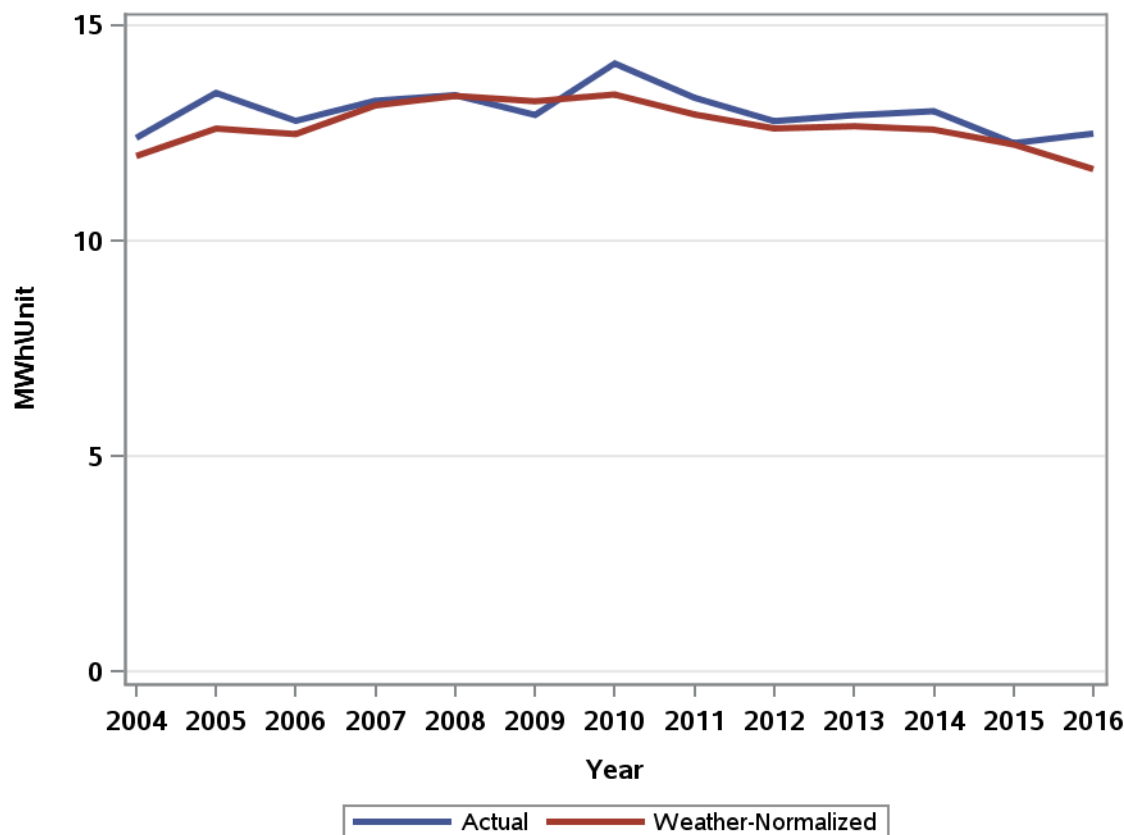


Chapter 3 – Appendix A

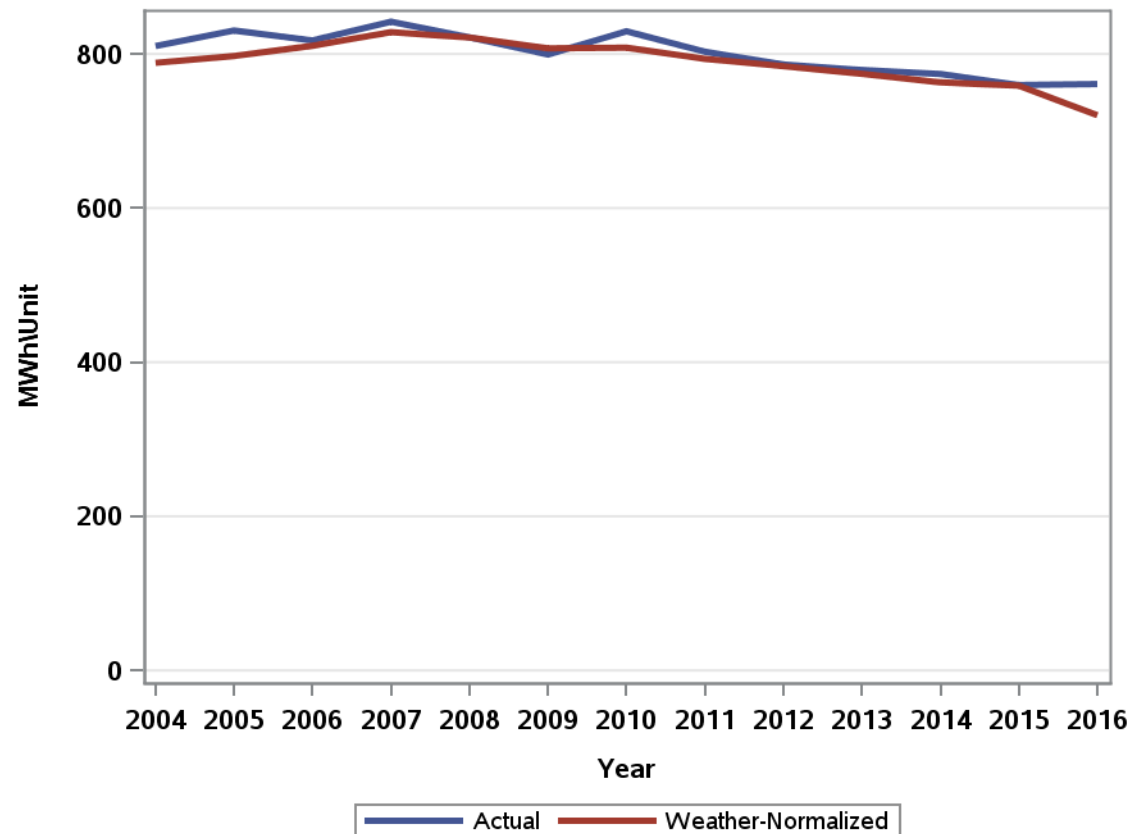
Annual Historical Actual and Weather-Normalized Energy Use per Customer by Class (2004 - 2016)¹

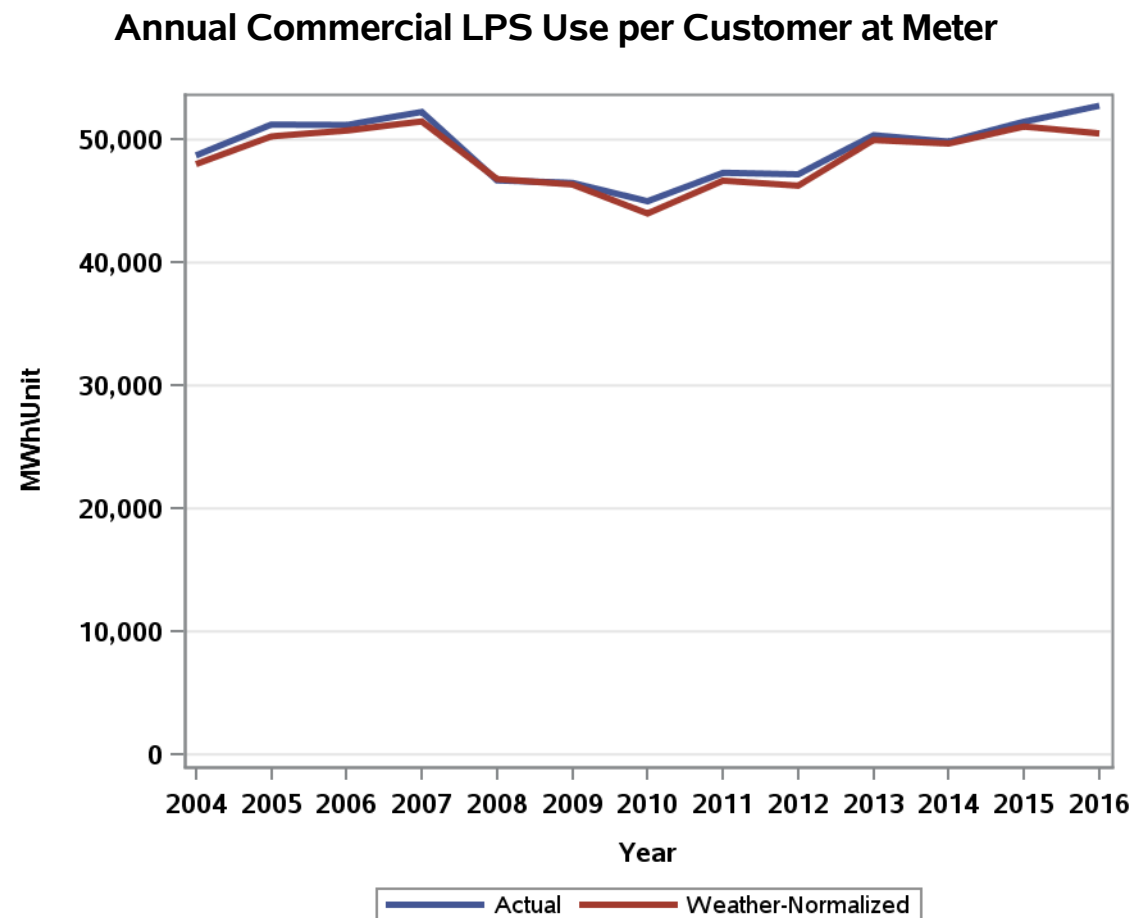
Annual Residential Use per Customer at Meter

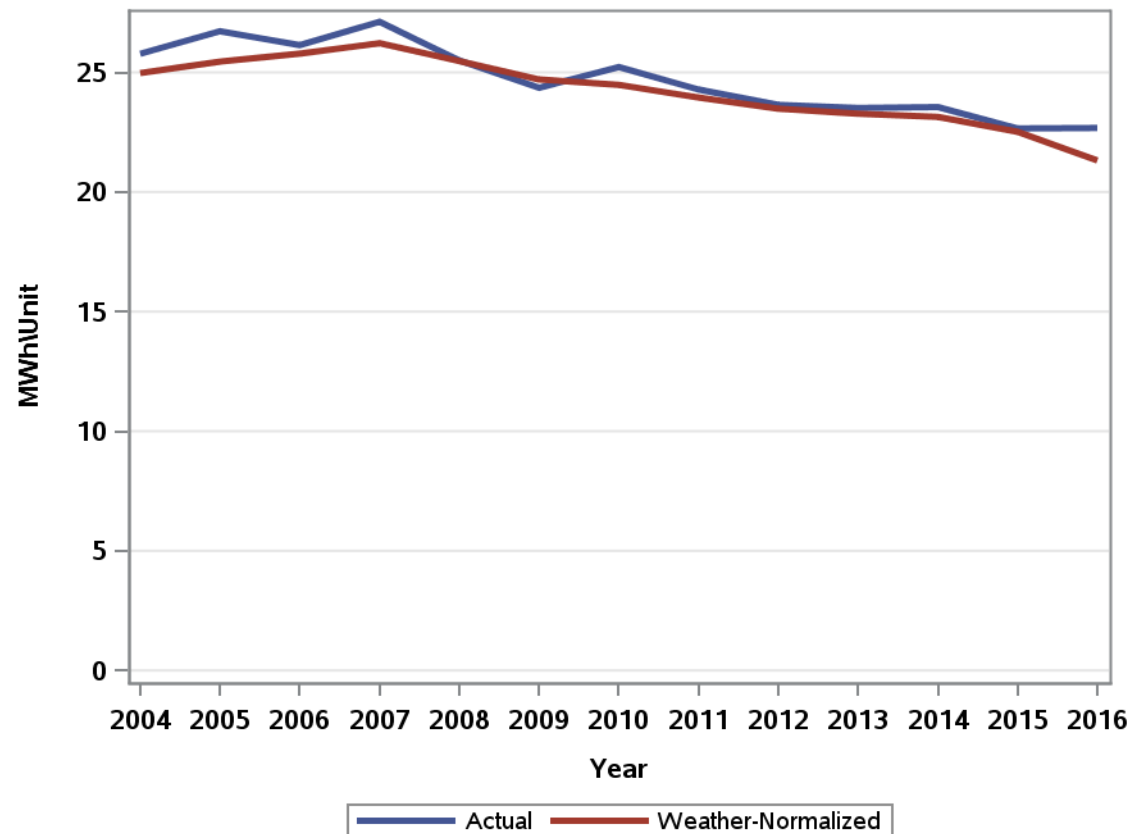


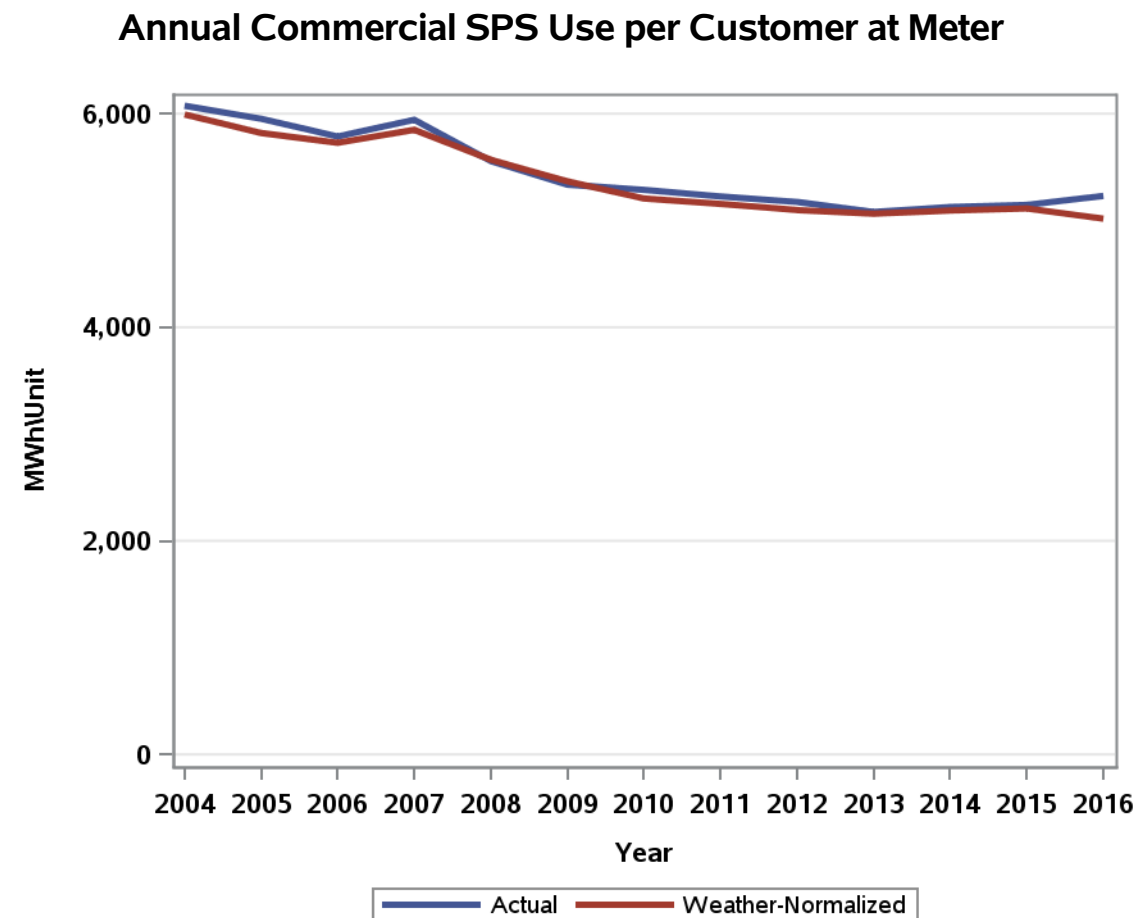
¹4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

Annual Commercial LGS Use per Customer at Meter

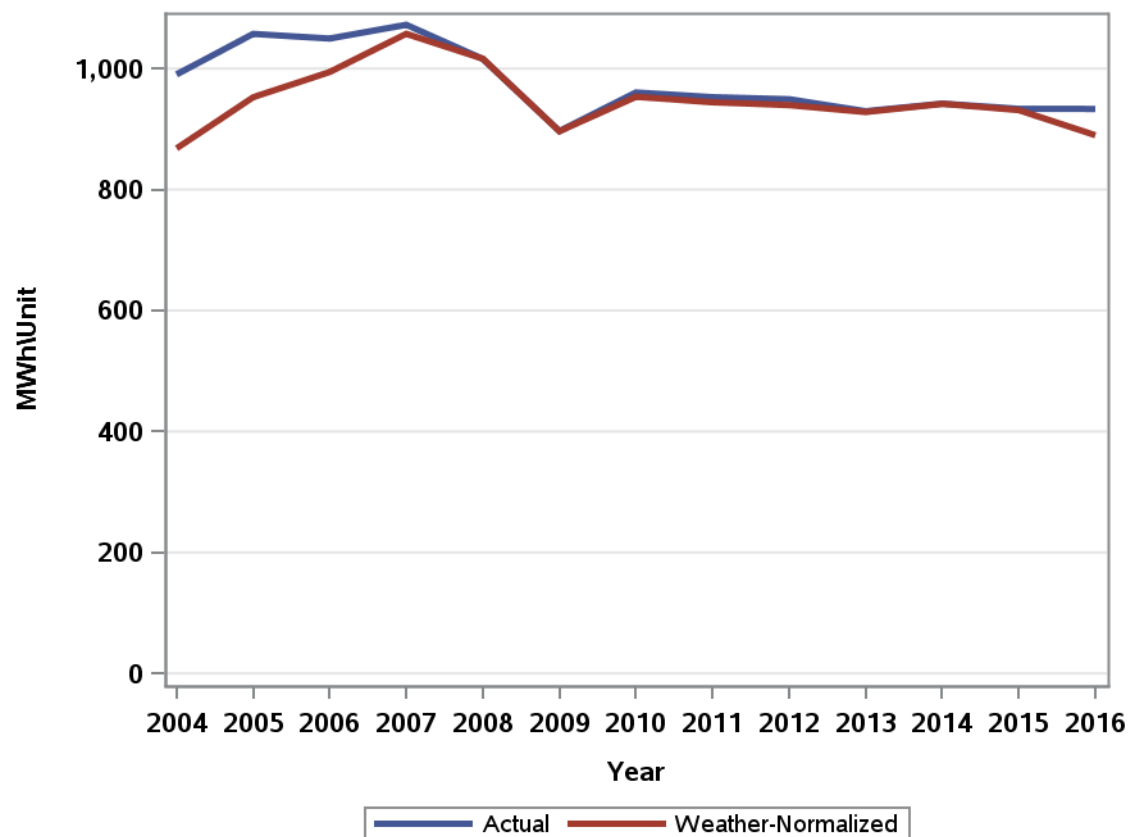




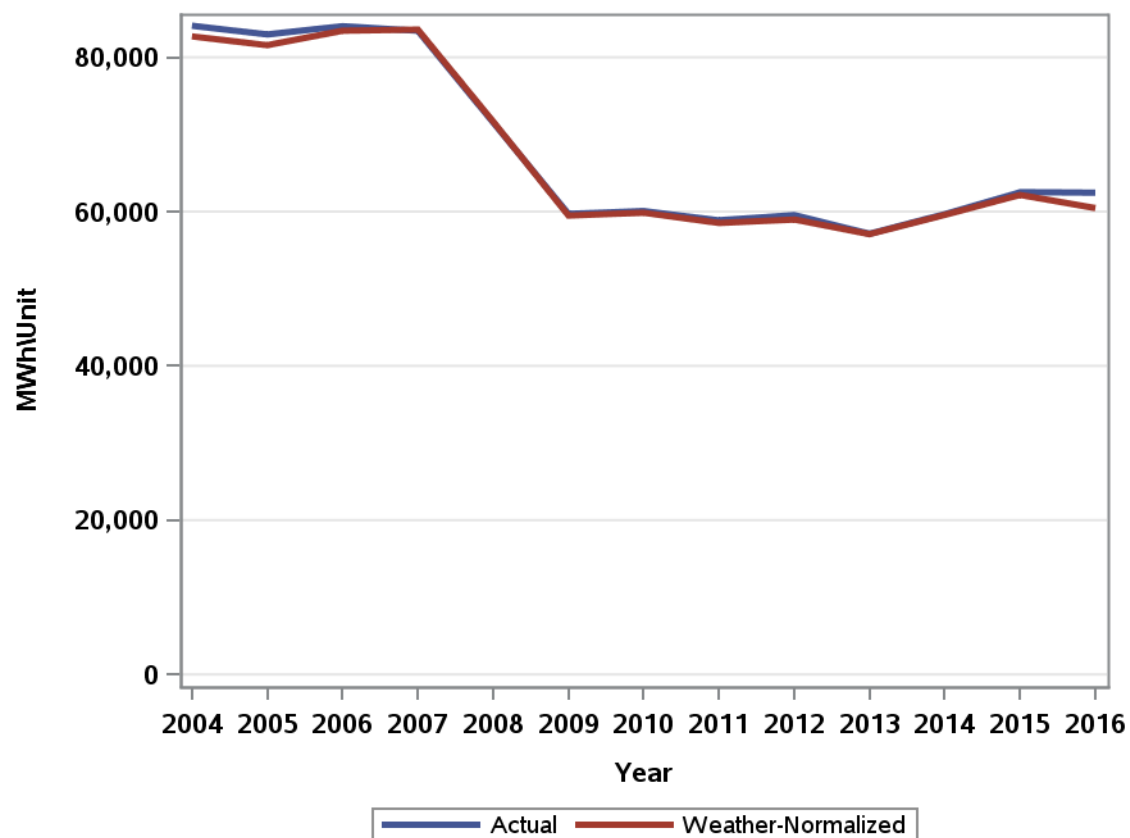
Annual Commercial SGS Use per Customer at Meter

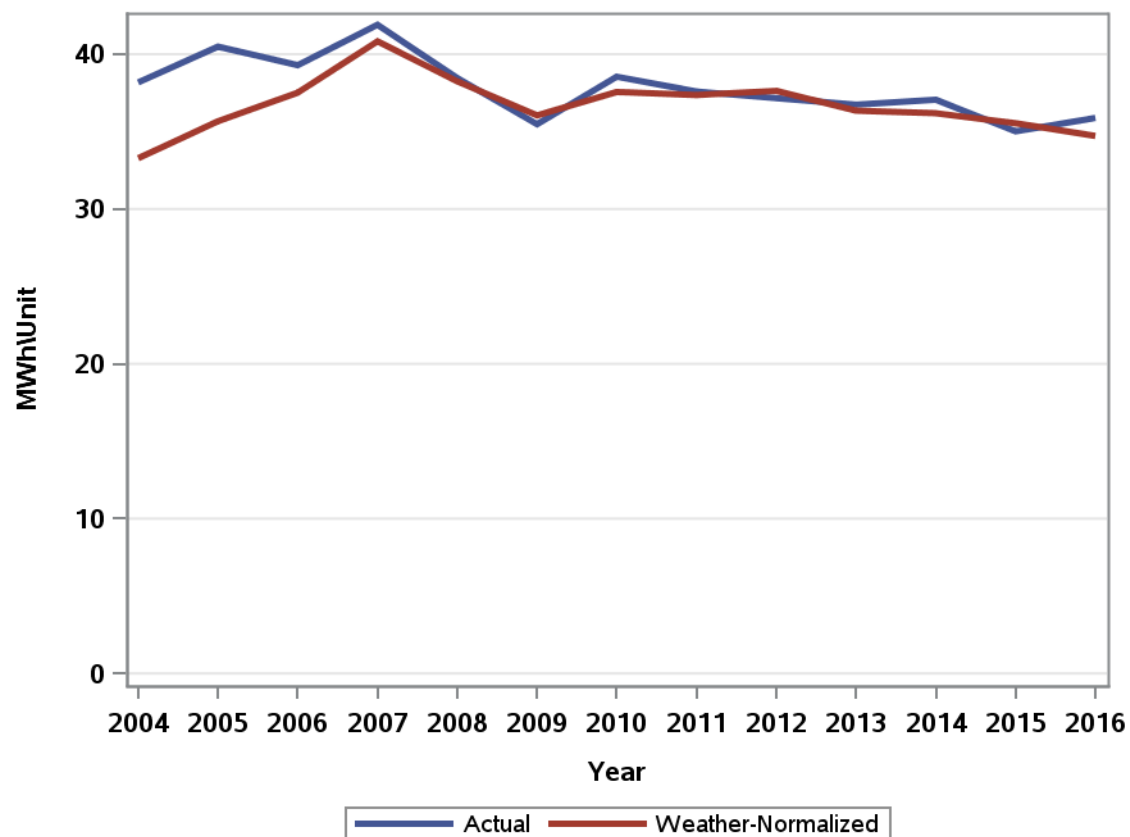


Annual Industrial LGS Use per Customer at Meter

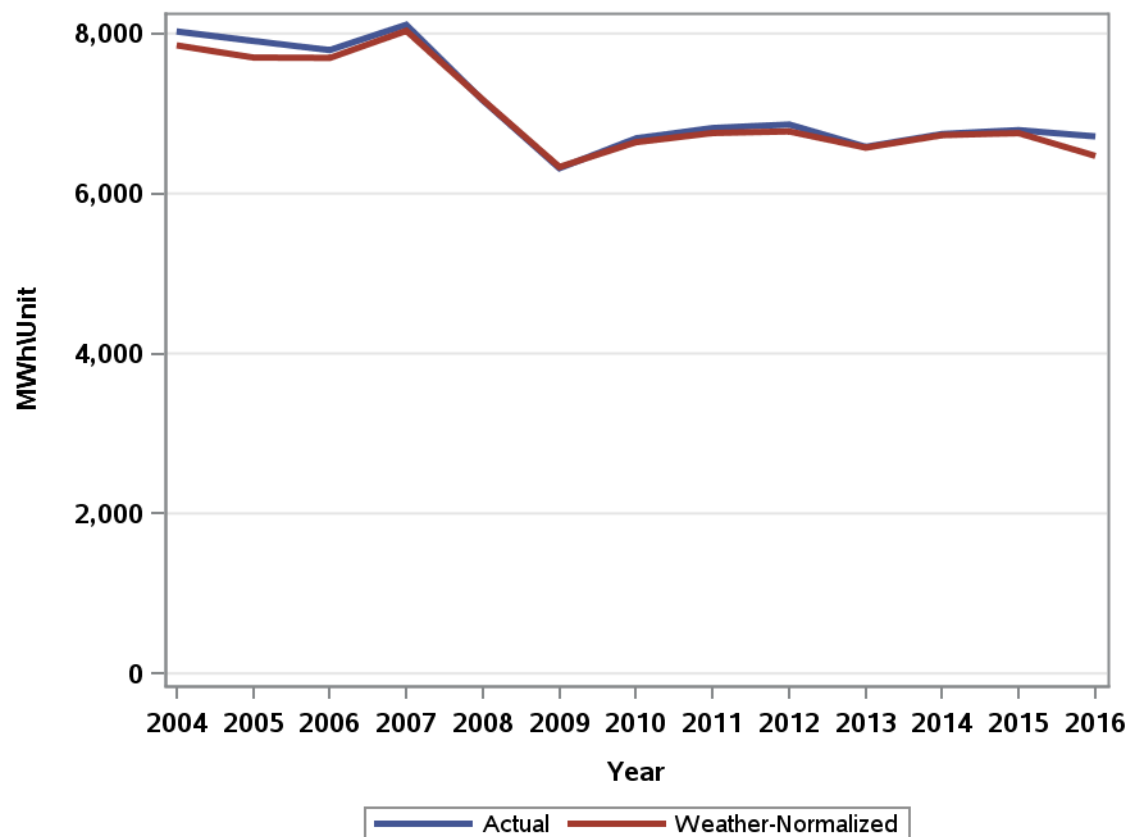


Annual Industrial LPS Use per Customer at Meter

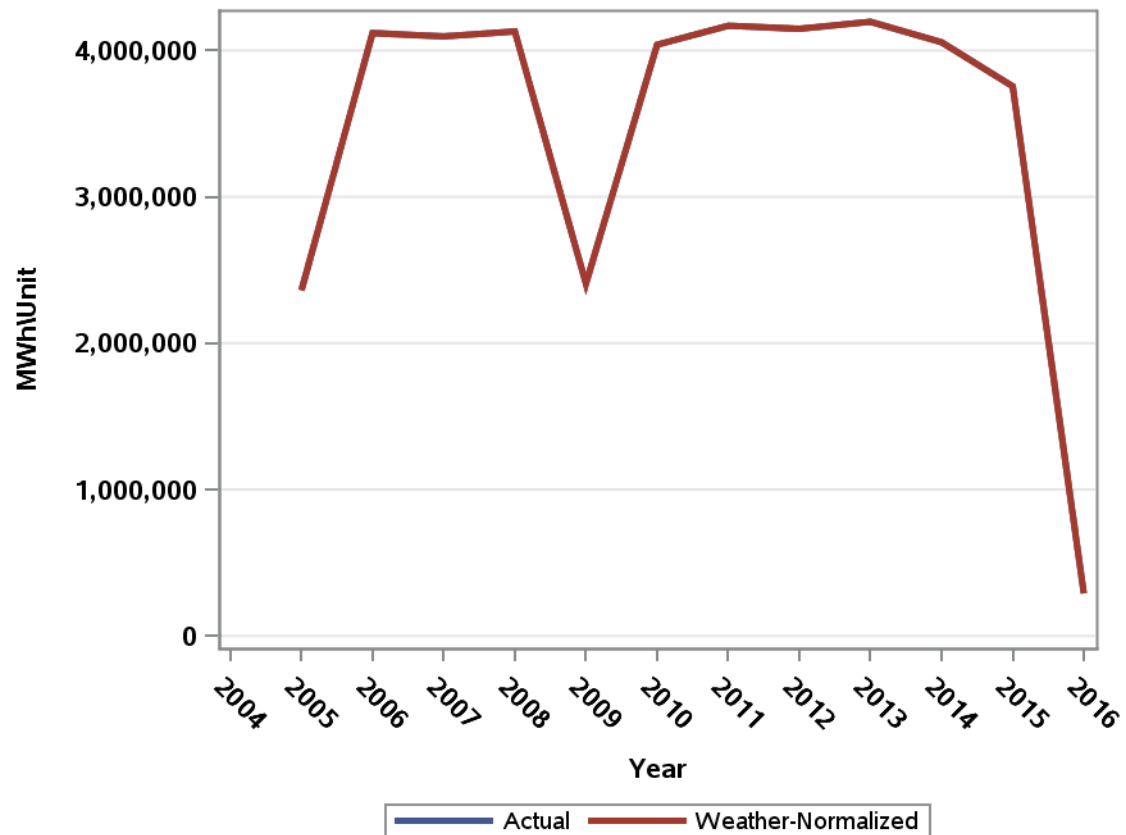


Annual Industrial SGS Use per Customer at Meter

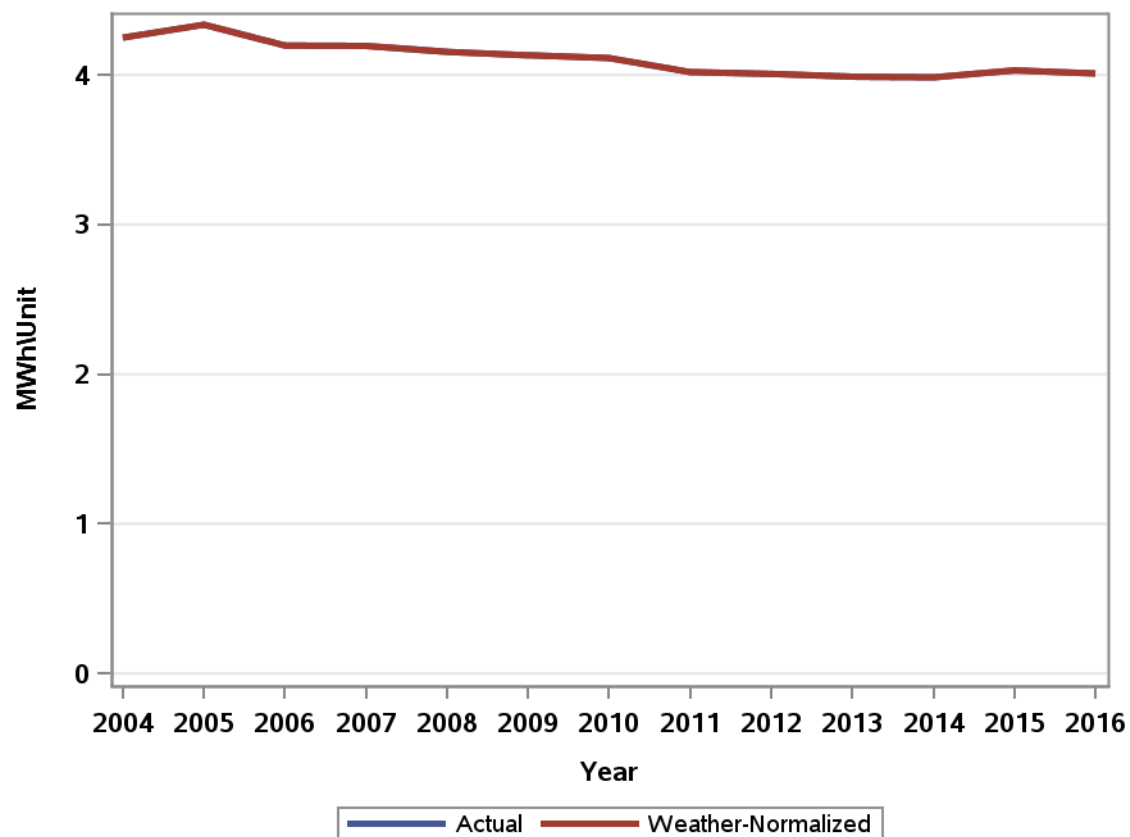
Annual Industrial SPS Use per Customer at Meter



Annual Large Transmission Service Use per Customer at Meter



Annual Lighting Use per Customer at Meter



Historical Annual Actual Use per Customer (MWh/Customer)

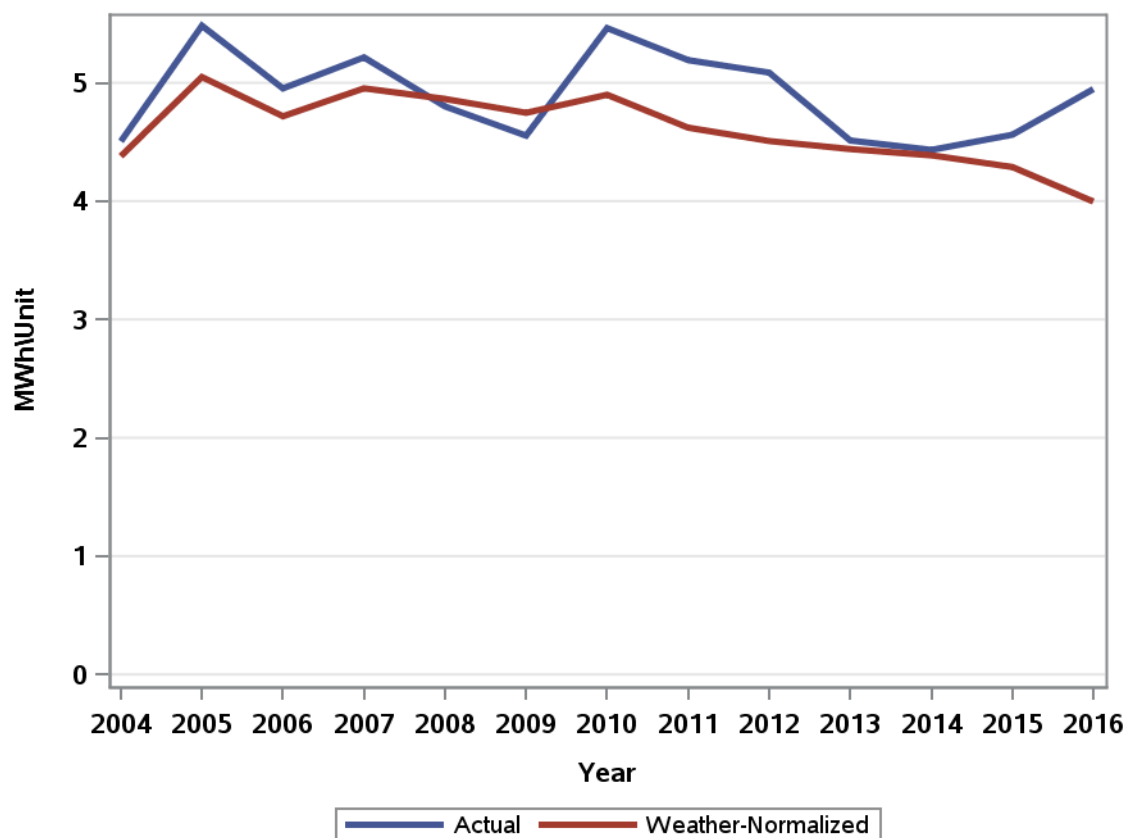
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	12.39	810.3	48,711	25.8	6,074	990	84,091	38.2	8,025	4.25	
2005	13.43	830.4	51,220	26.7	5,952	1,057	82,962	40.5	7,908	4.34	2,361,276
2006	12.78	817.5	51,187	26.1	5,786	1,050	84,032	39.3	7,793	4.20	4,118,877
2007	13.25	841.8	52,253	27.1	5,943	1,072	83,436	41.9	8,110	4.19	4,096,071
2008	13.38	821.5	46,683	25.5	5,556	1,016	71,560	38.5	7,163	4.15	4,130,376
2009	12.92	799.3	46,481	24.4	5,335	897	59,707	35.5	6,316	4.13	2,405,839
2010	14.11	829.4	44,988	25.2	5,287	960	60,068	38.5	6,689	4.11	4,038,773
2011	13.32	802.9	47,295	24.3	5,225	953	58,873	37.6	6,818	4.02	4,168,920
2012	12.77	786.3	47,179	23.6	5,174	949	59,541	37.2	6,863	4.01	4,147,672
2013	12.91	779.1	50,353	23.5	5,080	929	57,126	36.7	6,583	3.99	4,196,262
2014	13.01	774.0	49,831	23.6	5,126	942	59,667	37.1	6,744	3.98	4,056,201
2015	12.27	759.6	51,458	22.7	5,146	933	62,504	35.0	6,792	4.03	3,754,833
2016	12.49	761.0	52,755	22.7	5,230	933	62,458	35.9	6,713	4.01	290,791

Historical Annual Weather-Normalized Use per Customer (MWh/Customer)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	11.96	788.4	48,003	25.0	5,993	868	82,710	33.3	7,852	4.25	
2005	12.60	797.3	50,260	25.5	5,819	952	81,566	35.7	7,699	4.34	2,361,276
2006	12.47	810.6	50,737	25.8	5,727	994	83,446	37.5	7,694	4.20	4,118,877
2007	13.14	828.2	51,482	26.2	5,849	1,057	83,598	40.8	8,034	4.19	4,096,071
2008	13.36	821.3	46,794	25.5	5,569	1,016	71,691	38.3	7,171	4.15	4,130,376
2009	13.24	807.2	46,352	24.7	5,366	896	59,484	36.0	6,331	4.13	2,405,839
2010	13.39	808.1	43,991	24.5	5,206	953	59,845	37.6	6,642	4.11	4,038,773
2011	12.93	793.6	46,663	23.9	5,155	944	58,525	37.4	6,755	4.02	4,168,920
2012	12.61	784.1	46,255	23.5	5,097	939	58,972	37.6	6,775	4.01	4,147,672
2013	12.66	774.2	49,965	23.3	5,064	928	57,071	36.4	6,573	3.99	4,196,262
2014	12.58	763.1	49,680	23.1	5,093	942	59,575	36.2	6,730	3.98	4,056,201
2015	12.23	758.7	51,065	22.5	5,113	931	62,153	35.5	6,754	4.03	3,754,833
2016	11.66	720.5	50,504	21.3	5,017	890	60,456	34.7	6,470	4.01	290,791

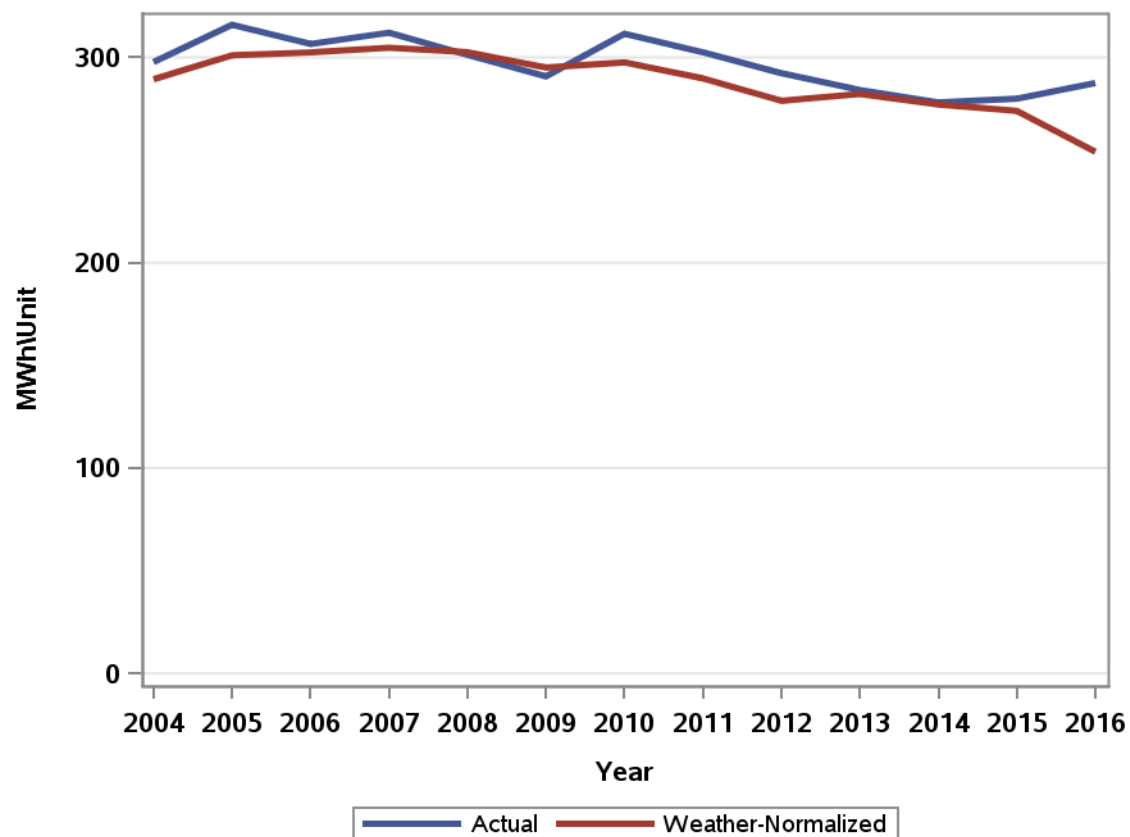
Historical Actual and Weather-Normalized Energy Use per Customer for Summer and Non-Summer (2004 - 2016)²

Summer Residential Use per Customer at Meter

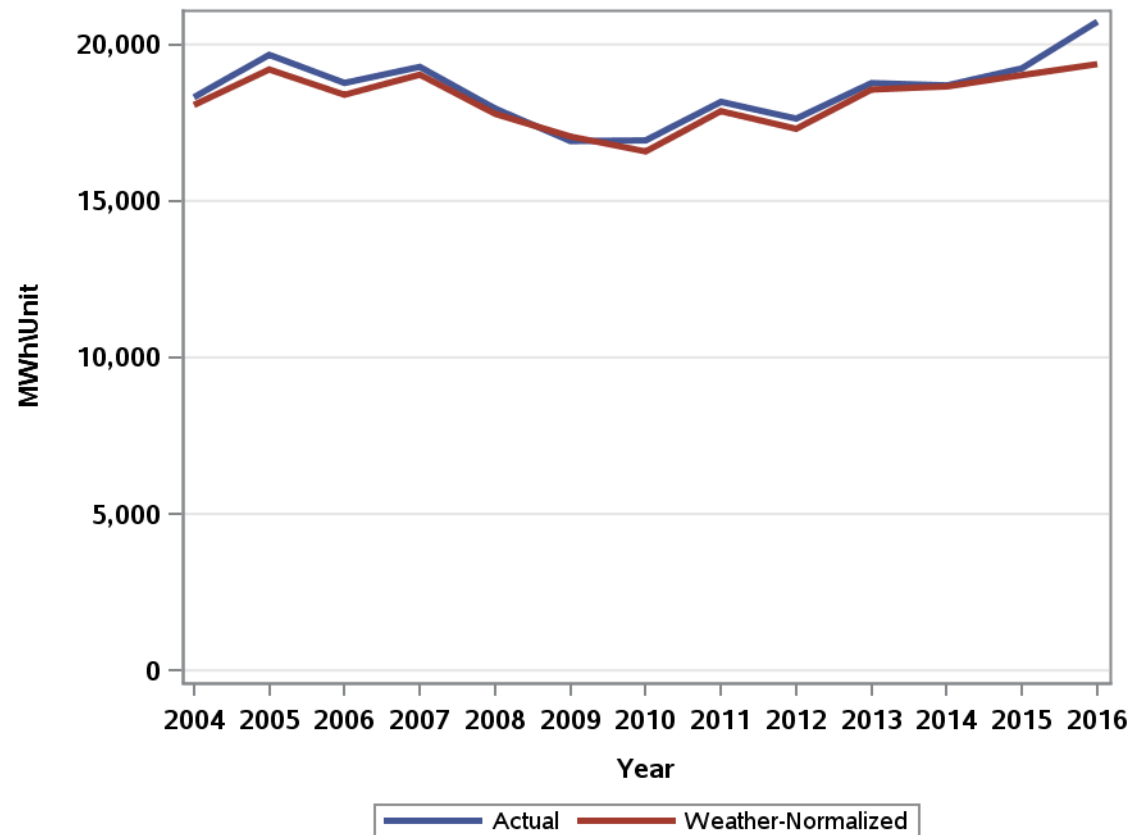


²4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

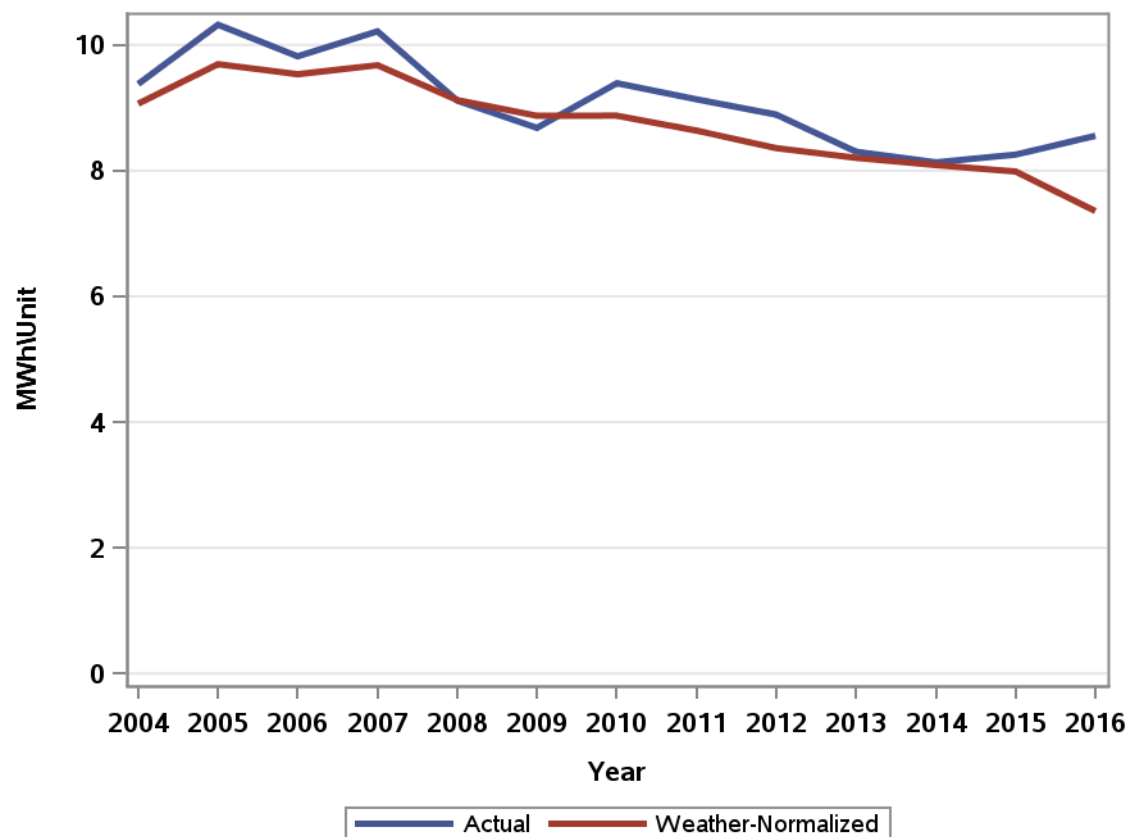
Summer Commercial LGS Use per Customer at Meter



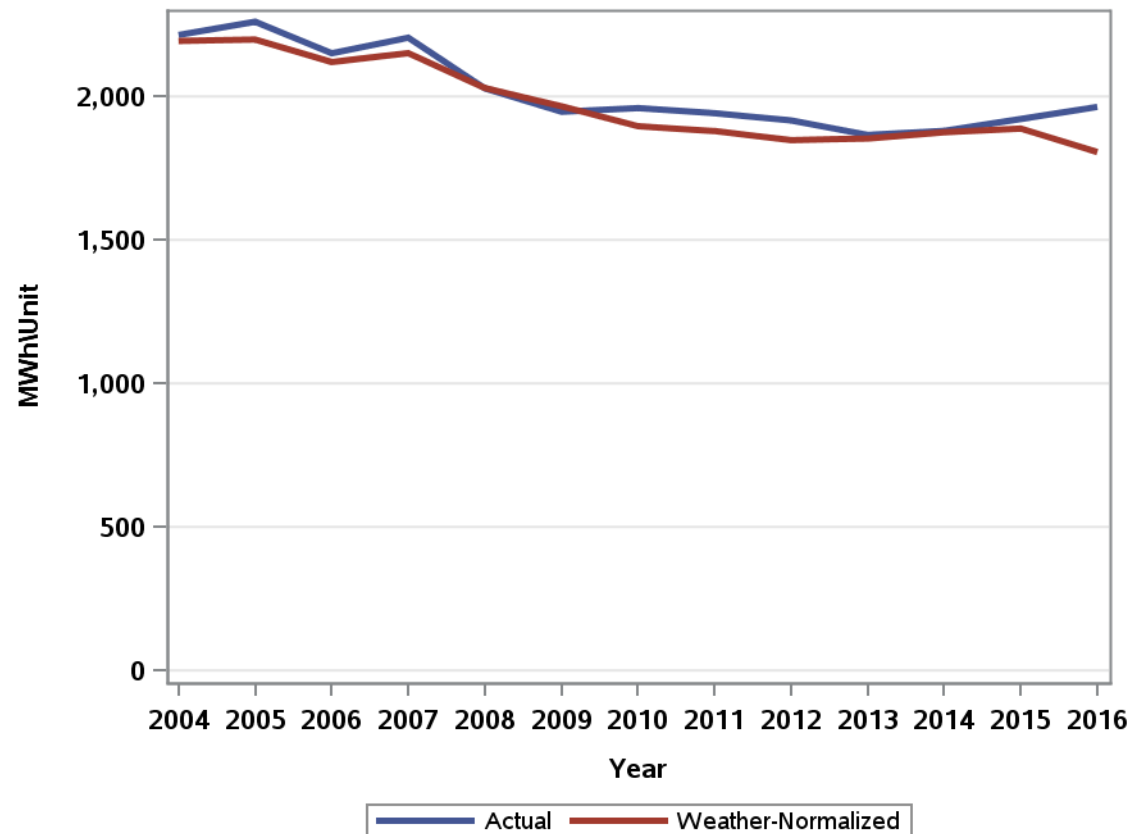
Summer Commercial LPS Use per Customer at Meter



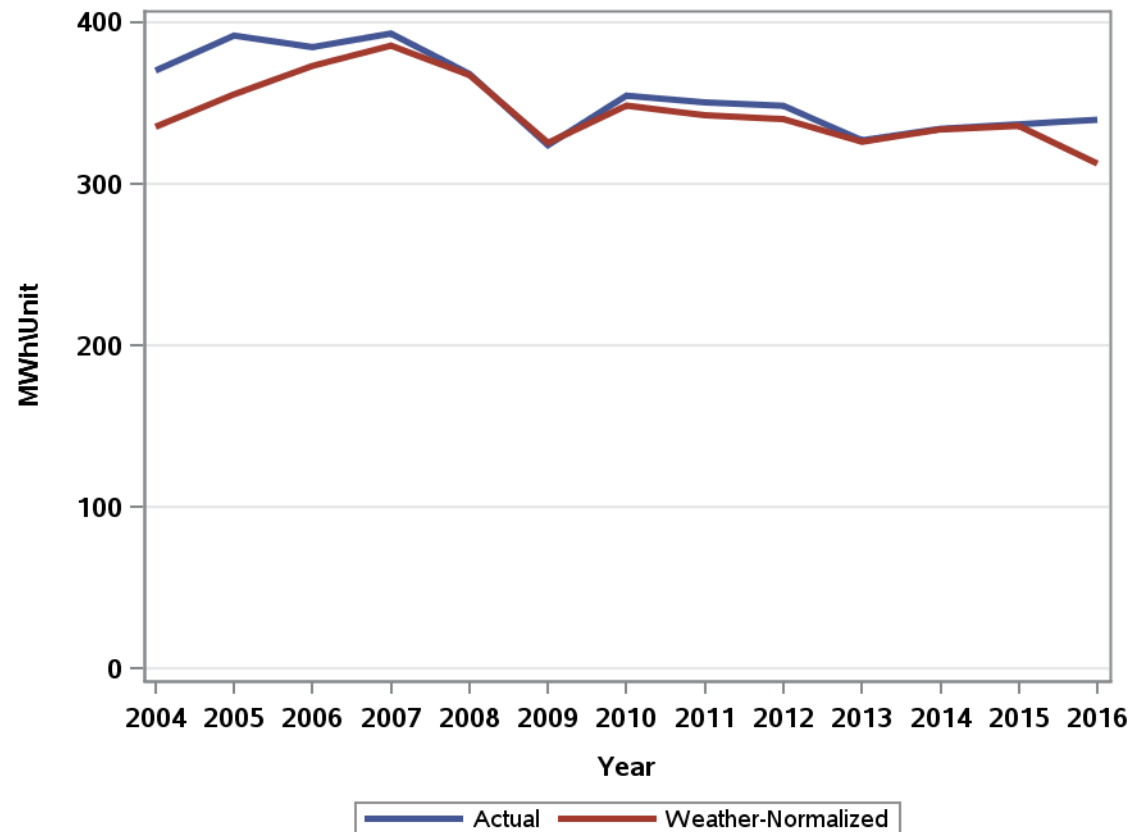
Summer Commercial SGS Use per Customer at Meter



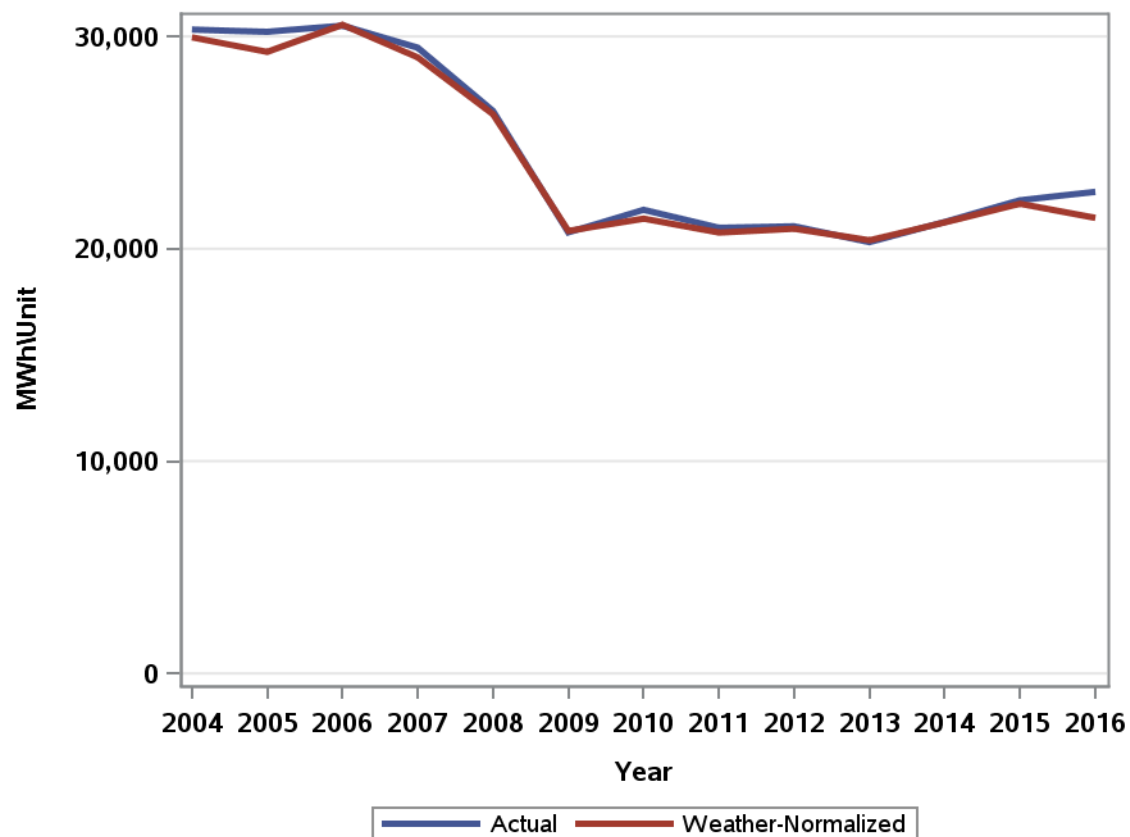
Summer Commercial SPS Use per Customer at Meter

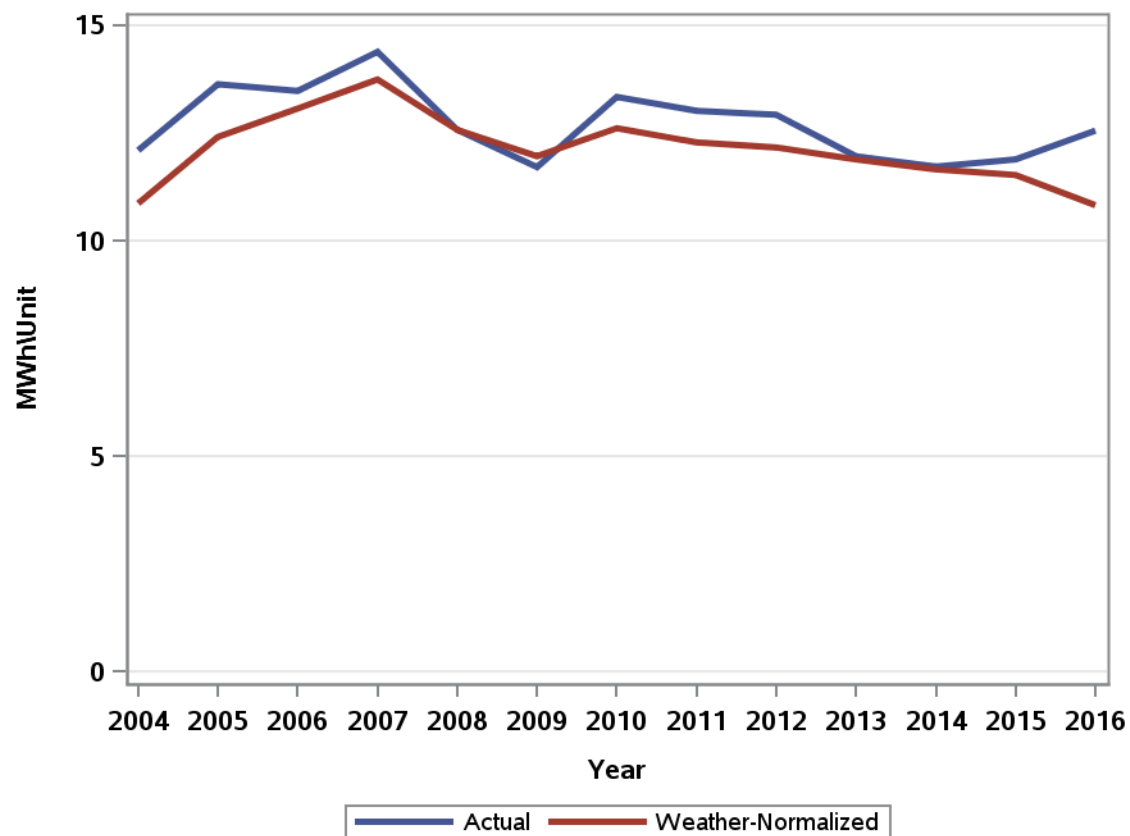


Summer Industrial LGS Use per Customer at Meter

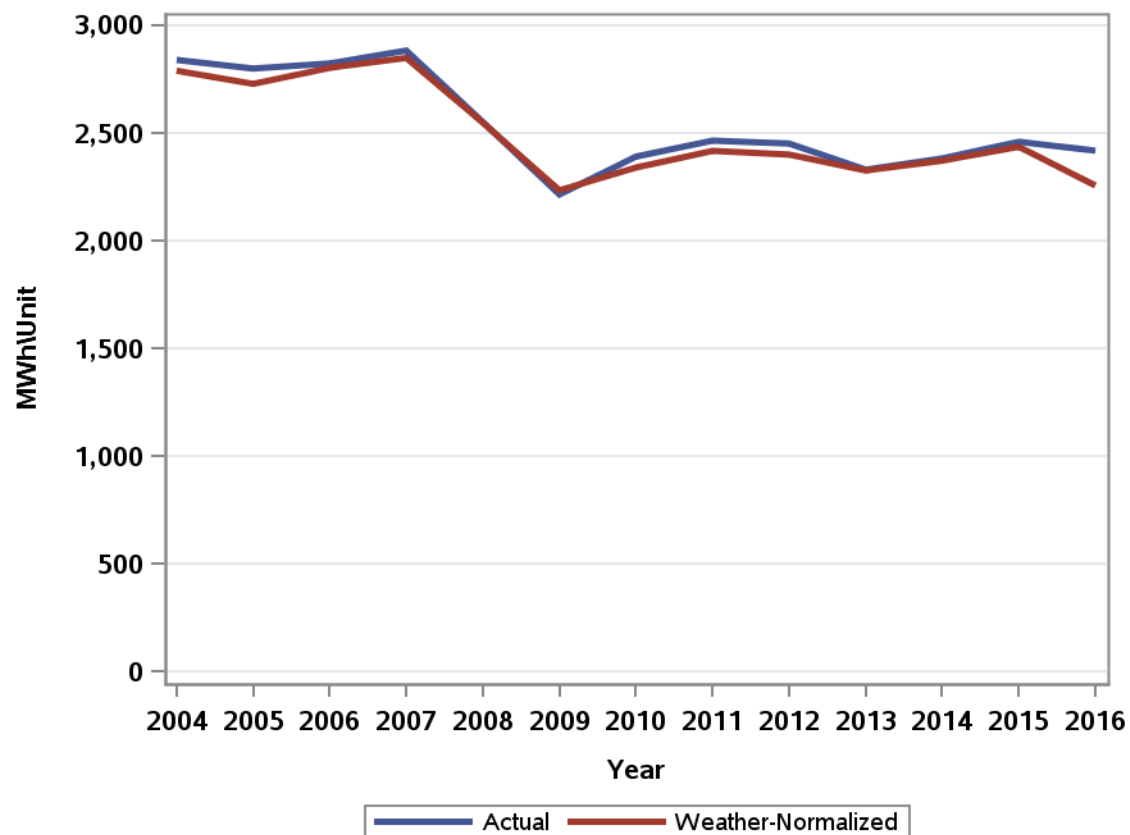


Summer Industrial LPS Use per Customer at Meter

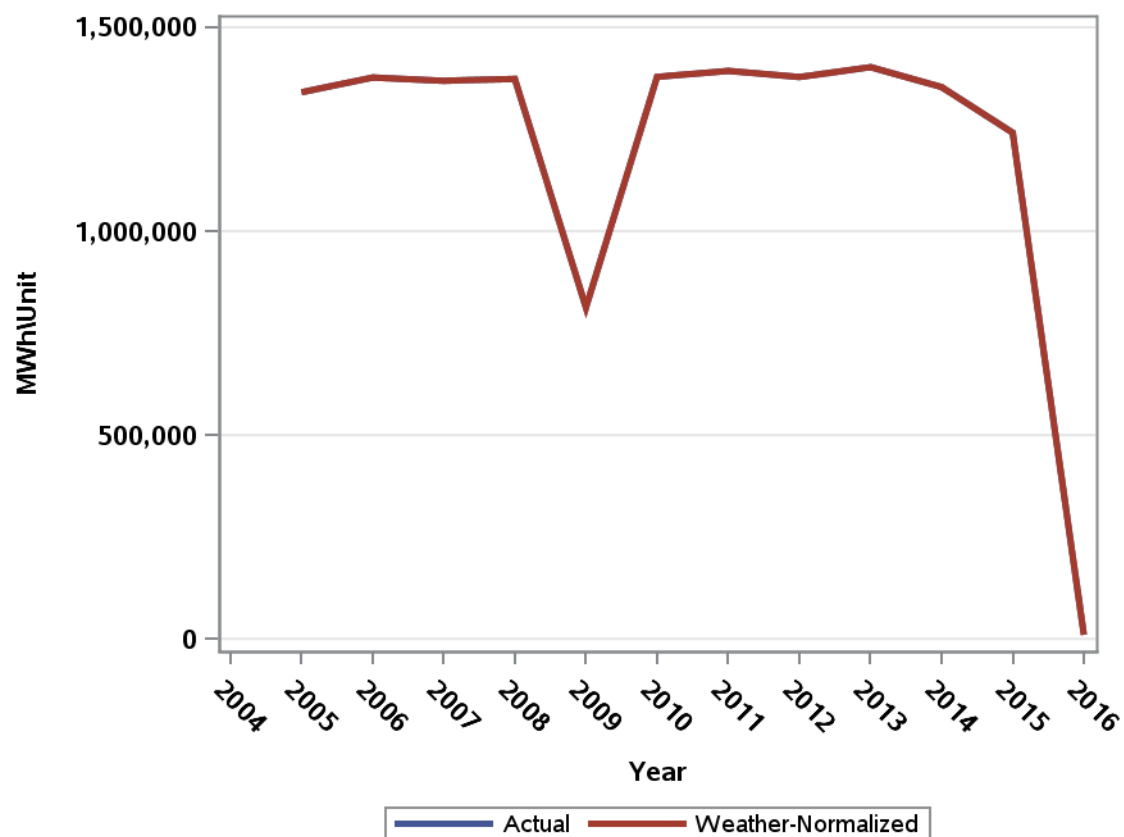


Summer Industrial SGS Use per Customer at Meter

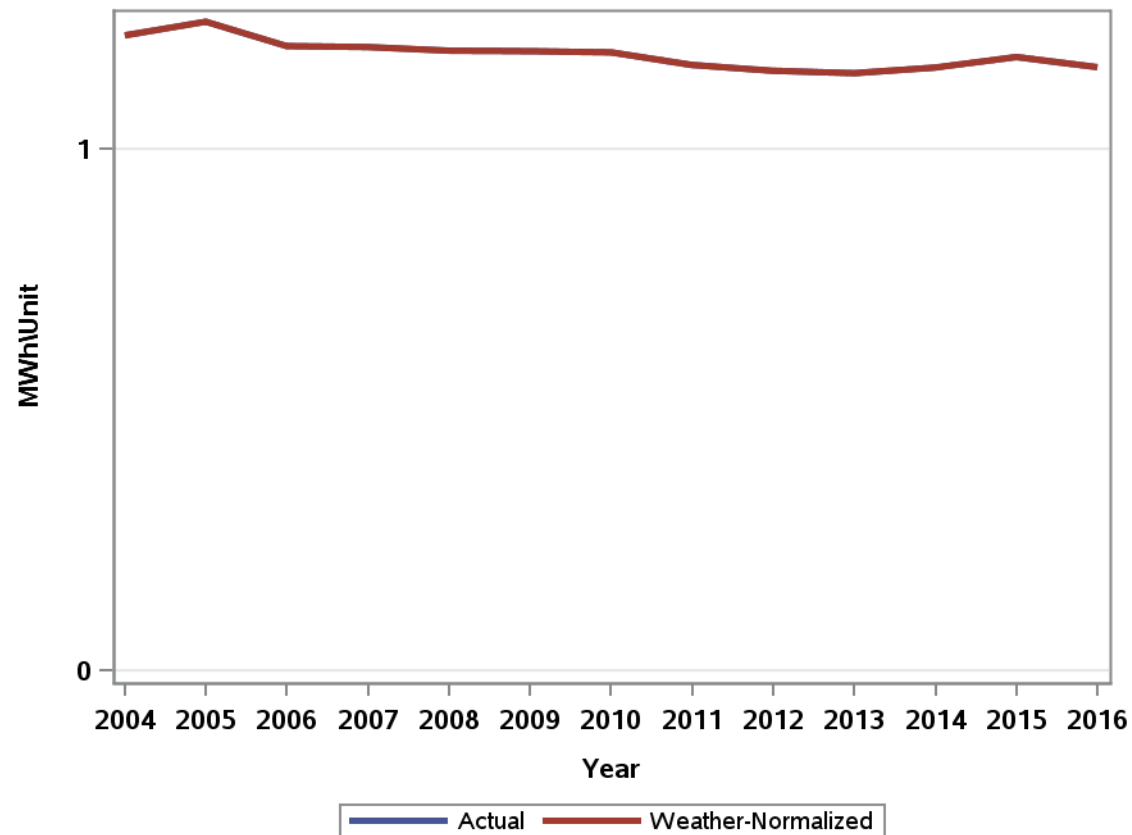
Summer Industrial SPS Use per Customer at Meter



Summer Large Transmission Service Use per Customer at Meter



Summer Lighting Use per Customer at Meter



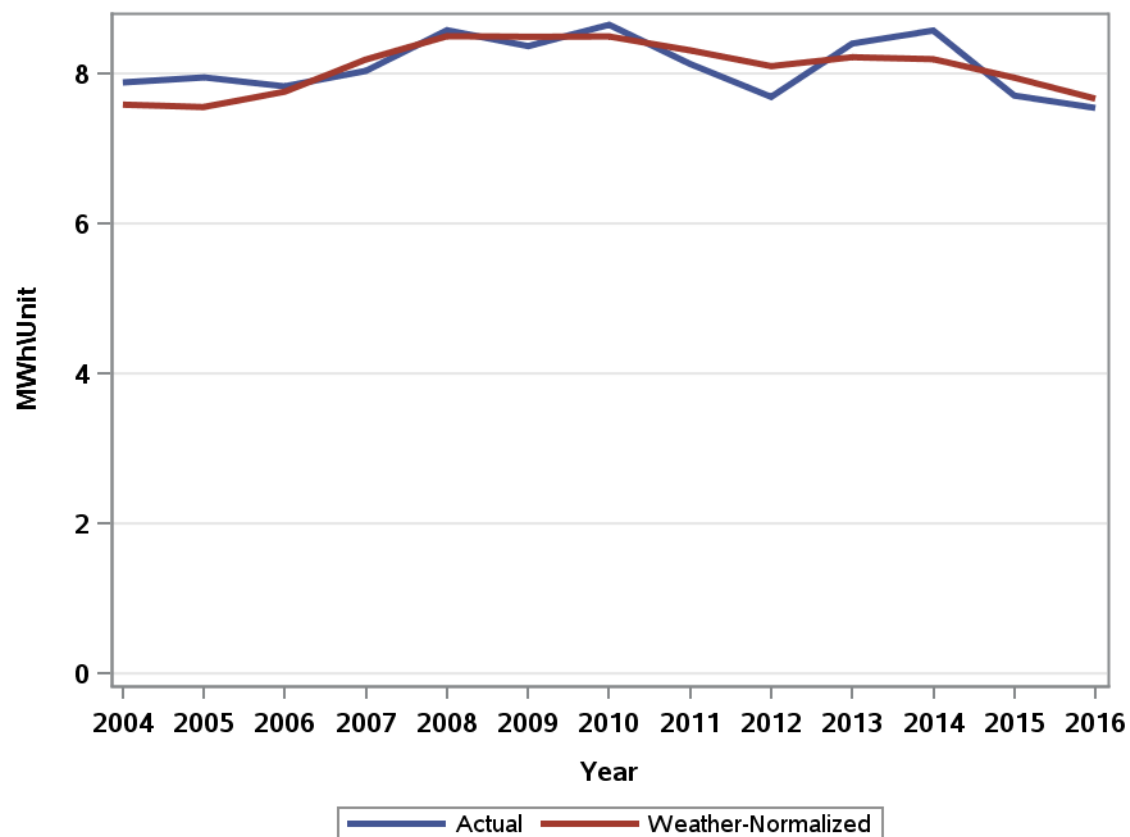
Historical Summer Actual Use per Customer (MWh/Customer)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	4.50	297.7	18,312	9.4	2,214	370.1	30,323	12.1	2,839	1.22	
2005	5.48	315.9	19,668	10.3	2,260	391.8	30,216	13.6	2,799	1.24	1,340,603
2006	4.95	306.6	18,769	9.8	2,150	384.6	30,508	13.5	2,823	1.20	1,376,792
2007	5.21	312.0	19,282	10.2	2,205	393.1	29,468	14.4	2,883	1.20	1,368,894
2008	4.80	301.2	17,953	9.1	2,028	368.0	26,491	12.6	2,551	1.19	1,373,286
2009	4.55	290.8	16,913	8.7	1,946	323.9	20,771	11.7	2,214	1.19	812,675
2010	5.46	311.5	16,931	9.4	1,959	354.6	21,836	13.3	2,391	1.18	1,378,333
2011	5.19	302.5	18,167	9.1	1,941	350.4	20,991	13.0	2,464	1.16	1,393,028
2012	5.09	292.3	17,628	8.9	1,916	348.3	21,056	12.9	2,451	1.15	1,377,961
2013	4.51	284.1	18,766	8.3	1,866	326.9	20,313	12.0	2,330	1.15	1,402,278
2014	4.43	278.1	18,690	8.1	1,880	334.1	21,265	11.7	2,382	1.16	1,353,488
2015	4.56	279.9	19,239	8.3	1,922	336.9	22,287	11.9	2,459	1.18	1,241,407
2016	4.95	287.5	20,725	8.6	1,963	339.7	22,682	12.6	2,418	1.16	10,273

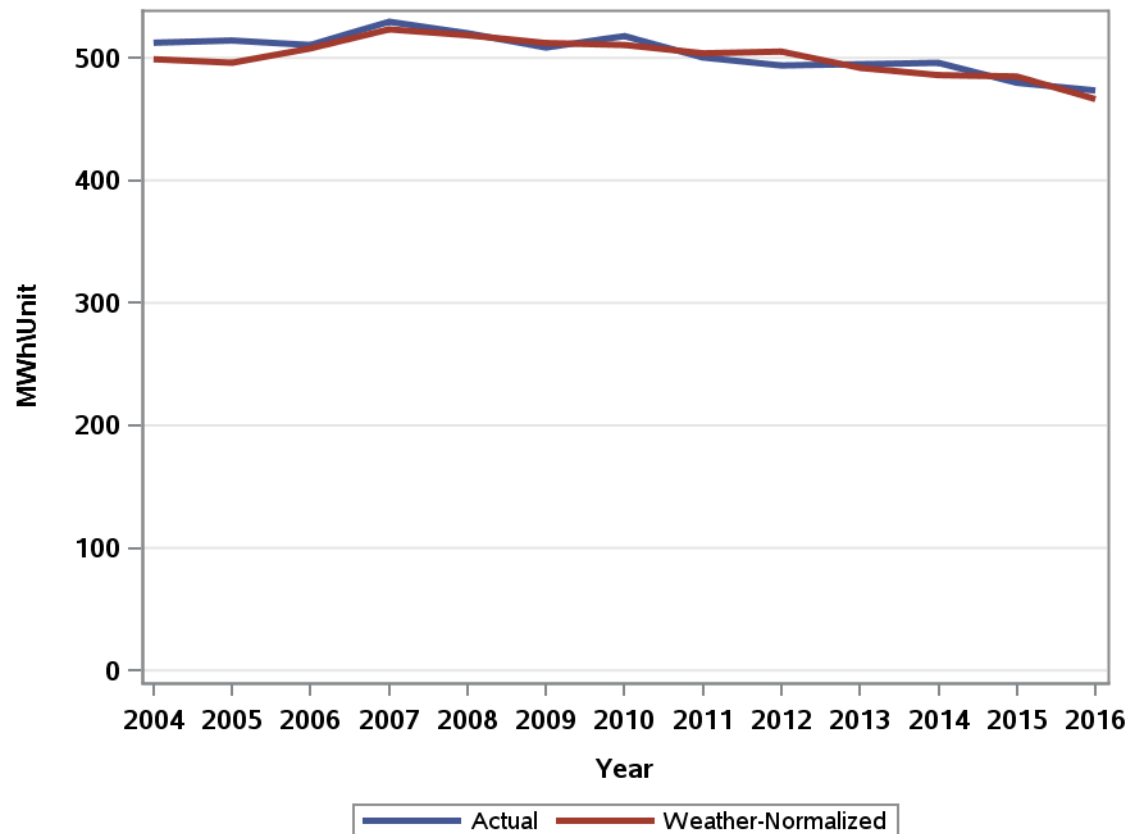
Historical Summer Weather-Normalized Use per Customer (MWh/Customer)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	4.38	289.4	18,066	9.1	2,193	335.3	29,956	10.9	2,789	1.22	
2005	5.05	301.0	19,200	9.7	2,198	355.4	29,272	12.4	2,728	1.24	1,340,603
2006	4.72	302.5	18,391	9.5	2,120	373.0	30,551	13.1	2,803	1.20	1,376,792
2007	4.95	304.7	19,034	9.7	2,151	385.6	29,012	13.7	2,849	1.20	1,368,894
2008	4.86	302.5	17,783	9.1	2,029	367.3	26,335	12.6	2,548	1.19	1,373,286
2009	4.75	295.1	17,059	8.9	1,966	325.4	20,840	12.0	2,234	1.19	812,675
2010	4.90	297.6	16,580	8.9	1,896	348.4	21,418	12.6	2,340	1.19	1,378,333
2011	4.62	289.8	17,869	8.6	1,879	342.5	20,765	12.3	2,417	1.16	1,393,028
2012	4.51	278.9	17,303	8.4	1,848	340.1	20,944	12.2	2,400	1.15	1,377,961
2013	4.44	282.2	18,560	8.2	1,853	326.0	20,401	11.9	2,325	1.15	1,402,278
2014	4.39	277.1	18,656	8.1	1,875	333.7	21,243	11.7	2,372	1.16	1,353,488
2015	4.29	273.9	19,019	8.0	1,888	335.8	22,122	11.5	2,436	1.18	1,241,407
2016	4.00	254.0	19,371	7.4	1,806	312.5	21,456	10.8	2,256	1.16	10,273

