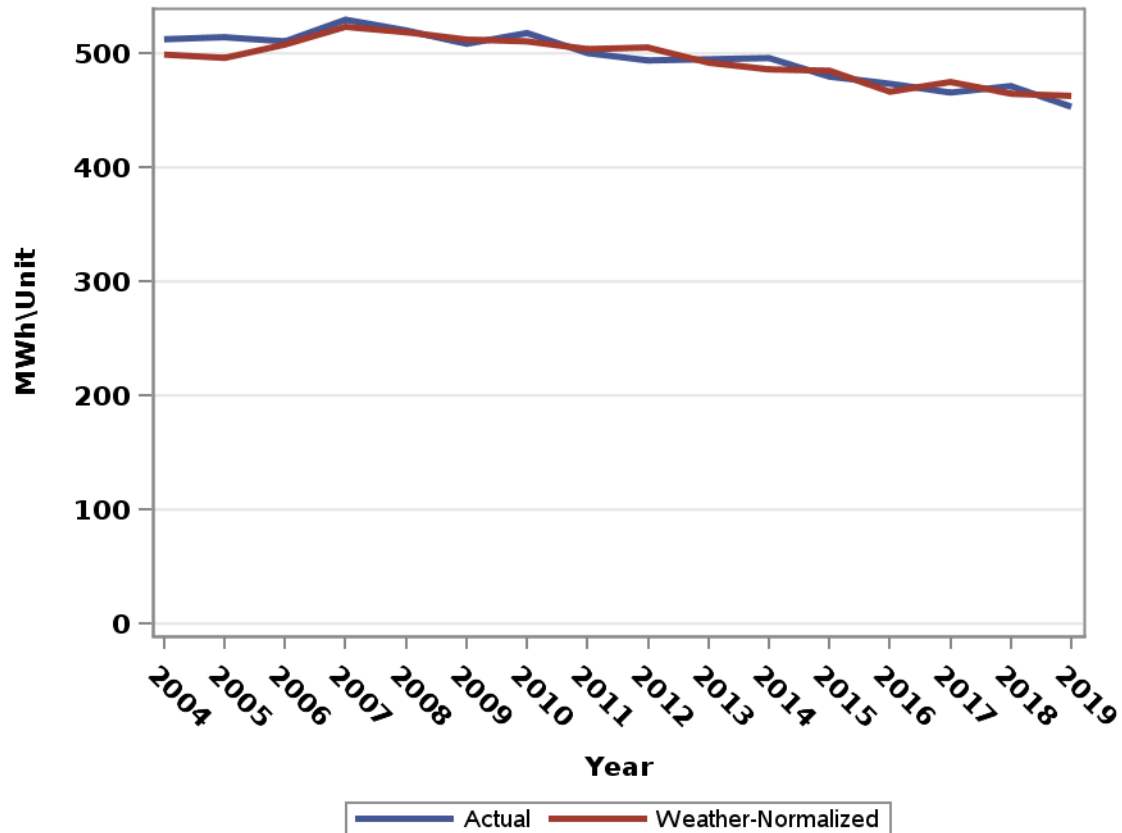
**THIS PAGE IS
CONFIDENTIAL IN
ITS ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN
ITS ENTIRETY**

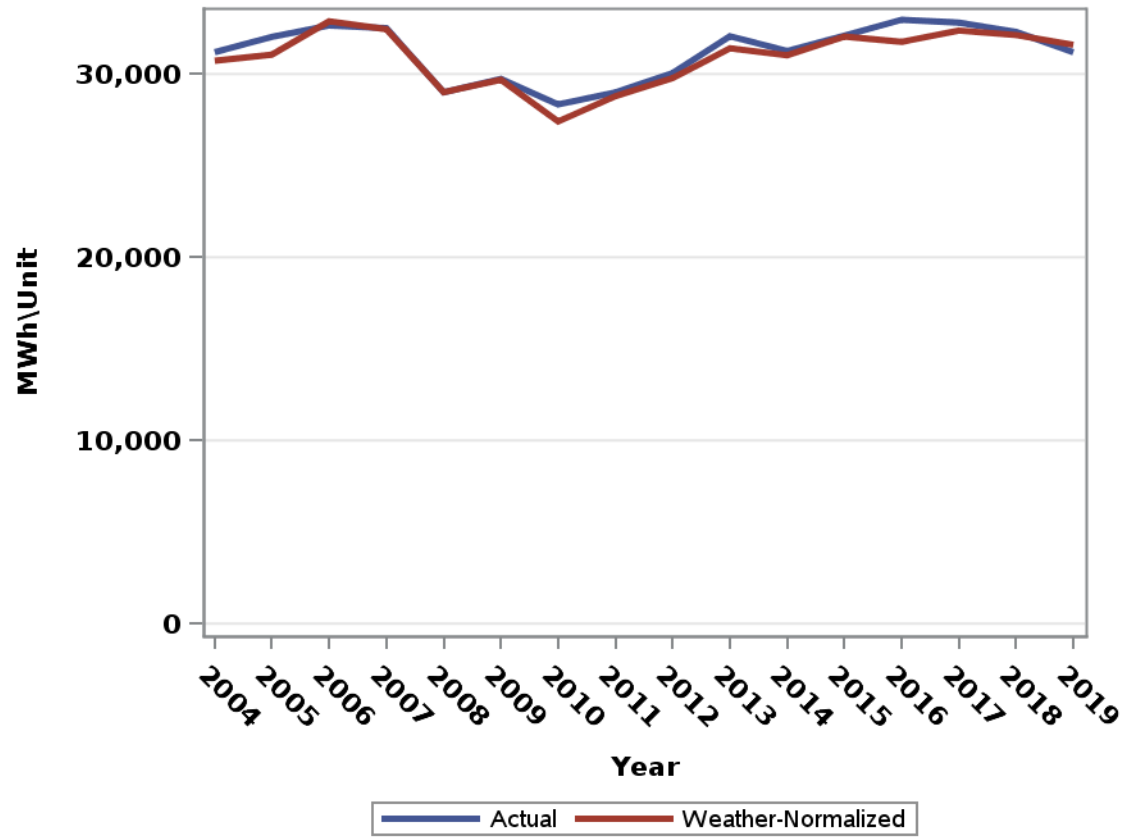
Non-Summer Residential Use per Customer at Meter



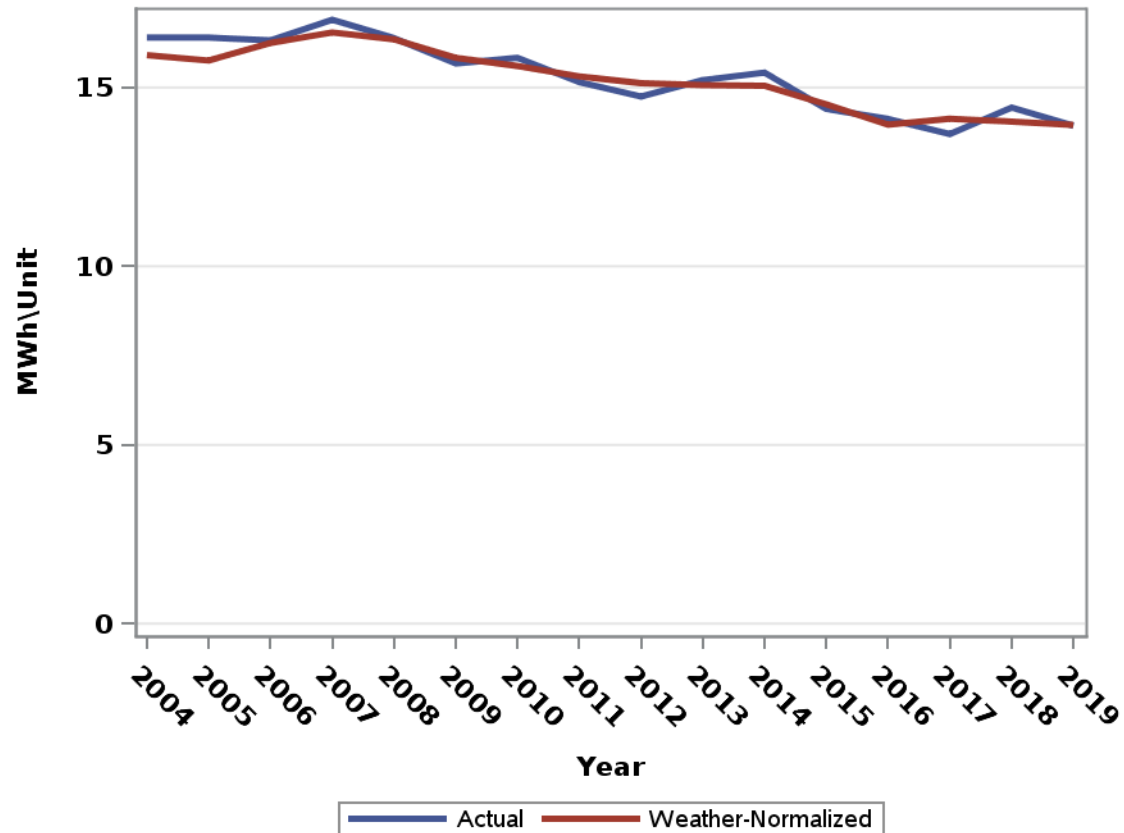
Non-Summer Commercial LGS Use per Customer at Meter



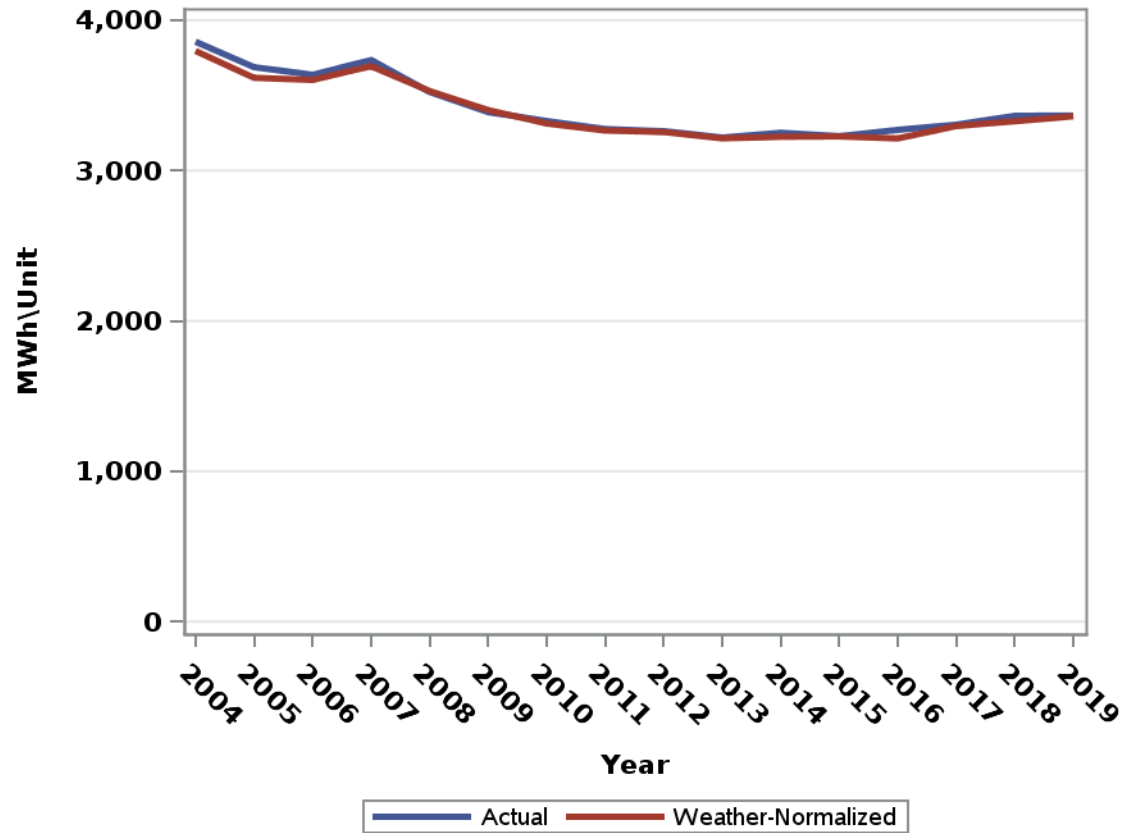
Non-Summer Commercial LPS Use per Customer at Meter



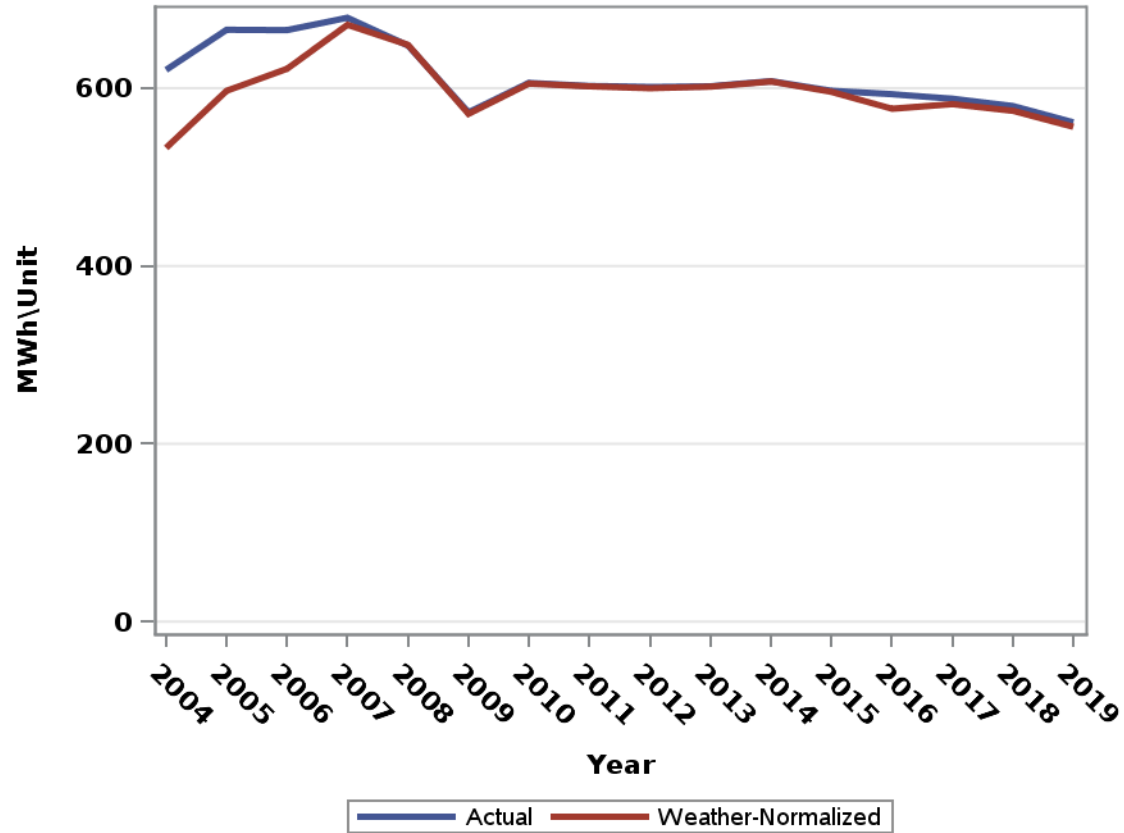
Non-Summer Commercial SGS Use per Customer at Meter



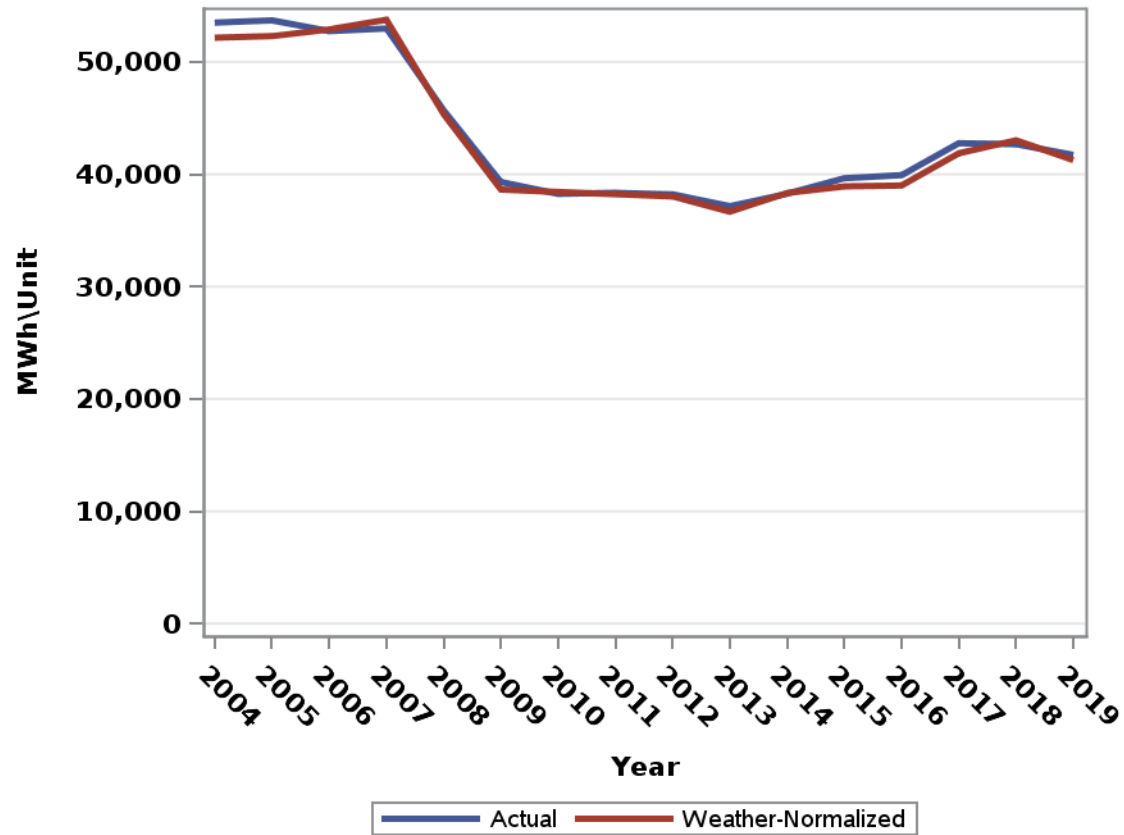
Non-Summer Commercial SPS Use per Customer at Meter



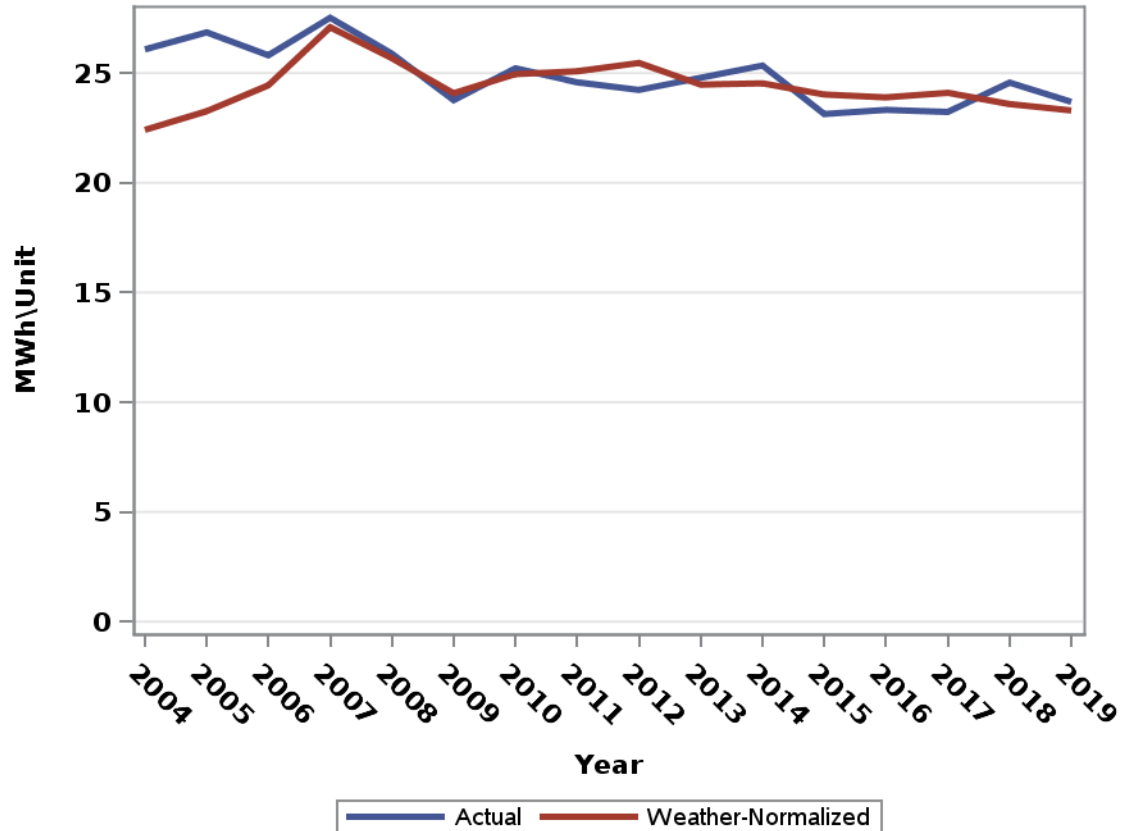
Non-Summer Industrial LGS Use per Customer at Meter



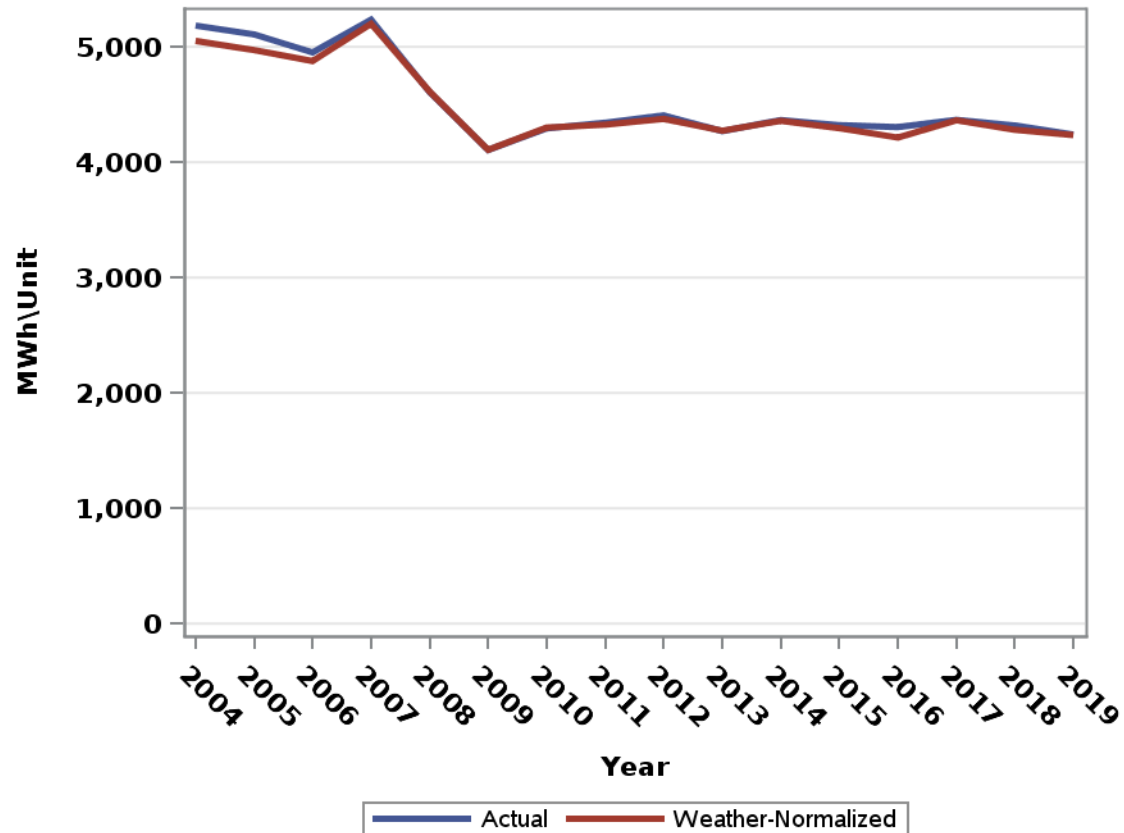
Non-Summer Industrial LPS Use per Customer at Meter



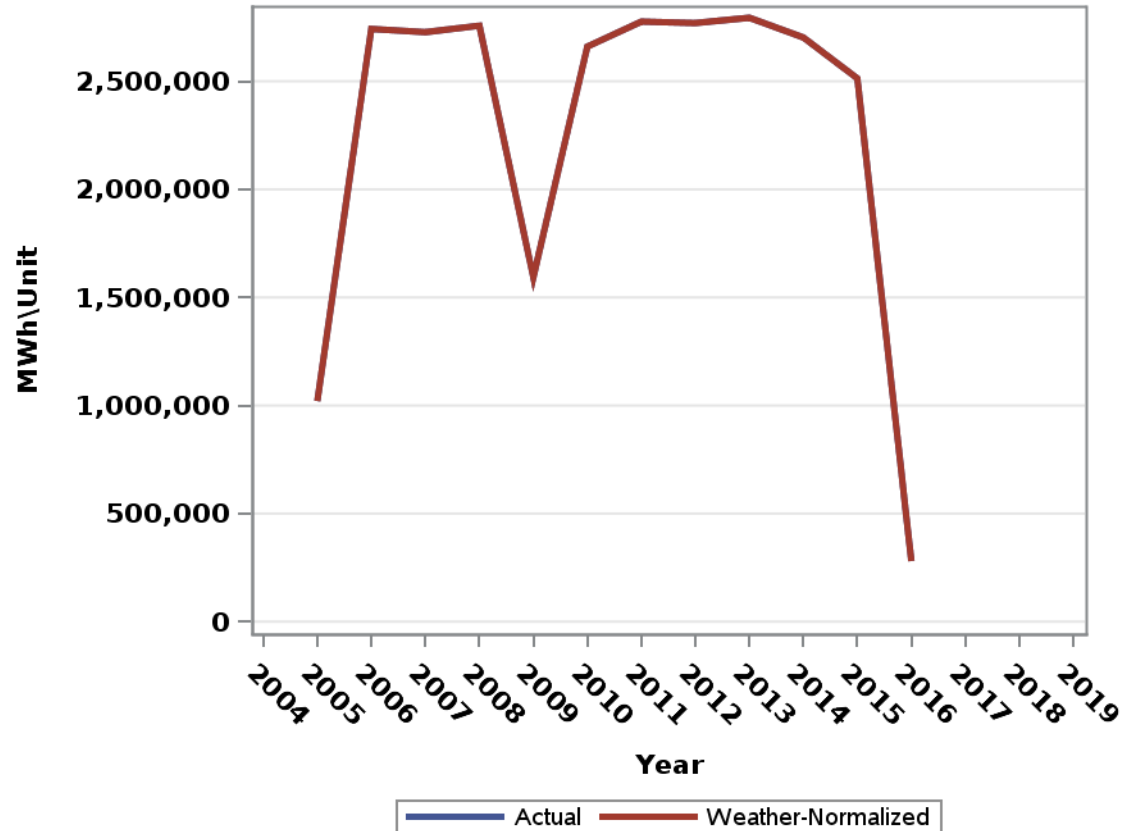
Non-Summer Industrial SGS Use per Customer at Meter



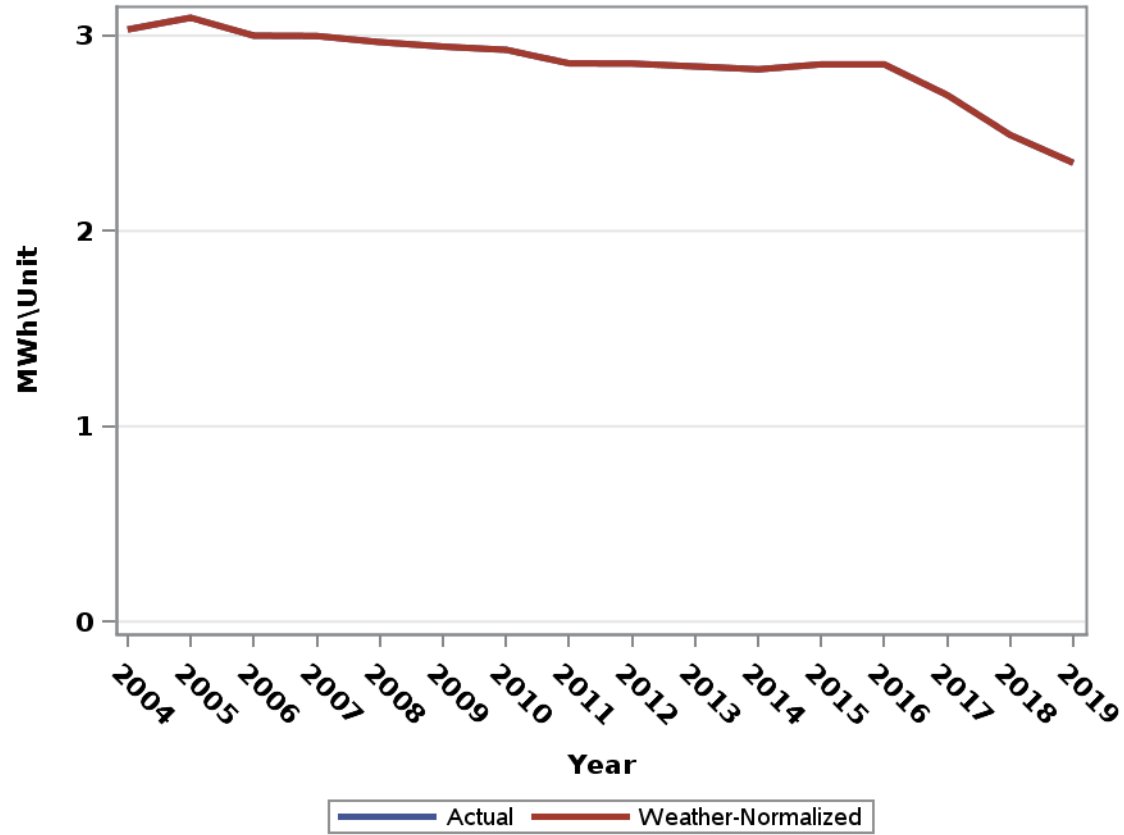
Non-Summer Industrial SPS Use per Customer at Meter



Non-Summer Large Transmission Service Use per Customer at Meter



Non-Summer Lighting Use per Customer at Meter

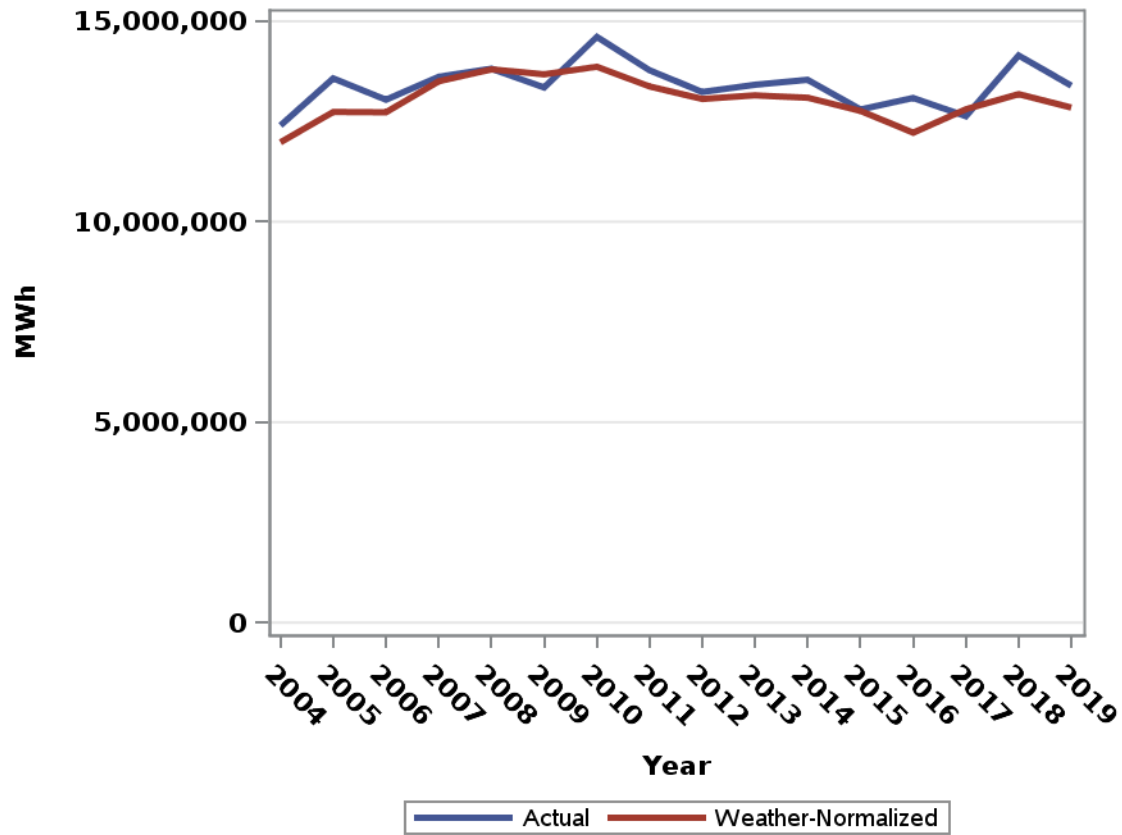


**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Annual Historical Actual and Weather-Normalized Energy Usage by Class (2004 - 2019*)³

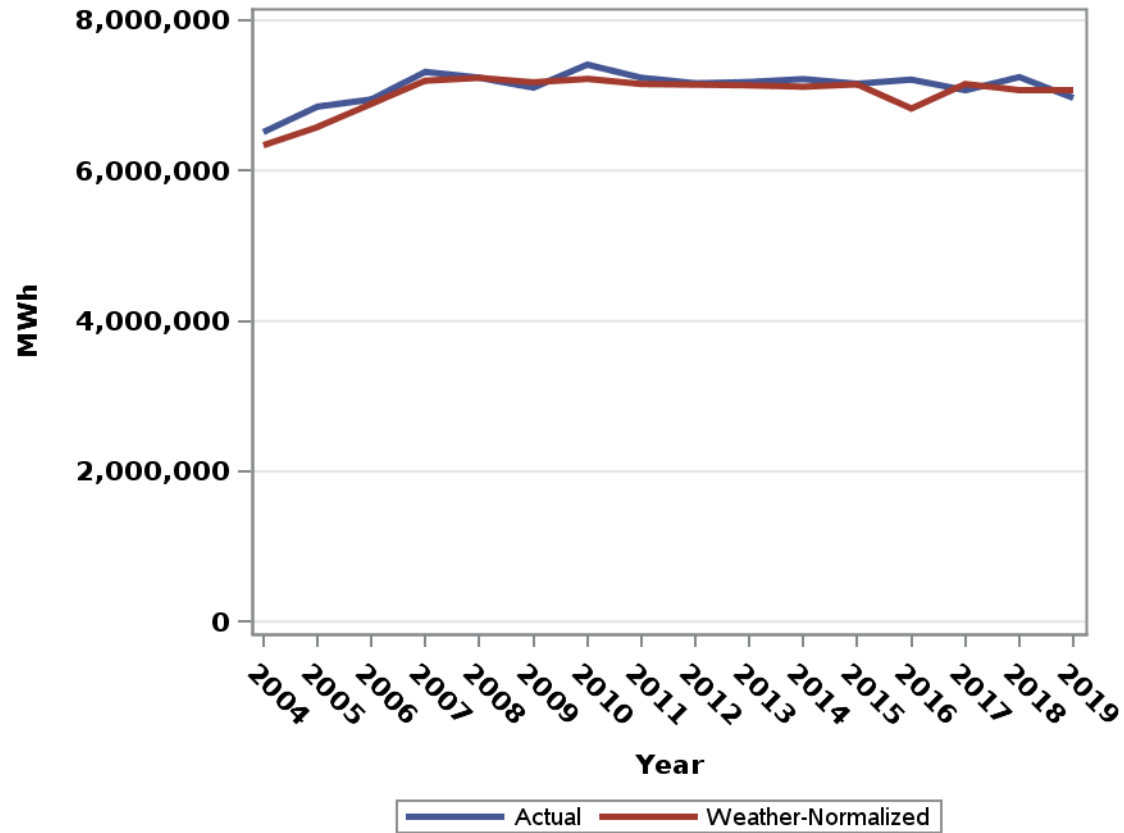
Annual Residential Usage at Meter



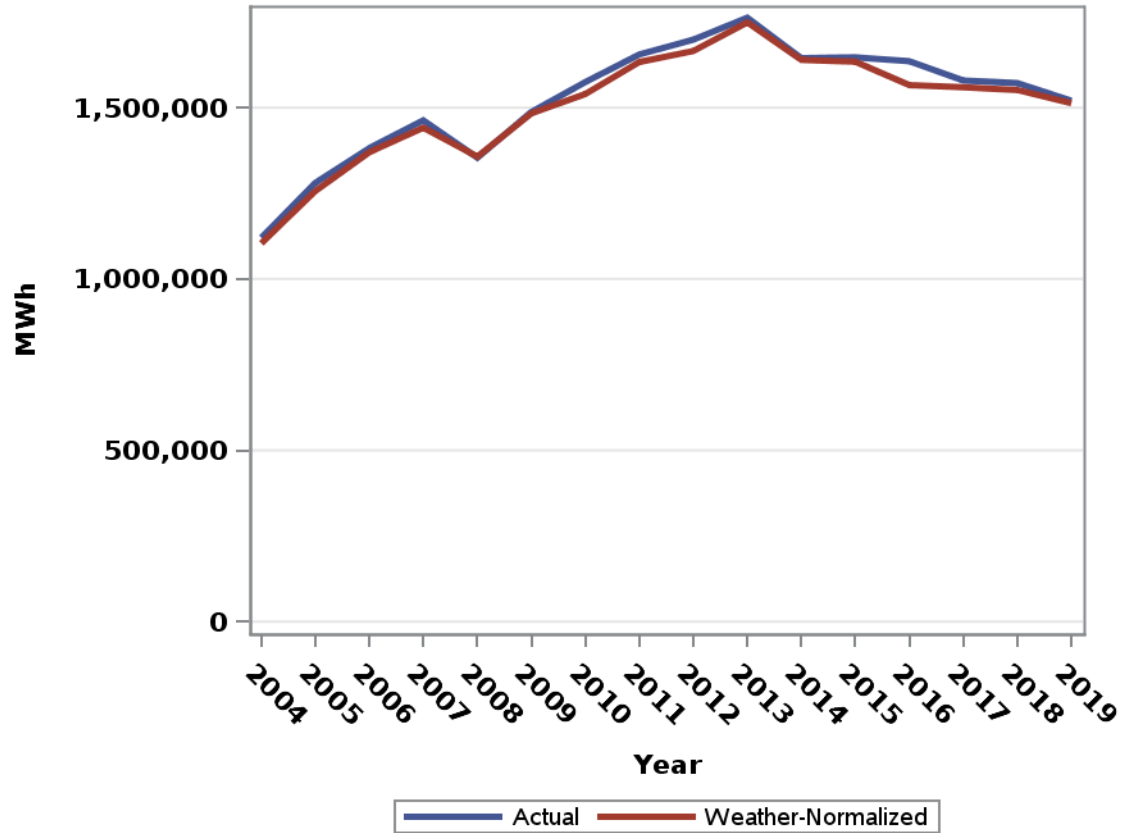
³20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

*Usage and Customer Count for 2019 are through November

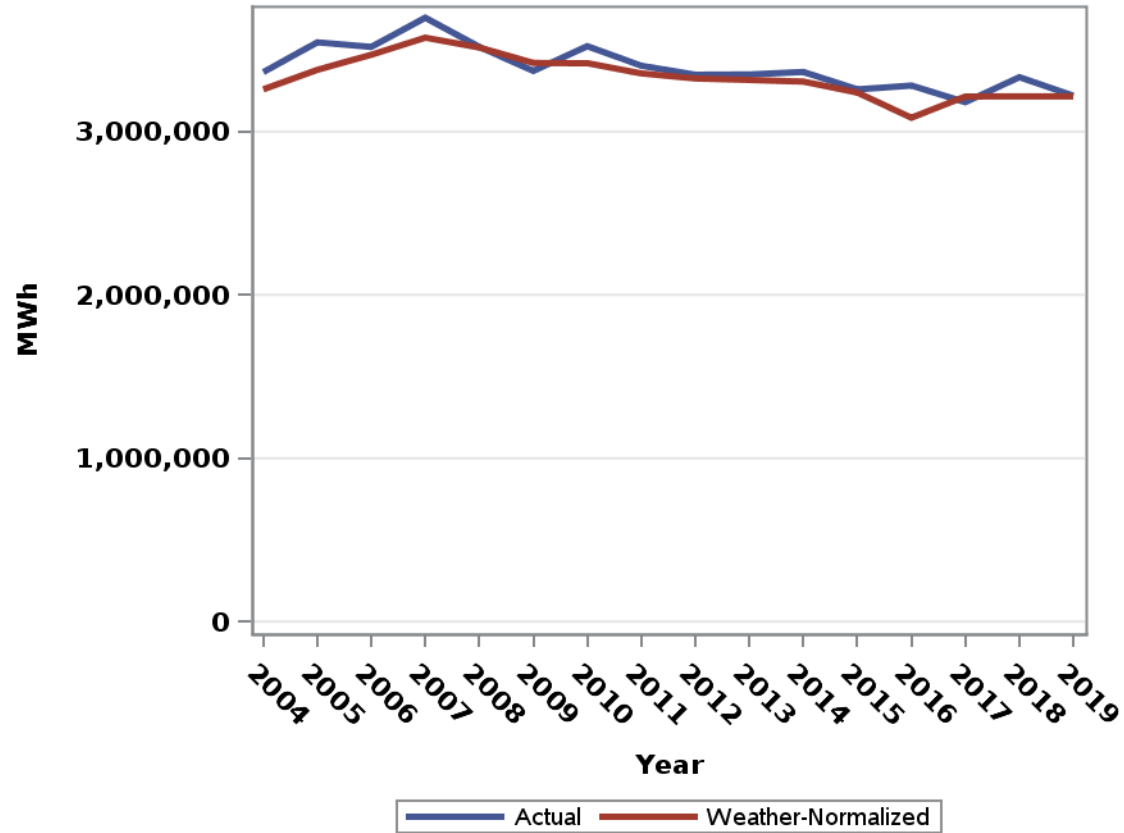
Annual Commercial LGS Usage at Meter



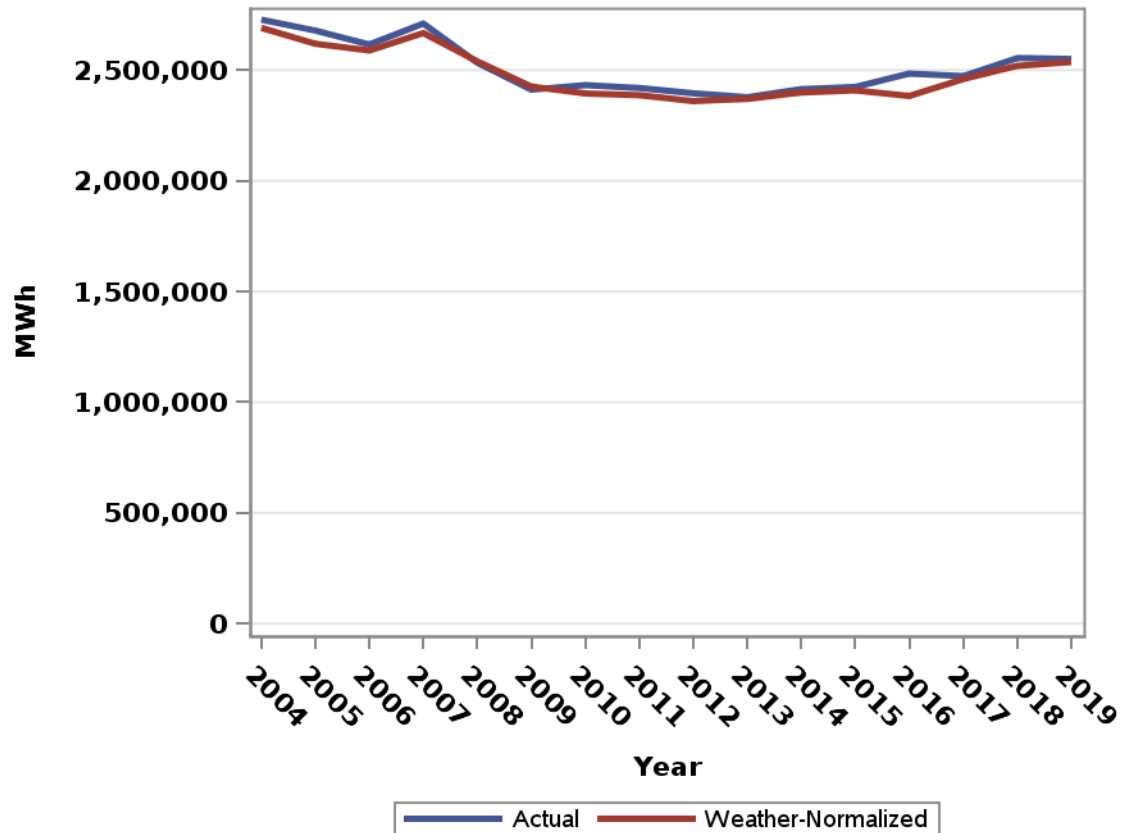
Annual Commercial LPS Usage at Meter



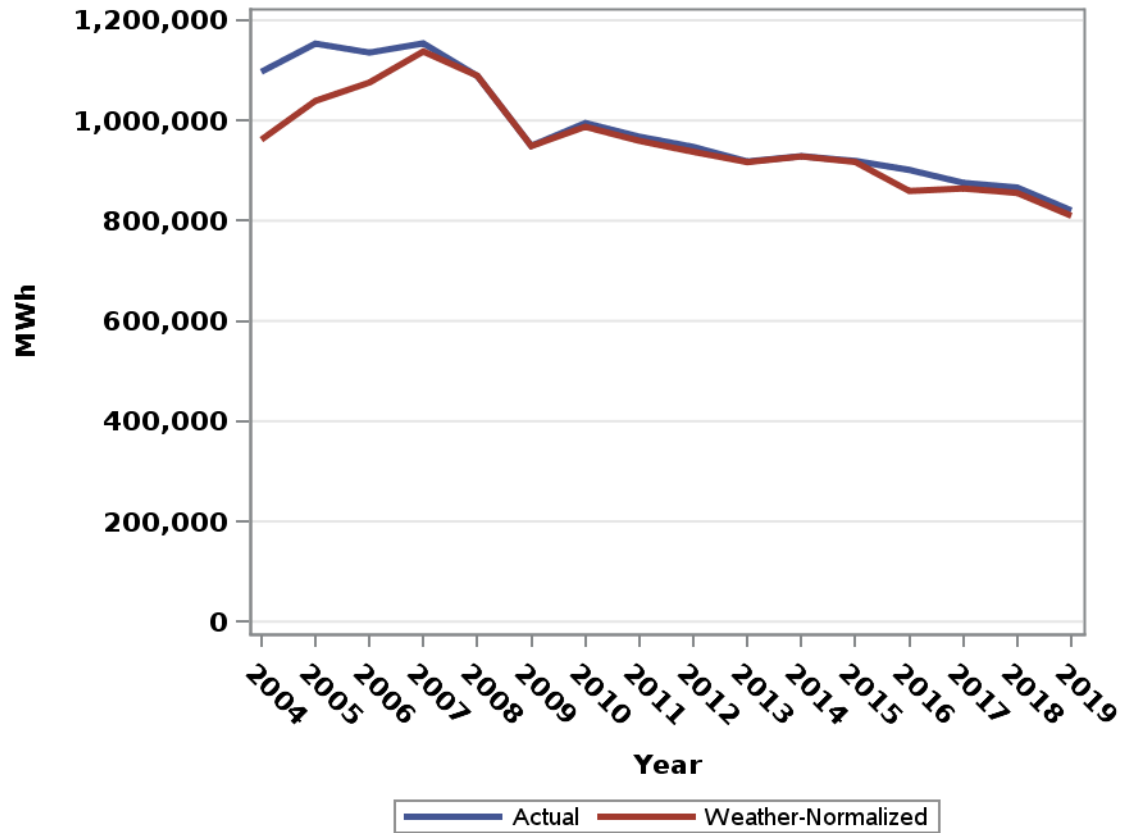
Annual Commercial SGS Usage at Meter



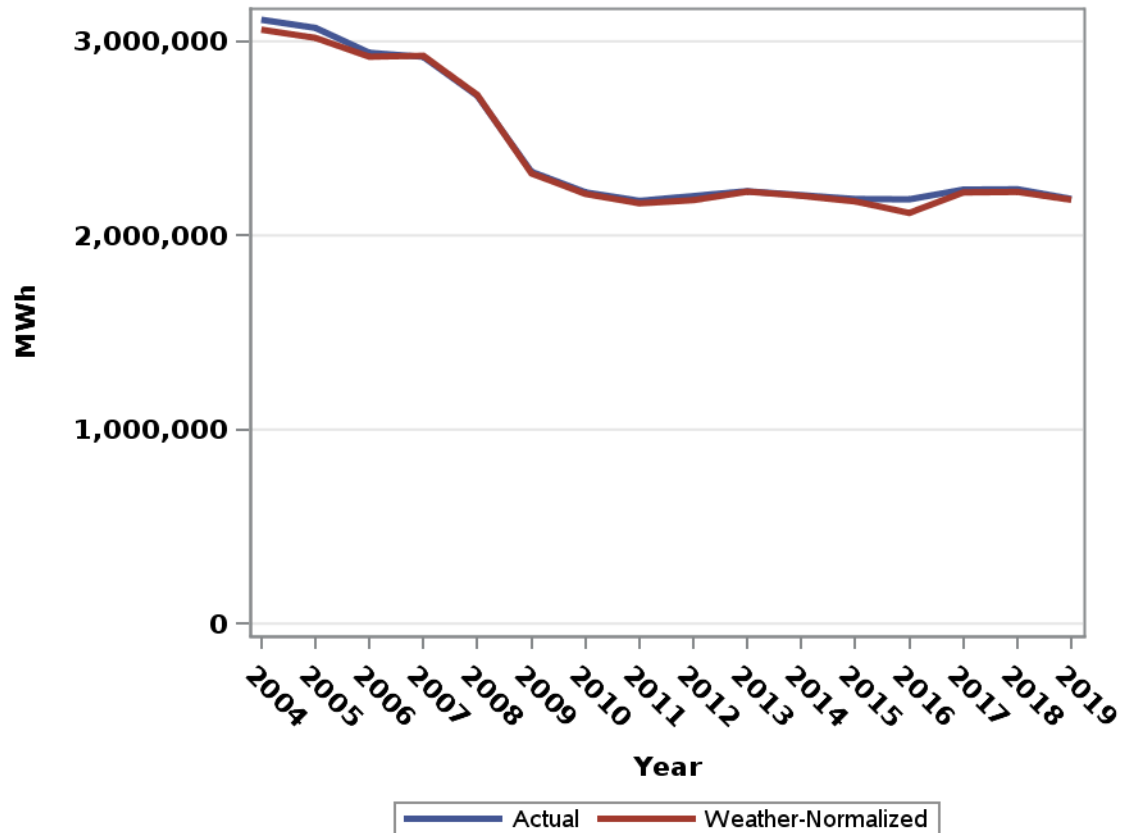
Annual Commercial SPS Usage at Meter



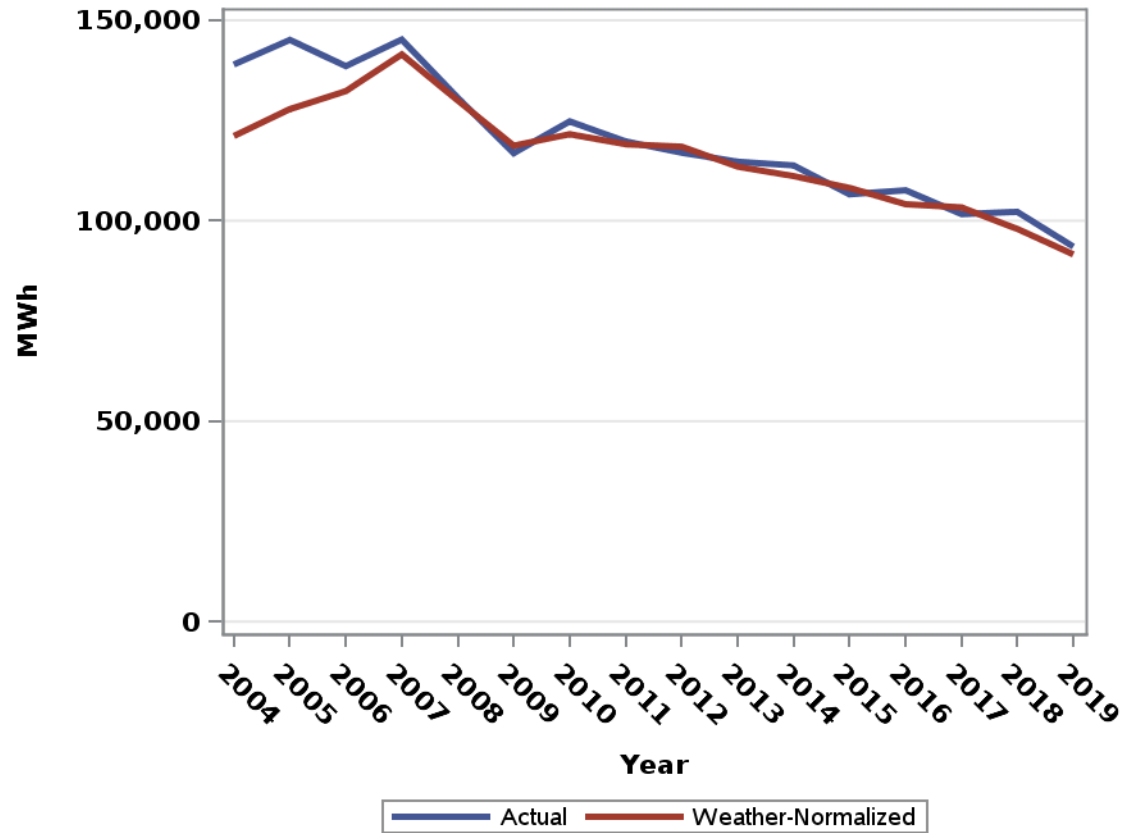
Annual Industrial LGS Usage at Meter



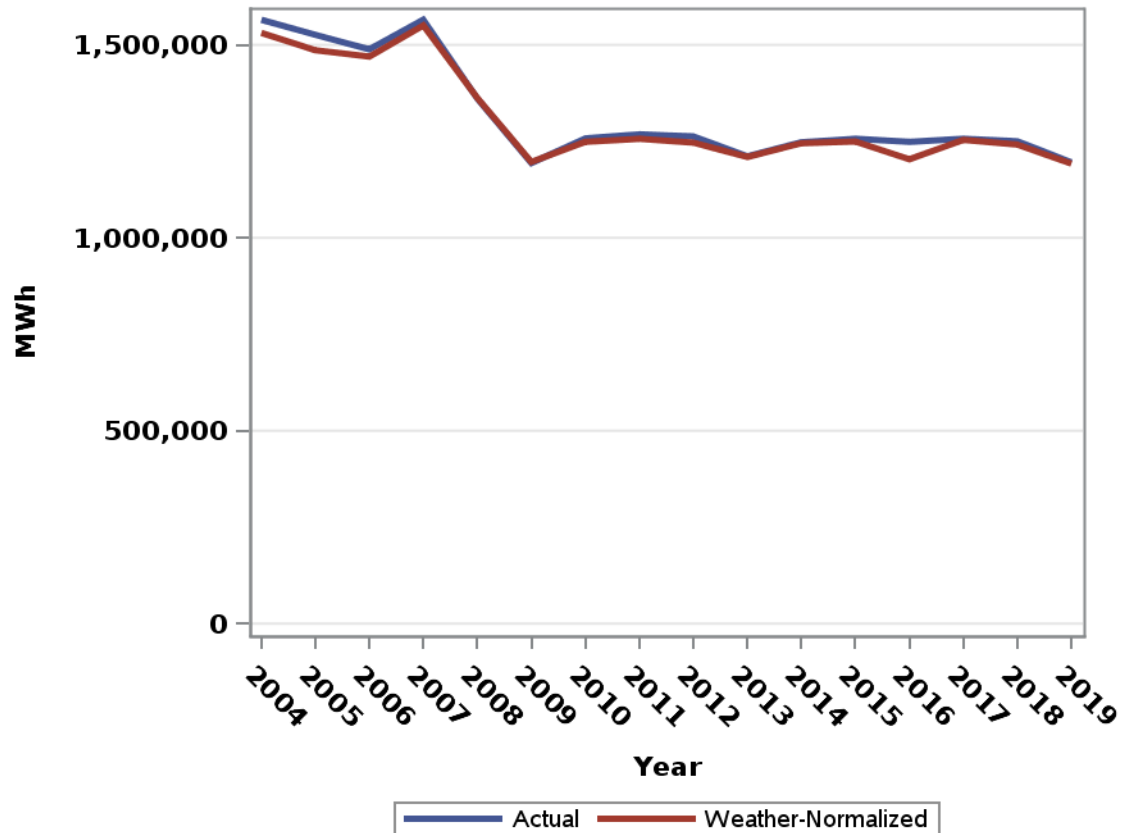
Annual Industrial LPS Usage at Meter



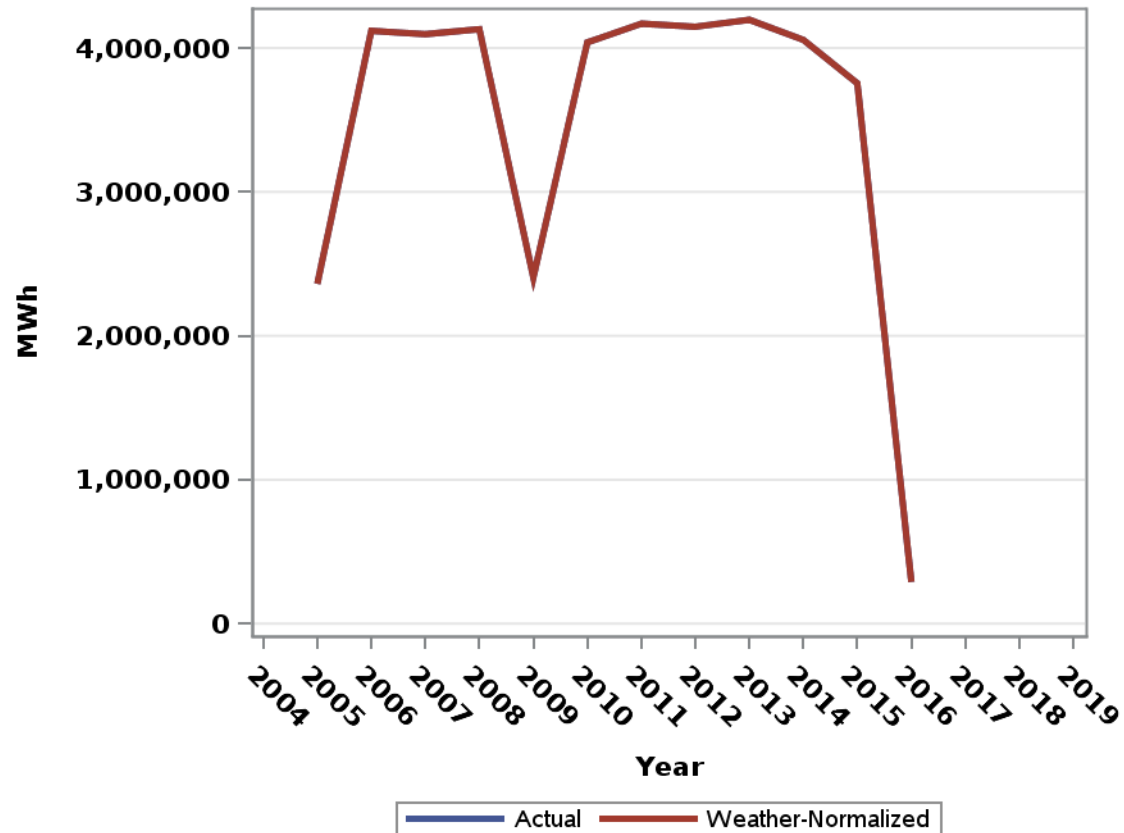
Annual Industrial SGS Usage at Meter



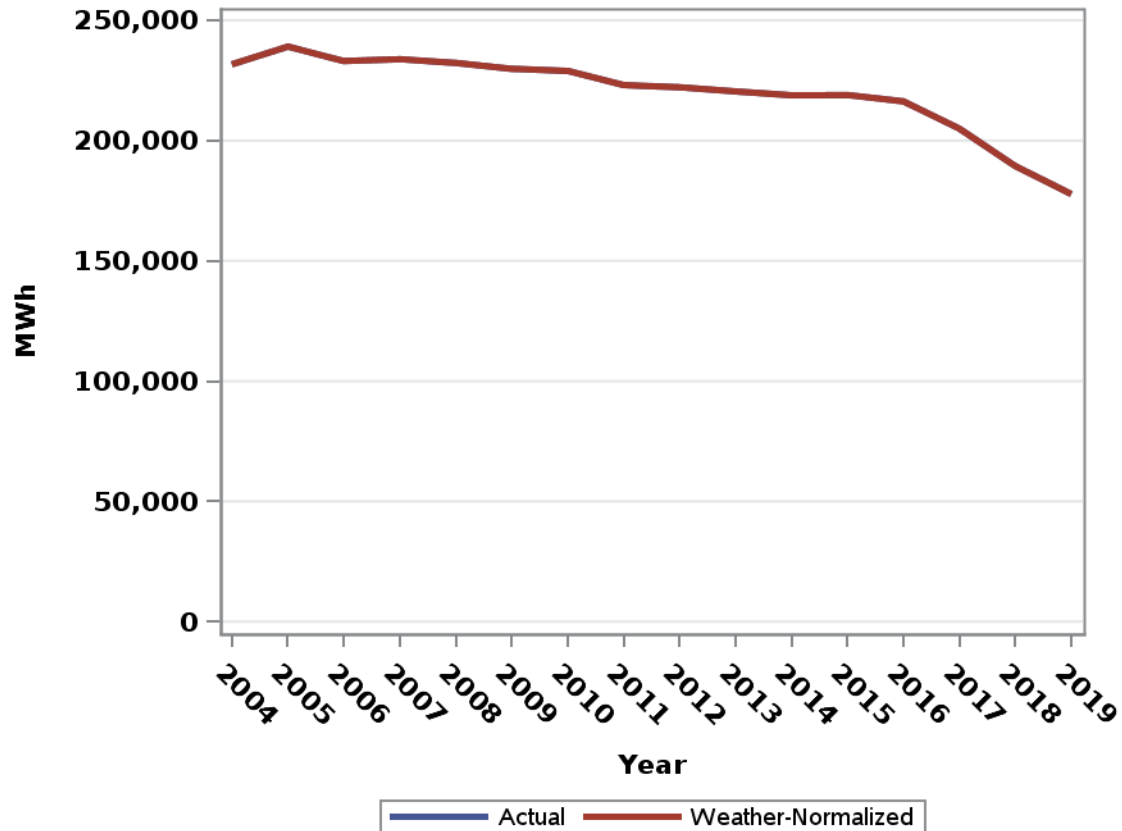
Annual Industrial SPS Usage at Meter



Annual Large Transmission Service Usage at Meter



Annual Lighting Usage at Meter

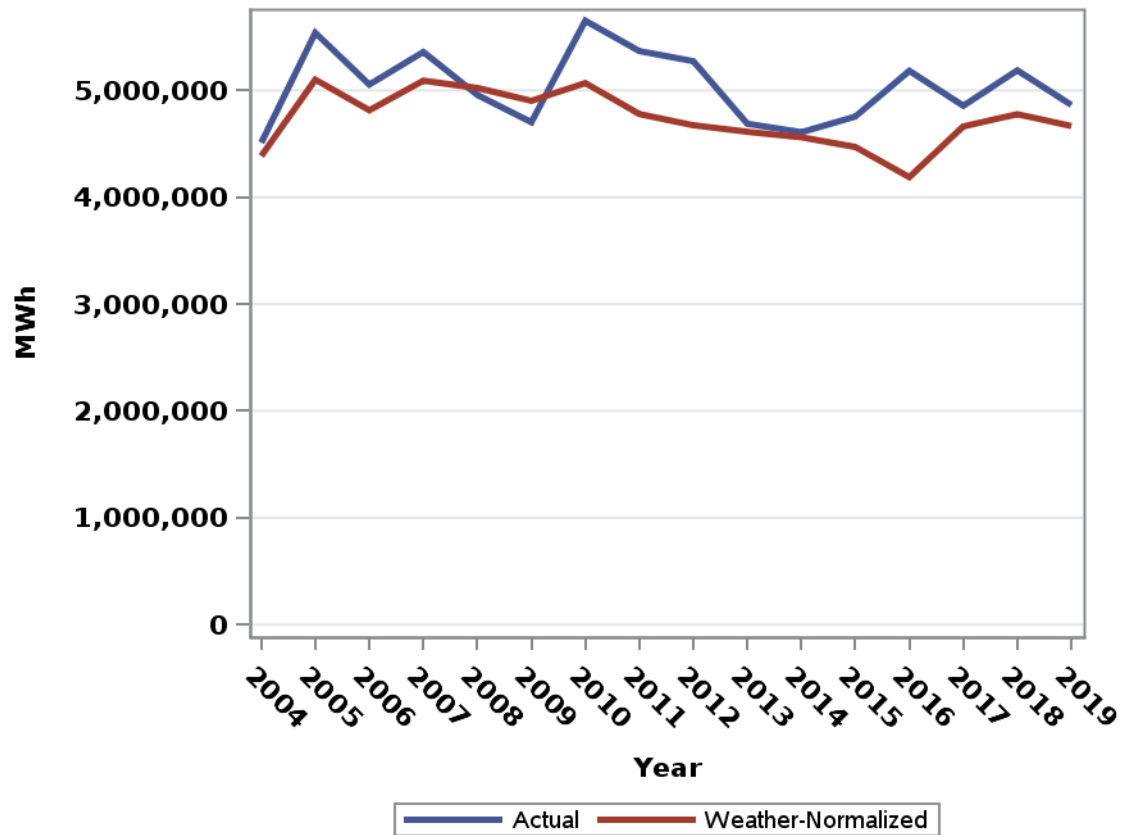


**THIS PAGE IS
CONFIDENTIAL IN
ITS ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Historical Actual and Weather-Normalized Energy Usage for Summer and Non-Summer (2004 - 2019*)⁴

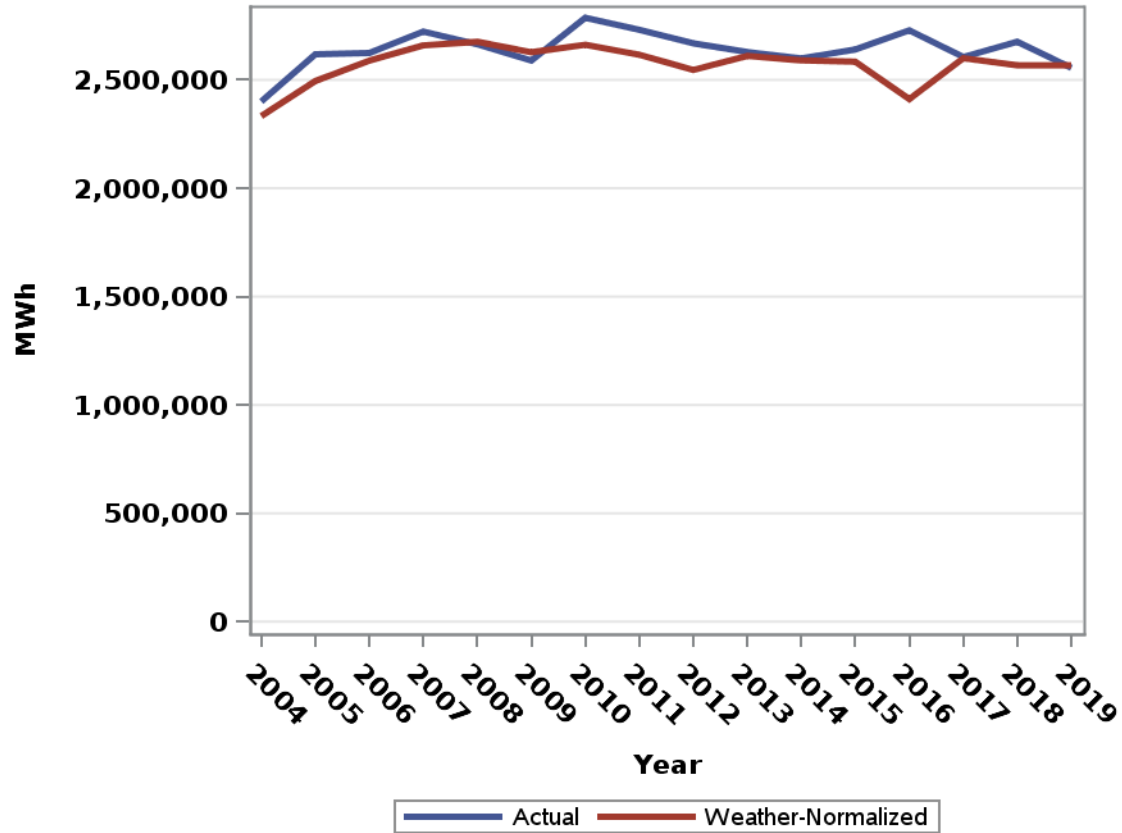
Summer Residential Usage at Meter



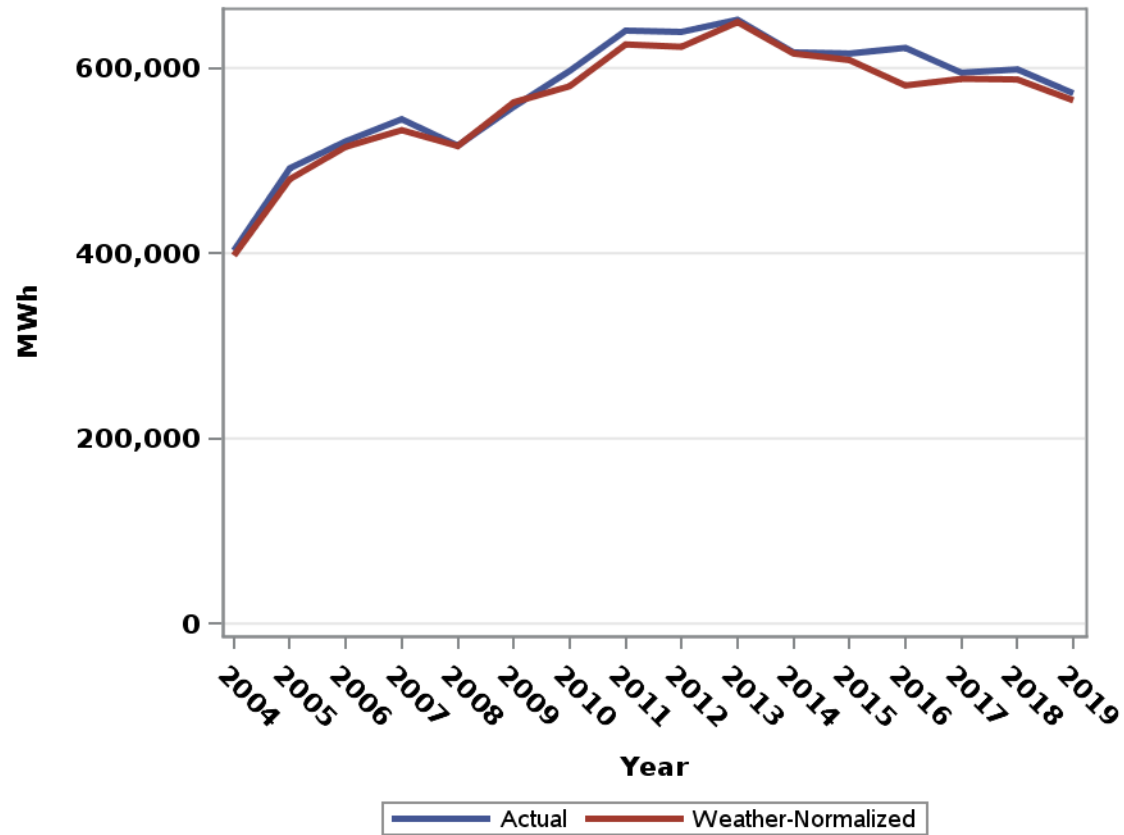
⁴20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

*Usage and Customer Count for 2019 are through November

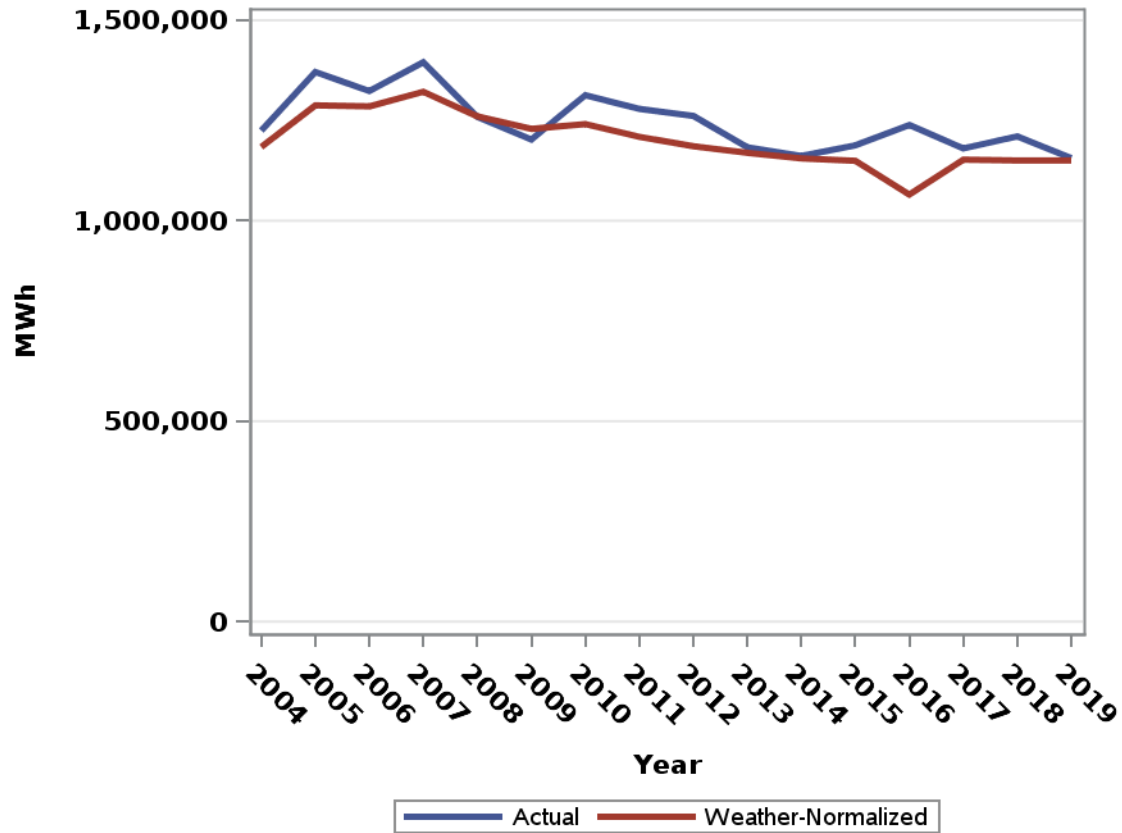
Summer Commercial LGS Usage at Meter



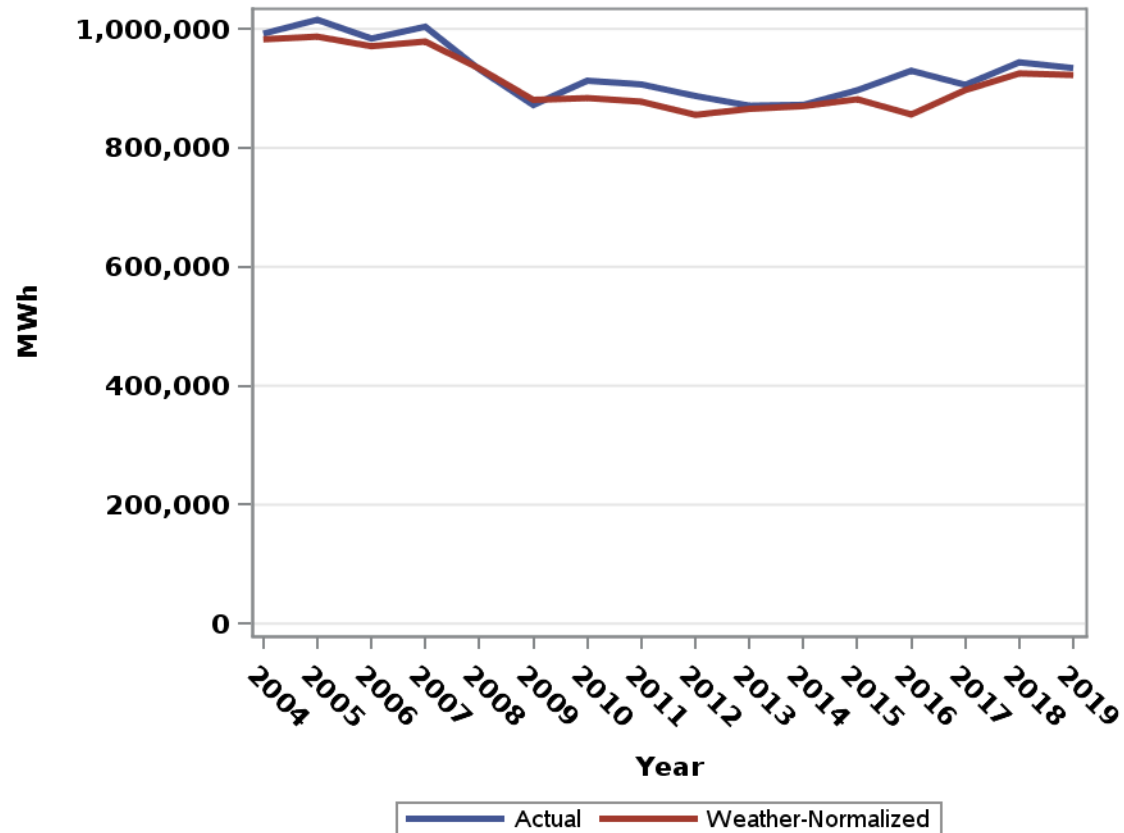
Summer Commercial LPS Usage at Meter



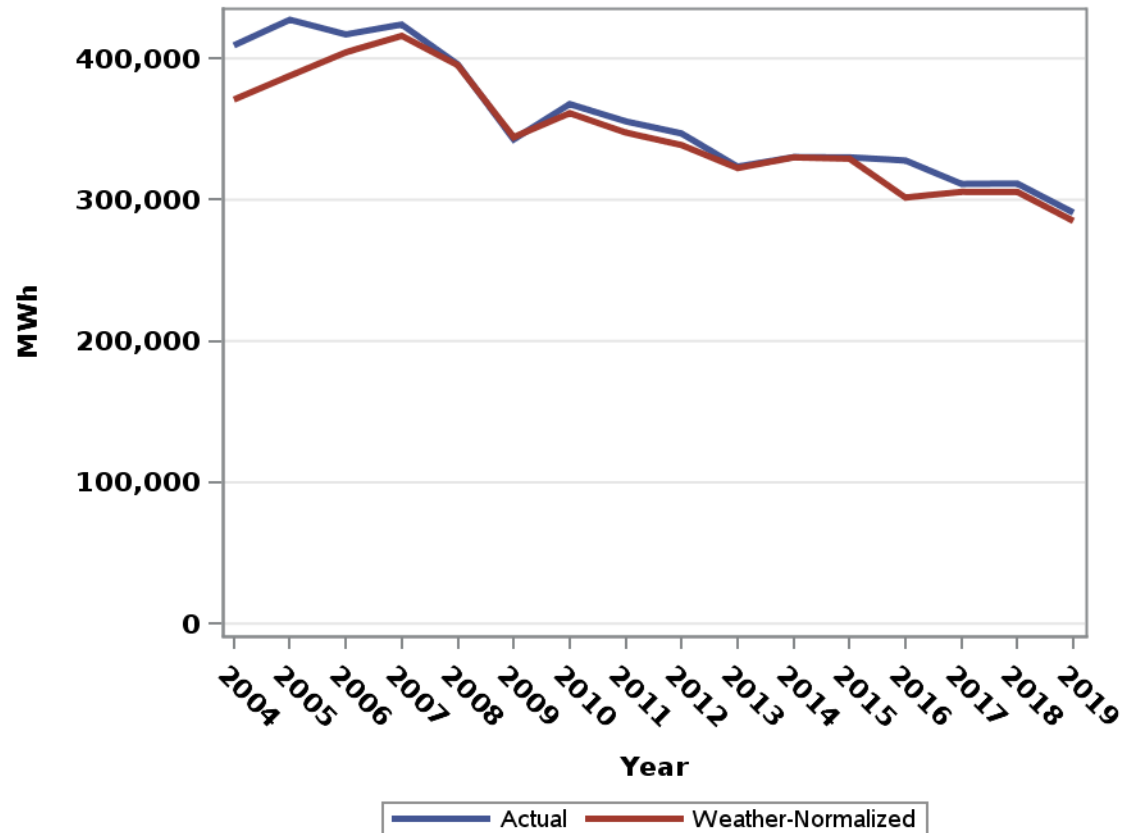
Summer Commercial SGS Usage at Meter



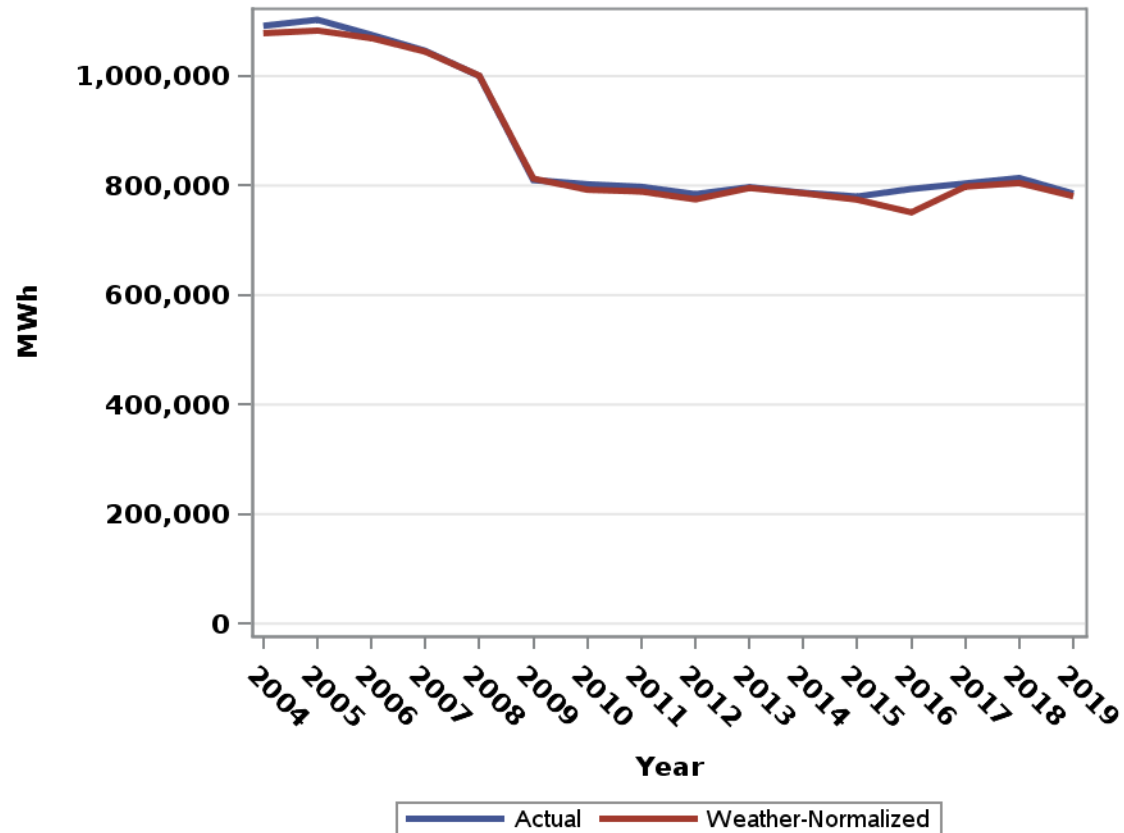
Summer Commercial SPS Usage at Meter



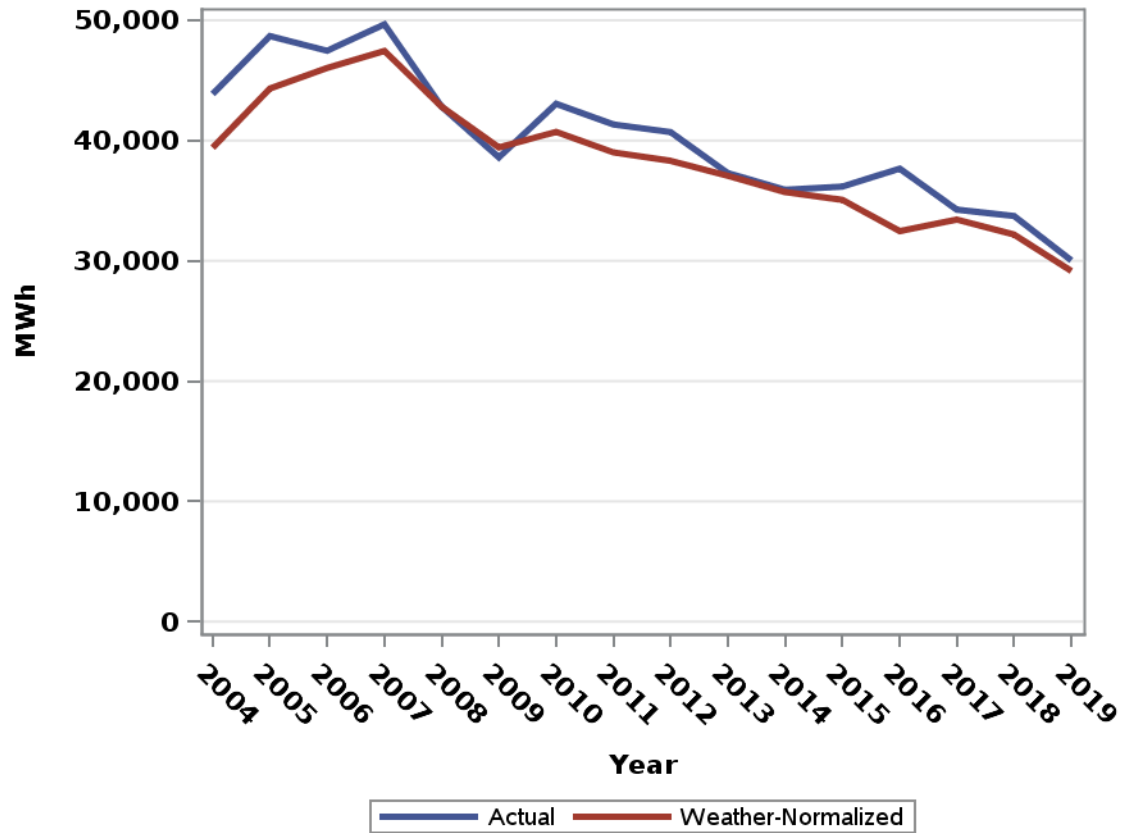
Summer Industrial LGS Usage at Meter



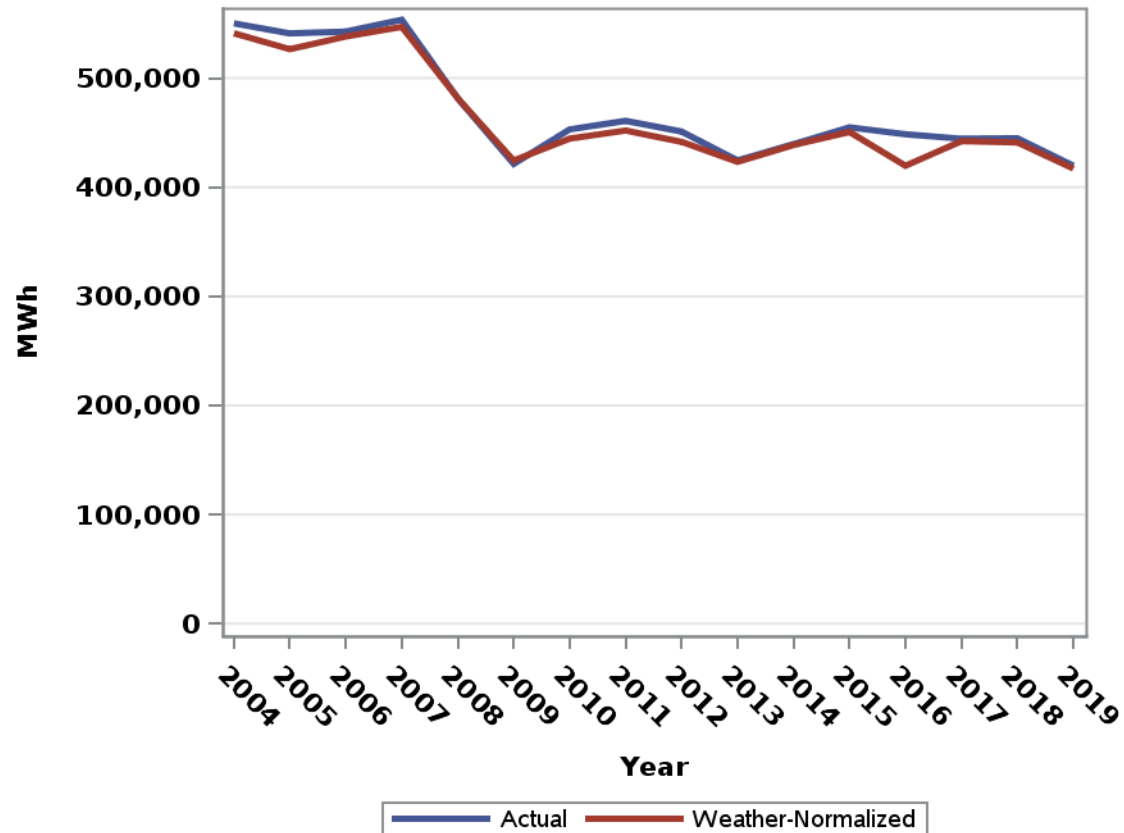
Summer Industrial LPS Usage at Meter



Summer Industrial SGS Usage at Meter

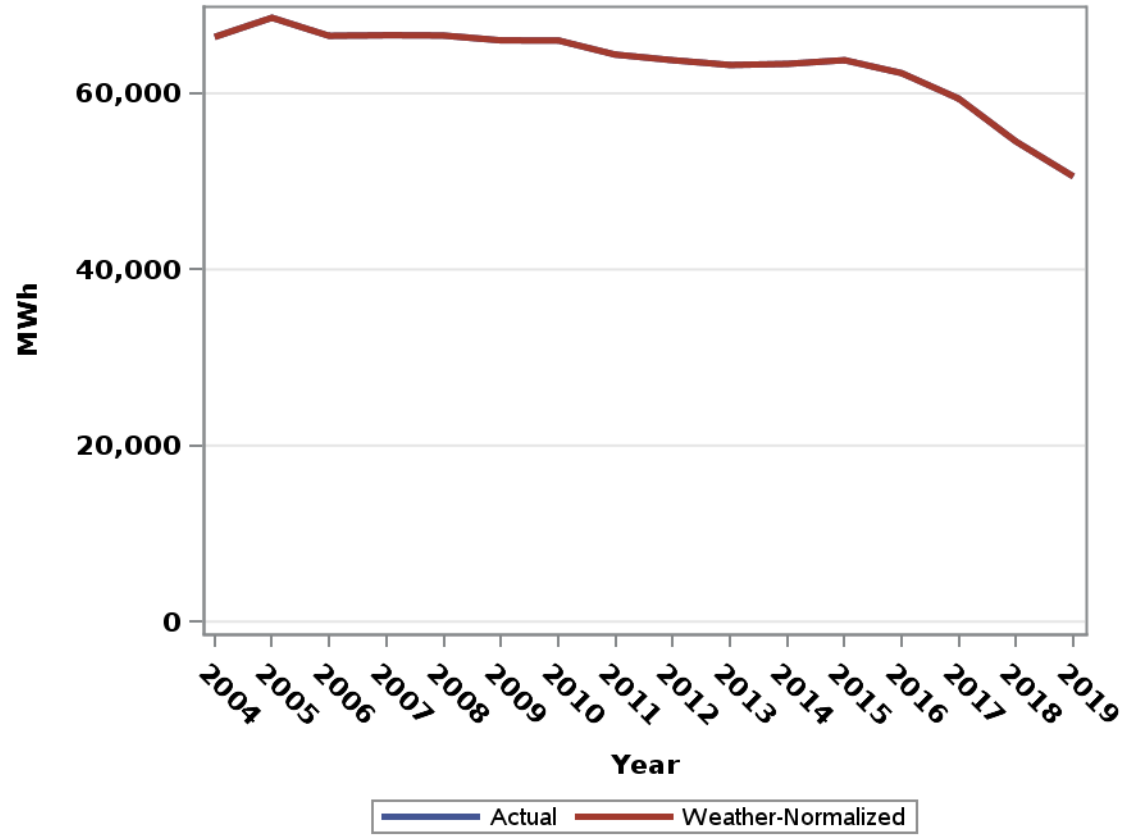


Summer Industrial SPS Usage at Meter



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Summer Lighting Usage at Meter

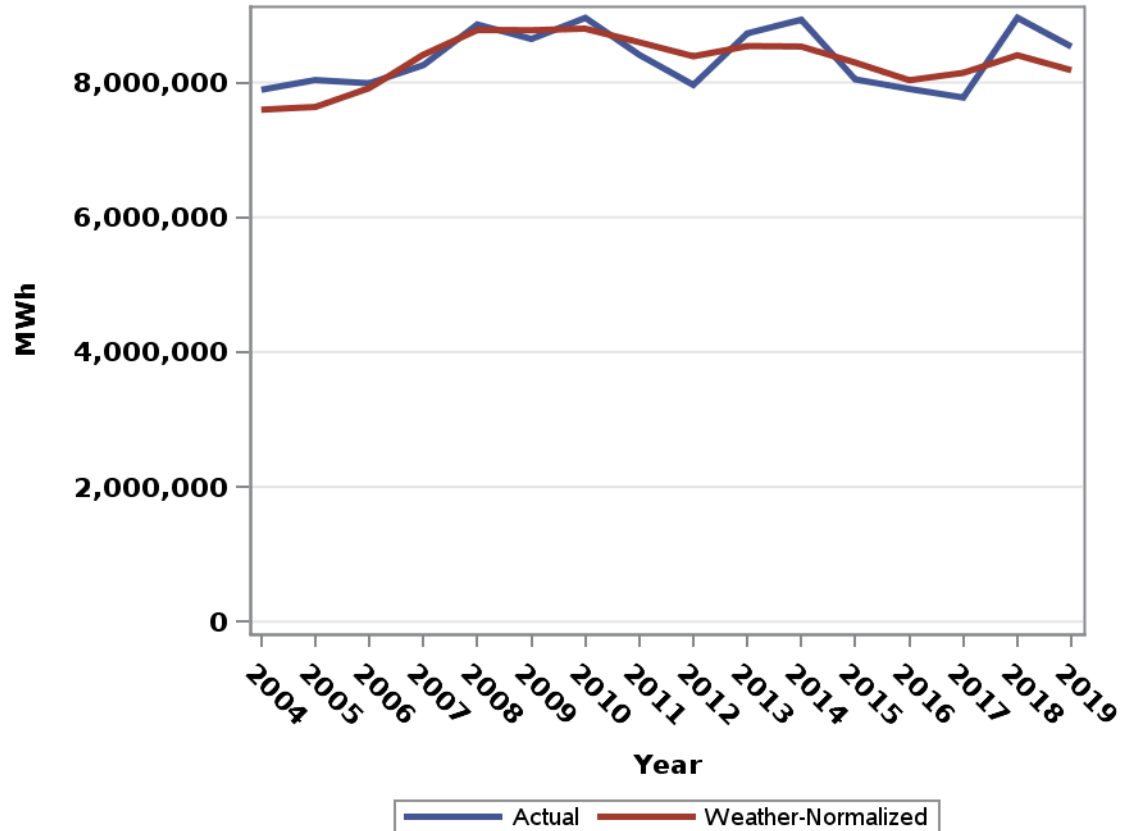


**

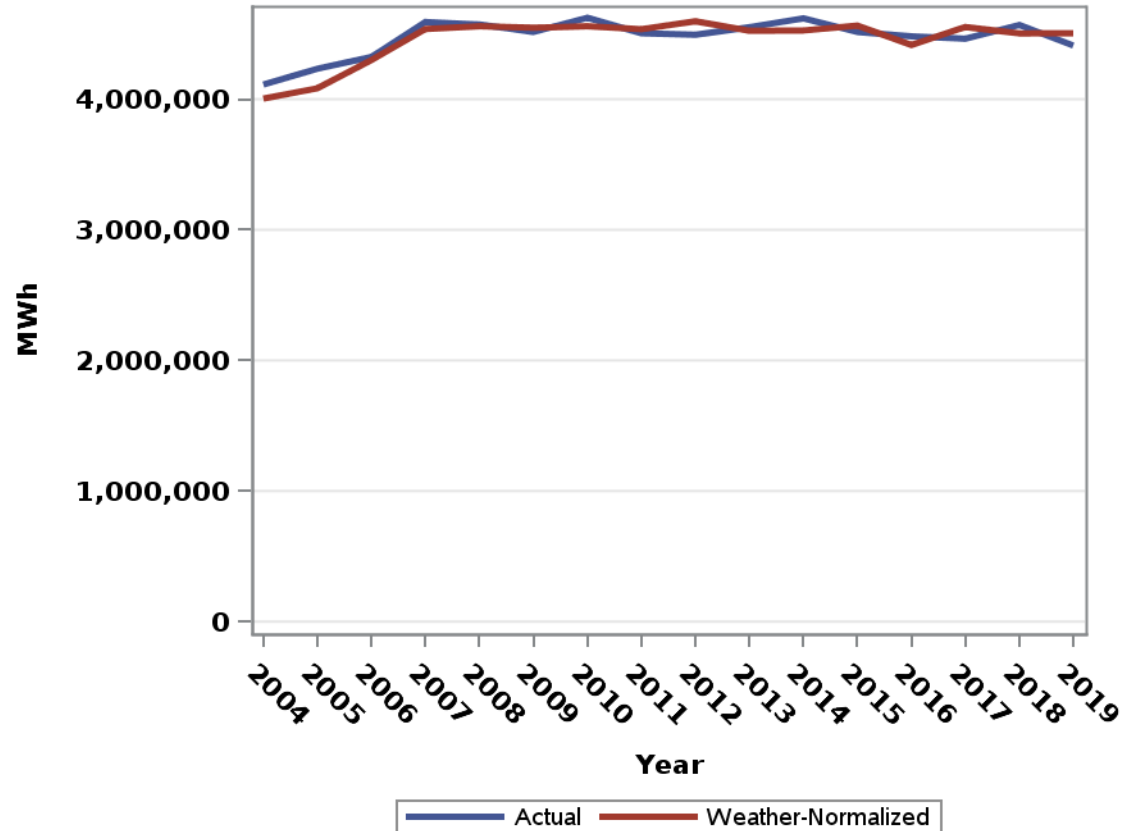
**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

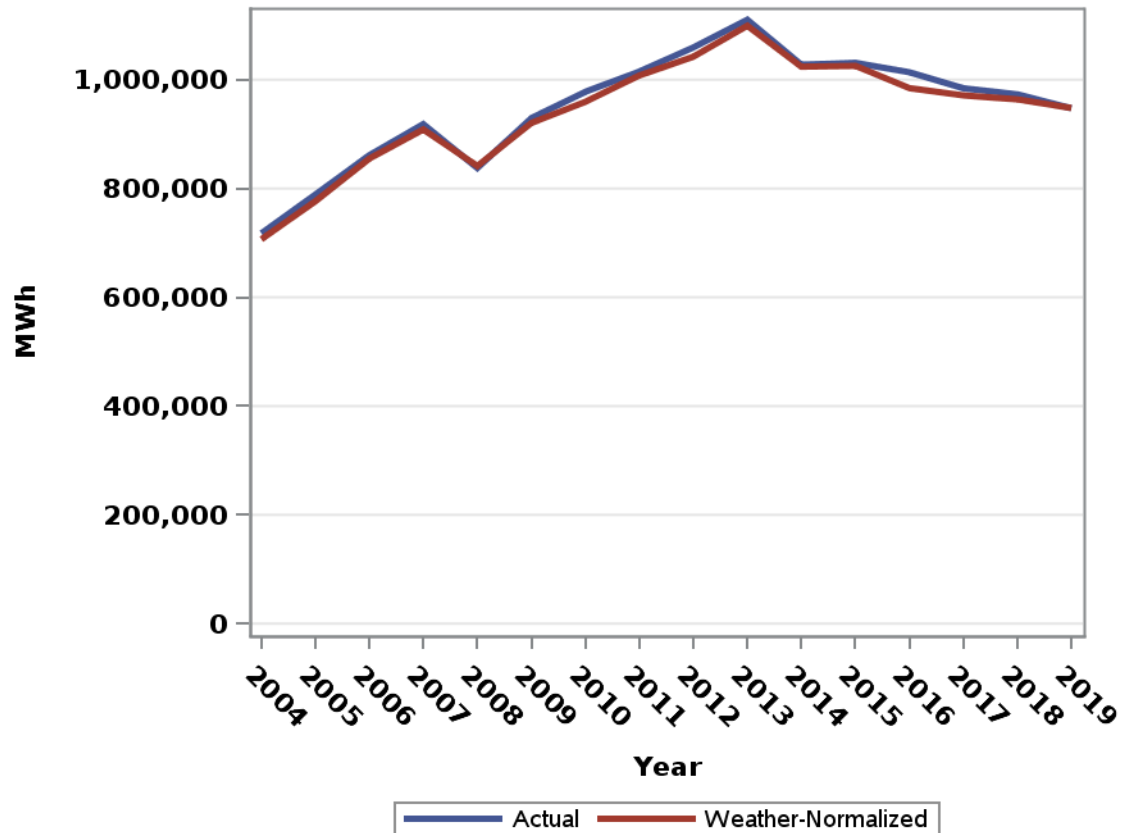
Non-Summer Residential Usage at Meter



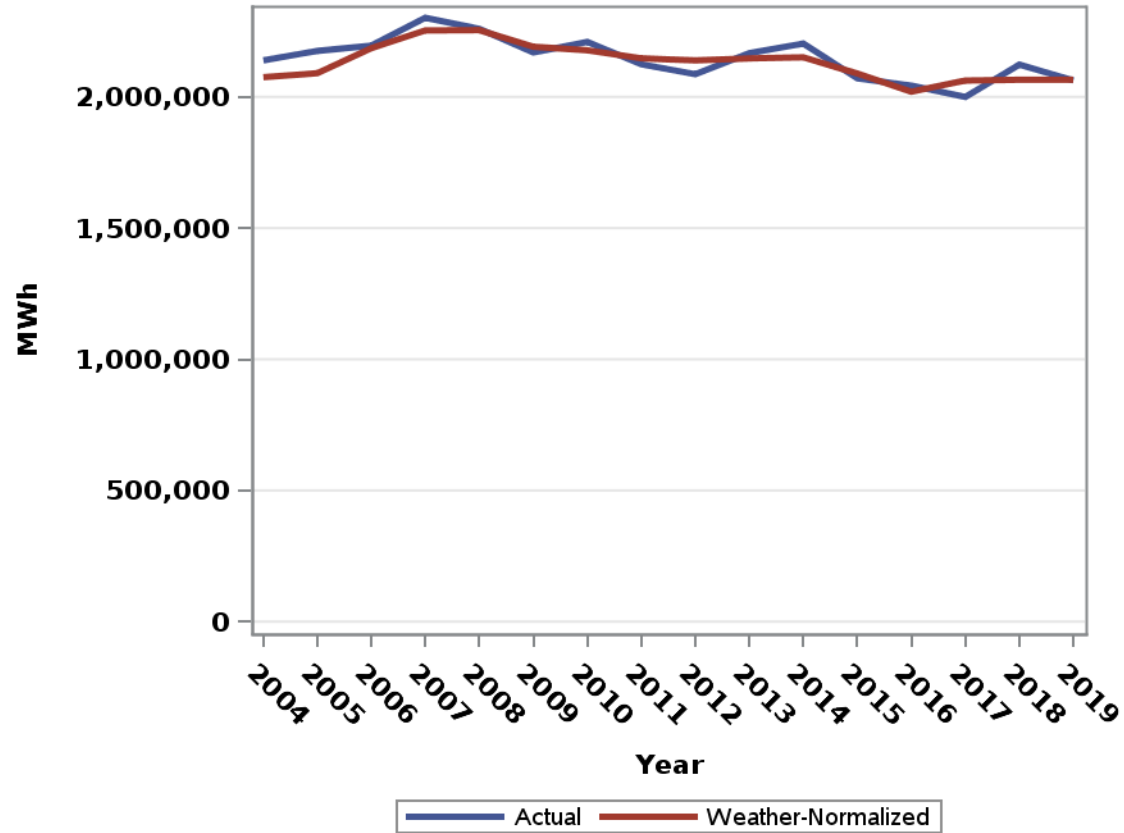
Non-Summer Commercial LGS Usage at Meter



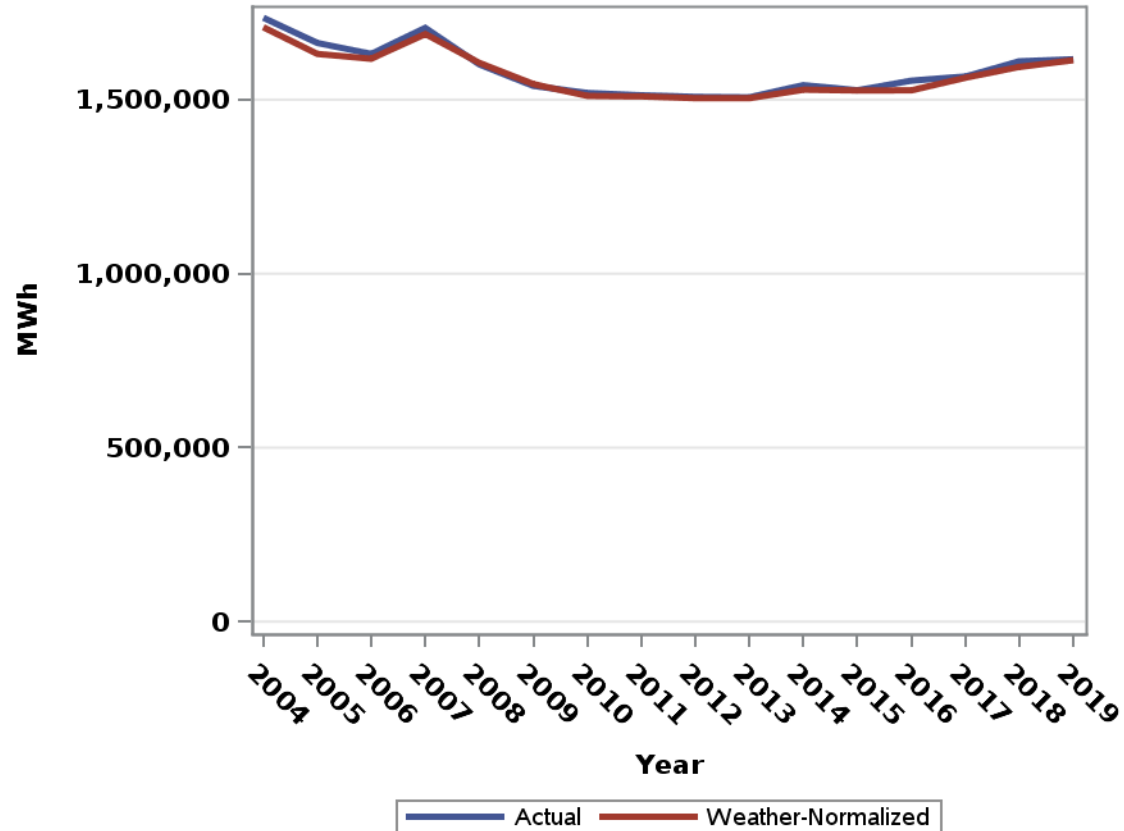
Non-Summer Commercial LPS Usage at Meter



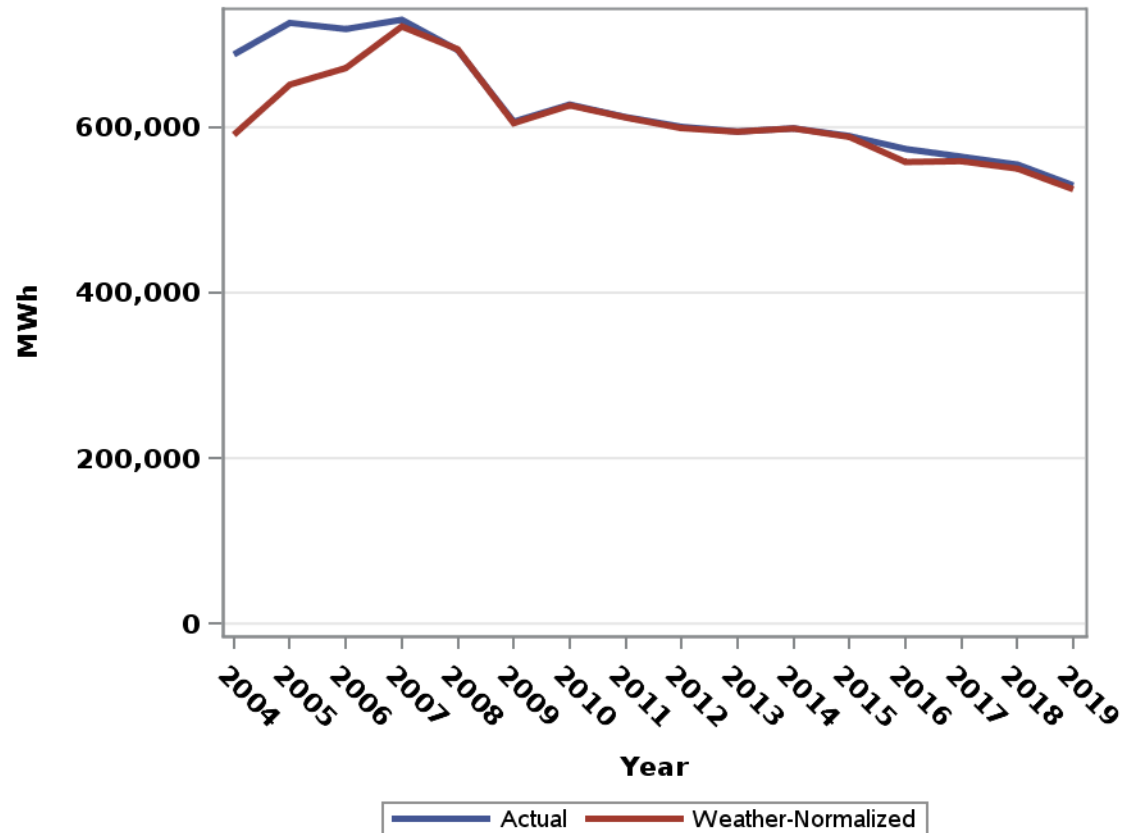
Non-Summer Commercial SGS Usage at Meter



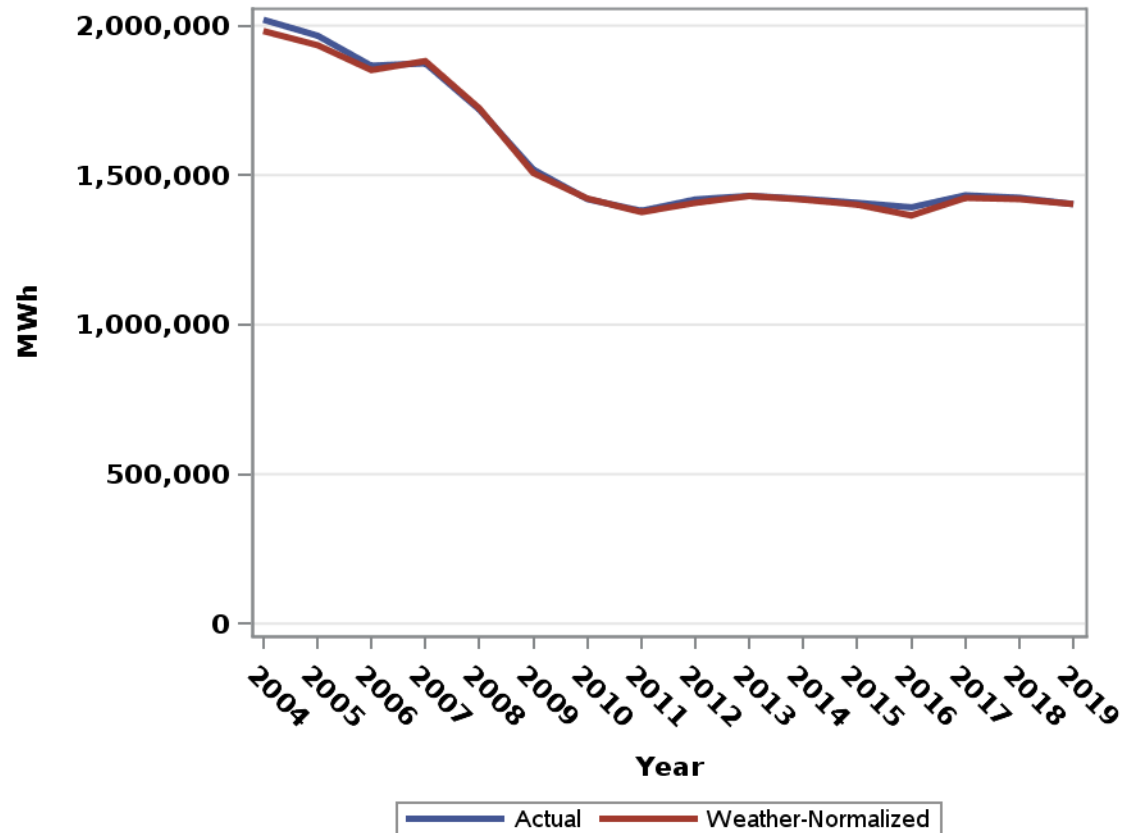
Non-Summer Commercial SPS Usage at Meter



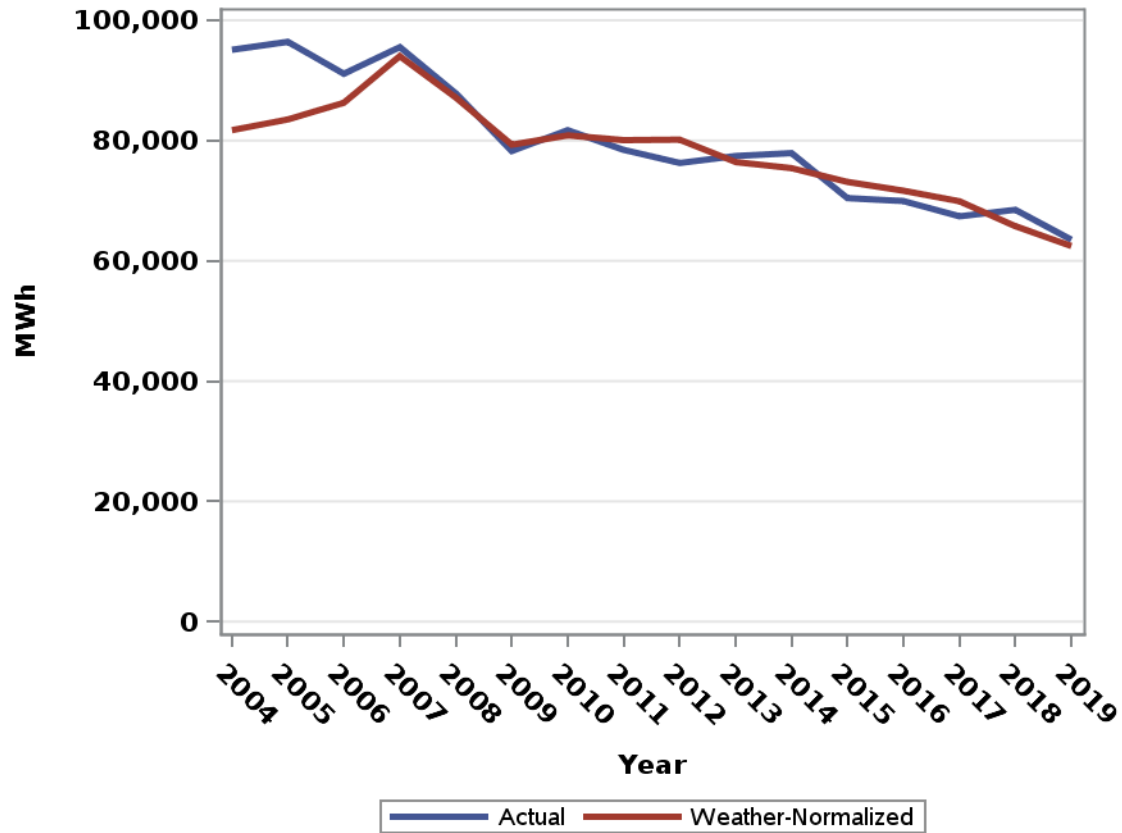
Non-Summer Industrial LGS Usage at Meter



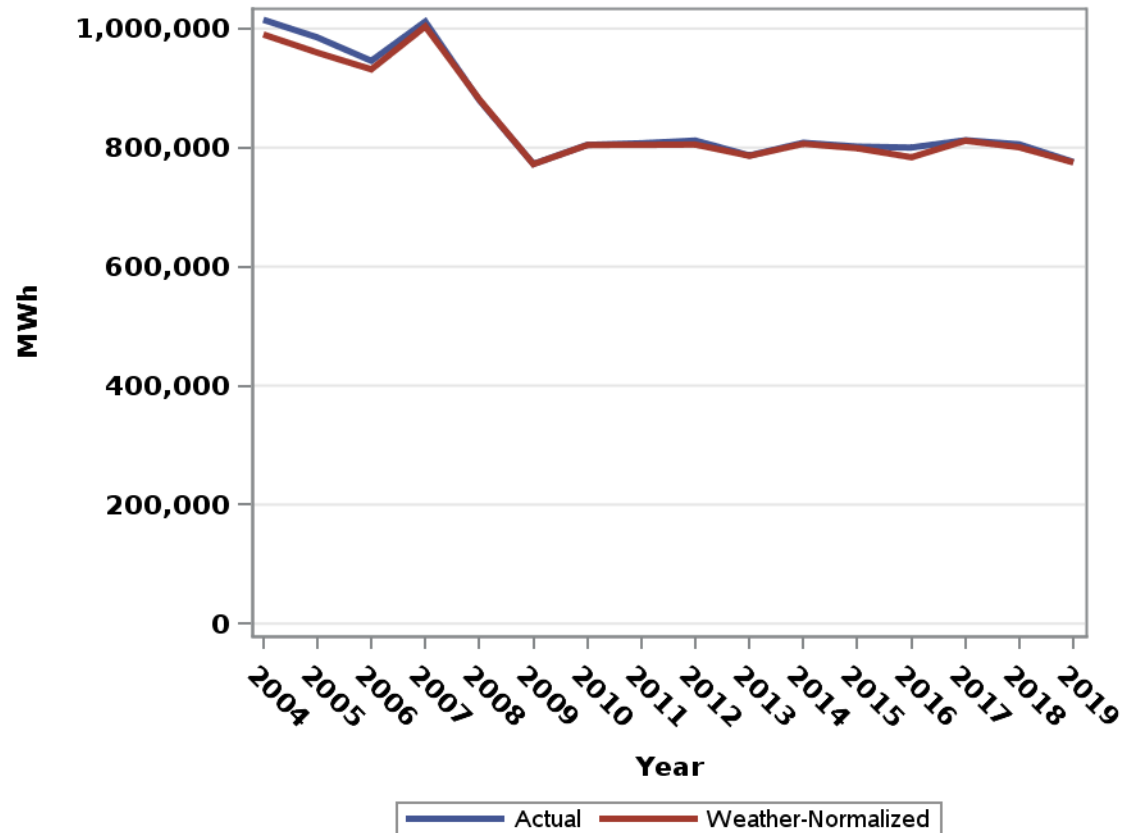
Non-Summer Industrial LPS Usage at Meter



Non-Summer Industrial SGS Usage at Meter

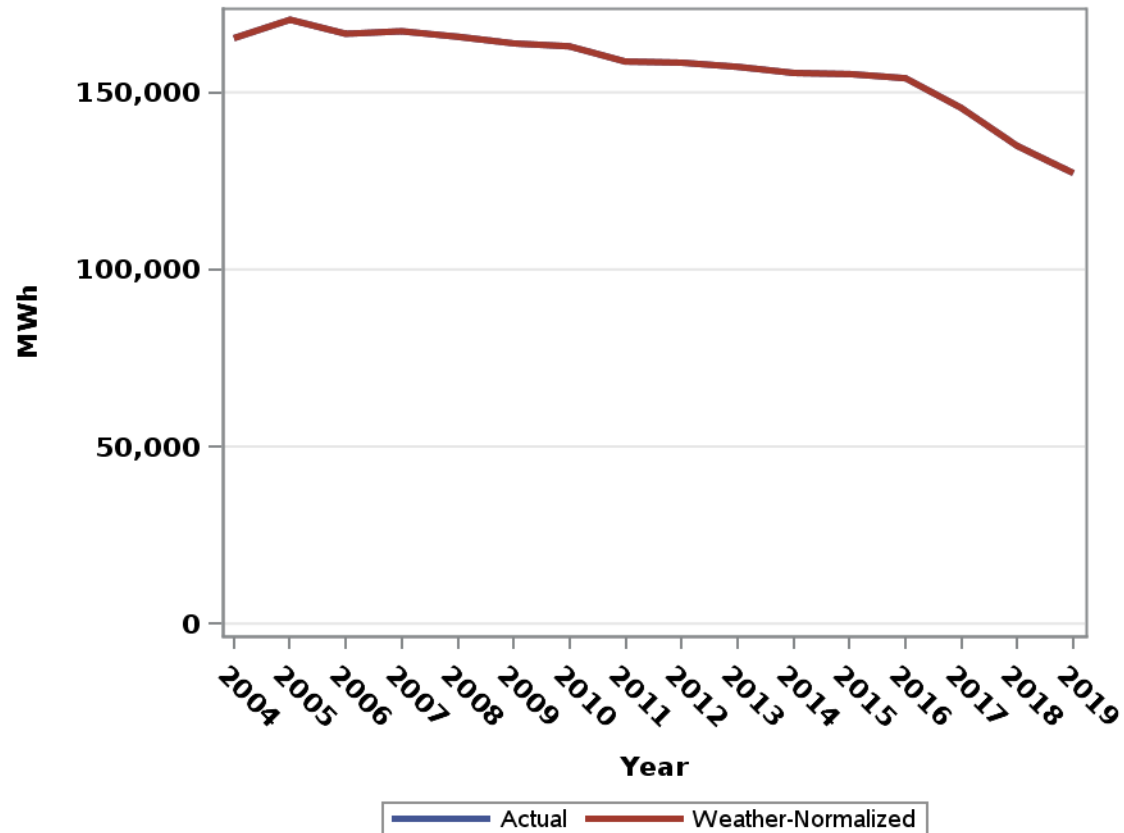


Non-Summer Industrial SPS Usage at Meter



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Non-Summer Lighting Usage at Meter

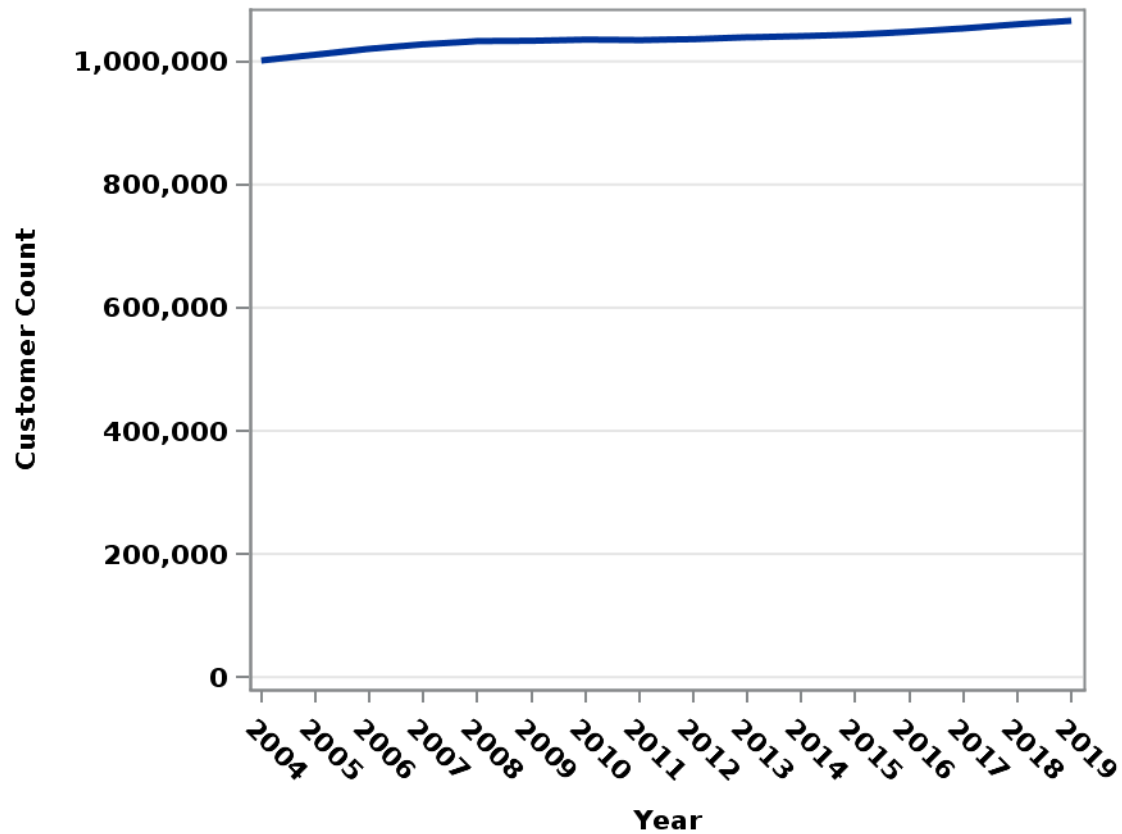


**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Number of Annual Units (Billed Customer Counts) by Class (2004 - 2019*)⁵

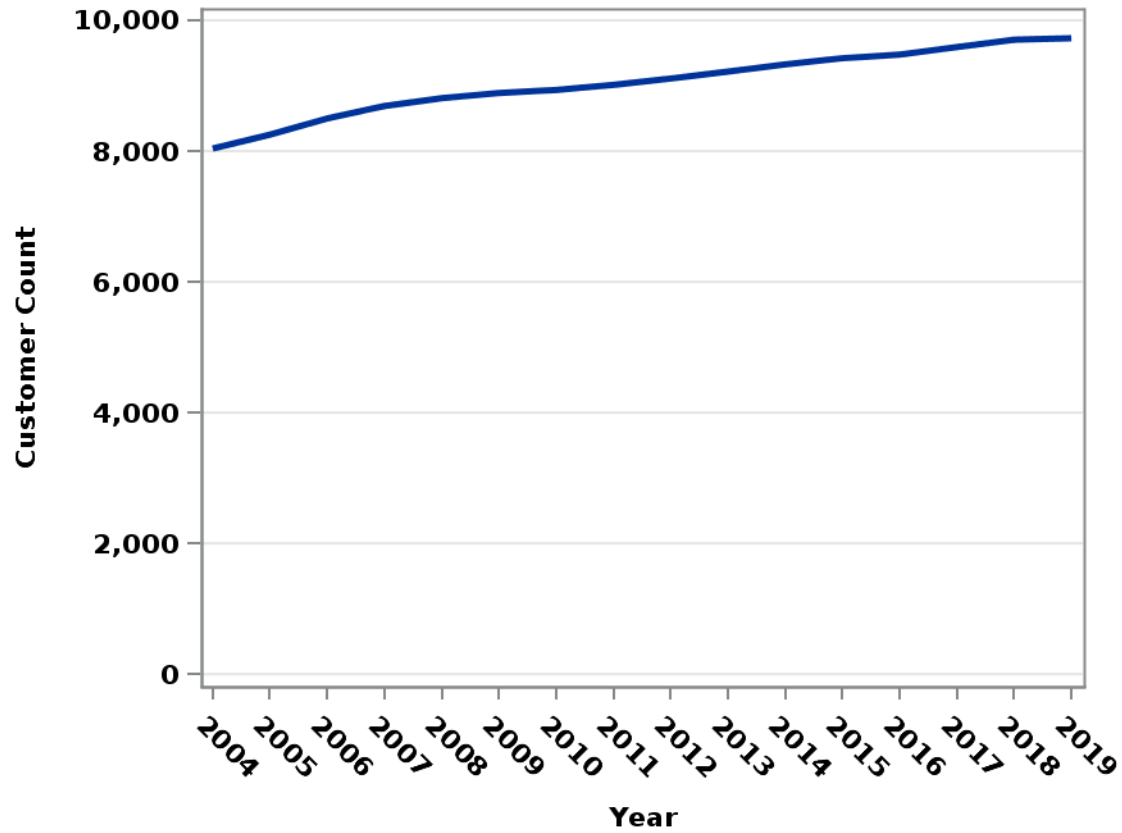
Residential Billed Customer Counts



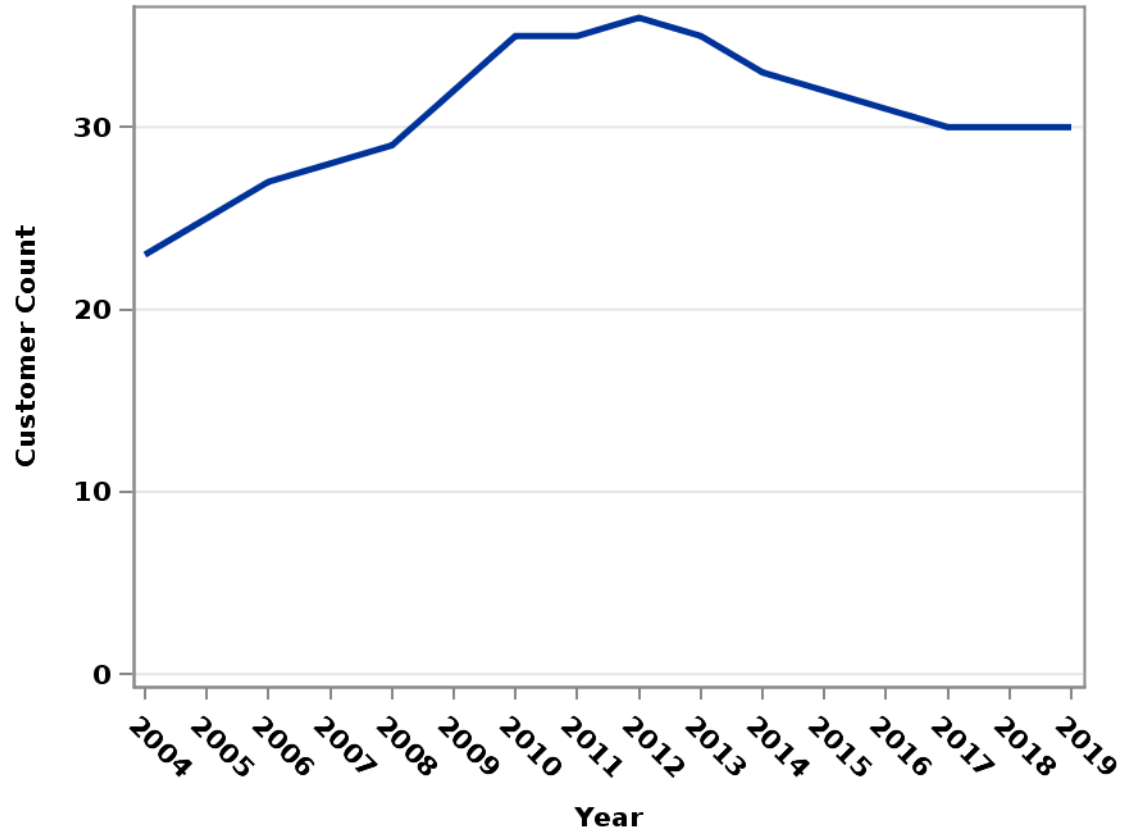
⁵20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

*Usage and Customer Count for 2019 are through November

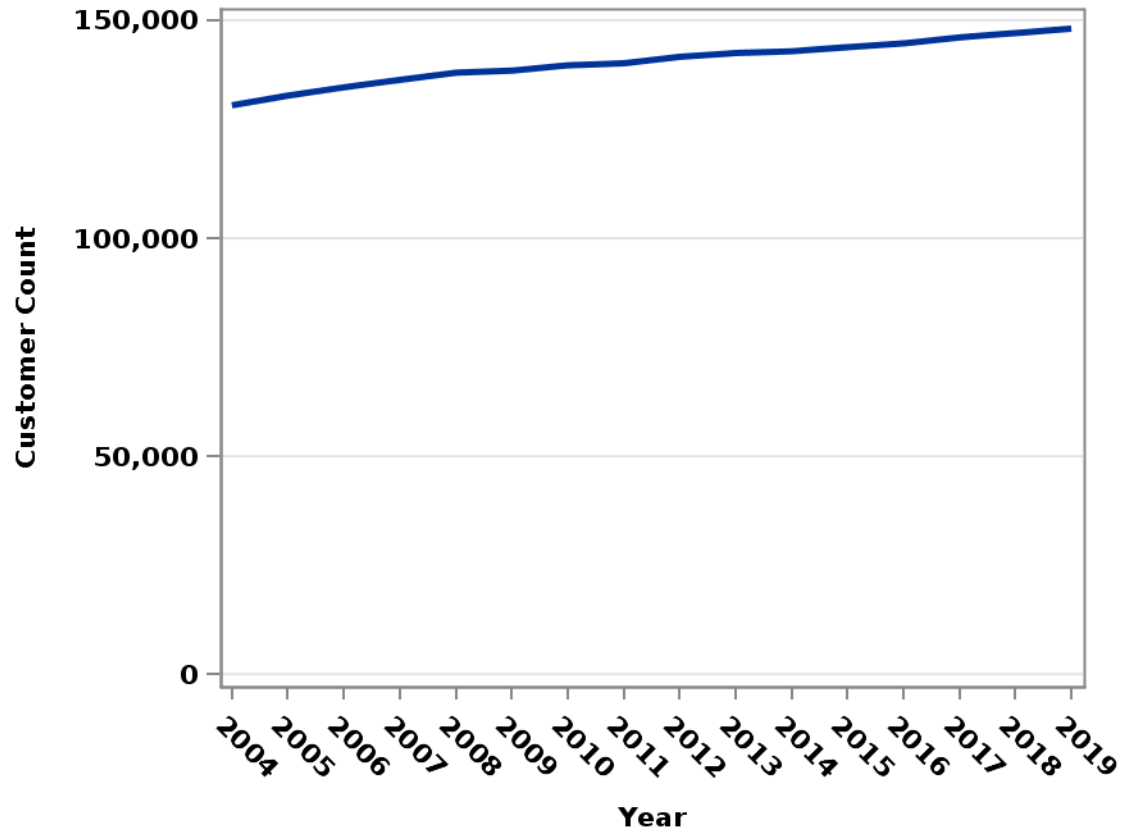
Commercial LGS Billed Customer Counts



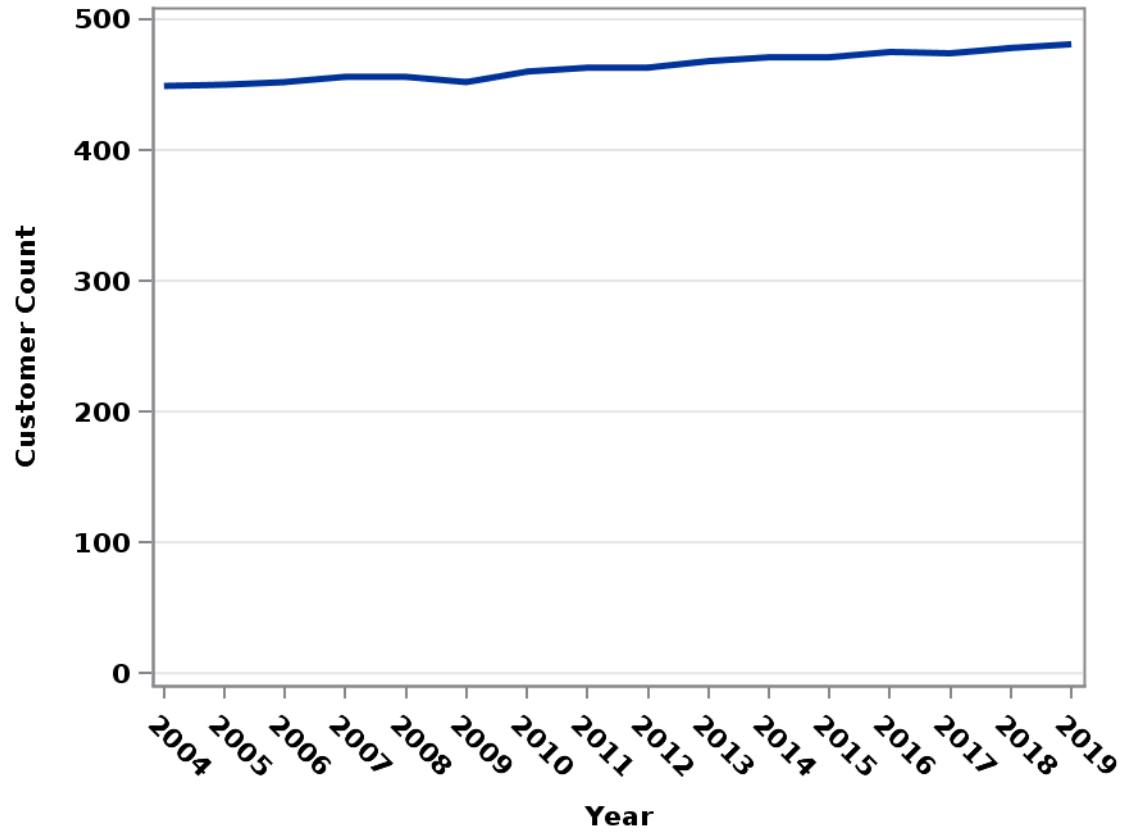
Commercial LPS Billed Customer Counts



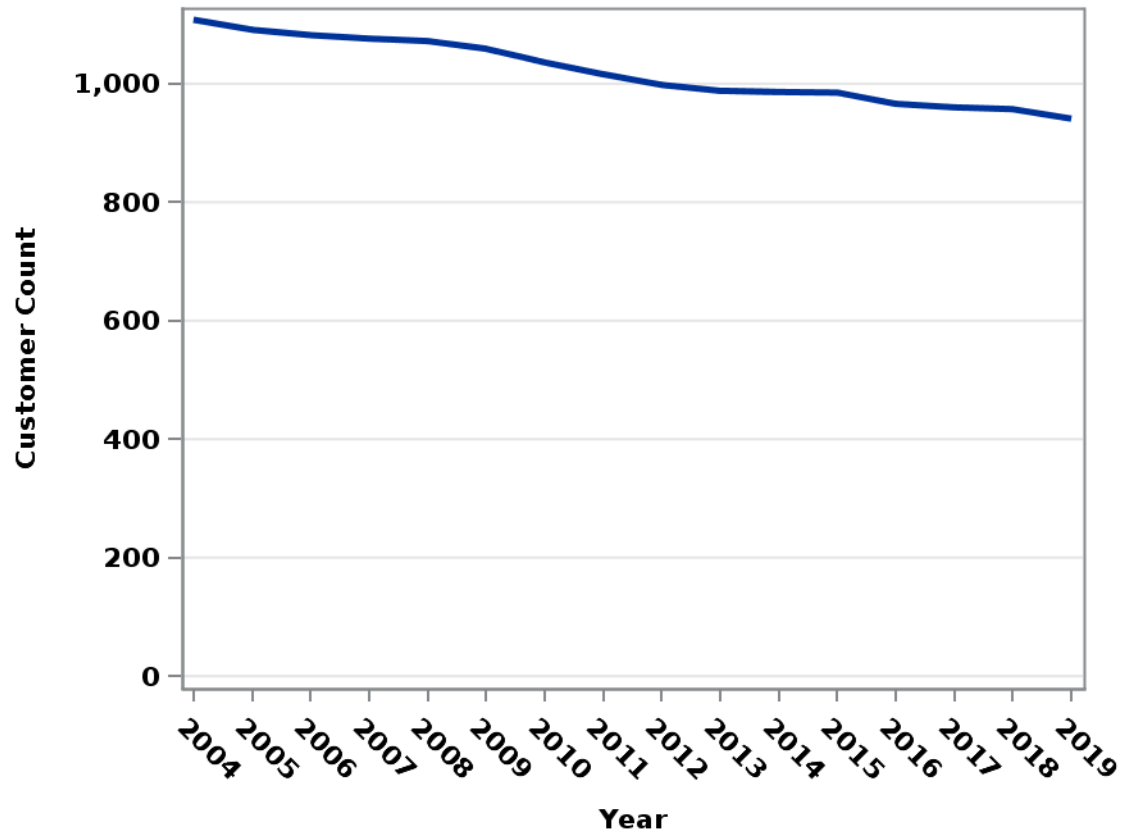
Commercial SGS Billed Customer Counts



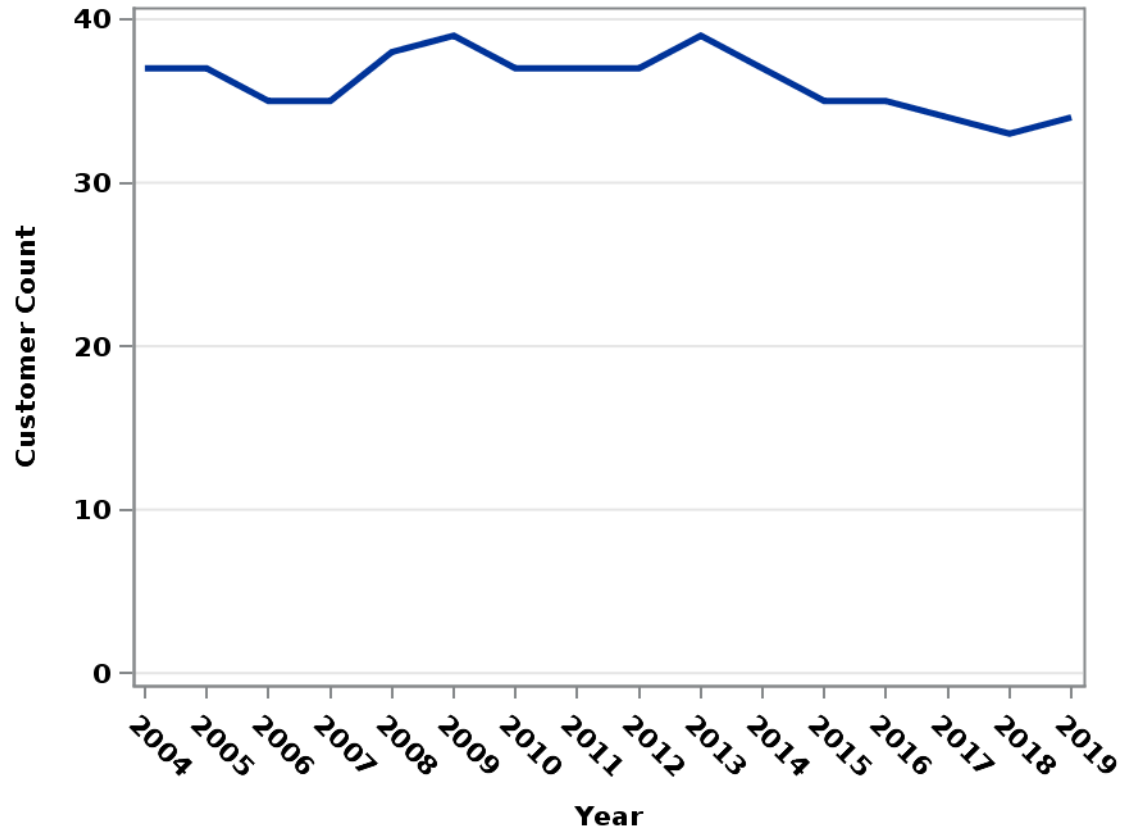
Commercial SPS Billed Customer Counts



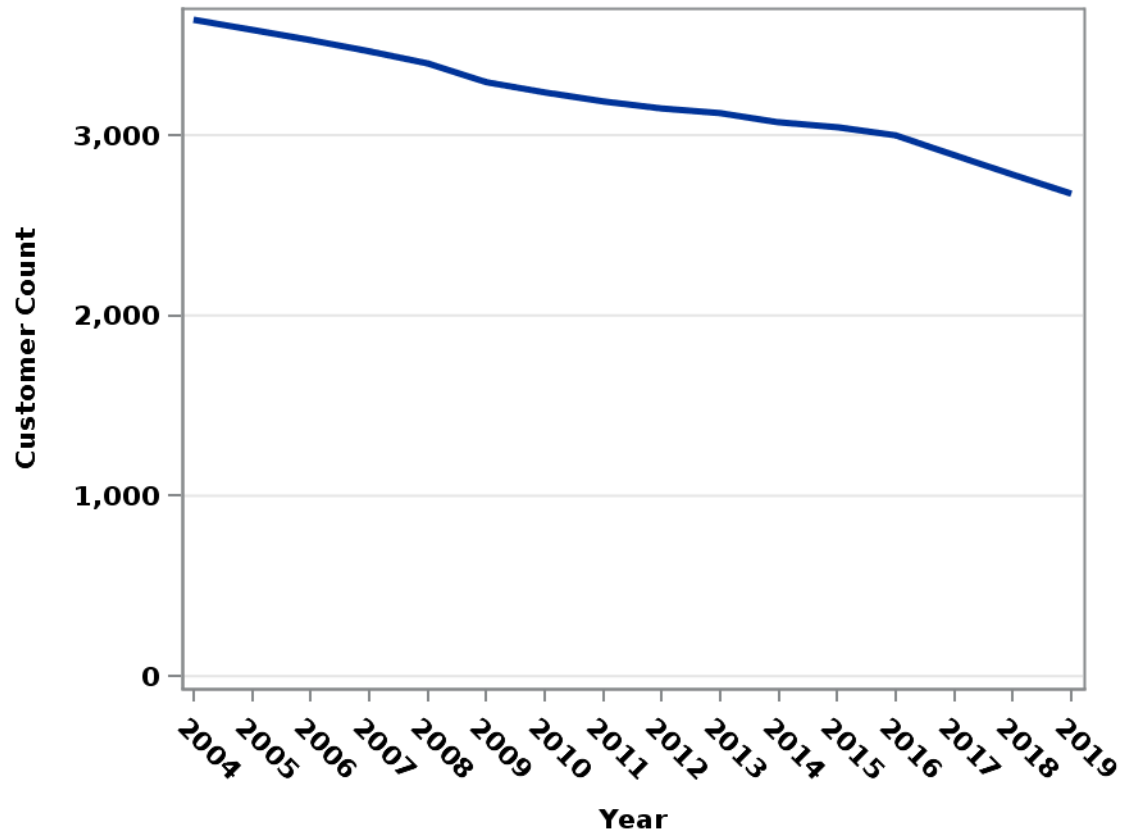
Industrial LGS Billed Customer Counts



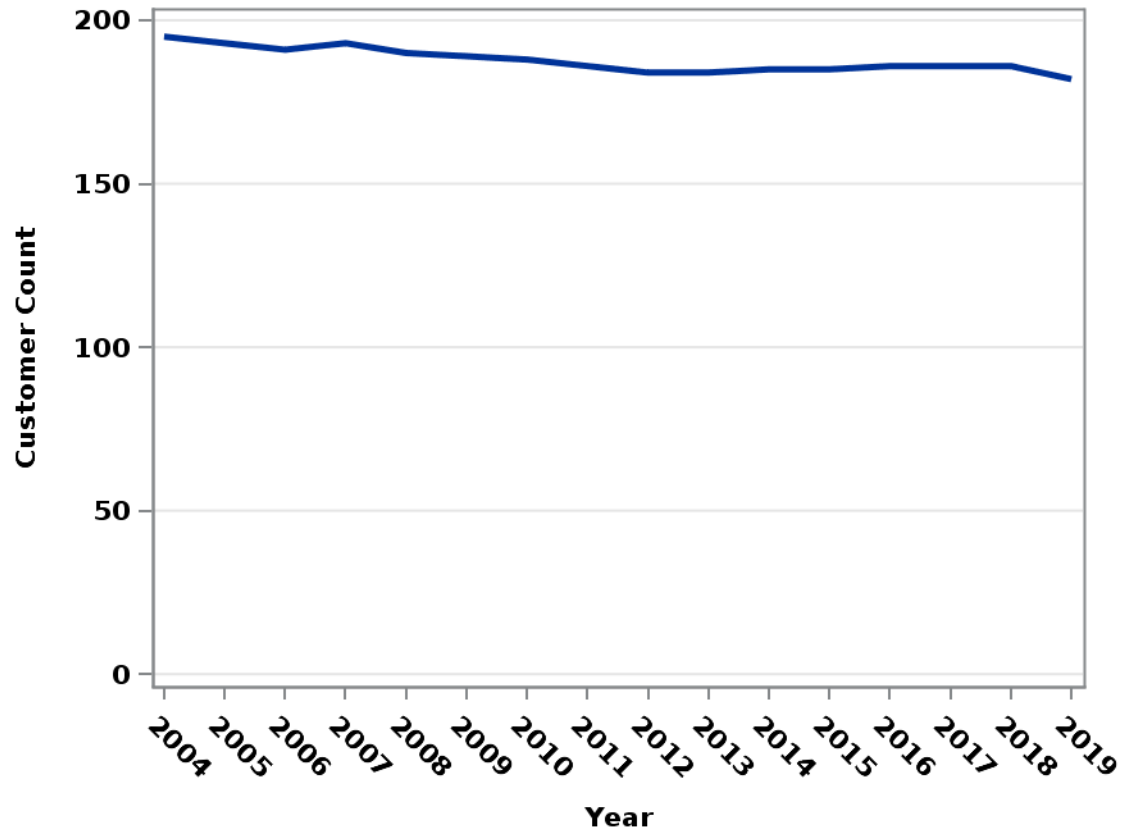
Industrial LPS Billed Customer Counts



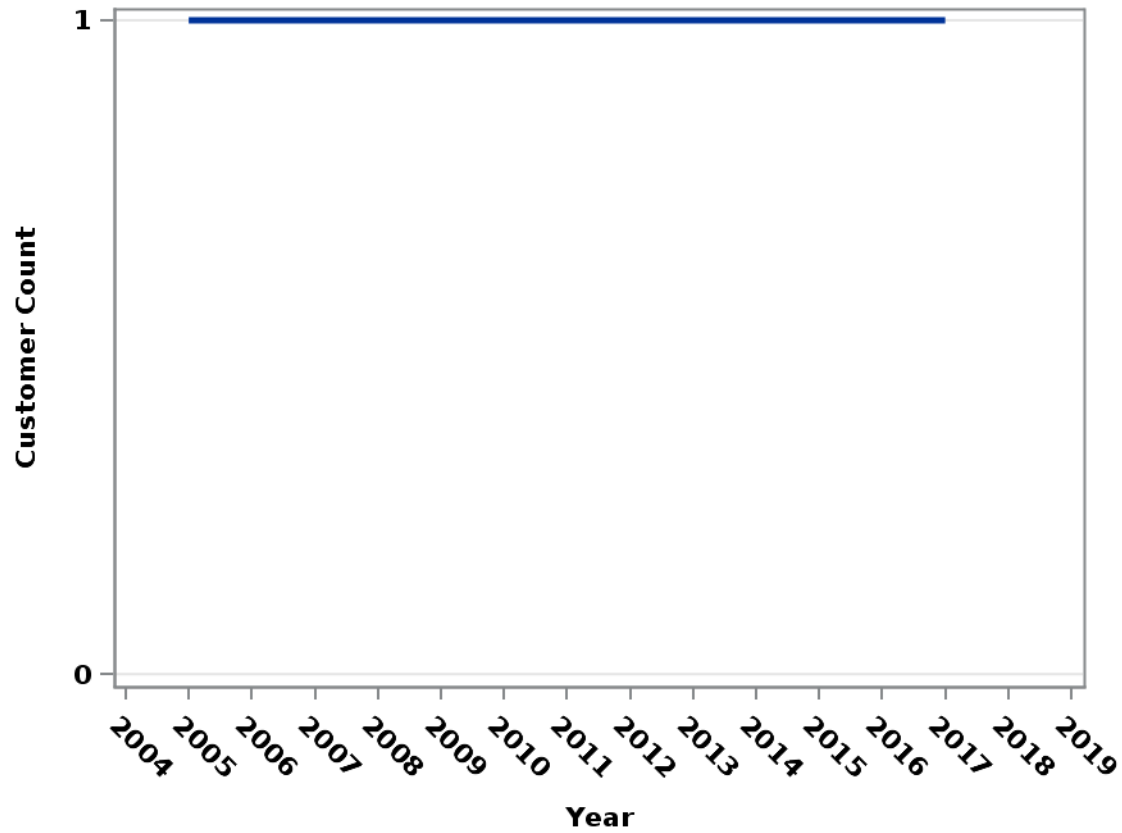
Industrial SGS Billed Customer Counts



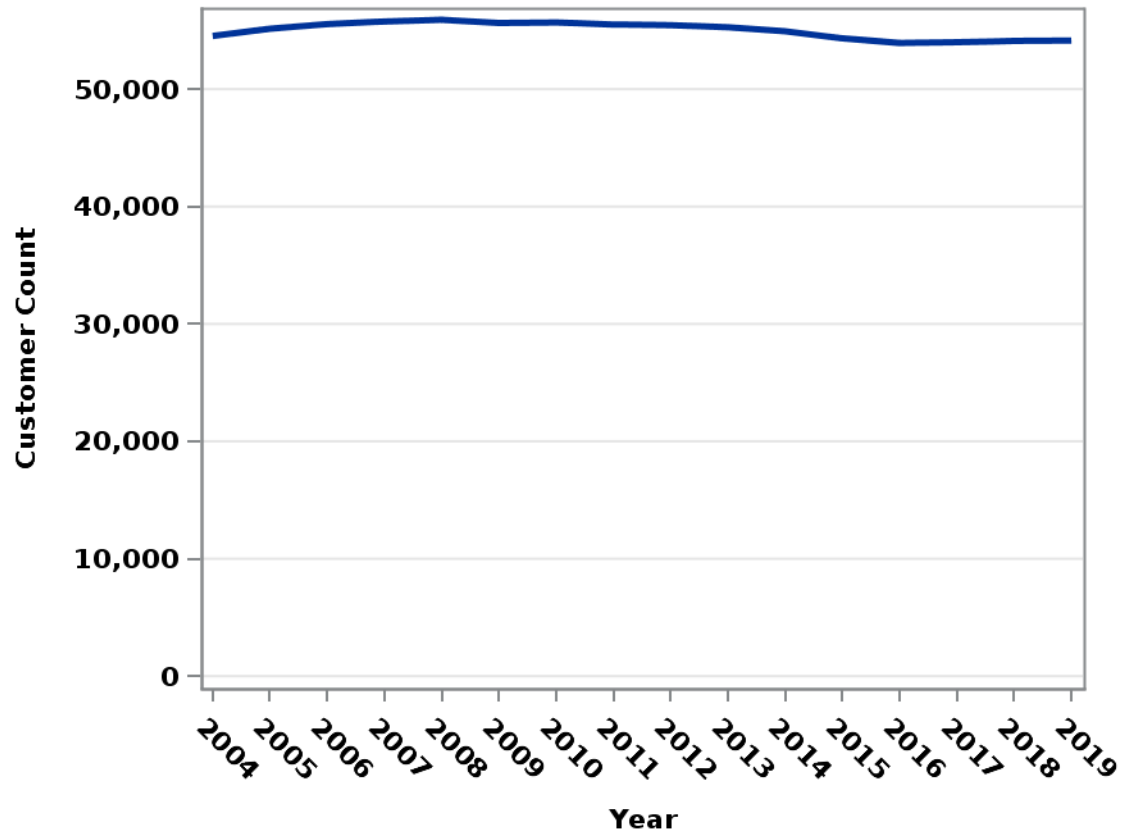
Industrial SPS Billed Customer Counts



Large Transmission Service Billed Customer Counts



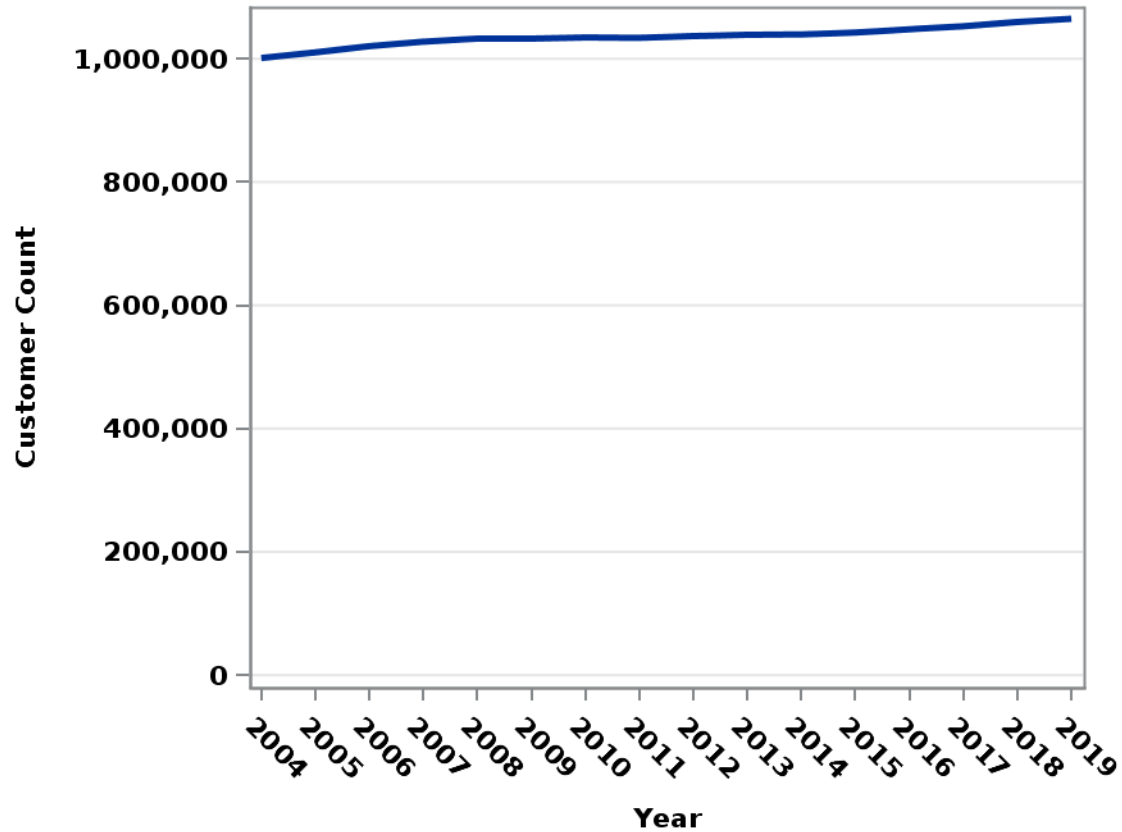
Lighting Billed Customer Counts



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

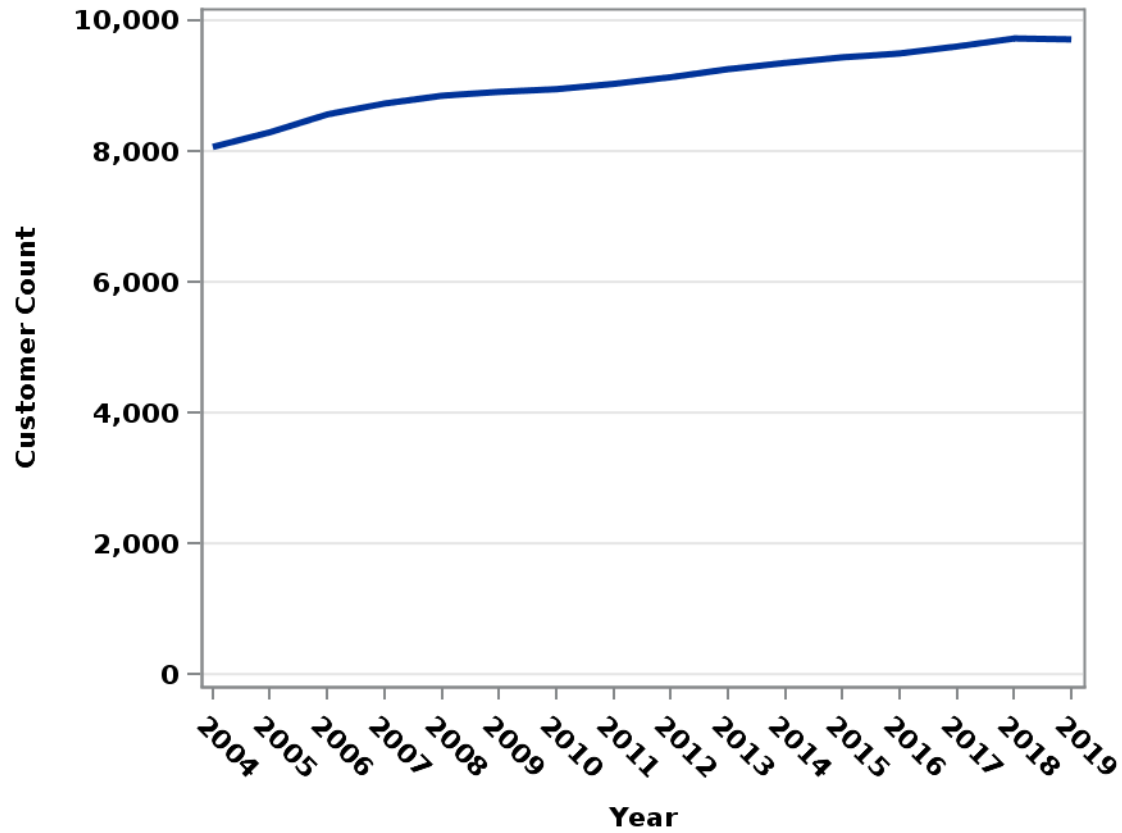
Number of Summer Units (Billed Customer Counts) by Class (2004 - 2019)⁶

Summer Residential Billed Customer Counts

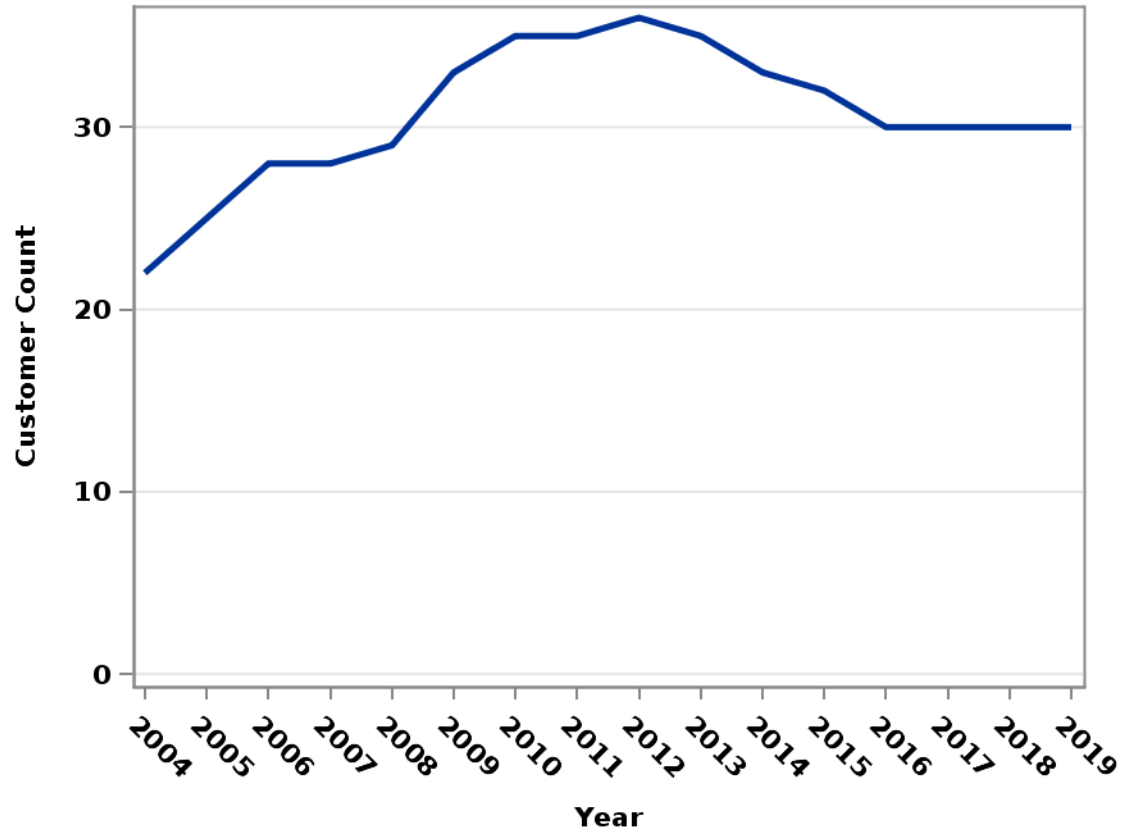


⁶20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

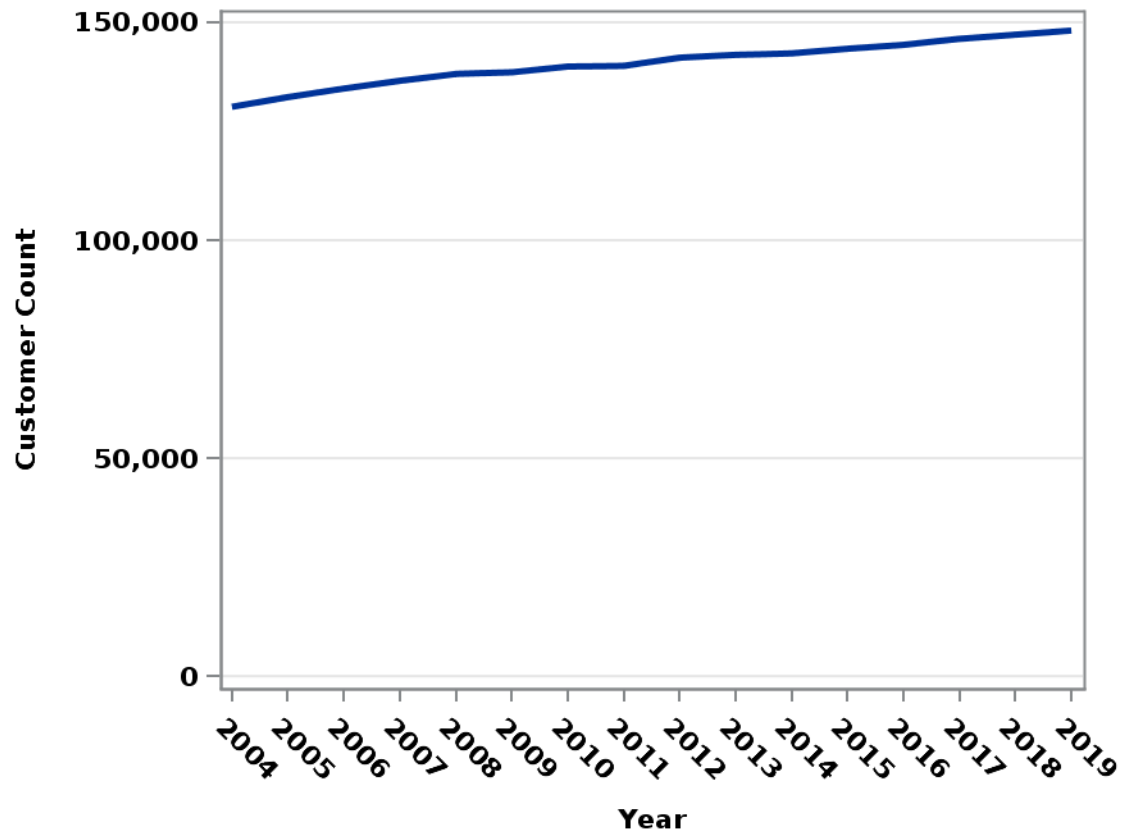
Summer Commercial LGS Billed Customer Counts



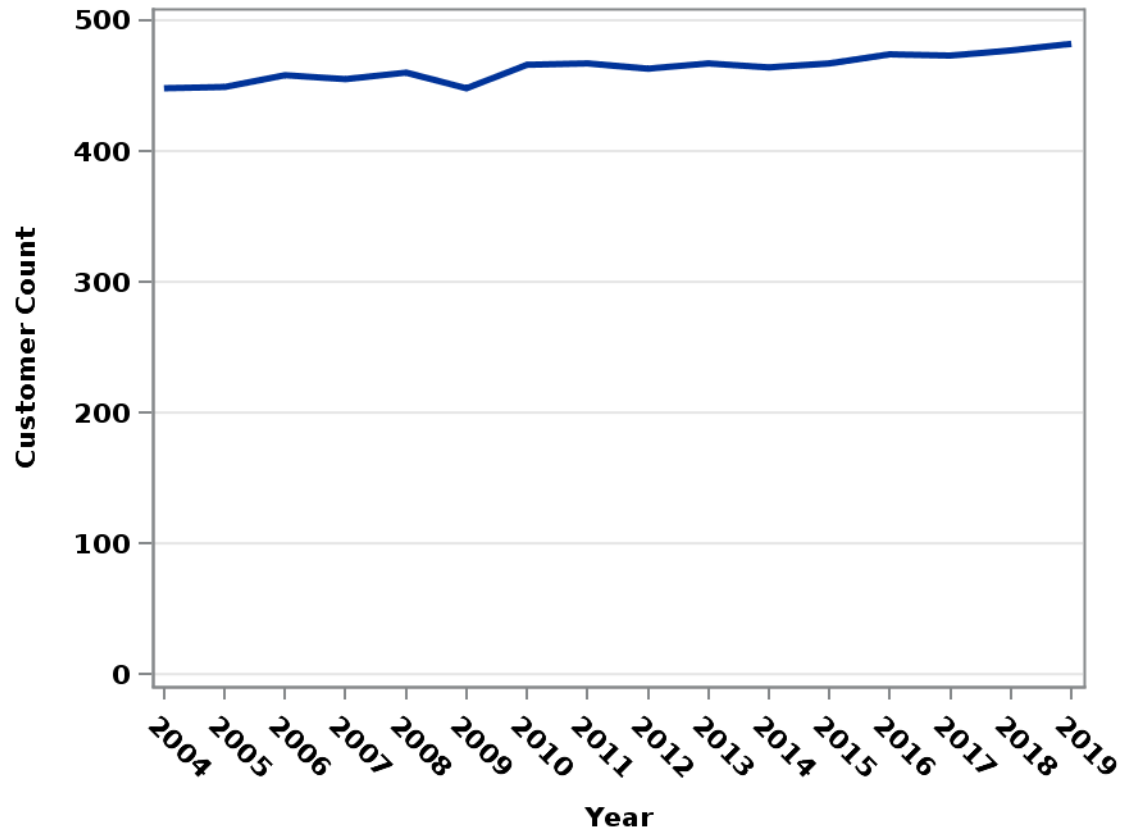
Summer Commercial LPS Billed Customer Counts



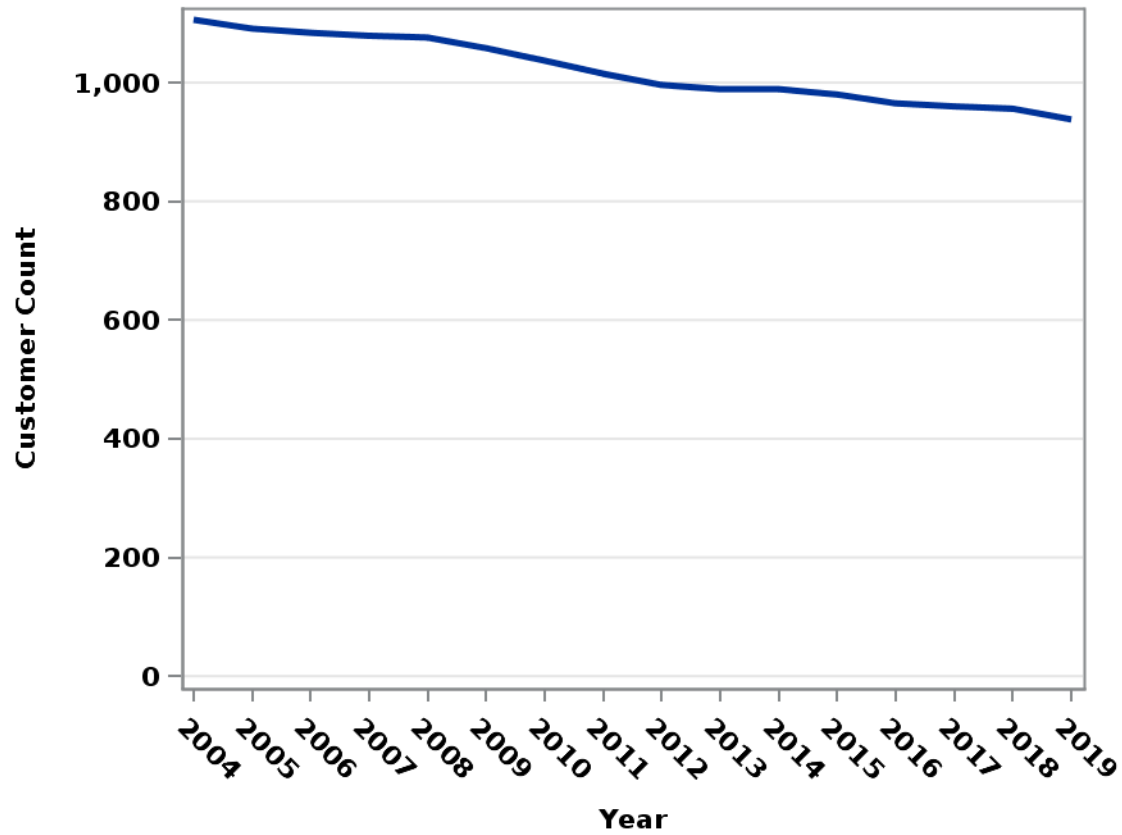
Summer Commercial SGS Billed Customer Counts



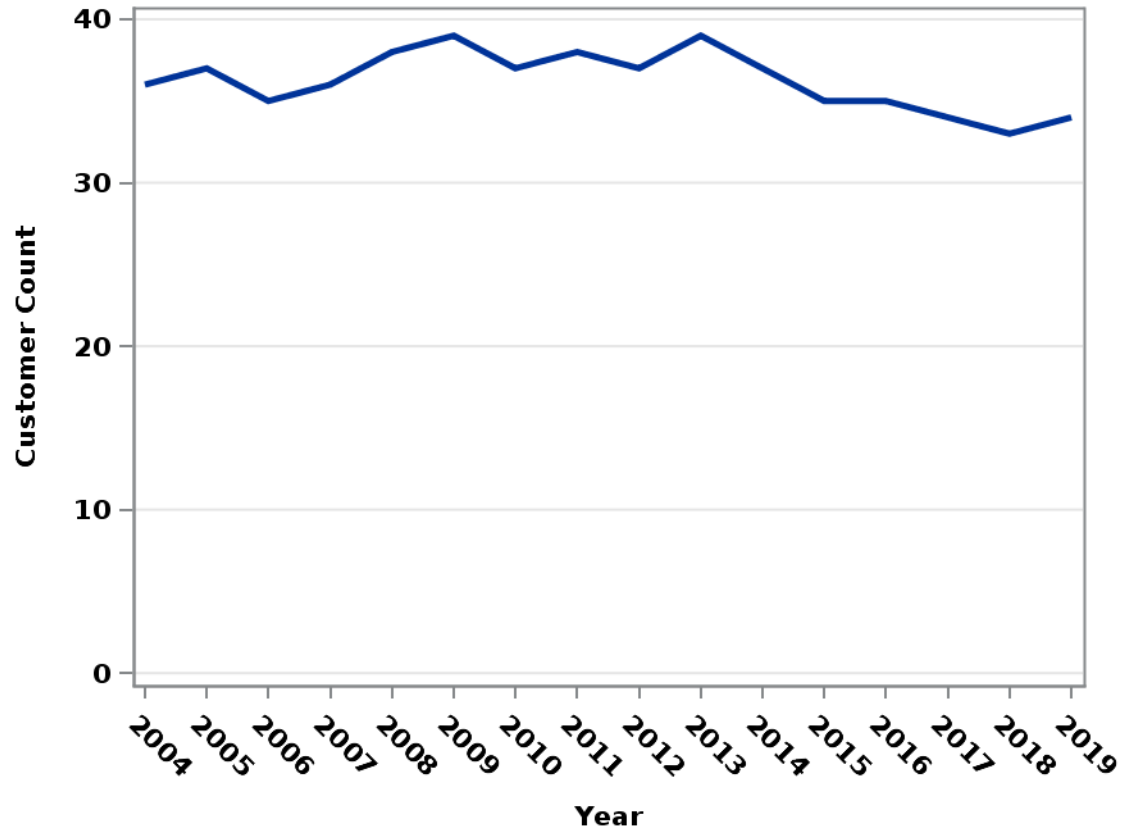
Summer Commercial SPS Billed Customer Counts



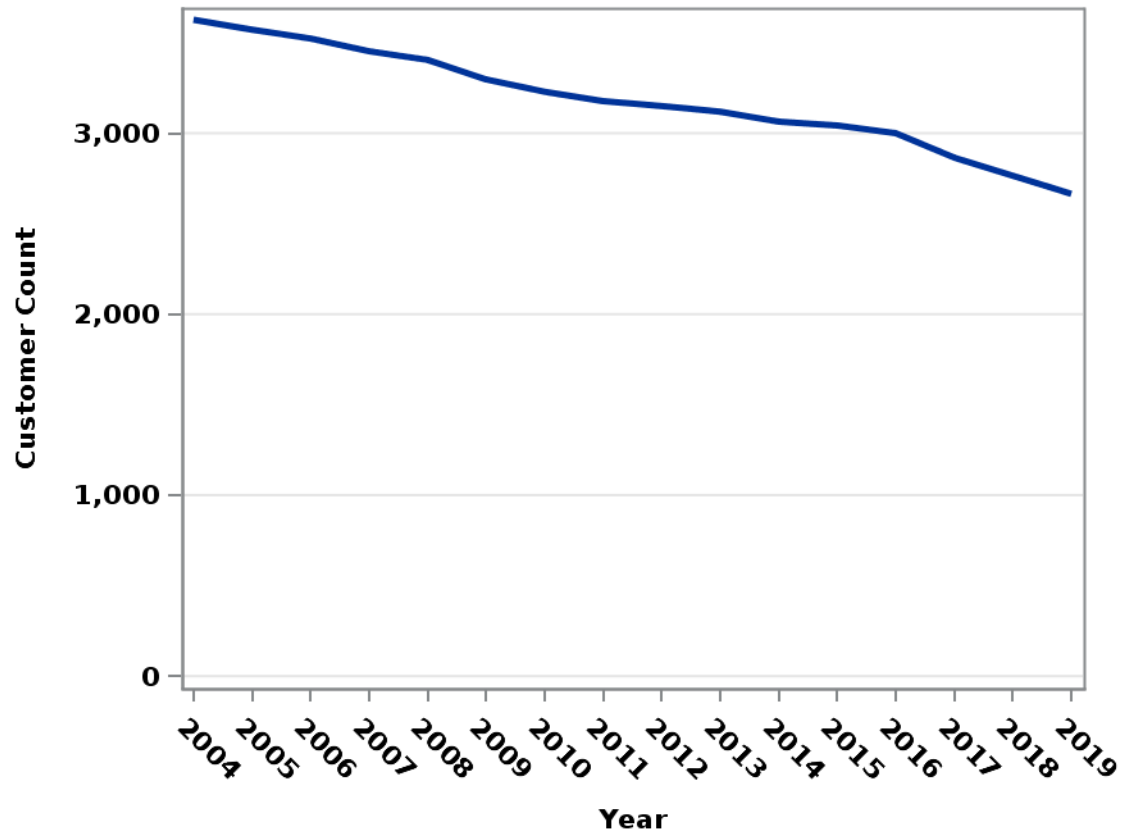
Summer Industrial LGS Billed Customer Counts



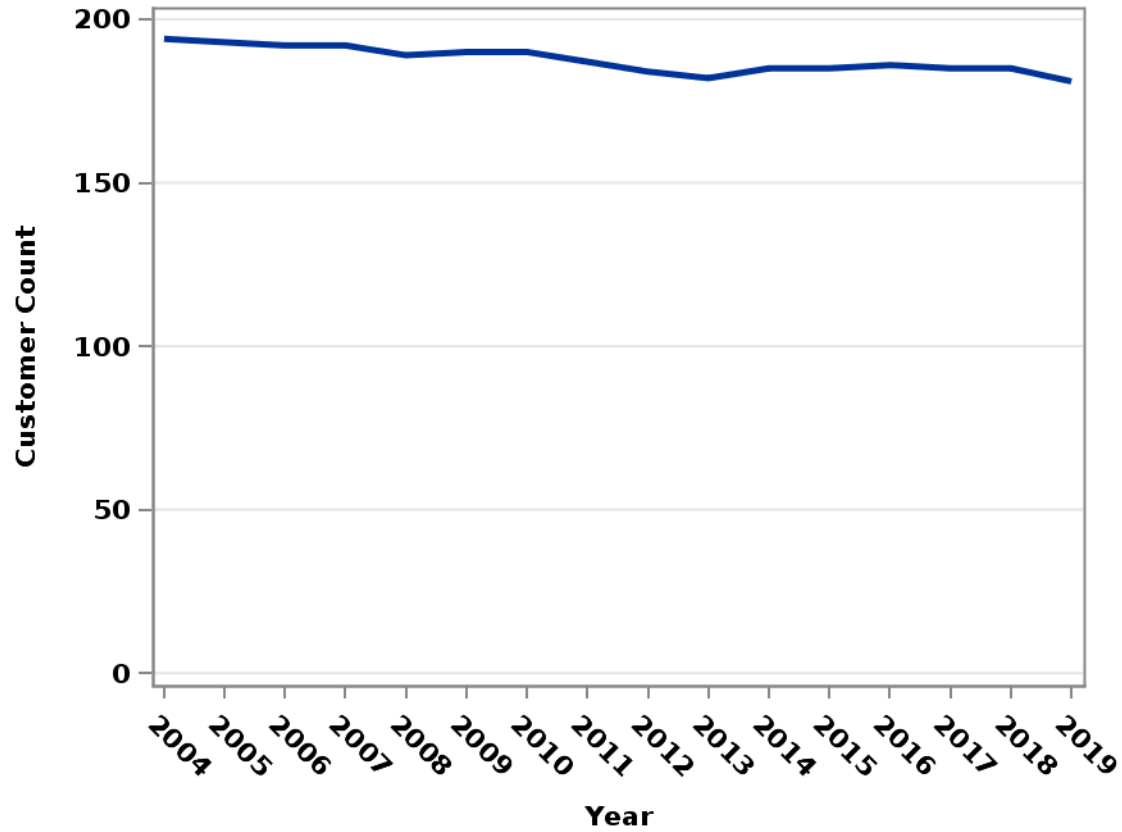
Summer Industrial LPS Billed Customer Counts



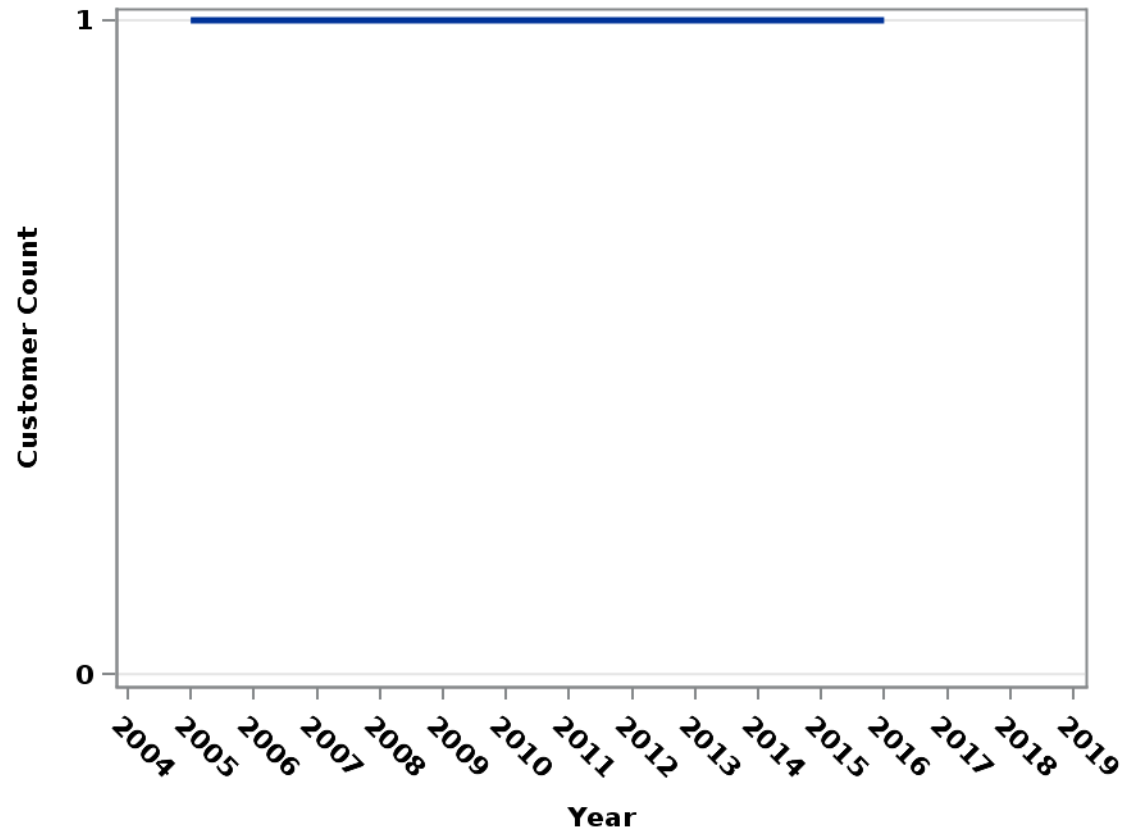
Summer Industrial SGS Billed Customer Counts



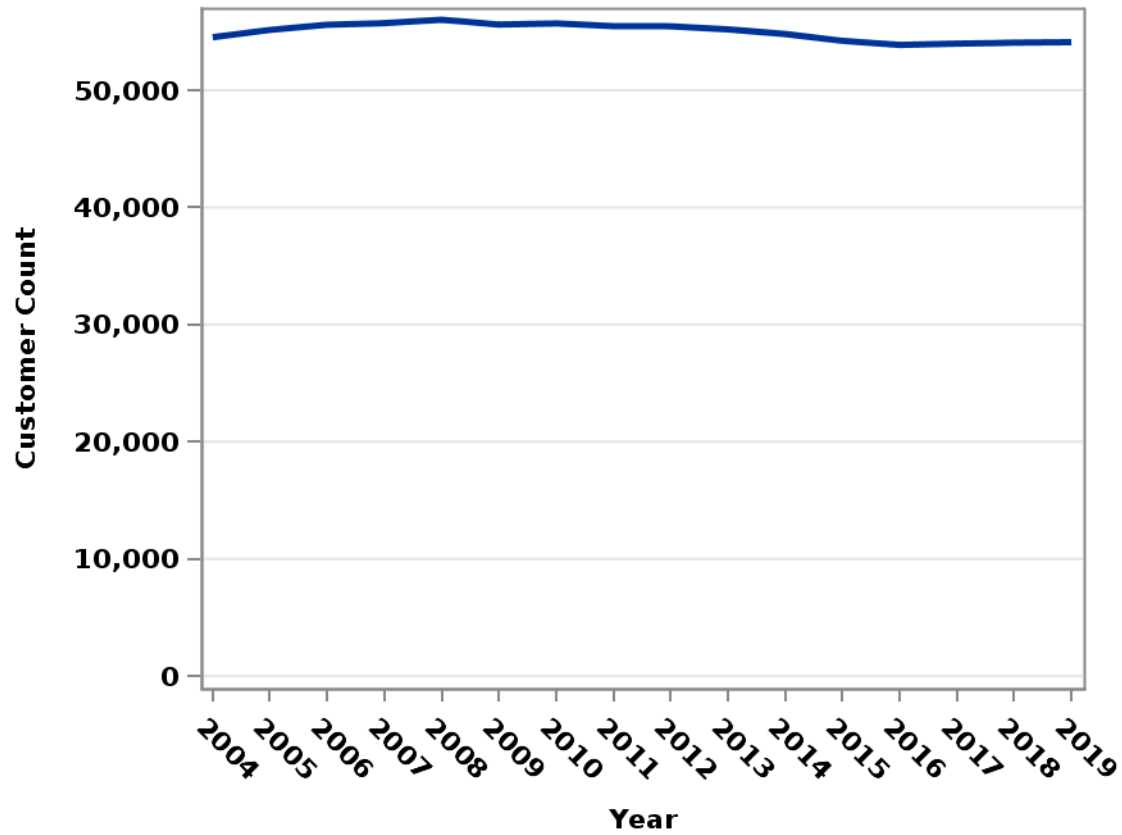
Summer Industrial SPS Billed Customer Counts



Summer Large Transmission Service Billed Customer Counts



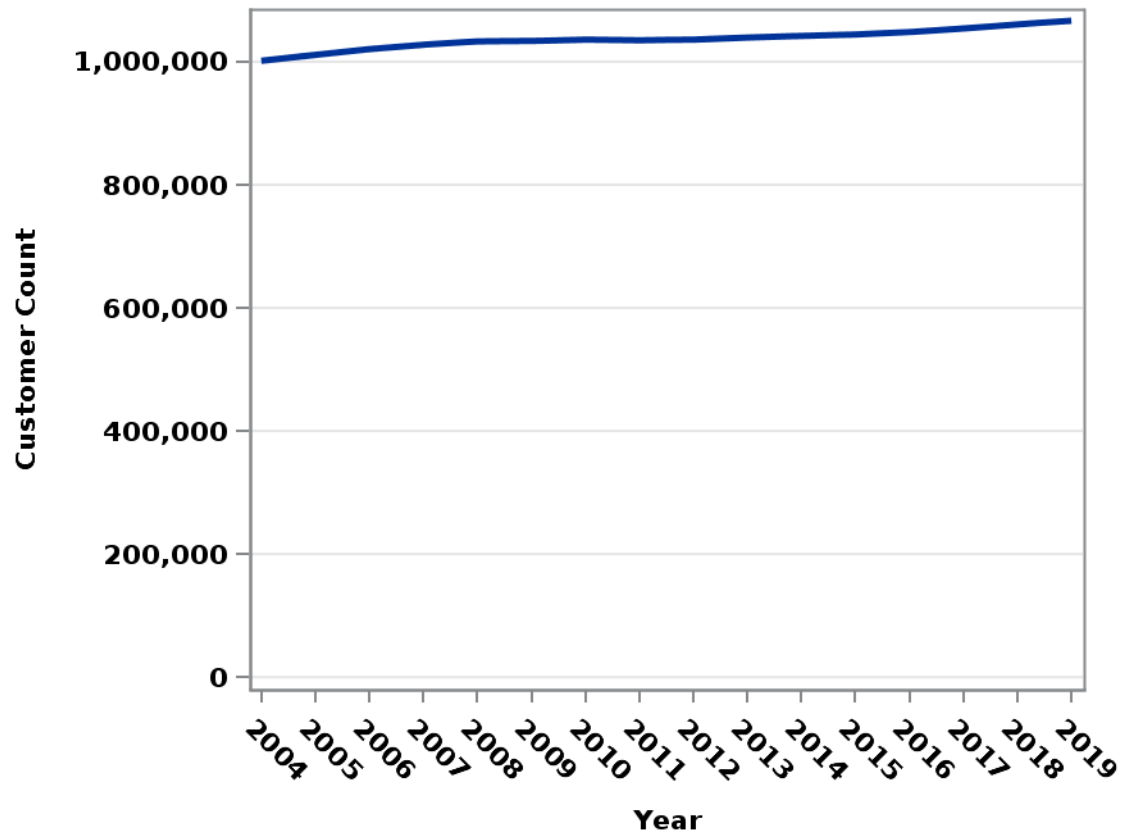
Summer Lighting Billed Customer Counts



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

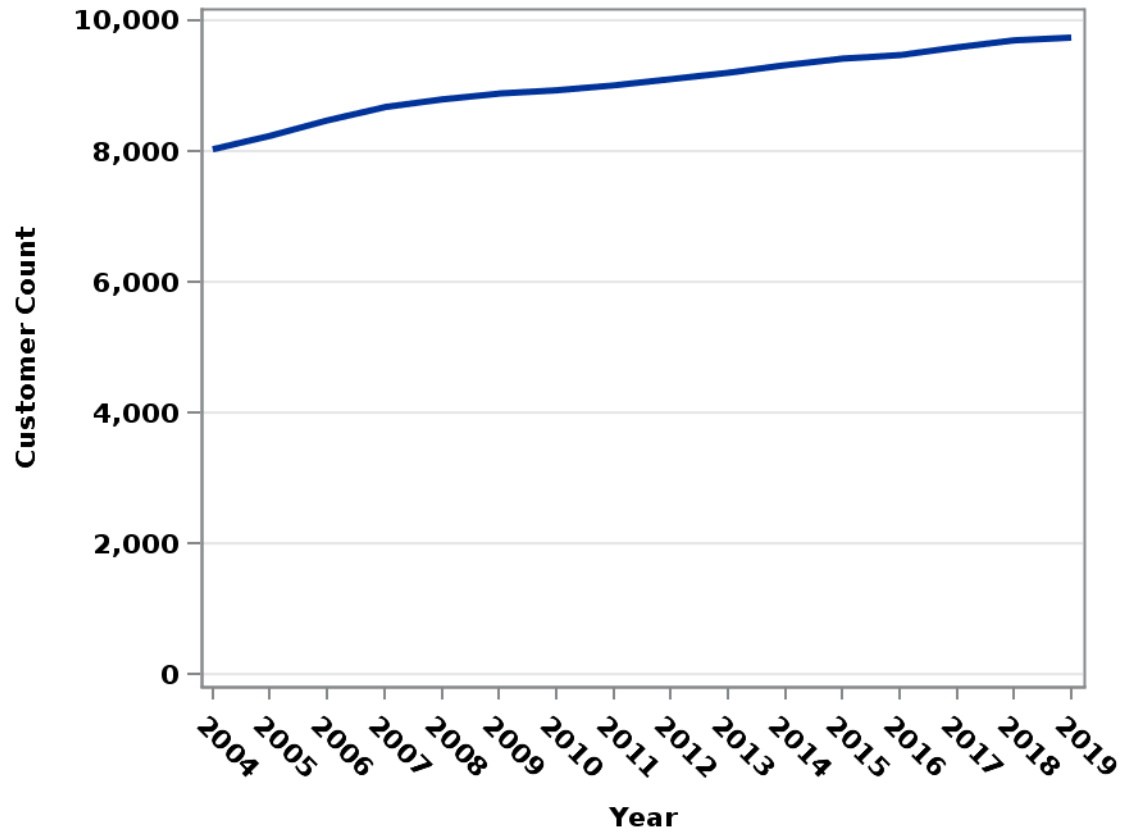
Number of Non-Summer Units (Billed Customer Counts) by Class (2004 - 2019)⁷

Non-Summer Residential Billed Customer Counts

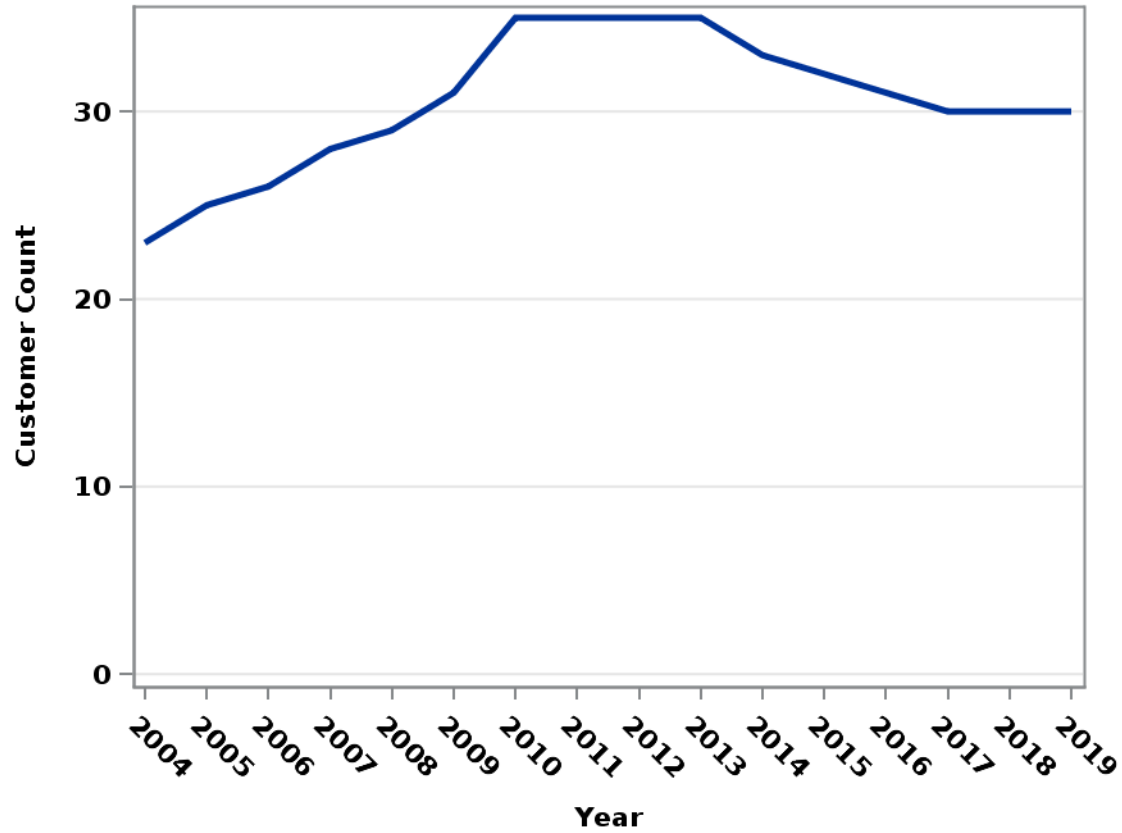


⁷20 CSR 4240-22.030(2)(D)1; 20 CSR 4240-22.030(2)(D)3

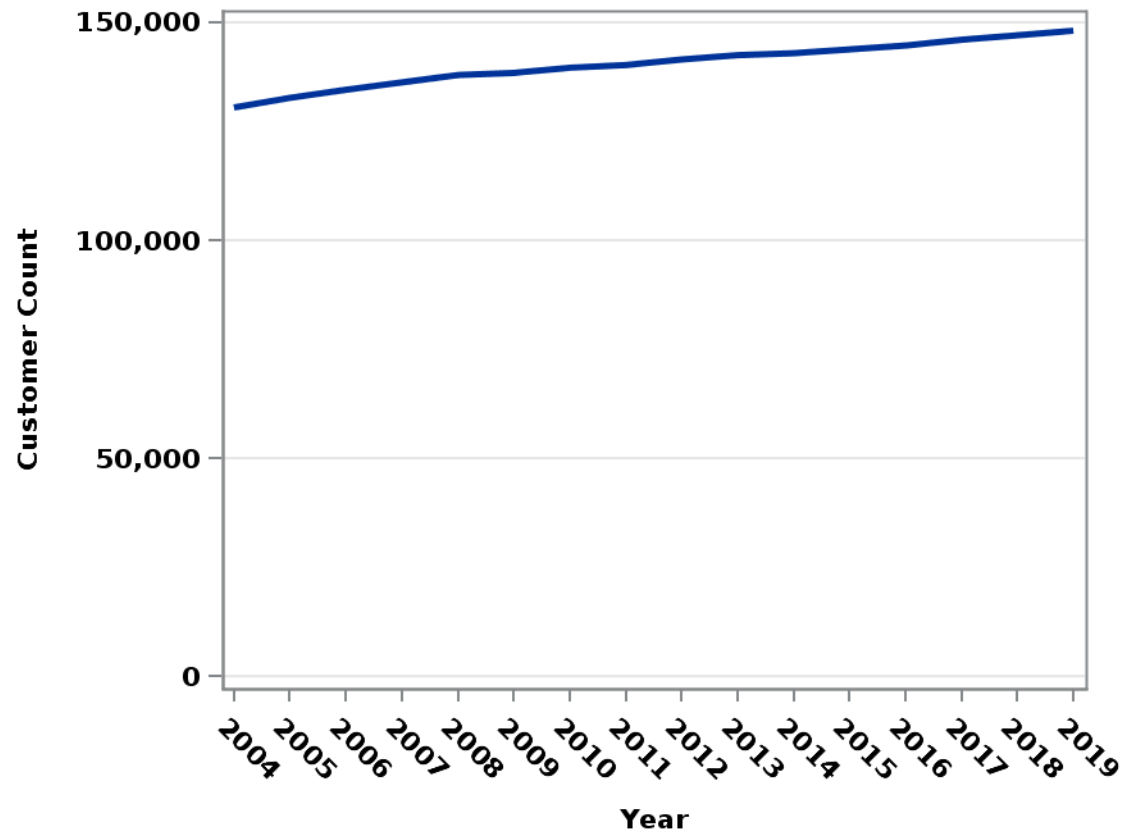
Non-Summer Commercial LGS Billed Customer Counts



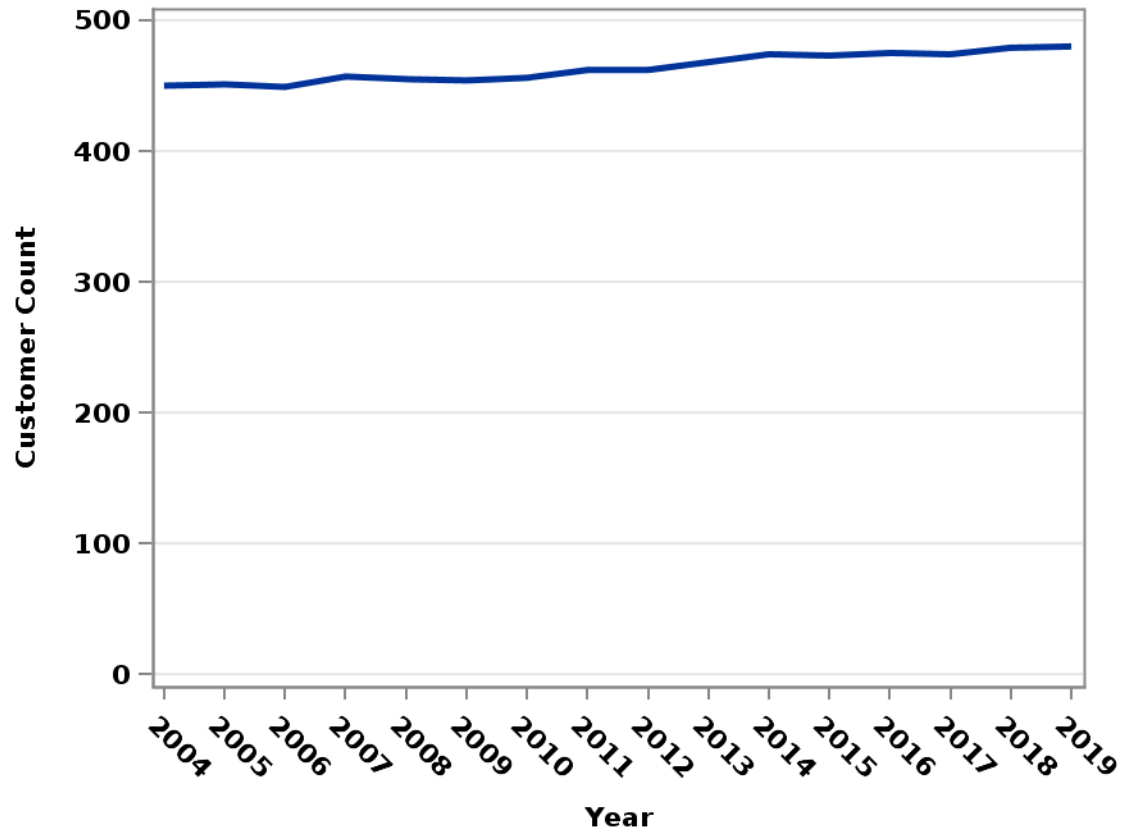
Non-Summer Commercial LPS Billed Customer Counts



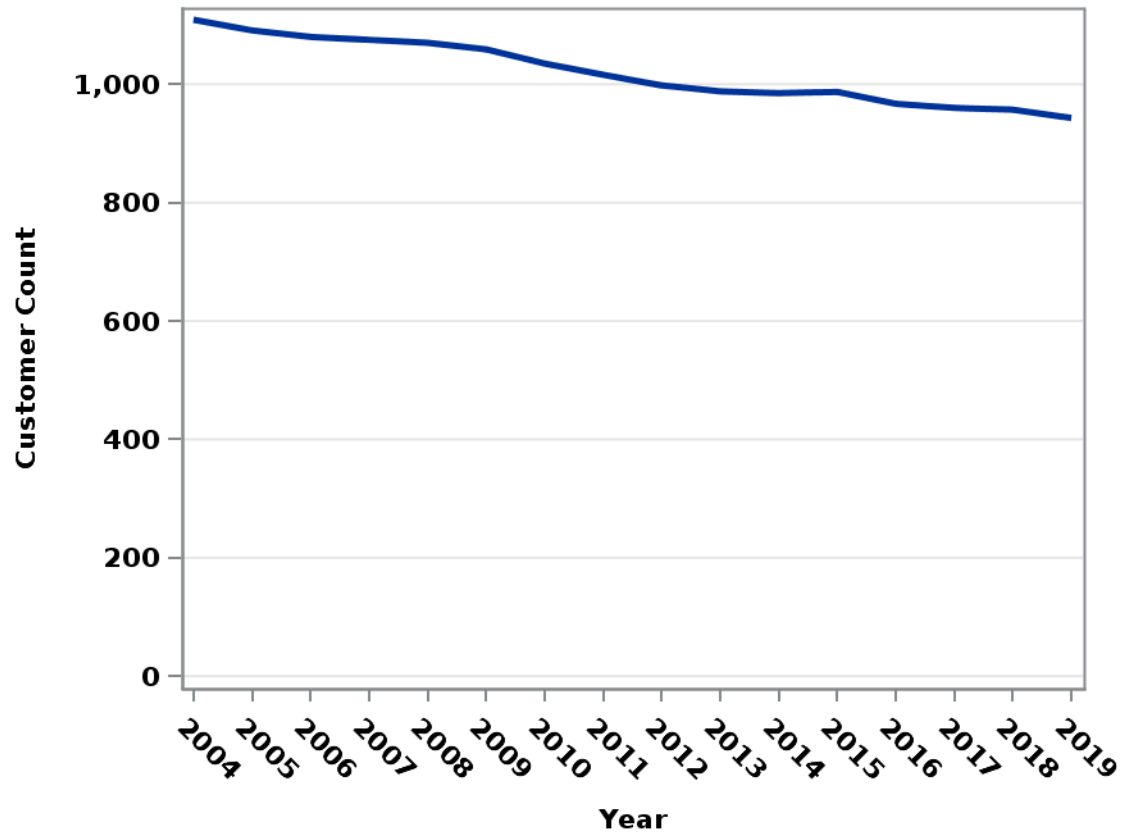
Non-Summer Commercial SGS Billed Customer Counts



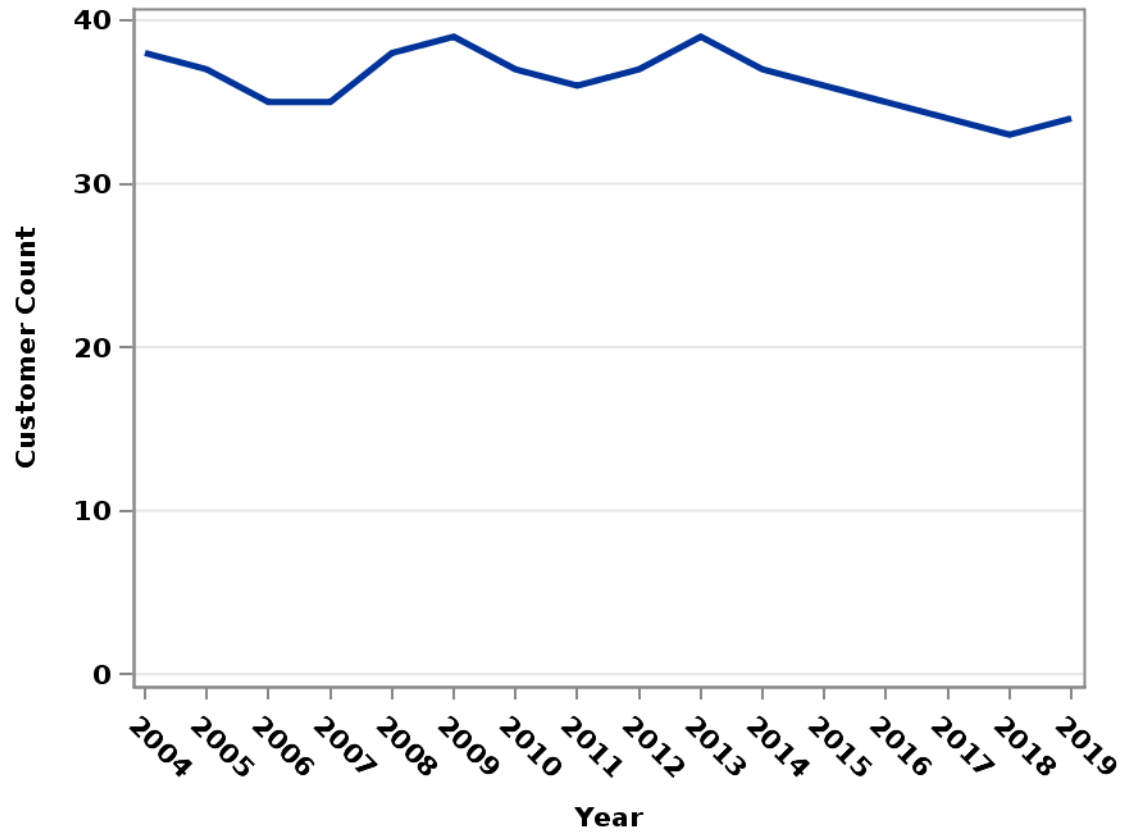
Non-Summer Commercial SPS Billed Customer Counts



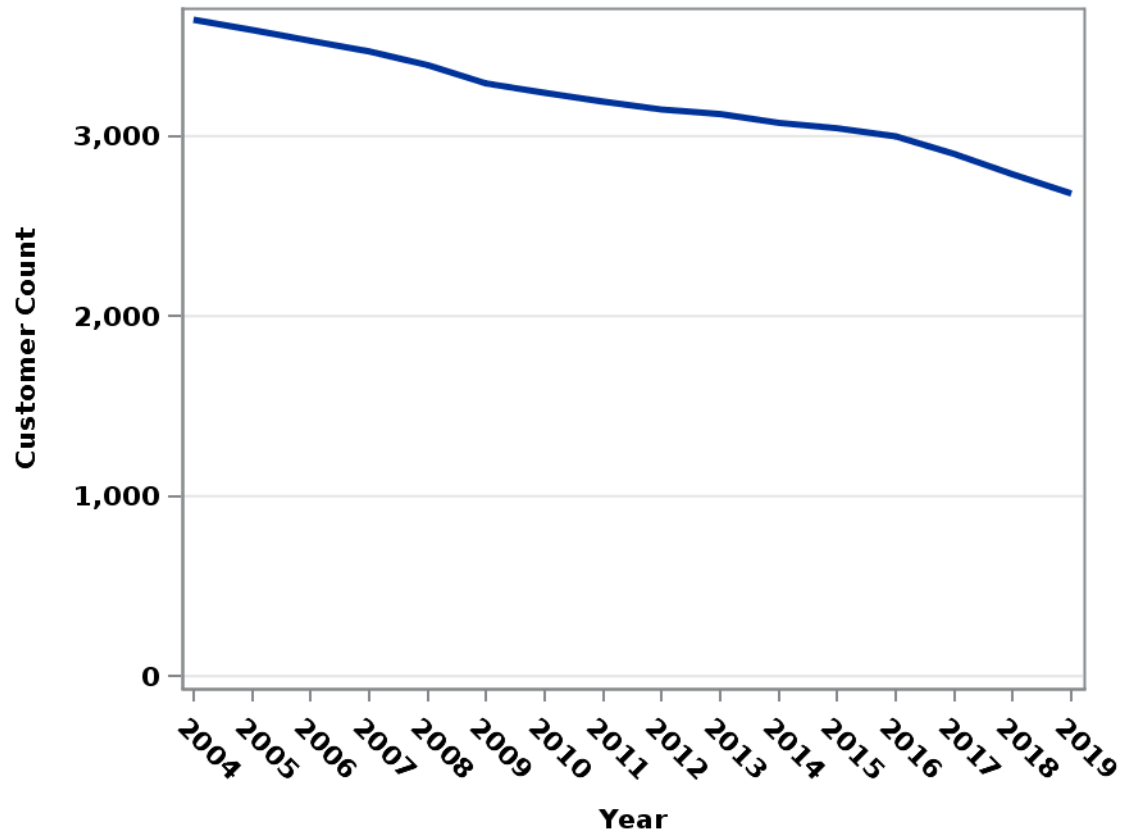
Non-Summer Industrial LGS Billed Customer Counts



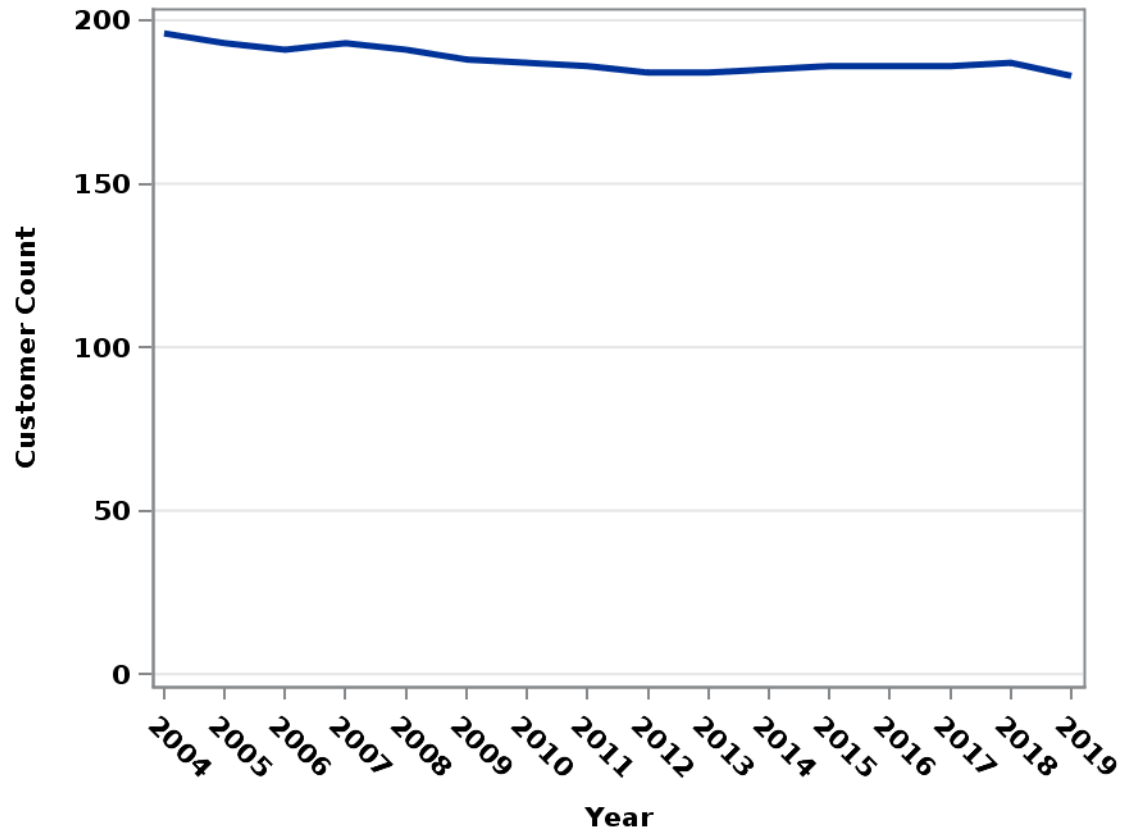
Non-Summer Industrial LPS Billed Customer Counts



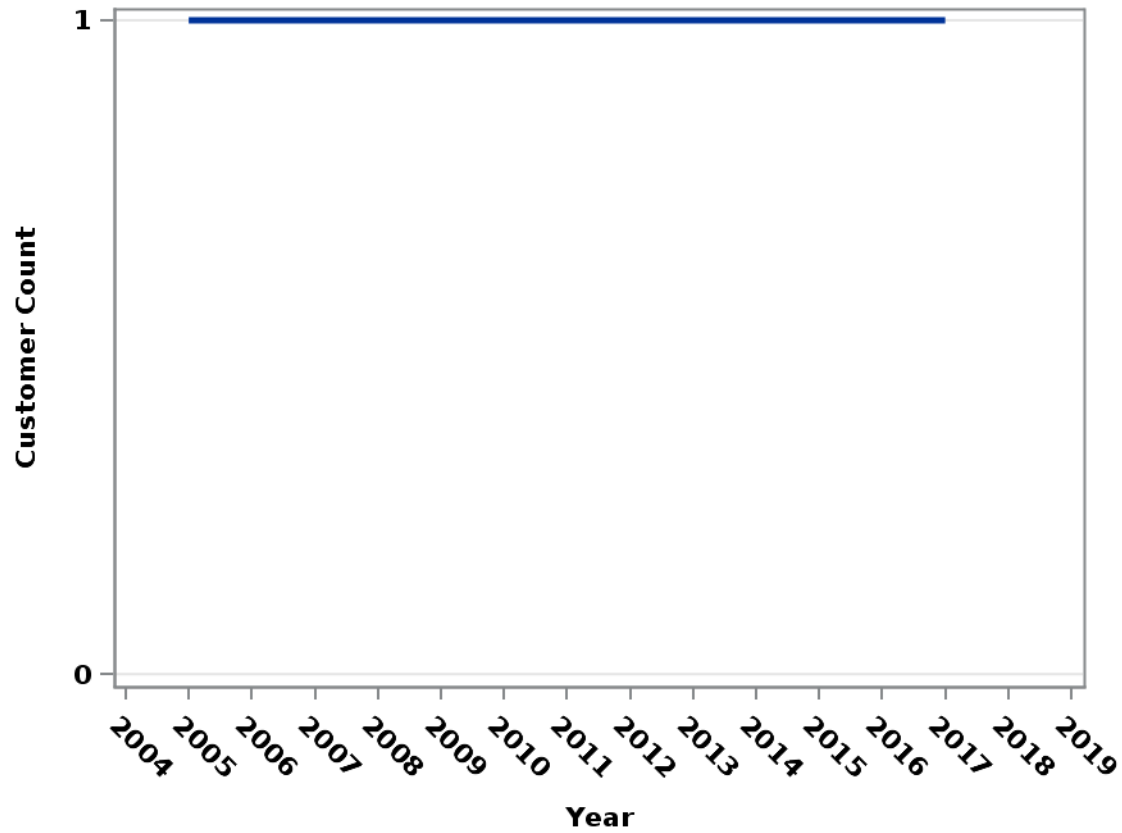
Non-Summer Industrial SGS Billed Customer Counts



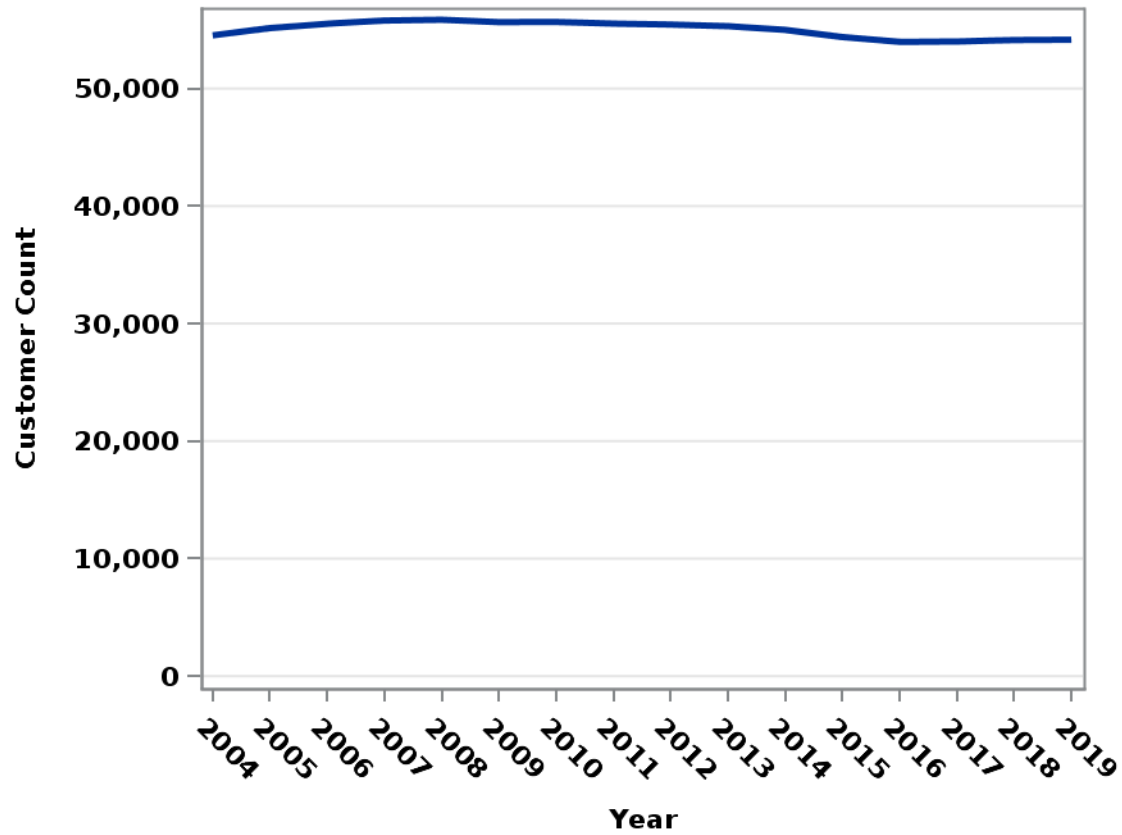
Non-Summer Industrial SPS Billed Customer Counts



Non-Summer Large Transmission Service Billed Customer Counts



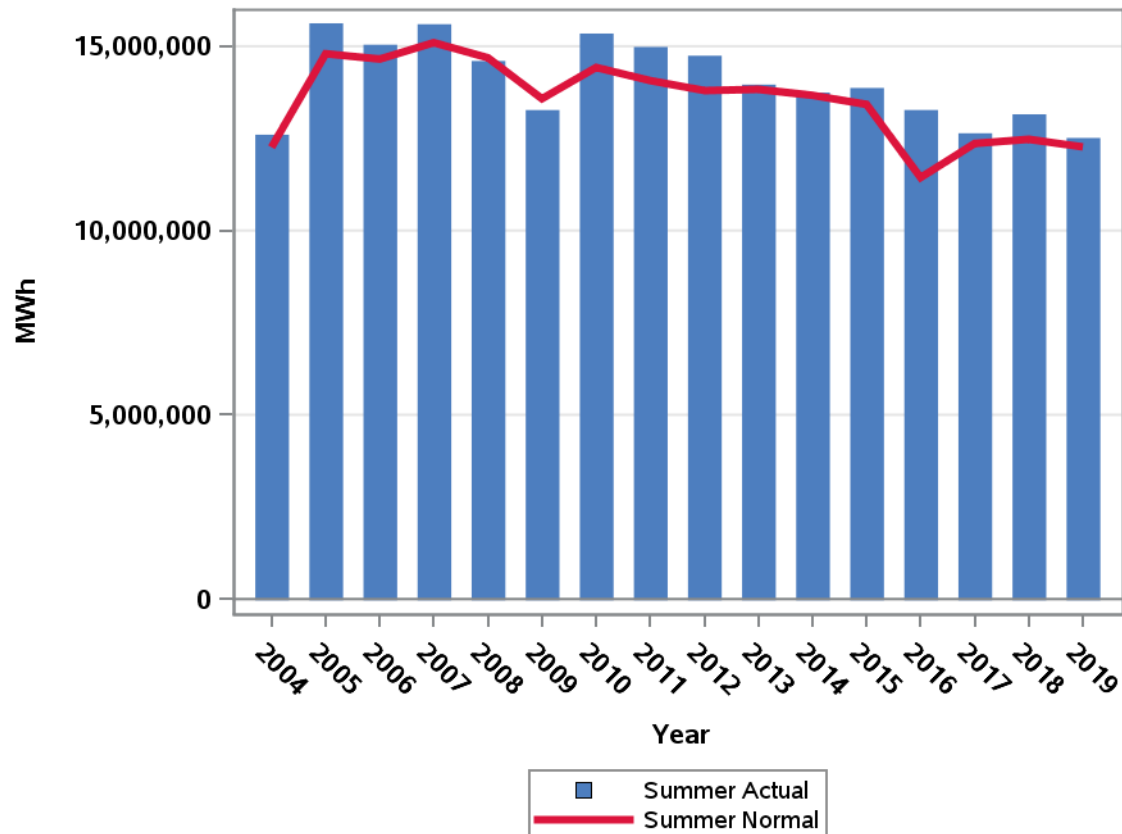
Non-Summer Lighting Billed Customer Counts



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

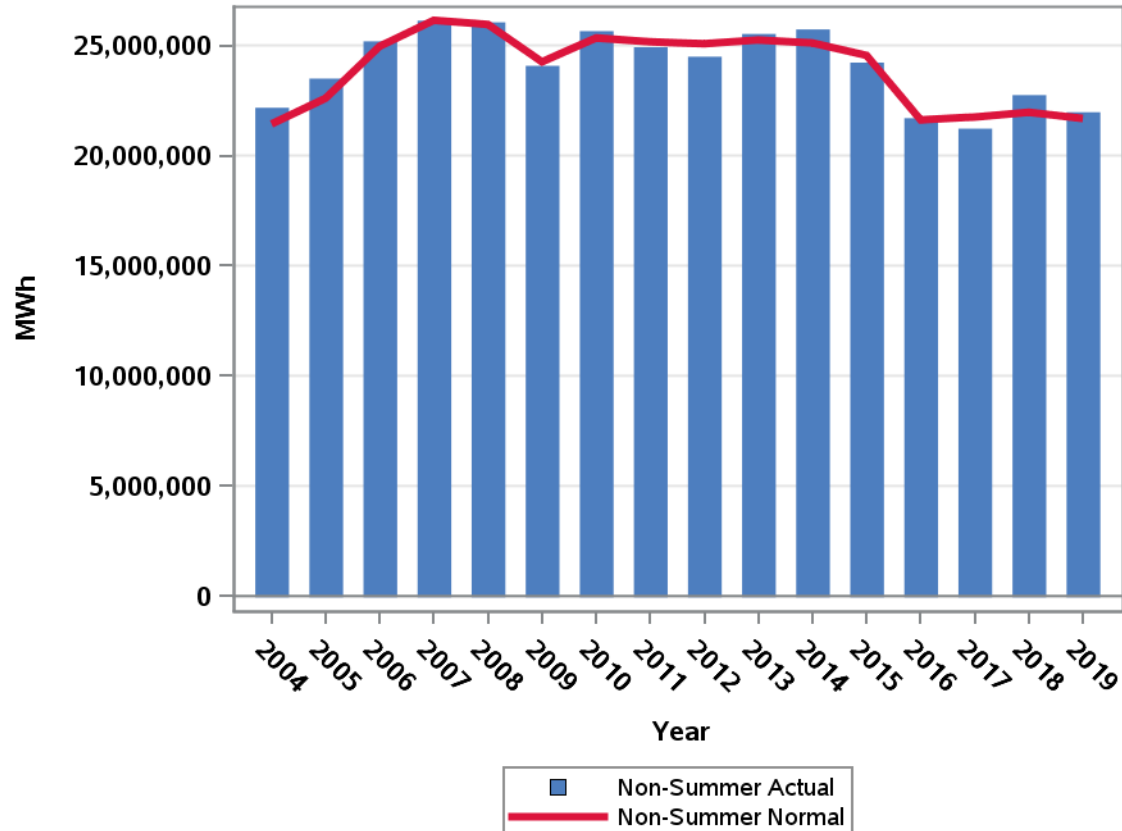
Historical Net System Load (2004 - 2019)⁸

Historical Actual and Weather-Normalized Summer Net System Energy (MWh)



⁸20 CSR 4240-22.030(8)(C)1; 20 CSR 4240-22.030(8)(C)2

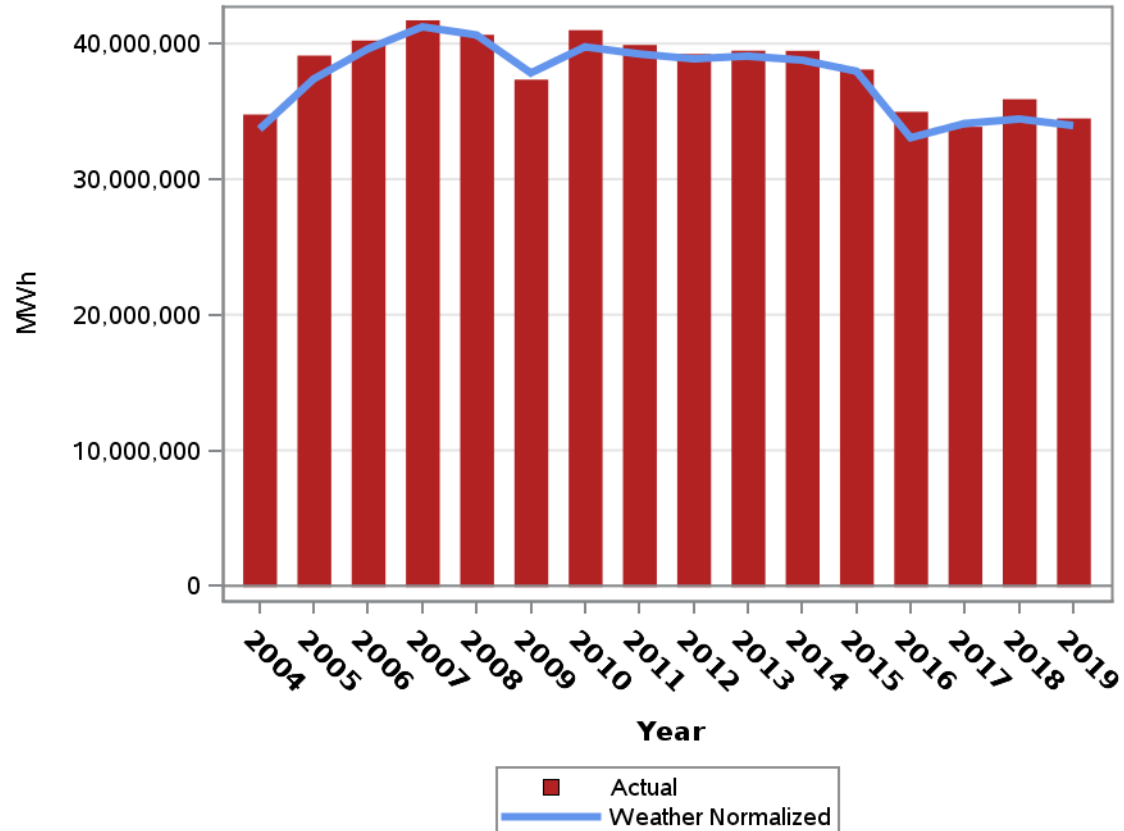
Historical Actual and Weather-Normalized Non-Summer Net System Energy (MWh)



Historical Actual and Weather-Normalized Summer and Non-Summer Net System Energy (MWh)

Year	Summer Actual	Summer Normalized	Non-Summer Actual	Non-Summer Normalized
2004	12,598,825	22,169,097	12,258,670	21,433,308
2005	15,621,885	23,493,231	14,794,314	22,601,168
2006	15,040,807	25,184,569	14,652,429	24,962,452
2007	15,596,739	26,121,358	15,096,543	26,139,707
2008	14,599,723	26,047,180	14,685,282	25,952,651
2009	13,267,862	24,072,791	13,576,591	24,254,530
2010	15,343,740	25,647,150	14,424,364	25,338,841
2011	14,979,884	24,918,726	14,067,996	25,162,538
2012	14,742,258	24,486,894	13,797,594	25,076,398
2013	13,958,150	25,519,482	13,829,107	25,247,442
2014	13,742,424	25,724,524	13,668,867	25,110,497
2015	13,867,568	24,218,810	13,421,499	24,545,965
2016	13,269,202	21,696,015	11,436,458	21,618,340
2017	12,638,209	21,220,234	12,362,142	21,748,896
2018	13,153,052	22,743,251	12,475,559	21,965,948
2019	12,510,930	21,965,950	12,268,529	21,680,748

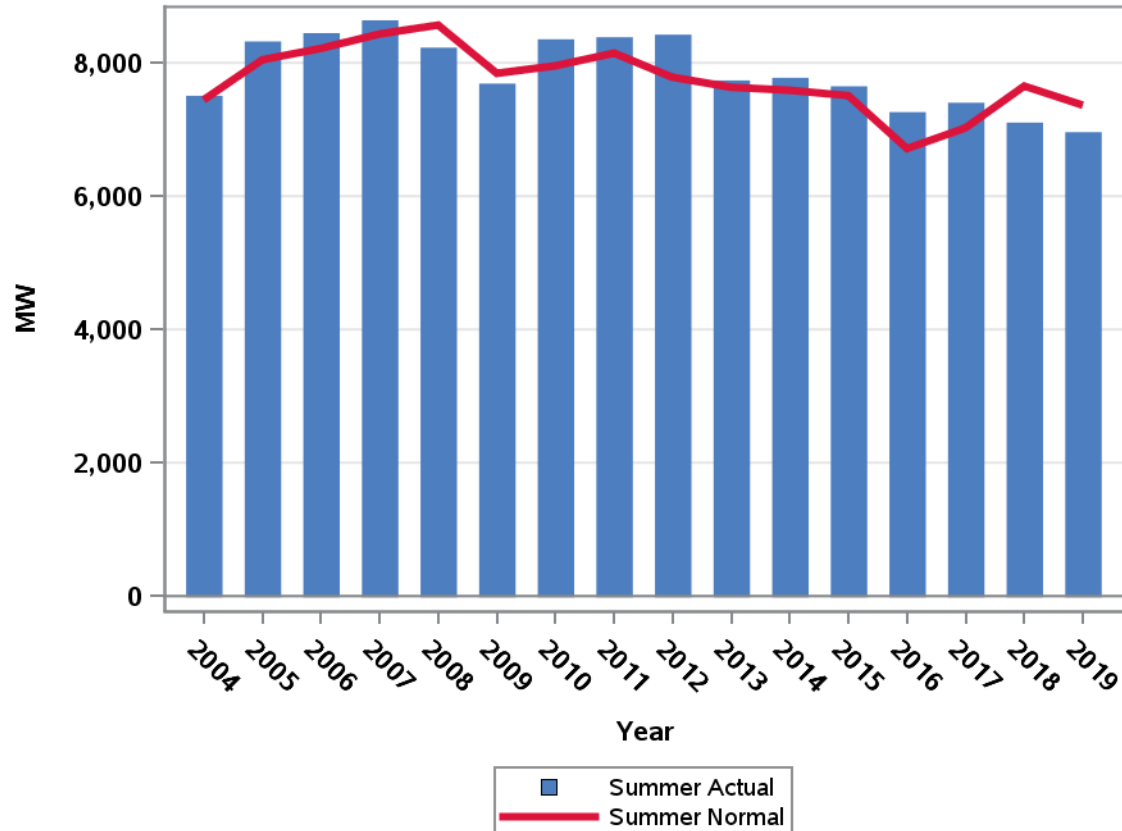
Annual Actual and Weather-Normalized Net System Energy (MWh)



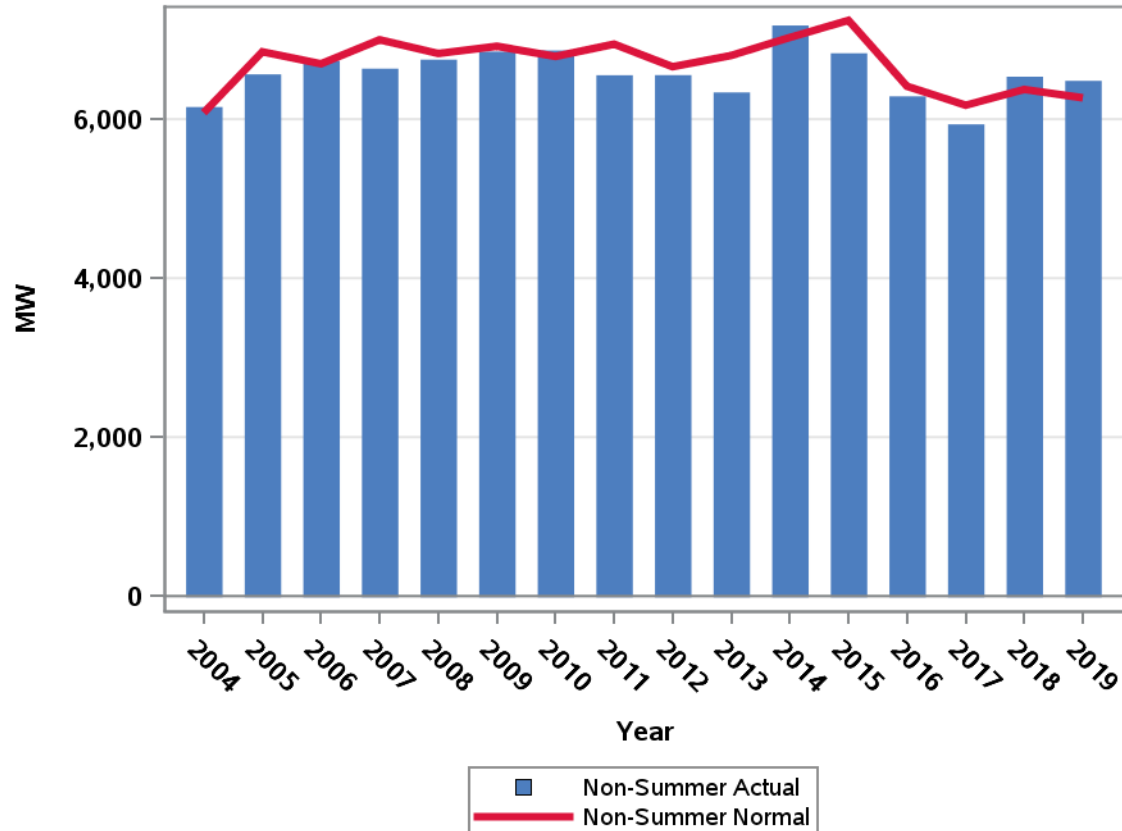
Annual Actual and Weather-Normalized Net System Energy (MWh)

Year	Actual	Weather Normalized
2004	34,767,922	33,691,979
2005	39,115,116	37,395,483
2006	40,225,376	39,614,881
2007	41,718,097	41,236,249
2008	40,646,903	40,637,933
2009	37,340,653	37,831,121
2010	40,990,889	39,763,206
2011	39,898,609	39,230,534
2012	39,229,152	38,873,992
2013	39,477,632	39,076,549
2014	39,466,949	38,779,364
2015	38,086,378	37,967,464
2016	34,965,217	33,054,798
2017	33,858,443	34,111,038
2018	35,896,302	34,441,507
2019	34,476,880	33,949,276

Historical Actual and Weather-Normalized Summer System Peak Demand (MW)



Historical Actual and Weather-Normalized Non-Summer System Peak Demand (MW)

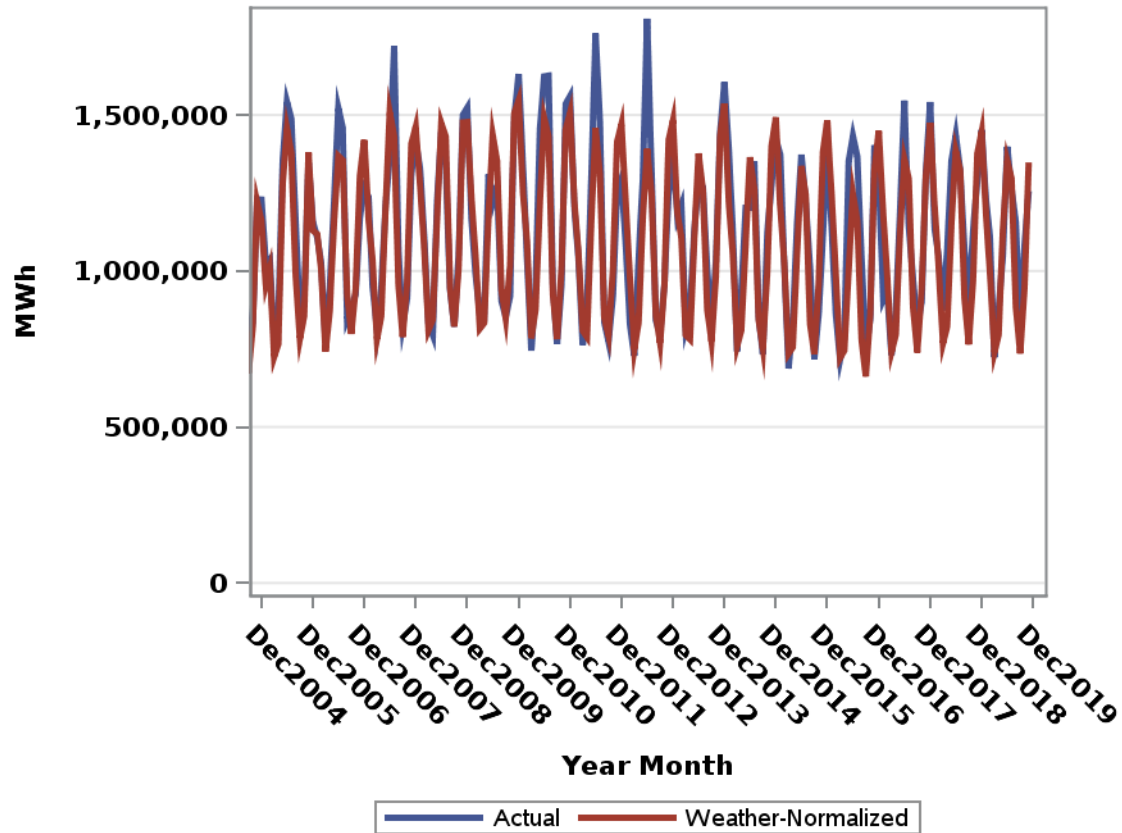


Historical Actual and Weather-Normalized Summer and Non-Summer System Peak Demand (MW)

Year	Summer Actual	Summer Normalized	Non-Summer Actual	Non-Summer Normalized
2004	7,506	6,153	7,445	6,081
2005	8,321	6,564	8,046	6,848
2006	8,446	6,734	8,217	6,697
2007	8,638	6,635	8,433	6,998
2008	8,228	6,749	8,567	6,827
2009	7,688	6,850	7,843	6,917
2010	8,353	6,864	7,956	6,790
2011	8,384	6,553	8,146	6,944
2012	8,423	6,554	7,783	6,660
2013	7,736	6,336	7,633	6,802
2014	7,775	7,178	7,588	7,028
2015	7,648	6,829	7,507	7,244
2016	7,261	6,287	6,714	6,414
2017	7,401	5,935	7,026	6,176
2018	7,103	6,534	7,651	6,374
2019	6,960	6,482	7,365	6,269

Historical Actual and Weather-Normalized Energy Usage by Classes for All Months (2004 - 2019*)⁹

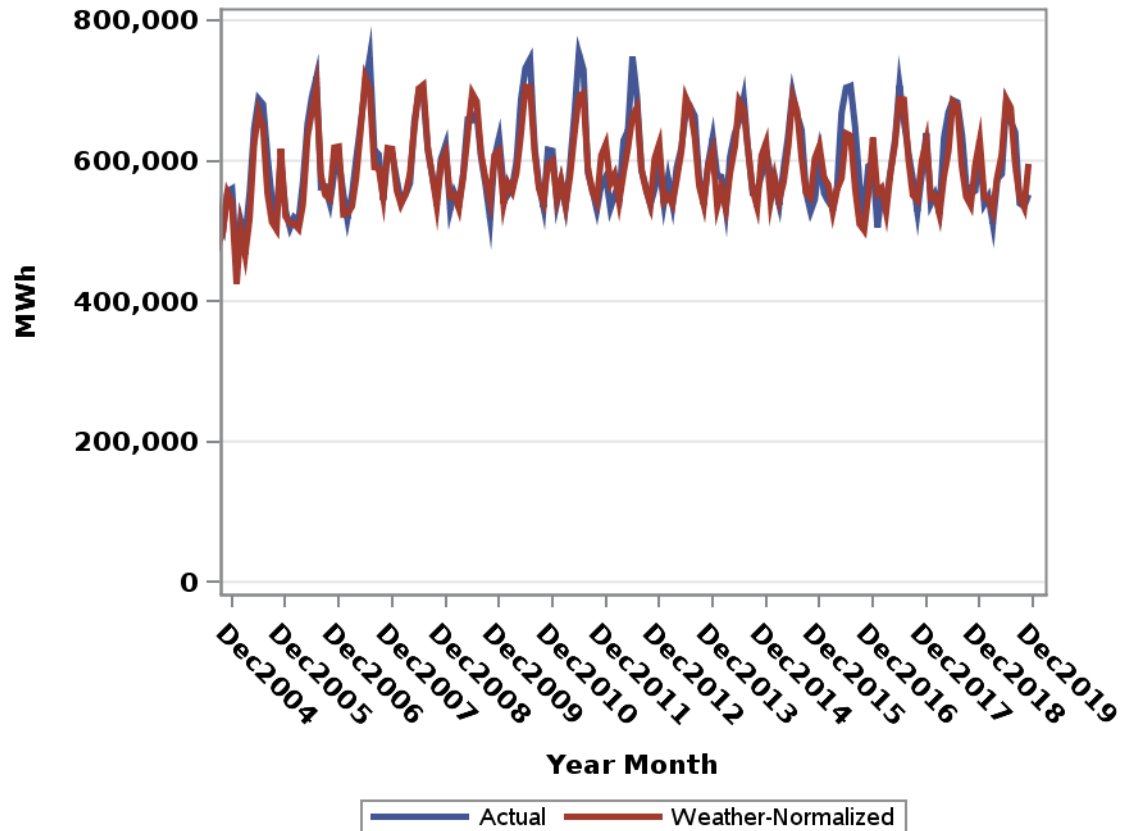
Residential Actual and Weather Normalized Monthly Sales (MWh)



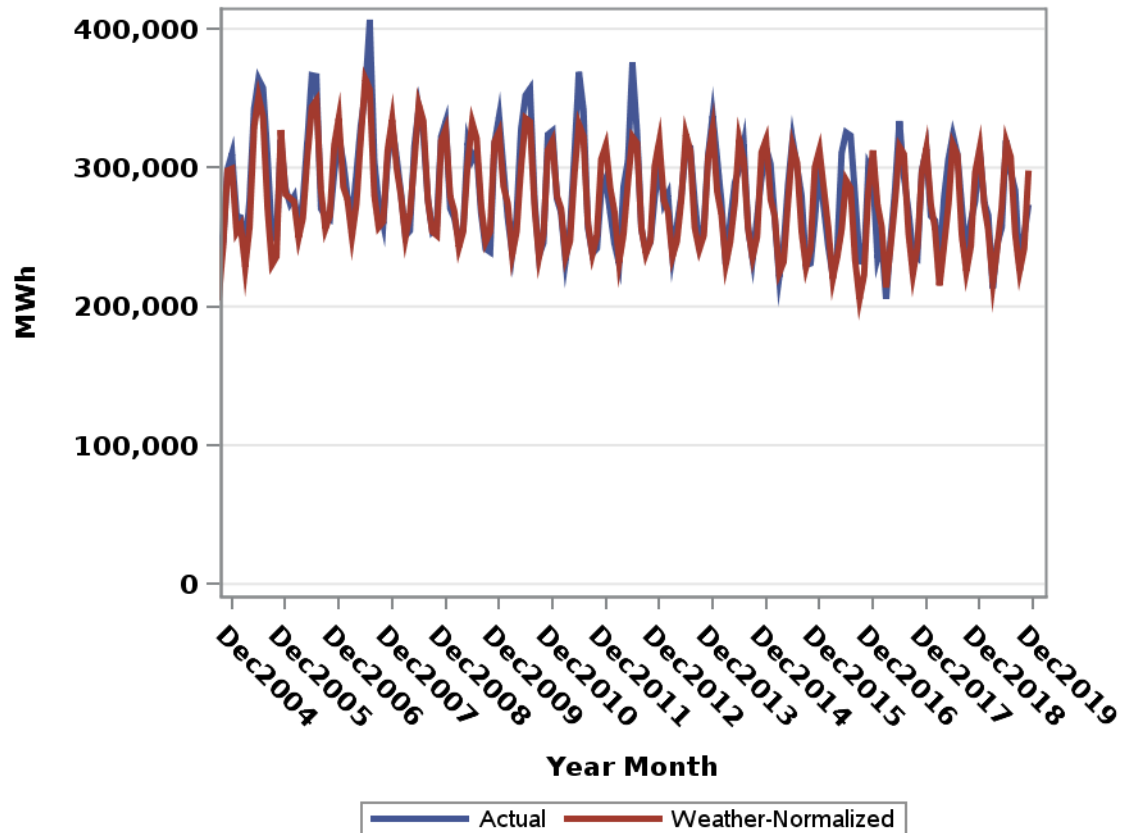
⁹20 CSR 4240-22.030(7)(A)6

*Usage and Customer Count for 2019 are through November

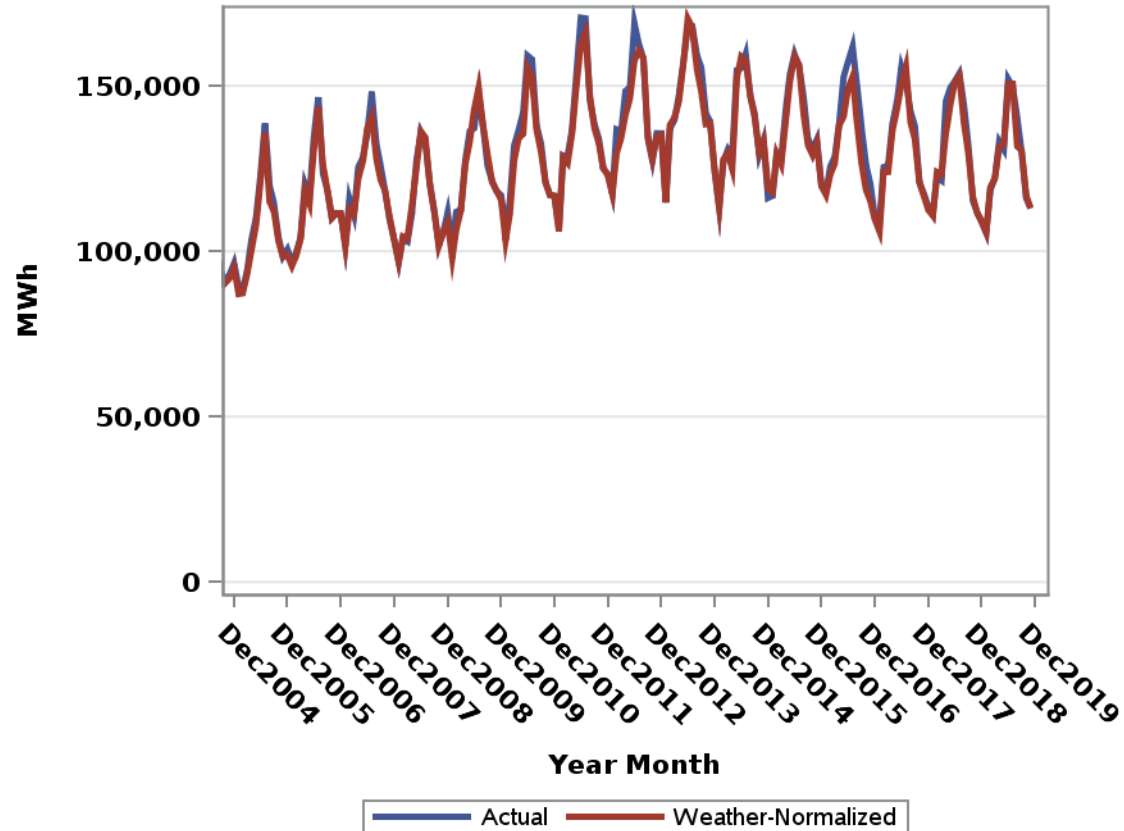
Commercial LGS Actual and Weather Normalized Monthly Sales (MWh)



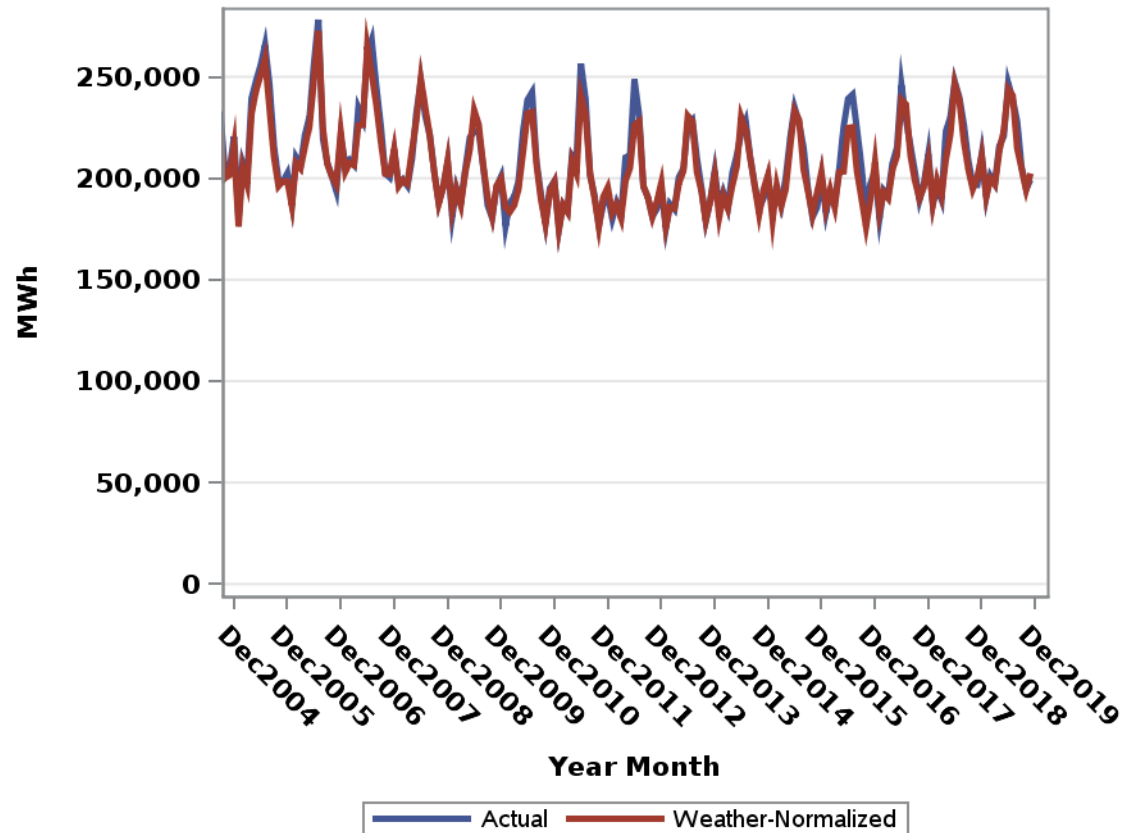
Commercial SGS Actual and Weather Normalized Monthly Sales (MWh)



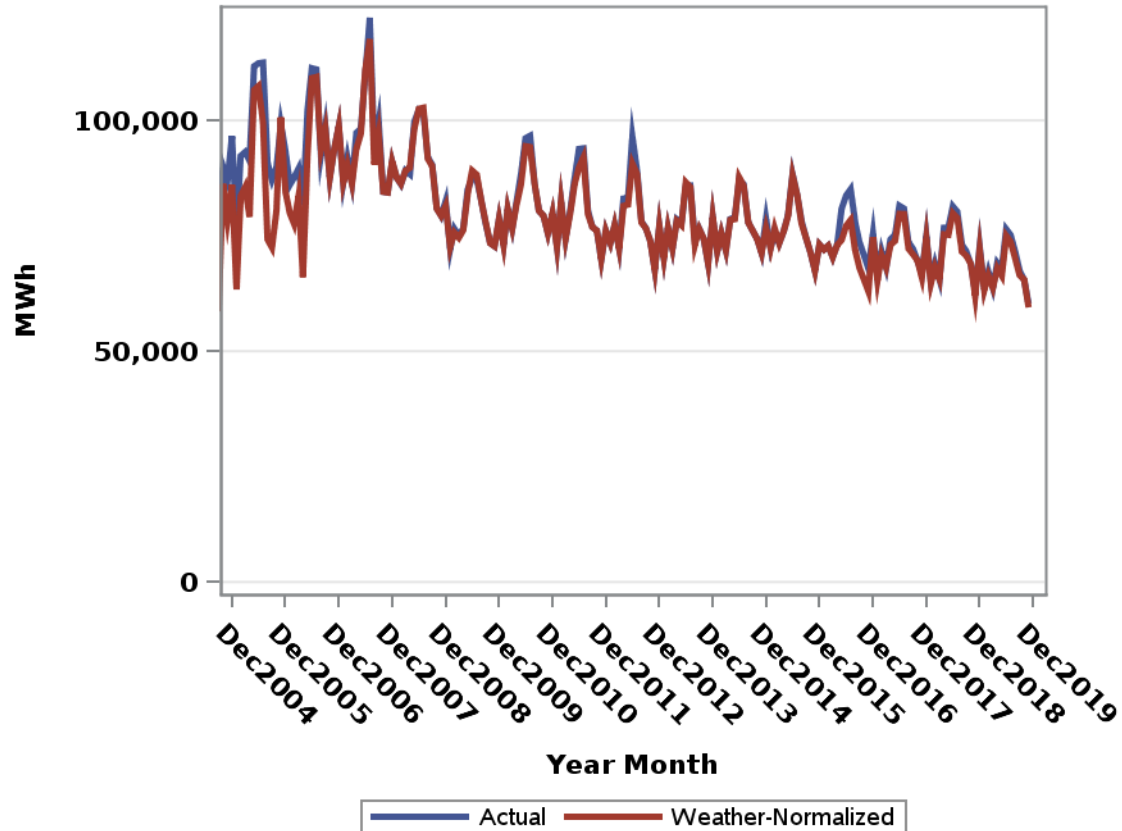
Commercial LPS Actual and Weather Normalized Monthly Sales (MWh)



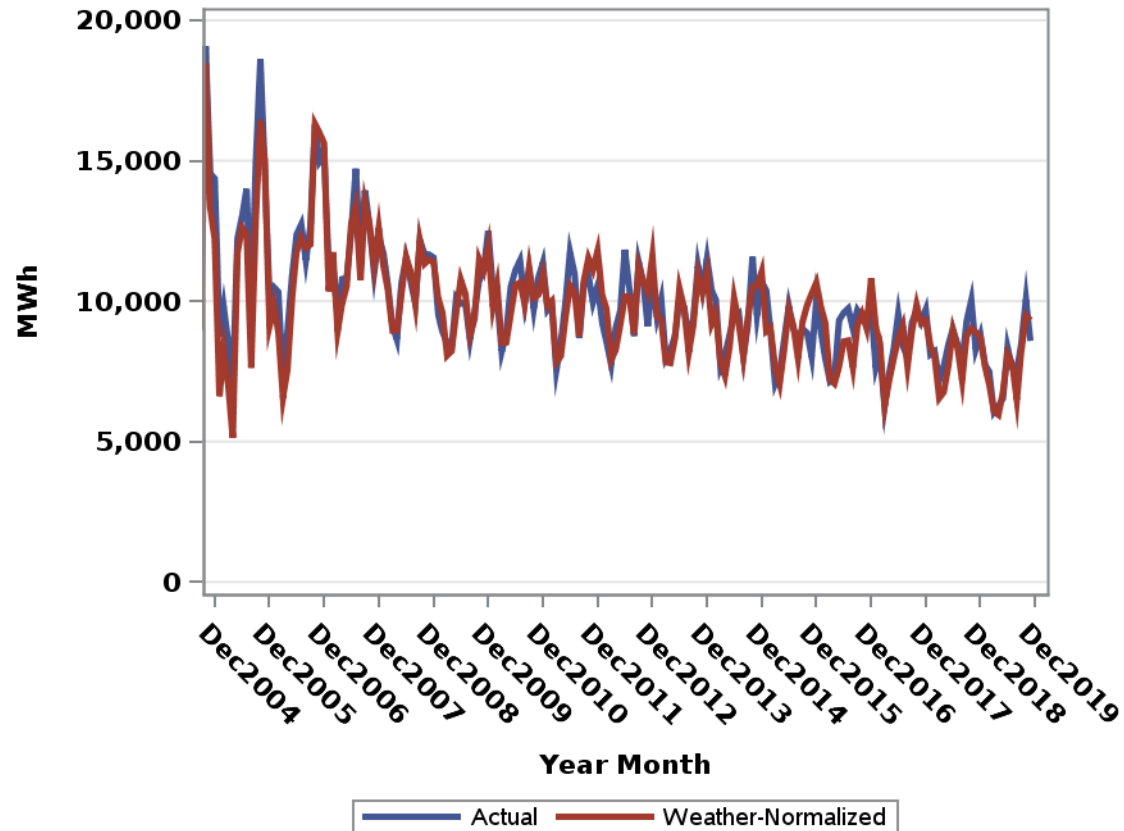
Commercial SPS Actual and Weather Normalized Monthly Sales (MWh)



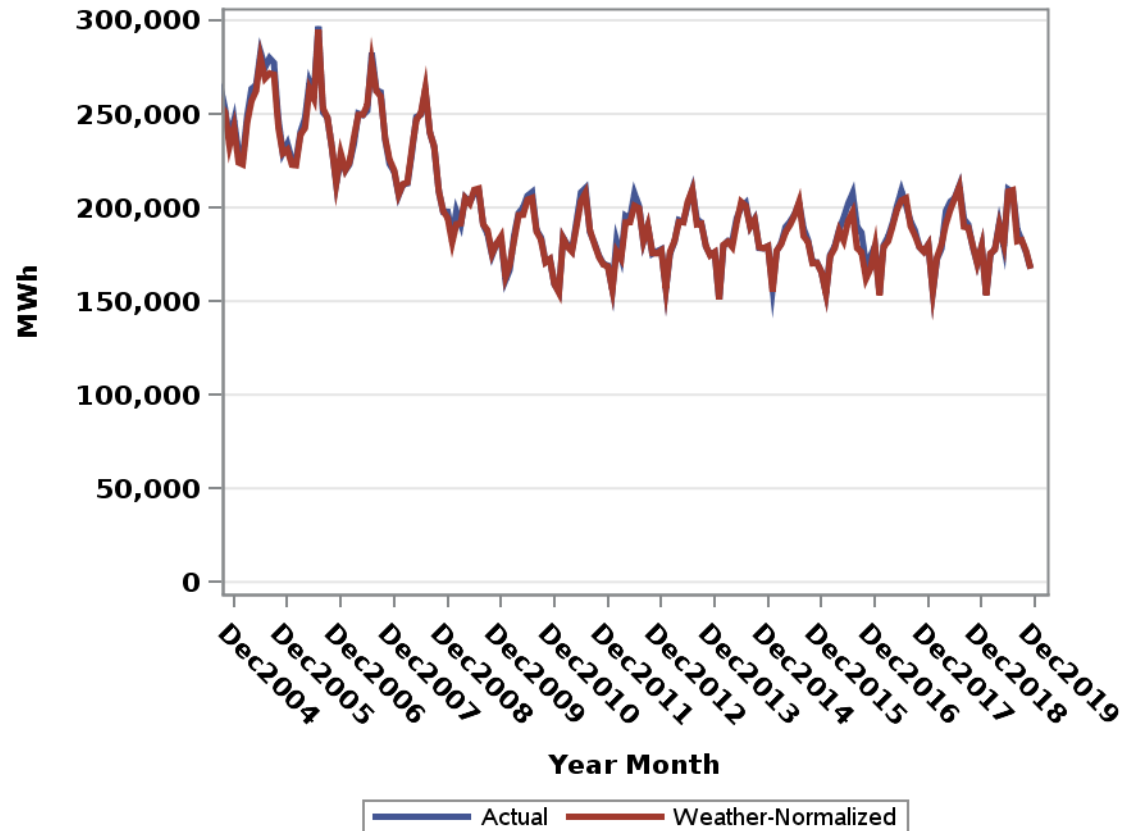
Industrial LGS Actual and Weather Normalized Monthly Sales (MWh)