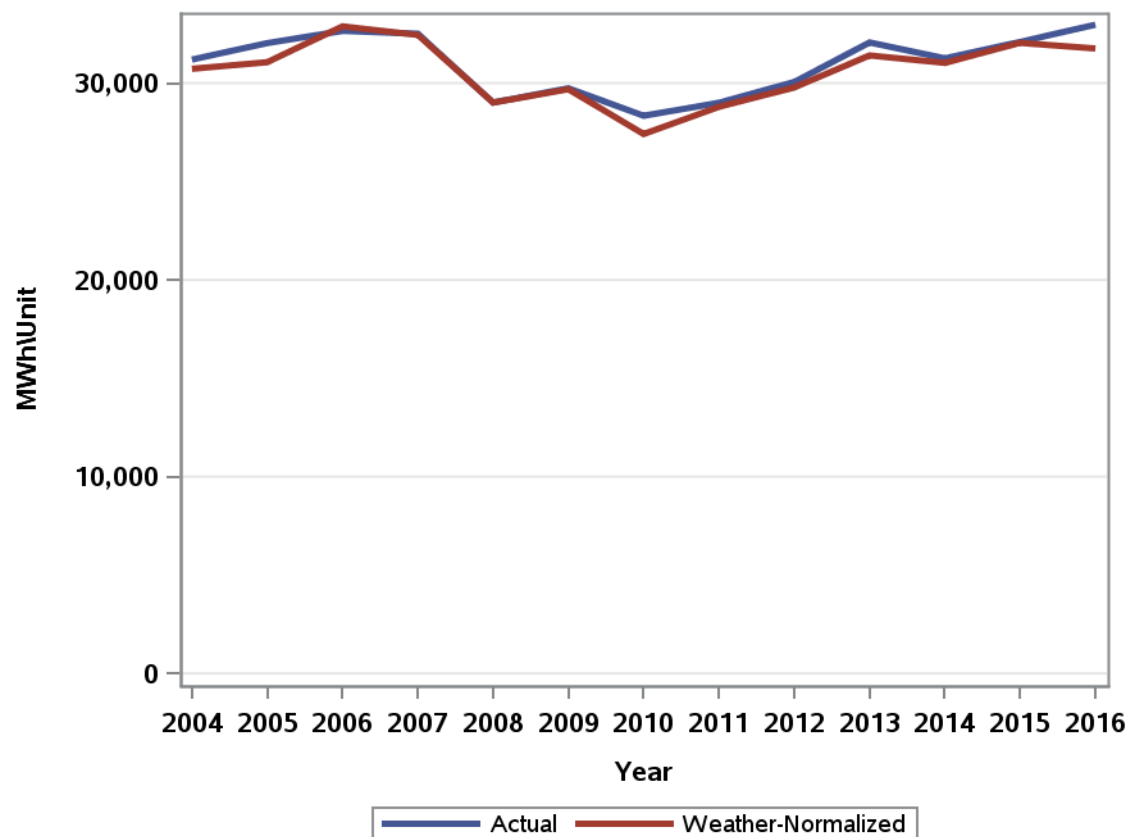
Non-Summer Residential Use per Customer at Meter



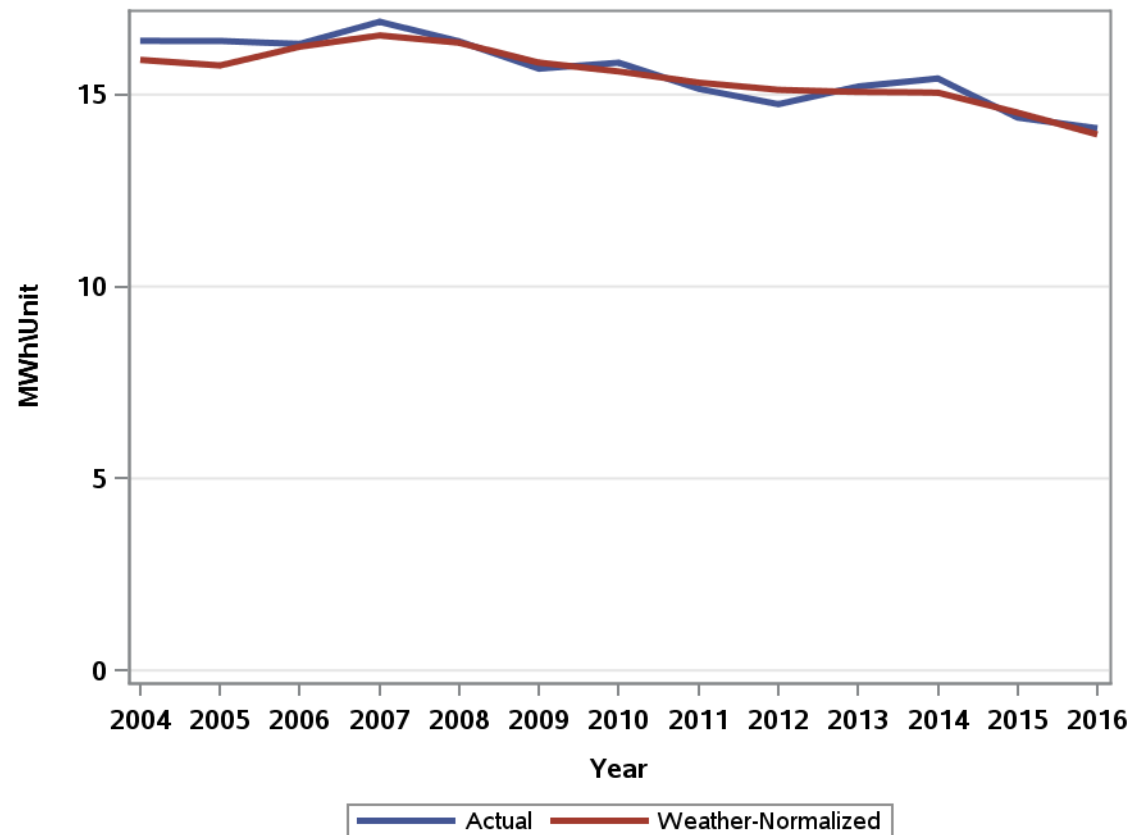
Non-Summer Commercial LGS Use per Customer at Meter



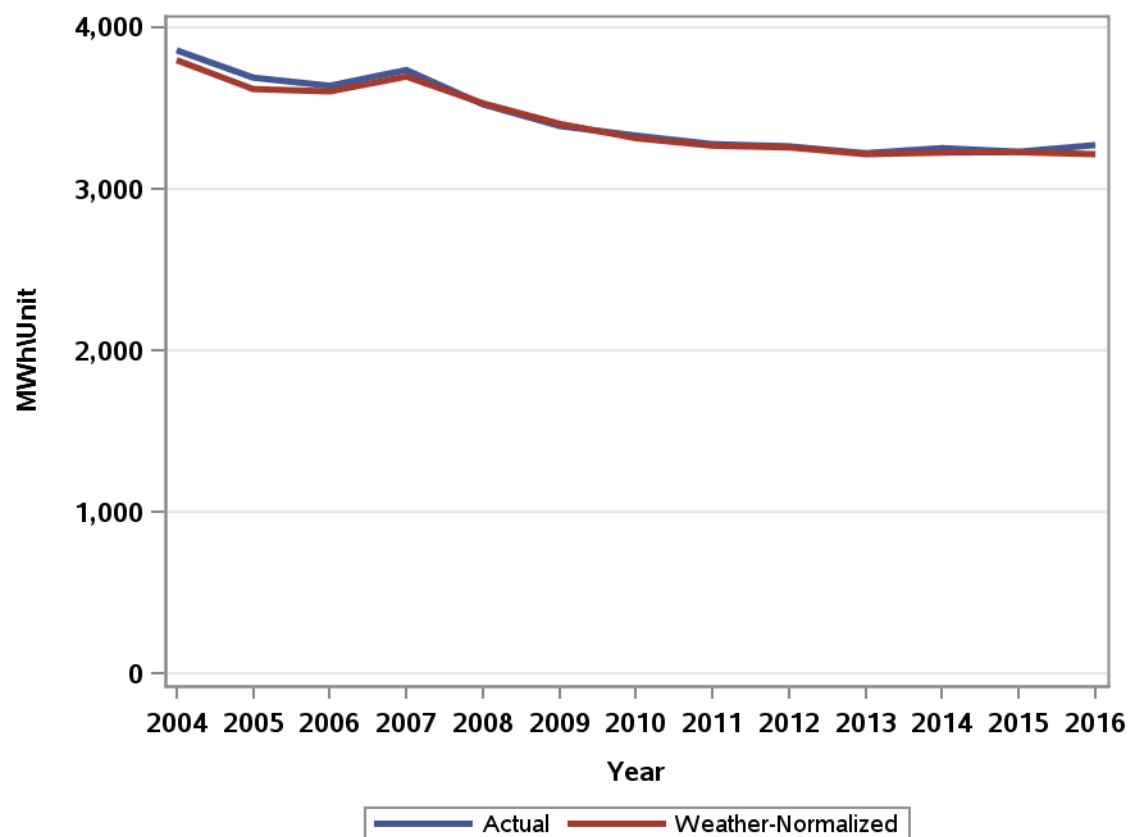
Non-Summer Commercial LPS Use per Customer at Meter



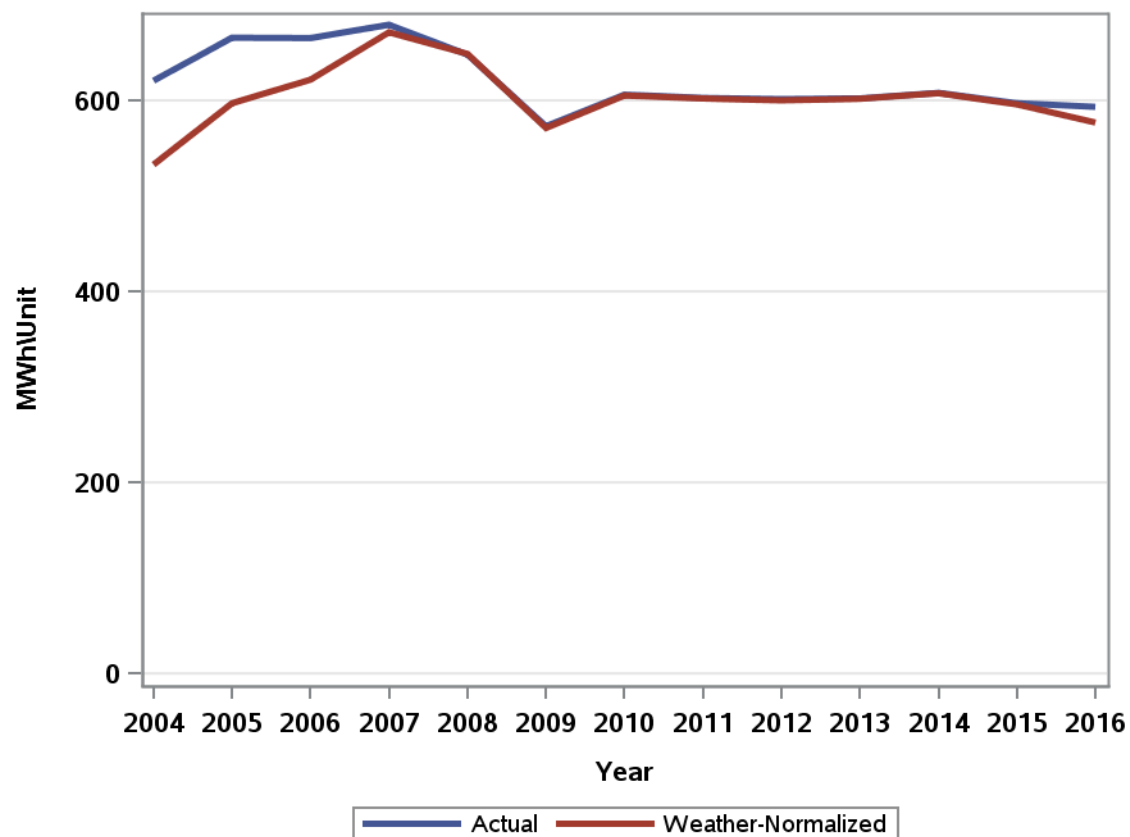
Non-Summer Commercial SGS Use per Customer at Meter



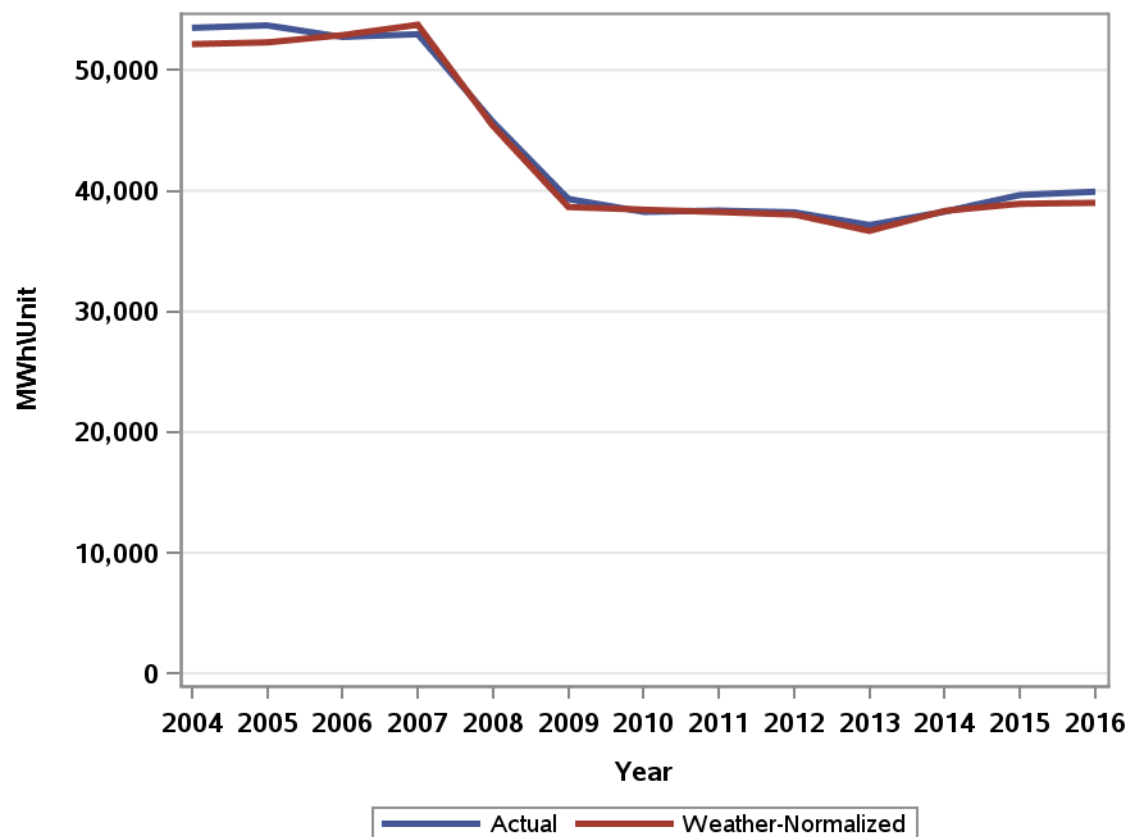
Non-Summer Commercial SPS Use per Customer at Meter

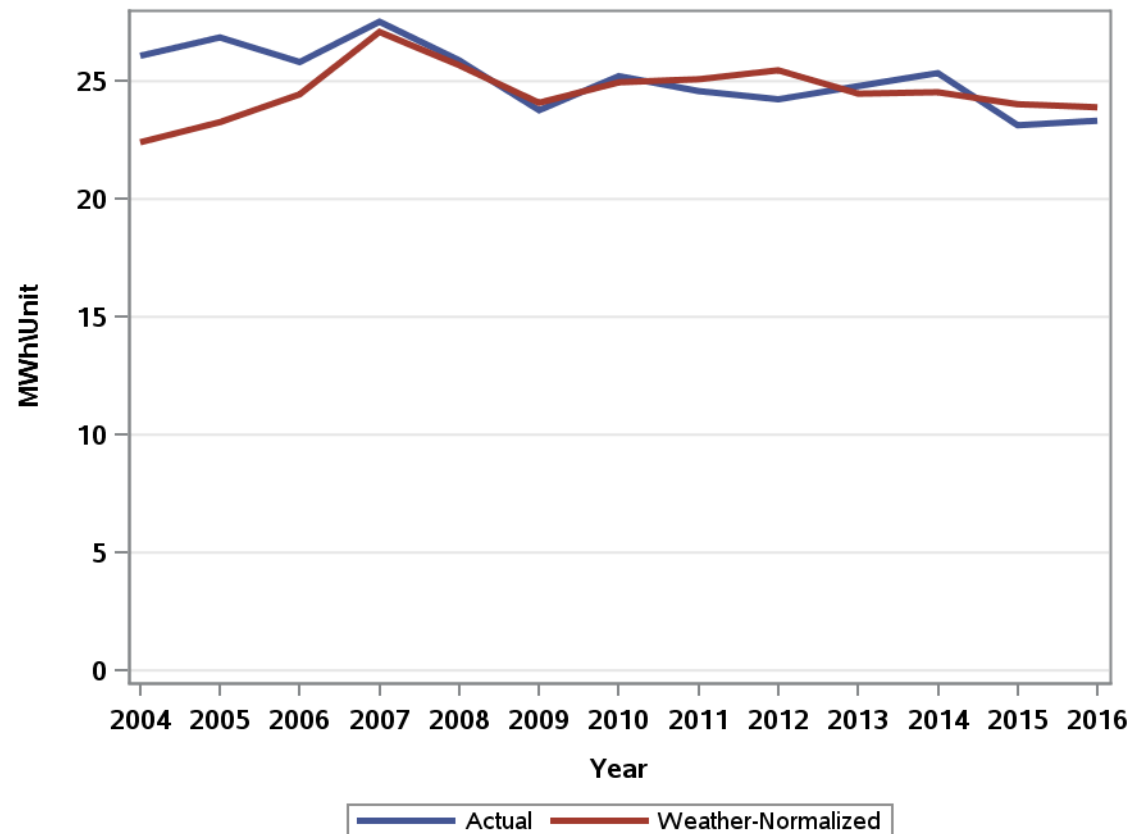


Non-Summer Industrial LGS Use per Customer at Meter

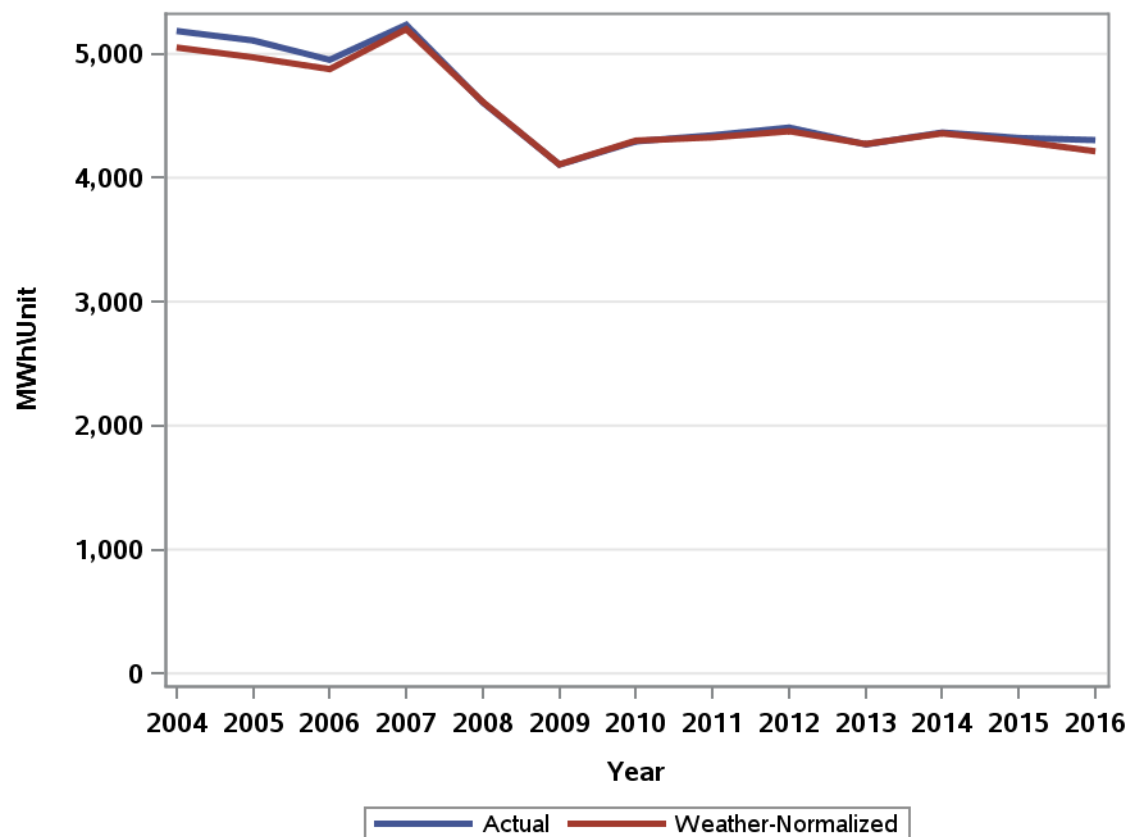


Non-Summer Industrial LPS Use per Customer at Meter

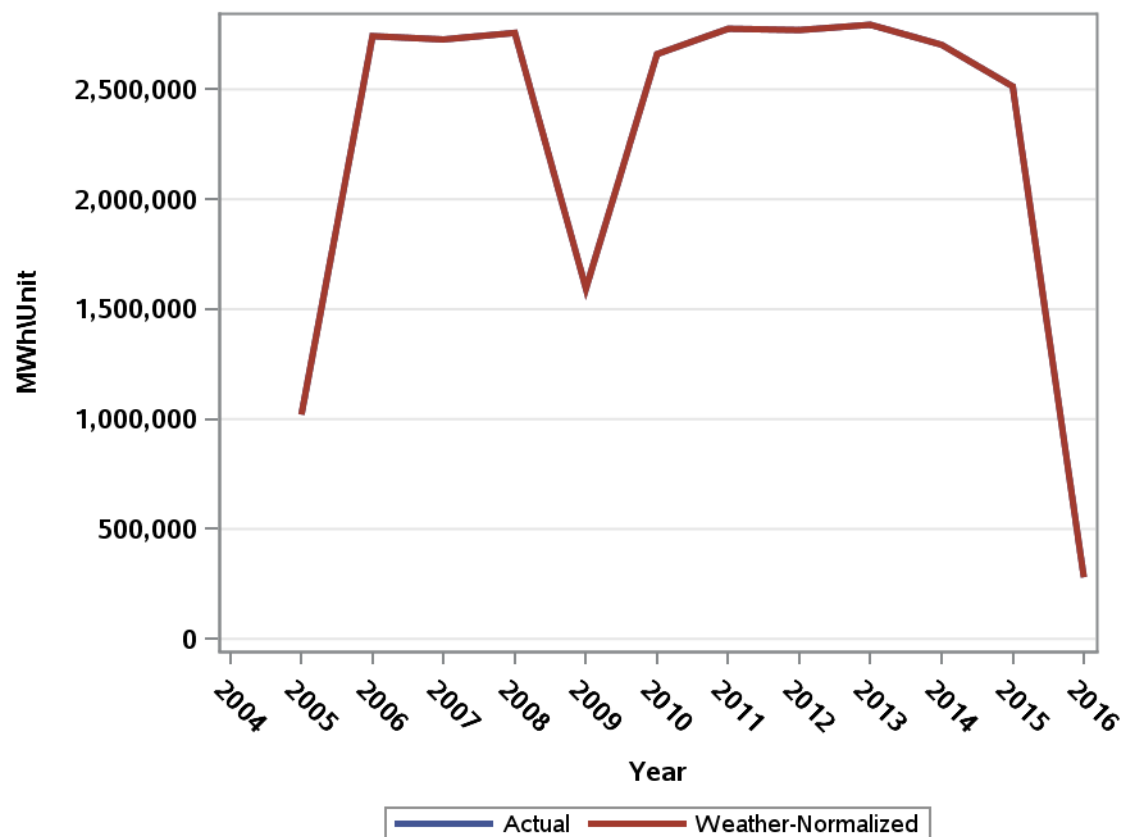


Non-Summer Industrial SGS Use per Customer at Meter

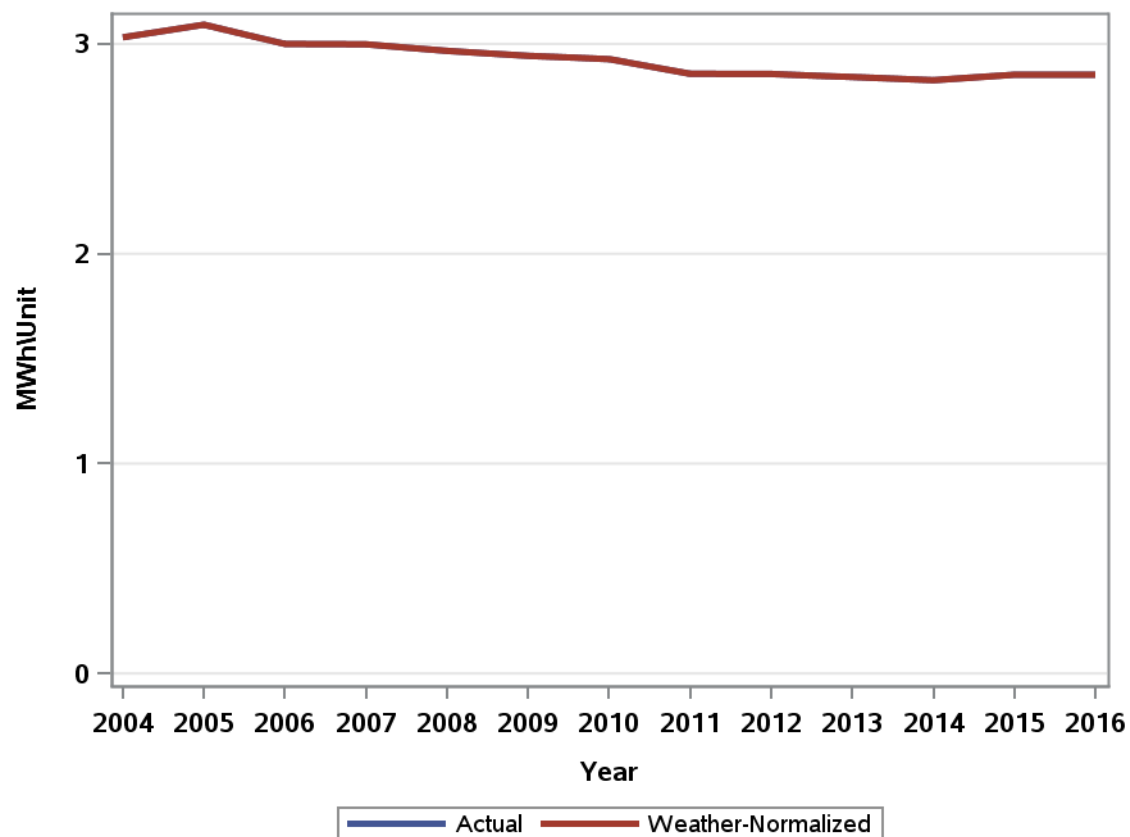
Non-Summer Industrial SPS Use per Customer at Meter



Non-Summer Large Transmission Service Use per Customer at Meter



Non-Summer Lighting Use per Customer at Meter



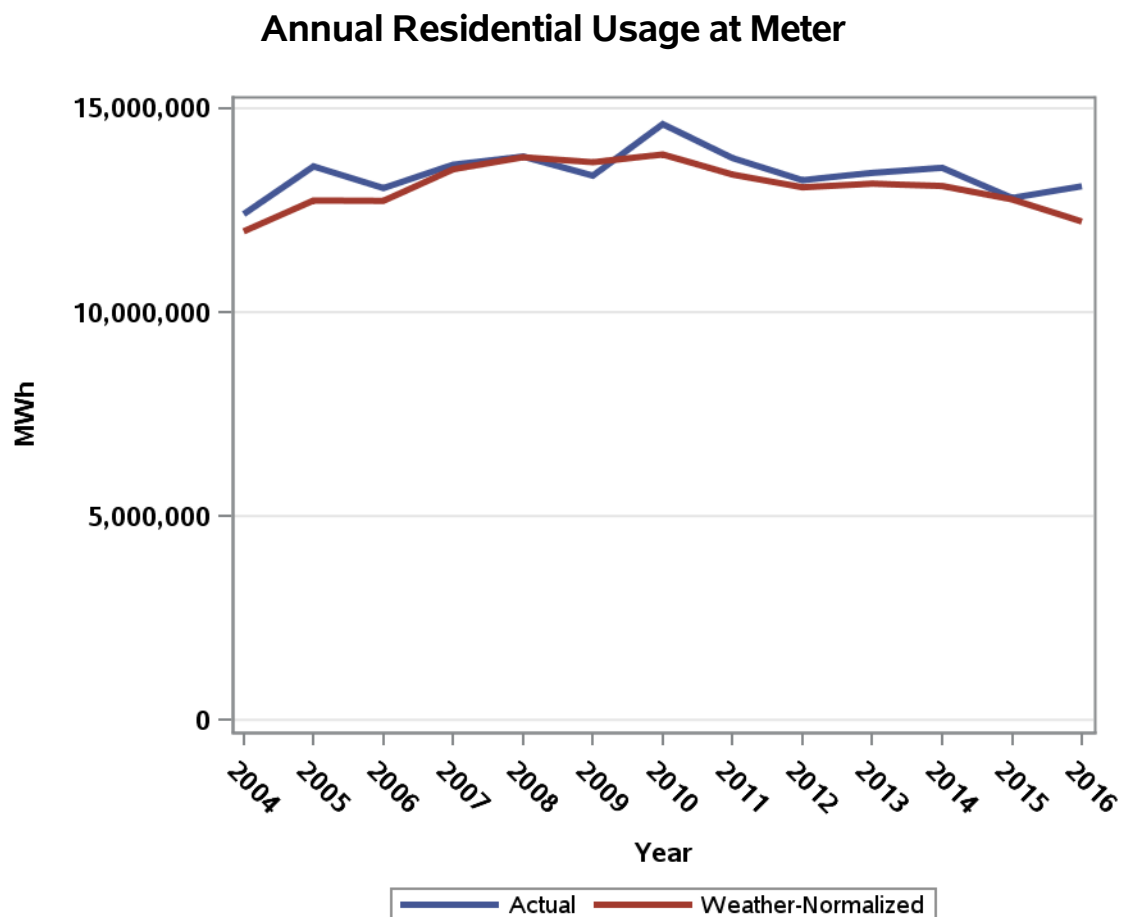
Historical Non-Summer Actual Use per Customer (MWh/Customer)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	7.88	512.4	31,196	16.4	3,858	620.6	53,503	26.1	5,184	3.03	
2005	7.95	514.2	32,032	16.4	3,688	665.7	53,699	26.9	5,108	3.09	1,020,673
2006	7.83	510.5	32,653	16.3	3,638	665.3	52,741	25.8	4,951	3.00	2,742,085
2007	8.04	529.5	32,508	16.9	3,736	679.3	52,979	27.5	5,235	3.00	2,727,178
2008	8.58	520.1	29,010	16.4	3,523	648.0	45,695	25.9	4,608	2.97	2,757,090
2009	8.36	508.4	29,736	15.7	3,389	572.9	39,314	23.8	4,106	2.94	1,593,164
2010	8.65	517.8	28,341	15.8	3,330	606.0	38,250	25.2	4,294	2.93	2,660,440
2011	8.13	500.3	28,999	15.2	3,276	602.6	38,351	24.6	4,343	2.86	2,775,892
2012	7.69	493.8	30,054	14.7	3,263	601.4	38,213	24.2	4,406	2.86	2,769,711
2013	8.40	494.9	32,064	15.2	3,220	602.1	37,159	24.8	4,269	2.84	2,793,984
2014	8.57	495.9	31,259	15.4	3,252	607.9	38,273	25.3	4,365	2.83	2,702,714
2015	7.71	479.7	32,093	14.4	3,229	597.1	39,651	23.1	4,321	2.85	2,513,426
2016	7.54	473.4	32,965	14.1	3,271	593.2	39,919	23.3	4,304	2.85	280,518

Historical Non-Summer Weather-Normalized Use per Customer (MWh/Customer)

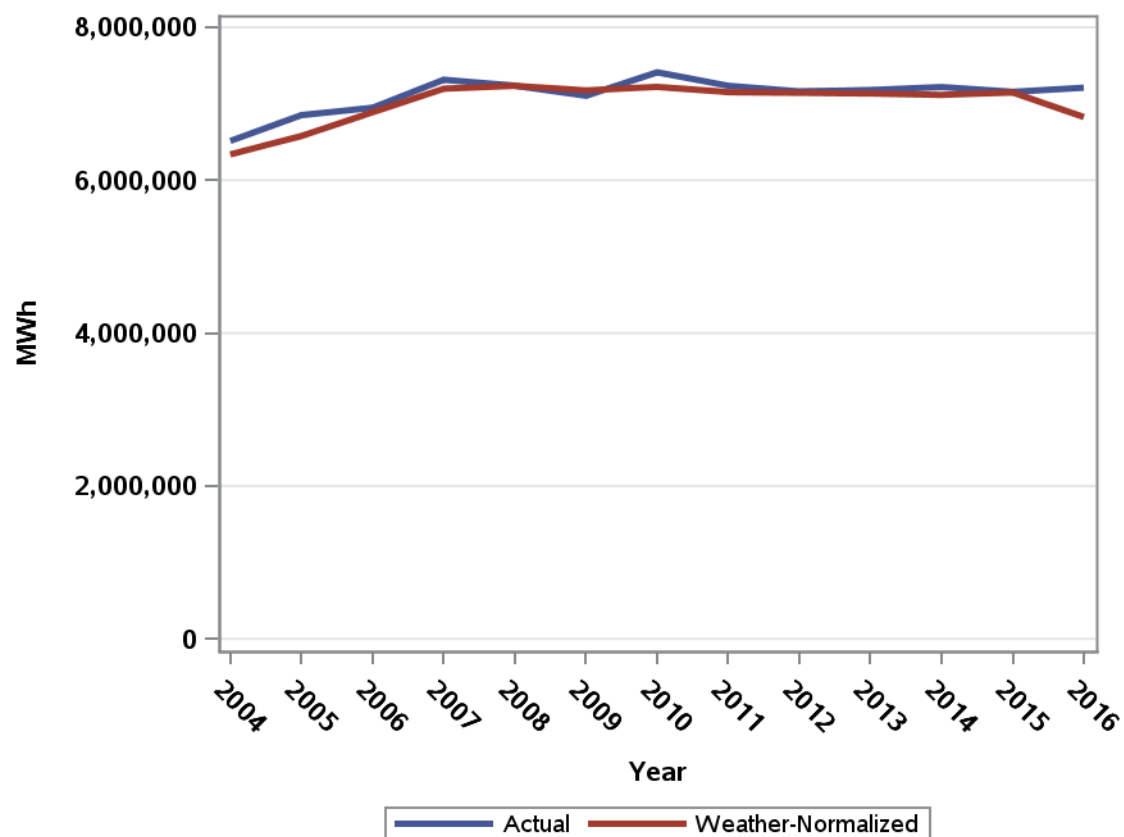
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	7.58	498.9	30,723	15.9	3,796	532.8	52,155	22.4	5,051	3.03	
2005	7.55	496.0	31,060	15.8	3,618	597.1	52,294	23.3	4,972	3.09	1,020,673
2006	7.76	507.8	32,882	16.2	3,603	621.7	52,895	24.4	4,877	3.00	2,742,085
2007	8.19	523.3	32,448	16.5	3,695	671.4	53,757	27.1	5,200	3.00	2,727,178
2008	8.50	518.6	29,011	16.3	3,529	648.7	45,356	25.7	4,613	2.97	2,757,090
2009	8.49	512.1	29,687	15.8	3,403	571.1	38,644	24.1	4,107	2.94	1,593,164
2010	8.49	510.5	27,411	15.6	3,313	605.1	38,427	25.0	4,301	2.93	2,660,440
2011	8.31	503.8	28,794	15.3	3,267	602.0	38,232	25.1	4,326	2.86	2,775,892
2012	8.10	505.2	29,779	15.1	3,257	600.0	38,028	25.5	4,375	2.86	2,769,711
2013	8.22	491.9	31,405	15.1	3,214	601.7	36,670	24.5	4,273	2.84	2,793,984
2014	8.19	486.0	31,025	15.1	3,225	607.5	38,333	24.5	4,359	2.83	2,702,714
2015	7.94	484.8	32,046	14.5	3,227	595.9	38,920	24.0	4,295	2.85	2,513,426
2016	7.66	466.3	31,758	14.0	3,214	576.9	39,000	23.9	4,213	2.85	280,518

Annual Historical Actual and Weather-Normalized Energy Usage by Class (2004 - 2016)³

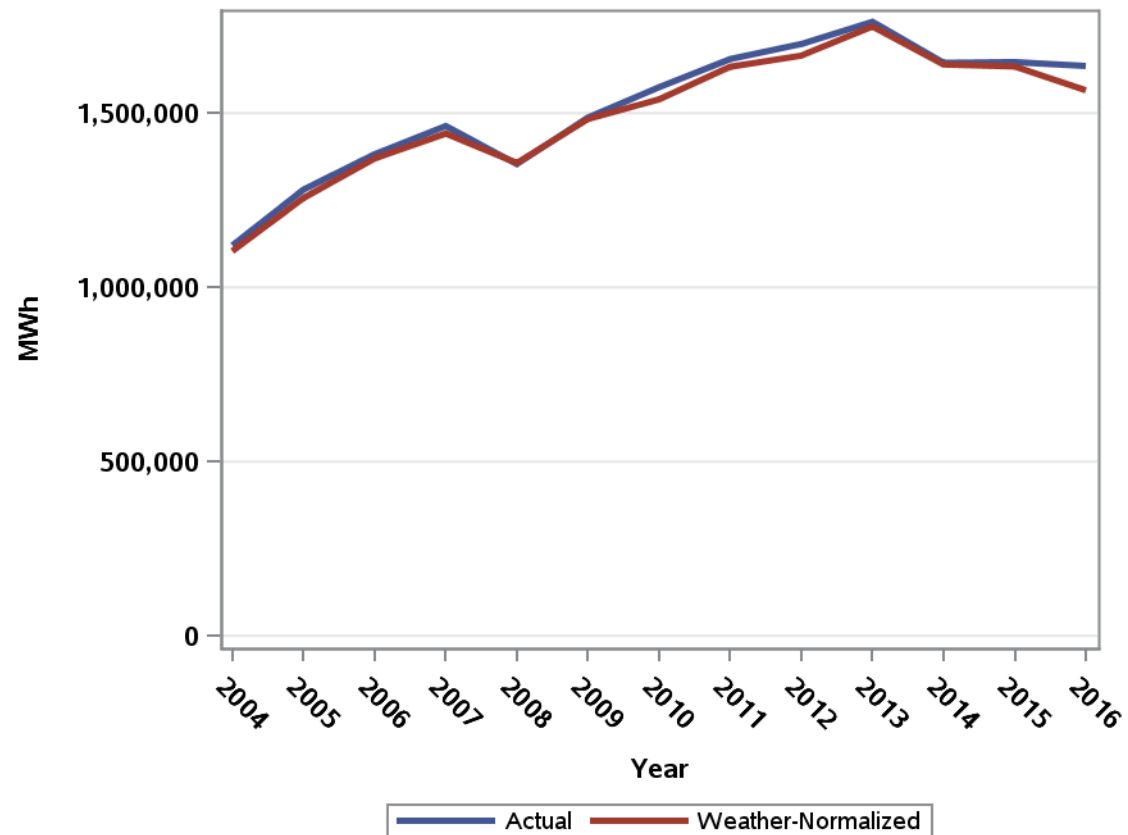


³4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

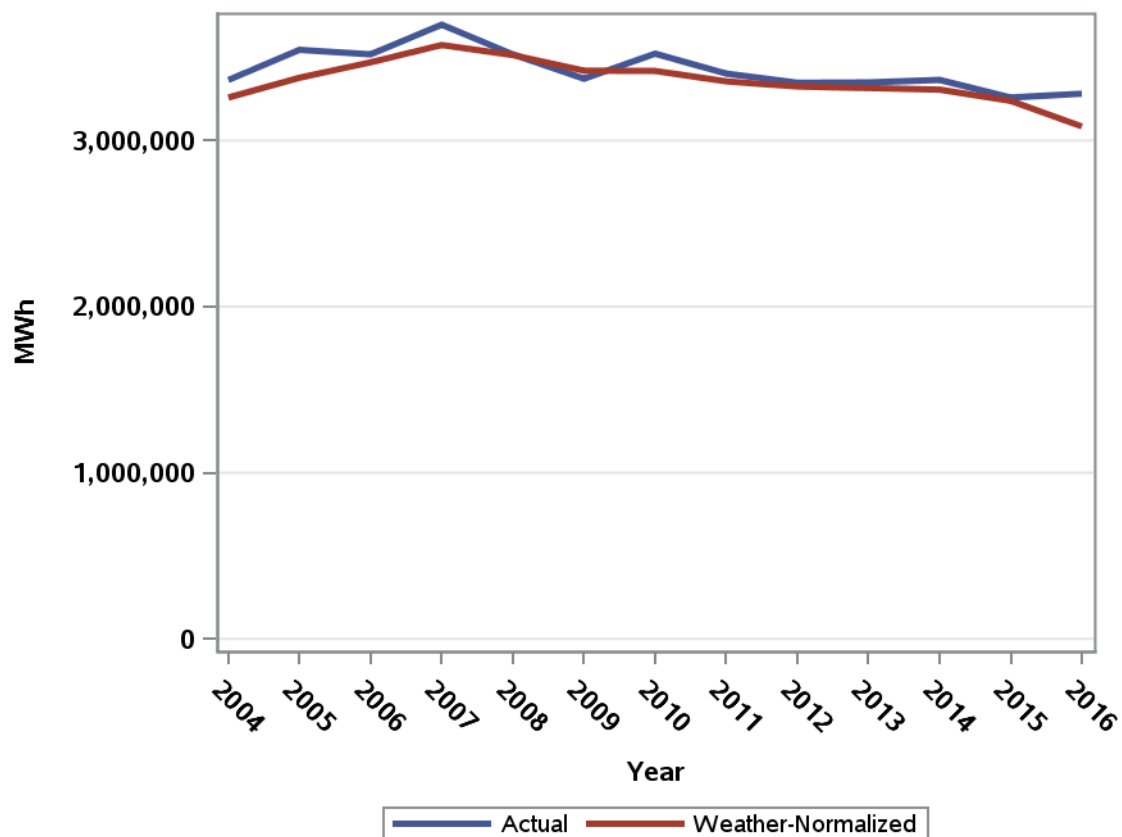
Annual Commercial LGS Usage at Meter



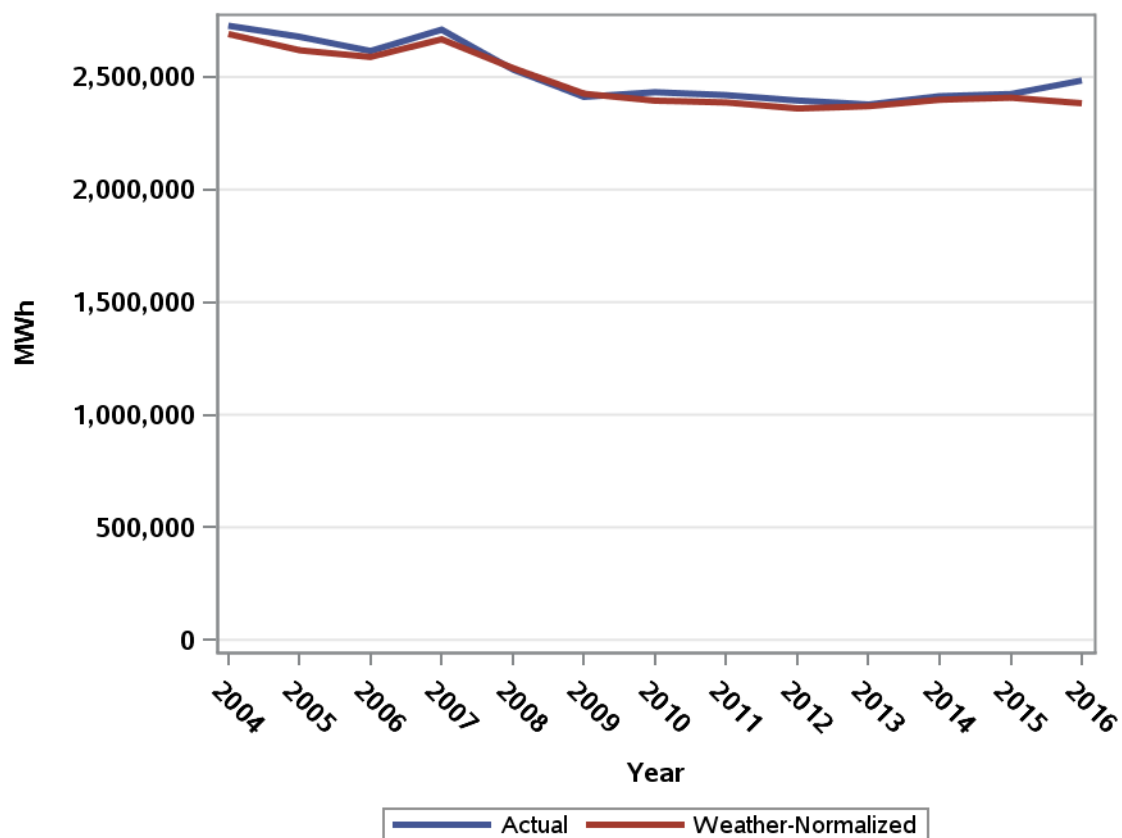
Annual Commercial LPS Usage at Meter



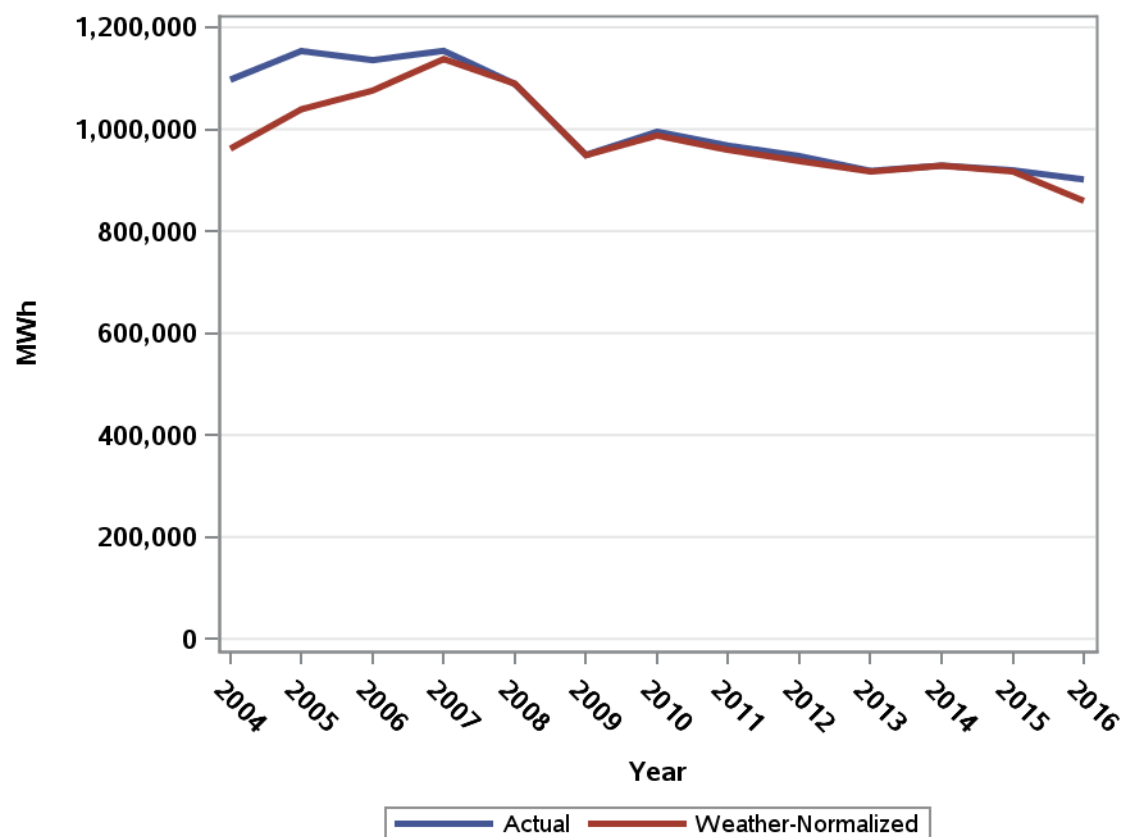
Annual Commercial SGS Usage at Meter



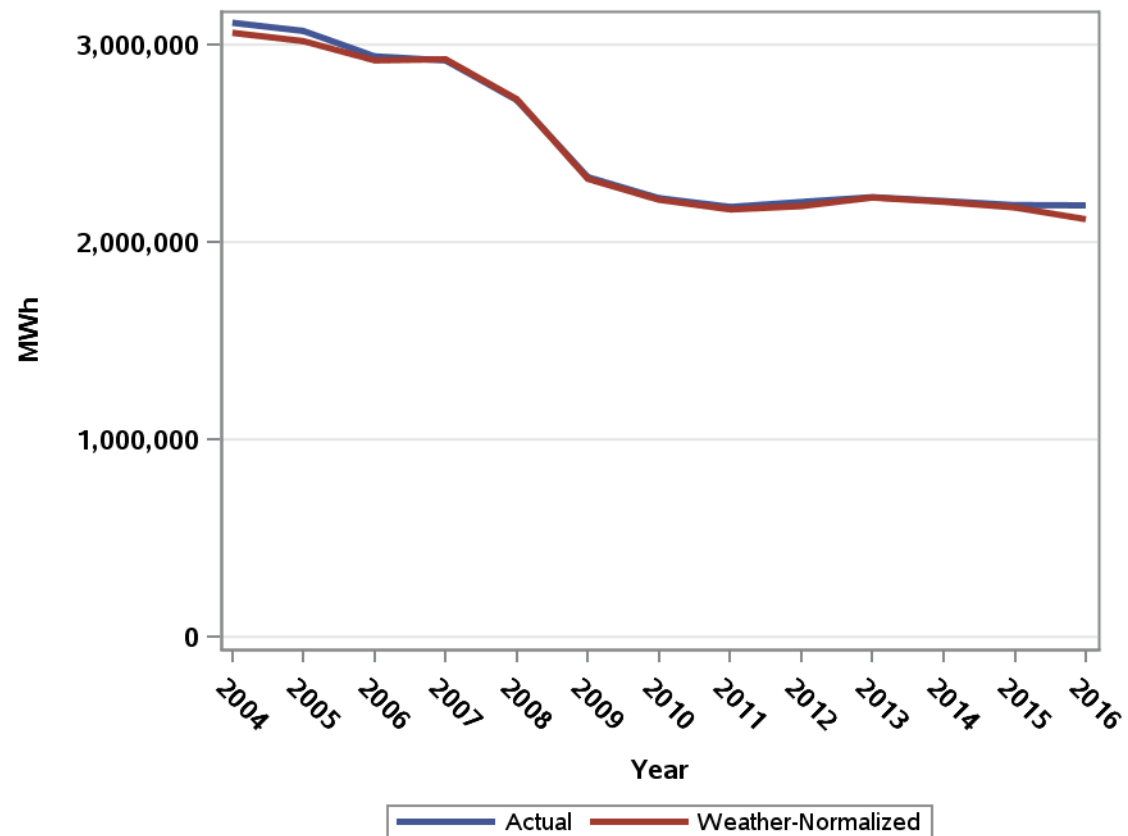
Annual Commercial SPS Usage at Meter

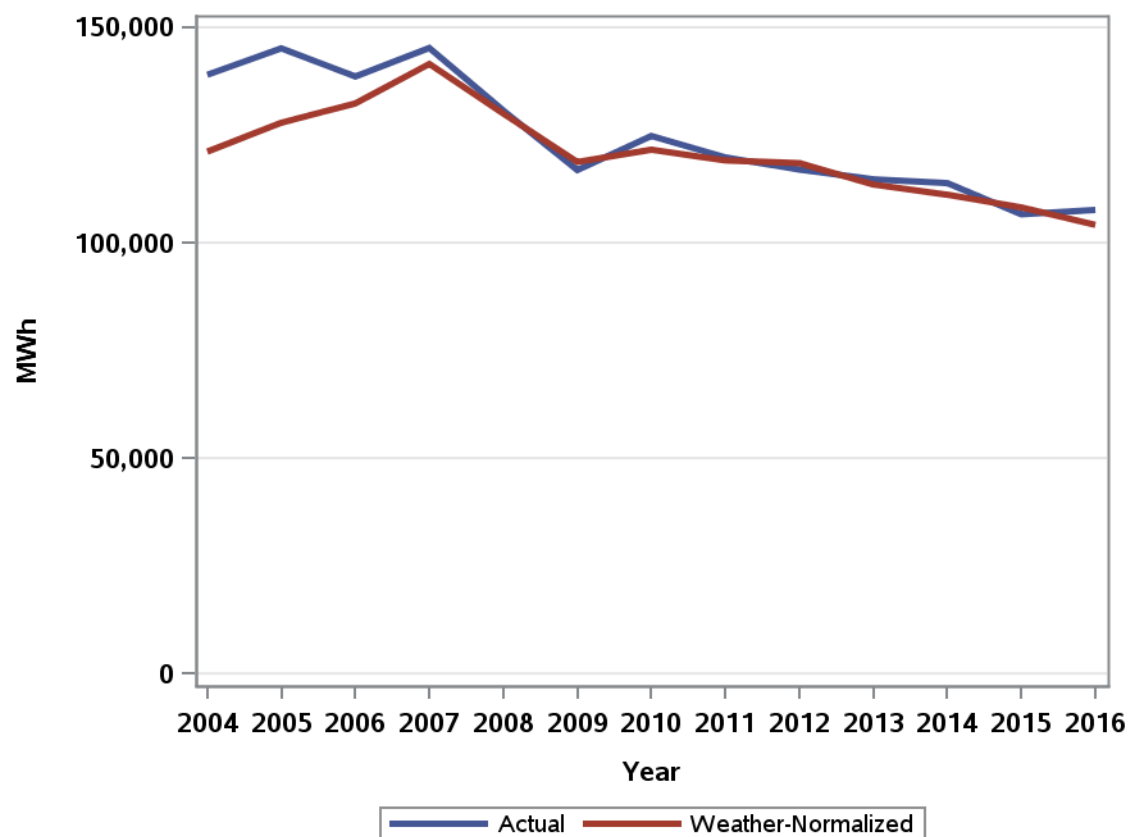


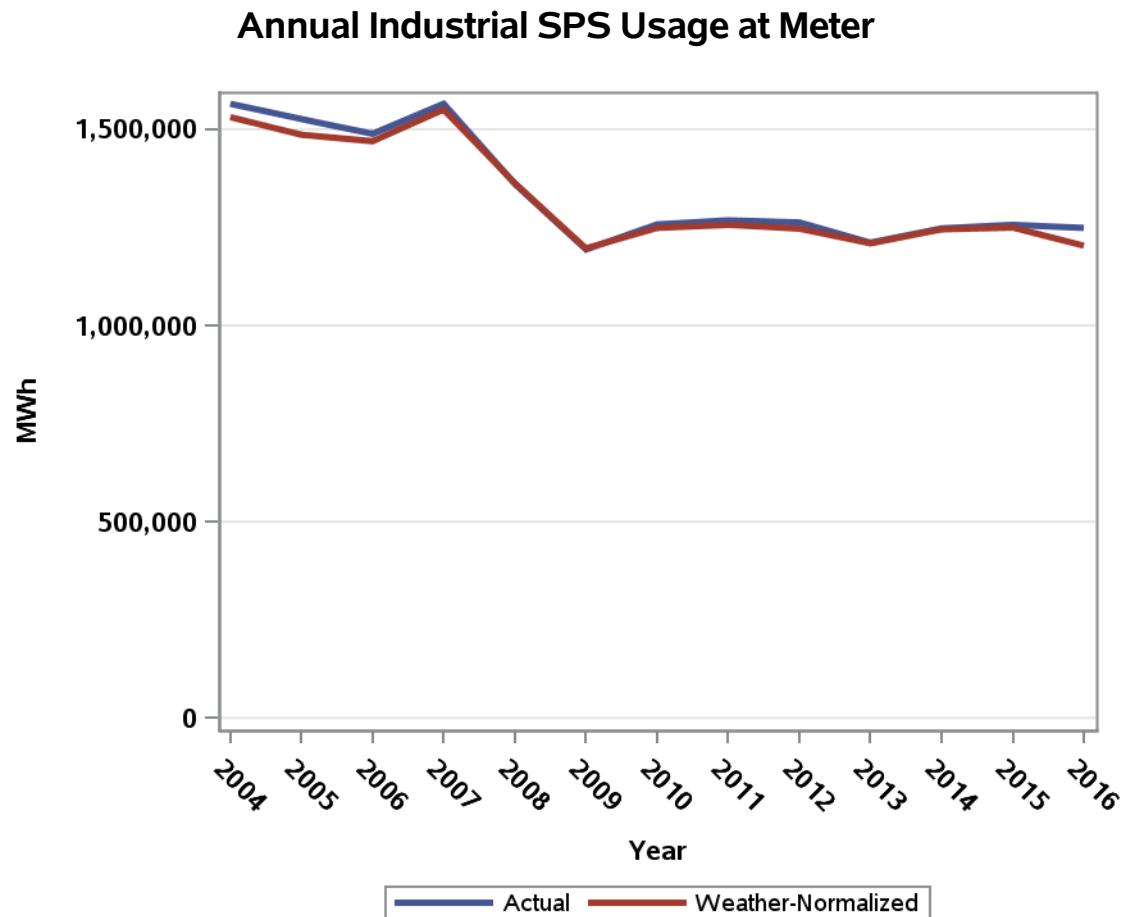
Annual Industrial LGS Usage at Meter



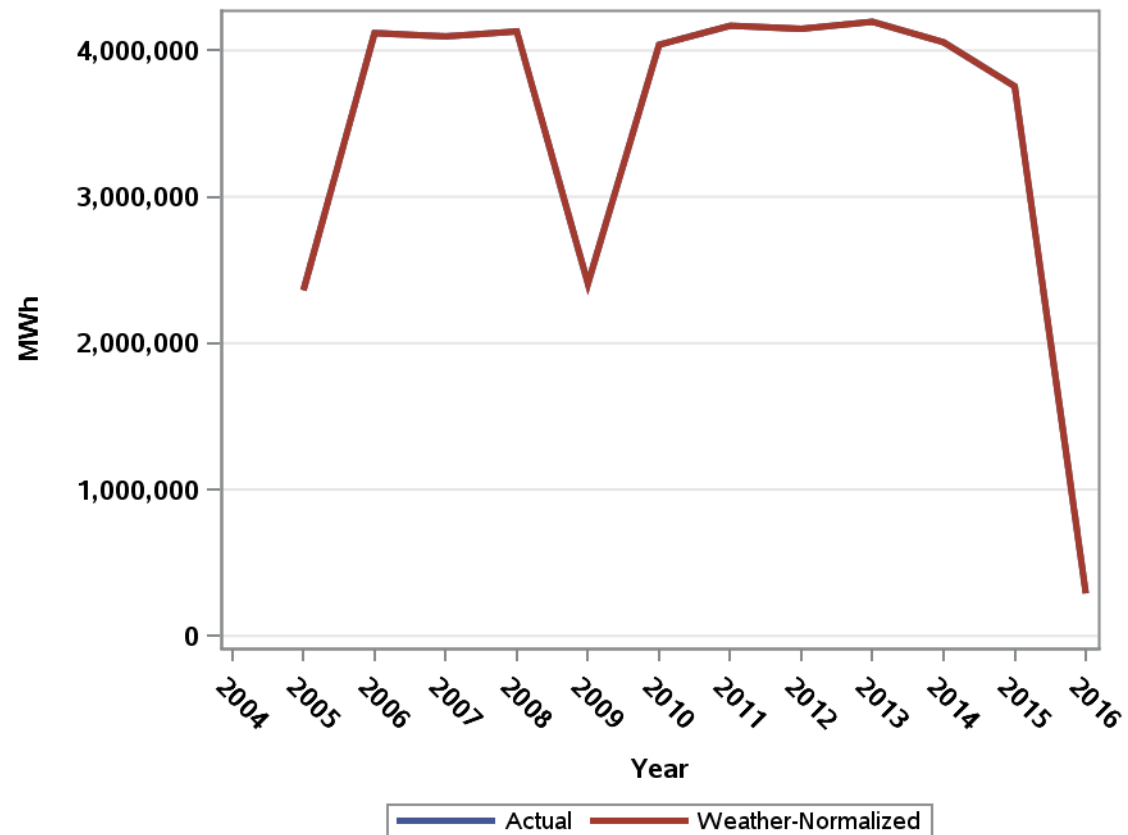
Annual Industrial LPS Usage at Meter



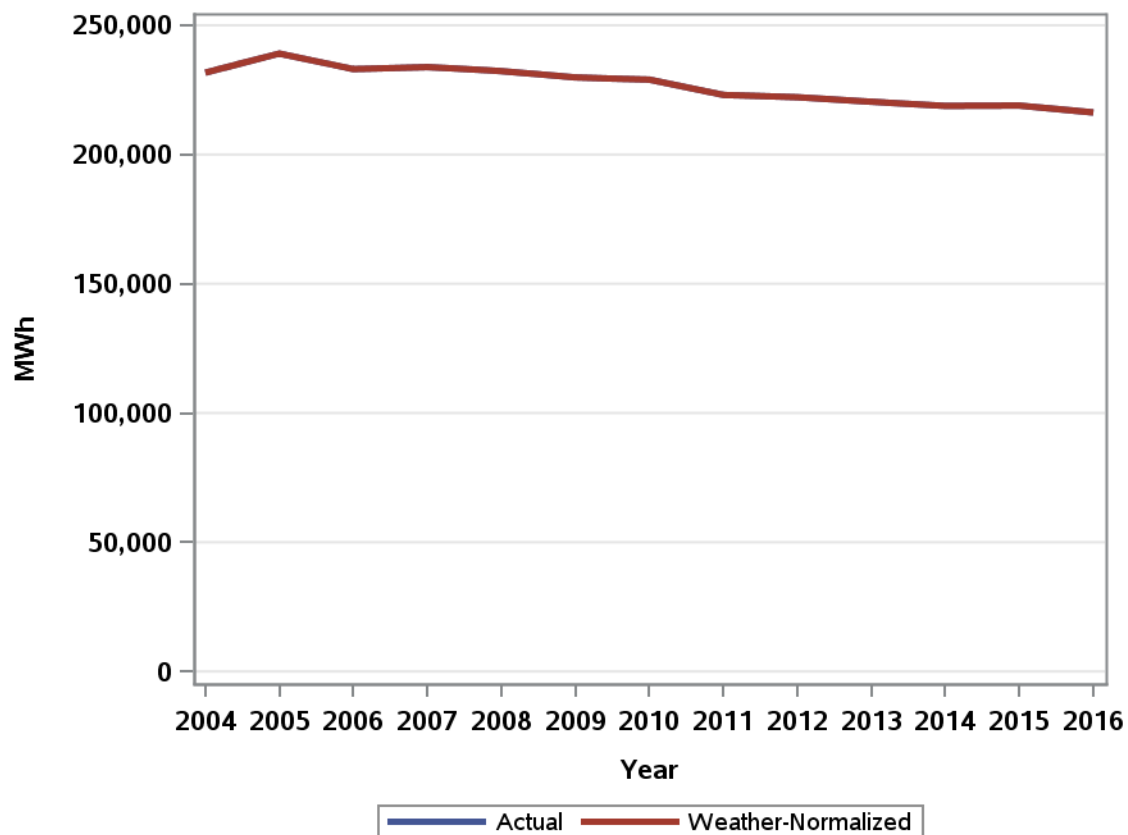
Annual Industrial SGS Usage at Meter



Annual Large Transmission Service Usage at Meter



Annual Lighting Usage at Meter



Historical Annual Actual Usage (MWh)

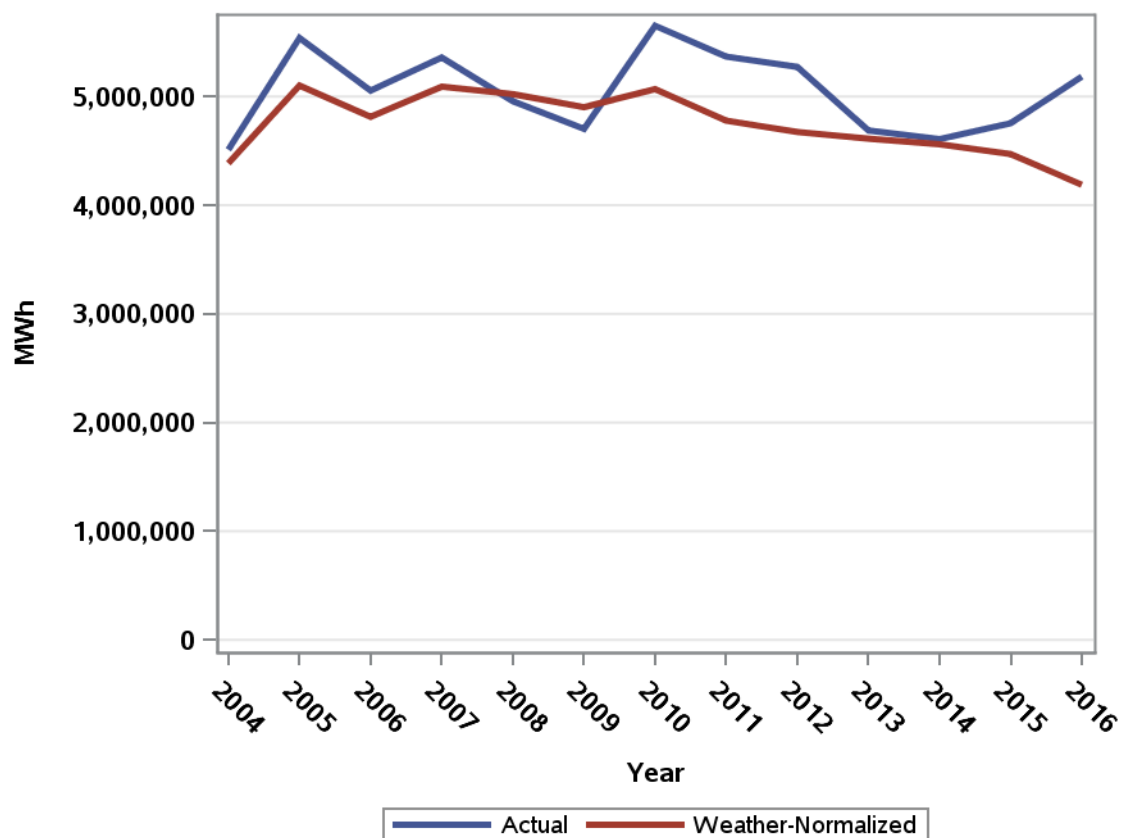
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	12,403,229	6,512,919	1,120,361	3,364,220	2,727,405	1,097,169	3,111,370	138,970	1,564,960	231,690	
2005	13,575,629	6,851,516	1,280,489	3,546,340	2,678,401	1,153,456	3,069,602	145,113	1,526,149	239,078	2,361,276
2006	13,043,239	6,947,197	1,382,051	3,518,803	2,615,321	1,135,613	2,941,135	138,579	1,488,399	233,062	4,118,877
2007	13,616,322	7,314,347	1,463,078	3,697,015	2,709,866	1,153,866	2,920,250	145,198	1,565,156	233,841	4,096,071
2008	13,817,769	7,236,083	1,353,805	3,518,470	2,533,332	1,088,971	2,719,290	130,691	1,360,968	232,270	4,130,376
2009	13,348,387	7,103,803	1,487,390	3,371,859	2,411,569	949,468	2,328,566	116,857	1,193,726	229,823	2,405,839
2010	14,611,855	7,410,600	1,574,575	3,522,780	2,432,138	995,031	2,222,528	124,780	1,257,537	228,975	4,038,773
2011	13,777,478	7,235,641	1,655,332	3,403,034	2,419,184	967,790	2,178,293	119,792	1,268,083	223,060	4,168,920
2012	13,236,917	7,162,158	1,698,440	3,347,956	2,395,403	947,345	2,203,012	116,979	1,262,739	222,153	4,147,672
2013	13,416,521	7,179,583	1,762,354	3,350,005	2,377,527	918,197	2,227,900	114,718	1,211,198	220,409	4,196,262
2014	13,540,092	7,217,992	1,644,411	3,364,960	2,414,186	928,824	2,207,691	113,815	1,247,615	218,818	4,056,201
2015	12,800,388	7,155,508	1,646,652	3,258,845	2,423,877	919,303	2,187,653	106,594	1,256,488	218,925	3,754,833
2016	13,087,497	7,210,417	1,635,418	3,281,769	2,484,352	901,434	2,186,046	107,614	1,248,619	216,289	290,791

Historical Annual Weather-Normalized Usage (MWh)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	11,981,363	6,337,545	1,104,075	3,258,874	2,690,887	961,783	3,060,277	121,136	1,531,078	231,690	
2005	12,738,041	6,578,650	1,256,497	3,377,837	2,618,585	1,039,154	3,017,953	127,840	1,486,000	239,078	2,361,276
2006	12,730,320	6,888,738	1,369,891	3,470,773	2,588,604	1,075,788	2,920,600	132,322	1,469,577	233,062	4,118,877
2007	13,503,920	7,196,586	1,441,485	3,574,814	2,667,288	1,137,736	2,925,919	141,486	1,550,486	233,841	4,096,071
2008	13,800,391	7,233,999	1,357,040	3,514,614	2,539,347	1,089,380	2,724,266	129,976	1,362,584	232,270	4,130,376
2009	13,677,386	7,174,790	1,483,262	3,420,259	2,425,580	949,118	2,319,873	118,741	1,196,605	229,823	2,405,839
2010	13,866,862	7,220,700	1,539,673	3,418,752	2,394,565	987,569	2,214,250	121,584	1,248,712	228,975	4,038,773
2011	13,375,370	7,151,942	1,633,210	3,356,074	2,386,831	959,290	2,165,431	119,079	1,256,522	223,060	4,168,920
2012	13,061,922	7,142,340	1,665,182	3,325,169	2,360,007	937,495	2,181,950	118,474	1,246,676	222,153	4,147,672
2013	13,151,796	7,134,595	1,748,783	3,315,946	2,369,875	916,919	2,225,782	113,495	1,209,423	220,409	4,196,262
2014	13,094,269	7,115,942	1,639,454	3,306,230	2,398,655	928,438	2,204,287	111,128	1,245,067	218,818	4,056,201
2015	12,765,145	7,147,390	1,634,085	3,238,610	2,408,053	917,221	2,175,367	108,192	1,249,517	218,925	3,754,833
2016	12,221,530	6,826,290	1,565,620	3,085,075	2,382,961	859,405	2,115,954	104,133	1,203,388	216,289	290,791

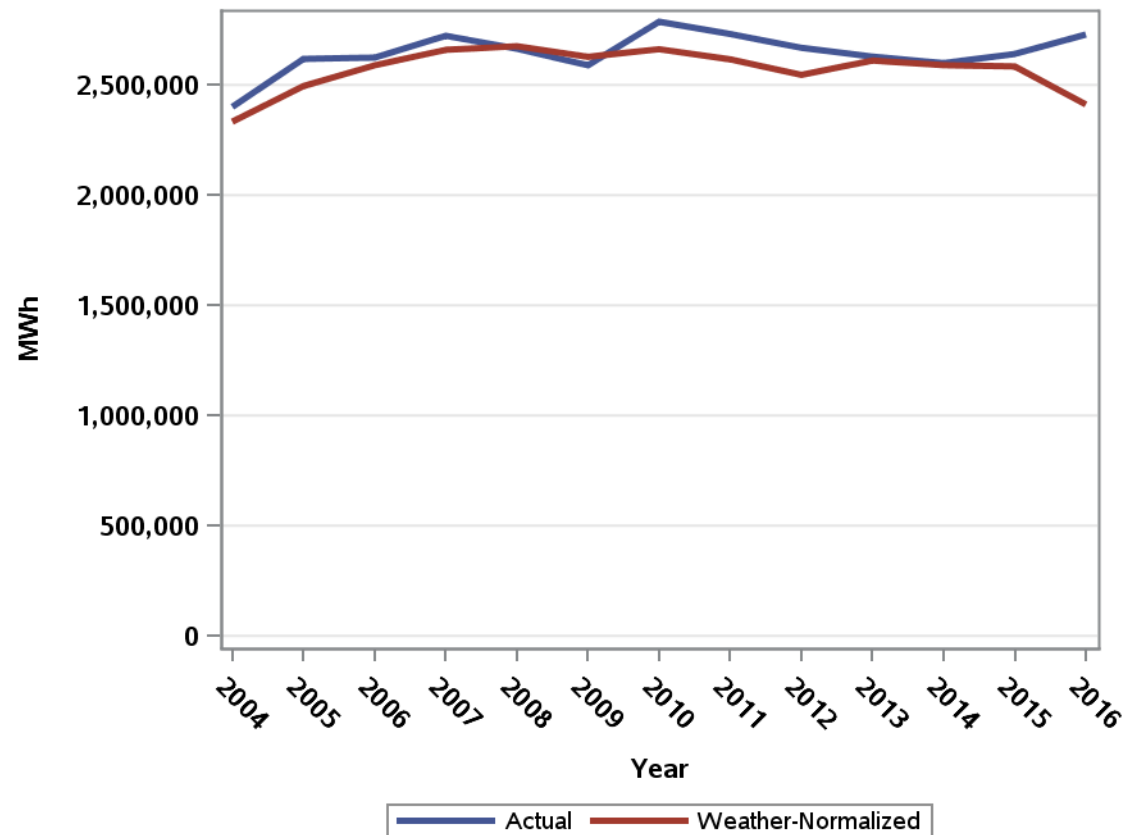
Historical Actual and Weather-Normalized Energy Usage for Summer and Non-Summer (2004 - 2016)⁴