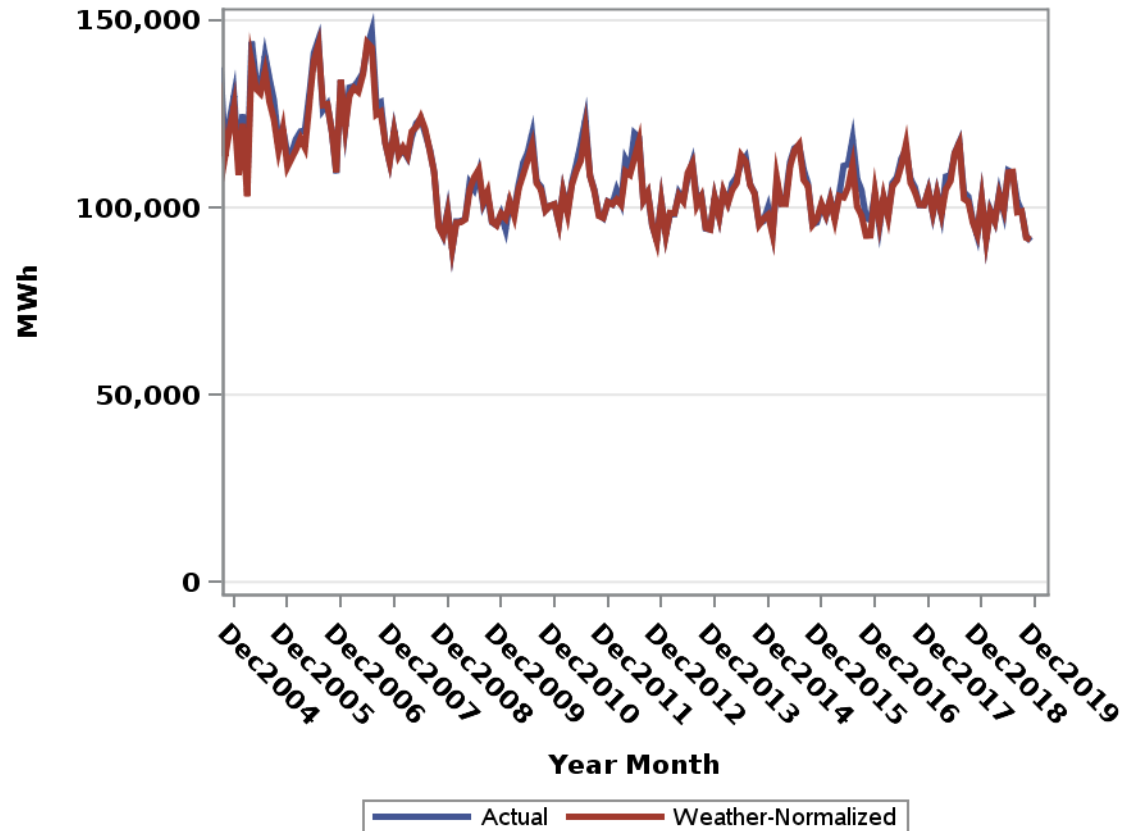
Industrial SGS Actual and Weather Normalized Monthly Sales (MWh)



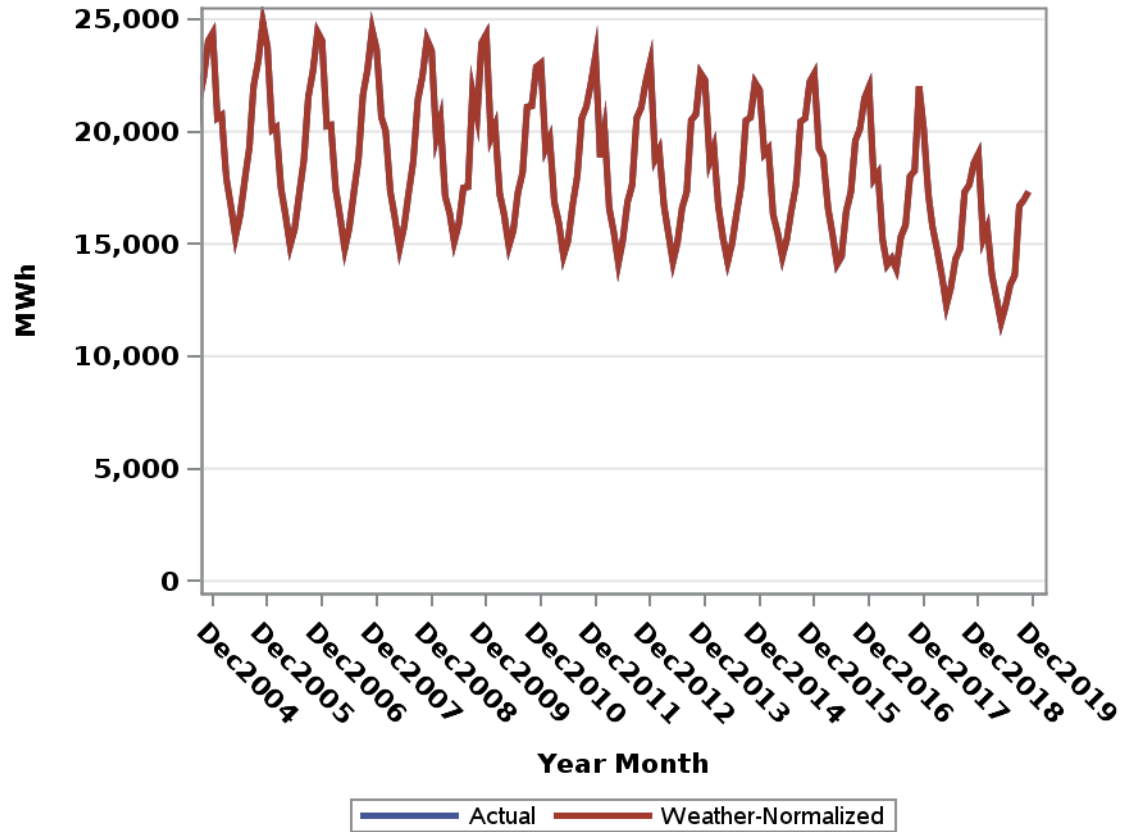
Industrial LPS Actual and Weather Normalized Monthly Sales (MWh)



Industrial SPS Actual and Weather Normalized Monthly Sales (MWh)



Lighting Actual and Weather Normalized Monthly Sales (MWh)



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

(continued next page)

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

(continued next page)

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

(continued next page)

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

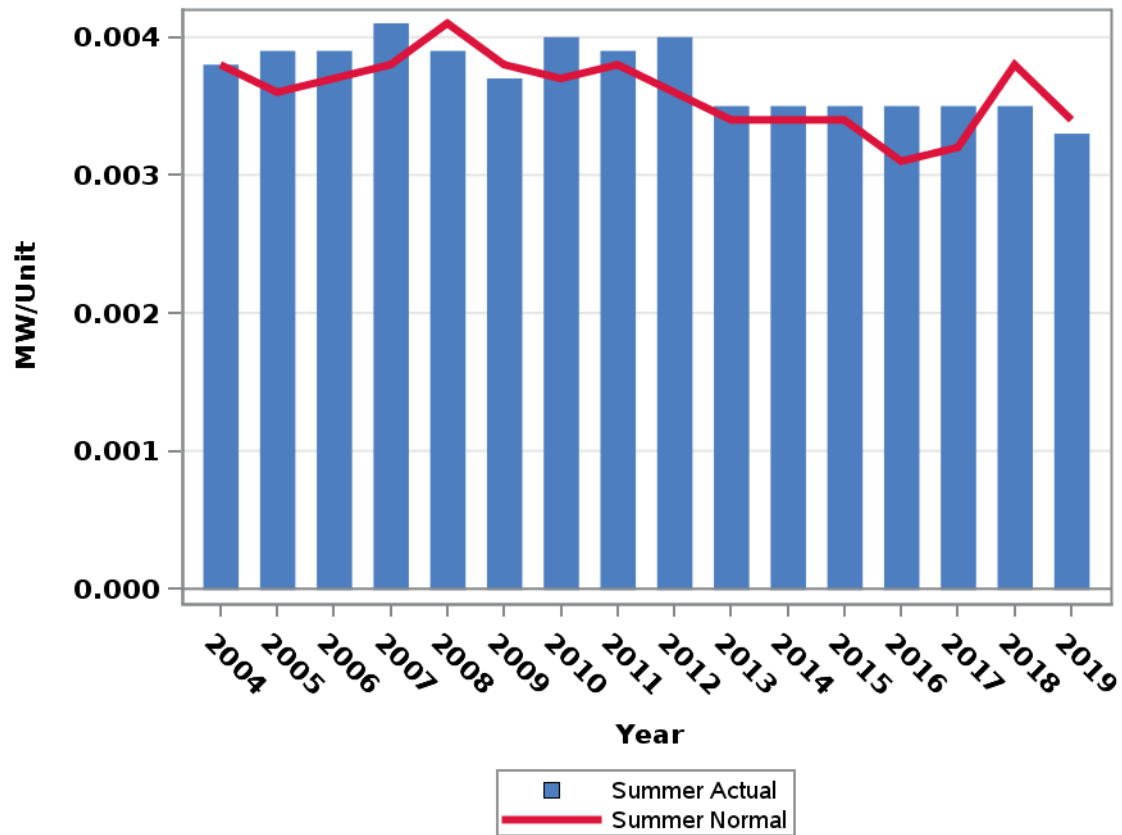
(continued next page)

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

Class Demand per Unit and Total Demand at Time of Summer and Winter System Peak (2004 - 2019*)¹⁰

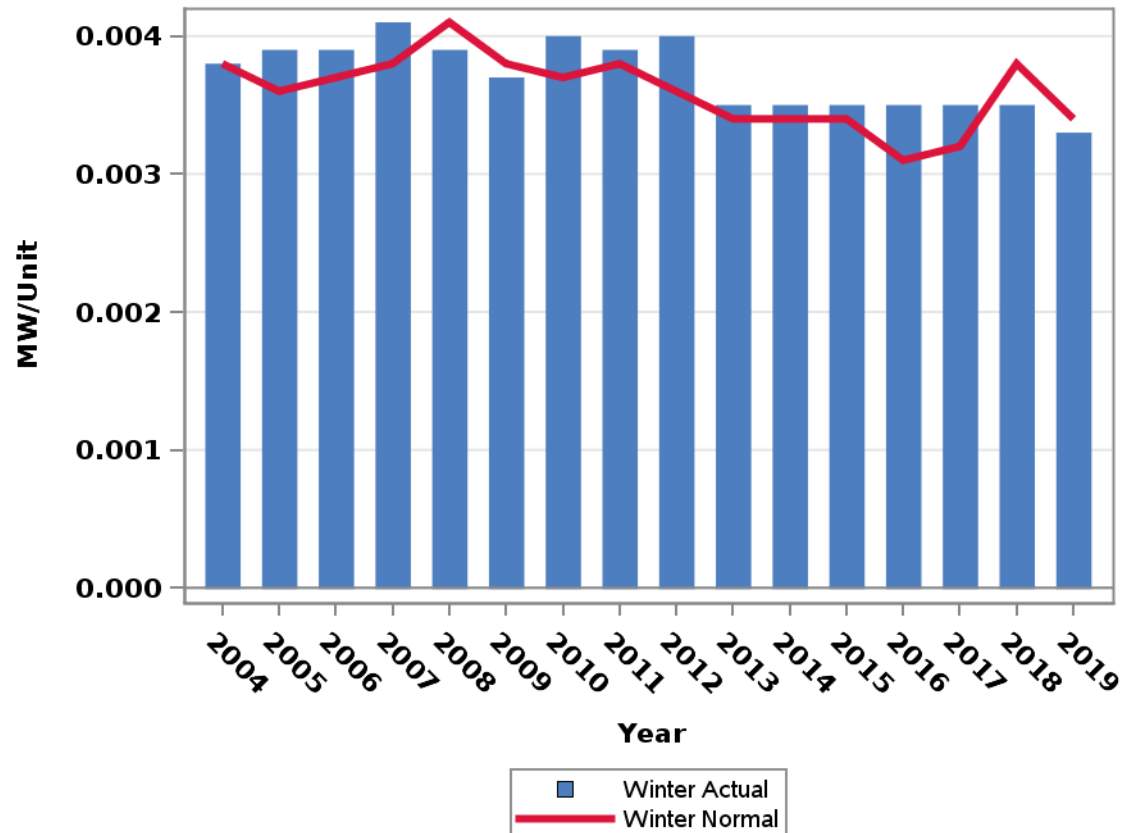
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Residential Class



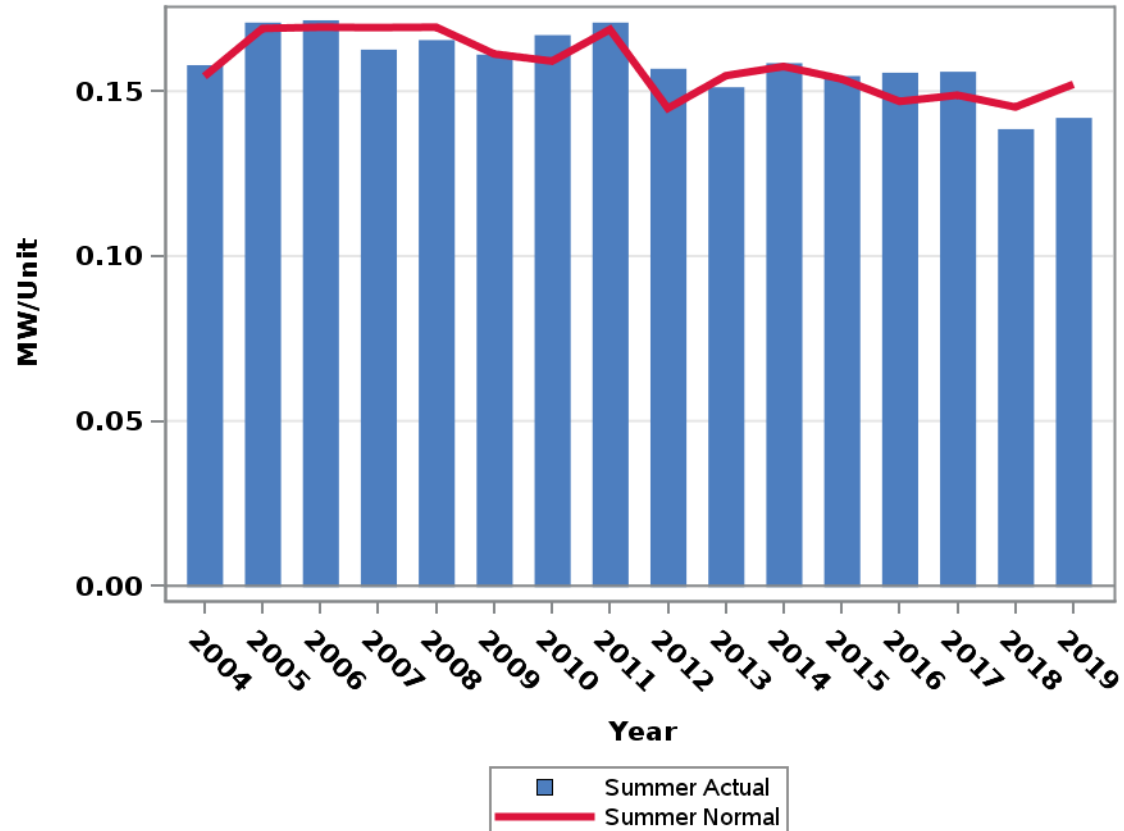
¹⁰20 CSR 4240-22.030(7)(A)6

*Usage and Customer Count for 2019 are through November

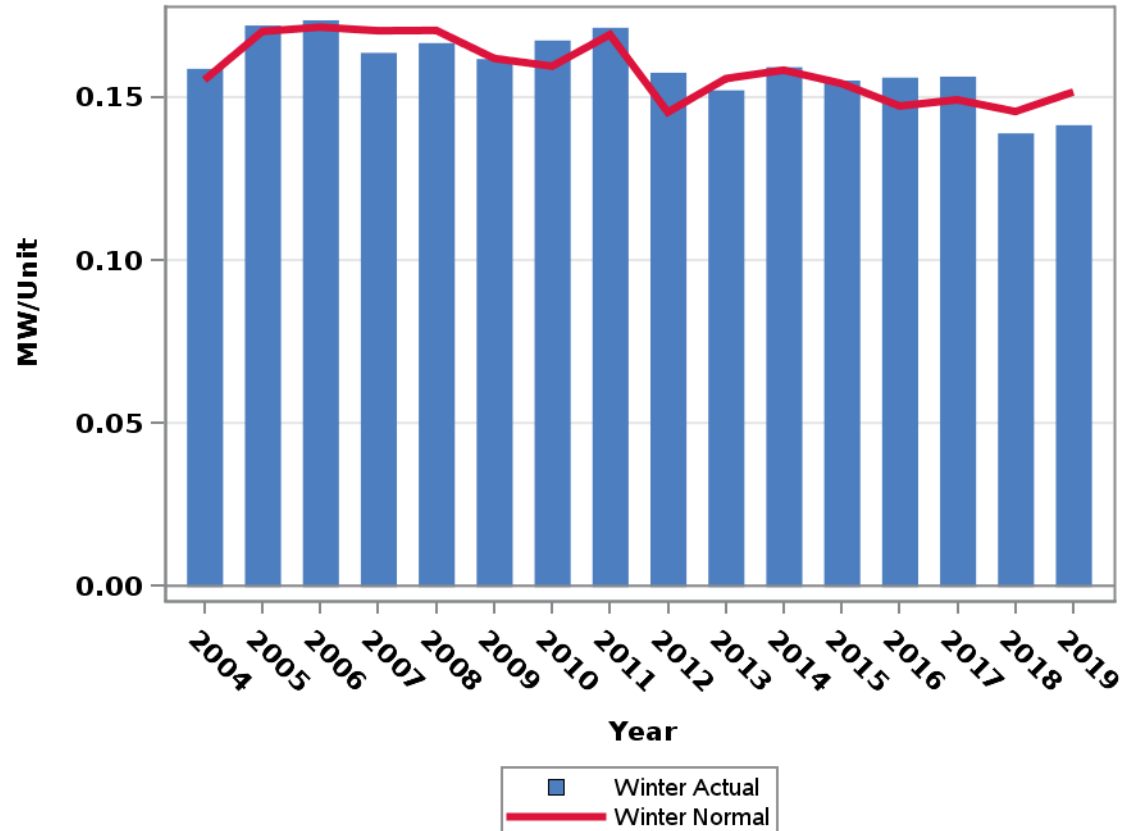
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Residential Class



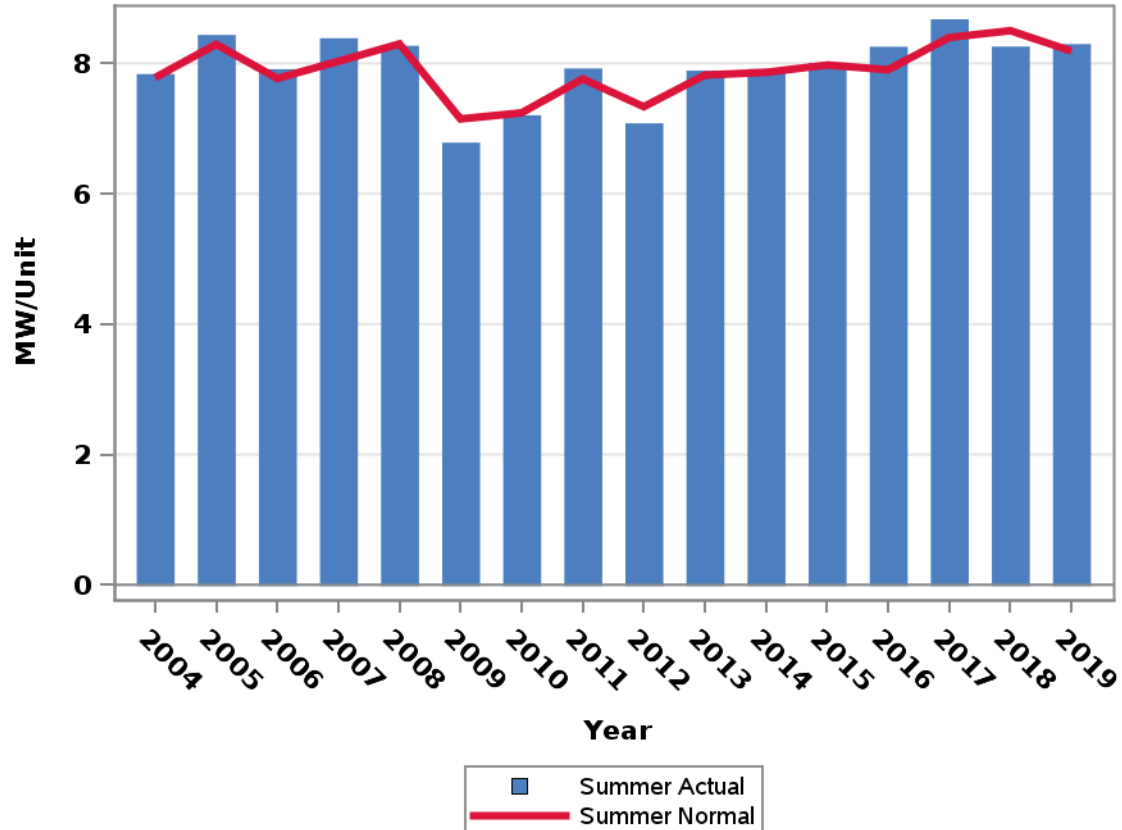
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial LGS Class



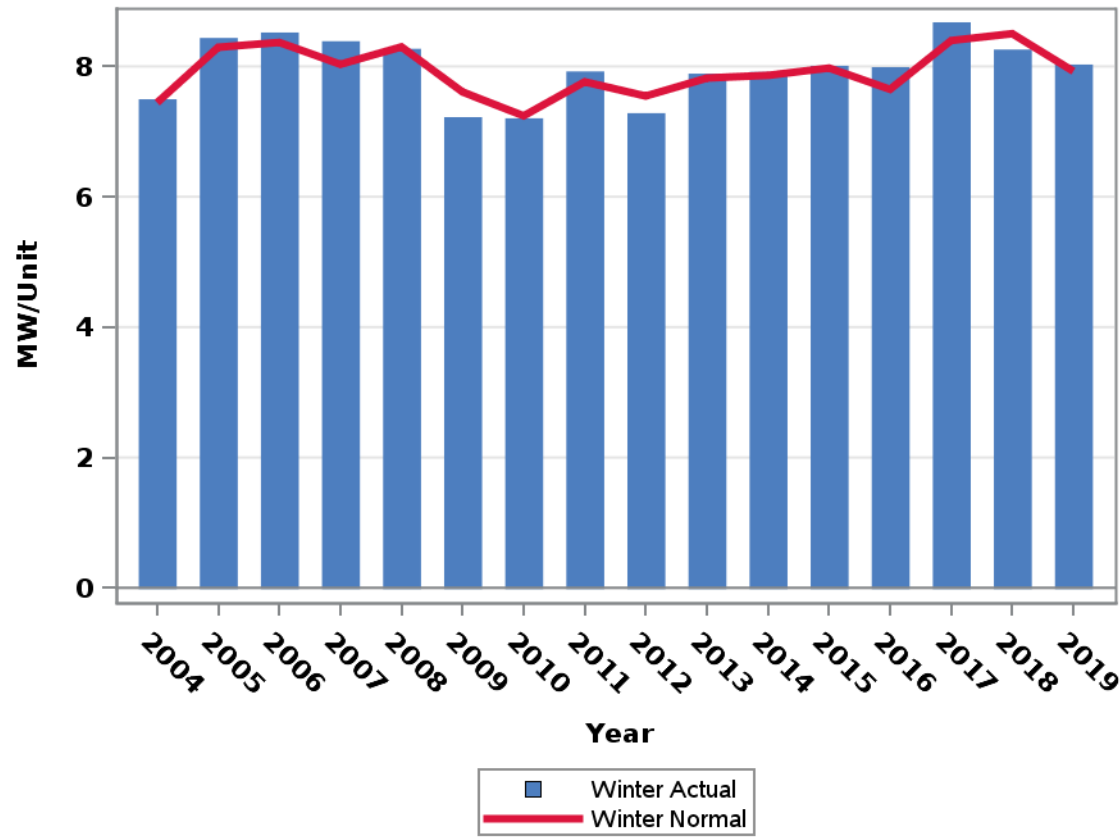
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial LGS Class



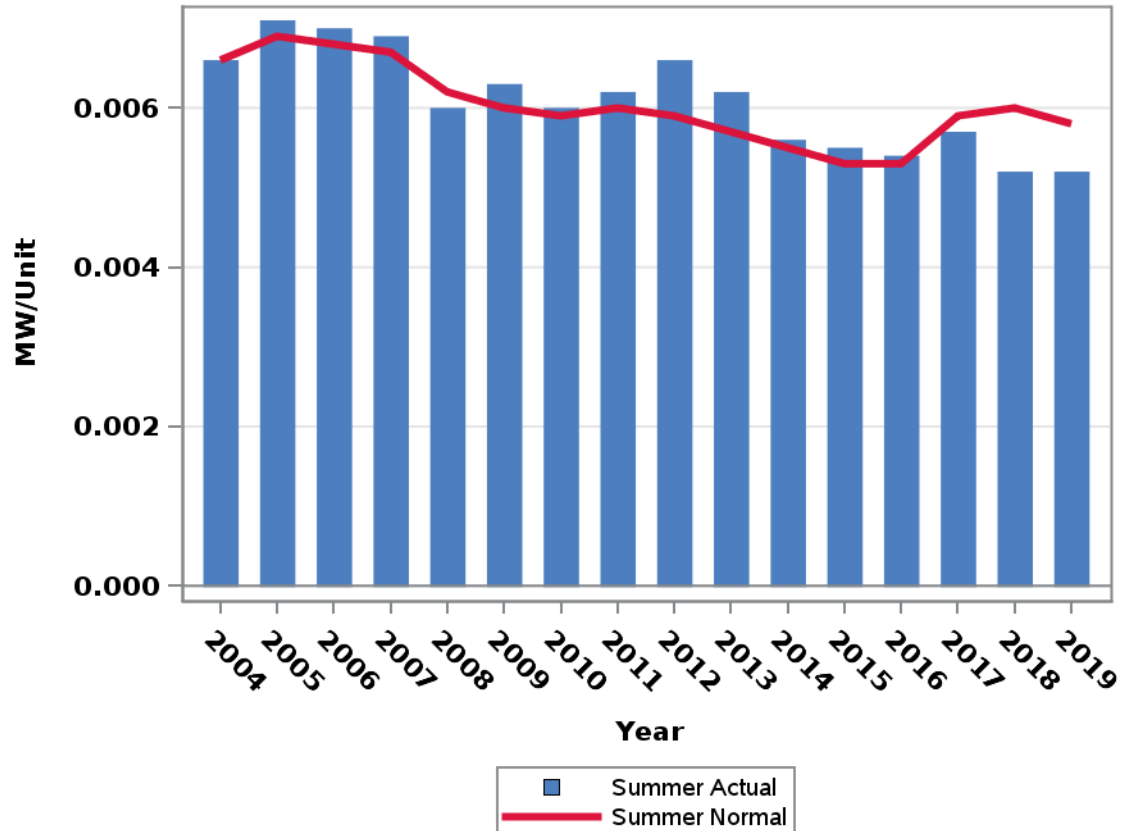
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial LPS Class



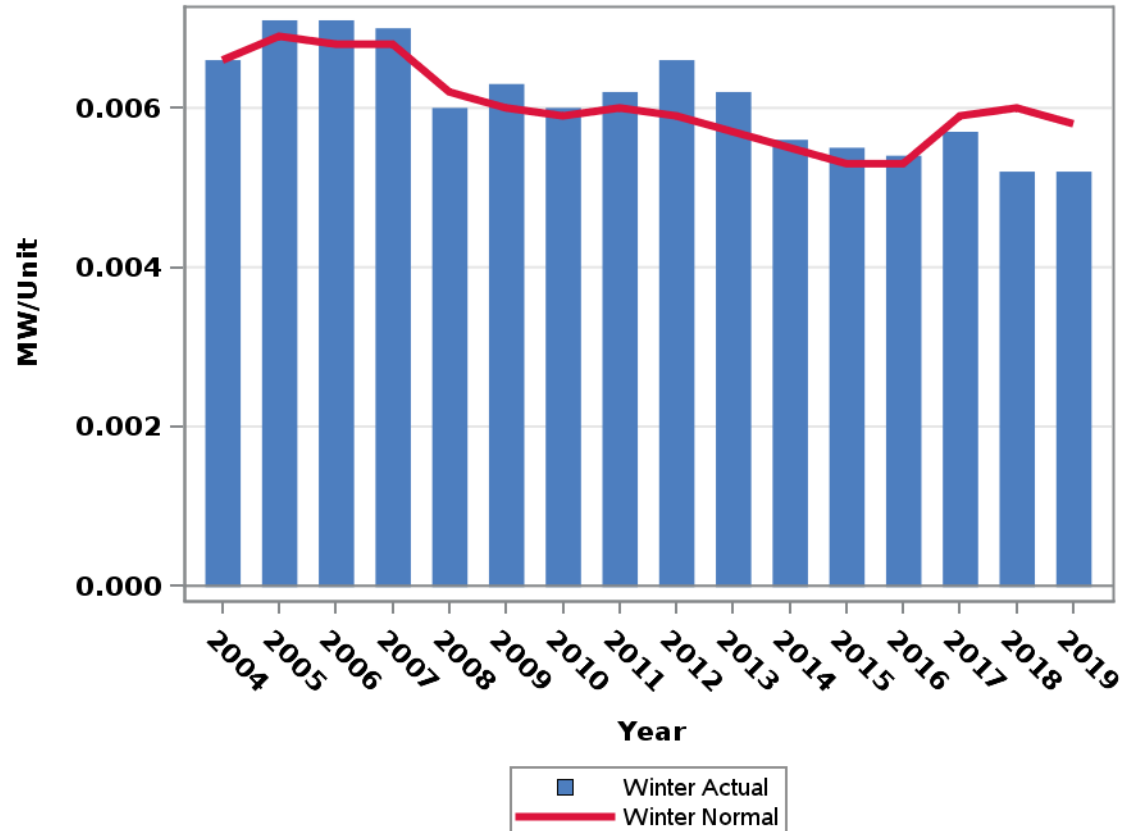
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial LPS Class



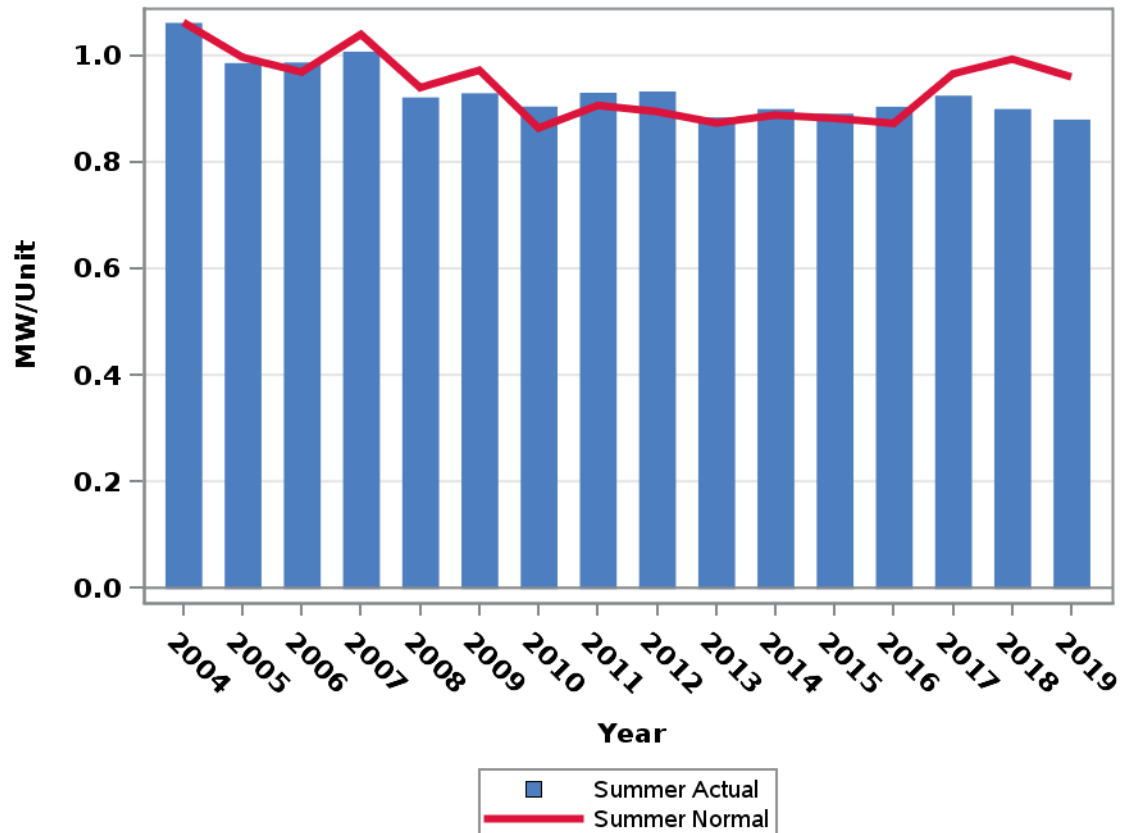
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial SGS Class



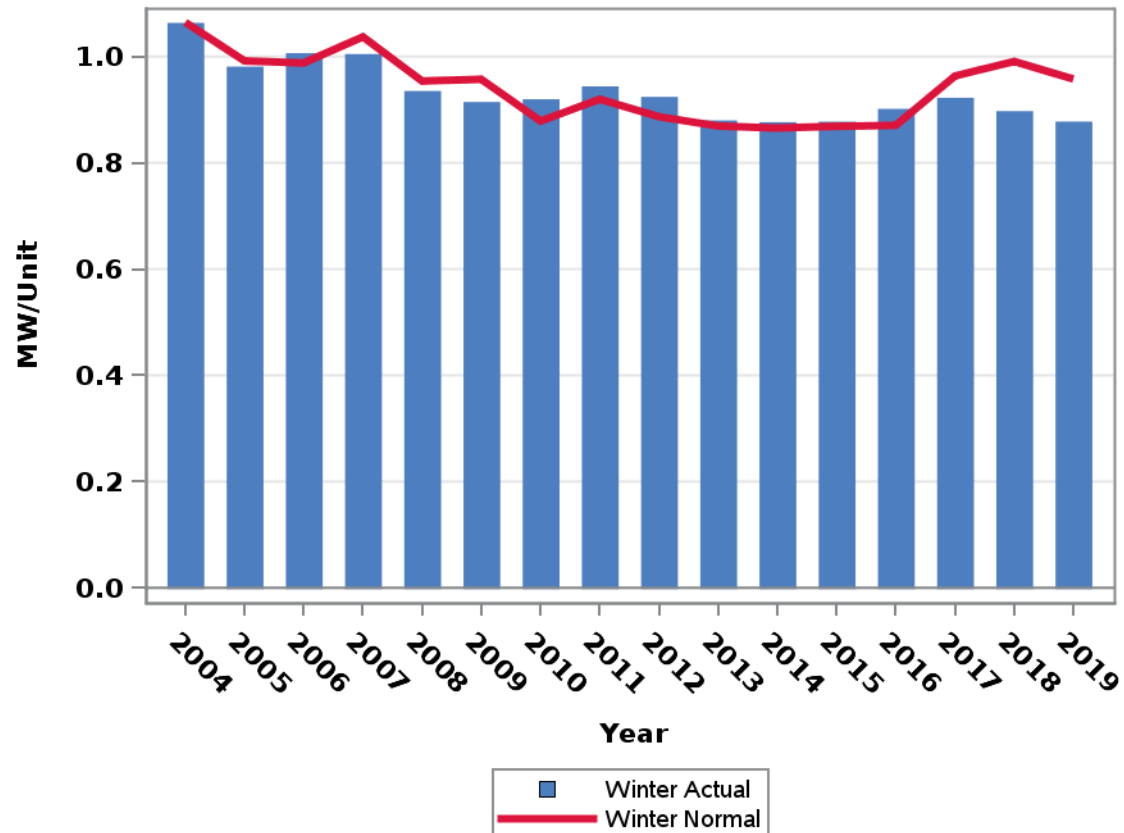
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial SGS Class



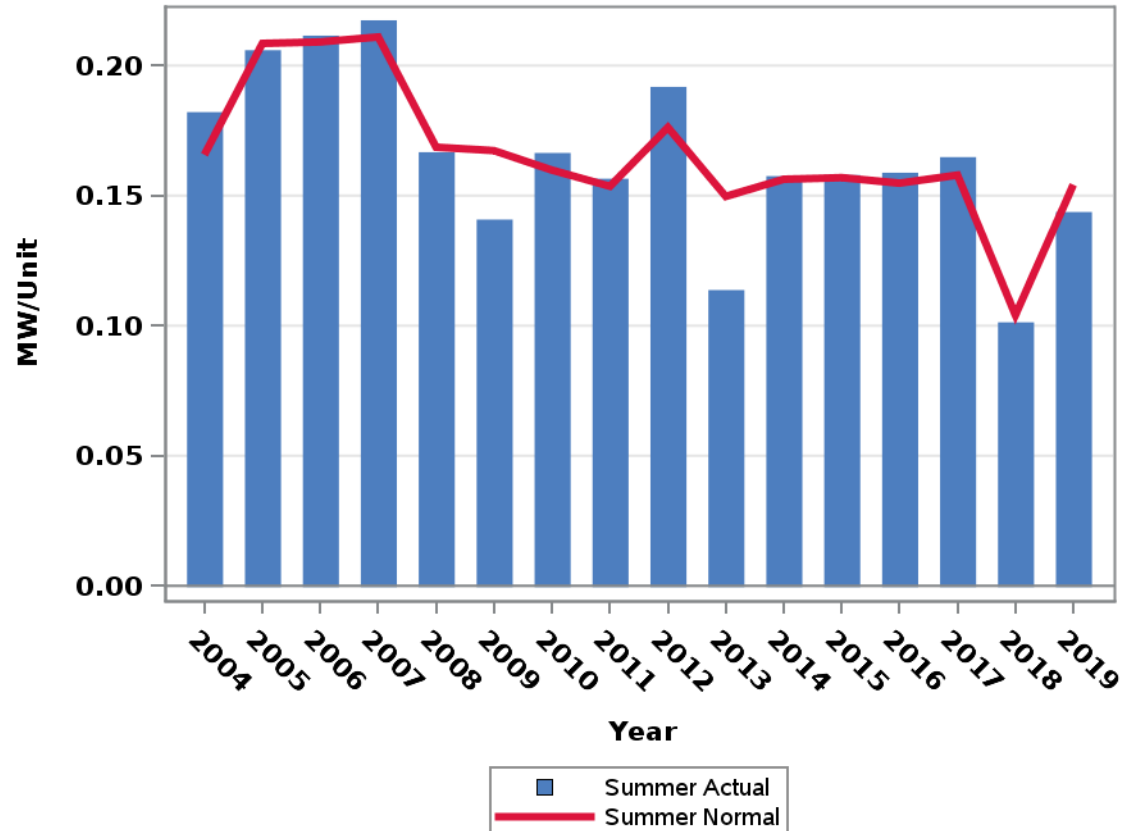
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial SPS Class



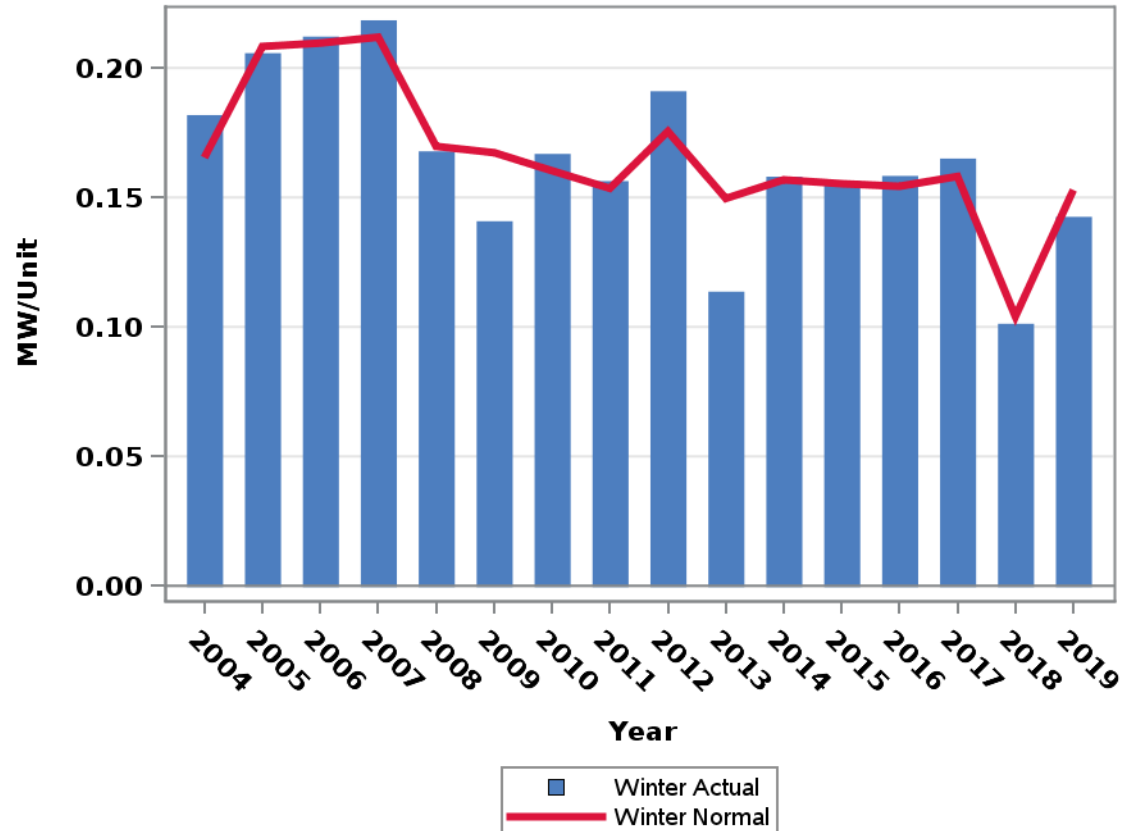
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial SPS Class



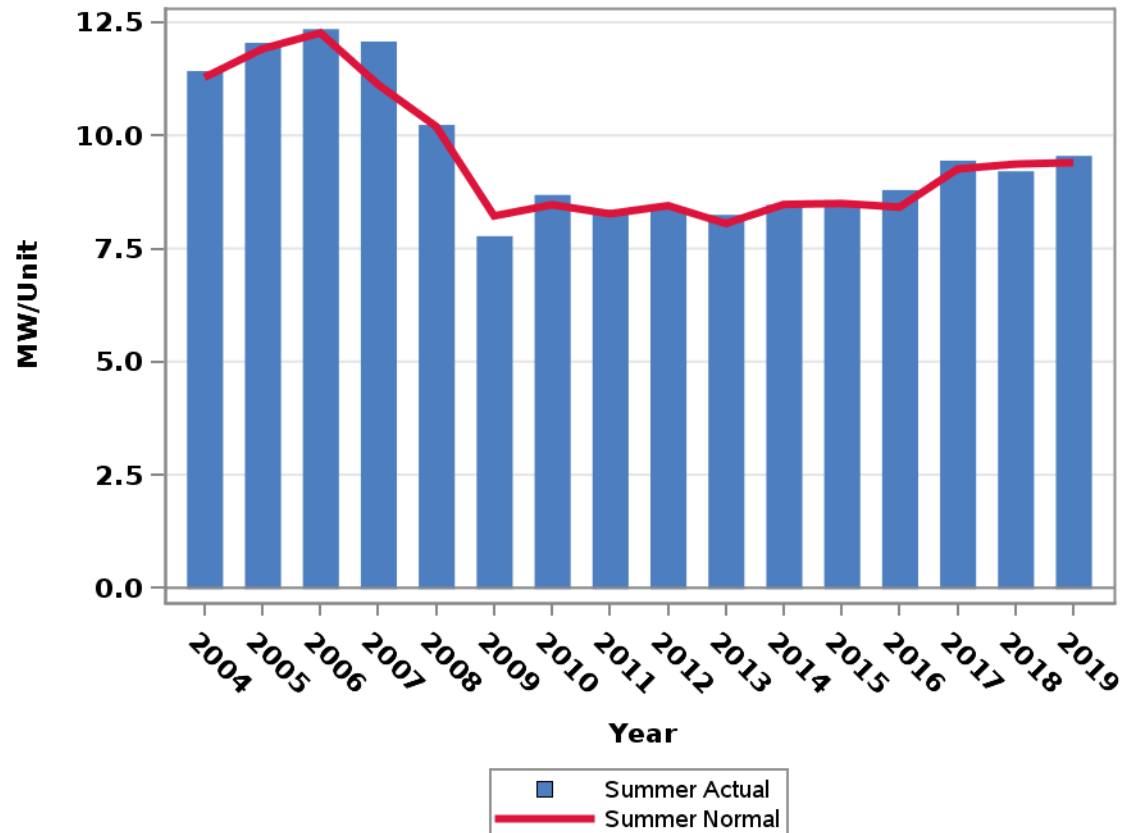
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial LGS Class



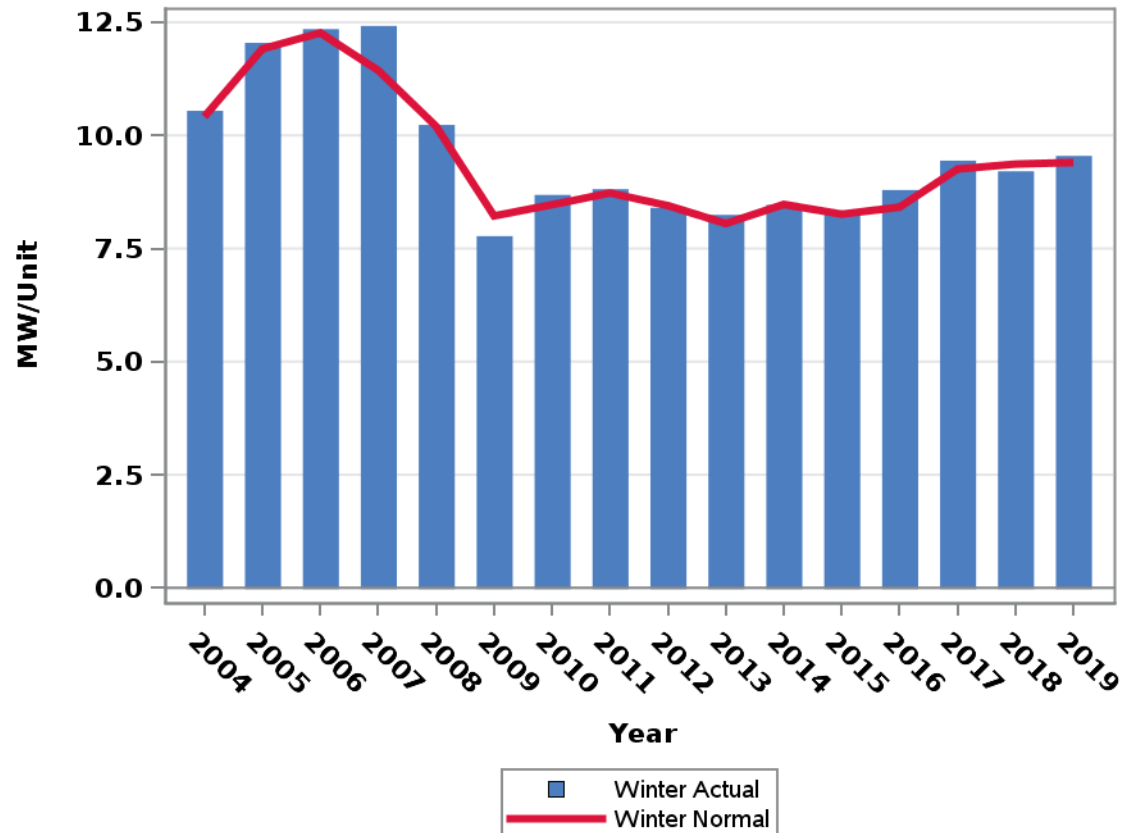
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial LGS Class



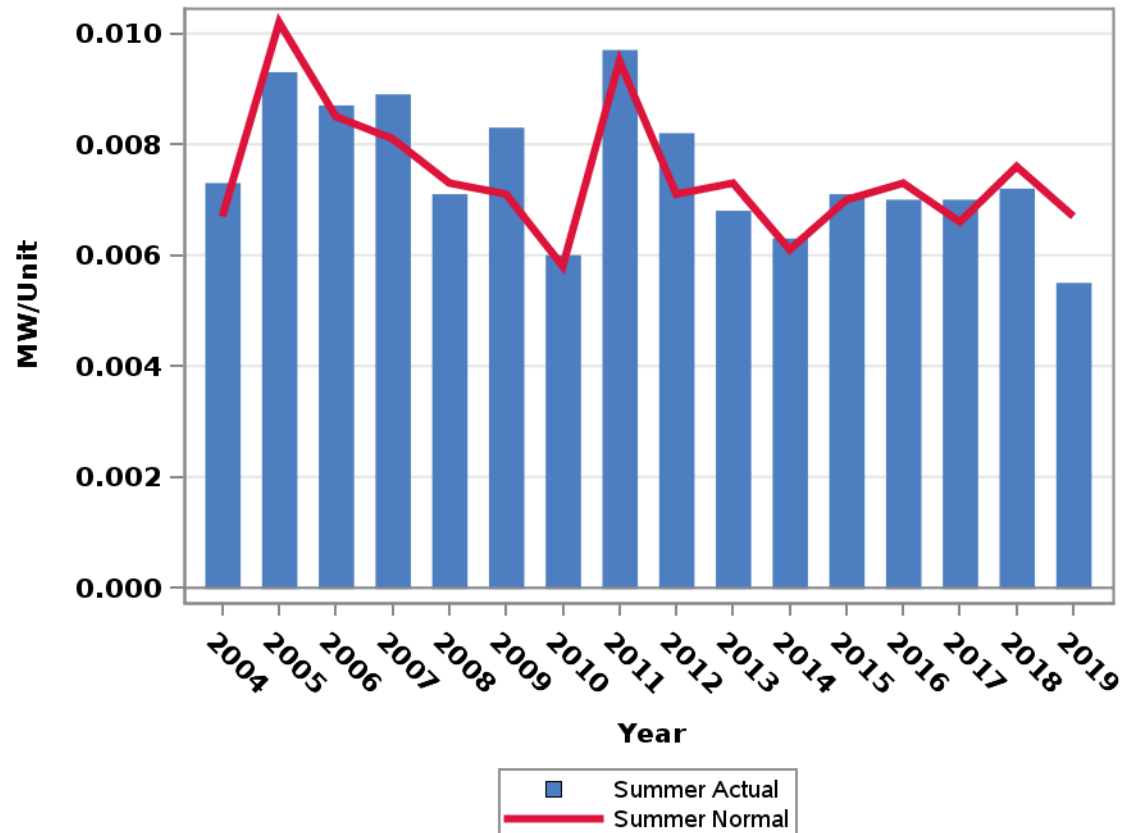
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial LPS Class



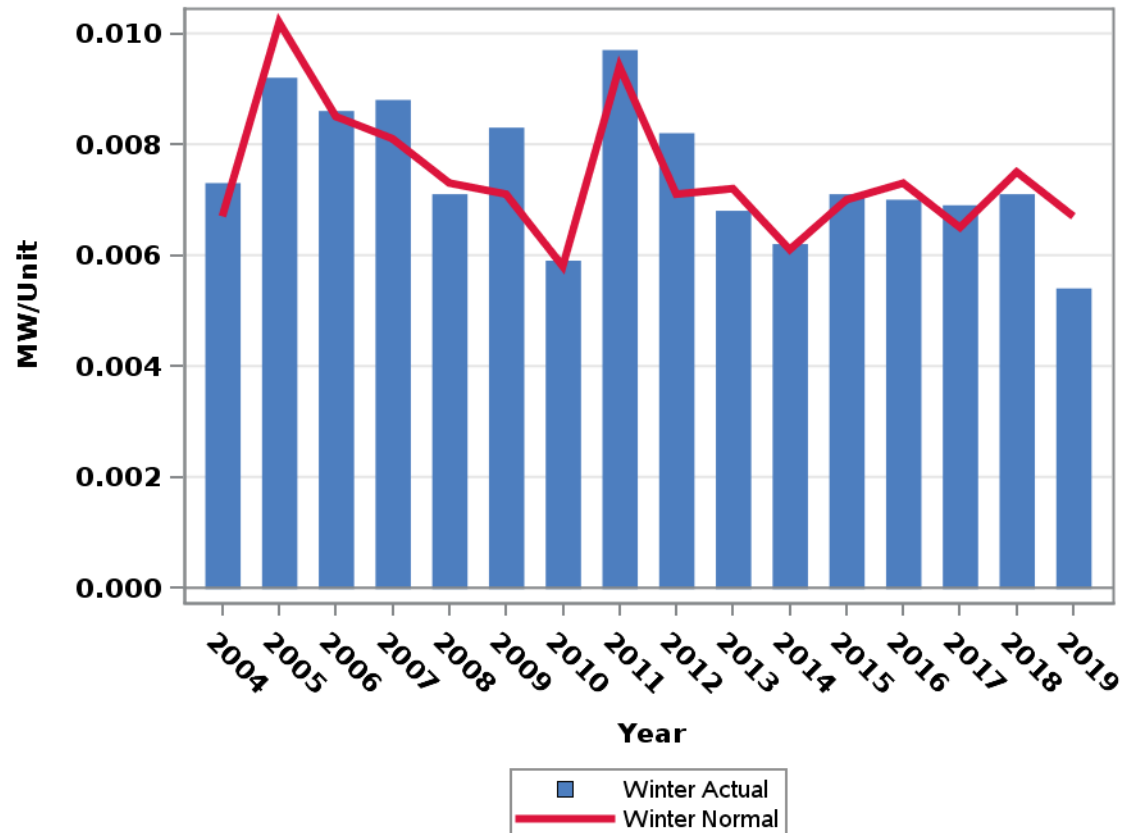
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial LPS Class



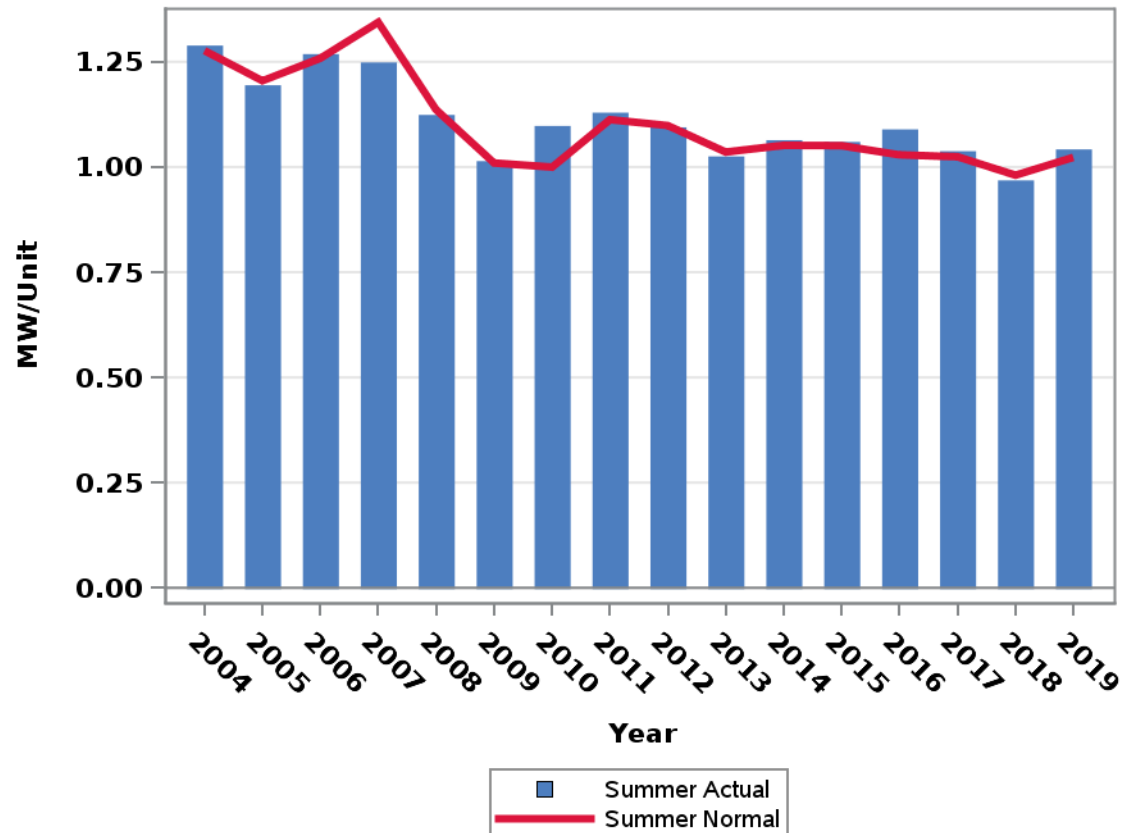
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial SGS Class



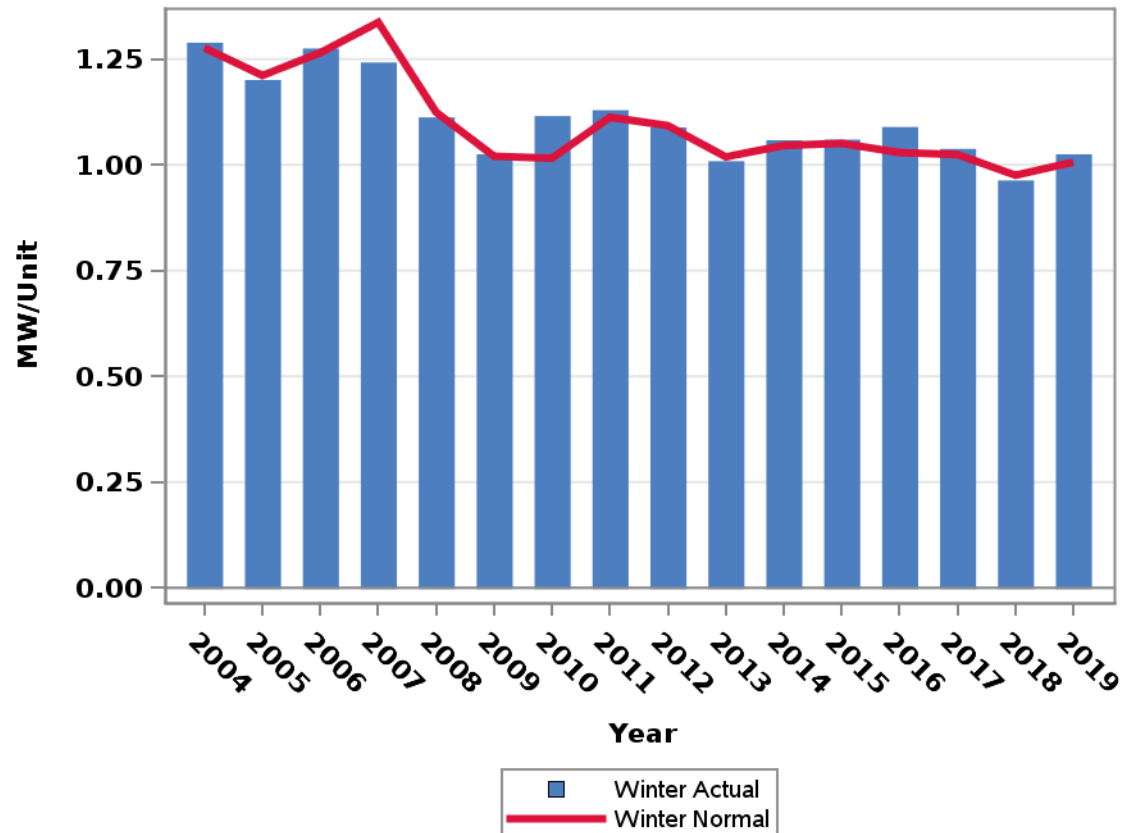
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial SGS Class



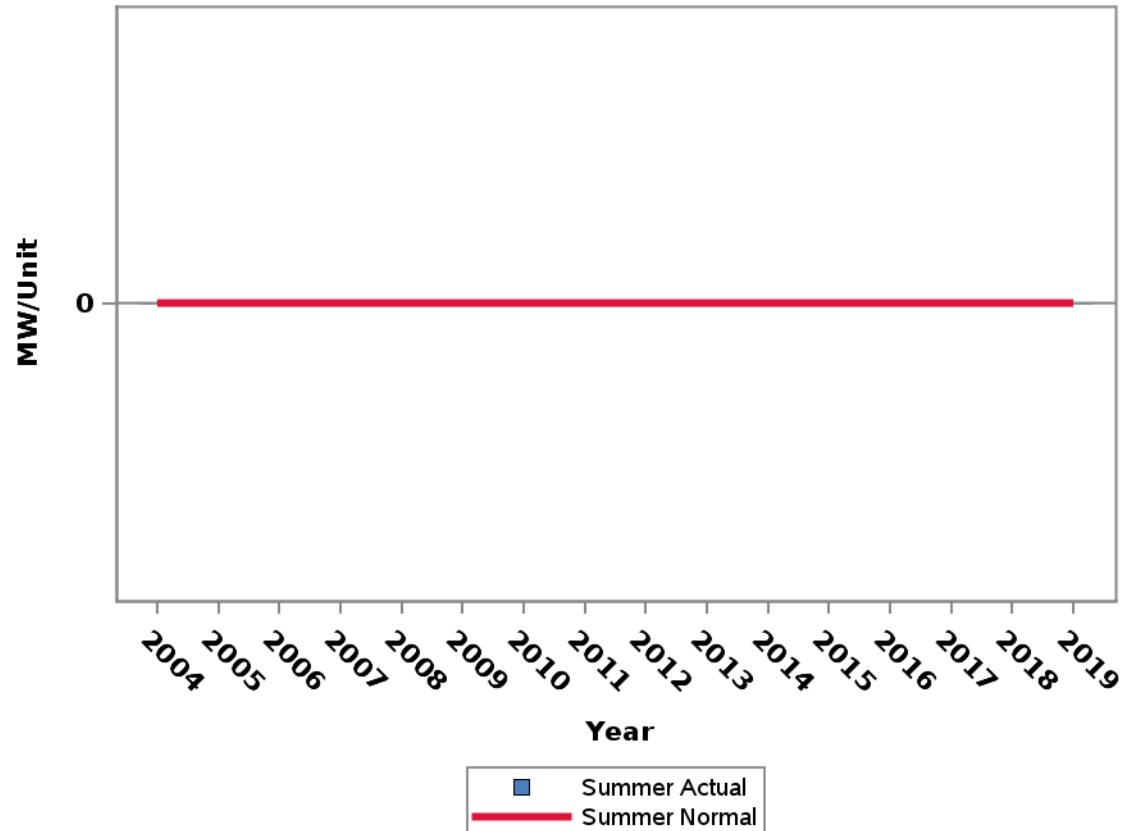
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial SPS Class



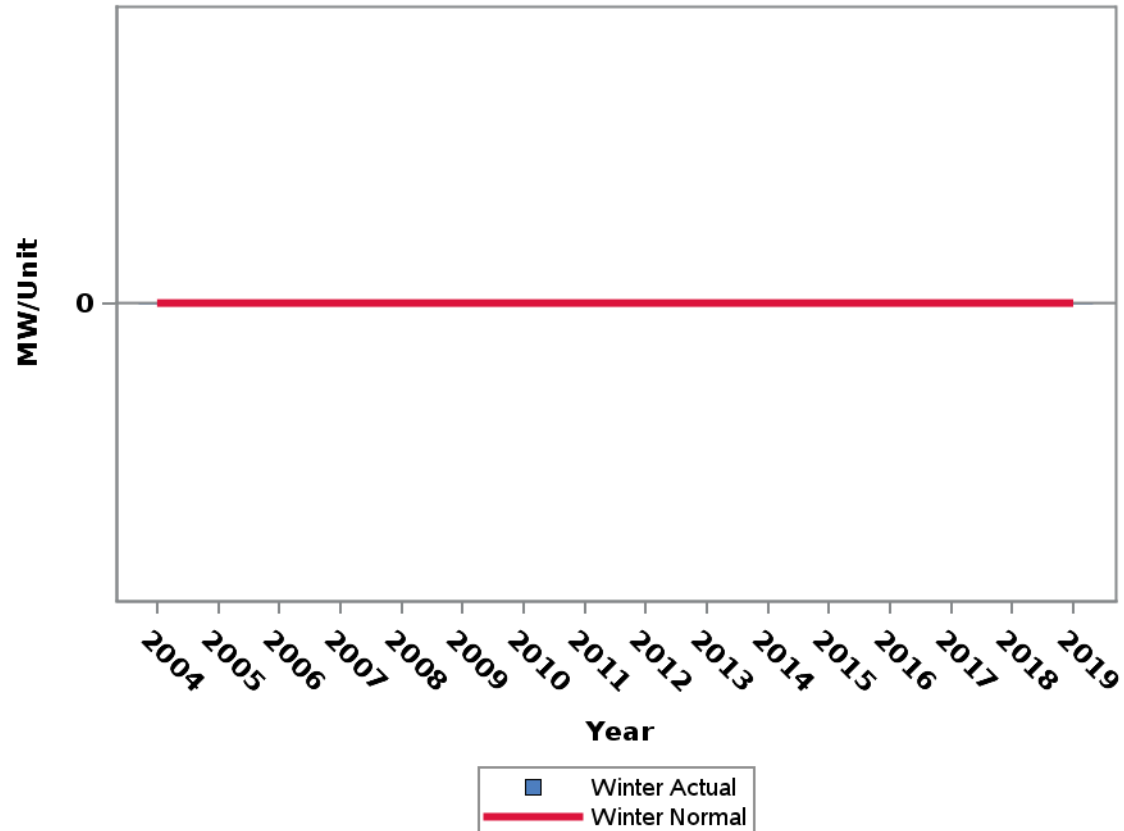
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial SPS Class



Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Lighting Class



Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Lighting Class



**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

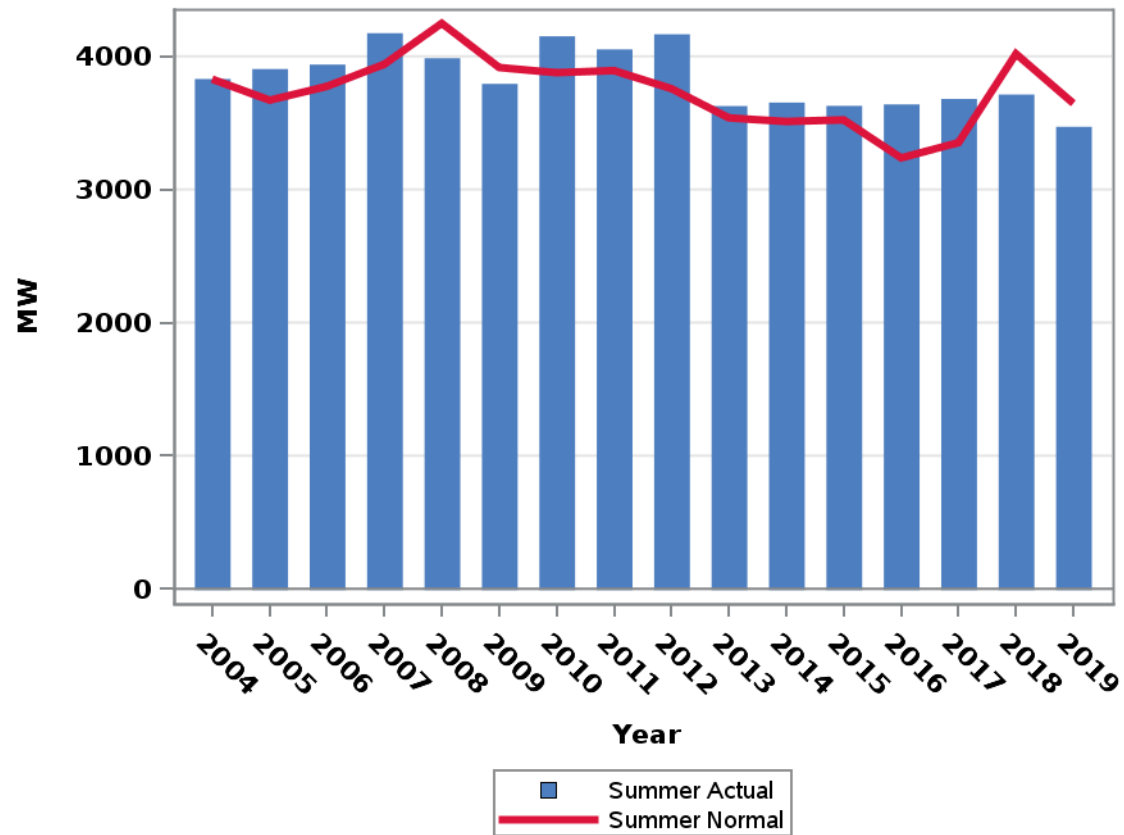
**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

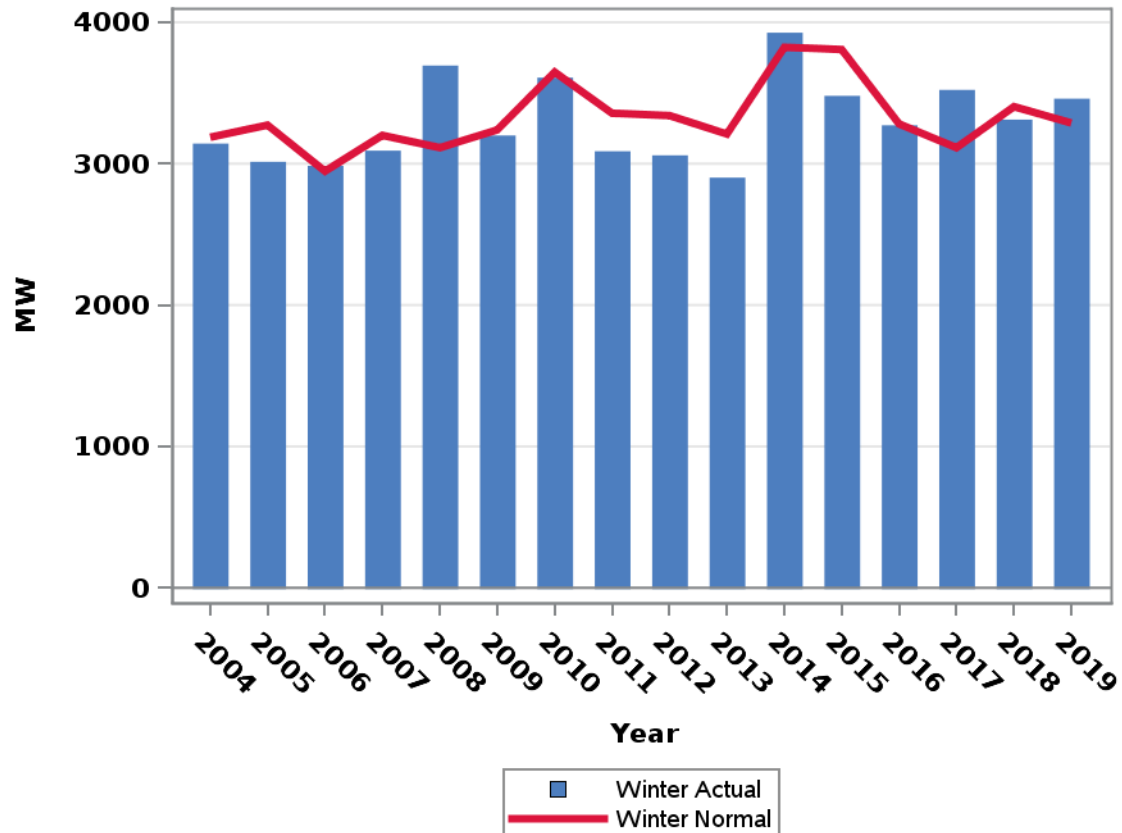
Class Demand and Total Demand at Time of Summer and Winter System Peak (2004 - 2019)¹¹

Actual and Weather-Normalized Summer Coincident Peak Demand for Residential Class

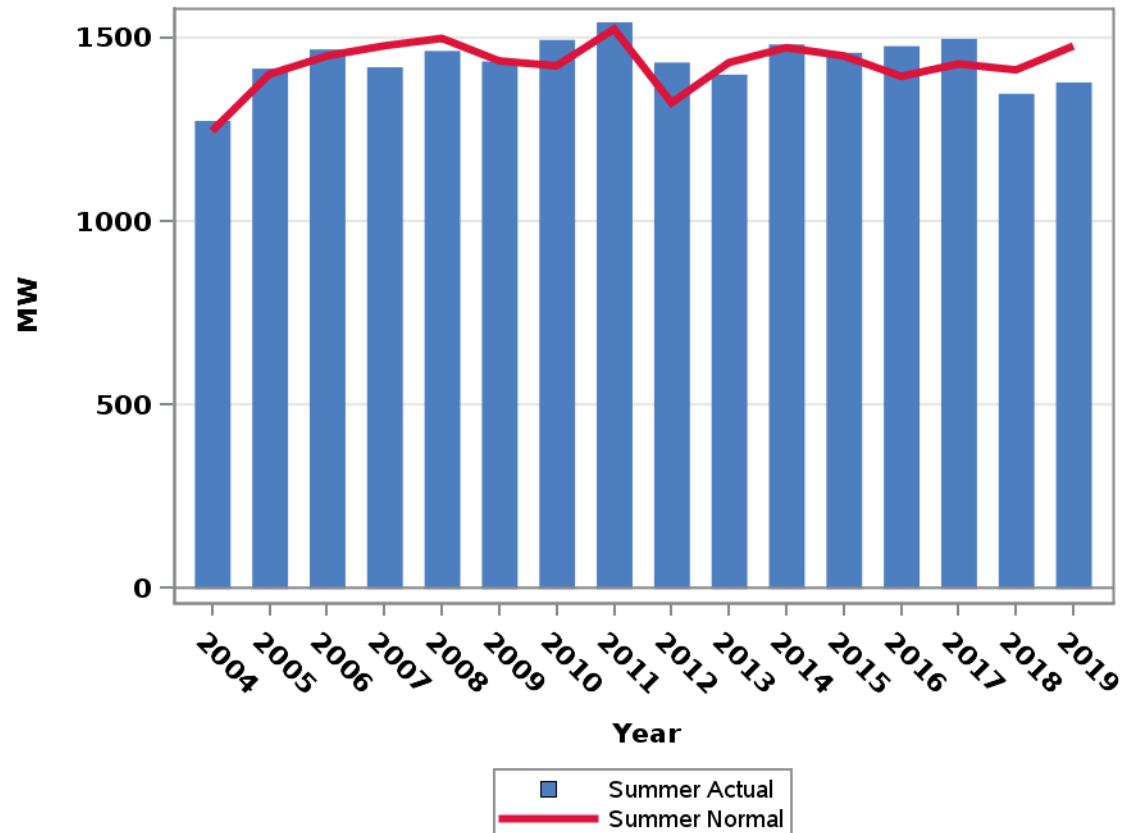


¹¹20 CSR 4240-22.030(7)(A)6

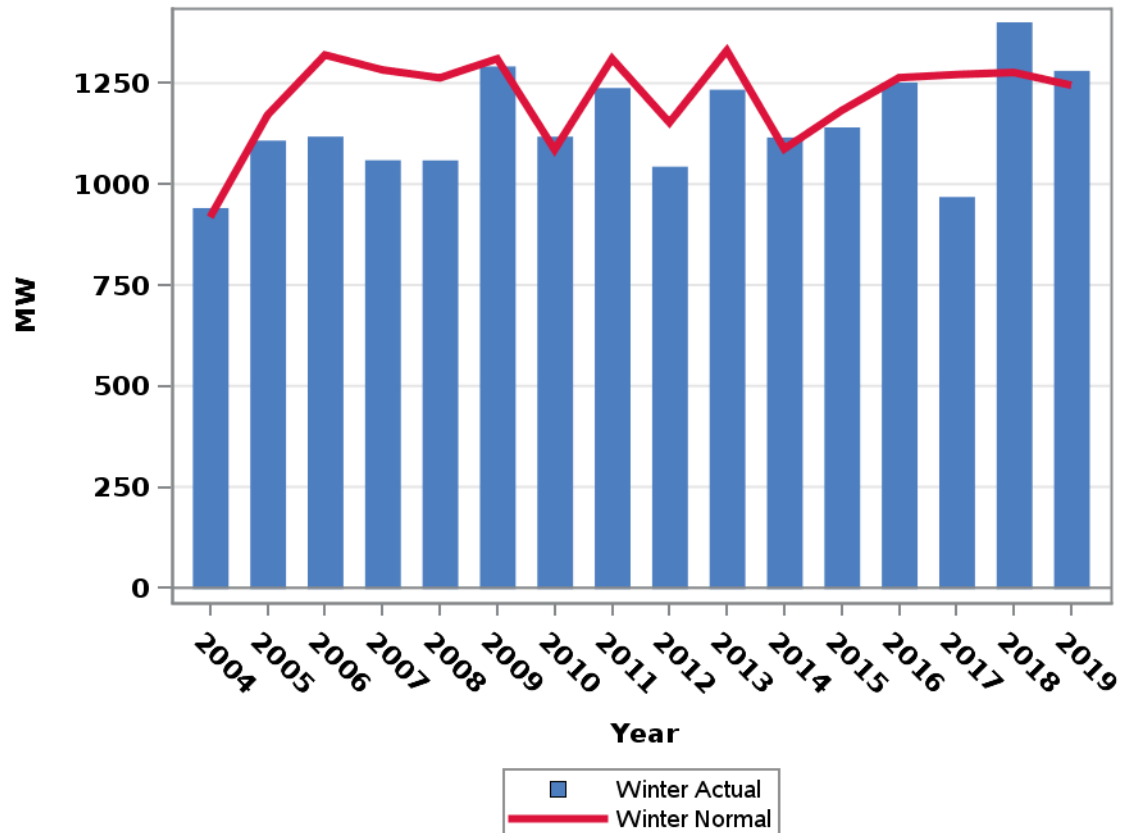
Actual and Weather-Normalized Winter Coincident Peak Demand for Residential Class



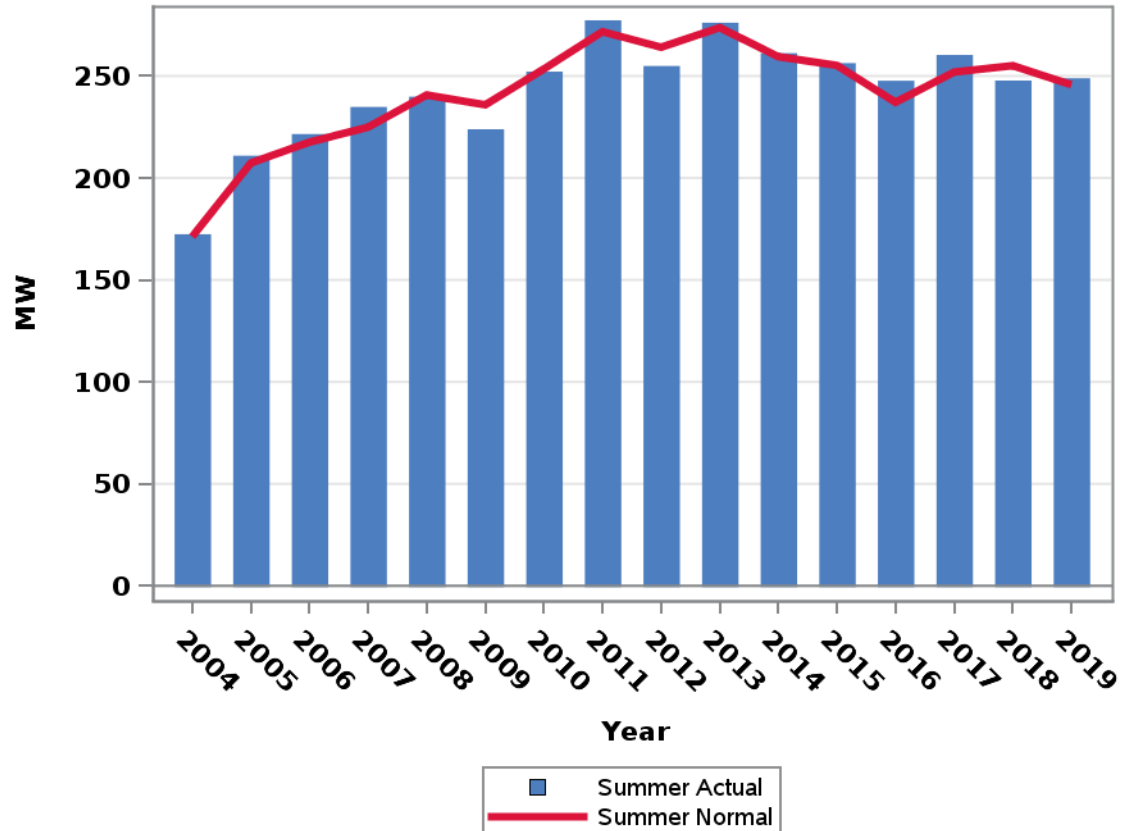
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial LGS Class



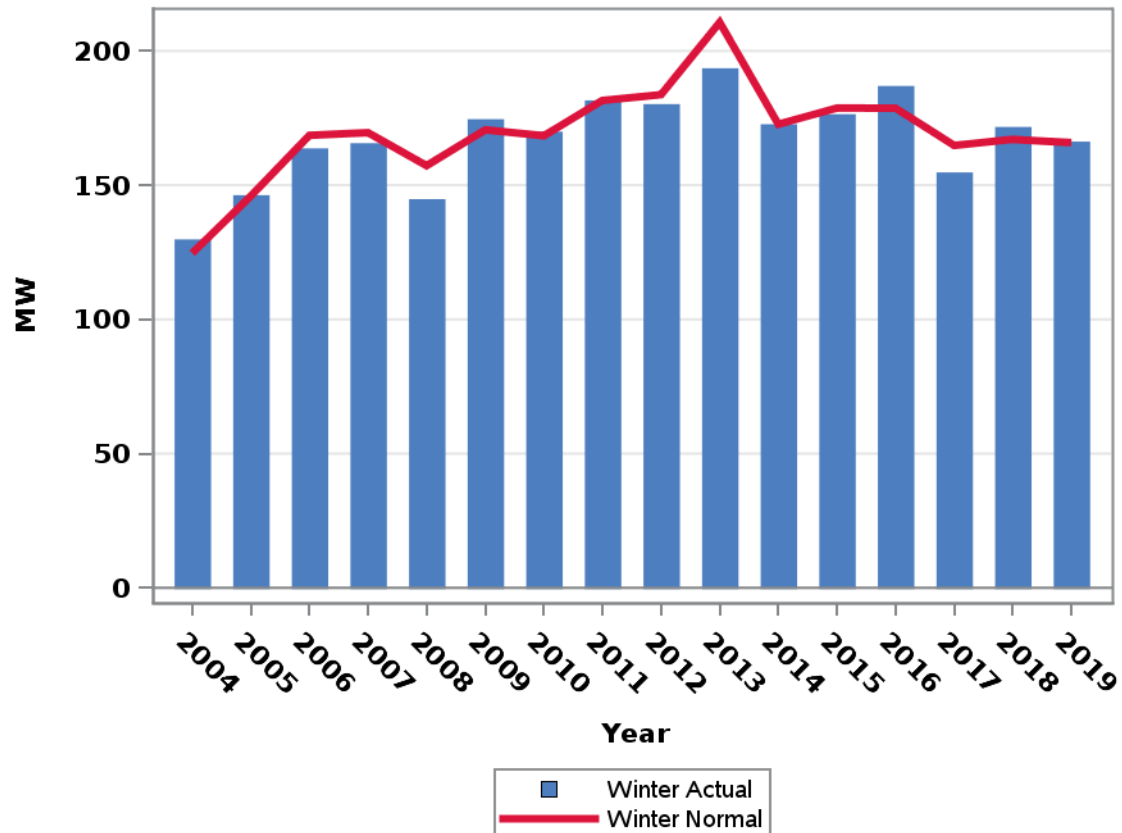
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial LGS Class



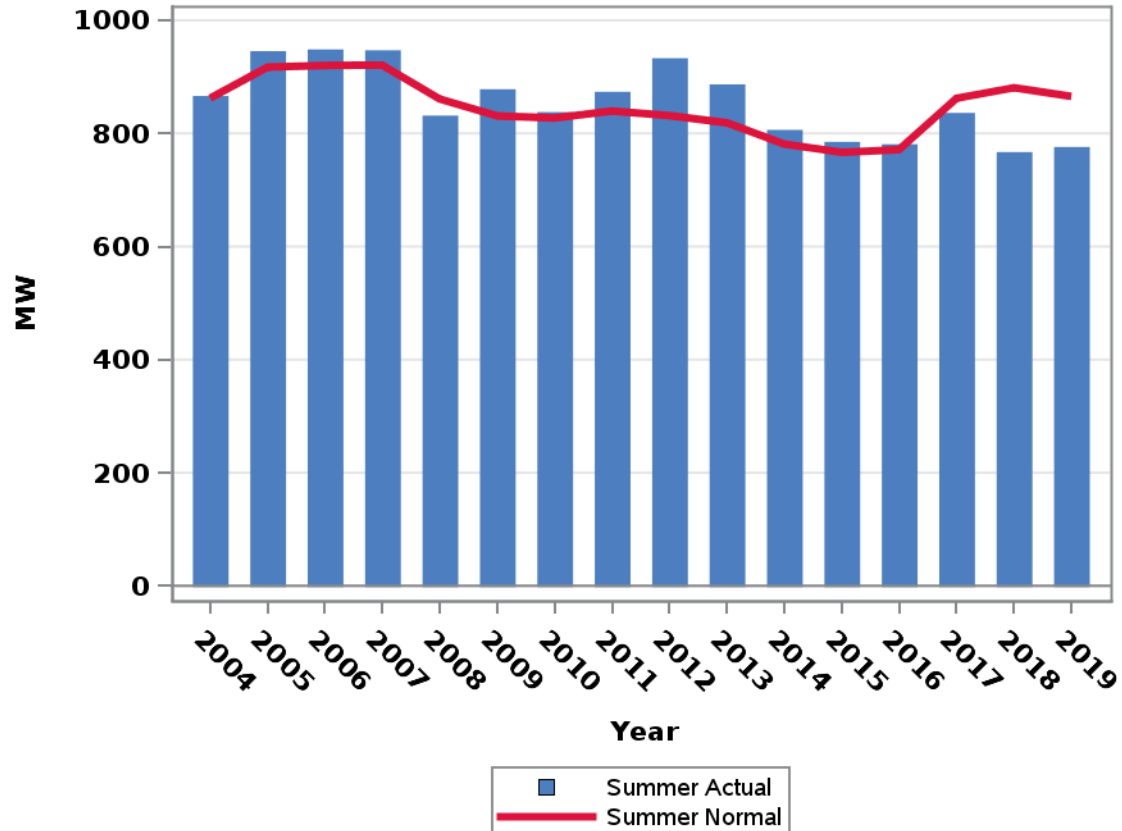
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial LPS Class



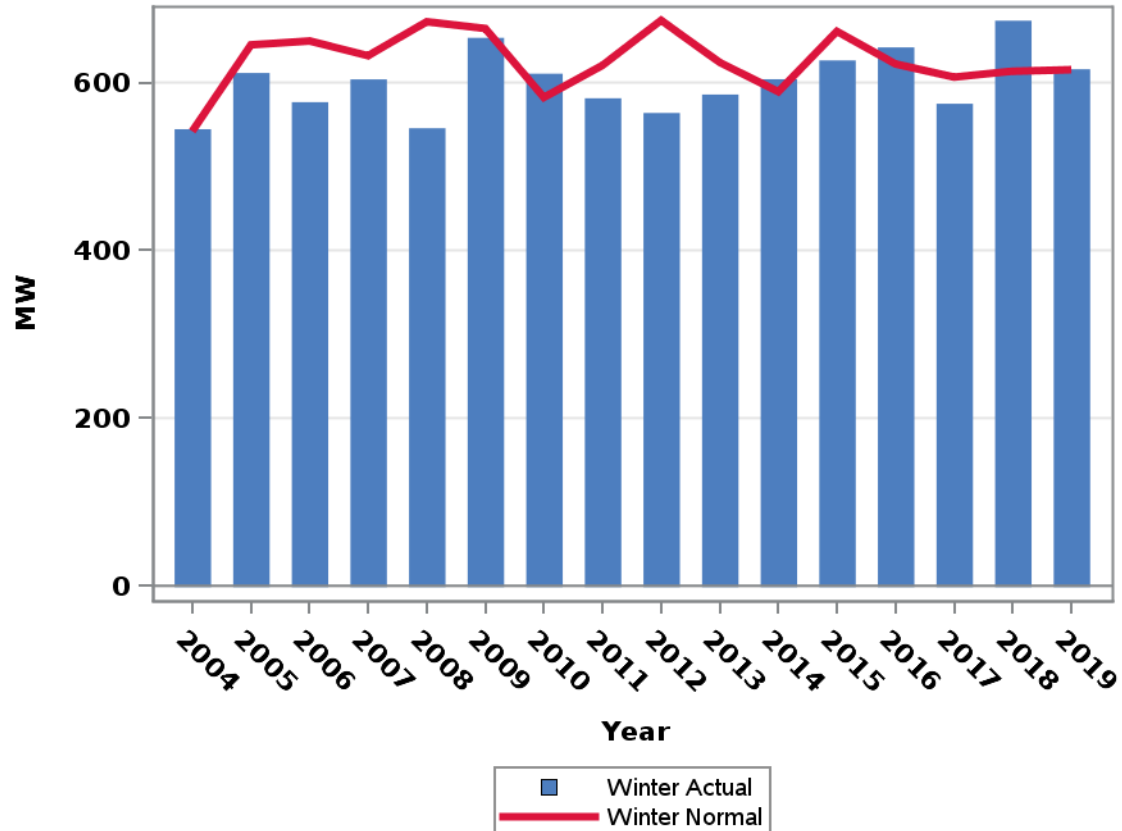
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial LPS Class



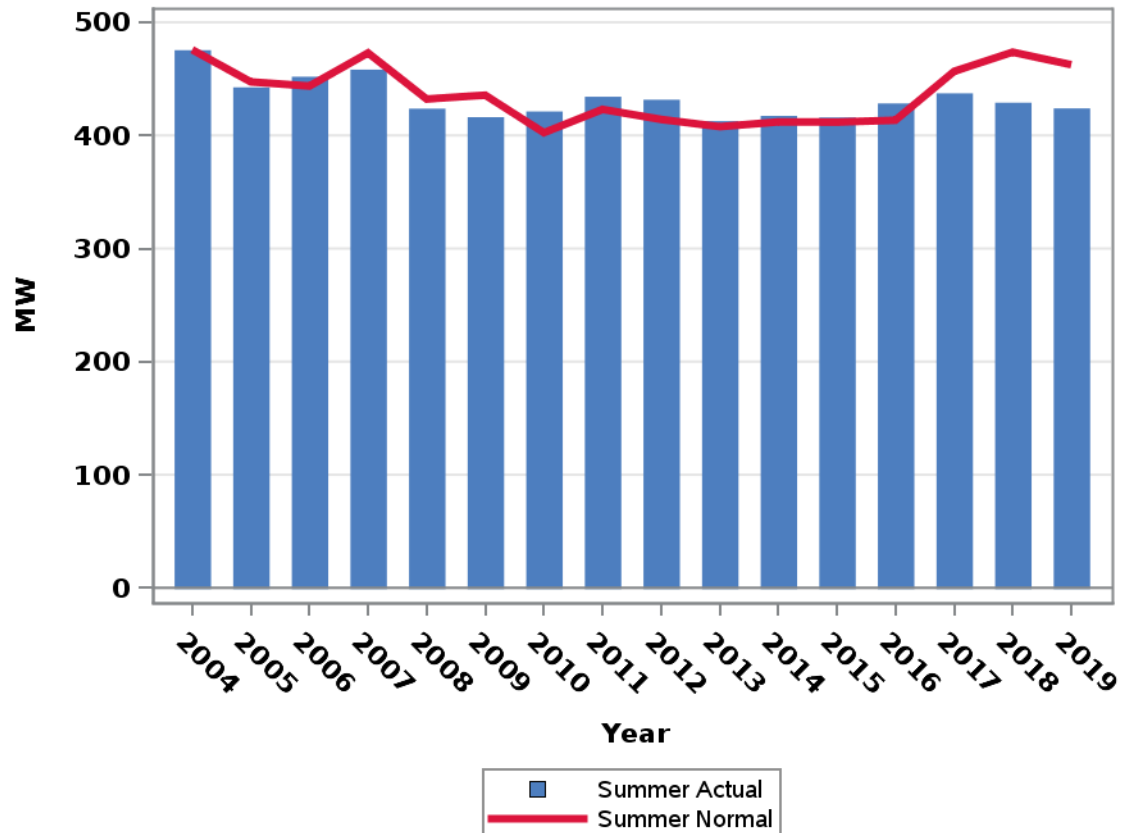
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial SGS Class



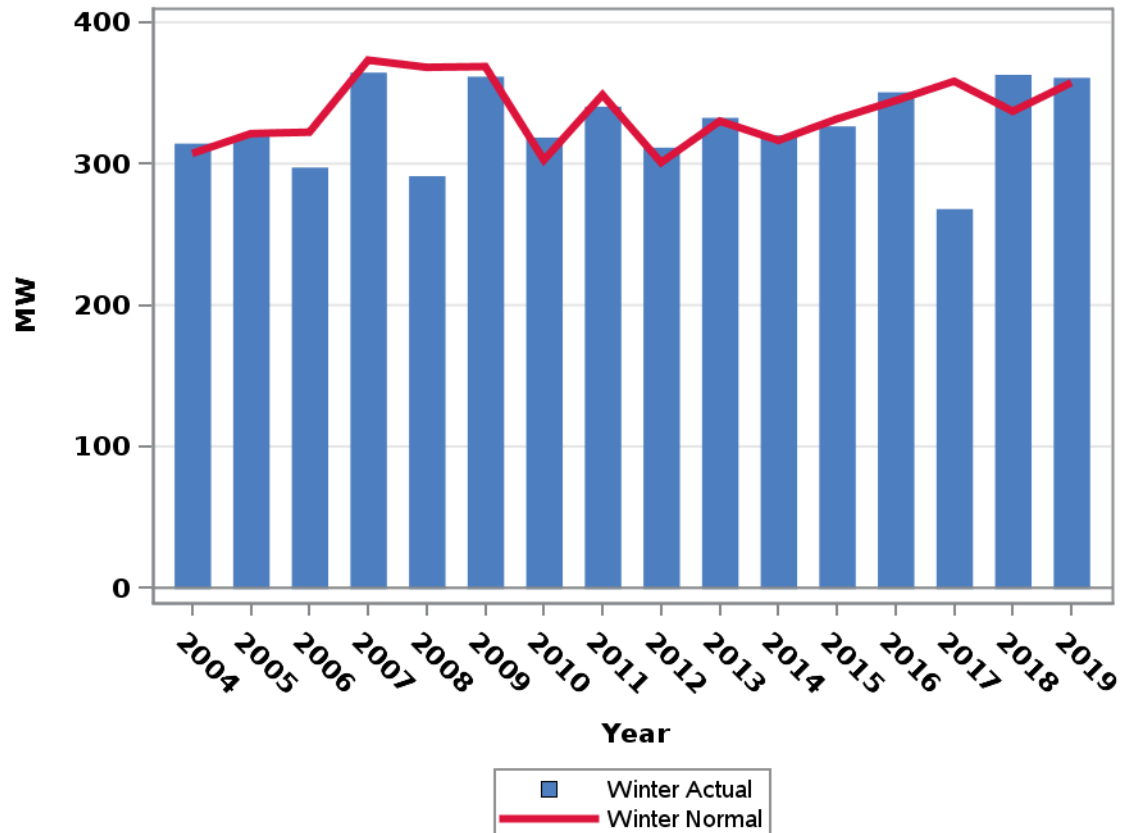
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial SGS Class



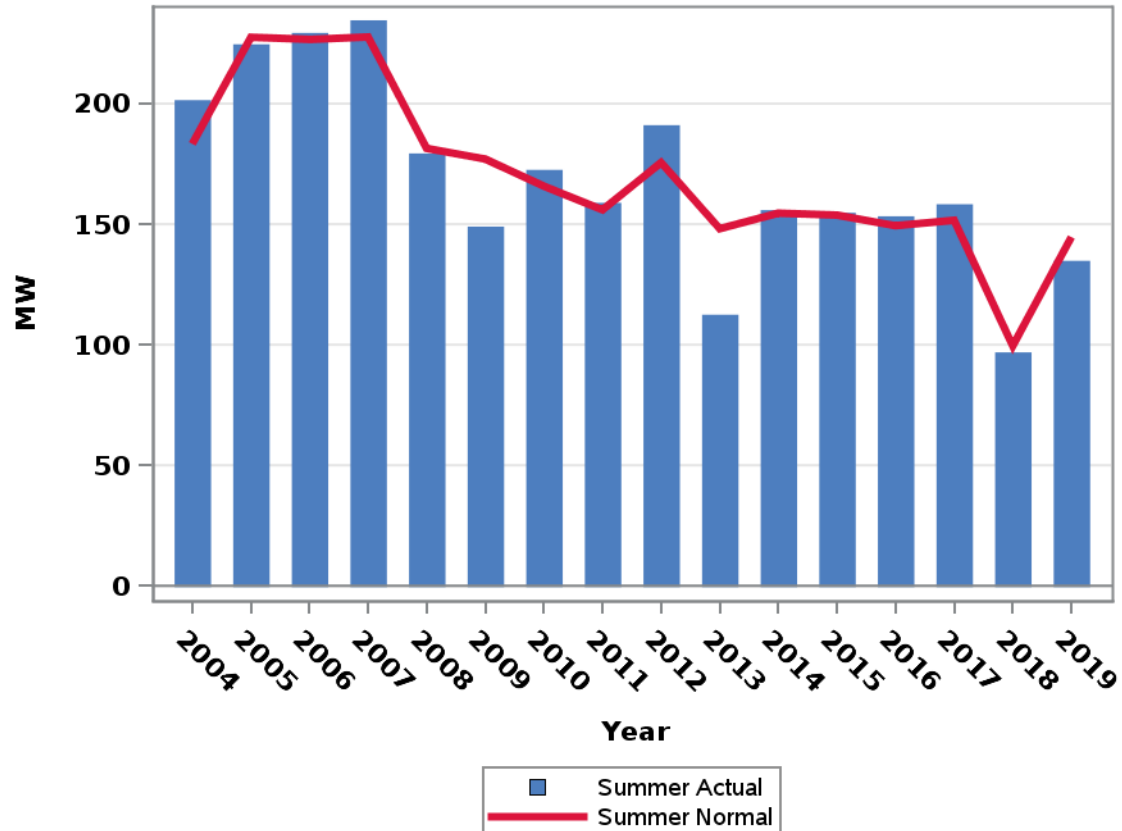
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial SPS Class



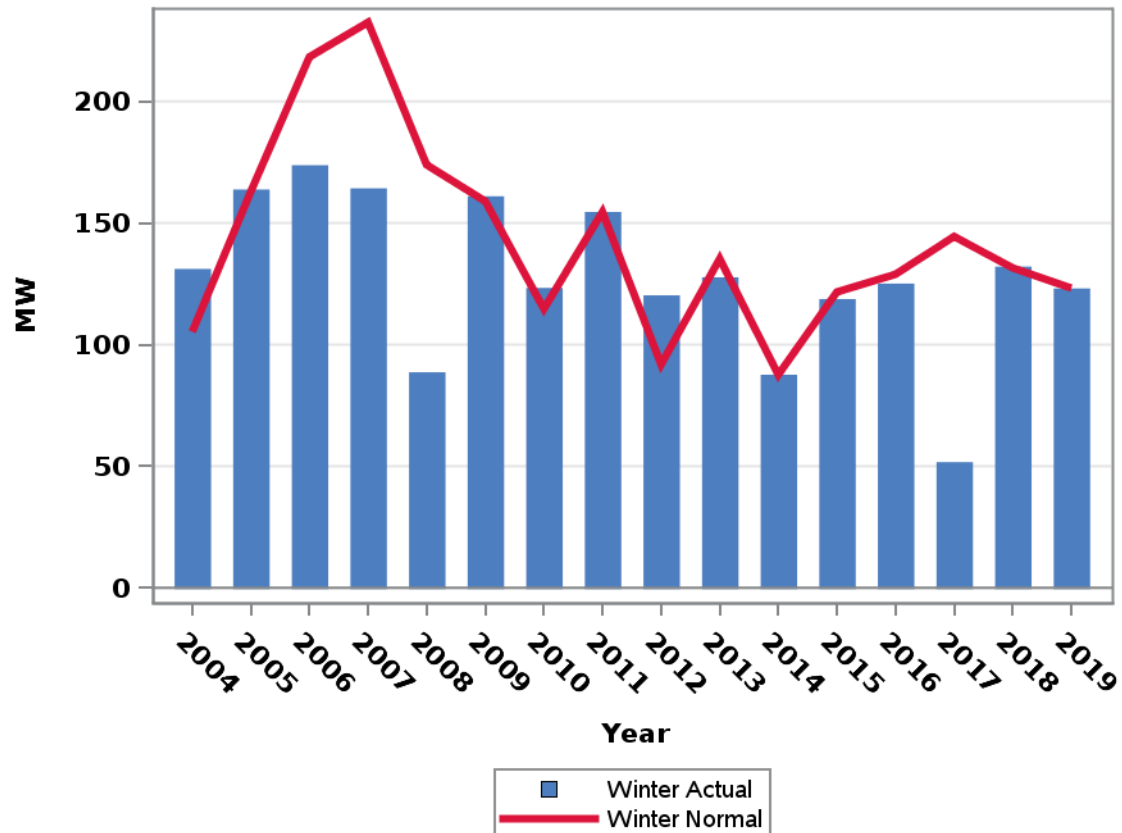
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial SPS Class



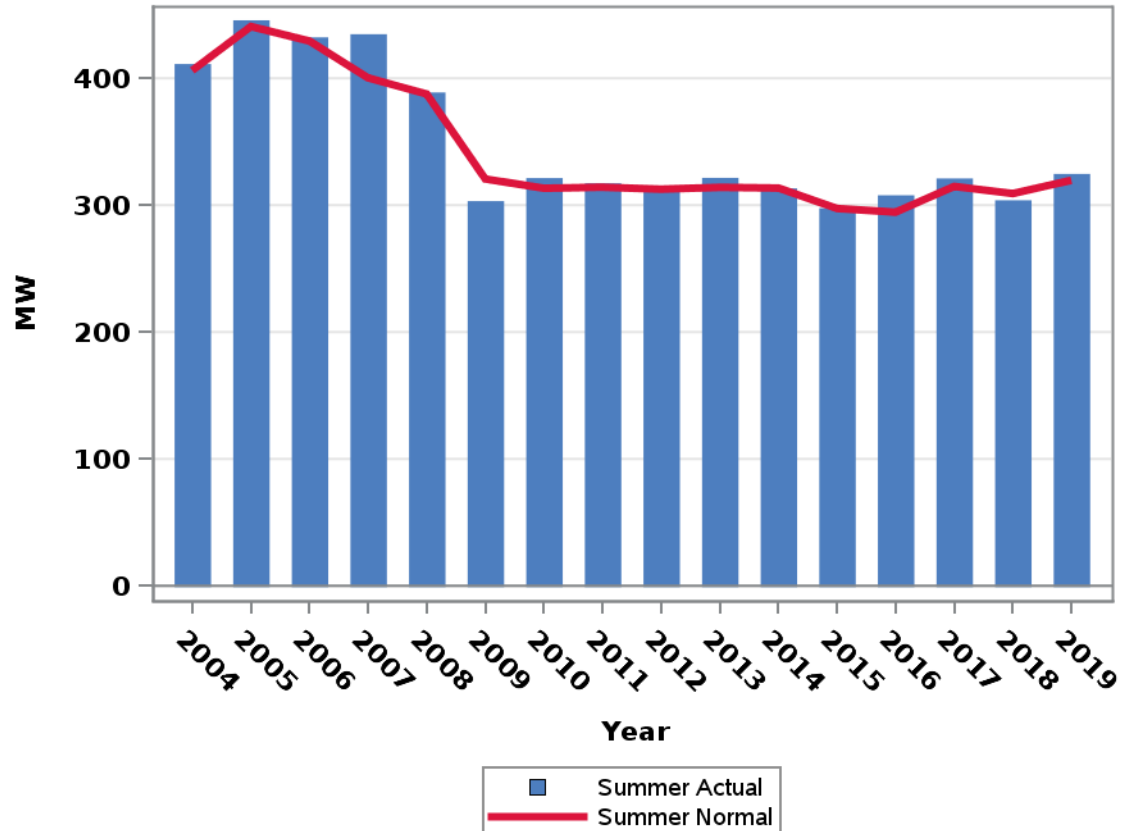
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial LGS Class



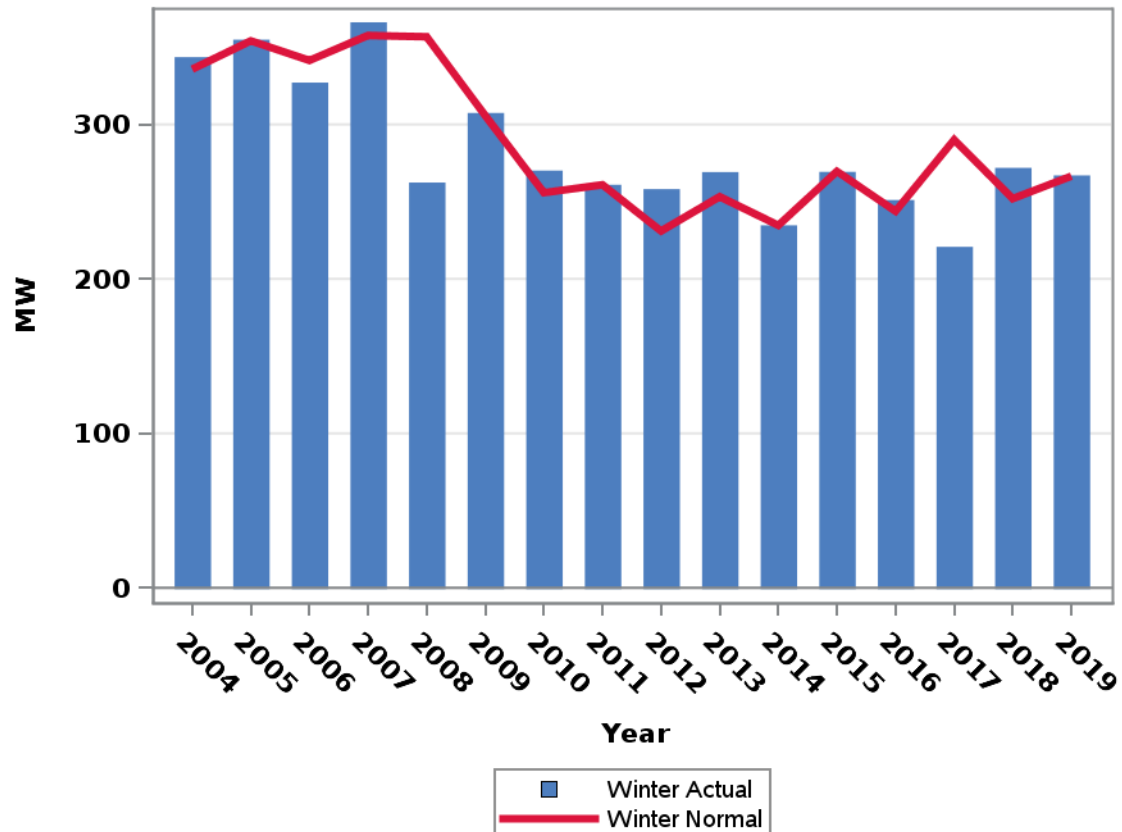
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial LGS Class



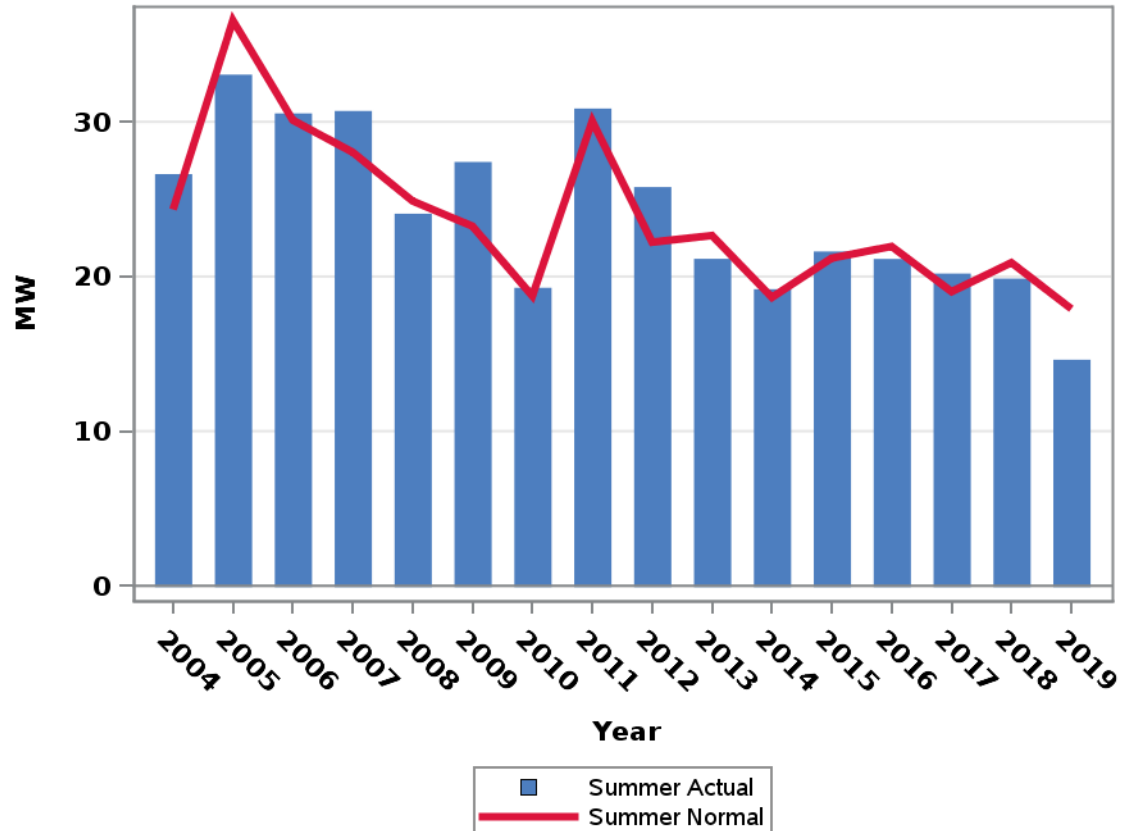
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial LPS Class



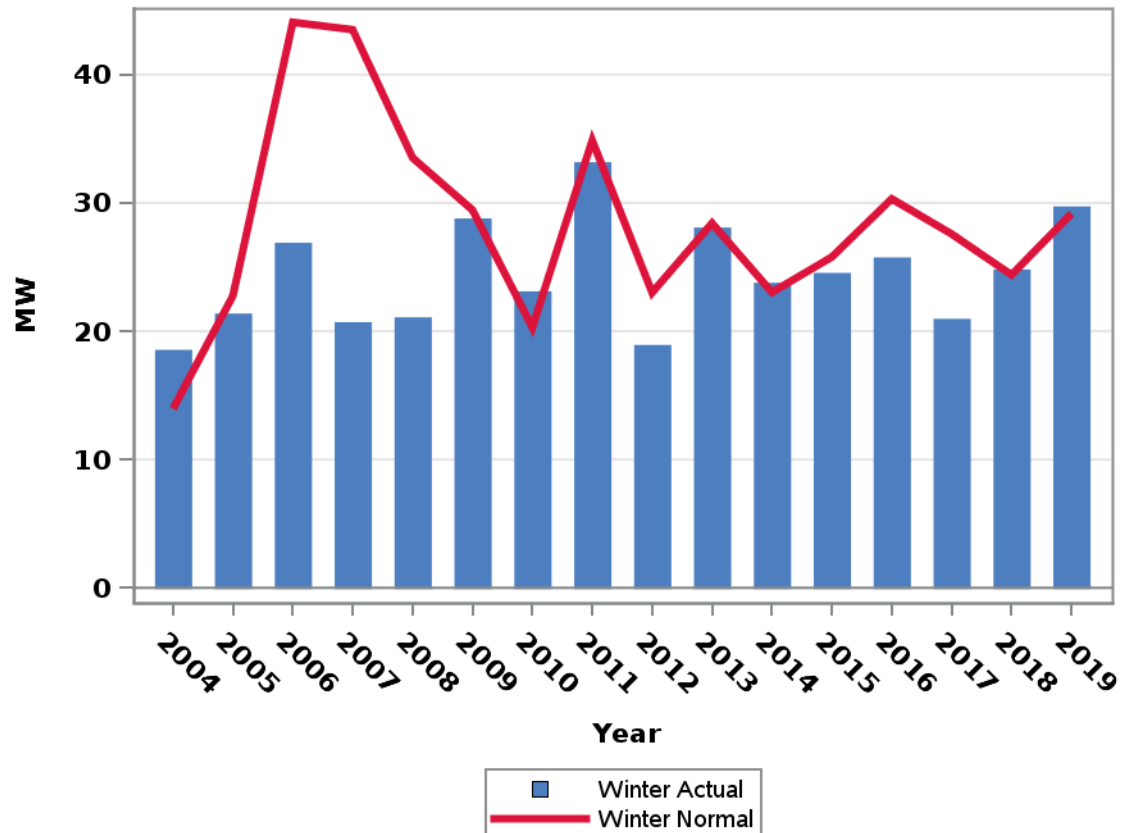
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial LPS Class



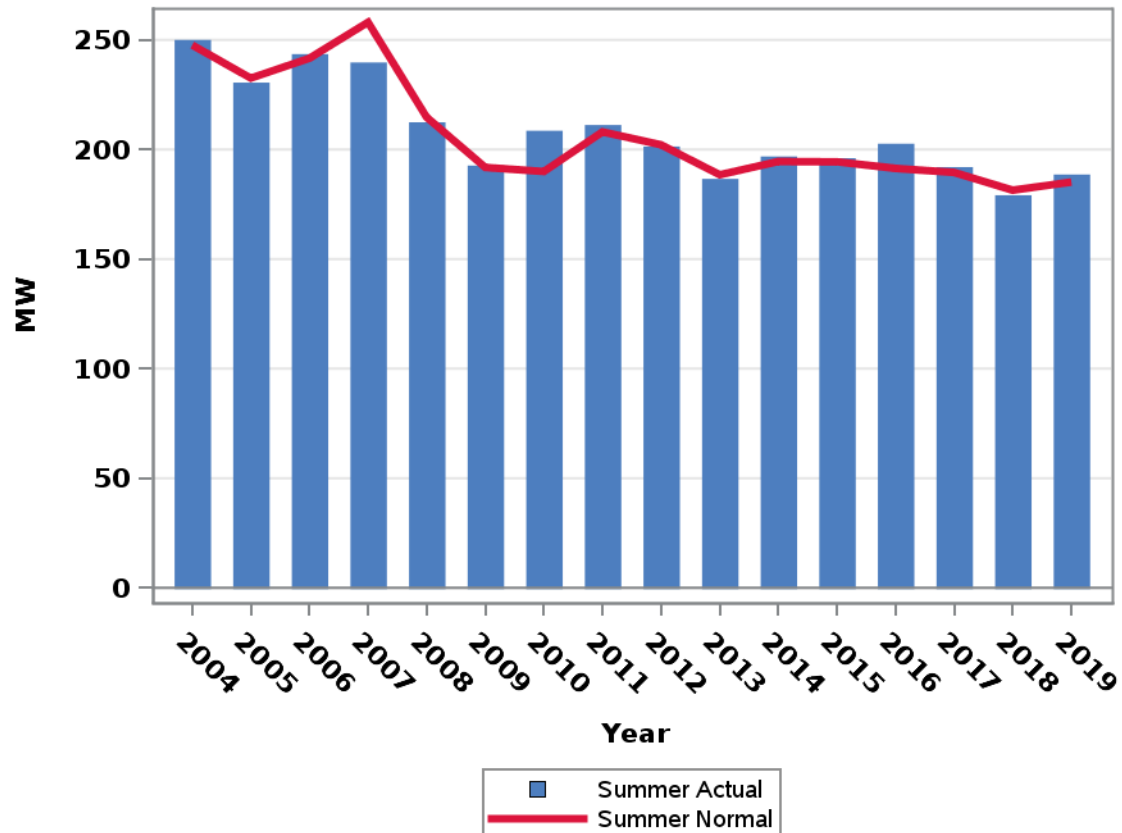
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial SGS Class



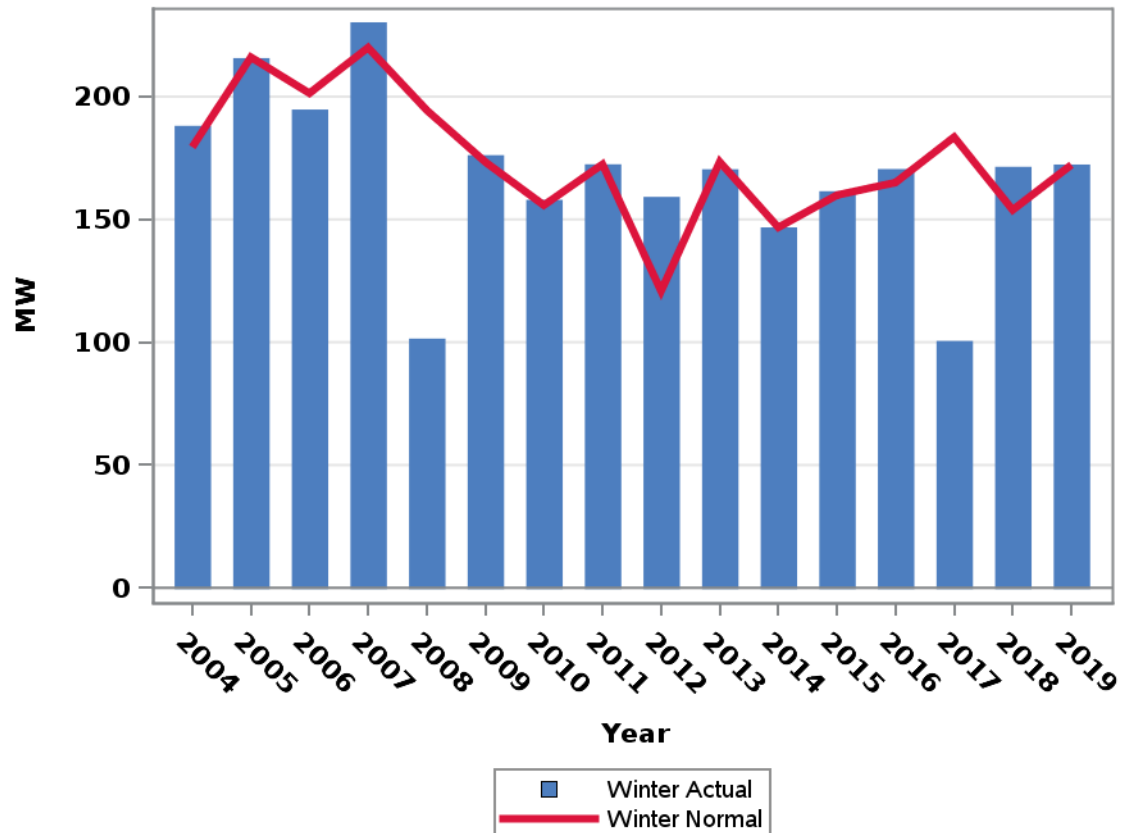
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial SGS Class



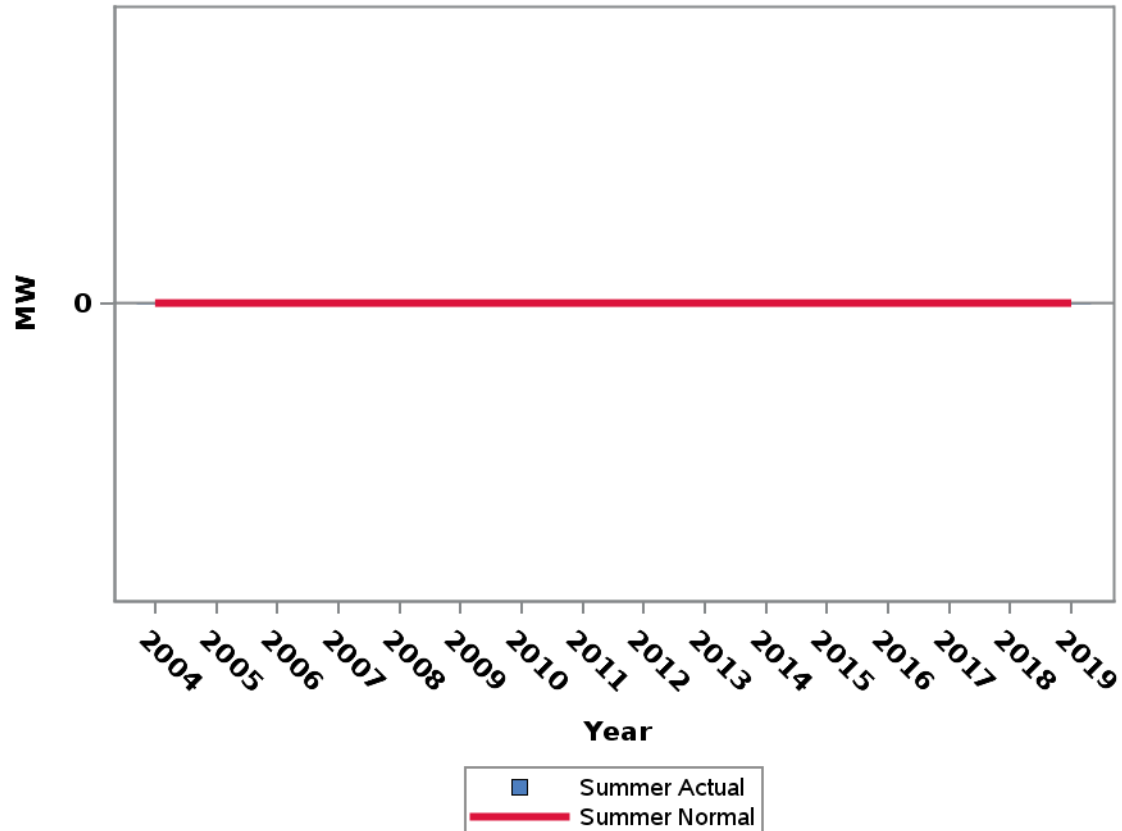
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial SPS Class



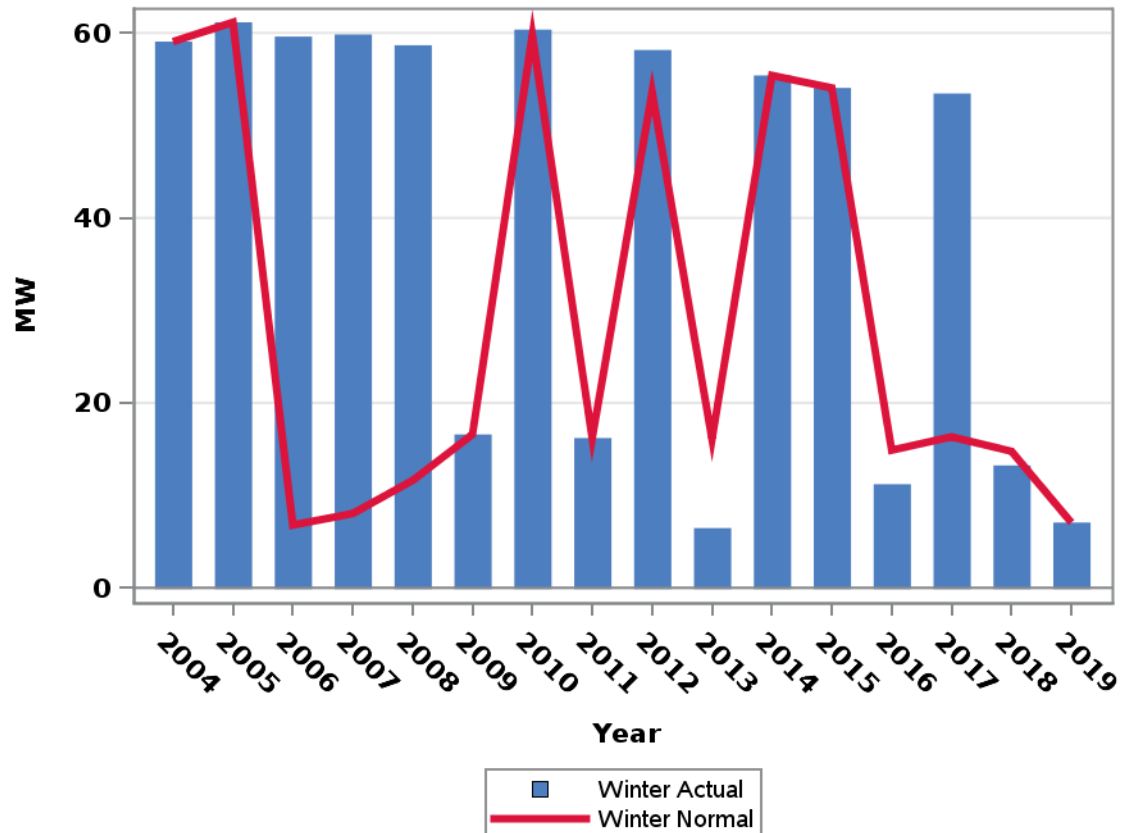
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial SPS Class



Actual and Weather-Normalized Summer Coincident Peak Demand for Lighting Class



Actual and Weather-Normalized Winter Coincident Peak Demand for Lighting Class



**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

THIS PAGE IS

CONFIDENTIAL IN ITS

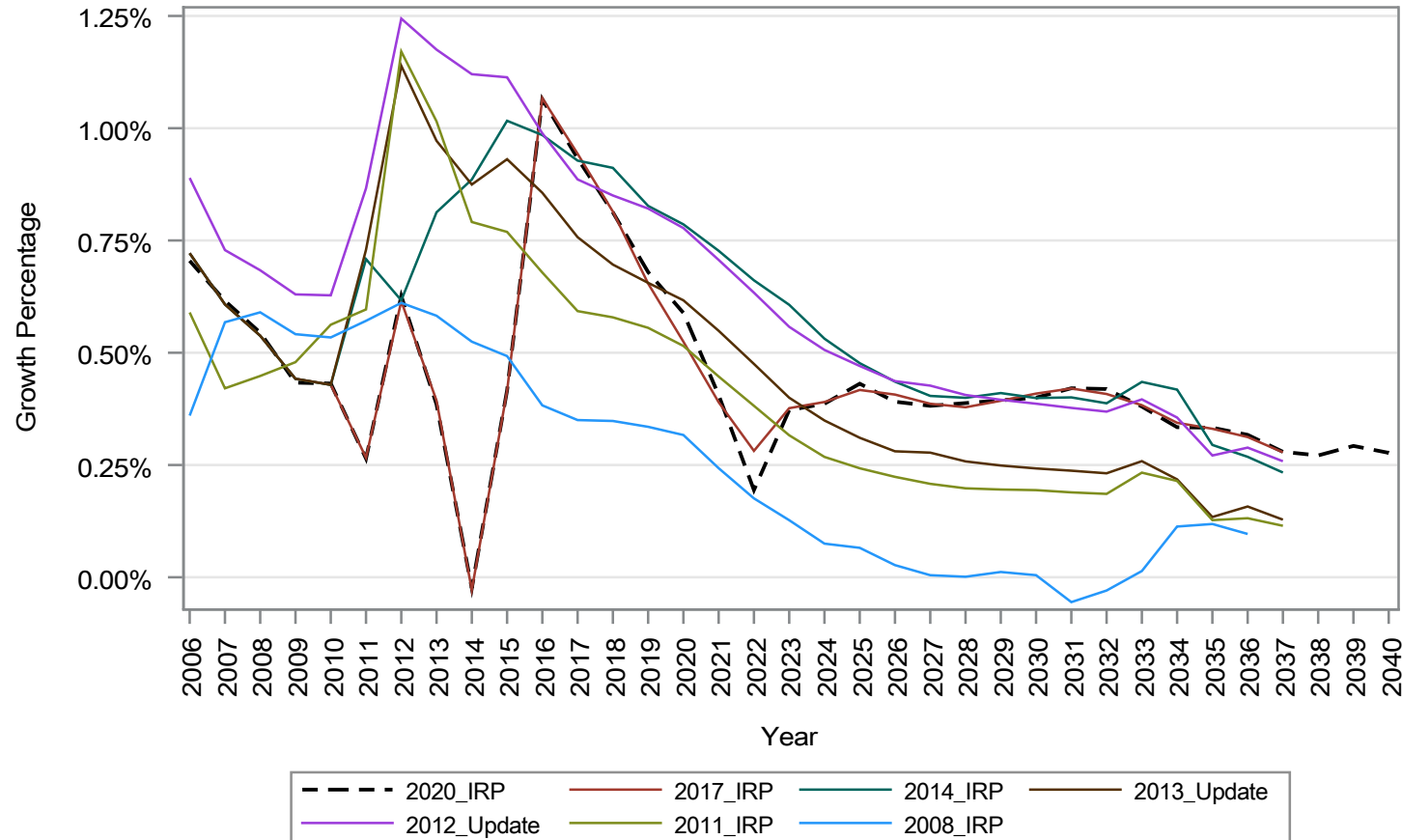
ENTIRETY

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

**THIS PAGE IS
CONFIDENTIAL IN ITS
ENTIRETY**

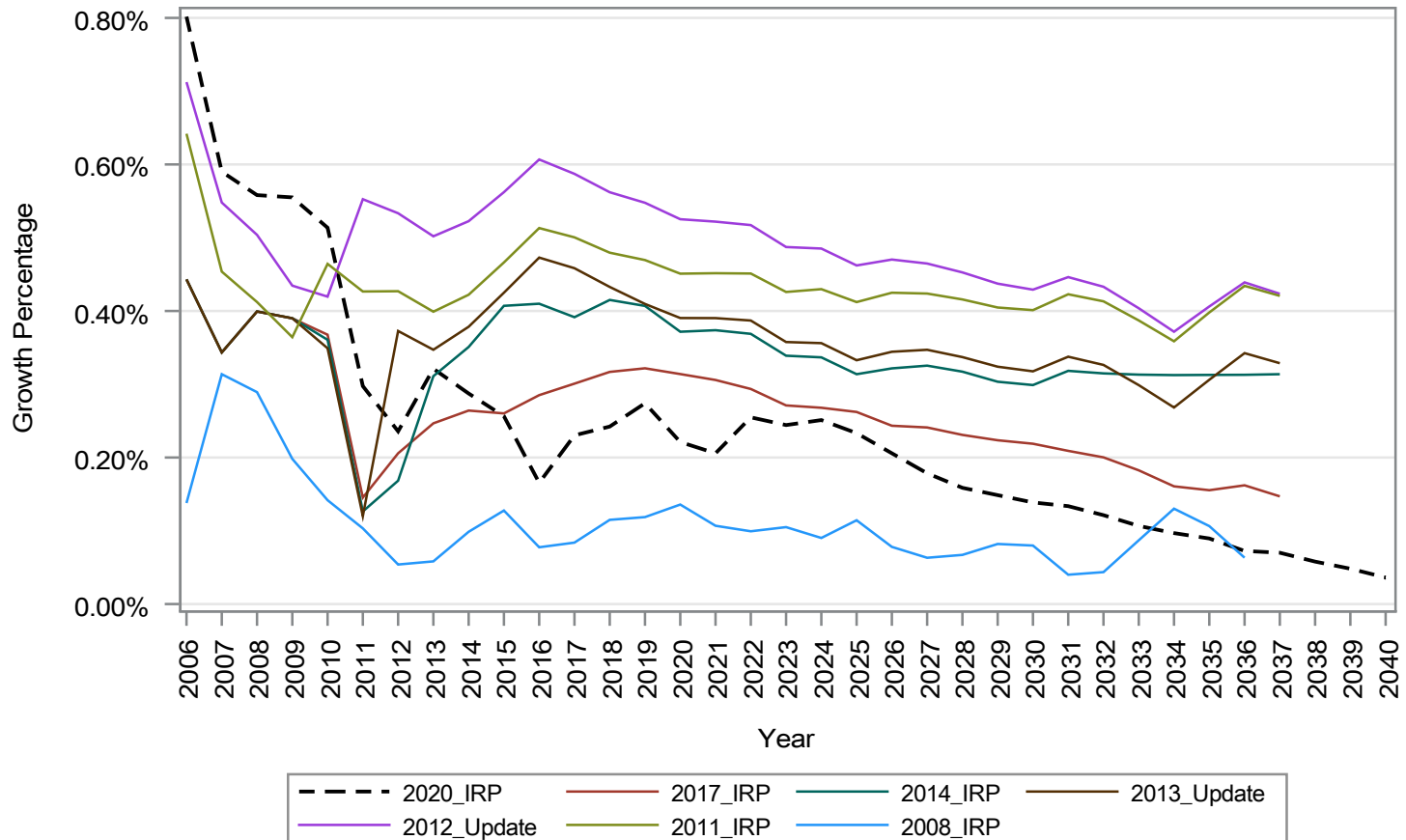
Archive of Previous Forecasts Independent Variables¹²

Historical/Forecast Growth Rate in Service Territory Households

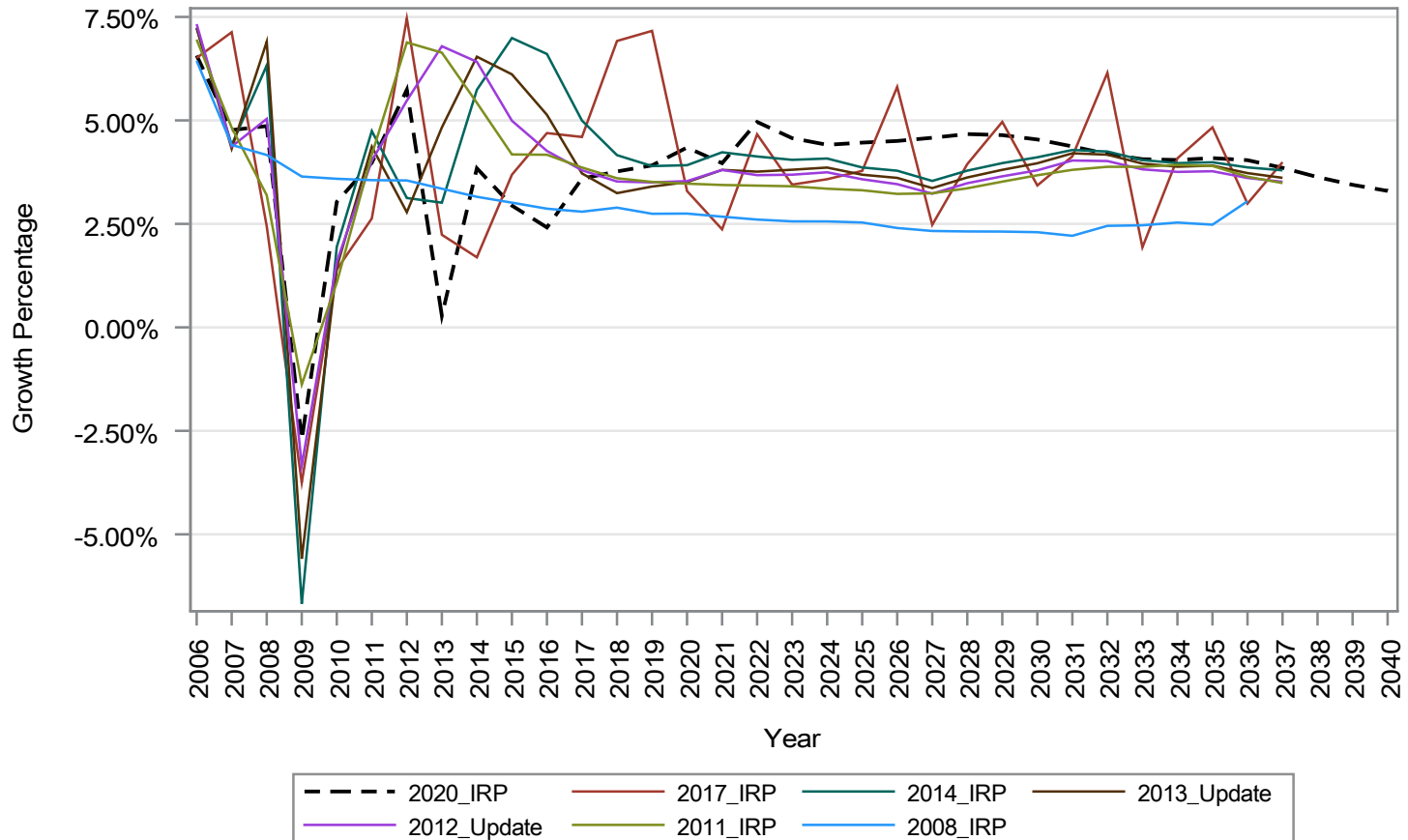


¹²20 CSR 4240-22.030(6)(C)3

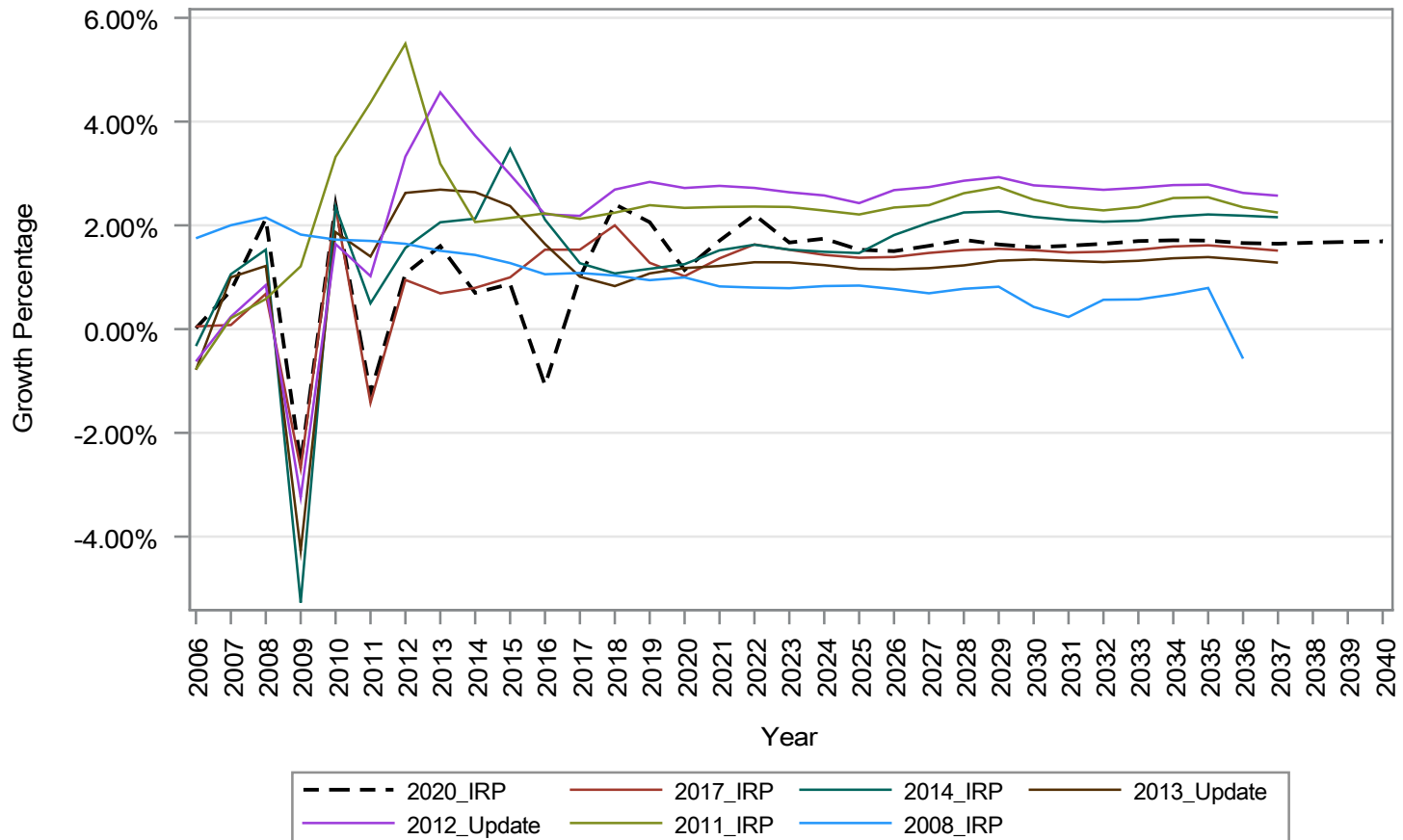
Historical/Forecast Growth Rate in Service Territory Population



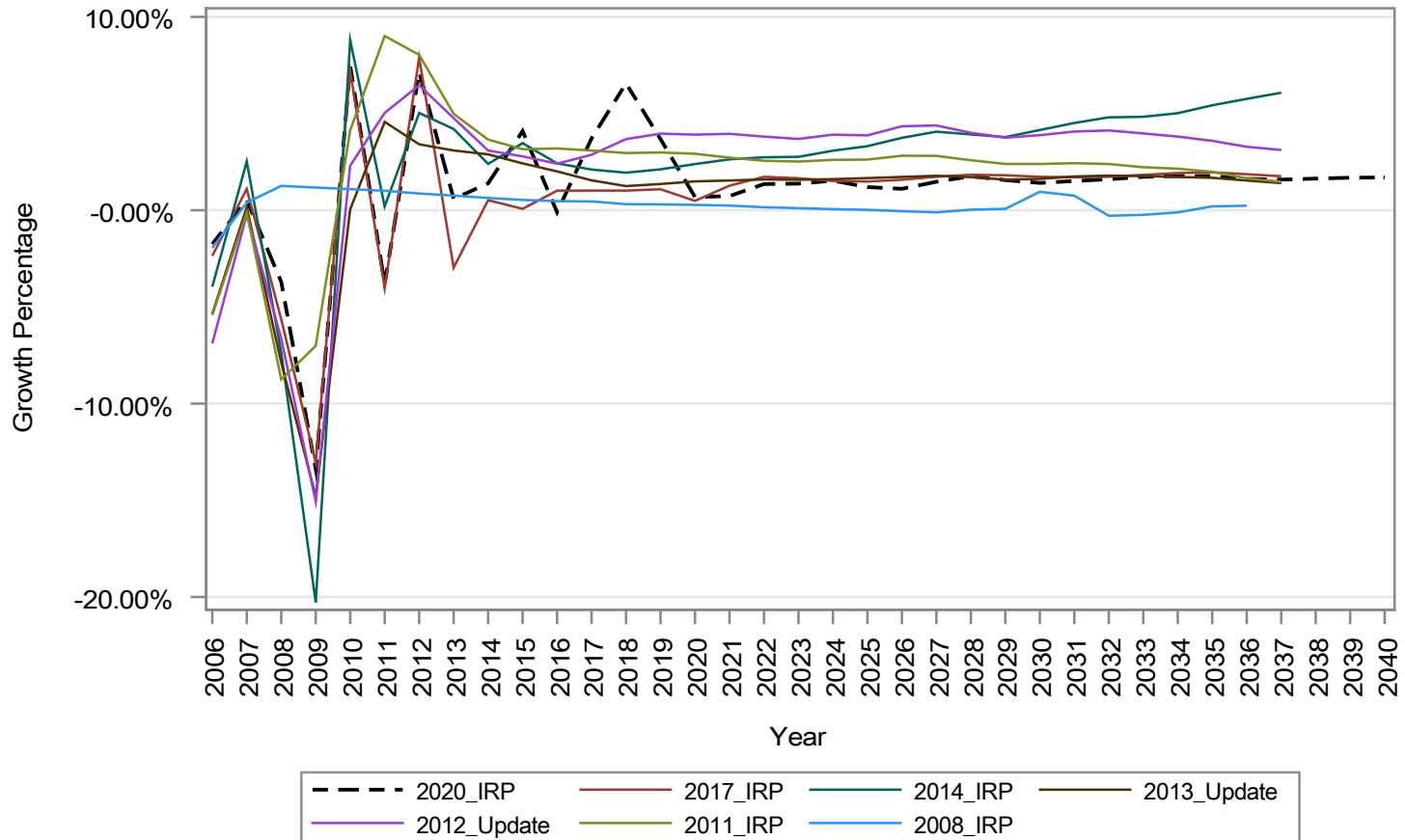
Historical/Forecast Growth Rate in Service Territory Personal Income



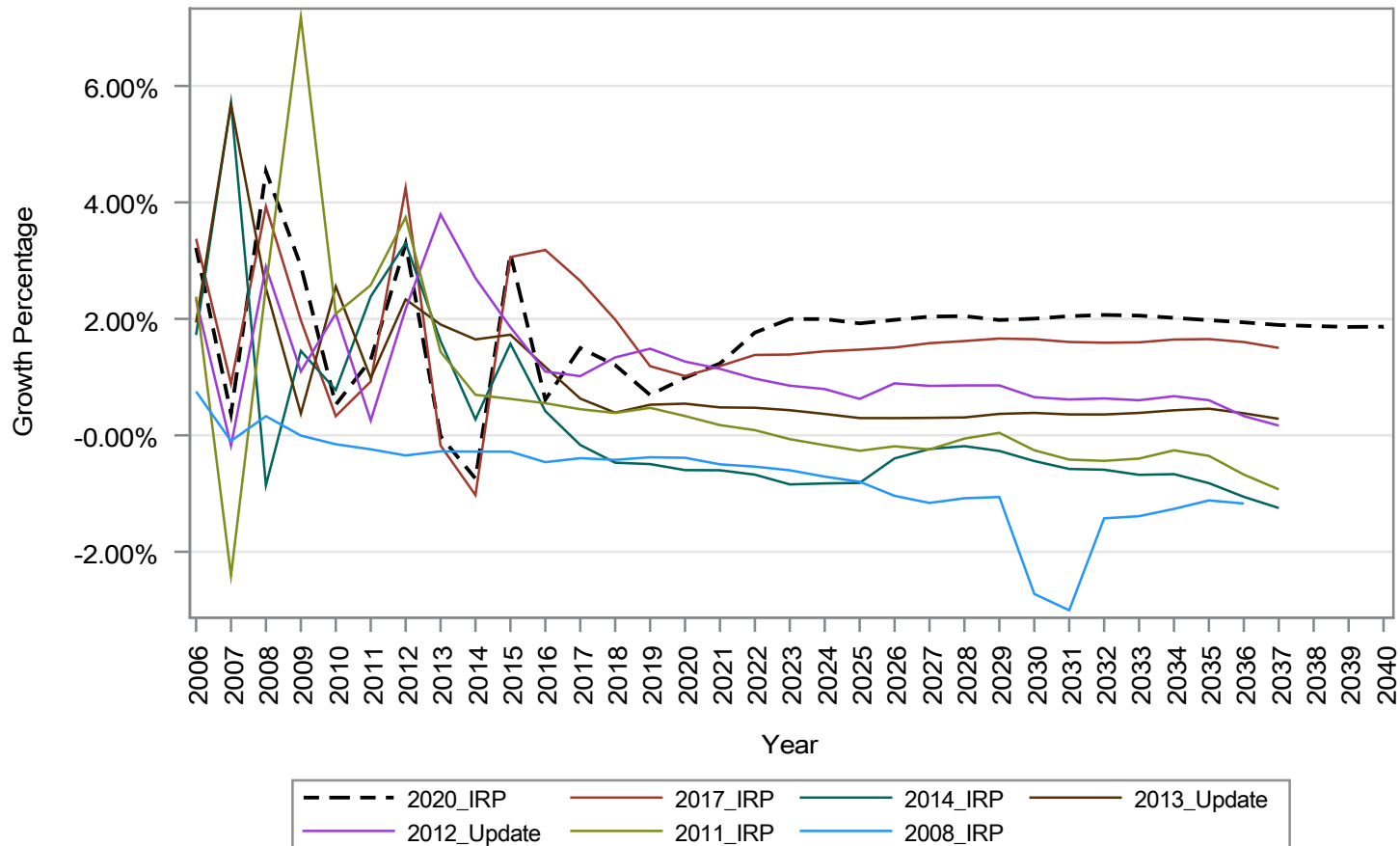
Historical/Forecast Growth Rate in Service Territory GDP



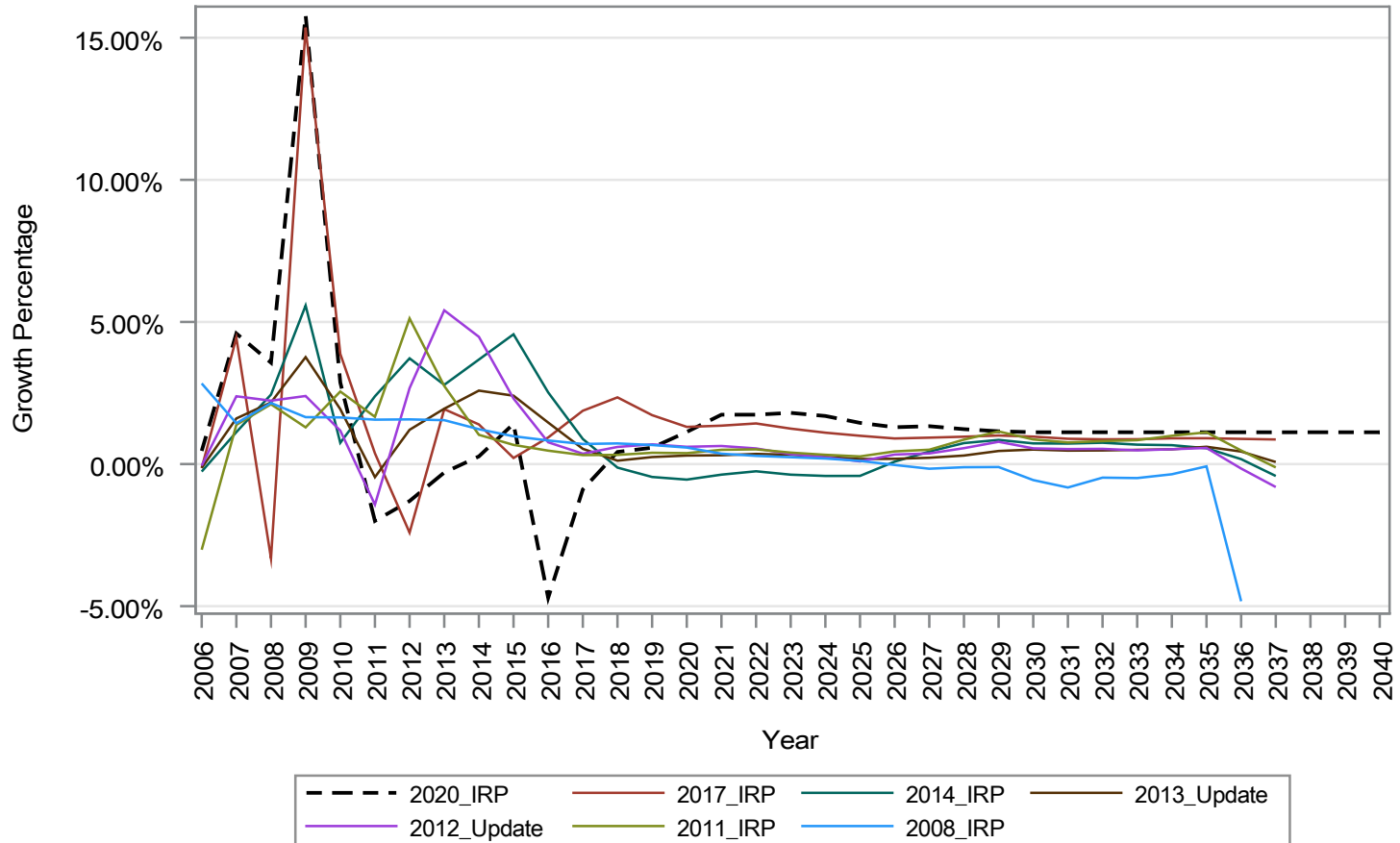
Historical/Forecast Growth Rate in Service Territory Manufacturing GDP



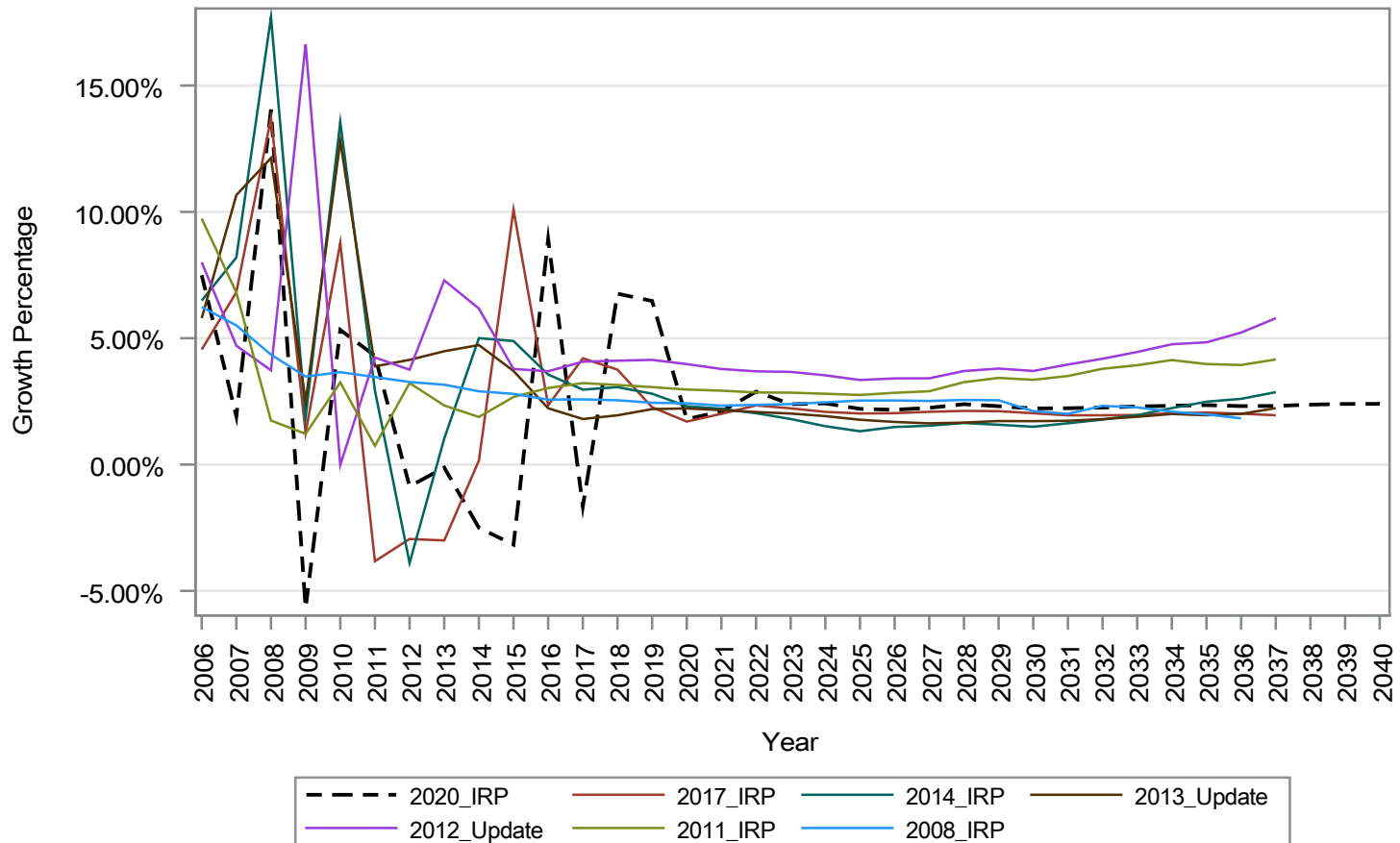
Historical/Forecast Growth Rate in Service Territory Education and Health Services GDP



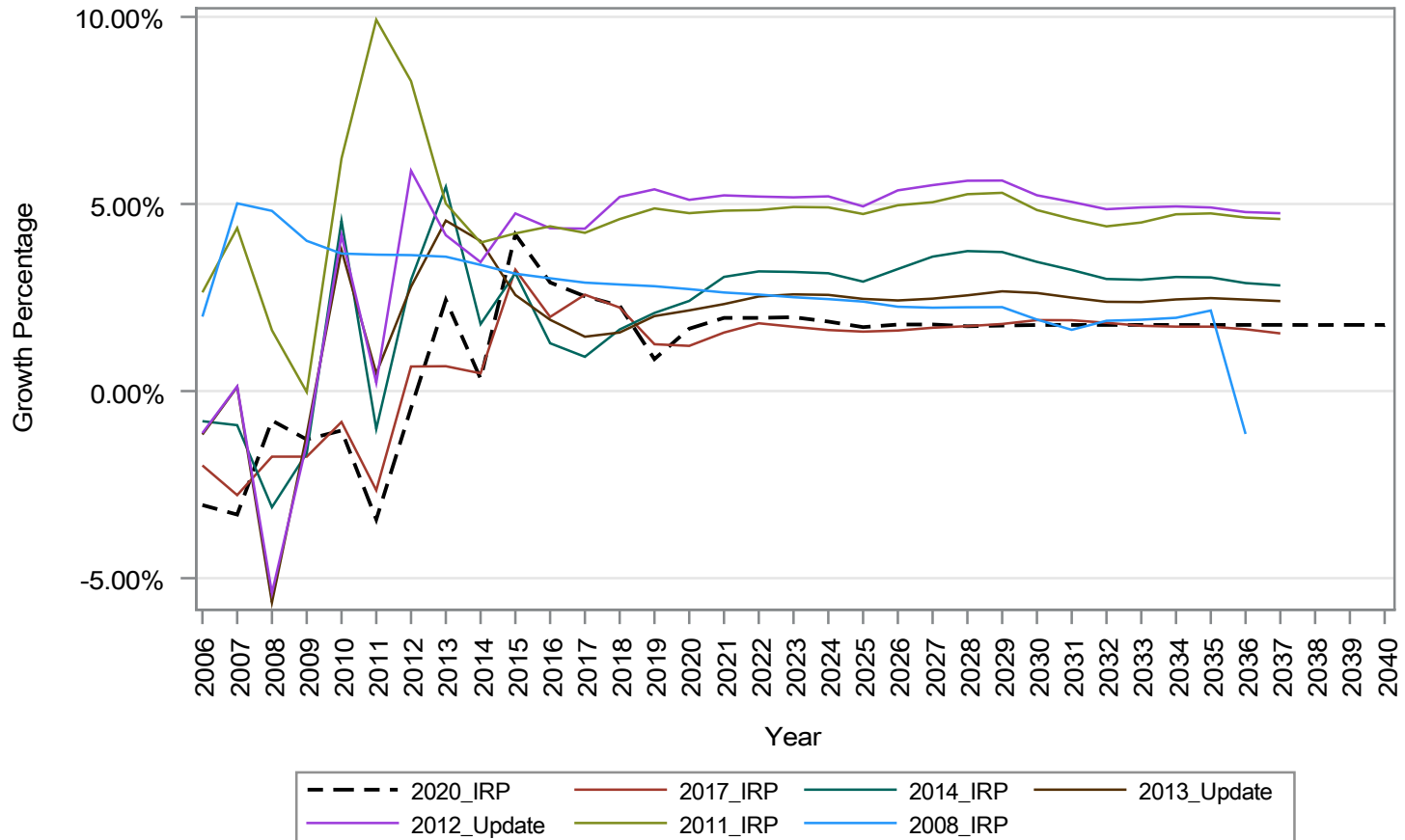
Historical/Forecast Growth Rate in Service Territory Financial Services GDP



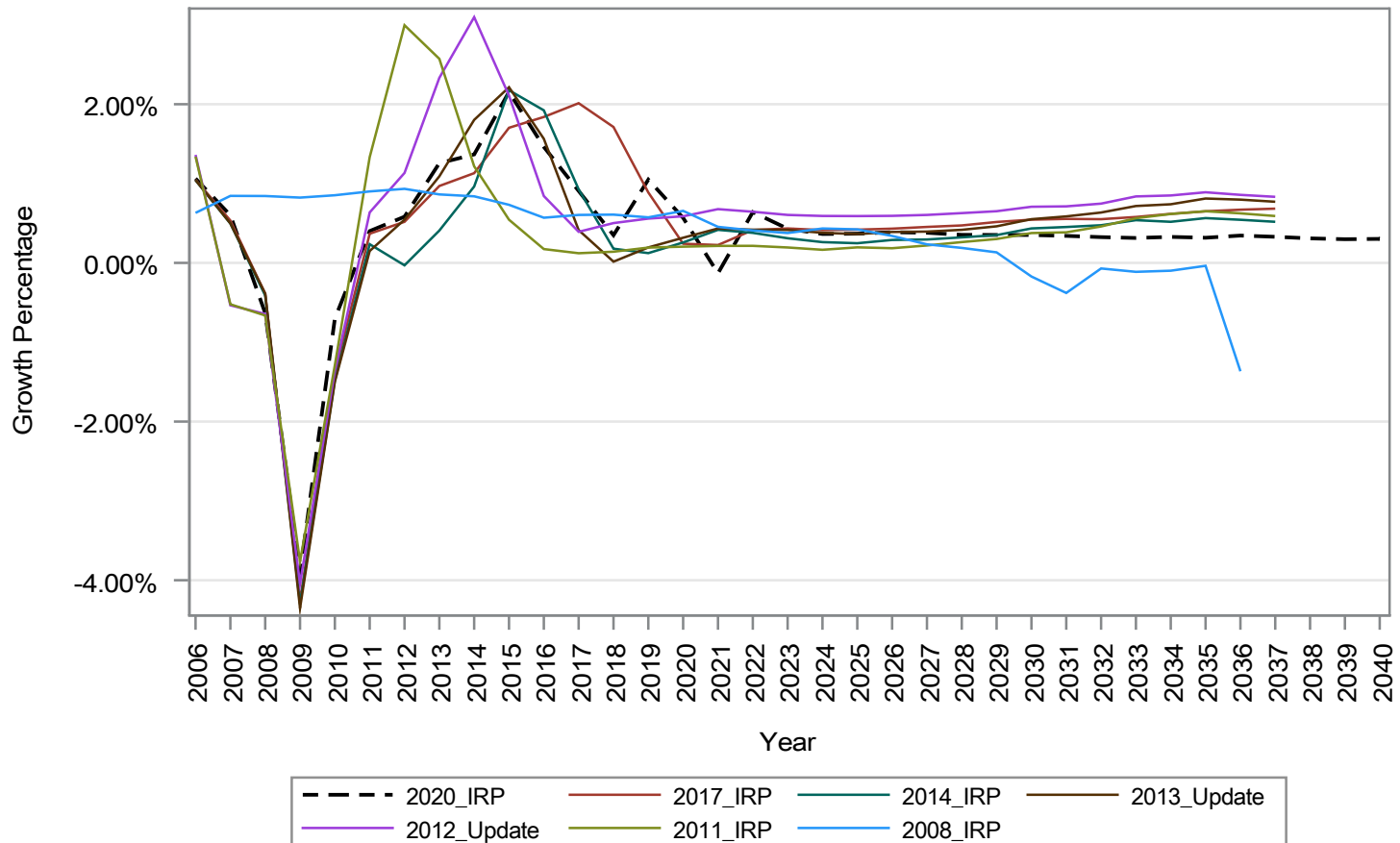
Historical/Forecast Growth Rate in Service Territory Information Services GDP



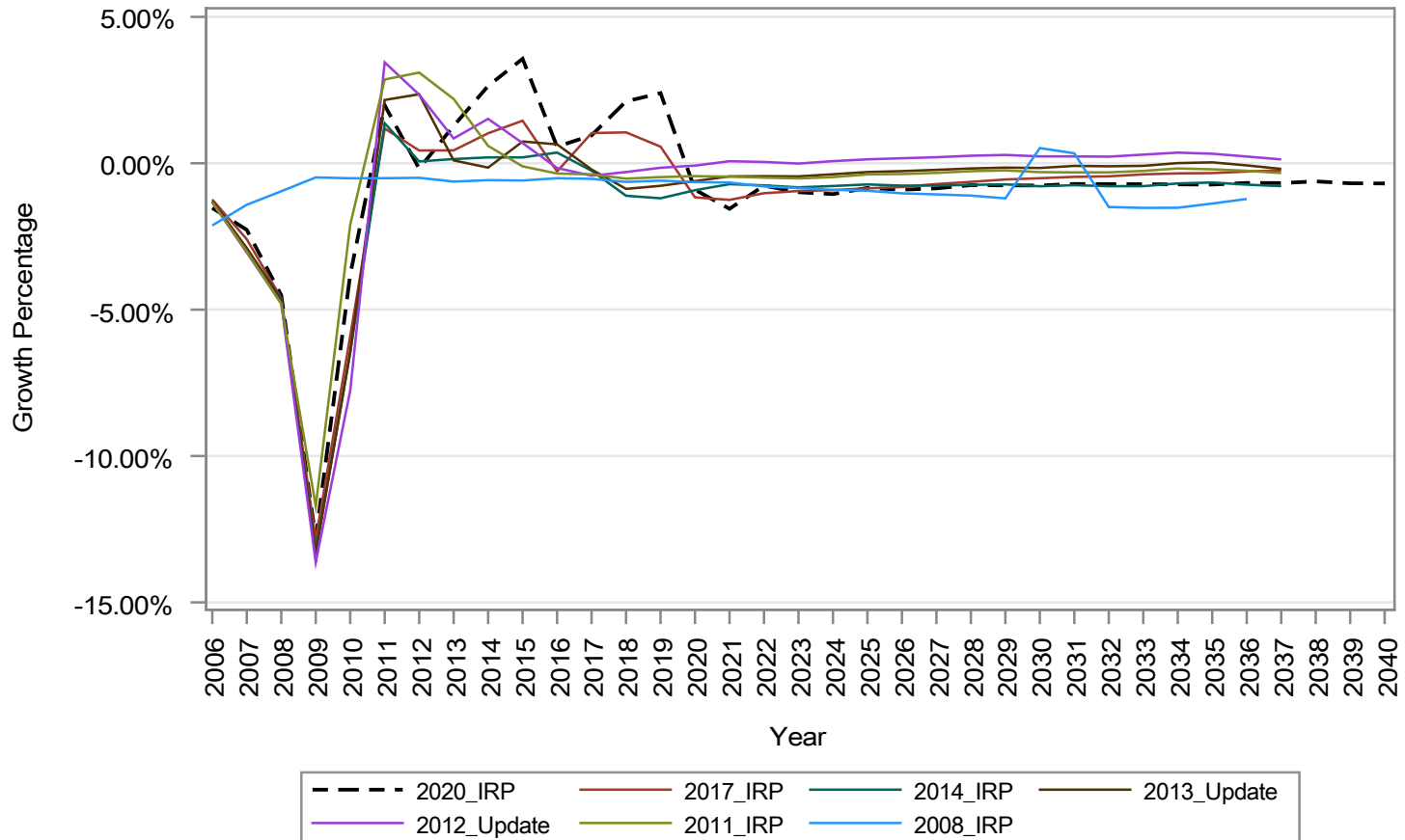
Historical/Forecast Growth Rate in Service Territory Retail/Trade GDP



Historical/Forecast Growth Rate in Service Territory Non-Farm Employment



Historical/Forecast Growth Rate in Service Territory Manufacturing Employment



Historical/Forecast Growth Rate in Service Territory Households (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	0.70%	0.72%	0.72%	0.72%	0.89%	0.59%	0.36%
2007	0.62%	0.61%	0.61%	0.61%	0.73%	0.42%	0.57%
2008	0.54%	0.54%	0.54%	0.54%	0.68%	0.45%	0.59%
2009	0.43%	0.44%	0.44%	0.44%	0.63%	0.48%	0.54%
2010	0.43%	0.43%	0.43%	0.43%	0.63%	0.56%	0.53%
2011	0.26%	0.27%	0.71%	0.73%	0.87%	0.60%	0.57%
2012	0.63%	0.61%	0.62%	1.14%	1.24%	1.17%	0.61%
2013	0.38%	0.39%	0.81%	0.97%	1.17%	1.02%	0.58%
2014	-0.02%	-0.03%	0.89%	0.87%	1.12%	0.79%	0.52%
2015	0.42%	0.41%	1.02%	0.93%	1.11%	0.77%	0.49%
2016	1.06%	1.07%	0.98%	0.86%	0.99%	0.68%	0.38%
2017	0.93%	0.94%	0.93%	0.76%	0.89%	0.59%	0.35%
2018	0.81%	0.81%	0.91%	0.70%	0.85%	0.58%	0.35%
2019	0.68%	0.65%	0.83%	0.66%	0.82%	0.56%	0.34%
2020	0.59%	0.52%	0.79%	0.62%	0.78%	0.52%	0.32%
2021	0.41%	0.39%	0.73%	0.55%	0.71%	0.45%	0.24%
2022	0.19%	0.28%	0.66%	0.48%	0.63%	0.38%	0.18%
2023	0.37%	0.38%	0.61%	0.40%	0.56%	0.32%	0.13%
2024	0.39%	0.39%	0.53%	0.35%	0.51%	0.27%	0.07%
2025	0.43%	0.42%	0.48%	0.31%	0.47%	0.24%	0.07%

Historical/Forecast Growth Rate in Service Territory Households

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	0.39%	0.41%	0.44%	0.28%	0.44%	0.22%	0.03%
2027	0.38%	0.39%	0.40%	0.28%	0.43%	0.21%	0.00%
2028	0.39%	0.38%	0.40%	0.26%	0.41%	0.20%	0.00%
2029	0.39%	0.39%	0.41%	0.25%	0.40%	0.20%	0.01%
2030	0.40%	0.41%	0.40%	0.24%	0.39%	0.19%	0.00%
2031	0.42%	0.42%	0.40%	0.24%	0.38%	0.19%	-0.06%
2032	0.42%	0.41%	0.39%	0.23%	0.37%	0.19%	-0.03%
2033	0.38%	0.38%	0.44%	0.26%	0.40%	0.23%	0.01%
2034	0.33%	0.34%	0.42%	0.22%	0.36%	0.21%	0.11%
2035	0.33%	0.33%	0.29%	0.13%	0.27%	0.13%	0.12%
2036	0.32%	0.31%	0.27%	0.16%	0.29%	0.13%	0.10%
2037	0.28%	0.28%	0.23%	0.13%	0.26%	0.11%	
2038	0.27%						
2039	0.29%						
2040	0.28%						

Historical/Forecast Growth Rate in Service Territory Population (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	0.80%	0.44%	0.44%	0.44%	0.71%	0.64%	0.14%
2007	0.59%	0.34%	0.34%	0.34%	0.55%	0.45%	0.31%
2008	0.56%	0.40%	0.40%	0.40%	0.50%	0.41%	0.29%
2009	0.56%	0.39%	0.39%	0.39%	0.43%	0.36%	0.20%
2010	0.51%	0.37%	0.36%	0.35%	0.42%	0.46%	0.14%
2011	0.30%	0.15%	0.13%	0.12%	0.55%	0.43%	0.10%
2012	0.24%	0.21%	0.17%	0.37%	0.53%	0.43%	0.05%
2013	0.32%	0.25%	0.31%	0.35%	0.50%	0.40%	0.06%
2014	0.29%	0.26%	0.35%	0.38%	0.52%	0.42%	0.10%
2015	0.26%	0.26%	0.41%	0.42%	0.56%	0.47%	0.13%
2016	0.17%	0.29%	0.41%	0.47%	0.61%	0.51%	0.08%
2017	0.23%	0.30%	0.39%	0.46%	0.59%	0.50%	0.08%
2018	0.24%	0.32%	0.42%	0.43%	0.56%	0.48%	0.11%
2019	0.27%	0.32%	0.41%	0.41%	0.55%	0.47%	0.12%
2020	0.22%	0.31%	0.37%	0.39%	0.53%	0.45%	0.14%
2021	0.21%	0.31%	0.37%	0.39%	0.52%	0.45%	0.11%
2022	0.25%	0.29%	0.37%	0.39%	0.52%	0.45%	0.10%
2023	0.24%	0.27%	0.34%	0.36%	0.49%	0.43%	0.10%
2024	0.25%	0.27%	0.34%	0.36%	0.49%	0.43%	0.09%
2025	0.23%	0.26%	0.31%	0.33%	0.46%	0.41%	0.11%

Historical/Forecast Growth Rate in Service Territory Population

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	0.21%	0.24%	0.32%	0.34%	0.47%	0.42%	0.08%
2027	0.18%	0.24%	0.33%	0.35%	0.46%	0.42%	0.06%
2028	0.16%	0.23%	0.32%	0.34%	0.45%	0.42%	0.07%
2029	0.15%	0.22%	0.30%	0.32%	0.44%	0.40%	0.08%
2030	0.14%	0.22%	0.30%	0.32%	0.43%	0.40%	0.08%
2031	0.13%	0.21%	0.32%	0.34%	0.45%	0.42%	0.04%
2032	0.12%	0.20%	0.31%	0.33%	0.43%	0.41%	0.04%
2033	0.11%	0.18%	0.31%	0.30%	0.40%	0.39%	0.09%
2034	0.10%	0.16%	0.31%	0.27%	0.37%	0.36%	0.13%
2035	0.09%	0.16%	0.31%	0.31%	0.41%	0.40%	0.11%
2036	0.07%	0.16%	0.31%	0.34%	0.44%	0.43%	0.06%
2037	0.07%	0.15%	0.31%	0.33%	0.42%	0.42%	
2038	0.06%						
2039	0.05%						
2040	0.04%						

Historical/Forecast Growth Rate in Service Territory Personal Income (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	6.57%	6.51%	7.24%	7.23%	7.33%	6.95%	6.44%
2007	4.77%	7.13%	4.41%	4.32%	4.37%	4.83%	4.41%
2008	4.86%	2.44%	6.33%	6.90%	5.04%	3.19%	4.16%
2009	-2.71%	-3.75%	-6.68%	-5.59%	-3.34%	-1.38%	3.64%
2010	3.03%	1.40%	1.94%	1.45%	1.58%	1.08%	3.59%
2011	3.98%	2.63%	4.74%	4.37%	4.03%	4.17%	3.56%
2012	5.74%	7.46%	3.12%	2.78%	5.48%	6.88%	3.55%
2013	0.28%	2.24%	3.01%	4.83%	6.79%	6.64%	3.35%
2014	3.84%	1.69%	5.74%	6.54%	6.42%	5.42%	3.15%
2015	2.94%	3.69%	6.99%	6.11%	4.99%	4.18%	3.01%
2016	2.41%	4.69%	6.60%	5.13%	4.26%	4.17%	2.87%
2017	3.59%	4.60%	5.00%	3.72%	3.80%	3.86%	2.79%
2018	3.77%	6.92%	4.16%	3.24%	3.52%	3.60%	2.89%
2019	3.91%	7.16%	3.90%	3.40%	3.50%	3.51%	2.74%
2020	4.35%	3.29%	3.92%	3.51%	3.53%	3.47%	2.75%
2021	3.97%	2.37%	4.23%	3.80%	3.80%	3.44%	2.67%
2022	4.96%	4.66%	4.13%	3.76%	3.68%	3.42%	2.60%
2023	4.57%	3.45%	4.05%	3.81%	3.69%	3.41%	2.56%
2024	4.41%	3.58%	4.08%	3.86%	3.75%	3.35%	2.56%
2025	4.46%	3.78%	3.86%	3.69%	3.58%	3.31%	2.53%

Historical/Forecast Growth Rate in Service Territory Personal Income

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	4.50%	5.81%	3.78%	3.61%	3.46%	3.22%	2.40%
2027	4.58%	2.48%	3.54%	3.36%	3.23%	3.24%	2.33%
2028	4.67%	3.94%	3.79%	3.62%	3.48%	3.36%	2.32%
2029	4.64%	4.96%	3.97%	3.81%	3.65%	3.52%	2.31%
2030	4.54%	3.43%	4.11%	3.96%	3.79%	3.67%	2.30%
2031	4.37%	4.13%	4.28%	4.20%	4.03%	3.81%	2.21%
2032	4.19%	6.15%	4.25%	4.17%	4.02%	3.88%	2.45%
2033	4.06%	1.93%	4.04%	3.96%	3.82%	3.88%	2.47%
2034	4.04%	4.08%	3.97%	3.88%	3.76%	3.93%	2.53%
2035	4.09%	4.83%	3.99%	3.91%	3.77%	3.90%	2.48%
2036	4.04%	2.99%	3.86%	3.73%	3.61%	3.64%	3.05%
2037	3.85%	3.99%	3.79%	3.61%	3.52%	3.49%	
2038	3.63%						
2039	3.44%						
2040	3.30%						

Historical/Forecast Growth Rate in Service Territory GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	0.02%	0.05%	-0.33%	-0.79%	-0.62%	-0.78%	1.75%
2007	0.74%	0.08%	1.06%	1.00%	0.24%	0.21%	2.00%
2008	2.13%	0.68%	1.53%	1.22%	0.85%	0.58%	2.15%
2009	-2.58%	-2.69%	-5.27%	-4.27%	-3.24%	1.21%	1.82%
2010	2.40%	2.35%	2.36%	1.87%	1.64%	3.32%	1.72%
2011	-1.23%	-1.42%	0.50%	1.40%	1.02%	4.37%	1.70%
2012	1.07%	0.95%	1.56%	2.63%	3.33%	5.50%	1.64%
2013	1.60%	0.69%	2.06%	2.69%	4.56%	3.19%	1.51%
2014	0.70%	0.80%	2.13%	2.64%	3.73%	2.06%	1.43%
2015	0.87%	1.00%	3.47%	2.37%	2.98%	2.14%	1.27%
2016	-1.08%	1.53%	2.11%	1.64%	2.21%	2.23%	1.06%
2017	1.00%	1.53%	1.27%	1.01%	2.18%	2.12%	1.08%
2018	2.41%	2.00%	1.07%	0.83%	2.69%	2.24%	1.03%
2019	2.06%	1.28%	1.16%	1.07%	2.84%	2.39%	0.94%
2020	1.14%	1.02%	1.25%	1.18%	2.72%	2.34%	1.00%
2021	1.70%	1.36%	1.52%	1.22%	2.76%	2.35%	0.82%
2022	2.20%	1.63%	1.63%	1.29%	2.72%	2.36%	0.80%
2023	1.67%	1.53%	1.53%	1.29%	2.64%	2.35%	0.79%
2024	1.74%	1.43%	1.49%	1.23%	2.58%	2.29%	0.83%
2025	1.53%	1.38%	1.47%	1.16%	2.43%	2.21%	0.84%

Historical/Forecast Growth Rate in Service Territory GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.50%	1.39%	1.81%	1.15%	2.68%	2.34%	0.77%
2027	1.61%	1.47%	2.05%	1.17%	2.74%	2.39%	0.69%
2028	1.72%	1.52%	2.25%	1.23%	2.86%	2.62%	0.78%
2029	1.63%	1.55%	2.27%	1.32%	2.93%	2.74%	0.82%
2030	1.58%	1.52%	2.16%	1.34%	2.77%	2.49%	0.43%
2031	1.61%	1.48%	2.10%	1.32%	2.73%	2.35%	0.23%
2032	1.64%	1.49%	2.07%	1.29%	2.68%	2.29%	0.57%
2033	1.70%	1.53%	2.09%	1.32%	2.72%	2.35%	0.57%
2034	1.71%	1.59%	2.17%	1.37%	2.78%	2.53%	0.67%
2035	1.71%	1.61%	2.21%	1.39%	2.78%	2.54%	0.79%
2036	1.66%	1.57%	2.19%	1.34%	2.62%	2.35%	-0.57%
2037	1.65%	1.51%	2.16%	1.28%	2.57%	2.25%	
2038	1.67%						
2039	1.68%						
2040	1.69%						

Historical/Forecast Growth Rate in Service Territory Manufacturing GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	-1.75%	-2.36%	-3.95%	-5.36%	-6.89%	-5.42%	-1.94%
2007	0.53%	1.10%	2.52%	0.16%	-0.23%	-0.12%	0.39%
2008	-3.71%	-5.64%	-7.35%	-7.88%	-6.63%	-8.75%	1.26%
2009	-13.38%	-13.06%	-20.28%	-14.80%	-15.07%	-7.01%	1.18%
2010	7.47%	7.20%	8.79%	0.05%	2.30%	4.13%	1.09%
2011	-3.82%	-4.03%	0.20%	4.57%	5.04%	9.01%	1.01%
2012	7.14%	7.90%	5.03%	3.41%	6.46%	8.03%	0.87%
2013	0.59%	-2.97%	4.20%	3.09%	4.76%	4.99%	0.76%
2014	1.39%	0.52%	2.40%	2.89%	3.09%	3.65%	0.63%
2015	4.09%	0.07%	3.47%	2.42%	2.79%	3.16%	0.53%
2016	-0.10%	1.02%	2.43%	2.01%	2.41%	3.20%	0.47%
2017	3.72%	1.02%	2.10%	1.55%	2.87%	3.09%	0.46%
2018	6.56%	1.02%	1.94%	1.25%	3.68%	2.96%	0.31%
2019	3.68%	1.09%	2.12%	1.36%	3.96%	2.99%	0.31%
2020	0.68%	0.48%	2.39%	1.49%	3.91%	2.92%	0.28%
2021	0.73%	1.27%	2.63%	1.54%	3.95%	2.72%	0.24%
2022	1.36%	1.73%	2.74%	1.59%	3.81%	2.56%	0.15%
2023	1.38%	1.65%	2.76%	1.58%	3.69%	2.52%	0.11%
2024	1.53%	1.52%	3.08%	1.61%	3.91%	2.61%	0.06%
2025	1.20%	1.48%	3.31%	1.66%	3.87%	2.62%	0.02%

Historical/Forecast Growth Rate in Service Territory Manufacturing GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.11%	1.58%	3.74%	1.72%	4.34%	2.82%	-0.05%
2027	1.47%	1.73%	4.06%	1.78%	4.38%	2.81%	-0.11%
2028	1.76%	1.83%	3.92%	1.71%	4.00%	2.59%	0.03%
2029	1.56%	1.81%	3.78%	1.58%	3.75%	2.39%	0.07%
2030	1.41%	1.73%	4.15%	1.62%	3.88%	2.39%	0.95%
2031	1.51%	1.70%	4.51%	1.75%	4.07%	2.43%	0.75%
2032	1.60%	1.73%	4.80%	1.79%	4.13%	2.39%	-0.29%
2033	1.73%	1.83%	4.83%	1.77%	3.97%	2.22%	-0.24%
2034	1.77%	1.92%	5.02%	1.72%	3.81%	2.15%	-0.11%
2035	1.77%	1.96%	5.43%	1.68%	3.59%	1.99%	0.20%
2036	1.62%	1.86%	5.76%	1.54%	3.28%	1.65%	0.23%
2037	1.58%	1.76%	6.08%	1.40%	3.12%	1.48%	
2038	1.64%						
2039	1.68%						
2040	1.69%						

Historical/Forecast Growth Rate in Service Territory Education and Health Services GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	3.22%	3.38%	1.72%	1.94%	2.33%	2.38%	0.75%
2007	0.38%	0.89%	5.71%	5.68%	-0.18%	-2.41%	-0.10%
2008	4.53%	3.93%	-0.86%	2.53%	2.89%	2.56%	0.33%
2009	2.91%	1.97%	1.45%	0.37%	1.10%	7.18%	-0.00%
2010	0.53%	0.33%	0.78%	2.56%	2.09%	2.09%	-0.15%
2011	1.30%	0.92%	2.38%	0.98%	0.26%	2.58%	-0.24%
2012	3.29%	4.25%	3.30%	2.33%	2.17%	3.74%	-0.35%
2013	-0.01%	-0.17%	1.62%	1.90%	3.79%	1.43%	-0.28%
2014	-0.74%	-1.03%	0.27%	1.65%	2.70%	0.70%	-0.28%
2015	3.12%	3.06%	1.57%	1.73%	1.86%	0.63%	-0.28%
2016	0.61%	3.18%	0.42%	1.17%	1.10%	0.55%	-0.46%
2017	1.50%	2.65%	-0.17%	0.63%	1.02%	0.45%	-0.39%
2018	1.21%	1.99%	-0.47%	0.39%	1.34%	0.38%	-0.42%
2019	0.69%	1.19%	-0.49%	0.53%	1.49%	0.47%	-0.38%
2020	0.99%	1.02%	-0.60%	0.54%	1.27%	0.33%	-0.39%
2021	1.23%	1.19%	-0.60%	0.48%	1.14%	0.18%	-0.50%
2022	1.76%	1.38%	-0.67%	0.47%	0.97%	0.09%	-0.54%
2023	2.00%	1.39%	-0.84%	0.43%	0.85%	-0.07%	-0.60%
2024	2.00%	1.44%	-0.83%	0.37%	0.79%	-0.17%	-0.71%
2025	1.92%	1.47%	-0.82%	0.30%	0.63%	-0.27%	-0.80%

Historical/Forecast Growth Rate in Service Territory Education and Health Services GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.98%	1.51%	-0.40%	0.30%	0.89%	-0.19%	-1.04%
2027	2.04%	1.58%	-0.23%	0.30%	0.85%	-0.24%	-1.16%
2028	2.05%	1.62%	-0.19%	0.31%	0.86%	-0.06%	-1.08%
2029	1.98%	1.66%	-0.27%	0.37%	0.86%	0.04%	-1.06%
2030	2.00%	1.65%	-0.44%	0.39%	0.66%	-0.26%	-2.72%
2031	2.05%	1.60%	-0.58%	0.36%	0.62%	-0.42%	-3.00%
2032	2.07%	1.59%	-0.59%	0.36%	0.63%	-0.44%	-1.43%
2033	2.06%	1.60%	-0.68%	0.38%	0.60%	-0.40%	-1.39%
2034	2.02%	1.65%	-0.67%	0.43%	0.67%	-0.26%	-1.26%
2035	1.98%	1.65%	-0.82%	0.46%	0.60%	-0.35%	-1.12%
2036	1.94%	1.60%	-1.06%	0.38%	0.33%	-0.67%	-1.17%
2037	1.89%	1.50%	-1.25%	0.28%	0.17%	-0.93%	
2038	1.88%						
2039	1.86%						
2040	1.87%						

Historical/Forecast Growth Rate in Service Territory Financial Services GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	0.46%	-0.14%	-0.26%	-0.14%	-0.06%	-3.01%	2.84%
2007	4.60%	4.45%	1.12%	1.60%	2.38%	1.38%	1.44%
2008	3.57%	-3.31%	2.44%	2.17%	2.23%	2.10%	2.15%
2009	15.79%	15.36%	5.58%	3.76%	2.39%	1.29%	1.65%
2010	2.87%	3.87%	0.75%	1.93%	1.18%	2.55%	1.64%
2011	-2.00%	0.38%	2.38%	-0.46%	-1.43%	1.66%	1.56%
2012	-1.30%	-2.41%	3.72%	1.21%	2.67%	5.12%	1.57%
2013	-0.30%	1.93%	2.79%	1.95%	5.41%	2.75%	1.54%
2014	0.27%	1.39%	3.68%	2.58%	4.48%	1.03%	1.23%
2015	1.42%	0.21%	4.57%	2.41%	2.31%	0.67%	0.98%
2016	-4.71%	0.93%	2.52%	1.46%	0.77%	0.47%	0.83%
2017	-0.89%	1.88%	0.88%	0.54%	0.36%	0.32%	0.71%
2018	0.43%	2.35%	-0.12%	0.12%	0.60%	0.32%	0.73%
2019	0.58%	1.72%	-0.45%	0.25%	0.69%	0.40%	0.67%
2020	1.13%	1.31%	-0.55%	0.30%	0.61%	0.38%	0.58%
2021	1.74%	1.35%	-0.37%	0.31%	0.64%	0.50%	0.37%
2022	1.74%	1.43%	-0.25%	0.36%	0.55%	0.52%	0.29%
2023	1.80%	1.25%	-0.37%	0.33%	0.35%	0.40%	0.24%
2024	1.69%	1.10%	-0.42%	0.25%	0.24%	0.33%	0.19%
2025	1.45%	0.99%	-0.42%	0.18%	0.09%	0.27%	0.11%

Historical/Forecast Growth Rate in Service Territory Financial Services GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.30%	0.90%	0.08%	0.19%	0.34%	0.45%	-0.03%
2027	1.33%	0.93%	0.44%	0.22%	0.37%	0.50%	-0.16%
2028	1.23%	0.96%	0.74%	0.30%	0.56%	0.86%	-0.11%
2029	1.15%	1.00%	0.85%	0.46%	0.78%	1.15%	-0.10%
2030	1.12%	0.96%	0.73%	0.51%	0.55%	0.87%	-0.56%
2031	1.12%	0.89%	0.72%	0.47%	0.53%	0.76%	-0.83%
2032	1.12%	0.87%	0.75%	0.48%	0.53%	0.81%	-0.48%
2033	1.12%	0.87%	0.68%	0.50%	0.48%	0.84%	-0.49%
2034	1.12%	0.91%	0.66%	0.52%	0.52%	1.00%	-0.36%
2035	1.12%	0.91%	0.56%	0.61%	0.57%	1.12%	-0.08%
2036	1.12%	0.89%	0.17%	0.44%	-0.16%	0.48%	-4.83%
2037	1.12%	0.86%	-0.42%	0.07%	-0.81%	-0.12%	
2038	1.12%						
2039	1.12%						
2040	1.12%						

Historical/Forecast Growth Rate in Service Territory Information Services GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	7.49%	4.55%	6.49%	5.79%	8.00%	9.73%	6.24%
2007	1.91%	6.82%	8.19%	10.66%	4.70%	6.81%	5.51%
2008	14.05%	13.71%	17.71%	12.13%	3.73%	1.74%	4.35%
2009	-5.68%	1.26%	1.88%	2.50%	16.63%	1.22%	3.48%
2010	5.33%	8.77%	13.55%	12.80%	-0.02%	3.25%	3.65%
2011	4.30%	-3.83%	2.93%	3.89%	4.24%	0.74%	3.46%
2012	-0.87%	-2.95%	-3.89%	4.14%	3.75%	3.23%	3.27%
2013	-0.12%	-3.00%	1.03%	4.48%	7.29%	2.34%	3.16%
2014	-2.50%	0.15%	5.00%	4.73%	6.17%	1.88%	2.90%
2015	-3.17%	10.09%	4.89%	3.70%	3.78%	2.68%	2.80%
2016	8.92%	2.35%	3.56%	2.23%	3.69%	3.03%	2.57%
2017	-1.66%	4.20%	2.97%	1.80%	4.07%	3.22%	2.58%
2018	6.76%	3.76%	3.06%	1.95%	4.11%	3.15%	2.54%
2019	6.47%	2.27%	2.80%	2.19%	4.14%	3.06%	2.45%
2020	1.80%	1.70%	2.31%	2.22%	3.98%	2.97%	2.42%
2021	2.10%	2.01%	2.21%	2.15%	3.78%	2.92%	2.33%
2022	2.88%	2.34%	2.03%	2.08%	3.69%	2.85%	2.36%
2023	2.39%	2.22%	1.80%	2.02%	3.67%	2.84%	2.39%
2024	2.42%	2.08%	1.52%	1.92%	3.53%	2.80%	2.46%
2025	2.20%	2.02%	1.32%	1.77%	3.35%	2.75%	2.53%

Historical/Forecast Growth Rate in Service Territory Information Services GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	2.17%	2.03%	1.49%	1.69%	3.41%	2.84%	2.54%
2027	2.24%	2.09%	1.54%	1.63%	3.41%	2.90%	2.52%
2028	2.39%	2.12%	1.64%	1.66%	3.70%	3.26%	2.56%
2029	2.31%	2.11%	1.58%	1.72%	3.80%	3.43%	2.54%
2030	2.22%	2.03%	1.50%	1.72%	3.71%	3.35%	2.12%
2031	2.23%	1.95%	1.63%	1.73%	3.96%	3.50%	2.01%
2032	2.26%	1.95%	1.78%	1.80%	4.19%	3.79%	2.32%
2033	2.30%	1.96%	1.95%	1.89%	4.45%	3.93%	2.26%
2034	2.33%	2.03%	2.23%	2.00%	4.76%	4.13%	2.09%
2035	2.35%	2.06%	2.49%	1.95%	4.84%	3.98%	1.98%
2036	2.31%	2.01%	2.60%	2.00%	5.22%	3.94%	1.83%
2037	2.32%	1.95%	2.86%	2.23%	5.79%	4.16%	
2038	2.37%						
2039	2.40%						
2040	2.40%						

Historical/Forecast Growth Rate in Service Territory Retail/Trade GDP (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	-3.05%	-1.99%	-0.80%	-1.16%	-1.12%	2.64%	1.99%
2007	-3.30%	-2.78%	-0.91%	0.11%	0.12%	4.36%	5.02%
2008	-0.79%	-1.75%	-3.10%	-5.65%	-5.39%	1.62%	4.82%
2009	-1.29%	-1.75%	-1.66%	-1.16%	-1.41%	-0.02%	4.01%
2010	-1.05%	-0.83%	4.55%	3.77%	4.16%	6.22%	3.67%
2011	-3.43%	-2.65%	-1.01%	0.47%	0.22%	9.92%	3.65%
2012	-0.45%	0.66%	2.97%	2.79%	5.89%	8.28%	3.63%
2013	2.44%	0.66%	5.46%	4.56%	4.17%	5.01%	3.59%
2014	0.33%	0.48%	1.79%	4.01%	3.45%	3.97%	3.37%
2015	4.19%	3.25%	3.15%	2.57%	4.75%	4.21%	3.14%
2016	2.90%	1.98%	1.28%	1.91%	4.35%	4.40%	3.01%
2017	2.53%	2.58%	0.92%	1.45%	4.34%	4.23%	2.90%
2018	2.28%	2.23%	1.65%	1.56%	5.19%	4.60%	2.85%
2019	0.85%	1.25%	2.09%	2.00%	5.39%	4.88%	2.80%
2020	1.67%	1.21%	2.41%	2.16%	5.11%	4.75%	2.73%
2021	1.96%	1.56%	3.05%	2.33%	5.23%	4.82%	2.63%
2022	1.96%	1.81%	3.20%	2.53%	5.20%	4.84%	2.58%
2023	1.97%	1.72%	3.18%	2.58%	5.18%	4.92%	2.51%
2024	1.86%	1.63%	3.15%	2.57%	5.20%	4.91%	2.46%
2025	1.71%	1.59%	2.93%	2.46%	4.94%	4.73%	2.39%

Historical/Forecast Growth Rate in Service Territory Retail/Trade GDP

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.78%	1.62%	3.26%	2.42%	5.36%	4.97%	2.25%
2027	1.78%	1.69%	3.59%	2.47%	5.50%	5.05%	2.23%
2028	1.73%	1.74%	3.74%	2.56%	5.62%	5.26%	2.24%
2029	1.75%	1.79%	3.72%	2.67%	5.63%	5.30%	2.24%
2030	1.77%	1.90%	3.45%	2.62%	5.23%	4.84%	1.91%
2031	1.77%	1.89%	3.24%	2.50%	5.06%	4.60%	1.64%
2032	1.77%	1.82%	3.00%	2.39%	4.86%	4.40%	1.88%
2033	1.77%	1.74%	2.97%	2.38%	4.91%	4.51%	1.91%
2034	1.77%	1.72%	3.05%	2.45%	4.93%	4.73%	1.96%
2035	1.77%	1.72%	3.04%	2.48%	4.91%	4.75%	2.15%
2036	1.77%	1.65%	2.89%	2.45%	4.78%	4.64%	-1.15%
2037	1.77%	1.54%	2.82%	2.40%	4.75%	4.60%	
2038	1.77%						
2039	1.77%						
2040	1.77%						

Historical/Forecast Growth Rate in Service Territory Non-Farm Employment (continued next page)

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	1.06%	1.05%	1.04%	1.04%	1.36%	1.34%	0.63%
2007	0.60%	0.53%	0.50%	0.50%	-0.53%	-0.52%	0.84%
2008	-0.63%	-0.39%	-0.41%	-0.39%	-0.64%	-0.66%	0.84%
2009	-3.91%	-4.26%	-4.30%	-4.35%	-4.04%	-3.76%	0.82%
2010	-0.70%	-1.39%	-1.48%	-1.50%	-1.36%	-1.29%	0.85%
2011	0.40%	0.37%	0.24%	0.15%	0.64%	1.33%	0.90%
2012	0.58%	0.52%	-0.03%	0.55%	1.13%	3.00%	0.93%
2013	1.26%	0.97%	0.41%	1.09%	2.33%	2.57%	0.86%
2014	1.37%	1.13%	0.96%	1.80%	3.10%	1.22%	0.84%
2015	2.15%	1.70%	2.18%	2.21%	2.11%	0.54%	0.73%
2016	1.46%	1.84%	1.92%	1.56%	0.84%	0.17%	0.57%
2017	0.91%	2.01%	0.93%	0.41%	0.39%	0.12%	0.60%
2018	0.35%	1.71%	0.18%	0.02%	0.50%	0.14%	0.61%
2019	1.05%	0.89%	0.12%	0.20%	0.56%	0.19%	0.57%
2020	0.57%	0.24%	0.26%	0.32%	0.59%	0.20%	0.66%
2021	-0.13%	0.23%	0.42%	0.43%	0.68%	0.21%	0.45%
2022	0.64%	0.41%	0.38%	0.42%	0.64%	0.21%	0.41%
2023	0.43%	0.43%	0.31%	0.42%	0.60%	0.19%	0.38%
2024	0.36%	0.41%	0.26%	0.38%	0.59%	0.17%	0.43%
2025	0.37%	0.42%	0.25%	0.36%	0.59%	0.20%	0.42%

Historical/Forecast Growth Rate in Service Territory Non-Farm Employment

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	0.39%	0.43%	0.29%	0.39%	0.59%	0.18%	0.34%
2027	0.38%	0.45%	0.30%	0.39%	0.60%	0.22%	0.23%
2028	0.35%	0.47%	0.32%	0.42%	0.63%	0.26%	0.19%
2029	0.35%	0.52%	0.35%	0.46%	0.65%	0.30%	0.13%
2030	0.35%	0.54%	0.43%	0.55%	0.71%	0.38%	-0.17%
2031	0.34%	0.55%	0.45%	0.59%	0.71%	0.39%	-0.38%
2032	0.32%	0.55%	0.47%	0.63%	0.75%	0.46%	-0.07%
2033	0.31%	0.58%	0.54%	0.72%	0.84%	0.56%	-0.11%
2034	0.33%	0.62%	0.52%	0.74%	0.85%	0.62%	-0.10%
2035	0.32%	0.65%	0.56%	0.81%	0.89%	0.65%	-0.04%
2036	0.34%	0.67%	0.54%	0.80%	0.86%	0.62%	-1.37%
2037	0.33%	0.68%	0.52%	0.77%	0.83%	0.59%	
2038	0.31%						
2039	0.30%						
2040	0.30%						

Historical/Forecast Growth Rate in Service Territory Manufacturing Employment (continued next page)

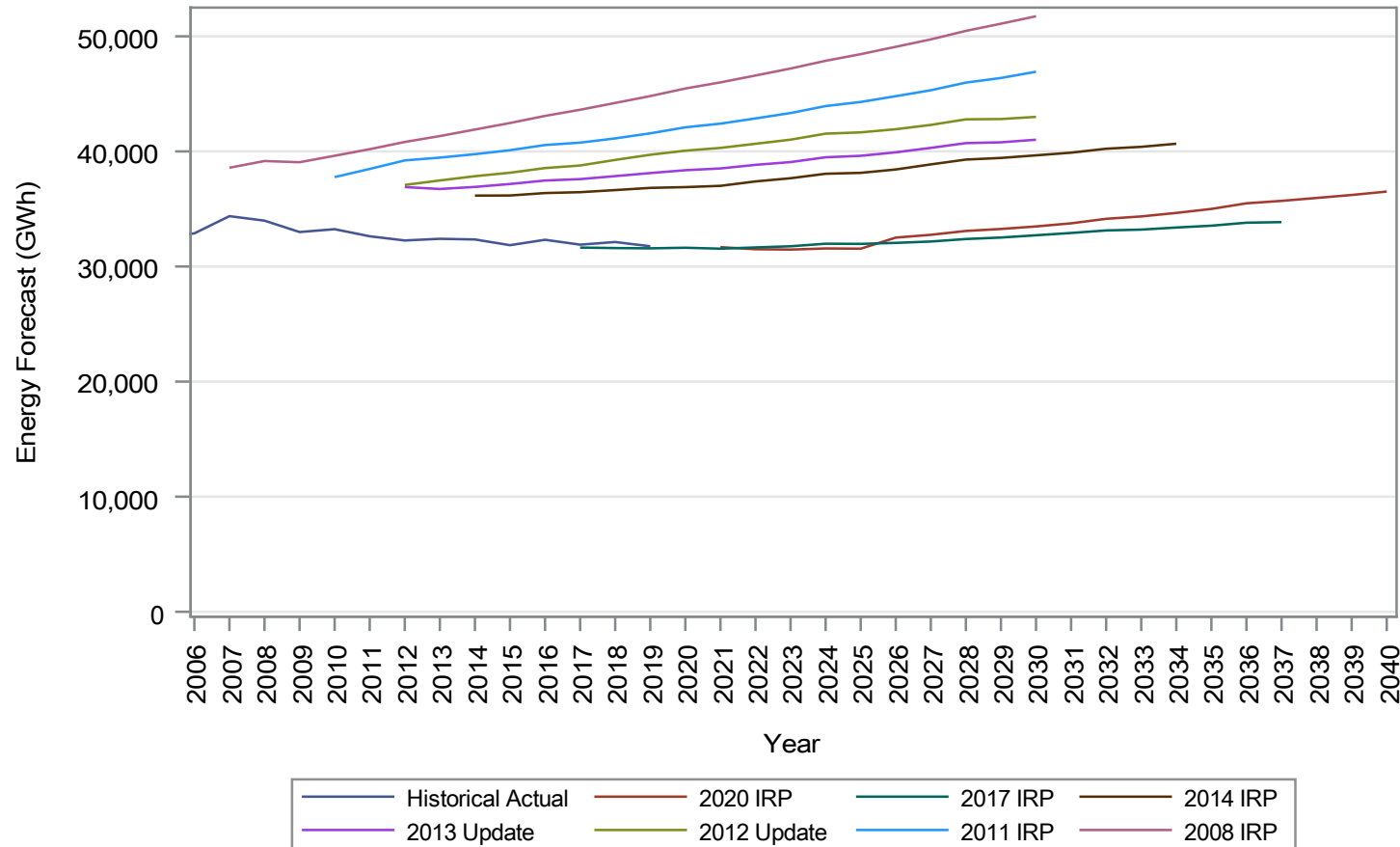
Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	-1.53%	-1.24%	-1.30%	-1.30%	-1.33%	-1.34%	-2.12%
2007	-2.28%	-2.60%	-2.90%	-2.90%	-3.05%	-3.01%	-1.42%
2008	-4.51%	-4.61%	-4.65%	-4.69%	-4.78%	-4.81%	-0.96%
2009	-12.82%	-12.86%	-13.25%	-13.33%	-13.63%	-11.71%	-0.48%
2010	-3.81%	-5.91%	-6.47%	-6.45%	-7.77%	-2.10%	-0.51%
2011	1.98%	1.19%	1.37%	2.16%	3.45%	2.86%	-0.51%
2012	-0.18%	0.44%	0.06%	2.36%	2.34%	3.10%	-0.50%
2013	1.28%	0.44%	0.14%	0.10%	0.85%	2.20%	-0.63%
2014	2.64%	1.02%	0.20%	-0.15%	1.52%	0.59%	-0.58%
2015	3.57%	1.45%	0.20%	0.74%	0.69%	-0.11%	-0.59%
2016	0.56%	-0.28%	0.36%	0.65%	-0.16%	-0.35%	-0.51%
2017	0.95%	1.03%	-0.26%	-0.21%	-0.43%	-0.38%	-0.53%
2018	2.11%	1.05%	-1.11%	-0.88%	-0.30%	-0.53%	-0.64%
2019	2.40%	0.57%	-1.20%	-0.77%	-0.15%	-0.47%	-0.59%
2020	-0.90%	-1.17%	-0.92%	-0.61%	-0.08%	-0.44%	-0.65%
2021	-1.56%	-1.25%	-0.71%	-0.45%	0.07%	-0.46%	-0.66%
2022	-0.76%	-1.02%	-0.76%	-0.44%	0.04%	-0.49%	-0.79%
2023	-0.99%	-0.95%	-0.82%	-0.45%	-0.01%	-0.52%	-0.85%
2024	-1.05%	-0.92%	-0.78%	-0.38%	0.07%	-0.47%	-0.91%
2025	-0.84%	-0.86%	-0.72%	-0.30%	0.13%	-0.38%	-0.94%

Historical/Forecast Growth Rate in Service Territory Manufacturing Employment

Year	2020_IRP	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	-0.90%	-0.81%	-0.76%	-0.27%	0.17%	-0.37%	-1.03%
2027	-0.86%	-0.71%	-0.76%	-0.23%	0.21%	-0.33%	-1.06%
2028	-0.75%	-0.64%	-0.74%	-0.18%	0.26%	-0.27%	-1.10%
2029	-0.75%	-0.55%	-0.72%	-0.15%	0.28%	-0.24%	-1.20%
2030	-0.76%	-0.51%	-0.79%	-0.16%	0.23%	-0.30%	0.52%
2031	-0.71%	-0.46%	-0.75%	-0.09%	0.23%	-0.31%	0.34%
2032	-0.71%	-0.45%	-0.78%	-0.10%	0.23%	-0.31%	-1.50%
2033	-0.72%	-0.38%	-0.78%	-0.09%	0.30%	-0.26%	-1.52%
2034	-0.72%	-0.35%	-0.69%	0.01%	0.36%	-0.18%	-1.52%
2035	-0.73%	-0.34%	-0.66%	0.03%	0.32%	-0.21%	-1.38%
2036	-0.67%	-0.28%	-0.73%	-0.07%	0.23%	-0.26%	-1.22%
2037	-0.68%	-0.24%	-0.78%	-0.19%	0.13%	-0.33%	
2038	-0.62%						
2039	-0.68%						
2040	-0.69%						

Archive of Previous Energy and Peak Demand Forecasts¹³

Previous IRP Energy Forecasts and Actual Historical Energy Usage (GWh)



¹³20 CSR 4240-22.030(6)(C)4

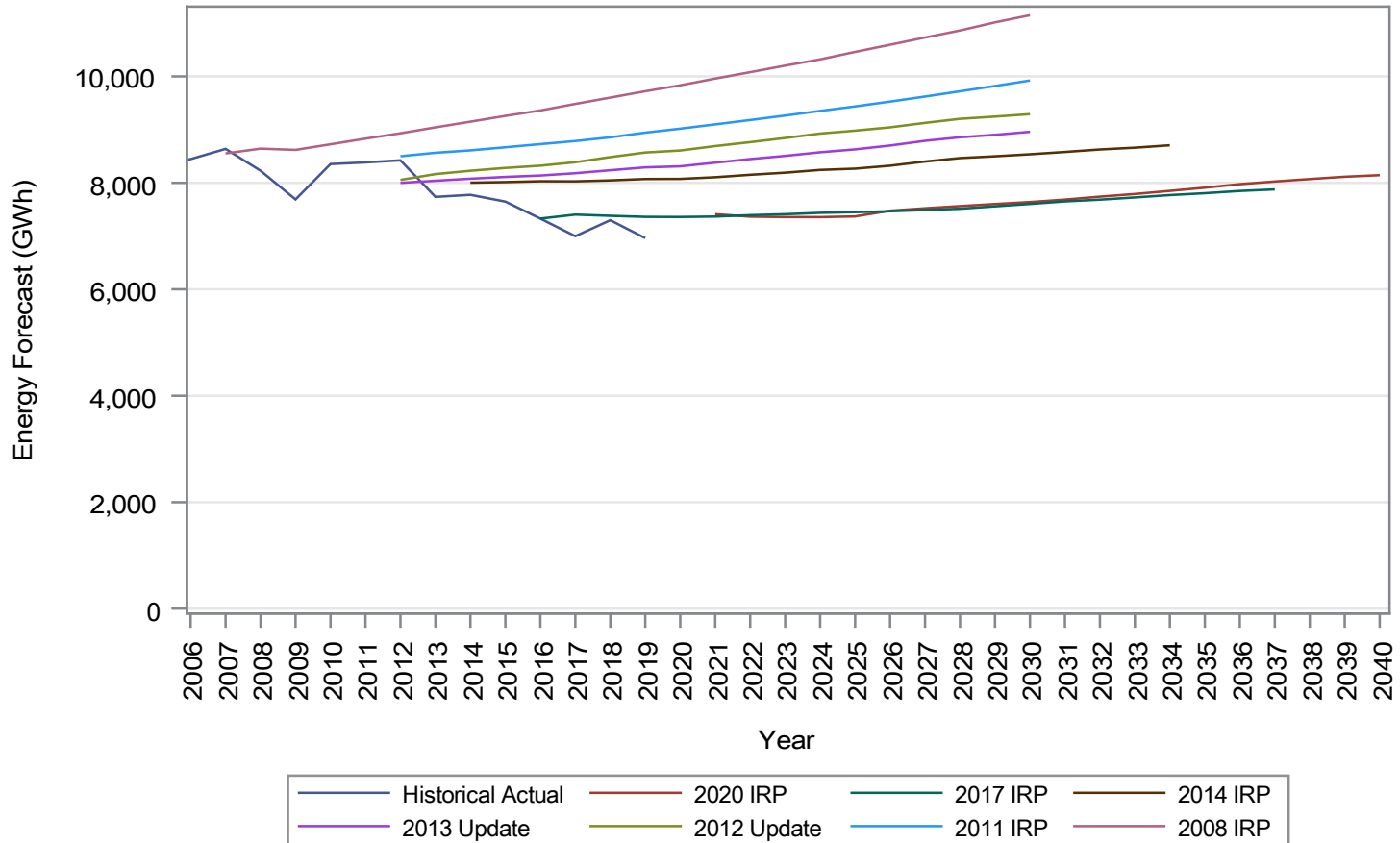
Previous IRP Energy Forecasts and Actual Historical Energy Usage (GWh) (continued next page)

Year	Actual	2020 IRP	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	32,880							
2007	34,374							38,580
2008	33,984							39,165
2009	32,995							39,059
2010	33,242						37,768	39,623
2011	32,627						38,476	40,192
2012	32,261				36,902	37,086	39,217	40,821
2013	32,407				36,735	37,477	39,462	41,332
2014	32,350			36,160	36,913	37,844	39,758	41,899
2015	31,852			36,169	37,168	38,146	40,103	42,467
2016	32,323			36,382	37,470	38,553	40,555	43,085
2017	31,899		31,643	36,457	37,593	38,776	40,761	43,618
2018	32,129		31,603	36,638	37,852	39,260	41,130	44,211
2019	31,758		31,579	36,831	38,118	39,709	41,572	44,805
2020			31,629	36,899	38,366	40,062	42,092	45,465
2021		31,680	31,550	37,008	38,518	40,303	42,412	45,996
2022		31,499	31,656	37,392	38,832	40,662	42,865	46,593
2023		31,471	31,756	37,670	39,073	41,020	43,332	47,202
2024		31,566	31,980	38,058	39,490	41,543	43,939	47,873
2025		31,547	31,964	38,136	39,617	41,654	44,295	48,450

Previous IRP Energy Forecasts and Actual Historical Energy Usage (GWh)

Year	Actual	2020 IRP	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2026		32,510	32,052	38,430	39,919	41,927	44,796	49,088
2027		32,754	32,170	38,872	40,306	42,303	45,313	49,732
2028		33,090	32,387	39,290	40,720	42,786	45,976	50,471
2029		33,262	32,516	39,432	40,789	42,813	46,379	51,095
2030		33,480	32,713	39,658	41,014	42,999	46,923	51,744
2031		33,751	32,912	39,891				
2032		34,144	33,134	40,232				
2033		34,349	33,206	40,397				
2034		34,656	33,387	40,667				
2035		35,002	33,545					
2036		35,490	33,805					
2037		35,701	33,857					
2038		35,955						
2039		36,215						
2040		36,510						

Previous IRP Peak Demand Forecasts and Actual Historical Peaks(MW)



Previous IRP Peak Demand Forecasts and Actual Historical Peaks (GWh) (continued next page)

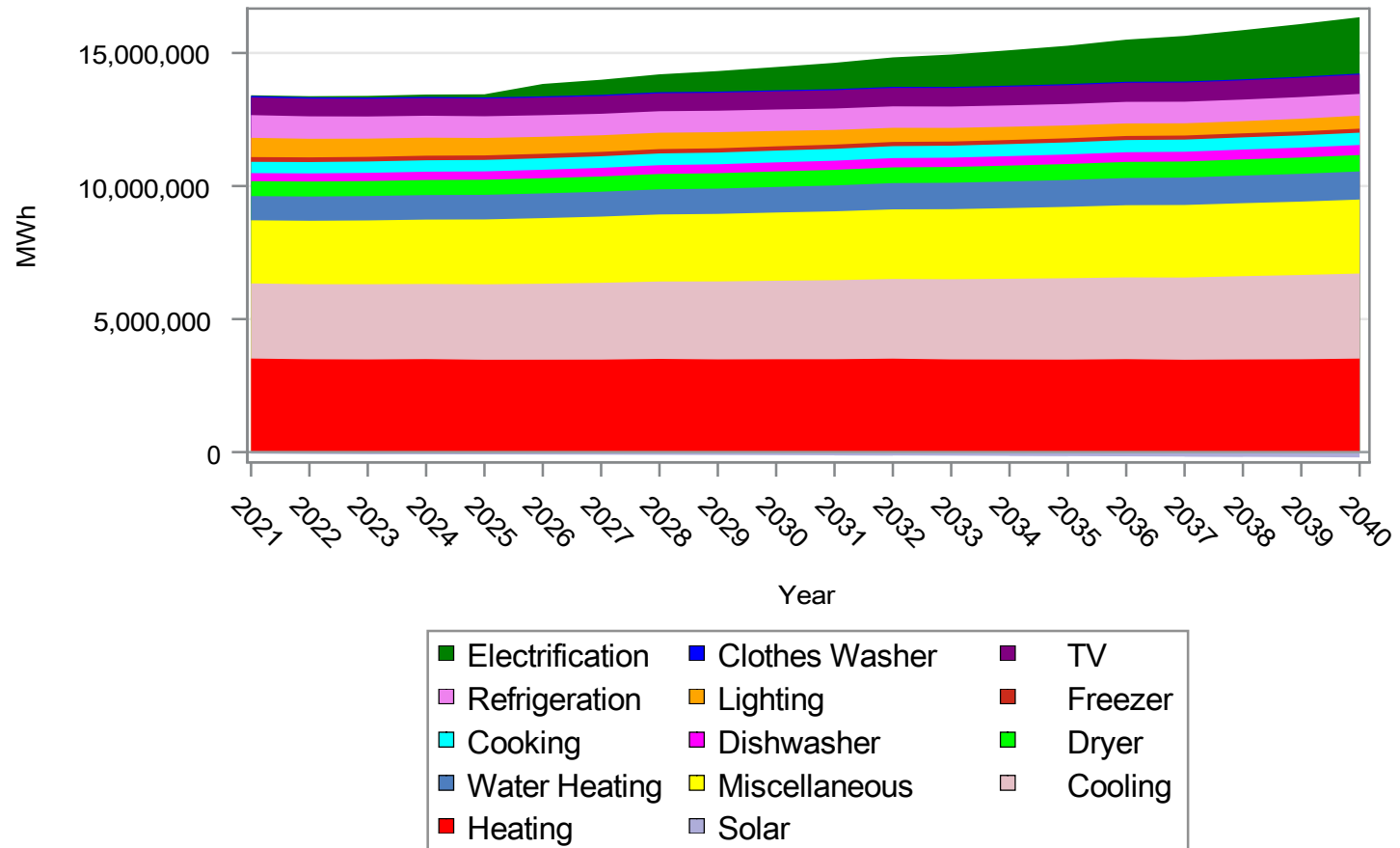
Year	Actual	2020 IRP	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	8,446							
2007	8,638							8,553
2008	8,228							8,643
2009	7,688							8,619
2010	8,353							8,724
2011	8,384							8,831
2012	8,423				7,999	8,056	8,501	8,932
2013	7,736				8,039	8,165	8,565	9,043
2014	7,775			8,004	8,078	8,227	8,610	9,149
2015	7,648			8,015	8,111	8,280	8,668	9,258
2016	7,329		7,329	8,030	8,138	8,322	8,728	9,360
2017	6,999		7,404	8,029	8,181	8,388	8,785	9,483
2018	7,299		7,381	8,046	8,237	8,484	8,855	9,602
2019	6,963		7,362	8,072	8,291	8,570	8,943	9,722
2020			7,359	8,074	8,311	8,608	9,018	9,833
2021		7,411	7,367	8,105	8,380	8,691	9,098	9,959
2022		7,365	7,393	8,152	8,447	8,765	9,181	10,080
2023		7,357	7,411	8,191	8,507	8,843	9,265	10,203
2024		7,356	7,437	8,243	8,574	8,926	9,352	10,320
2025		7,370	7,450	8,267	8,629	8,981	9,436	10,461

Previous IRP Peak Demand Forecasts and Actual Historical Peaks (GWh)

Year	Actual	2020 IRP	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2026		7,477	7,467	8,322	8,701	9,043	9,527	10,595
2027		7,522	7,490	8,401	8,790	9,127	9,621	10,731
2028		7,563	7,514	8,466	8,857	9,203	9,720	10,863
2029		7,602	7,559	8,499	8,902	9,245	9,820	11,015
2030		7,639	7,604	8,537	8,959	9,291	9,923	11,150
2031		7,685	7,652	8,580				
2032		7,741	7,684	8,627				
2033		7,791	7,726	8,661				
2034		7,849	7,770	8,706				
2035		7,909	7,805					
2036		7,975	7,848					
2037		8,026	7,877					
2038		8,071						
2039		8,115						
2040		8,144						

Energy Forecast by End Use Component of Major Classes - Base Case¹⁴

Residential Annual Energy Sales Forecast by End Use (MWh)

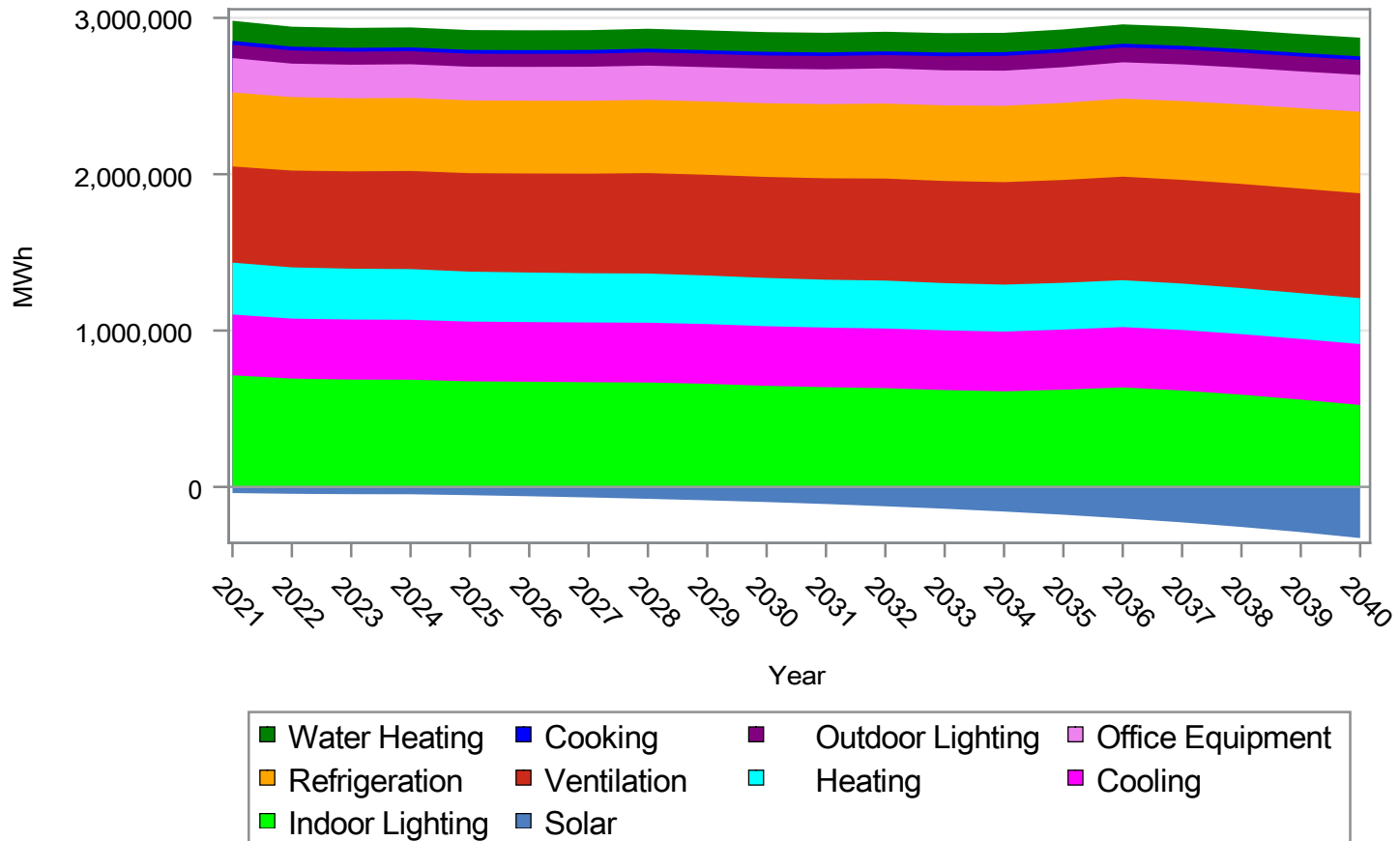


¹⁴20 CSR 4240-22.030(7)(A)4

Residential Annual Energy Sales Forecast by End Use (MWh)

Year	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
2021	3,573,095	2,823,939	910,191	422,887	853,766	179,468	303,191	53,863	560,050	665,726	724,078	-56,593	2,371,501	25,263
2022	3,559,902	2,821,989	912,170	425,481	843,294	176,965	305,454	51,132	562,603	664,460	698,138	-70,887	2,383,480	42,110
2023	3,562,772	2,826,692	915,335	427,223	833,129	174,138	307,788	48,686	564,248	662,599	684,413	-80,154	2,397,999	62,251
2024	3,577,805	2,824,308	920,630	429,612	825,080	171,664	311,286	46,696	566,795	662,606	677,314	-81,957	2,419,451	86,893
2025	3,557,191	2,835,451	923,143	430,690	817,057	169,055	314,313	44,877	567,391	662,275	654,516	-86,380	2,439,177	117,721
2026	3,564,443	2,855,580	929,088	432,962	812,001	166,954	318,815	43,569	569,668	664,368	638,070	-91,225	2,465,246	466,300
2027	3,573,283	2,885,479	935,127	435,468	807,413	164,917	324,041	42,676	572,682	667,088	624,324	-96,443	2,488,809	568,479
2028	3,604,715	2,909,864	944,758	439,367	808,605	163,434	330,691	42,309	577,635	672,545	615,500	-102,227	2,518,887	672,048
2029	3,592,371	2,930,374	949,534	440,630	807,080	161,277	335,079	41,485	579,295	675,509	604,648	-107,762	2,537,801	772,395
2030	3,604,201	2,950,903	961,228	443,166	806,979	159,671	339,992	40,702	582,841	680,762	576,783	-113,894	2,563,842	874,907
2031	3,612,215	2,969,609	972,470	445,388	806,020	158,212	344,205	39,915	585,881	686,378	551,516	-120,396	2,588,102	990,035
2032	3,640,424	2,993,756	986,566	448,859	806,966	157,185	349,215	39,302	590,831	693,437	531,490	-127,557	2,616,454	1,107,052
2033	3,617,659	3,014,049	992,703	449,599	804,759	155,480	351,907	38,639	592,180	697,218	511,181	-134,479	2,632,512	1,218,139
2034	3,621,154	3,036,270	1,001,782	451,811	805,087	154,290	355,789	38,319	595,721	702,532	495,444	-142,170	2,656,202	1,330,490
2035	3,626,228	3,059,469	1,010,667	453,818	806,644	153,298	359,501	38,152	599,144	708,057	481,824	-150,284	2,682,467	1,443,595
2036	3,653,758	3,070,844	1,023,341	457,125	811,719	152,885	364,124	38,304	604,090	715,855	471,585	-159,267	2,713,324	1,583,287
2037	3,638,861	3,090,514	1,028,948	457,372	812,412	151,830	366,320	38,255	605,201	719,030	459,172	-167,959	2,726,310	1,714,890
2038	3,658,858	3,132,182	1,037,277	459,030	813,941	151,251	369,613	38,355	608,472	722,556	455,245	-177,667	2,741,523	1,846,789
2039	3,677,457	3,166,576	1,045,594	460,394	815,567	150,849	372,564	38,463	611,128	724,816	474,693	-187,788	2,758,468	1,980,717
2040	3,713,486	3,196,795	1,056,853	463,204	818,407	150,963	376,730	38,686	615,845	727,611	487,250	-198,851	2,780,903	2,116,249

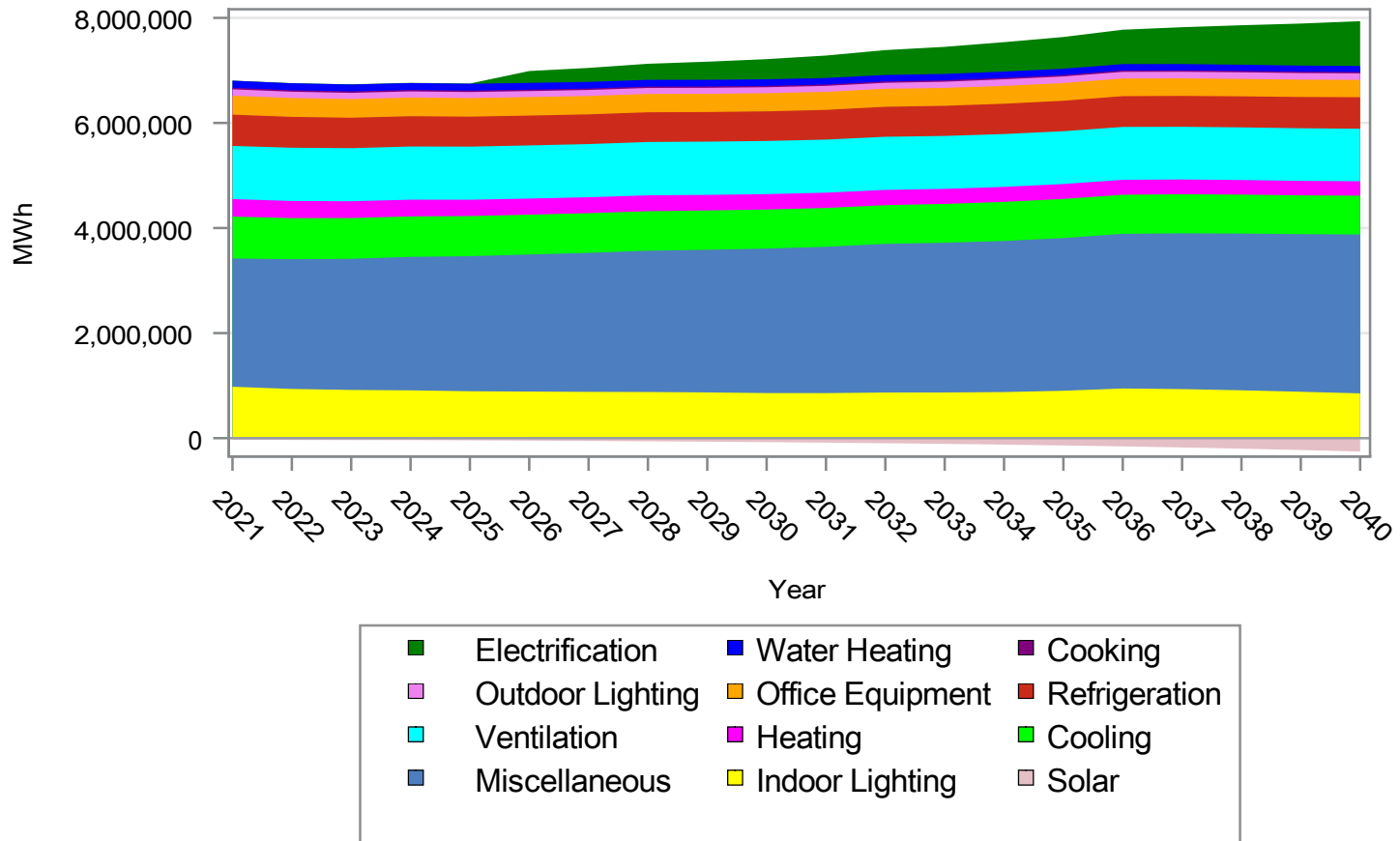
Commercial SGS Annual Energy Sales Forecast by End Use (MWh)



Commercial SGS Annual Energy Sales Forecast by End Use (MWh)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
2021	331,934	388,460	128,574	615,296	24,742	473,556	85,451	753,477	219,672	-39,435
2022	327,839	383,342	127,486	619,197	24,474	469,876	84,268	737,027	214,193	-44,033
2023	325,173	383,993	127,494	622,636	24,308	467,658	83,691	732,999	214,524	-46,515
2024	324,466	383,307	127,839	627,408	24,278	467,453	83,570	732,509	215,345	-47,060
2025	319,619	382,180	127,244	629,720	24,104	465,613	83,257	728,090	215,190	-52,974
2026	317,020	381,459	126,890	633,459	23,877	465,599	83,257	732,485	216,346	-59,749
2027	314,775	382,077	126,804	637,052	23,798	466,142	83,565	737,087	217,733	-67,463
2028	314,747	382,396	127,137	642,240	23,779	468,543	84,812	744,048	219,131	-76,372
2029	310,516	382,035	126,633	644,331	23,594	469,111	85,107	745,501	219,128	-85,982
2030	308,553	381,606	126,019	646,112	23,478	471,326	84,842	743,395	220,633	-97,055
2031	306,499	381,166	125,515	648,554	23,384	474,474	84,941	747,300	222,385	-109,573
2032	306,508	381,484	125,317	652,443	23,734	480,044	85,081	755,690	224,951	-123,985
2033	302,157	381,756	124,060	653,288	23,933	483,572	89,917	759,092	224,436	-139,603
2034	300,496	382,259	123,441	655,393	24,005	488,220	94,530	768,775	224,912	-157,624
2035	299,228	384,466	123,340	657,773	23,780	492,903	94,609	799,852	228,270	-177,951
2036	300,055	385,497	123,584	662,173	23,704	499,573	95,276	837,994	232,043	-201,414
2037	296,757	387,566	122,735	663,380	23,475	503,673	95,432	843,140	234,932	-226,851
2038	294,631	387,461	121,722	666,016	23,324	508,907	95,324	845,991	234,886	-256,281
2039	293,119	387,701	120,482	668,940	23,176	514,475	95,389	847,627	234,944	-289,302
2040	293,939	389,268	119,512	670,854	23,077	521,454	95,495	851,224	235,792	-327,180

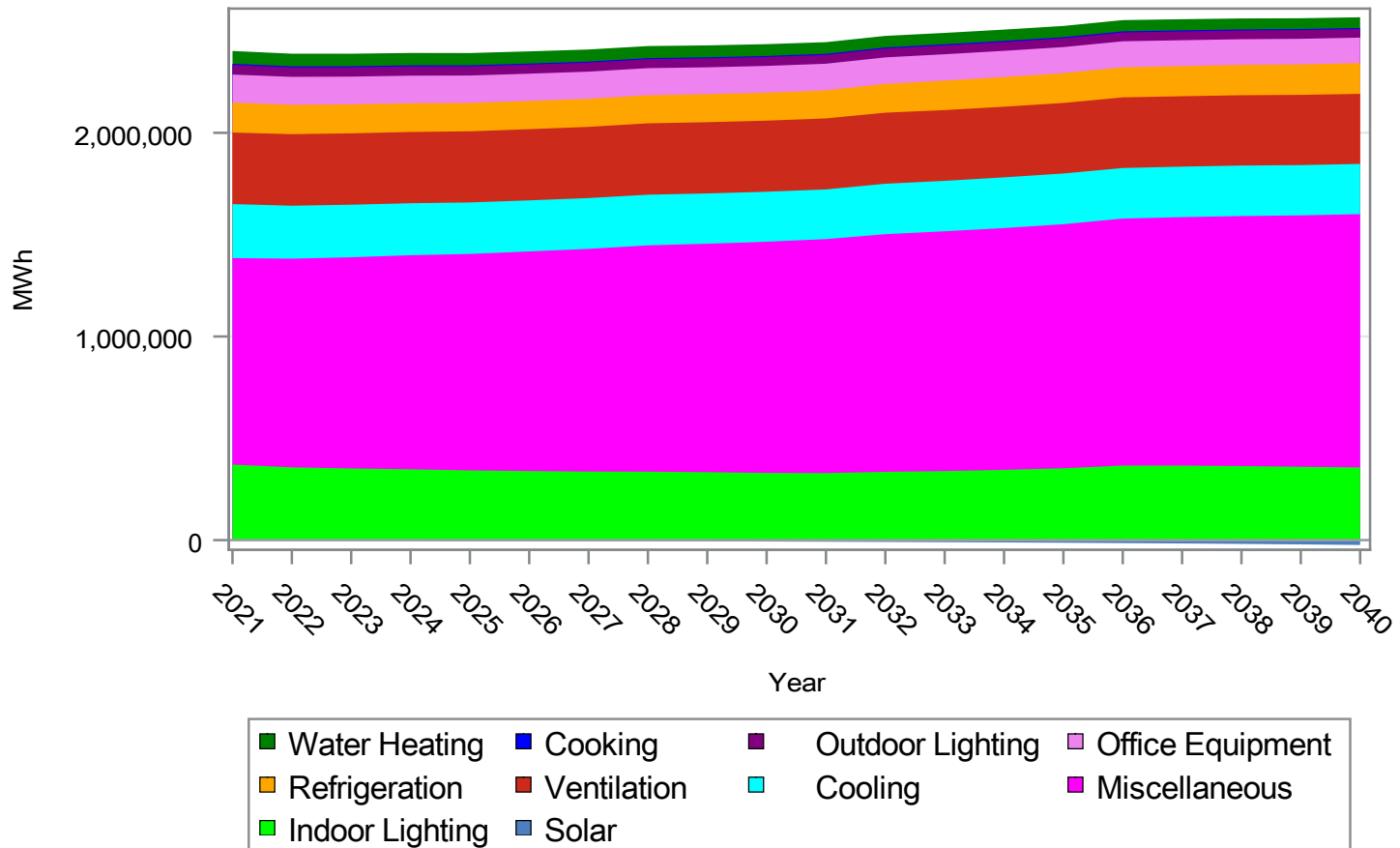
Commercial LGS Annual Energy Sales Forecast by End Use (MWh)



Commercial LGS Annual Energy Sales Forecast by End Use (MWh)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
2021	333,224	796,788	135,145	1,011,483	28,996	595,897	122,183	1,009,336	360,059	-30,733	1,703	2,442,198
2022	325,904	782,223	132,816	1,013,255	28,341	587,677	119,341	971,367	359,281	-34,316	2,405	2,469,523
2023	319,930	775,943	131,535	1,009,489	27,858	579,375	117,207	953,891	356,469	-36,251	3,105	2,496,730
2024	317,635	770,304	131,229	1,012,284	27,677	576,253	116,349	947,110	355,978	-36,675	3,806	2,541,266
2025	310,997	763,714	129,878	1,010,600	27,311	570,833	115,162	934,616	353,537	-41,284	4,510	2,570,584
2026	306,792	758,083	128,827	1,011,503	26,896	567,891	114,466	933,440	352,002	-46,564	225,767	2,609,232
2027	303,038	755,326	128,043	1,012,042	26,652	565,584	113,713	934,116	350,292	-52,576	265,298	2,646,224
2028	301,756	752,462	127,726	1,015,268	26,487	565,663	113,606	937,899	349,576	-59,518	305,747	2,689,657
2029	296,558	748,358	126,524	1,013,553	26,164	563,975	113,601	937,502	346,934	-67,008	344,434	2,715,396
2030	293,482	743,805	125,239	1,011,503	25,895	564,206	113,313	933,271	345,264	-75,638	383,921	2,750,642
2031	290,662	739,321	123,945	1,010,447	25,692	565,668	113,223	942,750	343,740	-85,393	427,696	2,785,543
2032	290,230	736,911	122,917	1,011,692	26,416	570,969	113,251	965,249	342,953	-96,625	473,013	2,829,681
2033	286,054	739,110	120,982	1,007,986	26,966	573,647	118,097	978,603	340,334	-108,796	515,640	2,850,072
2034	285,210	744,478	119,883	1,006,268	27,120	577,069	125,999	1,000,285	338,643	-122,841	559,912	2,875,918
2035	283,439	745,446	120,220	1,004,950	26,733	580,069	125,710	1,040,949	336,961	-138,683	603,947	2,906,537
2036	284,161	743,872	121,029	1,006,763	26,519	585,474	126,297	1,102,760	336,383	-156,967	654,625	2,944,004
2037	280,840	744,455	120,376	1,003,539	26,131	587,541	126,055	1,110,813	333,888	-176,791	701,464	2,964,360
2038	277,459	741,783	118,791	1,002,558	25,834	590,785	125,297	1,111,157	332,176	-199,727	751,023	2,982,800
2039	274,695	739,262	116,995	1,001,927	25,542	594,978	124,751	1,108,603	330,583	-225,461	800,207	3,000,191
2040	274,191	738,705	115,483	999,858	25,308	600,089	124,279	1,107,783	329,769	-254,980	852,631	3,024,465

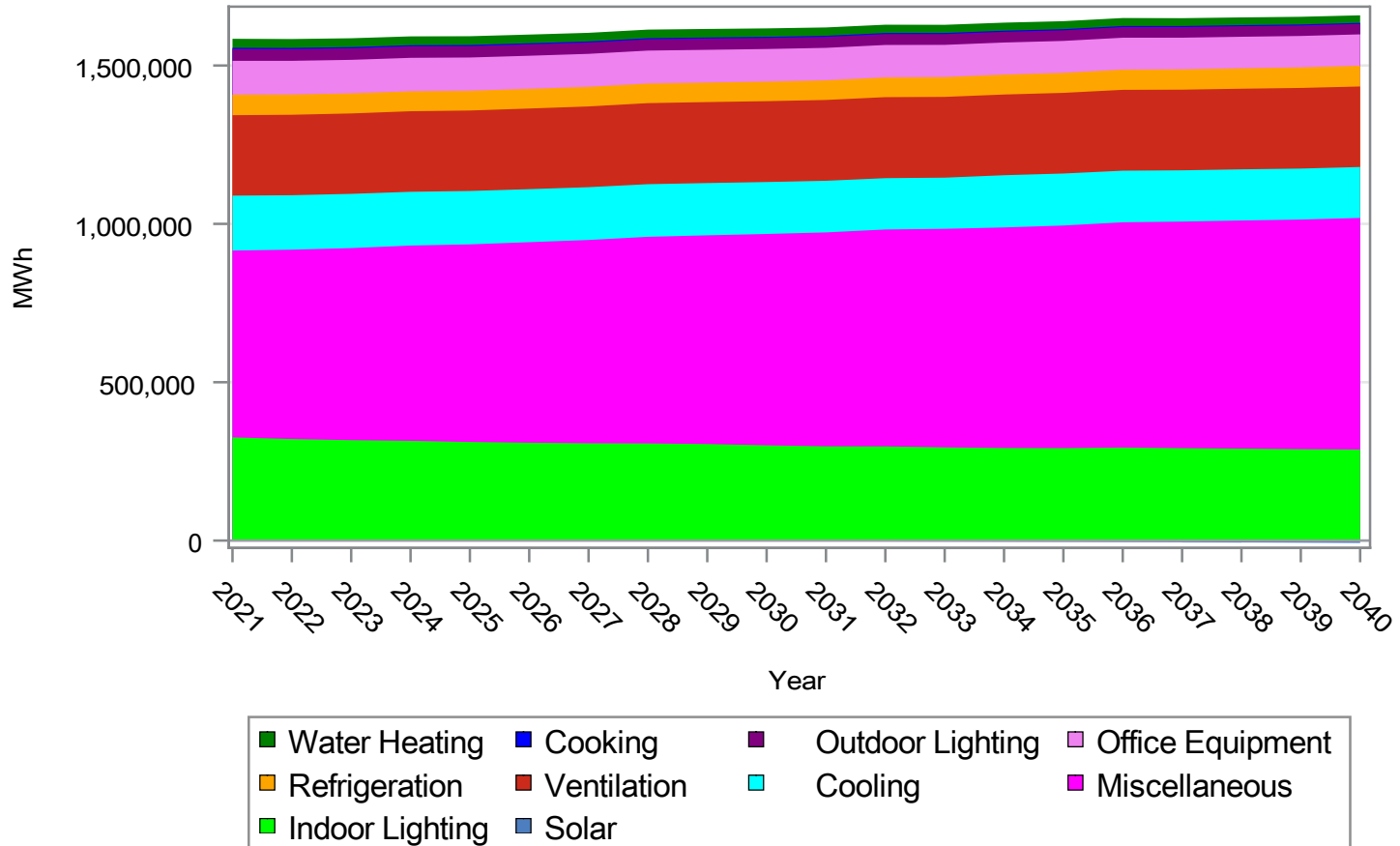
Commercial SPS Annual Energy Sales Forecast by End Use (MWh)



Commercial SPS Annual Energy Sales Forecast by End Use (MWh)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	264,988	62,749	351,519	5,564	146,648	47,529	373,647	137,948	-2,874	1,014,153
2022	259,991	61,810	351,338	5,377	144,129	46,500	360,651	137,339	-3,210	1,024,655
2023	258,162	61,297	350,436	5,288	142,198	45,812	355,107	136,421	-3,390	1,037,145
2024	255,217	60,905	350,015	5,228	140,812	45,322	351,032	135,692	-3,430	1,051,341
2025	252,888	60,262	349,283	5,154	139,378	44,903	346,137	134,705	-3,861	1,062,948
2026	250,884	59,766	349,497	5,071	138,593	44,650	343,440	134,083	-4,355	1,078,362
2027	249,602	59,388	349,555	5,021	137,958	44,317	341,520	133,384	-4,917	1,093,441
2028	248,746	59,214	350,511	4,985	137,915	44,230	341,608	133,050	-5,567	1,111,343
2029	247,028	58,657	349,868	4,914	137,473	44,182	339,921	132,026	-6,267	1,121,629
2030	245,447	58,018	349,115	4,860	137,461	43,948	336,812	131,373	-7,074	1,135,449
2031	243,998	57,351	348,697	4,828	137,793	43,768	336,966	130,774	-7,987	1,149,079
2032	247,771	56,824	349,021	5,067	141,129	43,568	344,237	130,434	-9,037	1,166,926
2033	247,632	55,933	347,682	5,272	144,621	43,661	349,075	129,417	-10,176	1,177,532
2034	249,056	55,352	347,001	5,344	145,578	43,567	356,494	128,740	-11,489	1,187,279
2035	249,001	55,190	346,440	5,266	146,329	43,339	365,679	128,061	-12,971	1,198,509
2036	248,234	55,207	346,939	5,222	147,676	43,491	380,857	127,794	-14,681	1,212,737
2037	248,017	54,675	345,741	5,145	148,183	43,375	382,521	126,816	-16,535	1,219,971
2038	247,970	53,937	345,275	5,084	148,929	43,096	382,266	126,119	-18,680	1,227,749
2039	246,897	53,103	344,945	5,025	149,757	42,896	381,154	125,473	-21,087	1,234,482
2040	246,591	52,393	344,079	4,977	150,976	42,714	380,693	125,108	-23,848	1,243,842

Commercial LPS Annual Energy Sales Forecast by End Use (MWh)

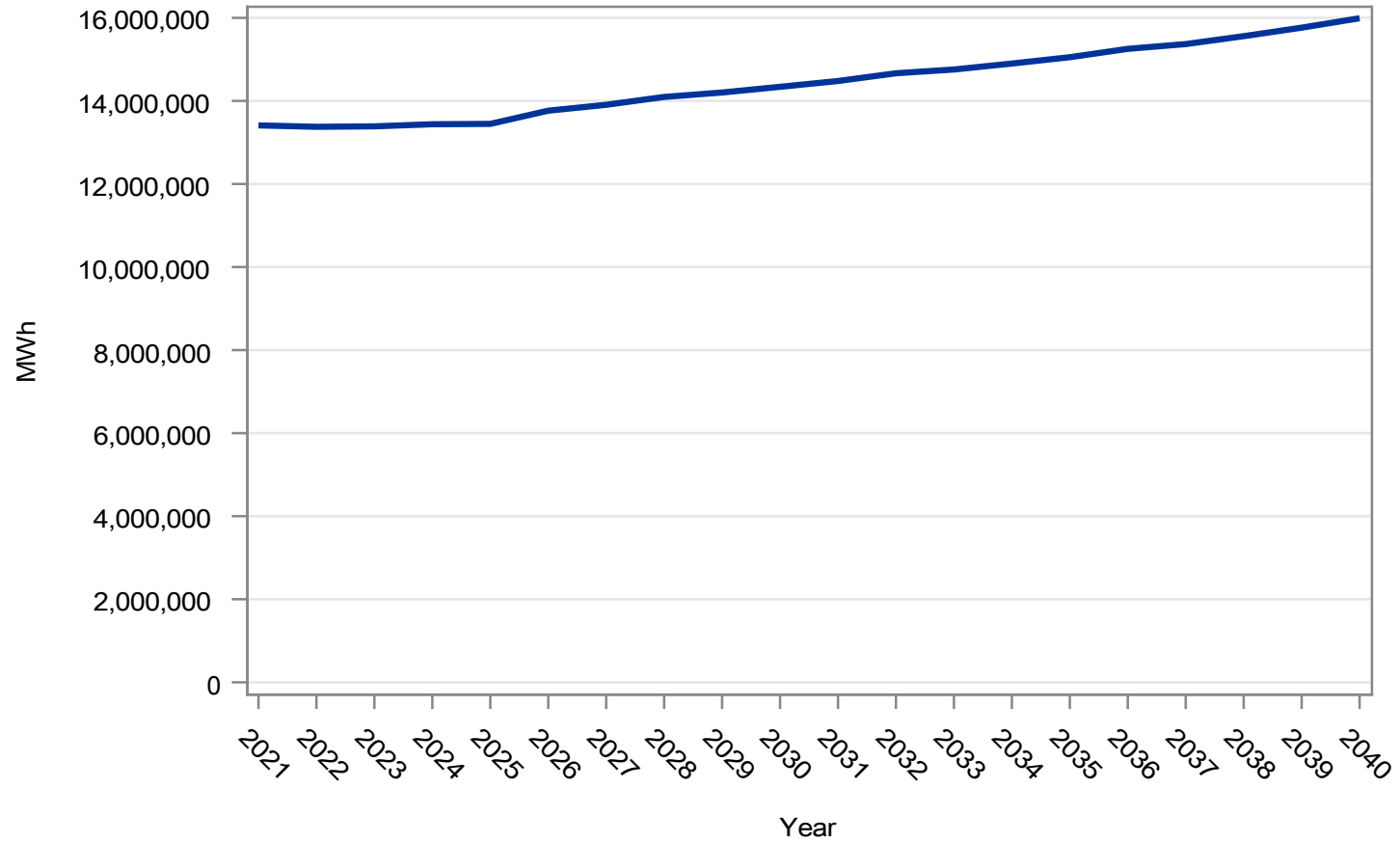


Commercial LPS Annual Energy Sales Forecast by End Use (MWh)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	173,463	28,362	253,925	3,754	64,842	37,484	326,784	106,731	-919	589,886
2022	171,900	28,112	254,065	3,698	63,983	36,990	321,602	106,373	-1,026	597,941
2023	171,174	27,946	253,975	3,651	63,304	36,548	318,148	105,896	-1,084	606,477
2024	169,784	27,856	254,435	3,625	62,906	36,286	316,048	105,648	-1,097	616,527
2025	168,492	27,599	254,198	3,582	62,368	36,012	312,583	105,002	-1,235	623,915
2026	167,370	27,403	254,603	3,532	62,095	35,859	310,387	104,619	-1,392	633,208
2027	166,722	27,263	254,918	3,505	61,889	35,634	308,728	104,185	-1,572	641,975
2028	166,161	27,216	255,897	3,486	61,930	35,530	308,462	104,038	-1,780	652,455
2029	165,136	26,990	255,667	3,445	61,726	35,375	306,743	103,334	-2,004	658,990
2030	164,039	26,719	255,342	3,414	61,763	34,958	303,017	102,914	-2,262	667,303
2031	162,992	26,420	255,277	3,385	61,919	34,668	300,051	102,541	-2,554	675,510
2032	162,088	26,185	255,770	3,410	62,376	34,388	300,102	102,378	-2,889	685,057
2033	161,567	25,809	255,051	3,413	62,561	34,145	297,510	101,684	-3,253	690,077
2034	164,890	25,539	254,814	3,404	62,891	33,876	295,971	101,257	-3,673	696,453
2035	164,185	25,334	254,668	3,358	63,224	33,651	295,989	100,828	-4,147	702,920
2036	162,905	25,194	255,297	3,333	63,807	33,655	298,424	100,721	-4,694	711,315
2037	161,832	24,858	254,678	3,287	64,056	33,517	297,008	100,053	-5,287	715,498
2038	161,555	24,548	254,595	3,252	64,444	33,336	296,166	99,605	-5,973	720,421
2039	161,017	24,193	254,610	3,217	64,868	33,215	295,213	99,196	-6,742	725,106
2040	160,784	23,894	254,235	3,190	65,464	33,108	295,154	99,010	-7,625	731,298

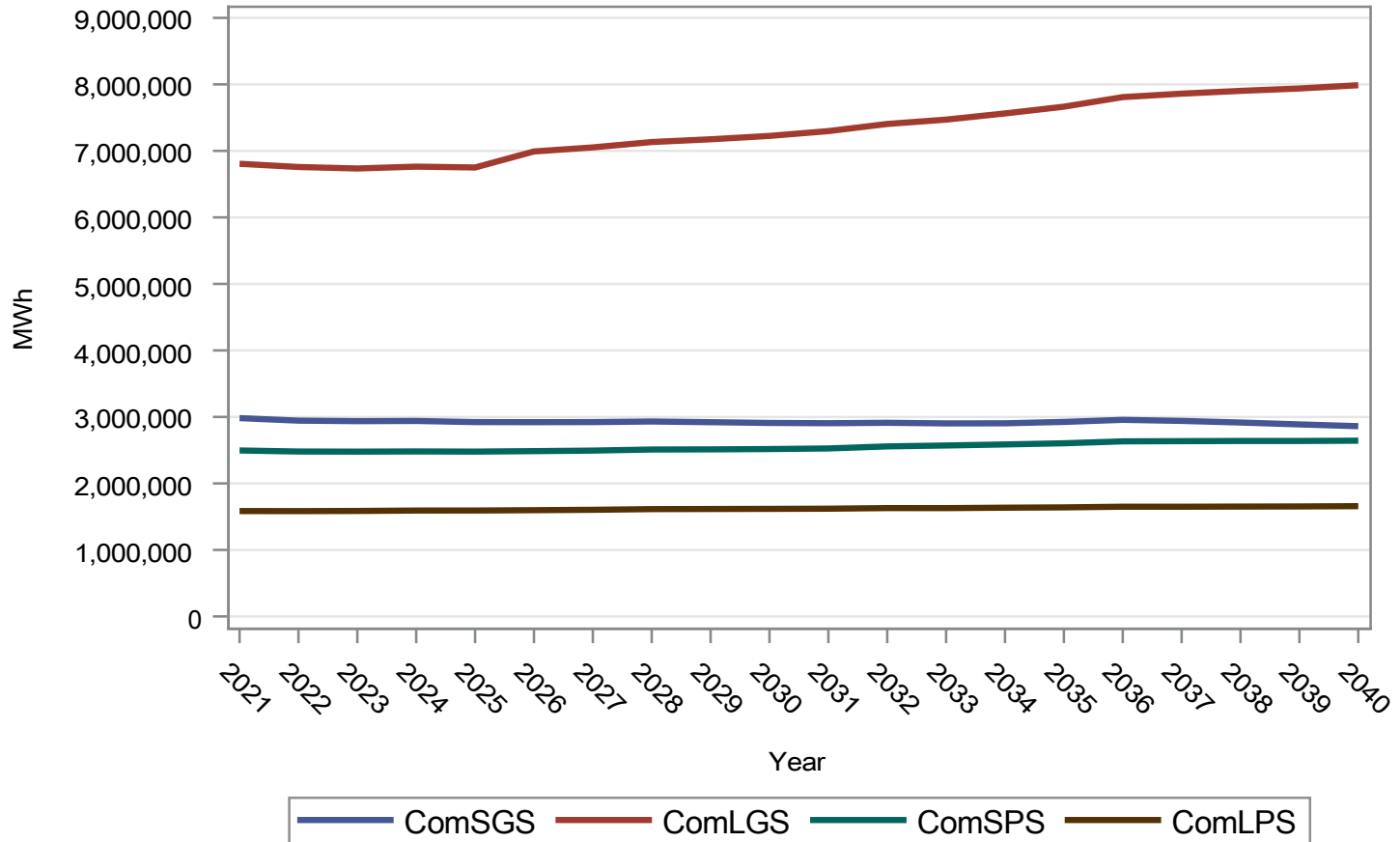
Probability Weighted Class Energy Forecast¹⁵

Annual Residential Energy Sales Forecast (MWh)

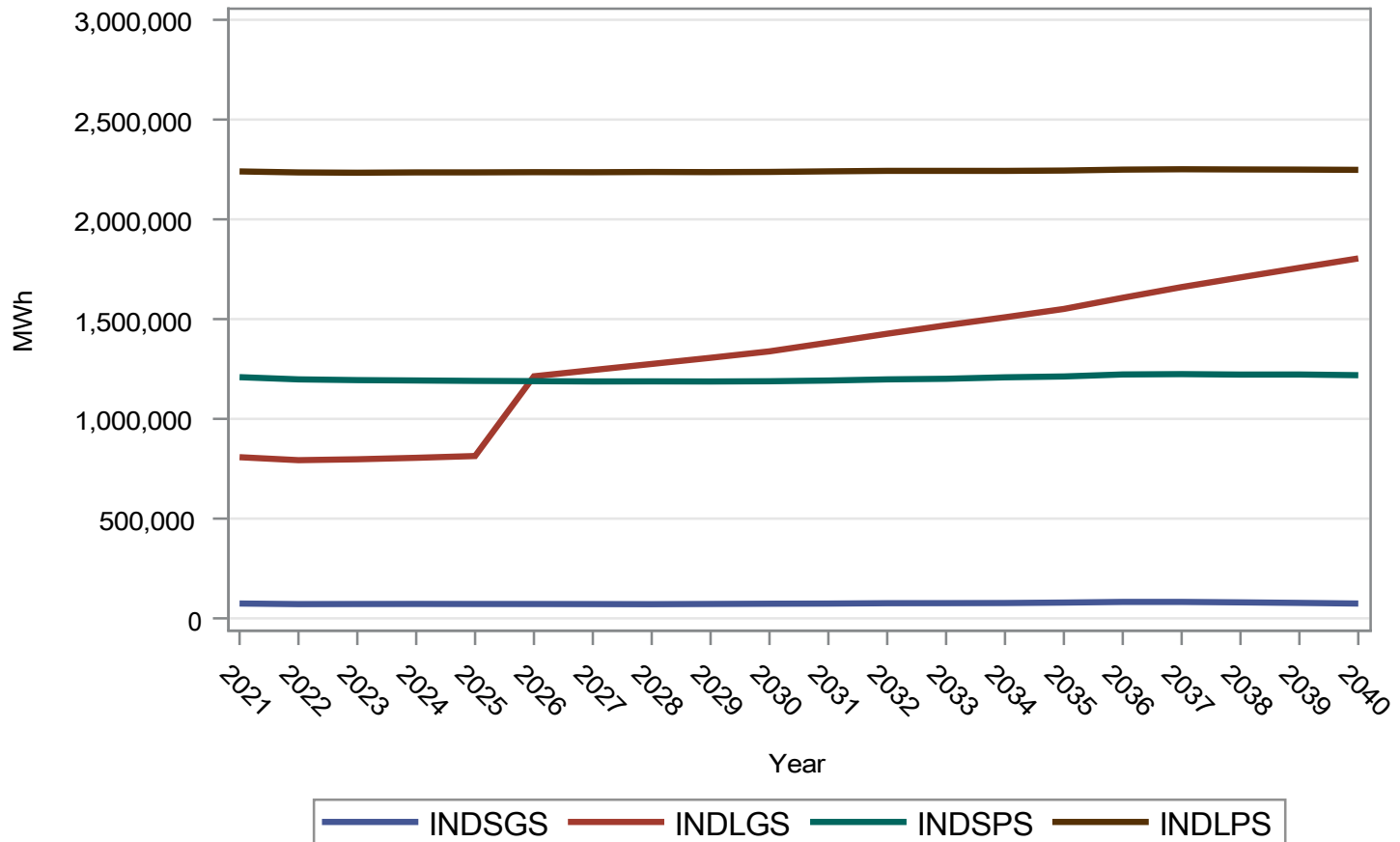


¹⁵20 CSR 4240-22.030(7)(A)6

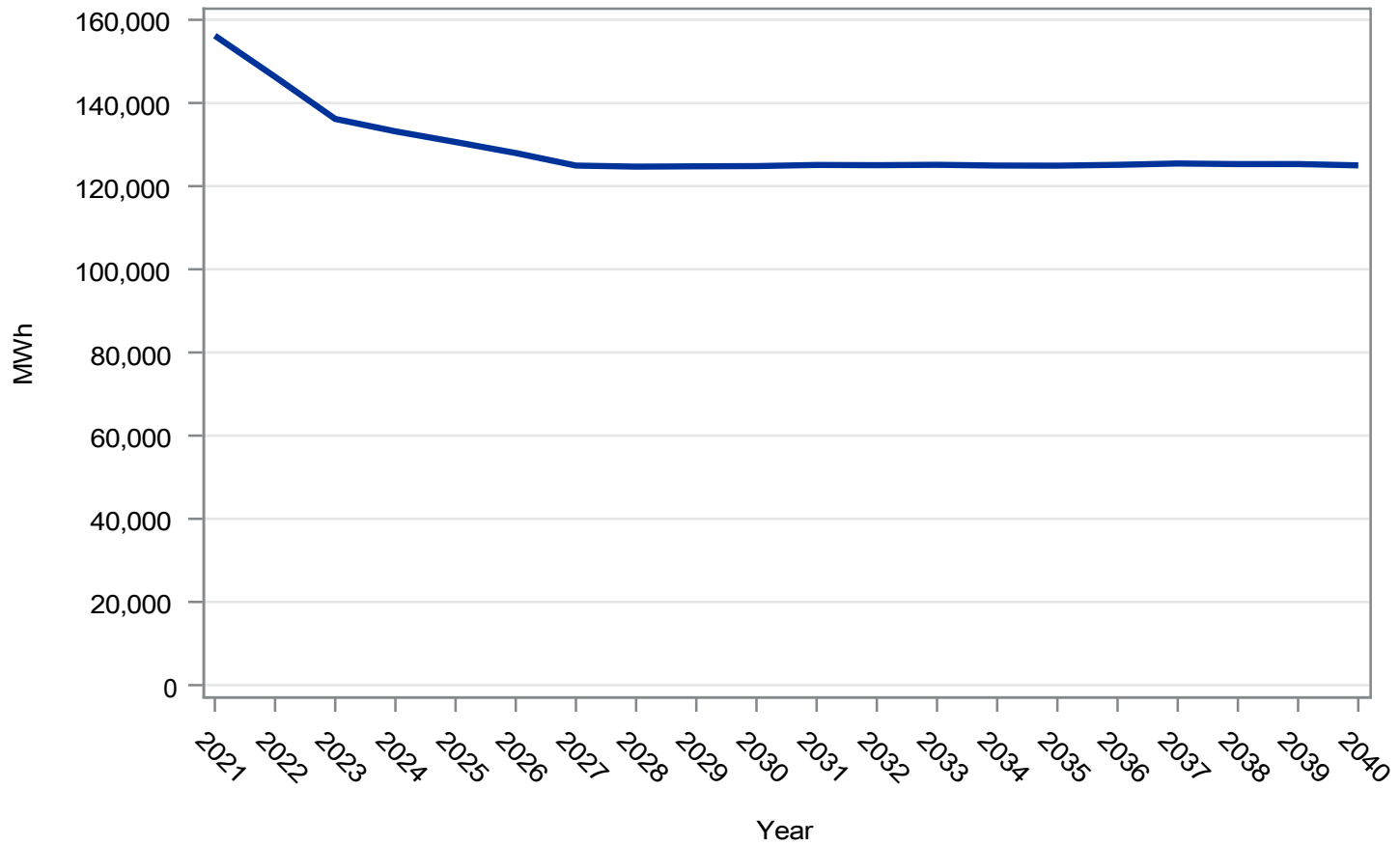
Annual Commercial Energy Sales Forecast (MWh)