Summer Residential Usage at Meter

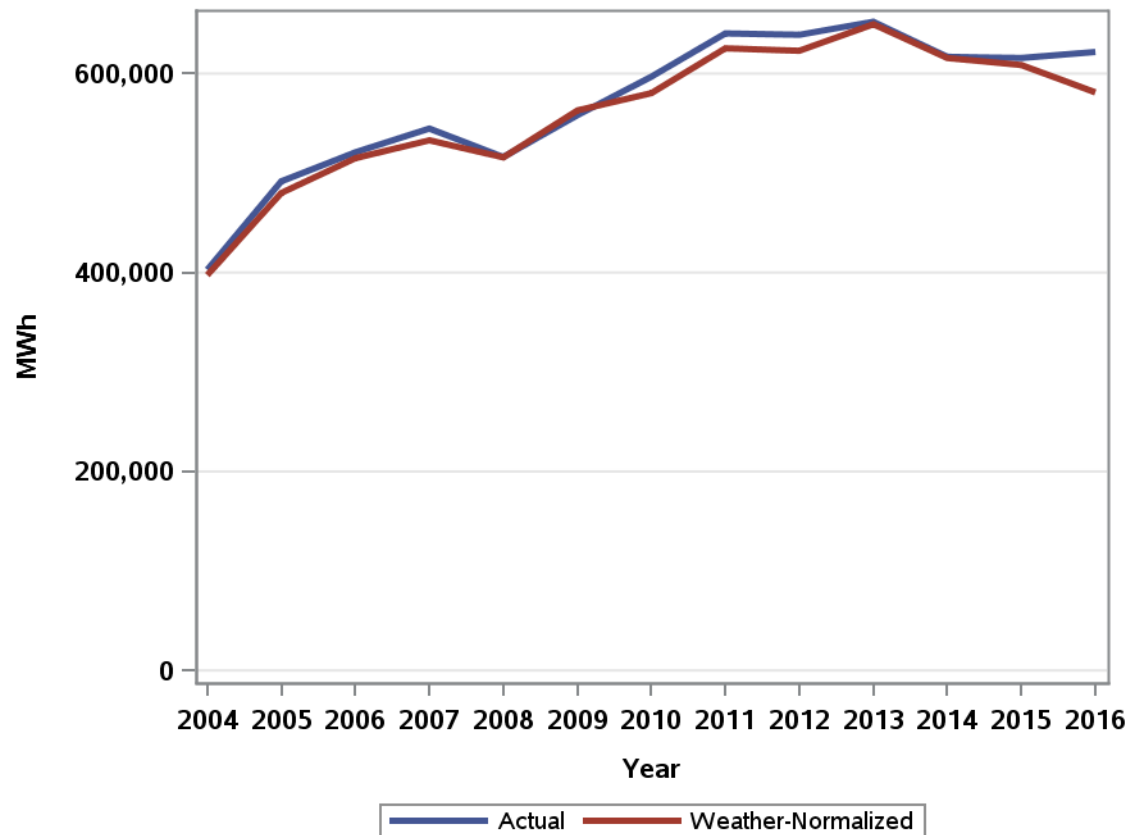


⁴⁴ CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

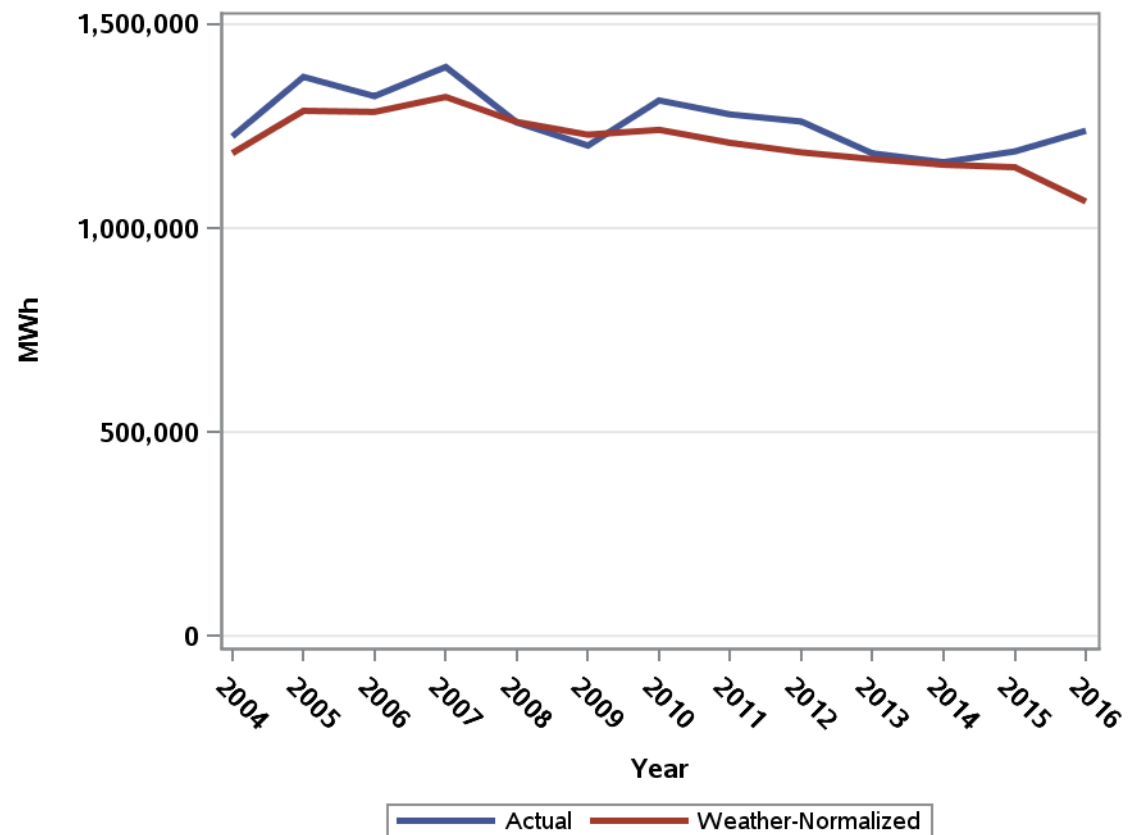
Summer Commercial LGS Usage at Meter



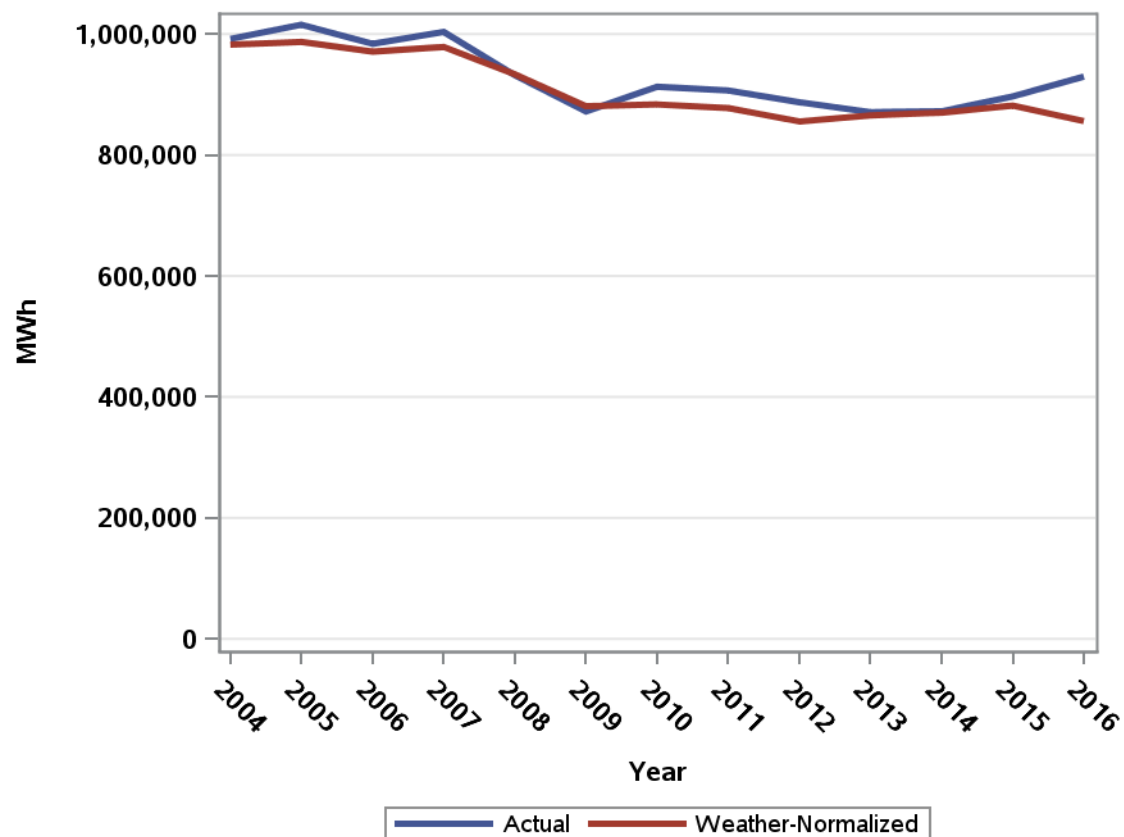
Summer Commercial LPS Usage at Meter



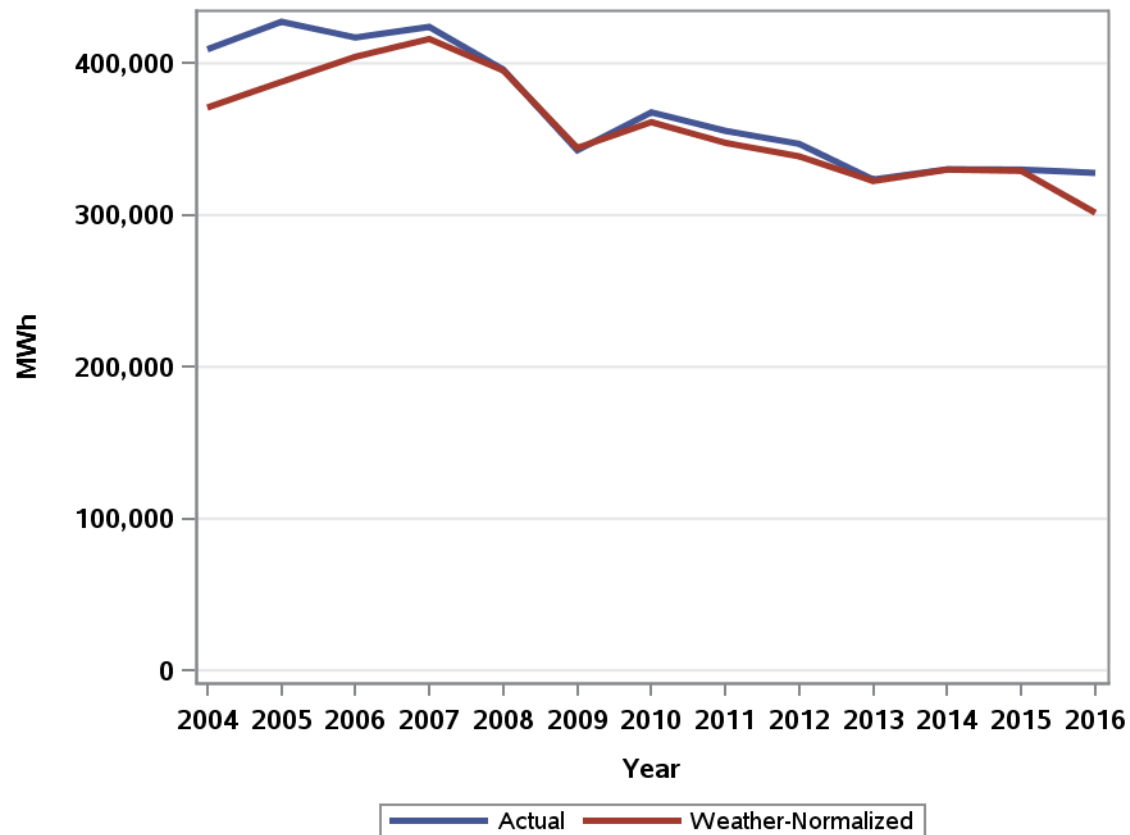
Summer Commercial SGS Usage at Meter



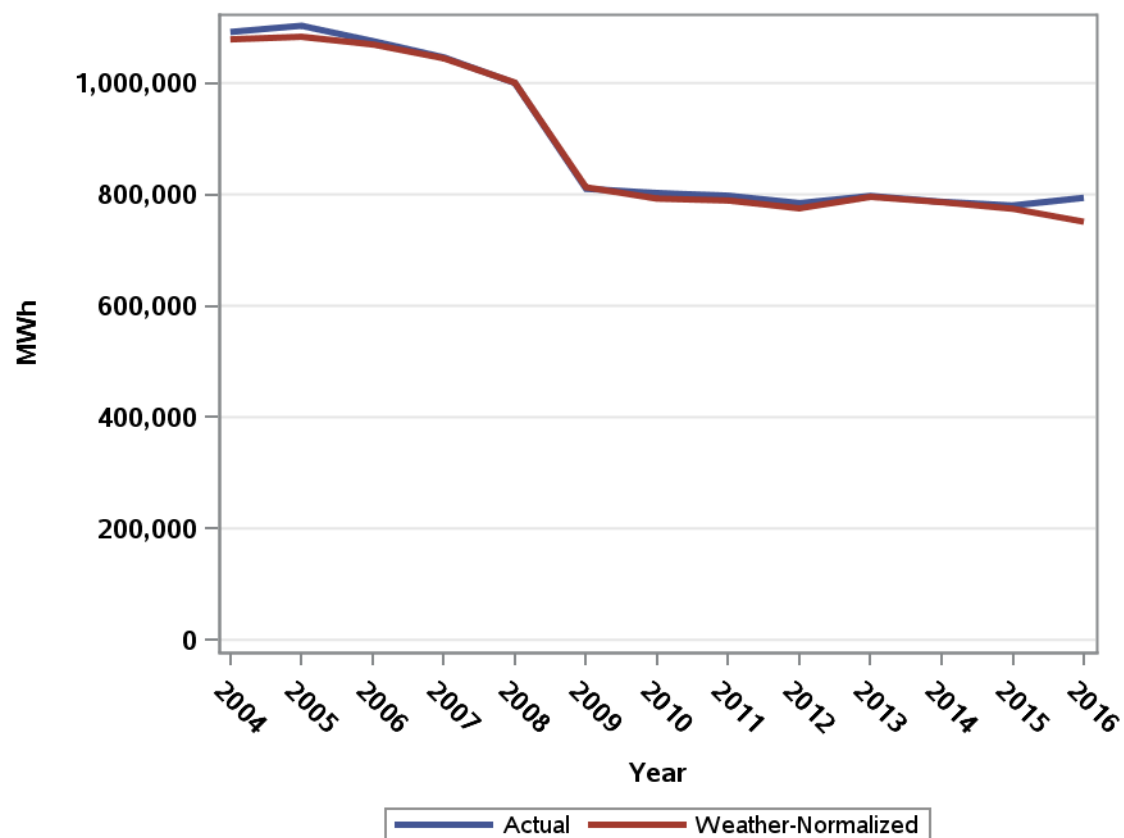
Summer Commercial SPS Usage at Meter

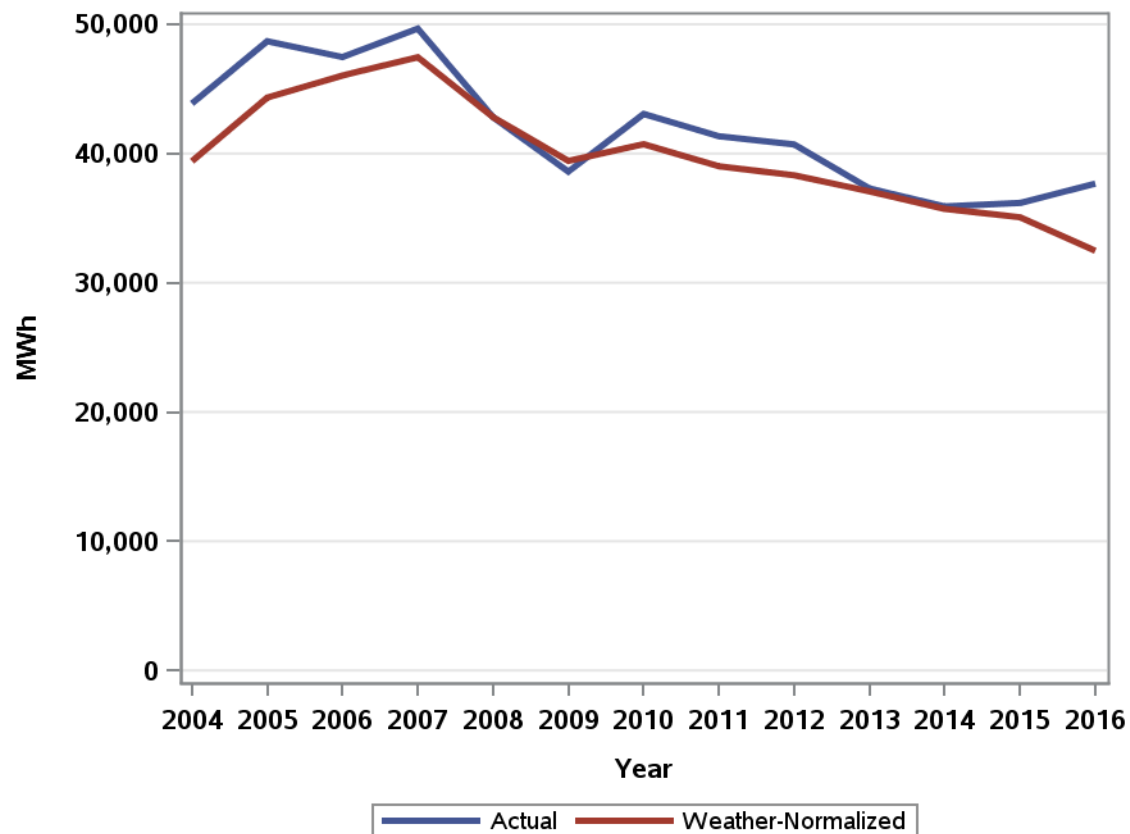


Summer Industrial LGS Usage at Meter

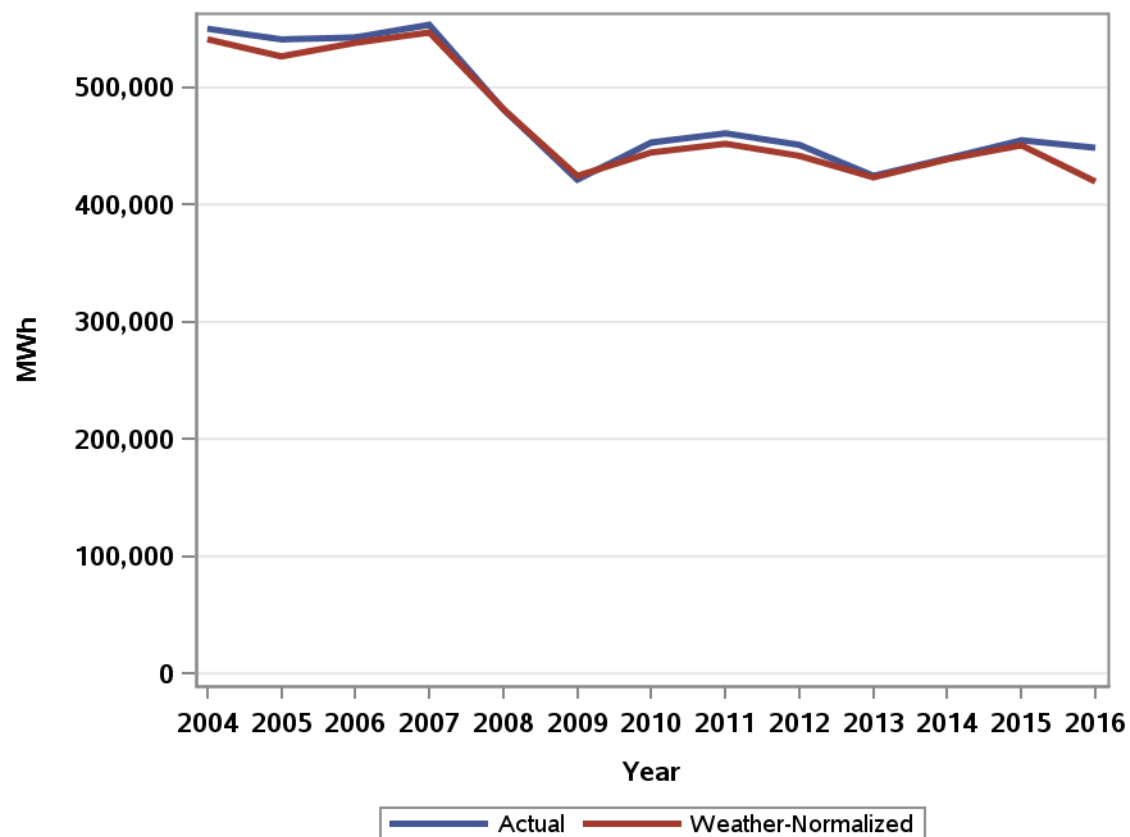


Summer Industrial LPS Usage at Meter

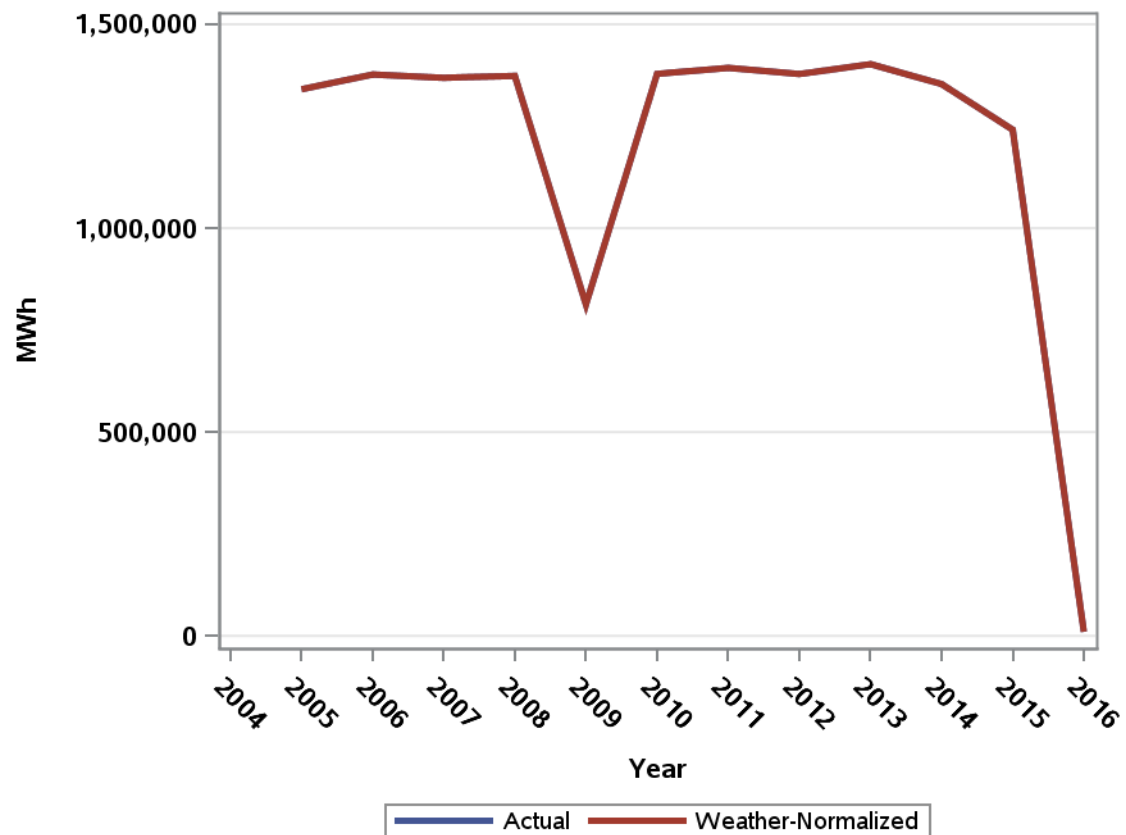


Summer Industrial SGS Usage at Meter

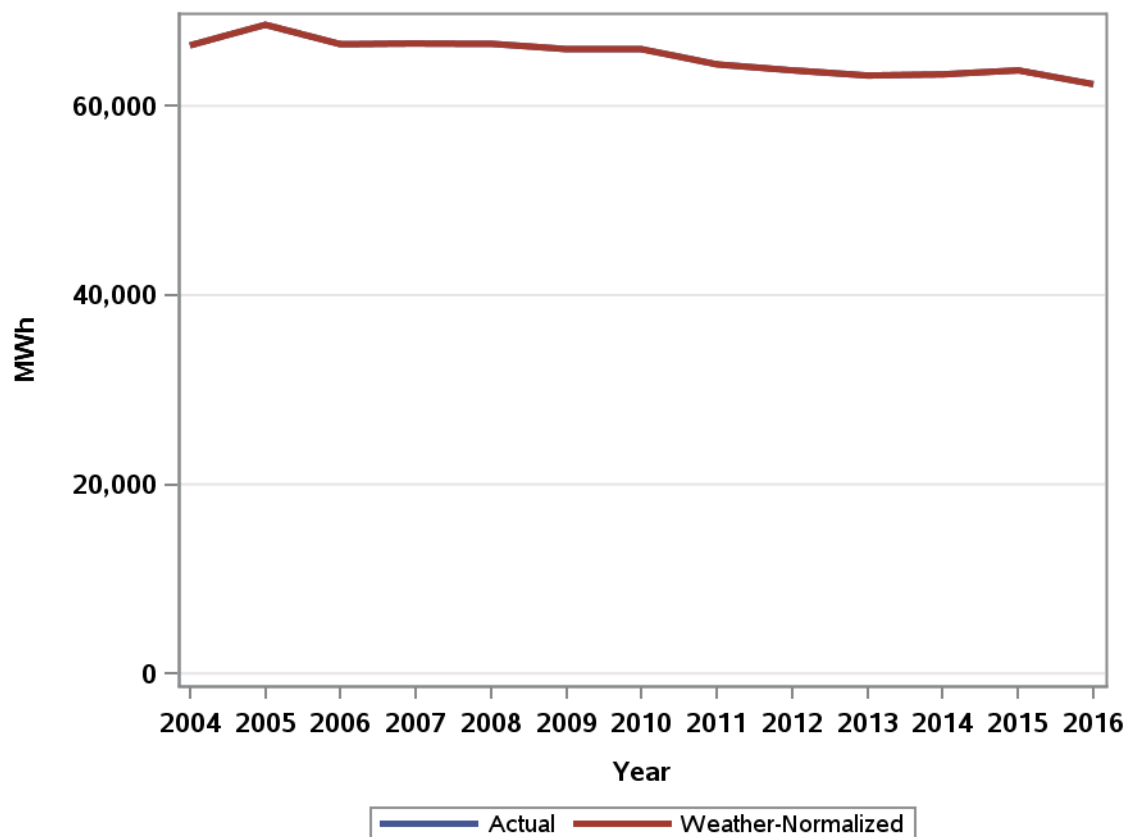
Summer Industrial SPS Usage at Meter



Summer Large Transmission Service Usage at Meter



Summer Lighting Usage at Meter



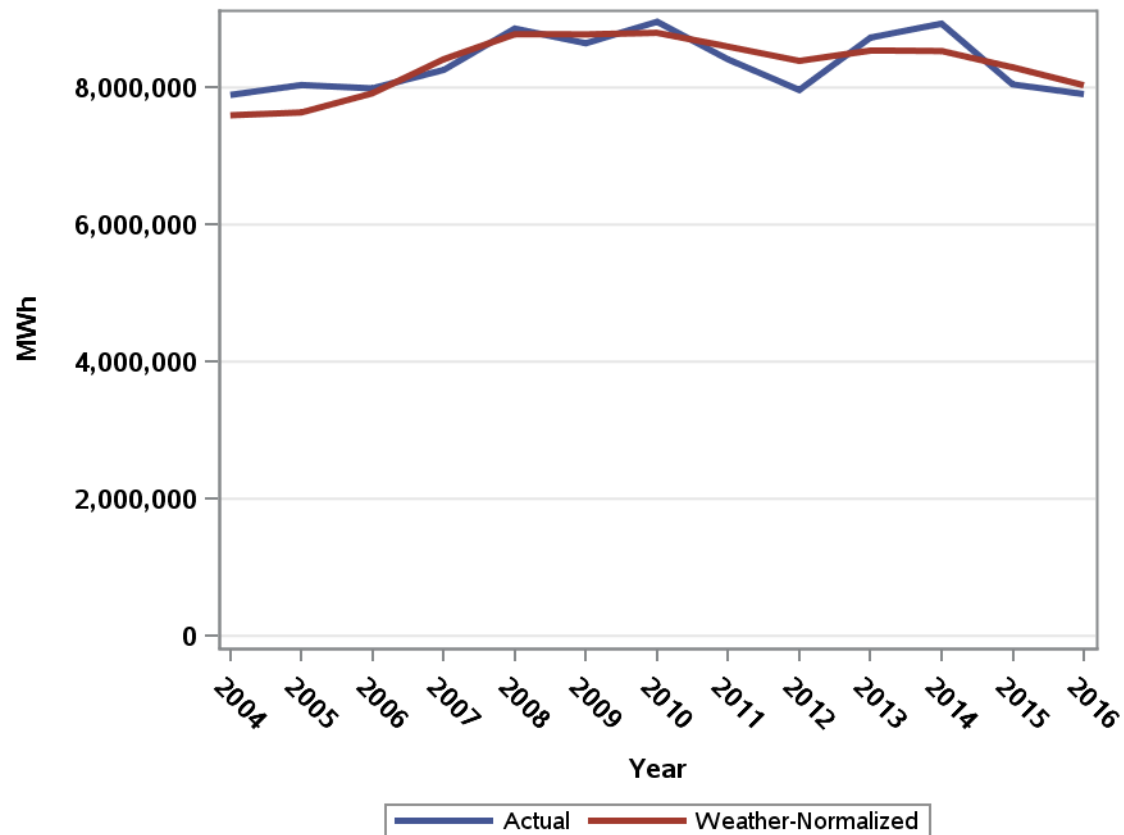
Historical Summer Actual Usage (MWh)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	4,510,750	2,400,469	402,858	1,224,976	991,938	409,238	1,091,638	43,871	550,139	66,398	
2005	5,538,946	2,618,280	491,710	1,371,103	1,015,416	427,420	1,102,883	48,690	540,959	68,586	1,340,603
2006	5,054,331	2,624,157	520,841	1,323,557	983,828	417,025	1,075,410	47,467	542,668	66,530	1,376,792
2007	5,359,337	2,723,054	544,714	1,395,386	1,003,605	424,009	1,046,131	49,668	553,500	66,600	1,368,894
2008	4,956,993	2,664,394	516,134	1,259,113	931,979	395,885	1,000,017	42,813	481,444	66,564	1,373,286
2009	4,702,333	2,589,209	558,134	1,202,570	872,016	342,705	810,069	38,599	421,294	66,012	812,675
2010	5,651,561	2,786,898	596,827	1,313,259	912,943	367,728	802,486	43,061	453,001	66,005	1,378,333
2011	5,367,606	2,731,070	640,380	1,278,940	906,677	355,516	797,656	41,337	460,858	64,394	1,393,028
2012	5,272,882	2,668,670	639,020	1,261,524	887,229	346,918	784,345	40,701	451,009	63,766	1,377,961
2013	4,687,694	2,628,567	652,123	1,183,315	870,880	323,426	797,268	37,295	424,573	63,211	1,402,278
2014	4,608,362	2,599,161	616,777	1,161,607	872,323	330,223	786,819	35,903	439,492	63,339	1,353,488
2015	4,754,975	2,640,602	615,662	1,188,218	896,861	330,043	780,033	36,174	454,903	63,765	1,241,407
2016	5,183,107	2,728,811	621,741	1,238,859	929,694	327,790	793,877	37,670	448,524	62,301	10,273

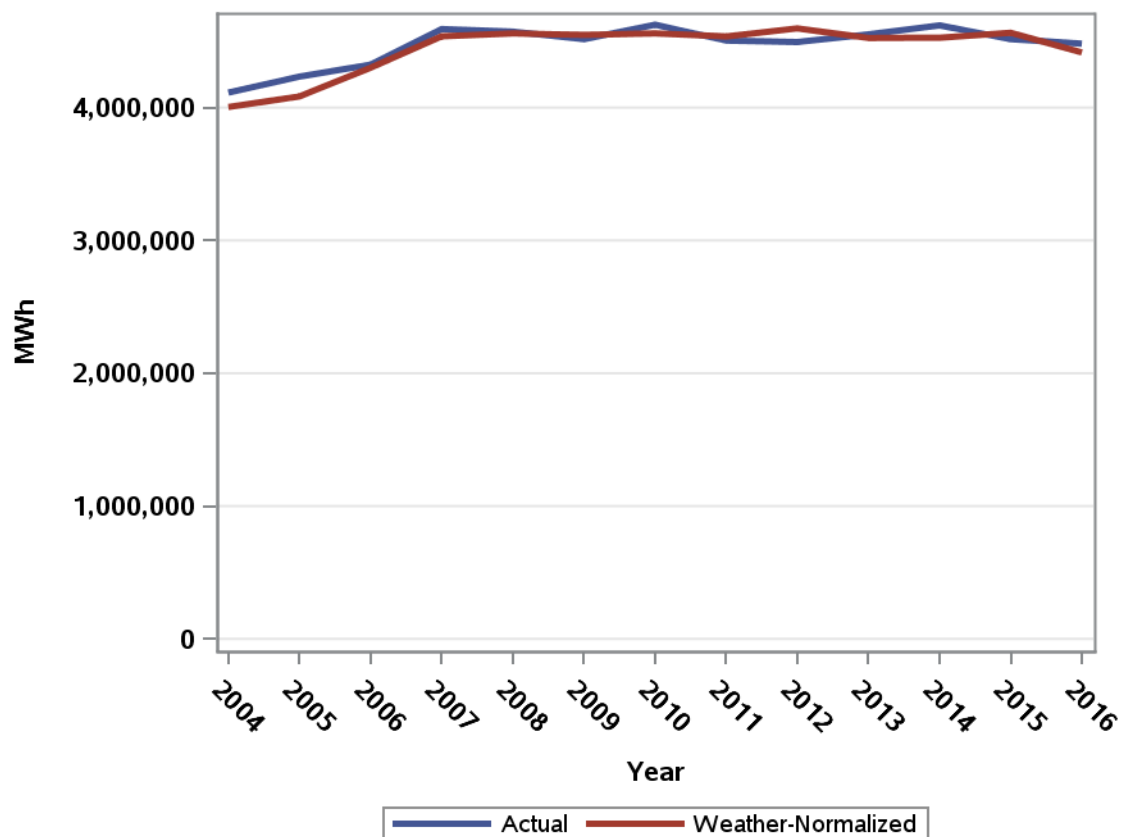
Historical Summer Weather-Normalized Usage (MWh)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	4,385,387	2,333,043	397,448	1,183,941	982,470	370,873	1,078,399	39,410	541,049	66,398	
2005	5,101,183	2,494,943	480,001	1,287,669	987,047	387,767	1,083,064	44,328	526,490	68,586	1,340,603
2006	4,813,614	2,589,017	514,957	1,285,195	970,876	404,347	1,069,290	46,036	538,115	66,530	1,376,792
2007	5,090,793	2,659,277	532,949	1,321,746	978,682	416,035	1,044,418	47,453	546,919	66,600	1,368,894
2008	5,022,182	2,675,945	515,718	1,260,353	933,443	395,261	1,000,738	42,811	481,566	66,564	1,373,286
2009	4,901,823	2,627,708	562,954	1,229,147	880,739	344,281	812,755	39,434	424,452	66,012	812,675
2010	5,068,442	2,662,225	580,294	1,241,181	883,632	361,280	792,461	40,720	444,517	66,005	1,378,333
2011	4,777,989	2,616,104	625,425	1,209,248	877,653	347,610	789,078	39,016	451,958	64,394	1,393,028
2012	4,673,584	2,545,908	622,916	1,185,878	855,477	338,696	774,928	38,315	441,596	63,766	1,377,961
2013	4,611,986	2,610,717	649,601	1,169,365	865,511	322,439	795,638	37,069	423,240	63,211	1,402,278
2014	4,560,881	2,589,926	615,642	1,155,540	870,092	330,018	785,983	35,717	438,744	63,339	1,353,488
2015	4,470,422	2,584,001	608,603	1,149,510	881,697	329,099	774,259	35,069	450,634	63,765	1,241,407
2016	4,187,869	2,411,382	581,127	1,065,378	856,139	301,574	750,953	32,472	419,680	62,301	10,273

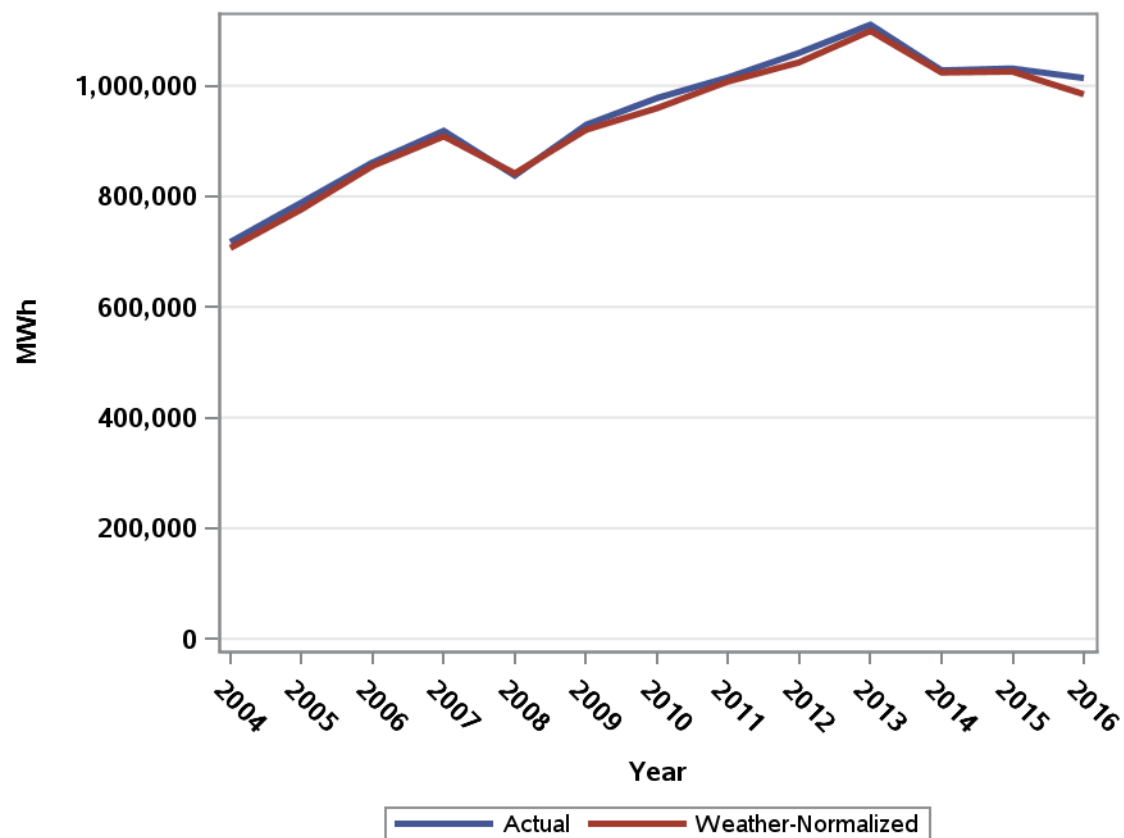
Non-Summer Residential Usage at Meter



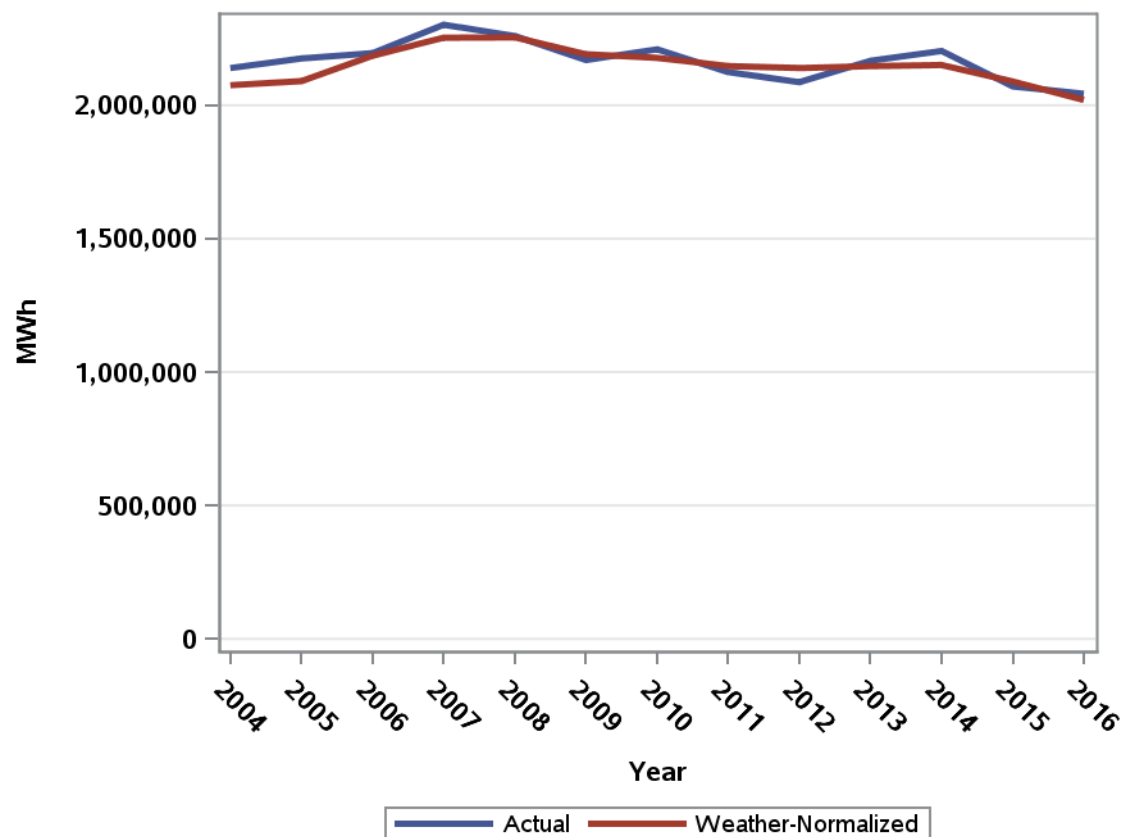
Non-Summer Commercial LGS Usage at Meter



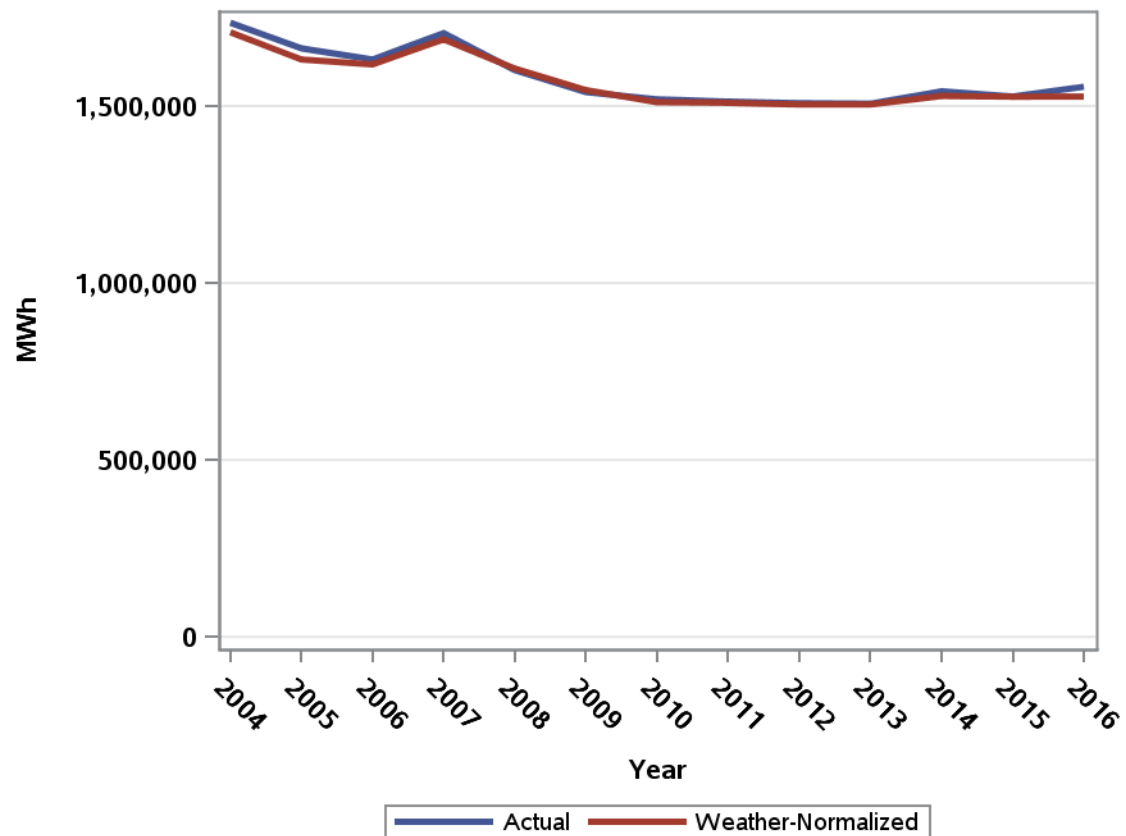
Non-Summer Commercial LPS Usage at Meter



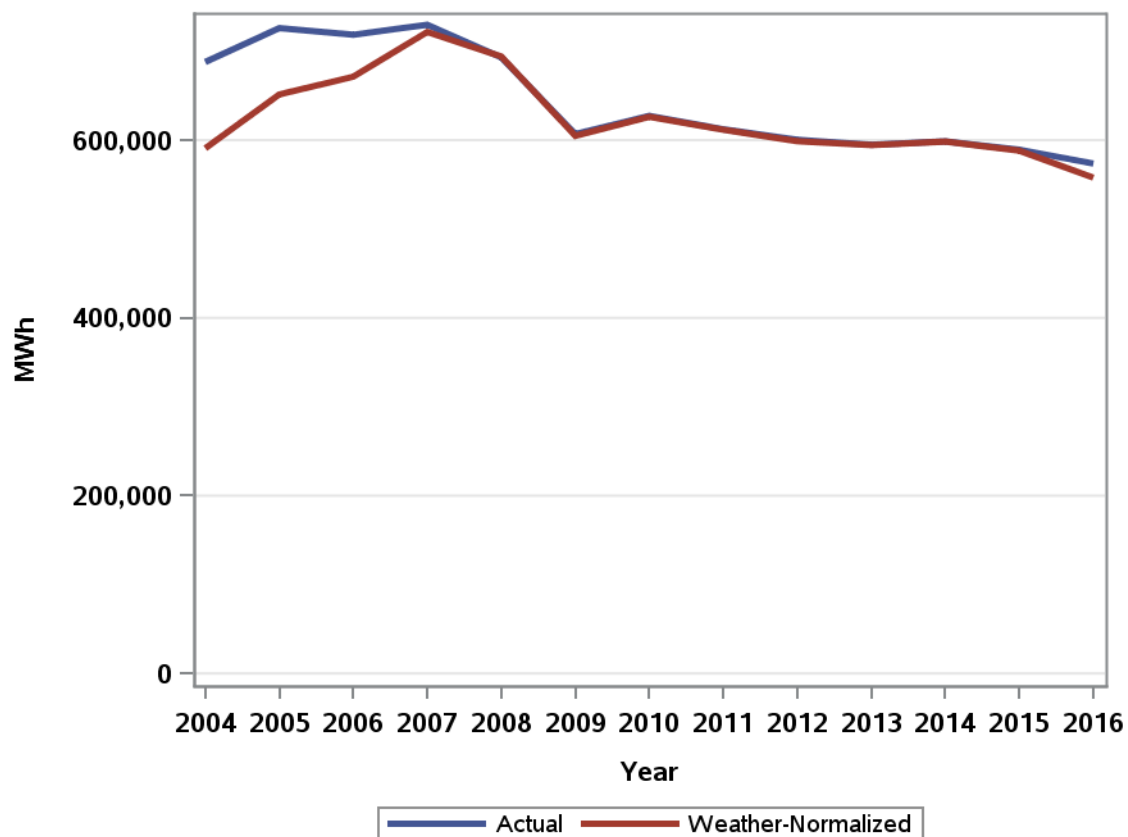
Non-Summer Commercial SGS Usage at Meter



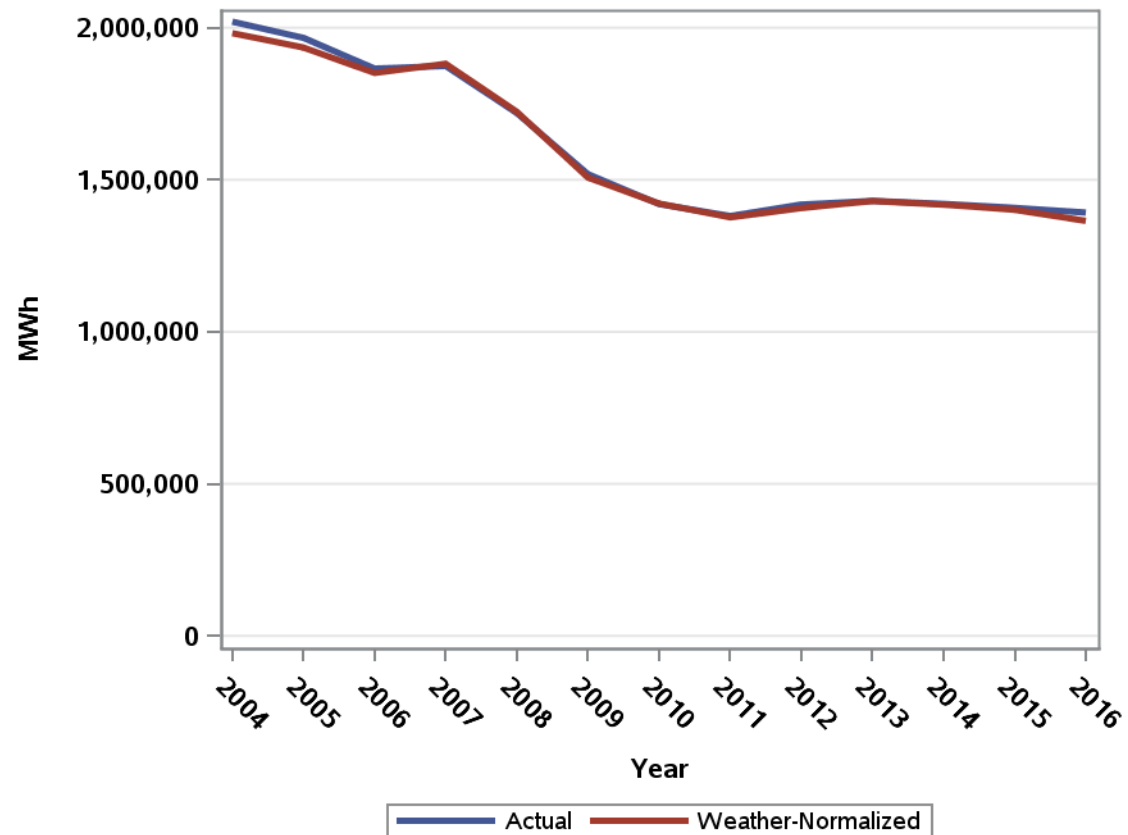
Non-Summer Commercial SPS Usage at Meter

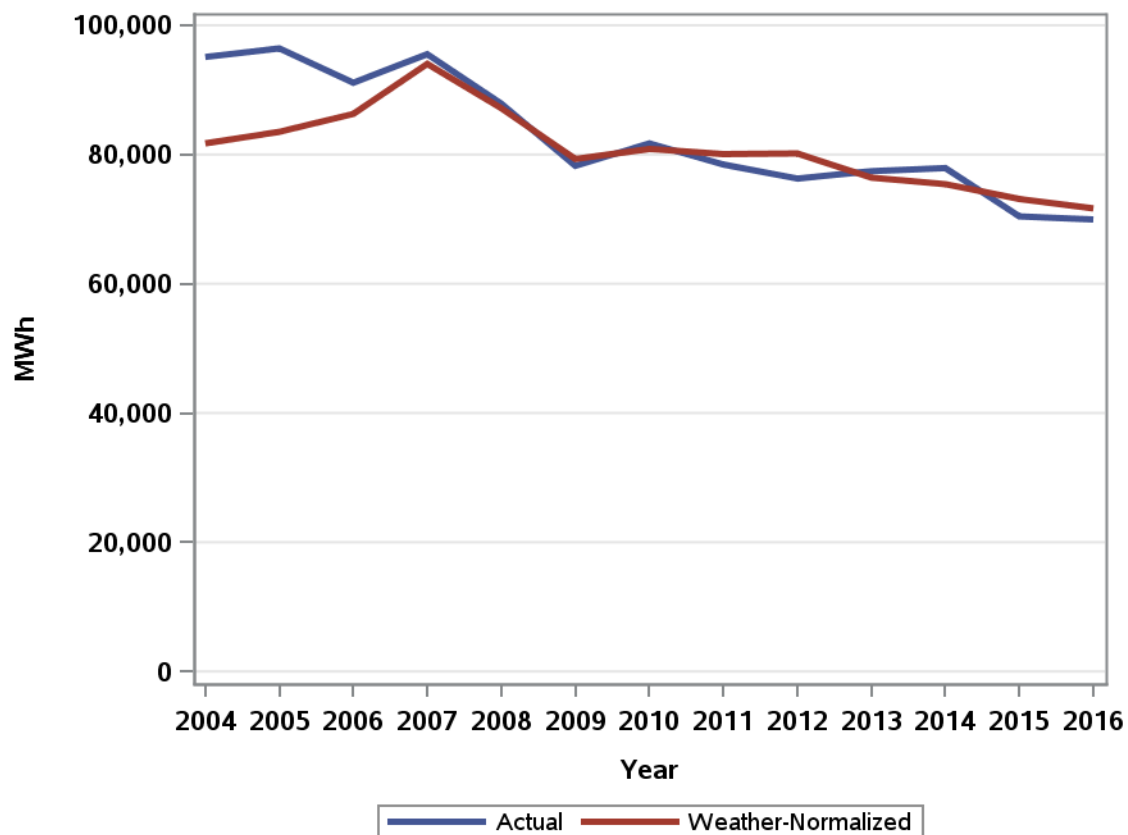


Non-Summer Industrial LGS Usage at Meter

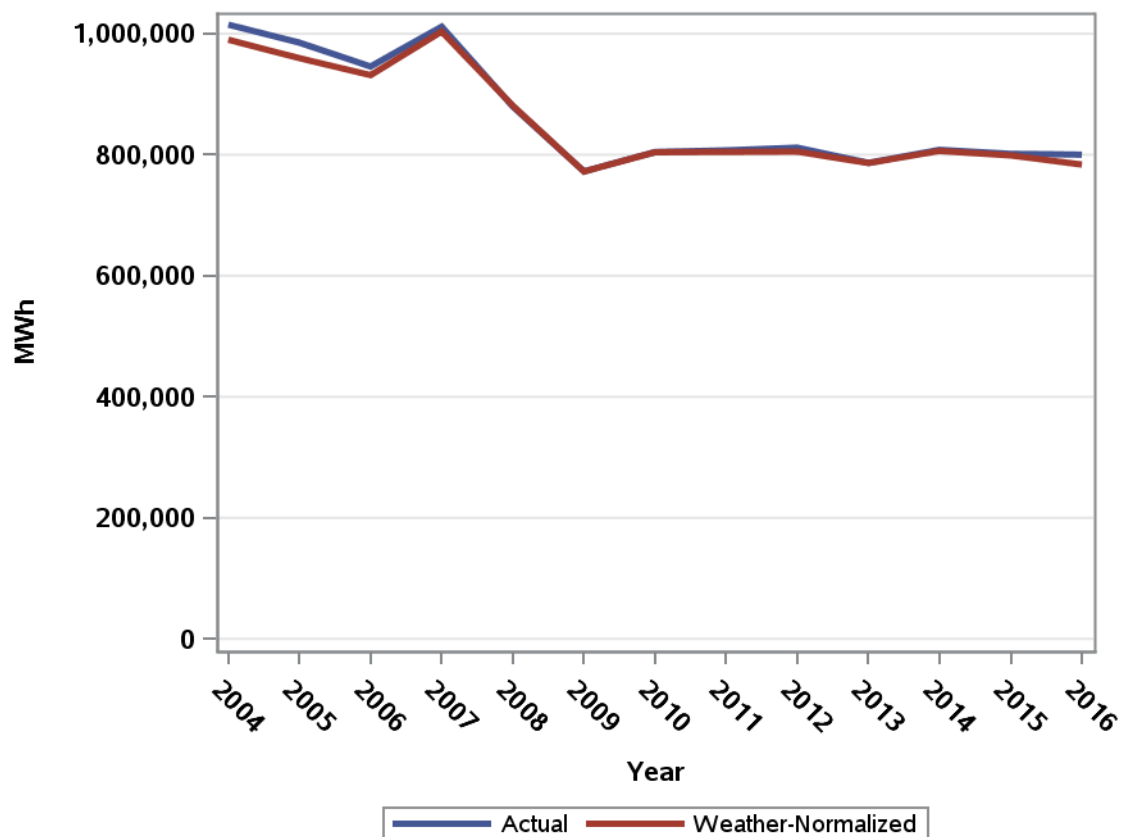


Non-Summer Industrial LPS Usage at Meter

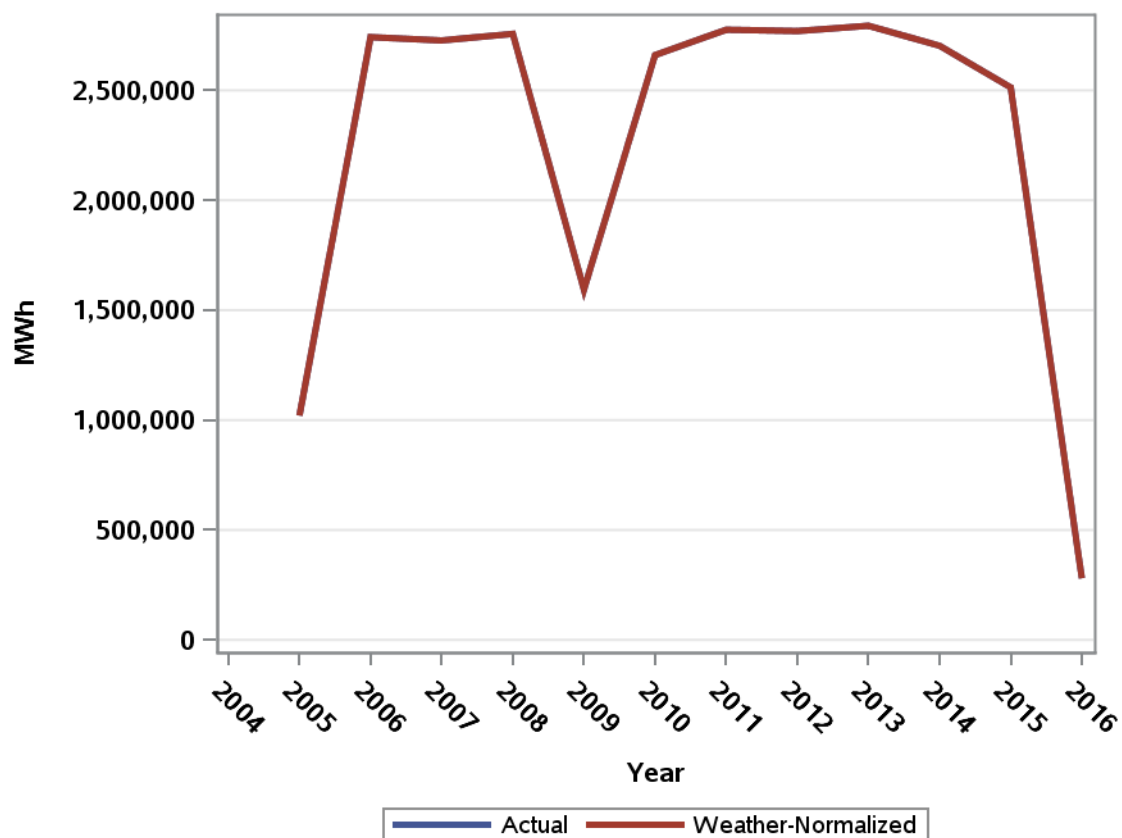


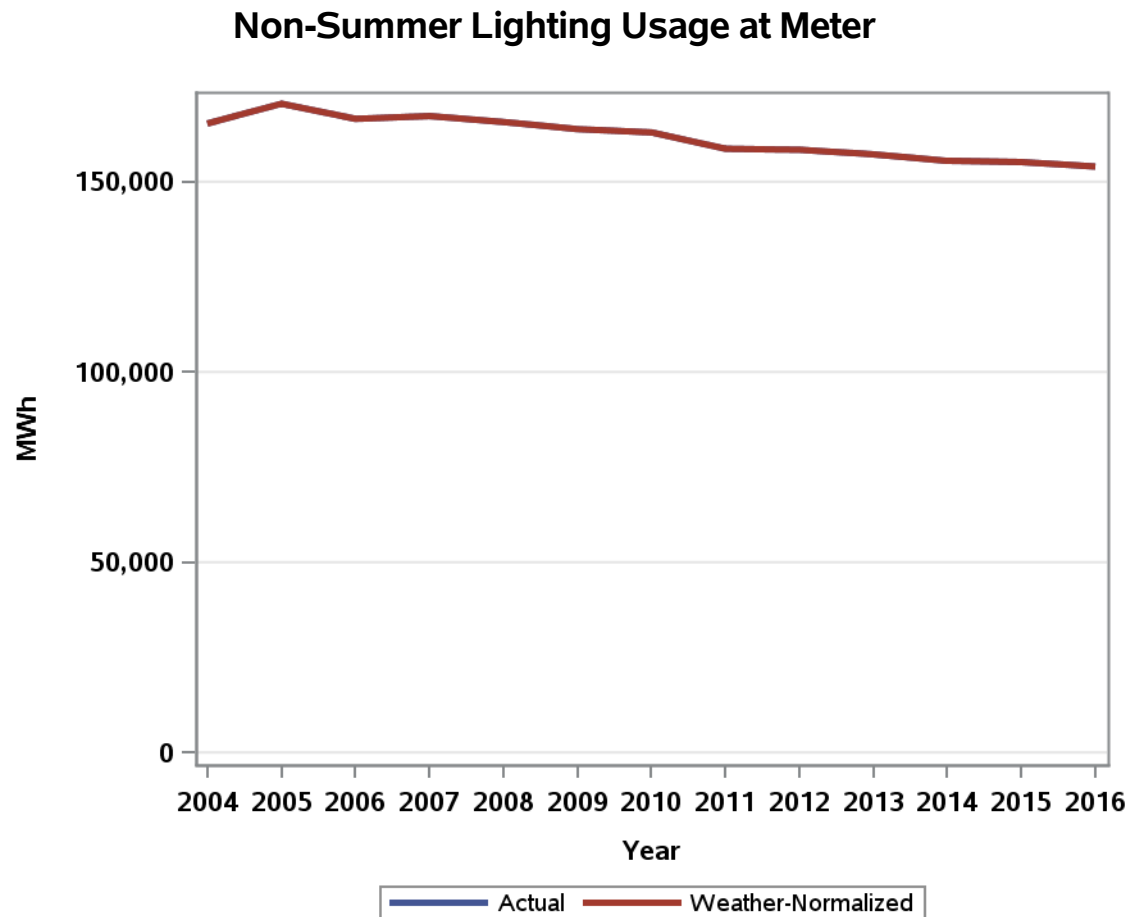
Non-Summer Industrial SGS Usage at Meter

Non-Summer Industrial SPS Usage at Meter



Non-Summer Large Transmission Service Usage at Meter





Historical Non-Summer Actual Usage (MWh)

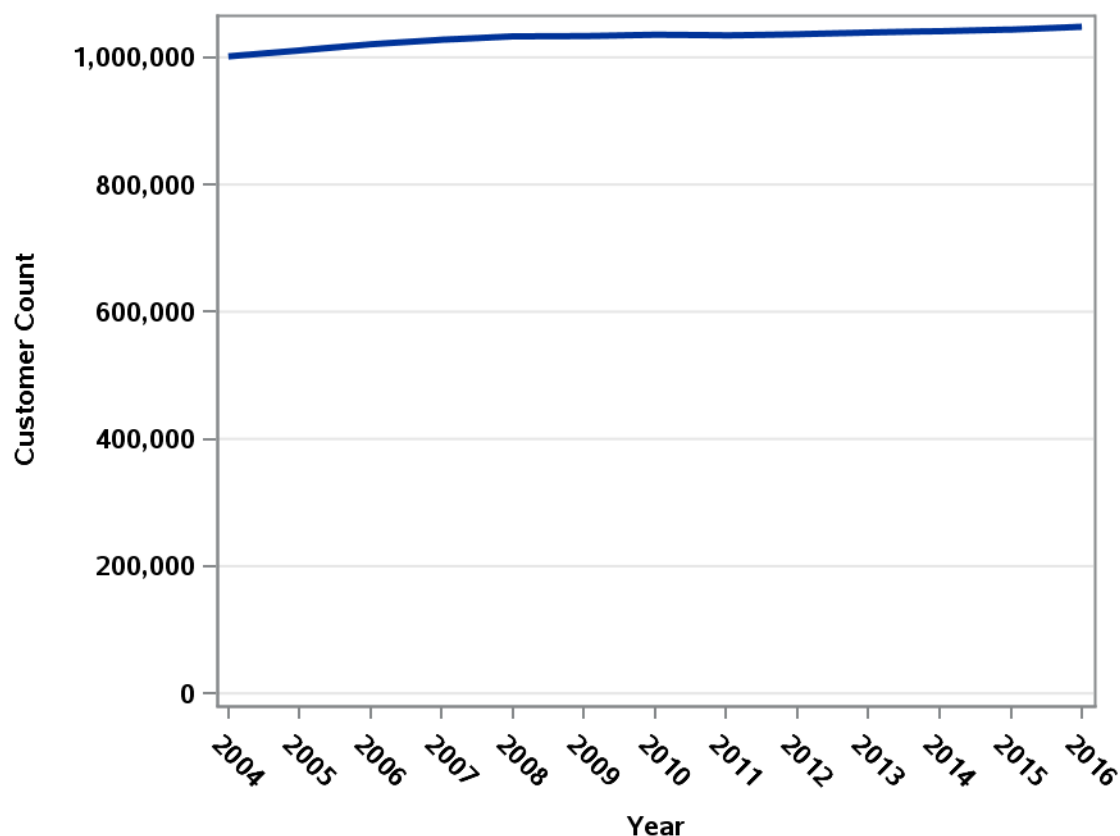
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	7,892,479	4,112,450	717,503	2,139,245	1,735,468	687,931	2,019,732	95,099	1,014,822	165,292	
2005	8,036,682	4,233,237	788,779	2,175,238	1,662,985	726,036	1,966,719	96,423	985,190	170,492	1,020,673
2006	7,988,908	4,323,040	861,210	2,195,247	1,631,493	718,589	1,865,726	91,112	945,731	166,532	2,742,085
2007	8,256,985	4,591,293	918,364	2,301,629	1,706,261	729,856	1,874,119	95,531	1,011,657	167,241	2,727,178
2008	8,860,776	4,571,689	837,671	2,259,358	1,601,353	693,085	1,719,273	87,878	879,525	165,706	2,757,090
2009	8,646,054	4,514,595	929,256	2,169,289	1,539,553	606,763	1,518,497	78,258	772,432	163,811	1,593,164
2010	8,960,295	4,623,702	977,748	2,209,521	1,519,196	627,304	1,420,042	81,719	804,536	162,970	2,660,440
2011	8,409,872	4,504,571	1,014,953	2,124,094	1,512,508	612,273	1,380,638	78,455	807,226	158,666	2,775,892
2012	7,964,035	4,493,488	1,059,420	2,086,432	1,508,174	600,427	1,418,668	76,278	811,730	158,387	2,769,711
2013	8,728,827	4,551,016	1,110,231	2,166,689	1,506,648	594,772	1,430,632	77,423	786,625	157,198	2,793,984
2014	8,931,730	4,618,831	1,027,634	2,203,353	1,541,863	598,601	1,420,872	77,913	808,123	155,479	2,702,714
2015	8,045,414	4,514,906	1,030,990	2,070,627	1,527,016	589,260	1,407,620	70,421	801,585	155,160	2,513,426
2016	7,904,390	4,481,605	1,013,677	2,042,910	1,554,658	573,645	1,392,169	69,943	800,095	153,988	280,518

Historical Non-Summer Weather-Normalized Usage (MWh)

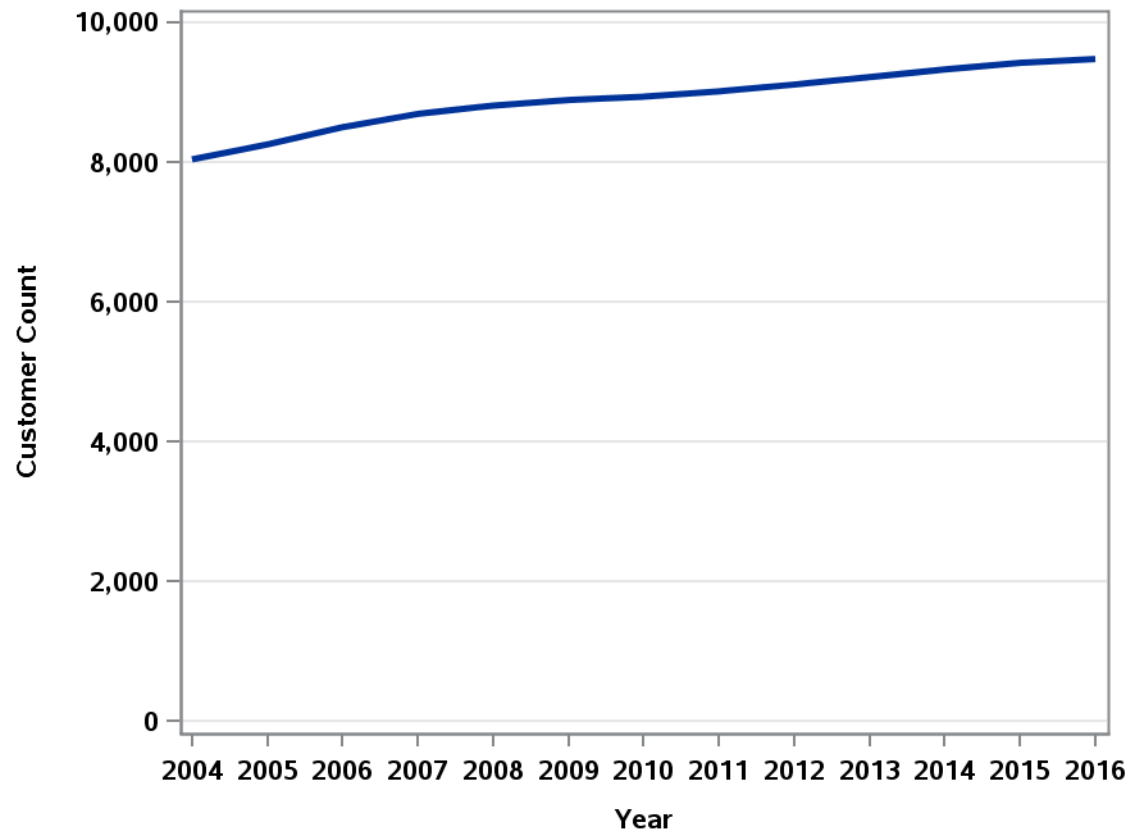
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	7,595,975	4,004,502	706,627	2,074,933	1,708,418	590,910	1,981,878	81,727	990,029	165,292	
2005	7,636,859	4,083,706	776,496	2,090,167	1,631,538	651,387	1,934,889	83,512	959,510	170,492	1,020,673
2006	7,916,706	4,299,721	854,934	2,185,579	1,617,727	671,441	1,851,310	86,286	931,461	166,532	2,742,085
2007	8,413,127	4,537,308	908,536	2,253,069	1,688,606	721,702	1,881,501	94,034	1,003,567	167,241	2,727,178
2008	8,778,209	4,558,055	841,322	2,254,261	1,605,904	694,119	1,723,528	87,165	881,018	165,706	2,757,090
2009	8,775,563	4,547,082	920,308	2,191,113	1,544,841	604,837	1,507,118	79,308	772,153	163,811	1,593,164
2010	8,798,420	4,558,476	959,379	2,177,570	1,510,933	626,289	1,421,789	80,864	804,195	162,970	2,660,440
2011	8,597,381	4,535,838	1,007,785	2,146,826	1,509,177	611,681	1,376,353	80,063	804,564	158,666	2,775,892
2012	8,388,338	4,596,432	1,042,266	2,139,291	1,504,531	598,799	1,407,022	80,158	805,080	158,387	2,769,711
2013	8,539,810	4,523,878	1,099,182	2,146,581	1,504,364	594,480	1,430,144	76,427	786,183	157,199	2,793,984
2014	8,533,388	4,526,016	1,023,812	2,150,691	1,528,562	598,420	1,418,304	75,411	806,323	155,479	2,702,714
2015	8,294,723	4,563,389	1,025,482	2,089,100	1,526,356	588,122	1,401,108	73,123	798,882	155,160	2,513,426
2016	8,033,661	4,414,908	984,494	2,019,696	1,526,823	557,831	1,365,001	71,661	783,709	153,988	280,518

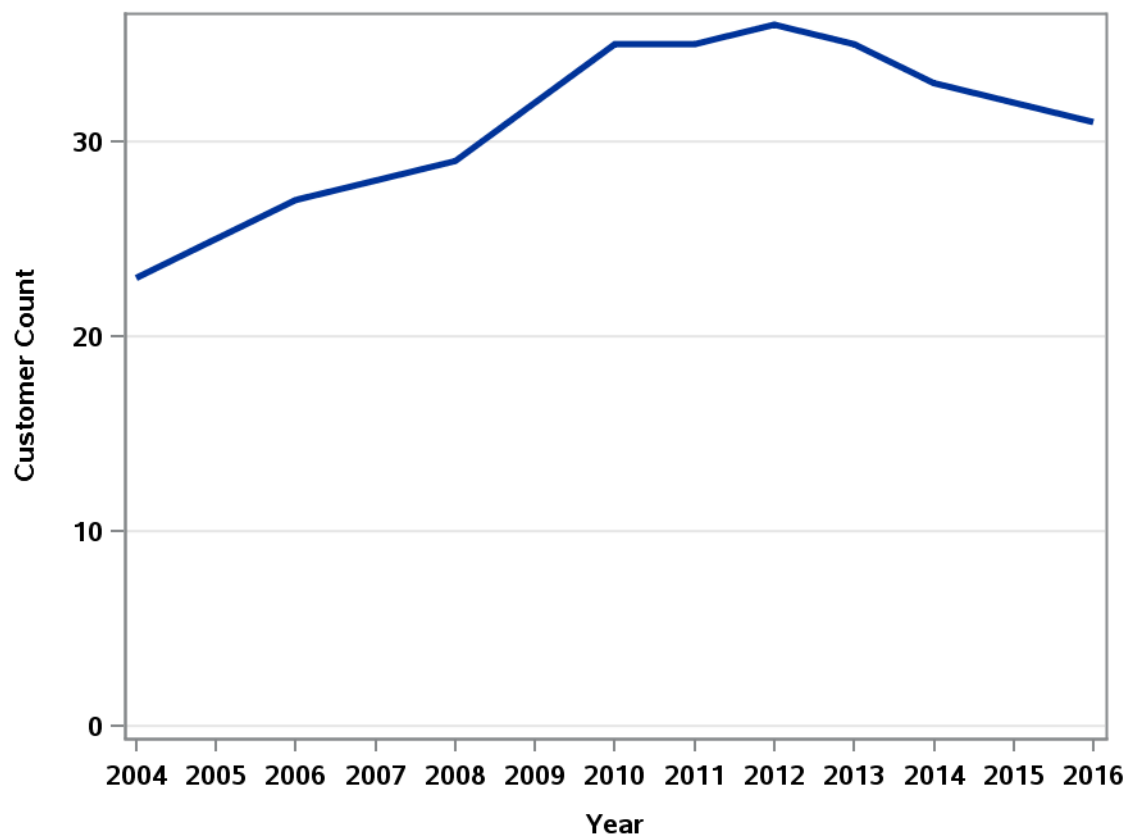
Number of Annual Units (Billed Customer Counts) by Class (2004 - 2016)⁵

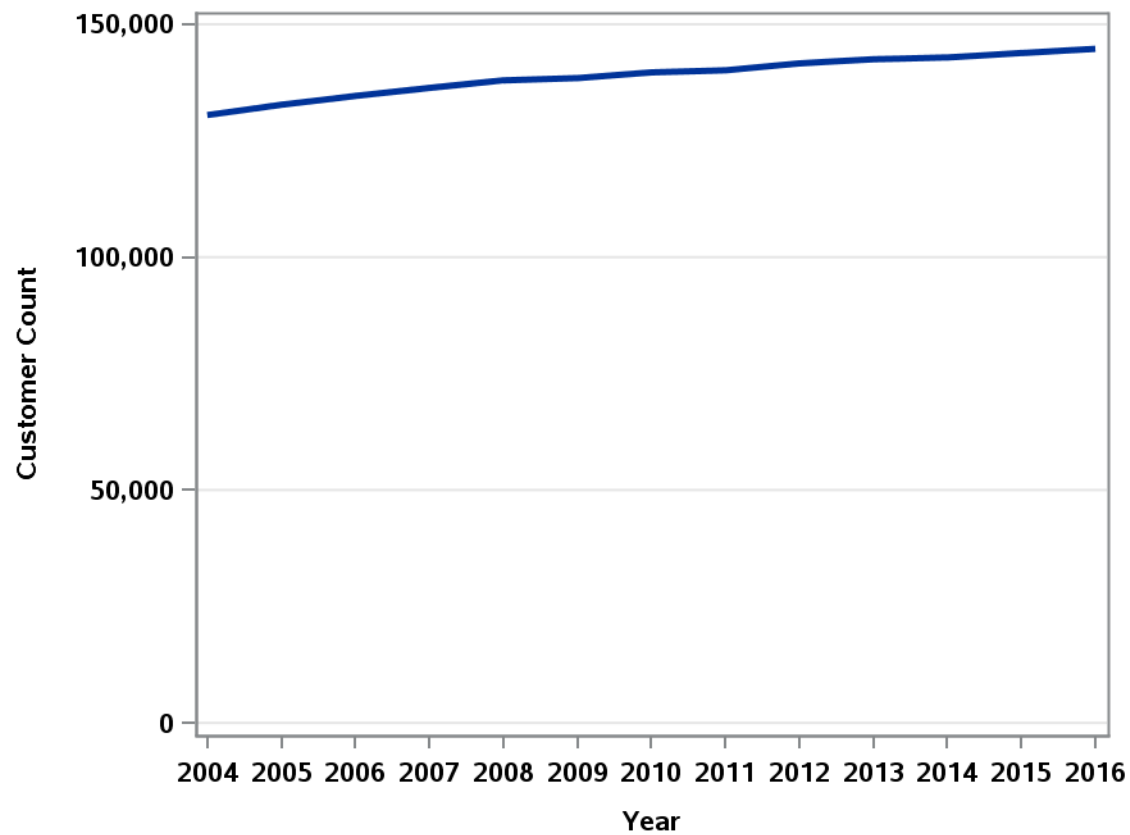
Residential Billed Customer Counts

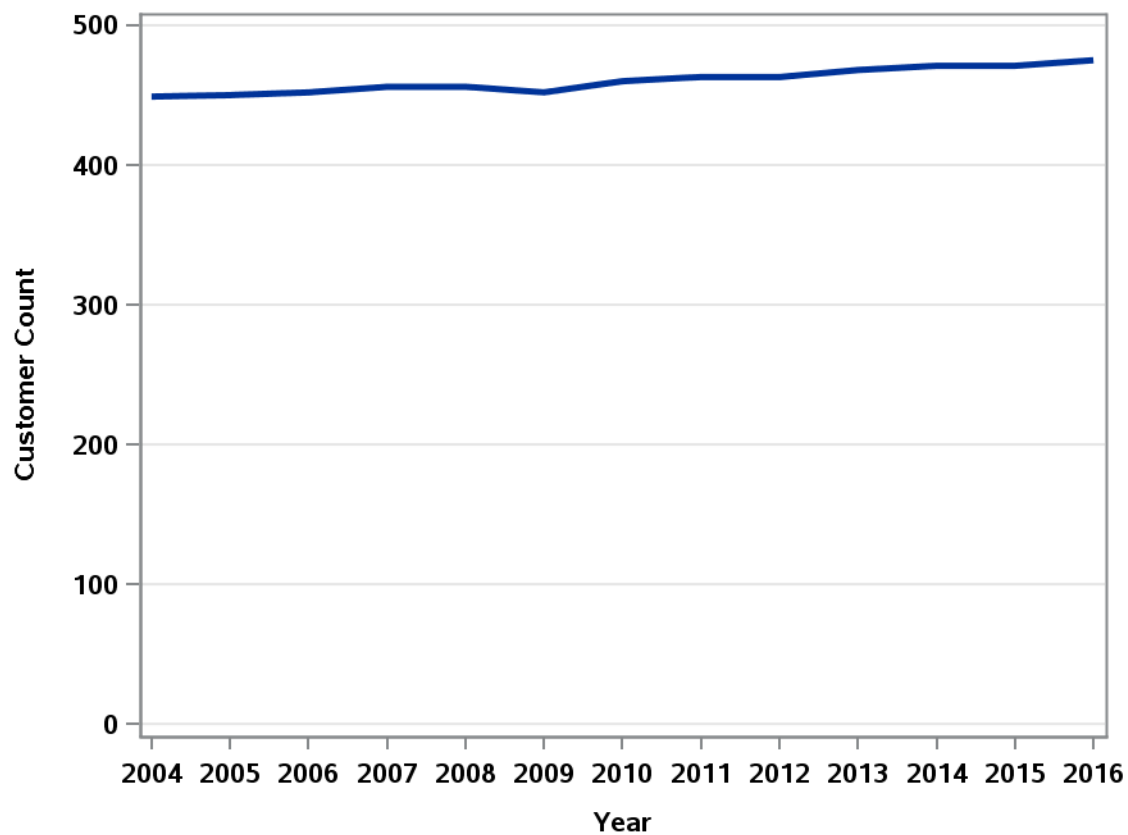


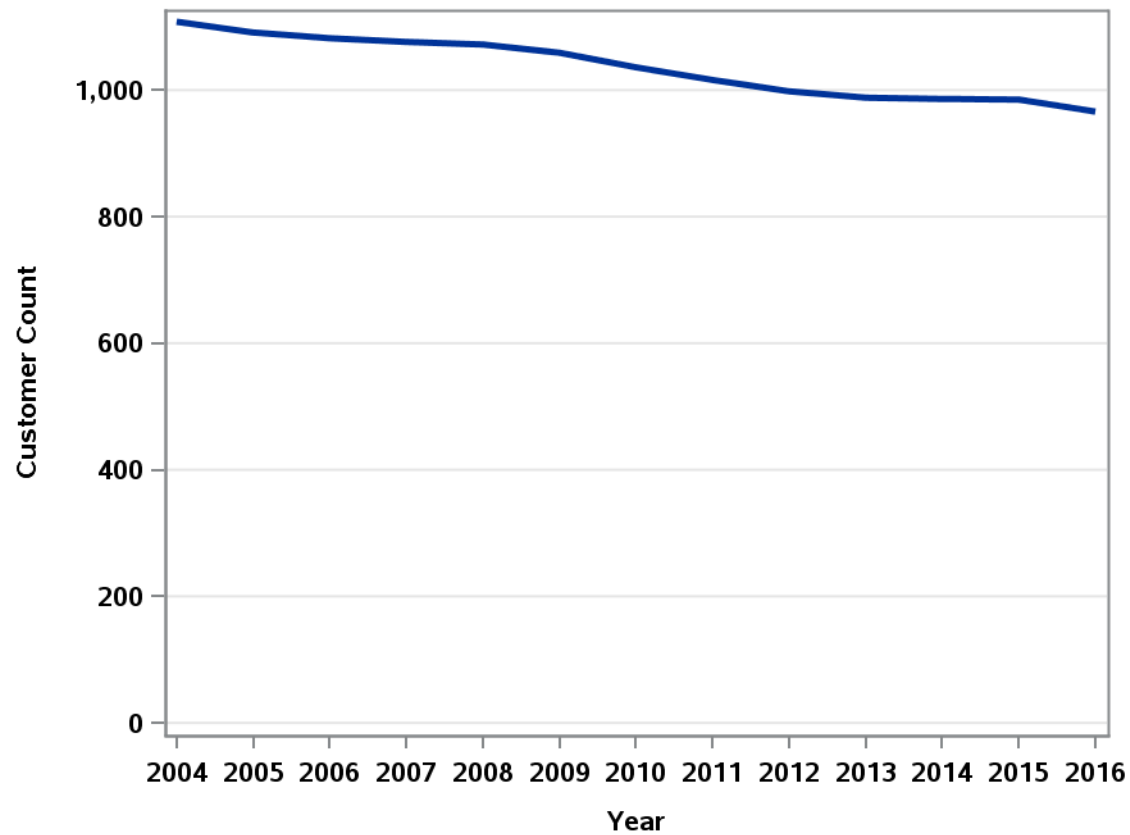
⁵4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