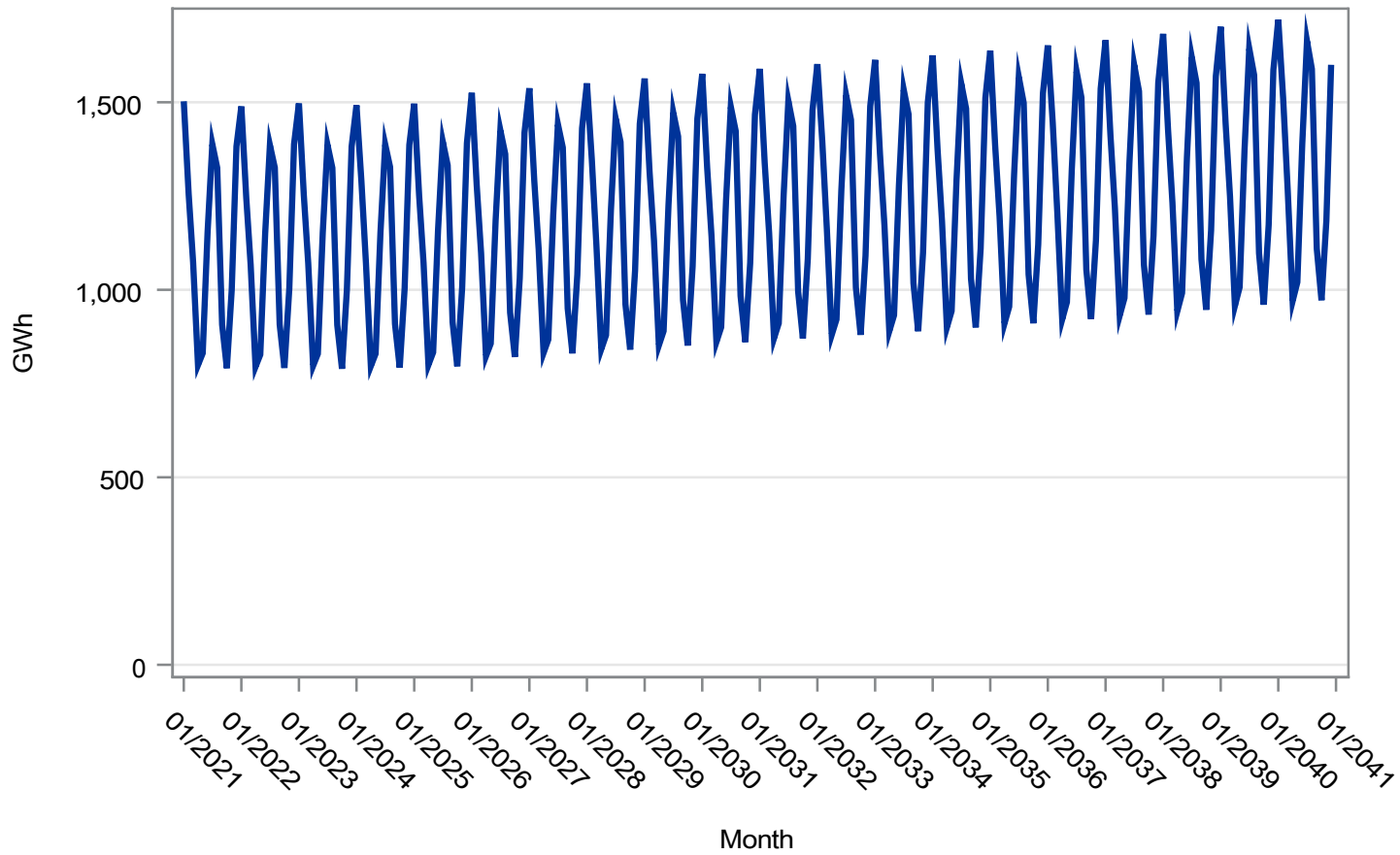
Annual Industrial Energy Sales Forecast (MWh)



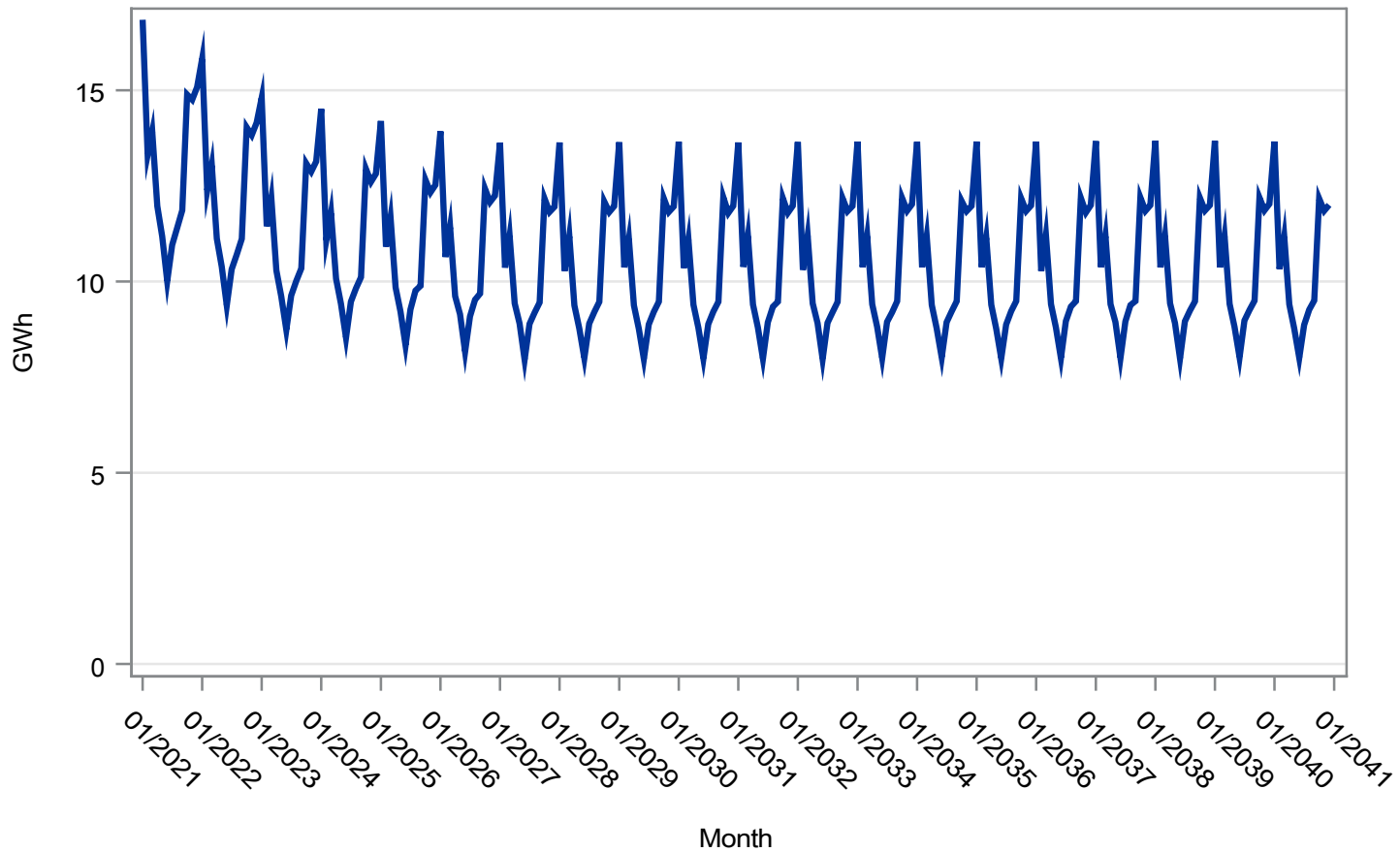
Annual Lighting Energy Sales Forecast (MWh)



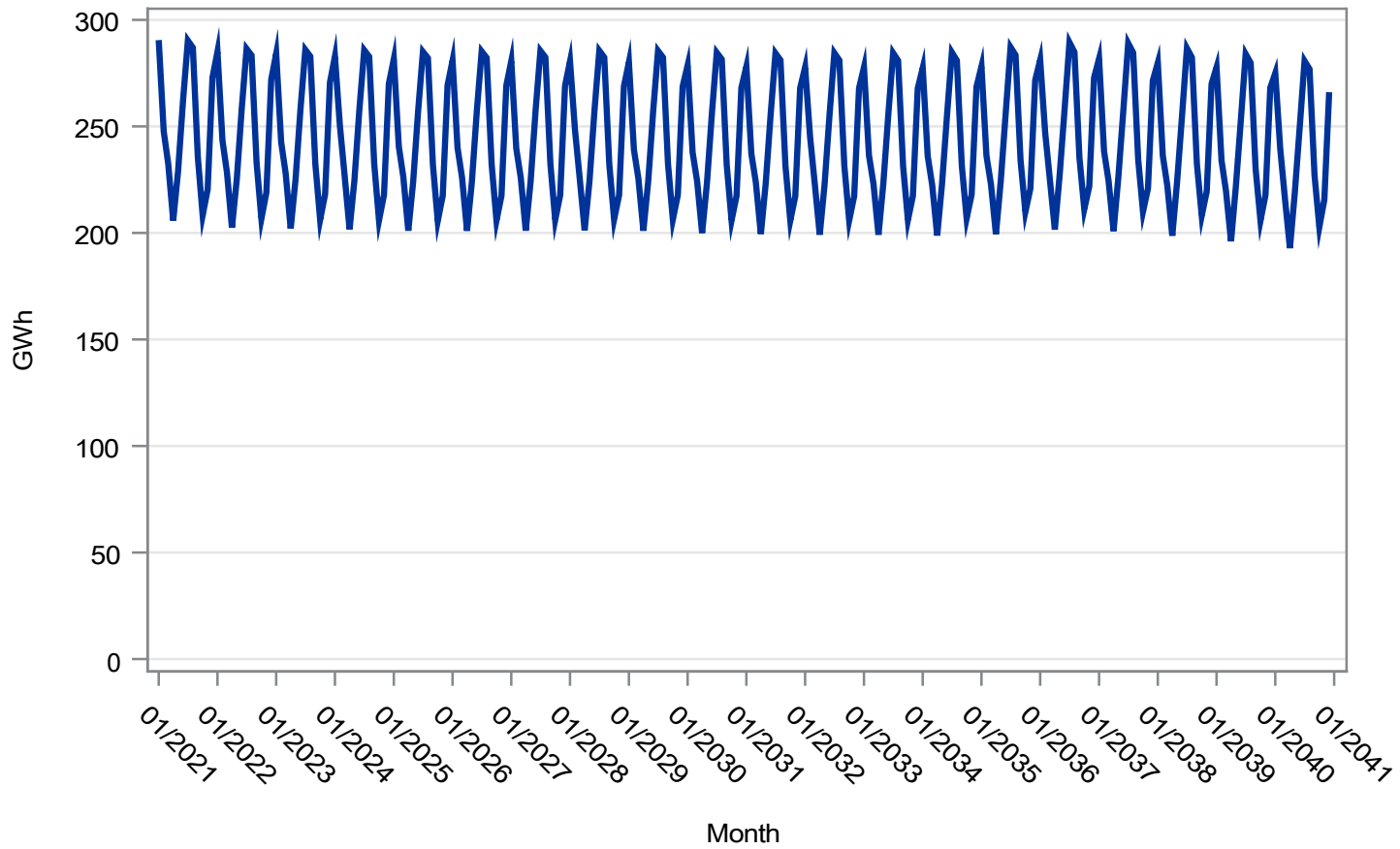
Residential Monthly Energy Forecast (GWh)



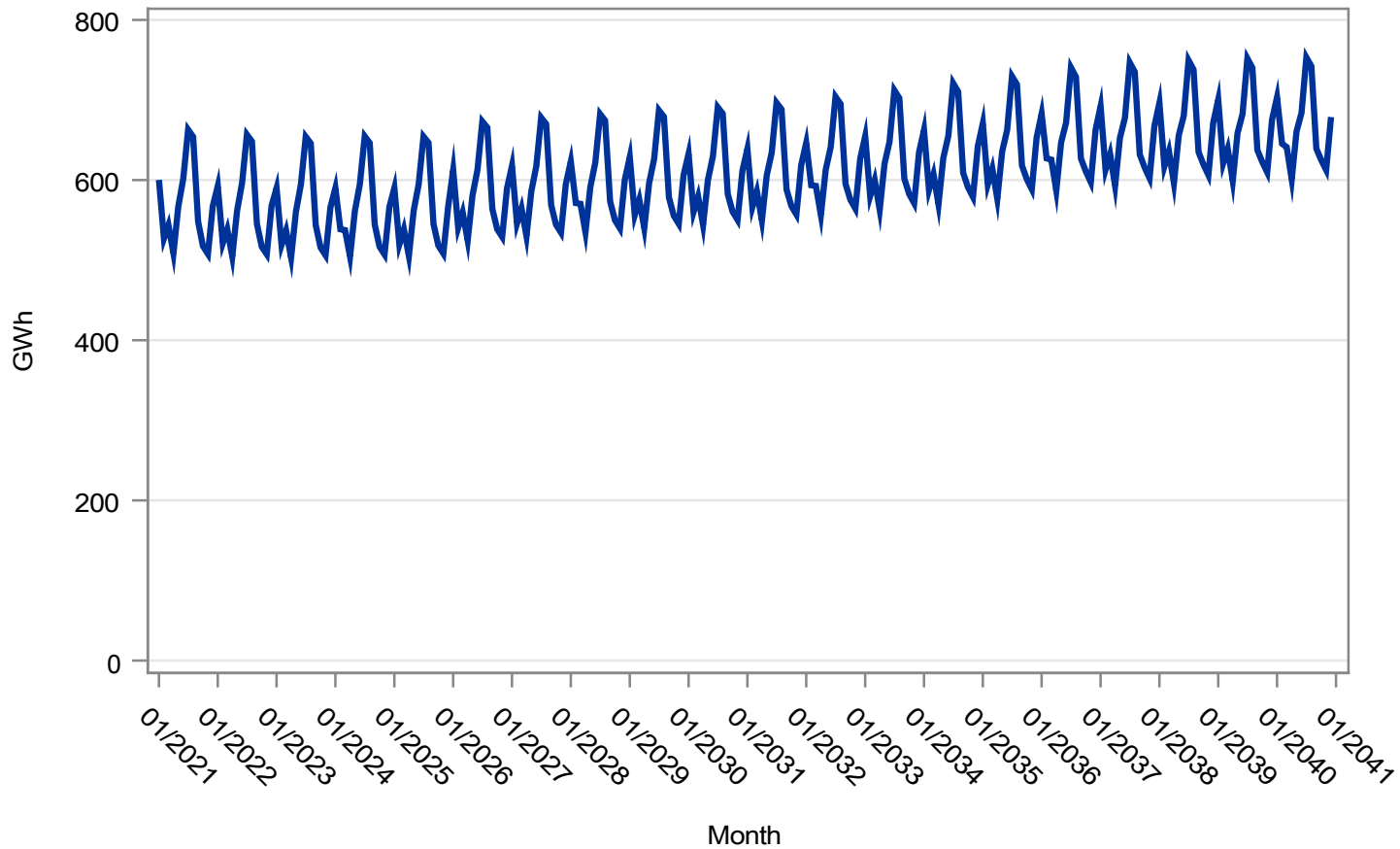
Lighting Monthly Energy Forecast (GWh)



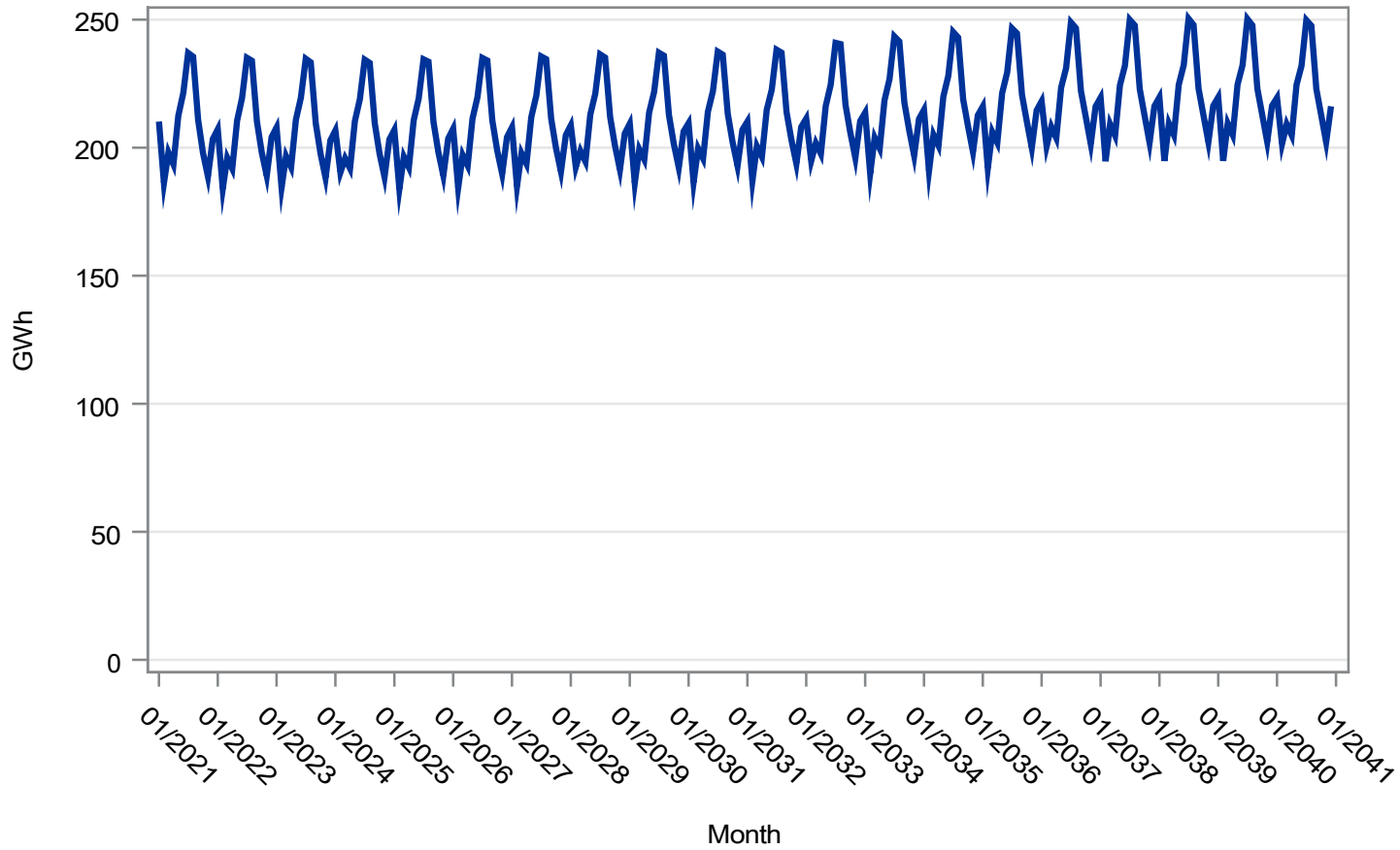
Commercial SGS Monthly Energy Forecast (GWh)



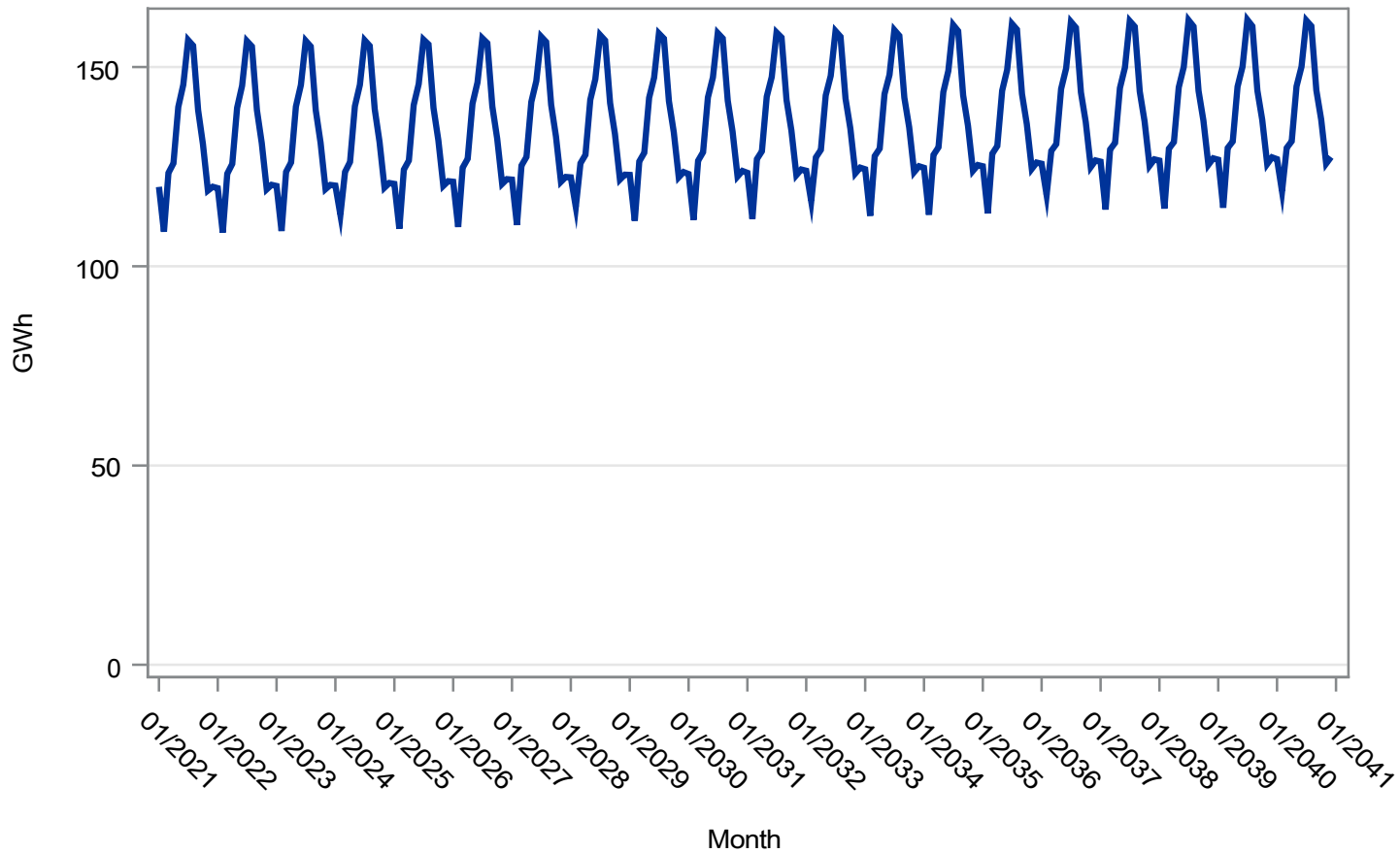
Commercial LGS Monthly Energy Forecast (GWh)



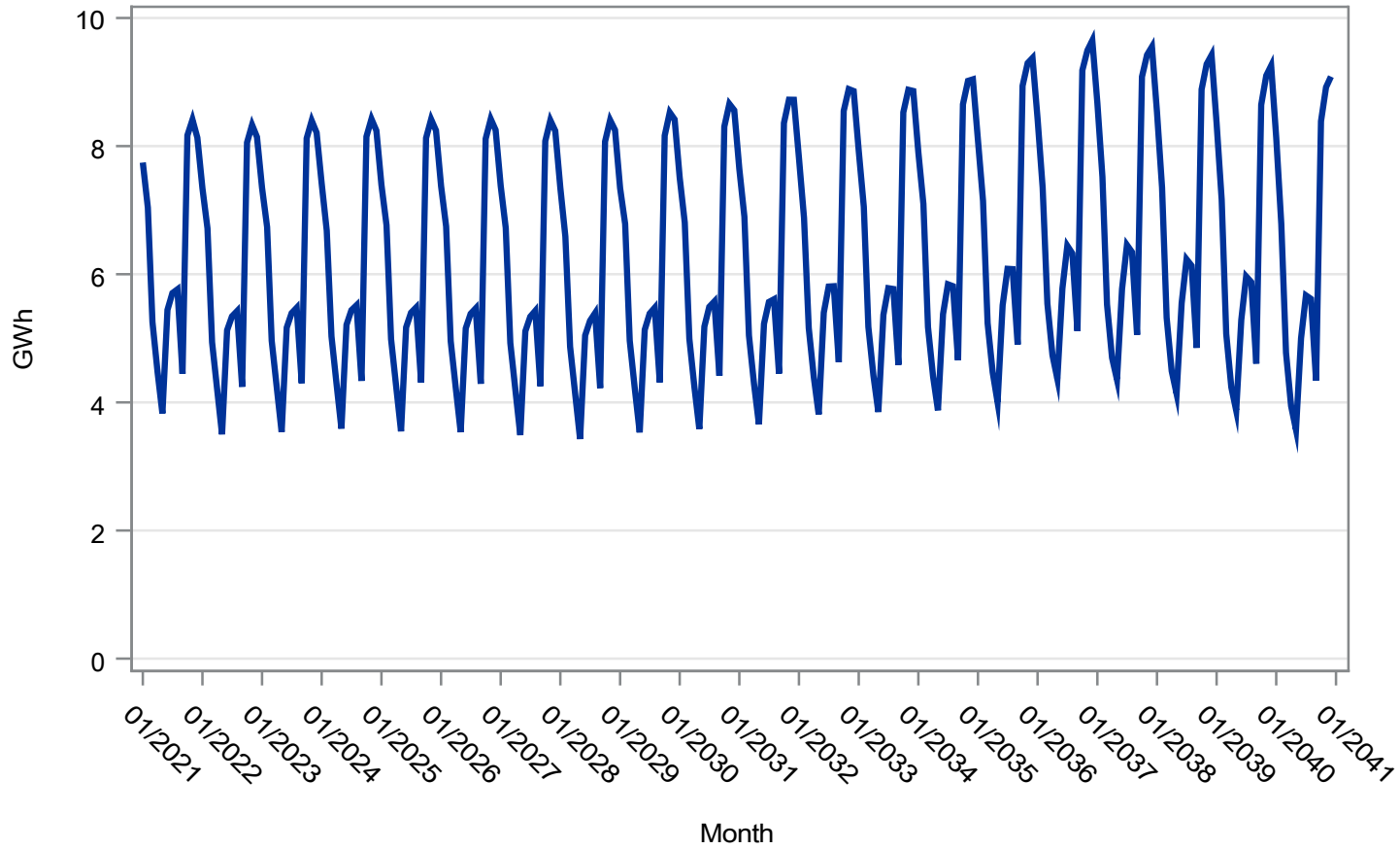
Commercial SPS Monthly Energy Forecast (GWh)



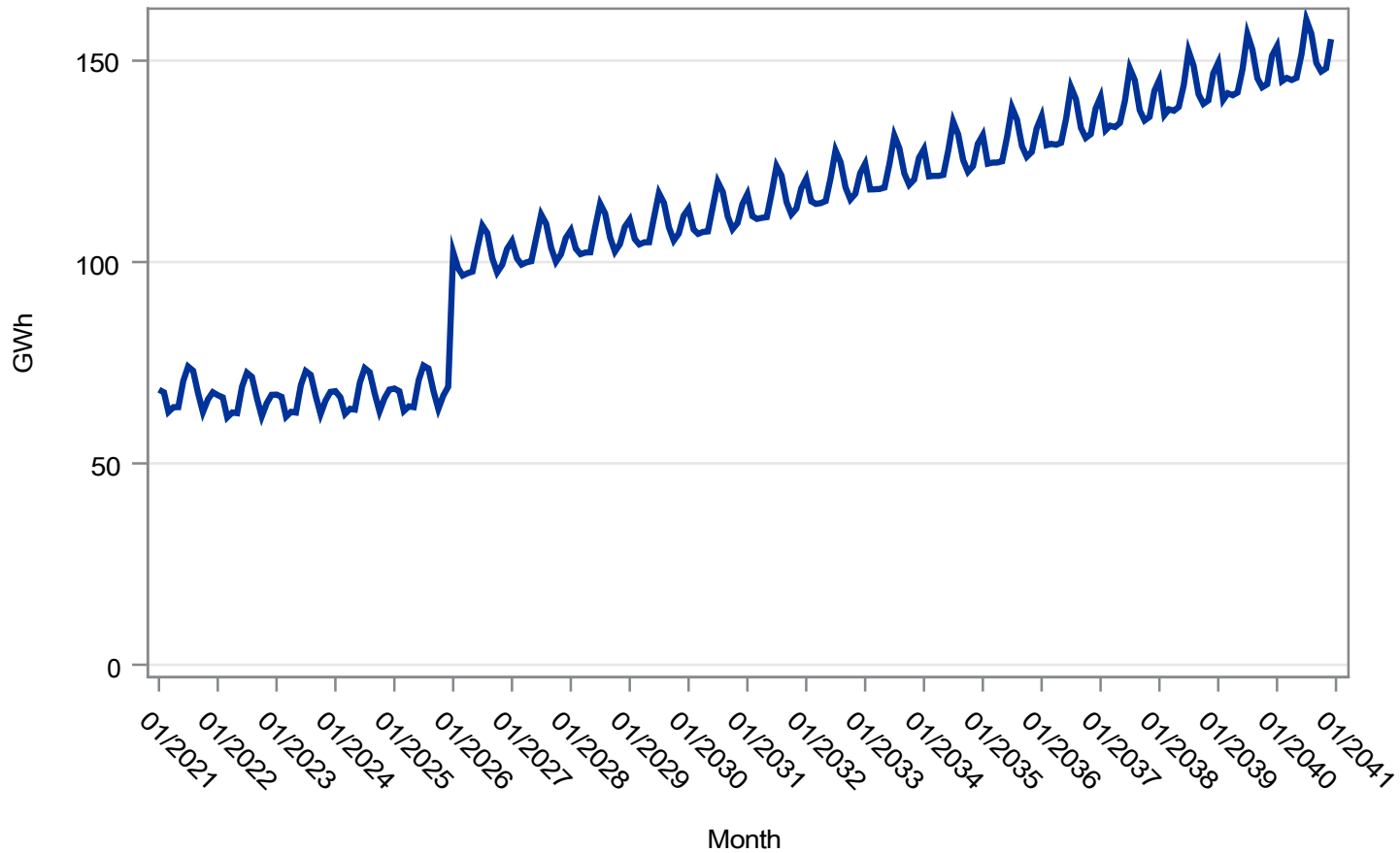
Commercial LPS Monthly Energy Forecast (GWh)



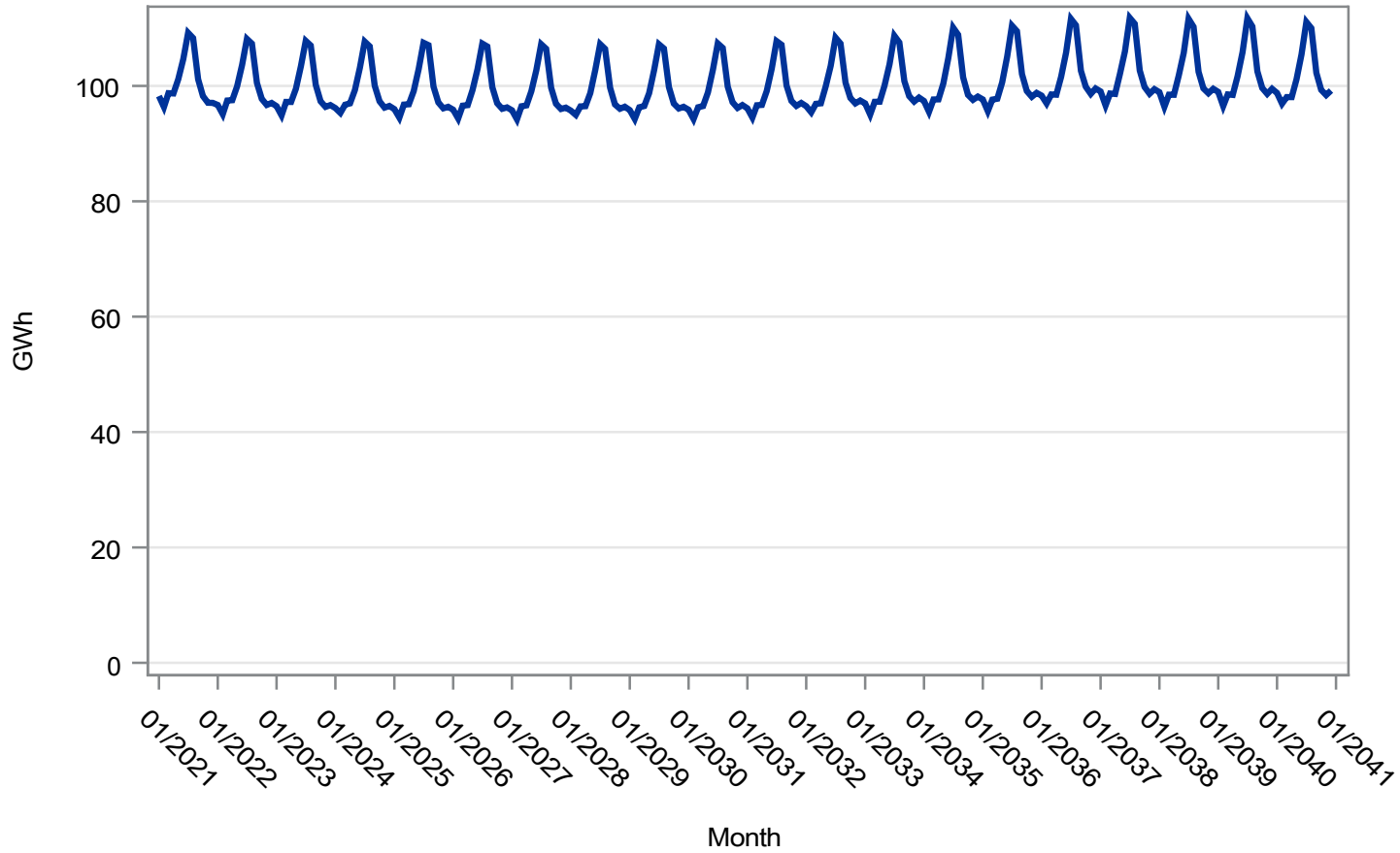
Industrial SGS Monthly Energy Forecast (GWh)



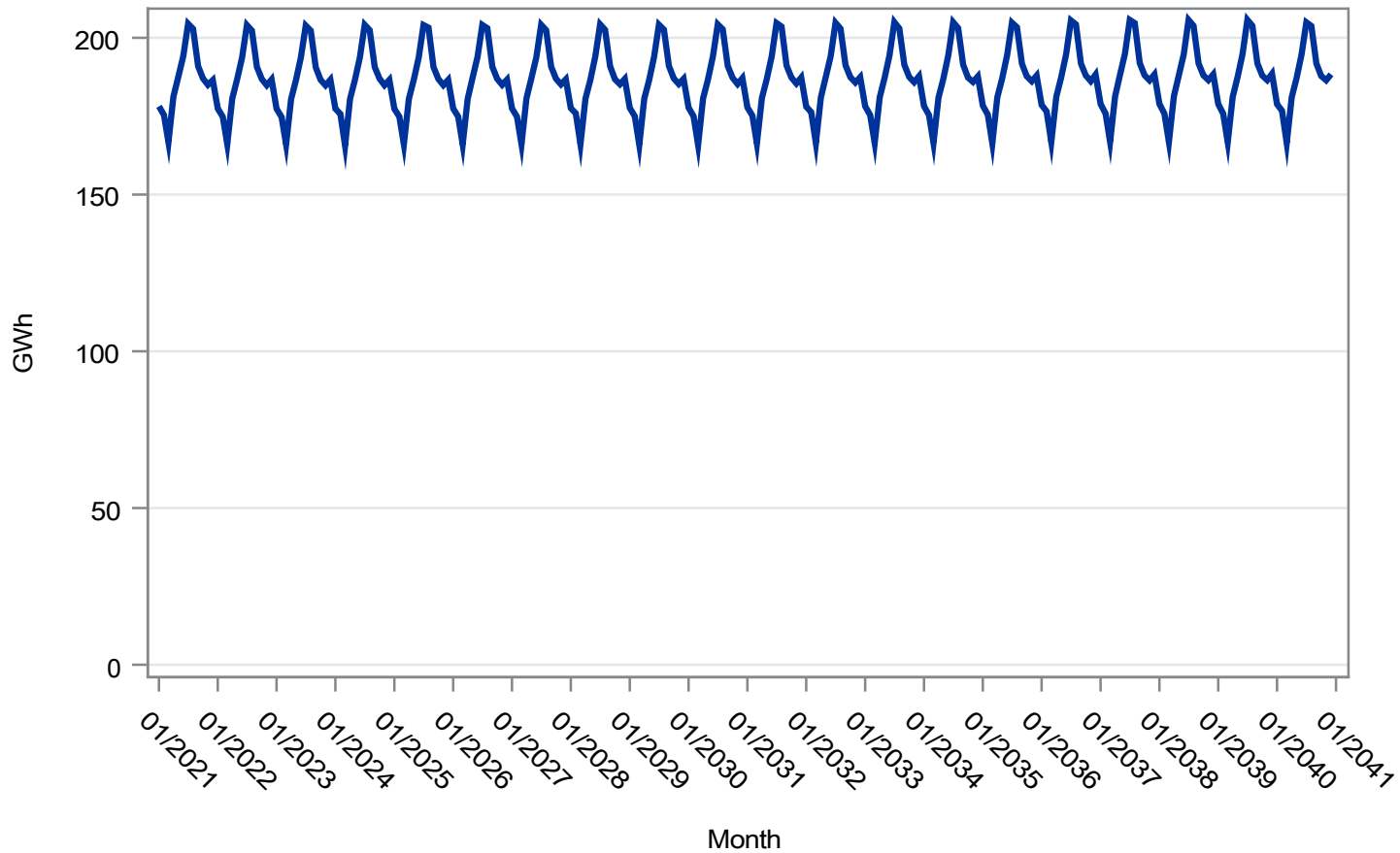
Industrial LGS Monthly Energy Forecast (GWh)



Industrial SPS Monthly Energy Forecast (GWh)



Industrial LPS Monthly Energy Forecast (GWh)



Annual Energy Sales Forecast by Rate Class (MWh)

Year	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	13,410,425	2,981,728	6,806,279	2,495,415	1,584,311	74,414	807,877	1,208,875	2,240,051	156,184
2022	13,376,292	2,943,669	6,757,817	2,479,731	1,583,638	71,366	792,816	1,197,858	2,234,982	146,286
2023	13,387,118	2,935,962	6,735,282	2,478,155	1,586,035	71,884	797,313	1,194,112	2,233,622	136,160
2024	13,438,184	2,939,114	6,763,215	2,480,734	1,592,017	72,322	804,686	1,192,274	2,235,175	133,176
2025	13,446,734	2,922,200	6,750,580	2,478,505	1,592,519	72,092	813,582	1,190,144	2,235,253	130,604
2026	13,764,266	2,920,932	6,991,032	2,485,486	1,597,682	71,924	1,213,124	1,188,870	2,236,319	127,960
2027	13,906,500	2,921,987	7,052,391	2,493,631	1,603,249	71,567	1,244,544	1,187,337	2,236,086	124,940
2028	14,095,703	2,930,962	7,132,911	2,509,899	1,613,393	71,035	1,275,101	1,187,731	2,237,268	124,689
2029	14,202,201	2,920,535	7,174,411	2,511,711	1,615,399	72,258	1,305,935	1,187,240	2,236,569	124,764
2030	14,339,070	2,909,474	7,225,196	2,516,819	1,617,208	73,317	1,338,221	1,188,441	2,237,575	124,819
2031	14,479,196	2,905,134	7,297,431	2,525,840	1,620,205	74,193	1,381,961	1,192,022	2,240,504	125,094
2032	14,665,824	2,911,526	7,404,551	2,556,632	1,628,844	76,011	1,426,667	1,197,804	2,242,925	125,034
2033	14,756,268	2,902,524	7,470,147	2,570,165	1,628,529	76,196	1,468,841	1,200,851	2,242,893	125,129
2034	14,899,717	2,903,740	7,562,882	2,586,242	1,635,369	76,859	1,508,989	1,208,105	2,242,771	124,950
2035	15,051,840	2,924,768	7,664,381	2,603,620	1,639,926	79,136	1,550,732	1,212,346	2,244,453	124,922
2036	15,253,238	2,955,801	7,808,414	2,632,408	1,649,872	82,414	1,606,835	1,222,416	2,249,107	125,124
2037	15,368,575	2,940,008	7,860,520	2,635,769	1,649,337	82,452	1,660,372	1,224,117	2,250,939	125,442
2038	15,558,442	2,915,603	7,902,037	2,638,469	1,651,731	80,182	1,708,862	1,221,883	2,249,810	125,295
2039	15,763,888	2,887,379	7,938,194	2,638,337	1,653,588	77,437	1,756,923	1,222,246	2,249,235	125,305
2040	15,990,376	2,860,612	7,986,850	2,642,751	1,658,104	74,228	1,803,924	1,218,709	2,247,915	124,994

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	1	1,503	291	600	210	120	8	68	98	178	17
2021	2	1,255	248	527	186	109	7	68	96	175	13
2021	3	1,074	232	544	198	123	5	63	99	167	14
2021	4	799	206	509	193	126	4	64	99	181	12
2021	5	831	229	567	212	140	4	64	101	188	11
2021	6	1,154	262	602	221	146	5	70	105	194	10
2021	7	1,388	290	663	237	157	6	74	109	204	11
2021	8	1,325	287	654	236	155	6	73	108	203	11
2021	9	907	235	548	211	139	4	67	101	191	12
2021	10	791	208	518	198	131	8	63	98	187	15
2021	11	1,000	220	508	189	119	8	66	97	185	15
2021	12	1,383	273	567	203	120	8	68	97	186	15
2022	1	1,489	285	593	207	120	7	67	97	177	16
2022	2	1,246	243	521	184	108	7	66	95	175	12
2022	3	1,067	228	538	196	123	5	61	97	166	13
2022	4	795	202	505	192	126	4	63	98	181	11
2022	5	827	225	562	211	140	4	62	100	187	10
2022	6	1,150	259	597	220	145	5	69	104	194	9
2022	7	1,385	286	657	235	157	5	73	108	204	10
2022	8	1,326	283	648	234	155	5	71	107	202	11

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2022	9	908	233	545	210	139	4	66	101	191	11
2022	10	792	207	517	198	131	8	62	98	187	14
2022	11	1,003	219	507	189	119	8	65	97	185	14
2022	12	1,388	272	568	204	120	8	67	97	187	14
2023	1	1,497	284	590	208	120	7	67	96	177	15
2023	2	1,252	243	519	184	109	7	67	95	175	11
2023	3	1,071	228	537	197	124	5	62	97	166	12
2023	4	798	202	503	192	126	4	63	97	180	10
2023	5	829	225	560	211	140	4	63	100	186	10
2023	6	1,152	258	595	220	145	5	69	103	194	9
2023	7	1,386	286	654	235	157	5	73	108	204	10
2023	8	1,325	283	646	233	155	5	72	107	202	10
2023	9	906	233	544	210	139	4	67	100	191	10
2023	10	790	206	516	198	131	8	62	97	187	13
2023	11	1,000	218	506	188	119	8	66	96	185	13
2023	12	1,382	271	566	203	120	8	68	97	187	13
2024	1	1,492	283	590	207	120	7	68	96	177	15
2024	2	1,291	250	539	190	113	7	66	95	176	11
2024	3	1,070	227	537	196	124	5	62	97	166	12
2024	4	797	202	505	192	126	4	64	97	181	10

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2024	5	829	225	561	210	140	4	63	99	187	9
2024	6	1,153	258	595	219	146	5	70	103	194	9
2024	7	1,387	286	655	234	157	5	74	108	204	9
2024	8	1,327	283	646	233	155	6	73	107	202	10
2024	9	909	232	545	210	139	4	67	100	191	10
2024	10	793	206	517	198	131	8	63	97	187	13
2024	11	1,003	218	507	189	120	8	66	96	185	13
2024	12	1,387	270	566	203	121	8	68	97	187	13
2025	1	1,496	282	590	207	121	7	69	96	177	14
2025	2	1,252	241	520	184	109	7	68	95	175	11
2025	3	1,072	226	539	196	124	5	63	97	166	12
2025	4	800	201	505	192	127	4	64	97	181	10
2025	5	833	224	562	211	140	4	64	99	187	9
2025	6	1,159	257	595	219	146	5	71	103	194	8
2025	7	1,395	285	654	235	157	5	74	107	204	9
2025	8	1,332	282	647	234	156	5	74	107	203	10
2025	9	914	232	545	210	140	4	68	100	191	10
2025	10	796	206	518	198	132	8	64	97	187	13
2025	11	1,006	217	508	189	120	8	67	96	185	12
2025	12	1,391	269	567	204	121	8	69	96	187	13

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2026	1	1,525	281	612	207	121	7	102	96	177	14
2026	2	1,279	240	541	184	110	7	98	94	175	11
2026	3	1,098	226	559	197	125	5	97	97	166	11
2026	4	823	201	525	193	127	4	97	97	181	10
2026	5	857	224	581	211	141	4	98	99	187	9
2026	6	1,185	257	613	220	146	5	104	103	194	8
2026	7	1,425	285	673	235	157	5	109	107	204	9
2026	8	1,362	282	666	234	156	5	107	107	203	10
2026	9	939	232	564	211	140	4	101	100	191	10
2026	10	821	206	539	199	132	8	97	97	187	12
2026	11	1,031	217	529	190	121	8	99	96	185	12
2026	12	1,419	269	589	204	122	8	103	96	187	12
2027	1	1,537	281	618	208	122	7	105	96	177	14
2027	2	1,291	240	546	185	110	7	101	94	175	10
2027	3	1,108	226	565	198	125	5	99	96	166	11
2027	4	832	201	530	194	127	4	100	97	181	9
2027	5	867	224	586	212	141	3	100	99	187	9
2027	6	1,199	257	617	220	147	5	106	103	194	8
2027	7	1,441	285	678	236	158	5	112	107	204	9
2027	8	1,379	282	670	235	156	5	110	106	202	9

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2027	9	950	232	569	211	141	4	104	100	191	9
2027	10	830	206	544	200	133	8	100	97	187	12
2027	11	1,041	218	534	191	121	8	102	96	185	12
2027	12	1,431	269	595	205	122	8	106	96	187	12
2028	1	1,551	281	623	209	122	7	108	96	178	14
2028	2	1,347	248	571	192	115	7	103	95	176	10
2028	3	1,119	226	570	199	126	5	102	96	166	11
2028	4	842	201	535	195	128	4	102	96	181	9
2028	5	879	224	591	213	142	3	102	99	187	9
2028	6	1,212	257	622	221	147	5	109	103	194	8
2028	7	1,457	286	682	236	158	5	114	107	204	9
2028	8	1,394	282	674	235	157	5	112	106	203	9
2028	9	961	232	573	212	141	4	106	100	191	9
2028	10	840	206	550	201	133	8	103	97	187	12
2028	11	1,051	218	540	191	122	8	104	96	185	12
2028	12	1,443	269	600	206	123	8	109	96	187	12
2029	1	1,563	280	629	209	123	7	111	96	178	14
2029	2	1,315	239	556	186	111	7	106	94	175	10
2029	3	1,131	226	575	199	126	5	104	96	166	11
2029	4	852	201	540	195	128	4	105	97	181	9

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2029	5	890	224	596	214	142	4	105	99	186	9
2029	6	1,226	257	626	222	147	5	111	103	194	8
2029	7	1,473	285	687	237	158	5	117	107	204	9
2029	8	1,409	282	679	236	157	5	115	106	203	9
2029	9	973	232	578	213	141	4	109	100	191	9
2029	10	851	206	556	202	134	8	105	97	187	12
2029	11	1,062	218	545	192	122	9	107	96	185	12
2029	12	1,456	269	606	206	124	8	111	96	187	12
2030	1	1,576	279	633	210	123	8	113	96	178	14
2030	2	1,326	238	560	186	112	7	108	94	175	10
2030	3	1,142	224	579	200	126	5	107	96	166	11
2030	4	861	200	544	196	129	4	107	97	181	9
2030	5	900	223	600	214	142	4	108	99	187	9
2030	6	1,239	256	630	222	147	5	114	103	194	8
2030	7	1,488	285	691	238	159	5	120	107	204	9
2030	8	1,423	282	683	236	157	6	117	107	203	9
2030	9	984	232	583	213	142	4	111	100	191	9
2030	10	861	206	561	202	134	8	108	97	187	12
2030	11	1,072	217	550	193	123	9	110	96	185	12
2030	12	1,467	268	611	207	124	9	114	97	187	12

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2031	1	1,589	278	639	210	123	8	117	96	178	14
2031	2	1,338	237	566	187	112	7	111	95	175	10
2031	3	1,151	224	586	201	127	5	111	97	166	11
2031	4	871	200	550	196	129	4	111	97	181	9
2031	5	911	223	606	215	143	4	111	99	187	9
2031	6	1,252	256	634	223	147	5	117	103	194	8
2031	7	1,503	284	697	238	159	6	124	108	205	9
2031	8	1,436	281	688	237	157	6	121	107	204	9
2031	9	995	231	588	214	142	4	115	100	191	9
2031	10	870	206	568	203	134	8	112	97	187	12
2031	11	1,082	217	557	194	123	9	113	97	185	12
2031	12	1,479	268	619	208	124	9	118	97	187	12
2032	1	1,602	278	646	211	124	8	121	96	178	14
2032	2	1,396	245	594	195	116	7	115	95	176	10
2032	3	1,162	223	593	202	127	5	114	97	166	11
2032	4	880	199	557	198	129	4	115	97	181	9
2032	5	921	223	613	216	143	4	115	100	187	9
2032	6	1,266	256	641	225	148	5	121	103	194	8
2032	7	1,519	284	704	241	159	6	128	108	205	9
2032	8	1,453	281	695	240	158	6	125	107	203	9

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2032	9	1,006	231	595	217	142	5	119	101	191	9
2032	10	880	206	575	206	135	9	116	98	187	12
2032	11	1,090	217	564	196	123	9	117	97	186	12
2032	12	1,489	268	627	210	125	9	122	97	187	12
2033	1	1,613	278	655	214	124	8	124	97	178	14
2033	2	1,361	236	580	190	113	7	118	95	175	10
2033	3	1,173	223	600	204	128	5	118	97	166	11
2033	4	890	199	563	200	130	4	118	97	181	9
2033	5	932	223	620	219	143	4	118	100	187	9
2033	6	1,279	255	648	227	148	5	124	104	194	8
2033	7	1,534	284	712	243	159	6	131	109	205	9
2033	8	1,468	281	702	241	158	6	128	108	203	9
2033	9	1,017	231	602	218	142	5	122	101	191	9
2033	10	890	206	583	207	135	9	119	98	188	12
2033	11	1,100	217	571	197	124	9	120	97	186	12
2033	12	1,500	268	634	211	125	9	126	98	188	12
2034	1	1,625	277	663	215	125	8	128	97	178	14
2034	2	1,373	236	588	191	113	7	121	96	175	10
2034	3	1,183	222	607	205	128	5	121	98	166	11
2034	4	900	199	570	201	130	4	121	98	181	9

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2034	5	943	223	628	220	144	4	122	100	187	9
2034	6	1,292	255	655	228	149	5	128	105	194	8
2034	7	1,550	285	721	245	161	6	135	110	205	9
2034	8	1,483	281	710	243	159	6	132	109	203	9
2034	9	1,029	232	609	219	143	5	125	101	191	9
2034	10	900	207	591	208	135	9	122	98	187	12
2034	11	1,110	218	579	198	124	9	124	98	186	12
2034	12	1,512	269	642	213	125	9	129	98	188	12
2035	1	1,638	278	671	216	125	8	132	98	178	14
2035	2	1,385	236	595	192	113	7	124	96	175	10
2035	3	1,195	223	614	206	128	5	125	98	166	11
2035	4	910	199	577	202	130	4	125	98	181	9
2035	5	955	224	636	221	144	4	125	101	187	9
2035	6	1,307	257	663	229	149	6	131	105	195	8
2035	7	1,567	287	730	247	161	6	138	110	205	9
2035	8	1,498	283	719	245	159	6	135	109	203	9
2035	9	1,041	234	618	221	143	5	129	102	192	9
2035	10	911	210	601	210	136	9	126	99	188	12
2035	11	1,121	221	589	200	124	9	127	98	186	12
2035	12	1,524	272	653	215	126	9	133	99	188	12

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2036	1	1,652	281	683	218	126	8	136	98	179	14
2036	2	1,446	247	627	201	118	7	129	97	177	10
2036	3	1,206	225	626	208	129	6	129	99	167	11
2036	4	921	202	587	204	131	5	129	98	181	9
2036	5	967	227	647	223	145	4	130	102	187	9
2036	6	1,322	258	672	231	150	6	136	106	195	8
2036	7	1,582	289	740	249	161	6	143	112	206	9
2036	8	1,513	285	729	247	160	6	140	111	204	9
2036	9	1,054	235	627	222	144	5	133	103	192	9
2036	10	922	211	611	212	136	9	131	100	188	12
2036	11	1,132	222	597	201	125	9	132	99	186	12
2036	12	1,536	273	663	216	127	10	138	100	188	12
2037	1	1,665	282	692	220	126	9	141	99	179	14
2037	2	1,412	238	613	195	114	8	133	97	176	10
2037	3	1,218	224	632	209	129	6	134	99	167	11
2037	4	932	201	593	205	131	5	134	99	181	9
2037	5	978	226	653	224	145	4	135	102	188	9
2037	6	1,336	258	678	232	150	6	140	106	195	8
2037	7	1,600	289	747	250	162	6	148	112	206	9
2037	8	1,529	285	735	248	160	6	145	111	205	9

Monthly Energy Sales Forecast by Rate Class (GWh) (continued next page)

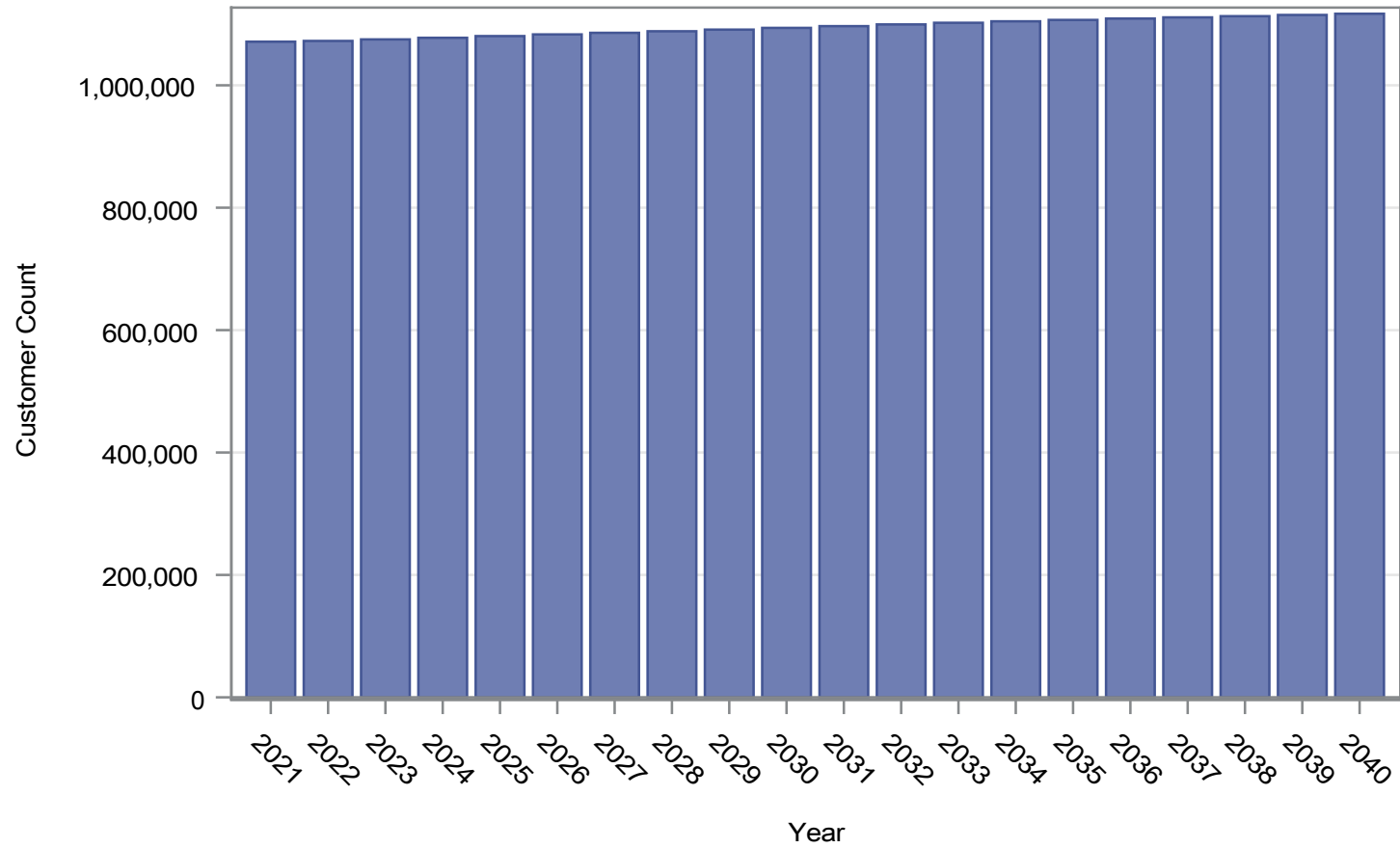
Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2037	9	1,067	234	632	223	144	5	138	103	192	9
2037	10	934	210	616	213	136	9	135	100	188	12
2037	11	1,144	221	602	202	125	9	136	99	186	12
2037	12	1,552	272	668	216	127	10	143	99	188	12
2038	1	1,682	280	696	220	127	9	145	99	179	14
2038	2	1,427	236	617	195	114	7	137	96	176	10
2038	3	1,232	222	636	209	130	5	138	98	167	11
2038	4	943	199	596	205	131	4	138	98	181	9
2038	5	991	224	656	225	145	4	139	102	188	9
2038	6	1,354	255	680	232	150	6	144	106	195	8
2038	7	1,621	287	750	250	162	6	152	112	206	9
2038	8	1,551	282	738	248	160	6	149	110	204	9
2038	9	1,081	232	635	223	144	5	142	102	192	9
2038	10	947	208	620	213	137	9	139	100	188	12
2038	11	1,158	219	606	202	125	9	140	99	186	12
2038	12	1,569	270	672	216	127	9	147	100	188	12
2039	1	1,701	278	700	220	127	8	150	99	179	14
2039	2	1,445	234	621	195	115	7	140	97	176	10
2039	3	1,249	220	639	209	130	5	142	99	167	11
2039	4	958	196	599	205	131	4	141	98	181	9

Monthly Energy Sales Forecast by Rate Class (GWh)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2039	5	1,007	222	659	225	145	4	142	102	187	9
2039	6	1,372	253	683	232	150	5	148	106	195	8
2039	7	1,643	284	752	250	162	6	157	112	206	9
2039	8	1,573	280	740	248	160	6	153	110	204	9
2039	9	1,097	230	637	223	144	5	146	103	192	9
2039	10	960	206	623	213	137	9	143	100	188	12
2039	11	1,173	218	610	202	126	9	144	99	186	12
2039	12	1,587	268	675	216	127	9	151	100	189	12
2040	1	1,720	275	703	219	127	8	154	99	179	14
2040	2	1,510	239	645	201	119	7	145	97	177	10
2040	3	1,264	216	641	209	130	5	146	98	166	11
2040	4	970	193	601	205	131	4	145	98	181	9
2040	5	1,020	218	661	225	145	4	146	101	187	9
2040	6	1,388	250	684	232	150	5	152	105	195	8
2040	7	1,663	281	753	250	162	6	160	111	205	9
2040	8	1,589	277	742	248	160	6	157	110	204	9
2040	9	1,110	227	639	223	144	4	149	102	192	10
2040	10	972	203	625	213	137	8	147	99	188	12
2040	11	1,184	216	613	202	126	9	148	98	186	12
2040	12	1,600	266	679	216	127	9	155	99	188	12

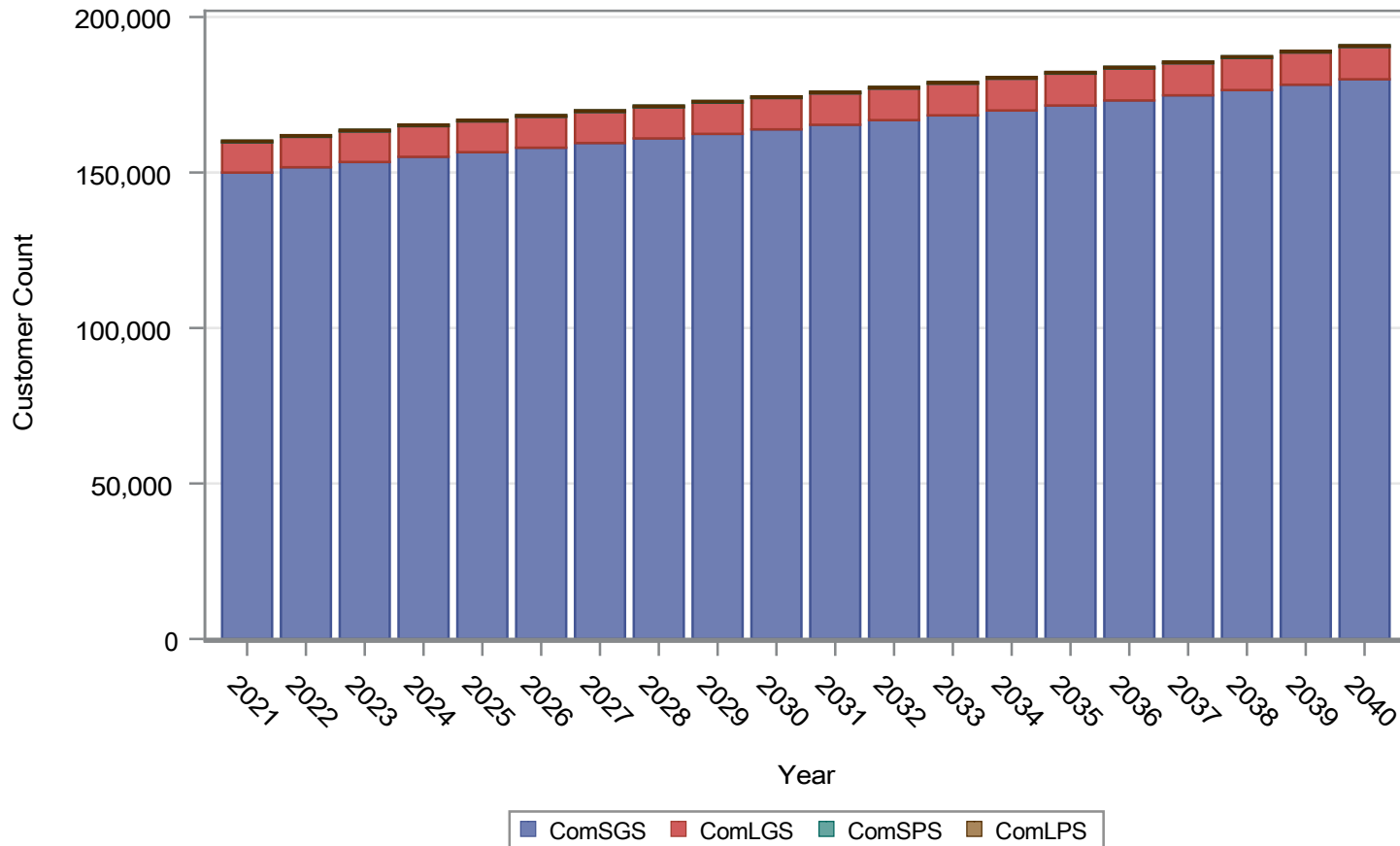
Forecast Customer Count - Base Case¹⁵

Forecast of Residential Class Customer Count

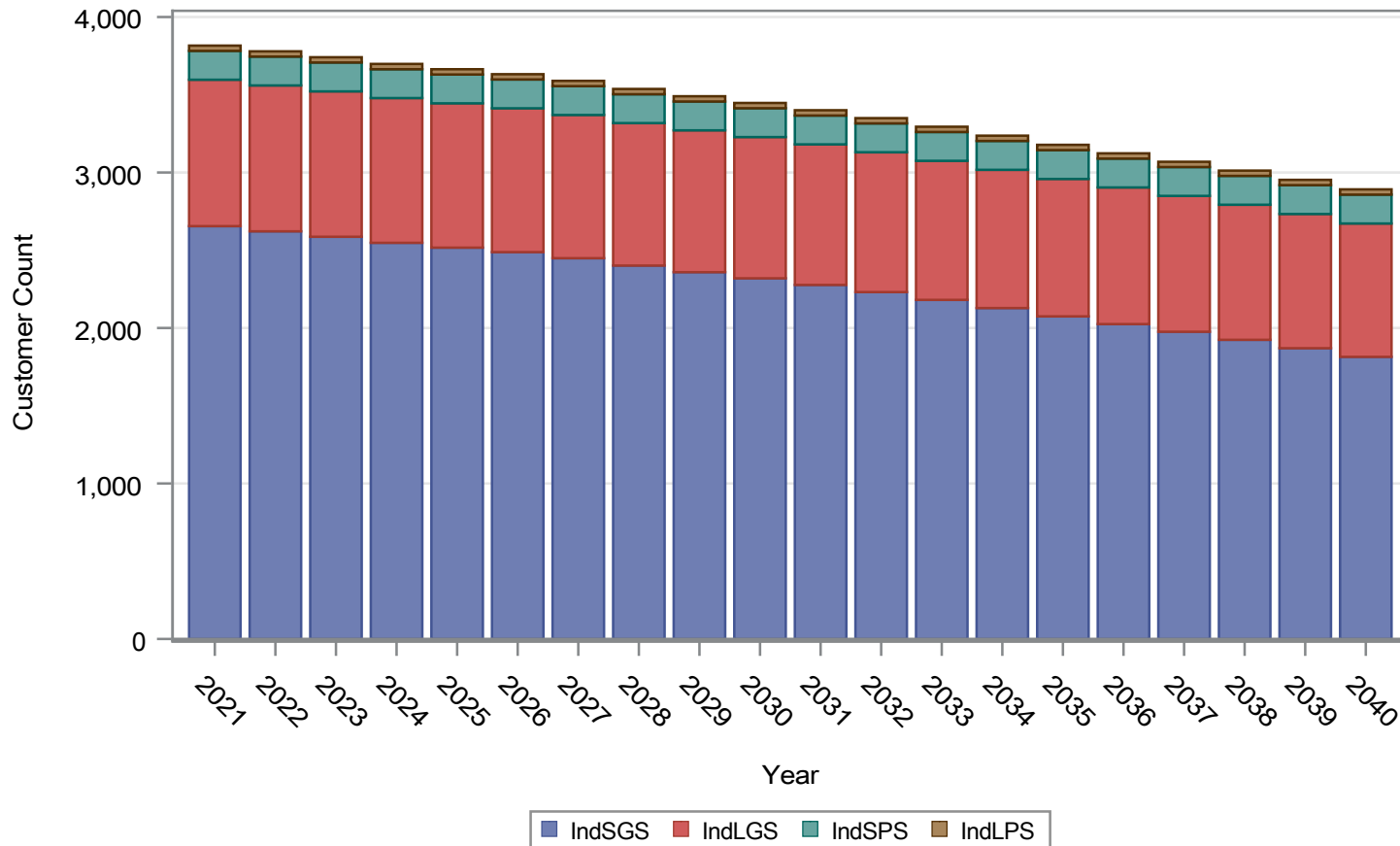


¹⁵20 CSR 4240-22.030(7)(A)6

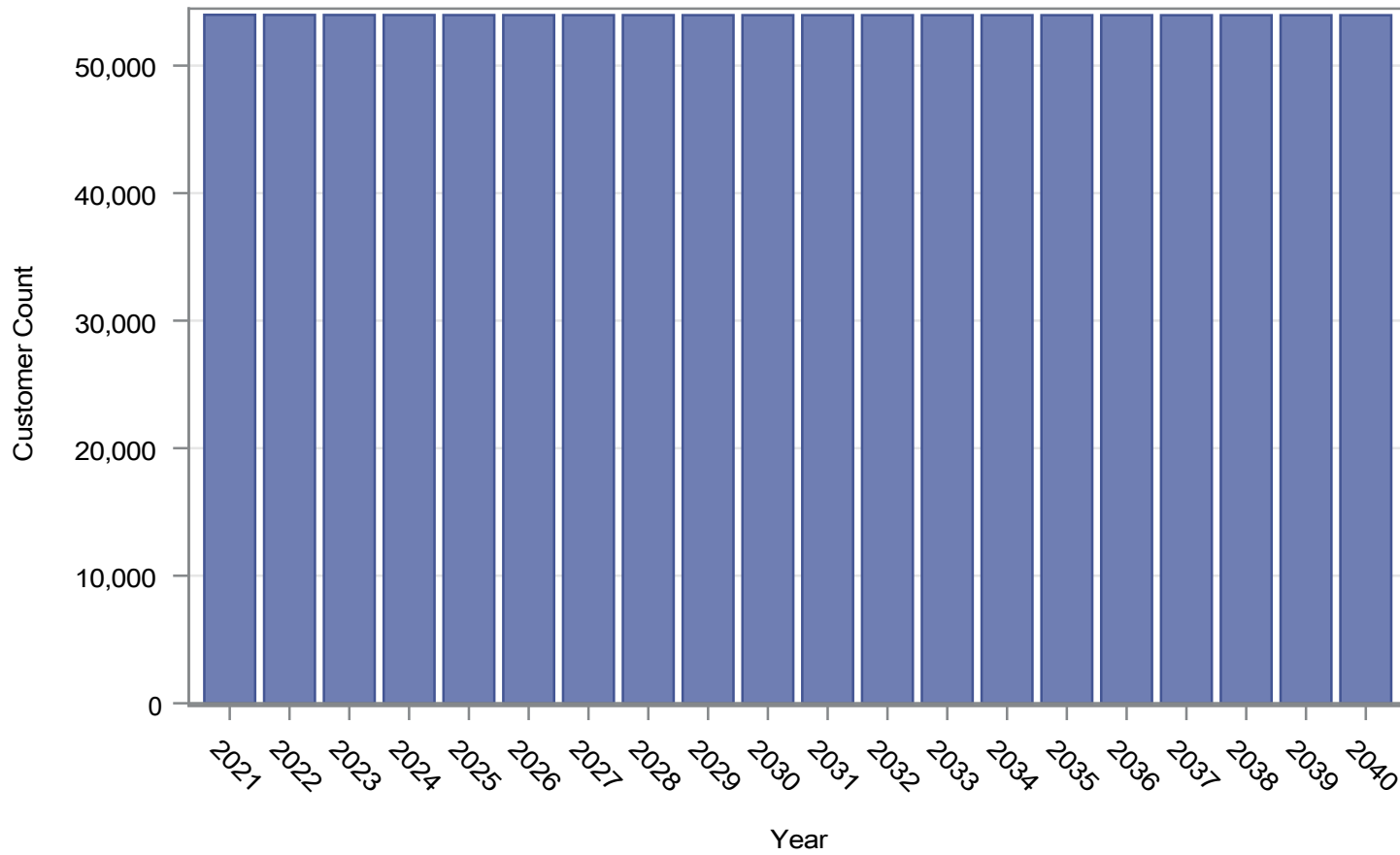
Forecast of Commercial Class Customer Count



Forecast of Industrial Class Customer Count



Forecast of Lighting Class Customer Count

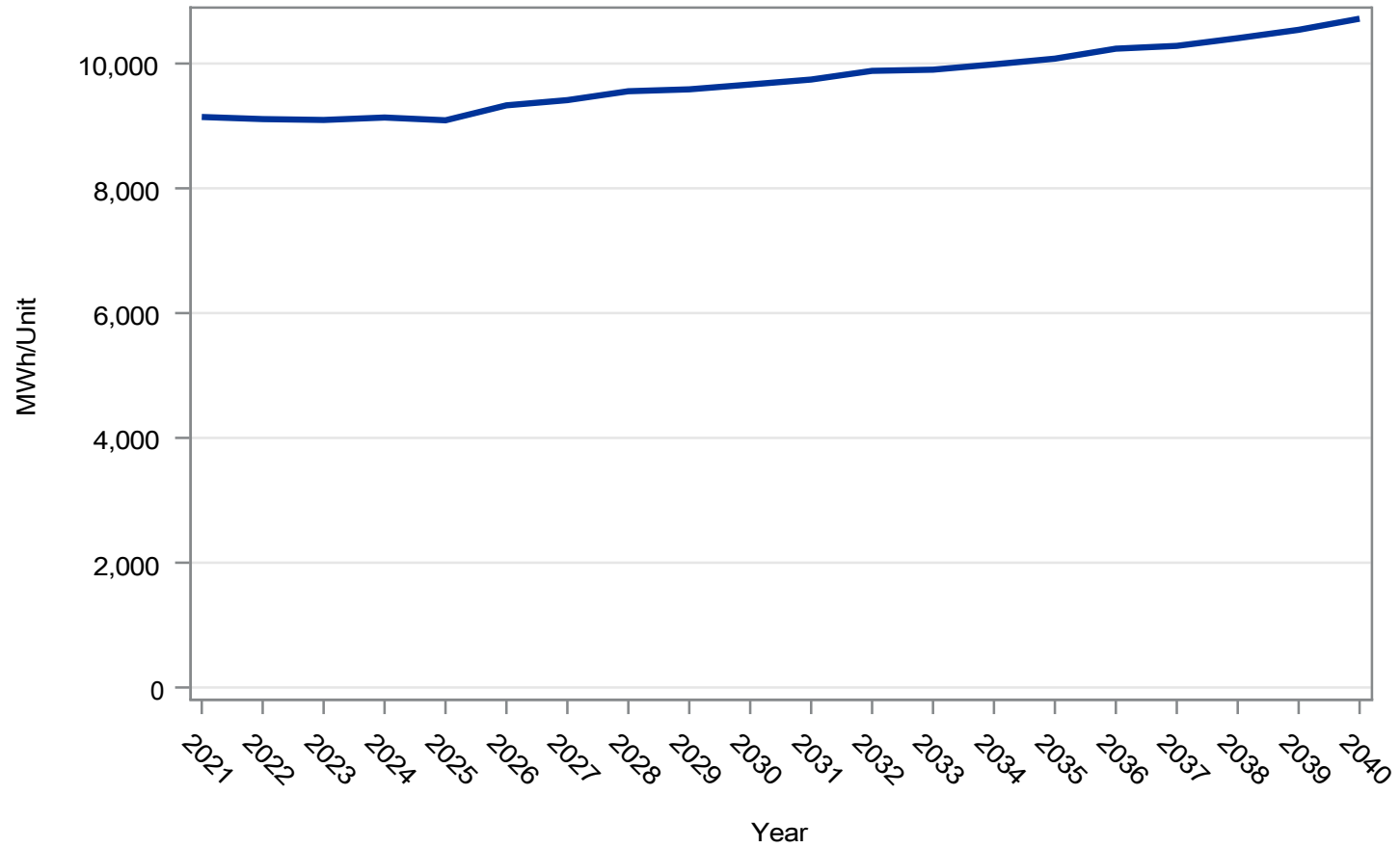


Forecast of Ameren Missouri's Customer Counts

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	1,071,185	149,970	9,742	479	30	2,655	942	186	34	53,981
2022	1,072,463	151,679	9,798	481	30	2,621	938	186	34	53,973
2023	1,074,969	153,377	9,841	482	30	2,587	935	186	34	53,968
2024	1,077,576	155,035	9,877	483	30	2,548	931	186	34	53,964
2025	1,080,373	156,528	9,914	484	30	2,517	928	186	34	53,961
2026	1,083,112	157,971	9,952	485	30	2,488	925	186	34	53,959
2027	1,085,724	159,472	9,988	486	30	2,449	921	186	34	53,957
2028	1,088,294	160,957	10,023	487	30	2,401	916	186	34	53,956
2029	1,090,972	162,415	10,057	487	30	2,359	912	186	34	53,954
2030	1,093,769	163,864	10,091	488	30	2,320	908	186	34	53,954
2031	1,096,657	165,338	10,125	489	30	2,277	904	186	34	53,953
2032	1,099,471	166,842	10,156	490	30	2,231	899	186	34	53,953
2033	1,102,125	168,380	10,187	491	30	2,181	894	186	34	53,952
2034	1,104,515	169,948	10,219	492	30	2,128	889	186	34	53,952
2035	1,106,822	171,548	10,252	492	30	2,075	884	186	34	53,952
2036	1,109,007	173,167	10,285	493	30	2,025	879	186	34	53,952
2037	1,110,961	174,814	10,317	494	30	1,976	874	186	34	53,951
2038	1,112,951	176,500	10,348	495	30	1,924	869	186	34	53,951
2039	1,114,885	178,222	10,378	495	30	1,870	863	186	34	53,951
2040	1,116,875	179,975	10,408	496	30	1,814	858	186	34	53,951

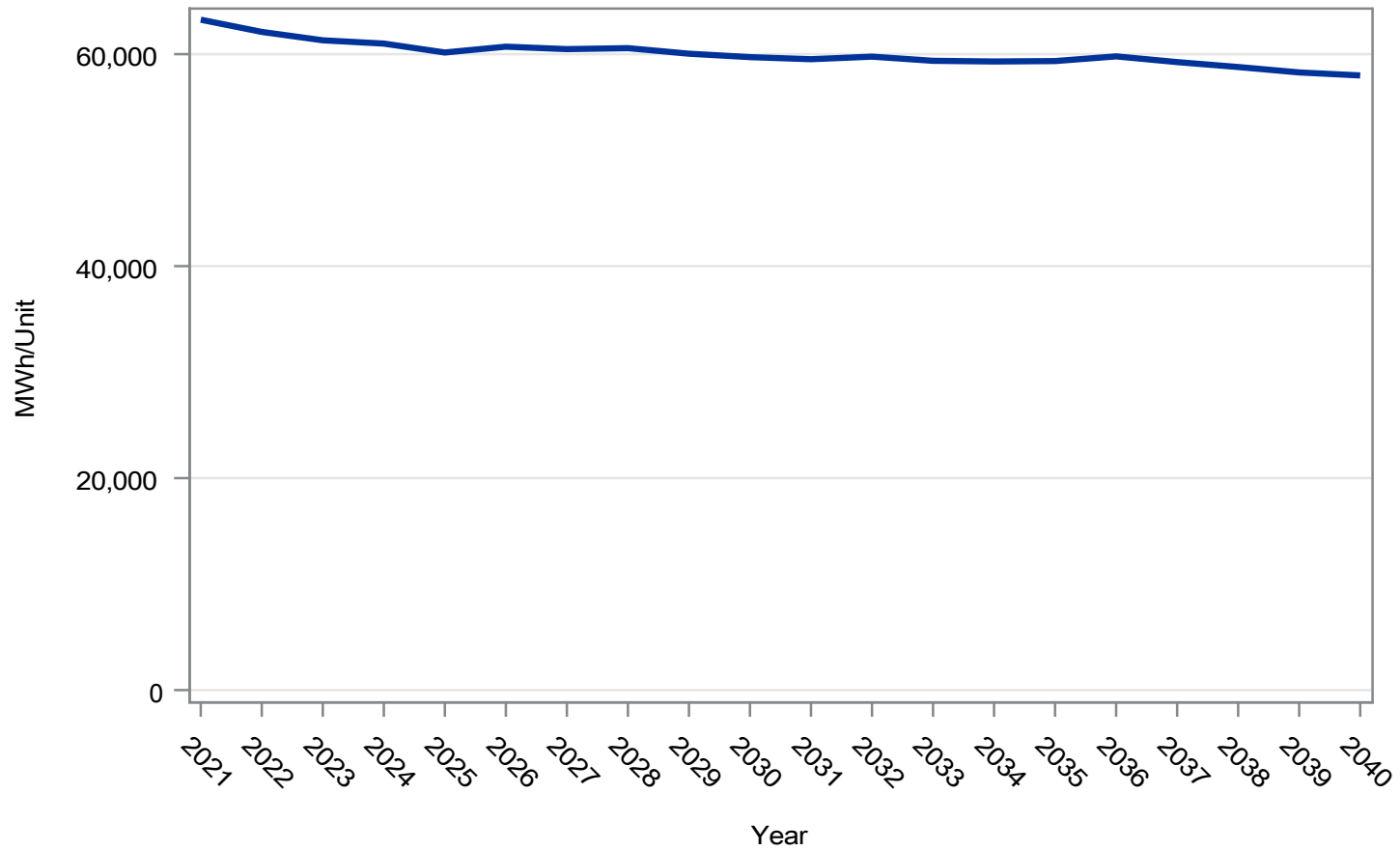
Class Energy Use per Unit Forecast - Base Case¹⁶

Forecast of Residential Annual Energy Use (MWh/Unit)

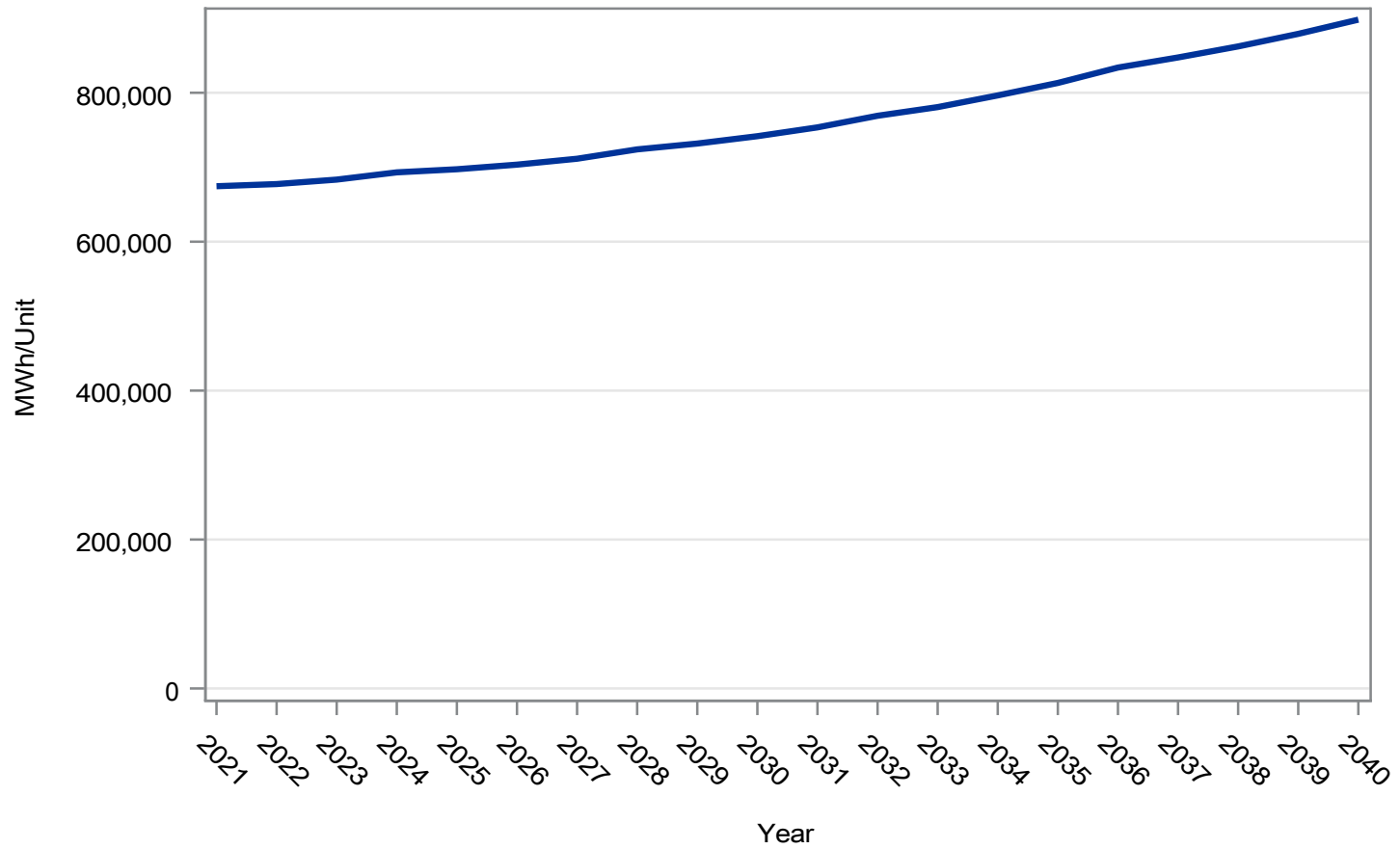


¹⁶20 CSR 4240-22.030(7)(A)6

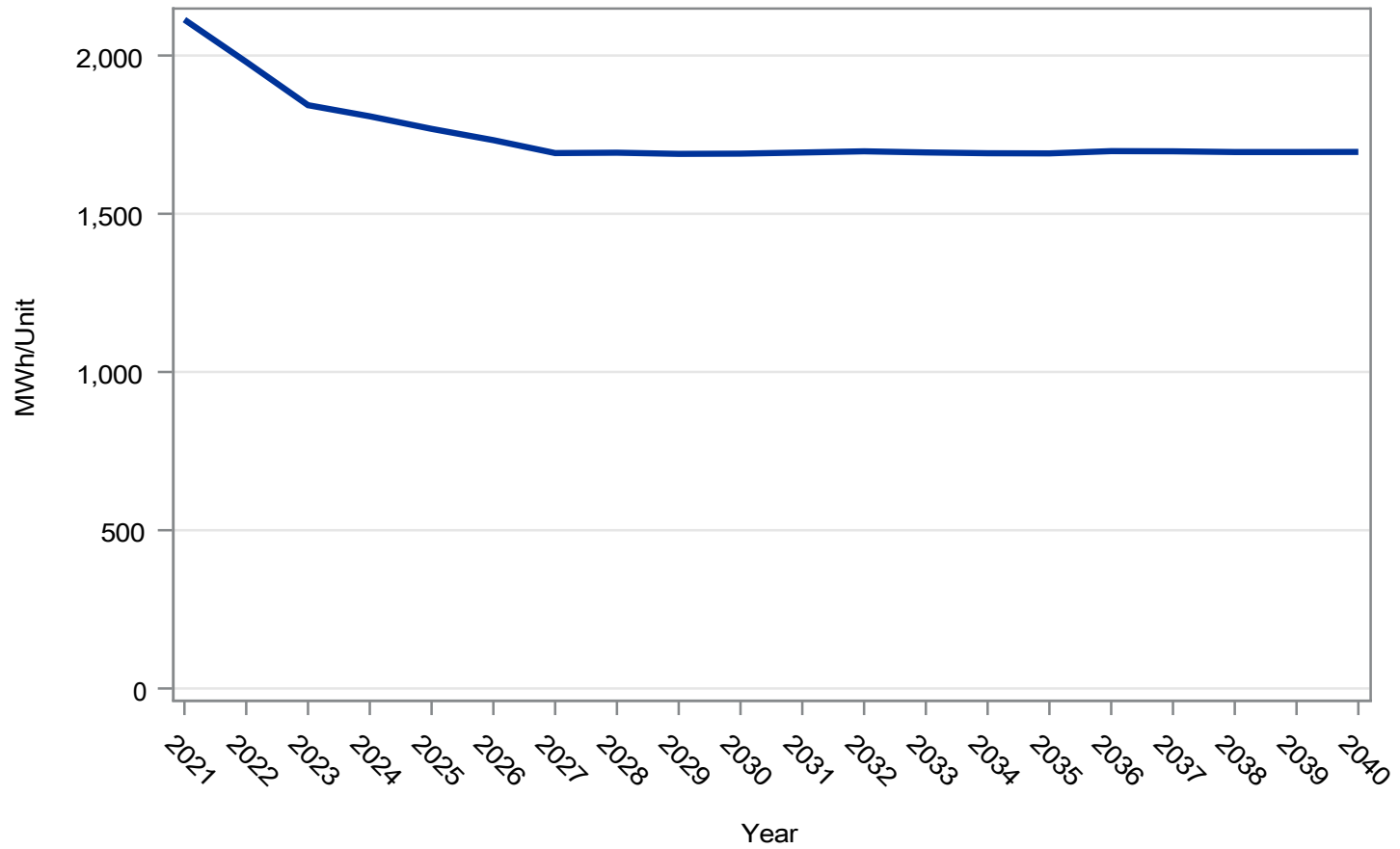
Forecast of Commercial Annual Use (MWh/Unit)



Forecast of Industrial Annual Use (MWh/Unit)



Forecast of Lighting Annual Use (MWh/Unit)

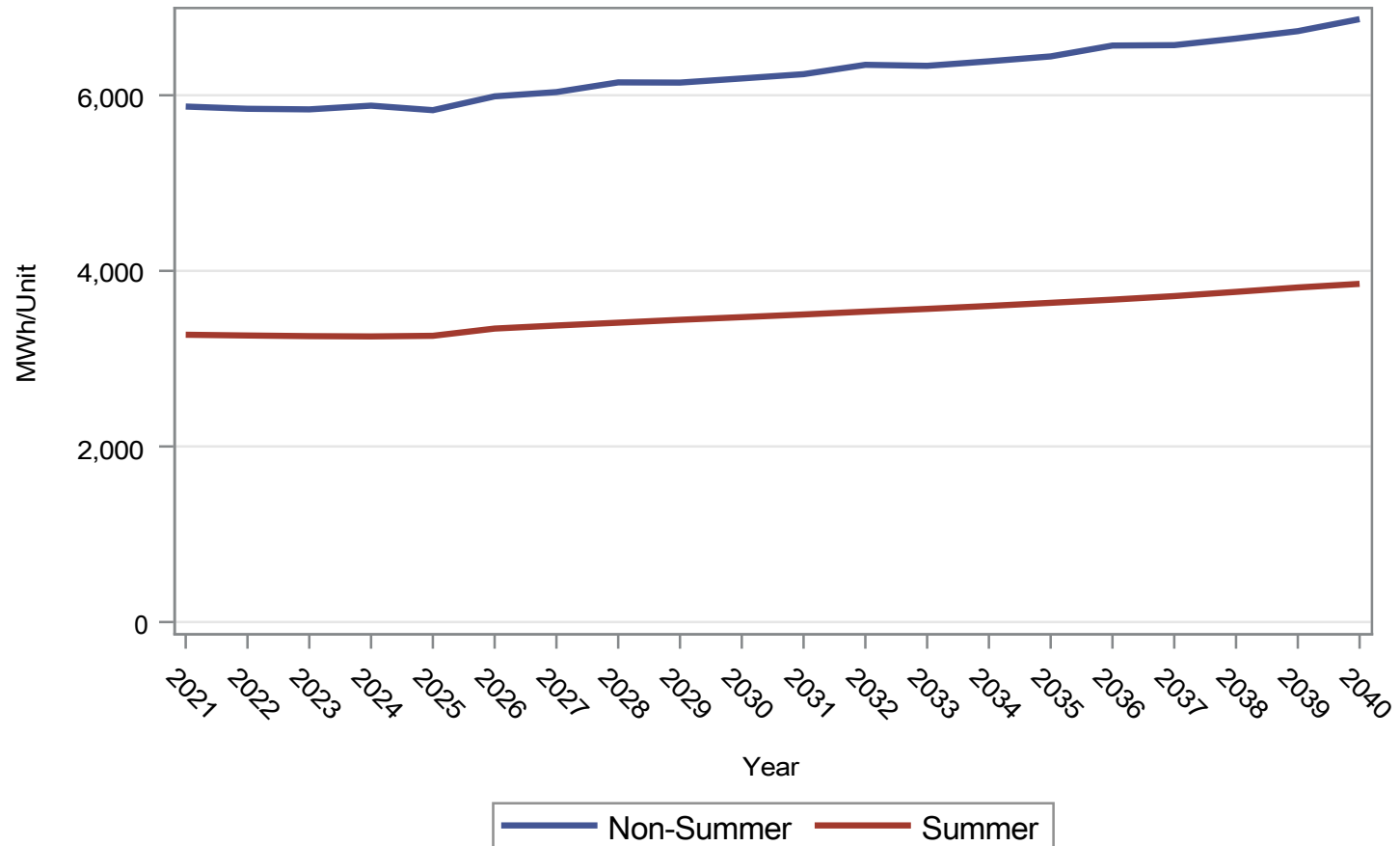


Forecast of Energy Use per Unit by Revenue Class (MWh/Unit)

Year	Annual				Non-Summer				Summer			
	Residential	Commercial	Industrial	Lighting	Residential	Commercial	Industrial	Lighting	Residential	Commercial	Industrial	Lighting
2021	9,143	63,251	674,483	2,113	5,871	40,217	435,342	1,513	3,272	23,029	239,306	600
2022	9,110	62,098	677,361	1,980	5,846	39,501	437,095	1,416	3,264	22,593	240,440	563
2023	9,095	61,306	683,359	1,843	5,839	39,002	440,865	1,317	3,257	22,300	242,673	526
2024	9,135	60,998	693,117	1,808	5,882	38,917	447,584	1,293	3,253	22,077	245,732	515
2025	9,090	60,157	697,289	1,768	5,830	38,279	449,489	1,263	3,260	21,874	248,009	506
2026	9,330	60,706	703,460	1,733	5,987	38,681	453,529	1,238	3,343	22,020	250,140	495
2027	9,413	60,475	711,408	1,692	6,036	38,552	458,681	1,210	3,377	21,918	252,955	482
2028	9,556	60,567	723,963	1,693	6,147	38,748	467,265	1,210	3,410	21,815	256,937	483
2029	9,587	60,041	731,777	1,689	6,144	38,316	471,531	1,207	3,443	21,721	260,502	482
2030	9,664	59,718	741,664	1,690	6,191	38,120	477,894	1,207	3,473	21,593	264,031	483
2031	9,743	59,522	753,487	1,693	6,240	38,019	485,309	1,209	3,503	21,499	268,459	485
2032	9,883	59,765	769,097	1,697	6,347	38,287	496,248	1,215	3,536	21,475	273,132	483
2033	9,902	59,373	780,732	1,694	6,335	37,942	502,839	1,210	3,567	21,426	278,211	483
2034	9,987	59,308	796,431	1,691	6,387	37,900	512,336	1,207	3,600	21,404	284,445	484
2035	10,078	59,348	813,169	1,691	6,443	37,933	522,956	1,208	3,636	21,411	290,585	483
2036	10,238	59,789	833,832	1,698	6,566	38,358	536,882	1,212	3,672	21,427	297,326	485
2037	10,283	59,251	847,411	1,697	6,571	37,913	544,698	1,211	3,712	21,334	303,126	486
2038	10,407	58,786	862,210	1,695	6,646	37,630	554,344	1,211	3,761	21,152	308,301	484
2039	10,541	58,276	879,074	1,695	6,730	37,320	564,882	1,210	3,811	20,952	314,662	485
2040	10,719	57,991	898,174	1,695	6,867	37,254	577,999	1,212	3,852	20,733	320,659	483

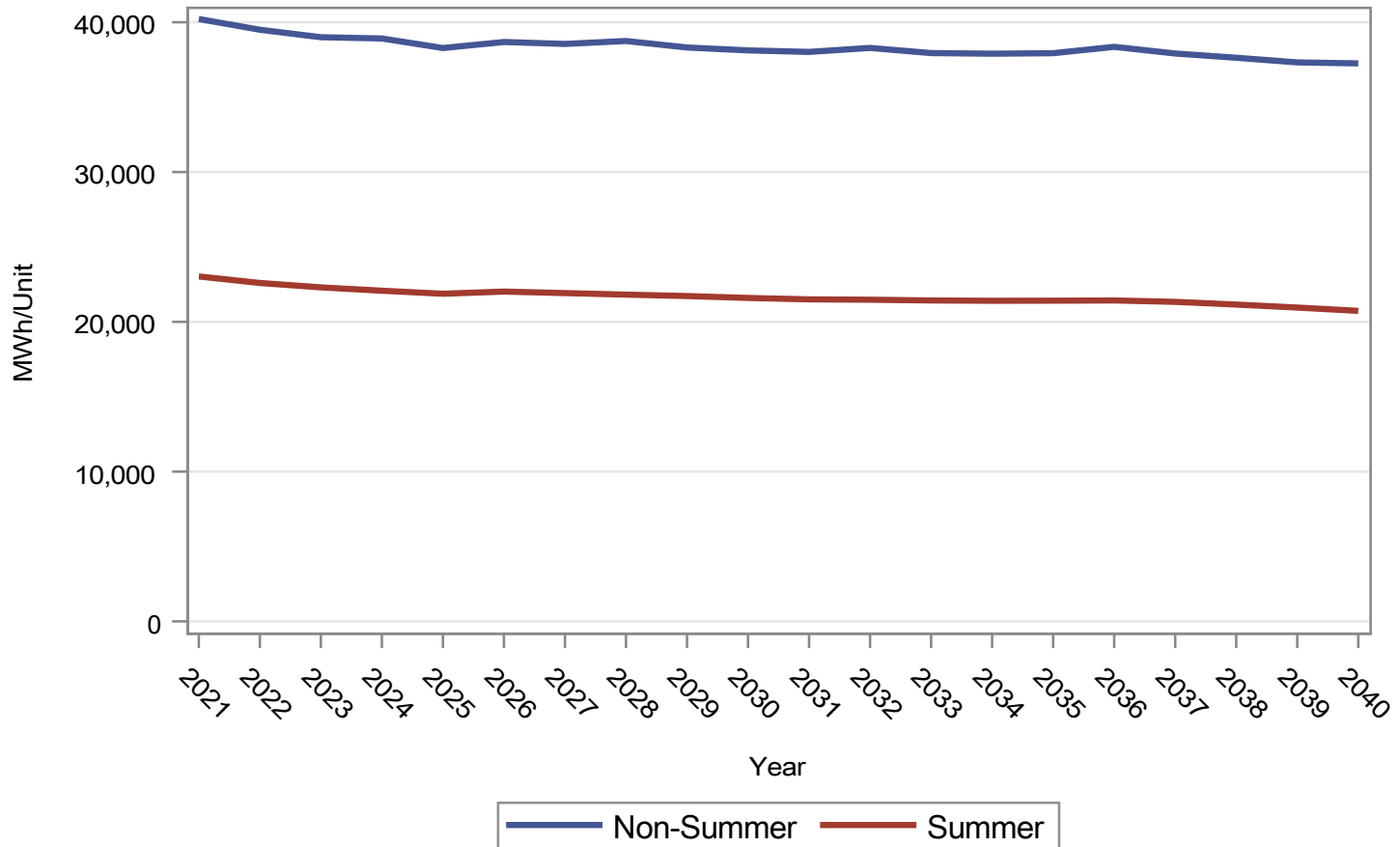
Summer and Non-Summer Class Energy Use per Unit Forecast - Base Case¹⁷

Forecast of Residential Energy Use per Unit (MWh/Unit)

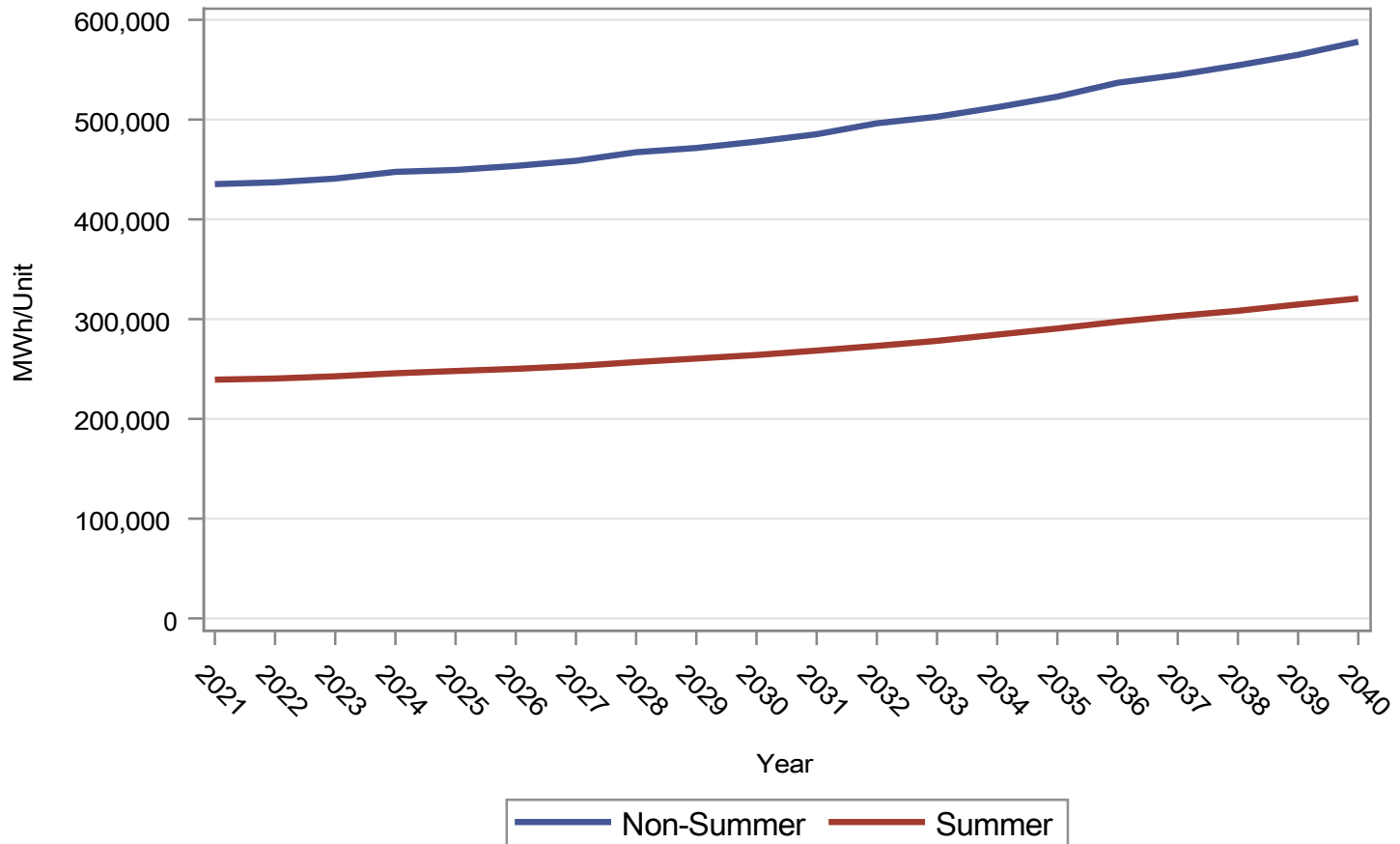


¹⁷20 CSR 4240-22.030(7)(A)6

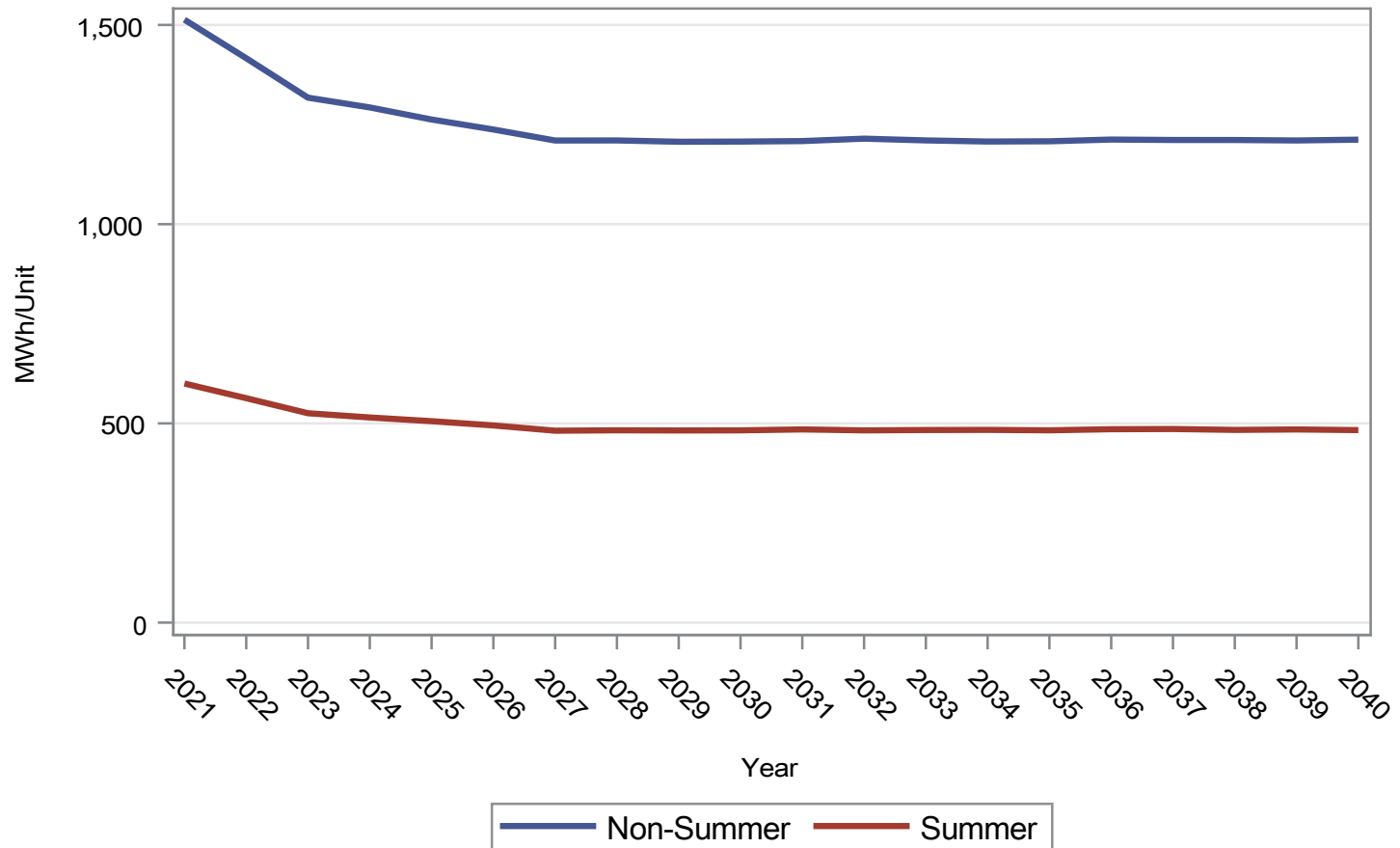
Forecast of Commercial Energy Use per Unit (MWh/Unit)



Forecast of Industrial Energy Use per Unit (MWh/Unit)

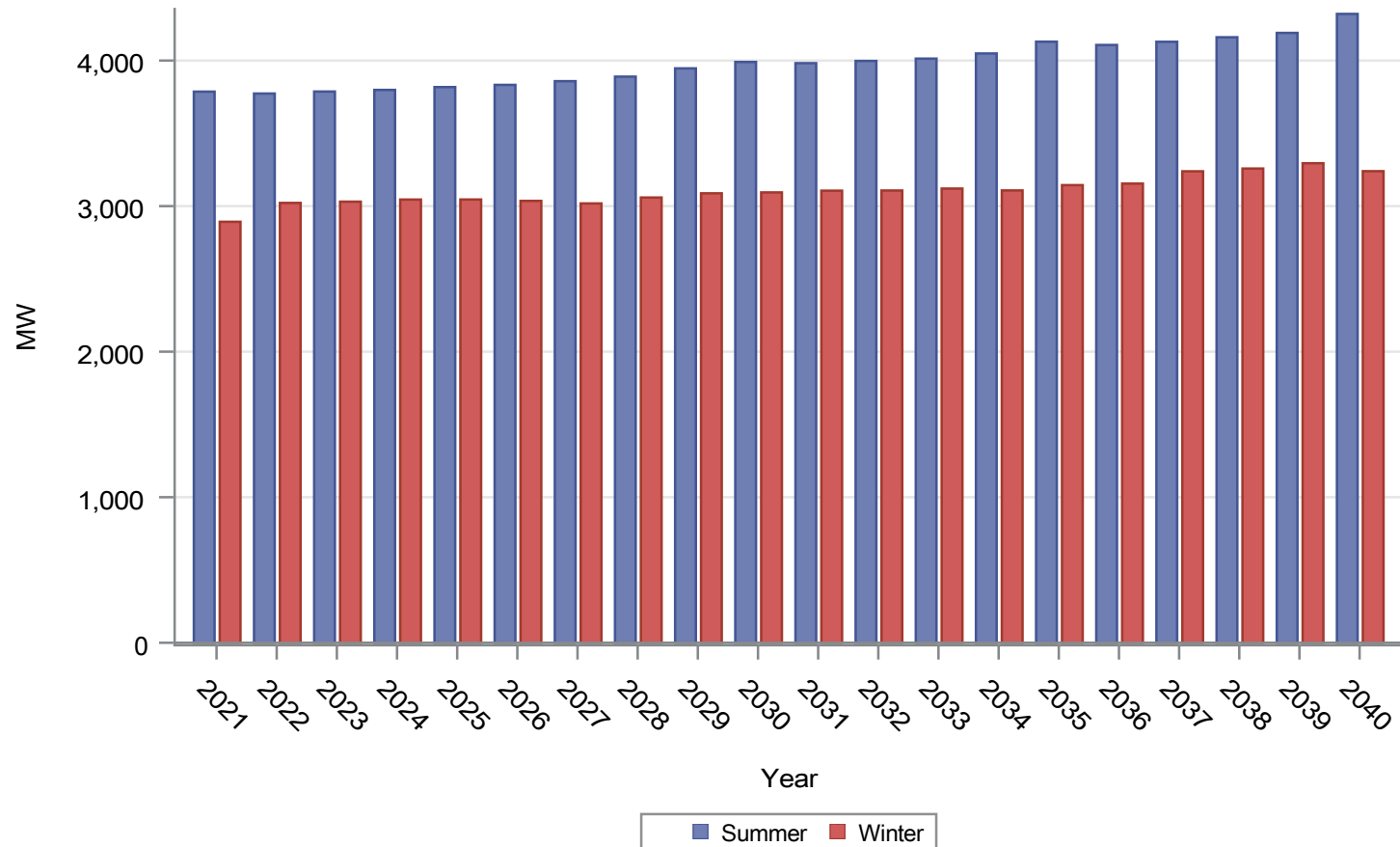


Forecast of Lighting Energy Use per Unit (MWh/Unit)



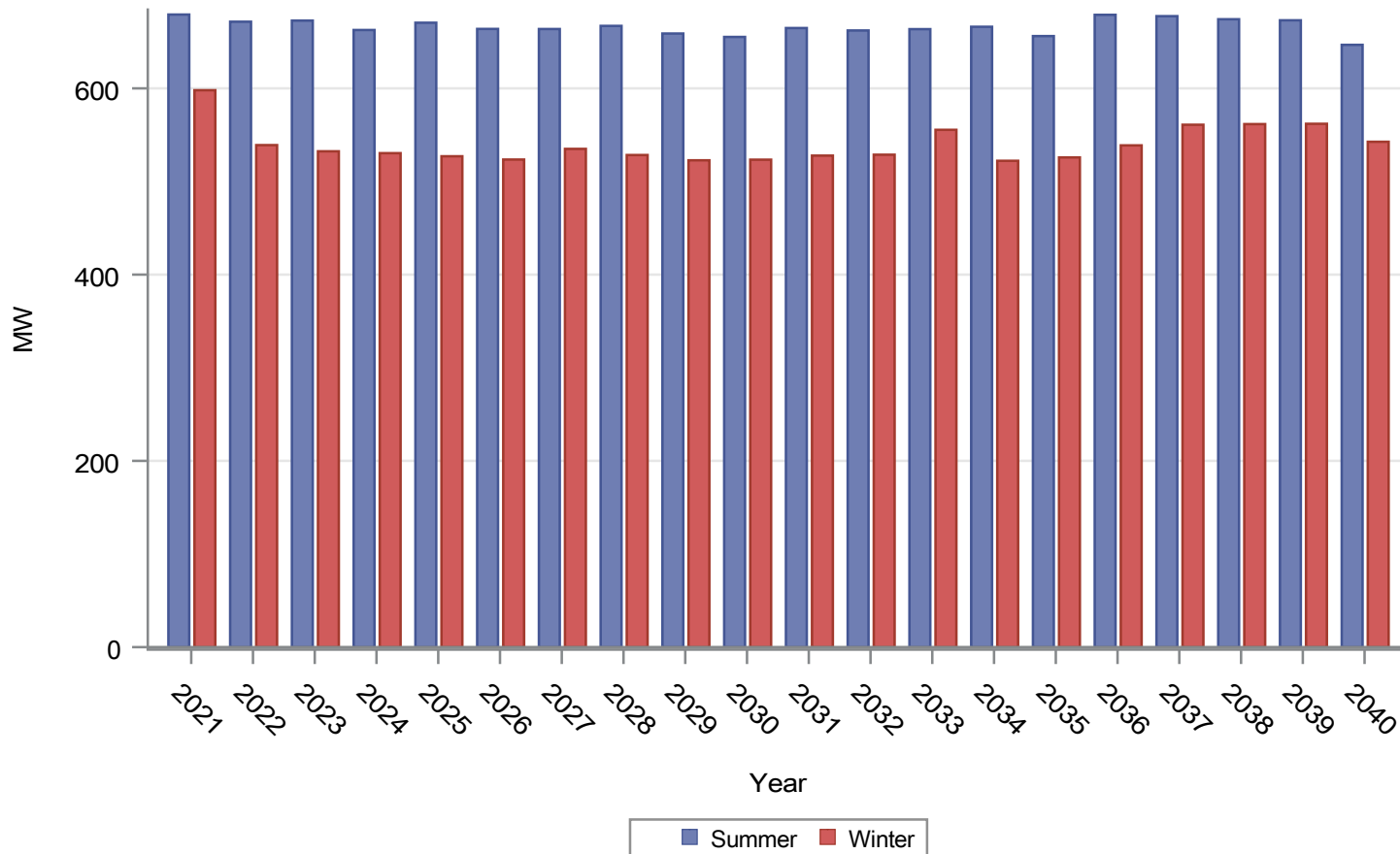
Forecasted Total Demand at the time of Summer and Winter System Peak for Planning Case¹⁸

Forecast of Residential Coincident Peak Demand (MW)

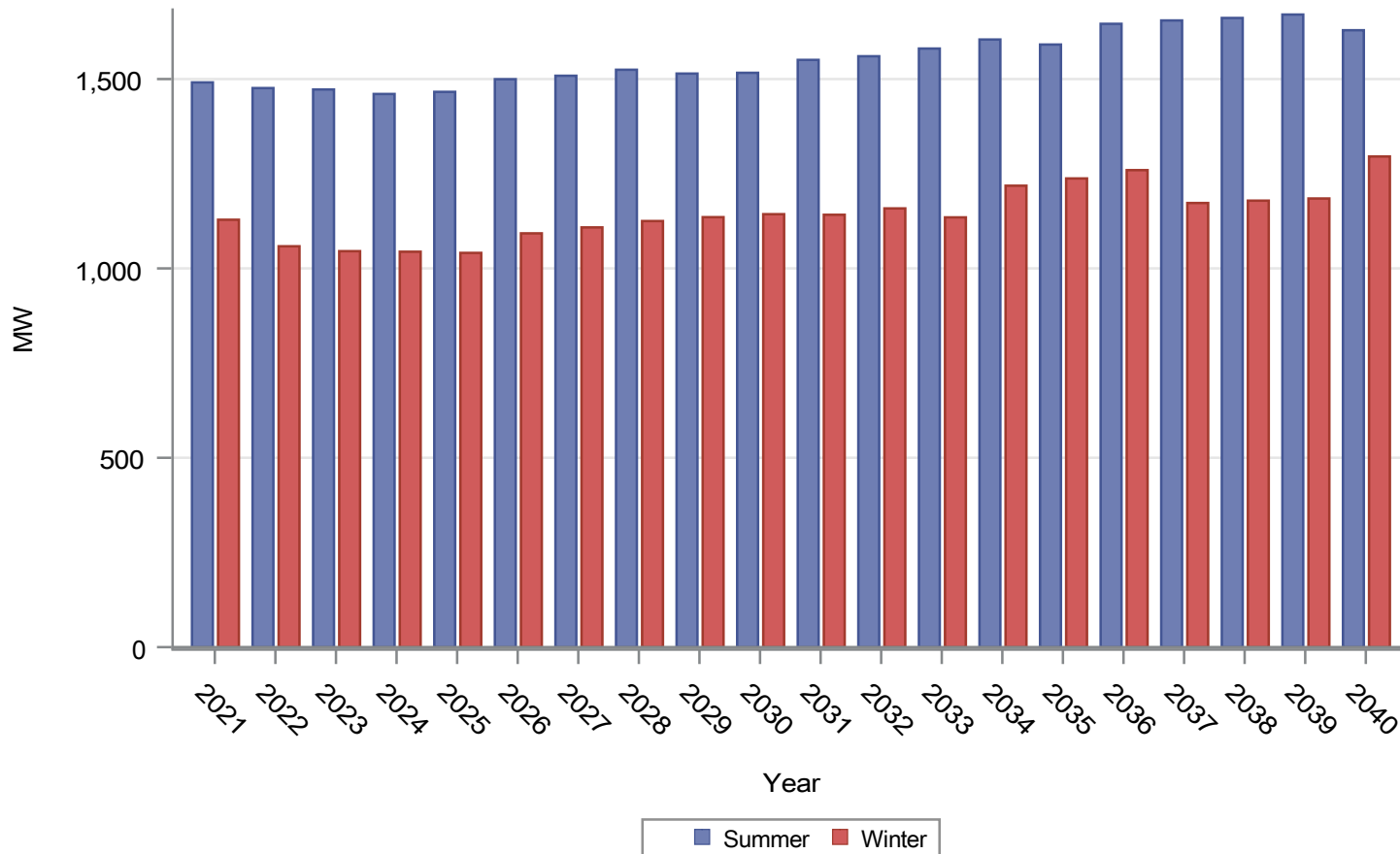


¹⁸20 CSR 4240-22.030(7)(A)6

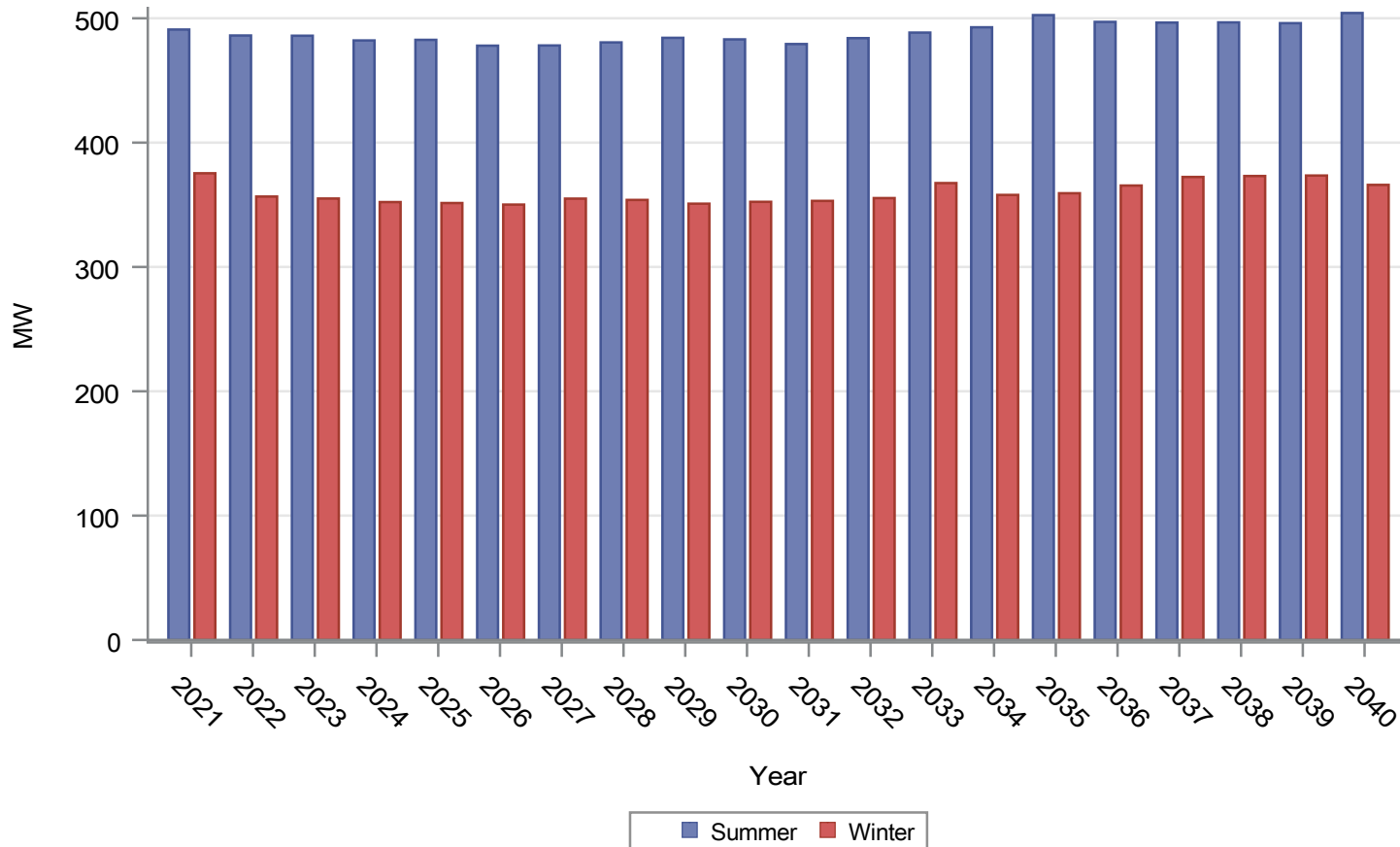
Forecast of Commercial SGS Coincident Peak Demand (MW)



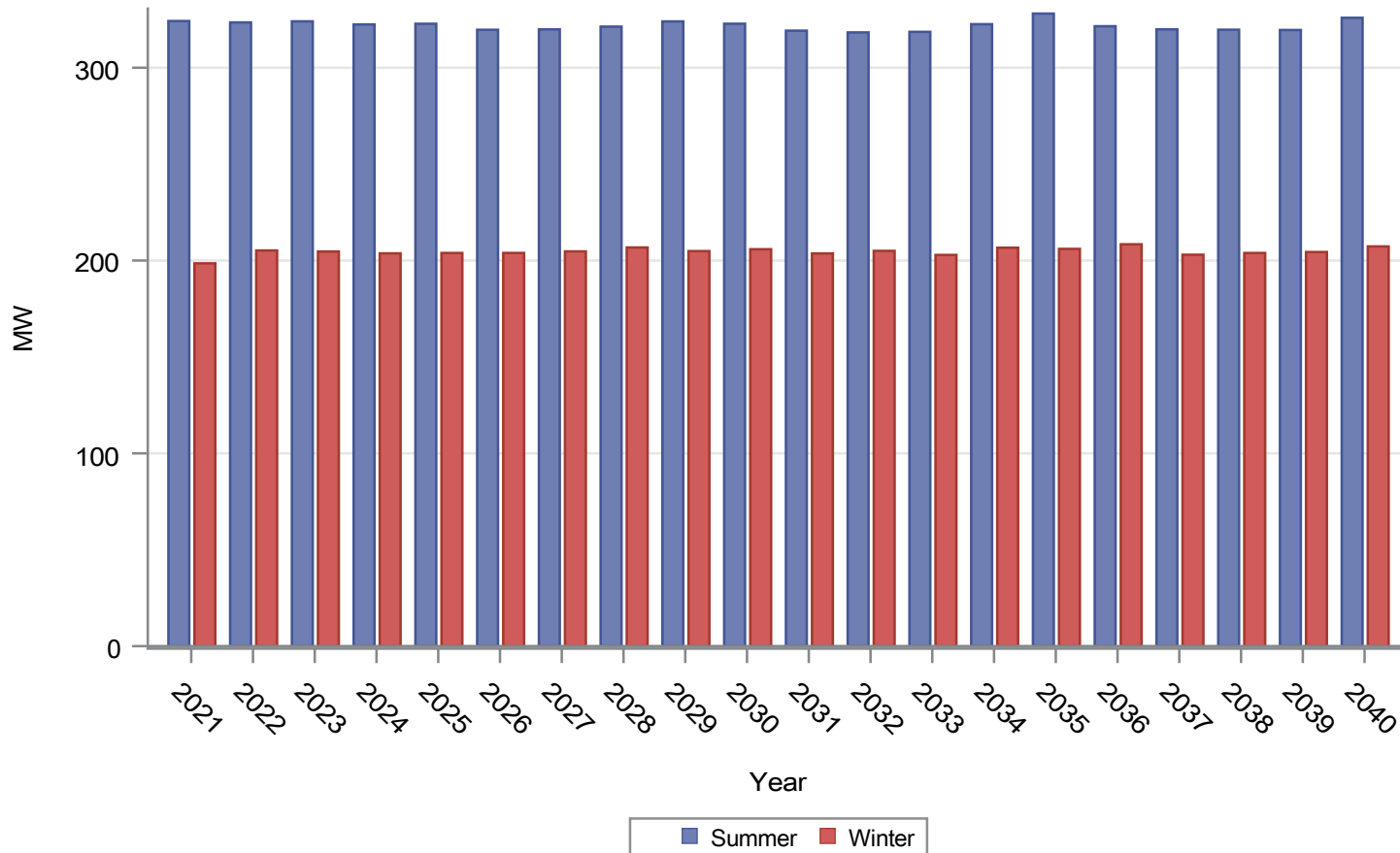
Forecast of Commercial LGS Coincident Peak Demand (MW)



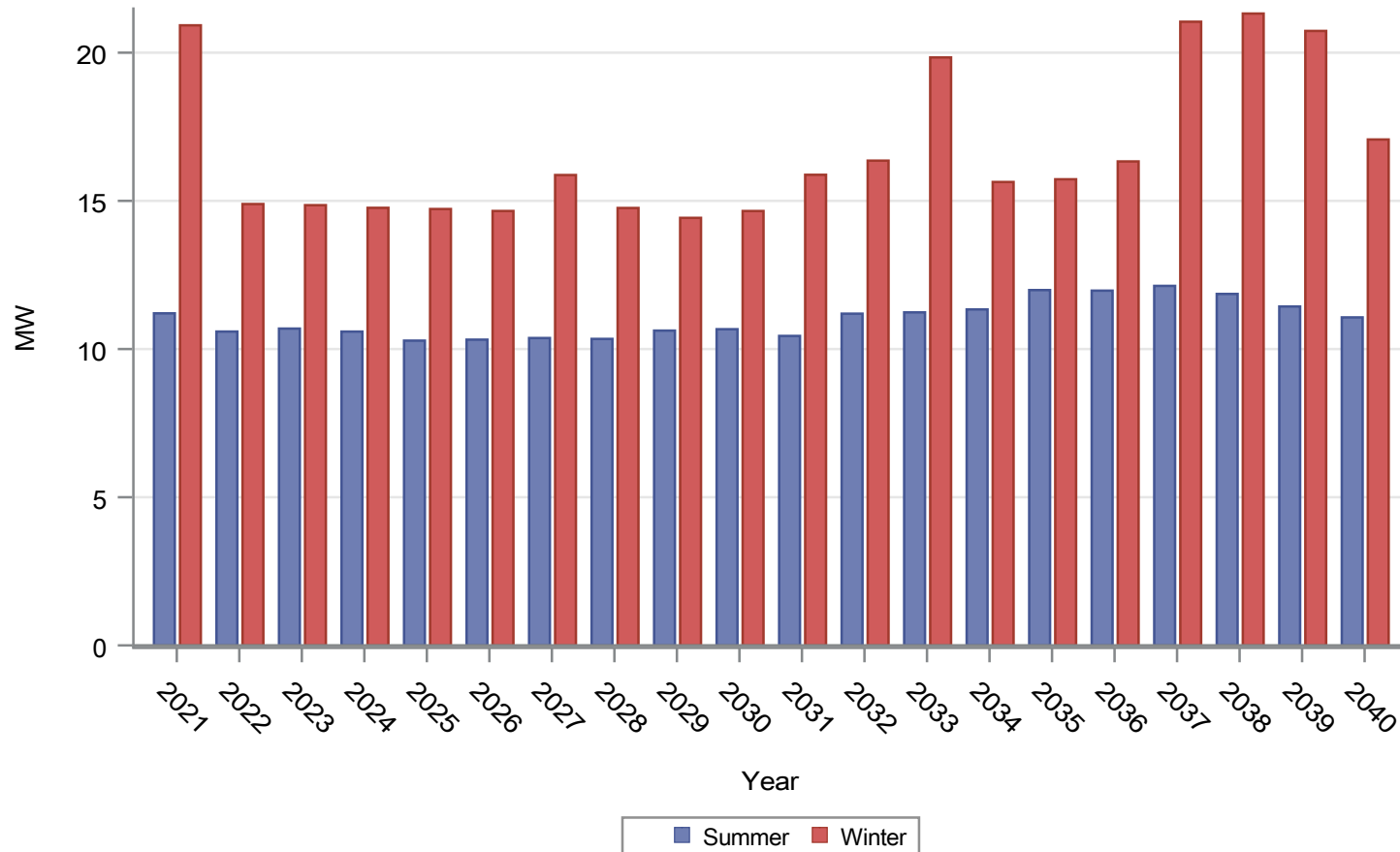
Forecast of Commercial SPS Coincident Peak Demand (MW)



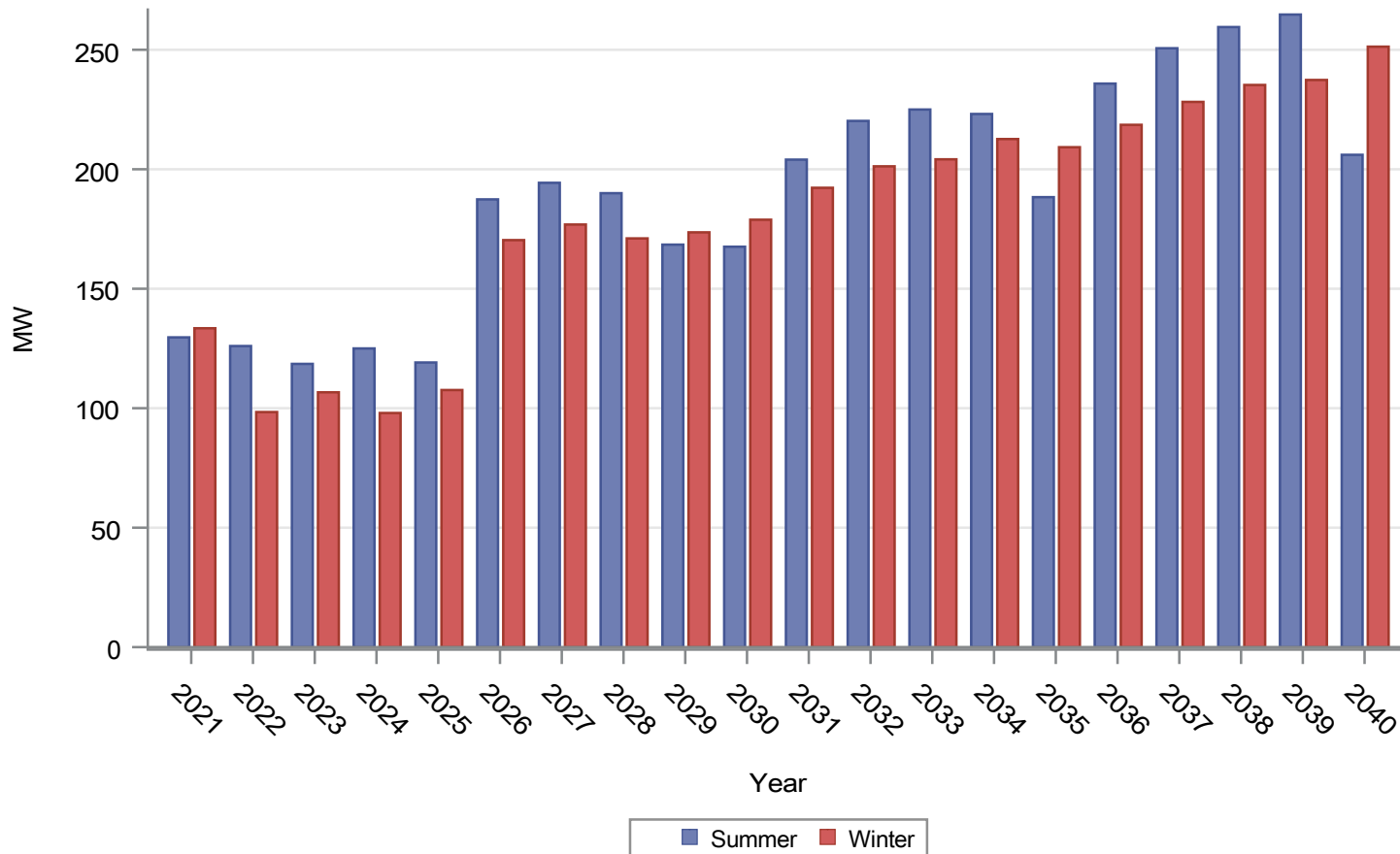
Forecast of Commercial LPS Coincident Peak Demand (MW)