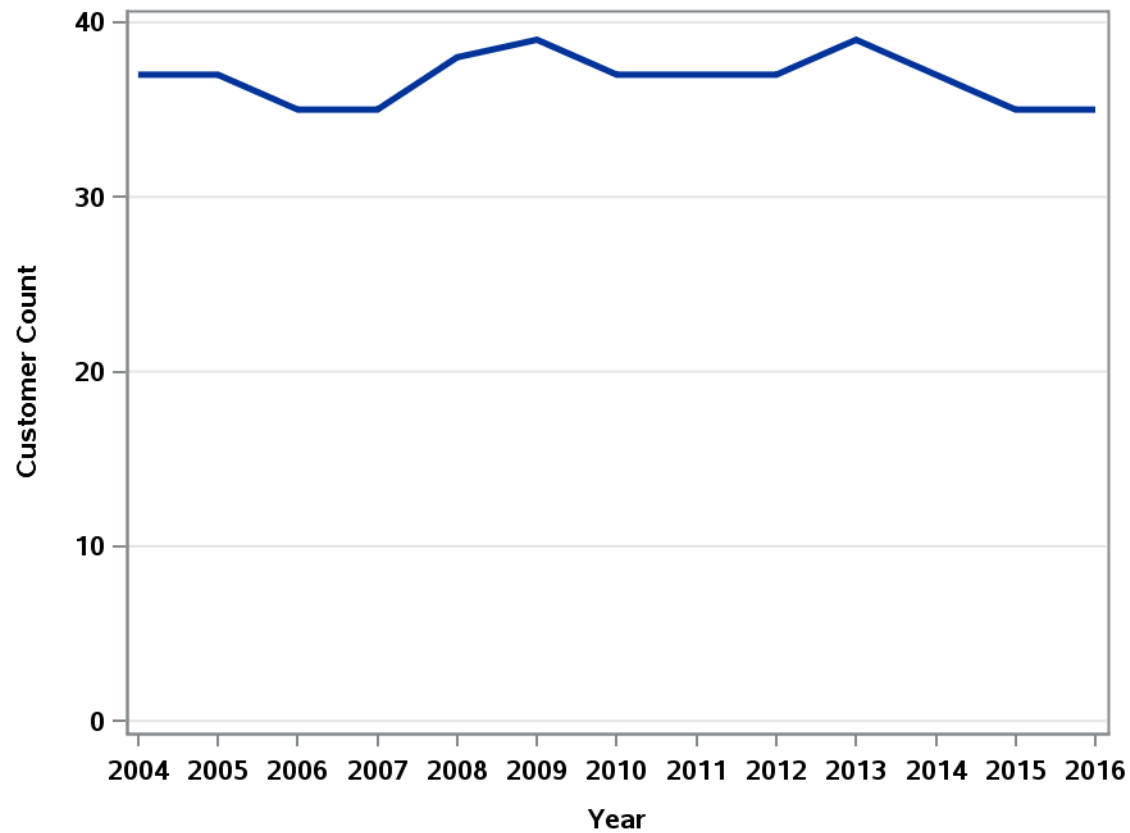
Commercial LGS Billed Customer Counts

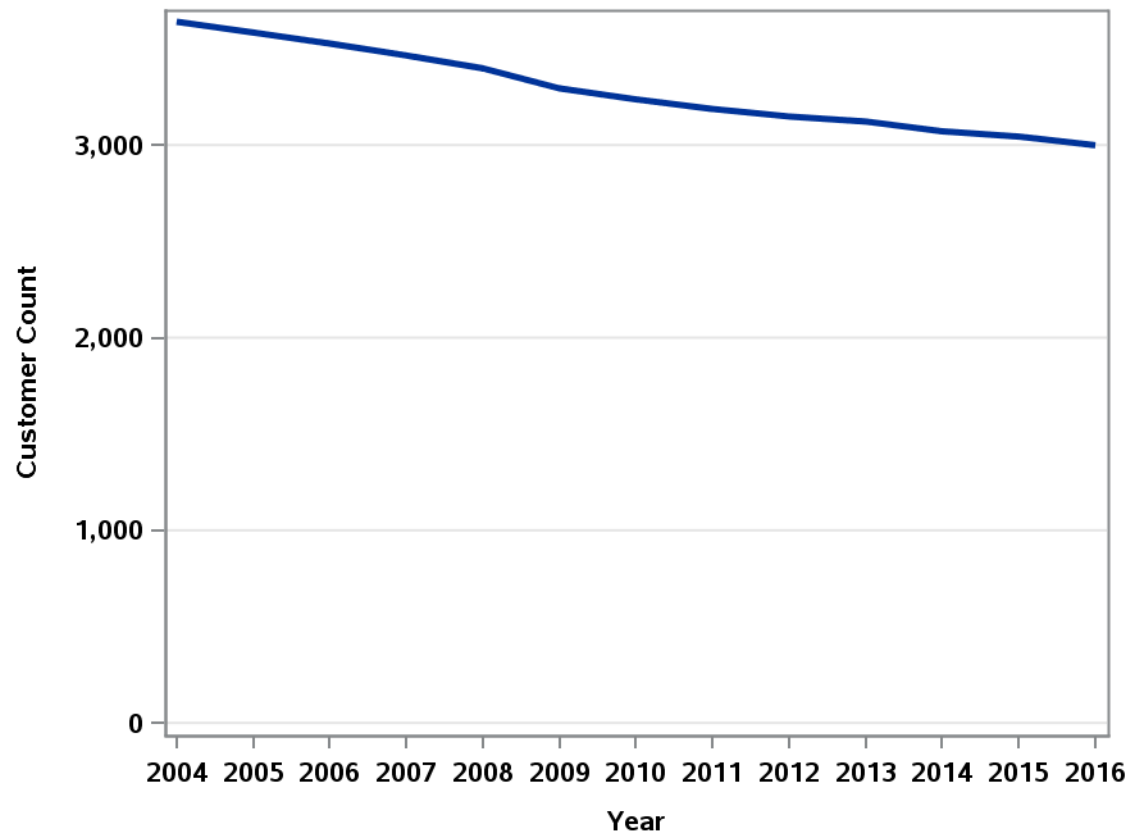
Commercial LPS Billed Customer Counts

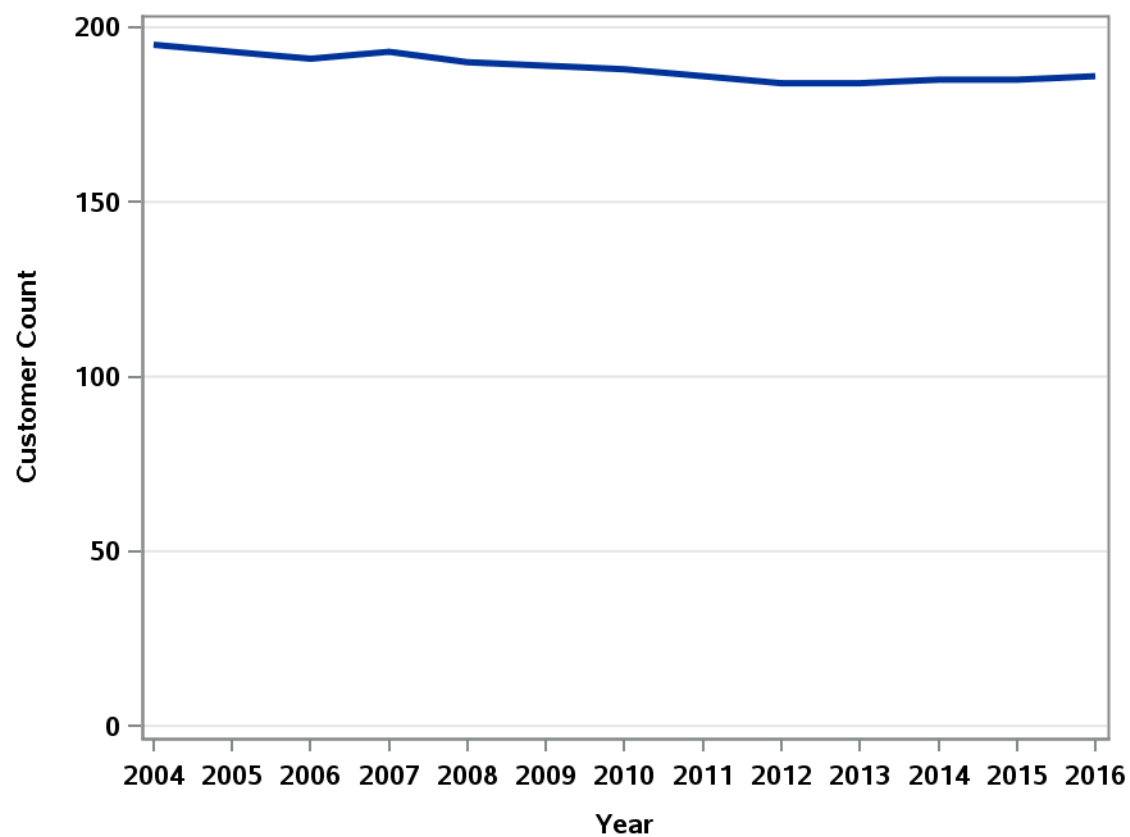
Commercial SGS Billed Customer Counts

Commercial SPS Billed Customer Counts

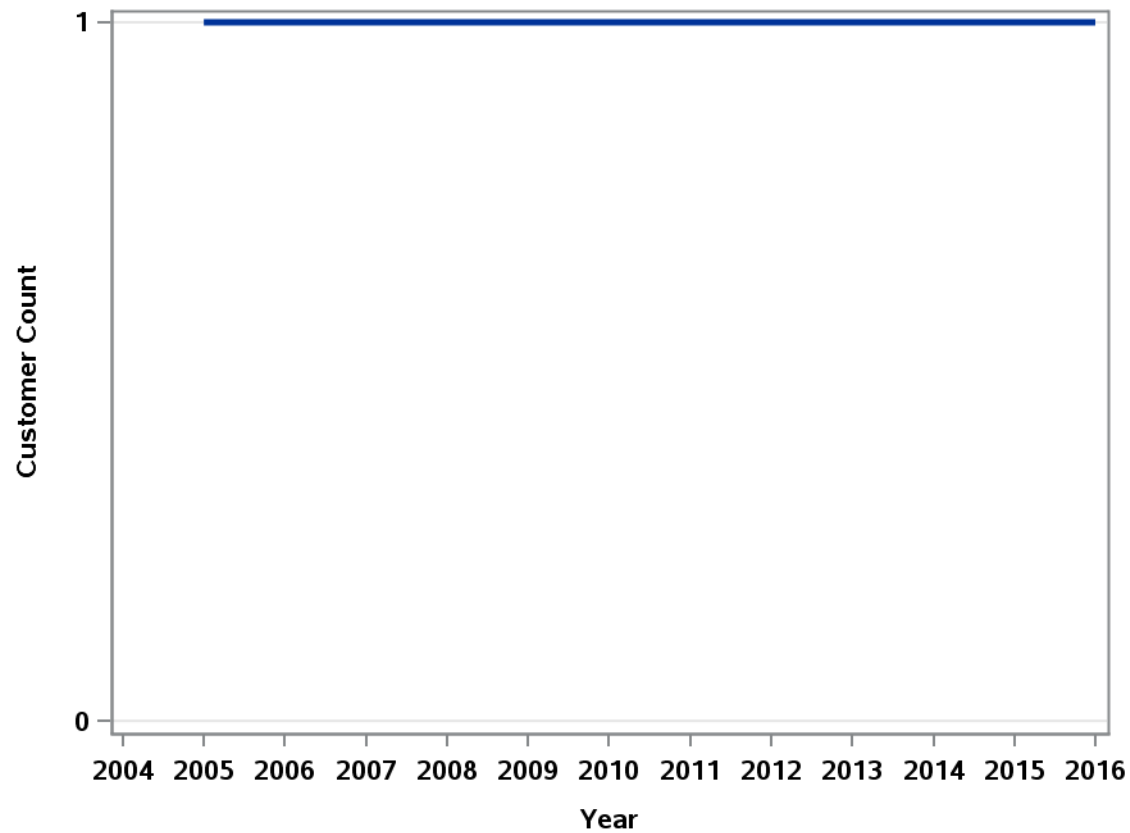
Industrial LGS Billed Customer Counts

Industrial LPS Billed Customer Counts

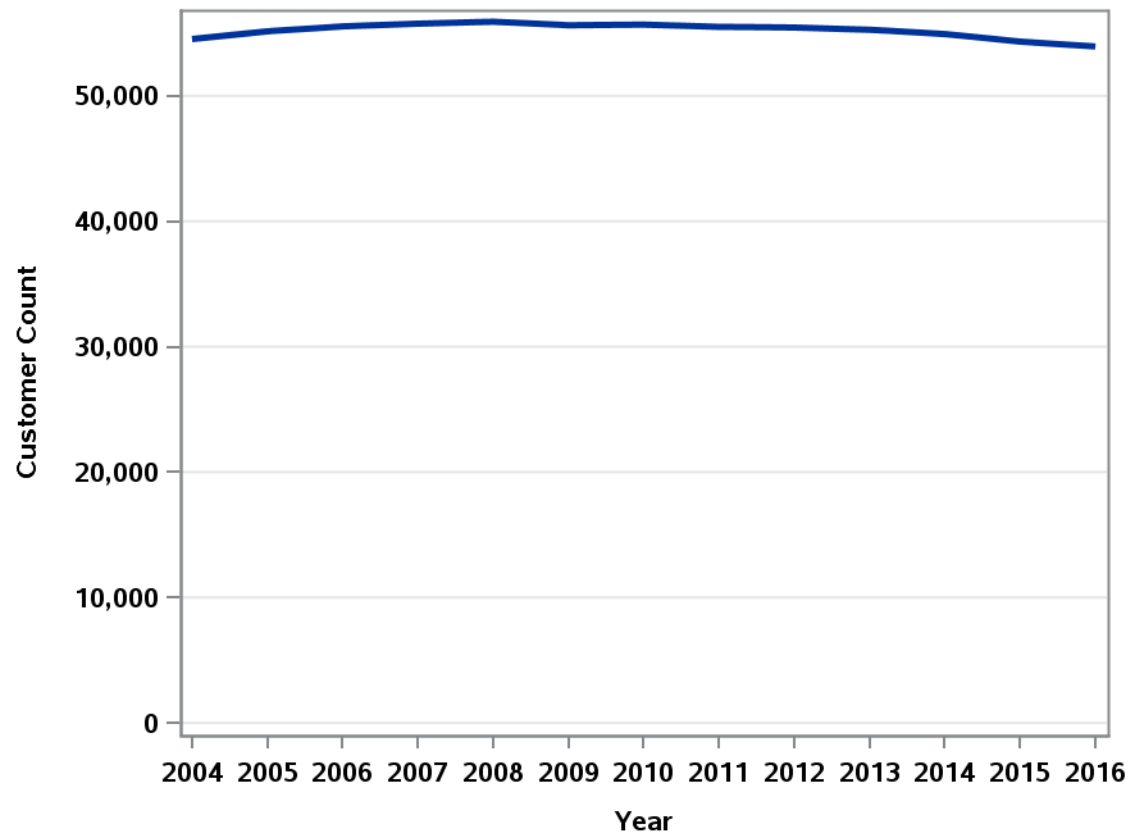
Industrial SGS Billed Customer Counts

Industrial SPS Billed Customer Counts

Large Transmission Service Billed Customer Counts



Lighting Billed Customer Counts

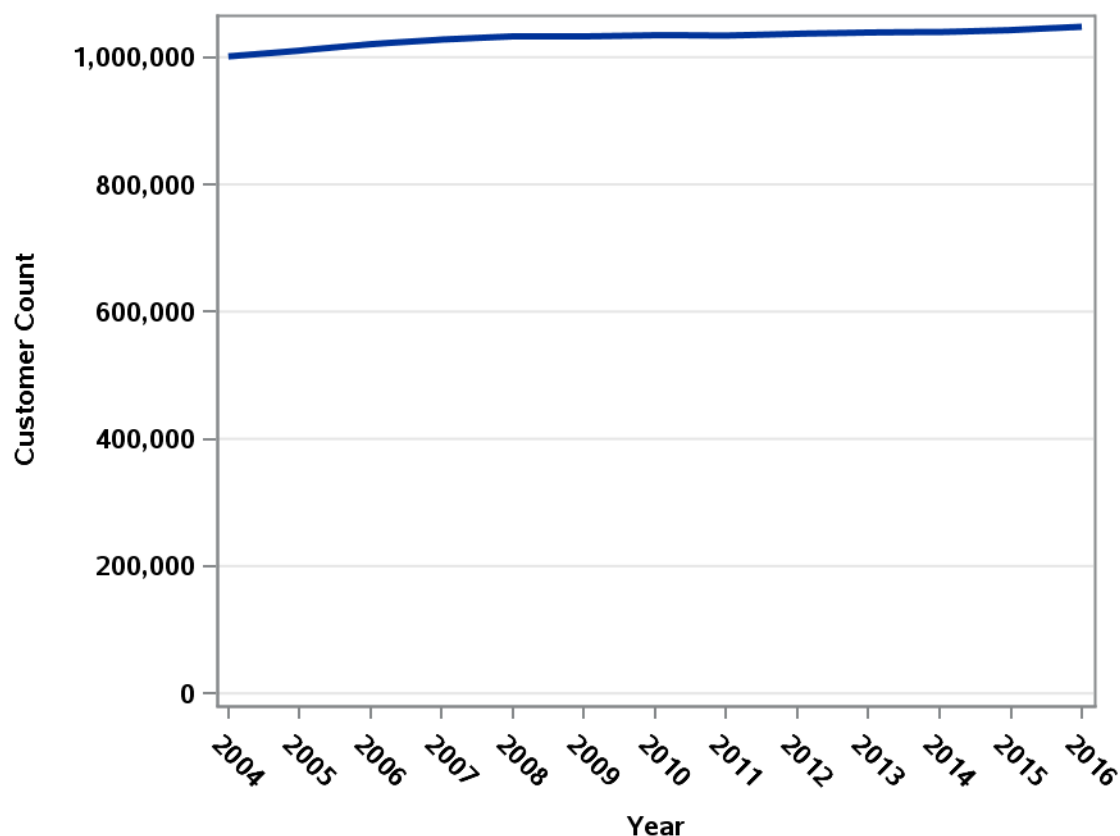


Billed Customer Class Counts by Year

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	1,001,447	8,038	23	130,506	449	1,108	37	3,640	195	54,528	
2005	1,010,857	8,251	25	132,718	450	1,091	37	3,584	193	55,148	1
2006	1,020,482	8,498	27	134,612	452	1,082	35	3,527	191	55,538	1
2007	1,027,667	8,689	28	136,332	456	1,076	35	3,465	193	55,762	1
2008	1,032,902	8,808	29	137,974	456	1,072	38	3,398	190	55,911	1
2009	1,033,360	8,888	32	138,443	452	1,059	39	3,294	189	55,634	1
2010	1,035,425	8,935	35	139,662	460	1,036	37	3,237	188	55,679	1
2011	1,034,549	9,012	35	140,135	463	1,016	37	3,187	186	55,506	1
2012	1,036,216	9,109	36	141,603	463	998	37	3,148	184	55,449	1
2013	1,039,085	9,215	35	142,485	468	988	39	3,122	184	55,272	1
2014	1,041,094	9,325	33	142,885	471	986	37	3,071	185	54,928	1
2015	1,043,603	9,420	32	143,831	471	985	35	3,044	185	54,329	1
2016	1,048,101	9,475	31	144,717	475	966	35	2,999	186	53,936	1

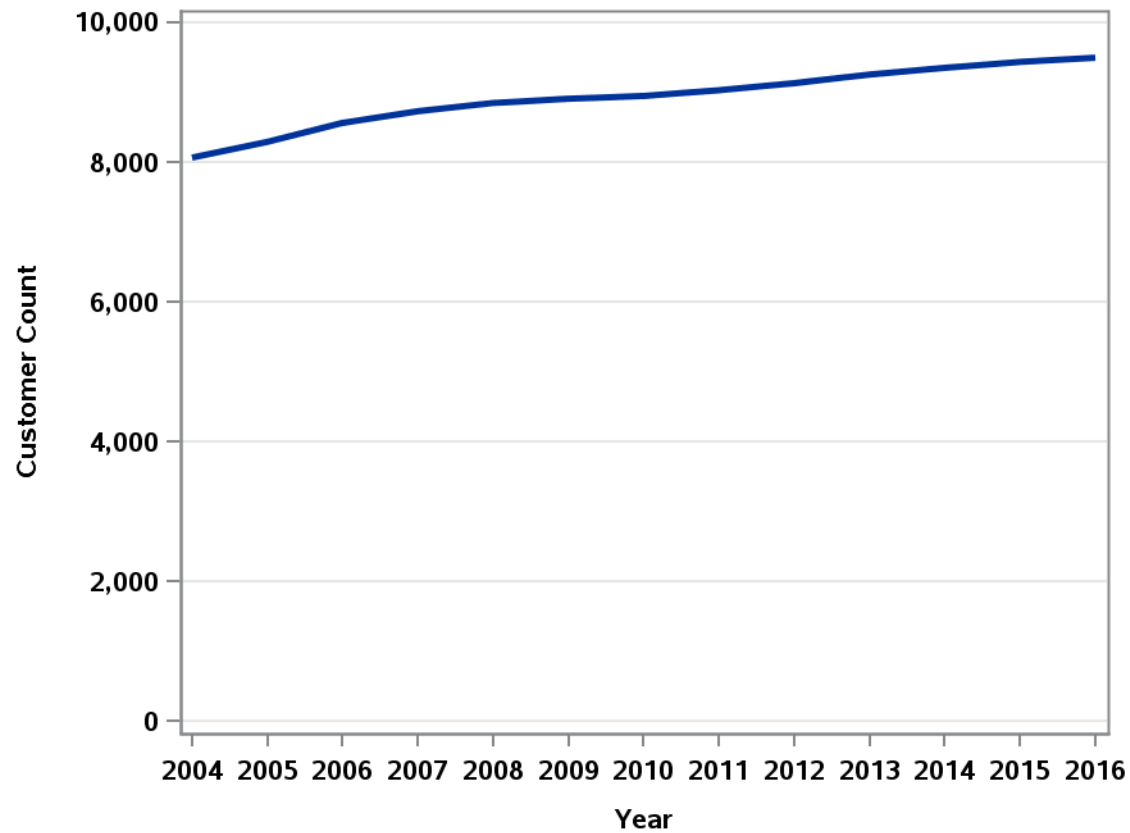
Number of Summer Units (Billed Customer Counts) by Class (2004 - 2016)⁶

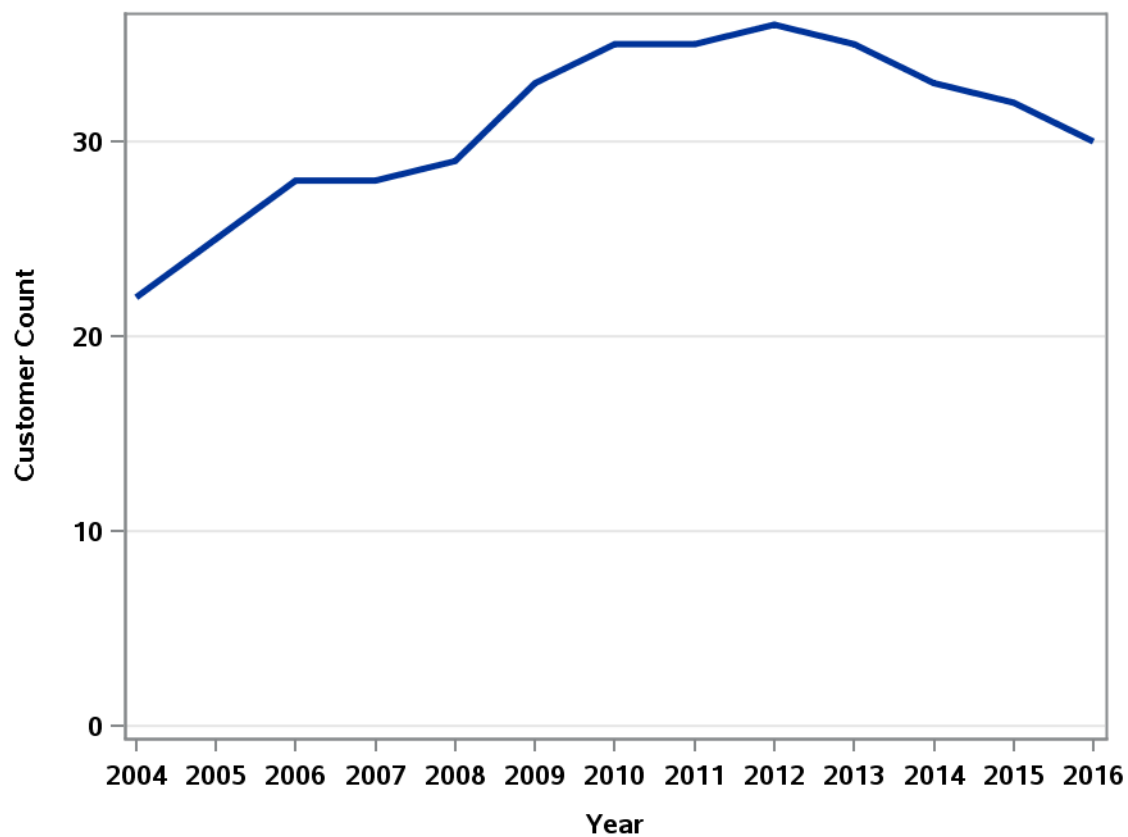
Summer Residential Billed Customer Counts

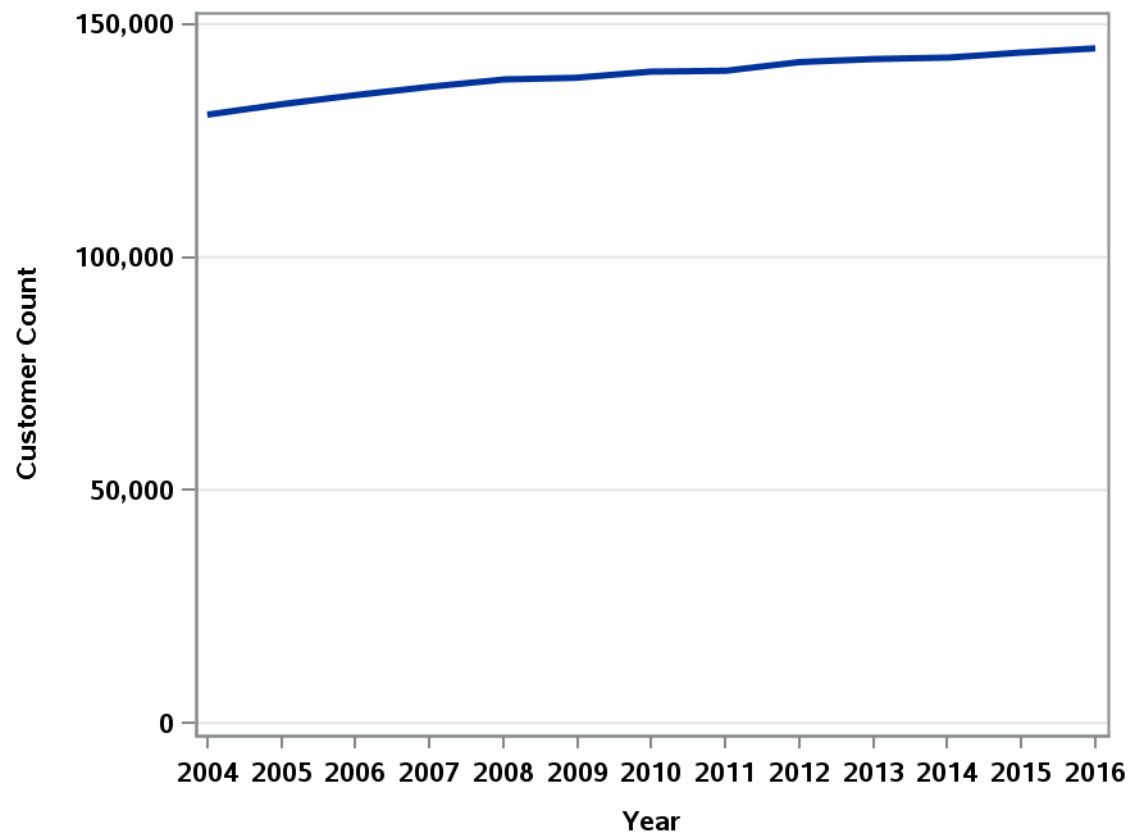


⁶4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

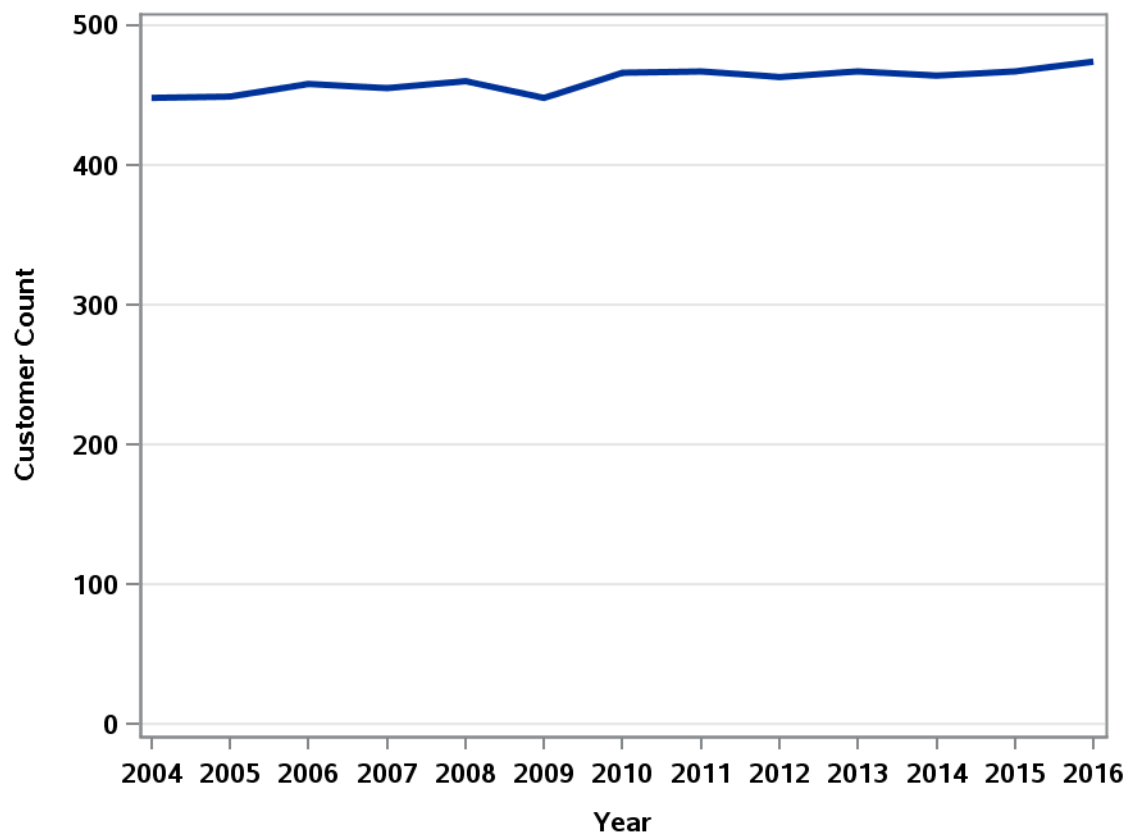
Summer Commercial LGS Billed Customer Counts



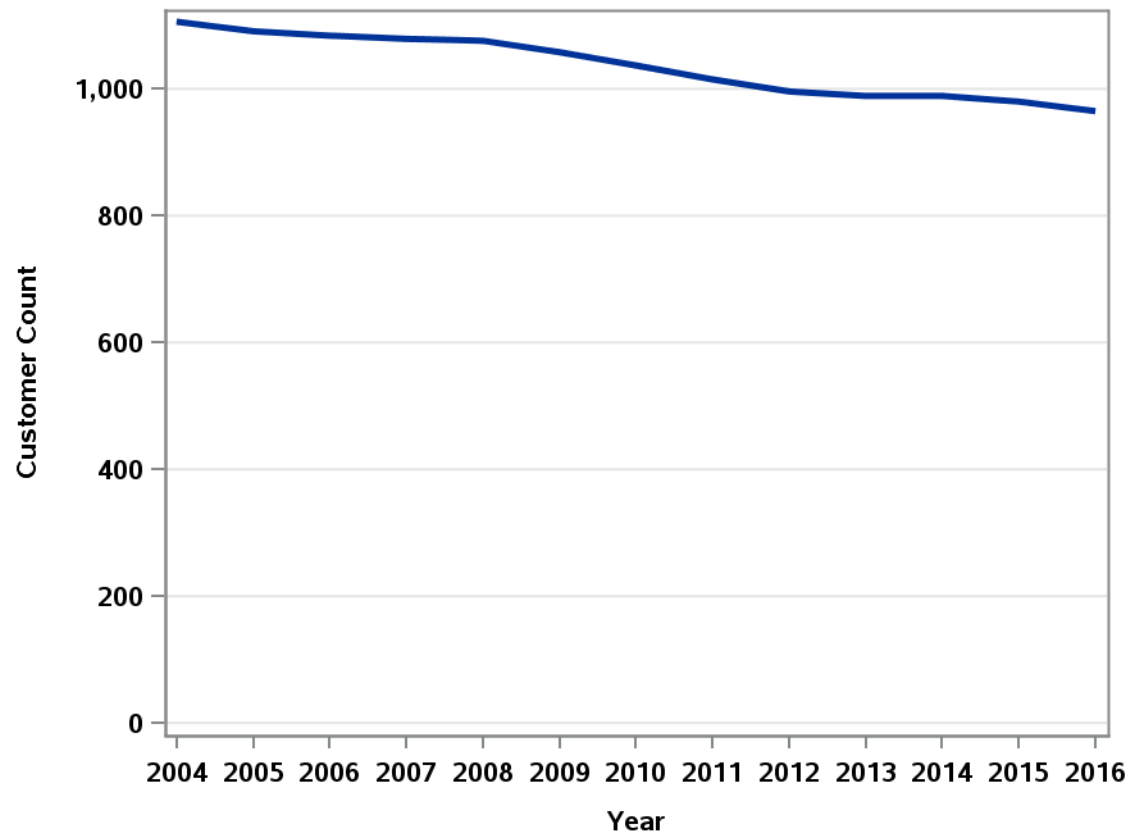
Summer Commercial LPS Billed Customer Counts

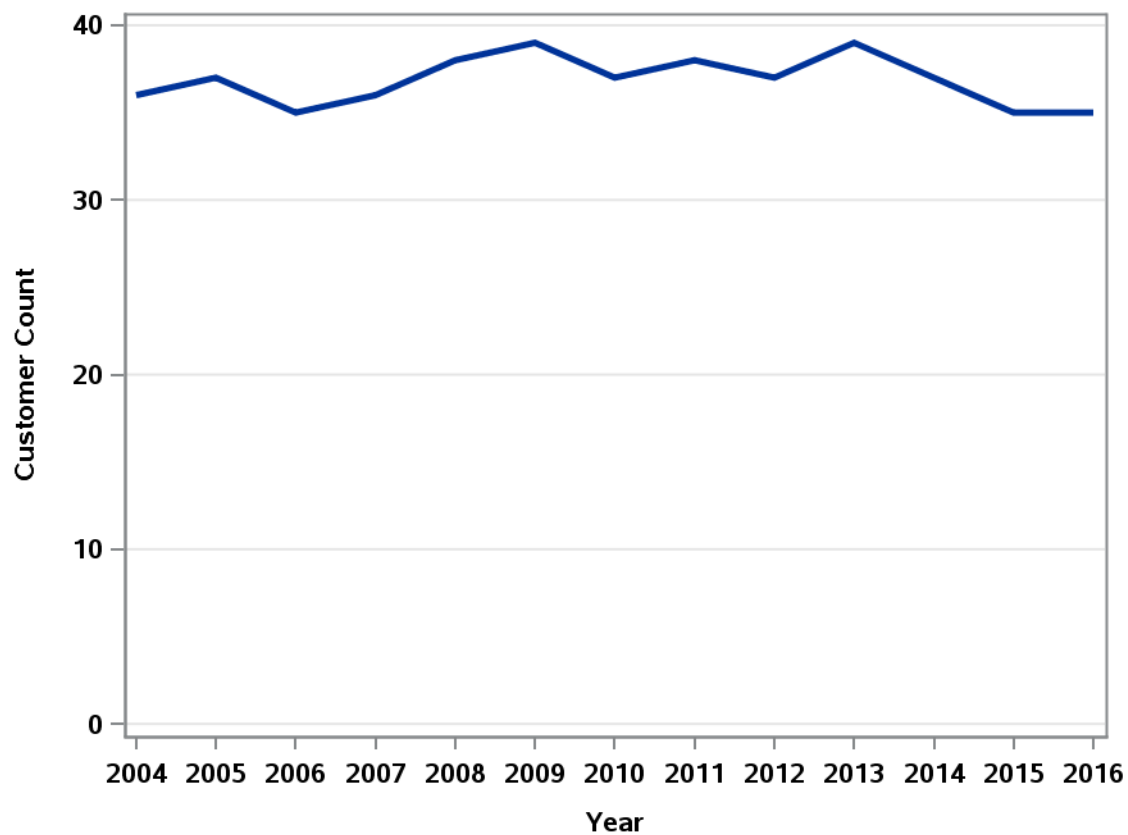
Summer Commercial SGS Billed Customer Counts

Summer Commercial SPS Billed Customer Counts

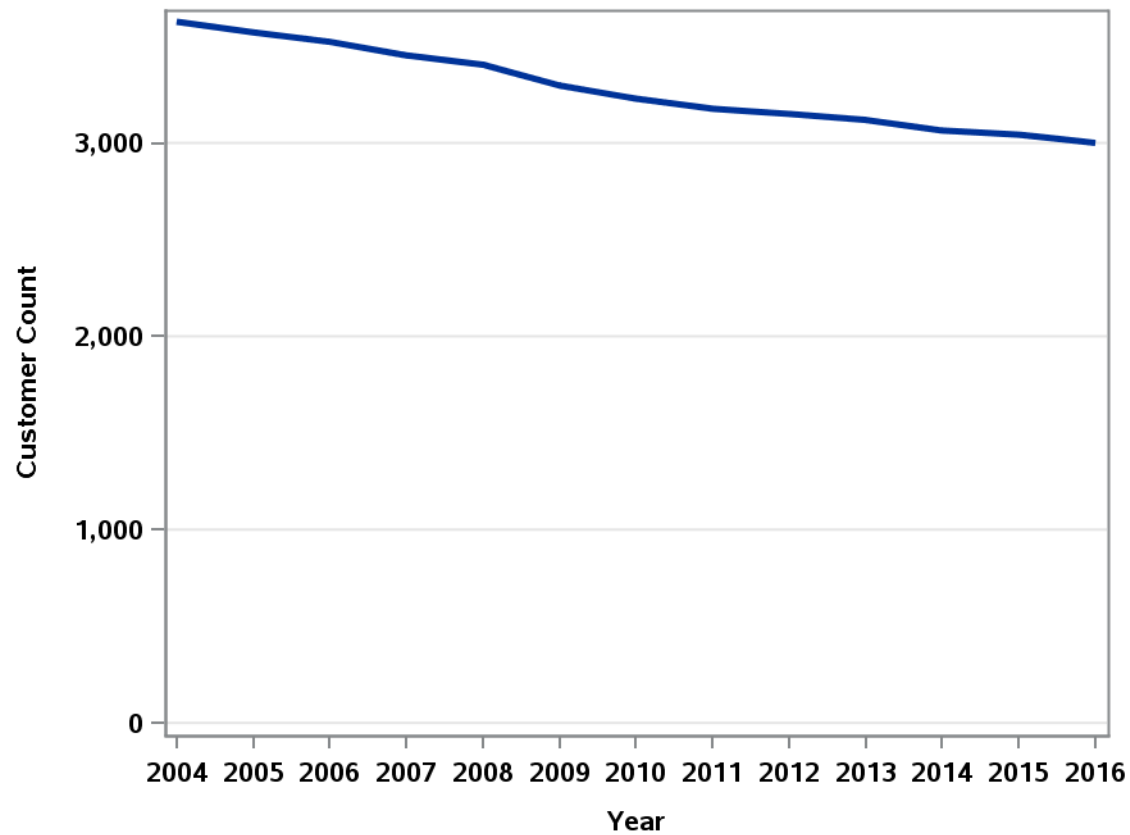


Summer Industrial LGS Billed Customer Counts

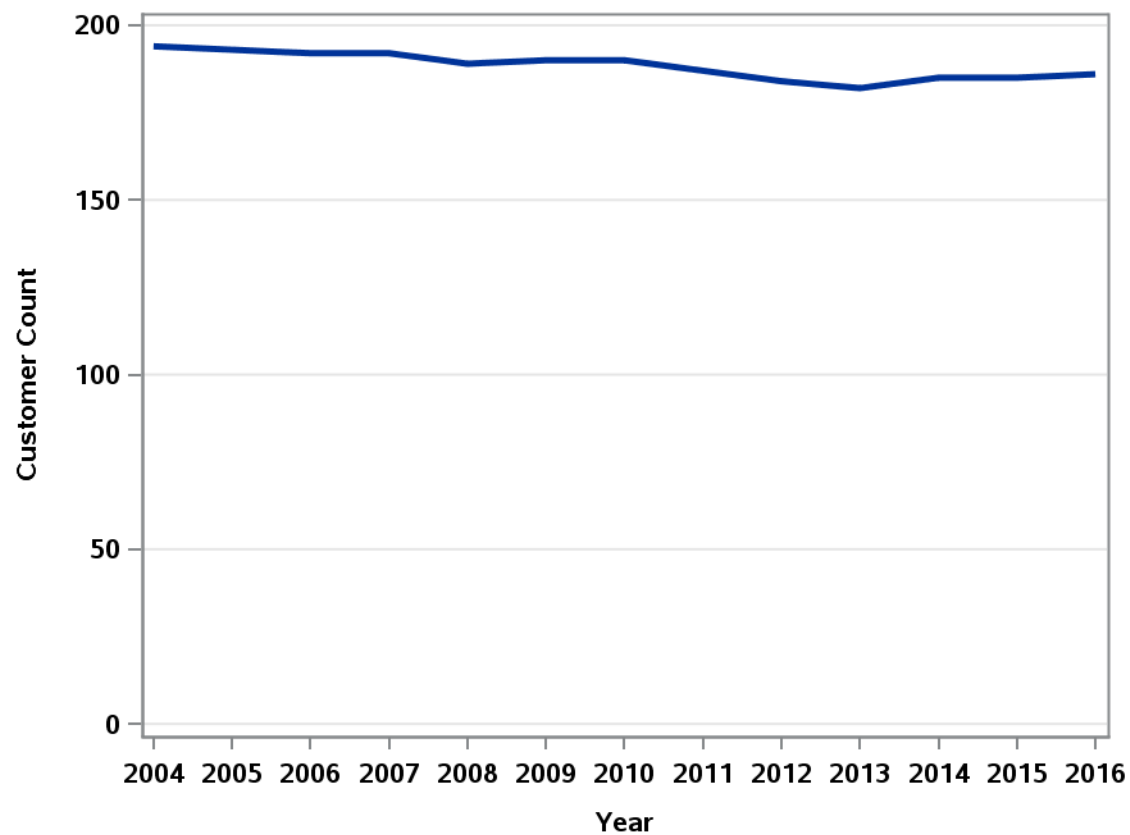


Summer Industrial LPS Billed Customer Counts

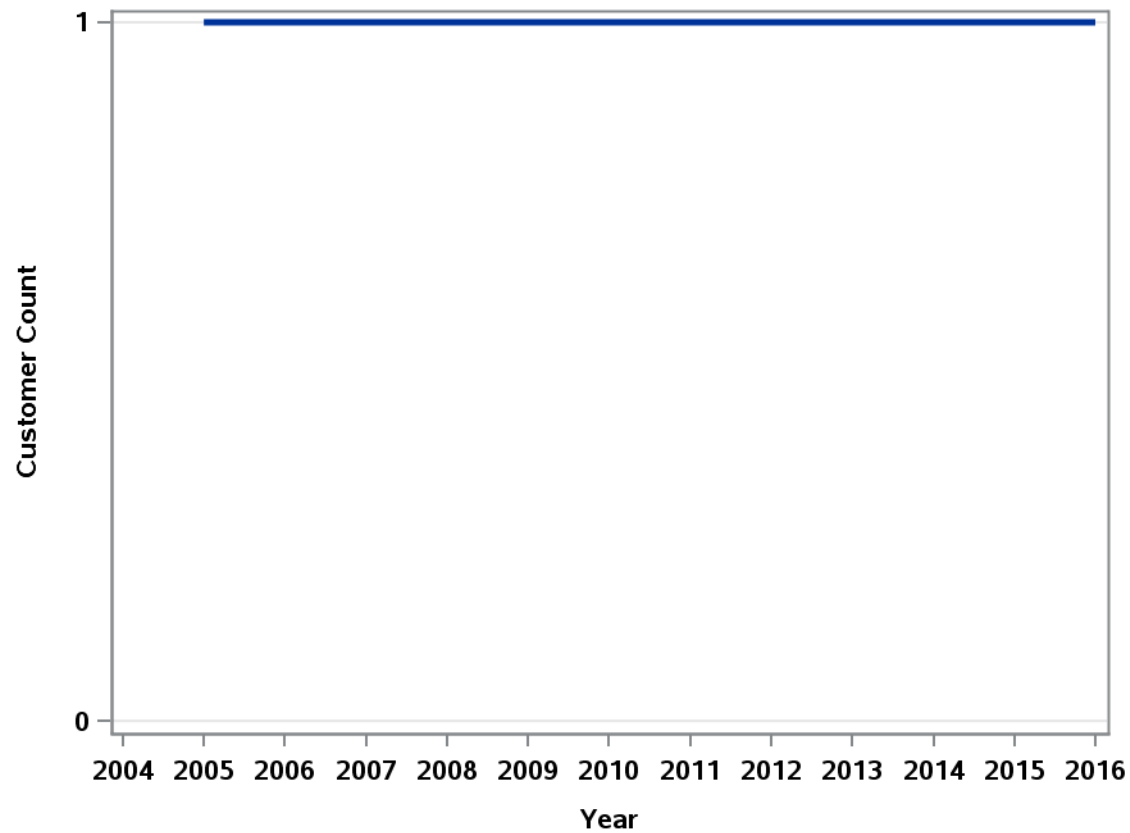
Summer Industrial SGS Billed Customer Counts



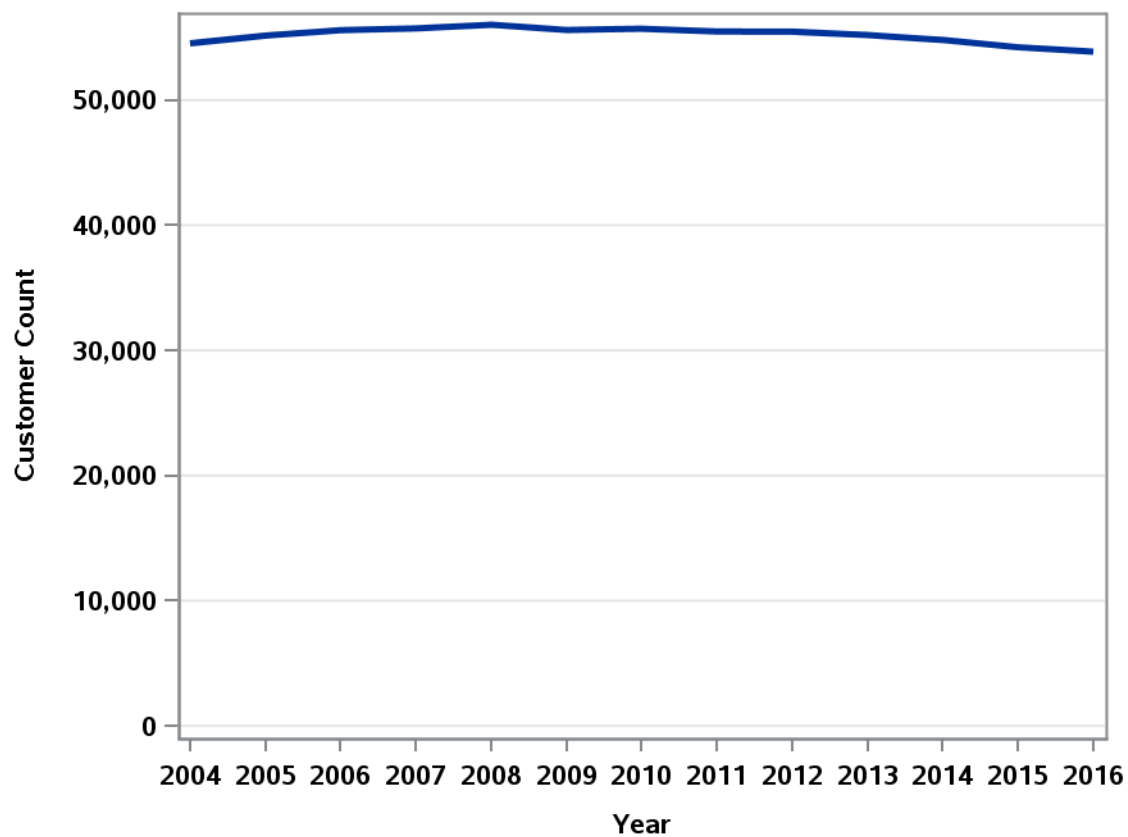
Summer Industrial SPS Billed Customer Counts



Summer Large Transmission Service Billed Customer Counts



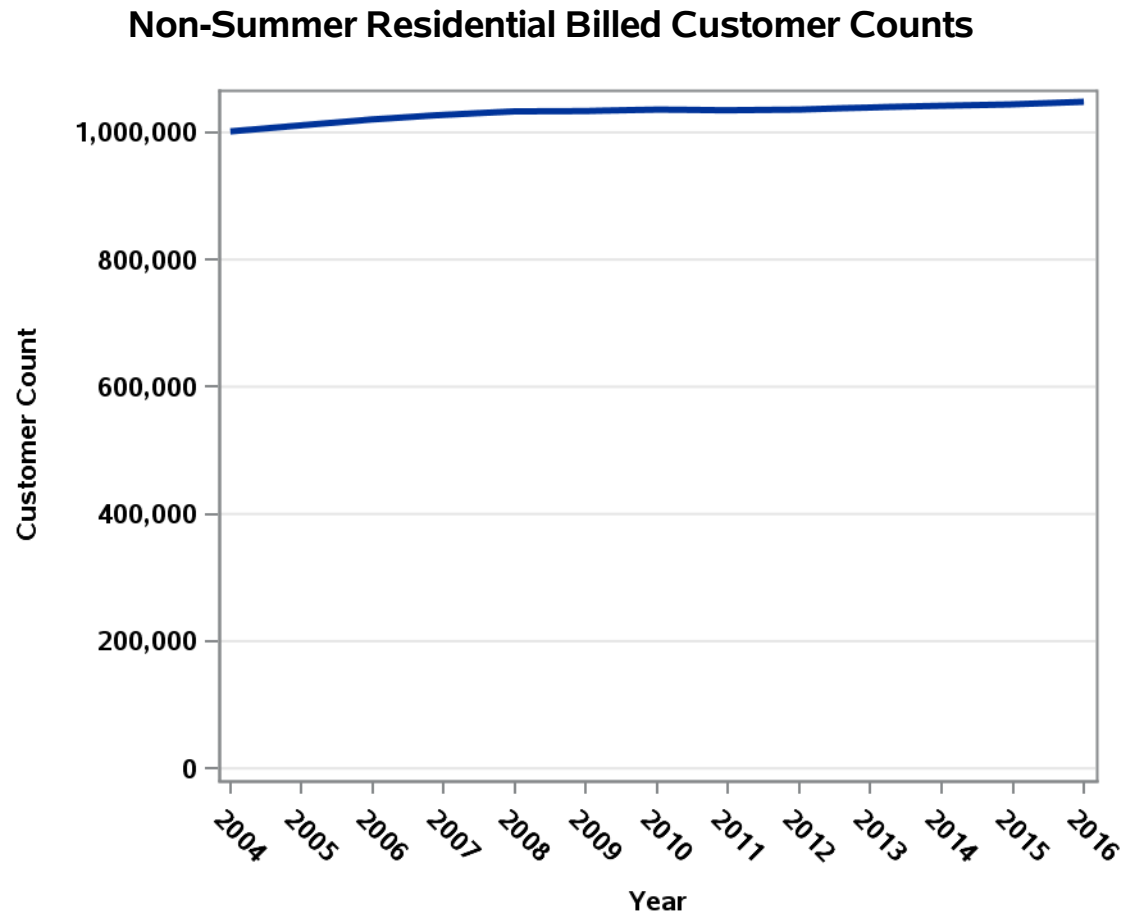
Summer Lighting Billed Customer Counts



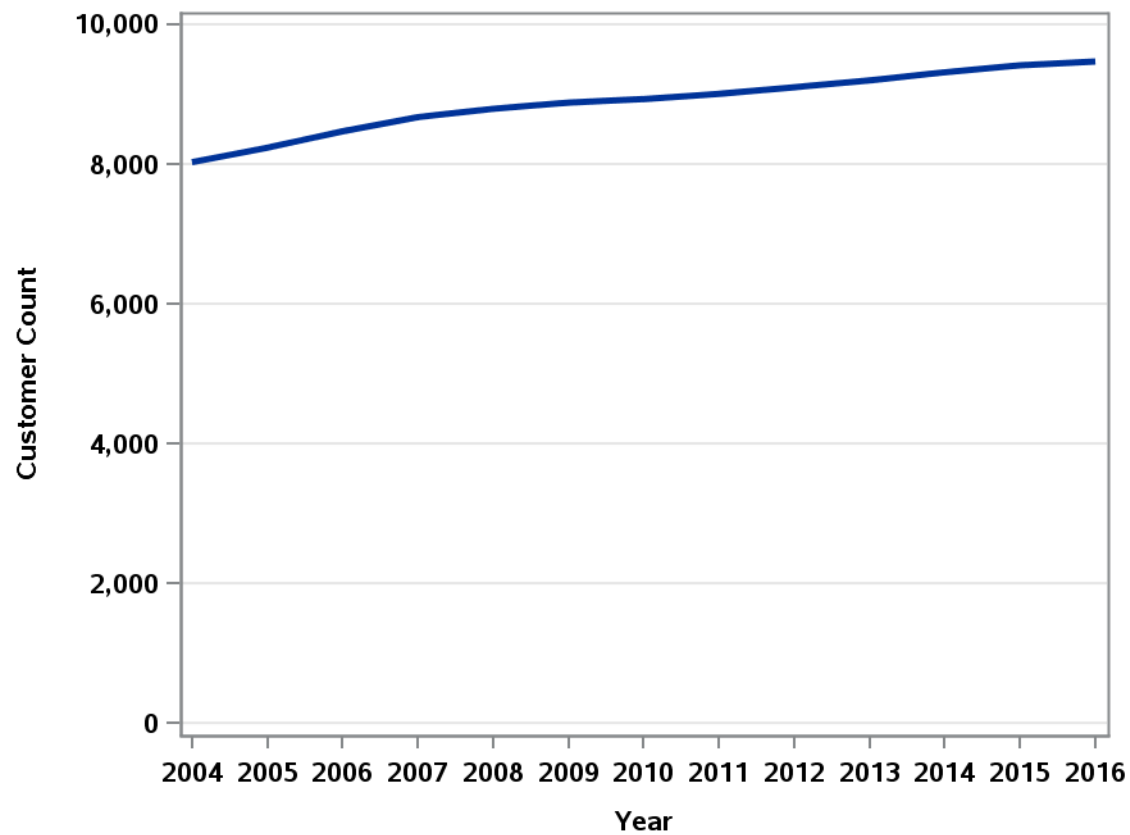
Summer Billed Customer Class Counts by Year

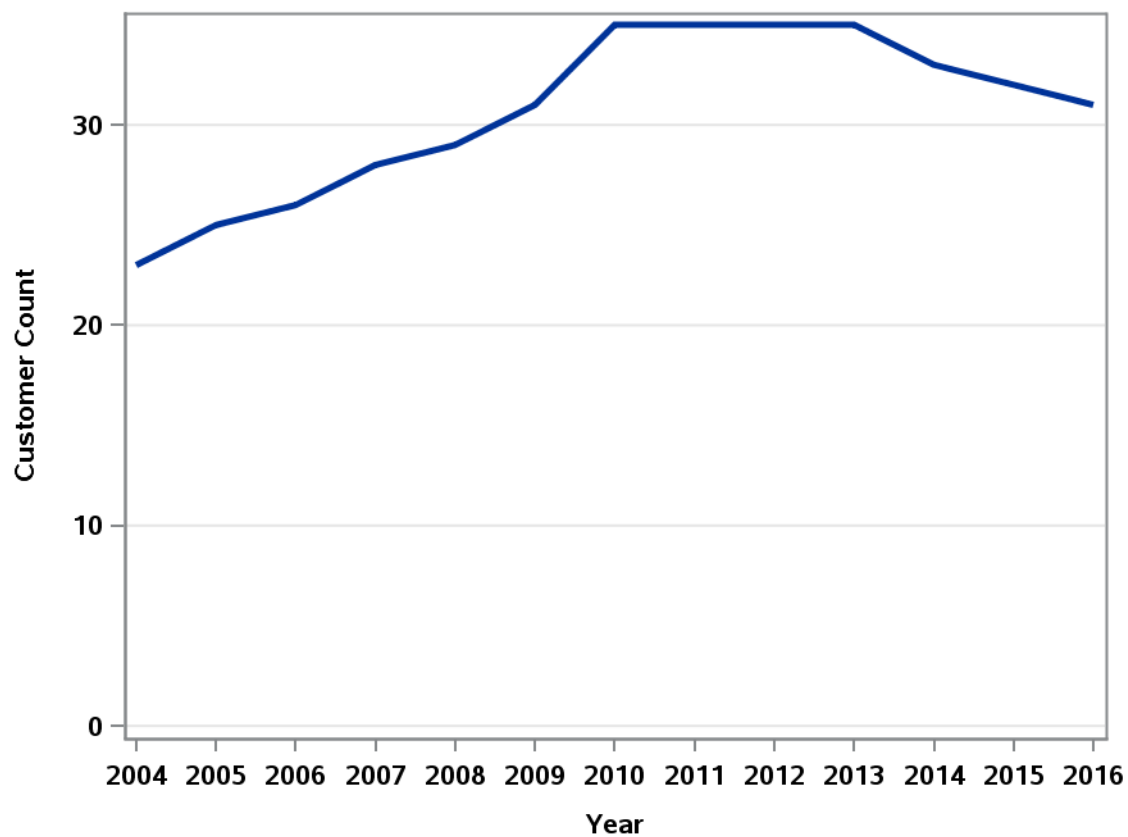
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	1,001,343	8,063	22	130,604	448	1,106	36	3,627	194	54,531	
2005	1,010,365	8,288	25	132,833	449	1,091	37	3,572	193	55,148	1
2006	1,020,511	8,560	28	134,794	458	1,084	35	3,523	192	55,587	1
2007	1,027,781	8,727	28	136,569	455	1,079	36	3,453	192	55,725	1
2008	1,032,636	8,845	29	138,147	460	1,076	38	3,405	189	56,019	1
2009	1,032,708	8,905	33	138,529	448	1,058	39	3,297	190	55,601	1
2010	1,034,608	8,946	35	139,840	466	1,037	37	3,229	190	55,701	1
2011	1,033,999	9,028	35	140,007	467	1,015	38	3,177	187	55,476	1
2012	1,036,804	9,129	36	141,880	463	996	37	3,150	184	55,463	1
2013	1,038,863	9,252	35	142,540	467	989	39	3,119	182	55,198	1
2014	1,039,577	9,348	33	142,852	464	989	37	3,064	185	54,799	1
2015	1,042,490	9,433	32	143,932	467	980	35	3,043	185	54,219	1
2016	1,047,887	9,492	30	144,821	474	965	35	3,000	186	53,865	1

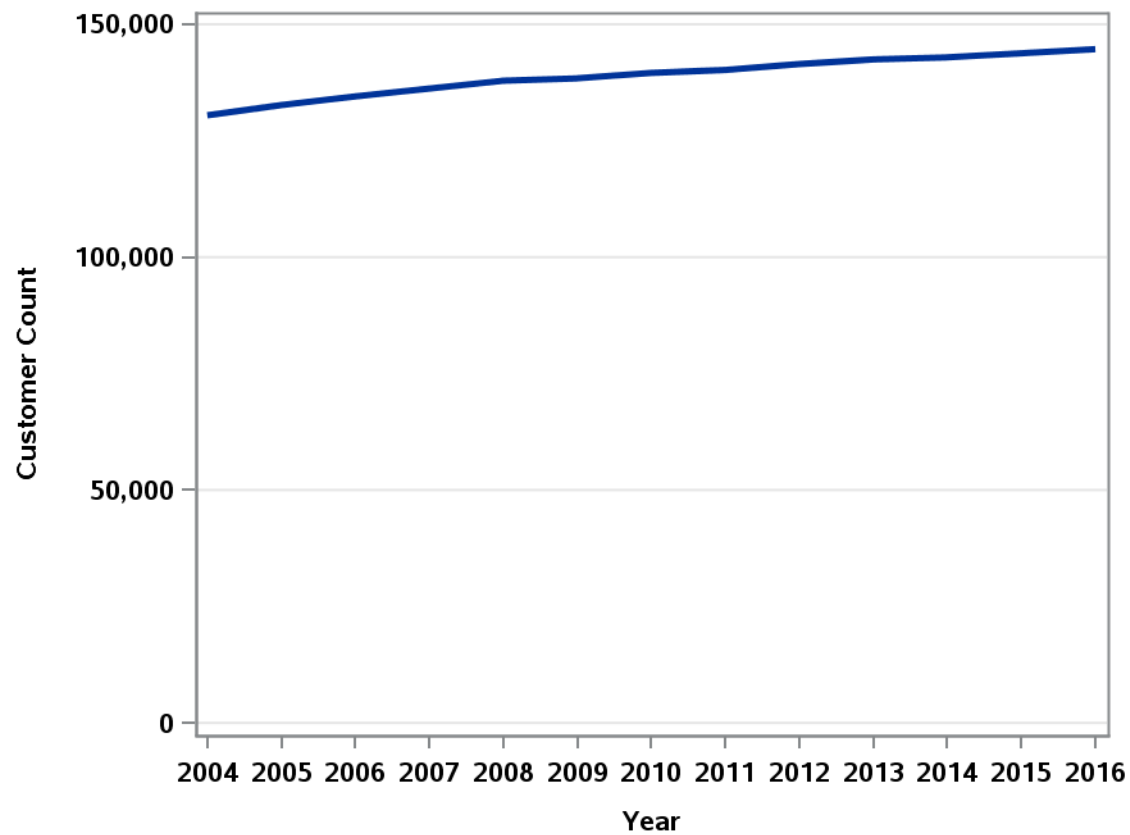
Number of Non-Summer Units (Billed Customer Counts) by Class (2004 - 2016)⁷

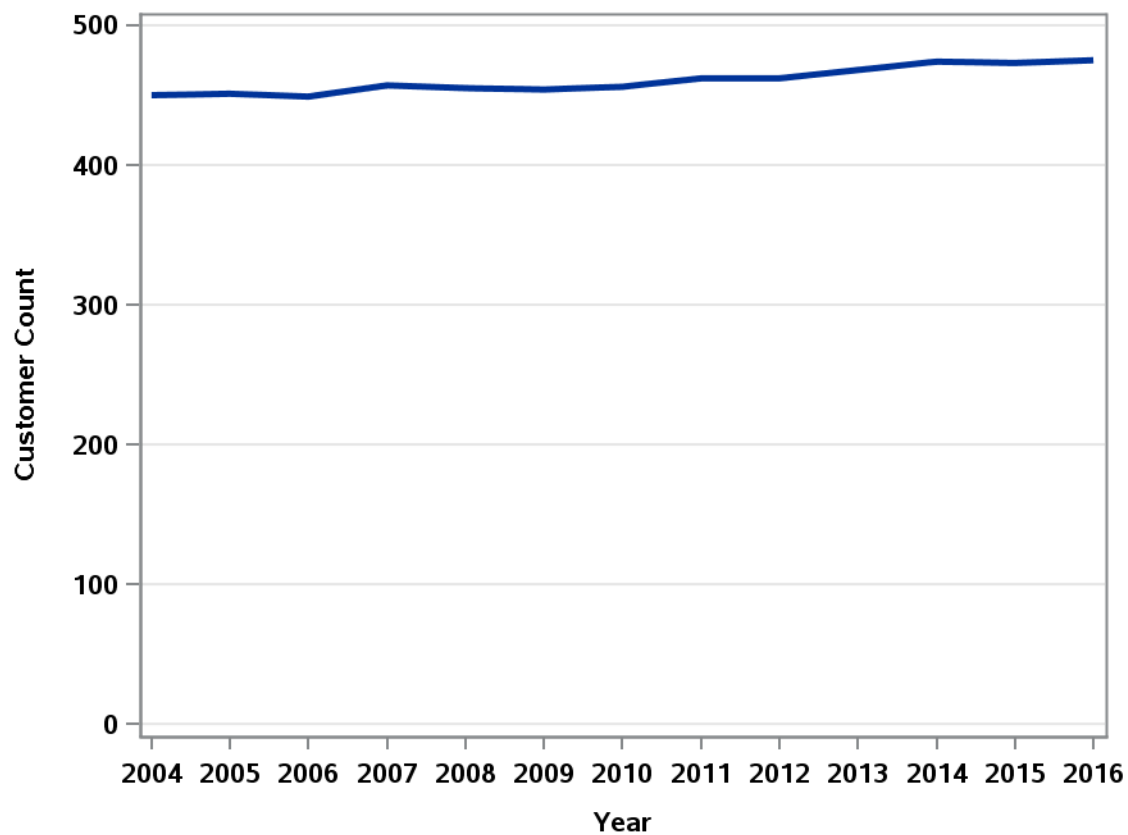


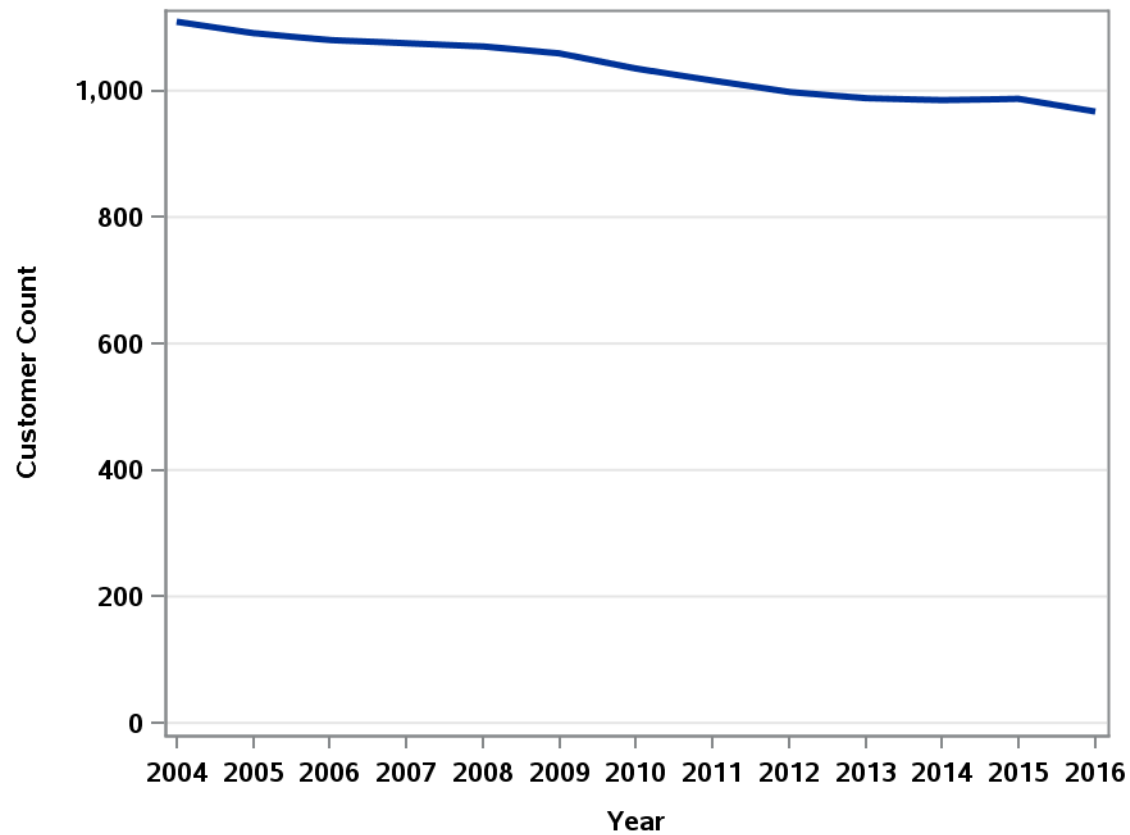
⁷4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

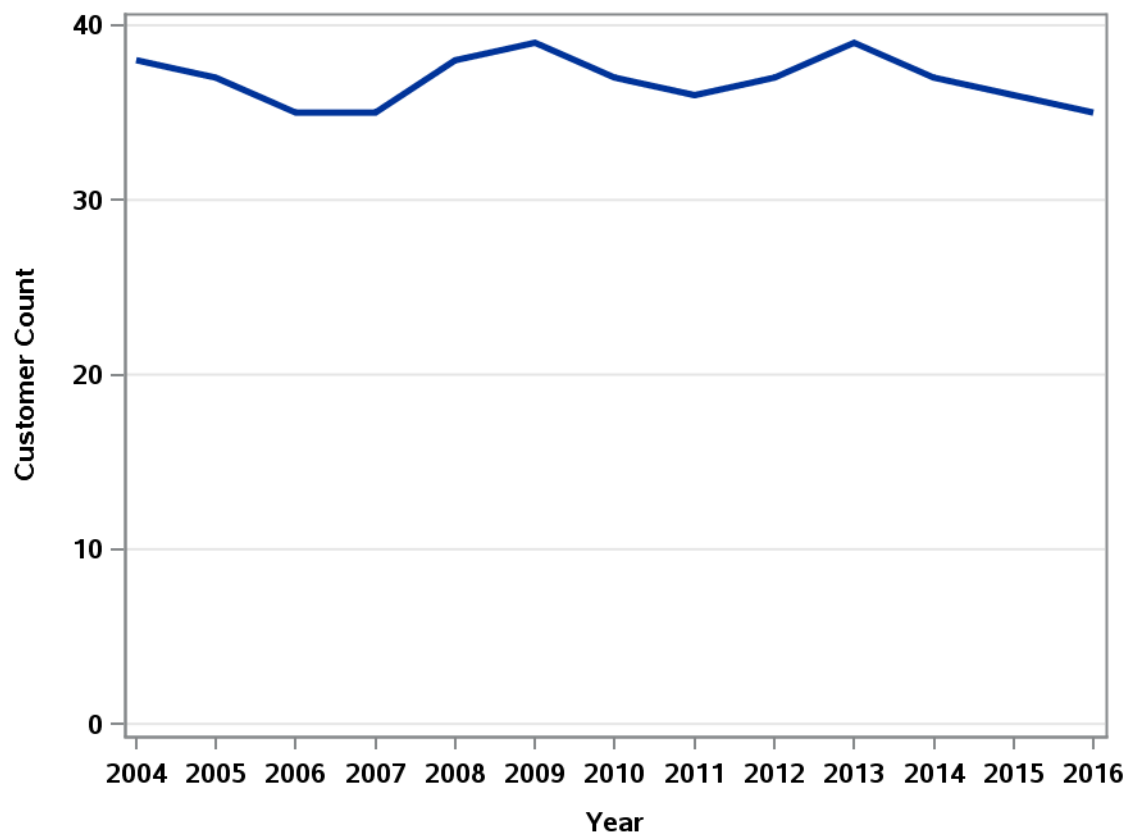
Non-Summer Commercial LGS Billed Customer Counts

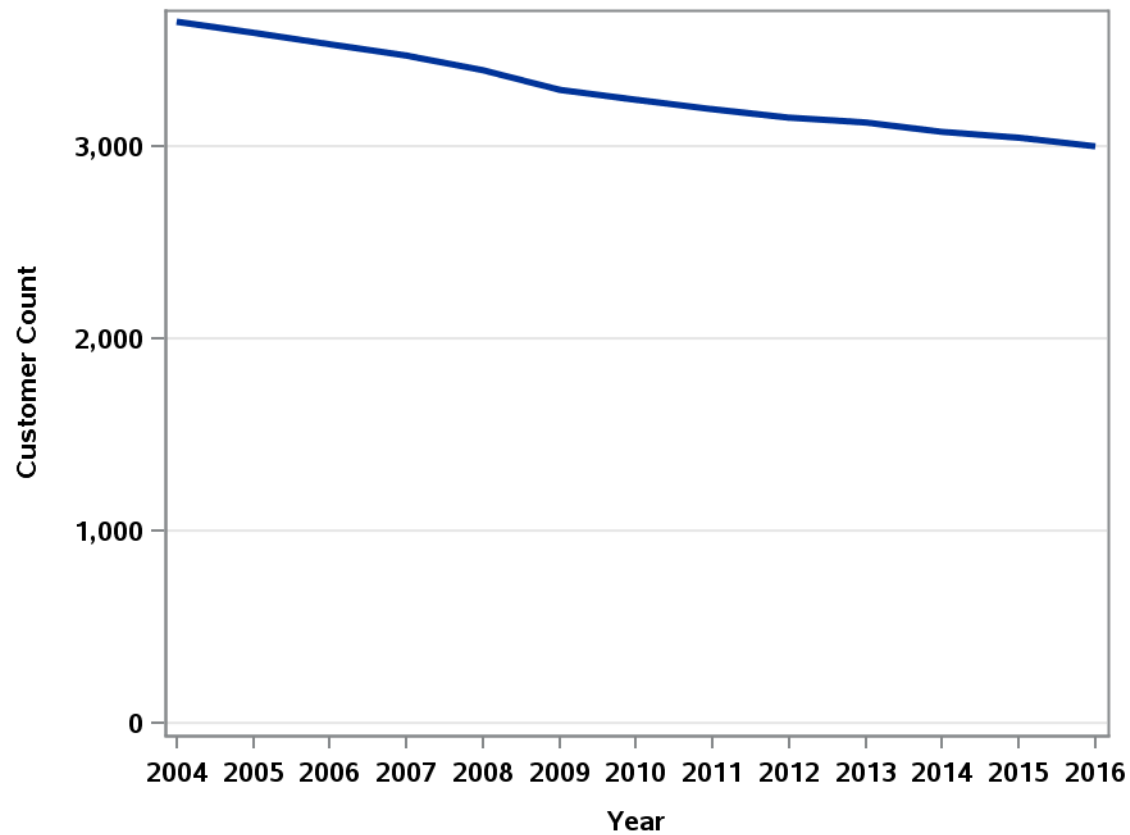
Non-Summer Commercial LPS Billed Customer Counts

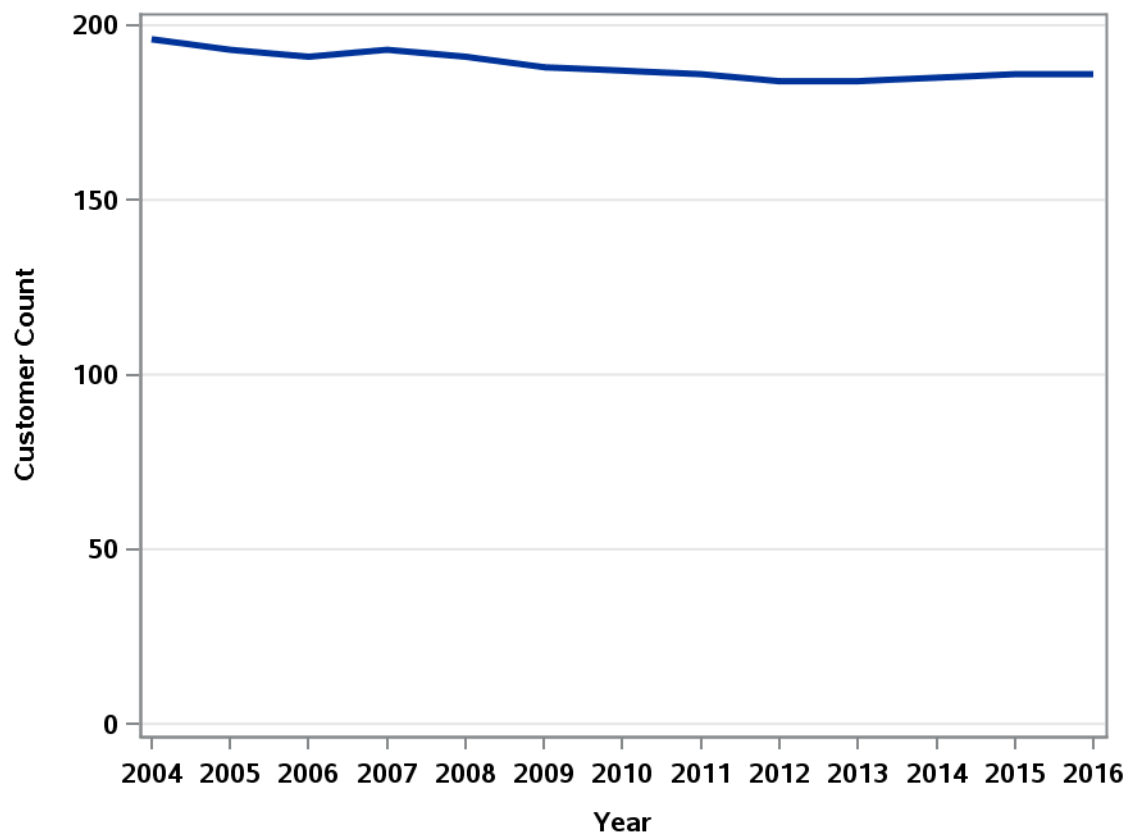
Non-Summer Commercial SGS Billed Customer Counts

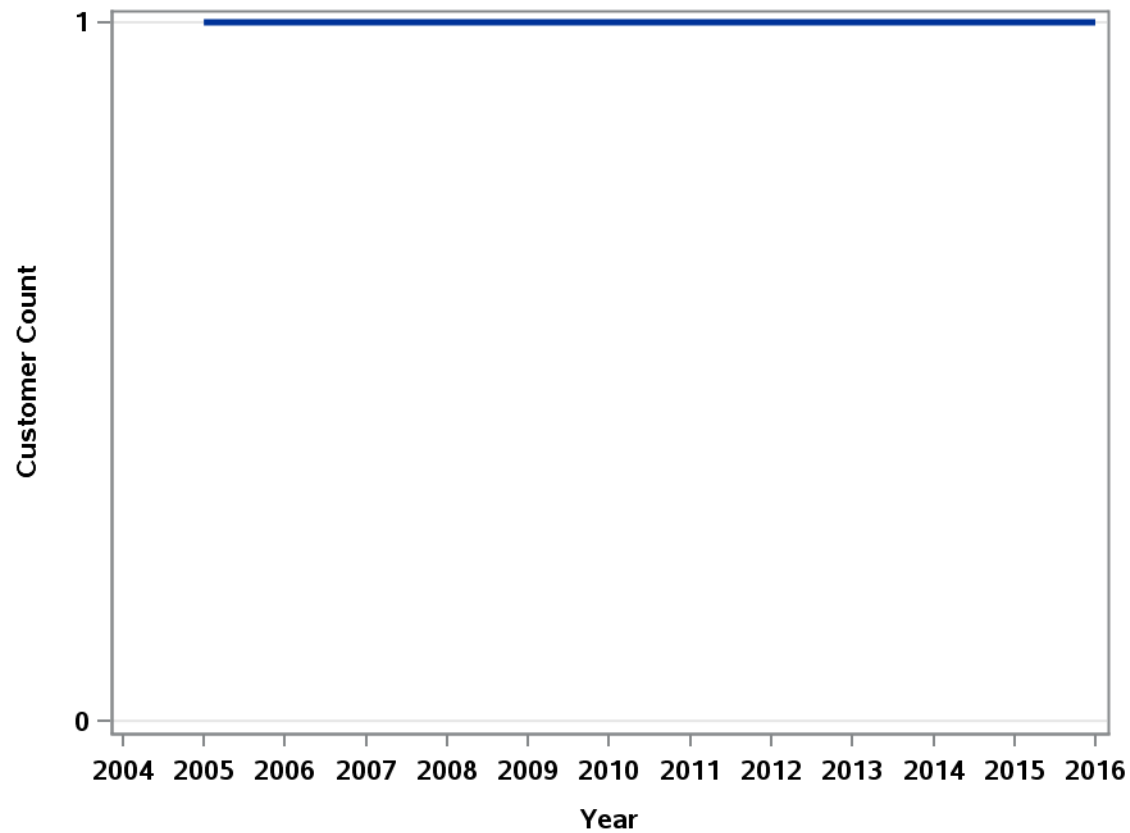
Non-Summer Commercial SPS Billed Customer Counts

Non-Summer Industrial LGS Billed Customer Counts

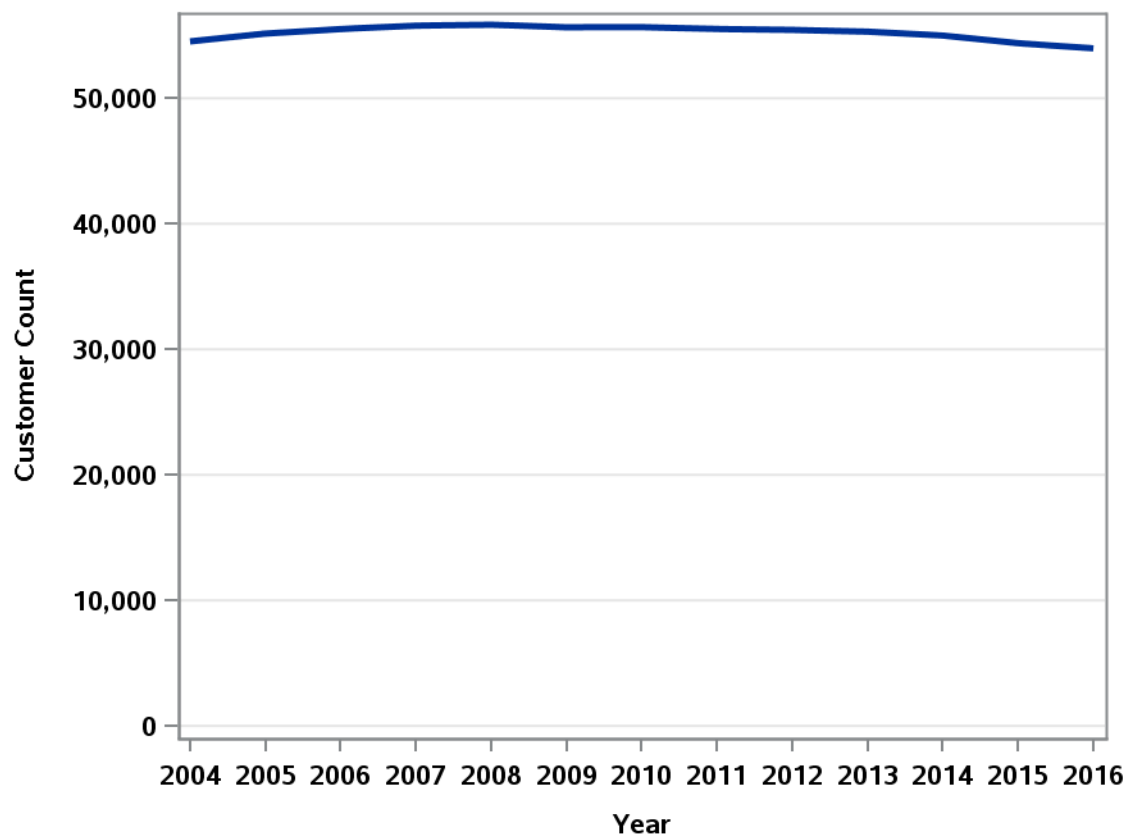
Non-Summer Industrial LPS Billed Customer Counts

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

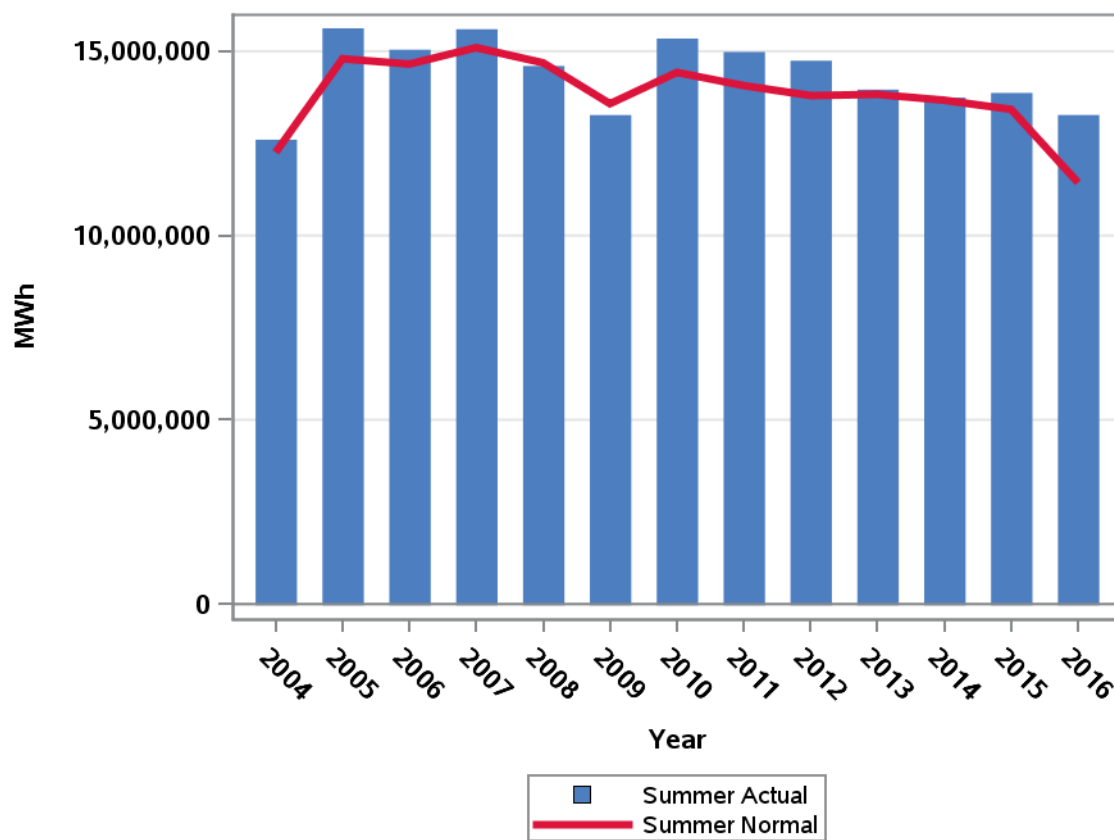


Non-Summer Billed Customer Class Counts by Year

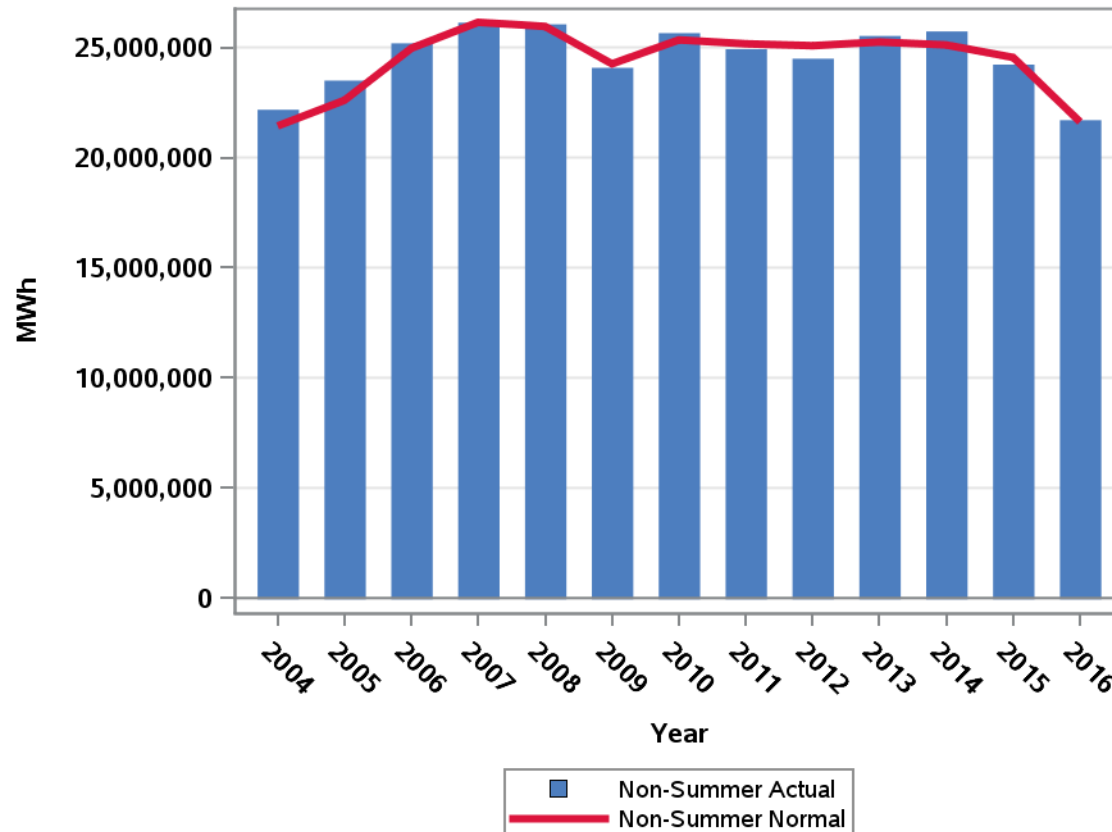
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	1,001,499	8,026	23	130,457	450	1,109	38	3,647	196	54,526	
2005	1,011,103	8,233	25	132,661	451	1,091	37	3,590	193	55,149	1
2006	1,020,468	8,468	26	134,522	449	1,080	35	3,530	191	55,514	1
2007	1,027,611	8,671	28	136,214	457	1,075	35	3,471	193	55,781	1
2008	1,033,036	8,790	29	137,888	455	1,070	38	3,395	191	55,856	1
2009	1,033,686	8,879	31	138,399	454	1,059	39	3,293	188	55,651	1
2010	1,035,834	8,929	35	139,573	456	1,035	37	3,241	187	55,668	1
2011	1,034,824	9,004	35	140,199	462	1,016	36	3,192	186	55,521	1
2012	1,035,923	9,099	35	141,464	462	998	37	3,148	184	55,442	1
2013	1,039,196	9,197	35	142,457	468	988	39	3,123	184	55,309	1
2014	1,041,853	9,313	33	142,902	474	985	37	3,074	185	54,993	1
2015	1,044,160	9,413	32	143,780	473	987	36	3,044	186	54,384	1
2016	1,048,208	9,467	31	144,665	475	967	35	2,999	186	53,972	1

Historical Net System Load (2004 - 2016)⁸

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

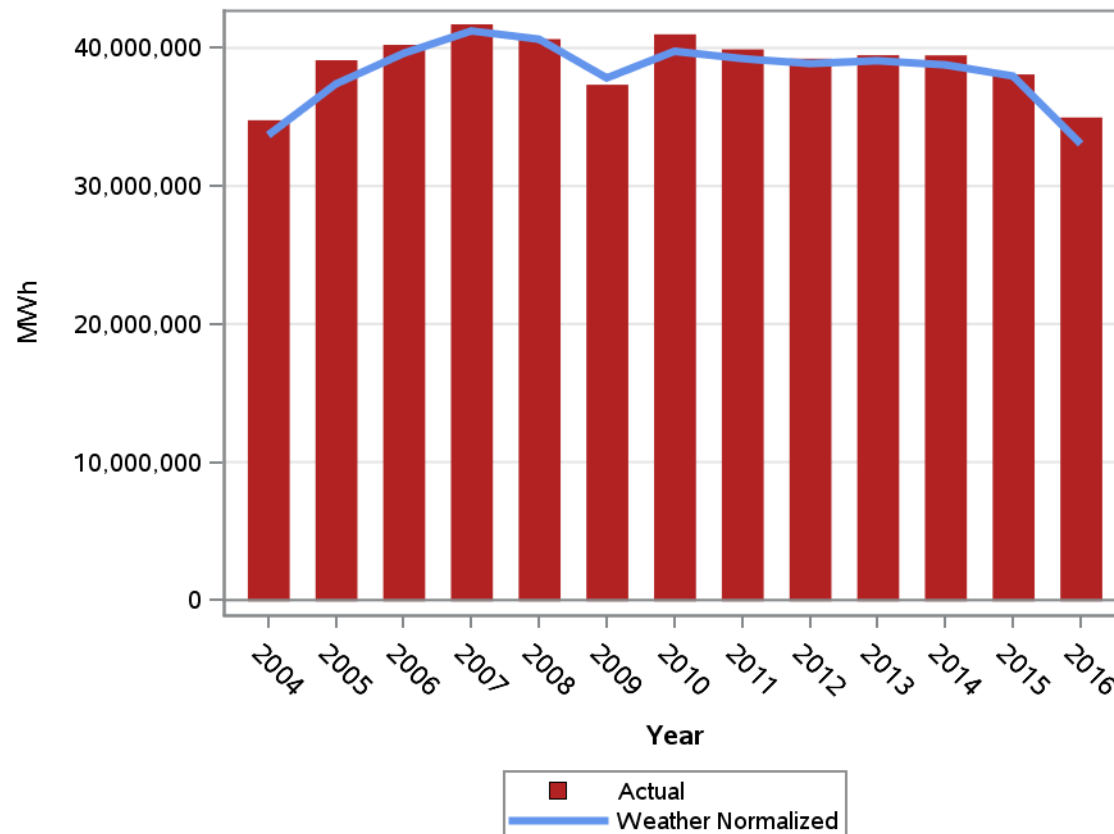


⁸4 CSR 240-22.030(8)(C)1; 4 CSR 240-22.030(8)(C)2

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

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

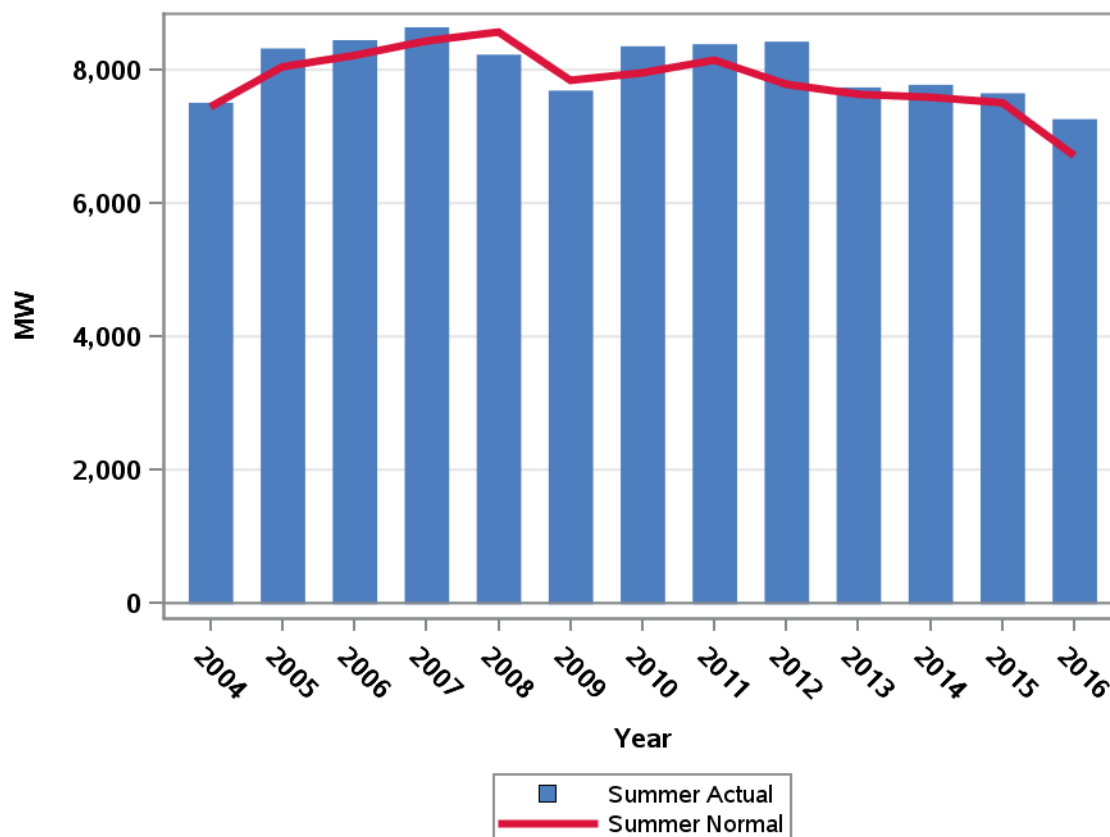
Year	Summer Actual	Summer Normalized	Non-Summer Actual	Non-Summer Normalized
2004	12,598,825	22,169,097	12,258,670	21,433,308
2005	15,621,885	23,493,231	14,794,314	22,601,168
2006	15,040,807	25,184,569	14,652,429	24,962,452
2007	15,596,739	26,121,358	15,096,543	26,139,707
2008	14,599,723	26,047,180	14,685,282	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

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

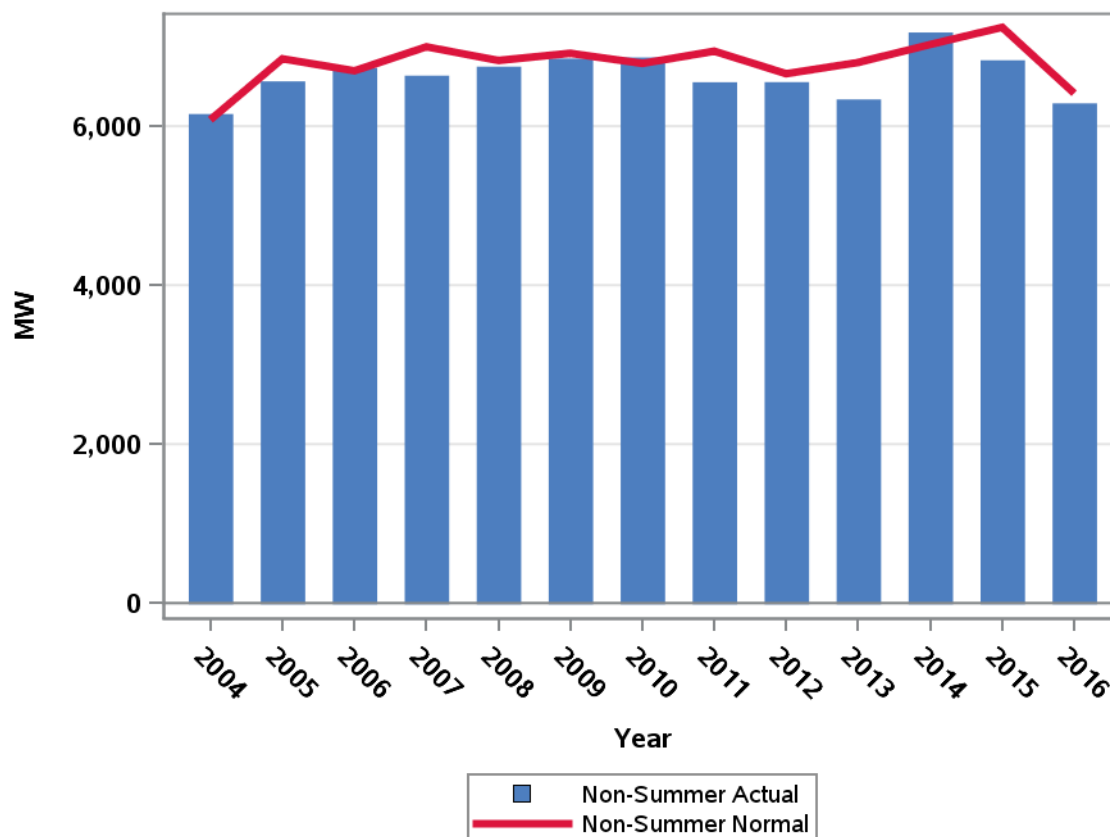
Annual Actual and Weather-Normalized Net System Energy (MWh)

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

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



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

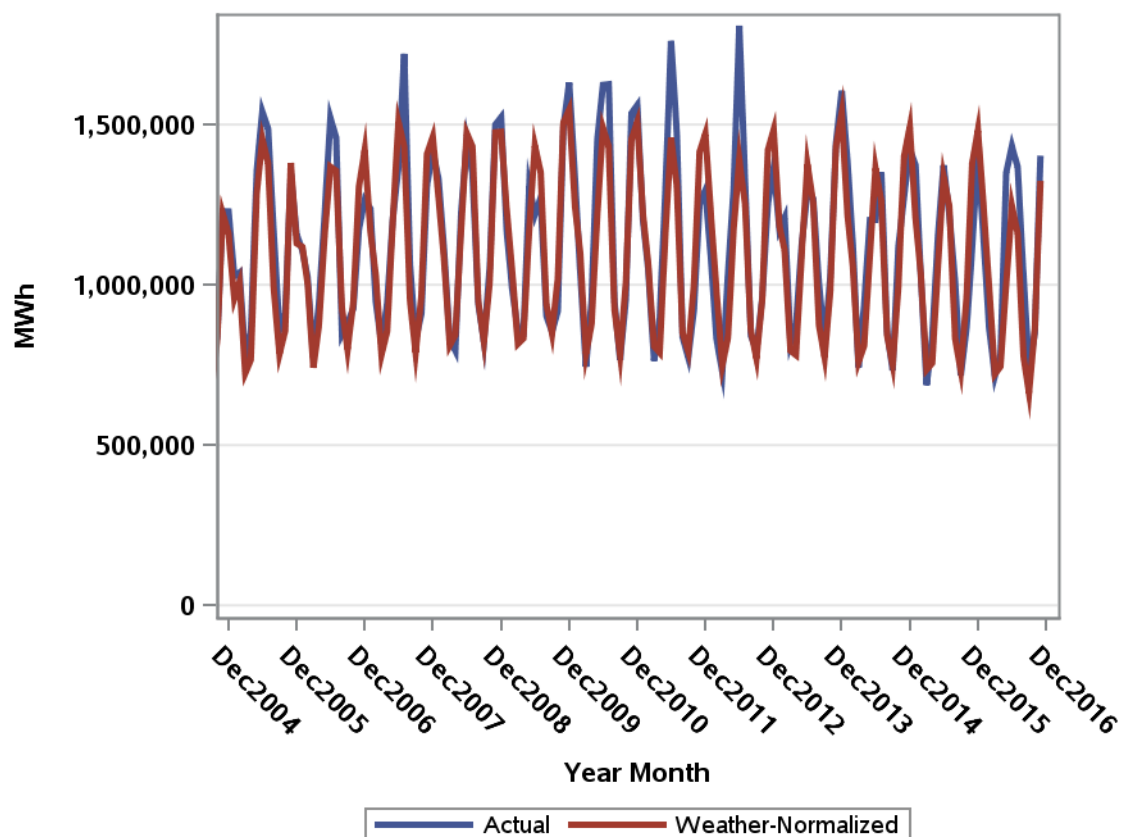


Historical Actual and Weather-Normalized Summer and Non-Summer System Peak Demand (MW)

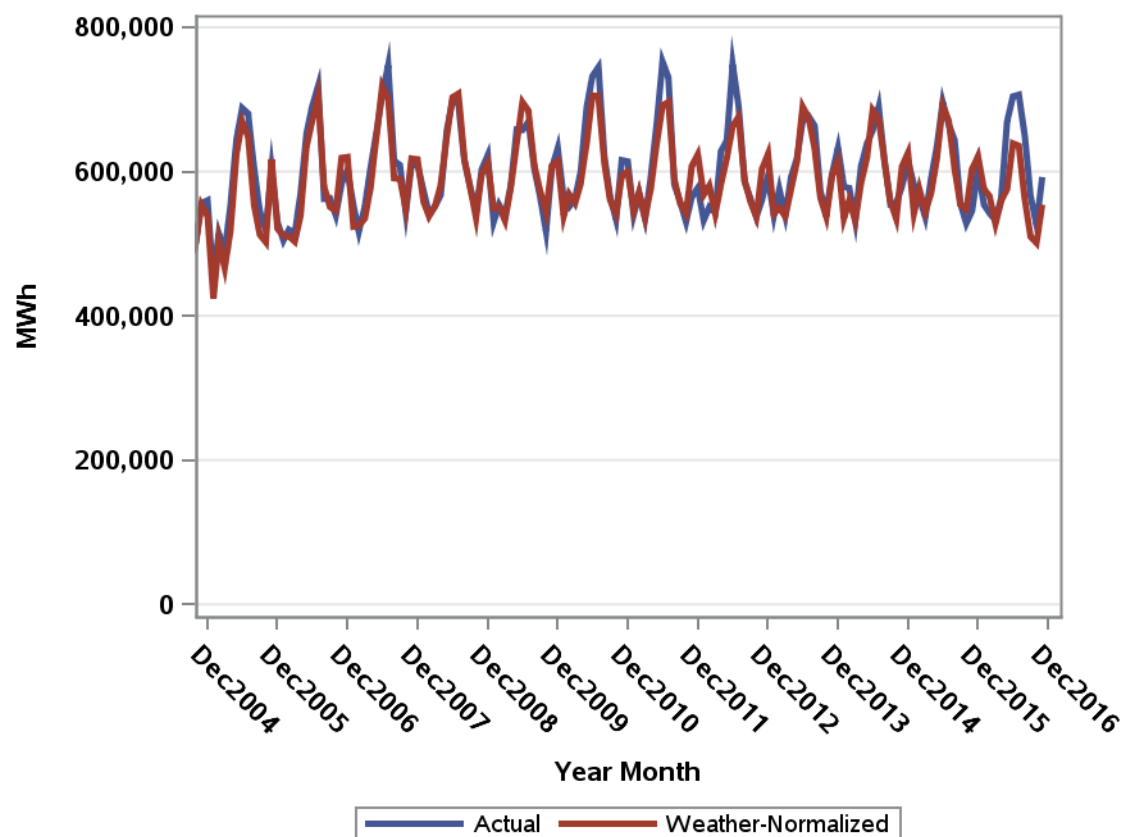
Year	Summer Actual	Summer Normalized	Non-Summer Actual	Non-Summer Normalized
2004	7,506	6,153	7,445	6,081
2005	8,321	6,564	8,046	6,848
2006	8,446	6,734	8,217	6,697
2007	8,638	6,635	8,433	6,998
2008	8,228	6,749	8,567	6,827
2009	7,688	6,850	7,843	6,917
2010	8,353	6,864	7,956	6,790
2011	8,384	6,553	8,146	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

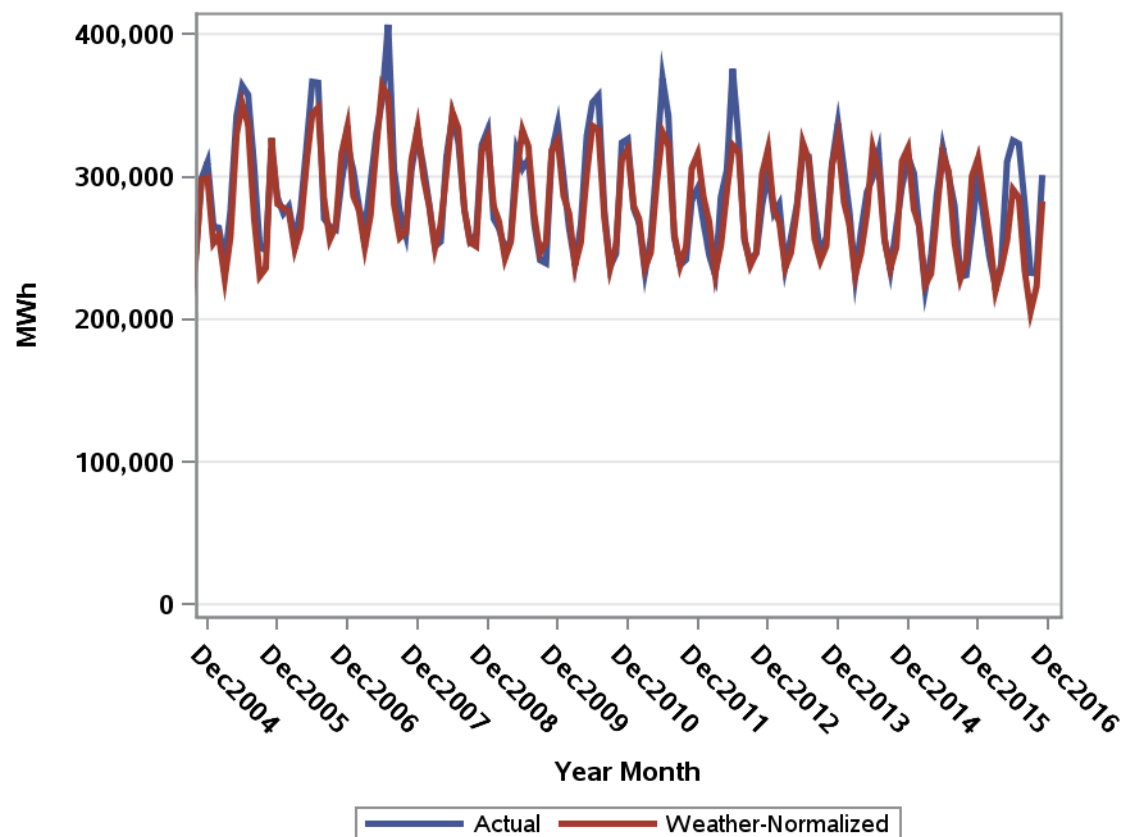
Historical Actual and Weather-Normalized Energy Usage by Classes for All Months (2004 - 2016)⁹

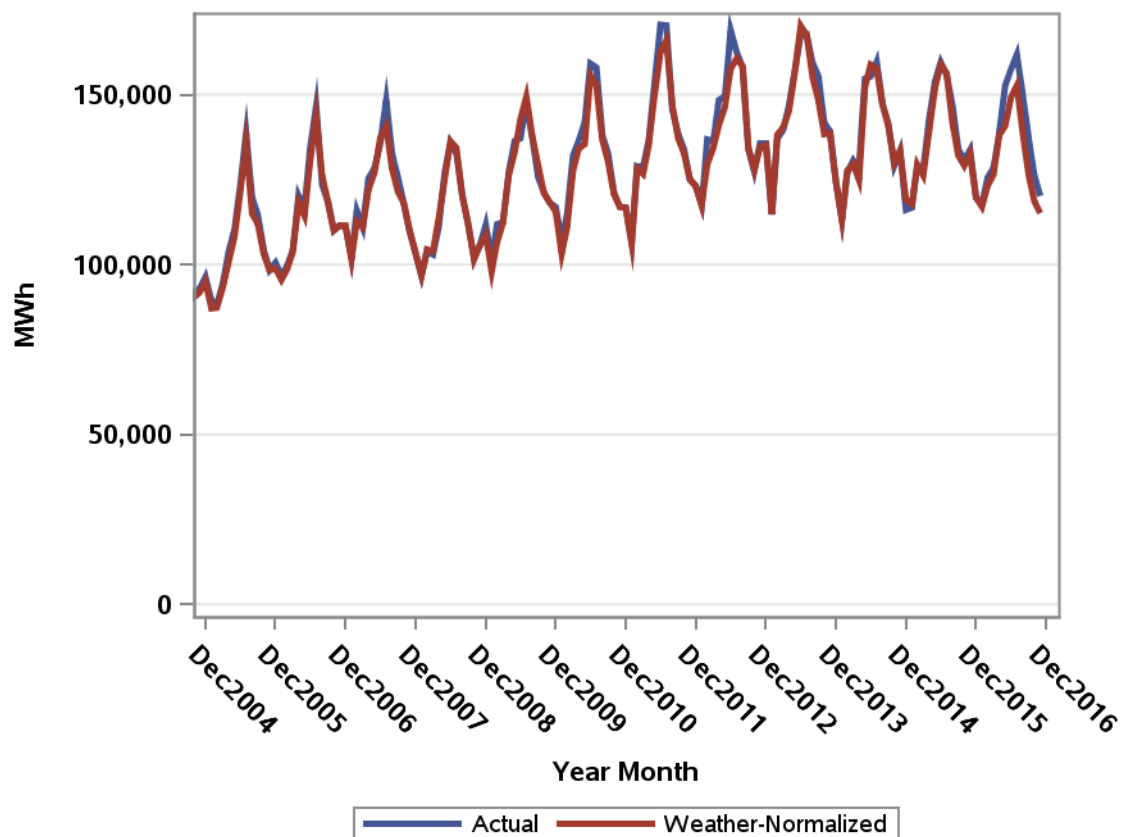
Residential Actual and Weather Normalized Monthly Sales (MWh)

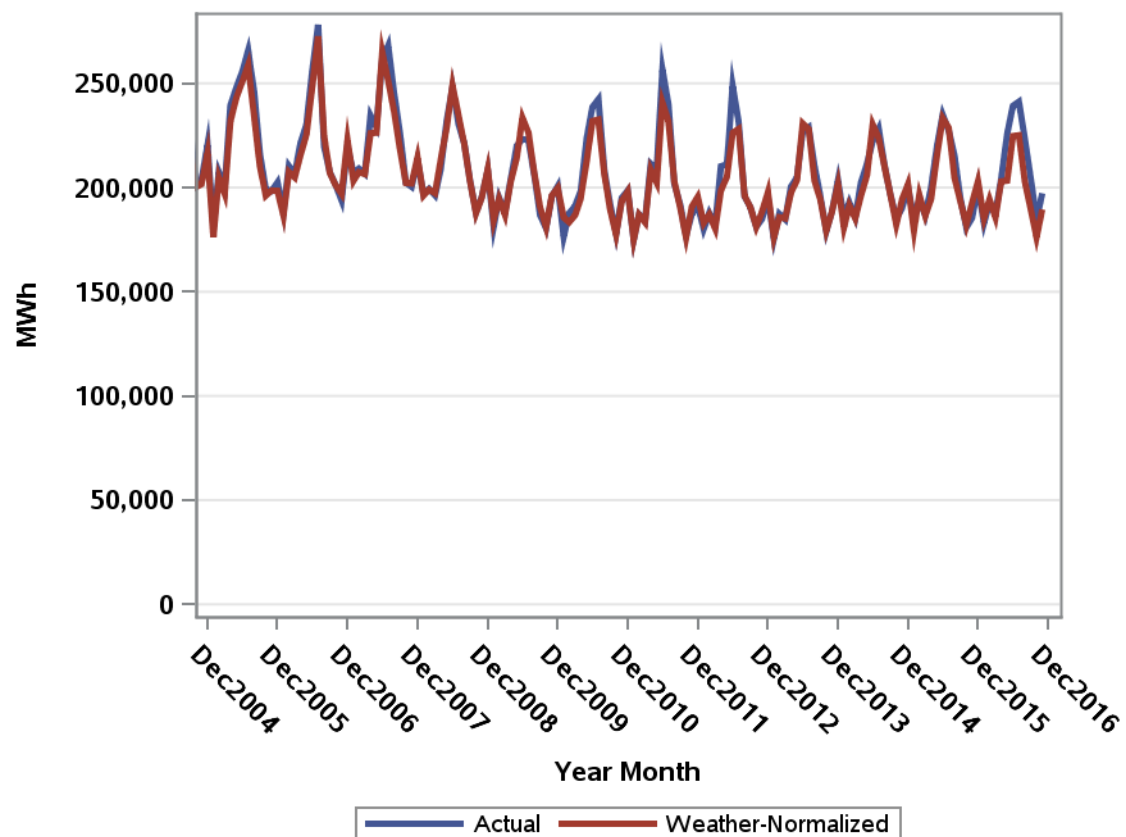


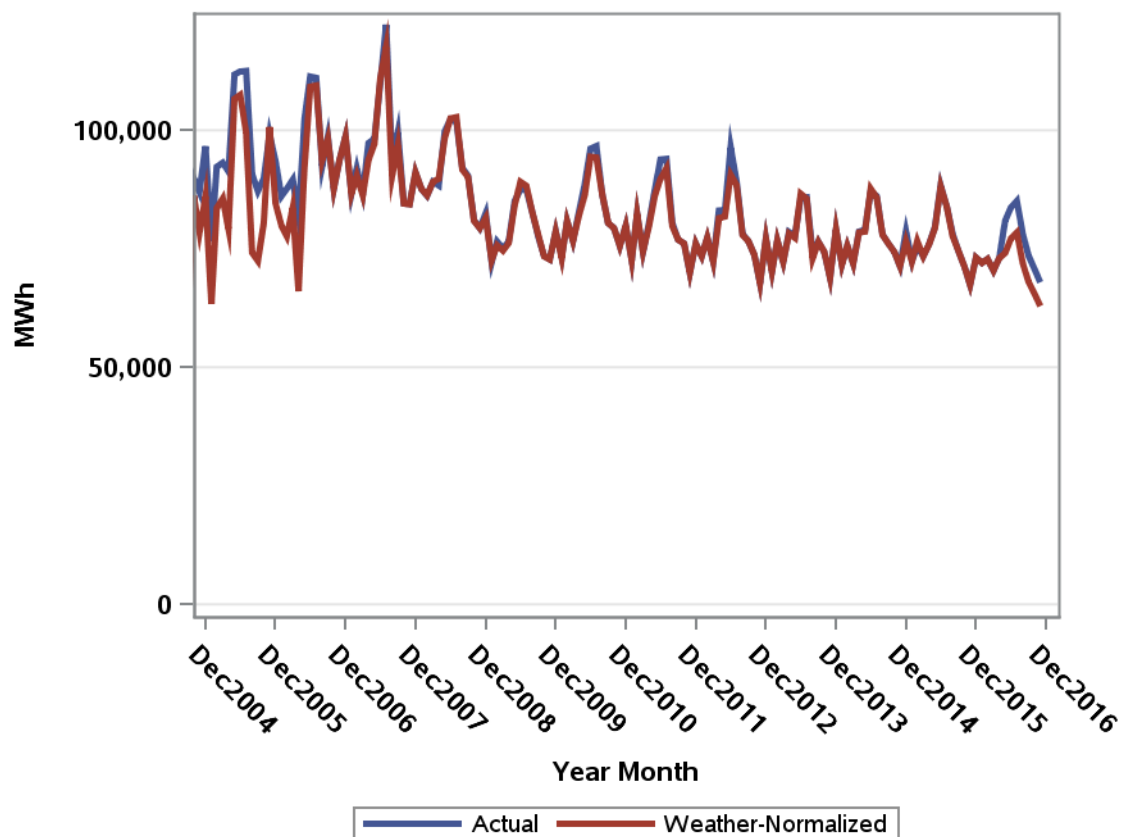
⁹4 CSR 240-22.030(7)(A)6

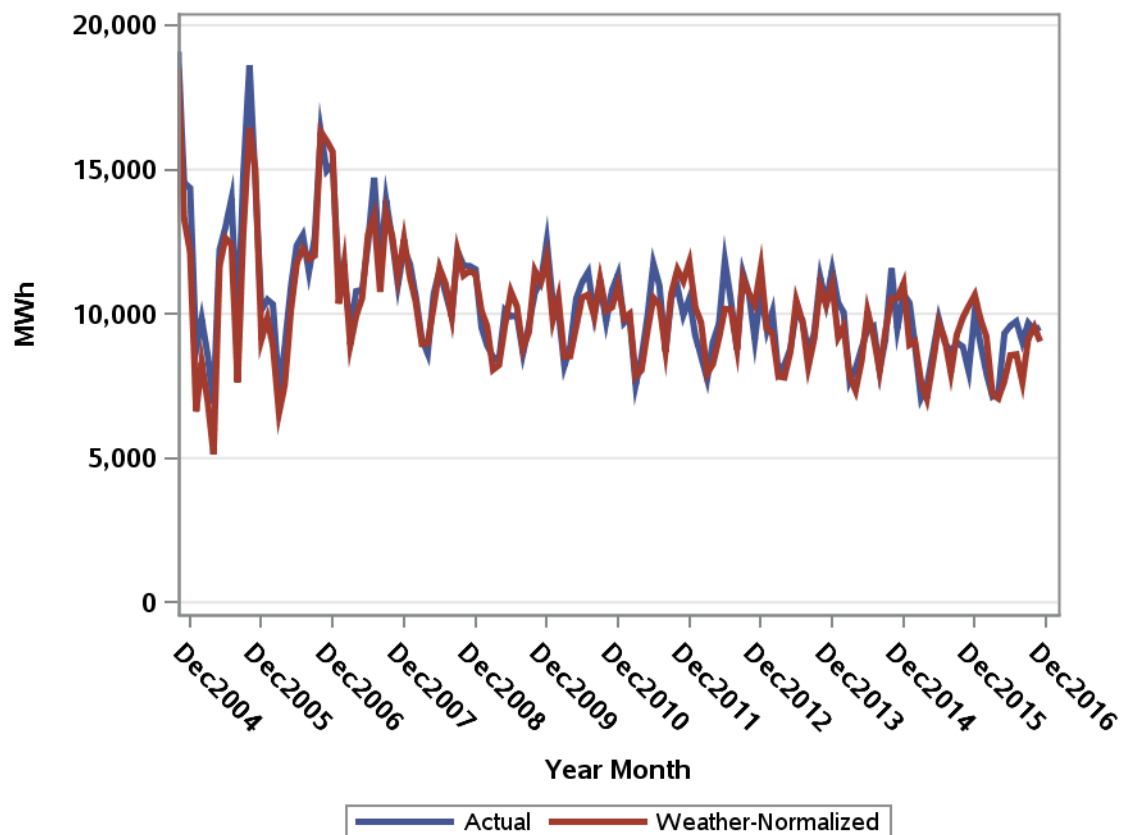
Commercial LGS Actual and Weather Normalized Monthly Sales (MWh)

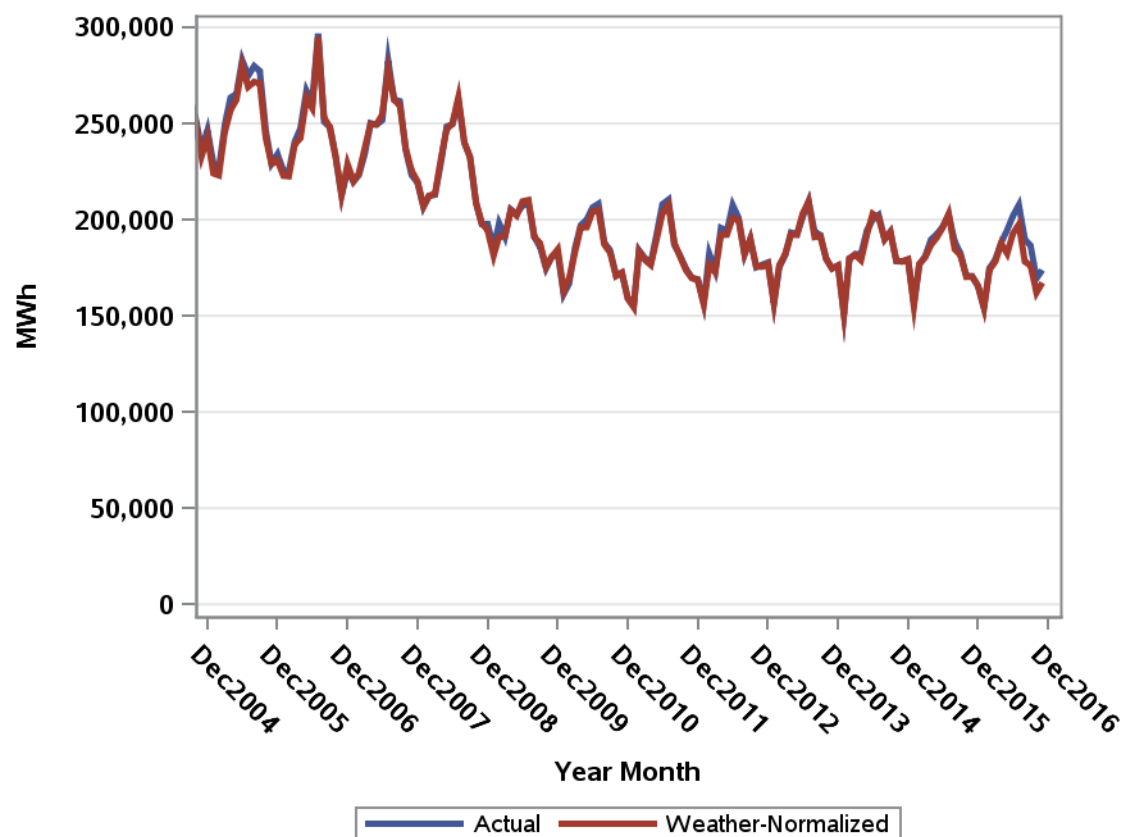
Commercial SGS Actual and Weather Normalized Monthly Sales (MWh)

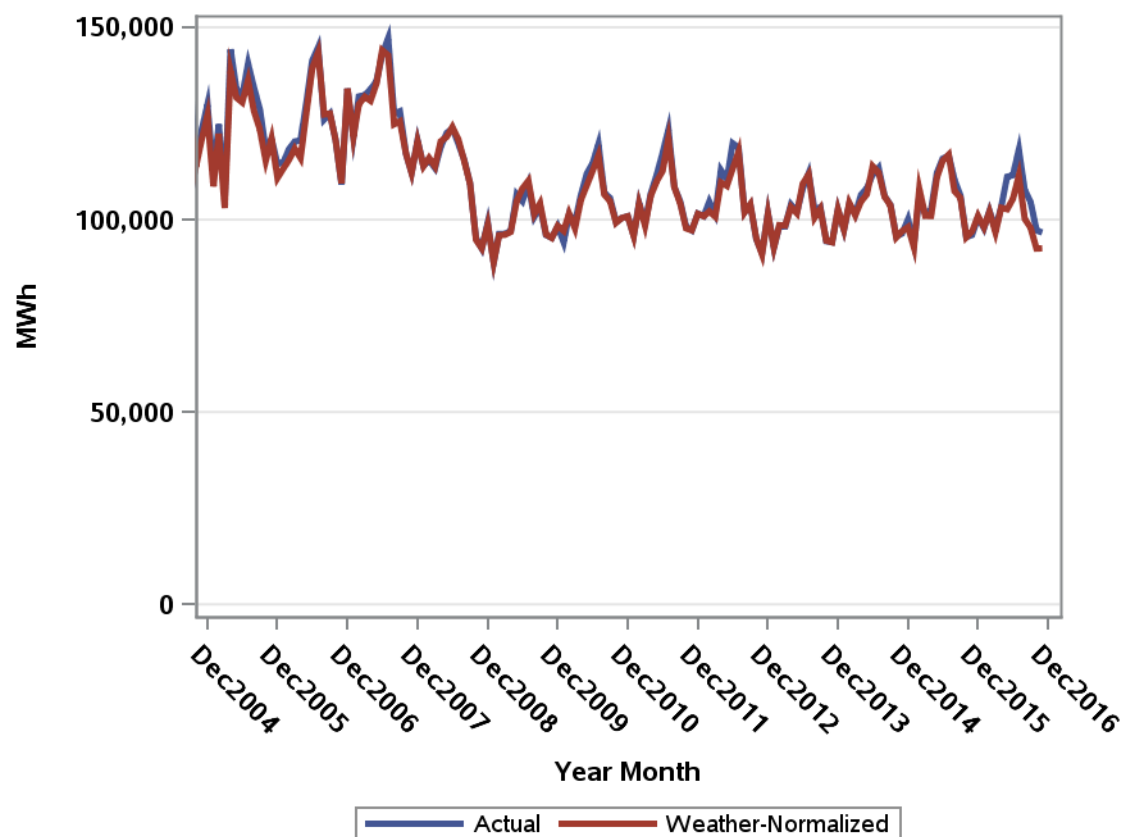
Commercial LPS Actual and Weather Normalized Monthly Sales (MWh)

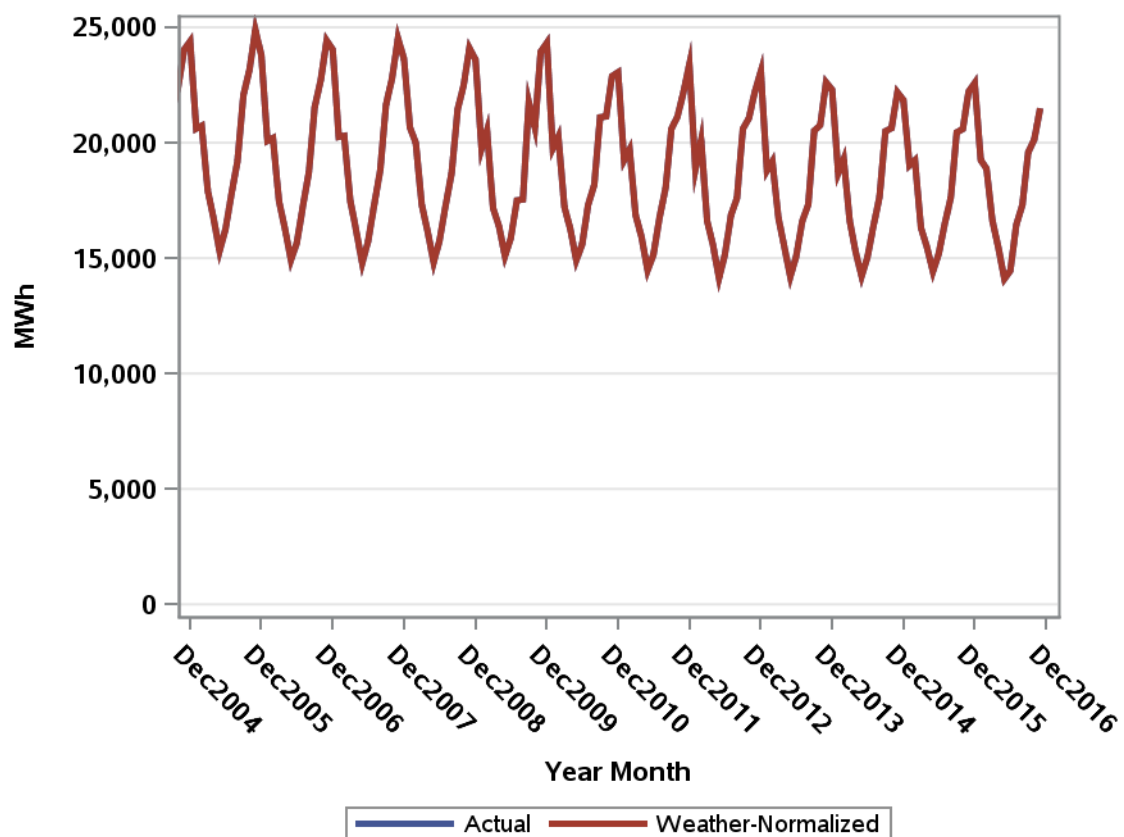
Commercial SPS Actual and Weather Normalized Monthly Sales (MWh)

Industrial LGS Actual and Weather Normalized Monthly Sales (MWh)

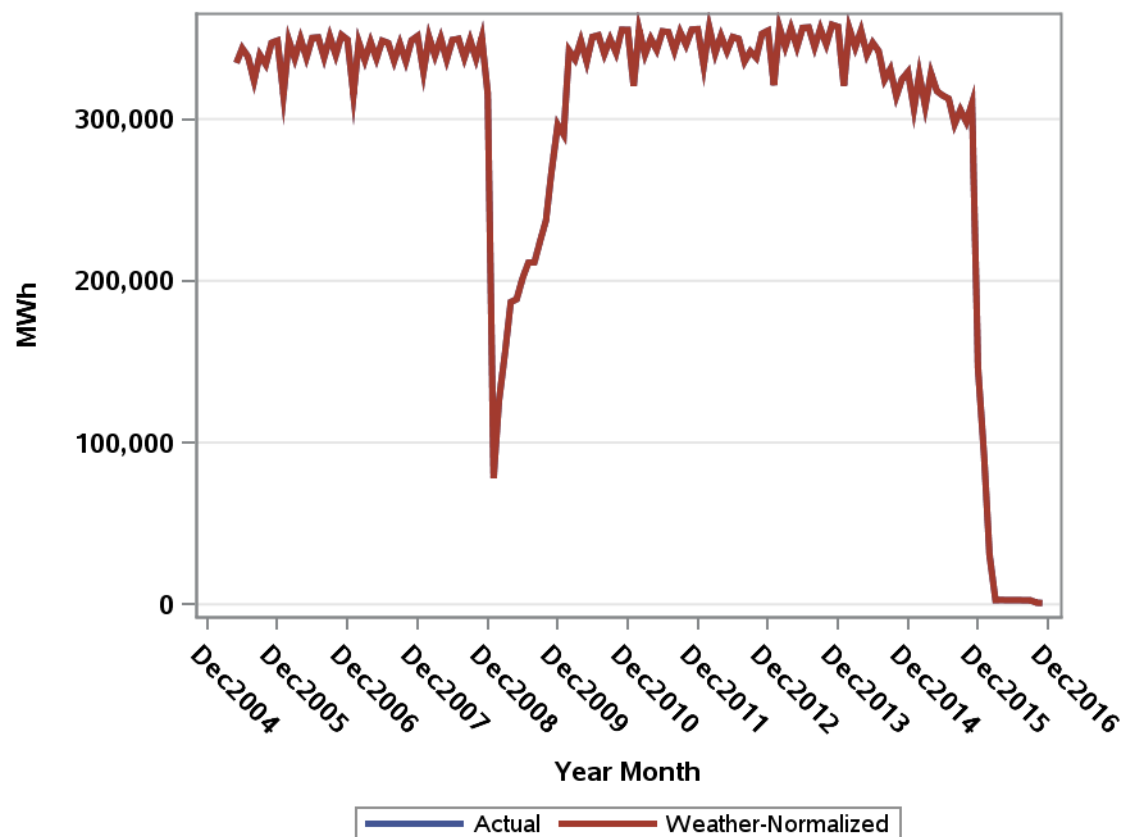
Industrial SGS Actual and Weather Normalized Monthly Sales (MWh)

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)

Large Transmission Service Actual and Weather Normalized Monthly Sales (MWh)



Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2004	1	1,260,017	554,091	87,808	309,533	220,084	91,758	262,526	13,017	122,069	23,561	
2004	2	1,117,245	484,189	82,642	280,276	217,432	81,060	232,839	9,650	126,204	20,586	
2004	3	942,950	468,352	84,361	260,707	206,355	83,051	243,883	9,335	128,091	19,957	
2004	4	761,357	472,465	87,170	239,602	211,049	84,608	261,294	9,077	126,933	17,263	
2004	5	985,039	559,657	97,890	275,468	244,786	90,767	266,536	8,591	136,577	16,104	
2004	6	1,072,042	607,326	95,769	302,206	246,643	112,869	261,025	12,131	139,957	14,786	
2004	7	1,312,893	625,146	103,250	330,813	263,100	107,770	285,918	11,901	141,928	15,724	
2004	8	1,172,532	584,392	103,079	299,275	251,513	91,427	276,213	8,741	143,192	17,245	
2004	9	953,283	583,606	100,759	292,682	230,681	97,172	268,482	11,098	125,061	18,643	
2004	10	760,001	515,610	94,062	228,664	231,170	79,838	263,702	11,798	137,371	21,371	
2004	11	836,009	501,858	90,713	246,178	200,777	89,886	252,469	19,082	114,437	22,416	
2004	12	1,229,860	556,227	92,857	298,816	203,816	86,963	236,484	14,547	123,139	24,034	
2005	1	1,228,937	560,218	96,337	310,103	220,472	96,618	246,648	14,361	129,935	24,394	
2005	2	1,027,157	449,696	89,331	265,249	180,951	76,534	228,984	8,740	112,397	20,610	
2005	3	1,038,667	514,405	88,176	264,157	207,575	92,304	226,036	9,814	124,808	20,736	
2005	4	776,883	488,714	94,297	240,270	200,730	93,154	248,970	8,546	106,122	17,939	
2005	5	852,245	553,572	103,541	276,590	239,671	91,251	263,423	6,886	144,275	16,720	
2005	6	1,354,567	644,871	110,264	342,377	248,167	111,749	265,369	12,230	134,023	15,316	334,742
2005	7	1,541,209	688,024	123,120	363,900	255,509	112,391	282,952	13,001	132,203	16,246	343,743
2005	8	1,488,050	680,479	138,611	357,349	265,629	112,526	274,774	13,996	140,538	17,792	338,448
2005	9	1,155,121	604,907	119,714	307,476	246,112	90,754	279,788	9,463	134,195	19,232	323,669

(continued next page)

Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2005	10	857,489	544,227	114,509	250,290	216,137	87,159	277,265	14,910	128,626	22,057	339,695
2005	11	908,924	518,766	104,204	248,571	199,085	89,845	246,166	18,611	118,071	23,160	333,796
2005	12	1,346,381	603,639	98,385	320,007	198,364	99,171	229,227	14,556	120,956	24,876	347,182
2006	1	1,157,440	529,766	100,564	285,210	202,502	93,477	234,096	10,132	114,425	23,768	348,497
2006	2	1,107,012	504,628	96,684	274,219	188,353	86,082	225,463	10,488	114,962	20,081	315,099
2006	3	1,025,374	519,498	99,439	279,197	210,384	87,661	224,906	10,327	118,272	20,203	348,684
2006	4	772,206	514,233	104,140	255,238	206,481	89,578	240,548	7,367	120,333	17,478	337,471
2006	5	945,802	568,744	120,314	276,587	221,420	81,648	247,482	8,911	120,601	16,291	349,706
2006	6	1,227,924	652,353	116,457	320,643	230,282	102,250	267,010	10,911	130,583	14,923	338,097
2006	7	1,521,237	690,648	134,347	366,572	255,915	111,322	260,820	12,375	141,284	15,654	350,181
2006	8	1,459,324	718,732	146,555	365,893	278,119	111,053	296,723	12,730	144,816	17,231	350,510
2006	9	845,846	562,424	123,482	270,449	219,512	92,400	250,857	11,452	125,985	18,722	338,003
2006	10	880,735	563,198	118,476	265,129	207,404	98,615	248,124	12,641	127,542	21,567	351,040
2006	11	926,246	539,524	110,096	262,925	201,036	87,725	232,313	16,289	120,393	22,715	339,614
2006	12	1,174,093	583,450	111,497	296,742	193,913	93,804	212,793	14,956	109,205	24,431	351,975
2007	1	1,264,862	602,137	111,028	322,436	219,935	98,700	225,932	15,187	134,055	24,034	349,157
2007	2	1,237,194	552,772	101,920	303,698	206,906	86,618	219,786	11,253	121,624	20,254	315,145
2007	3	948,602	516,957	115,791	279,519	209,090	91,941	223,135	11,254	132,039	20,298	347,419
2007	4	816,365	551,254	110,992	261,391	206,641	86,671	234,329	9,493	132,372	17,474	336,457
2007	5	939,362	604,554	125,411	295,557	234,537	97,321	250,209	10,788	133,907	16,202	347,746
2007	6	1,208,526	654,374	128,323	330,623	229,064	98,236	249,326	10,835	135,959	14,792	337,432

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Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2007	7	1,366,950	706,388	135,611	353,856	261,269	109,900	251,747	12,454	142,936	15,715	348,441
2007	8	1,720,722	747,415	148,214	406,566	268,100	122,252	282,537	14,717	147,104	17,298	347,077
2007	9	1,063,139	614,877	132,565	304,341	245,172	93,621	262,522	11,662	127,501	18,795	335,944
2007	10	828,025	609,073	125,659	274,598	226,460	99,636	261,573	13,939	128,151	21,651	346,699
2007	11	910,792	543,850	117,868	259,149	202,313	84,541	235,963	12,612	117,277	22,803	335,813
2007	12	1,311,783	610,697	109,694	305,281	200,379	84,429	223,193	11,004	112,232	24,526	348,741
2008	1	1,416,554	609,387	103,454	329,653	213,115	91,101	219,212	12,279	120,566	23,620	351,378
2008	2	1,329,536	573,749	96,702	307,233	197,073	87,588	206,586	11,712	113,947	20,638	329,066
2008	3	1,113,825	541,285	103,793	281,671	199,389	86,185	212,289	10,616	115,509	20,007	350,826
2008	4	831,737	551,822	102,940	251,047	196,249	89,146	212,923	9,136	113,417	17,306	339,276
2008	5	794,975	567,436	111,104	254,425	208,889	88,361	229,248	8,630	118,976	16,144	349,957
2008	6	1,223,863	656,477	127,093	315,231	232,126	99,732	248,419	10,681	122,529	14,823	336,879
2008	7	1,446,908	698,162	135,874	342,673	247,931	102,294	249,638	11,504	123,742	15,764	348,935
2008	8	1,345,977	694,399	132,747	323,853	230,758	101,825	262,017	10,708	119,710	17,288	349,672
2008	9	940,246	615,356	120,421	277,356	221,164	92,034	239,943	9,920	115,462	18,690	337,801
2008	10	822,246	578,741	112,143	254,565	203,106	90,370	232,476	12,174	109,384	21,424	348,885
2008	11	1,051,993	545,933	102,002	258,406	188,051	80,996	208,730	11,668	95,194	22,472	337,365
2008	12	1,499,910	603,338	105,532	322,359	195,482	79,339	197,810	11,661	92,532	24,094	350,338
2009	1	1,523,114	622,567	111,695	332,915	208,229	82,491	197,716	11,547	99,197	23,602	315,773
2009	2	1,159,742	530,481	100,948	270,614	181,266	72,149	184,925	9,517	88,955	19,744	78,148
2009	3	989,418	554,147	111,876	263,794	195,185	76,543	198,125	8,913	96,283	20,536	126,122

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Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2009	4	858,097	538,700	112,434	248,596	187,927	75,048	191,130	8,499	96,296	17,157	155,320
2009	5	851,399	581,016	127,233	255,459	204,065	76,596	205,347	8,368	97,073	16,390	186,888
2009	6	1,309,611	658,389	136,341	318,006	220,040	85,101	202,950	10,118	106,562	15,096	188,714
2009	7	1,218,536	657,610	137,156	305,634	223,168	87,465	207,271	9,911	104,801	15,872	201,301
2009	8	1,271,640	669,047	147,353	312,198	222,929	87,475	208,923	9,942	109,184	17,502	211,232
2009	9	902,546	604,162	137,284	266,732	205,879	82,664	190,925	8,629	100,746	17,542	211,428
2009	10	852,819	565,407	125,731	241,407	186,668	77,723	185,774	9,580	103,349	21,769	224,552
2009	11	918,099	517,454	121,183	239,240	180,481	73,460	174,695	10,752	95,994	20,665	237,551
2009	12	1,493,365	604,822	118,155	317,262	195,733	72,752	180,785	11,081	95,286	23,948	268,811
2010	1	1,631,070	632,393	116,907	336,655	200,708	78,703	182,460	12,505	98,254	24,326	296,523
2010	2	1,334,505	563,049	107,056	298,267	176,523	73,255	161,306	10,429	94,154	19,758	290,430
2010	3	1,041,210	551,292	114,647	263,911	187,679	80,823	166,699	10,114	101,310	20,264	342,412
2010	4	744,682	562,463	132,020	239,008	191,063	76,641	185,170	8,201	99,278	17,221	336,959
2010	5	950,841	600,125	136,557	265,065	198,438	82,536	197,095	8,852	106,196	16,279	348,489
2010	6	1,454,525	689,019	141,850	328,188	223,634	88,592	200,020	10,530	111,900	14,911	335,430
2010	7	1,623,827	732,404	159,099	352,034	238,654	96,131	206,283	11,097	114,563	15,598	350,880
2010	8	1,626,084	744,710	157,961	356,848	242,365	96,671	208,247	11,449	119,608	17,321	351,850
2010	9	947,125	620,765	137,917	276,189	208,290	86,333	187,937	9,986	106,931	18,175	340,173
2010	10	765,893	565,137	132,634	236,912	191,897	80,416	184,025	11,061	105,598	21,101	349,477
2010	11	956,389	533,583	120,960	245,827	177,835	79,352	170,909	9,733	99,299	21,139	340,950
2010	12	1,535,705	615,660	116,968	323,875	195,053	75,577	172,378	10,824	100,448	22,883	355,200

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Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2011	1	1,560,757	614,063	116,706	326,490	198,598	79,865	158,989	11,372	100,893	23,050	355,134
2011	2	1,198,156	540,617	106,614	277,512	175,115	72,573	155,008	9,693	95,951	19,250	320,686
2011	3	1,046,993	569,315	128,927	267,567	187,072	82,356	183,985	9,891	104,343	19,710	355,339
2011	4	762,956	534,814	128,632	233,012	184,136	74,402	179,926	7,548	99,123	16,847	340,007
2011	5	893,363	591,743	136,632	255,997	211,392	80,101	177,206	8,505	106,763	15,922	349,700
2011	6	1,296,514	666,523	153,857	310,651	208,655	87,308	192,430	9,949	111,731	14,472	342,780
2011	7	1,761,170	752,365	170,565	368,935	256,436	93,832	208,035	11,736	117,234	15,149	354,241
2011	8	1,473,655	730,176	170,383	342,423	239,874	93,957	210,390	10,968	123,418	16,751	353,736
2011	9	836,268	582,006	145,575	256,932	201,712	80,419	186,801	8,685	108,475	18,023	342,272
2011	10	773,695	558,337	138,483	238,051	192,004	76,901	181,282	10,573	104,766	20,601	353,841
2011	11	920,838	530,278	133,925	241,804	176,868	76,123	174,405	10,919	98,172	21,126	345,838
2011	12	1,253,114	565,404	125,034	283,661	187,322	69,952	169,838	9,954	97,215	22,159	355,347
2012	1	1,295,468	577,318	123,214	292,077	191,384	76,128	169,026	10,534	101,578	23,399	355,630
2012	2	1,074,516	532,310	117,573	266,678	180,122	73,453	156,508	9,223	100,918	18,861	332,871
2012	3	829,624	550,766	136,807	244,687	187,749	77,318	182,212	8,540	104,691	20,100	356,490
2012	4	728,103	543,253	136,263	230,978	181,988	72,303	173,662	7,744	101,457	16,605	340,658
2012	5	1,029,808	628,361	148,399	286,033	210,217	83,072	195,615	9,033	112,862	15,556	351,443
2012	6	1,301,037	643,552	149,523	304,727	211,134	83,207	194,126	9,666	110,520	14,142	341,957
2012	7	1,808,415	748,343	168,860	375,641	248,723	96,402	207,500	11,832	119,829	15,159	350,730
2012	8	1,322,355	690,813	162,523	326,028	231,698	89,234	200,820	10,442	118,710	16,859	349,639
2012	9	841,075	585,962	158,114	255,127	195,674	78,075	181,898	8,761	101,951	17,607	335,635

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Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2012	10	795,536	563,048	134,075	240,384	190,640	76,650	189,787	11,404	103,901	20,598	341,916
2012	11	960,490	537,342	127,445	246,310	181,113	73,768	175,309	10,693	94,989	21,063	337,924
2012	12	1,250,488	561,089	135,645	279,285	184,959	67,734	176,548	9,107	91,334	22,203	352,778
2013	1	1,366,879	594,004	135,621	303,859	194,935	77,193	177,747	10,767	101,695	23,098	354,661
2013	2	1,173,745	539,337	114,711	274,524	175,513	70,236	156,626	9,427	92,780	18,788	321,026
2013	3	1,210,394	575,296	137,011	280,940	187,368	76,745	175,236	10,067	98,173	19,191	356,823
2013	4	818,730	539,056	139,648	237,173	184,732	72,263	181,663	7,953	98,218	16,751	344,761
2013	5	874,843	591,758	146,899	257,678	200,488	78,546	193,284	8,231	103,927	15,484	356,167
2013	6	1,130,725	618,653	157,324	280,519	204,845	77,703	192,469	8,778	102,072	14,204	344,631
2013	7	1,286,070	669,819	167,633	313,729	226,841	85,764	201,604	10,065	108,062	15,079	356,424
2013	8	1,268,787	676,633	167,813	313,822	228,895	85,874	209,517	9,787	112,025	16,606	356,715
2013	9	1,002,113	663,462	159,354	275,245	210,298	74,084	193,678	8,665	102,414	17,322	344,508
2013	10	814,682	572,528	155,495	246,251	195,898	76,520	192,020	9,343	103,294	20,517	355,977
2013	11	1,027,852	542,850	141,592	256,738	179,078	74,323	179,363	11,266	94,379	20,756	346,244
2013	12	1,441,701	596,187	139,254	309,527	188,636	68,945	174,694	10,369	94,160	22,613	358,325
2014	1	1,605,333	632,509	124,215	337,448	203,322	79,032	176,069	11,512	102,637	22,291	357,119
2014	2	1,385,003	578,886	113,231	305,857	185,426	71,709	150,960	10,379	97,439	18,689	320,762
2014	3	1,129,759	577,205	127,089	275,881	192,864	75,599	179,428	10,052	104,128	19,288	355,943
2014	4	742,629	531,656	130,647	230,285	185,692	71,866	182,166	7,667	101,480	16,629	344,427
2014	5	938,752	607,157	128,332	261,732	202,557	78,627	181,827	8,096	106,477	15,266	354,715
2014	6	1,202,351	638,885	154,702	289,149	211,271	79,020	194,384	8,805	108,189	14,214	339,855

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Historical Actual Energy Usage by Classes for All Months

Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2014	7	1,202,381	656,948	155,344	299,140	222,428	87,119	200,093	9,464	111,715	15,041	347,191
2014	8	1,350,653	689,392	159,612	316,843	228,215	86,139	202,459	9,573	113,487	16,416	342,073
2014	9	852,976	613,936	147,119	256,476	210,409	77,945	189,883	8,061	106,101	17,667	324,369
2014	10	733,583	555,024	141,503	234,384	196,832	76,119	193,784	9,134	103,909	20,501	330,783
2014	11	1,121,957	556,654	129,165	264,697	185,052	74,342	178,419	11,577	95,667	20,630	314,210
2014	12	1,274,715	579,739	133,452	293,071	190,118	71,305	178,220	9,495	96,386	22,186	324,755
2015	1	1,423,289	614,022	116,124	314,174	199,863	78,624	179,370	10,684	100,065	21,849	329,215
2015	2	1,372,970	581,172	116,783	302,412	185,182	72,427	156,757	10,373	93,593	19,019	306,439
2015	3	1,028,137	564,097	129,214	263,940	194,300	75,527	176,763	8,928	106,177	19,241	327,690
2015	4	687,303	537,058	128,026	221,194	186,726	73,413	181,072	7,074	101,451	16,306	308,002
2015	5	837,927	589,397	142,511	244,176	199,842	75,955	189,696	7,481	102,448	15,488	328,260
2015	6	1,153,860	635,177	153,841	288,267	219,741	79,622	192,539	8,670	112,166	14,420	317,267
2015	7	1,372,759	696,169	159,529	320,269	234,797	88,297	196,366	9,828	115,872	15,203	314,550
2015	8	1,218,219	665,444	155,779	300,234	227,361	83,980	202,430	9,004	116,645	16,503	312,654
2015	9	1,010,137	643,813	146,513	279,448	214,962	78,144	188,697	8,671	110,220	17,640	296,936
2015	10	717,246	555,861	133,892	229,797	194,867	74,569	182,593	9,006	106,323	20,447	305,685
2015	11	864,347	528,018	130,691	230,998	180,845	71,313	170,728	8,863	95,493	20,594	298,377
2015	12	1,114,196	545,281	133,749	263,937	185,392	67,433	170,642	8,012	96,036	22,216	309,758
2016	1	1,411,214	604,787	119,731	302,679	200,595	73,135	165,522	10,040	100,644	22,588	146,761
2016	2	1,137,638	553,875	117,826	269,772	182,946	72,026	154,404	8,894	97,783	19,242	93,147
2016	3	865,260	542,135	125,531	243,566	192,909	72,852	174,866	7,942	102,259	18,882	30,912

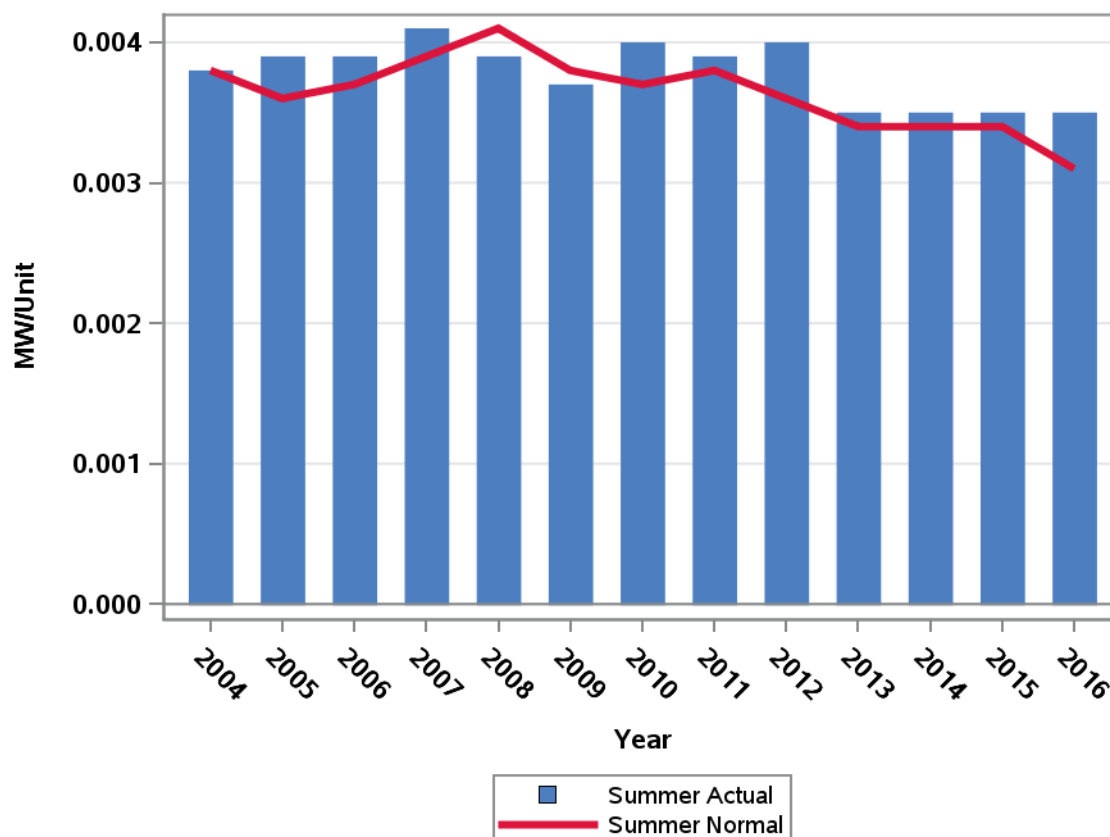
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Historical Actual Energy Usage by Classes for All Months

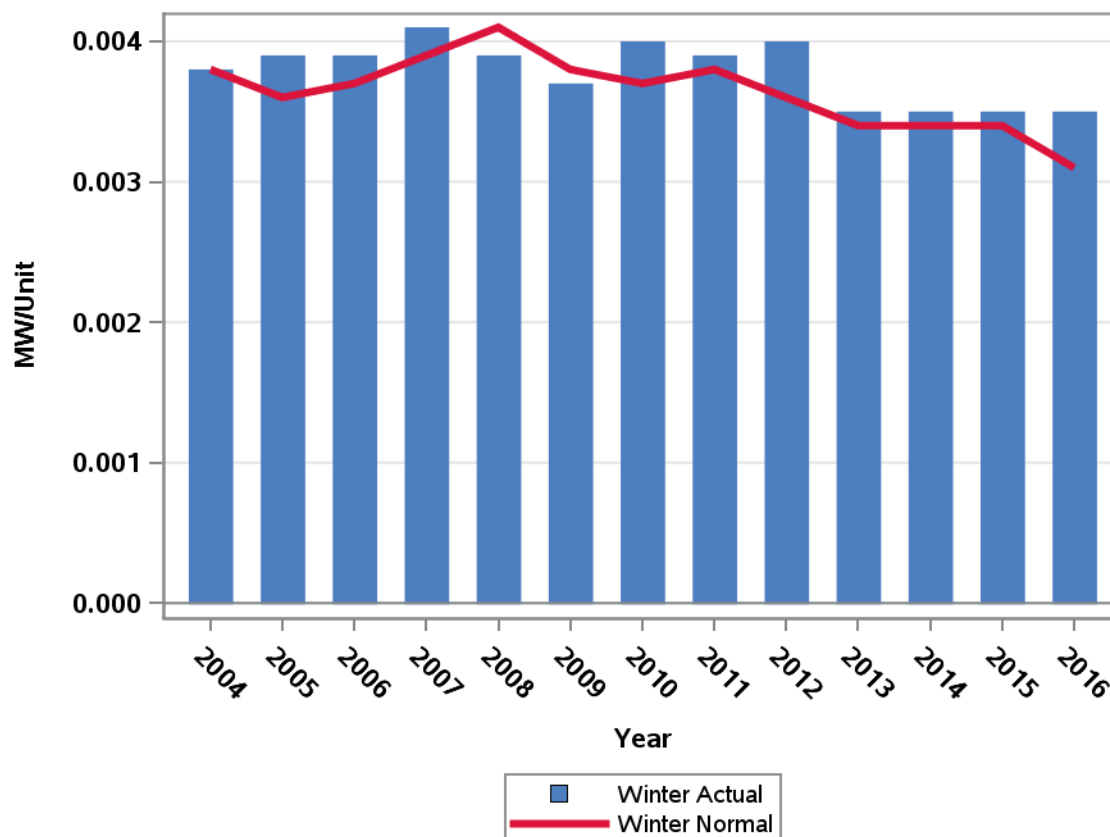
Year	Month	Residential	ComLGS	ComLPS	ComSGS	ComSPS	IndLGS	IndLPS	IndSGS	IndSPS	Lighting	LTS
2016	4	716,118	532,733	128,472	222,458	187,727	70,388	179,389	7,142	97,567	16,599	2,614
2016	5	782,417	563,155	138,555	238,611	204,055	73,056	188,128	7,266	103,357	15,460	2,705
2016	6	1,350,802	669,312	152,705	310,901	225,702	80,914	194,615	9,324	111,154	14,101	2,554
2016	7	1,432,673	704,121	157,389	325,399	239,167	83,722	201,964	9,583	111,546	14,447	2,603
2016	8	1,367,688	706,573	161,804	323,117	241,222	85,102	207,625	9,738	118,191	16,453	2,634
2016	9	1,031,944	648,806	149,843	279,442	223,603	78,052	189,673	9,026	107,633	17,300	2,482
2016	10	740,272	566,284	137,387	232,547	205,030	73,543	186,545	9,680	104,623	19,594	2,481
2016	11	848,430	526,233	126,001	232,100	184,132	70,717	169,478	9,438	97,203	20,133	1,041
2016	12	1,403,041	592,403	120,173	301,177	197,265	67,927	173,835	9,541	96,659	21,489	856