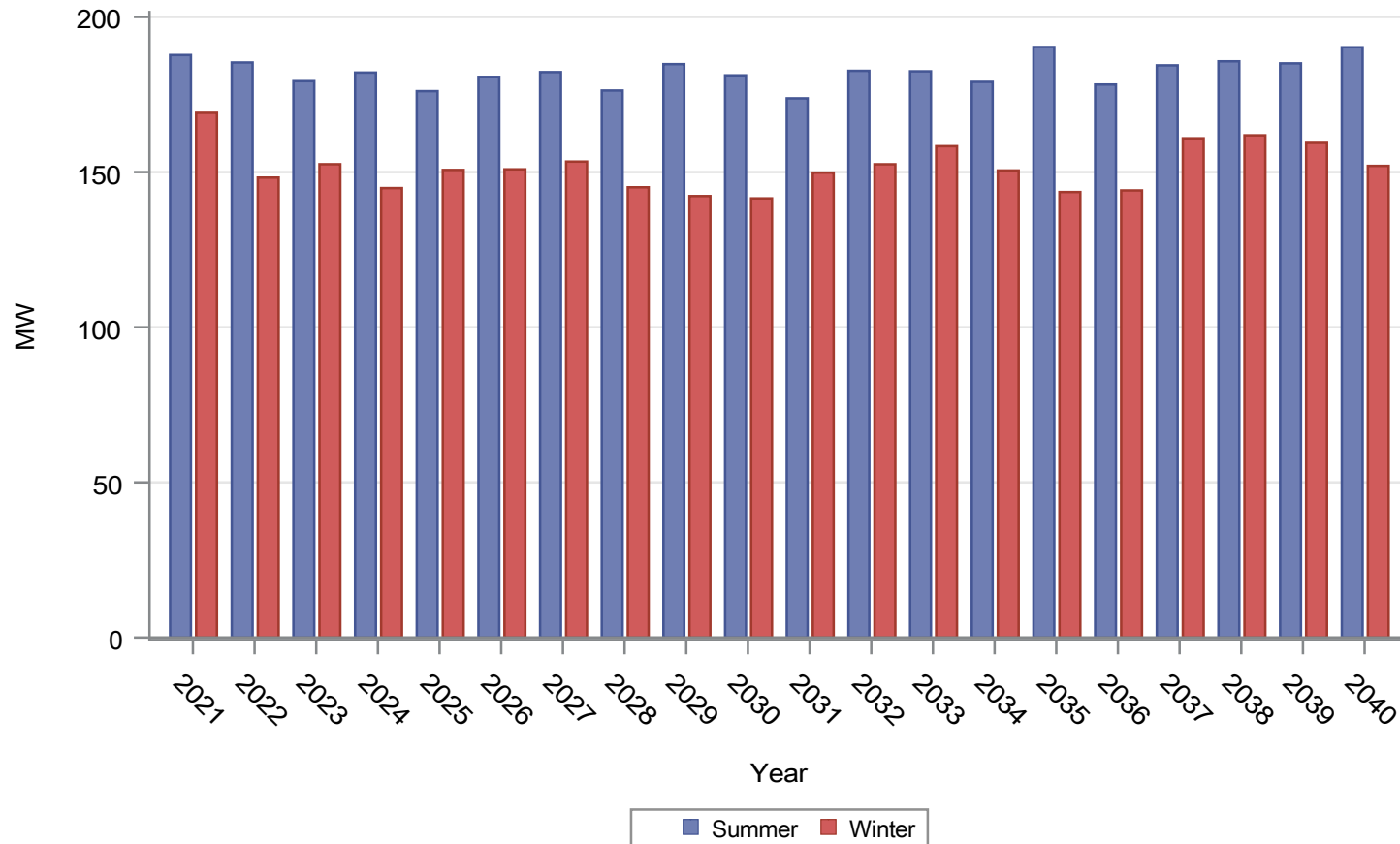
Forecast of Industrial SGS Coincident Peak Demand (MW)



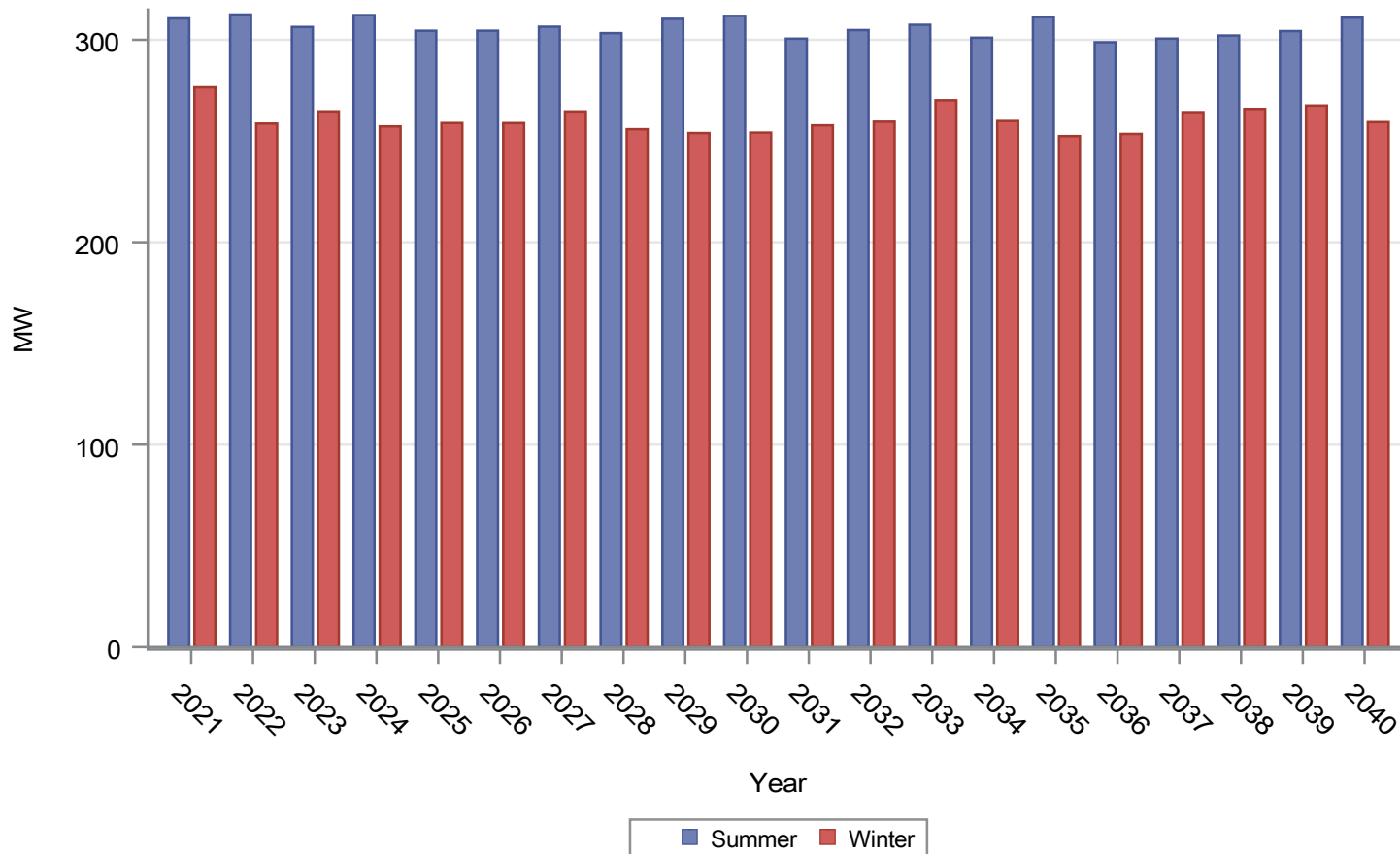
Forecast of Industrial LGS Coincident Peak Demand (MW)



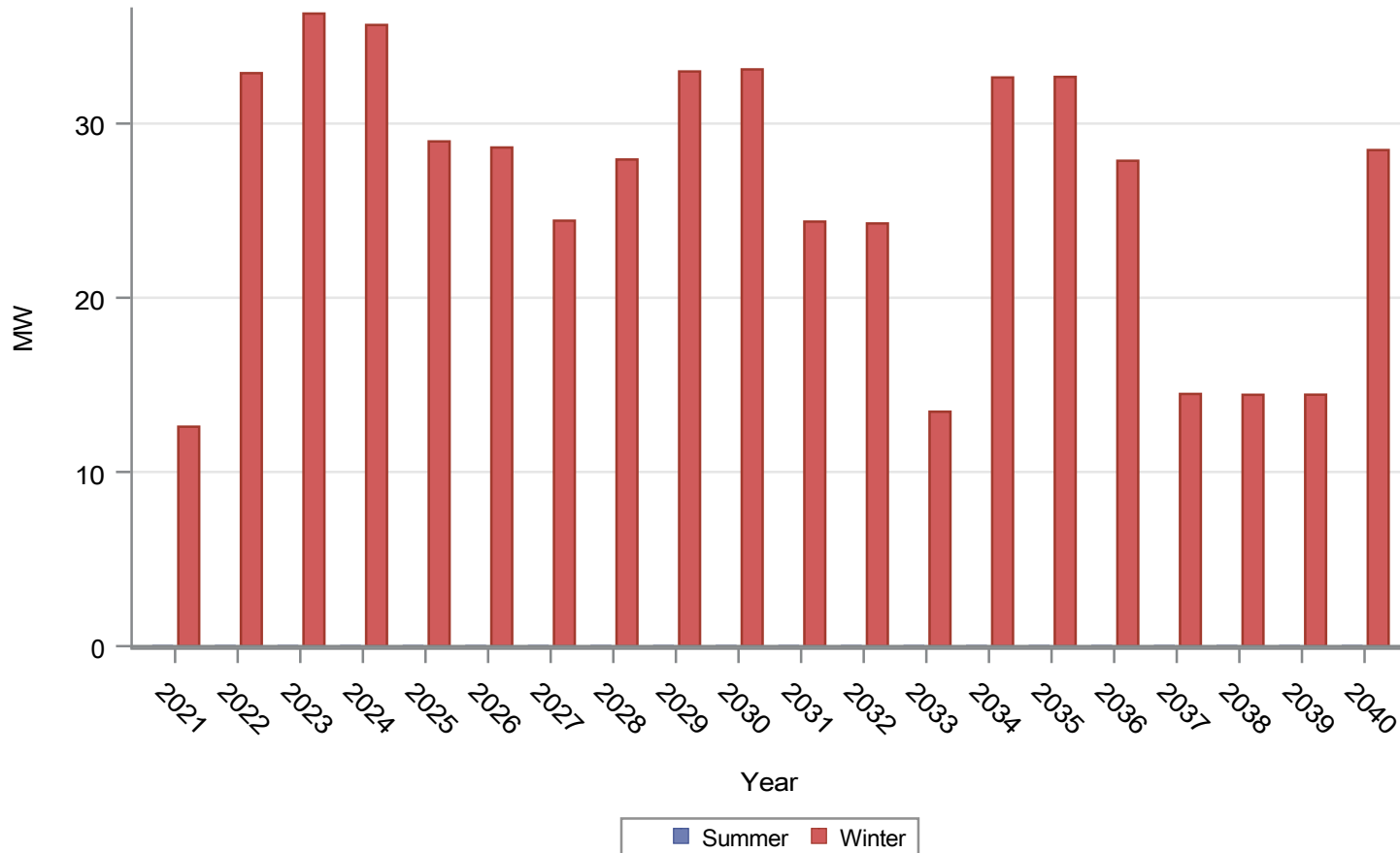
Forecast of Industrial SPS Coincident Peak Demand (MW)



Forecast of Industrial LPS Coincident Peak Demand (MW)



Forecast of Lighting Coincident Peak Demand (MW)



Forecast of Class Demand at the Time of Summer System Peak (MW)

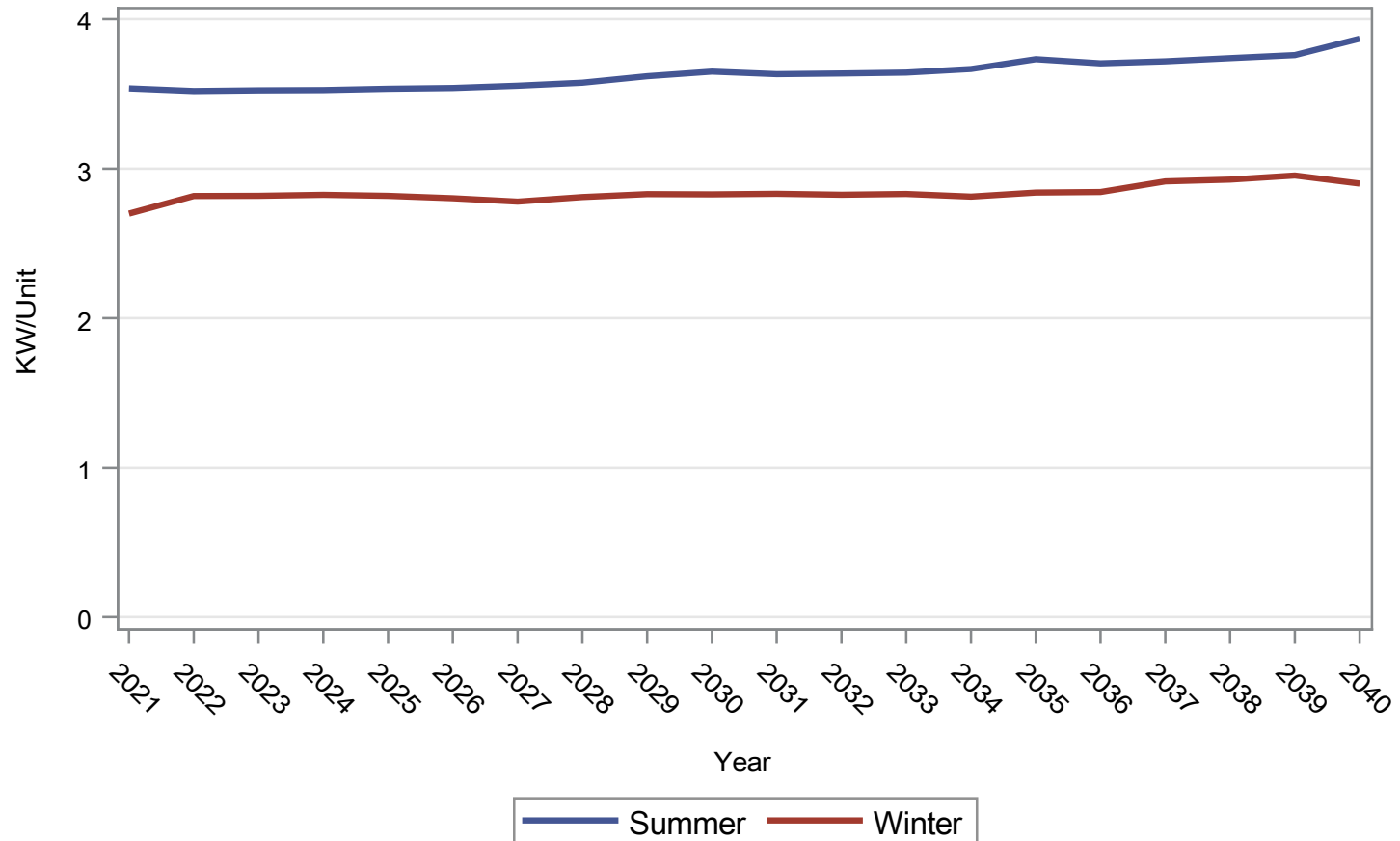
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	Sys Demand
2021	3,787	679	1,491	491	324	11	130	188	311	0.00	7,411
2022	3,773	672	1,476	486	323	11	126	185	312	0.00	7,365
2023	3,787	673	1,472	486	324	11	119	179	306	0.00	7,357
2024	3,798	663	1,461	482	322	11	125	182	312	0.00	7,356
2025	3,818	670	1,466	483	323	10	119	176	304	0.00	7,370
2026	3,833	664	1,500	478	320	10	187	181	304	0.00	7,477
2027	3,858	664	1,509	478	320	10	194	182	306	0.00	7,522
2028	3,889	667	1,524	481	321	10	190	176	303	0.00	7,563
2029	3,946	659	1,514	484	324	11	168	185	310	0.00	7,602
2030	3,990	655	1,516	483	323	11	168	181	312	0.00	7,639
2031	3,982	665	1,551	479	319	10	204	174	301	0.00	7,685
2032	3,997	662	1,560	484	318	11	220	183	305	0.00	7,741
2033	4,013	664	1,580	489	319	11	225	182	307	0.00	7,791
2034	4,049	666	1,604	493	323	11	223	179	301	0.00	7,849
2035	4,130	656	1,591	503	328	12	188	190	311	0.00	7,909
2036	4,107	679	1,646	497	322	12	236	178	299	0.00	7,975
2037	4,129	678	1,655	497	320	12	251	184	301	0.00	8,026
2038	4,160	674	1,661	497	320	12	260	186	302	0.00	8,071
2039	4,190	673	1,670	496	320	11	265	185	304	0.00	8,115
2040	4,320	647	1,629	504	326	11	206	190	311	0.00	8,144

Forecast of Class Demand at the Time of Winter System Peak (MW)

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	Sys Demand
2021	2,892	598	1,128	375	199	21	133	169	276	12.60	5,805
2022	3,022	539	1,058	357	205	15	98	148	259	32.89	5,734
2023	3,030	532	1,046	355	205	15	107	153	265	36.31	5,743
2024	3,045	530	1,044	352	204	15	98	145	257	35.66	5,726
2025	3,045	527	1,041	351	204	15	108	151	259	28.97	5,730
2026	3,036	524	1,093	350	204	15	170	151	259	28.62	5,829
2027	3,018	535	1,108	355	205	16	177	153	265	24.42	5,857
2028	3,059	528	1,125	354	207	15	171	145	256	27.94	5,888
2029	3,088	523	1,135	351	205	14	174	142	254	32.99	5,919
2030	3,094	523	1,143	352	206	15	179	142	254	33.11	5,941
2031	3,106	528	1,142	353	204	16	192	150	258	24.37	5,973
2032	3,107	529	1,158	355	205	16	201	153	260	24.26	6,009
2033	3,121	555	1,135	367	203	20	204	158	270	13.46	6,047
2034	3,108	522	1,218	358	207	16	213	151	260	32.65	6,084
2035	3,144	526	1,238	359	206	16	209	144	252	32.68	6,127
2036	3,155	539	1,259	365	208	16	219	144	254	27.86	6,187
2037	3,239	561	1,173	372	203	21	228	161	264	14.48	6,237
2038	3,258	562	1,179	373	204	21	235	162	266	14.43	6,274
2039	3,295	562	1,185	374	204	21	237	159	267	14.44	6,318
2040	3,240	543	1,295	366	207	17	251	152	259	28.48	6,360

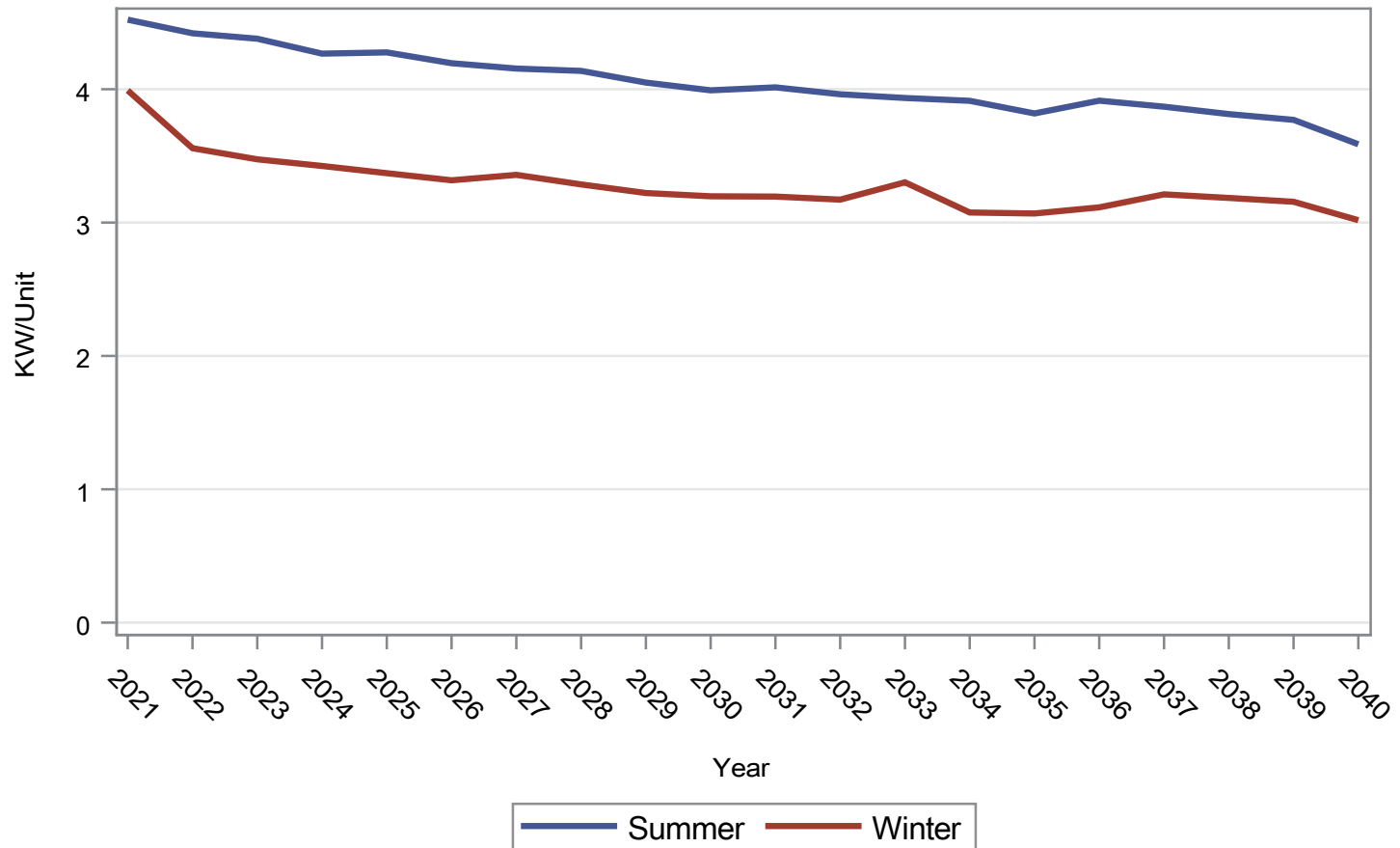
Forecasted Demand per Unit at the time of Summer and Winter System Peak for Planning Case¹⁹

Forecast of Residential Coincident Demand per Unit (KW/Unit)

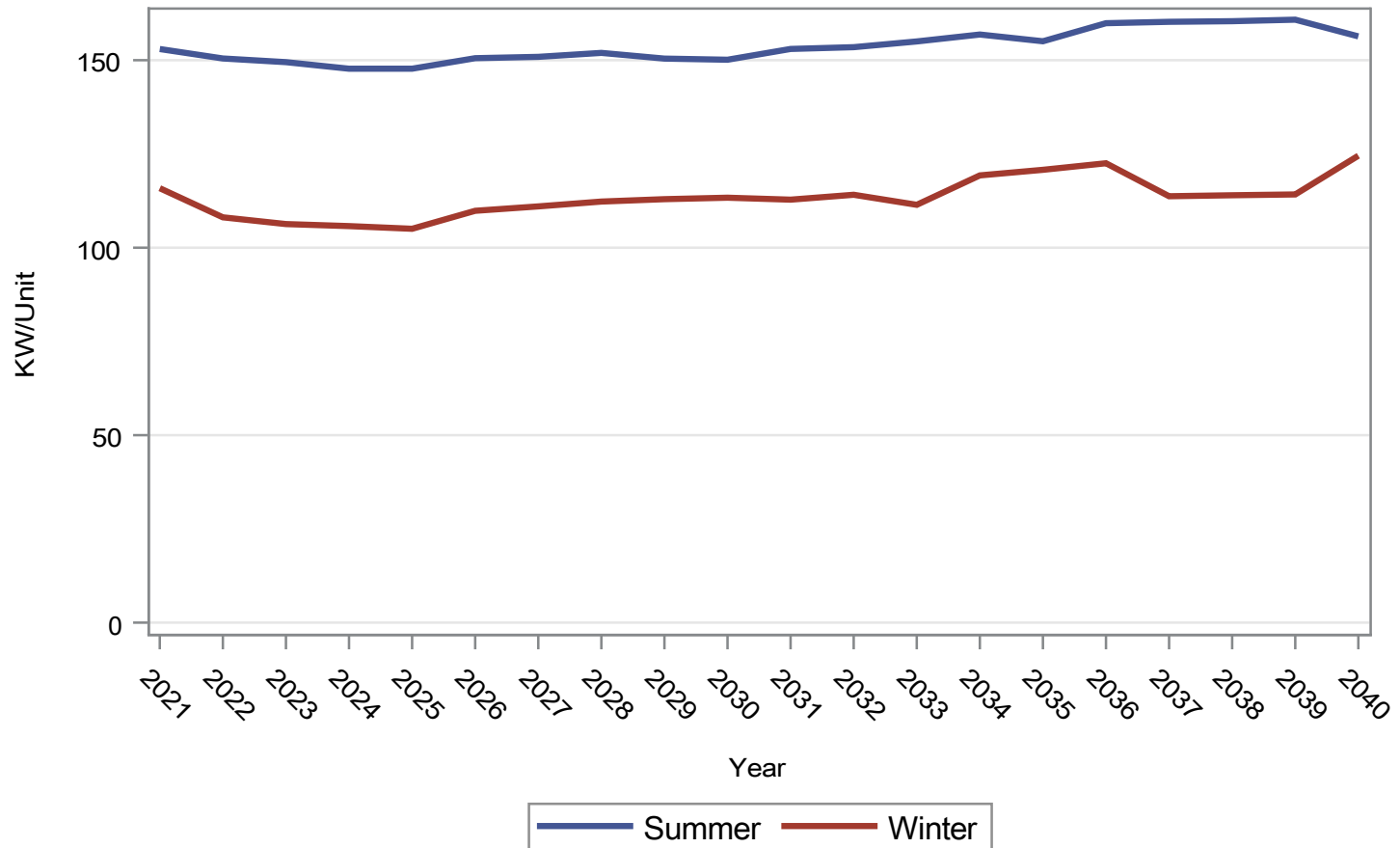


¹⁹20 CSR 4240-22.030(7)(A)6

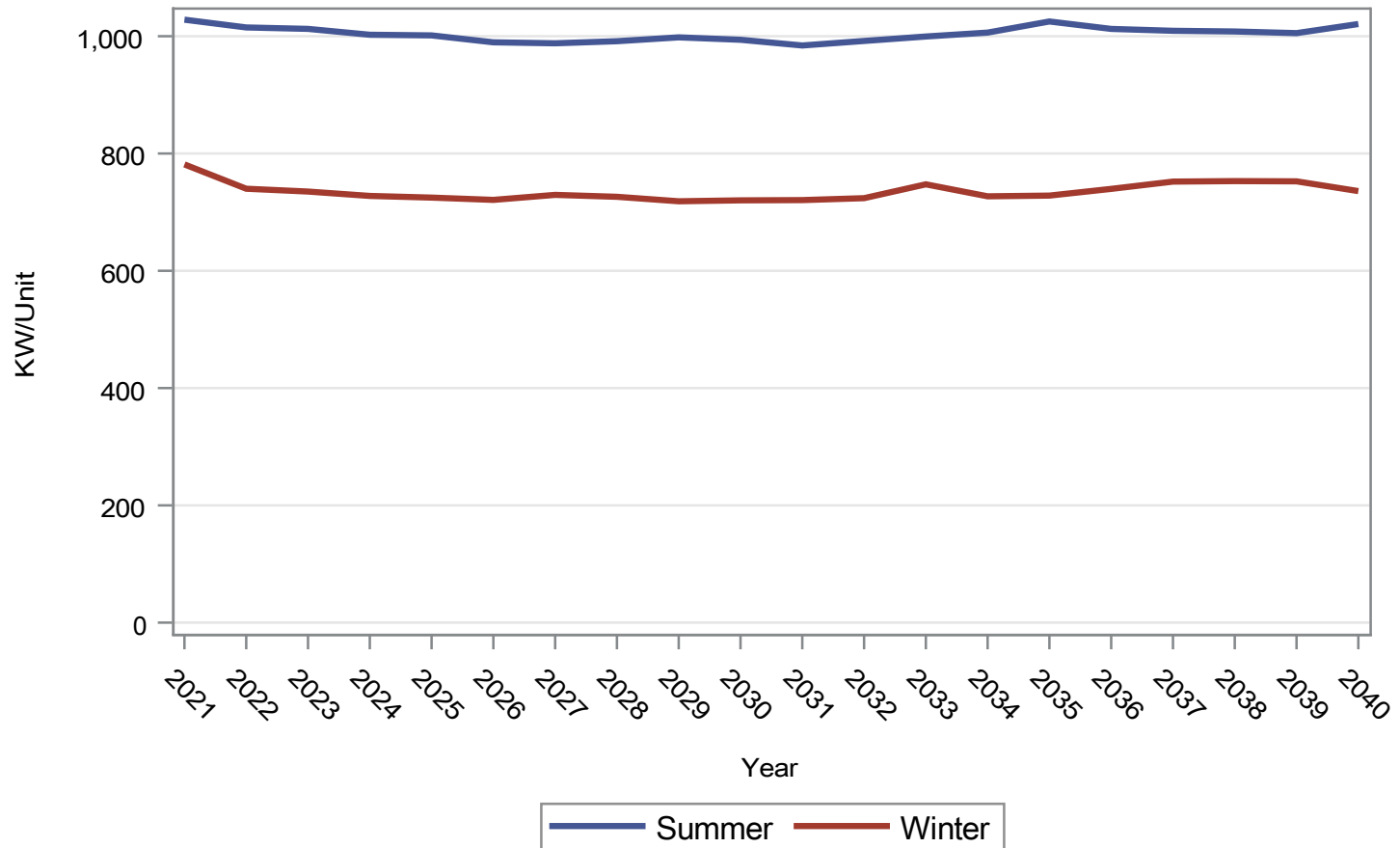
Forecast of Commercial SGS Coincident Demand per Unit (KW/Unit)



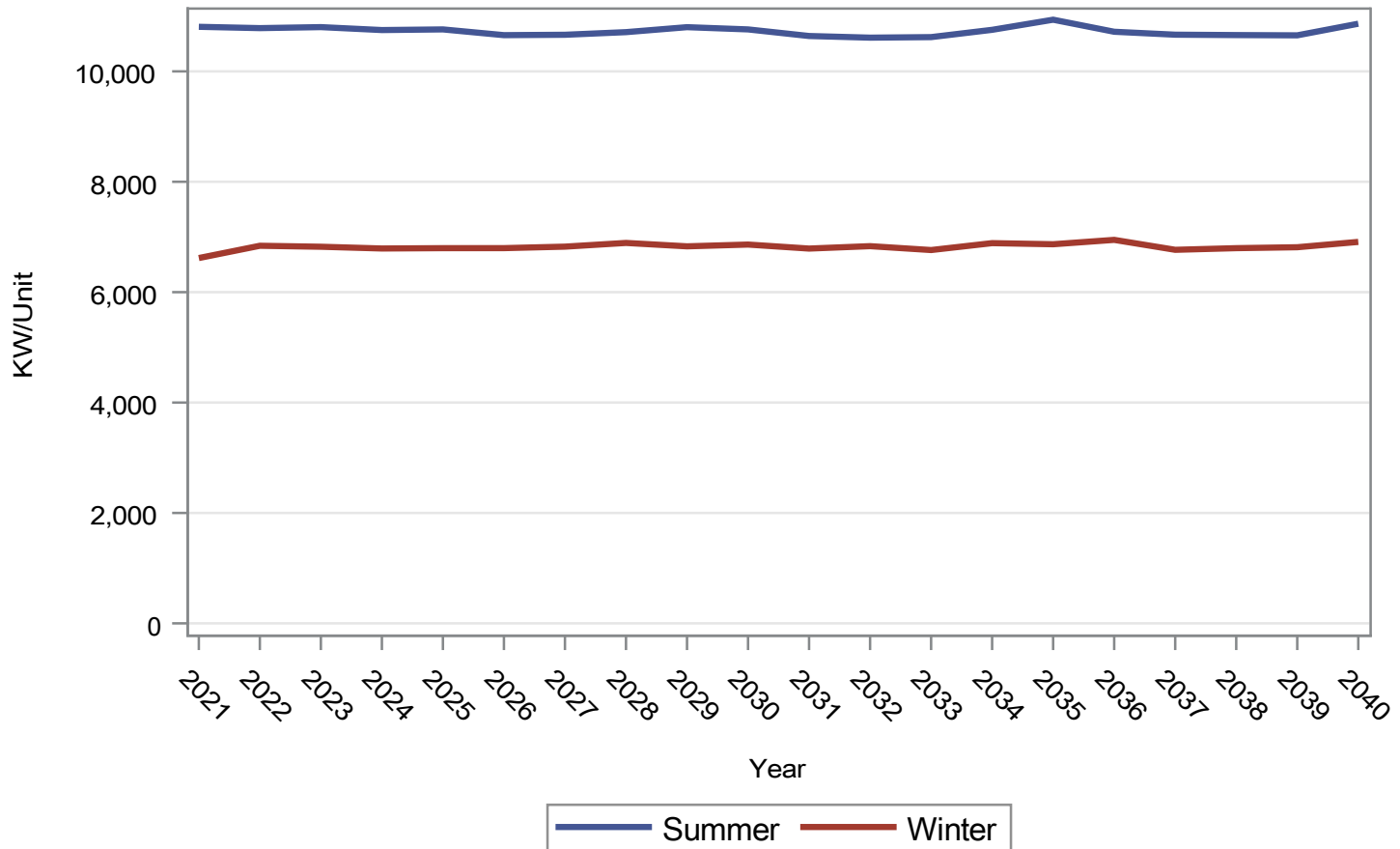
Forecast of Commercial LGS Coincident Demand per Unit (KW/Unit)



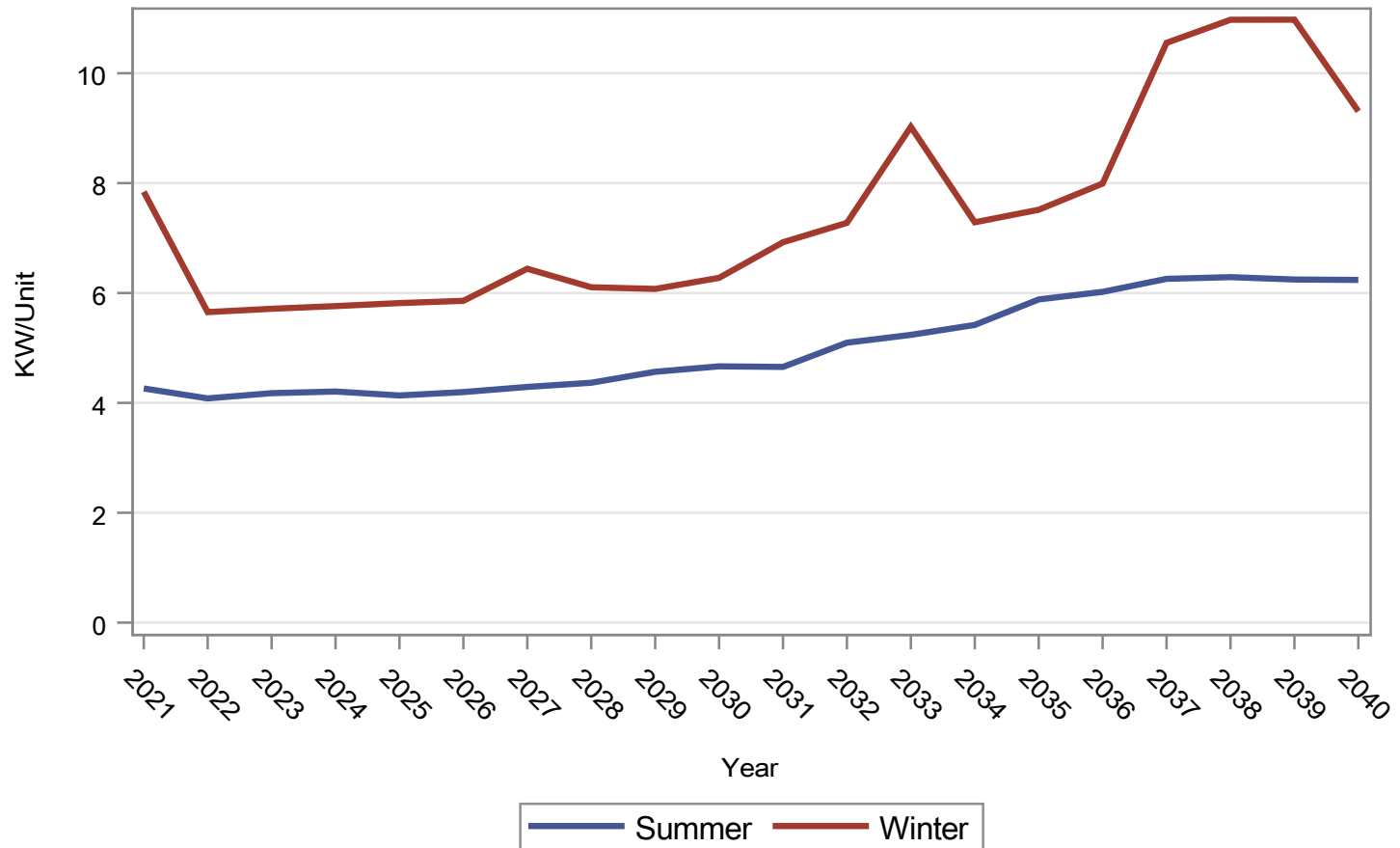
Forecast of Commercial SPS Coincident Demand per Unit (KW/Unit)



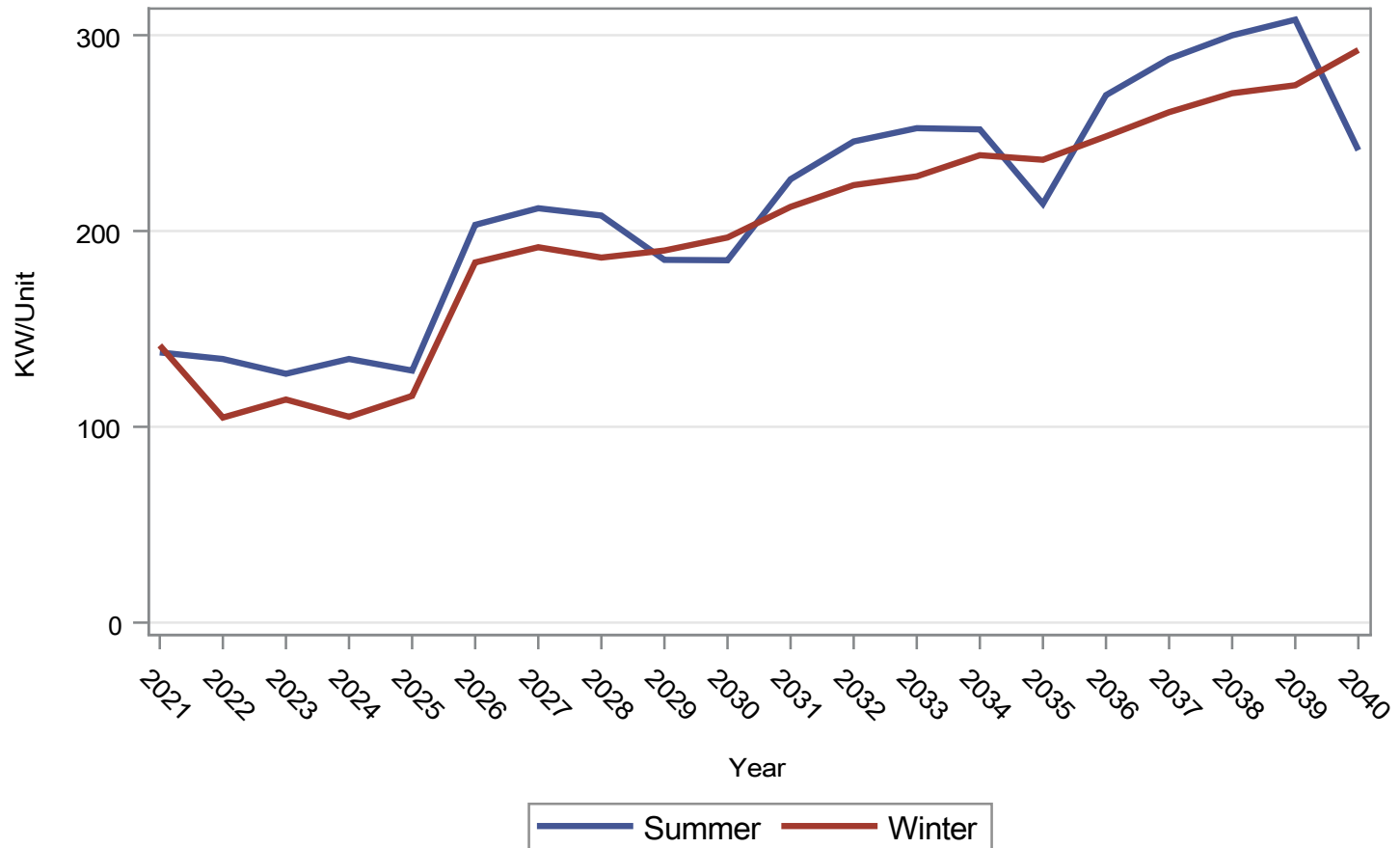
Forecast of Commercial LPS Coincident Demand per Unit (KW/Unit)



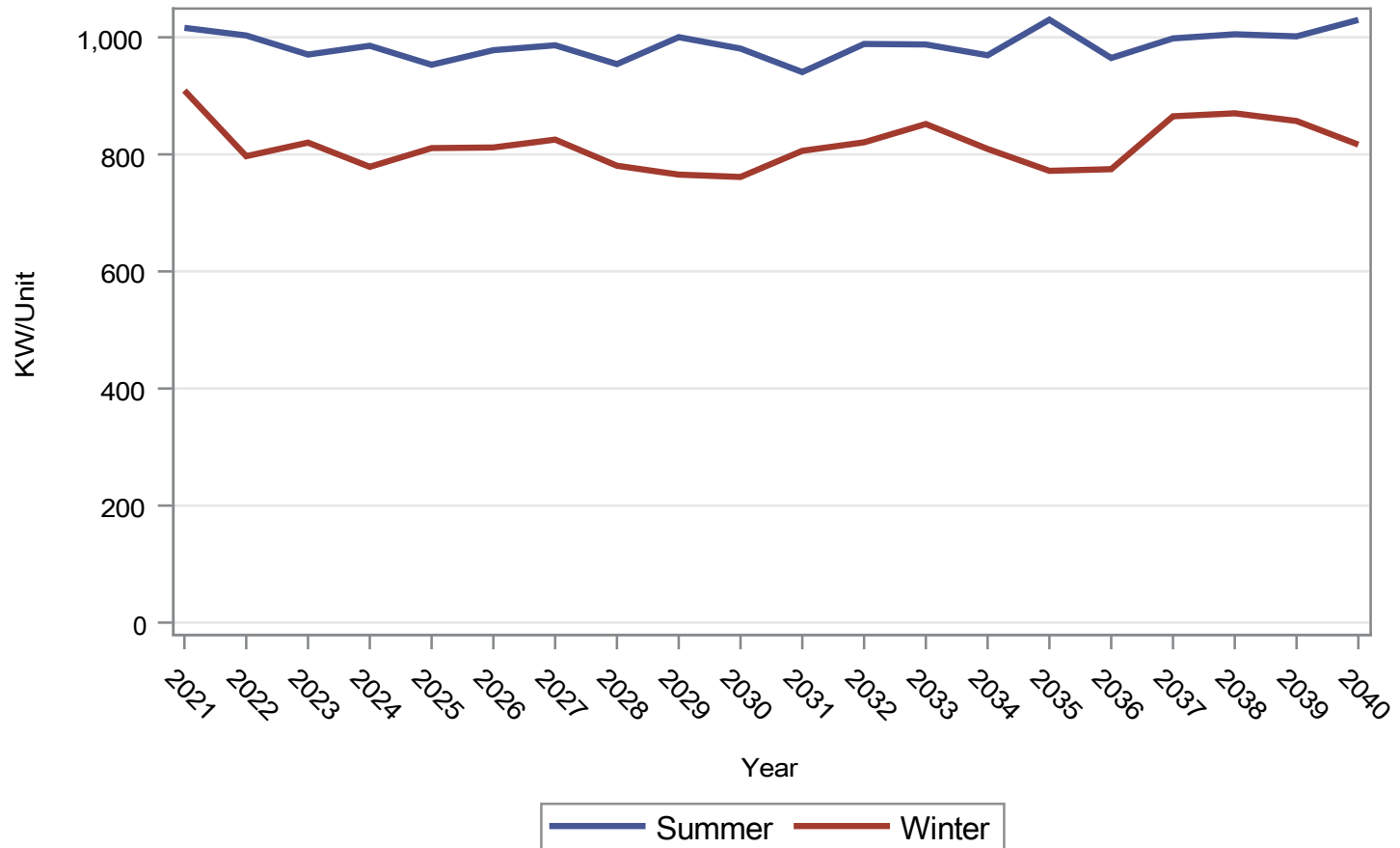
Forecast of Industrial SGS Coincident Demand per Unit (KW/Unit)



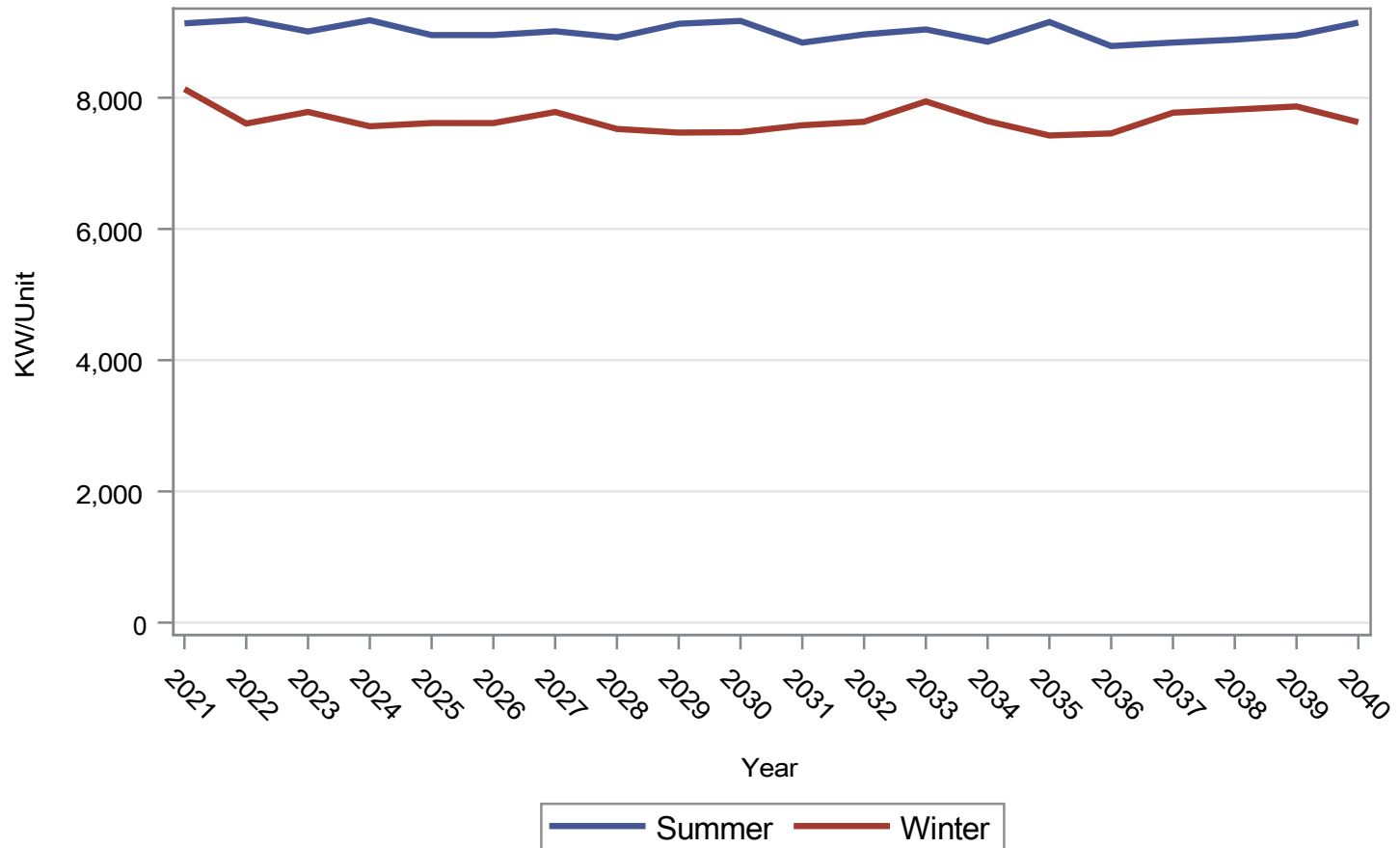
Forecast of Industrial LGS Coincident Demand per Unit (KW/Unit)



Forecast of Industrial SPS Coincident Demand per Unit (KW/Unit)



Forecast of Industrial LPS Coincident Demand per Unit (KW/Unit)



Forecast of Summer Coincident Demand per Unit (KW/Unit)

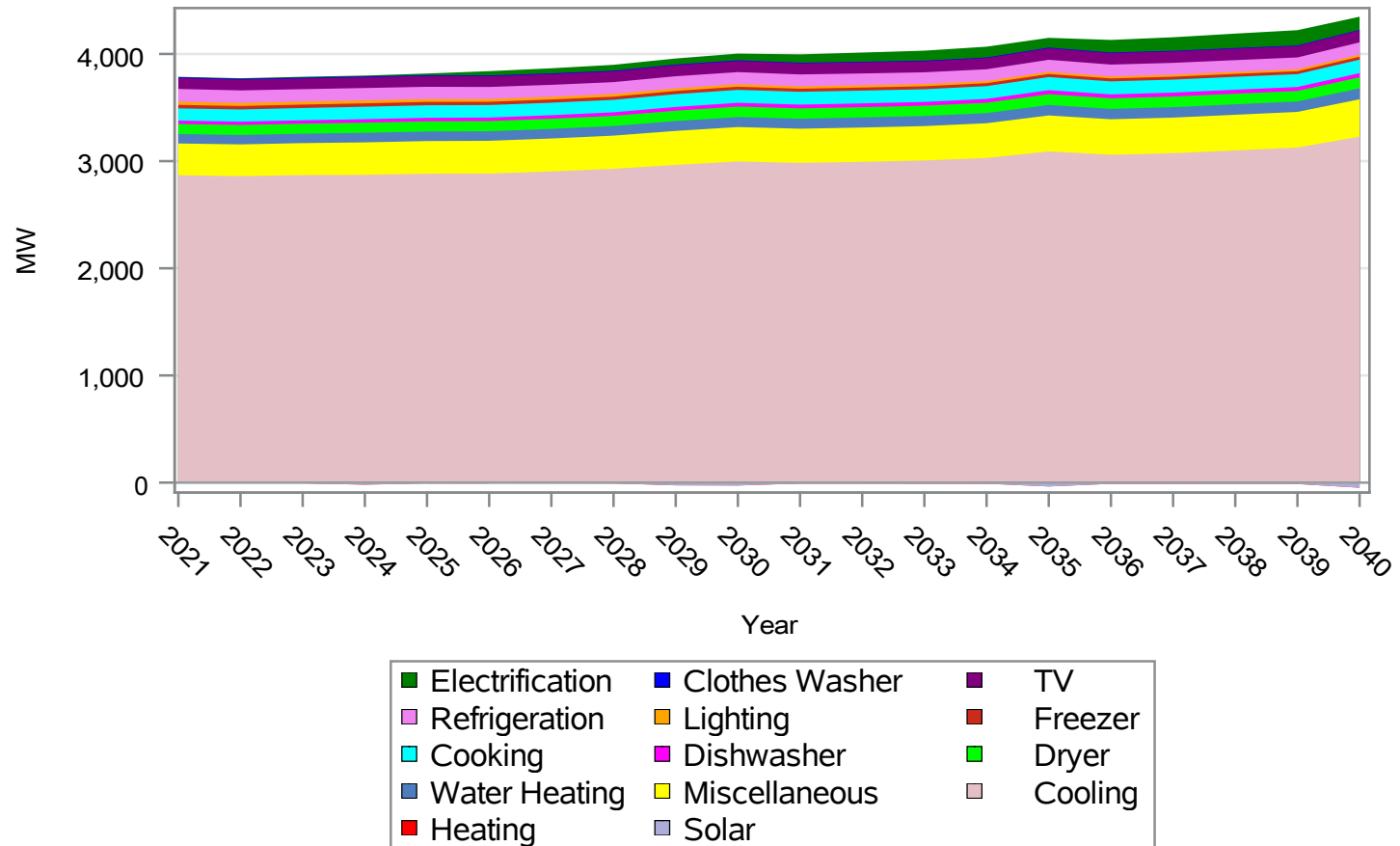
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	3.54	4.52	153	1,028	10,807	4.26	138	1,016	9,134	0.00
2022	3.52	4.42	150	1,015	10,783	4.08	135	1,003	9,190	0.00
2023	3.52	4.38	149	1,012	10,802	4.18	127	971	9,010	0.00
2024	3.53	4.27	148	1,002	10,748	4.21	135	986	9,182	0.00
2025	3.53	4.28	148	1,001	10,760	4.13	129	953	8,955	0.00
2026	3.54	4.19	151	990	10,656	4.20	203	978	8,955	0.00
2027	3.56	4.15	151	988	10,663	4.29	212	986	9,013	0.00
2028	3.58	4.14	152	991	10,710	4.37	208	954	8,920	0.00
2029	3.62	4.05	150	998	10,800	4.57	185	1,000	9,128	0.00
2030	3.65	3.99	150	994	10,760	4.66	185	981	9,171	0.00
2031	3.63	4.01	153	984	10,641	4.65	226	941	8,840	0.00
2032	3.64	3.96	153	992	10,610	5.10	246	989	8,965	0.00
2033	3.64	3.93	155	1,000	10,620	5.24	253	988	9,041	0.00
2034	3.67	3.91	157	1,006	10,753	5.42	252	969	8,854	0.00
2035	3.73	3.82	155	1,025	10,936	5.88	214	1,030	9,154	0.00
2036	3.70	3.91	160	1,012	10,717	6.02	269	965	8,788	0.00
2037	3.72	3.87	160	1,009	10,664	6.26	288	998	8,841	0.00
2038	3.74	3.81	160	1,008	10,657	6.29	300	1,005	8,886	0.00
2039	3.76	3.77	161	1,005	10,652	6.25	308	1,002	8,950	0.00
2040	3.87	3.59	156	1,021	10,863	6.24	241	1,030	9,145	0.00

Forecast of Winter Coincident Demand per Unit (KW/Unit)

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	2.70	3.99	116	781	6,618	7.84	142	909	8,132	0.23
2022	2.82	3.56	108	740	6,841	5.65	105	797	7,607	0.61
2023	2.82	3.47	106	735	6,823	5.71	114	820	7,784	0.67
2024	2.83	3.42	106	728	6,791	5.76	105	779	7,566	0.66
2025	2.82	3.37	105	725	6,797	5.82	116	811	7,615	0.54
2026	2.80	3.32	110	721	6,798	5.86	184	812	7,614	0.53
2027	2.78	3.36	111	729	6,824	6.44	192	825	7,783	0.45
2028	2.81	3.29	112	726	6,892	6.10	186	781	7,525	0.52
2029	2.83	3.22	113	719	6,830	6.07	190	765	7,469	0.61
2030	2.83	3.20	113	720	6,862	6.28	197	761	7,475	0.61
2031	2.83	3.19	113	721	6,790	6.92	212	806	7,581	0.45
2032	2.83	3.17	114	724	6,833	7.28	223	821	7,634	0.45
2033	2.83	3.30	111	747	6,763	9.02	228	852	7,944	0.25
2034	2.81	3.08	119	727	6,888	7.29	239	809	7,644	0.61
2035	2.84	3.07	121	728	6,868	7.51	236	772	7,425	0.61
2036	2.84	3.11	123	740	6,948	7.99	248	775	7,456	0.52
2037	2.91	3.21	114	752	6,767	10.55	261	865	7,772	0.27
2038	2.93	3.18	114	753	6,797	10.97	270	870	7,819	0.27
2039	2.95	3.16	114	753	6,814	10.97	274	857	7,867	0.27
2040	2.90	3.02	125	736	6,911	9.31	292	817	7,628	0.53

Forecasted Summer and Non-summer Coincident Peak for various Classes by End Use¹⁹

Forecast for Summer Coincident Peaks for Residential End Use (MW)

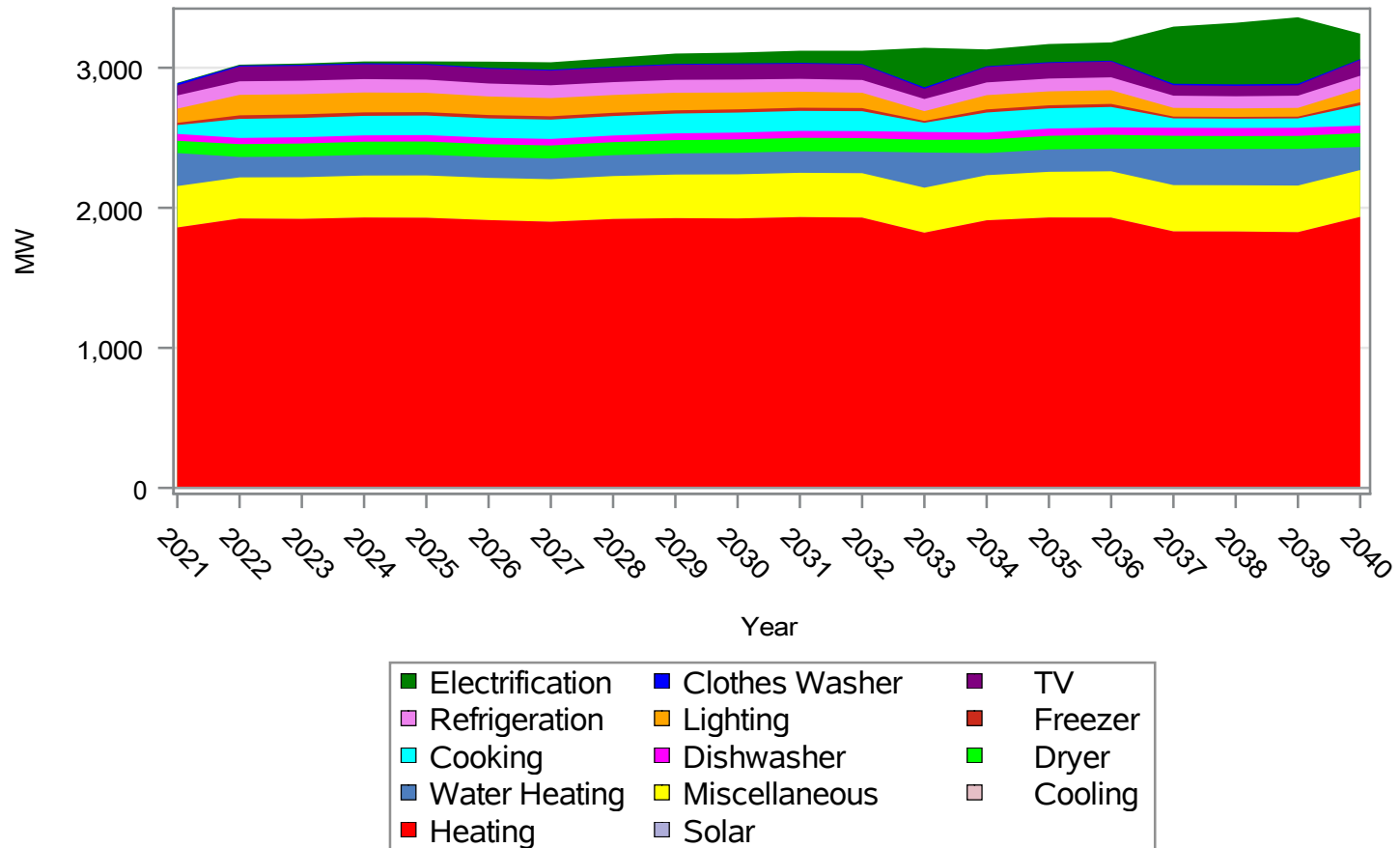


¹⁹20 CSR 4240-22.030(7)(A)6

Forecast for Summer Coincident Peaks for Residential End Use (MW)

Year	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Electrification	Miscellaneous
2021	0	2,872	88	114	119	33	31	8	94	101	30	-4.24	3	296
2022	0	2,865	88	114	117	32	31	8	93	100	28	-5.29	5	296
2023	0	2,875	88	115	116	32	32	7	94	100	28	-5.93	8	299
2024	0	2,892	89	117	115	31	32	7	95	101	28	-19.55	8	303
2025	0	2,888	89	117	114	31	32	7	95	101	27	-6.39	16	305
2026	0	2,890	89	117	113	30	33	7	95	101	26	-6.70	40	306
2027	0	2,910	89	117	112	30	33	6	95	101	25	-7.07	47	308
2028	0	2,936	90	116	111	30	33	6	95	100	25	-7.45	55	310
2029	0	2,990	92	119	113	30	35	6	97	103	25	-25.79	56	318
2030	0	3,024	93	121	113	29	35	6	98	104	24	-27.23	62	321
2031	0	2,992	93	119	111	29	35	6	97	103	22	-8.79	78	319
2032	0	3,002	93	119	111	28	35	6	97	104	21	-9.26	85	321
2033	0	3,016	94	118	110	28	35	6	96	103	20	-9.74	93	321
2034	0	3,040	94	119	110	28	36	6	97	104	20	-10.30	101	324
2035	0	3,126	98	123	113	28	37	6	100	108	20	-35.99	91	336
2036	0	3,071	96	121	111	27	37	6	99	107	19	-11.50	118	331
2037	0	3,086	97	121	111	27	37	6	99	107	18	-12.12	126	332
2038	0	3,112	97	121	111	27	37	6	99	107	18	-12.78	135	333
2039	0	3,140	97	120	110	27	37	6	98	106	19	-13.42	143	333
2040	0	3,276	102	126	115	28	39	6	103	111	20	-47.57	122	348

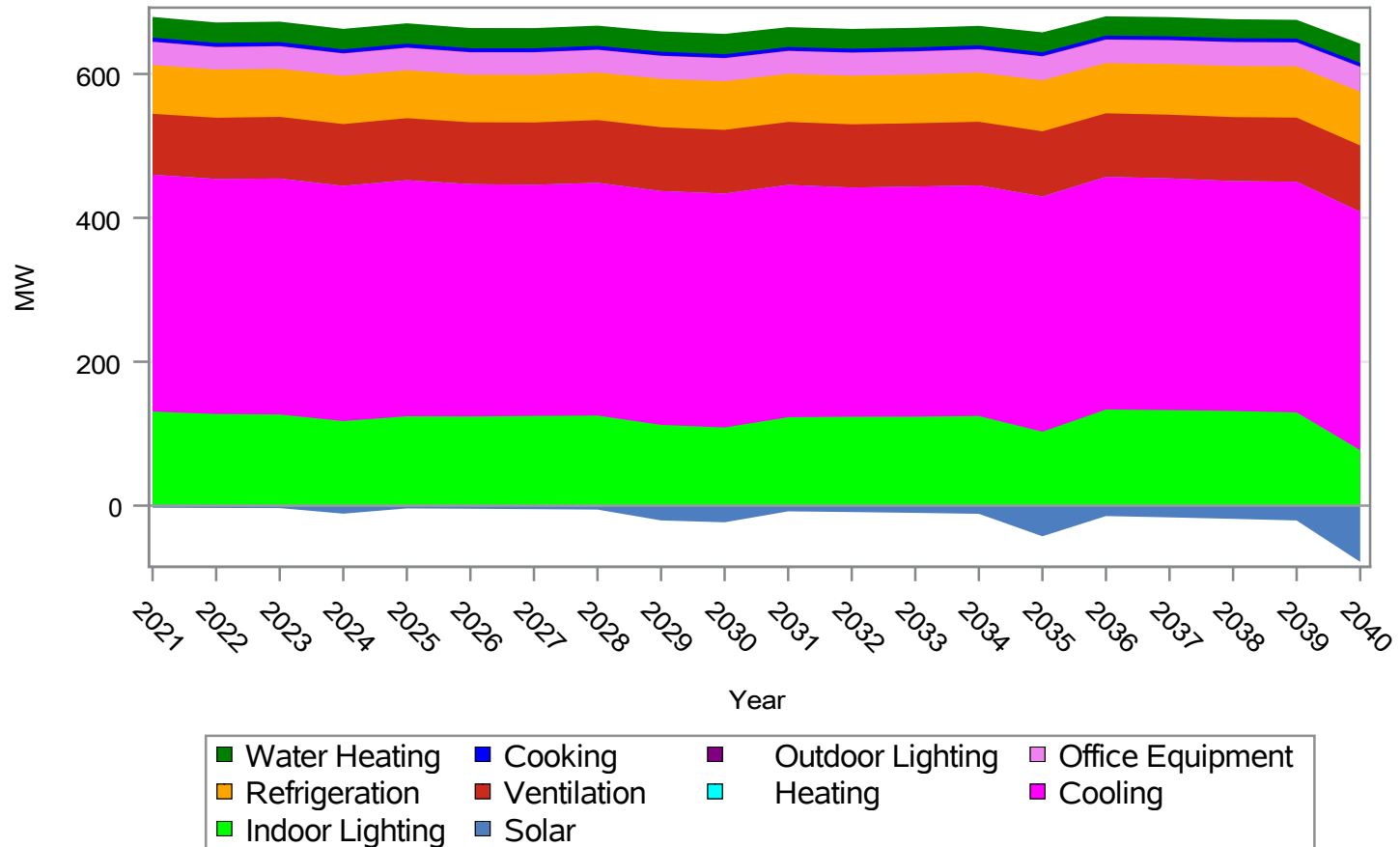
Forecast for Winter Coincident Peaks for Residential End Use (MW)



Forecast for Winter Coincident Peaks for Residential End Use (MW)

Year	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Electrification	Miscellaneous
2021	1,861	0	236	63	94	16	49	15	88	71	101	-1.85	4	296
2022	1,924	0	146	136	97	26	44	8	92	105	146	0.00	6	293
2023	1,921	0	147	138	96	25	45	8	93	106	144	0.00	9	298
2024	1,931	0	148	139	95	25	45	7	94	106	142	0.00	13	300
2025	1,929	0	149	140	94	25	46	7	94	106	137	0.00	17	302
2026	1,912	0	148	138	93	24	46	7	93	105	132	0.00	45	302
2027	1,901	0	148	138	92	24	47	7	93	105	129	0.00	53	304
2028	1,920	0	149	139	92	23	47	6	93	105	127	0.00	61	307
2029	1,926	0	151	141	92	23	48	6	95	107	126	0.00	74	311
2030	1,924	0	153	143	93	23	49	6	96	108	120	0.00	78	315
2031	1,934	0	154	143	92	23	50	6	96	108	114	0.00	86	316
2032	1,930	0	155	142	91	22	50	6	95	108	109	0.00	95	317
2033	1,827	0	251	66	87	13	56	10	91	73	69	-4.80	282	321
2034	1,911	0	158	143	91	22	51	6	96	110	102	0.00	120	322
2035	1,931	0	160	144	91	22	52	6	97	111	99	0.00	130	326
2036	1,930	0	162	146	92	22	52	6	98	113	97	0.00	131	331
2037	1,837	0	259	67	87	13	58	10	93	75	62	-5.94	408	331
2038	1,837	0	259	66	87	13	58	10	92	74	60	-6.25	440	330
2039	1,833	0	262	67	87	13	58	10	93	75	62	-6.61	475	333
2040	1,935	0	165	145	92	21	53	6	98	113	98	0.00	182	334

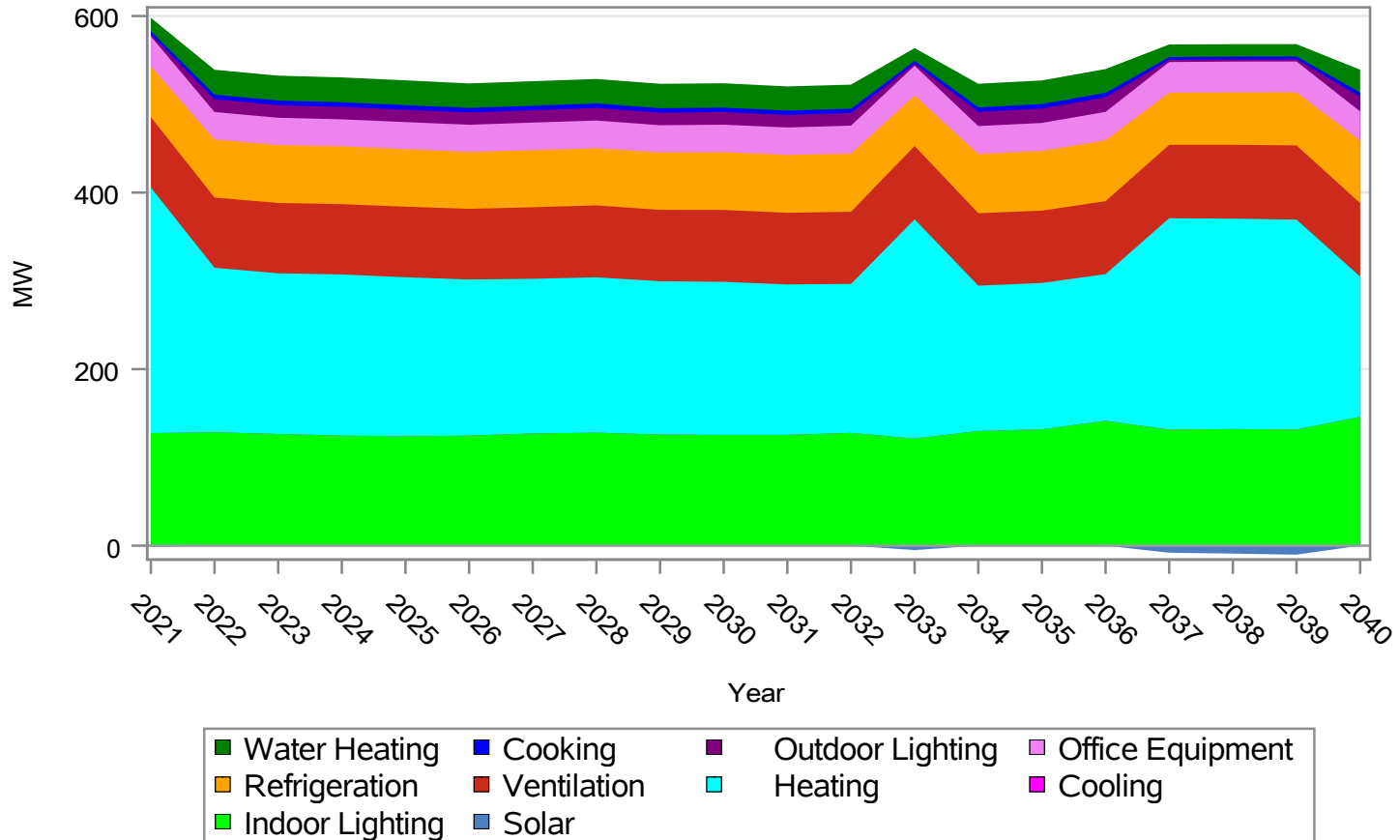
Forecast for Summer Coincident Peaks for Commercial SGS End Use (MW)



Forecast for Summer Coincident Peaks for Commercial SGS End Use (MW)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
2021	0	329	29	85	5	68	1	134	32	-2.94
2022	0	327	28	85	5	67	1	131	31	-3.26
2023	0	328	28	86	5	67	1	130	31	-3.44
2024	0	327	28	86	5	67	1	129	31	-11.23
2025	0	328	28	86	5	67	0	128	31	-3.92
2026	0	323	28	86	5	66	0	128	31	-4.39
2027	0	321	28	87	5	66	0	130	31	-4.95
2028	0	323	28	87	5	66	1	131	32	-5.57
2029	0	325	28	89	5	67	1	133	32	-20.58
2030	0	325	28	89	5	68	1	132	32	-23.21
2031	0	323	28	88	5	67	1	131	32	-8.00
2032	0	319	27	88	5	68	0	133	32	-9.00
2033	0	320	27	88	5	68	1	134	32	-10.11
2034	0	321	27	88	5	69	1	136	32	-11.42
2035	0	327	28	91	5	71	1	145	33	-42.62
2036	0	323	27	88	5	70	1	148	33	-14.54
2037	0	322	27	88	5	70	1	149	33	-16.37
2038	0	319	26	89	5	71	1	150	33	-18.43
2039	0	321	26	89	5	71	1	150	33	-20.68
2040	0	331	27	92	5	75	1	155	34	-78.26

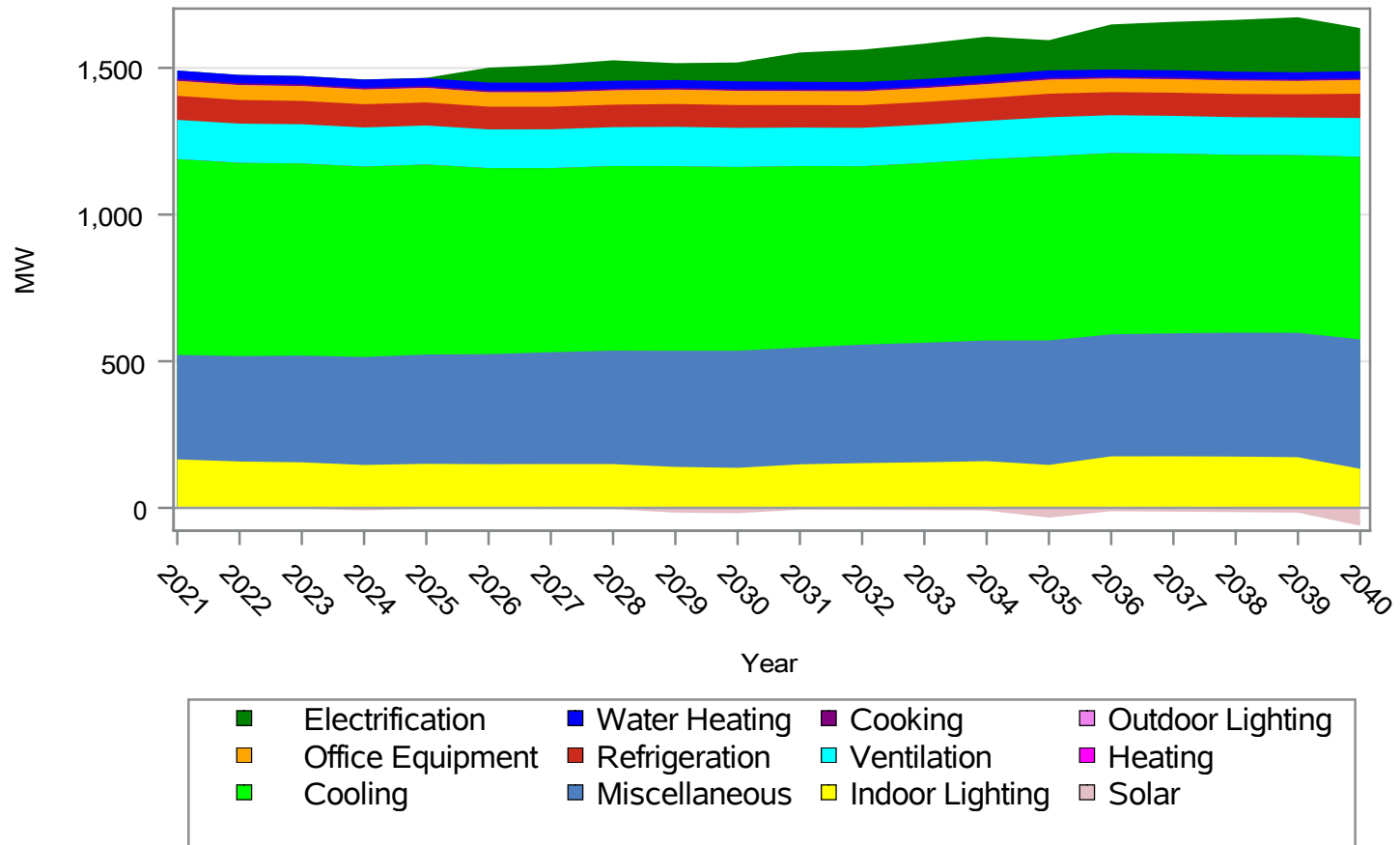
Forecast for Winter Coincident Peaks for Commercial SGS End Use (MW)



Forecast for Winter Coincident Peaks for Commercial SGS End Use (MW)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
2021	278	0	15	80	3	57	2	129	34	-1.35
2022	186	0	28	80	5	66	14	128	31	0.00
2023	182	0	28	80	5	66	14	127	31	0.00
2024	183	0	28	80	5	65	14	125	31	0.00
2025	180	0	28	80	5	65	14	124	31	0.00
2026	177	0	28	80	5	65	14	125	31	0.00
2027	175	0	28	81	5	65	14	127	31	0.00
2028	176	0	28	81	5	65	14	128	31	0.00
2029	174	0	28	81	5	65	14	126	31	0.00
2030	173	0	28	81	5	66	14	125	31	0.00
2031	170	0	27	81	5	66	14	125	31	0.00
2032	169	0	27	82	5	66	14	128	32	0.00
2033	248	0	14	83	3	57	2	126	34	-4.98
2034	165	0	27	82	5	67	16	130	32	0.00
2035	166	0	27	82	5	68	16	132	32	0.00
2036	166	0	27	83	5	69	17	141	32	0.00
2037	239	0	14	83	3	59	2	140	35	-8.03
2038	238	0	14	84	3	59	2	141	35	-9.01
2039	238	0	14	84	3	60	2	142	35	-10.18
2040	159	0	26	83	5	71	17	146	33	0.00

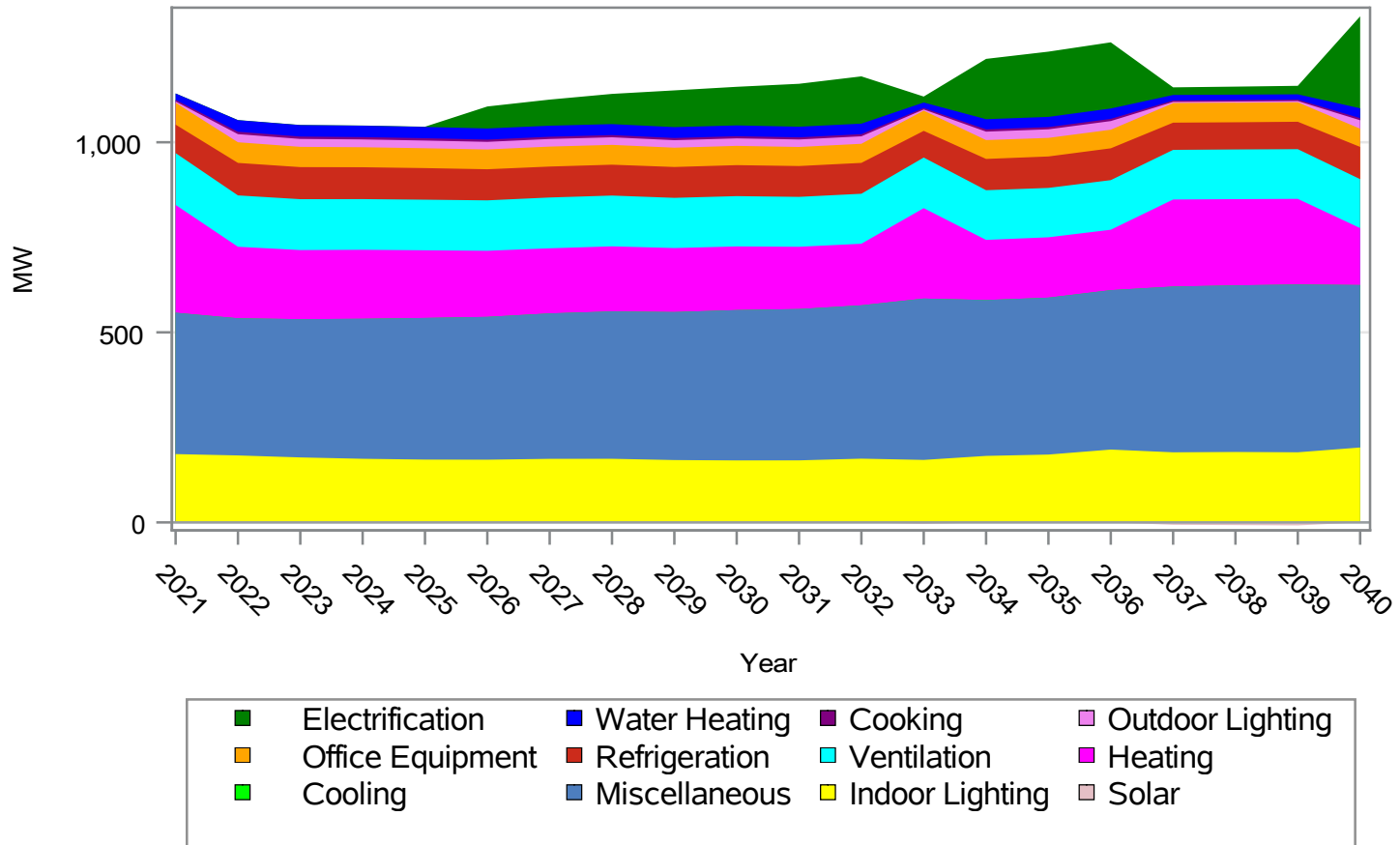
Forecast for Summer Coincident Peaks for Commercial LGS End Use (MW)



Forecast for Summer Coincident Peaks for Commercial LGS End Use (MW)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
2021	0	667	29	134	6	82	1	168	50	-2.29	0	356
2022	0	659	28	134	6	81	1	161	50	-2.54	0	359
2023	0	655	28	134	6	80	1	158	50	-2.68	0	364
2024	0	649	28	133	6	79	1	155	50	-8.75	0	368
2025	0	648	28	133	6	79	1	153	49	-3.05	1	373
2026	0	634	27	132	5	77	1	152	49	-3.42	51	375
2027	0	628	27	132	5	77	1	153	49	-3.85	60	381
2028	0	629	27	133	5	77	1	154	48	-4.34	70	387
2029	0	629	27	134	5	78	1	156	49	-16.04	57	396
2030	0	626	27	133	5	78	1	155	48	-18.09	64	399
2031	0	619	26	131	5	77	1	155	47	-6.23	100	398
2032	0	608	26	131	5	77	1	160	47	-7.01	110	404
2033	0	613	26	131	5	77	1	164	47	-7.88	120	407
2034	0	618	25	130	5	78	1	168	47	-8.90	131	411
2035	0	628	26	133	6	80	1	180	47	-33.21	103	425
2036	0	618	25	129	5	79	1	187	46	-11.33	154	416
2037	0	613	25	129	5	79	1	189	45	-12.75	165	419
2038	0	606	25	129	5	79	1	189	45	-14.36	177	422
2039	0	606	24	128	5	79	1	189	45	-16.12	187	424
2040	0	623	25	132	5	83	1	194	46	-60.99	147	441

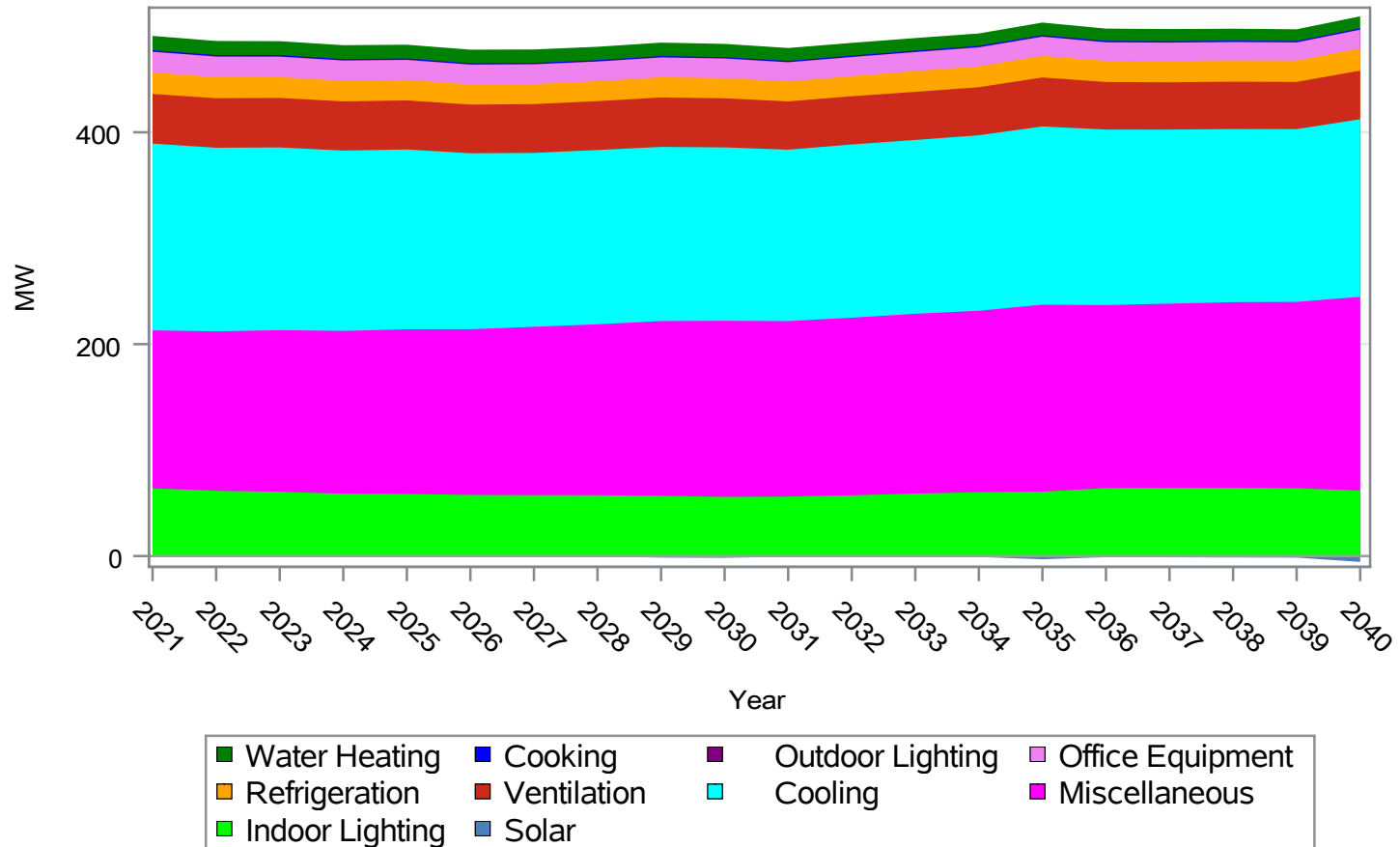
Forecast for Winter Coincident Peaks for Commercial LGS End Use (MW)



Forecast for Winter Coincident Peaks for Commercial LGS End Use (MW)

Year	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
2021	284	0	17	136	4	75	3	181	57	-1.05	0	372
2022	188	0	30	135	6	85	21	176	54	0.00	0	361
2023	182	0	30	134	6	84	21	171	53	0.00	0	364
2024	182	0	30	133	6	84	21	167	53	0.00	1	368
2025	178	0	30	133	6	83	20	165	52	0.00	1	373
2026	174	0	29	133	6	82	20	165	52	0.00	58	376
2027	171	0	29	134	6	81	20	167	52	0.00	69	382
2028	171	0	29	134	6	81	20	167	52	0.00	79	388
2029	168	0	29	132	6	81	20	164	51	0.00	97	389
2030	167	0	28	132	6	82	20	163	51	0.00	102	395
2031	164	0	28	131	6	81	20	163	50	0.00	113	398
2032	162	0	28	131	6	81	20	168	50	0.00	124	403
2033	238	0	15	133	4	70	3	168	53	-3.88	16	424
2034	158	0	27	131	6	82	22	175	50	0.00	159	410
2035	159	0	27	130	6	83	23	178	49	0.00	172	413
2036	159	0	27	130	6	84	23	192	49	0.00	174	419
2037	229	0	15	131	4	72	3	191	51	-6.26	20	436
2038	227	0	14	131	4	72	3	192	51	-7.02	21	438
2039	225	0	14	131	4	72	3	192	51	-7.94	22	441
2040	150	0	26	129	5	85	22	197	48	0.00	242	427

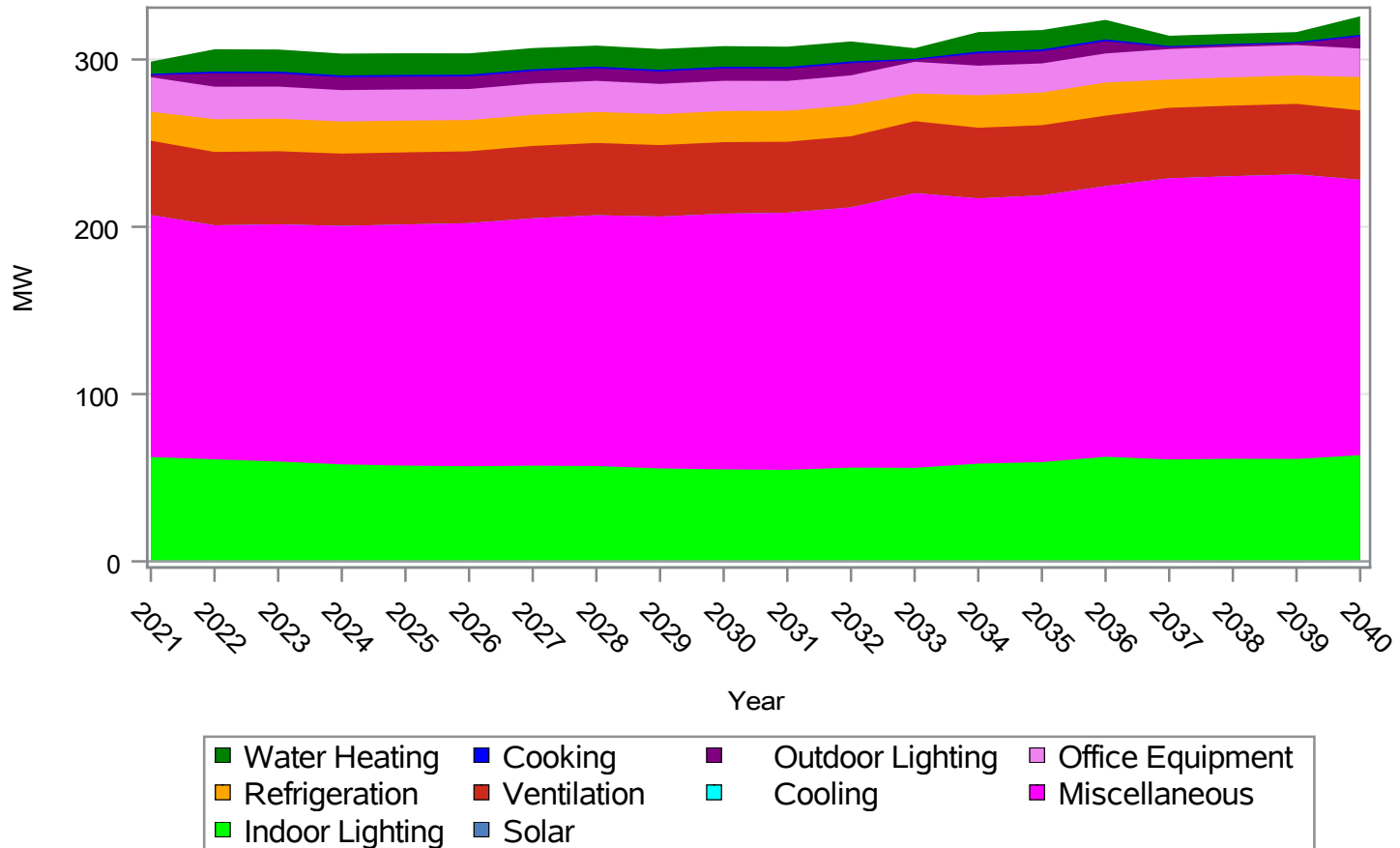
Forecast for Summer Coincident Peaks for Commercial SPS End Use (MW)



Forecast for Summer Coincident Peaks for Commercial SPS End Use (MW)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	176	14	47	1	20	0	64	19	-0.21	149
2022	173	13	47	1	20	0	62	19	-0.23	150
2023	172	13	47	1	20	0	61	19	-0.24	153
2024	170	13	46	1	20	0	60	19	-0.79	154
2025	170	13	46	1	19	0	59	19	-0.28	155
2026	166	13	46	1	19	0	58	19	-0.31	156
2027	164	13	46	1	19	0	58	19	-0.35	159
2028	165	13	46	1	19	0	58	19	-0.39	161
2029	164	13	47	1	19	0	58	19	-1.45	165
2030	164	13	46	1	19	0	58	18	-1.64	166
2031	162	12	46	1	19	0	57	18	-0.56	166
2032	163	12	46	1	19	0	58	18	-0.64	168
2033	164	12	45	1	20	0	60	18	-0.71	170
2034	166	12	45	1	20	0	61	18	-0.81	171
2035	168	12	46	1	20	0	64	18	-3.01	176
2036	166	12	45	1	20	0	65	17	-1.03	173
2037	164	12	45	1	20	0	66	17	-1.16	174
2038	163	11	45	1	20	0	66	17	-1.30	175
2039	163	11	45	1	20	0	65	17	-1.46	176
2040	168	11	46	1	21	0	67	18	-5.53	183

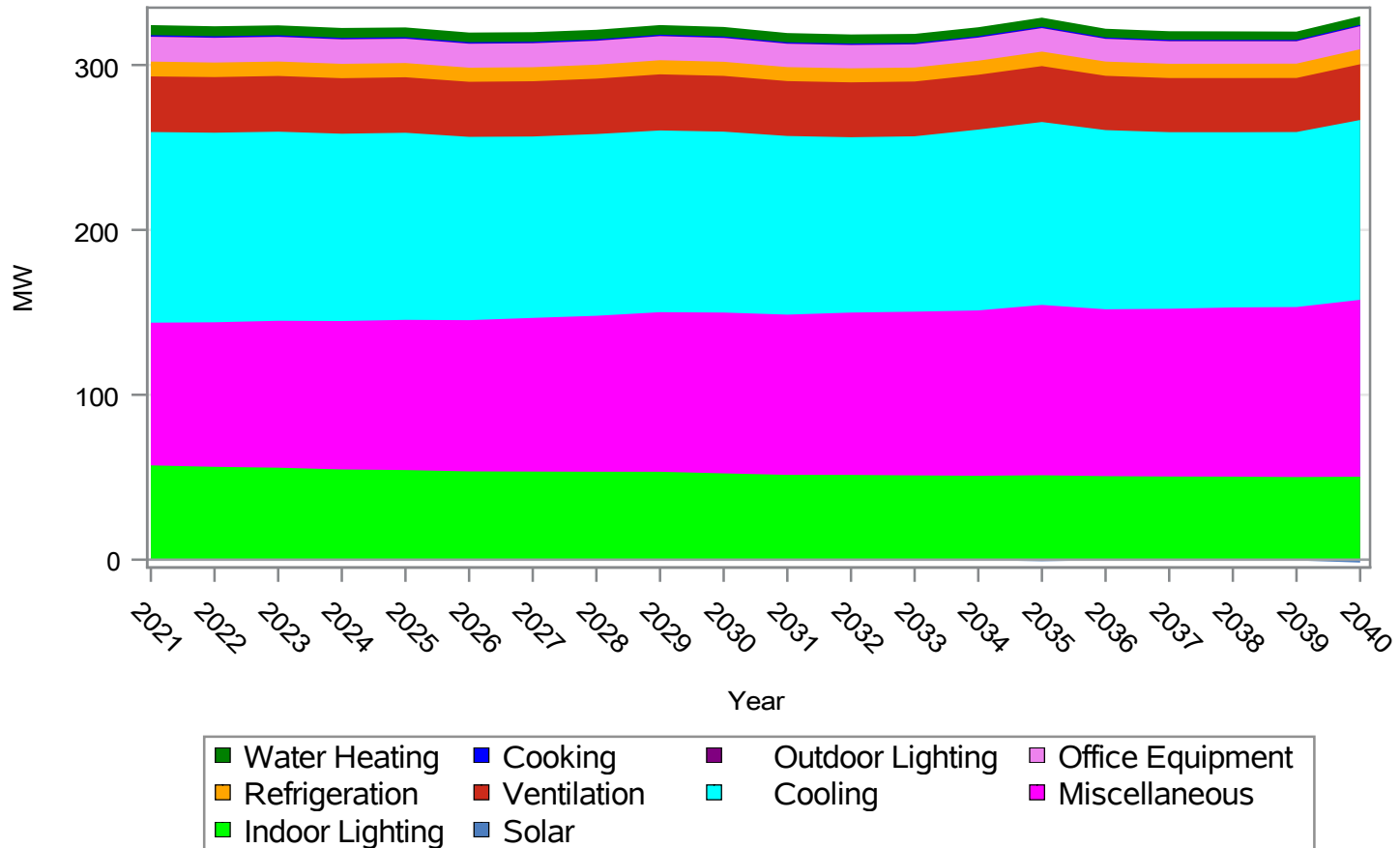
Forecast for Winter Coincident Peaks for Commercial SPS End Use (MW)



Forecast for Winter Coincident Peaks for Commercial SPS End Use (MW)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	0	7	44	1	17	1	62	21	-0.10	145
2022	0	13	44	1	20	8	61	19	0.00	140
2023	0	13	44	1	19	8	60	19	0.00	142
2024	0	13	43	1	19	8	58	19	0.00	143
2025	0	13	43	1	19	8	57	19	0.00	144
2026	0	13	43	1	19	8	57	19	0.00	145
2027	0	13	43	1	19	8	57	19	0.00	148
2028	0	13	43	1	19	7	57	19	0.00	150
2029	0	12	43	1	19	7	56	18	0.00	151
2030	0	12	43	1	19	7	55	18	0.00	153
2031	0	12	42	1	19	7	55	18	0.00	154
2032	0	12	42	1	19	7	56	18	0.00	156
2033	0	6	43	1	17	1	56	19	-0.35	164
2034	0	12	42	1	19	7	58	18	0.00	159
2035	0	12	42	1	20	7	59	17	0.00	159
2036	0	12	42	1	20	7	63	17	0.00	162
2037	0	6	42	1	17	1	62	18	-0.57	168
2038	0	6	42	1	17	1	62	18	-0.64	169
2039	0	6	42	1	17	1	62	18	-0.72	170
2040	0	11	41	1	20	7	63	17	0.00	165

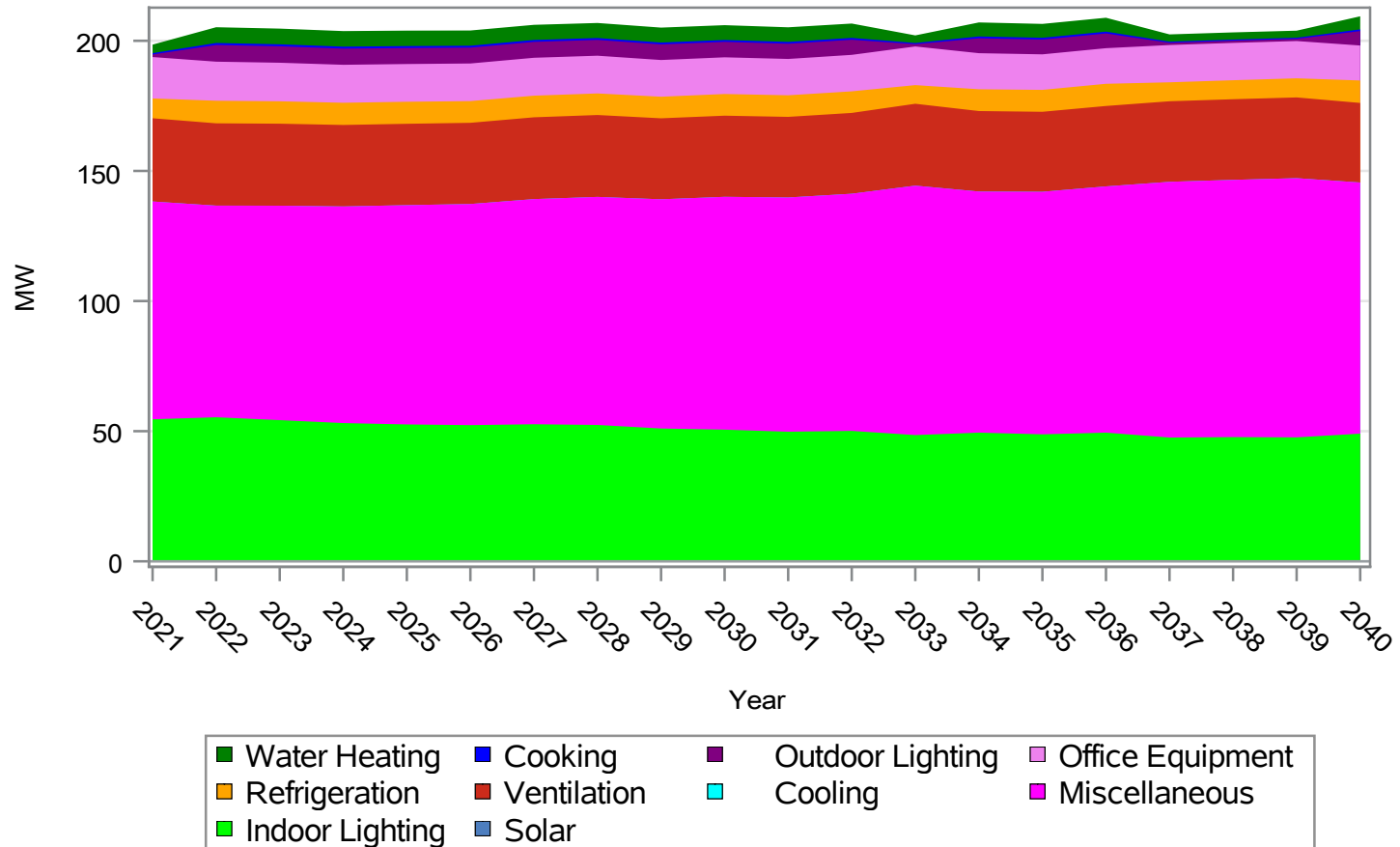
Forecast for Summer Coincident Peaks for Commercial LPS End Use (MW)



Forecast for Summer Coincident Peaks for Commercial LPS End Use (MW)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	116	6	34	1	9	0	57	15	-0.07	87
2022	115	6	34	1	9	0	56	15	-0.07	88
2023	115	6	34	1	9	0	56	15	-0.08	89
2024	114	6	34	1	9	0	55	15	-0.25	90
2025	113	6	34	1	9	0	54	15	-0.09	91
2026	111	6	33	1	9	0	54	15	-0.10	92
2027	110	6	34	1	8	0	54	15	-0.11	93
2028	110	6	34	1	8	0	53	14	-0.13	95
2029	110	6	34	1	9	0	54	15	-0.46	97
2030	110	6	34	1	9	0	53	14	-0.52	98
2031	108	6	33	1	8	0	52	14	-0.18	97
2032	106	6	33	1	8	0	52	14	-0.20	98
2033	106	5	33	1	8	0	51	14	-0.23	99
2034	110	5	33	1	9	0	51	14	-0.26	100
2035	111	5	34	1	9	0	52	14	-0.96	103
2036	109	5	33	1	9	0	51	14	-0.33	101
2037	107	5	33	1	9	0	51	14	-0.37	102
2038	106	5	33	1	9	0	51	14	-0.42	103
2039	106	5	33	1	9	0	51	14	-0.47	103
2040	109	5	34	1	9	0	52	14	-1.76	107

Forecast for Winter Coincident Peaks for Commercial LPS End Use (MW)

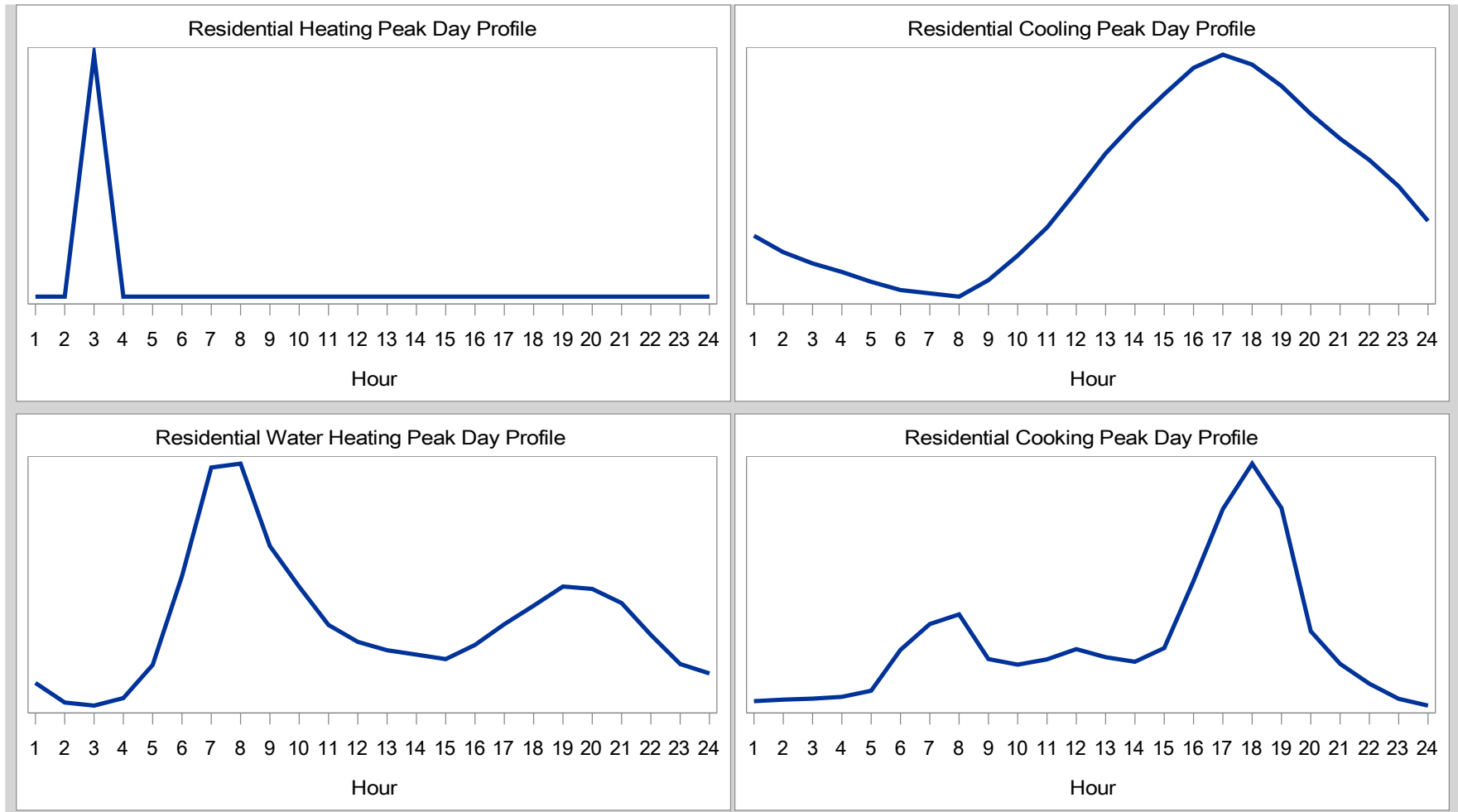


Forecast for Winter Coincident Peaks for Commercial LPS End Use (MW)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2021	0	3	32	1	8	1	55	16	-0.03	84
2022	0	6	32	1	9	6	55	15	0.00	81
2023	0	6	32	1	9	6	54	15	0.00	82
2024	0	6	31	1	9	6	53	15	0.00	83
2025	0	6	31	1	8	6	53	14	0.00	84
2026	0	6	31	1	8	6	52	14	0.00	85
2027	0	6	31	1	8	6	53	15	0.00	87
2028	0	6	31	1	8	6	52	15	0.00	88
2029	0	6	31	1	8	6	51	14	0.00	88
2030	0	6	31	1	8	6	51	14	0.00	89
2031	0	6	31	1	8	6	50	14	0.00	90
2032	0	6	31	1	8	6	50	14	0.00	91
2033	0	3	31	0	7	1	49	15	-0.11	96
2034	0	5	31	1	8	6	49	14	0.00	93
2035	0	5	31	1	8	6	49	14	0.00	93
2036	0	5	31	1	9	6	49	14	0.00	95
2037	0	3	31	0	7	1	48	14	-0.18	98
2038	0	3	31	0	7	1	48	14	-0.20	99
2039	0	3	31	0	7	1	48	14	-0.23	100
2040	0	5	31	1	9	6	49	13	0.00	96

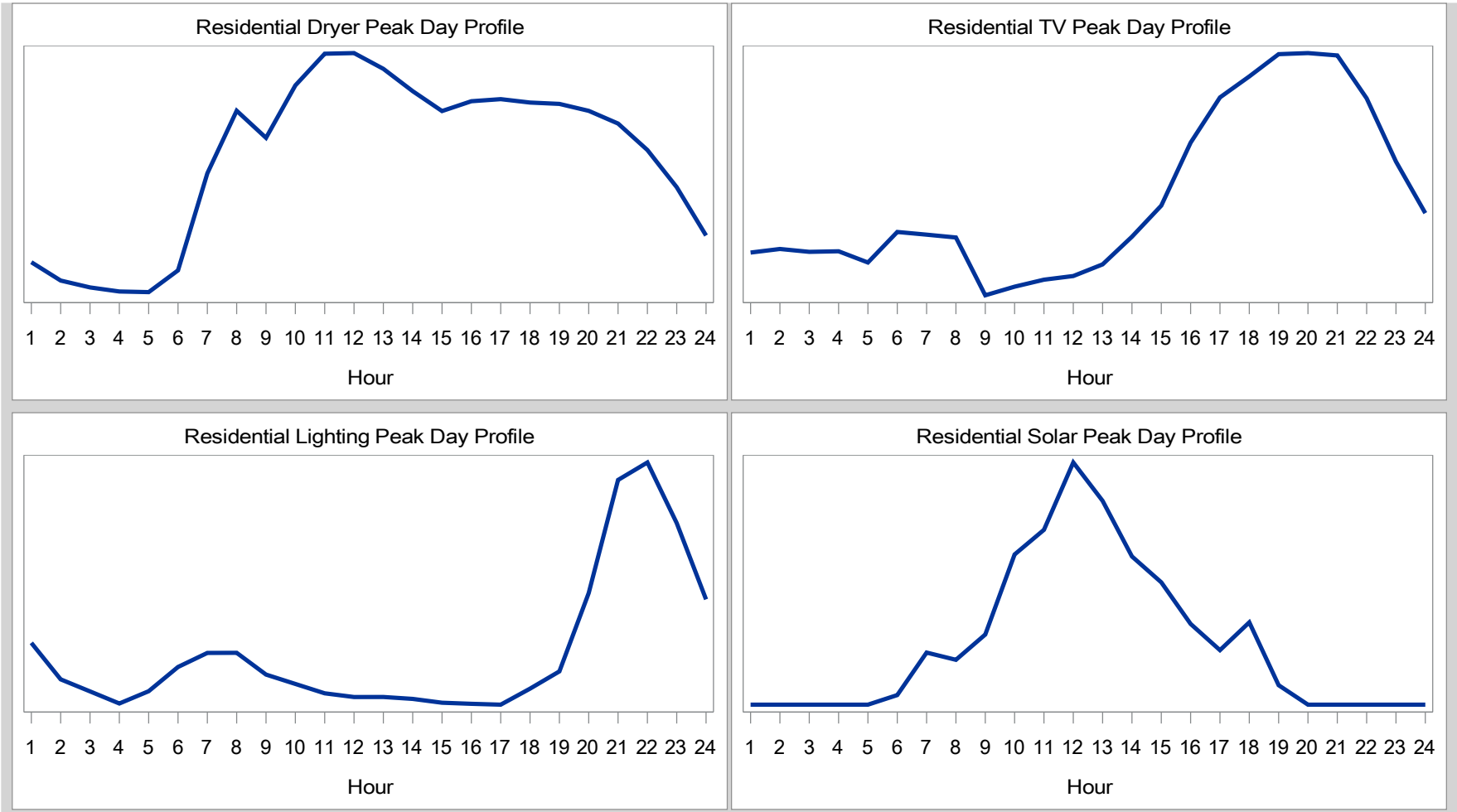
Load Profile by Class and End Uses on System Peak Days²⁰

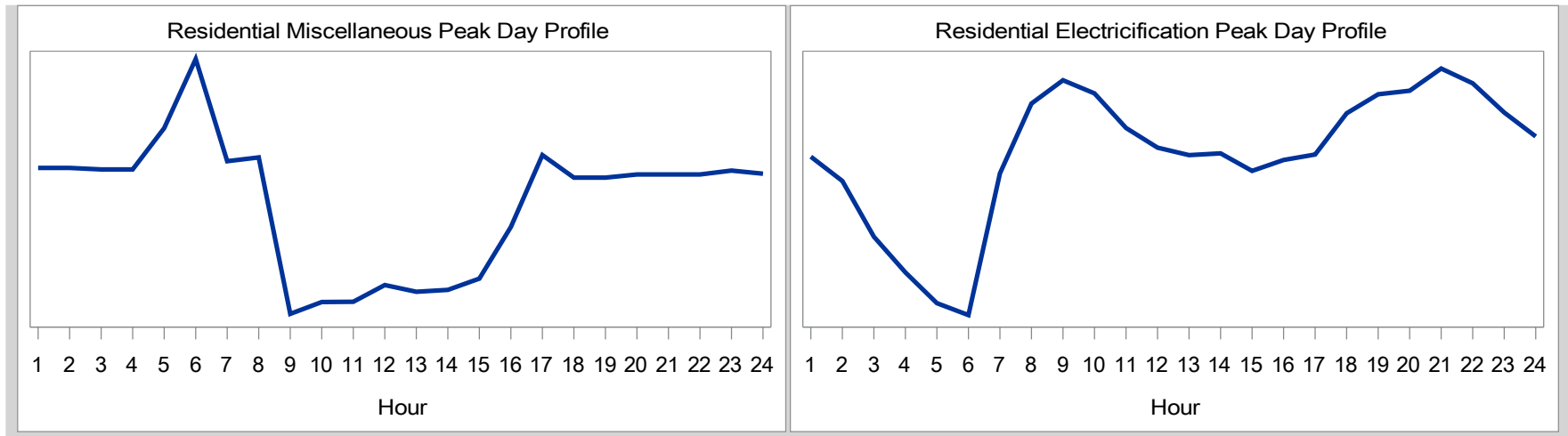
Profile Shapes for Residential End Uses



²⁰20 CSR 4240-22.030(7)(A)7





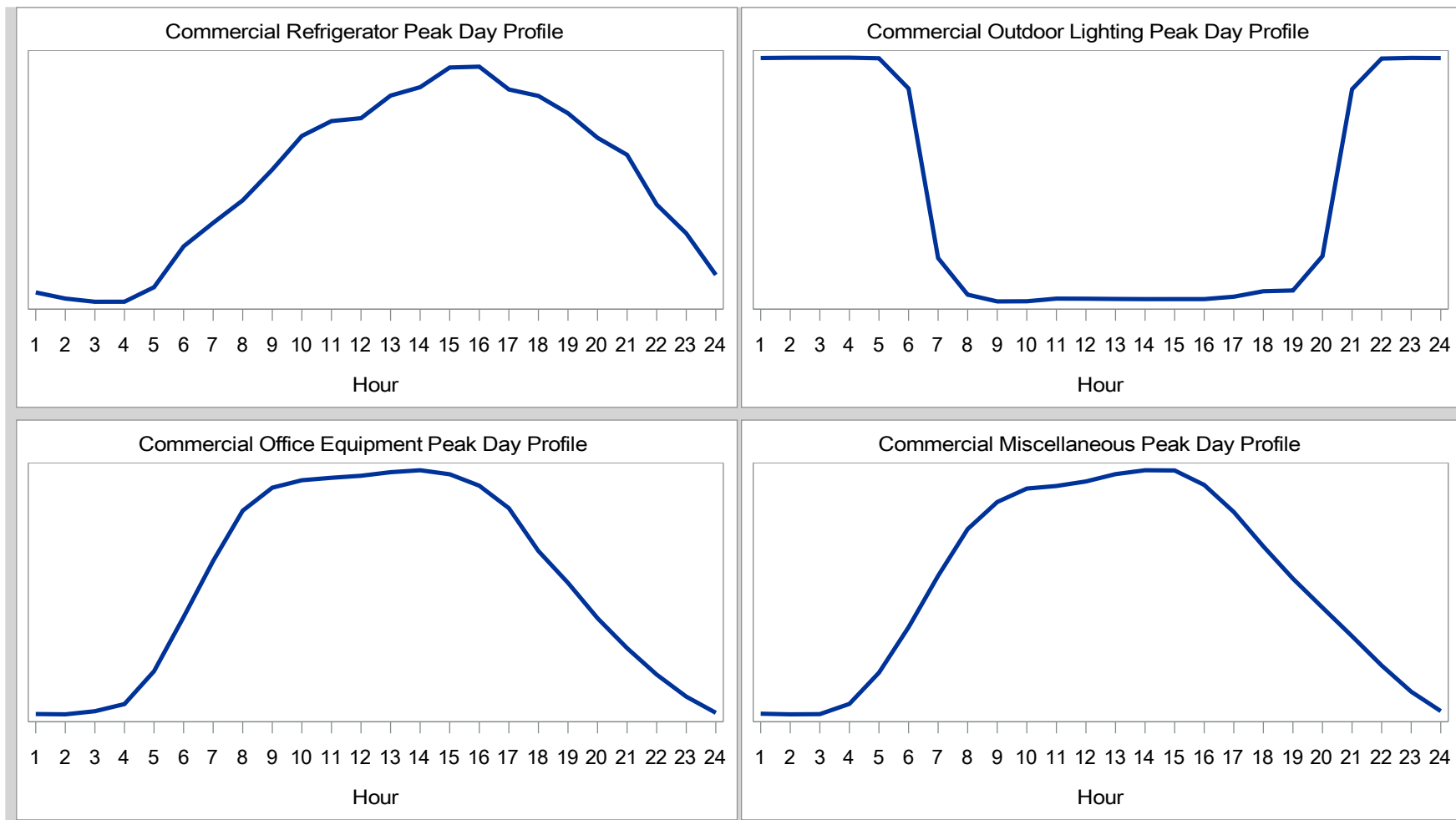


System Peak Day by Residential End Use (MW)

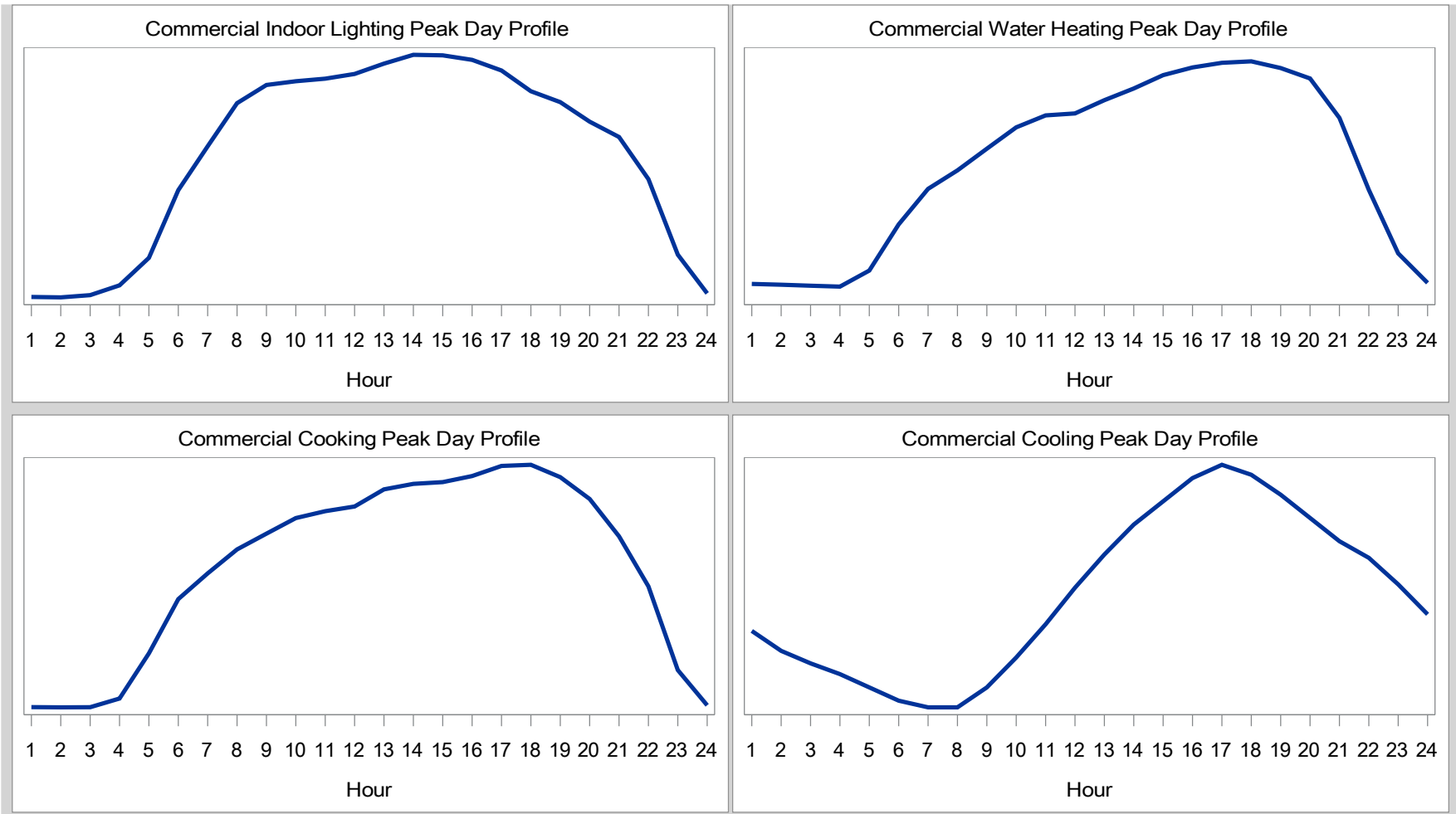
HE	Heating	Cooling	Water Heating	Cooking	Refrigerator	Freezer	Dishwashing	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	0	1,586	62	21	113	21	22	0	15	67	78	0.00	289	3
2	0	1,478	55	22	113	21	7	0	7	68	49	0.00	290	3
3	0	1,406	54	22	114	20	2	0	4	67	40	0.00	290	2
4	0	1,352	57	23	114	20	1	1	2	68	30	0.00	291	2
5	0	1,289	70	26	115	18	1	2	1	65	40	0.00	298	1
6	0	1,235	107	46	115	18	19	6	12	72	60	-0.74	308	1
7	0	1,215	152	59	115	18	26	11	58	72	71	-4.04	295	3
8	0	1,195	154	63	115	19	49	15	88	71	71	-3.48	296	4
9	0	1,319	121	42	116	22	53	12	76	59	54	-5.49	276	4
10	0	1,490	104	39	115	24	52	12	101	61	46	-11.74	278	4
11	0	1,683	88	42	115	26	40	11	116	62	39	-13.66	278	4
12	0	1,933	81	47	114	27	37	9	116	63	36	-18.90	280	3
13	0	2,193	77	43	114	29	41	8	108	66	36	-15.88	278	3
14	0	2,408	75	41	115	31	42	8	98	72	34	-11.54	278	3
15	0	2,601	74	47	116	32	31	7	88	78	31	-9.52	280	3
16	0	2,782	79	80	118	33	32	8	93	92	30	-6.28	287	3
17	0	2,872	88	114	119	33	31	8	94	101	30	-4.24	296	3
18	0	2,805	96	136	121	32	44	8	92	106	42	-6.40	293	4
19	0	2,658	104	115	120	30	80	8	91	111	56	-1.51	294	4
20	0	2,466	103	55	120	29	88	7	88	111	120	0.00	294	4
21	0	2,296	97	40	119	28	78	6	82	111	211	0.00	294	4
22	0	2,150	84	30	121	27	48	3	70	102	225	0.00	295	4
23	0	1,971	72	23	120	25	30	1	52	88	177	0.00	296	4
24	0	1,734	68	19	119	23	26	0	29	77	115	0.00	296	4

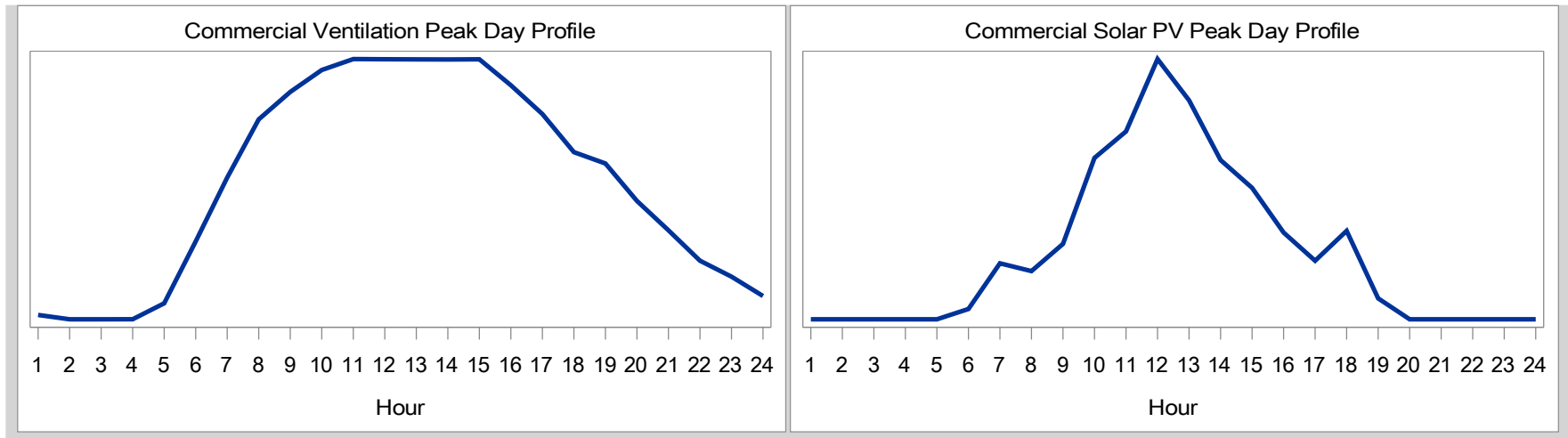
Load Profile by Class and End Uses on System Peak Days²⁰

Profile Shapes for Commercial End Uses



²⁰20 CSR 4240-22.030(7)(A)7



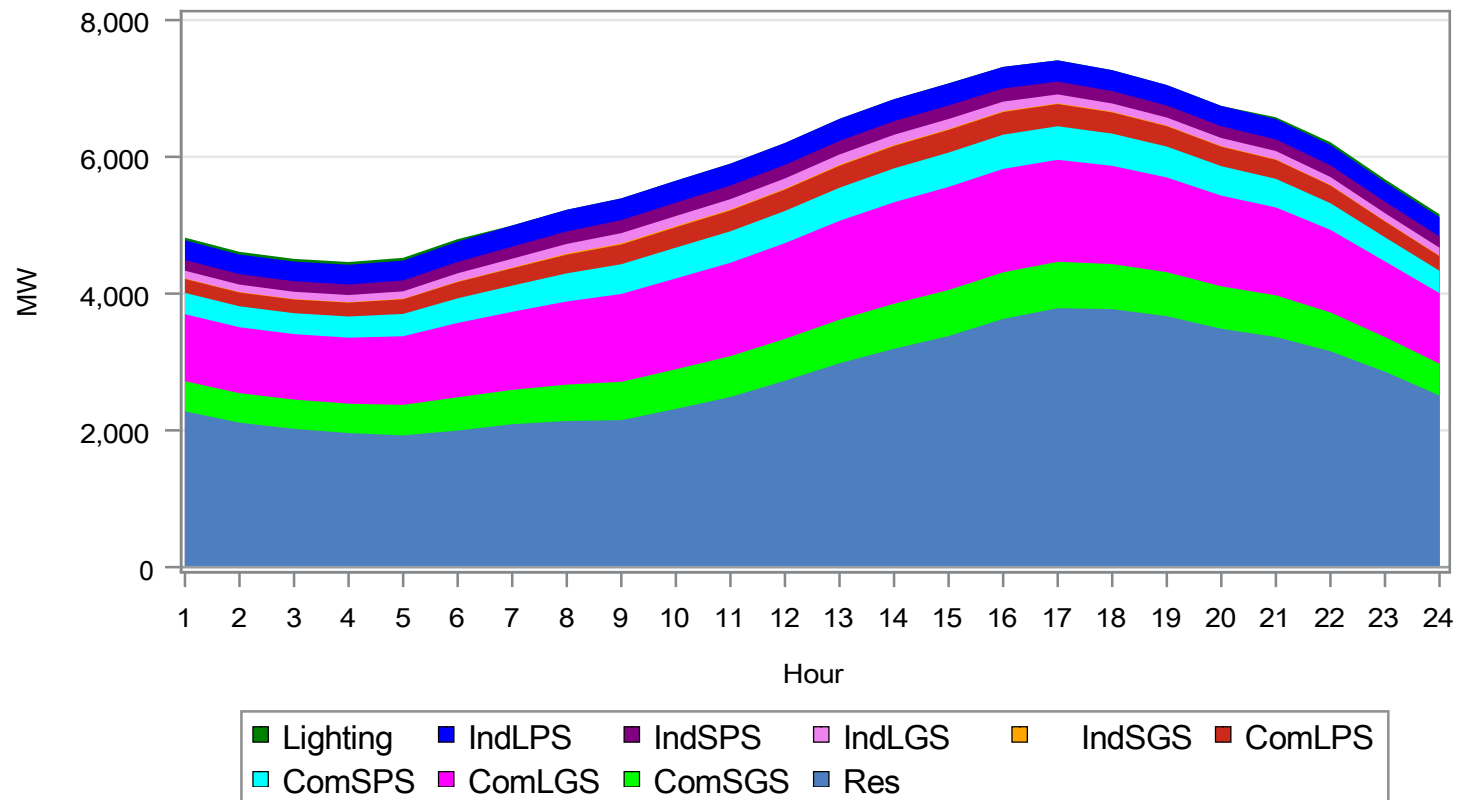


System Peak Day by Commercial End Use (MW)

HE	Refrigerator	Outdoor_Lighting	Office_Equipment	Miscellaneous	Indoor_Lighting	Water_Heating	Cooking	Cooling	Ventilation	Solar_PV
1	123	81	79	340	87	4	0	987	234	0.00
2	122	81	80	340	87	4	0	956	234	0.00
3	121	81	80	341	90	4	0	938	234	0.00
4	122	82	82	355	105	4	0	923	235	0.00
5	126	82	88	393	145	9	3	904	240	0.00
6	137	72	97	449	245	24	6	884	259	-0.96
7	143	15	107	512	310	36	7	874	279	-5.24
8	150	2	117	570	374	42	9	876	297	-4.52
9	159	0	121	608	404	49	10	917	307	-7.13
10	168	0	123	623	409	56	10	967	314	-15.24
11	172	1	123	626	413	60	11	1,023	317	-17.73
12	172	1	123	631	419	61	11	1,084	316	-24.53
13	178	1	124	639	434	65	12	1,139	316	-20.62
14	180	1	124	643	447	69	12	1,189	316	-14.98
15	185	1	123	643	446	73	12	1,227	315	-12.36
16	185	1	121	625	439	76	13	1,266	308	-8.15
17	179	2	117	592	423	77	13	1,288	299	-5.50
18	178	4	110	550	393	78	13	1,272	288	-8.31
19	173	4	104	511	377	76	13	1,239	284	-1.97
20	167	15	98	477	348	72	11	1,200	273	0.00
21	162	72	93	442	326	59	9	1,161	265	0.00
22	149	82	88	407	264	36	7	1,135	256	0.00
23	142	83	84	376	152	15	2	1,091	252	0.00
24	131	83	82	353	95	5	0	1,043	246	0.00

Summer and Winter Peak Day Profiles – System by Class, Class by End Use – 2021, 2026, 2031, 2040²¹

Load Profiles for Summer 2021 System Peak Day (MW)