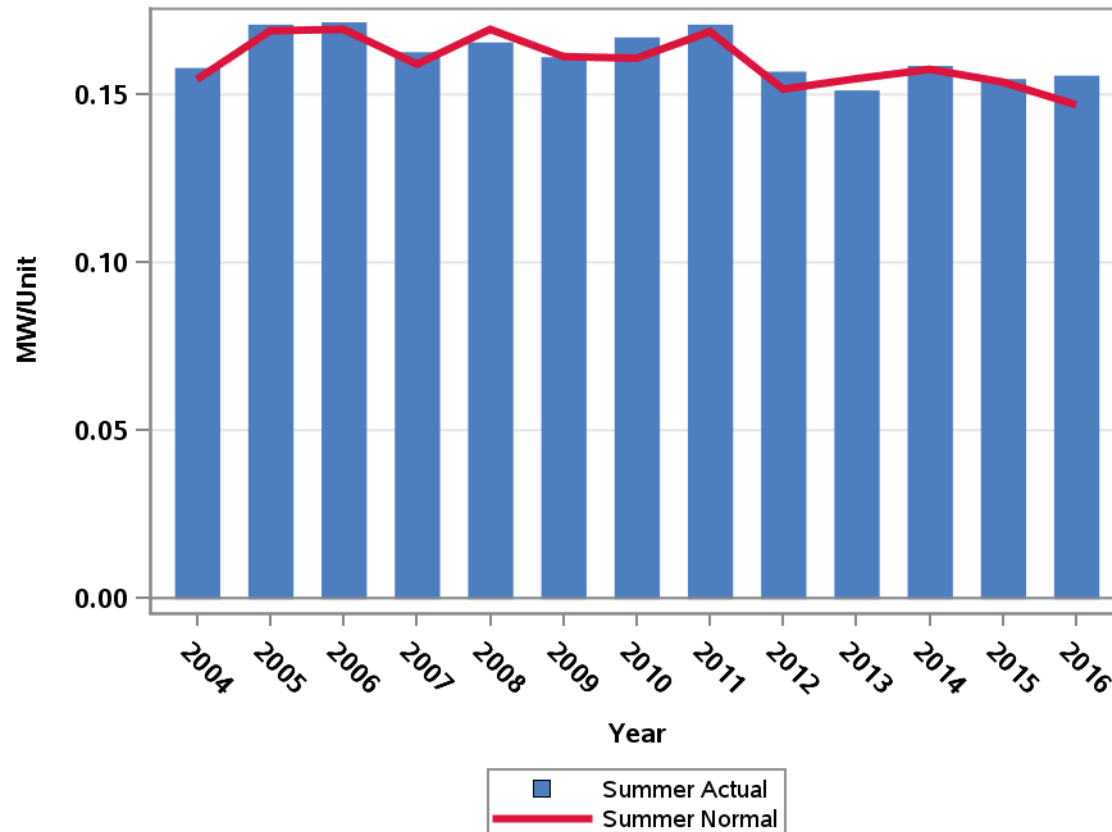
Class Demand per Unit and Total Demand at Time of Summer and Winter System Peak (2004 - 2016)¹⁰

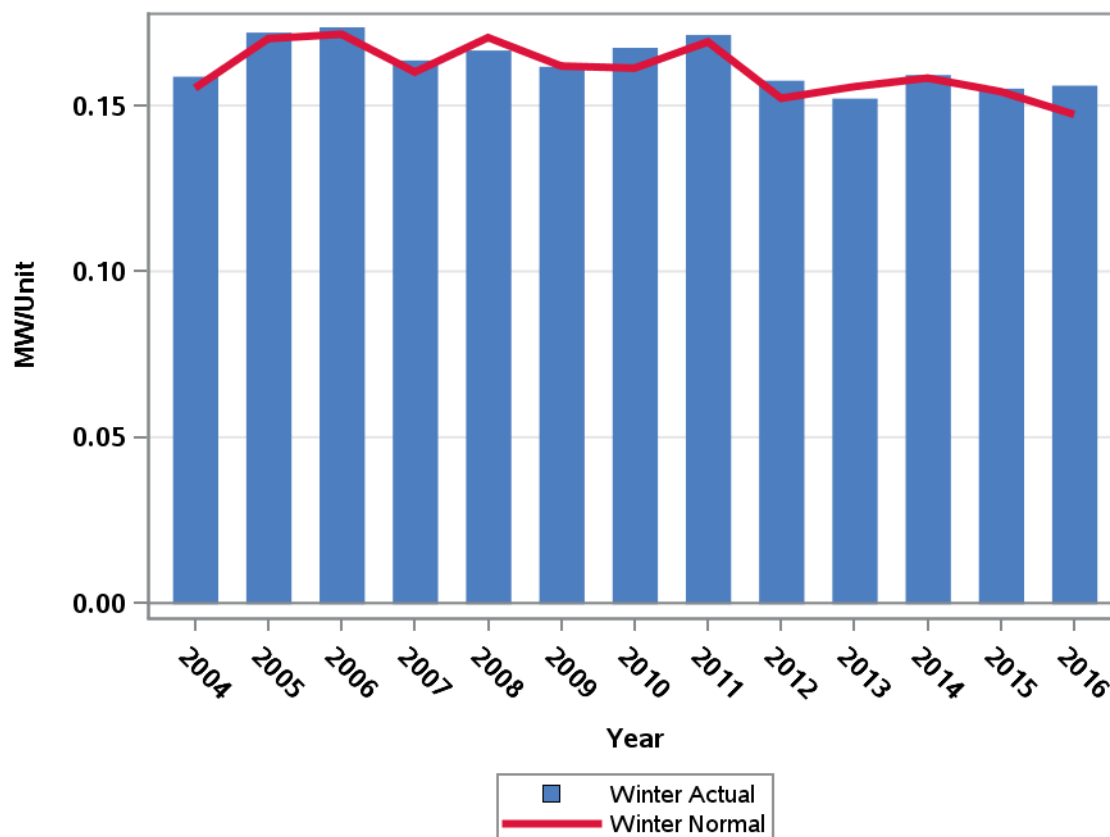
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Residential Class

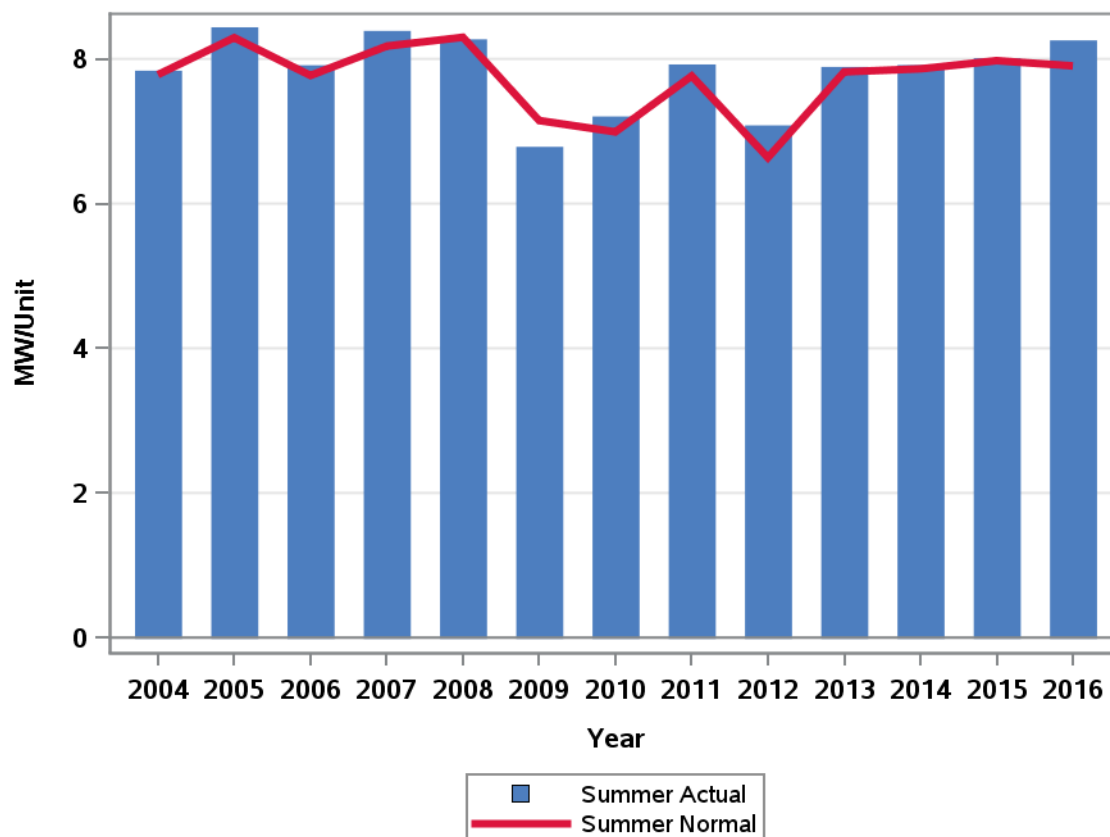


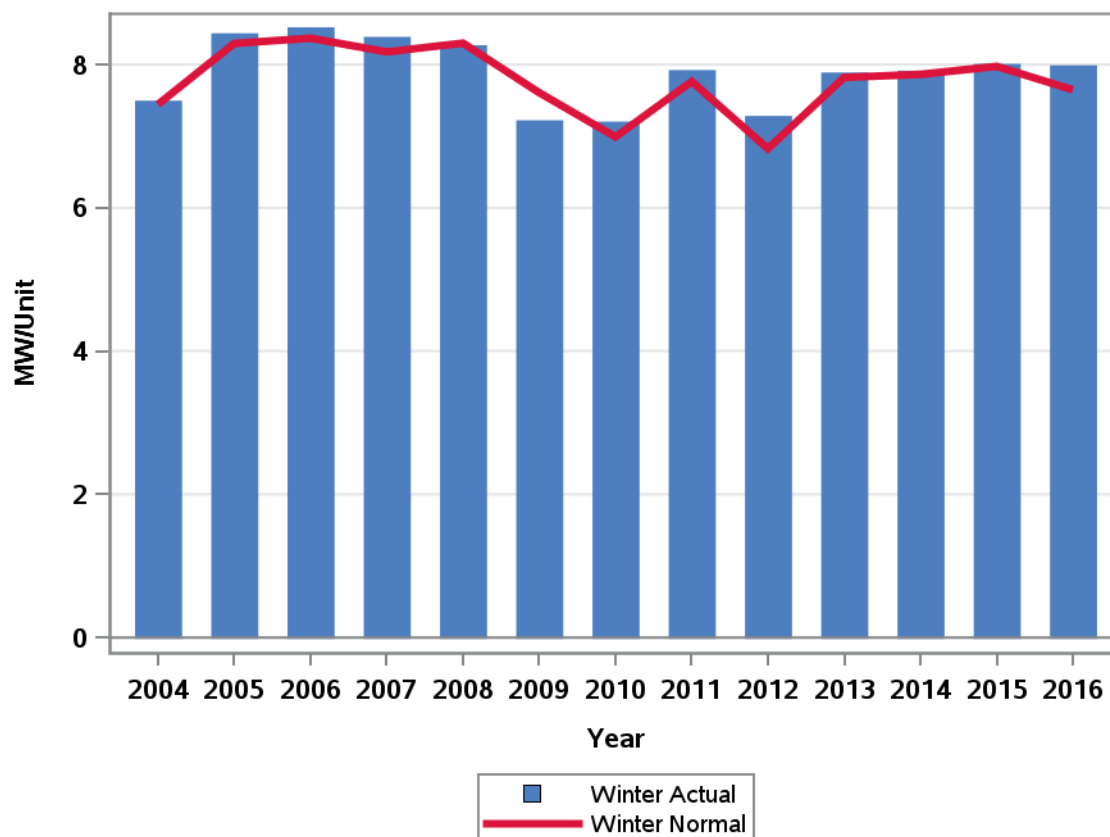
¹⁰4 CSR 240-22.030 (7) (A) 6

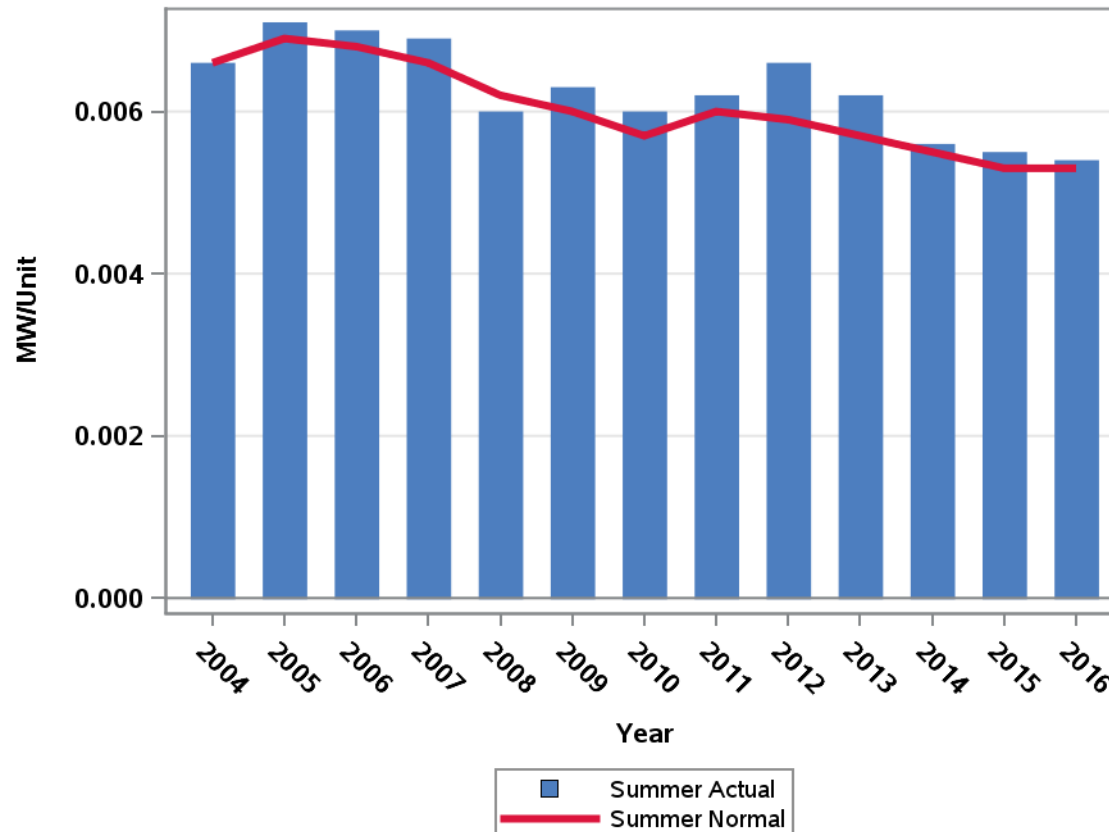
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Residential Class

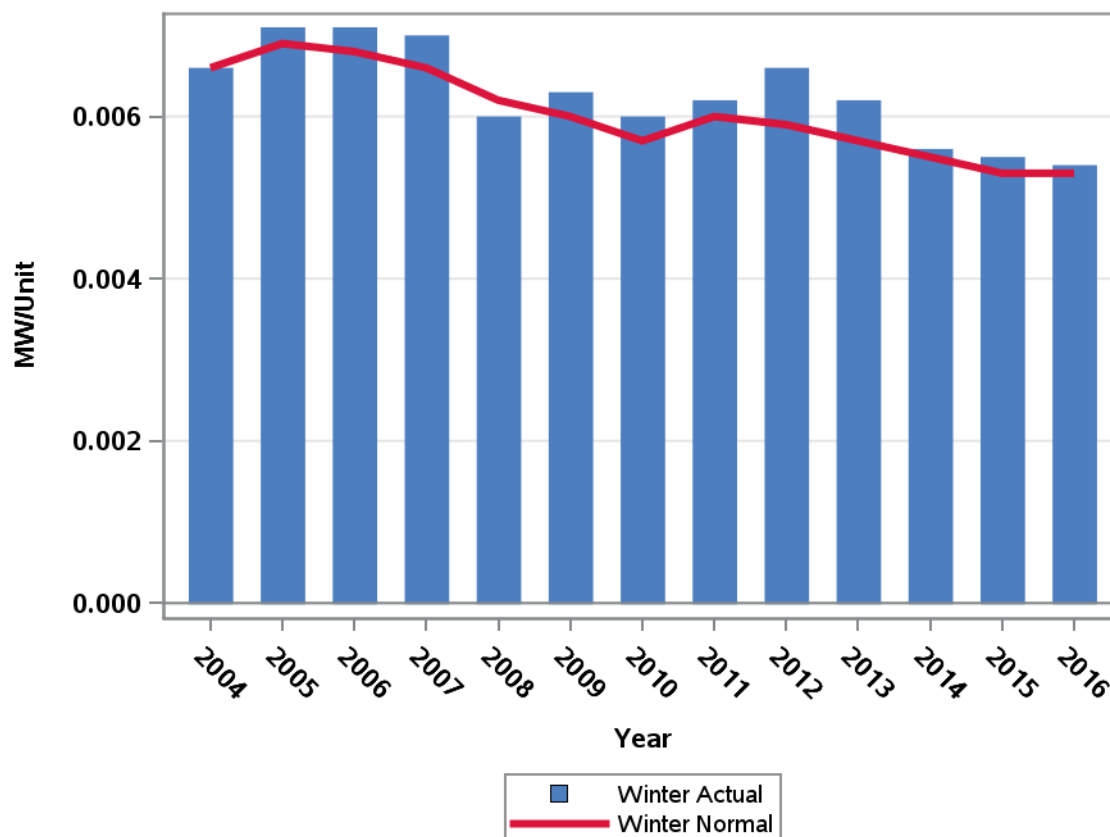
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial LGS Class

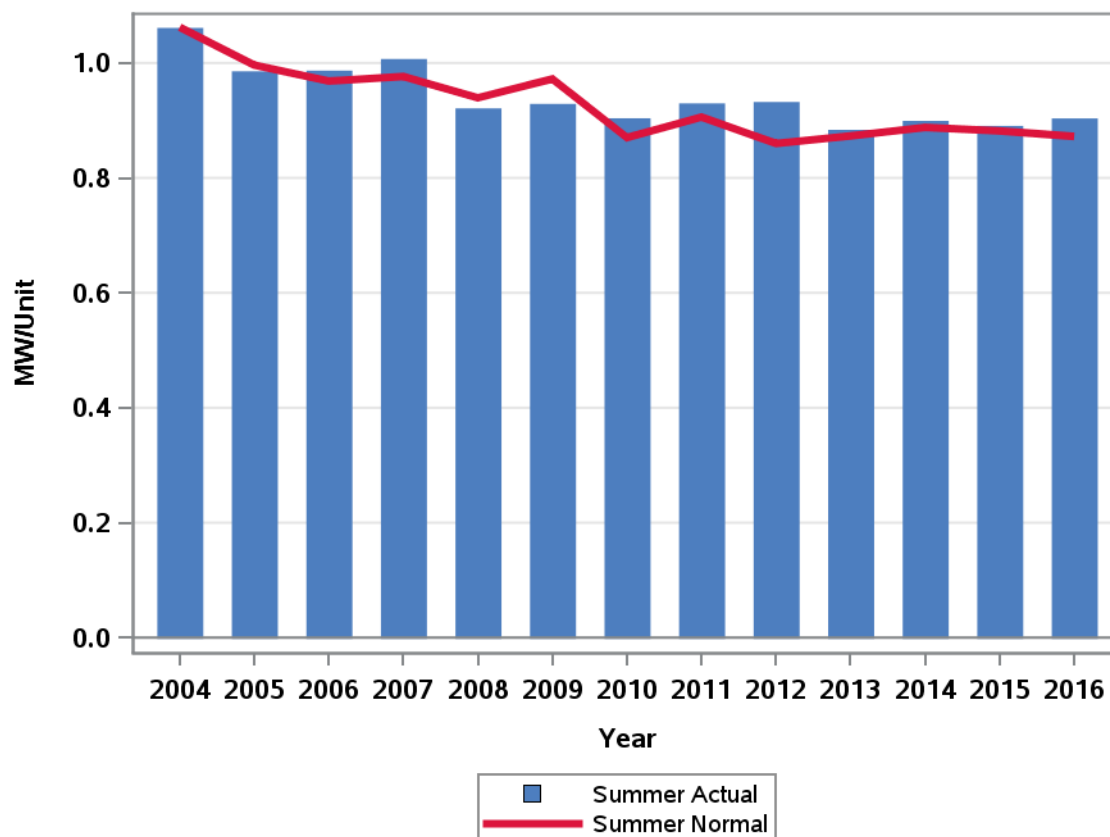
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial LGS Class

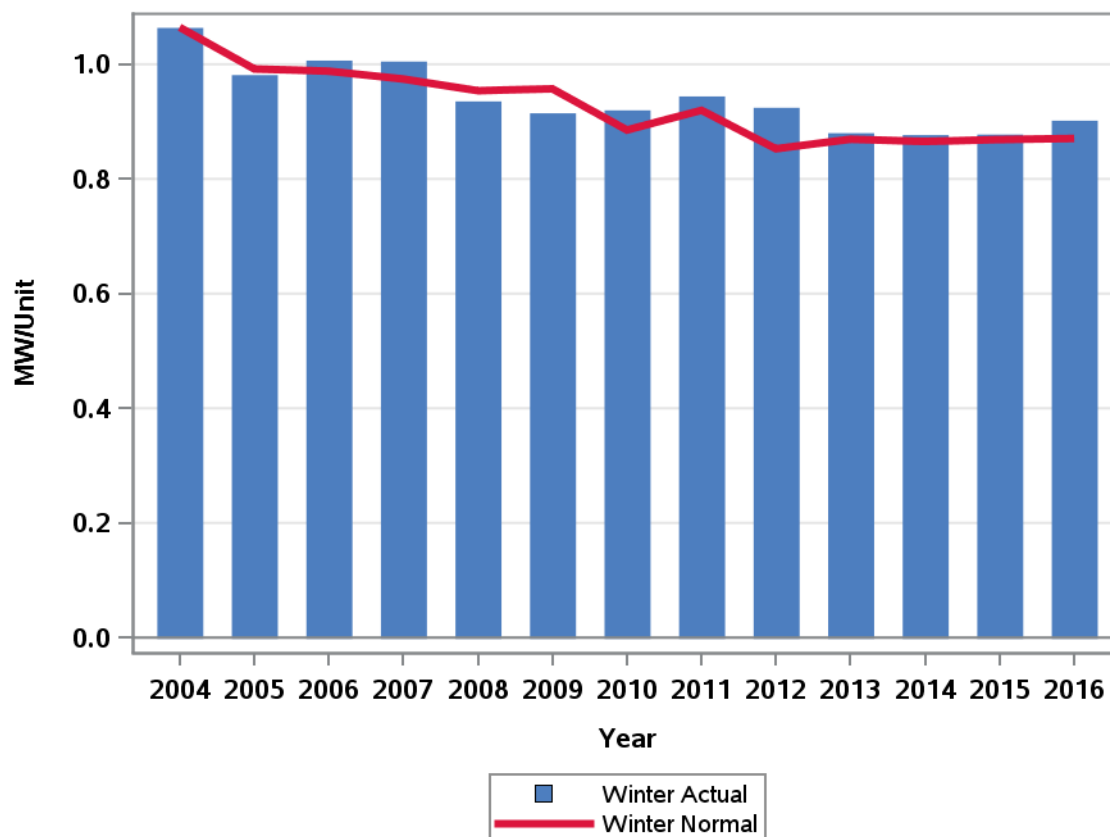
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial LPS Class

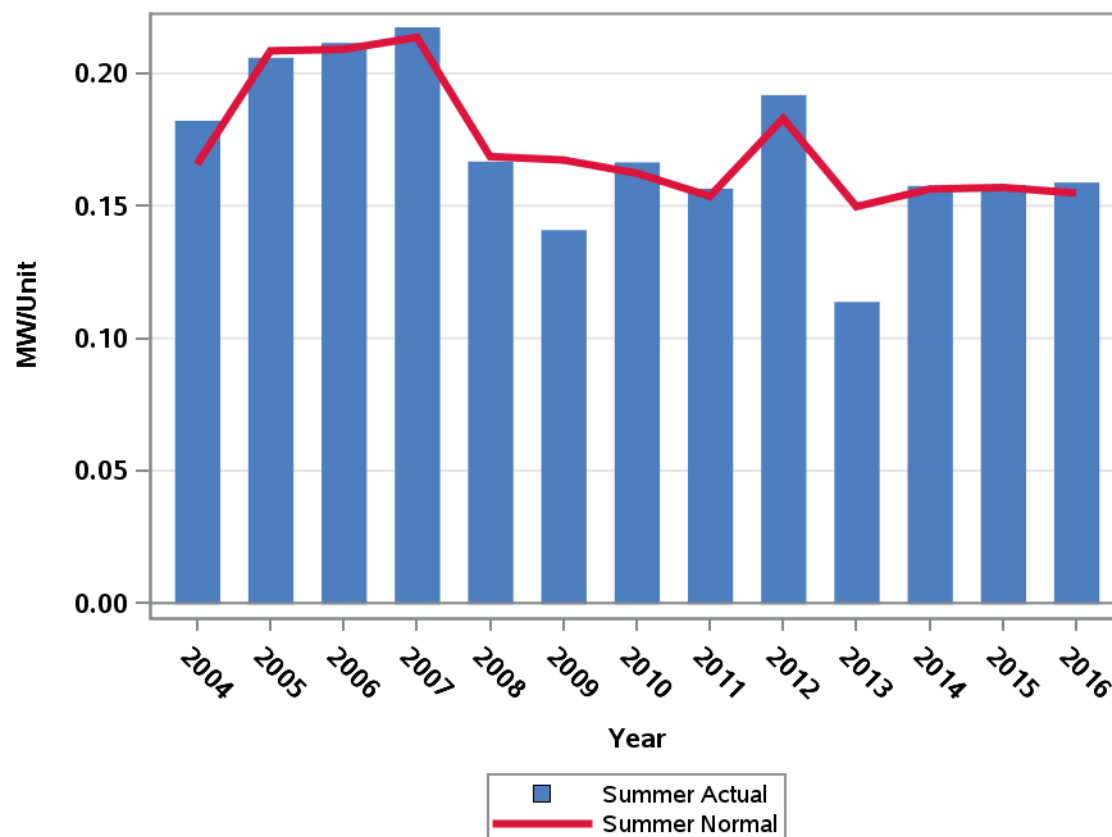
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial LPS Class

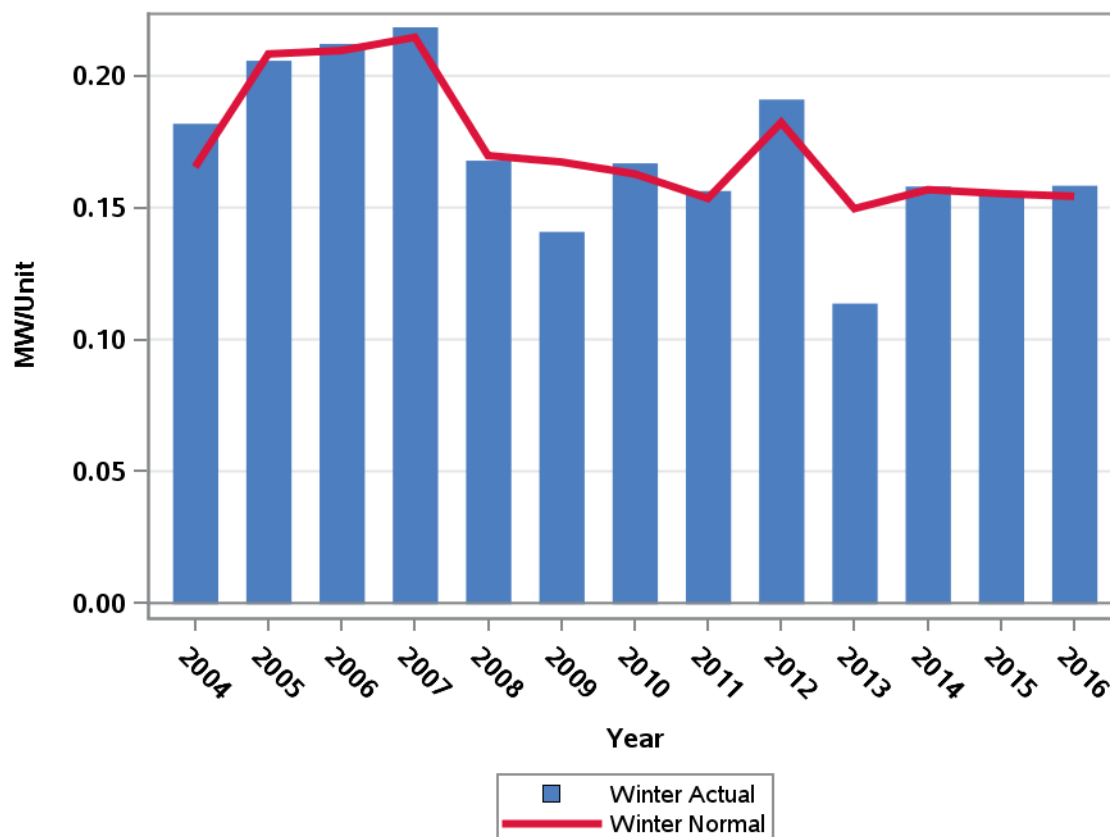
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial SGS Class

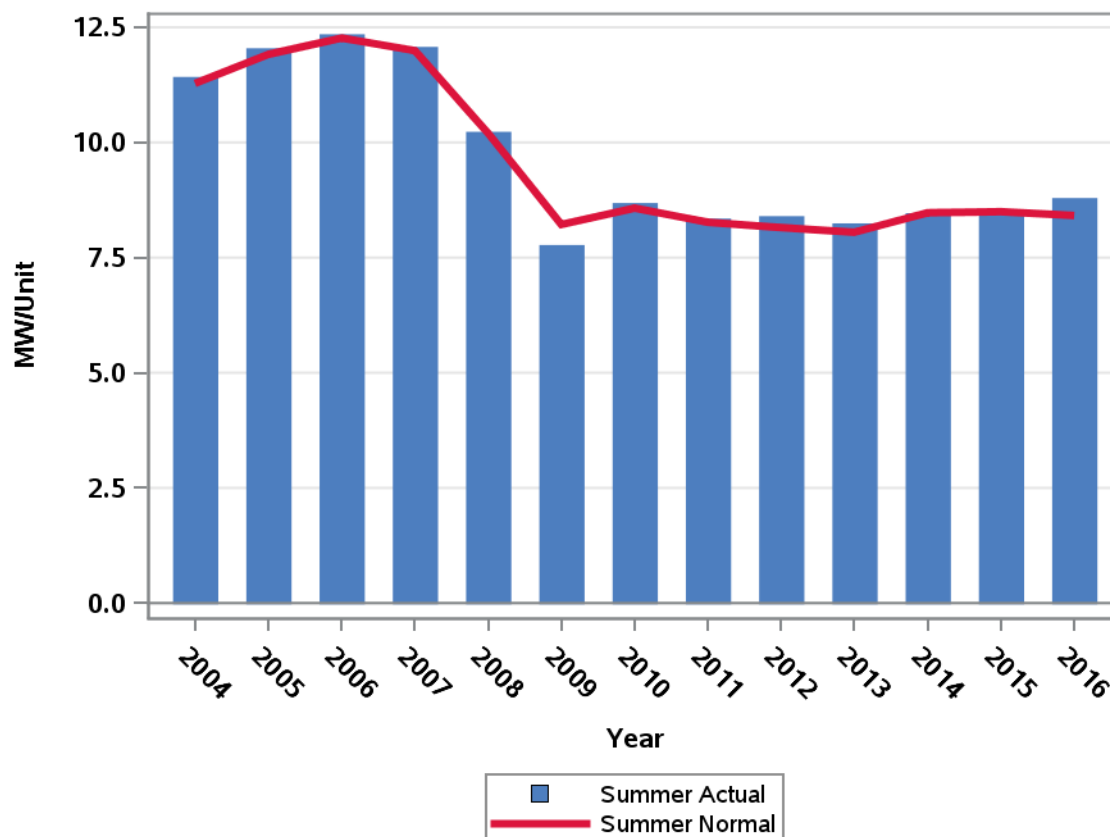
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial SGS Class

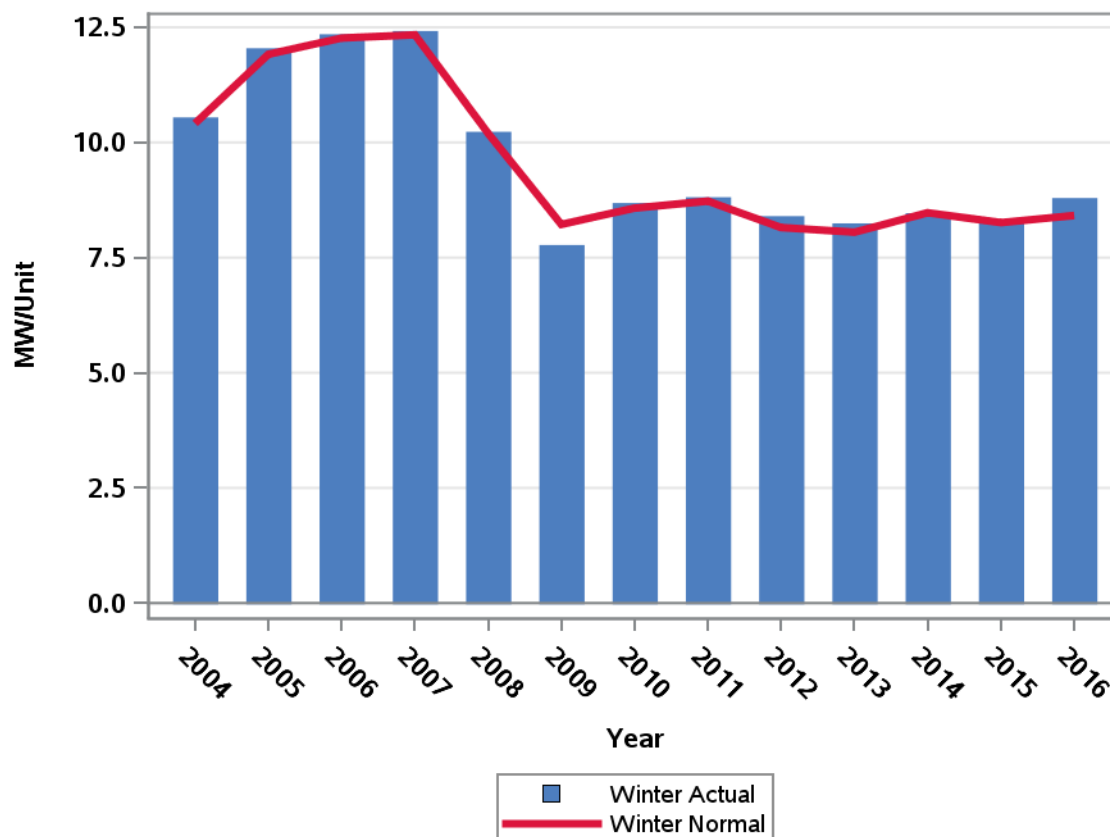
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Commercial SPS Class

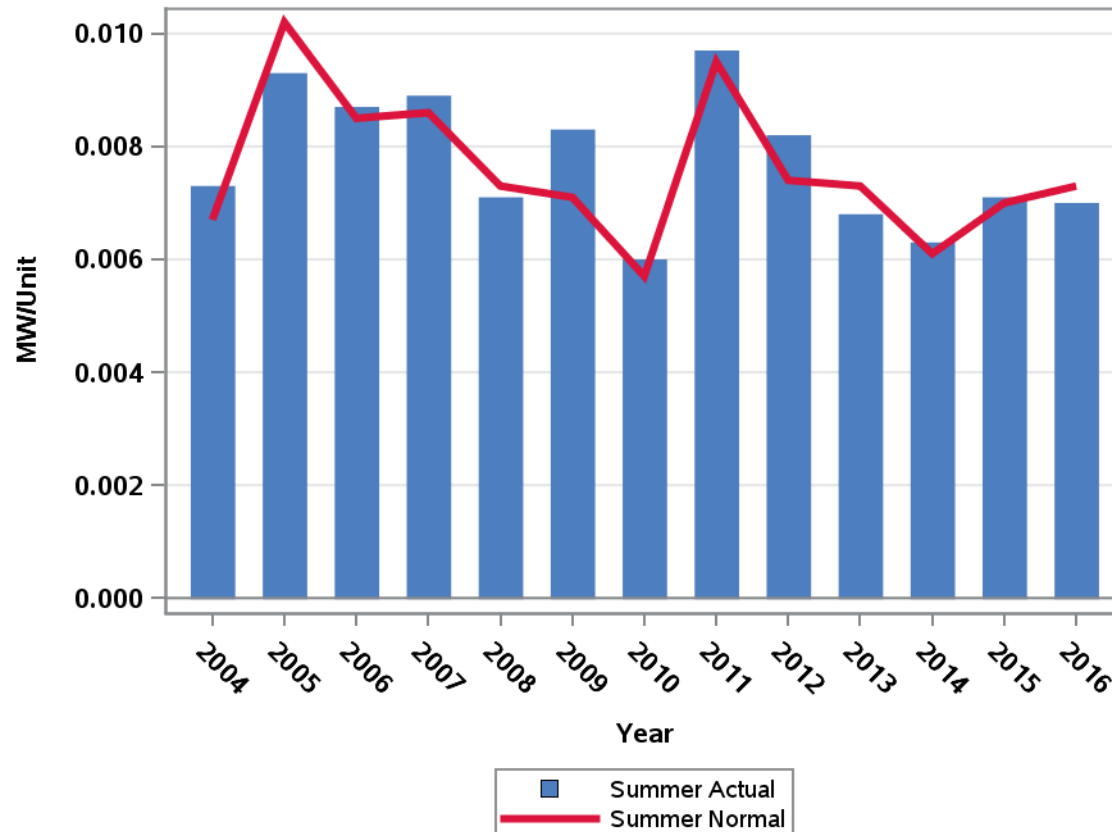
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Commercial SPS Class

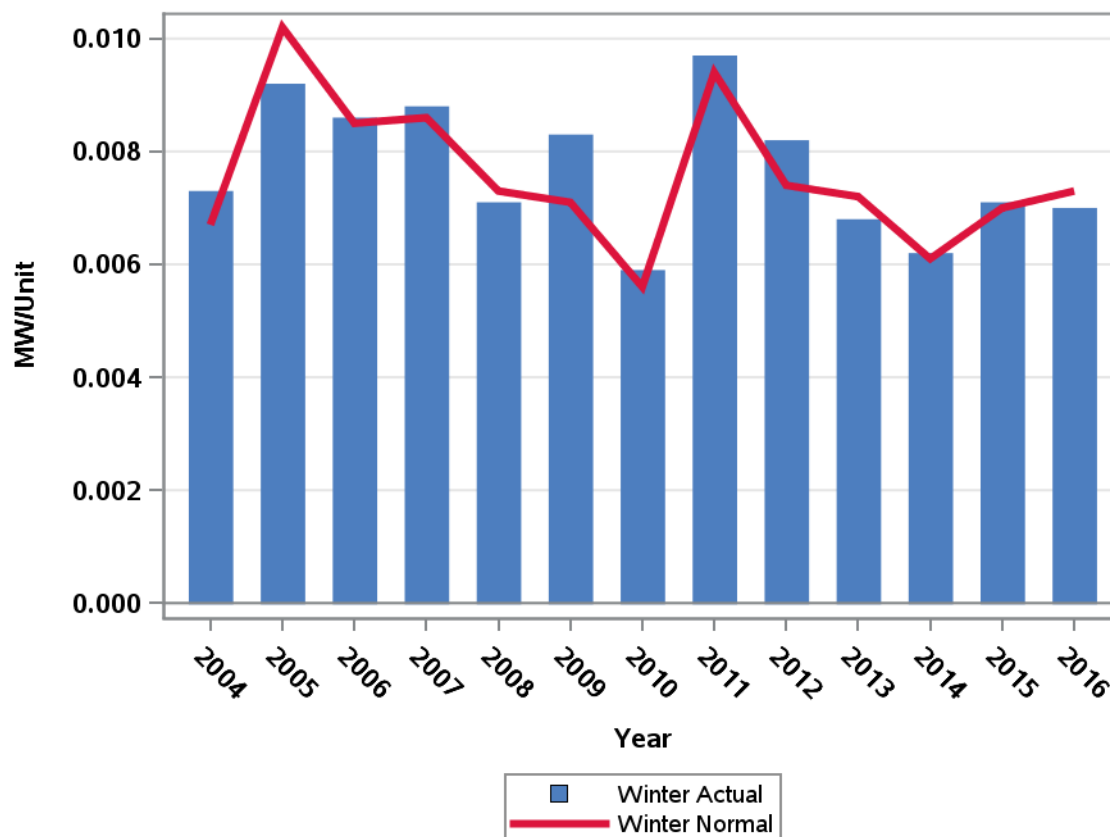
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial LGS Class

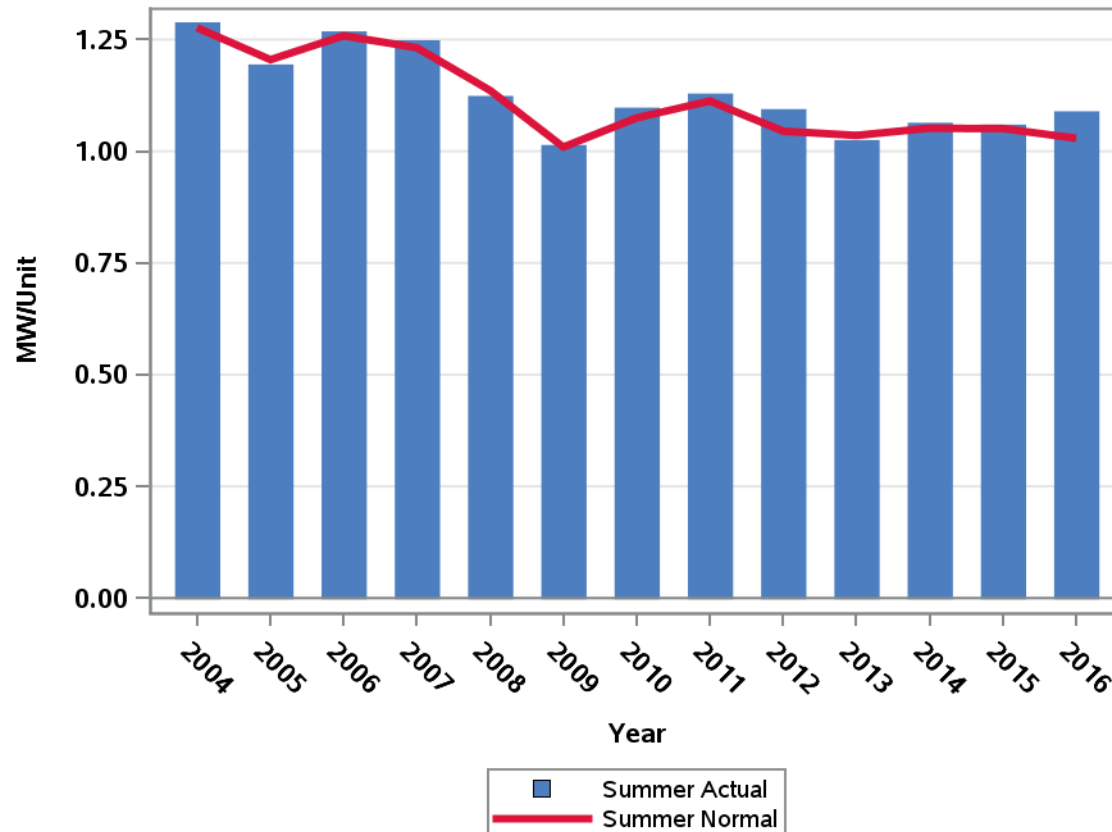
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial LGS Class

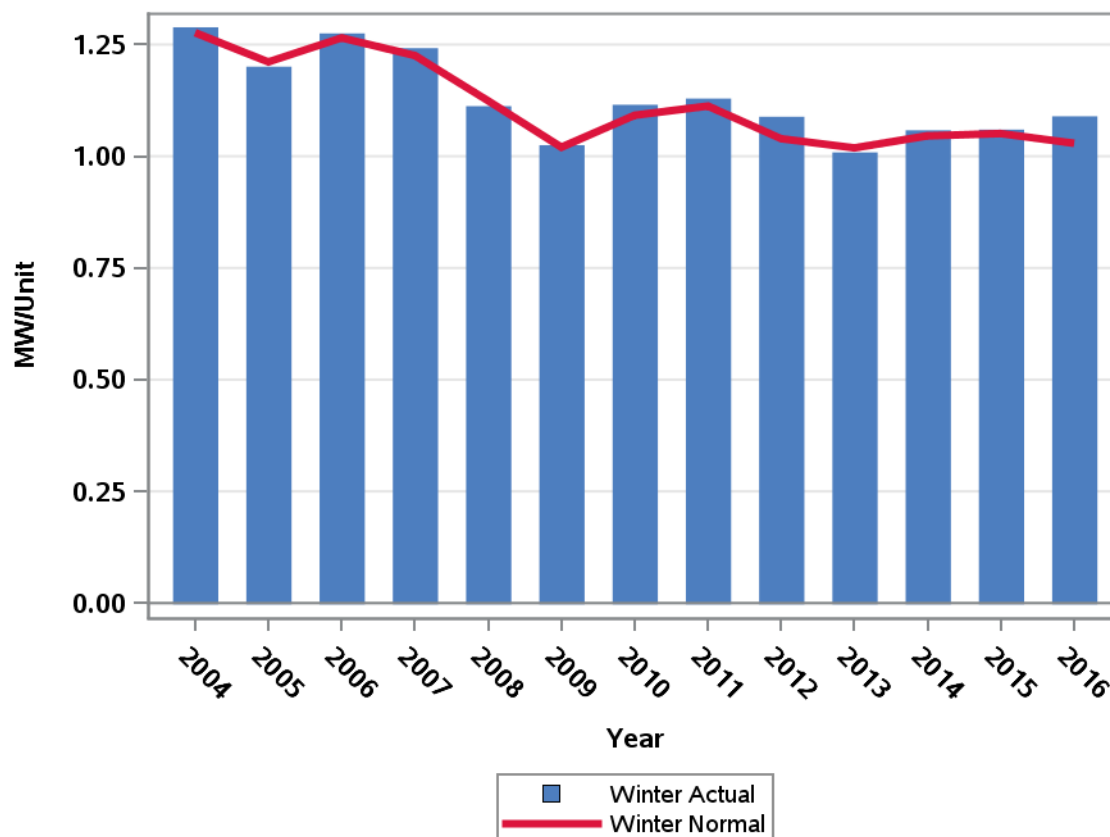
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial LPS Class

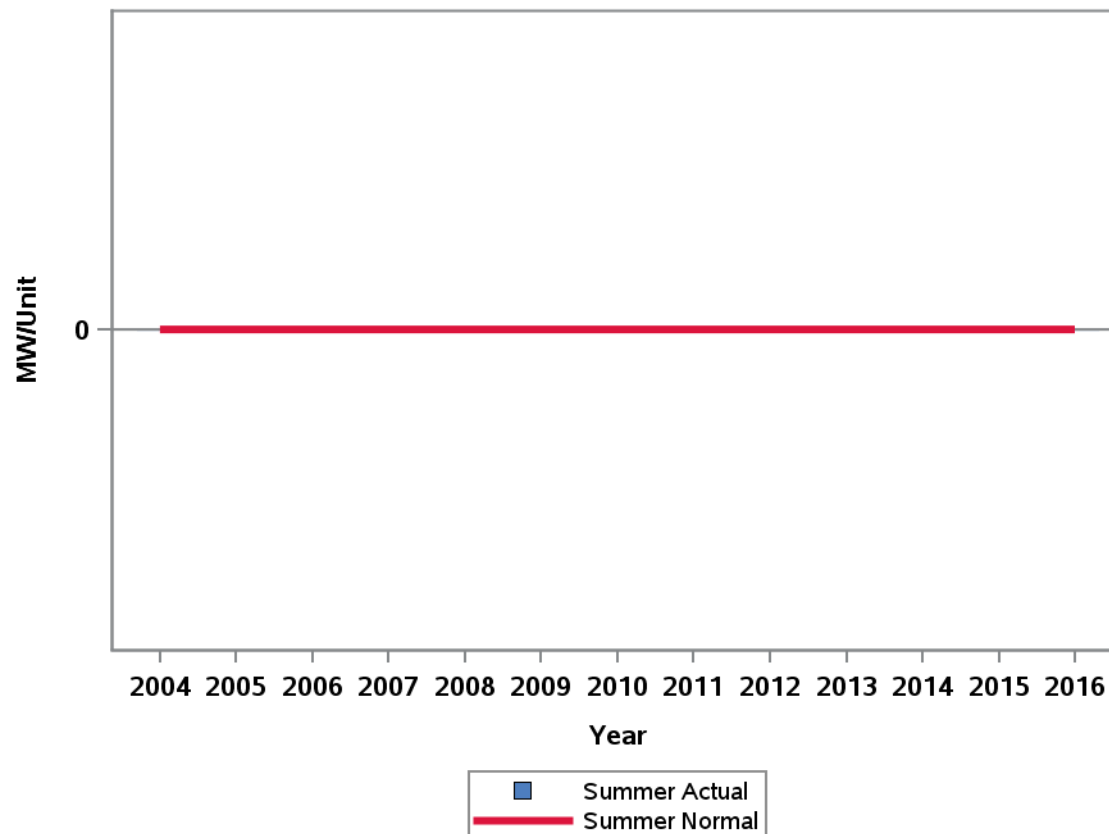
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial LPS Class

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

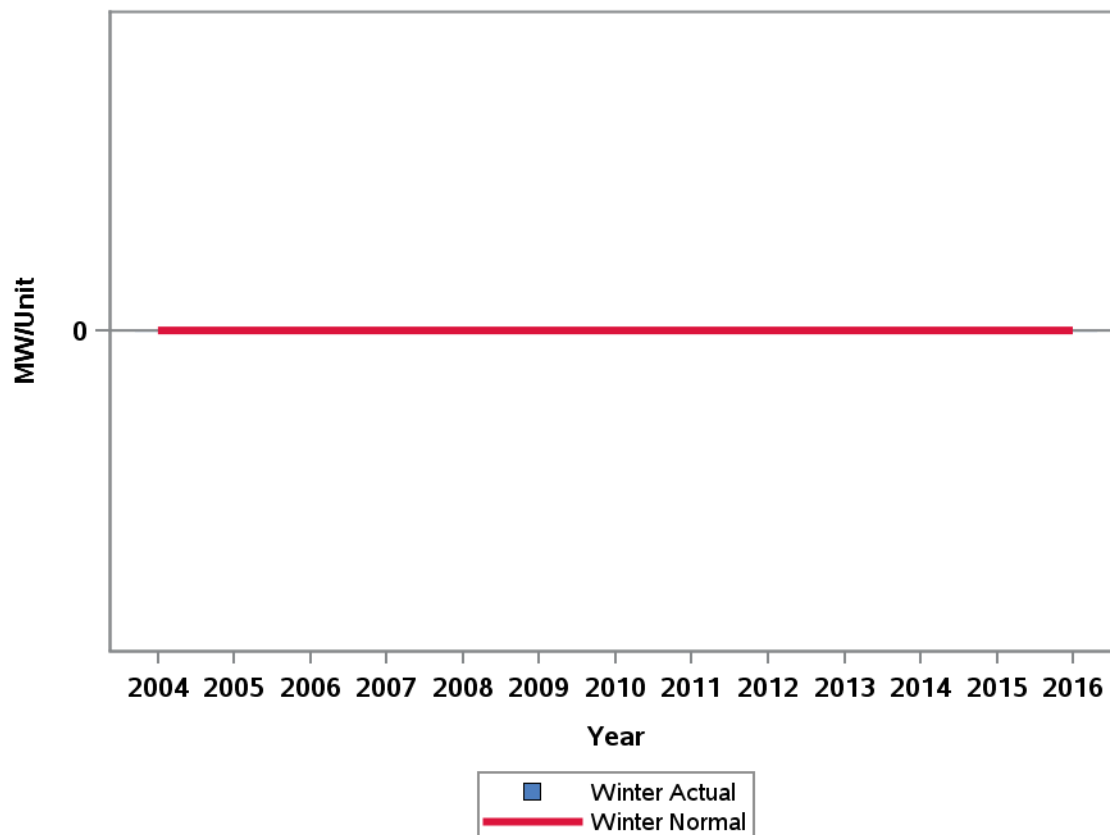
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial SGS Class

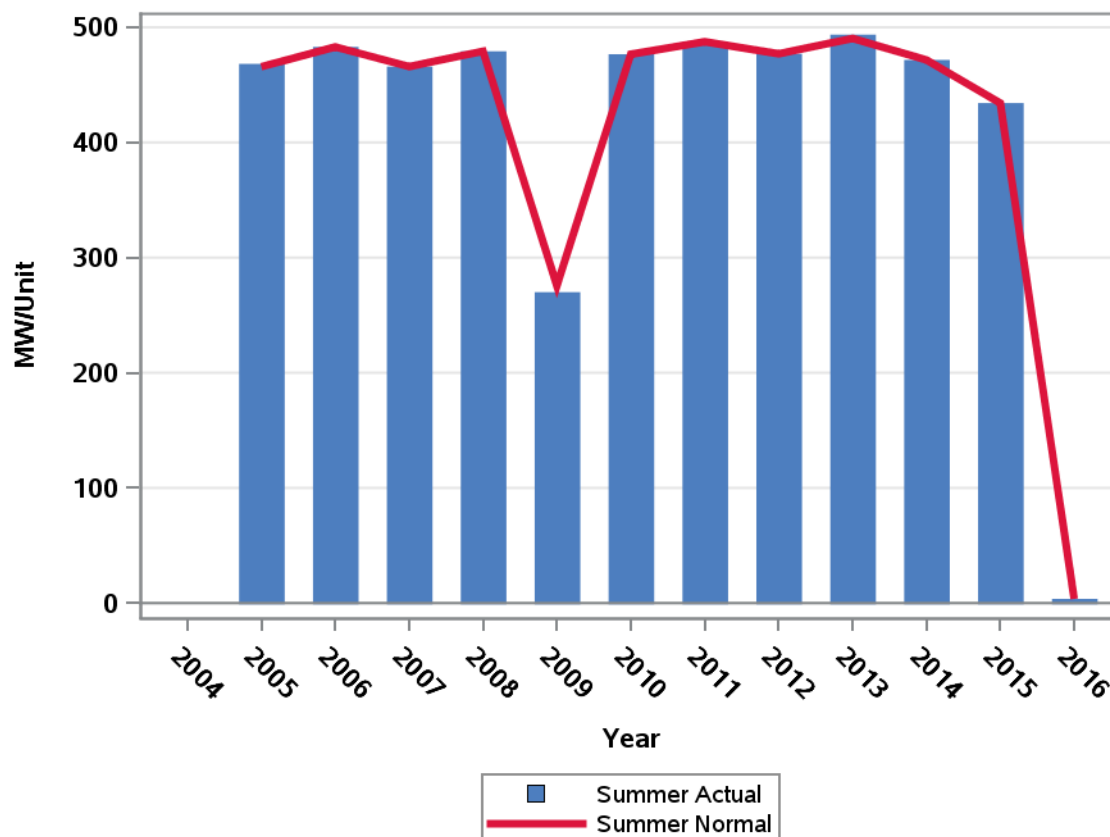
Actual and Weather-Normalized Summer Coincident Peak Demand per Unit for Industrial SPS Class

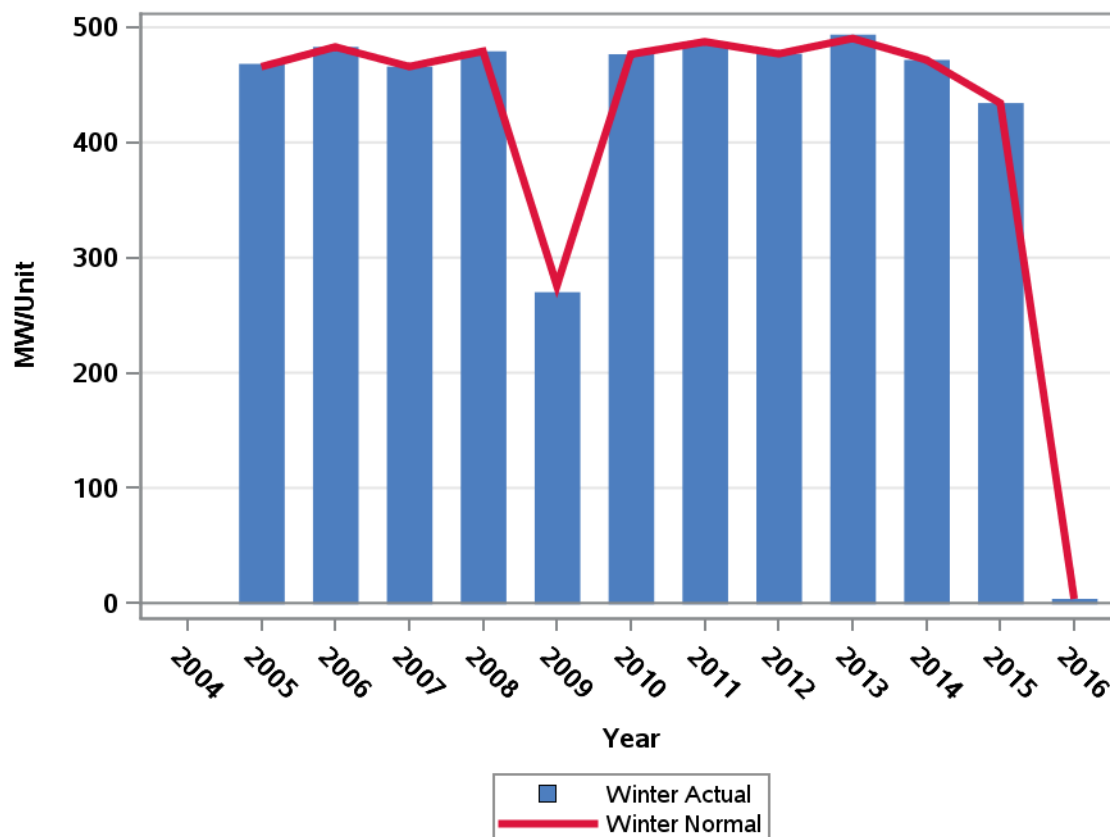
Actual and Weather-Normalized Winter Coincident Peak Demand per Unit for Industrial SPS Class

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



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

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

Actual Summer Coincident Peak Demand per Unit by Class (MW/Unit)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	0.0038	0.16	7.84	0.0066	1.06	0.18	11.42	0.0073	1.29	0.00	
2005	0.0039	0.17	8.44	0.0071	0.99	0.21	12.04	0.0093	1.19	0.00	468.2
2006	0.0039	0.17	7.91	0.0070	0.99	0.21	12.35	0.0087	1.27	0.00	483.0
2007	0.0041	0.16	8.39	0.0069	1.01	0.22	12.07	0.0089	1.25	0.00	465.9
2008	0.0039	0.17	8.27	0.0060	0.92	0.17	10.23	0.0071	1.12	0.00	479.2
2009	0.0037	0.16	6.78	0.0063	0.93	0.14	7.77	0.0083	1.01	0.00	270.0
2010	0.0040	0.17	7.20	0.0060	0.90	0.17	8.68	0.0060	1.10	0.00	476.6
2011	0.0039	0.17	7.92	0.0062	0.93	0.16	8.35	0.0097	1.13	0.00	487.4
2012	0.0040	0.16	7.08	0.0066	0.93	0.19	8.40	0.0082	1.09	0.00	477.0
2013	0.0035	0.15	7.89	0.0062	0.88	0.11	8.24	0.0068	1.03	0.00	493.6
2014	0.0035	0.16	7.91	0.0056	0.90	0.16	8.46	0.0063	1.06	0.00	471.7
2015	0.0035	0.15	8.01	0.0055	0.89	0.16	8.50	0.0071	1.06	0.00	434.2
2016	0.0035	0.16	8.26	0.0054	0.90	0.16	8.79	0.0070	1.09	0.00	3.6

Weather-Normalized Summer Coincident Peak Demand per Unit by Class (MW/Unit)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	0.0038	0.15	7.78	0.0066	1.06	0.17	11.28	0.007	1.28	0.00	
2005	0.0036	0.17	8.29	0.0069	1.00	0.21	11.91	0.010	1.20	0.00	465.7
2006	0.0037	0.17	7.77	0.0068	0.97	0.21	12.27	0.009	1.26	0.00	483.0
2007	0.0039	0.16	8.18	0.0066	0.98	0.21	11.99	0.009	1.23	0.00	465.9
2008	0.0041	0.17	8.30	0.0062	0.94	0.17	10.20	0.007	1.14	0.00	479.2
2009	0.0038	0.16	7.15	0.0060	0.97	0.17	8.22	0.007	1.01	0.00	275.6
2010	0.0037	0.16	6.99	0.0057	0.87	0.16	8.57	0.006	1.07	0.00	476.6
2011	0.0038	0.17	7.76	0.0060	0.91	0.15	8.27	0.010	1.11	0.00	487.4
2012	0.0036	0.15	6.64	0.0059	0.86	0.18	8.15	0.007	1.04	0.00	477.0
2013	0.0034	0.15	7.82	0.0057	0.87	0.15	8.05	0.007	1.04	0.00	490.3
2014	0.0034	0.16	7.86	0.0055	0.89	0.16	8.47	0.006	1.05	0.00	471.7
2015	0.0034	0.15	7.98	0.0053	0.88	0.16	8.50	0.007	1.05	0.00	434.2
2016	0.0031	0.15	7.90	0.0053	0.87	0.15	8.41	0.007	1.03	0.00	3.6

Actual Winter Coincident Peak Demand per Unit by Class (MW/Unit)

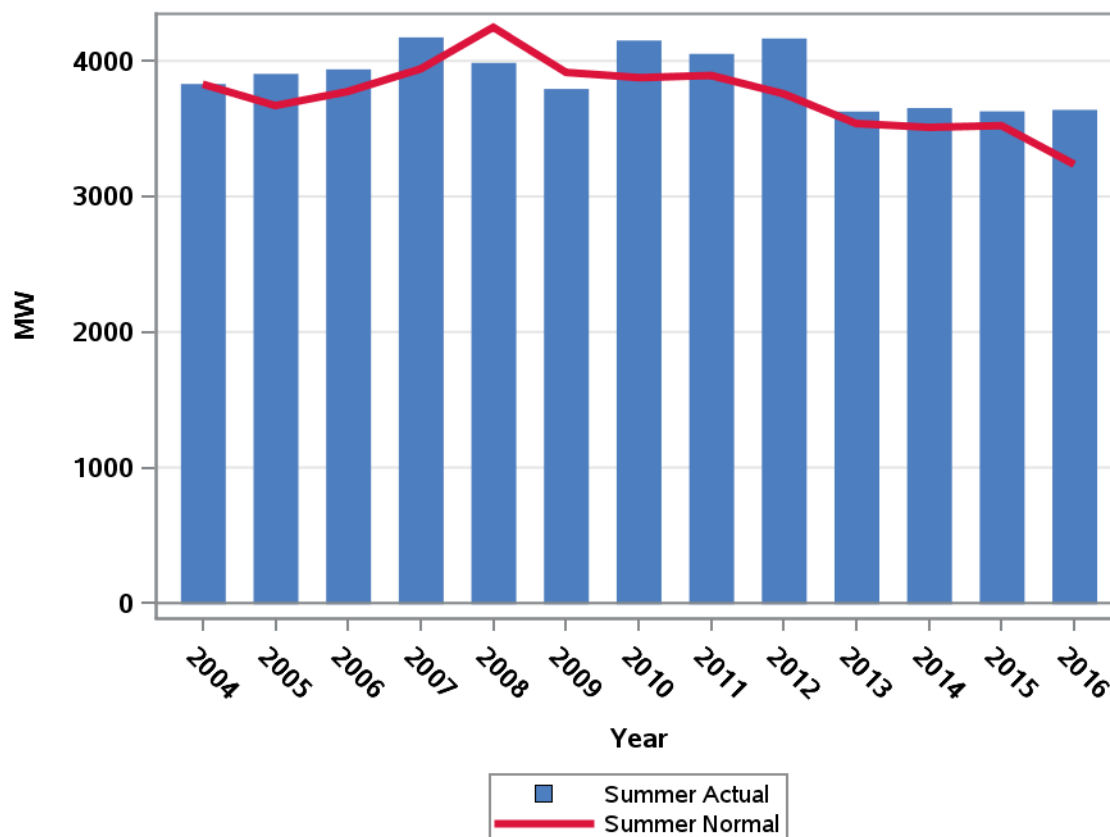
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	0.0038	0.16	7.50	0.0066	1.06	0.18	10.54	0.0073	1.29	0.00	
2005	0.0039	0.17	8.44	0.0071	0.98	0.21	12.04	0.0092	1.20	0.00	468.2
2006	0.0039	0.17	8.52	0.0071	1.01	0.21	12.35	0.0086	1.27	0.00	483.0
2007	0.0041	0.16	8.39	0.0070	1.00	0.22	12.42	0.0088	1.24	0.00	465.9
2008	0.0039	0.17	8.27	0.0060	0.94	0.17	10.23	0.0071	1.11	0.00	479.2
2009	0.0037	0.16	7.22	0.0063	0.91	0.14	7.77	0.0083	1.02	0.00	270.0
2010	0.0040	0.17	7.20	0.0060	0.92	0.17	8.68	0.0059	1.12	0.00	476.6
2011	0.0039	0.17	7.92	0.0062	0.94	0.16	8.81	0.0097	1.13	0.00	487.4
2012	0.0040	0.16	7.28	0.0066	0.92	0.19	8.40	0.0082	1.09	0.00	477.0
2013	0.0035	0.15	7.89	0.0062	0.88	0.11	8.24	0.0068	1.01	0.00	493.6
2014	0.0035	0.16	7.91	0.0056	0.88	0.16	8.46	0.0062	1.06	0.00	471.7
2015	0.0035	0.16	8.01	0.0055	0.88	0.16	8.27	0.0071	1.06	0.00	434.2
2016	0.0035	0.16	7.99	0.0054	0.90	0.16	8.79	0.0070	1.09	0.00	3.6

Weather-Normalized Winter Coincident Peak Demand per Unit by Class (MW/Unit)

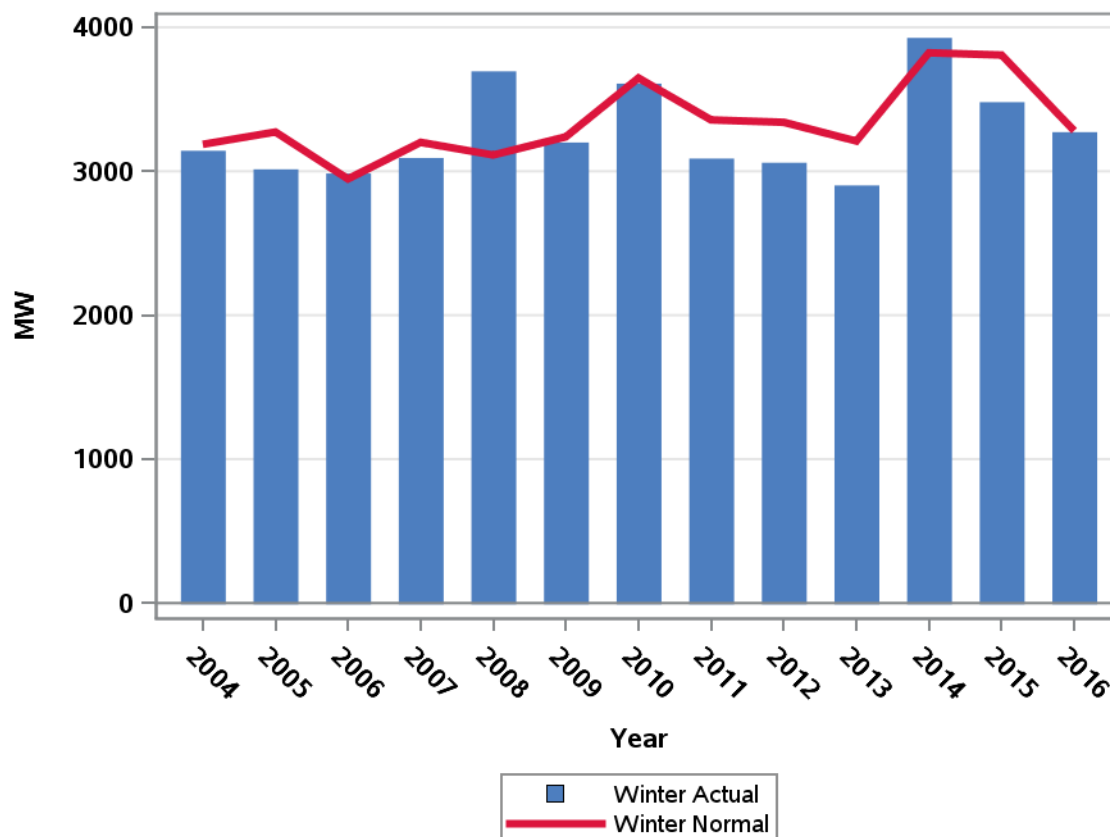
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	0.0038	0.16	7.44	0.0066	1.06	0.17	10.41	0.007	1.28	0.00	
2005	0.0036	0.17	8.29	0.0069	0.99	0.21	11.91	0.010	1.21	0.00	465.7
2006	0.0037	0.17	8.37	0.0068	0.99	0.21	12.27	0.009	1.27	0.00	483.0
2007	0.0039	0.16	8.18	0.0066	0.97	0.21	12.34	0.009	1.23	0.00	465.9
2008	0.0041	0.17	8.30	0.0062	0.95	0.17	10.20	0.007	1.12	0.00	479.2
2009	0.0038	0.16	7.61	0.0060	0.96	0.17	8.22	0.007	1.02	0.00	275.6
2010	0.0037	0.16	6.99	0.0057	0.89	0.16	8.57	0.006	1.09	0.00	476.6
2011	0.0038	0.17	7.76	0.0060	0.92	0.15	8.73	0.009	1.11	0.00	487.4
2012	0.0036	0.15	6.83	0.0059	0.85	0.18	8.15	0.007	1.04	0.00	477.0
2013	0.0034	0.16	7.82	0.0057	0.87	0.15	8.05	0.007	1.02	0.00	490.3
2014	0.0034	0.16	7.86	0.0055	0.87	0.16	8.47	0.006	1.05	0.00	471.7
2015	0.0034	0.15	7.98	0.0053	0.87	0.16	8.26	0.007	1.05	0.00	434.2
2016	0.0031	0.15	7.65	0.0053	0.87	0.15	8.41	0.007	1.03	0.00	3.6

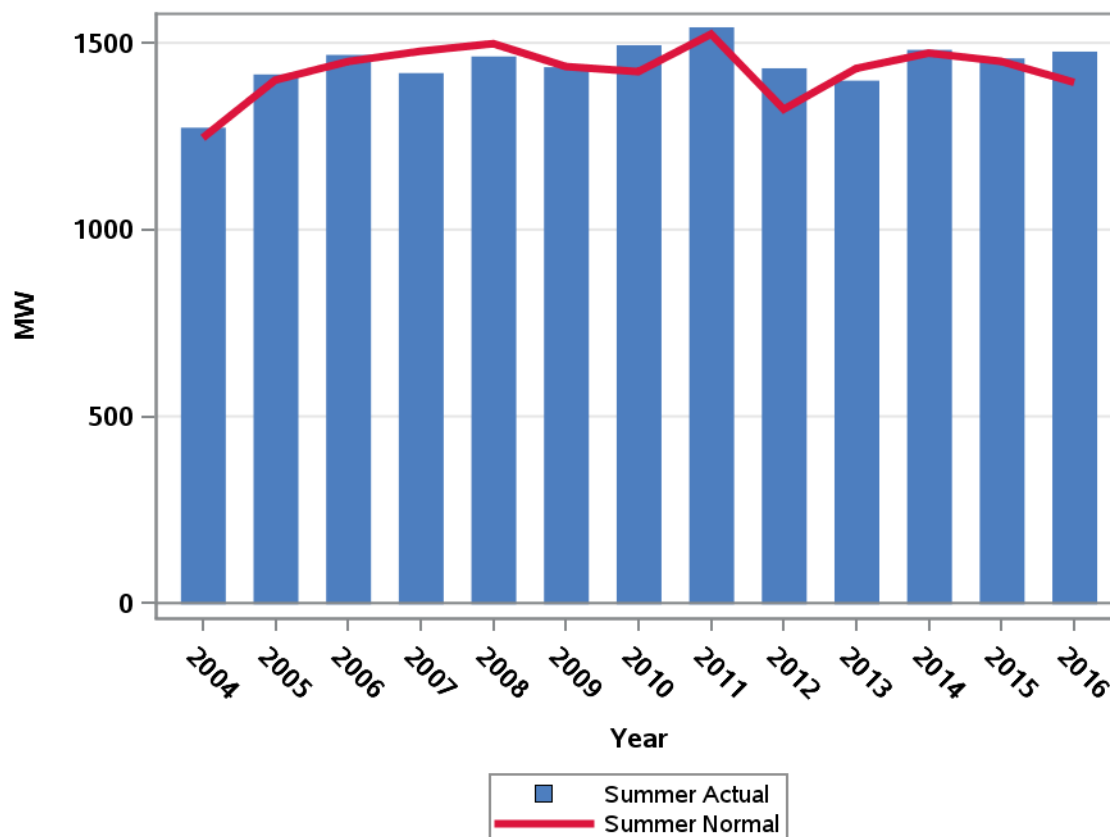
Class Demand and Total Demand at Time of Summer and Winter System Peak (2004 - 2016)¹¹

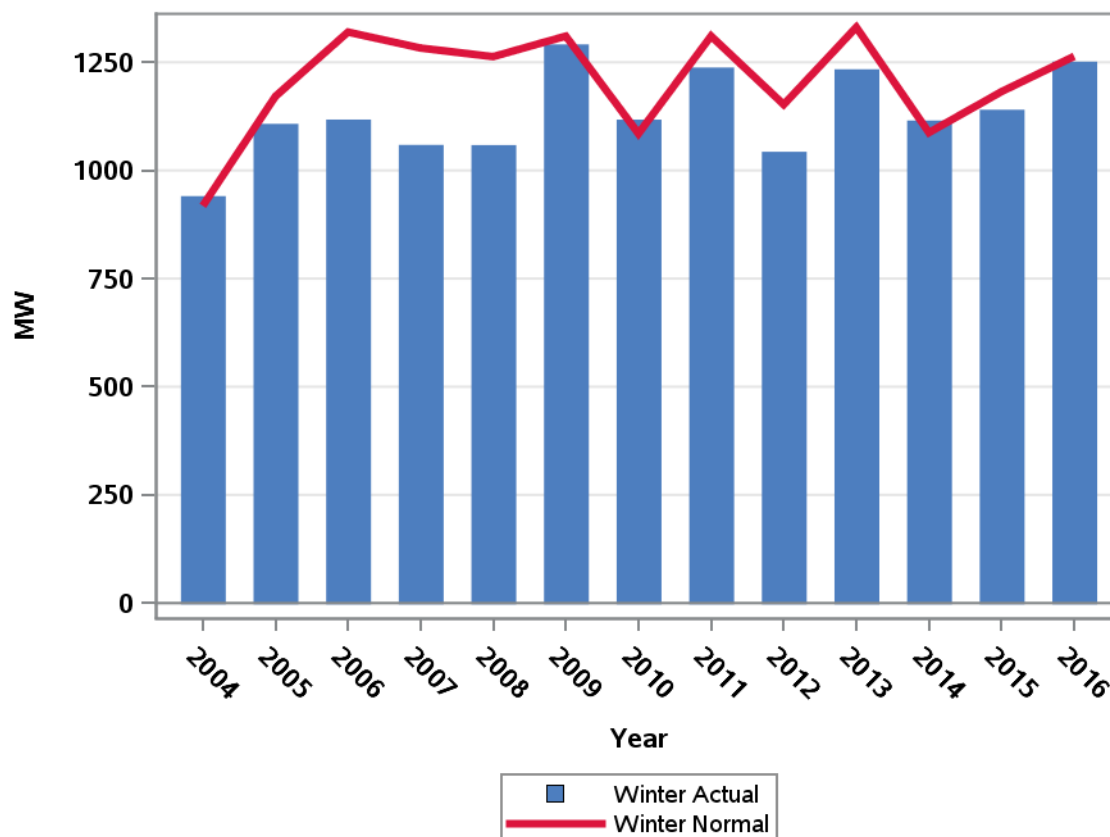
Actual and Weather-Normalized Summer Coincident Peak Demand for Residential Class

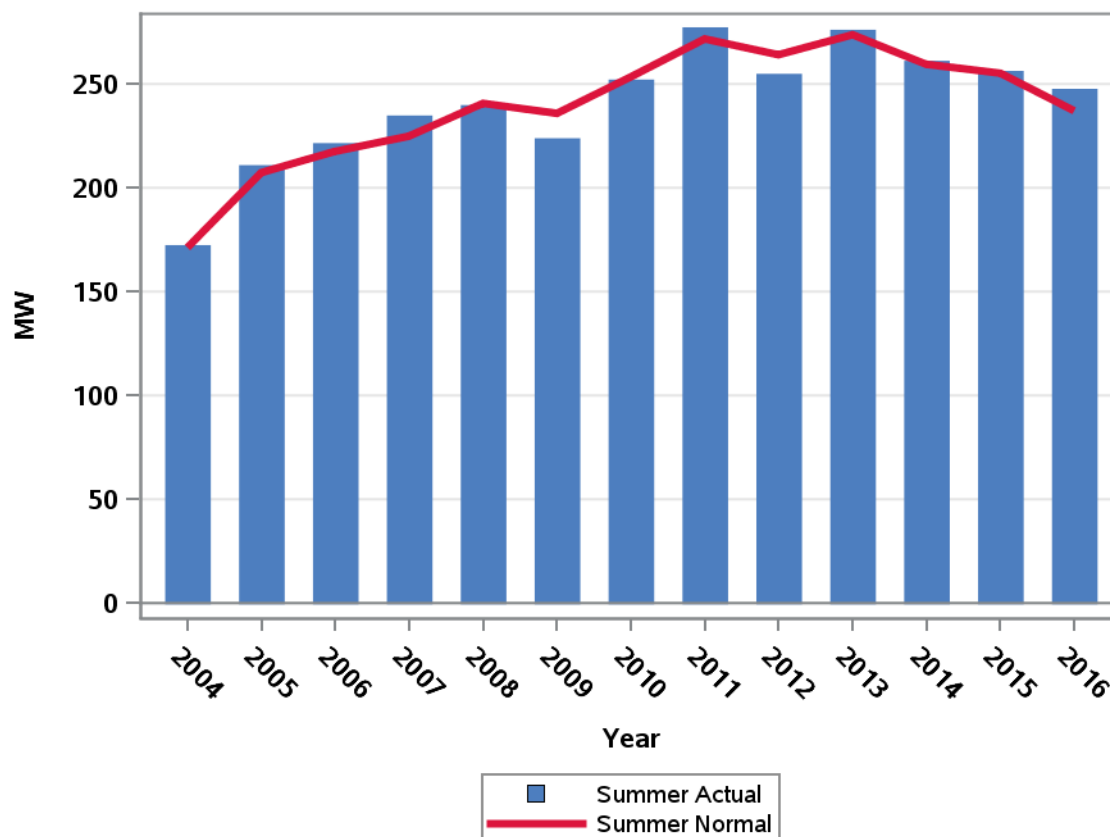


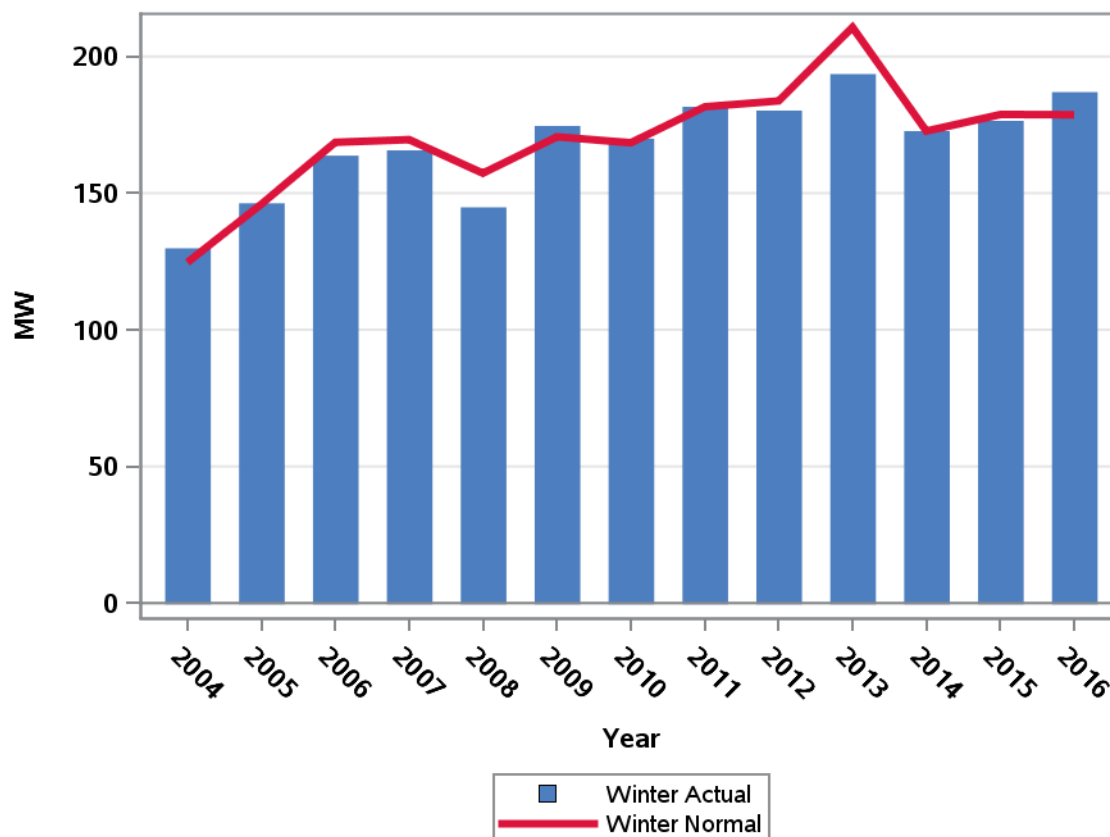
¹¹4 CSR 240-22.030 (7) (A) 6

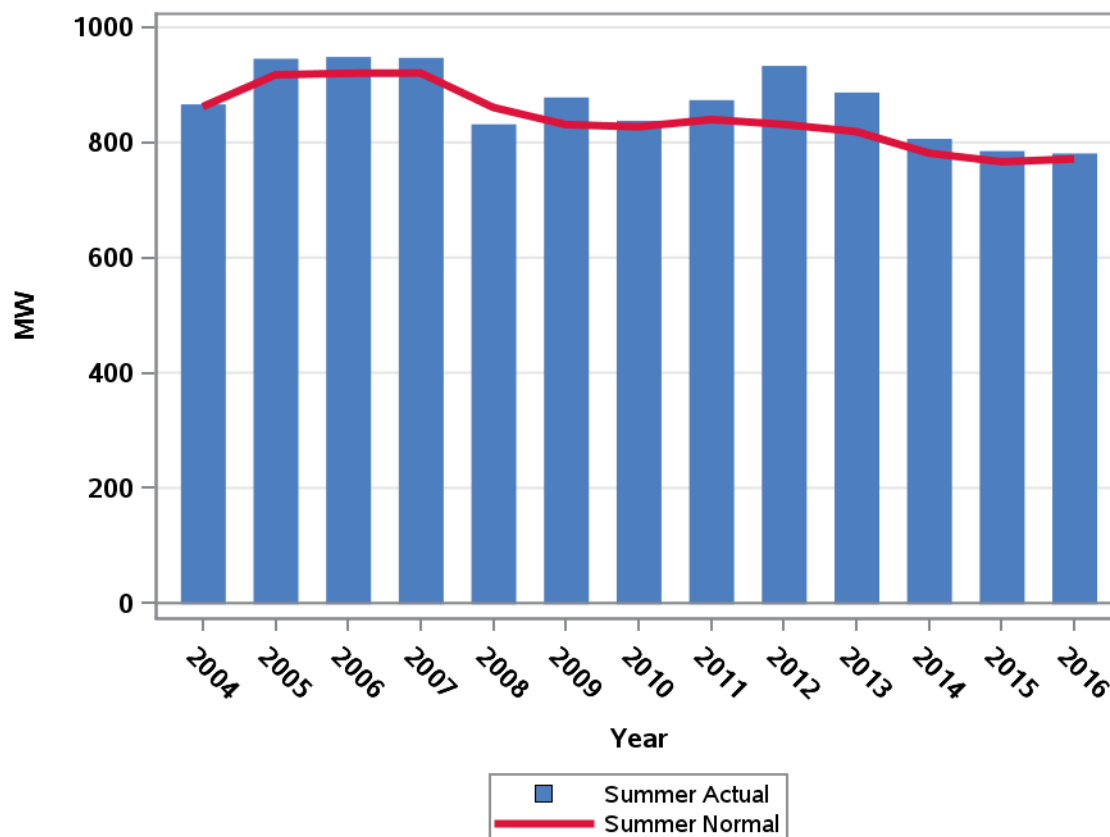
Actual and Weather-Normalized Winter Coincident Peak Demand for Residential Class

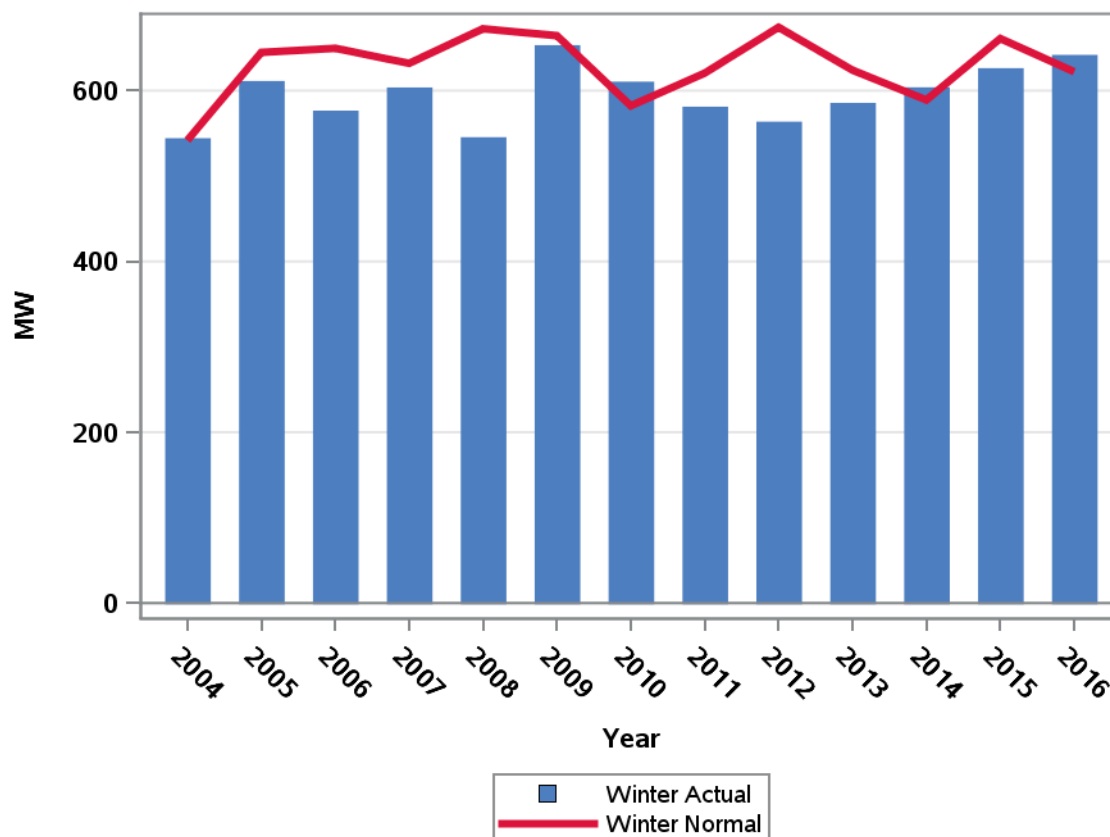
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial LGS Class

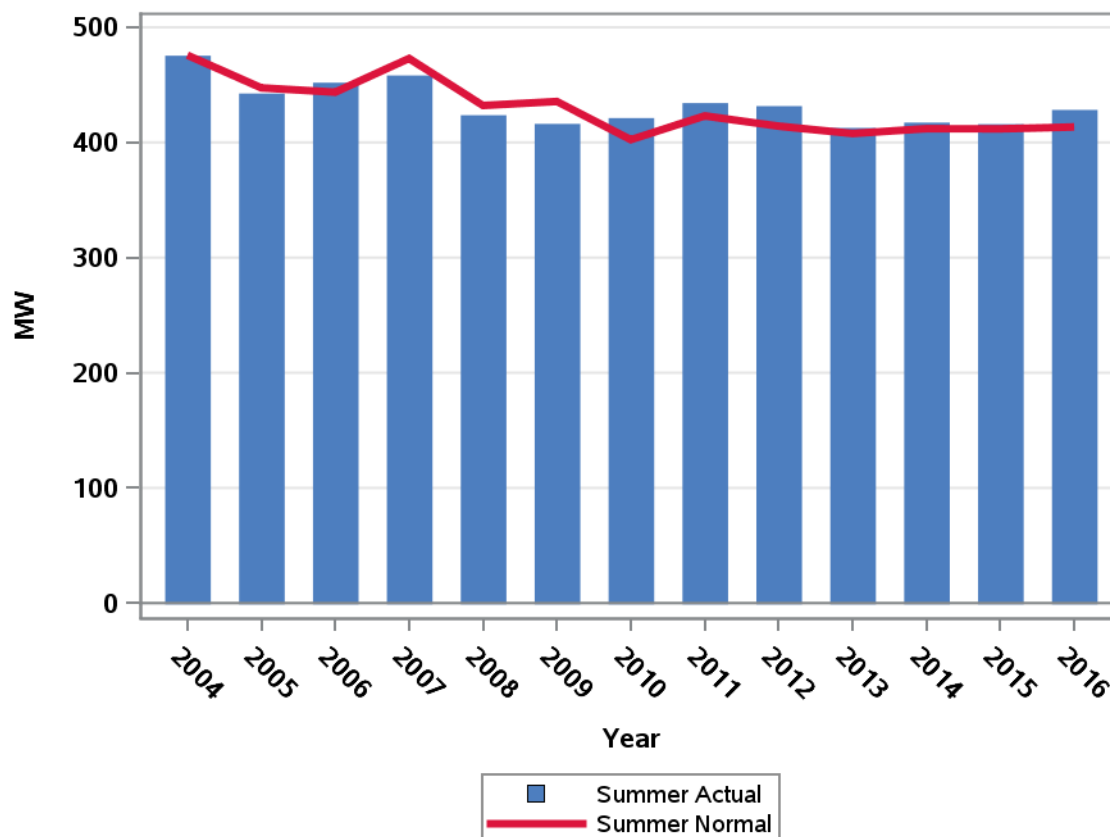
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial LGS Class

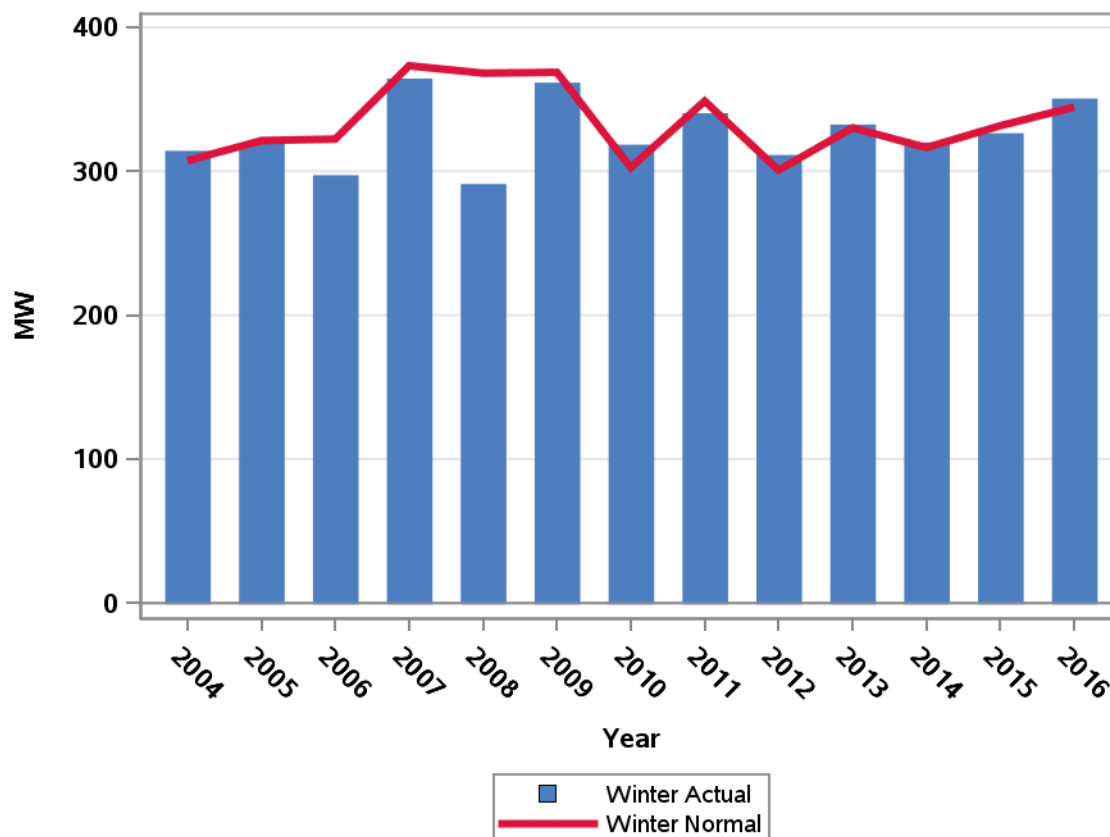
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial LPS Class

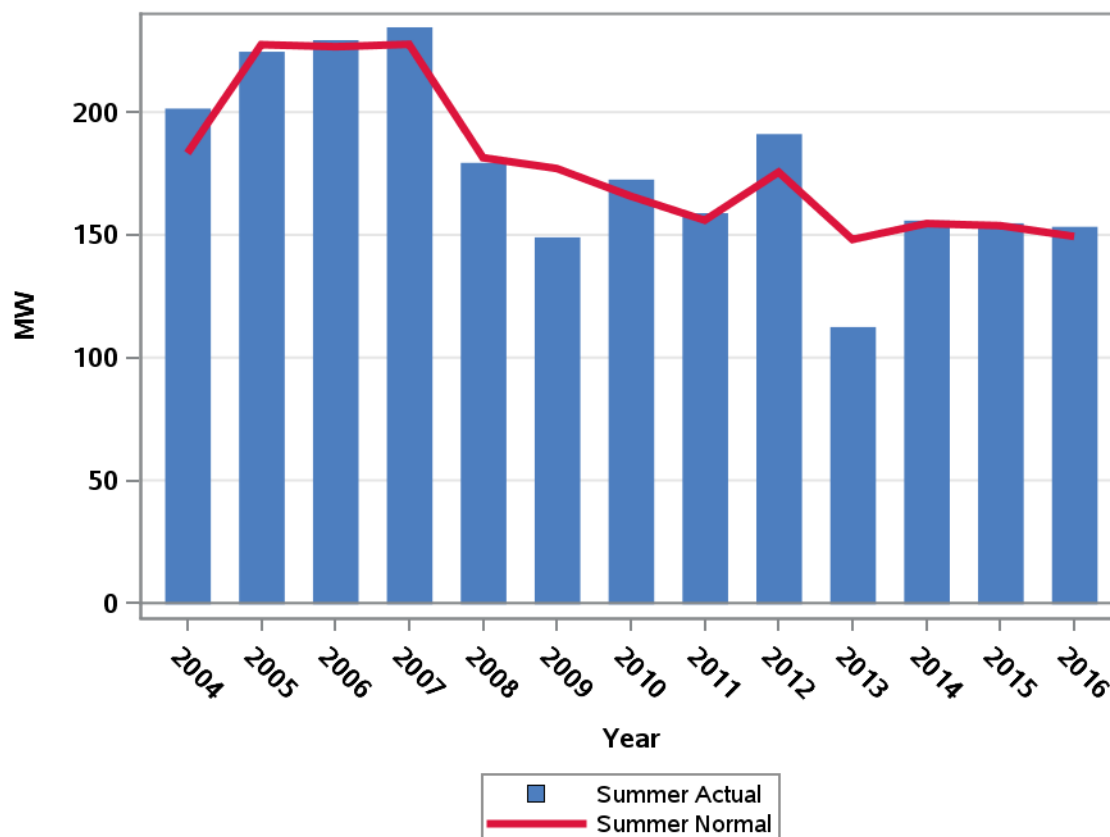
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial LPS Class

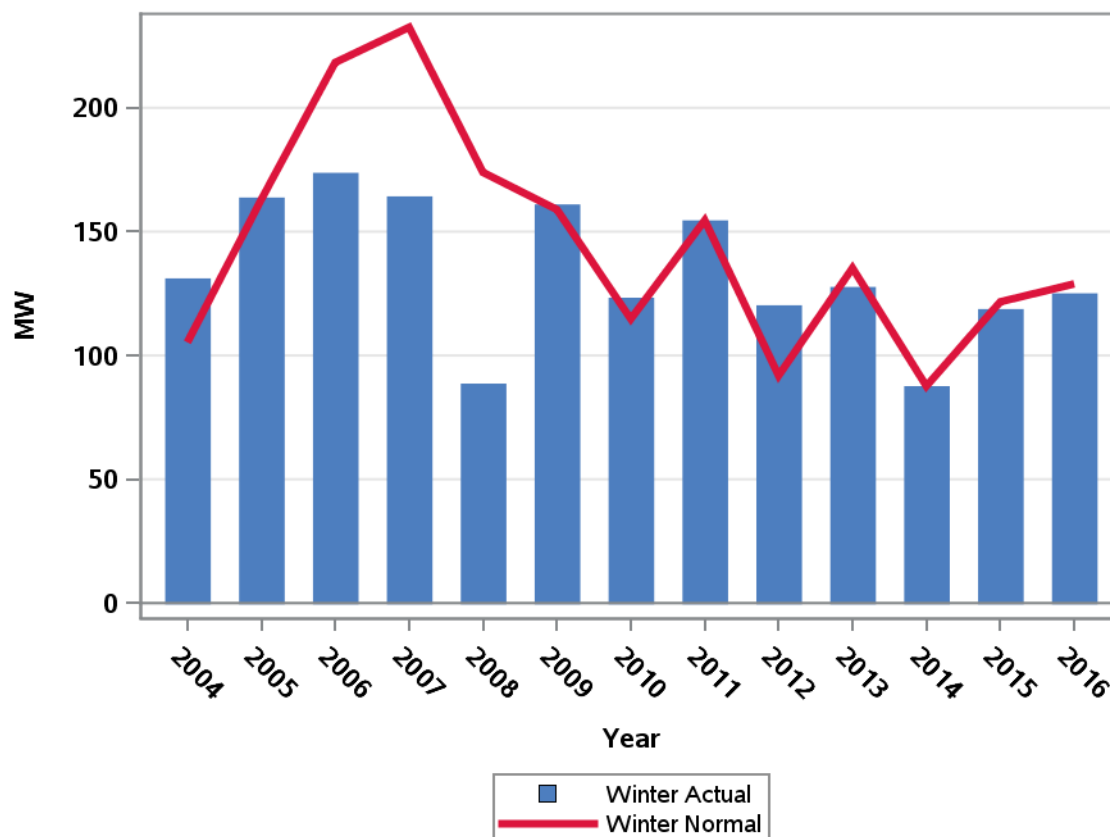
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial SGS Class

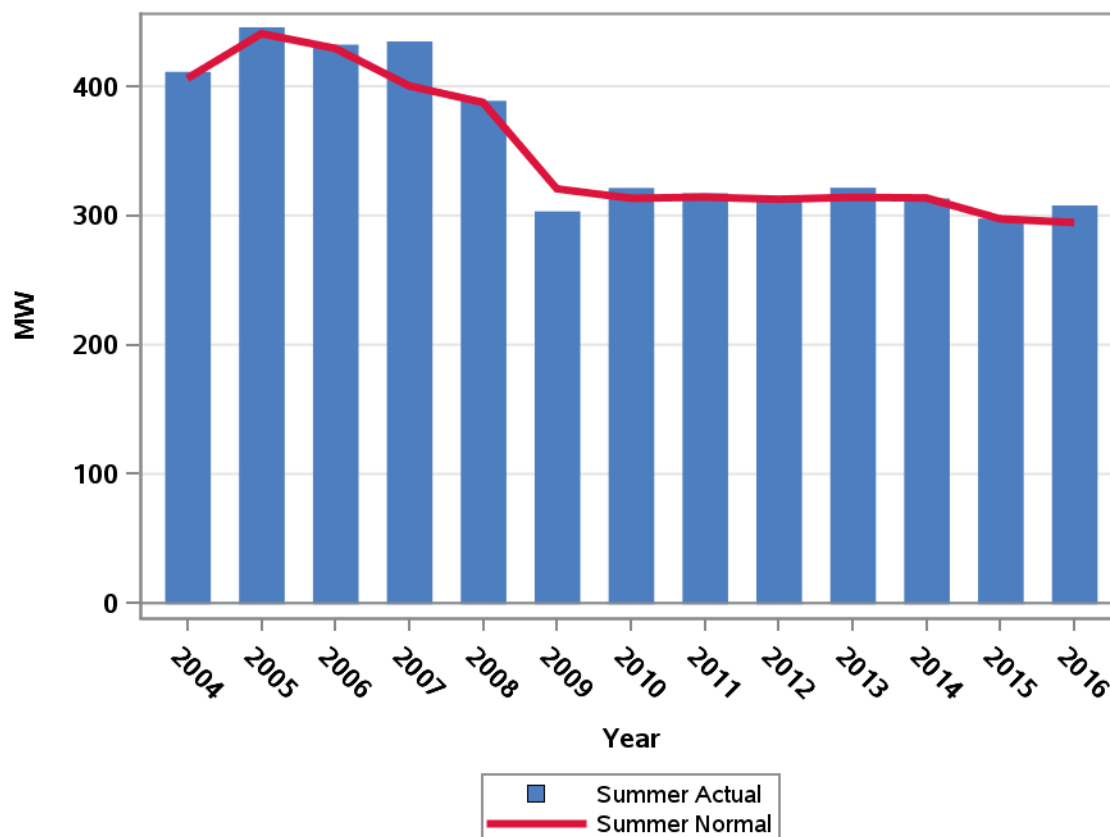
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial SGS Class

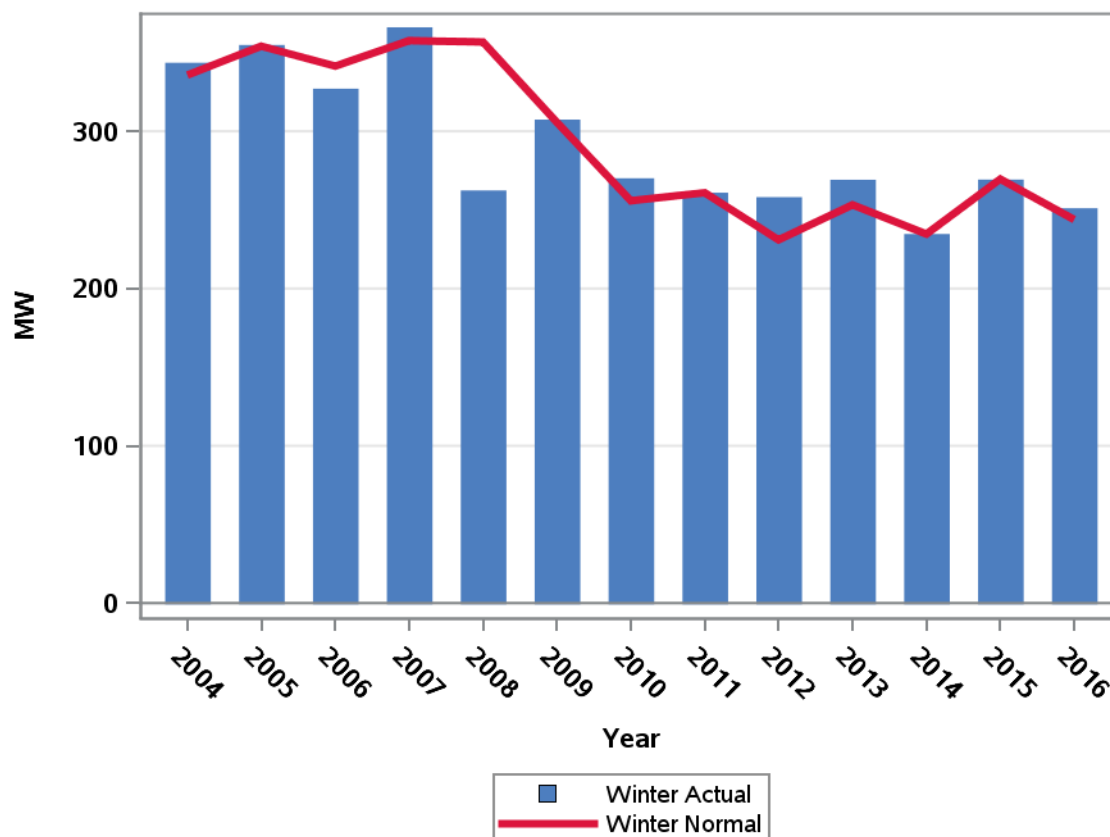
Actual and Weather-Normalized Summer Coincident Peak Demand for Commercial SPS Class

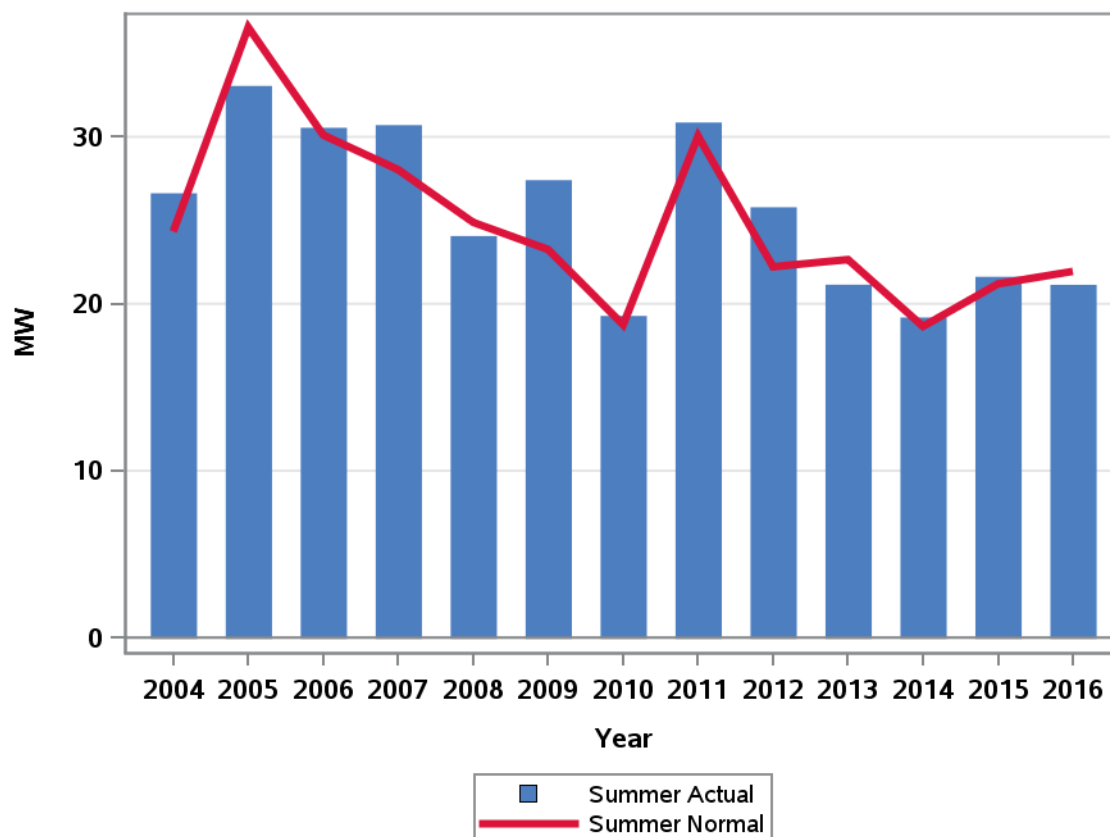
Actual and Weather-Normalized Winter Coincident Peak Demand for Commercial SPS Class

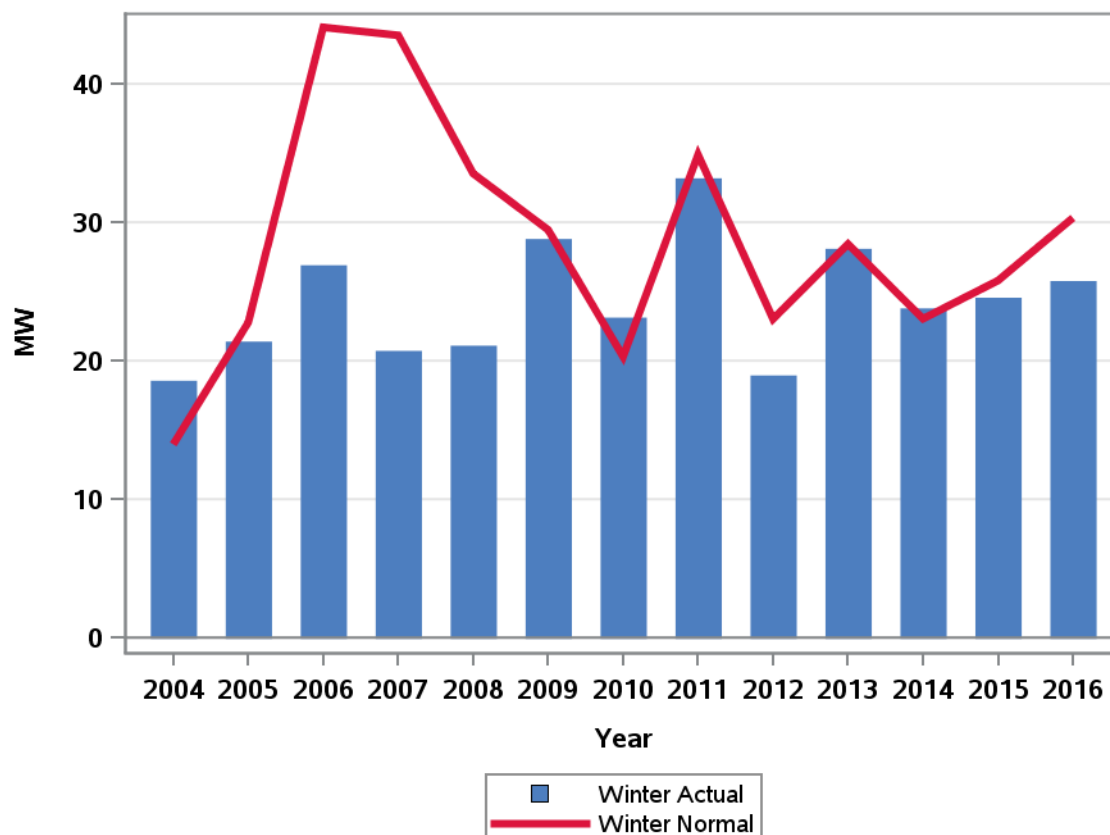
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial LGS Class

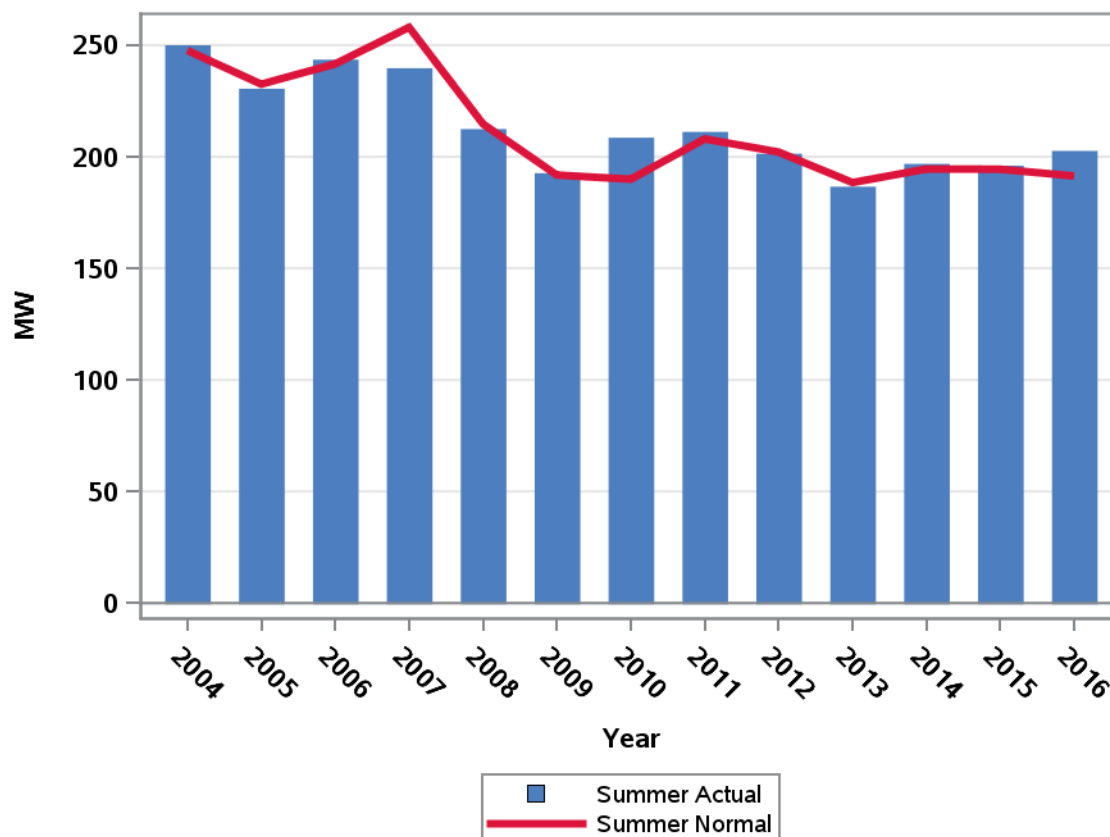
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial LGS Class

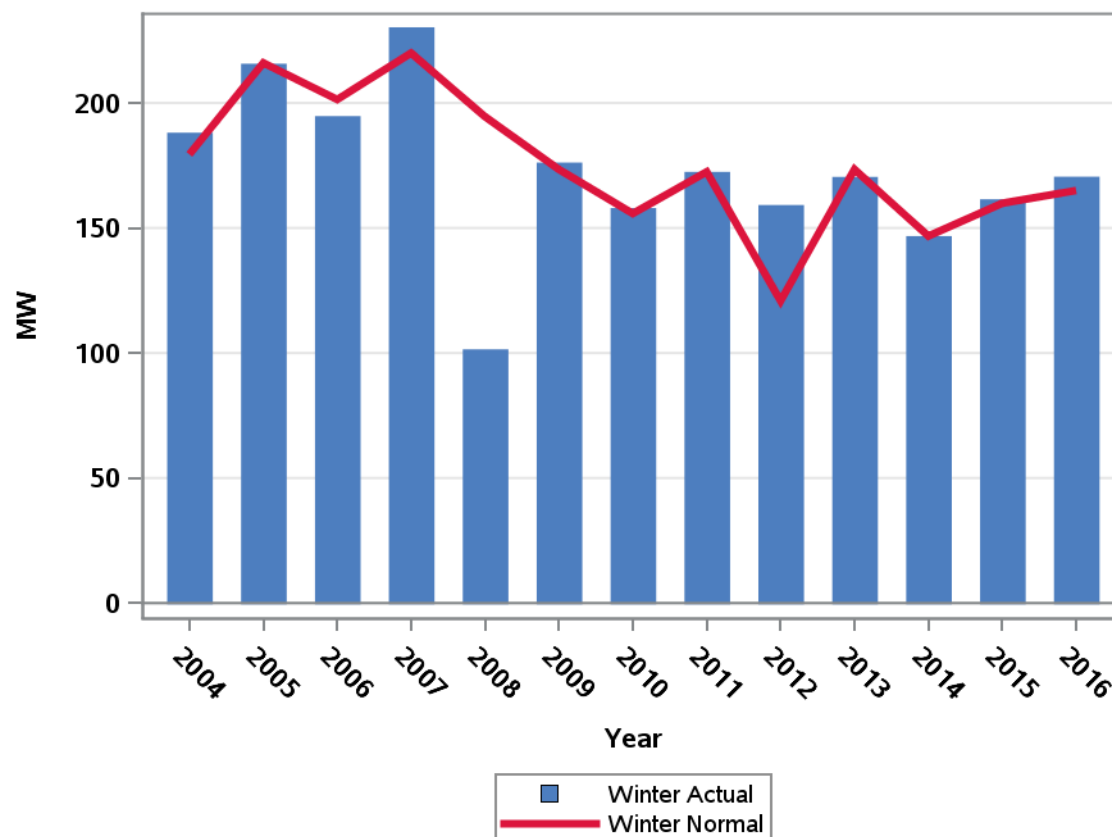
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial LPS Class

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

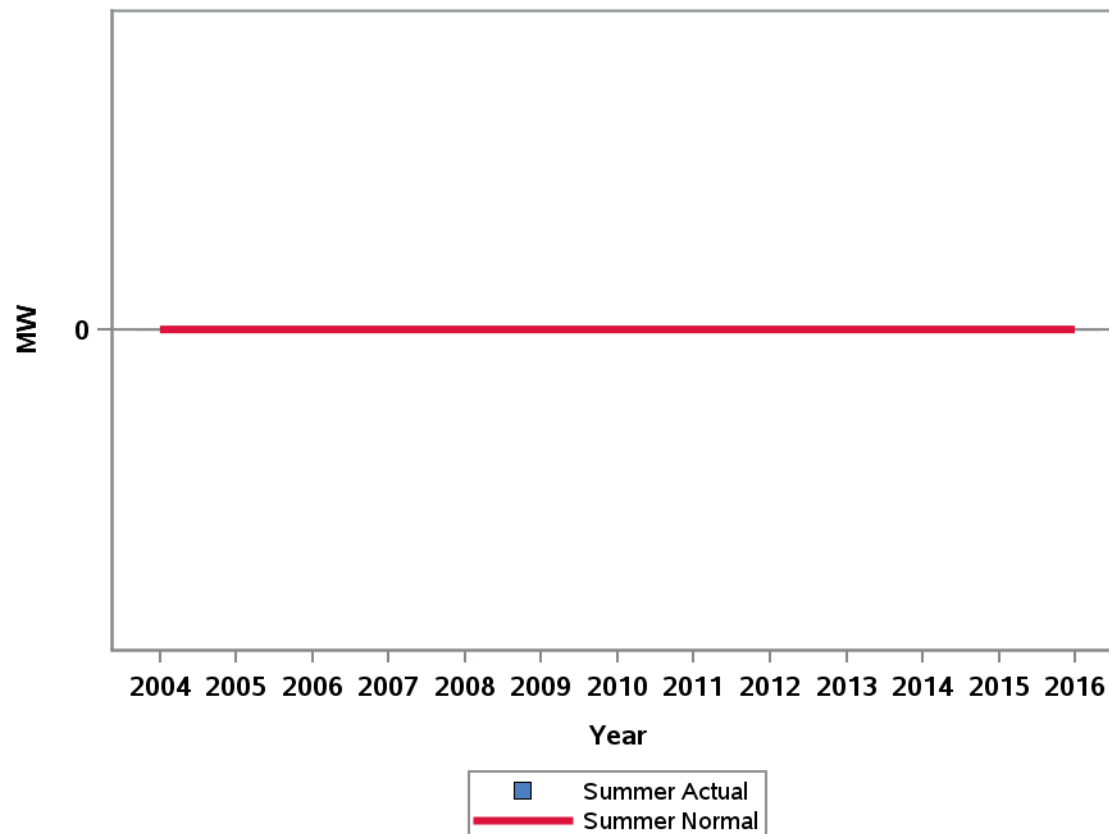
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial SGS Class

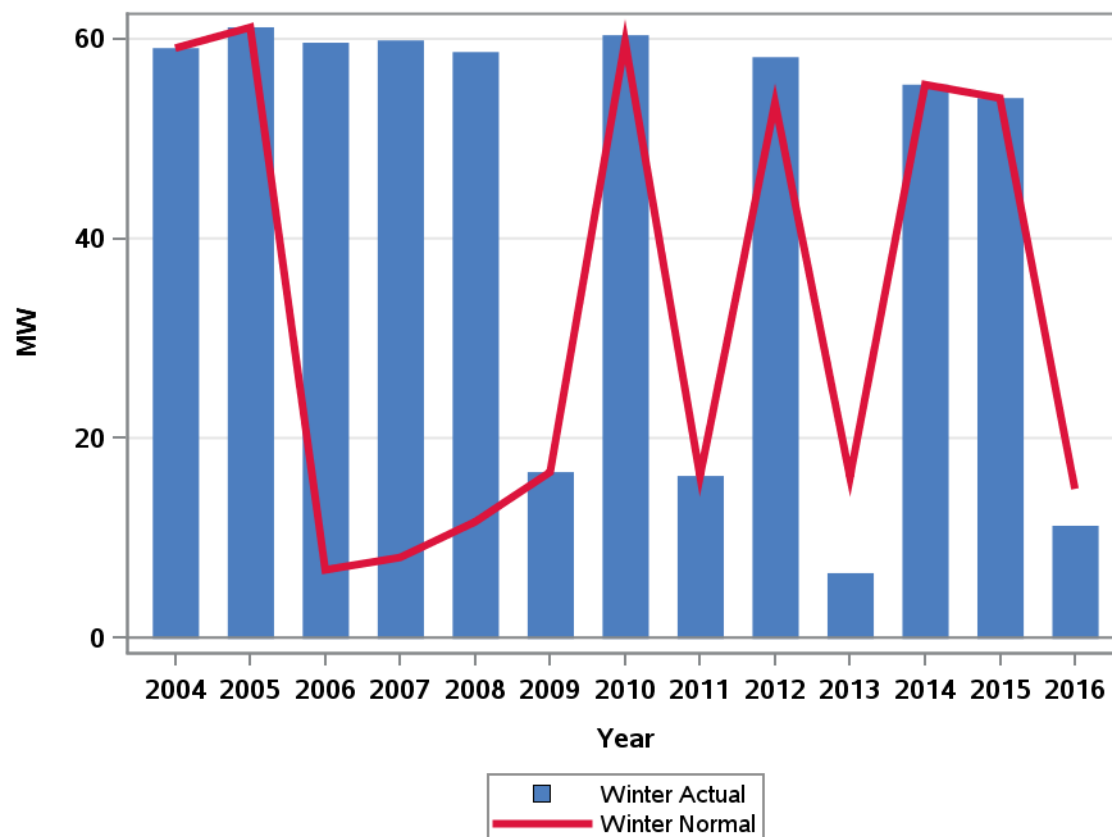
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial SGS Class

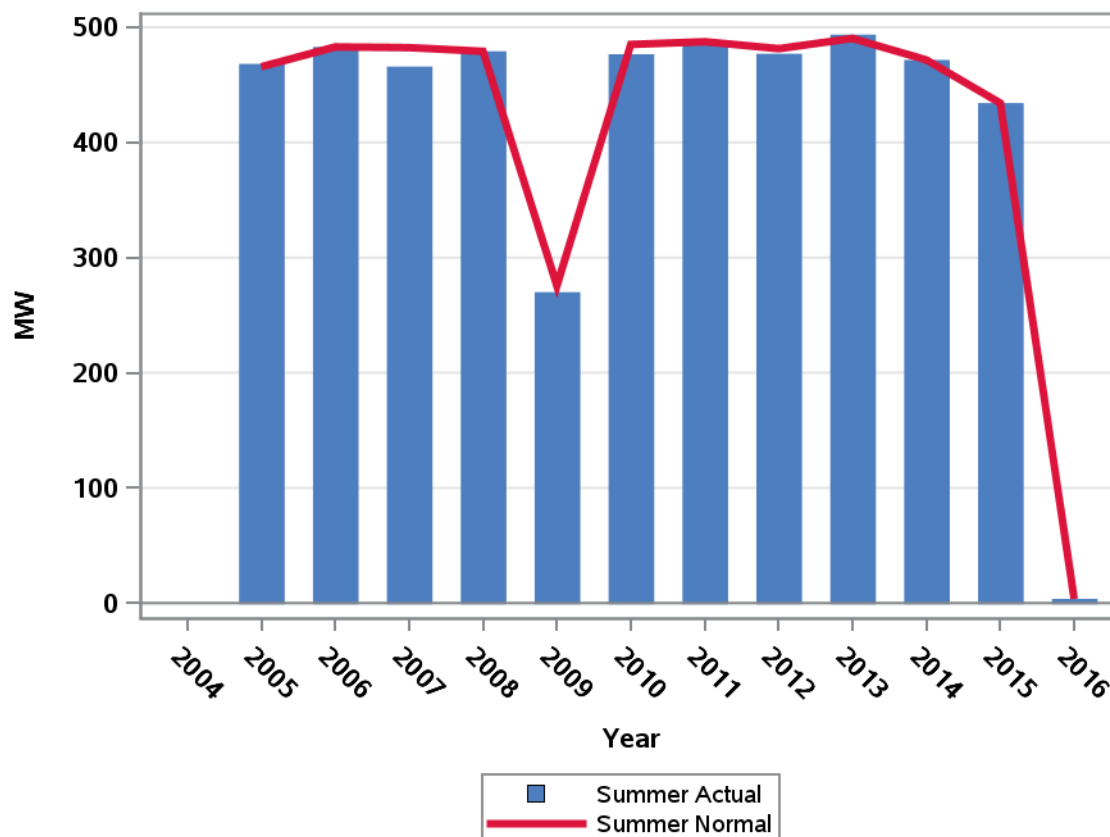
Actual and Weather-Normalized Summer Coincident Peak Demand for Industrial SPS Class

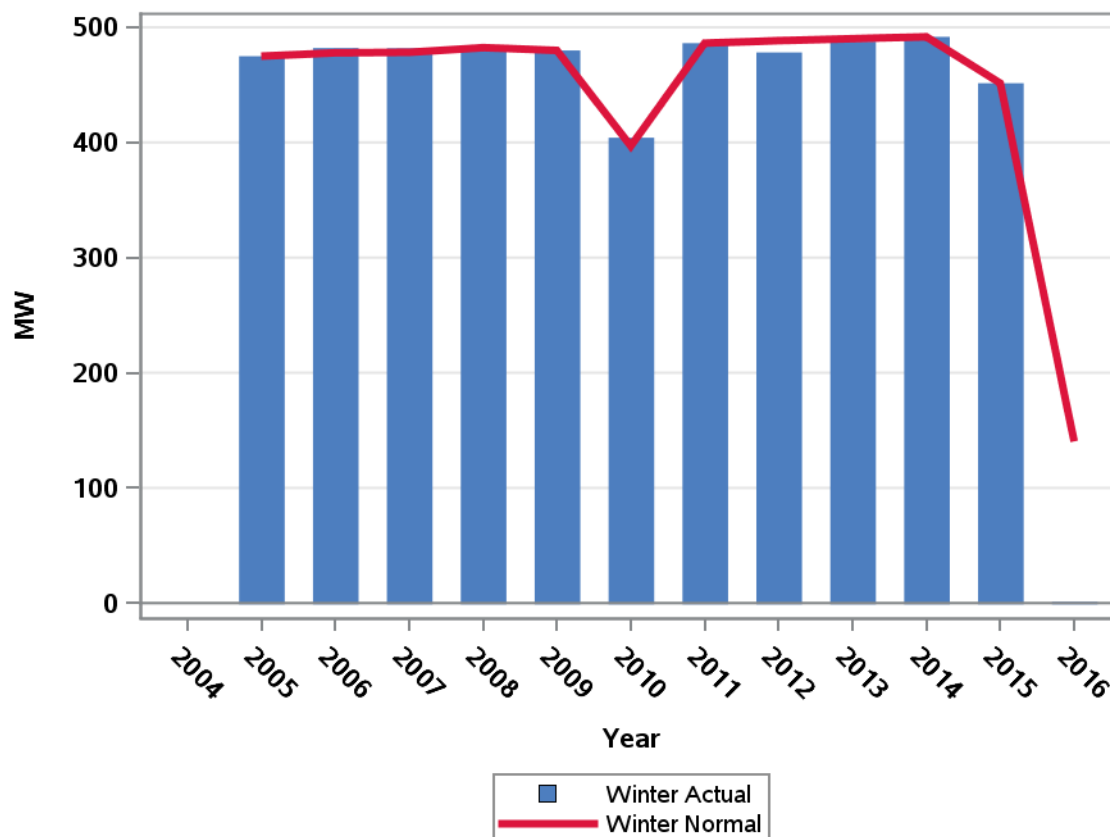
Actual and Weather-Normalized Winter Coincident Peak Demand for Industrial SPS Class

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



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

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

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

Actual Summer Coincident Peak Demand by Class (MW)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	3,830	1,273	172.4	866.1	475.3	201.4	411.2	26.6	250.0	0.0	
2005	3,904	1,415	210.9	945.4	442.5	224.6	445.7	33.1	230.5	0.0	468.2
2006	3,938	1,468	221.5	948.5	451.9	229.3	432.2	30.5	243.5	0.0	483.0
2007	4,174	1,419	234.8	947.0	458.1	234.5	434.7	30.7	239.7	0.0	465.9
2008	3,986	1,463	239.8	831.5	423.6	179.3	388.8	24.1	212.4	0.0	479.2
2009	3,793	1,435	223.9	878.1	416.1	149.0	303.2	27.4	192.7	0.0	270.0
2010	4,151	1,494	252.1	837.7	421.2	172.5	321.3	19.3	208.5	0.0	476.6
2011	4,052	1,542	277.3	873.6	434.2	158.8	317.2	30.9	211.2	0.0	487.4
2012	4,166	1,432	254.9	932.9	431.6	191.0	310.8	25.8	201.4	0.0	477.0
2013	3,626	1,399	276.1	886.7	412.6	112.4	321.5	21.1	186.6	0.0	493.6
2014	3,653	1,481	261.2	806.2	417.2	155.8	313.2	19.2	196.8	0.0	471.7
2015	3,628	1,458	256.3	785.0	415.9	154.7	297.6	21.6	196.0	0.0	434.2
2016	3,639	1,476	247.7	780.9	428.3	153.3	307.8	21.1	202.6	0.0	3.6

Weather-Normalized Summer Coincident Peak Demand by Class (MW)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	3,829	1,246	171.2	862.3	475.8	183.3	406.2	24.3	247.6	0.0	
2005	3,671	1,400	207.3	917.2	447.4	227.5	440.8	36.6	232.5	0.0	465.7
2006	3,775	1,450	217.6	920.2	443.6	226.6	429.3	30.1	241.6	0.0	483.0
2007	3,941	1,478	224.9	920.6	472.9	227.6	400.3	28.0	258.0	0.0	482.3
2008	4,248	1,498	240.7	860.8	432.1	181.4	387.6	24.9	214.7	0.0	479.2
2009	3,916	1,436	235.9	830.9	435.6	177.0	320.6	23.3	191.8	0.0	275.6
2010	3,877	1,423	253.5	827.3	402.4	165.7	313.3	18.7	189.9	0.0	485.1
2011	3,893	1,523	271.7	839.7	423.0	155.9	314.2	30.0	208.0	0.0	487.4
2012	3,757	1,322	264.1	831.4	414.1	175.5	312.6	22.2	202.1	0.0	481.4
2013	3,538	1,432	273.7	818.8	407.7	148.1	314.0	22.6	188.5	0.0	490.3
2014	3,510	1,472	259.5	781.2	412.0	154.6	313.5	18.6	194.5	0.0	471.7
2015	3,523	1,450	255.2	766.5	411.8	153.8	297.3	21.2	194.4	0.0	434.2
2016	3,237	1,394	237.1	771.4	413.5	149.4	294.5	21.9	191.4	0.0	3.6

Actual Winter Coincident Peak Demand by Class (MW)

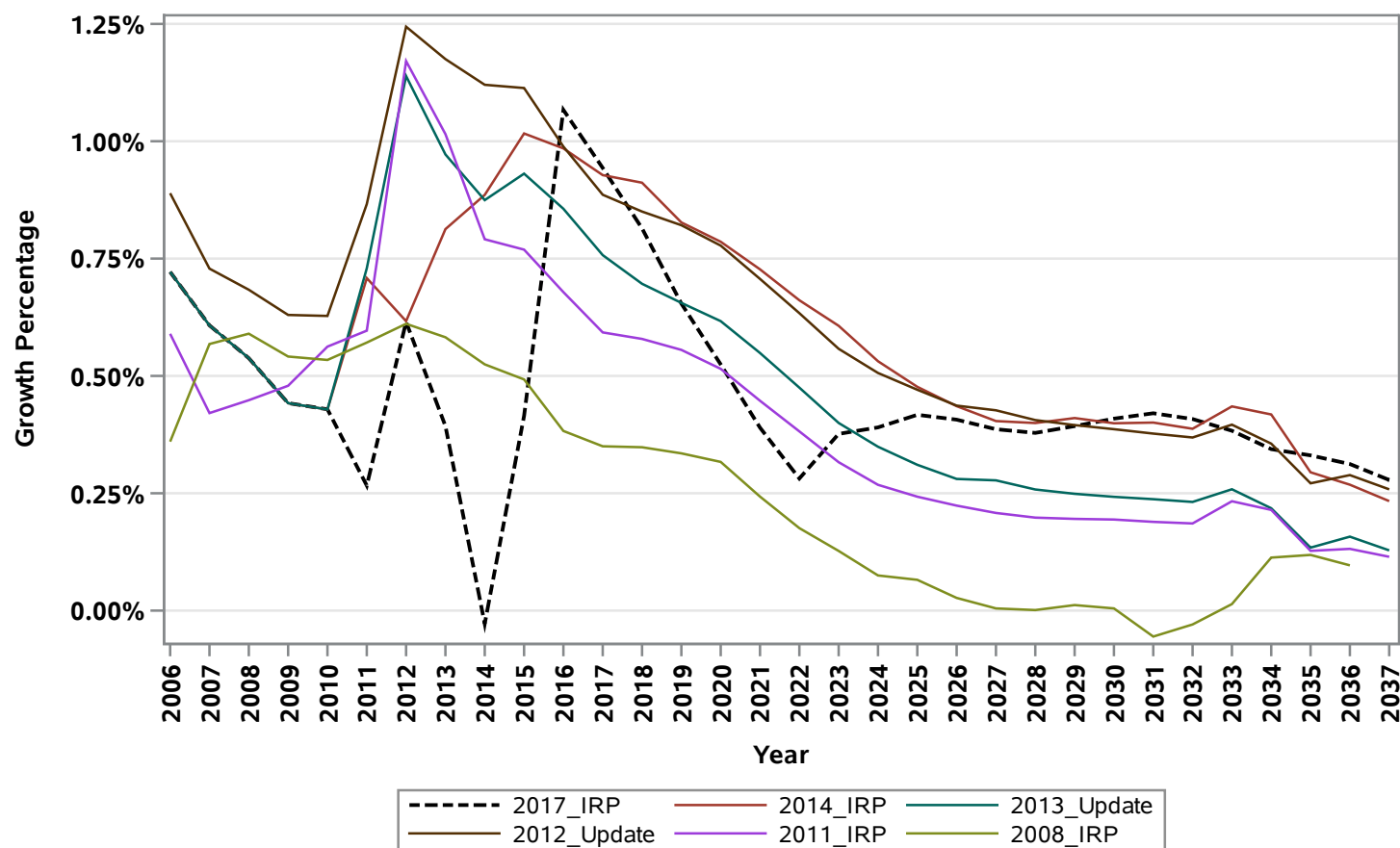
Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	3,142	941	129.8	544.3	314.2	131.1	343.6	18.6	188.1	59.1	
2005	3,013	1,108	146.3	611.4	319.3	163.8	354.9	21.4	215.7	61.2	474.9
2006	2,984	1,118	163.7	576.6	297.3	173.8	327.1	26.9	194.7	59.6	482.0
2007	3,092	1,059	165.6	603.8	364.4	164.3	366.1	20.7	230.3	59.8	481.8
2008	3,694	1,059	144.8	545.5	291.2	88.6	262.4	21.1	101.5	58.7	482.5
2009	3,199	1,291	174.6	653.3	361.5	161.0	307.4	28.8	176.2	16.6	479.9
2010	3,609	1,117	169.9	610.6	318.5	123.3	270.1	23.1	158.0	60.4	404.1
2011	3,088	1,238	181.6	581.2	340.3	154.6	260.9	33.2	172.4	16.2	486.2
2012	3,059	1,043	180.2	563.7	311.3	120.3	258.1	18.9	159.2	58.2	478.2
2013	2,901	1,234	193.6	585.7	332.4	127.7	269.2	28.1	170.4	6.5	487.6
2014	3,926	1,115	172.7	603.9	320.0	87.6	234.7	23.8	146.8	55.4	491.7
2015	3,480	1,140	176.4	626.4	326.4	118.7	269.3	24.5	161.5	54.1	451.4
2016	3,272	1,251	187.0	641.9	350.5	125.1	251.1	25.8	170.5	11.2	1.1

Weather-Normalized Winter Coincident Peak Demand by Class (MW)

Year	Residential	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	LTS
2004	3,187	918	124.7	541.9	307.2	105.3	335.7	14.0	179.4	59.1	
2005	3,273	1,171	146.0	644.9	321.3	163.0	354.1	22.8	216.0	61.2	474.9
2006	2,947	1,320	168.6	649.6	322.3	218.3	341.4	44.1	201.4	6.8	477.8
2007	3,201	1,283	169.6	632.0	373.3	232.5	357.6	43.5	220.0	8.0	478.3
2008	3,113	1,263	157.3	672.5	368.2	173.9	356.7	33.5	194.5	11.6	482.3
2009	3,239	1,310	170.6	664.4	368.7	158.9	305.7	29.5	173.4	16.6	479.9
2010	3,648	1,085	168.4	582.3	302.6	114.7	255.8	20.3	155.8	59.7	396.8
2011	3,357	1,311	181.6	620.5	348.7	154.6	260.9	34.9	172.4	16.2	486.2
2012	3,340	1,152	183.7	674.2	300.8	91.9	231.0	23.0	120.8	53.6	488.4
2013	3,209	1,331	210.7	624.0	330.2	135.3	253.2	28.4	173.4	16.1	490.1
2014	3,823	1,087	172.7	589.1	316.5	87.6	234.7	23.0	146.8	55.4	491.7
2015	3,808	1,182	178.8	661.1	331.6	121.7	269.6	25.8	159.9	54.1	451.4
2016	3,281	1,264	178.7	622.1	344.6	128.9	243.8	30.3	165.0	14.9	140.4

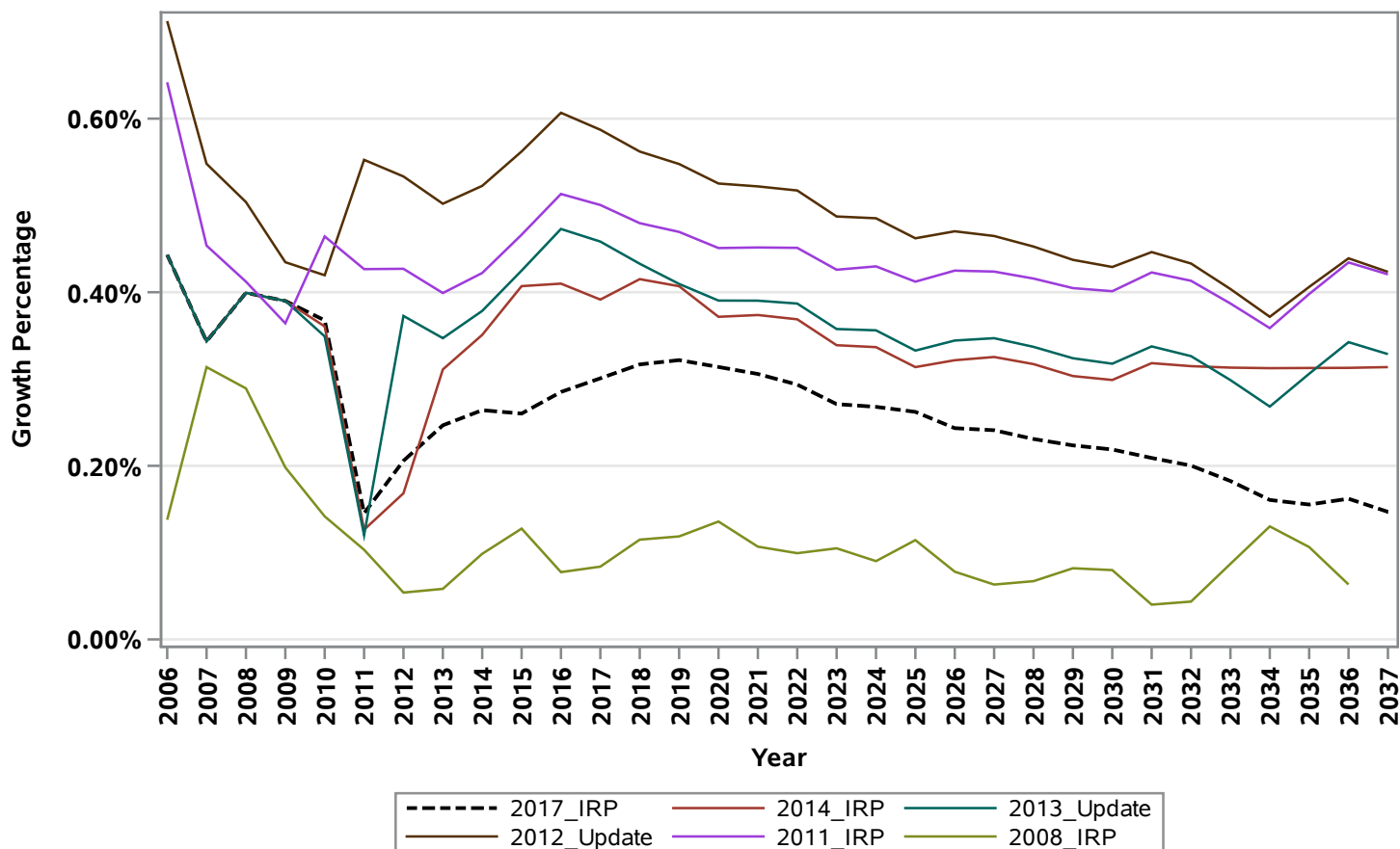
Archive of Previous Forecasts Independent Variables¹²

Historical/Forecast Growth Rate in Service Territory Households

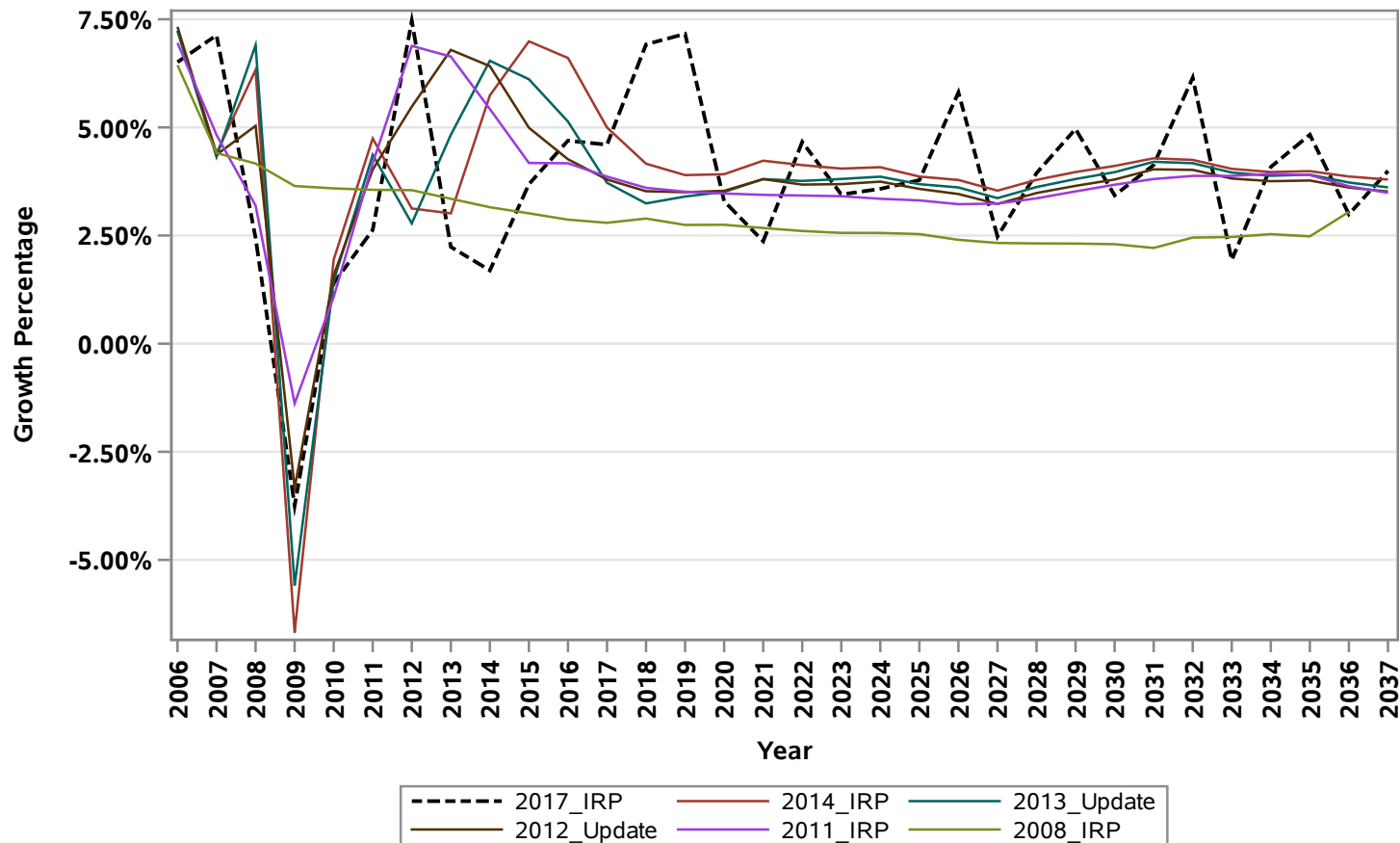


¹²⁴ CSR 240-22.030(6)(C)3

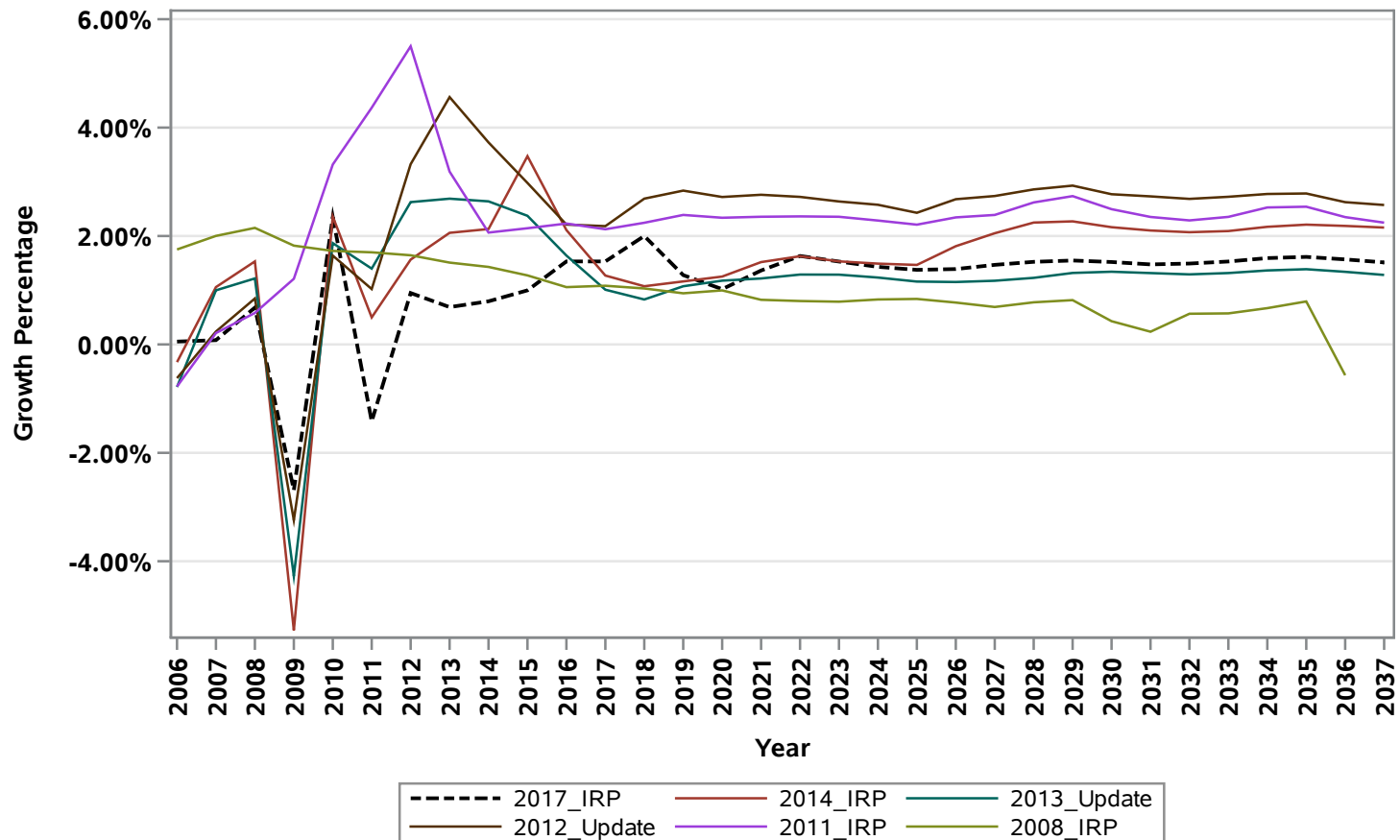
Historical/Forecast Growth Rate in Service Territory Population



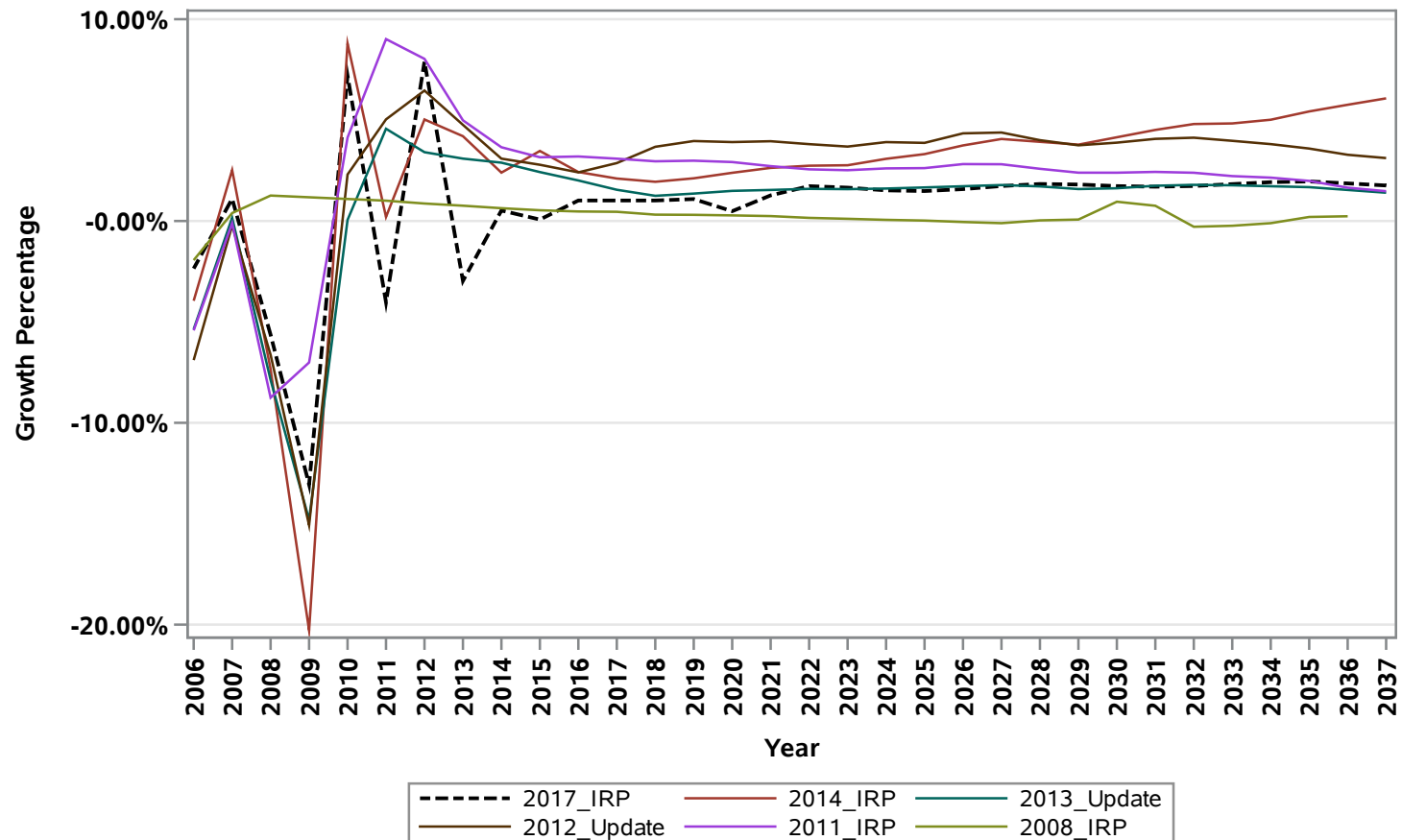
Historical/Forecast Growth Rate in Service Territory Personal Income



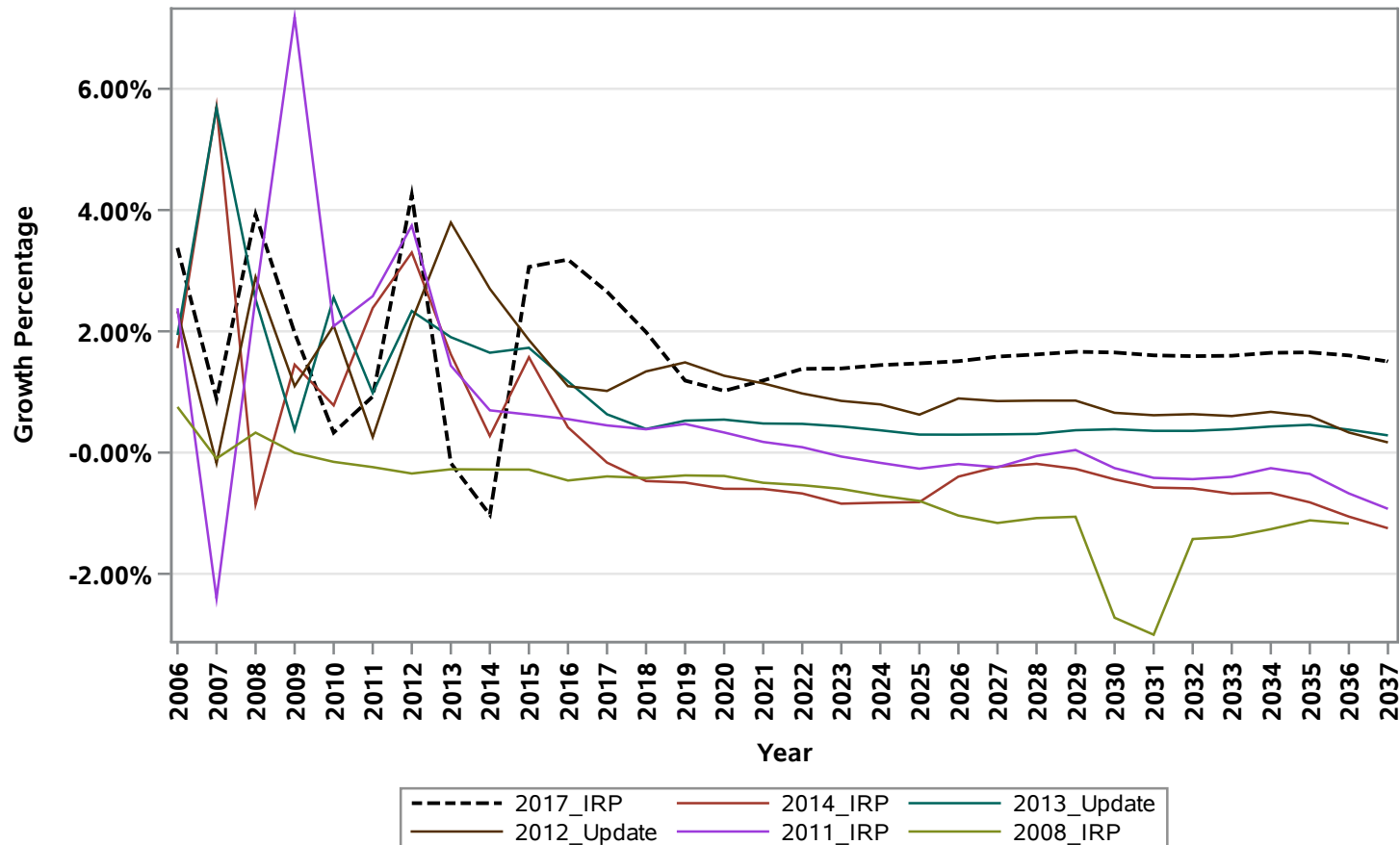
Historical/Forecast Growth Rate in Service Territory GDP