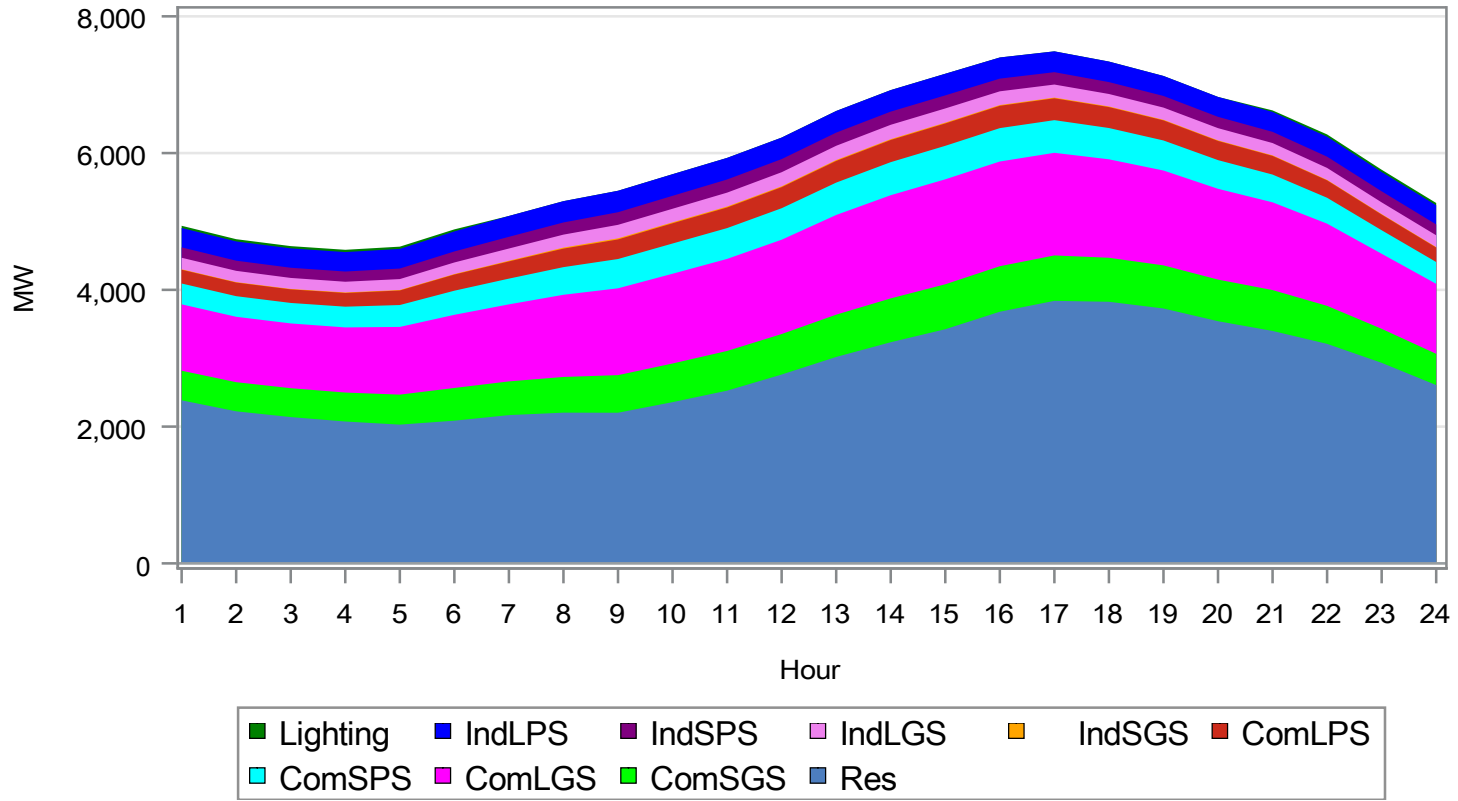


²¹20 CSR 4240-22.030(7)(A)7

Load Profiles for Summer 2021 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,278	440	980	312	204	7	114	157	288	39
2	2,112	432	964	307	201	7	109	154	286	40
3	2,022	428	957	306	200	7	107	154	287	40
4	1,960	430	965	310	203	7	104	154	289	40
5	1,927	446	1,004	326	214	7	109	159	291	40
6	1,997	488	1,087	360	238	8	120	167	298	35
7	2,090	502	1,142	383	253	11	130	177	309	0
8	2,137	532	1,216	411	273	16	141	184	316	0
9	2,149	561	1,284	436	289	17	148	191	318	0
10	2,314	580	1,328	450	298	15	149	196	321	0
11	2,488	598	1,364	461	305	15	151	199	320	0
12	2,726	612	1,399	471	312	14	150	199	320	0
13	2,982	637	1,445	485	321	14	151	199	322	0
14	3,193	659	1,483	496	328	13	150	200	321	0
15	3,379	674	1,507	502	332	13	147	198	322	0
16	3,630	682	1,512	501	331	12	140	193	315	0
17	3,787	679	1,491	491	324	11	130	188	311	0
18	3,773	659	1,436	471	310	10	120	181	306	0
19	3,669	644	1,385	452	298	9	118	177	299	0
20	3,485	620	1,326	431	285	9	119	172	297	0
21	3,366	609	1,286	418	277	8	121	170	297	26
22	3,157	567	1,208	390	258	7	118	171	297	40
23	2,858	506	1,106	353	232	7	114	168	287	40
24	2,509	465	1,032	327	214	7	116	165	285	41

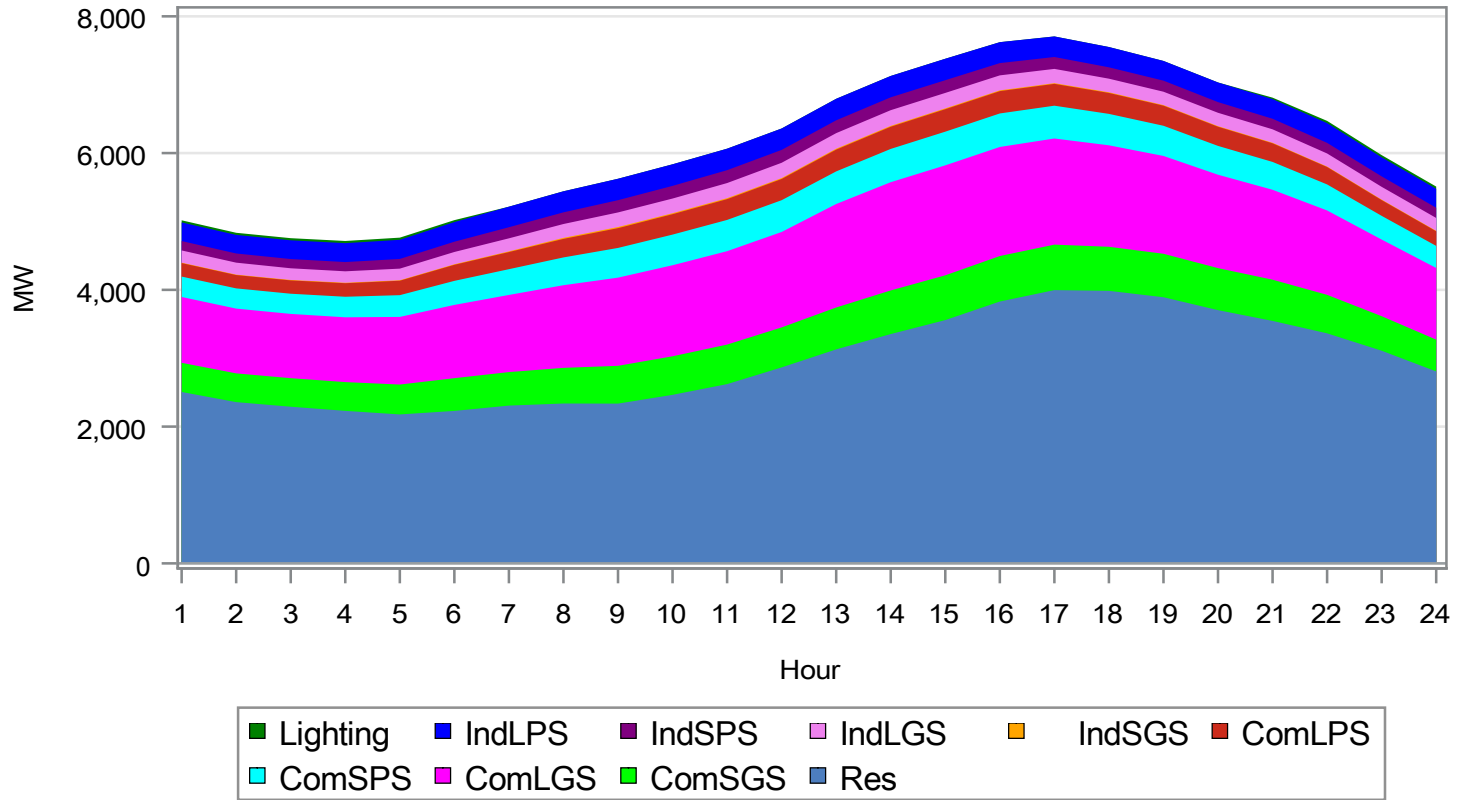
Load Profiles for Summer 2026 System Peak Day (MW)



Load Profiles for Summer 2026 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,384	433	971	304	201	6	169	152	283	33
2	2,223	426	956	301	199	6	165	149	282	33
3	2,139	422	947	300	198	6	161	149	284	33
4	2,074	424	952	303	201	7	157	149	285	33
5	2,029	439	990	320	213	7	160	154	287	33
6	2,087	479	1,070	353	236	8	169	161	293	29
7	2,168	493	1,127	376	252	10	179	171	305	0
8	2,204	522	1,201	405	271	15	189	178	312	0
9	2,203	550	1,270	428	287	16	197	185	314	0
10	2,358	565	1,313	442	296	14	198	189	316	0
11	2,526	581	1,346	451	302	14	204	192	316	0
12	2,761	592	1,379	460	308	12	206	192	315	0
13	3,018	619	1,458	473	317	13	209	192	316	0
14	3,234	641	1,509	484	324	12	210	193	315	0
15	3,424	657	1,535	490	328	12	207	191	316	0
16	3,680	666	1,531	488	326	11	201	185	310	0
17	3,839	664	1,501	478	320	10	191	181	304	0
18	3,826	643	1,440	458	306	10	182	174	300	0
19	3,727	631	1,387	440	294	8	179	170	293	0
20	3,541	609	1,327	420	281	8	179	165	291	0
21	3,399	598	1,283	406	273	8	180	164	292	22
22	3,210	556	1,202	378	254	7	175	165	292	33
23	2,932	498	1,097	344	229	7	172	162	282	33
24	2,607	457	1,023	319	211	7	173	159	280	33

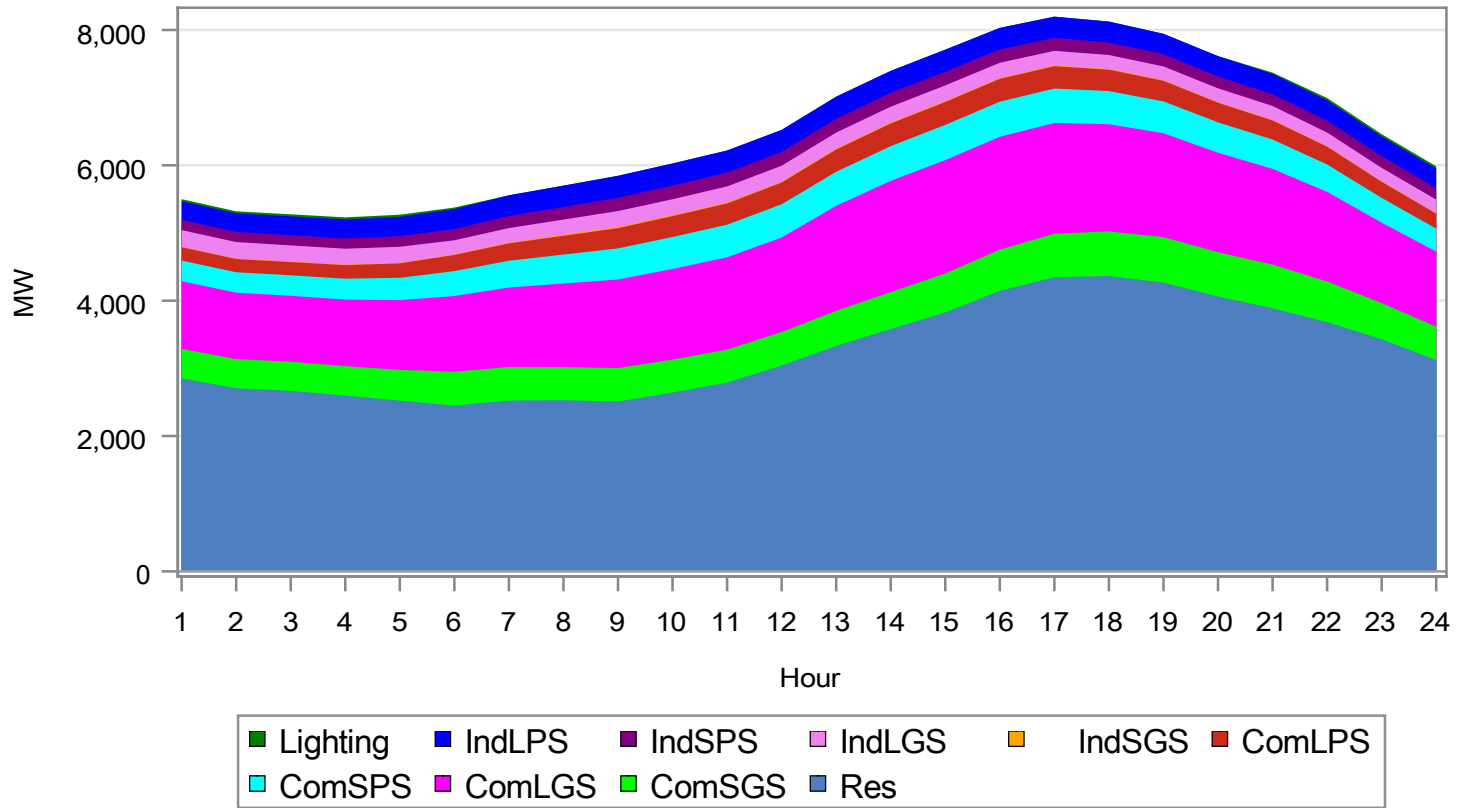
Load Profiles for Summer 2031 System Peak Day (MW)



Load Profiles for Summer 2031 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,506	427	963	298	197	6	179	137	272	31
2	2,358	420	947	296	195	6	175	134	272	31
3	2,291	418	940	295	195	6	171	135	274	31
4	2,230	421	947	300	198	7	167	135	277	32
5	2,178	437	989	318	211	6	171	141	280	32
6	2,230	479	1,071	352	235	8	180	150	287	28
7	2,307	490	1,128	376	251	10	191	163	300	0
8	2,338	521	1,209	406	271	15	203	170	308	0
9	2,336	553	1,290	434	290	16	213	180	313	0
10	2,465	564	1,332	448	299	14	214	185	315	0
11	2,621	578	1,366	457	304	14	221	188	314	0
12	2,866	585	1,395	465	310	13	224	188	313	0
13	3,129	612	1,513	477	318	13	227	188	314	0
14	3,353	638	1,583	487	325	12	230	188	312	0
15	3,558	655	1,608	493	328	12	226	186	314	0
16	3,829	666	1,595	490	326	11	219	179	306	0
17	3,996	665	1,552	480	319	10	208	174	301	0
18	3,985	644	1,484	460	306	10	199	166	297	0
19	3,892	636	1,430	442	294	9	195	162	288	0
20	3,703	615	1,366	421	281	8	196	156	287	0
21	3,545	603	1,315	407	273	8	197	155	288	21
22	3,364	563	1,234	381	255	7	191	156	289	32
23	3,109	505	1,121	347	230	7	187	153	279	33
24	2,807	465	1,048	323	213	7	189	149	277	33

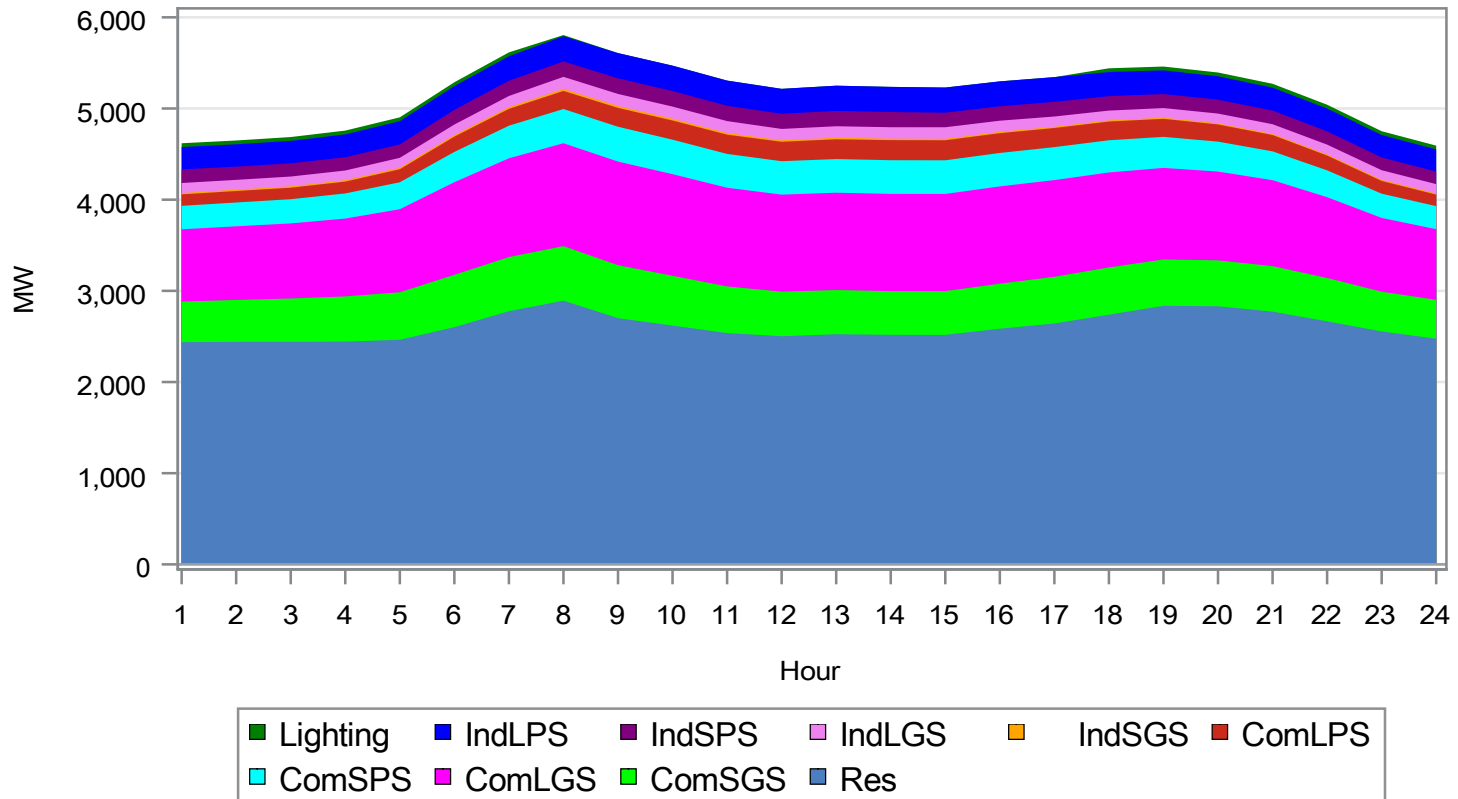
Load Profiles for Summer 2040 System Peak Day (MW)



Load Profiles for Summer 2040 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,851	437	1,001	305	196	7	247	152	274	30
2	2,706	431	981	302	195	7	245	150	274	30
3	2,668	430	974	303	195	7	240	151	277	31
4	2,597	435	983	310	200	7	236	152	280	31
5	2,523	455	1,029	330	213	7	239	158	284	31
6	2,450	500	1,119	368	238	8	210	167	293	24
7	2,525	497	1,173	396	256	11	216	178	306	0
8	2,529	491	1,234	428	277	17	223	186	315	0
9	2,510	493	1,309	460	299	18	235	197	324	0
10	2,642	487	1,339	473	308	16	235	202	326	0
11	2,790	487	1,364	482	314	15	237	205	325	0
12	3,042	495	1,397	491	320	14	236	205	324	0
13	3,331	519	1,552	503	328	15	236	205	326	0
14	3,582	547	1,641	514	334	14	235	205	324	0
15	3,826	576	1,675	520	338	13	232	204	325	0
16	4,145	609	1,667	519	336	12	226	198	318	0
17	4,348	642	1,636	509	330	11	216	192	313	0
18	4,363	661	1,583	490	316	11	207	185	309	0
19	4,268	670	1,535	471	303	9	204	181	301	0
20	4,062	655	1,469	449	289	9	204	176	300	0
21	3,887	645	1,415	434	281	8	206	175	300	18
22	3,685	600	1,323	405	262	7	203	176	301	33
23	3,430	535	1,188	367	237	7	200	173	291	33
24	3,124	491	1,110	341	219	7	202	170	289	33

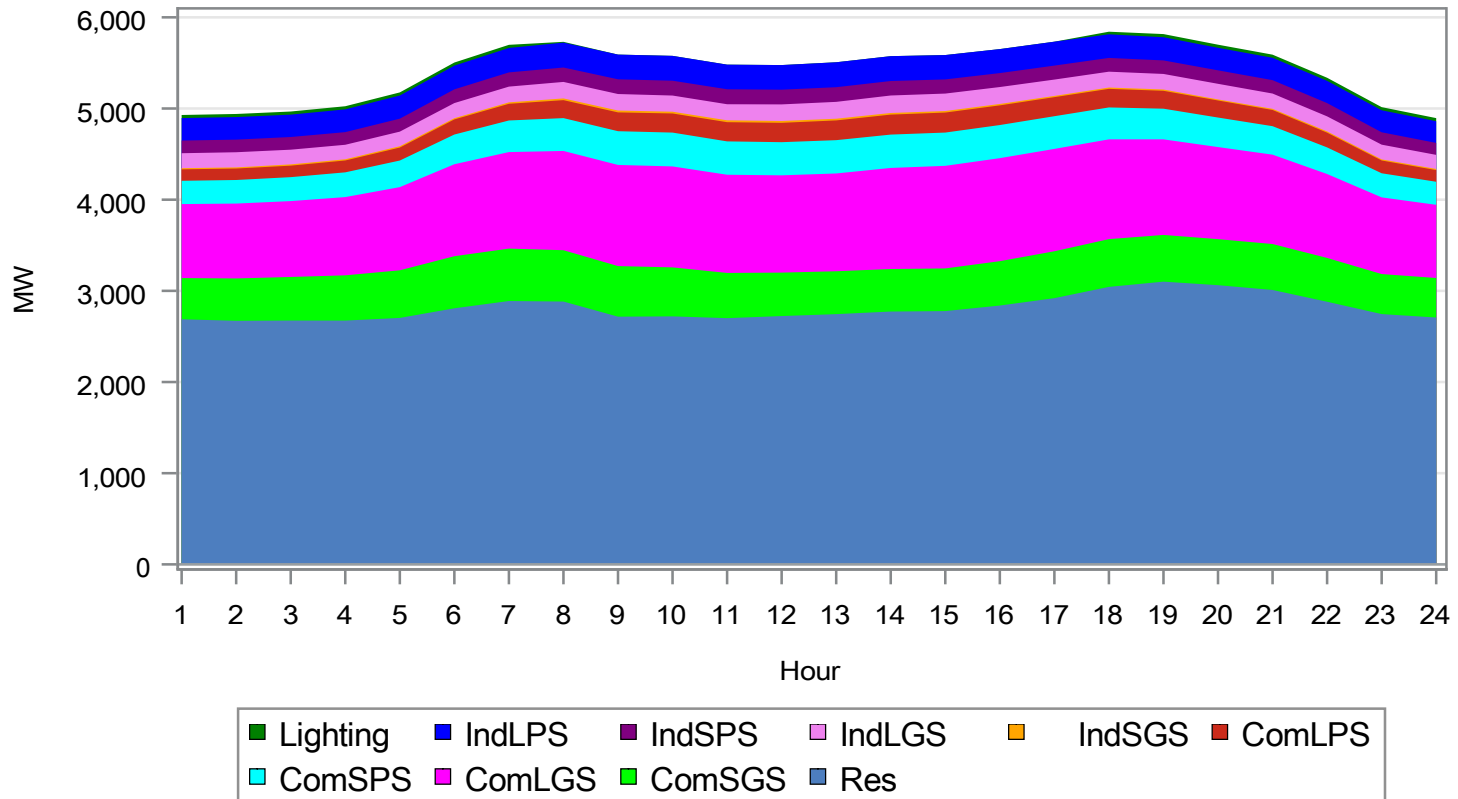
Load Profiles for Winter 2021 System Peak Day (MW)



Load Profiles for Winter 2021 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,437	445	793	257	126	15	110	149	245	42
2	2,440	460	808	261	126	15	107	145	245	42
3	2,440	476	824	266	126	15	108	145	246	42
4	2,443	496	854	275	130	15	106	145	251	42
5	2,463	521	911	296	143	15	110	147	255	42
6	2,602	574	1,016	332	167	16	117	161	260	42
7	2,776	594	1,083	358	185	18	124	167	269	42
8	2,892	598	1,128	375	199	21	133	169	276	13
9	2,700	581	1,137	382	207	21	132	171	277	0
10	2,619	546	1,114	379	210	19	133	171	278	0
11	2,537	512	1,082	371	211	18	131	168	276	0
12	2,502	489	1,064	367	213	16	124	166	273	0
13	2,524	485	1,068	369	217	17	126	168	277	0
14	2,518	479	1,066	370	220	16	125	167	276	0
15	2,517	480	1,066	369	220	15	127	160	276	0
16	2,585	494	1,067	367	217	14	122	158	273	0
17	2,642	512	1,061	362	210	13	112	161	271	0
18	2,738	518	1,041	354	205	13	107	158	265	41
19	2,836	508	1,004	340	198	13	105	154	260	42
20	2,831	504	974	328	189	12	107	152	256	42
21	2,772	499	943	316	179	12	107	150	251	42
22	2,666	475	886	294	163	11	108	146	250	42
23	2,554	436	809	266	140	12	106	140	246	42
24	2,475	426	775	253	127	12	103	137	243	42

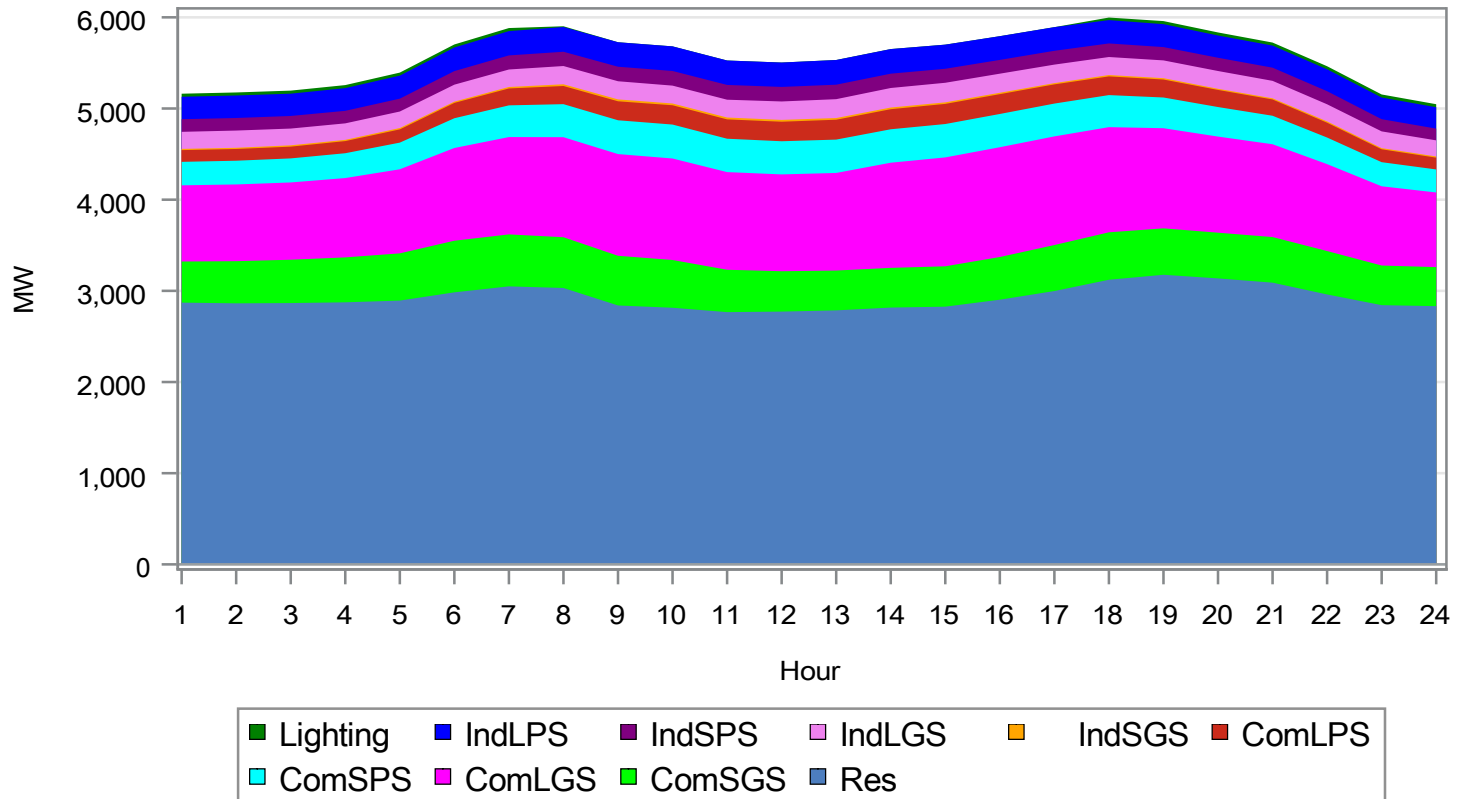
Load Profiles for Winter 2026 System Peak Day (MW)



Load Profiles for Winter 2026 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,688	452	812	255	126	13	164	139	247	34
2	2,671	464	821	259	126	12	166	138	247	34
3	2,674	478	832	262	126	14	161	139	246	34
4	2,674	496	858	272	130	13	159	139	250	34
5	2,703	522	912	291	143	14	160	142	254	34
6	2,809	571	1,009	326	166	13	166	150	260	34
7	2,888	575	1,059	346	183	16	172	156	268	34
8	2,883	563	1,089	360	197	19	181	158	273	9
9	2,717	555	1,109	370	206	21	181	161	271	0
10	2,720	537	1,107	371	210	19	177	163	273	0
11	2,700	496	1,077	366	211	20	177	164	270	0
12	2,723	477	1,067	363	212	20	182	161	270	0
13	2,745	470	1,073	365	216	19	185	161	274	0
14	2,773	466	1,108	366	219	18	192	159	273	0
15	2,778	468	1,125	365	219	17	191	155	267	0
16	2,839	487	1,130	363	216	15	185	153	263	0
17	2,920	514	1,123	359	209	13	179	153	262	0
18	3,044	524	1,094	350	204	15	174	151	259	29
19	3,101	512	1,048	336	196	14	171	148	255	34
20	3,062	505	1,010	324	187	12	172	147	247	34
21	3,010	504	980	312	178	12	168	147	245	34
22	2,880	480	920	292	162	14	165	146	244	34
23	2,745	439	841	264	140	12	161	136	241	34
24	2,707	434	803	253	128	13	155	131	238	34

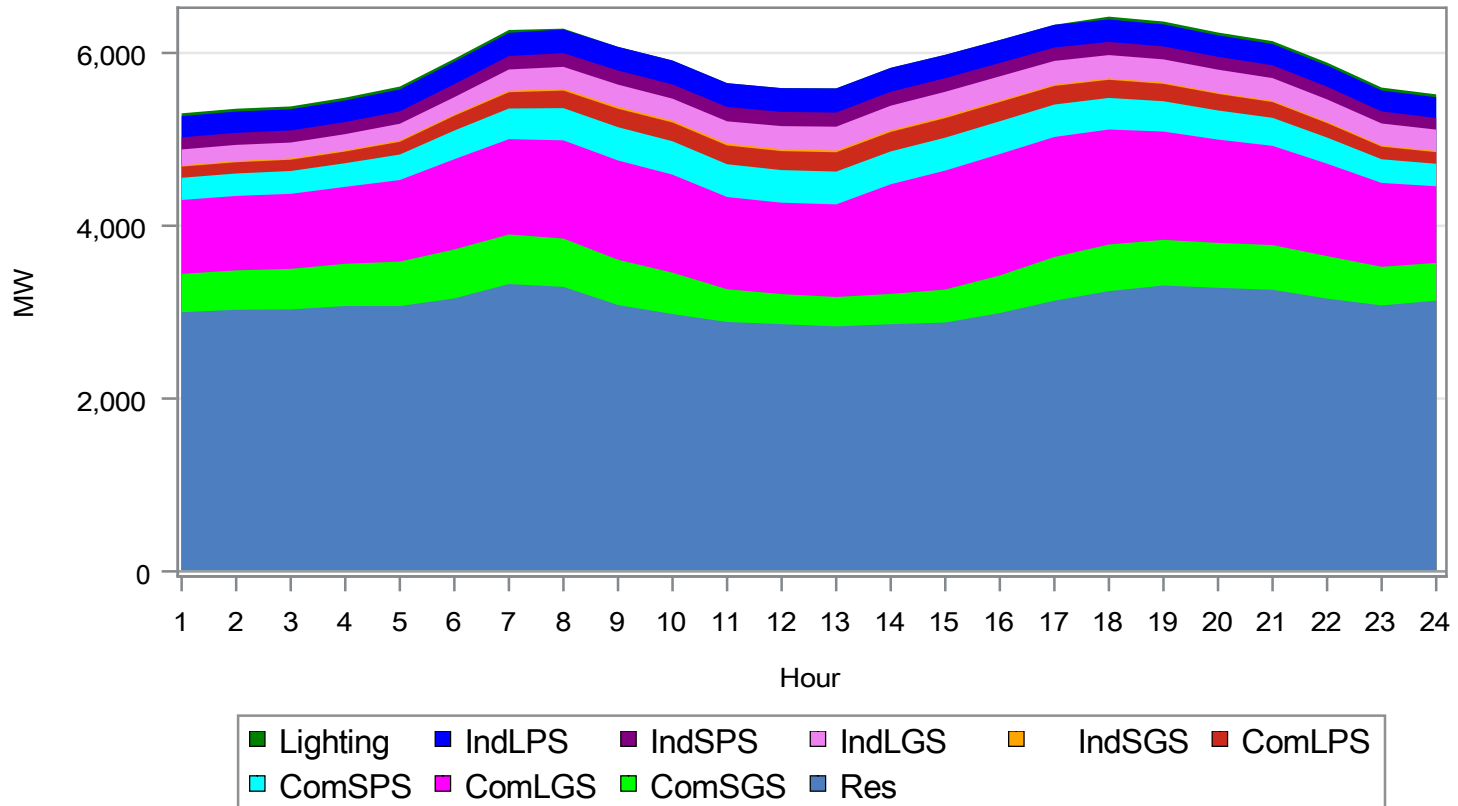
Load Profiles for Winter 2031 System Peak Day (MW)



Load Profiles for Winter 2031 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,871	451	835	258	129	13	187	138	246	34
2	2,863	463	841	260	129	13	189	138	247	34
3	2,866	475	848	264	129	14	184	138	245	34
4	2,874	493	870	273	133	14	181	138	249	34
5	2,893	518	922	292	145	15	181	141	252	34
6	2,984	566	1,017	327	168	14	186	149	259	34
7	3,049	570	1,068	348	185	16	192	155	266	34
8	3,032	557	1,097	362	199	19	200	157	271	8
9	2,840	545	1,115	371	208	21	199	159	269	0
10	2,814	524	1,113	372	212	19	196	161	270	0
11	2,766	465	1,071	366	212	20	195	162	268	0
12	2,772	443	1,062	364	214	20	202	159	268	0
13	2,786	437	1,070	366	218	19	207	159	271	0
14	2,816	436	1,153	367	220	18	214	157	270	0
15	2,827	443	1,194	366	221	17	215	153	265	0
16	2,903	468	1,204	365	217	16	209	151	260	0
17	2,998	505	1,192	360	211	14	203	151	259	0
18	3,122	520	1,154	351	205	15	198	149	256	28
19	3,176	509	1,098	337	197	15	195	146	252	34
20	3,137	501	1,054	324	188	12	195	145	244	34
21	3,090	500	1,018	312	179	13	191	145	242	34
22	2,960	476	953	292	163	14	188	143	240	34
23	2,843	435	869	264	142	13	183	134	238	34
24	2,832	428	819	253	130	13	176	129	234	34

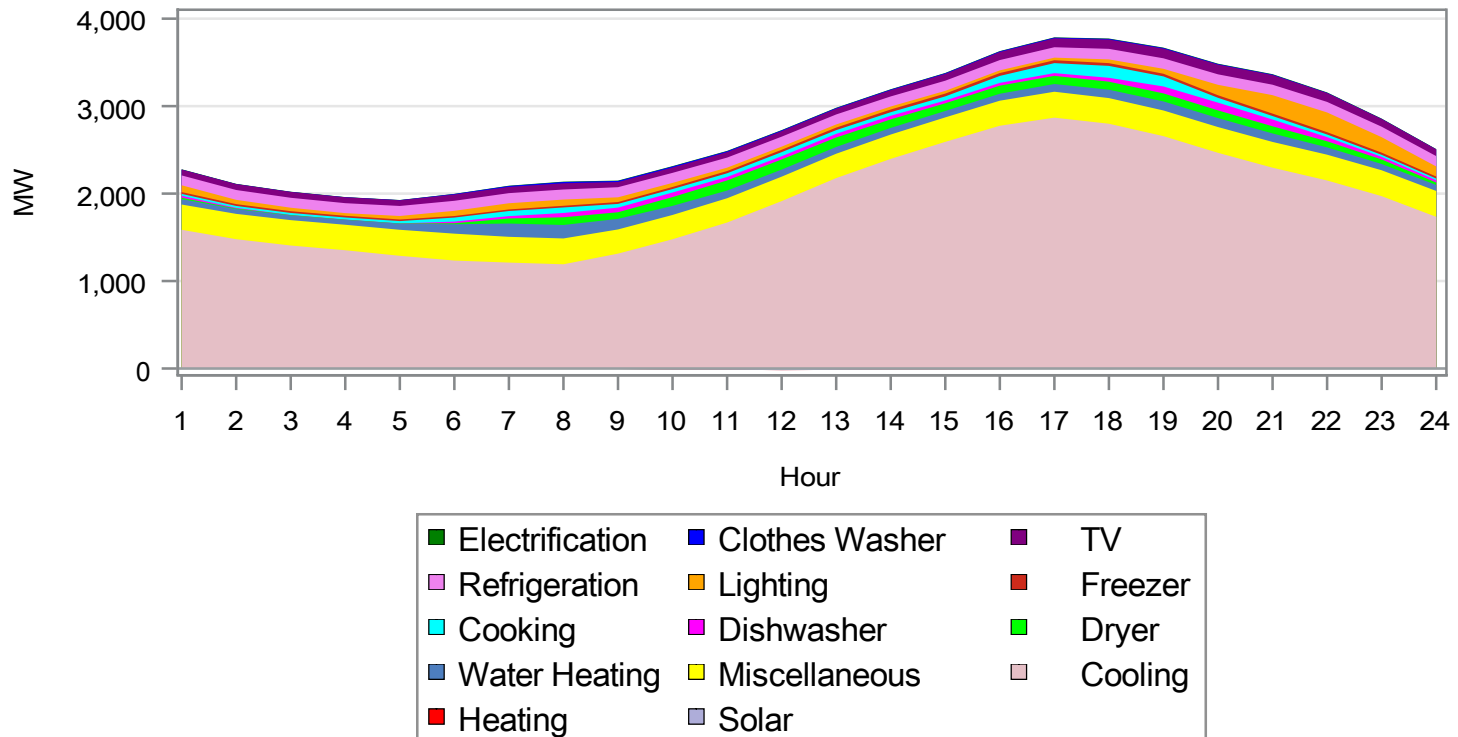
Load Profiles for Winter 2040 System Peak Day (MW)



Load Profiles for Winter 2040 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,999	444	856	257	130	14	184	140	246	33
2	3,028	456	861	260	130	14	187	139	247	33
3	3,032	470	868	264	131	15	183	140	245	33
4	3,071	489	891	274	135	14	187	140	250	33
5	3,071	515	944	295	148	16	193	143	254	33
6	3,159	567	1,045	332	171	15	201	151	260	33
7	3,326	574	1,103	355	188	17	246	156	268	33
8	3,292	560	1,137	373	203	21	254	159	274	10
9	3,083	524	1,149	385	213	23	257	163	274	0
10	2,978	479	1,134	387	217	21	255	165	276	0
11	2,886	379	1,067	379	218	23	256	167	275	0
12	2,861	348	1,058	378	219	23	267	164	275	0
13	2,835	341	1,071	380	223	21	275	164	279	0
14	2,860	350	1,269	381	225	20	284	161	277	0
15	2,880	382	1,376	381	226	19	286	158	271	0
16	2,989	436	1,405	380	222	17	281	155	265	0
17	3,132	506	1,389	375	215	15	275	155	264	0
18	3,243	539	1,331	366	209	16	270	152	260	33
19	3,309	528	1,253	351	201	16	268	149	255	33
20	3,282	520	1,196	337	192	13	268	149	248	33
21	3,259	518	1,148	325	182	14	263	149	246	33
22	3,157	492	1,069	303	167	15	259	148	245	33
23	3,078	447	970	274	146	14	254	139	243	34
24	3,132	437	888	260	134	14	247	134	240	34

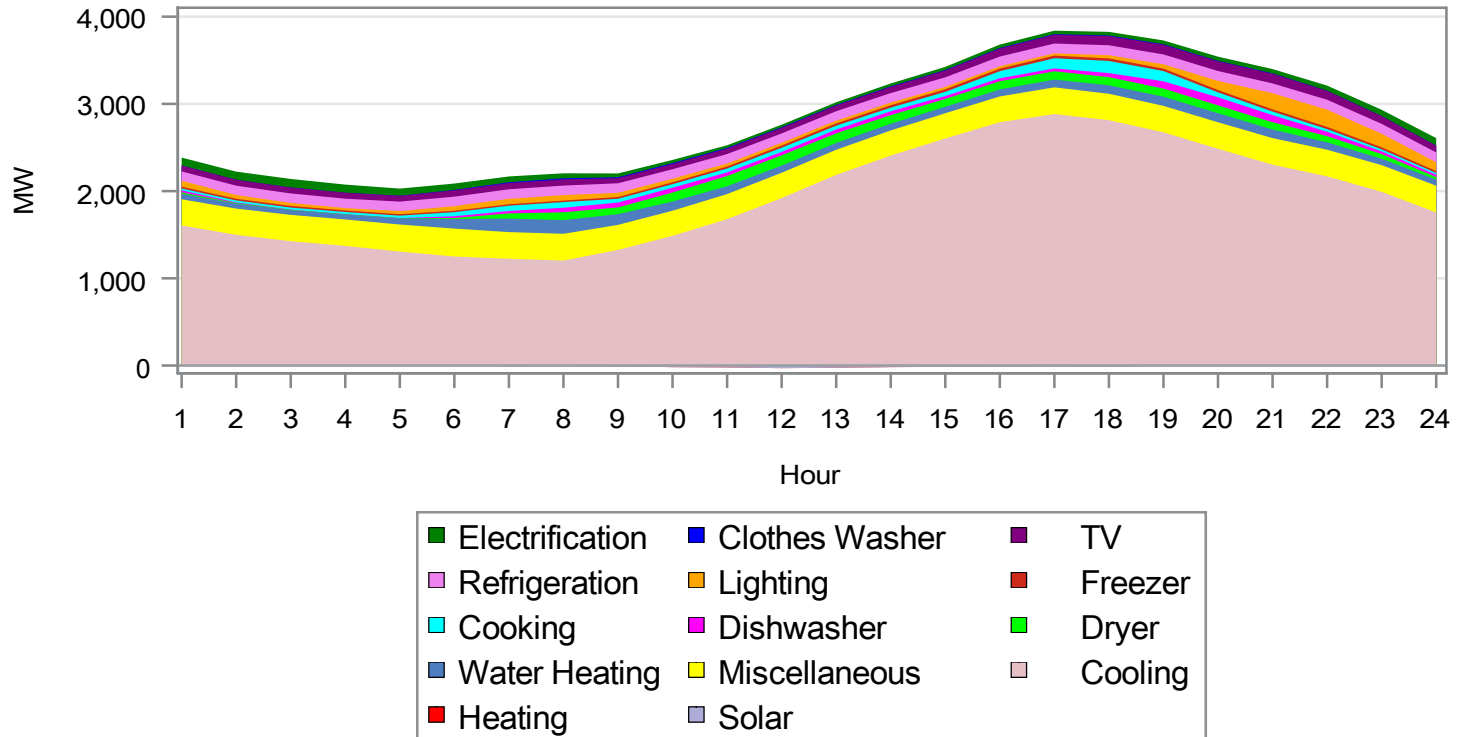
Summer 2021 System Peak Day: Residential End-Use Profiles
(MW)



Summer 2021 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	0	1,586	62	21	113	21	22	0	15	67	78	0.00	289	3
2	0	1,478	55	22	113	21	7	0	7	68	49	0.00	290	3
3	0	1,406	54	22	114	20	2	0	4	67	40	0.00	290	2
4	0	1,352	57	23	114	20	1	1	2	68	30	0.00	291	2
5	0	1,289	70	26	115	18	1	2	1	65	40	0.00	298	1
6	0	1,235	107	46	115	18	19	6	12	72	60	-0.74	308	1
7	0	1,215	152	59	115	18	26	11	58	72	71	-4.04	295	3
8	0	1,195	154	63	115	19	49	15	88	71	71	-3.48	296	4
9	0	1,319	121	42	116	22	53	12	76	59	54	-5.49	276	4
10	0	1,490	104	39	115	24	52	12	101	61	46	-11.74	278	4
11	0	1,683	88	42	115	26	40	11	116	62	39	-13.66	278	4
12	0	1,933	81	47	114	27	37	9	116	63	36	-18.90	280	3
13	0	2,193	77	43	114	29	41	8	108	66	36	-15.88	278	3
14	0	2,408	75	41	115	31	42	8	98	72	34	-11.54	278	3
15	0	2,601	74	47	116	32	31	7	88	78	31	-9.52	280	3
16	0	2,782	79	80	118	33	32	8	93	92	30	-6.28	287	3
17	0	2,872	88	114	119	33	31	8	94	101	30	-4.24	296	3
18	0	2,805	96	136	121	32	44	8	92	106	42	-6.40	293	4
19	0	2,658	104	115	120	30	80	8	91	111	56	-1.51	294	4
20	0	2,466	103	55	120	29	88	7	88	111	120	0.00	294	4
21	0	2,296	97	40	119	28	78	6	82	111	211	0.00	294	4
22	0	2,150	84	30	121	27	48	3	70	102	225	0.00	295	4
23	0	1,971	72	23	120	25	30	1	52	88	177	0.00	296	4
24	0	1,734	68	19	119	23	26	0	29	77	115	0.00	296	4

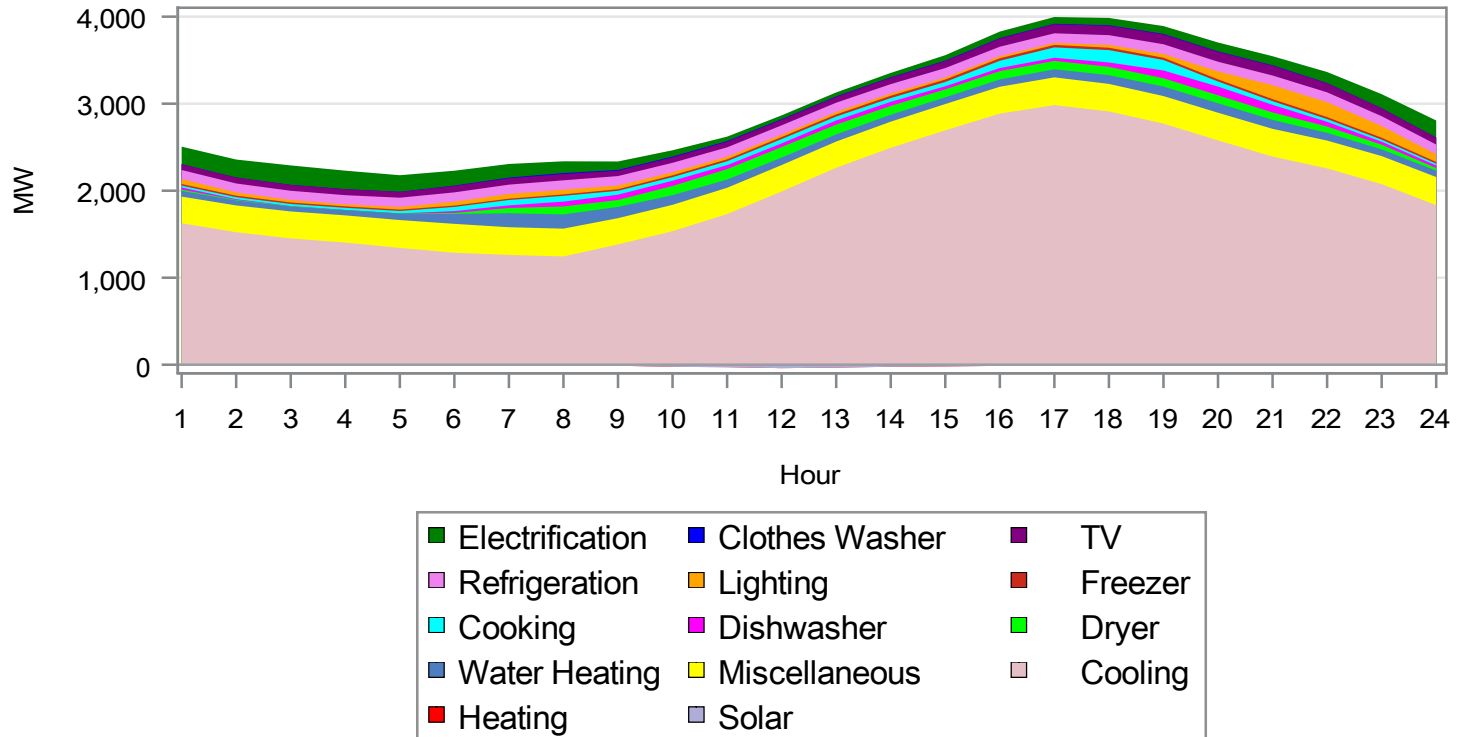
Summer 2026 System Peak Day: Residential End-Use Profiles
(MW)



Summer 2026 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	0	1,606	64	22	107	20	24	0	16	67	68	0.00	300	91
2	0	1,499	56	22	107	19	8	0	7	68	43	0.00	301	93
3	0	1,426	55	23	108	19	2	0	4	67	35	0.00	302	98
4	0	1,372	58	24	108	18	1	1	2	68	27	0.00	303	93
5	0	1,307	72	27	109	17	1	2	2	65	35	0.00	310	82
6	0	1,251	109	47	109	16	20	5	12	72	52	-1.18	320	73
7	0	1,231	155	60	110	17	28	9	59	72	62	-6.42	306	67
8	0	1,209	157	65	109	18	52	12	90	71	63	-5.53	307	57
9	0	1,335	123	43	110	20	56	10	77	59	48	-8.72	287	44
10	0	1,506	106	40	109	22	55	10	103	61	41	-18.65	288	36
11	0	1,700	90	43	109	24	42	9	118	62	34	-21.67	288	30
12	0	1,951	82	48	108	25	39	7	118	63	31	-29.96	289	30
13	0	2,211	79	44	108	27	43	6	110	65	31	-25.15	288	31
14	0	2,426	77	41	109	29	44	6	99	71	30	-18.27	288	33
15	0	2,619	75	48	110	30	33	6	89	78	27	-15.06	289	36
16	0	2,800	81	81	111	31	33	6	94	91	26	-9.93	296	40
17	0	2,890	89	117	113	30	33	7	95	101	26	-6.70	306	40
18	0	2,823	97	139	114	29	46	7	93	105	37	-10.13	303	41
19	0	2,677	105	117	113	28	83	6	93	110	49	-2.39	303	44
20	0	2,485	104	57	113	27	93	5	90	111	105	0.00	304	48
21	0	2,303	98	41	113	26	81	5	84	110	185	0.00	304	49
22	0	2,169	85	31	114	25	50	2	71	101	198	0.00	305	59
23	0	1,991	73	23	114	23	32	1	53	88	155	0.00	307	72
24	0	1,755	69	20	113	21	27	0	29	77	101	0.00	307	87

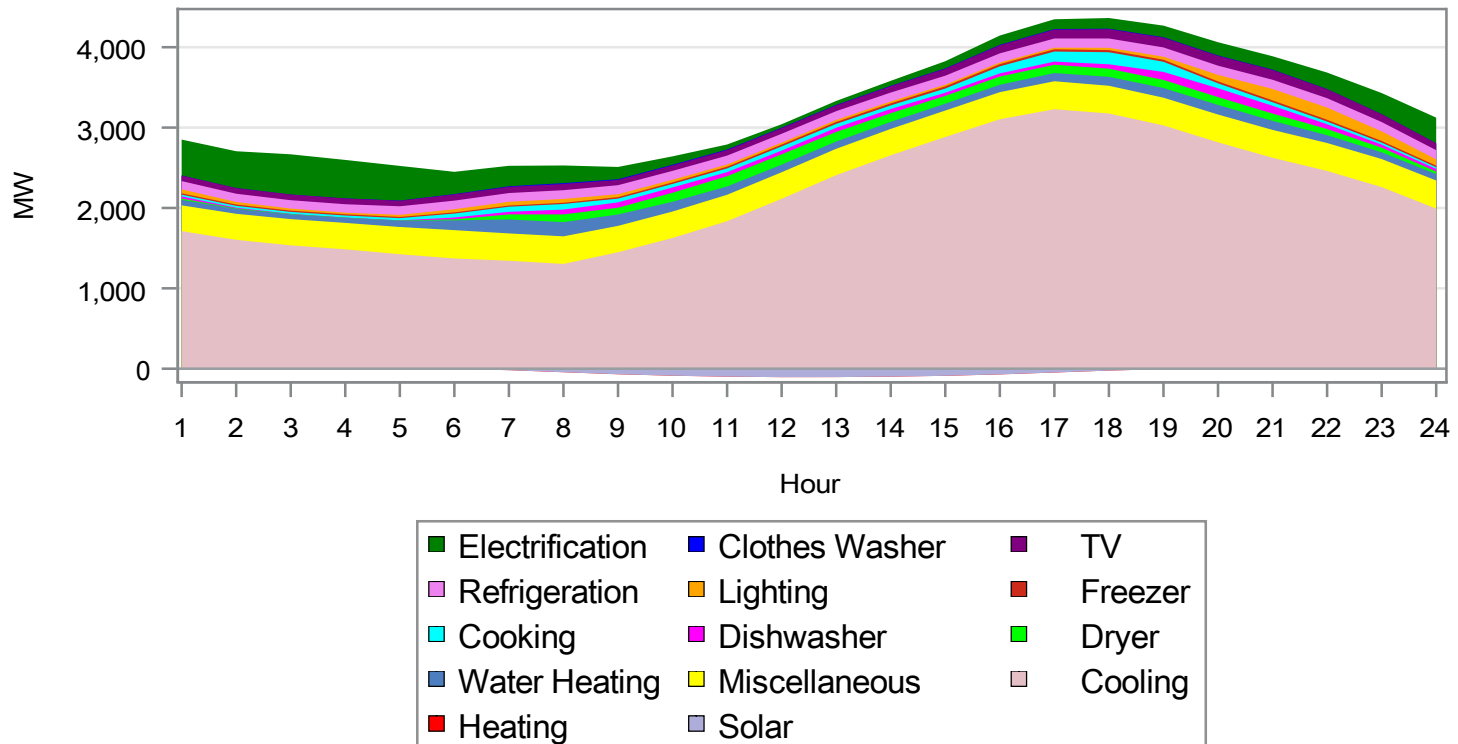
Summer 2031 System Peak Day: Residential End-Use Profiles
(MW)



Summer 2031 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	0	1,626	65	22	103	18	25	0	16	67	58	0.00	306	201
2	0	1,522	57	23	104	18	8	0	7	68	36	0.00	308	207
3	0	1,451	56	23	105	17	2	0	4	68	30	0.00	310	223
4	0	1,404	60	24	106	17	2	1	2	69	23	0.00	312	212
5	0	1,342	74	27	107	16	1	1	2	67	30	0.00	321	190
6	0	1,288	113	48	107	15	21	5	12	74	45	-1.54	332	171
7	0	1,270	161	61	108	16	30	8	60	73	54	-8.40	318	156
8	0	1,251	163	66	108	17	55	11	92	73	54	-7.25	320	135
9	0	1,394	129	45	109	19	61	9	80	61	41	-11.54	302	97
10	0	1,559	111	42	108	21	59	9	106	63	35	-24.65	303	72
11	0	1,760	94	44	108	23	45	8	122	64	30	-28.62	302	51
12	0	2,030	86	49	107	24	42	7	121	65	27	-39.50	304	43
13	0	2,297	82	45	107	25	47	6	113	67	27	-33.10	301	45
14	0	2,516	80	43	108	27	47	6	102	73	26	-24.00	301	50
15	0	2,714	78	49	108	28	35	5	92	80	23	-19.77	302	63
16	0	2,899	84	83	110	29	35	6	96	94	23	-13.02	309	75
17	0	2,992	93	119	111	29	35	6	97	103	22	-8.79	319	78
18	0	2,924	101	143	113	27	50	6	96	108	32	-13.28	316	83
19	0	2,774	109	120	112	26	90	6	95	113	42	-3.14	317	90
20	0	2,578	109	58	112	25	100	5	92	114	90	0.00	318	102
21	0	2,392	103	42	112	24	88	4	86	114	159	0.00	319	104
22	0	2,256	89	32	113	23	54	2	73	104	171	0.00	320	127
23	0	2,076	77	24	113	22	34	1	54	91	134	0.00	322	161
24	0	1,833	73	21	112	20	29	0	30	80	88	0.00	324	197

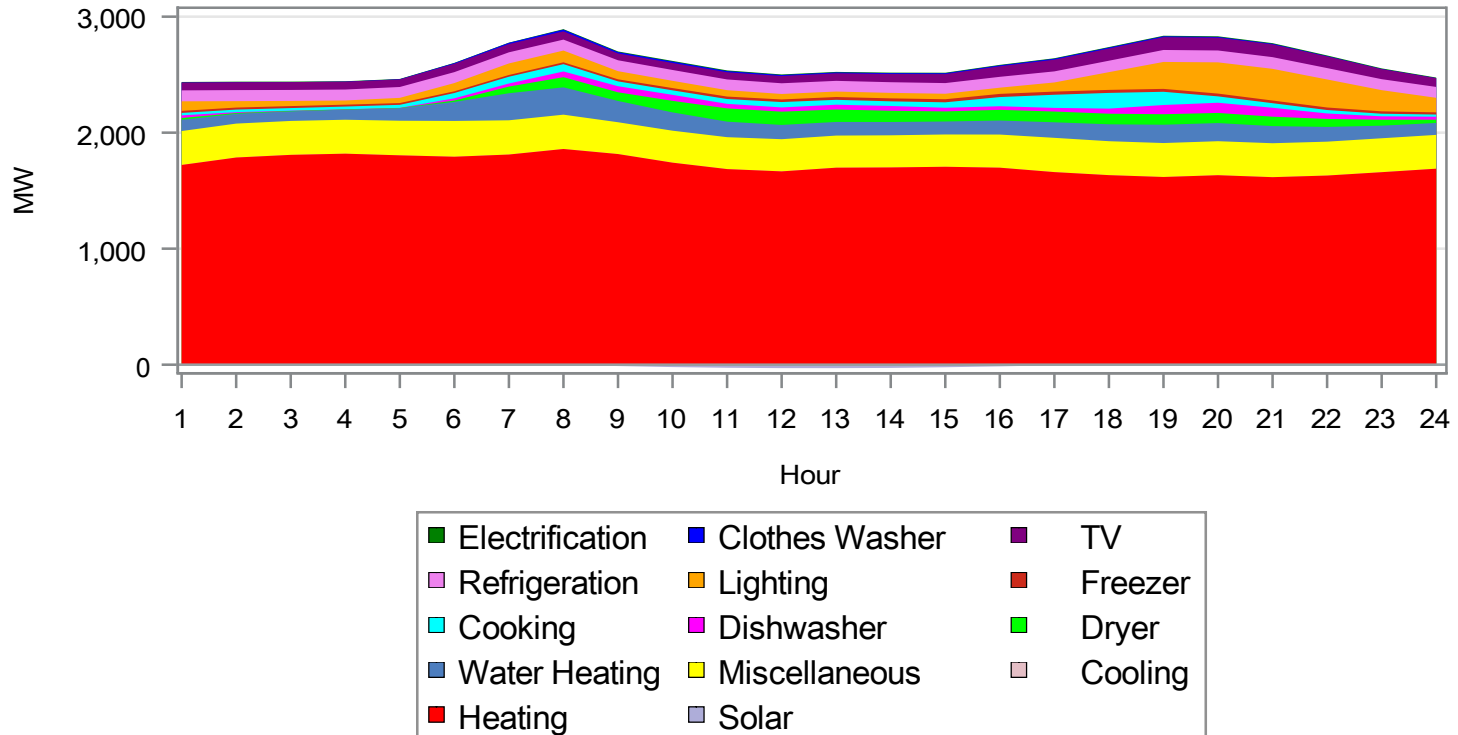
Summer 2040 System Peak Day: Residential End-Use Profiles
(MW)



Summer 2040 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	0	1,712	69	22	103	17	26	0	16	69	49	0.00	321	447
2	0	1,604	60	23	103	17	9	0	7	70	31	0.00	323	458
3	0	1,535	60	23	104	16	3	0	4	70	25	0.00	326	500
4	0	1,485	63	25	105	16	2	1	2	71	19	0.00	329	479
5	0	1,424	79	28	107	15	1	1	2	69	26	0.00	339	432
6	0	1,375	121	49	107	15	23	4	13	77	39	-3.42	353	277
7	0	1,362	174	63	109	15	32	8	63	77	47	-18.19	340	254
8	0	1,348	177	69	109	16	60	11	96	77	47	-44.02	343	219
9	0	1,519	142	47	112	18	67	9	84	65	37	-69.42	328	153
10	0	1,714	122	44	111	20	66	9	112	67	31	-87.31	329	104
11	0	1,935	103	46	111	22	50	8	129	69	26	-99.17	328	62
12	0	2,219	95	52	110	23	46	6	129	70	24	-105.2	330	43
13	0	2,513	90	47	110	25	52	6	120	72	24	-104.6	328	49
14	0	2,755	88	45	111	26	52	5	108	79	23	-98.99	328	61
15	0	2,971	86	52	112	27	39	5	97	86	21	-88.44	329	89
16	0	3,175	92	87	113	28	39	6	102	100	20	-71.00	337	116
17	0	3,276	102	126	115	28	39	6	103	111	20	-47.57	348	122
18	0	3,199	111	150	116	27	55	6	101	116	29	-23.58	345	133
19	0	3,033	120	126	115	26	99	6	101	121	38	-5.70	345	144
20	0	2,816	119	61	115	24	110	5	97	122	80	0.00	346	165
21	0	2,625	113	44	115	24	97	4	91	121	142	0.00	346	167
22	0	2,460	98	33	116	22	60	2	77	112	152	0.00	347	205
23	0	2,260	84	25	116	21	38	1	57	97	119	0.00	349	263
24	0	1,992	80	21	115	19	32	0	32	85	78	0.00	350	320

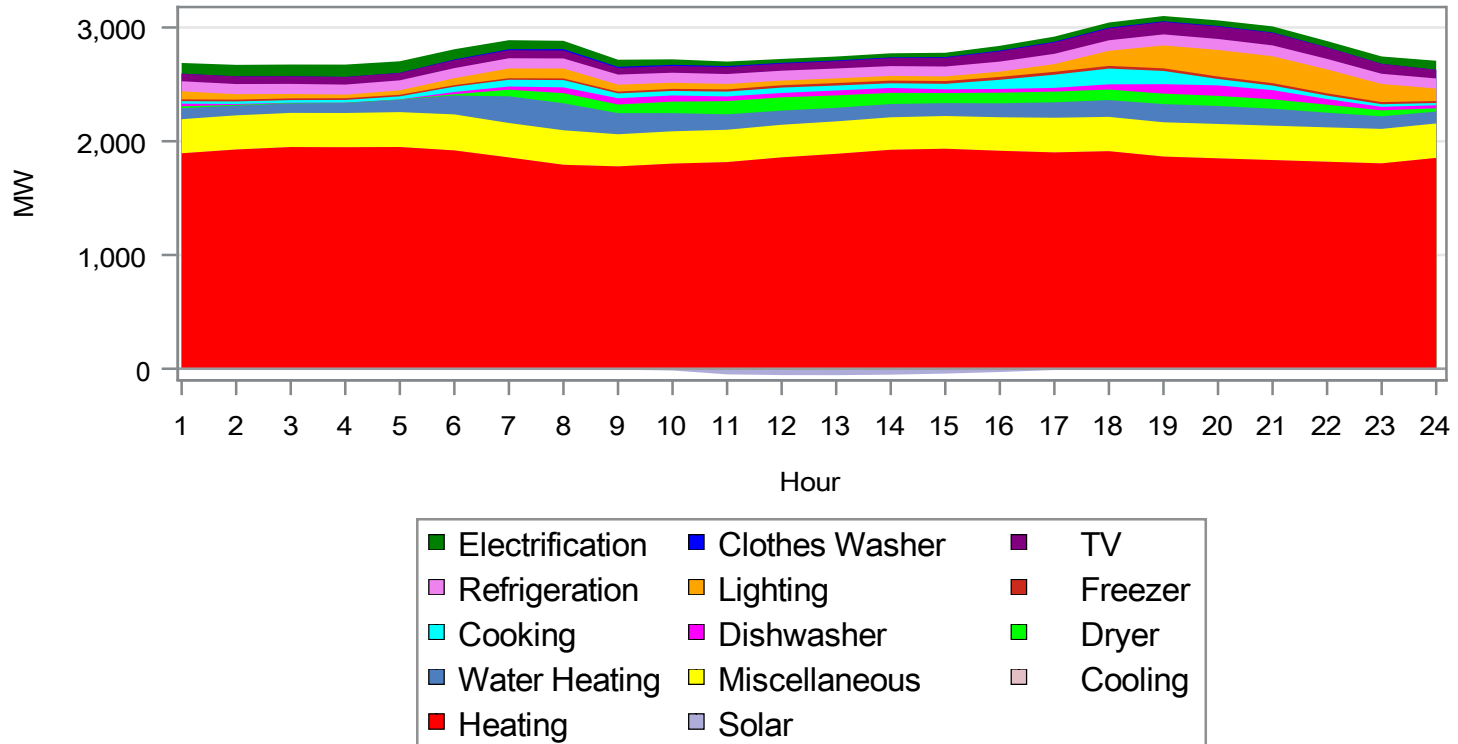
Winter 2021 System Peak Day: Residential End-Use Profiles
(MW)



Winter 2021 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	1,722	0	97	21	94	18	23	0	16	67	82	0.00	292	5
2	1,786	0	84	22	95	17	7	0	7	68	55	0.00	292	4
3	1,809	0	82	22	95	17	2	0	4	67	45	0.00	292	4
4	1,819	0	87	23	94	16	1	1	2	68	36	0.00	292	3
5	1,805	0	108	26	94	15	1	2	1	65	45	0.00	298	2
6	1,793	0	164	46	94	15	19	6	12	72	71	0.00	308	2
7	1,812	0	233	58	96	15	27	11	58	72	99	0.00	295	1
8	1,861	0	236	63	94	16	49	15	88	71	101	-1.85	296	4
9	1,828	0	184	42	94	18	53	12	75	59	70	-11.84	274	5
10	1,762	0	158	39	93	20	52	12	99	60	63	-20.74	276	6
11	1,713	0	134	41	93	21	39	11	114	62	55	-26.82	275	6
12	1,696	0	123	46	92	22	37	9	115	63	47	-29.66	277	5
13	1,728	0	118	42	92	24	41	8	107	65	47	-29.97	277	5
14	1,728	0	115	40	92	26	41	7	97	71	47	-27.81	277	4
15	1,728	0	112	47	92	27	31	7	87	78	47	-22.12	278	4
16	1,713	0	121	79	94	27	31	8	92	91	54	-14.59	286	4
17	1,665	0	134	113	96	27	31	8	93	101	79	-5.07	295	4
18	1,634	0	146	135	98	26	44	8	91	105	153	0.00	293	4
19	1,618	0	158	114	103	25	79	8	91	110	232	0.00	293	5
20	1,634	0	156	55	102	24	88	7	87	110	269	0.00	293	5
21	1,616	0	147	39	101	23	77	6	81	110	273	0.00	293	5
22	1,630	0	127	30	98	22	47	3	69	100	242	0.00	292	6
23	1,659	0	109	22	95	21	30	1	51	87	183	0.00	292	5
24	1,690	0	103	19	94	19	25	0	28	76	125	0.00	292	5

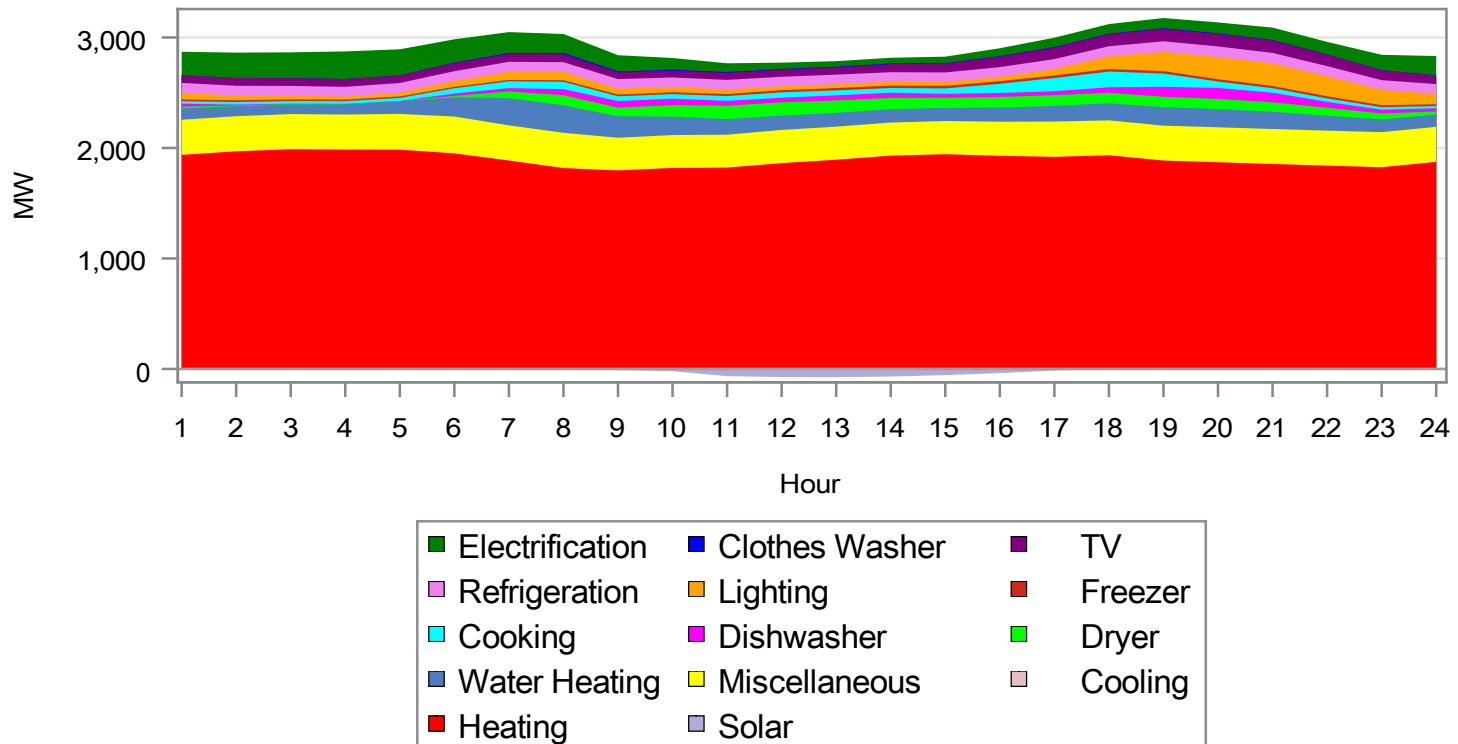
Winter 2026 System Peak Day: Residential End-Use Profiles
(MW)



Winter 2026 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	1,894	0	97	22	88	16	24	0	16	66	71	0.00	300	94
2	1,927	0	85	22	89	16	8	0	7	67	48	0.00	300	101
3	1,949	0	83	23	89	16	2	0	4	67	39	0.00	300	103
4	1,947	0	88	24	89	15	1	1	2	67	31	0.00	301	108
5	1,949	0	109	27	88	14	1	2	2	65	39	0.00	307	102
6	1,919	0	166	47	88	14	20	5	12	71	61	0.00	317	90
7	1,858	0	235	59	90	14	28	9	58	71	86	0.00	303	80
8	1,796	0	237	64	89	14	51	12	89	70	87	-3.39	303	73
9	1,787	0	186	42	89	16	55	10	76	58	61	-8.00	282	63
10	1,819	0	160	40	88	18	54	10	101	60	54	-15.38	284	48
11	1,866	0	135	42	87	20	41	9	116	61	48	-49.79	284	40
12	1,914	0	125	47	87	21	38	7	117	62	41	-55.76	287	34
13	1,945	0	119	43	87	22	43	6	109	65	41	-56.49	286	34
14	1,977	0	116	41	87	24	43	6	98	71	41	-52.22	286	36
15	1,977	0	114	48	87	24	33	6	89	77	41	-42.59	287	38
16	1,945	0	123	81	88	25	33	6	93	91	47	-28.81	295	42
17	1,913	0	136	116	90	25	33	7	94	100	68	-11.29	305	45
18	1,912	0	148	138	93	24	46	7	93	105	132	0.00	302	45
19	1,865	0	160	116	97	23	83	6	92	109	201	0.00	302	46
20	1,850	0	158	56	96	22	92	5	89	110	233	0.00	302	49
21	1,834	0	149	40	95	21	81	5	83	109	237	0.00	302	53
22	1,820	0	129	30	93	20	50	2	70	100	210	0.00	302	54
23	1,805	0	111	23	90	19	31	1	52	87	159	0.00	303	65
24	1,853	0	105	20	89	17	27	0	29	76	109	0.00	303	80

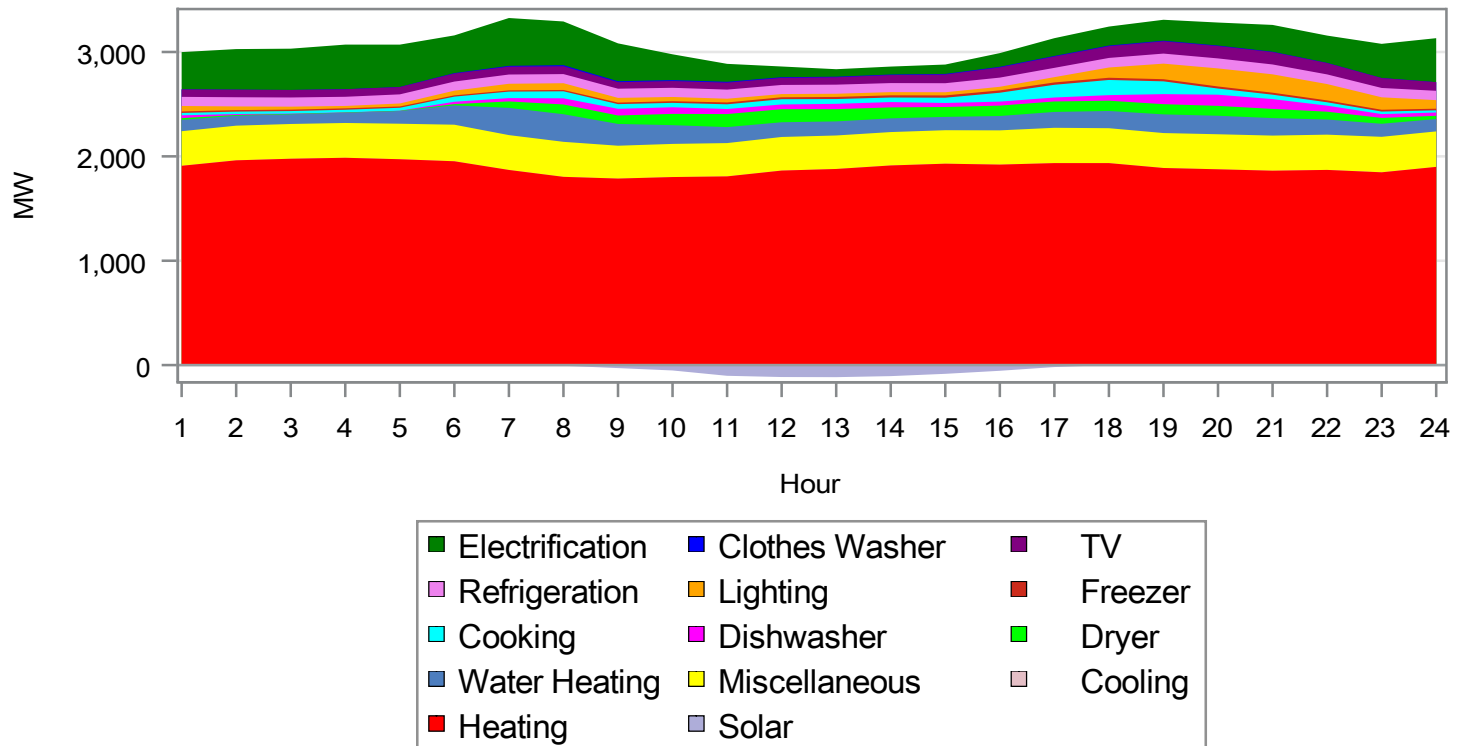
Winter 2031 System Peak Day: Residential End-Use Profiles
(MW)



Winter 2031 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	1,937	0	103	22	89	16	26	0	16	70	62	0.00	318	212
2	1,969	0	90	23	89	15	8	0	7	70	42	0.00	318	230
3	1,989	0	88	24	89	15	3	0	4	70	34	0.00	318	234
4	1,985	0	93	25	89	14	2	1	2	70	27	0.00	318	250
5	1,984	0	115	28	88	13	1	1	2	67	34	0.00	324	236
6	1,951	0	174	48	88	13	21	5	12	74	53	0.00	334	210
7	1,886	0	246	61	89	13	30	8	61	73	74	0.00	319	188
8	1,822	0	249	66	88	14	55	11	92	73	76	-4.47	319	171
9	1,807	0	194	44	88	15	59	9	78	60	52	-10.53	296	147
10	1,839	0	167	41	87	17	58	9	104	62	47	-20.24	298	105
11	1,888	0	142	44	87	19	45	8	120	64	41	-65.52	298	79
12	1,936	0	130	49	86	20	41	7	120	64	35	-73.37	301	57
13	1,968	0	125	45	86	21	47	6	113	67	35	-74.33	300	49
14	1,999	0	122	42	86	22	47	6	101	73	35	-68.71	300	52
15	1,999	0	119	49	86	23	35	5	91	80	35	-56.04	301	58
16	1,966	0	128	83	87	24	35	6	96	94	40	-37.91	309	71
17	1,934	0	142	120	89	24	35	6	97	104	59	-14.85	320	84
18	1,934	0	154	143	92	23	50	6	96	108	114	0.00	316	86
19	1,886	0	167	120	96	22	90	6	95	113	174	0.00	316	92
20	1,870	0	165	58	96	21	99	5	92	113	202	0.00	317	99
21	1,855	0	156	41	94	20	87	4	85	113	204	0.00	317	112
22	1,840	0	135	31	92	19	53	2	72	104	181	0.00	317	114
23	1,825	0	116	24	89	18	34	1	54	90	137	0.00	318	139
24	1,874	0	109	20	88	16	29	0	30	78	94	0.00	317	175

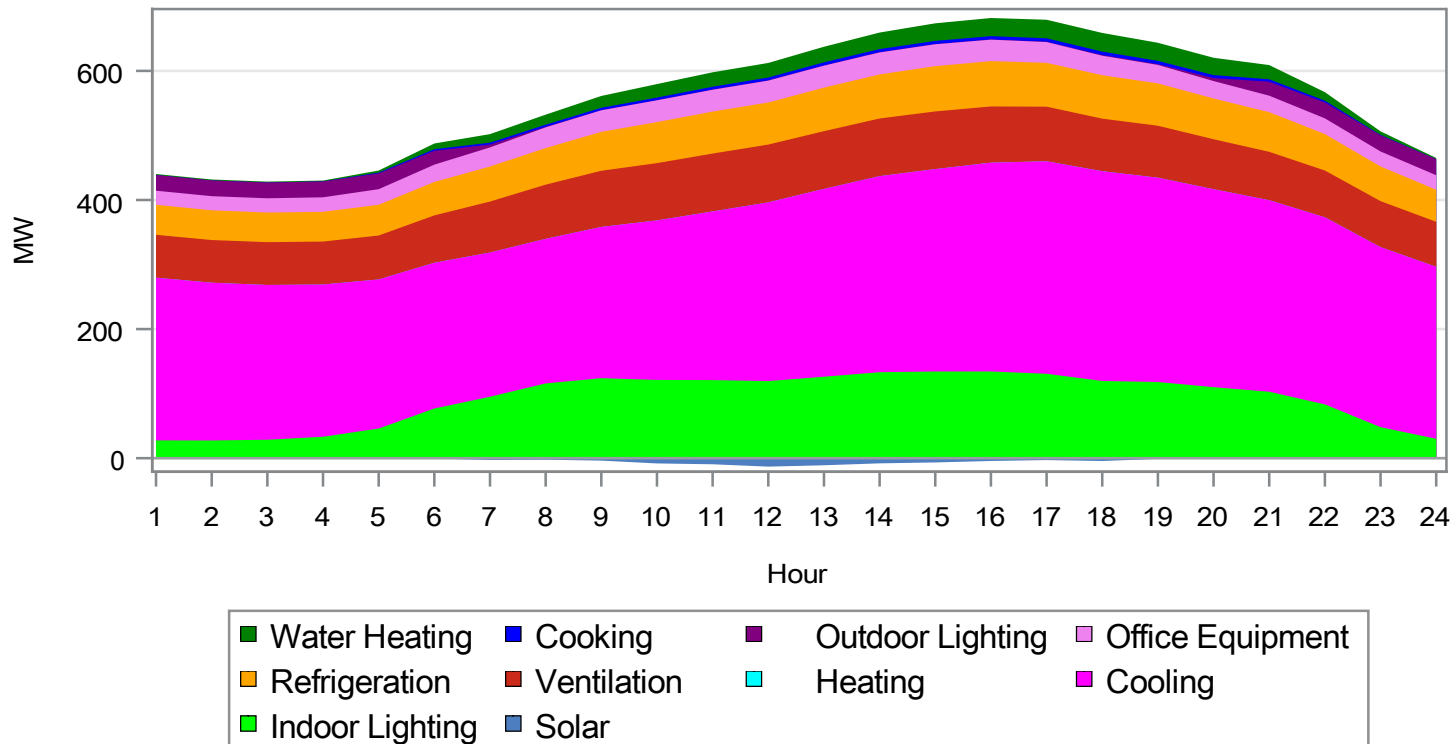
Winter 2040 System Peak Day: Residential End-Use Profiles
(MW)



Winter 2040 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electrification
1	1,910	0	108	23	87	14	27	0	17	71	52	0.00	331	357
2	1,962	0	95	23	88	14	9	0	7	72	35	0.00	332	389
3	1,977	0	93	24	88	14	3	0	4	72	29	0.00	333	396
4	1,986	0	98	25	88	13	2	1	2	72	23	0.00	333	427
5	1,972	0	122	28	87	12	1	1	2	70	29	0.00	340	406
6	1,953	0	185	49	87	12	23	4	13	76	45	0.00	350	361
7	1,870	0	261	62	88	12	32	7	62	76	63	0.00	334	458
8	1,810	0	264	67	87	13	59	10	94	75	65	-6.44	335	419
9	1,816	0	209	45	88	15	64	9	81	63	45	-28.67	315	363
10	1,853	0	180	42	88	16	63	9	108	65	40	-51.43	317	247
11	1,911	0	153	45	88	18	48	8	125	67	36	-102.6	319	172
12	1,978	0	141	50	87	19	45	6	125	68	31	-114.5	322	103
13	1,995	0	135	46	87	20	51	6	117	71	31	-115.6	321	72
14	2,019	0	131	44	87	21	51	5	105	77	31	-105.7	320	76
15	2,013	0	128	51	87	22	38	5	95	84	31	-83.76	321	90
16	1,976	0	138	85	88	23	38	6	100	98	35	-54.52	328	131
17	1,954	0	152	122	89	22	38	6	100	108	51	-18.91	338	171
18	1,935	0	165	145	92	21	53	6	98	113	98	0.00	334	182
19	1,889	0	179	122	96	21	96	6	98	118	149	0.00	335	201
20	1,876	0	177	59	96	20	107	5	94	118	173	0.00	336	221
21	1,863	0	168	42	95	19	94	4	88	118	176	0.00	336	257
22	1,870	0	145	32	92	18	58	2	75	109	157	0.00	338	261
23	1,847	0	125	24	90	17	37	1	56	94	119	0.00	340	327
24	1,899	0	118	21	89	16	32	0	31	83	82	0.00	340	422

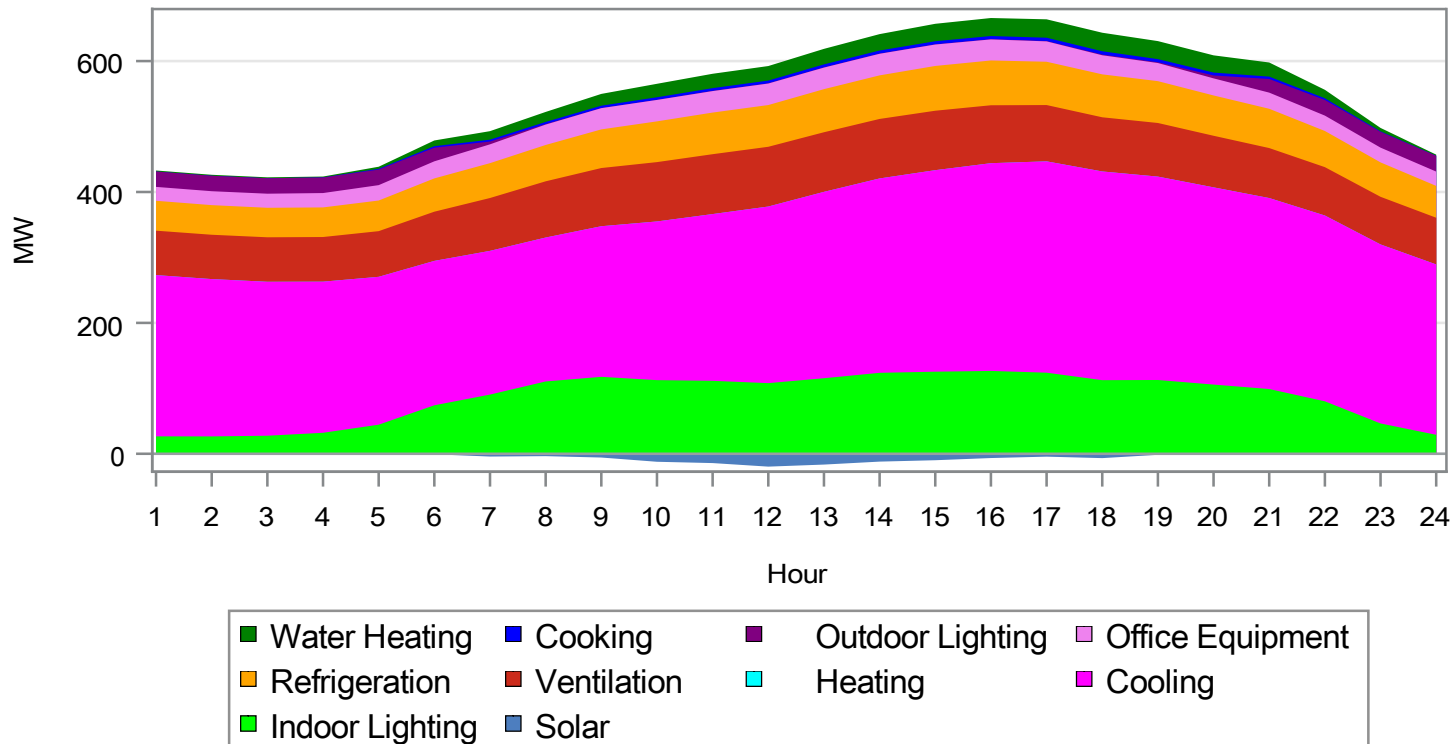
Summer 2021 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2021 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	0	252	2	66	0	47	24	28	22	0.00
2	0	244	2	66	0	46	24	27	22	0.00
3	0	240	1	66	0	46	24	29	22	0.00
4	0	236	1	67	0	46	24	33	23	0.00
5	0	231	3	68	1	48	24	46	24	0.00
6	0	226	9	73	2	52	22	77	27	-0.51
7	0	223	13	79	3	54	4	98	30	-2.80
8	0	224	16	84	3	57	1	118	32	-2.41
9	0	234	18	87	4	60	0	128	33	-3.81
10	0	247	21	89	4	64	0	129	34	-8.14
11	0	261	22	90	4	65	0	130	34	-9.47
12	0	277	23	90	4	65	0	133	34	-13.10
13	0	291	24	89	5	67	0	137	34	-11.01
14	0	304	26	89	5	68	0	141	34	-8.00
15	0	314	27	89	5	70	0	141	34	-6.60
16	0	324	28	87	5	70	0	139	33	-4.35
17	0	329	29	85	5	68	1	134	32	-2.94
18	0	325	29	81	5	67	1	124	30	-4.44
19	0	317	28	81	5	66	1	119	29	-1.05
20	0	307	27	77	5	63	5	110	27	0.00
21	0	297	22	75	4	61	22	103	26	0.00
22	0	290	13	72	3	57	25	83	24	0.00
23	0	279	5	71	1	54	25	48	23	0.00
24	0	266	2	70	0	50	25	30	23	0.00

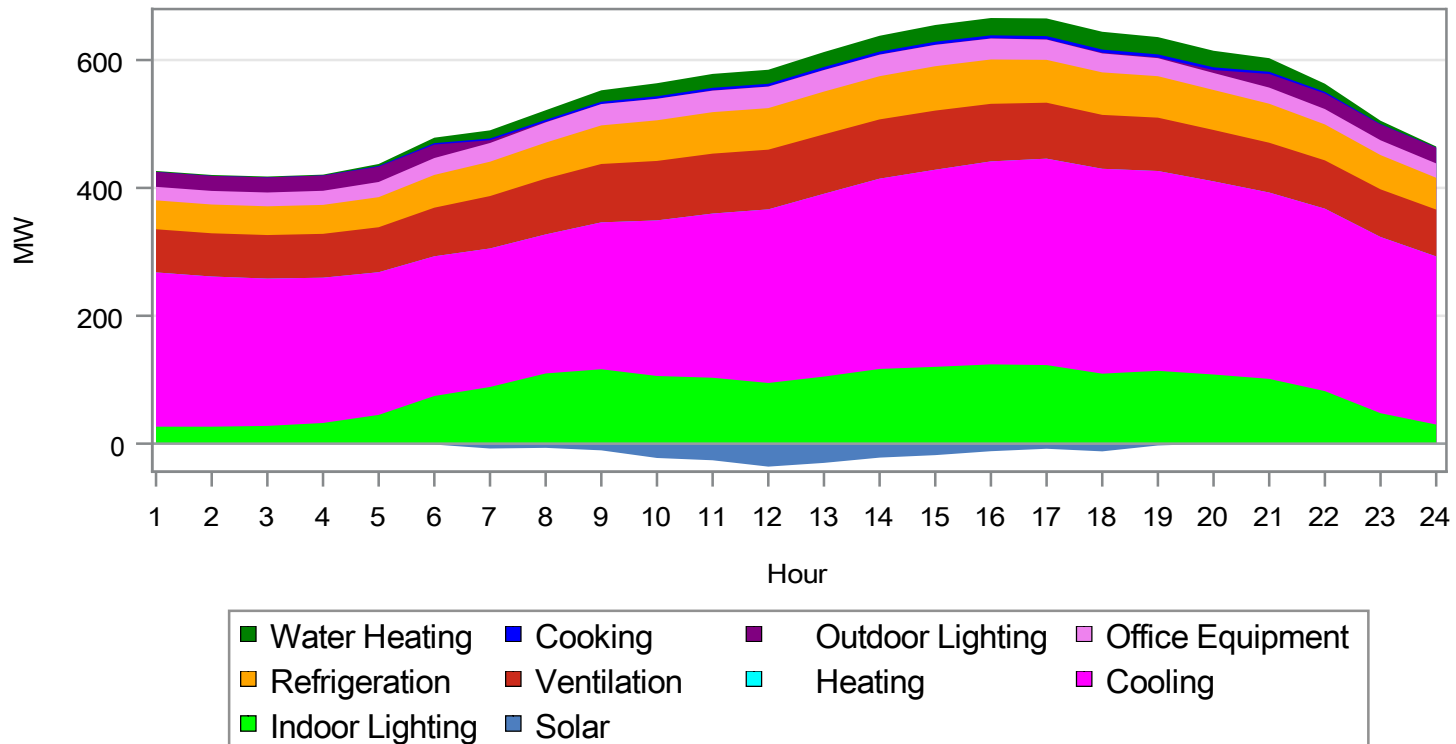
Summer 2026 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2026 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	0	246	2	68	0	46	23	27	21	0.00
2	0	240	2	68	0	45	24	27	21	0.00
3	0	235	1	68	0	45	24	28	22	0.00
4	0	231	1	68	0	45	24	32	22	0.00
5	0	226	3	70	1	47	24	44	24	0.00
6	0	221	9	75	2	51	21	75	26	-0.77
7	0	220	13	81	3	53	4	95	29	-4.21
8	0	220	15	86	3	56	1	114	31	-3.62
9	0	230	18	89	4	59	0	123	32	-5.71
10	0	242	21	91	4	62	0	125	33	-12.21
11	0	255	22	91	4	64	0	126	33	-14.19
12	0	270	22	91	4	64	0	128	33	-19.62
13	0	285	24	91	5	66	0	132	33	-16.48
14	0	297	25	91	5	67	0	136	33	-11.96
15	0	308	27	91	5	68	0	135	33	-9.86
16	0	317	28	88	5	68	0	133	32	-6.50
17	0	323	28	86	5	66	0	128	31	-4.39
18	0	319	28	83	5	66	1	119	29	-6.63
19	0	311	28	82	5	64	1	114	28	-1.57
20	0	301	26	79	4	62	4	106	26	0.00
21	0	292	22	76	4	60	21	99	25	0.00
22	0	284	13	74	3	55	24	80	24	0.00
23	0	274	5	73	1	53	24	46	23	0.00
24	0	260	2	71	0	49	24	29	22	0.00

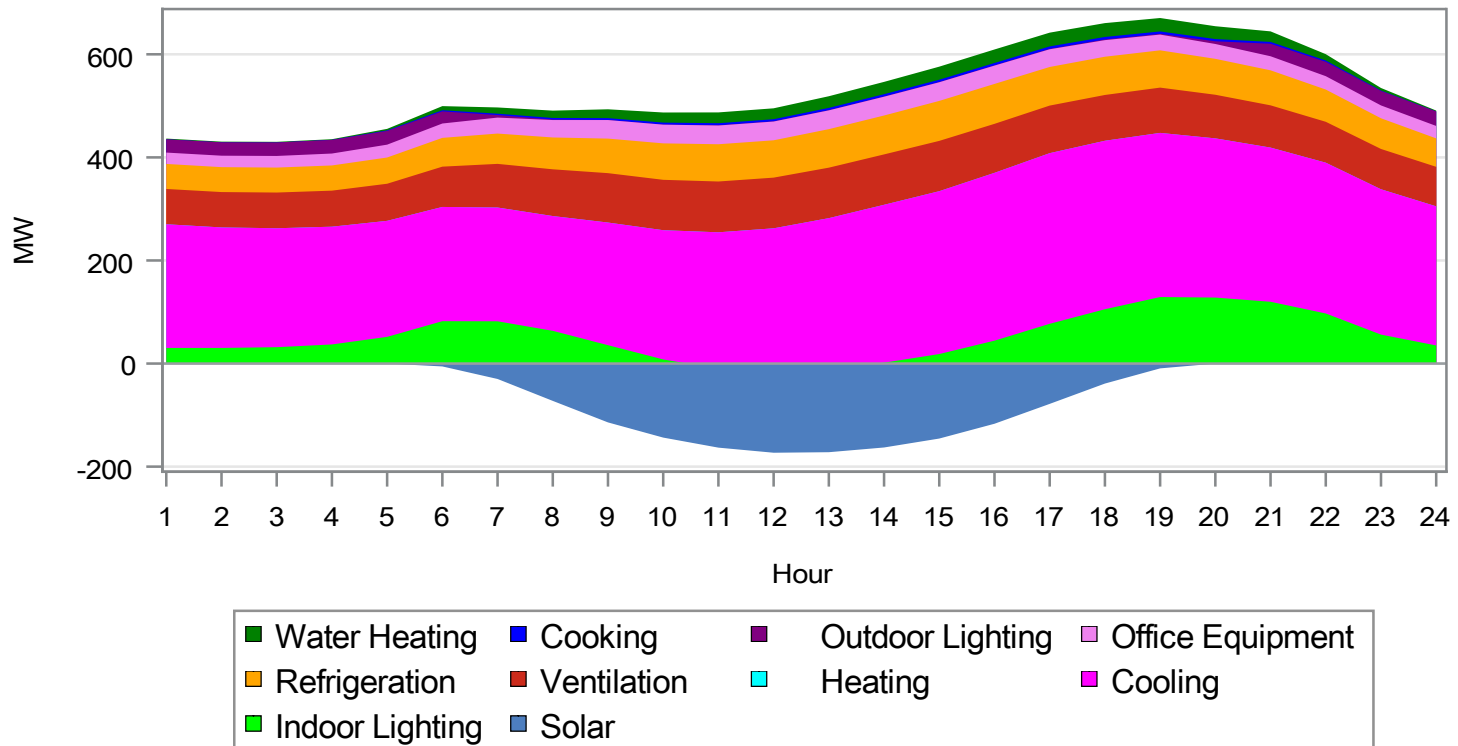
Summer 2031 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2031 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	0	241	2	67	0	45	23	27	21	0.00
2	0	235	1	68	0	45	23	27	21	0.00
3	0	230	1	68	0	45	24	28	22	0.00
4	0	227	1	69	0	45	24	32	22	0.00
5	0	223	3	70	1	47	24	45	24	0.00
6	0	218	9	76	2	51	21	76	26	-1.40
7	0	217	13	82	3	54	4	96	29	-7.64
8	0	217	15	87	3	56	1	116	32	-6.60
9	0	230	18	91	4	60	0	127	33	-10.51
10	0	243	20	93	4	64	0	128	34	-22.43
11	0	257	22	94	4	65	0	129	34	-26.04
12	0	272	22	93	4	65	0	131	34	-35.95
13	0	286	23	93	4	67	0	135	34	-30.12
14	0	298	25	93	5	68	0	139	34	-21.84
15	0	308	26	93	5	69	0	138	33	-17.99
16	0	317	27	90	5	69	0	136	33	-11.85
17	0	323	28	88	5	67	1	131	32	-8.00
18	0	320	28	84	5	66	1	122	30	-12.09
19	0	313	27	83	5	65	1	117	28	-2.86
20	0	302	26	80	4	63	5	108	27	0.00
21	0	291	21	78	4	61	21	101	25	0.00
22	0	285	13	76	2	56	24	82	24	0.00
23	0	276	5	75	1	54	25	48	23	0.00
24	0	263	2	73	0	50	25	30	22	0.00

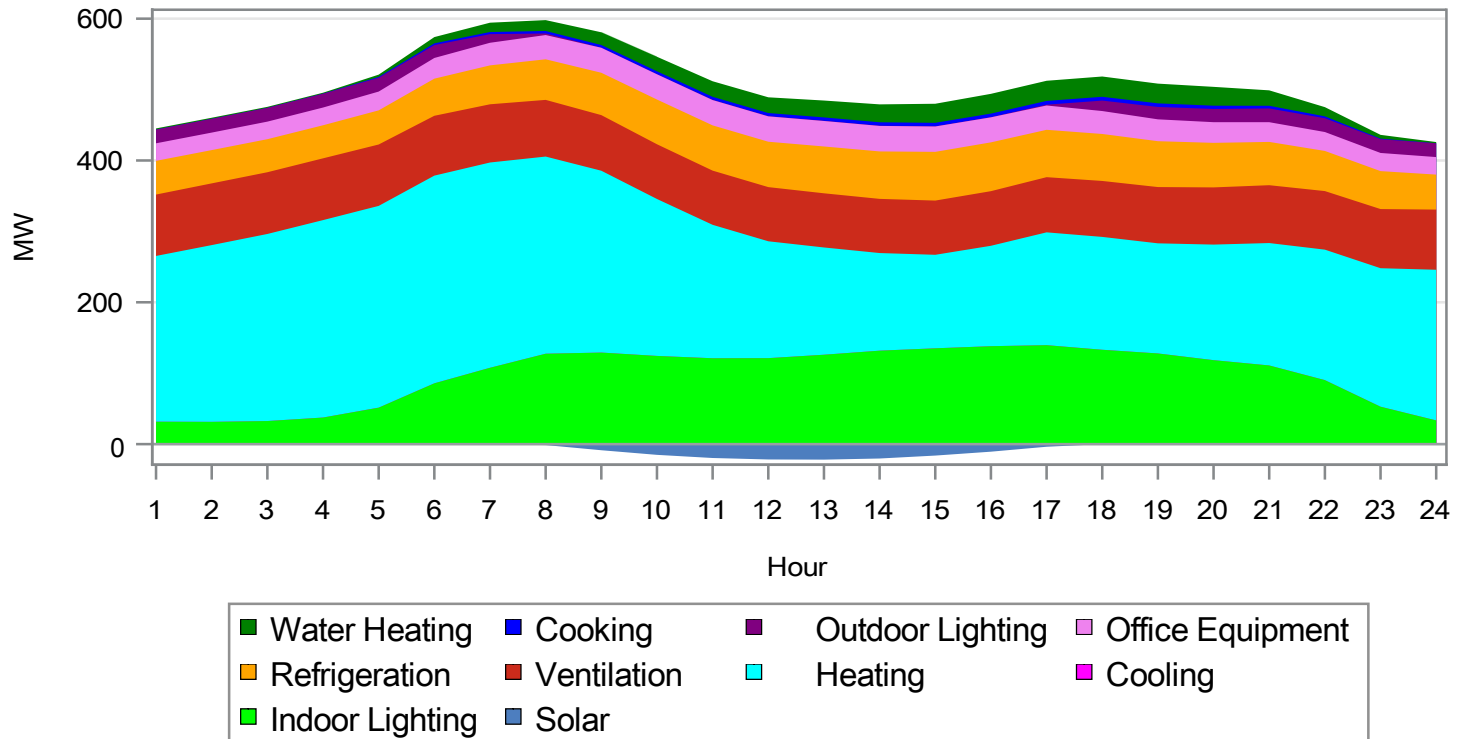
Summer 2040 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2040 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	0	240	1	68	0	49	26	30	22	0.00
2	0	234	1	69	0	48	26	30	22	0.00
3	0	231	1	69	0	48	26	32	23	0.00
4	0	228	1	70	0	49	26	37	23	0.00
5	0	225	3	72	1	51	27	52	25	0.00
6	0	222	8	78	2	56	24	88	28	-5.62
7	0	221	12	85	3	59	5	112	31	-29.92
8	0	223	14	91	3	62	1	136	34	-72.43
9	0	238	17	96	4	67	0	150	36	-114.22
10	0	251	20	98	4	71	0	152	36	-143.66
11	0	265	21	99	4	72	0	153	36	-163.17
12	0	280	21	98	4	72	0	155	36	-173.03
13	0	294	23	98	5	75	0	160	36	-172.02
14	0	306	24	98	5	75	0	165	36	-162.87
15	0	316	25	98	5	78	0	164	36	-145.52
16	0	326	26	95	5	77	0	161	36	-116.82
17	0	331	27	92	5	75	1	155	34	-78.26
18	0	327	27	89	5	74	1	144	32	-38.80
19	0	318	26	88	5	72	1	138	31	-9.37
20	0	309	25	85	4	70	5	128	29	0.00
21	0	299	21	82	4	68	24	120	27	0.00
22	0	293	12	79	3	63	28	97	26	0.00
23	0	282	5	78	1	60	28	56	25	0.00
24	0	270	2	77	0	55	28	35	24	0.00

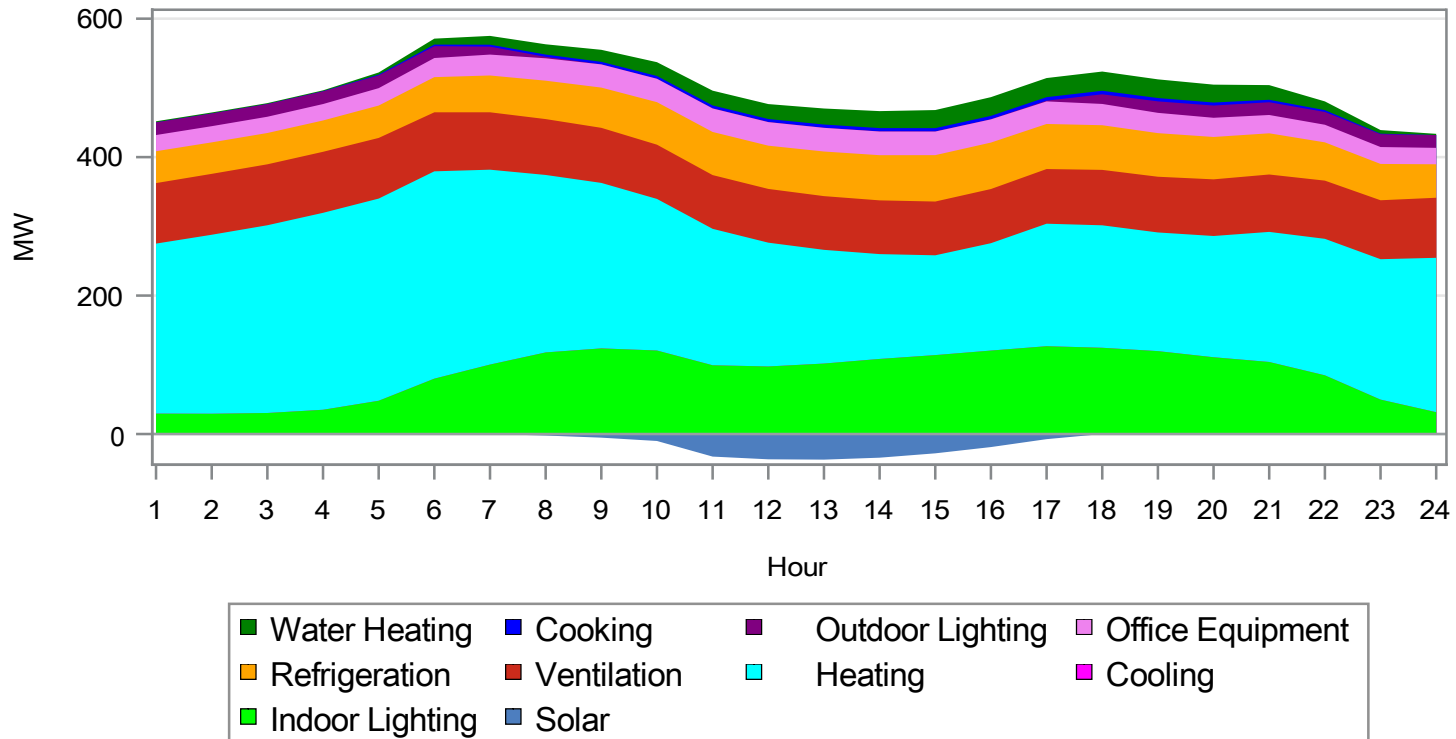
Winter 2021 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2021 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	234	0	2	87	0	48	19	32	25	0.00
2	249	0	2	87	0	47	19	31	25	0.00
3	264	0	1	87	0	47	19	33	25	0.00
4	278	0	1	87	0	47	19	38	25	0.00
5	284	0	3	87	1	48	19	51	27	0.00
6	293	0	9	84	2	52	18	86	29	0.00
7	289	0	13	82	3	55	12	108	32	0.00
8	278	0	15	80	3	57	2	129	34	-1.35
9	256	0	18	78	4	60	0	138	35	-8.64
10	221	0	21	77	4	63	0	140	36	-15.13
11	188	0	22	76	4	64	0	141	36	-19.57
12	165	0	22	76	4	64	0	143	36	-21.64
13	151	0	24	76	5	66	0	148	36	-21.87
14	138	0	25	76	5	67	0	152	36	-20.29
15	132	0	27	76	5	69	0	151	36	-16.14
16	142	0	28	77	5	69	0	149	35	-10.64
17	159	0	28	78	5	67	1	143	34	-3.70
18	159	0	29	79	5	66	15	133	32	0.00
19	155	0	28	79	5	65	17	128	31	0.00
20	163	0	27	81	5	63	19	118	29	0.00
21	173	0	22	82	4	61	19	111	28	0.00
22	184	0	13	83	3	57	19	90	27	0.00
23	195	0	5	83	1	54	19	53	26	0.00
24	212	0	2	85	0	49	19	33	25	0.00

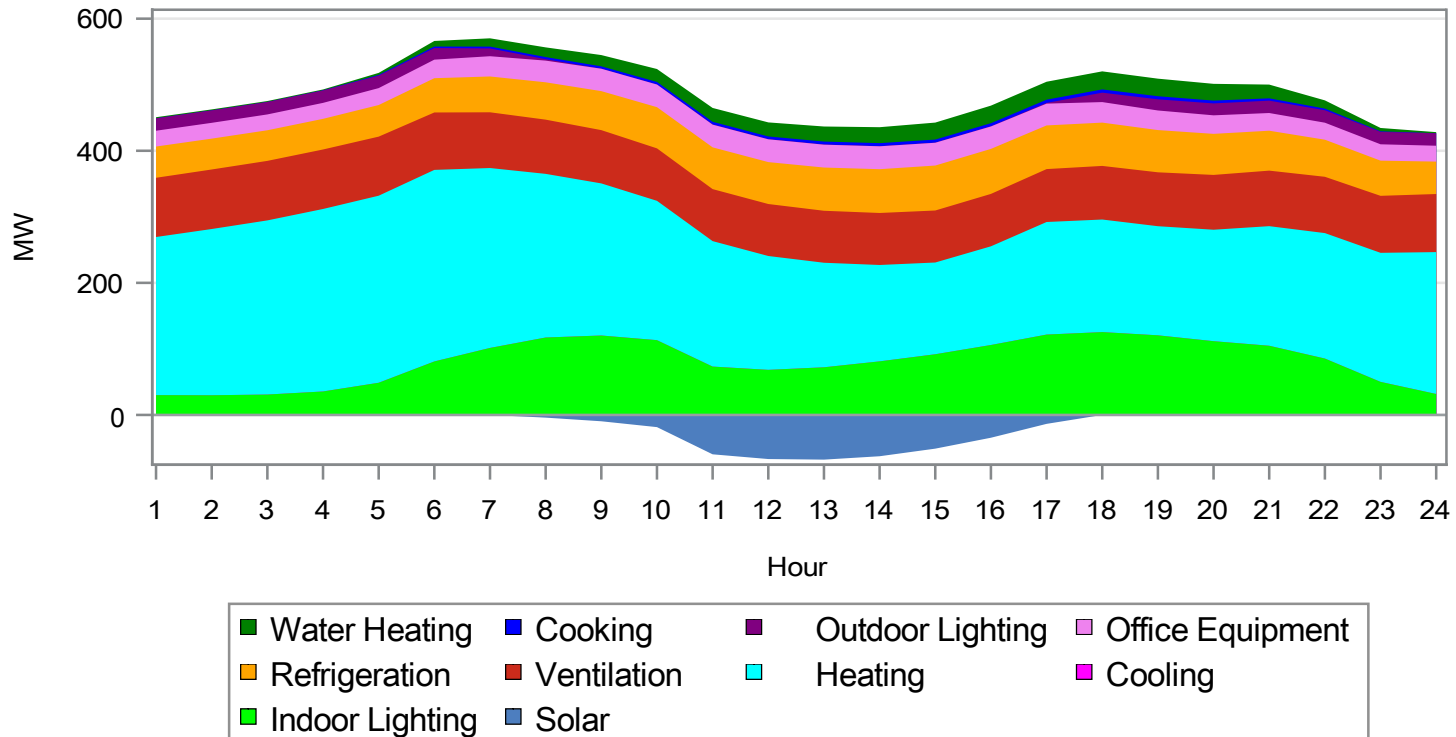
Winter 2026 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2026 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	246	0	2	87	0	46	18	29	23	0.00
2	259	0	1	88	0	45	18	29	23	0.00
3	271	0	1	88	0	45	18	30	23	0.00
4	284	0	1	88	0	45	18	35	24	0.00
5	292	0	3	88	1	47	18	48	25	0.00
6	299	0	9	85	2	51	17	80	28	0.00
7	282	0	13	83	3	53	11	100	30	0.00
8	256	0	15	81	3	55	2	120	32	-2.22
9	239	0	17	80	4	58	0	129	34	-5.24
10	219	0	20	78	4	61	0	131	34	-10.08
11	197	0	21	78	4	62	0	132	34	-32.61
12	179	0	22	78	4	62	0	134	34	-36.52
13	164	0	23	78	5	64	0	139	34	-37.00
14	151	0	25	78	5	65	0	143	34	-34.20
15	144	0	26	78	5	67	0	142	34	-27.90
16	155	0	27	78	5	67	0	139	34	-18.87
17	177	0	28	79	5	65	1	134	33	-7.39
18	177	0	28	80	5	65	14	125	31	0.00
19	171	0	27	80	5	63	17	120	29	0.00
20	175	0	26	82	4	61	18	111	28	0.00
21	188	0	21	83	4	60	18	104	26	0.00
22	197	0	13	84	3	55	18	85	25	0.00
23	203	0	5	85	1	52	18	50	24	0.00
24	223	0	2	87	0	48	18	32	24	0.00

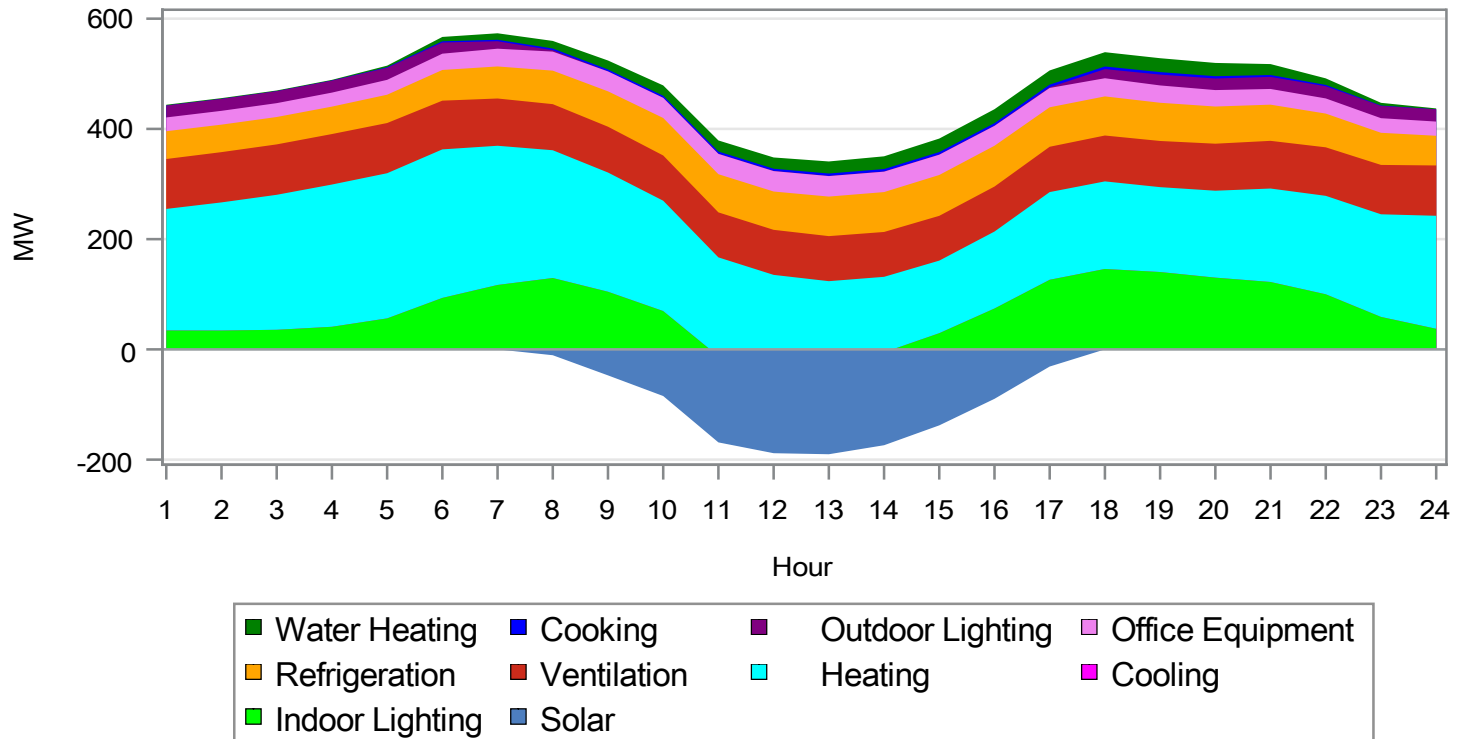
Winter 2031 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2031 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	239	0	2	90	0	47	19	30	24	0.00
2	252	0	1	90	0	47	19	30	24	0.00
3	264	0	1	90	0	46	19	31	24	0.00
4	276	0	1	90	0	46	19	36	24	0.00
5	283	0	3	89	1	48	19	49	26	0.00
6	290	0	8	87	2	52	18	81	28	0.00
7	272	0	13	84	3	54	12	101	31	0.00
8	248	0	15	82	3	57	2	121	33	-4.07
9	230	0	17	81	4	59	0	130	34	-9.58
10	211	0	20	79	4	62	0	132	34	-18.42
11	190	0	21	79	4	63	0	133	34	-59.63
12	172	0	21	79	4	63	0	135	35	-66.78
13	158	0	23	79	4	65	0	140	35	-67.65
14	146	0	24	79	5	66	0	144	35	-62.54
15	139	0	26	79	5	68	0	143	35	-51.00
16	149	0	27	79	5	68	0	140	34	-34.50
17	170	0	27	80	5	66	1	135	33	-13.52
18	170	0	27	81	5	66	14	125	31	0.00
19	165	0	27	82	5	64	17	121	30	0.00
20	169	0	25	83	4	62	18	112	28	0.00
21	181	0	21	84	3	60	19	105	27	0.00
22	190	0	12	85	2	56	19	85	26	0.00
23	195	0	5	86	1	53	19	50	25	0.00
24	215	0	2	88	0	49	19	32	24	0.00

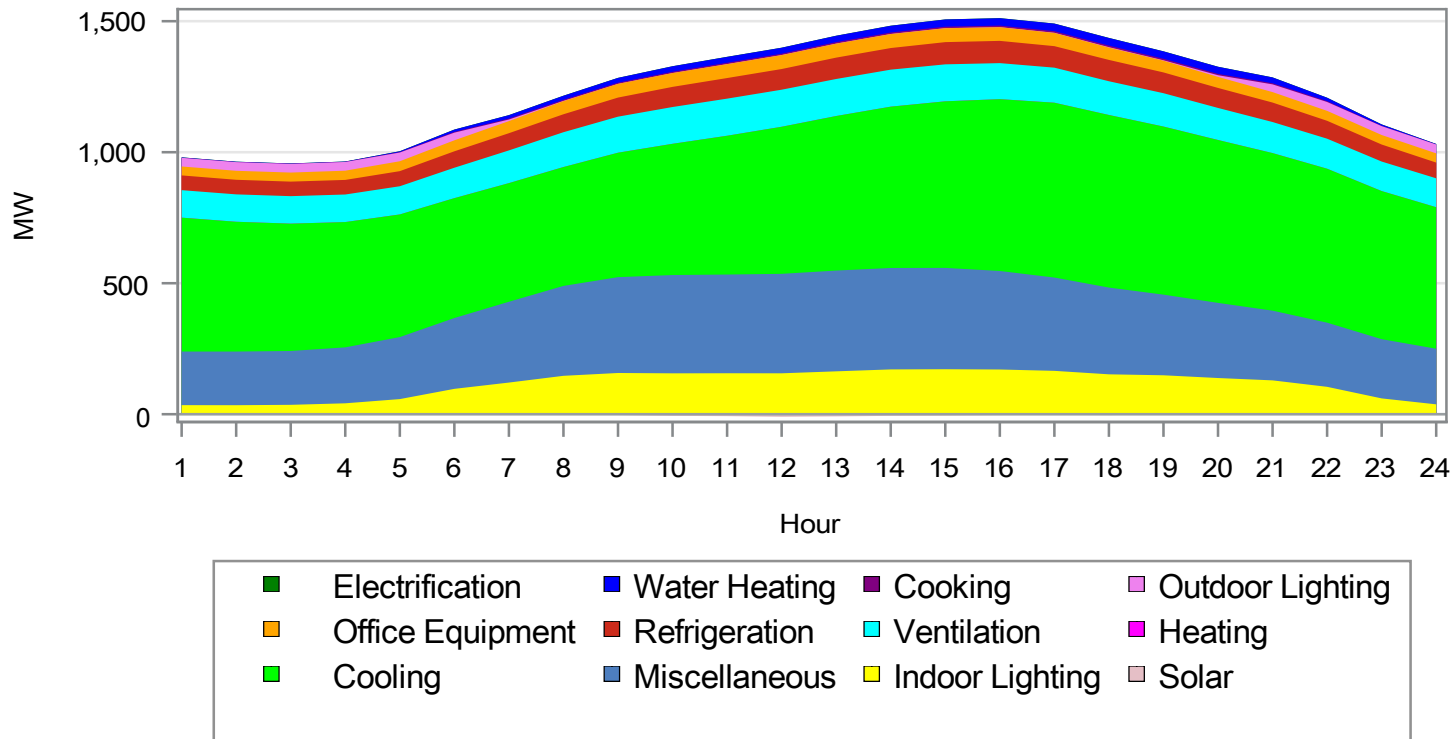
Winter 2040 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2040 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar
1	220	0	1	91	0	50	22	34	25	0.00
2	232	0	1	91	0	50	22	34	25	0.00
3	245	0	1	91	0	50	22	36	25	0.00
4	258	0	1	92	0	50	22	41	25	0.00
5	263	0	3	91	1	51	22	56	27	0.00
6	269	0	8	88	2	56	20	93	30	0.00
7	253	0	12	86	3	58	14	117	32	0.00
8	232	0	14	84	3	61	2	140	35	-10.60
9	216	0	16	83	3	64	0	152	36	-47.18
10	200	0	19	82	4	68	0	154	37	-84.62
11	179	0	20	82	4	69	0	156	37	-168.74
12	164	0	20	82	4	70	0	159	37	-188.32
13	149	0	22	82	4	72	0	165	37	-190.20
14	137	0	23	81	4	72	0	169	37	-173.88
15	132	0	25	81	5	74	0	167	37	-137.82
16	140	0	25	82	5	74	0	164	36	-89.70
17	159	0	26	82	5	72	1	157	35	-31.11
18	159	0	26	83	5	71	17	146	33	0.00
19	154	0	25	84	5	69	20	140	31	0.00
20	158	0	24	85	4	67	21	130	30	0.00
21	170	0	20	86	3	66	22	122	28	0.00
22	179	0	12	88	2	61	22	100	28	0.00
23	186	0	5	90	1	58	22	59	27	0.00
24	205	0	2	91	0	54	22	37	26	0.00

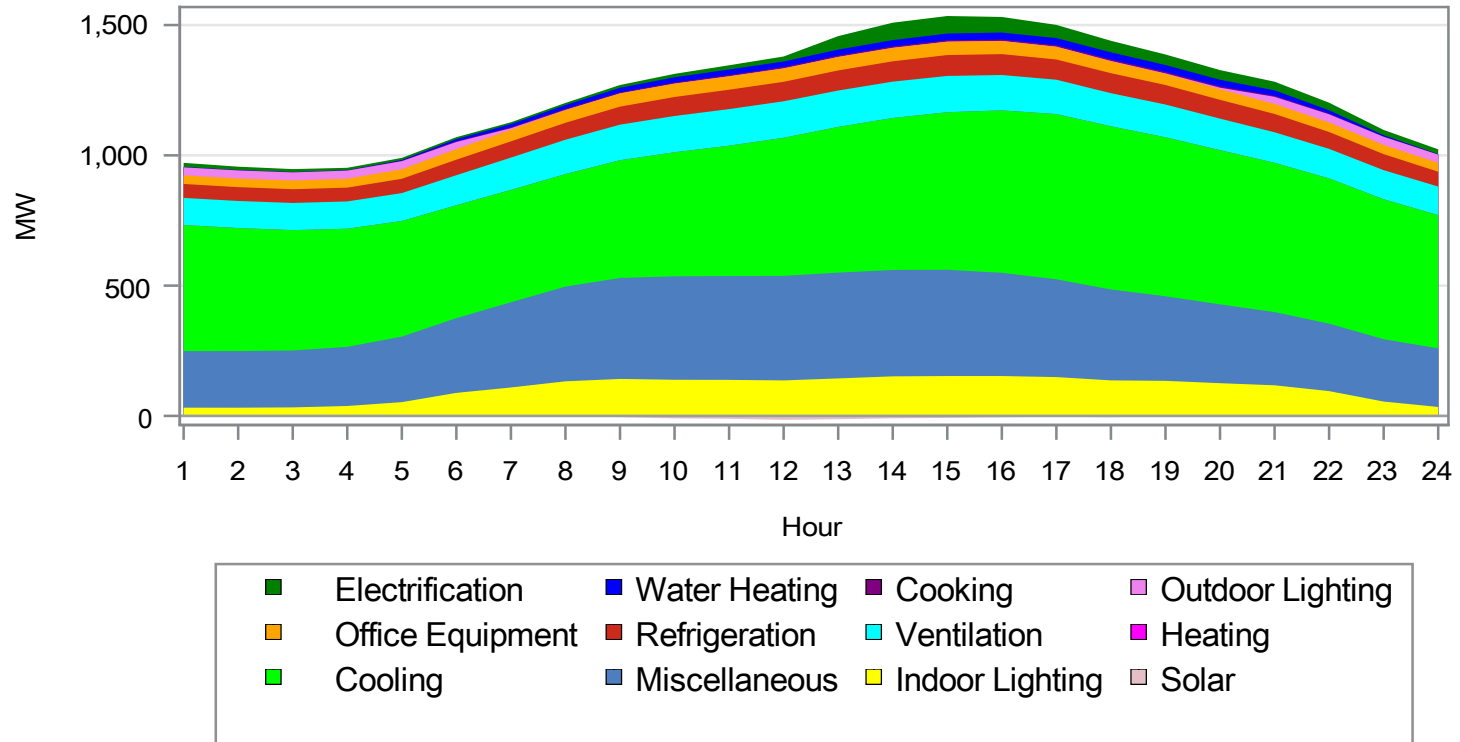
Summer 2021 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2021 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	0	511	2	105	0	56	33	35	34	0.00	0	205
2	0	495	2	104	0	56	33	34	34	0.00	0	205
3	0	486	1	105	0	55	33	36	35	0.00	0	206
4	0	478	1	105	0	56	33	42	35	0.00	0	214
5	0	468	3	108	1	58	33	58	38	0.00	0	237
6	0	458	9	116	3	63	29	97	42	-0.40	0	270
7	0	453	13	125	3	66	6	123	46	-2.18	0	308
8	0	454	16	133	4	69	1	148	50	-1.88	0	343
9	0	475	19	137	4	73	0	160	52	-2.97	0	366
10	0	501	21	140	5	77	0	162	53	-6.34	0	375
11	0	530	23	142	5	79	0	164	53	-7.38	0	377
12	0	561	23	141	5	79	0	166	53	-10.21	0	380
13	0	590	24	141	5	82	0	172	53	-8.58	0	385
14	0	616	26	141	6	82	0	177	53	-6.24	0	387
15	0	636	28	141	6	85	0	177	53	-5.14	0	387
16	0	656	28	138	6	85	0	174	52	-3.39	0	376
17	0	667	29	134	6	82	1	168	50	-2.29	0	356
18	0	659	29	129	6	81	1	156	47	-3.46	0	331
19	0	642	28	127	6	79	2	149	45	-0.82	0	308
20	0	622	27	122	5	76	6	138	42	0.00	0	287
21	0	602	22	118	4	74	29	129	40	0.00	0	266
22	0	588	13	115	3	68	34	105	38	0.00	0	245
23	0	565	5	113	1	65	34	60	36	0.00	0	226
24	0	540	2	110	0	60	34	38	35	0.00	0	212

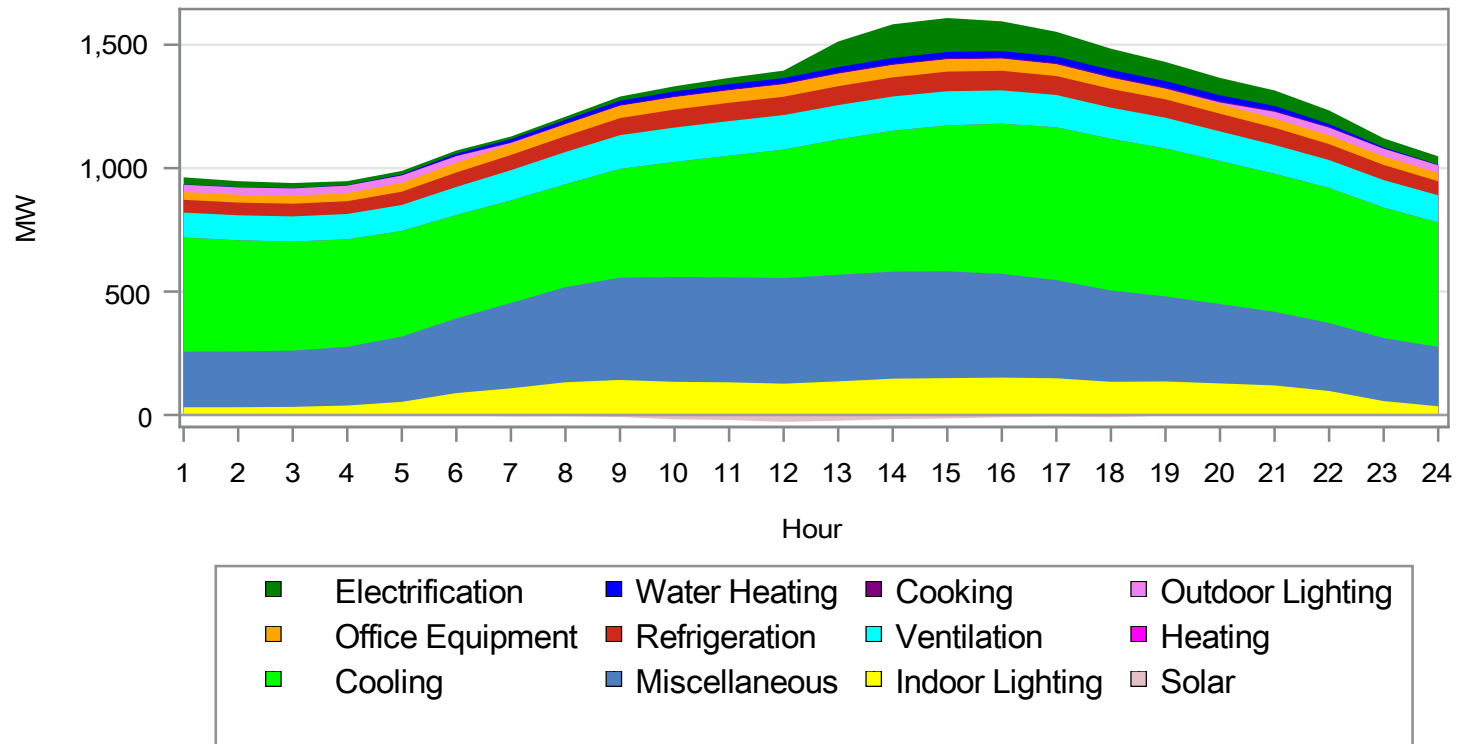
Summer 2026 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2026 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	0	484	2	104	0	53	31	32	33	0.00	16	217
2	0	472	1	104	0	53	31	32	33	0.00	13	217
3	0	462	1	104	0	53	31	33	34	0.00	11	218
4	0	454	1	105	0	53	31	38	34	0.00	9	227
5	0	444	3	107	1	55	31	53	37	0.00	8	251
6	0	433	9	115	2	60	27	89	41	-0.60	7	287
7	0	431	13	124	3	62	6	112	45	-3.28	7	327
8	0	432	15	132	4	65	1	136	49	-2.82	8	363
9	0	452	18	136	4	69	0	146	51	-4.45	11	387
10	0	476	20	139	4	73	0	148	51	-9.52	13	397
11	0	500	21	140	4	74	0	149	51	-11.06	16	398
12	0	530	22	140	5	75	0	152	51	-15.29	19	401
13	0	559	23	140	5	77	0	157	51	-12.84	52	406
14	0	583	24	140	5	78	0	161	52	-9.32	67	408
15	0	605	26	139	5	80	0	161	51	-7.69	67	408
16	0	623	27	136	5	80	0	158	50	-5.07	60	396
17	0	634	27	132	5	77	1	152	49	-3.42	51	375
18	0	626	28	127	6	77	1	141	46	-5.17	44	349
19	0	610	27	126	5	75	1	136	43	-1.22	40	324
20	0	592	26	121	5	72	6	126	41	0.00	37	303
21	0	573	21	117	4	70	27	118	39	0.00	33	281
22	0	558	13	113	3	65	31	95	37	0.00	29	259
23	0	537	5	112	1	62	31	55	35	0.00	20	239
24	0	511	2	109	0	57	32	34	34	0.00	18	225

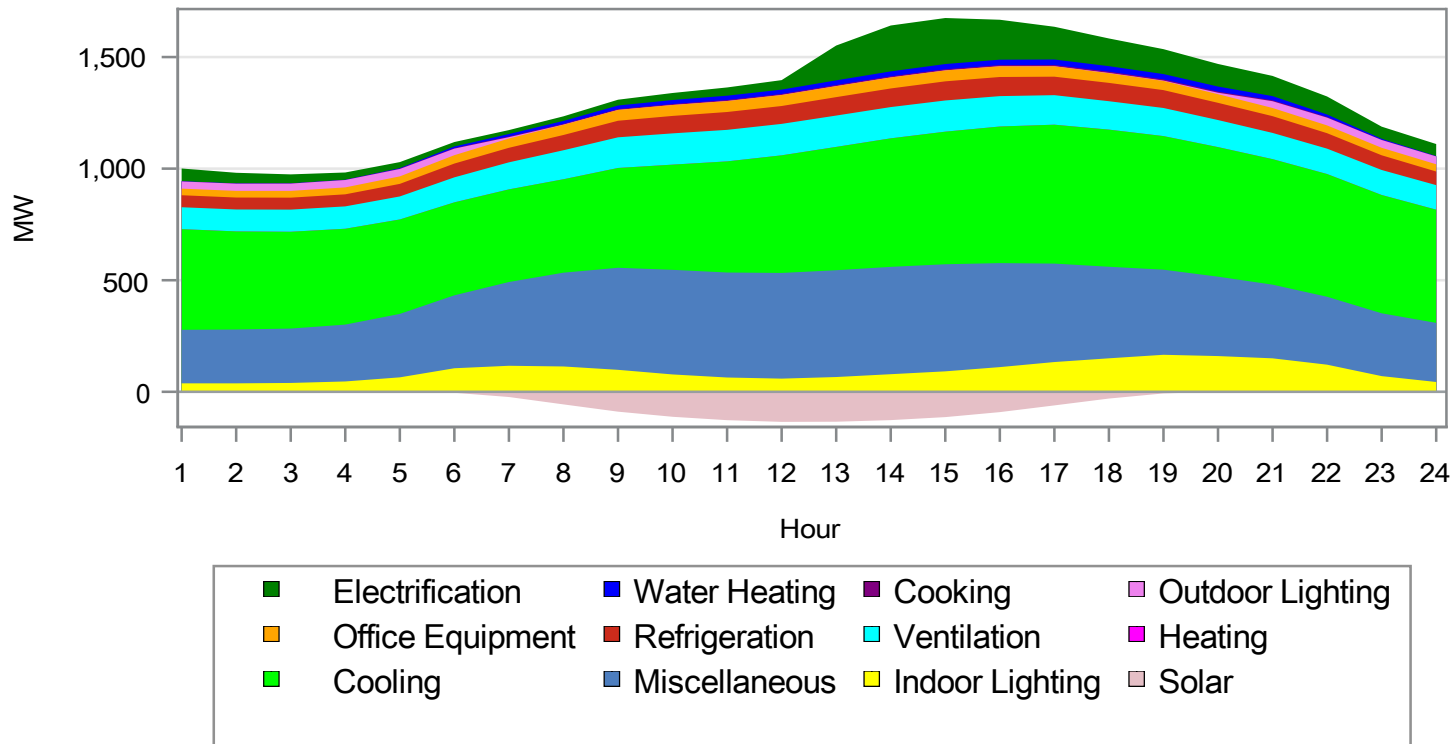
Summer 2031 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2031 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	0	463	1	101	0	52	30	31	31	0.00	29	225
2	0	450	1	101	0	51	30	31	32	0.00	24	226
3	0	442	1	102	0	51	30	33	32	0.00	20	228
4	0	436	1	103	0	52	30	38	33	0.00	17	238
5	0	428	3	105	1	54	30	53	35	0.00	14	265
6	0	419	8	114	2	59	27	90	39	-1.09	12	302
7	0	415	12	123	3	62	6	114	43	-5.95	11	346
8	0	417	14	131	3	64	1	138	47	-5.14	13	385
9	0	440	17	137	4	69	0	150	50	-8.19	17	415
10	0	466	19	139	4	73	0	152	50	-17.48	21	425
11	0	492	21	140	4	74	0	153	50	-20.30	25	426
12	0	521	21	140	4	74	0	155	50	-28.02	30	428
13	0	548	22	139	5	77	0	160	50	-23.47	104	432
14	0	571	23	139	5	77	0	164	50	-17.02	136	434
15	0	591	25	139	5	79	0	163	50	-14.02	137	433
16	0	609	26	135	5	79	0	161	49	-9.24	121	420
17	0	619	26	131	5	77	1	155	47	-6.23	100	398
18	0	614	26	126	5	76	1	144	44	-9.42	86	370
19	0	599	26	125	5	74	1	138	42	-2.23	77	344
20	0	579	25	120	4	72	6	128	40	0.00	71	322
21	0	559	20	117	4	70	27	120	38	0.00	63	299
22	0	547	12	113	3	64	31	97	36	0.00	55	276
23	0	528	5	112	1	61	31	56	34	0.00	36	255
24	0	504	2	110	0	57	31	35	33	0.00	35	241

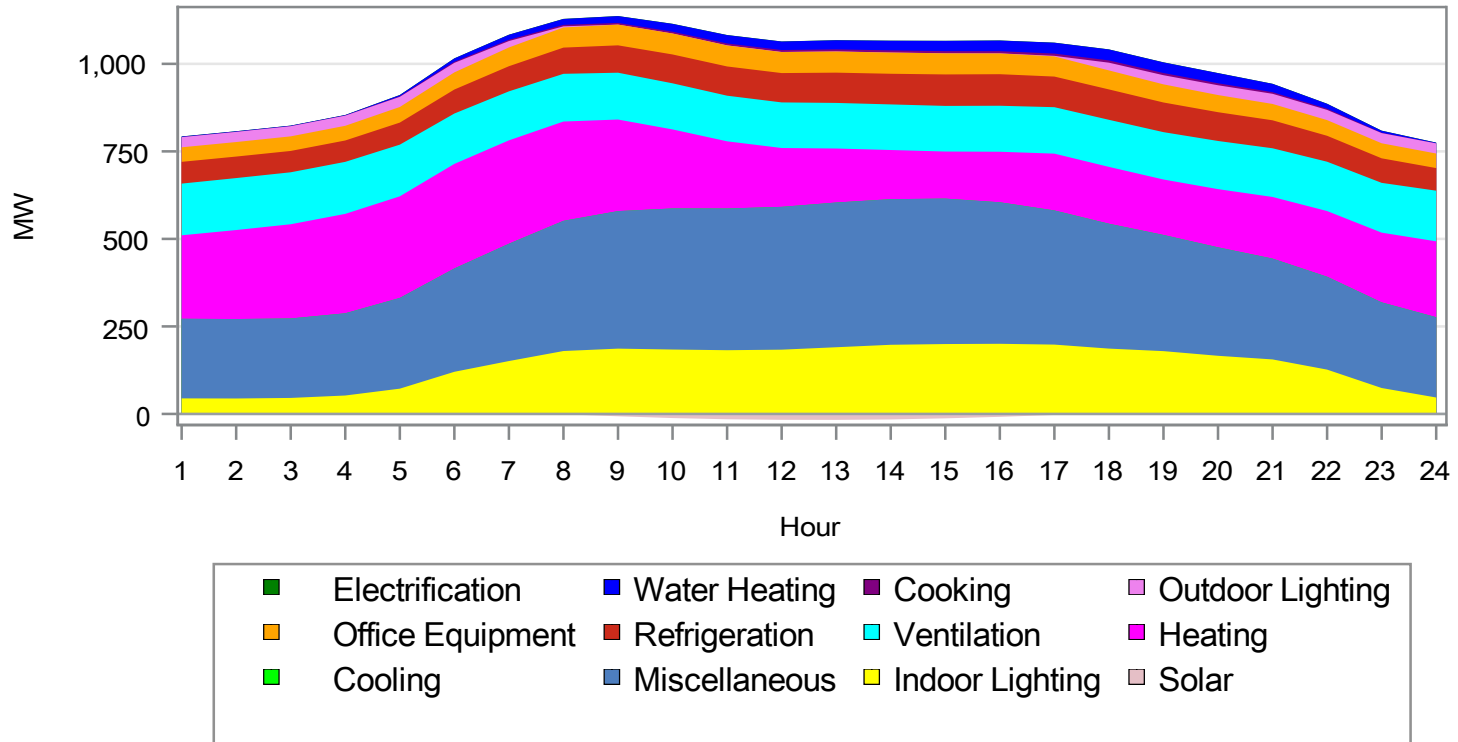
Summer 2040 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2040 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	0	451	1	98	0	54	32	38	30	0.00	57	240
2	0	440	1	98	0	53	32	38	30	0.00	47	241
3	0	434	1	99	0	54	33	40	30	0.00	40	244
4	0	430	1	100	0	54	33	46	31	0.00	32	255
5	0	423	3	103	1	56	33	65	34	0.00	27	284
6	0	417	7	112	2	62	29	110	38	-4.38	20	327
7	0	415	11	121	3	65	6	140	42	-23.32	18	375
8	0	419	13	130	3	68	1	170	45	-56.45	21	420
9	0	447	16	137	4	74	0	187	48	-89.02	26	457
10	0	471	18	140	4	78	0	190	49	-111.96	31	469
11	0	498	19	141	4	80	0	191	49	-127.16	37	470
12	0	527	20	141	4	80	0	194	49	-134.85	43	473
13	0	553	21	140	5	83	0	200	49	-134.06	156	478
14	0	576	22	140	5	83	0	206	49	-126.93	206	481
15	0	594	24	140	5	86	0	205	49	-113.41	206	480
16	0	612	24	136	5	86	0	202	48	-91.04	179	466
17	0	623	25	132	5	83	1	194	46	-60.99	147	441
18	0	615	25	127	5	82	1	180	43	-30.24	124	410
19	0	599	24	126	5	80	2	173	41	-7.30	112	381
20	0	581	23	121	5	77	7	160	39	0.00	101	356
21	0	562	19	117	4	75	30	150	37	0.00	91	330
22	0	550	11	114	3	69	35	122	35	0.00	81	304
23	0	530	5	112	1	66	35	70	34	0.00	54	282
24	0	507	2	110	0	61	35	44	33	0.00	54	265

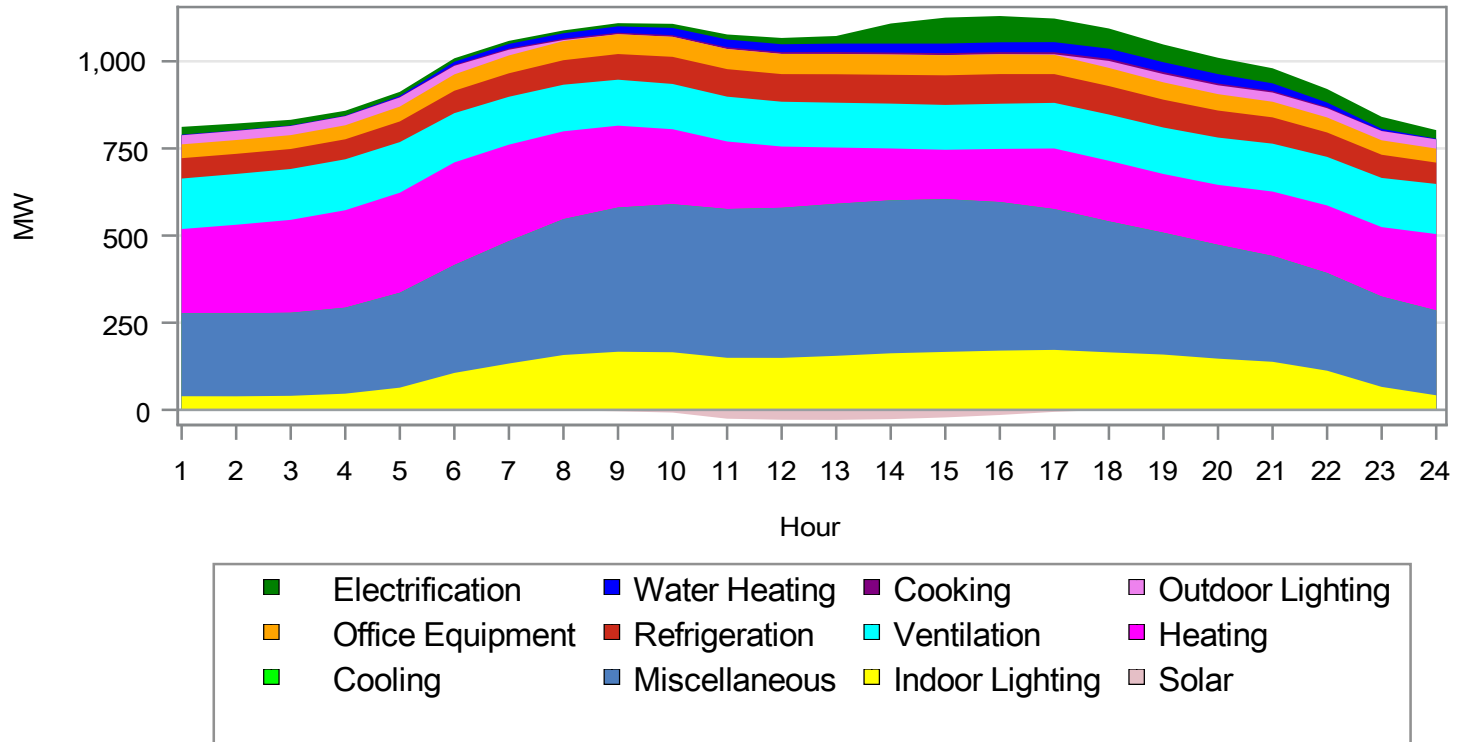
Winter 2021 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2021 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	238	0	2	148	0	62	29	44	42	0.00	0	227
2	254	0	2	148	0	61	29	44	42	0.00	0	227
3	269	0	2	148	0	61	29	46	42	0.00	0	227
4	284	0	1	149	0	61	29	53	42	0.00	0	235
5	290	0	4	148	1	63	29	72	45	0.00	0	259
6	299	0	10	144	3	69	27	120	49	0.00	0	295
7	295	0	14	140	4	72	18	151	54	0.00	0	335
8	284	0	17	136	4	75	3	181	57	-1.05	0	372
9	262	0	20	134	5	78	0	193	59	-6.73	0	393
10	226	0	22	132	5	82	0	196	60	-11.79	0	403
11	192	0	24	130	5	84	0	197	60	-15.25	0	405
12	168	0	24	130	5	84	0	200	60	-16.87	0	408
13	154	0	26	130	6	86	0	208	60	-17.04	0	413
14	140	0	28	130	6	88	0	213	60	-15.81	0	416
15	135	0	29	130	6	90	0	212	60	-12.58	0	415
16	144	0	30	131	6	90	0	209	59	-8.30	0	404
17	162	0	31	133	7	87	2	201	58	-2.88	0	383
18	162	0	31	135	7	87	22	187	54	0.00	0	357
19	158	0	30	135	6	85	26	179	52	0.00	0	332
20	166	0	29	138	6	82	28	166	49	0.00	0	310
21	176	0	24	139	5	80	29	156	47	0.00	0	288
22	188	0	14	141	3	74	29	127	45	0.00	0	265
23	199	0	6	142	1	70	29	74	43	0.00	0	244
24	217	0	2	145	0	65	29	47	42	0.00	0	229

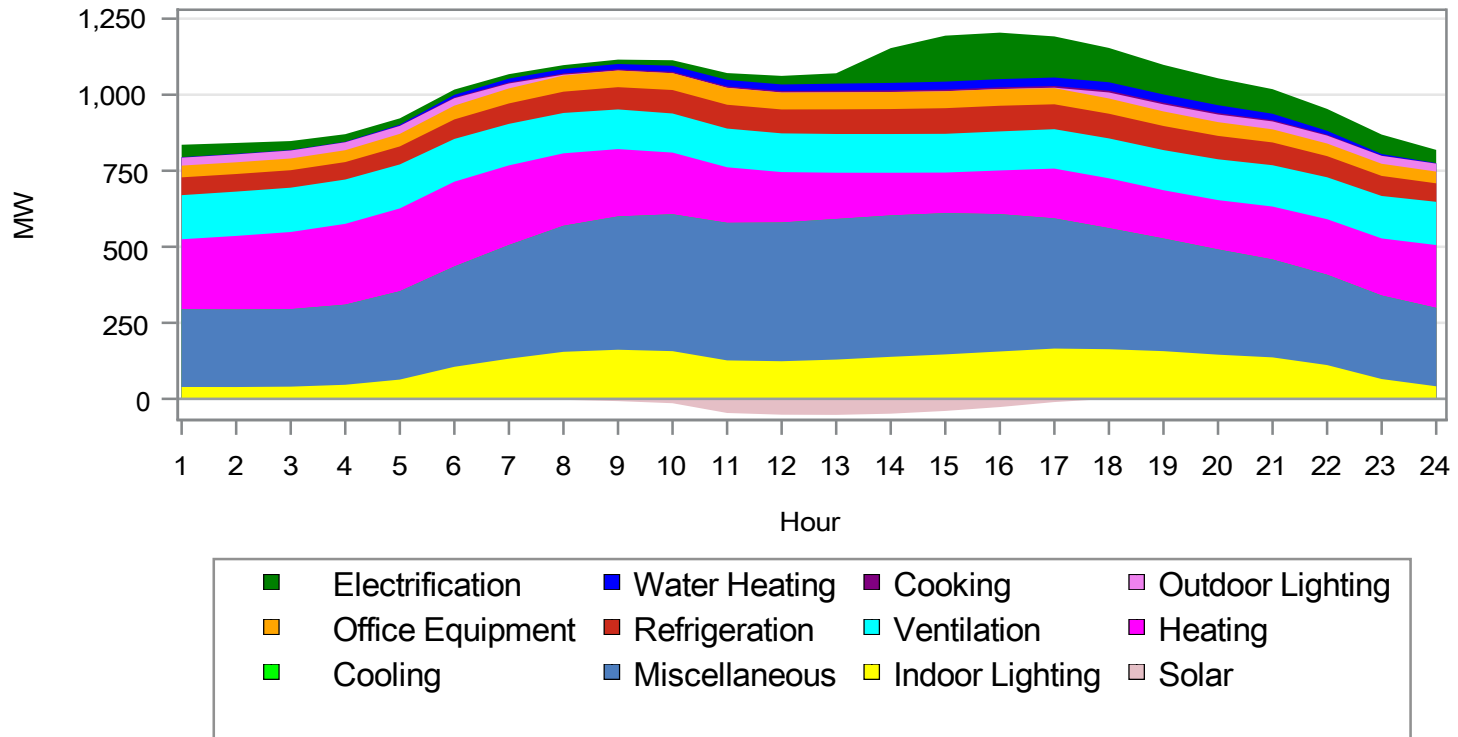
Winter 2026 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2026 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	241	0	2	145	0	58	26	39	40	0.00	22	238
2	254	0	2	146	0	58	26	39	40	0.00	20	238
3	267	0	1	146	0	57	26	40	40	0.00	16	238
4	280	0	1	146	0	57	26	46	40	0.00	14	247
5	287	0	3	145	1	59	26	64	43	0.00	11	272
6	294	0	9	141	3	64	25	106	47	0.00	10	310
7	277	0	13	137	3	67	16	133	51	0.00	9	351
8	252	0	16	134	4	70	3	159	55	-1.73	8	390
9	235	0	18	132	4	74	0	171	57	-4.08	9	414
10	215	0	21	130	5	78	0	173	57	-7.85	12	425
11	194	0	22	129	5	79	0	175	58	-25.41	14	427
12	176	0	23	129	5	79	0	178	58	-28.46	18	430
13	161	0	24	129	5	82	0	184	58	-28.83	22	436
14	149	0	26	129	5	83	0	189	58	-26.66	58	439
15	142	0	27	129	6	85	0	188	58	-21.74	74	438
16	152	0	28	130	6	85	0	185	57	-14.71	75	426
17	174	0	29	131	6	82	1	178	55	-5.76	68	404
18	174	0	29	133	6	82	20	165	52	0.00	58	376
19	169	0	28	133	6	80	24	159	50	0.00	51	349
20	172	0	27	136	5	78	25	147	47	0.00	47	326
21	185	0	22	137	4	75	26	138	45	0.00	43	304
22	194	0	13	139	3	70	27	112	43	0.00	39	280
23	199	0	5	141	1	66	27	66	41	0.00	35	259
24	219	0	2	144	0	61	27	42	40	0.00	25	243

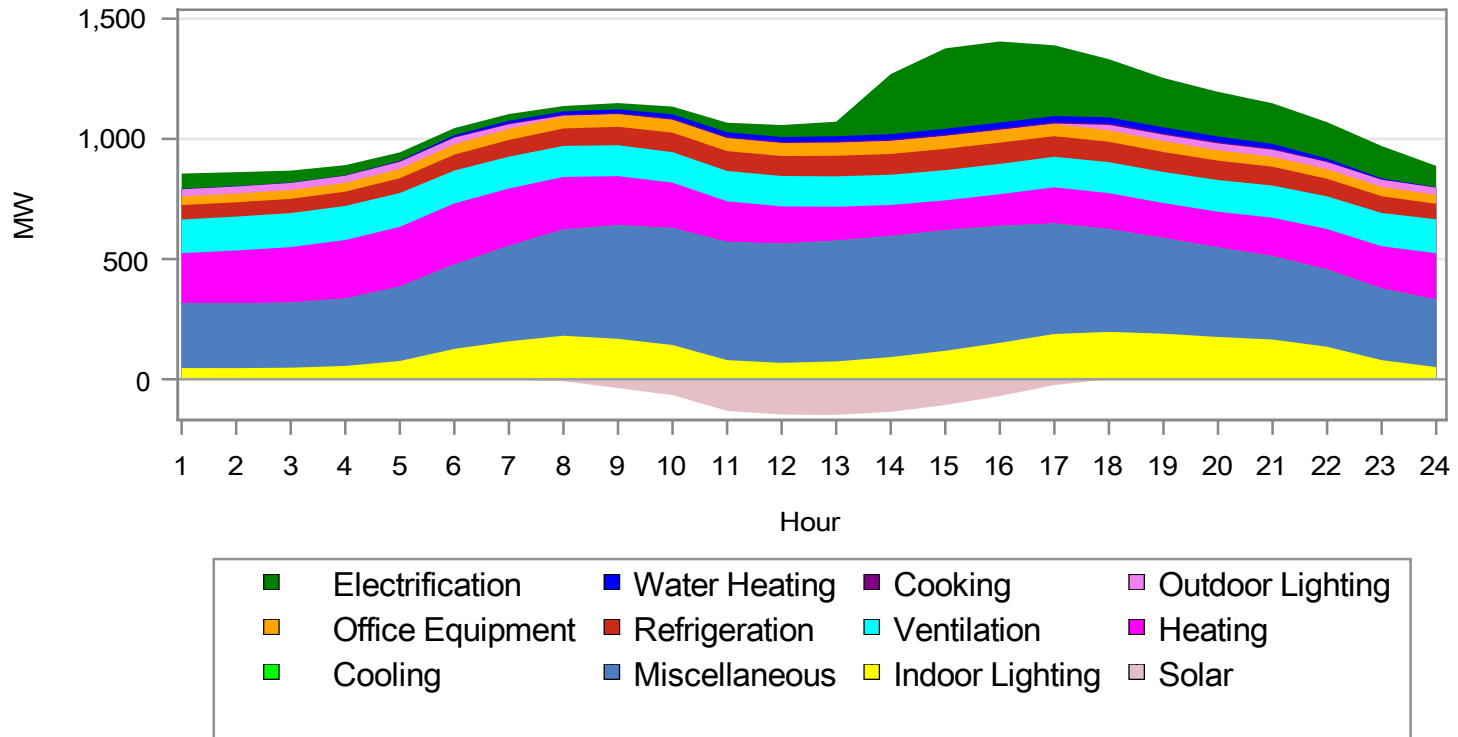
Winter 2031 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2031 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	230	0	2	145	0	59	26	39	39	0.00	41	255
2	242	0	2	146	0	58	26	39	39	0.00	36	255
3	254	0	1	146	0	57	26	40	39	0.00	30	255
4	266	0	1	146	0	57	26	46	39	0.00	25	263
5	272	0	3	145	1	59	26	63	41	0.00	20	290
6	279	0	9	141	3	64	24	105	45	0.00	17	330
7	262	0	13	136	3	67	16	132	49	0.00	15	374
8	238	0	15	133	4	70	3	158	53	-3.17	13	414
9	221	0	17	130	4	73	0	169	55	-7.47	14	438
10	203	0	20	128	4	77	0	171	55	-14.35	18	450
11	183	0	21	127	5	78	0	173	55	-46.47	22	452
12	166	0	22	127	5	79	0	176	56	-52.04	28	456
13	152	0	23	127	5	81	0	182	56	-52.72	34	462
14	140	0	25	127	5	82	0	187	56	-48.74	114	465
15	134	0	26	127	5	84	0	186	56	-39.75	151	464
16	144	0	27	128	5	84	0	183	55	-26.89	153	451
17	164	0	28	130	6	82	1	176	53	-10.53	135	428
18	164	0	28	131	6	81	20	163	50	0.00	113	398
19	159	0	27	132	5	79	23	157	48	0.00	97	370
20	162	0	26	134	5	77	25	145	45	0.00	88	346
21	174	0	21	136	4	75	26	136	43	0.00	81	322
22	183	0	13	138	3	69	26	111	41	0.00	72	297
23	188	0	5	140	1	66	26	65	40	0.00	64	274
24	207	0	2	142	0	61	26	41	39	0.00	43	258

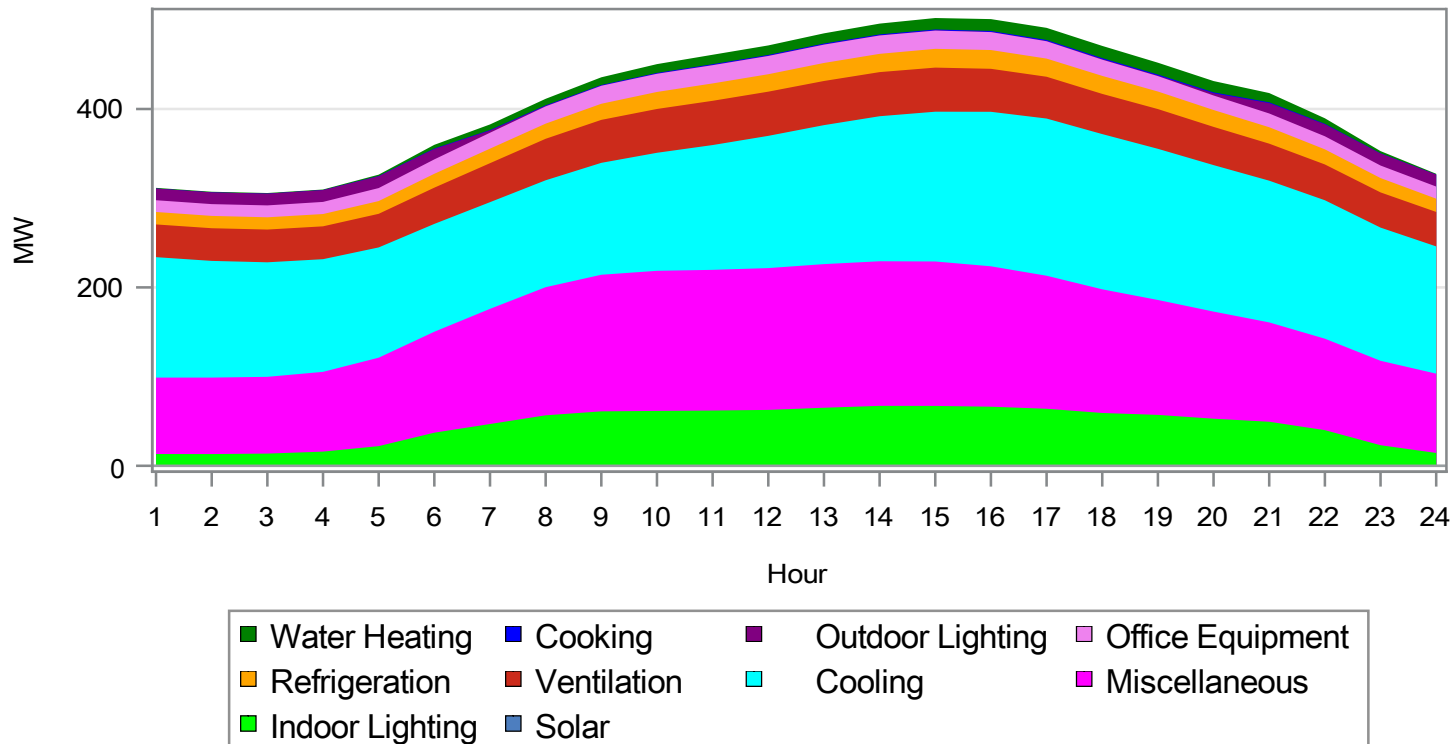
Winter 2040 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2040 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Electrification	Miscellaneous
1	208	0	1	140	0	60	29	46	36	0.00	64	270
2	219	0	1	141	0	60	29	46	36	0.00	58	270
3	231	0	1	141	0	59	29	48	37	0.00	50	271
4	243	0	1	142	0	59	29	55	37	0.00	43	280
5	248	0	3	141	1	61	29	76	39	0.00	35	310
6	254	0	8	137	2	67	27	126	43	0.00	29	351
7	238	0	12	133	3	69	18	158	47	0.00	28	397
8	219	0	14	129	4	73	3	189	50	-8.26	22	442
9	204	0	16	129	4	77	0	205	52	-36.77	26	473
10	189	0	19	127	4	81	0	208	53	-65.95	32	487
11	169	0	20	126	4	83	0	211	54	-131.50	39	491
12	155	0	20	126	5	83	0	215	54	-146.76	50	496
13	141	0	22	126	5	86	0	222	54	-148.23	60	503
14	129	0	23	126	5	86	0	228	54	-135.51	250	504
15	124	0	25	126	5	89	0	226	53	-107.41	335	502
16	132	0	25	126	5	88	0	221	53	-69.90	337	487
17	150	0	26	127	5	86	2	213	51	-24.24	294	460
18	150	0	26	129	5	85	22	197	48	0.00	242	427
19	145	0	25	130	5	83	27	190	46	0.00	206	398
20	149	0	24	132	5	81	28	176	43	0.00	186	372
21	160	0	20	134	4	78	30	165	41	0.00	169	347
22	168	0	12	136	3	73	30	135	40	0.00	151	321
23	176	0	5	138	1	70	30	80	39	0.00	135	298
24	193	0	2	141	0	64	30	51	37	0.00	89	280

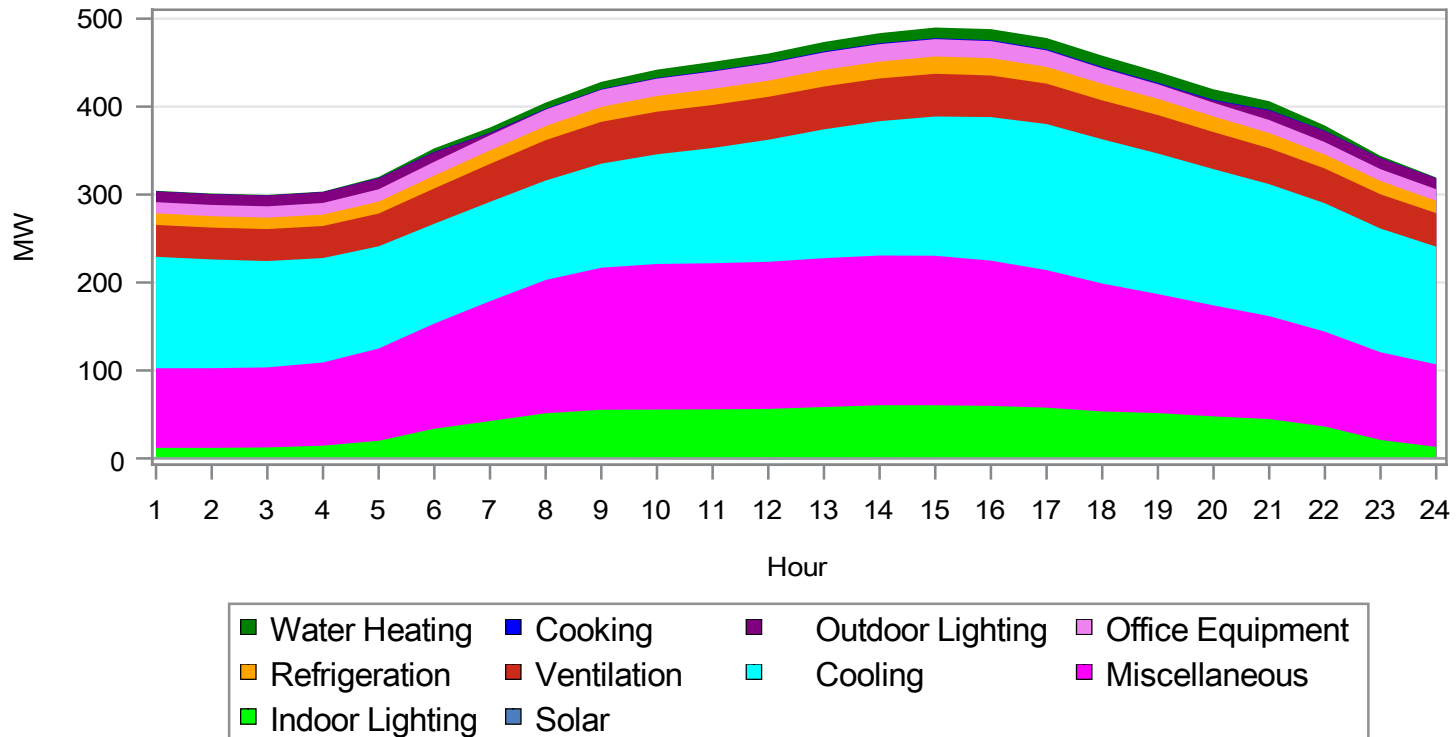
Summer 2021 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2021 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	135	1	37	0	14	13	13	13	0.00	86
2	131	1	37	0	14	13	13	13	0.00	86
3	128	1	37	0	14	13	14	13	0.00	86
4	126	1	37	0	14	13	16	14	0.00	89
5	124	2	38	0	14	13	22	15	0.00	99
6	121	4	41	1	16	12	37	16	-0.04	113
7	120	6	44	1	16	2	47	18	-0.20	129
8	120	7	47	1	17	0	57	19	-0.17	144
9	125	9	48	1	18	0	61	20	-0.27	153
10	132	10	49	1	19	0	62	20	-0.57	157
11	140	11	50	1	19	0	63	20	-0.67	158
12	148	11	50	1	20	0	64	20	-0.93	159
13	156	11	49	1	20	0	66	21	-0.78	161
14	163	12	49	1	20	0	68	21	-0.57	162
15	168	13	49	1	21	0	68	20	-0.47	162
16	173	13	48	1	21	0	67	20	-0.31	157
17	176	14	47	1	20	0	64	19	-0.21	149
18	174	14	45	1	20	1	60	18	-0.31	139
19	169	13	45	1	20	1	57	17	-0.07	129
20	164	13	43	1	19	3	53	16	0.00	120
21	159	10	41	1	18	12	49	15	0.00	111
22	155	6	40	1	17	13	40	15	0.00	103
23	149	3	39	0	16	13	23	14	0.00	95
24	143	1	39	0	15	13	14	14	0.00	89

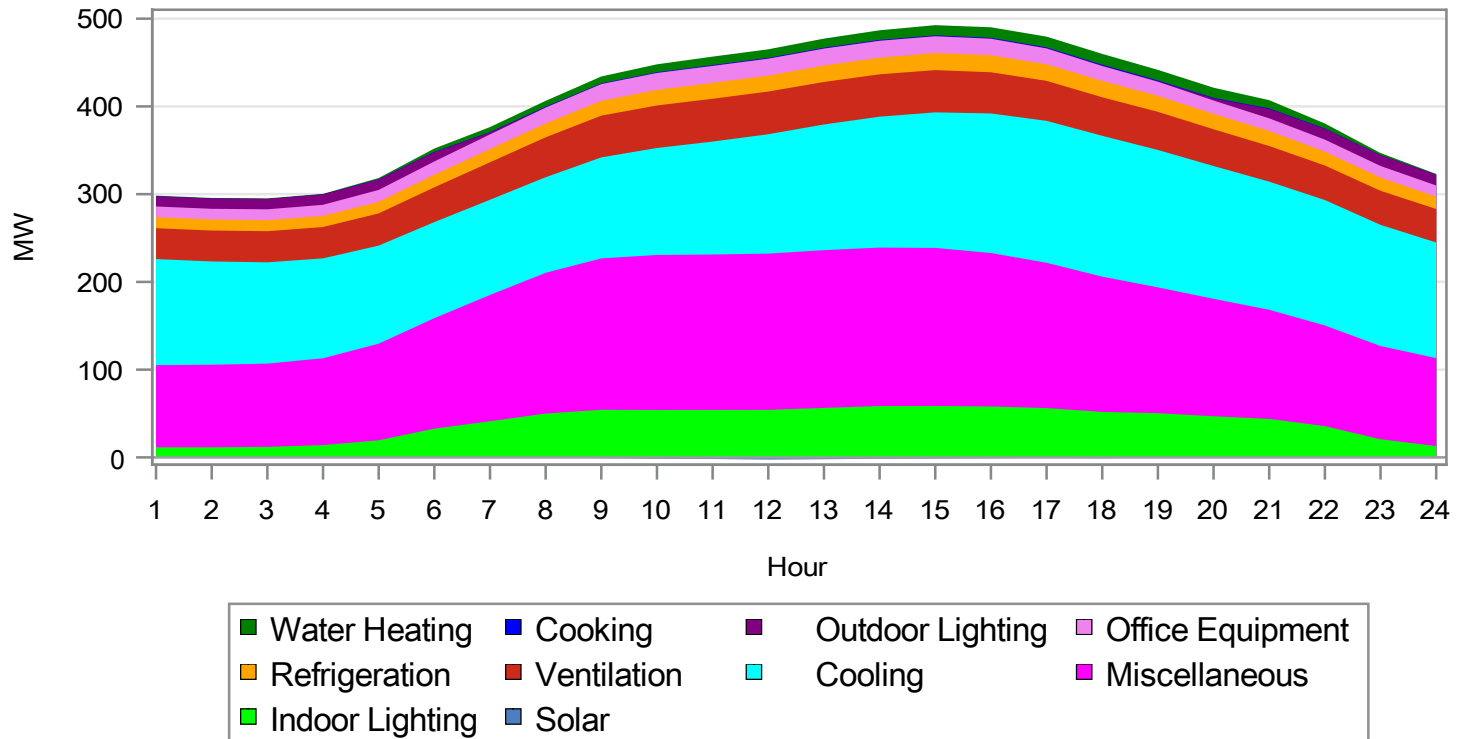
Summer 2026 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2026 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	127	1	36	0	13	12	12	13	0.00	90
2	124	1	36	0	13	12	12	13	0.00	91
3	121	1	36	0	13	12	12	13	0.00	91
4	119	1	36	0	13	12	15	13	0.00	95
5	116	1	37	0	13	12	20	14	0.00	105
6	113	4	40	0	15	11	34	16	-0.05	120
7	113	6	43	1	15	2	43	17	-0.30	136
8	113	7	46	1	16	0	52	19	-0.26	152
9	118	8	48	1	17	0	56	19	-0.40	161
10	125	9	48	1	18	0	56	20	-0.86	166
11	131	10	49	1	18	0	57	20	-1.00	166
12	139	10	49	1	18	0	58	20	-1.39	167
13	146	11	49	1	19	0	60	20	-1.16	169
14	153	11	49	1	19	0	61	20	-0.84	170
15	158	12	49	1	20	0	61	20	-0.70	170
16	163	13	47	1	20	0	60	19	-0.46	165
17	166	13	46	1	19	0	58	19	-0.31	156
18	164	13	44	1	19	1	54	17	-0.47	145
19	160	13	44	1	18	1	52	17	-0.11	135
20	155	12	42	1	18	2	48	16	0.00	126
21	150	10	41	1	17	11	45	15	0.00	117
22	146	6	39	1	16	12	36	14	0.00	108
23	141	2	39	0	15	13	21	14	0.00	100
24	134	1	38	0	14	13	13	13	0.00	94

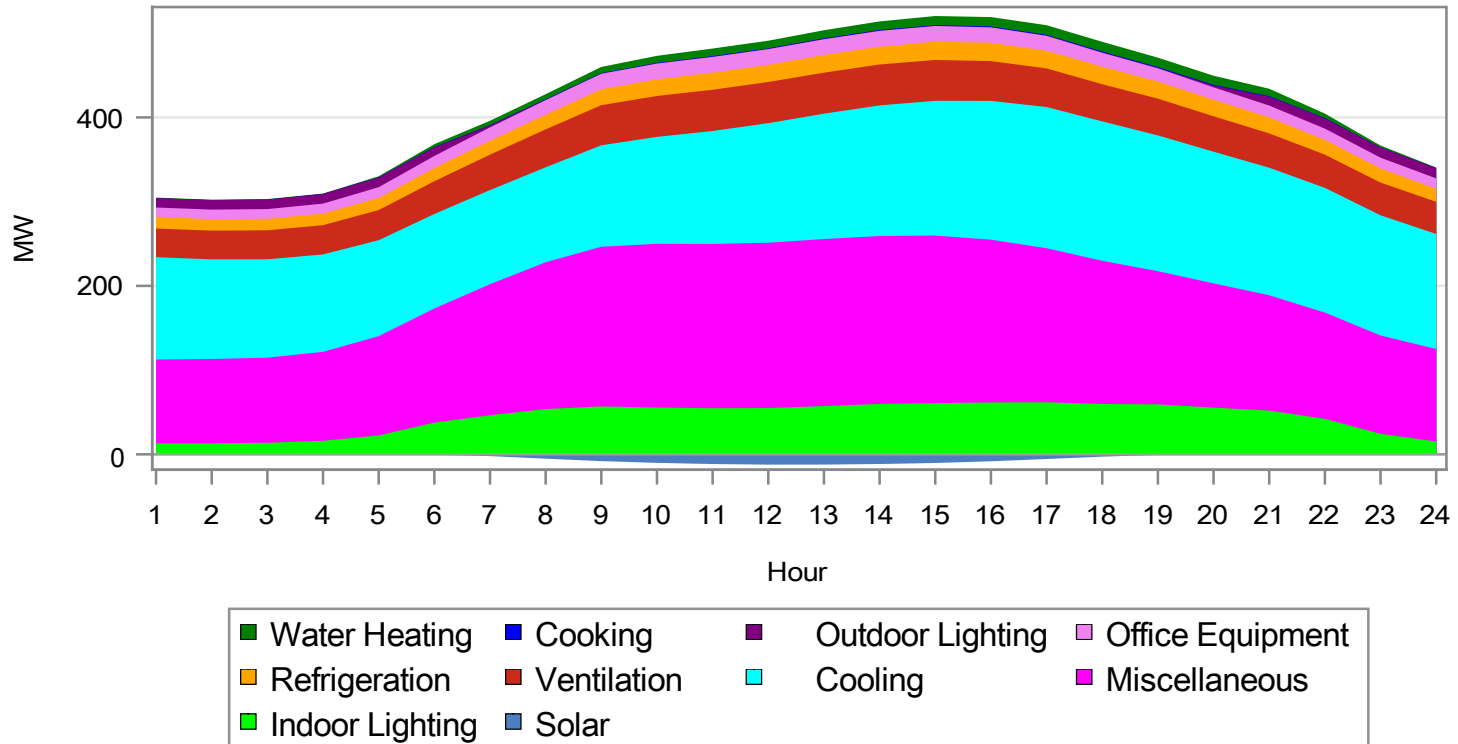
Summer 2031 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2031 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	121	1	35	0	13	12	12	12	0.00	94
2	118	1	35	0	13	12	12	12	0.00	94
3	115	1	35	0	13	12	12	12	0.00	95
4	114	1	36	0	13	12	14	13	0.00	99
5	112	1	37	0	13	12	19	14	0.00	110
6	109	4	40	0	14	11	33	15	-0.10	126
7	109	6	43	1	15	2	42	17	-0.54	144
8	109	7	46	1	16	0	50	18	-0.47	160
9	115	8	48	1	17	0	55	19	-0.74	173
10	122	9	48	1	18	0	56	19	-1.58	177
11	129	10	49	1	18	0	56	19	-1.84	177
12	136	10	49	1	18	0	57	19	-2.54	178
13	143	10	48	1	19	0	59	19	-2.13	180
14	149	11	48	1	19	0	60	19	-1.54	181
15	154	12	48	1	19	0	60	19	-1.27	180
16	159	12	47	1	19	0	59	19	-0.84	175
17	162	12	46	1	19	0	57	18	-0.56	166
18	161	12	44	1	19	1	53	17	-0.85	154
19	157	12	43	1	18	1	51	16	-0.20	143
20	151	11	42	1	18	2	47	15	0.00	134
21	146	9	41	1	17	11	44	14	0.00	124
22	143	6	39	0	16	12	36	14	0.00	115
23	138	2	39	0	15	12	21	13	0.00	106
24	132	1	38	0	14	12	13	13	0.00	100

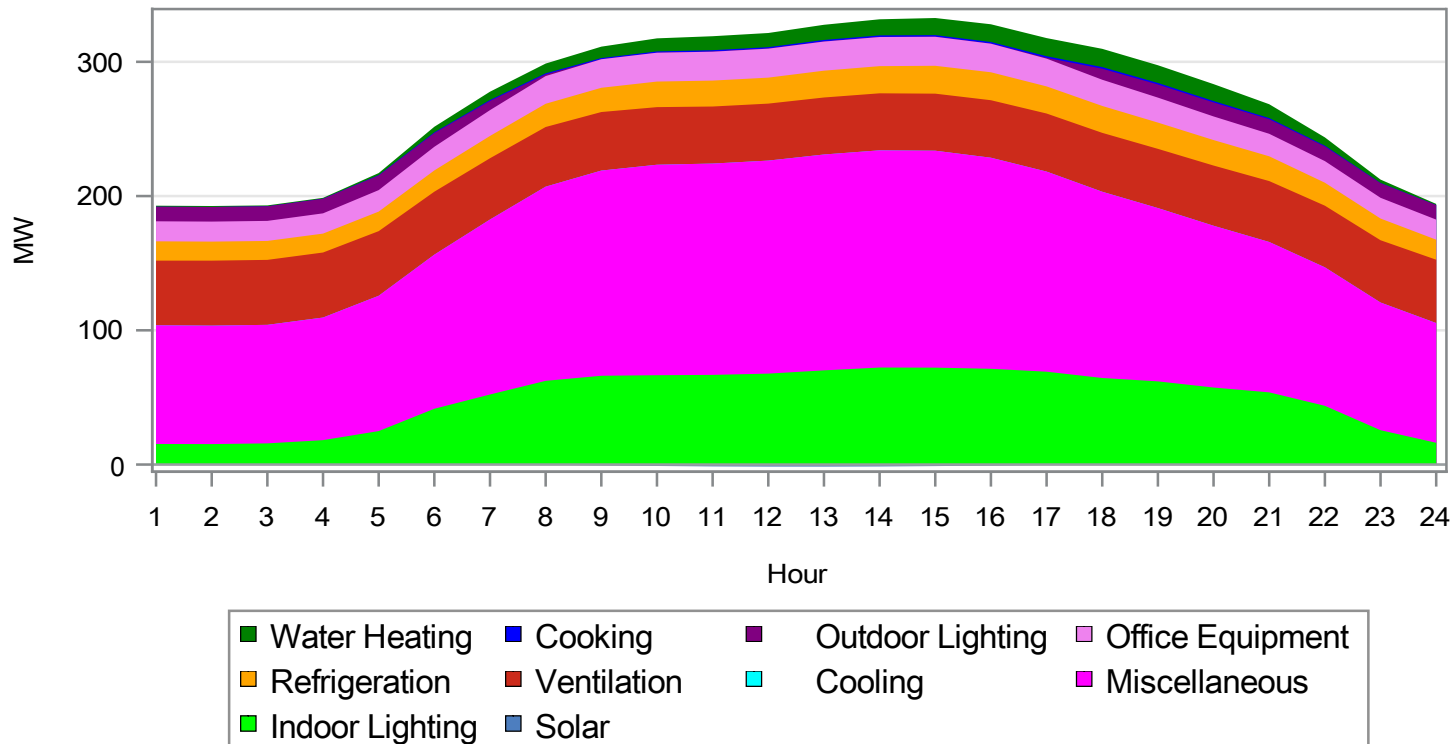
Summer 2040 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2040 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	121	1	34	0	14	11	13	11	0.00	99
2	118	1	34	0	14	11	13	11	0.00	100
3	117	1	34	0	14	11	14	12	0.00	101
4	116	0	35	0	14	11	16	12	0.00	106
5	114	1	36	0	14	12	22	13	0.00	118
6	112	3	39	0	16	10	38	14	-0.40	135
7	112	5	42	1	17	2	48	16	-2.11	156
8	113	6	45	1	17	0	59	17	-5.12	174
9	120	7	48	1	19	0	65	19	-8.07	190
10	127	8	49	1	20	0	66	19	-10.15	194
11	134	9	49	1	20	0	66	19	-11.52	195
12	142	9	49	1	20	0	67	19	-12.22	196
13	149	10	49	1	21	0	69	19	-12.15	198
14	155	10	49	1	21	0	71	19	-11.50	199
15	160	11	48	1	22	0	71	19	-10.28	199
16	165	11	47	1	22	0	70	18	-8.25	193
17	168	11	46	1	21	0	67	18	-5.53	183
18	165	11	44	1	21	1	62	17	-2.74	170
19	161	11	44	1	20	1	60	16	-0.66	158
20	156	11	42	1	20	2	55	15	0.00	147
21	151	9	41	1	19	11	52	14	0.00	137
22	148	5	39	1	18	12	42	13	0.00	126
23	143	2	39	0	17	12	24	13	0.00	117
24	137	1	38	0	15	12	15	12	0.00	110

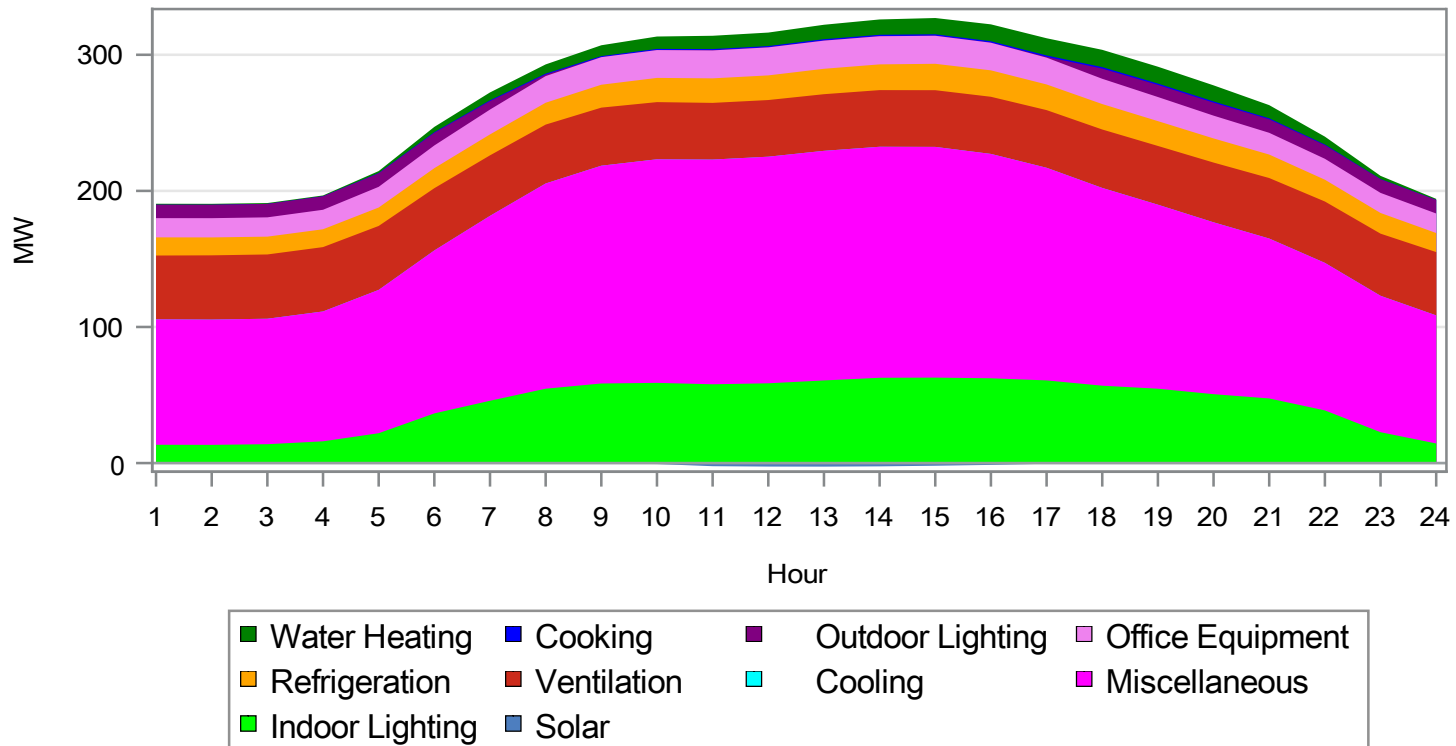
Winter 2021 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2021 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	1	48	0	14	11	15	15	0.00	88
2	0	1	48	0	14	11	15	15	0.00	88
3	0	1	48	0	14	11	16	15	0.00	88
4	0	1	48	0	14	11	18	15	0.00	91
5	0	2	48	0	15	11	25	16	0.00	101
6	0	4	47	1	16	10	42	18	0.00	115
7	0	6	46	1	17	7	52	19	0.00	130
8	0	7	44	1	17	1	62	21	-0.10	145
9	0	9	44	1	18	0	67	21	-0.61	153
10	0	10	43	1	19	0	68	21	-1.07	157
11	0	10	42	1	19	0	68	22	-1.38	157
12	0	11	42	1	19	0	69	22	-1.53	159
13	0	11	42	1	20	0	72	22	-1.54	161
14	0	12	42	1	20	0	74	22	-1.43	162
15	0	13	42	1	21	0	73	22	-1.14	162
16	0	13	43	1	21	0	72	21	-0.75	157
17	0	14	43	1	20	1	69	21	-0.26	149
18	0	14	44	1	20	8	64	20	0.00	139
19	0	13	44	1	20	10	62	19	0.00	129
20	0	13	45	1	19	10	57	18	0.00	121
21	0	10	45	1	18	11	54	17	0.00	112
22	0	6	46	1	17	11	44	16	0.00	103
23	0	3	46	0	16	11	26	15	0.00	95
24	0	1	47	0	15	11	16	15	0.00	89

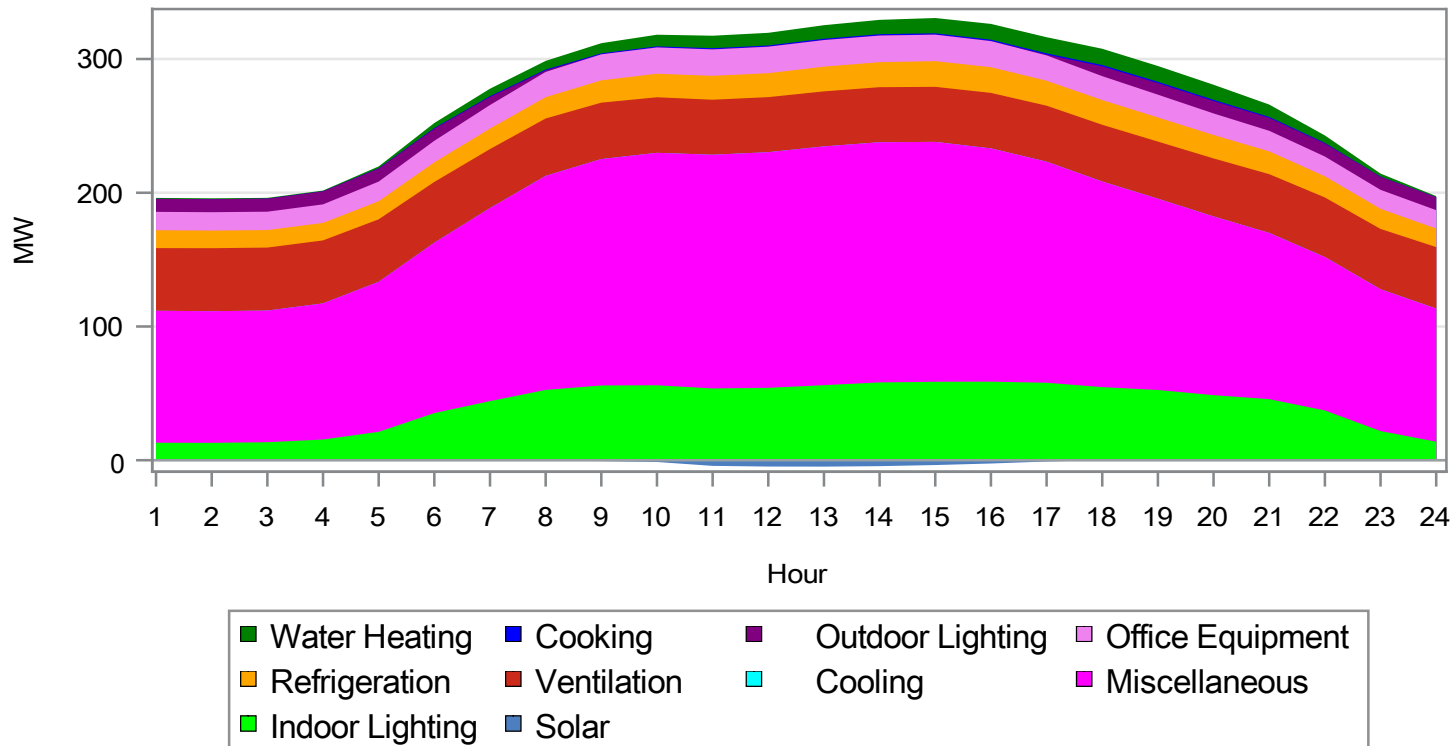
Winter 2026 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2026 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	1	47	0	13	10	13	14	0.00	92
2	0	1	47	0	13	10	13	14	0.00	92
3	0	1	47	0	13	10	14	14	0.00	92
4	0	1	47	0	13	10	16	14	0.00	95
5	0	1	47	0	14	10	22	15	0.00	105
6	0	4	46	0	15	9	37	17	0.00	120
7	0	6	44	1	15	6	46	18	0.00	136
8	0	7	43	1	16	1	55	20	-0.16	151
9	0	8	43	1	17	0	59	20	-0.37	160
10	0	9	42	1	18	0	60	20	-0.71	164
11	0	10	42	1	18	0	60	21	-2.30	165
12	0	10	42	1	18	0	61	21	-2.58	167
13	0	11	42	1	19	0	63	21	-2.61	169
14	0	11	42	1	19	0	65	21	-2.42	170
15	0	12	42	1	19	0	65	21	-1.97	170
16	0	12	42	1	19	0	64	20	-1.33	165
17	0	13	42	1	19	1	61	20	-0.52	156
18	0	13	43	1	19	8	57	19	0.00	145
19	0	12	43	1	18	9	55	18	0.00	135
20	0	12	44	1	18	10	51	17	0.00	126
21	0	10	44	1	17	10	47	16	0.00	117
22	0	6	45	1	16	10	39	15	0.00	108
23	0	2	46	0	15	10	23	15	0.00	100
24	0	1	47	0	14	10	14	14	0.00	94

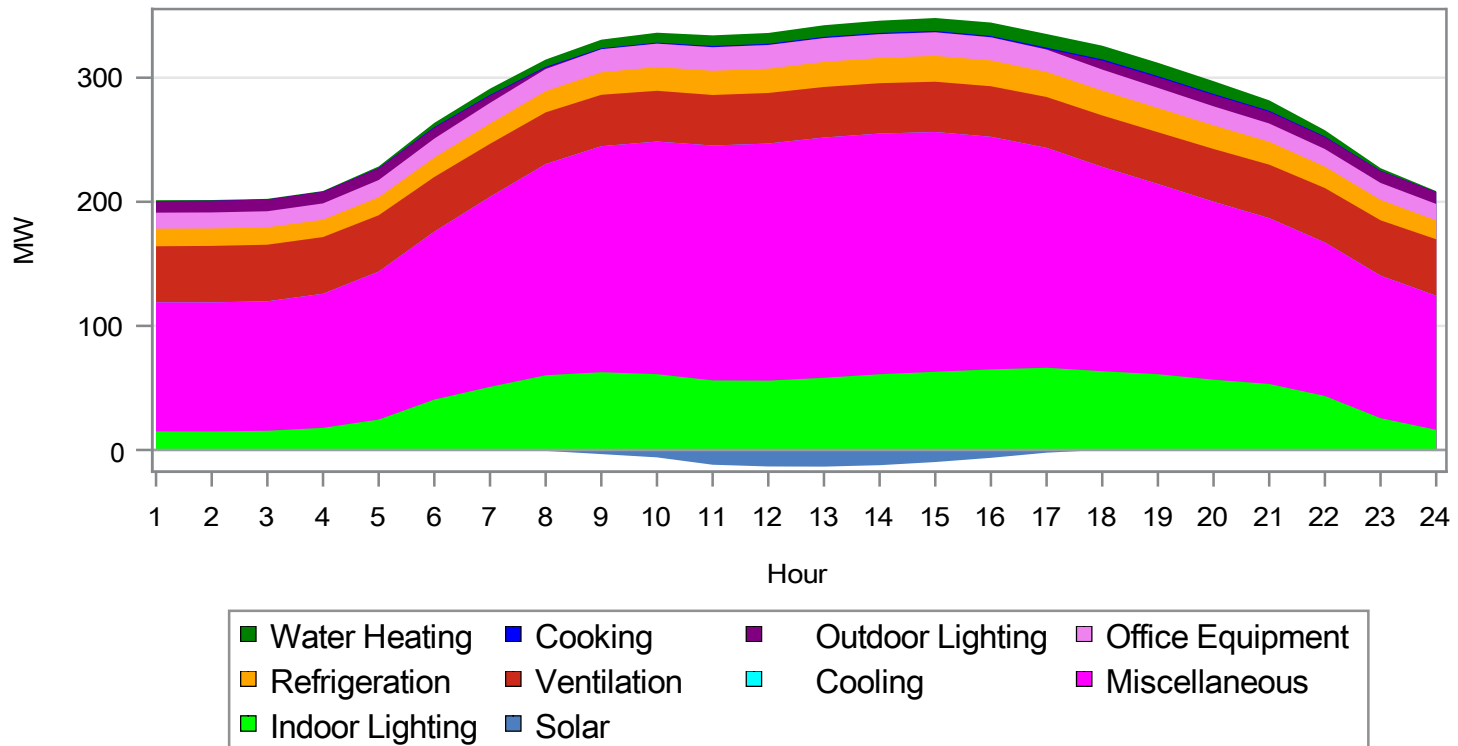
Winter 2031 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2031 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	1	47	0	13	10	13	14	0.00	99
2	0	1	47	0	13	10	13	14	0.00	98
3	0	1	47	0	13	10	13	14	0.00	98
4	0	1	47	0	13	10	15	14	0.00	102
5	0	1	47	0	14	10	21	15	0.00	112
6	0	4	45	0	15	9	35	16	0.00	127
7	0	6	44	1	15	6	44	18	0.00	144
8	0	7	43	1	16	1	53	19	-0.29	160
9	0	8	42	1	17	0	57	19	-0.68	169
10	0	9	42	1	18	0	57	20	-1.30	174
11	0	9	41	1	18	0	58	20	-4.21	175
12	0	9	41	1	18	0	59	20	-4.72	176
13	0	10	41	1	18	0	61	20	-4.78	179
14	0	11	41	1	19	0	63	20	-4.42	180
15	0	11	41	1	19	0	62	20	-3.60	179
16	0	12	41	1	19	0	61	20	-2.44	174
17	0	12	42	1	19	1	59	19	-0.95	165
18	0	12	42	1	19	7	55	18	0.00	154
19	0	12	43	1	18	9	53	17	0.00	143
20	0	11	43	1	18	9	49	16	0.00	134
21	0	9	44	1	17	10	46	15	0.00	124
22	0	6	45	0	16	10	37	15	0.00	115
23	0	2	45	0	15	10	22	14	0.00	106
24	0	1	46	0	14	10	14	14	0.00	100

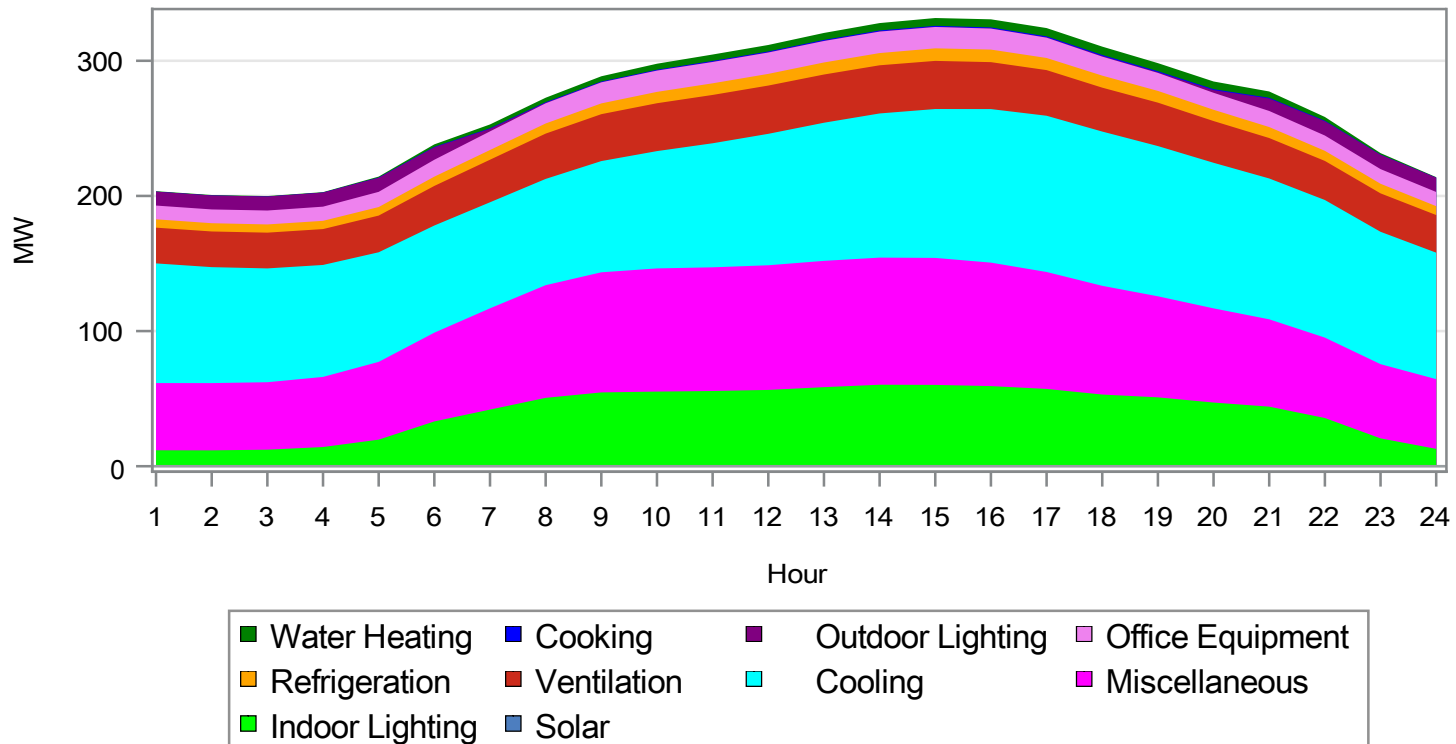
Winter 2040 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2040 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	1	45	0	14	9	15	13	0.00	104
2	0	1	45	0	14	9	15	13	0.00	104
3	0	1	46	0	14	9	15	13	0.00	104
4	0	1	46	0	14	9	18	13	0.00	108
5	0	1	45	0	14	9	24	14	0.00	119
6	0	3	44	0	16	9	41	15	0.00	135
7	0	5	43	1	16	6	51	17	0.00	153
8	0	6	42	1	17	1	61	18	-0.75	170
9	0	7	41	1	18	0	66	19	-3.33	182
10	0	8	41	1	19	0	67	19	-5.98	187
11	0	9	41	1	19	0	68	19	-11.92	189
12	0	9	41	1	20	0	69	19	-13.30	191
13	0	9	41	1	20	0	72	19	-13.43	194
14	0	10	41	1	20	0	73	19	-12.28	194
15	0	10	41	1	21	0	73	19	-9.73	193
16	0	11	41	1	21	0	71	19	-6.34	187
17	0	11	41	1	20	1	68	18	-2.20	177
18	0	11	41	1	20	7	63	17	0.00	165
19	0	11	42	1	20	9	61	16	0.00	153
20	0	10	43	1	19	9	57	15	0.00	143
21	0	8	43	1	18	10	53	15	0.00	134
22	0	5	44	1	17	10	43	14	0.00	124
23	0	2	45	0	16	10	26	14	0.00	115
24	0	1	46	0	15	10	16	13	0.00	108

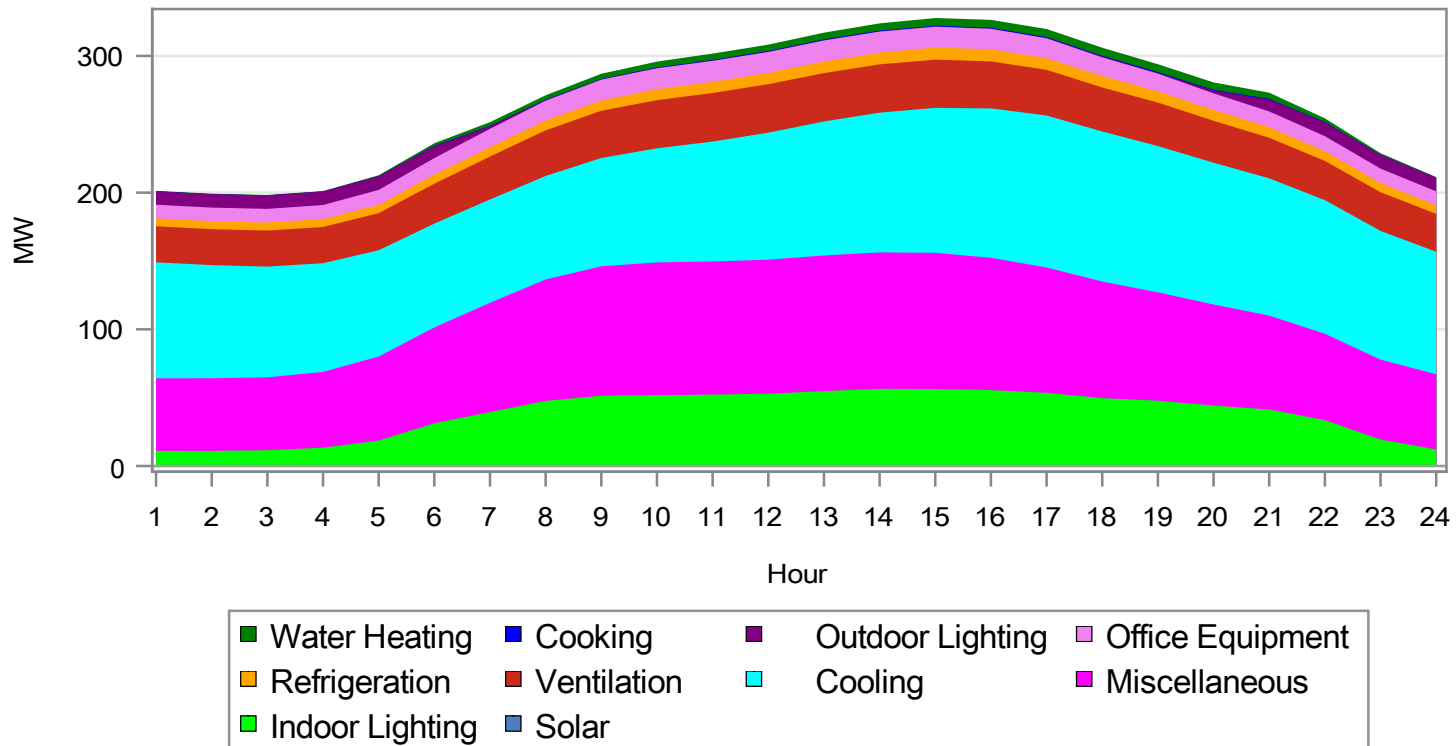
Summer 2021 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2021 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	89	0	26	0	6	10	12	10	0.00	50
2	86	0	26	0	6	10	12	10	0.00	50
3	84	0	26	0	6	10	12	10	0.00	50
4	83	0	27	0	6	10	14	10	0.00	52
5	81	1	27	0	6	10	20	11	0.00	58
6	79	2	29	0	7	9	33	13	-0.01	66
7	78	3	31	0	7	2	42	14	-0.06	75
8	79	3	34	1	8	0	51	15	-0.05	83
9	82	4	35	1	8	0	55	16	-0.09	89
10	87	4	35	1	8	0	55	16	-0.18	91
11	92	5	36	1	9	0	56	16	-0.21	92
12	97	5	36	1	9	0	57	16	-0.30	92
13	102	5	36	1	9	0	59	16	-0.25	93
14	107	5	36	1	9	0	60	16	-0.18	94
15	110	6	36	1	9	0	60	16	-0.15	94
16	114	6	35	1	9	0	59	16	-0.10	91
17	116	6	34	1	9	0	57	15	-0.07	87
18	114	6	32	1	9	0	53	14	-0.10	80
19	111	6	32	1	9	0	51	13	-0.02	75
20	108	6	31	1	8	2	47	13	0.00	70
21	104	5	30	1	8	9	44	12	0.00	65
22	102	3	29	0	7	11	36	11	0.00	59
23	98	1	28	0	7	11	21	11	0.00	55
24	94	0	28	0	7	11	13	10	0.00	52

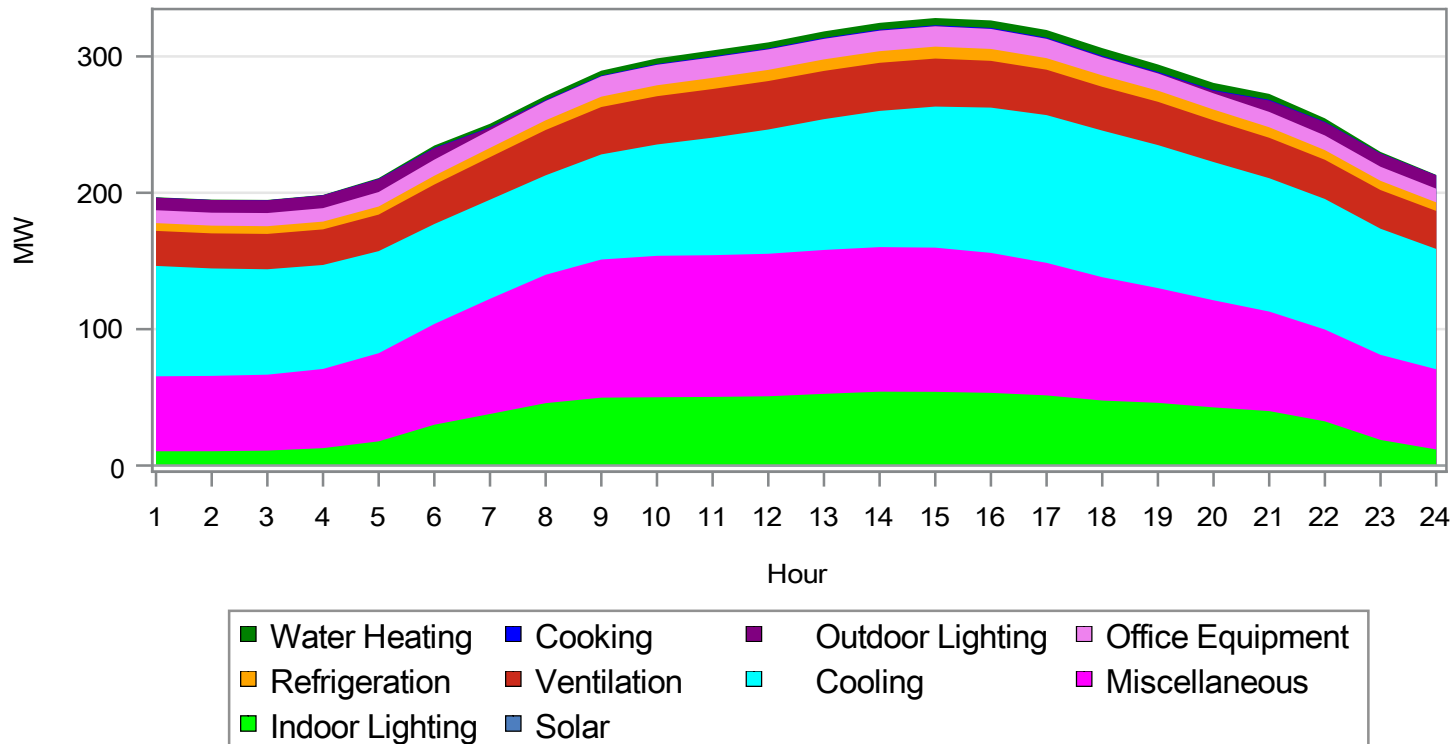
Summer 2026 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2026 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	85	0	26	0	6	10	11	10	0.00	53
2	83	0	26	0	6	10	11	10	0.00	53
3	81	0	26	0	6	10	12	10	0.00	53
4	79	0	26	0	6	10	13	10	0.00	55
5	78	1	27	0	6	10	19	11	0.00	61
6	76	2	29	0	7	9	31	12	-0.02	70
7	76	3	31	0	7	2	40	13	-0.09	80
8	76	3	33	0	7	0	48	15	-0.08	89
9	79	4	35	1	8	0	52	15	-0.13	95
10	83	4	35	1	8	0	52	15	-0.28	97
11	88	5	36	1	8	0	53	15	-0.32	97
12	93	5	35	1	8	0	53	15	-0.44	98
13	98	5	35	1	8	0	55	15	-0.37	99
14	102	5	35	1	9	0	57	15	-0.27	100
15	106	6	35	1	9	0	57	15	-0.22	100
16	109	6	34	1	9	0	56	15	-0.15	97
17	111	6	33	1	9	0	54	15	-0.10	92
18	110	6	32	1	8	0	50	14	-0.15	85
19	107	6	32	1	8	0	48	13	-0.04	79
20	104	5	31	1	8	2	44	12	0.00	74
21	100	4	30	1	8	9	41	12	0.00	69
22	98	3	29	0	7	10	34	11	0.00	63
23	94	1	28	0	7	10	19	11	0.00	58
24	90	0	28	0	6	10	12	10	0.00	55

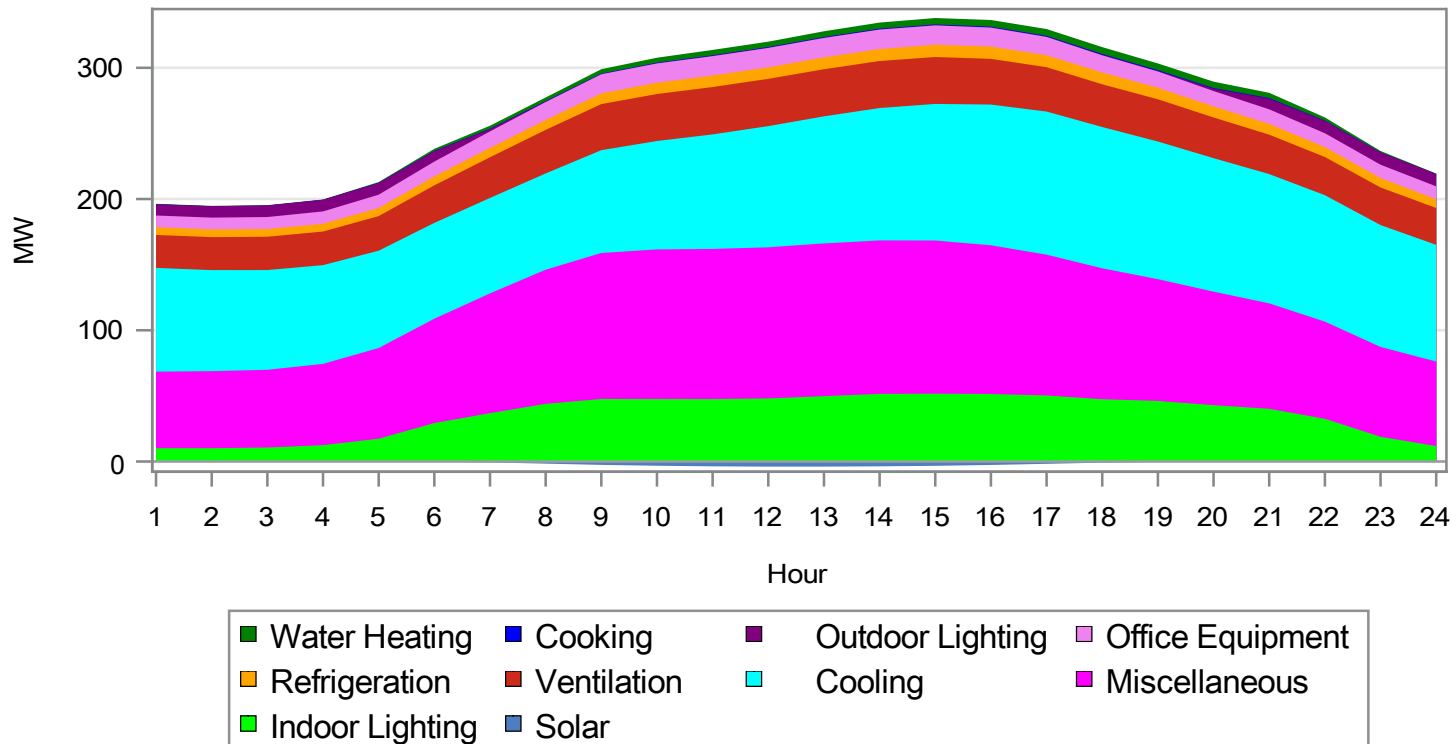
Summer 2031 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2031 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	81	0	26	0	6	9	10	9	0.00	55
2	79	0	26	0	6	9	10	10	0.00	55
3	77	0	26	0	6	9	11	10	0.00	56
4	76	0	26	0	6	9	13	10	0.00	58
5	75	1	27	0	6	9	18	11	0.00	65
6	73	2	29	0	6	8	30	12	-0.03	74
7	73	3	31	0	7	2	38	13	-0.17	84
8	73	3	33	0	7	0	46	14	-0.15	94
9	77	4	35	1	8	0	50	15	-0.24	101
10	82	4	35	1	8	0	51	15	-0.51	104
11	86	4	36	1	8	0	51	15	-0.59	104
12	91	4	36	1	8	0	52	15	-0.81	105
13	96	5	35	1	8	0	53	15	-0.68	106
14	100	5	35	1	9	0	55	15	-0.49	106
15	103	5	35	1	9	0	54	15	-0.41	106
16	107	6	34	1	9	0	54	15	-0.27	103
17	108	6	33	1	8	0	52	14	-0.18	97
18	108	6	32	1	8	0	48	13	-0.27	90
19	105	6	32	1	8	0	46	13	-0.06	84
20	101	5	31	1	8	2	43	12	0.00	79
21	98	4	30	0	8	8	40	11	0.00	73
22	96	3	29	0	7	10	32	11	0.00	67
23	92	1	28	0	7	10	19	10	0.00	62
24	88	0	28	0	6	10	12	10	0.00	59

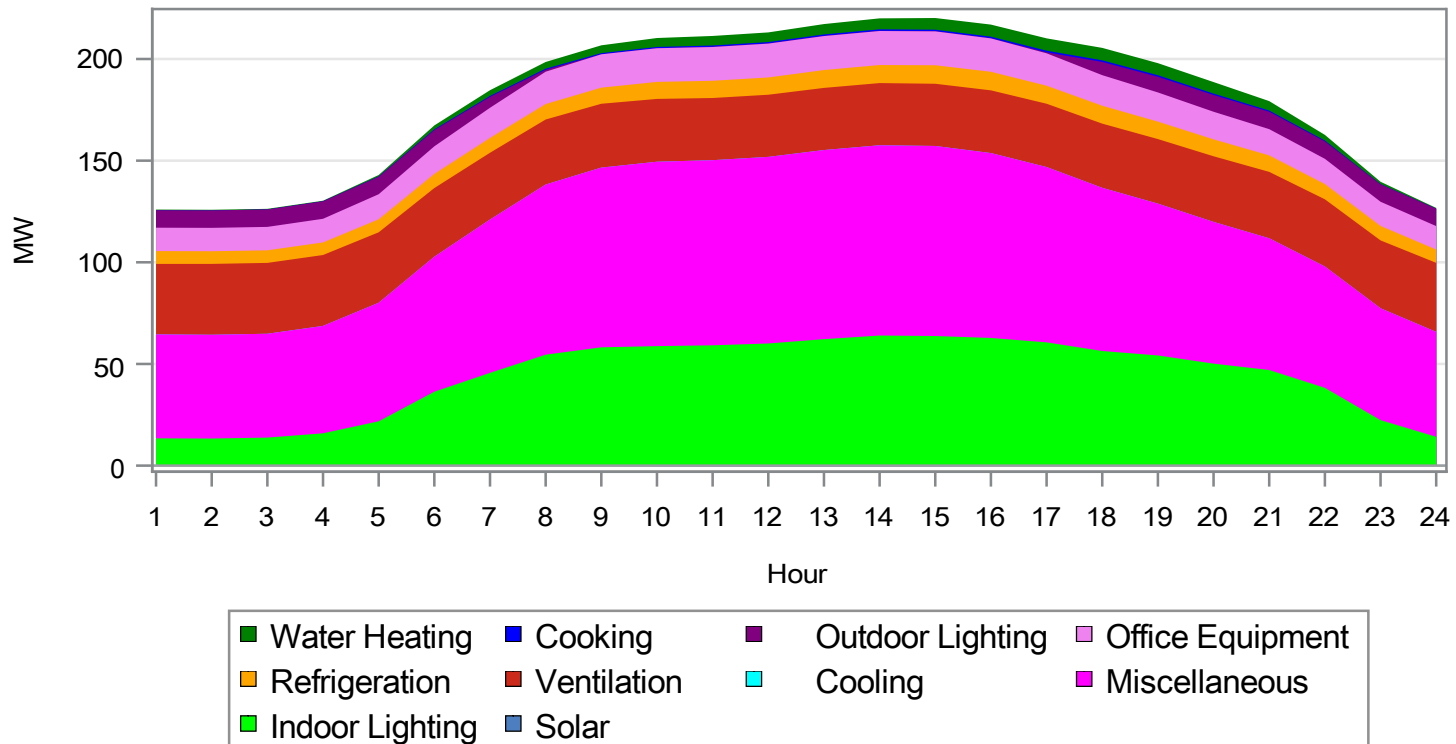
Summer 2040 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2040 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	79	0	25	0	6	9	10	9	0.00	58
2	77	0	25	0	6	9	10	9	0.00	59
3	76	0	25	0	6	9	11	9	0.00	59
4	75	0	26	0	6	9	12	9	0.00	62
5	74	1	26	0	6	9	17	10	0.00	69
6	73	2	29	0	7	8	29	11	-0.13	79
7	73	2	31	0	7	2	38	13	-0.67	91
8	73	3	33	0	8	0	46	14	-1.63	102
9	78	3	35	0	8	0	50	15	-2.57	111
10	83	4	36	1	9	0	51	15	-3.24	114
11	87	4	36	1	9	0	51	15	-3.68	114
12	92	4	36	1	9	0	52	15	-3.90	115
13	97	4	36	1	9	0	54	15	-3.88	116
14	101	5	36	1	9	0	55	15	-3.67	117
15	104	5	36	1	9	0	55	15	-3.28	117
16	107	5	35	1	9	0	54	14	-2.63	113
17	109	5	34	1	9	0	52	14	-1.76	107
18	108	5	33	1	9	0	48	13	-0.87	100
19	105	5	32	1	9	0	46	12	-0.21	93
20	102	5	31	1	8	2	43	12	0.00	87
21	99	4	30	0	8	8	40	11	0.00	80
22	96	2	29	0	8	9	33	11	0.00	74
23	93	1	29	0	7	9	19	10	0.00	68
24	89	0	28	0	7	9	12	10	0.00	64

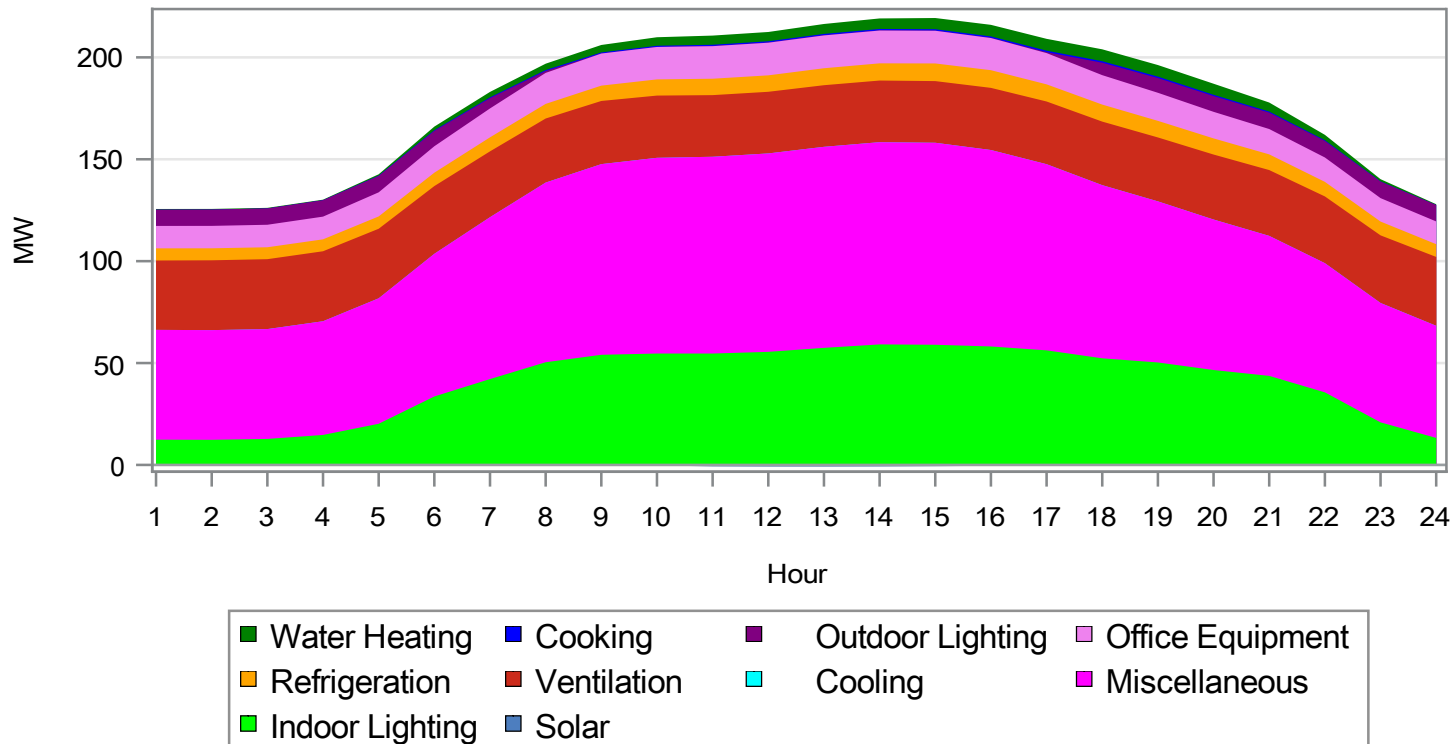
Winter 2021 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2021 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	0	35	0	6	9	13	12	0.00	51
2	0	0	35	0	6	9	13	12	0.00	51
3	0	0	35	0	6	9	14	12	0.00	51
4	0	0	35	0	6	9	16	12	0.00	53
5	0	1	35	0	6	9	22	12	0.00	58
6	0	2	34	0	7	8	36	14	0.00	66
7	0	3	33	0	7	5	46	15	0.00	75
8	0	3	32	1	8	1	55	16	-0.03	84
9	0	4	31	1	8	0	58	16	-0.19	88
10	0	4	31	1	8	0	59	17	-0.34	91
11	0	5	31	1	8	0	60	17	-0.44	91
12	0	5	31	1	8	0	61	17	-0.49	92
13	0	5	31	1	9	0	63	17	-0.49	93
14	0	5	31	1	9	0	64	17	-0.46	94
15	0	6	31	1	9	0	64	17	-0.36	93
16	0	6	31	1	9	0	63	16	-0.24	91
17	0	6	31	1	9	0	61	16	-0.08	86
18	0	6	32	1	9	7	56	15	0.00	80
19	0	6	32	1	9	8	54	14	0.00	75
20	0	6	32	1	8	8	50	14	0.00	70
21	0	5	33	1	8	9	47	13	0.00	65
22	0	3	33	0	8	9	38	12	0.00	60
23	0	1	33	0	7	9	22	12	0.00	55
24	0	0	34	0	7	9	14	12	0.00	52

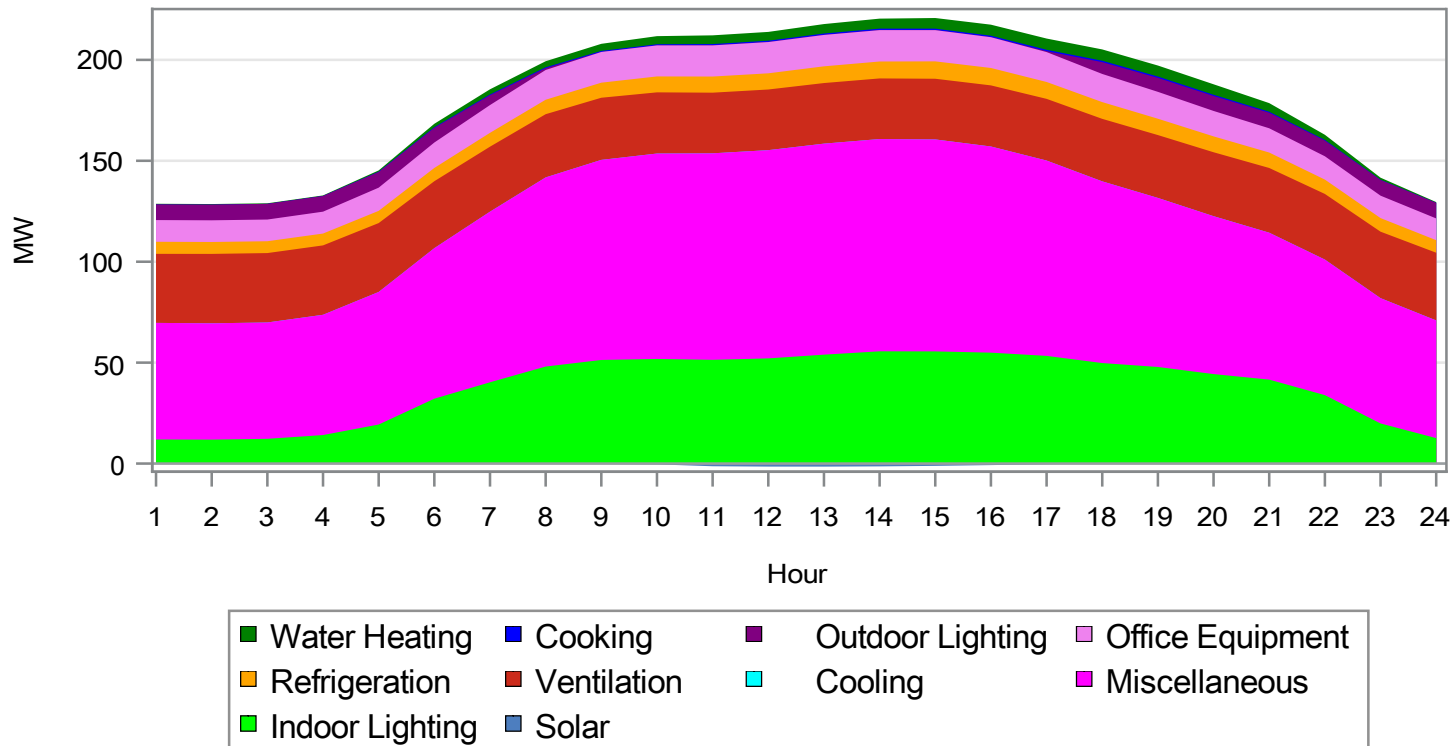
Winter 2026 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2026 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	0	34	0	6	8	12	11	0.00	54
2	0	0	34	0	6	8	12	11	0.00	54
3	0	0	34	0	6	8	13	11	0.00	54
4	0	0	34	0	6	8	15	11	0.00	56
5	0	1	34	0	6	8	20	12	0.00	62
6	0	2	33	0	7	8	34	13	0.00	70
7	0	3	32	0	7	5	42	14	0.00	79
8	0	3	31	0	7	1	50	15	-0.05	88
9	0	4	31	1	8	0	54	16	-0.12	94
10	0	4	31	1	8	0	55	16	-0.23	96
11	0	4	30	1	8	0	55	16	-0.73	97
12	0	5	30	1	8	0	56	16	-0.82	97
13	0	5	30	1	8	0	58	16	-0.83	99
14	0	5	30	1	8	0	60	16	-0.77	99
15	0	6	30	1	9	0	60	16	-0.63	99
16	0	6	30	1	9	0	59	16	-0.43	96
17	0	6	31	1	8	0	56	15	-0.17	91
18	0	6	31	1	8	6	52	14	0.00	85
19	0	6	31	1	8	7	50	14	0.00	79
20	0	5	32	1	8	8	47	13	0.00	74
21	0	4	32	1	8	8	44	12	0.00	69
22	0	3	33	0	7	8	36	12	0.00	63
23	0	1	33	0	7	8	21	12	0.00	59
24	0	0	34	0	6	8	13	11	0.00	55

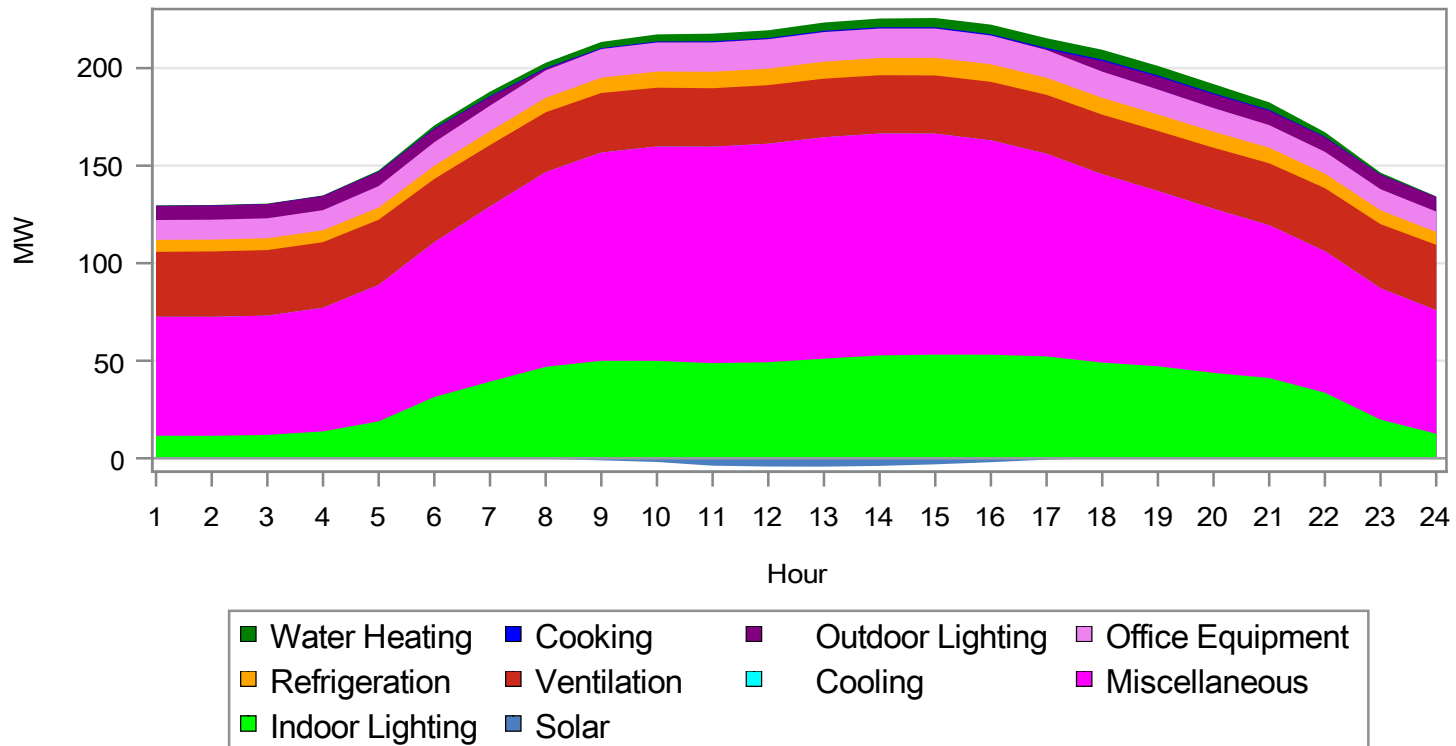
Winter 2031 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2031 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	0	34	0	6	8	12	11	0.00	58
2	0	0	34	0	6	8	12	11	0.00	58
3	0	0	34	0	6	8	12	11	0.00	58
4	0	0	34	0	6	8	14	11	0.00	60
5	0	1	34	0	6	8	19	11	0.00	66
6	0	2	33	0	7	7	32	13	0.00	75
7	0	3	32	0	7	5	40	14	0.00	85
8	0	3	31	0	7	1	48	15	-0.09	94
9	0	4	31	0	7	0	52	15	-0.22	99
10	0	4	30	1	8	0	52	15	-0.41	102
11	0	4	30	1	8	0	53	15	-1.34	102
12	0	4	30	1	8	0	54	15	-1.50	103
13	0	5	30	1	8	0	55	16	-1.52	105
14	0	5	30	1	8	0	57	16	-1.41	105
15	0	5	30	1	9	0	57	15	-1.15	105
16	0	5	30	1	9	0	56	15	-0.78	102
17	0	6	31	1	8	0	54	15	-0.30	97
18	0	6	31	1	8	6	50	14	0.00	90
19	0	5	31	1	8	7	48	13	0.00	84
20	0	5	32	1	8	7	44	13	0.00	78
21	0	4	32	0	8	8	42	12	0.00	73
22	0	3	33	0	7	8	34	12	0.00	67
23	0	1	33	0	7	8	20	11	0.00	62
24	0	0	34	0	6	8	13	11	0.00	58

Winter 2040 System Peak Day: Commercial LPS End-Use Profiles (MW)

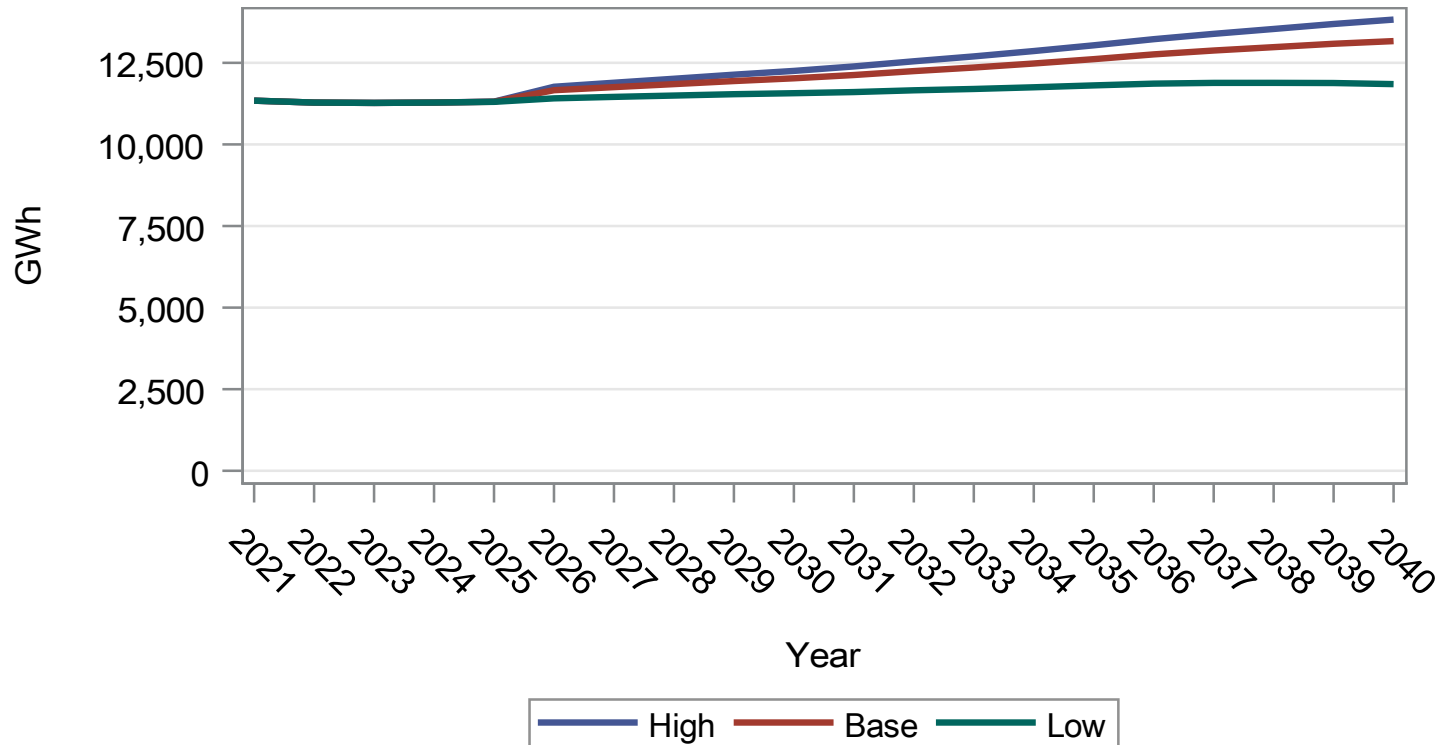


Winter 2040 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	0	33	0	6	7	12	10	0.00	61
2	0	0	34	0	6	7	12	10	0.00	61
3	0	0	34	0	6	7	12	10	0.00	61
4	0	0	34	0	6	7	14	10	0.00	63
5	0	1	33	0	6	7	19	11	0.00	70
6	0	2	32	0	7	7	31	12	0.00	79
7	0	2	31	0	7	5	39	13	0.00	90
8	0	3	31	0	7	1	47	14	-0.24	100
9	0	3	31	0	8	0	51	15	-1.06	107
10	0	4	30	1	8	0	52	15	-1.91	110
11	0	4	30	1	8	0	53	15	-3.80	111
12	0	4	30	1	8	0	53	15	-4.24	112
13	0	4	30	1	9	0	55	15	-4.29	113
14	0	4	30	1	9	0	57	15	-3.92	114
15	0	5	30	1	9	0	56	15	-3.11	113
16	0	5	30	1	9	0	55	15	-2.02	110
17	0	5	30	1	9	0	53	14	-0.70	104
18	0	5	31	1	9	6	49	13	0.00	96
19	0	5	31	1	8	7	47	13	0.00	90
20	0	5	31	1	8	7	44	12	0.00	84
21	0	4	32	0	8	7	41	12	0.00	78
22	0	2	32	0	7	7	34	11	0.00	73
23	0	1	33	0	7	7	20	11	0.00	67
24	0	0	34	0	7	7	13	10	0.00	63

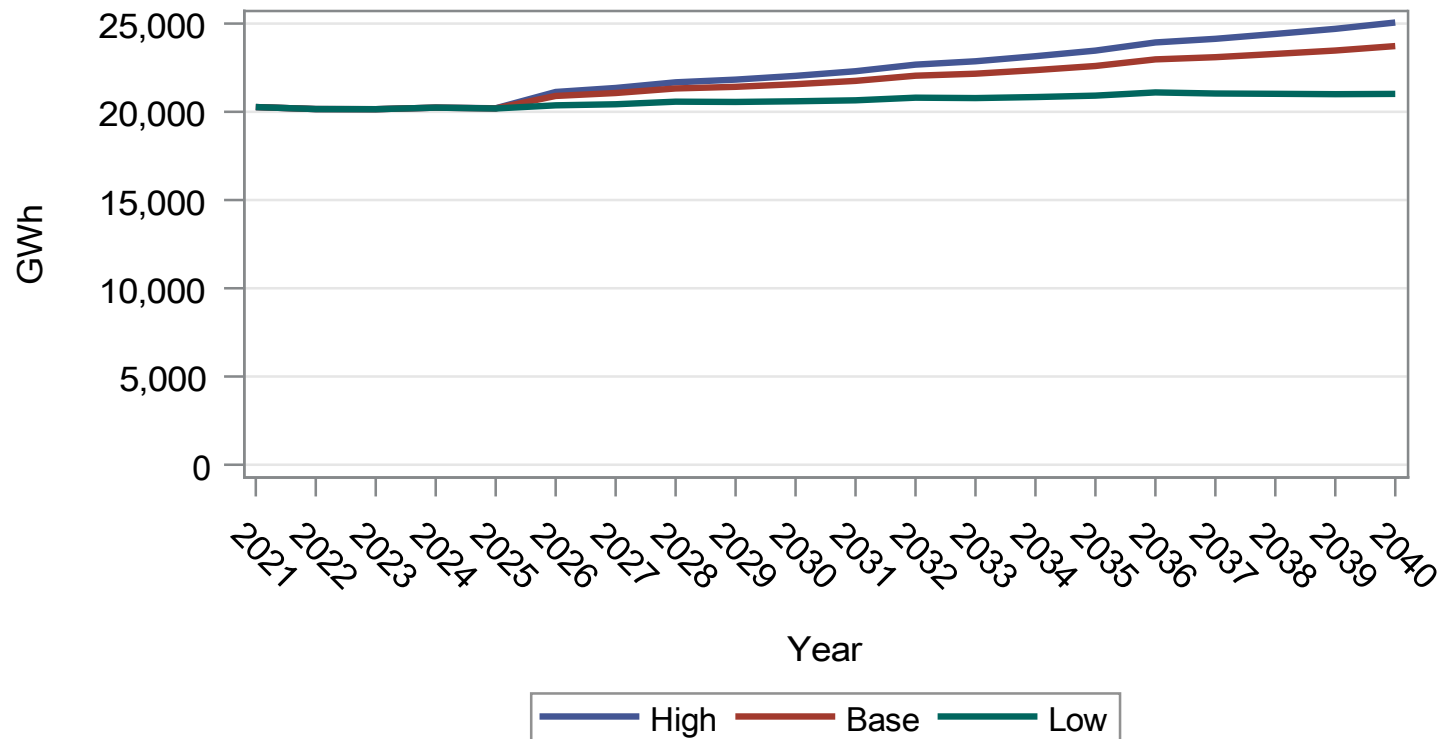
Energy Forecast for High-Low-Base Case Scenarios²²

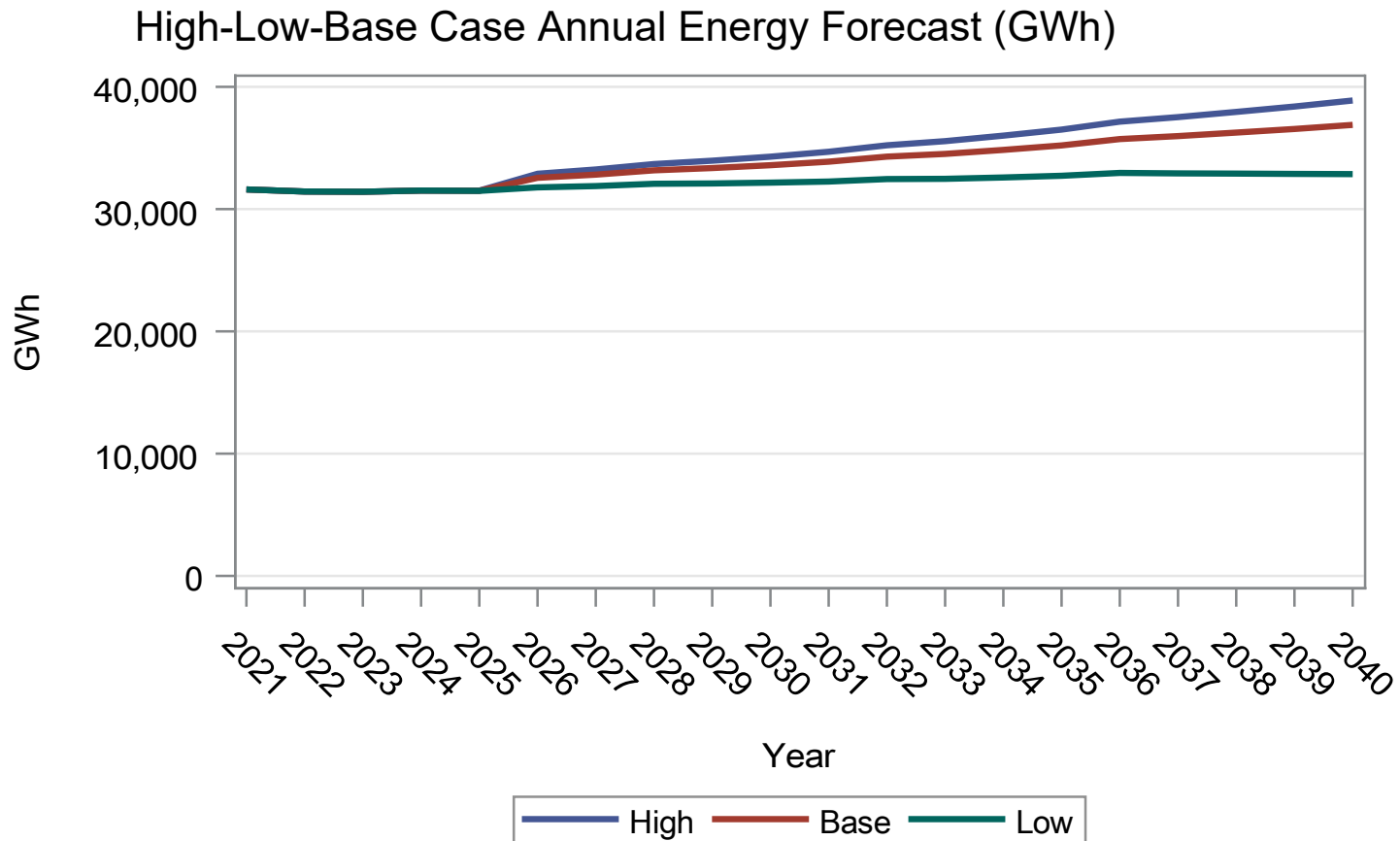
High-Low-Base Case Energy Use Forecast Summer Months
(GWh)



²²20 CSR 4240-22.030(8)(C)1, 20 CSR 4240-22.030(8)(C)2

High-Low-Base Case Energy Use Forecast Non-Summer Months (GWh)



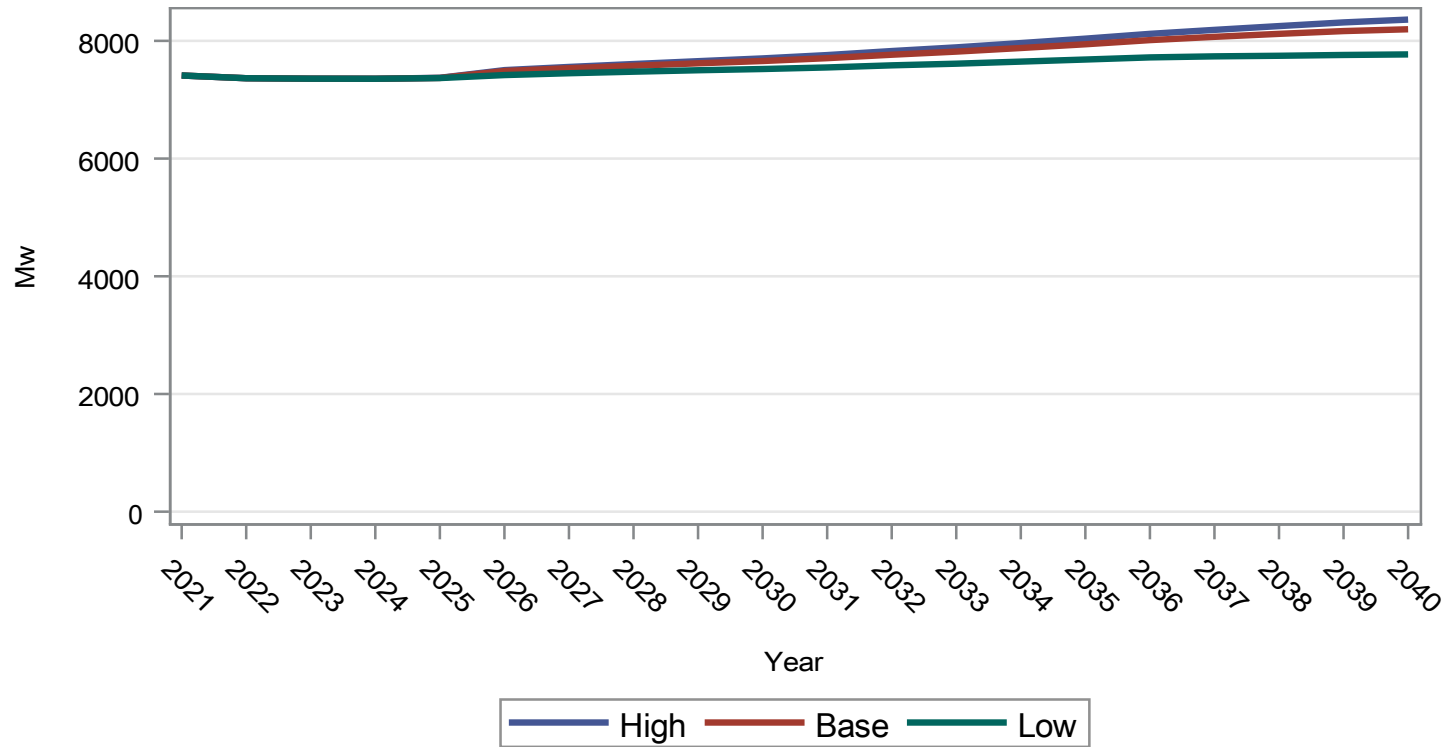


High-Low-Base Case Energy Usage Forecast by Season (GWh)

Year	Annual			Non-Summer			Summer		
	Base	High	Low	Base	High	Low	Base	High	Low
2021	31,609	31,609	31,609	20,269	20,269	20,269	11,340	11,340	11,340
2022	31,438	31,438	31,438	20,156	20,156	20,156	11,283	11,283	11,283
2023	31,419	31,419	31,419	20,148	20,148	20,148	11,271	11,271	11,271
2024	31,518	31,518	31,518	20,236	20,236	20,236	11,282	11,282	11,282
2025	31,501	31,513	31,492	20,193	20,201	20,188	11,308	11,312	11,304
2026	32,560	32,891	31,778	20,899	21,125	20,367	11,661	11,767	11,411
2027	32,821	33,241	31,883	21,065	21,350	20,427	11,755	11,890	11,456
2028	33,172	33,683	32,071	21,324	21,671	20,574	11,848	12,012	11,497
2029	33,358	33,960	32,098	21,416	21,823	20,559	11,942	12,137	11,539
2030	33,591	34,289	32,165	21,565	22,037	20,596	12,026	12,252	11,569
2031	33,879	34,689	32,255	21,753	22,300	20,650	12,126	12,389	11,605
2032	34,292	35,220	32,458	22,046	22,673	20,800	12,246	12,547	11,658
2033	34,515	35,560	32,477	22,159	22,863	20,778	12,356	12,697	11,699
2034	34,842	36,010	32,586	22,363	23,150	20,836	12,479	12,861	11,750
2035	35,208	36,505	32,726	22,596	23,468	20,917	12,612	13,037	11,809
2036	35,729	37,155	32,961	22,970	23,930	21,098	12,759	13,225	11,863
2037	35,972	37,524	32,921	23,094	24,136	21,036	12,878	13,388	11,885
2038	36,260	37,950	32,905	23,280	24,412	21,020	12,980	13,537	11,886
2039	36,555	38,391	32,880	23,472	24,700	20,999	13,084	13,690	11,881
2040	36,890	38,885	32,862	23,725	25,060	21,015	13,165	13,825	11,848

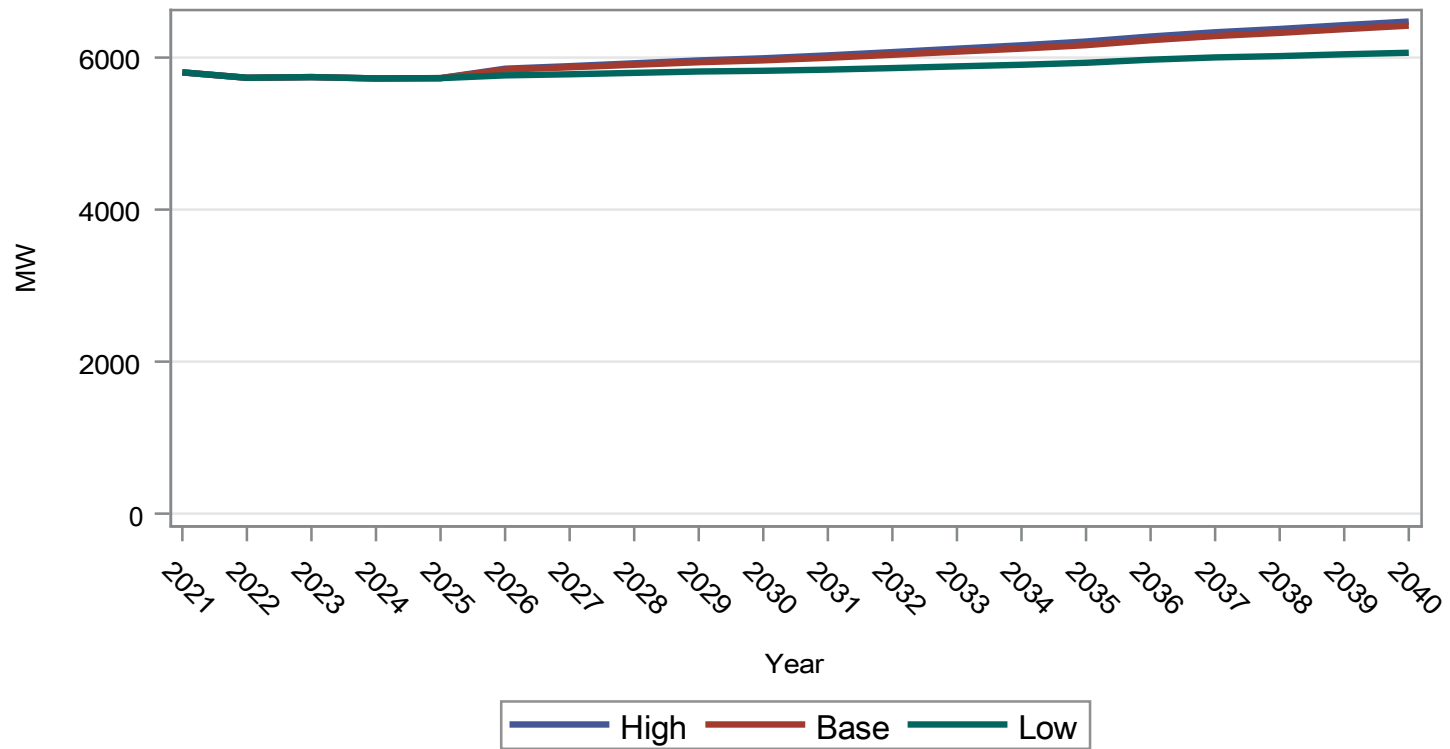
Peak Demand Forecasts for Base, High and Low Case Scenarios²³

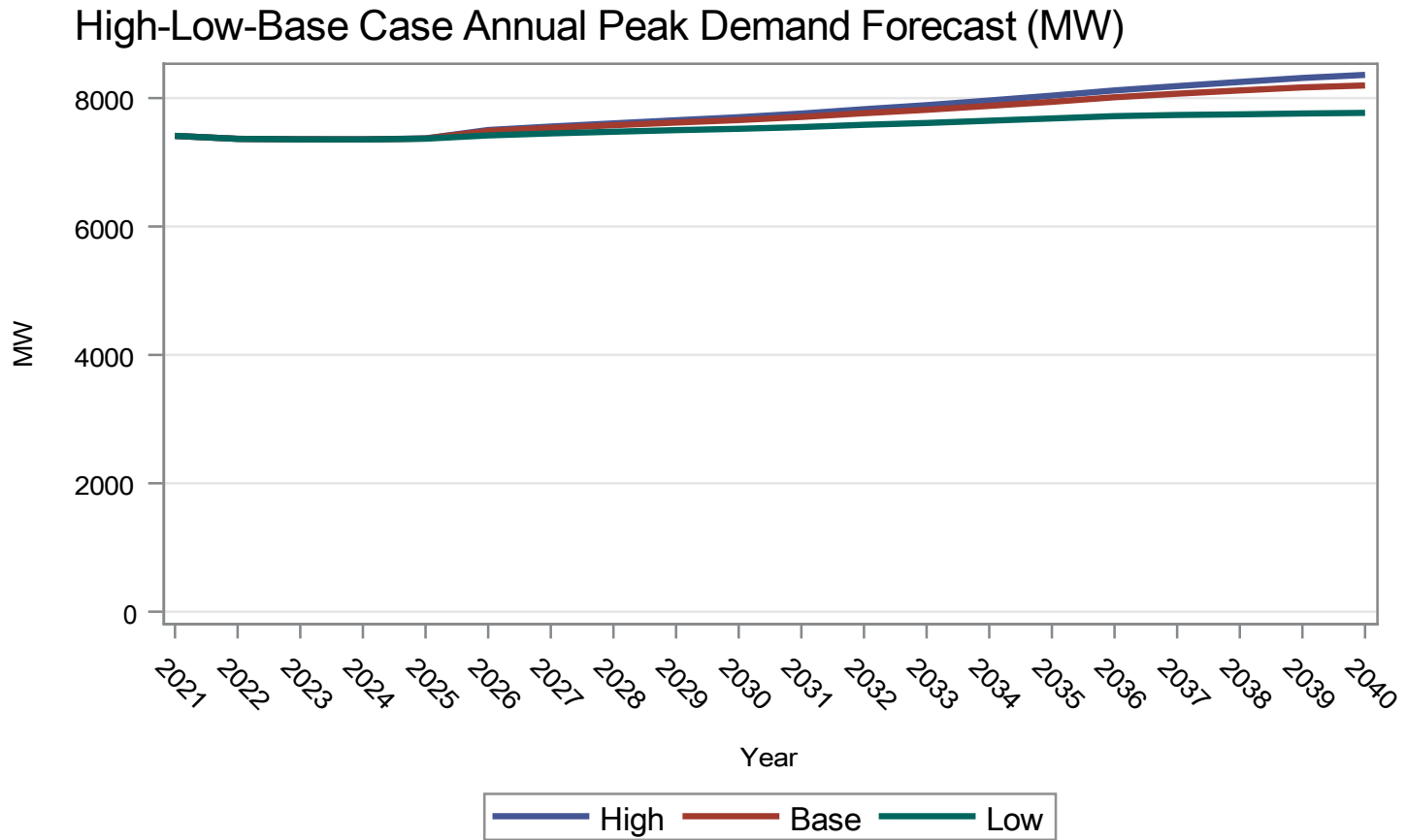
High-Low-Base Case Peak Demand Forecast for Summer Months (MW)



²³20 CSR 4240-22.030(8)(C)1, 20 CSR 4240-22.030(8)(C)2

High-Low-Base Case Peak Demand Forecast for Winter Months (MW)





High-Low-Base Case Seasonal Peak Demand Forecast (MW)

Year	Annual			Summer			Winter		
	High	Base	Low	High	Base	Low	High	Base	Low
2021	7,411	7,411	7,411	7,411	7,411	7,411	5,805	5,805	5,805
2022	7,365	7,365	7,365	7,365	7,365	7,365	5,734	5,734	5,734
2023	7,357	7,357	7,357	7,357	7,357	7,357	5,743	5,743	5,743
2024	7,356	7,356	7,356	7,356	7,356	7,356	5,726	5,726	5,726
2025	7,372	7,370	7,368	7,372	7,370	7,368	5,730	5,730	5,729
2026	7,503	7,488	7,418	7,503	7,488	7,418	5,854	5,842	5,766
2027	7,557	7,535	7,450	7,557	7,535	7,450	5,887	5,872	5,780
2028	7,606	7,577	7,476	7,606	7,577	7,476	5,925	5,905	5,799
2029	7,655	7,619	7,500	7,655	7,619	7,500	5,962	5,939	5,817
2030	7,702	7,657	7,522	7,702	7,657	7,522	5,991	5,963	5,826
2031	7,759	7,706	7,548	7,759	7,706	7,548	6,029	5,997	5,842
2032	7,827	7,765	7,584	7,827	7,765	7,584	6,072	6,037	5,862
2033	7,890	7,817	7,612	7,890	7,817	7,612	6,117	6,078	5,884
2034	7,962	7,879	7,648	7,962	7,879	7,648	6,162	6,118	5,905
2035	8,038	7,942	7,683	8,038	7,942	7,683	6,211	6,163	5,932
2036	8,119	8,013	7,719	8,119	8,013	7,719	6,277	6,229	5,972
2037	8,187	8,068	7,737	8,187	8,068	7,737	6,333	6,283	6,002
2038	8,251	8,119	7,747	8,251	8,119	7,747	6,376	6,325	6,019
2039	8,314	8,166	7,760	8,314	8,166	7,760	6,427	6,374	6,043
2040	8,361	8,197	7,770	8,361	8,197	7,770	6,474	6,420	6,064

Compliance References

20 CSR 4240-22.030(2)(D)1.....1, 14, 40, 53, 79, 91, 103
20 CSR 4240-22.030(2)(D)31, 14, 40, 53, 79, 91, 103
20 CSR 4240-22.030(7)(A)6.....123, 144, 170
20 CSR 4240-22.030(8)(C)1..... 115
20 CSR 4240-22.030(8)(C)2 115
20 CSR 4240-22.030(6)(C)3 196
20 CSR 4240-22.030(6)(C)4 229
20 CSR 4240-22.030(7)(A)4 235
20 CSR 4240-22.030(7)(A)6..... 245, 272, 277, 282, 286, 298, 309
20 CSR 4240-22.030(7)(A)7.....329, 334, 338
20 CSR 4240-22.030(8)(C)1434, 438
20 CSR 4240-22.030(8)(C)2 434, 438