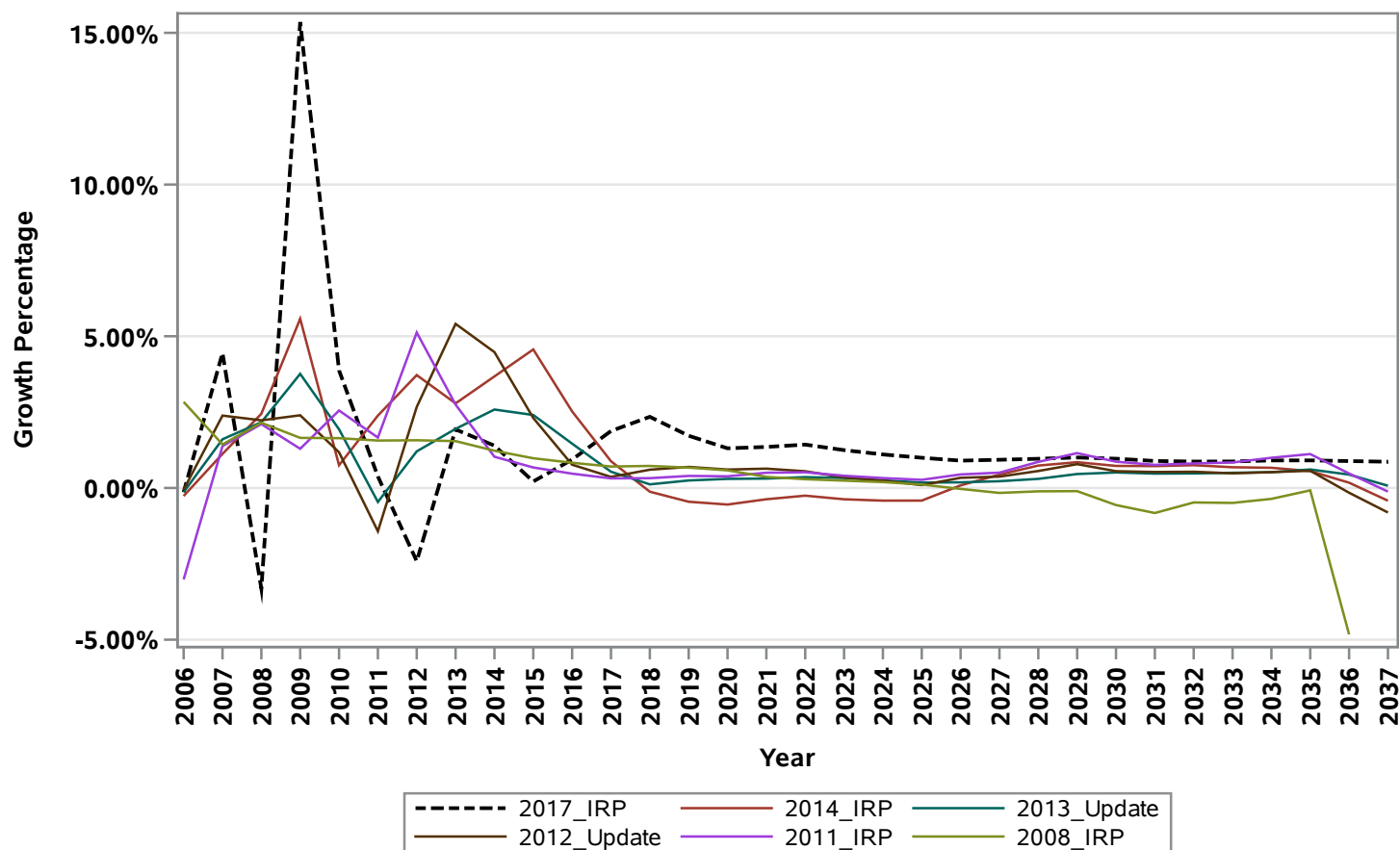
Historical/Forecast Growth Rate in Service Territory Manufacturing GDP



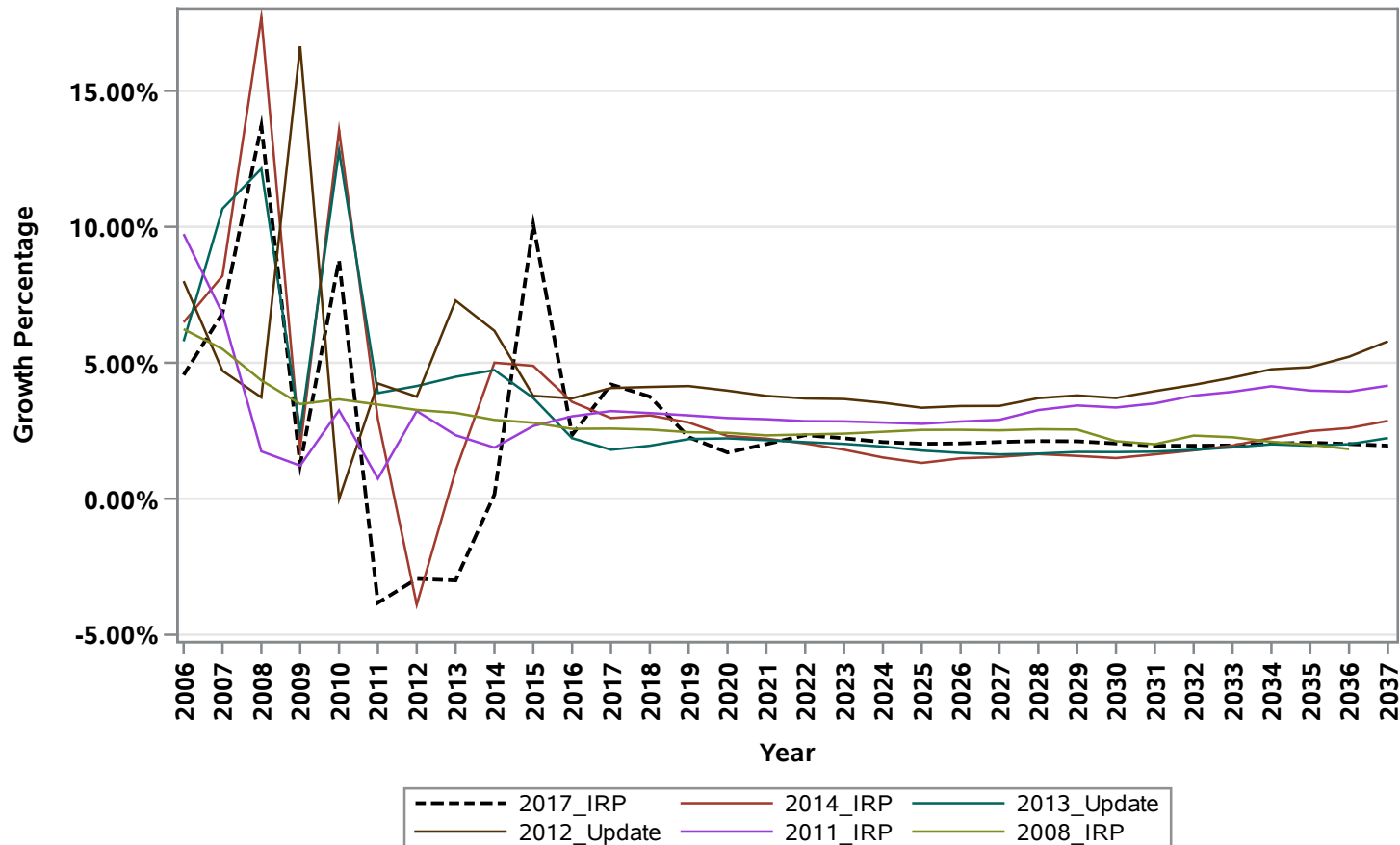
Historical/Forecast Growth Rate in Service Territory Education and Health Services GDP



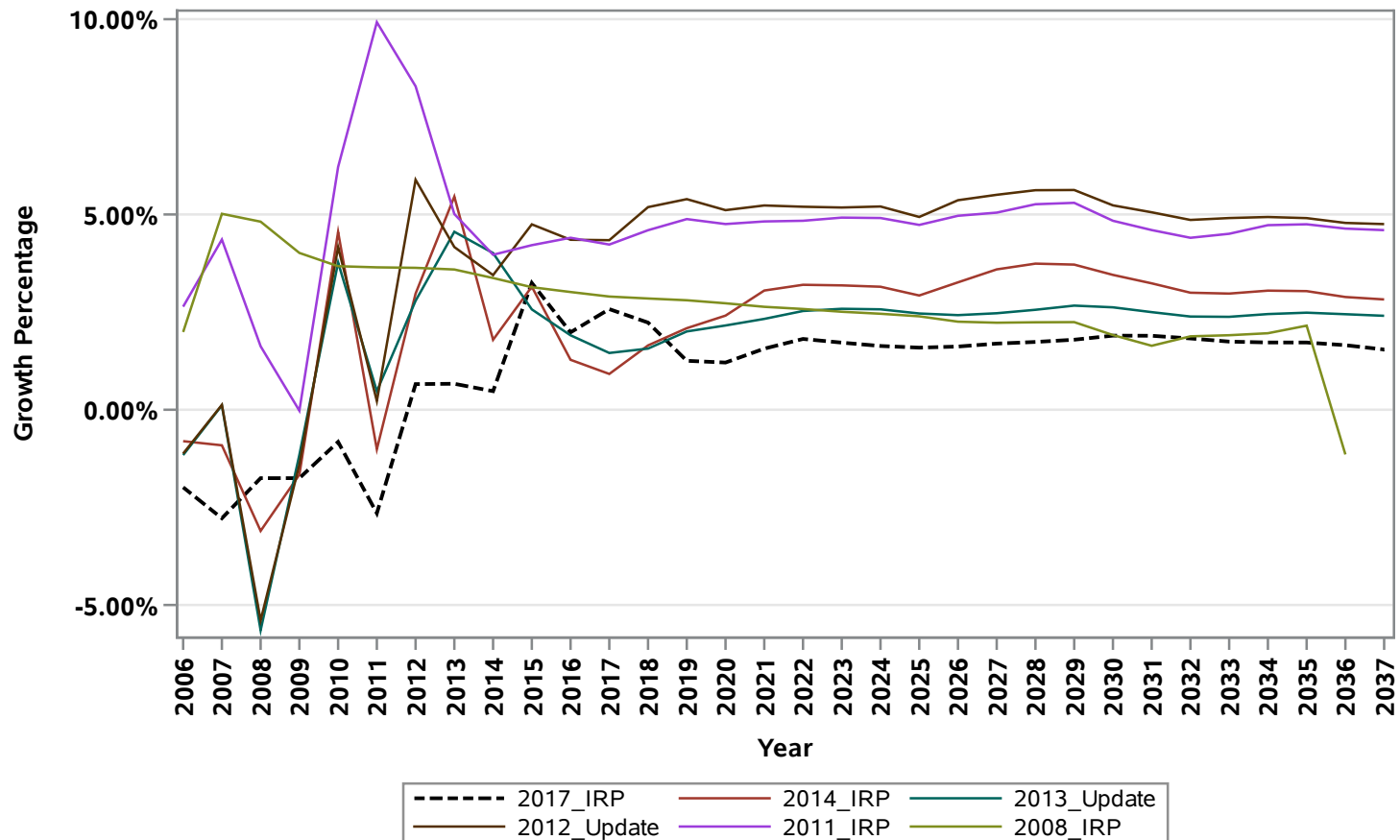
Historical/Forecast Growth Rate in Service Territory Financial Services GDP



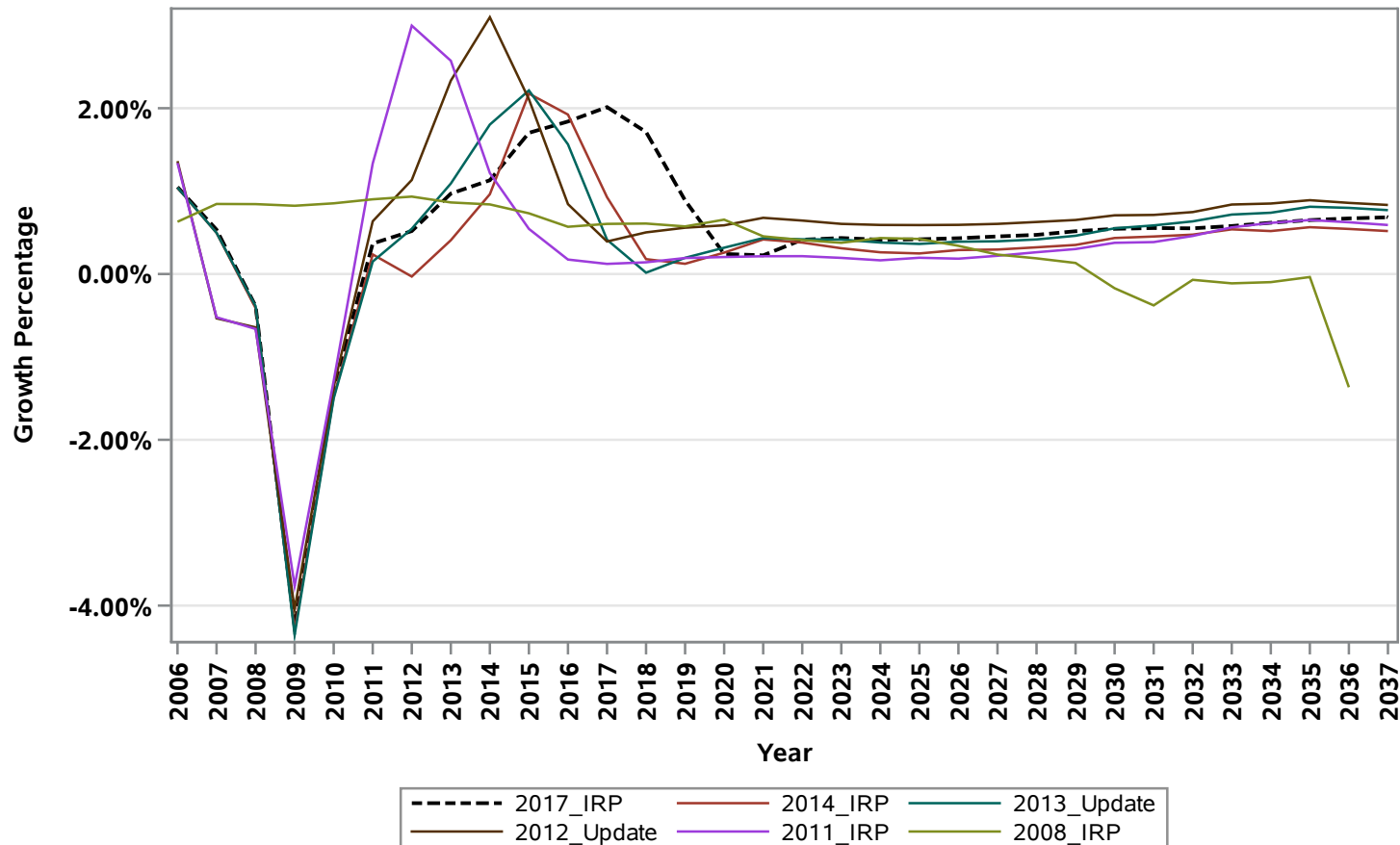
Historical/Forecast Growth Rate in Service Territory Information Services GDP



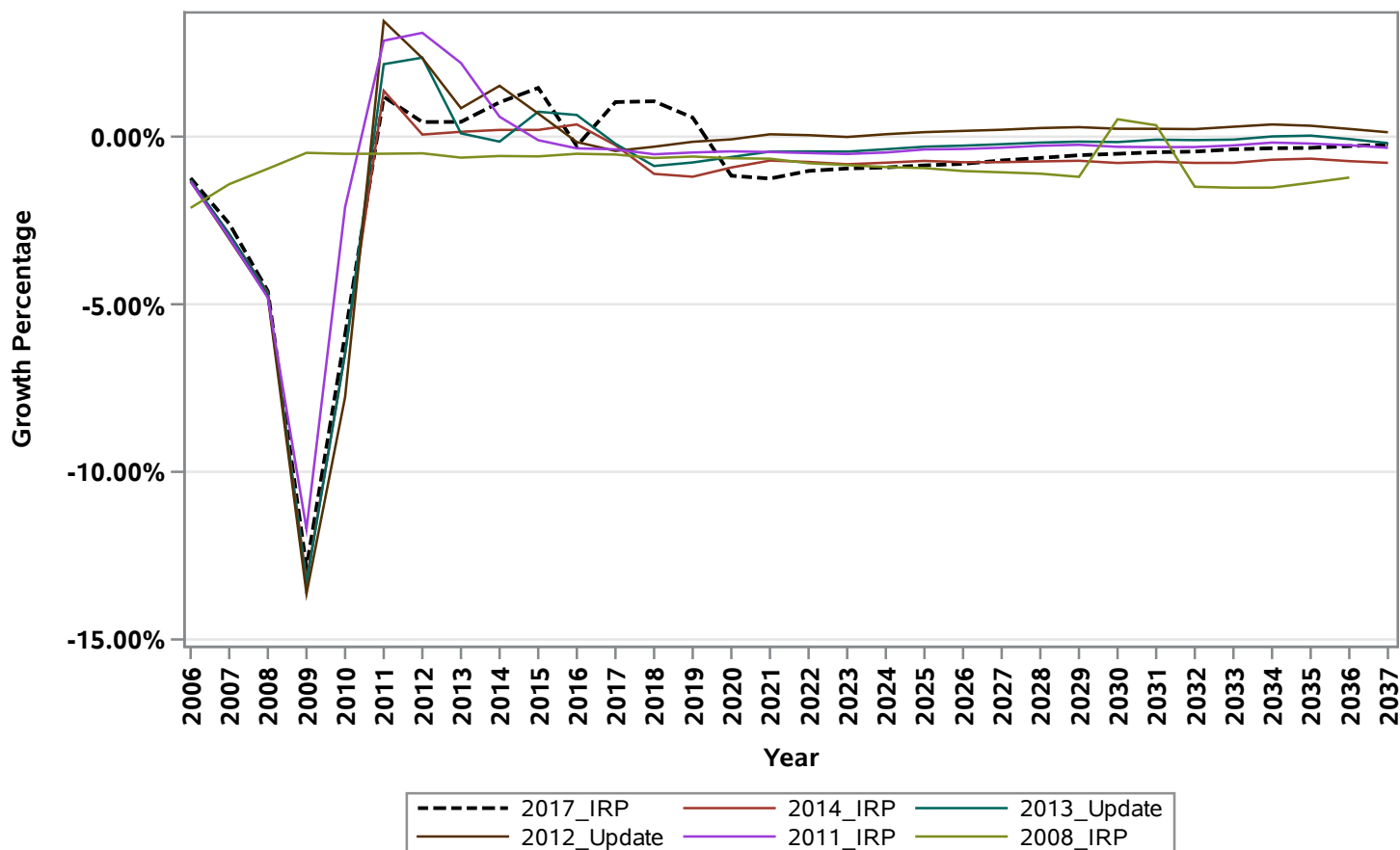
Historical/Forecast Growth Rate in Service Territory Retail/Trade GDP



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

Historical/Forecast Growth Rate in Service Territory Households

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

Historical/Forecast Growth Rate in Service Territory Population

(continued next page)

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

Historical/Forecast Growth Rate in Service Territory Population

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

Historical/Forecast Growth Rate in Service Territory Personal Income

(continued next page)

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

Historical/Forecast Growth Rate in Service Territory Personal Income

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

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

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

Historical/Forecast Growth Rate in Service Territory GDP

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

Historical/Forecast Growth Rate in Service Territory Manufacturing GDP

(continued next page)

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

Historical/Forecast Growth Rate in Service Territory Manufacturing GDP

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

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

(continued)

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Year	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	3.38%	1.72%	1.94%	2.33%	2.38%	0.75%
2007	0.89%	5.71%	5.68%	-0.18%	-2.41%	-0.10%
2008	3.93%	-0.86%	2.53%	2.89%	2.56%	0.33%
2009	1.97%	1.45%	0.37%	1.10%	7.18%	-0.00%
2010	0.33%	0.78%	2.56%	2.09%	2.09%	-0.15%
2011	0.92%	2.38%	0.98%	0.26%	2.58%	-0.24%
2012	4.25%	3.30%	2.33%	2.17%	3.74%	-0.35%
2013	-0.17%	1.62%	1.90%	3.79%	1.43%	-0.28%
2014	-1.03%	0.27%	1.65%	2.70%	0.70%	-0.28%
2015	3.06%	1.57%	1.73%	1.86%	0.63%	-0.28%
2016	3.18%	0.42%	1.17%	1.10%	0.55%	-0.46%
2017	2.65%	-0.17%	0.63%	1.02%	0.45%	-0.39%
2018	1.99%	-0.47%	0.39%	1.34%	0.38%	-0.42%
2019	1.19%	-0.49%	0.53%	1.49%	0.47%	-0.38%
2020	1.02%	-0.60%	0.54%	1.27%	0.33%	-0.39%
2021	1.19%	-0.60%	0.48%	1.14%	0.18%	-0.50%
2022	1.38%	-0.67%	0.47%	0.97%	0.09%	-0.54%
2023	1.39%	-0.84%	0.43%	0.85%	-0.07%	-0.60%
2024	1.44%	-0.83%	0.37%	0.79%	-0.17%	-0.71%
2025	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	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2026	1.51%	-0.40%	0.30%	0.89%	-0.19%	-1.04%
2027	1.58%	-0.23%	0.30%	0.85%	-0.24%	-1.16%
2028	1.62%	-0.19%	0.31%	0.86%	-0.06%	-1.08%
2029	1.66%	-0.27%	0.37%	0.86%	0.04%	-1.06%
2030	1.65%	-0.44%	0.39%	0.66%	-0.26%	-2.72%
2031	1.60%	-0.58%	0.36%	0.62%	-0.42%	-3.00%
2032	1.59%	-0.59%	0.36%	0.63%	-0.44%	-1.43%
2033	1.60%	-0.68%	0.38%	0.60%	-0.40%	-1.39%
2034	1.65%	-0.67%	0.43%	0.67%	-0.26%	-1.26%
2035	1.65%	-0.82%	0.46%	0.60%	-0.35%	-1.12%
2036	1.60%	-1.06%	0.38%	0.33%	-0.67%	-1.17%
2037	1.50%	-1.25%	0.28%	0.17%	-0.93%	

Historical/Forecast Growth Rate in Service Territory Financial Services GDP

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

Historical/Forecast Growth Rate in Service Territory Financial Services GDP

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

Historical/Forecast Growth Rate in Service Territory Information Services GDP

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

Historical/Forecast Growth Rate in Service Territory Information Services GDP

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

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

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

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

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

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

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

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

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

Historical/Forecast Growth Rate in Service Territory Manufacturing Employment

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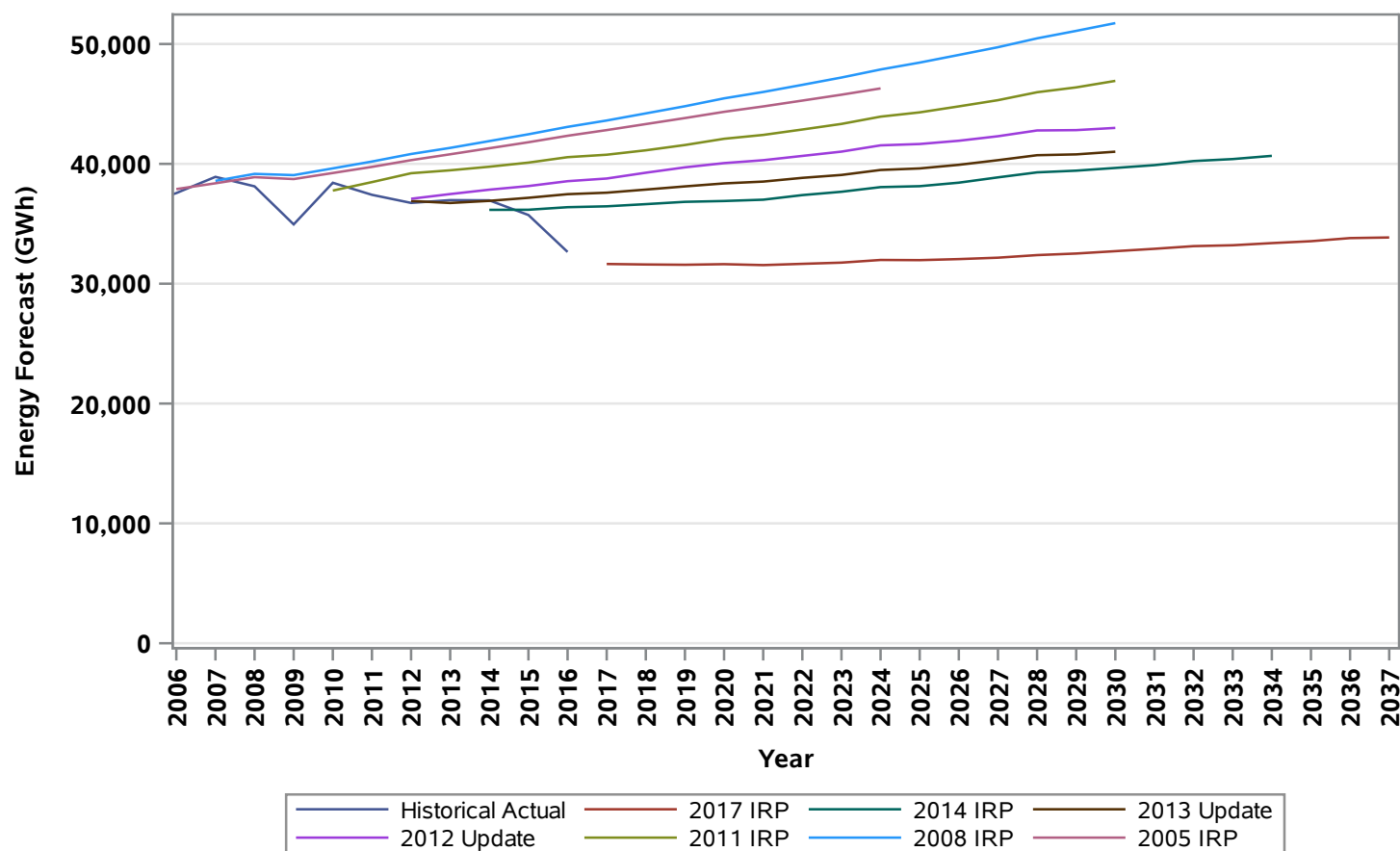
Year	2017_IRP	2014_IRP	2013_Update	2012_Update	2011_IRP	2008_IRP
2006	-1.24%	-1.30%	-1.30%	-1.33%	-1.34%	-2.12%
2007	-2.60%	-2.90%	-2.90%	-3.05%	-3.01%	-1.42%
2008	-4.61%	-4.65%	-4.69%	-4.78%	-4.81%	-0.96%
2009	-12.86%	-13.25%	-13.33%	-13.63%	-11.71%	-0.48%
2010	-5.91%	-6.47%	-6.45%	-7.77%	-2.10%	-0.51%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

Historical/Forecast Growth Rate in Service Territory Manufacturing Employment

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

Archive of Previous Energy and Peak Demand Forecasts¹³

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



¹³⁴ CSR 240-22.030(6)(C)4

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

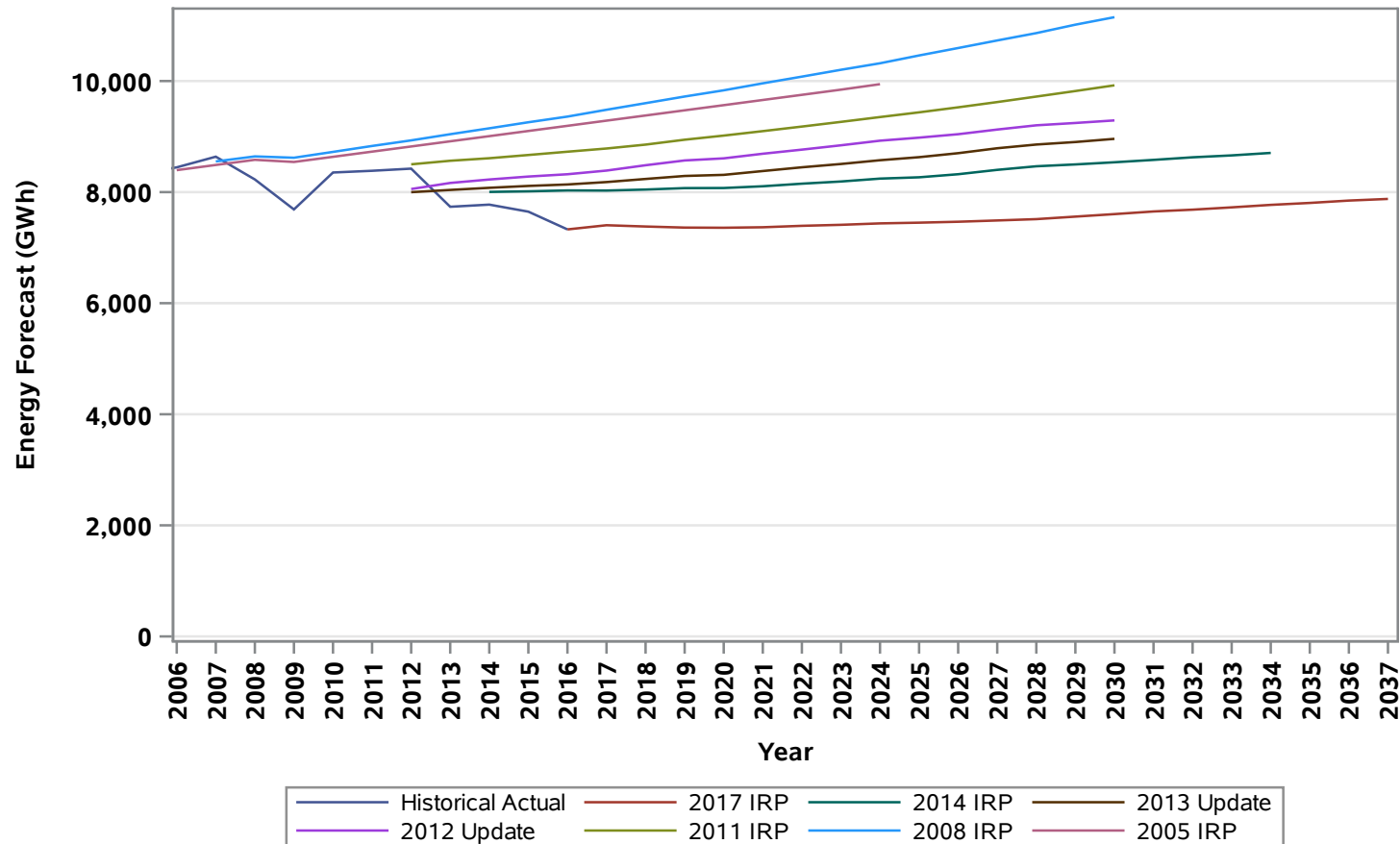
(continued next page)

Year	Actual	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	37,562							37,894
2007	38,915						38,580	38,377
2008	38,122						39,165	38,890
2009	34,947						39,059	38,731
2010	38,420					37,768	39,623	39,237
2011	37,417					38,476	40,192	39,747
2012	36,741			36,902	37,086	39,217	40,821	40,307
2013	36,975			36,735	37,477	39,462	41,332	40,797
2014	36,955		36,160	36,913	37,844	39,758	41,899	41,301
2015	35,729		36,169	37,168	38,146	40,103	42,467	41,802
2016	32,650		36,382	37,470	38,553	40,555	43,085	42,342
2017		31,643	36,457	37,593	38,776	40,761	43,618	42,816
2018		31,603	36,638	37,852	39,260	41,130	44,211	43,318
2019		31,579	36,831	38,118	39,709	41,572	44,805	43,820
2020		31,629	36,899	38,366	40,062	42,092	45,465	44,340
2021		31,550	37,008	38,518	40,303	42,412	45,996	44,791
2022		31,656	37,392	38,832	40,662	42,865	46,593	45,280
2023		31,756	37,670	39,073	41,020	43,332	47,202	45,769
2024		31,980	38,058	39,490	41,543	43,939	47,873	46,293
2025		31,964	38,136	39,617	41,654	44,295	48,450	

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

Year	Actual	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2026		32,052	38,430	39,919	41,927	44,796	49,088	
2027		32,170	38,872	40,306	42,303	45,313	49,732	
2028		32,387	39,290	40,720	42,786	45,976	50,471	
2029		32,516	39,432	40,789	42,813	46,379	51,095	
2030		32,713	39,658	41,014	42,999	46,923	51,744	
2031		32,912	39,891					
2032		33,134	40,232					
2033		33,206	40,397					
2034		33,387	40,667					
2035		33,545						
2036		33,805						
2037		33,857						

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



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

(continued next page)

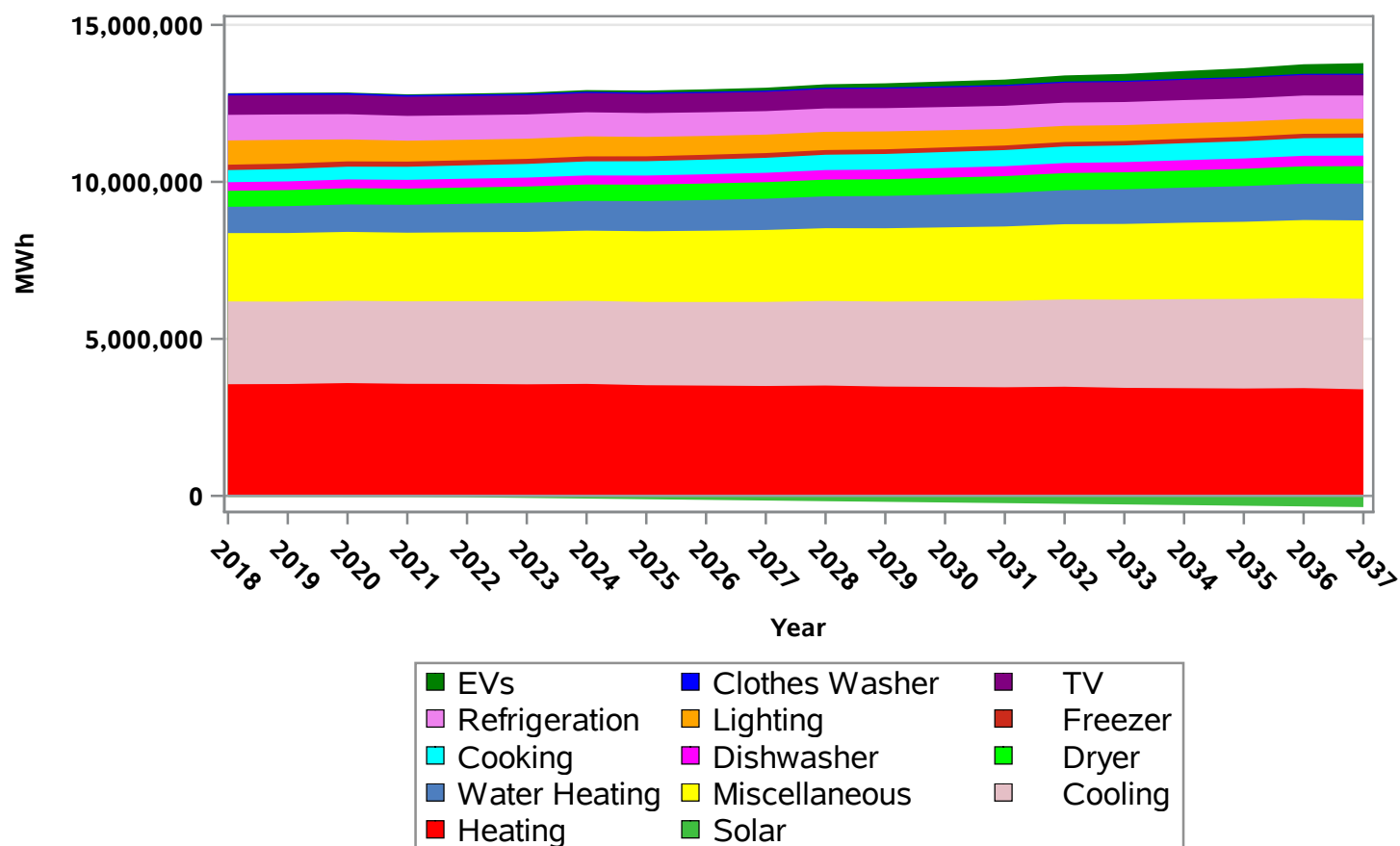
Year	Actual	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	8,446							8,396
2007	8,638						8,553	8,489
2008	8,228						8,643	8,582
2009	7,688						8,619	8,543
2010	8,353						8,724	8,636
2011	8,384						8,831	8,729
2012	8,423			7,999	8,056	8,501	8,932	8,822
2013	7,736			8,039	8,165	8,565	9,043	8,915
2014	7,775		8,004	8,078	8,227	8,610	9,149	9,008
2015	7,648		8,015	8,111	8,280	8,668	9,258	9,101
2016	7,329	7,329	8,030	8,138	8,322	8,728	9,360	9,194
2017		7,404	8,029	8,181	8,388	8,785	9,483	9,287
2018		7,381	8,046	8,237	8,484	8,855	9,602	9,380
2019		7,362	8,072	8,291	8,570	8,943	9,722	9,473
2020		7,359	8,074	8,311	8,608	9,018	9,833	9,566
2021		7,367	8,105	8,380	8,691	9,098	9,959	9,659
2022		7,393	8,152	8,447	8,765	9,181	10,080	9,752
2023		7,411	8,191	8,507	8,843	9,265	10,203	9,845
2024		7,437	8,243	8,574	8,926	9,352	10,320	9,944
2025		7,450	8,267	8,629	8,981	9,436	10,461	

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

Year	Actual	2017 IRP	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2026		7,467	8,322	8,701	9,043	9,527	10,595	
2027		7,490	8,401	8,790	9,127	9,621	10,731	
2028		7,514	8,466	8,857	9,203	9,720	10,863	
2029		7,559	8,499	8,902	9,245	9,820	11,015	
2030		7,604	8,537	8,959	9,291	9,923	11,150	
2031		7,652	8,580					
2032		7,684	8,627					
2033		7,726	8,661					
2034		7,770	8,706					
2035		7,805						
2036		7,848						
2037		7,877						

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

Residential Annual Energy Sales Forecast by End Use (MWh)

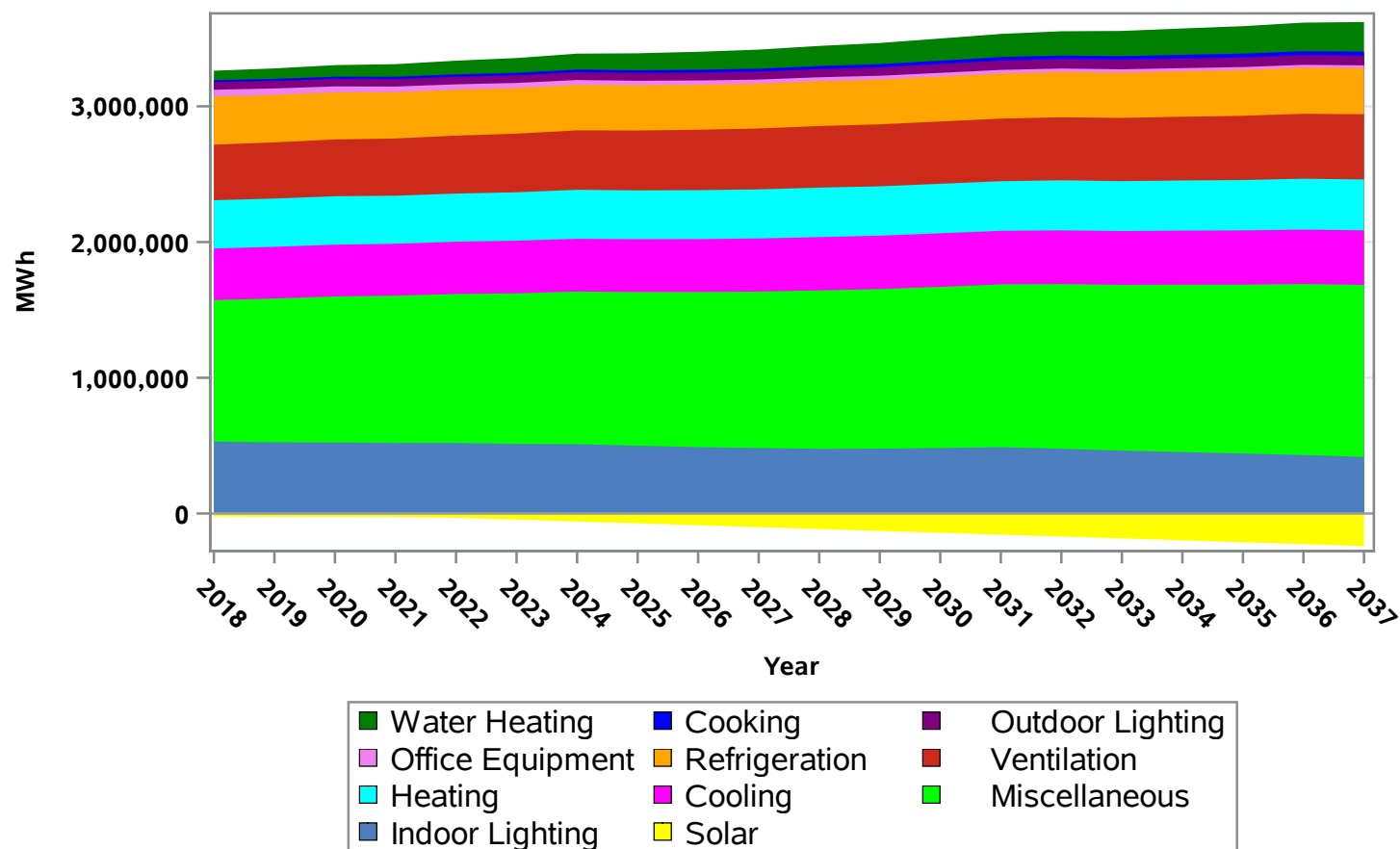


¹⁴ CSR 240-22.030(7)(A)4

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	EVs
2018	3,588,495	2,636,737	838,307	385,136	816,298	172,131	274,853	58,562	508,403	616,701	771,198	-33,445	2,176,109	14,031
2019	3,596,017	2,623,968	855,858	396,006	808,852	170,233	276,775	55,901	512,858	616,656	757,710	-34,458	2,184,063	16,994
2020	3,627,167	2,622,658	874,115	407,461	802,546	168,325	279,062	52,994	516,052	617,344	699,464	-35,862	2,193,149	20,463
2021	3,605,332	2,627,634	888,411	416,126	791,092	165,203	279,409	49,640	516,208	612,906	663,924	-37,385	2,184,822	24,447
2022	3,612,509	2,635,049	907,256	426,113	782,321	162,682	281,180	47,071	517,986	610,949	651,384	-47,039	2,194,071	31,336
2023	3,618,813	2,644,017	925,498	436,327	773,778	160,237	283,589	44,864	519,999	609,778	641,965	-66,195	2,209,492	41,156
2024	3,652,809	2,645,961	946,118	447,941	768,392	158,356	287,465	43,132	523,528	611,351	637,548	-87,057	2,235,179	52,353
2025	3,631,315	2,651,703	960,411	456,777	760,307	155,817	290,050	41,413	523,684	610,546	616,233	-107,543	2,251,366	64,832
2026	3,639,282	2,661,436	977,465	466,767	754,323	153,688	294,074	40,191	525,603	611,642	600,386	-128,226	2,271,716	78,694
2027	3,648,343	2,677,011	994,420	476,640	749,098	151,689	298,652	39,333	527,933	613,639	587,356	-149,006	2,291,536	91,882
2028	3,683,599	2,694,216	1,014,566	487,718	746,402	150,184	304,508	38,961	532,006	618,049	578,900	-169,988	2,316,845	110,540
2029	3,670,517	2,709,419	1,029,107	495,814	741,611	148,111	308,305	38,179	533,098	620,468	570,269	-190,462	2,332,531	131,579
2030	3,680,696	2,728,034	1,046,488	505,186	739,343	146,539	312,547	37,420	535,867	624,905	546,381	-211,086	2,353,256	152,665
2031	3,690,416	2,748,933	1,064,120	514,352	737,949	145,110	316,311	36,681	538,505	629,643	526,202	-231,736	2,371,969	169,639
2032	3,728,239	2,779,188	1,085,811	524,847	738,552	144,100	320,866	36,111	542,959	635,788	514,161	-252,580	2,396,030	195,171
2033	3,712,871	2,809,661	1,100,634	532,047	736,590	142,518	323,325	35,497	544,131	639,177	503,427	-273,107	2,410,704	220,083
2034	3,722,783	2,836,724	1,118,424	540,985	737,034	141,418	326,769	35,189	547,183	644,005	494,705	-293,879	2,432,721	246,667
2035	3,732,907	2,853,068	1,136,078	550,079	738,771	140,524	330,123	35,042	550,205	649,189	484,102	-314,618	2,457,685	274,897
2036	3,767,615	2,866,622	1,157,230	560,791	743,301	140,126	334,292	35,165	554,636	656,281	474,657	-335,810	2,485,634	304,674
2037	3,749,691	2,882,636	1,170,744	568,254	743,909	139,185	336,516	35,135	555,967	659,252	463,366	-357,364	2,497,315	335,988

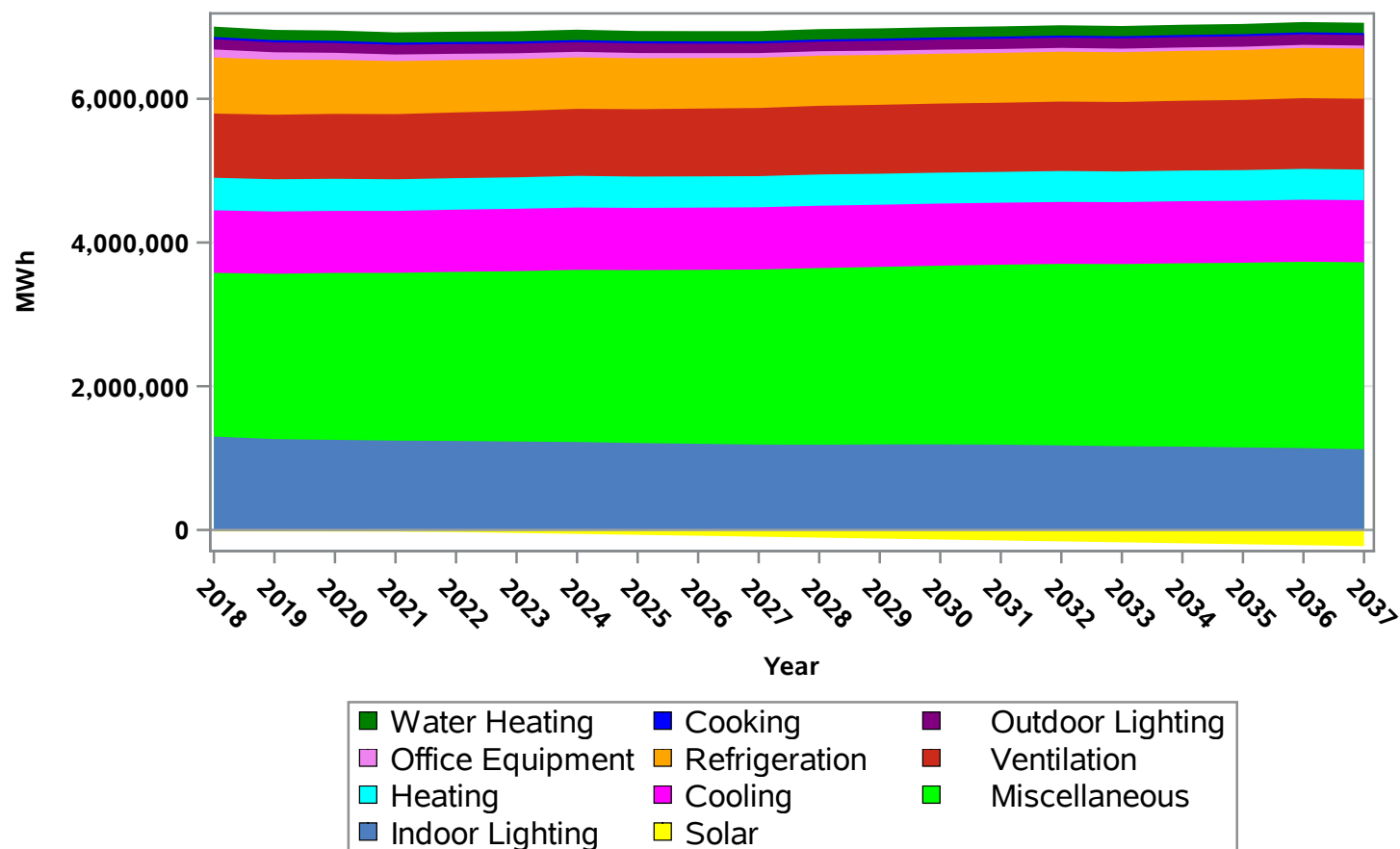
Commercial SGS Annual Energy Sales Forecast by End Use (MWh)



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	Miscellaneous
2018	355,658	380,222	69,531	409,313	14,337	354,918	56,188	552,201	49,815	-22,448	1,042,545
2019	355,633	381,086	77,209	413,691	15,125	350,172	55,597	547,288	47,190	-23,130	1,059,682
2020	357,297	381,144	85,061	418,335	15,998	346,180	55,599	547,366	44,715	-24,074	1,075,849
2021	354,181	382,582	92,669	421,283	16,823	340,885	55,136	545,124	42,134	-25,100	1,084,767
2022	354,713	385,267	100,818	426,756	17,768	338,137	55,535	551,034	40,008	-31,585	1,097,806
2023	356,712	387,425	108,956	431,960	18,705	335,709	55,794	557,148	37,935	-44,472	1,109,849
2024	361,063	388,598	117,273	437,891	19,669	334,835	57,236	569,519	36,150	-58,507	1,124,307
2025	359,676	389,584	124,639	441,227	20,416	332,167	57,401	571,566	34,232	-72,281	1,132,063
2026	360,585	390,245	132,311	445,036	21,228	330,643	57,691	575,368	32,336	-86,197	1,142,328
2027	361,366	391,289	140,003	448,694	22,050	329,710	58,608	582,387	30,808	-100,175	1,152,932
2028	364,863	392,688	148,238	453,567	22,940	330,063	59,525	590,669	29,416	-114,288	1,167,198
2029	363,594	393,514	155,516	456,683	23,693	329,822	62,091	605,533	28,178	-128,059	1,175,968
2030	364,718	394,460	163,138	459,093	24,532	331,029	65,450	624,262	27,183	-141,937	1,187,701
2031	365,493	394,804	170,699	461,123	25,342	332,439	69,258	644,449	26,553	-155,824	1,199,211
2032	369,008	395,444	178,922	464,225	26,261	333,846	69,581	646,776	25,441	-169,845	1,213,366
2033	367,783	396,443	186,015	465,905	27,023	333,925	69,761	646,973	24,167	-183,653	1,221,082
2034	369,481	398,459	193,999	469,367	27,896	335,233	70,126	650,564	23,133	-197,628	1,232,719
2035	371,326	399,721	201,859	473,100	28,773	336,874	70,446	652,850	22,230	-211,575	1,244,728
2036	375,722	400,736	210,227	478,011	29,732	339,456	71,024	656,469	21,319	-225,835	1,259,828
2037	374,522	402,271	217,271	480,392	30,484	340,233	71,203	656,769	20,496	-240,328	1,267,732

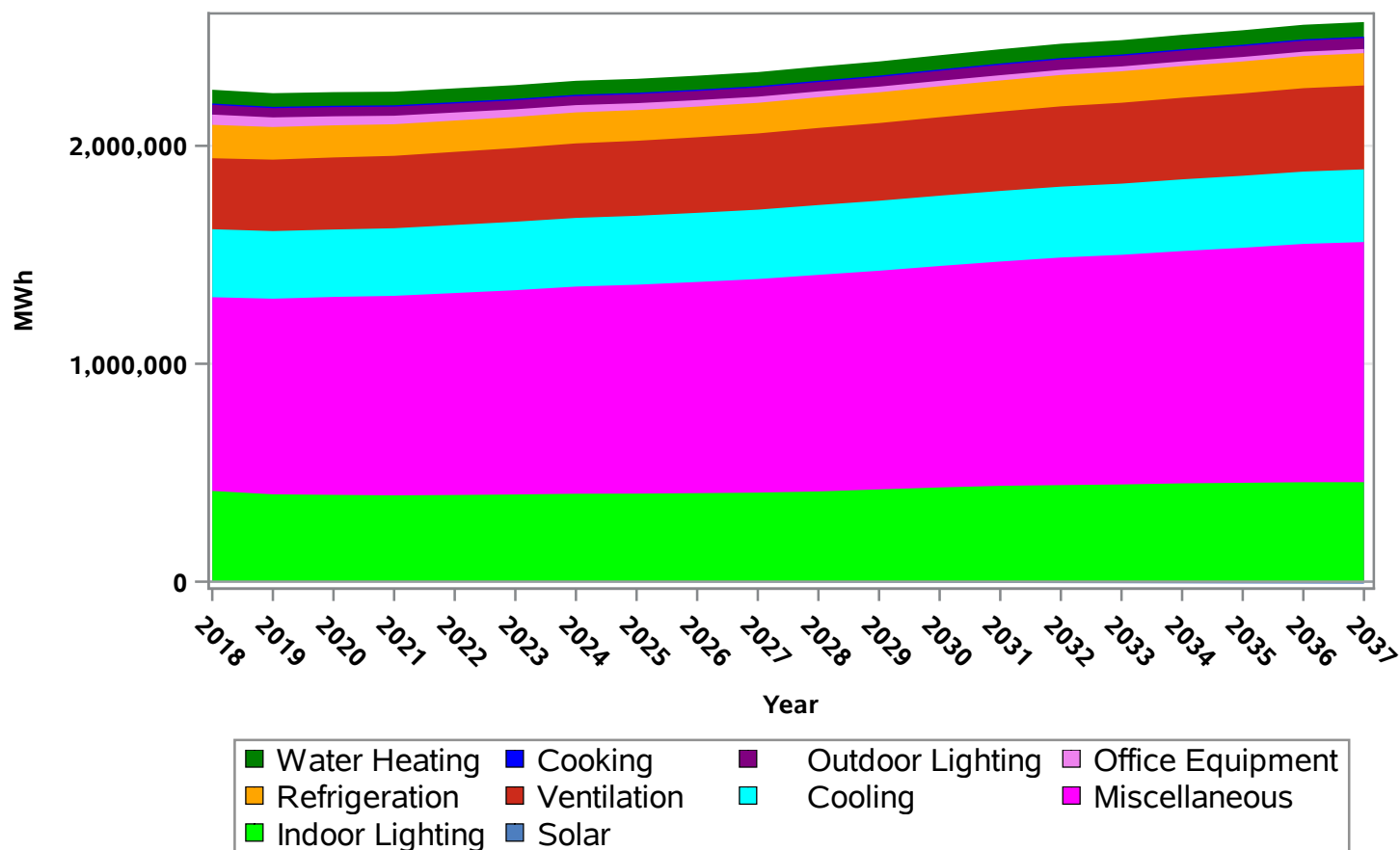
Commercial LGS Annual Energy Sales Forecast by End Use (MWh)



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	Miscellaneous
2018	452,729	870,345	144,037	894,208	30,610	780,751	142,728	1,320,880	111,248	-20,971	2,277,846
2019	448,470	866,716	143,652	898,158	30,472	764,818	137,759	1,285,782	103,978	-21,609	2,300,869
2020	446,744	862,438	143,277	903,452	30,404	752,029	136,552	1,276,361	97,994	-22,494	2,323,654
2021	440,078	862,531	142,740	906,626	30,179	737,952	134,899	1,266,045	92,070	-23,453	2,334,682
2022	437,901	865,430	143,165	915,039	30,162	729,040	134,125	1,267,554	86,993	-29,531	2,354,077
2023	437,688	867,560	143,577	923,127	30,149	721,196	133,338	1,271,461	82,139	-41,601	2,372,004
2024	440,430	867,209	144,152	932,984	30,192	716,422	133,313	1,278,612	77,661	-54,749	2,395,649
2025	436,291	867,022	143,615	937,406	29,928	708,615	132,939	1,277,114	73,306	-67,657	2,405,288
2026	435,034	866,007	143,498	942,942	29,802	703,367	132,832	1,279,643	69,038	-80,694	2,420,525
2027	433,559	865,637	143,517	948,003	29,719	698,999	132,909	1,282,398	65,378	-93,793	2,436,058
2028	435,362	866,442	143,980	955,467	29,696	697,546	133,945	1,293,363	62,218	-107,015	2,458,937
2029	431,370	865,348	143,570	959,049	29,494	694,403	137,223	1,310,715	59,372	-119,921	2,469,686
2030	430,234	864,460	143,282	961,198	29,379	693,780	140,006	1,324,057	56,790	-132,914	2,486,766
2031	428,681	862,489	142,860	962,686	29,194	693,364	142,535	1,333,715	54,755	-145,934	2,503,636
2032	430,537	861,282	142,899	966,473	29,158	694,434	143,048	1,336,175	52,395	-159,069	2,526,171
2033	426,811	861,236	142,249	967,216	28,972	692,833	143,783	1,337,173	49,838	-172,002	2,535,000
2034	426,533	863,287	142,322	971,573	28,874	693,736	144,868	1,344,998	47,787	-185,096	2,551,742
2035	426,367	863,432	142,292	976,475	28,784	695,169	145,280	1,346,826	45,835	-198,167	2,569,188
2036	429,203	863,122	142,554	983,922	28,787	698,591	146,081	1,350,599	43,841	-211,519	2,593,254
2037	425,576	864,217	142,065	986,185	28,599	698,316	146,050	1,347,604	42,030	-225,109	2,602,555

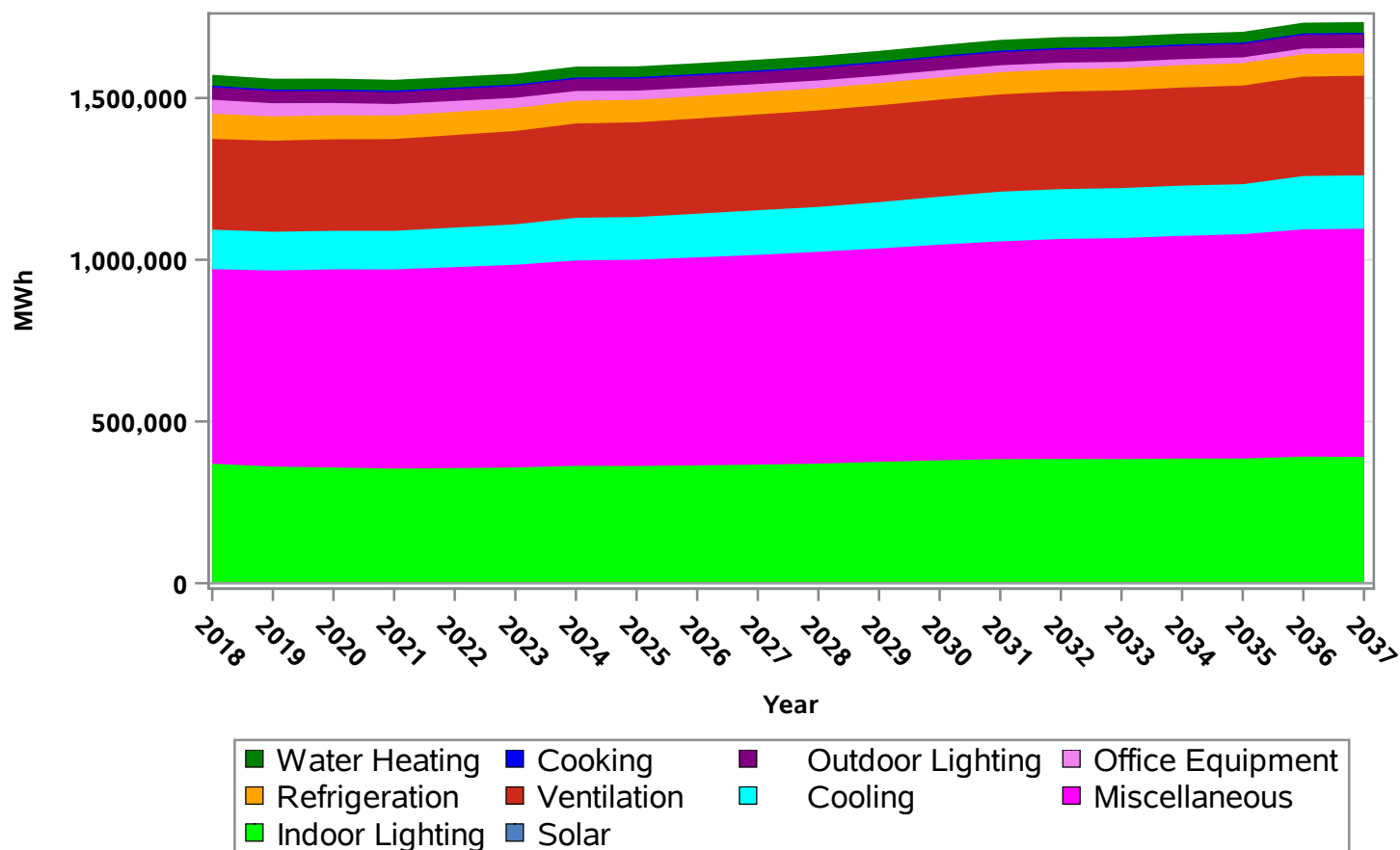
Commercial SPS Annual Energy Sales Forecast by End Use (MWh)



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
2018	312,010	63,051	325,711	6,112	153,256	44,651	417,520	47,236	-1,057	888,941
2019	310,345	62,832	327,875	6,072	149,621	42,322	401,940	44,088	-1,084	897,656
2020	309,320	62,762	330,714	6,066	147,318	41,986	399,447	41,610	-1,120	908,400
2021	310,134	62,691	332,350	6,035	144,921	41,579	397,264	39,195	-1,159	915,555
2022	312,283	63,086	335,423	6,056	143,646	41,495	399,237	37,157	-1,408	926,729
2023	314,190	63,489	338,257	6,073	142,594	41,418	402,050	35,208	-1,903	937,491
2024	315,143	63,970	341,925	6,102	142,156	41,587	405,976	33,407	-2,442	950,657
2025	316,274	63,969	344,003	6,073	141,131	41,642	407,166	31,655	-2,970	958,520
2026	317,205	64,185	346,825	6,073	140,663	41,803	409,838	29,938	-3,504	969,021
2027	318,429	64,476	349,841	6,082	140,409	42,045	412,731	28,478	-4,041	979,943
2028	320,239	64,971	353,817	6,105	140,781	42,672	418,714	27,223	-4,584	993,923
2029	321,315	65,092	356,389	6,096	141,012	44,337	428,618	26,114	-5,112	1,003,361
2030	322,745	65,313	360,127	6,111	141,913	45,972	438,071	25,122	-5,644	1,016,162
2031	323,907	65,496	364,028	6,112	142,858	47,470	446,018	24,365	-6,177	1,029,281
2032	325,149	65,865	368,489	6,139	143,910	48,009	449,879	23,442	-6,716	1,044,463
2033	326,773	65,886	371,036	6,132	144,387	48,670	453,432	22,407	-7,246	1,053,643
2034	329,090	66,225	374,479	6,141	145,340	49,426	459,123	21,587	-7,782	1,065,871
2035	330,620	66,513	378,078	6,149	146,328	49,834	462,055	20,799	-8,317	1,078,409
2036	331,900	66,920	382,644	6,177	147,675	50,322	465,328	19,979	-8,865	1,093,509
2037	333,562	66,947	384,922	6,160	148,181	50,502	466,073	19,226	-9,421	1,101,974

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

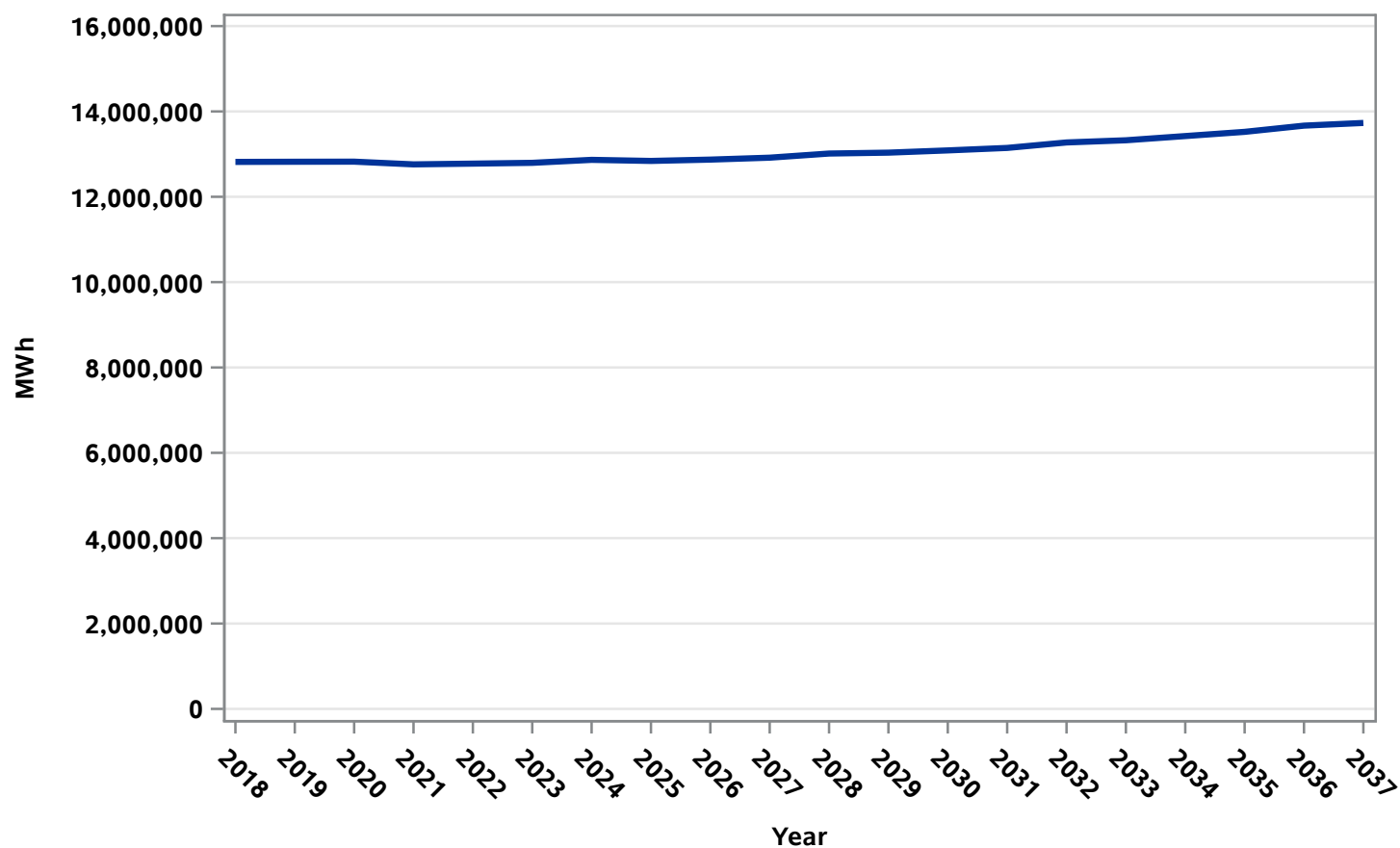


Commercial LPS Annual Energy Sales Forecast by End Use (MWh)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2018	122,097	33,714	280,580	4,607	77,572	38,828	369,514	43,496	-146	601,510
2019	119,886	33,572	281,409	4,580	75,466	37,656	360,666	40,499	-151	606,091
2020	119,152	33,472	282,980	4,567	74,147	37,312	357,923	38,126	-158	612,490
2021	119,260	33,319	283,750	4,529	72,675	36,819	354,746	35,765	-165	615,505
2022	122,311	33,392	286,139	4,522	71,729	36,769	356,072	33,756	-208	621,252
2023	124,988	33,469	288,488	4,519	70,902	36,708	358,058	31,840	-293	626,687
2024	131,954	33,589	291,459	4,524	70,405	37,259	363,270	30,114	-386	634,837
2025	131,932	33,458	292,785	4,482	69,612	37,140	362,774	28,397	-478	637,783
2026	134,841	33,428	294,485	4,463	69,082	37,359	364,936	26,739	-571	642,971
2027	138,150	33,430	296,045	4,451	68,638	37,663	367,322	25,321	-663	648,295
2028	138,720	33,534	298,342	4,448	68,524	37,954	370,409	24,085	-757	654,973
2029	142,986	33,436	299,442	4,415	68,428	39,023	376,132	23,032	-849	659,711
2030	148,449	33,371	300,095	4,398	68,641	39,975	380,831	22,097	-941	666,561
2031	153,573	33,274	300,552	4,370	68,838	40,893	384,677	21,368	-1,033	673,242
2032	154,095	33,282	301,718	4,367	69,009	41,029	385,308	20,458	-1,127	680,022
2033	154,476	33,131	301,956	4,338	68,963	41,147	385,068	19,477	-1,219	683,150
2034	155,230	33,149	303,326	4,321	69,164	41,375	386,823	18,689	-1,311	688,404
2035	154,595	33,143	304,864	4,310	69,333	41,415	386,895	17,926	-1,404	693,439
2036	164,868	33,205	307,182	4,310	69,672	42,494	392,839	17,204	-1,498	702,633
2037	165,065	33,088	307,882	4,282	69,644	42,486	391,958	16,495	-1,595	705,519

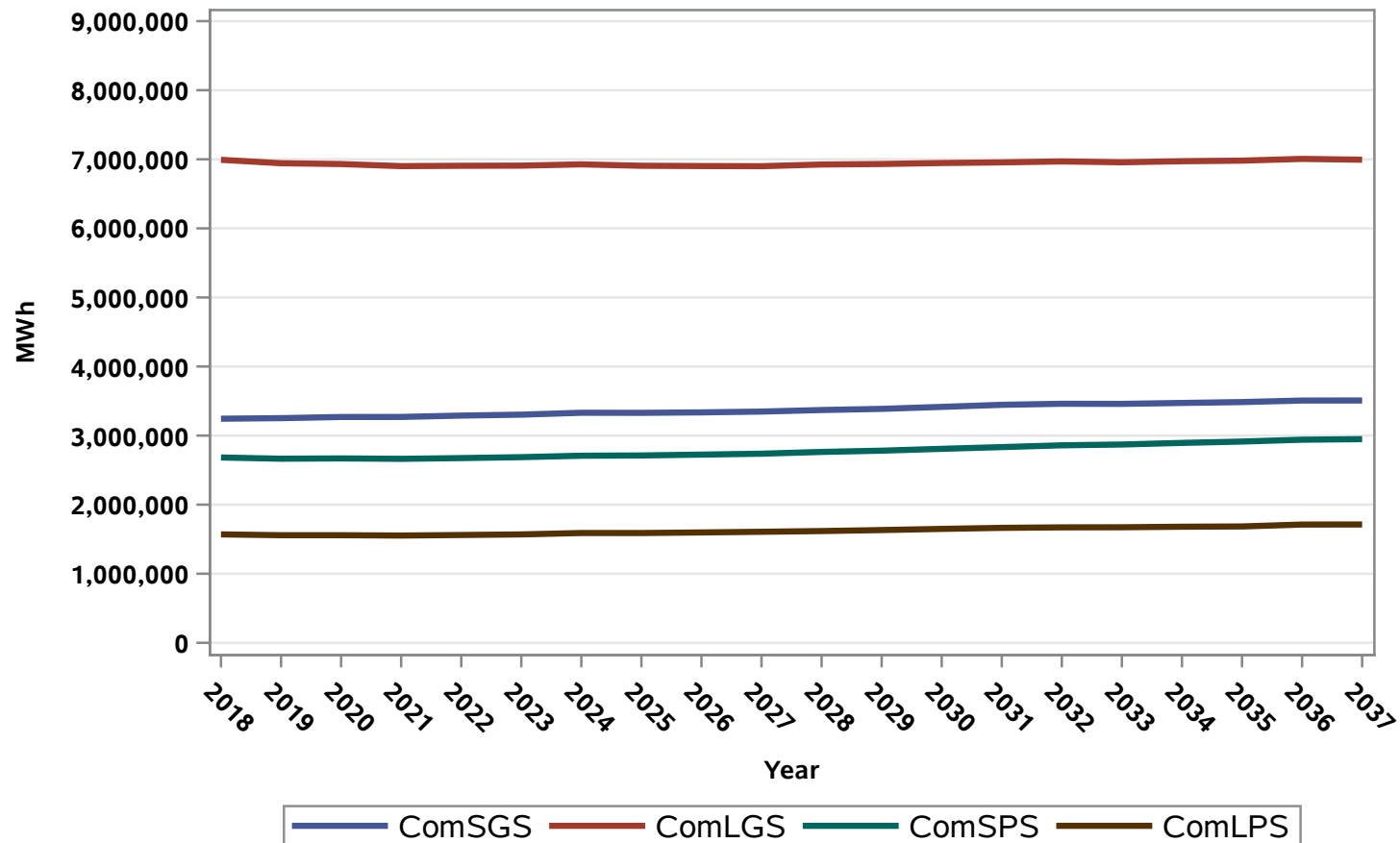
Probability Weighted Class Energy Forecast¹⁵

Annual Residential Energy Sales Forecast (MWh)

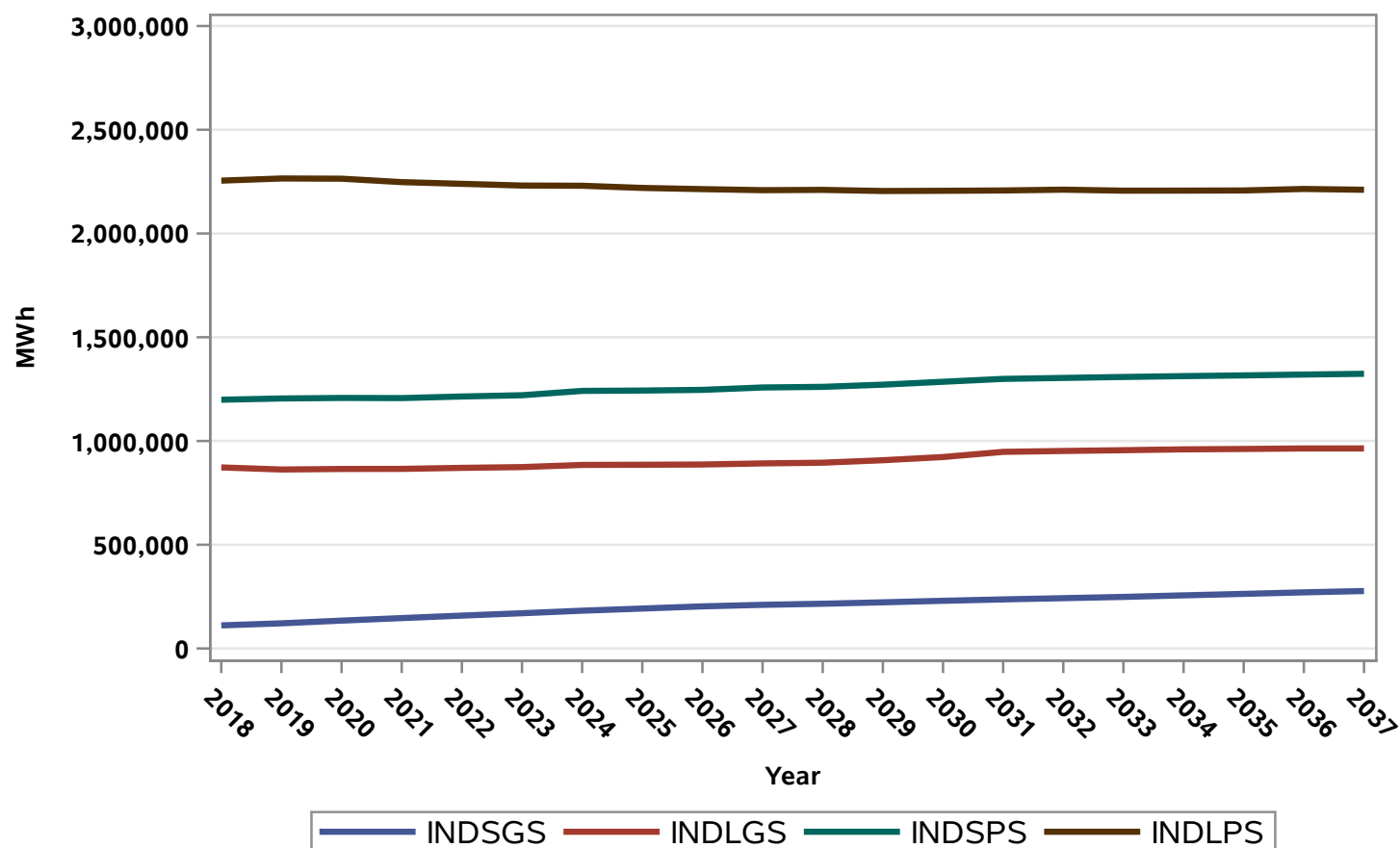


¹⁵⁴ CSR 240-22.030(7)(A)6

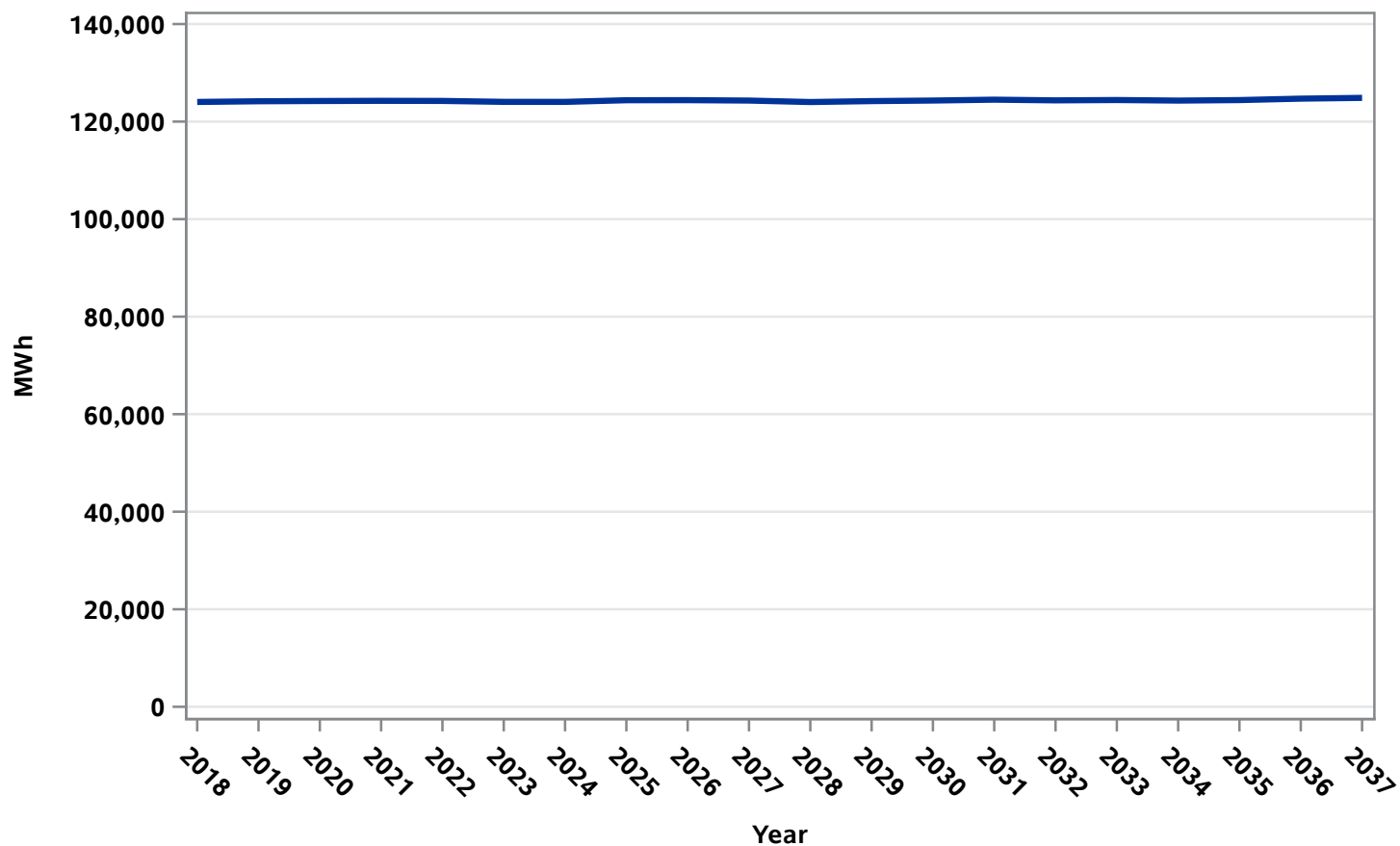
Annual Commercial Energy Sales Forecast (MWh)



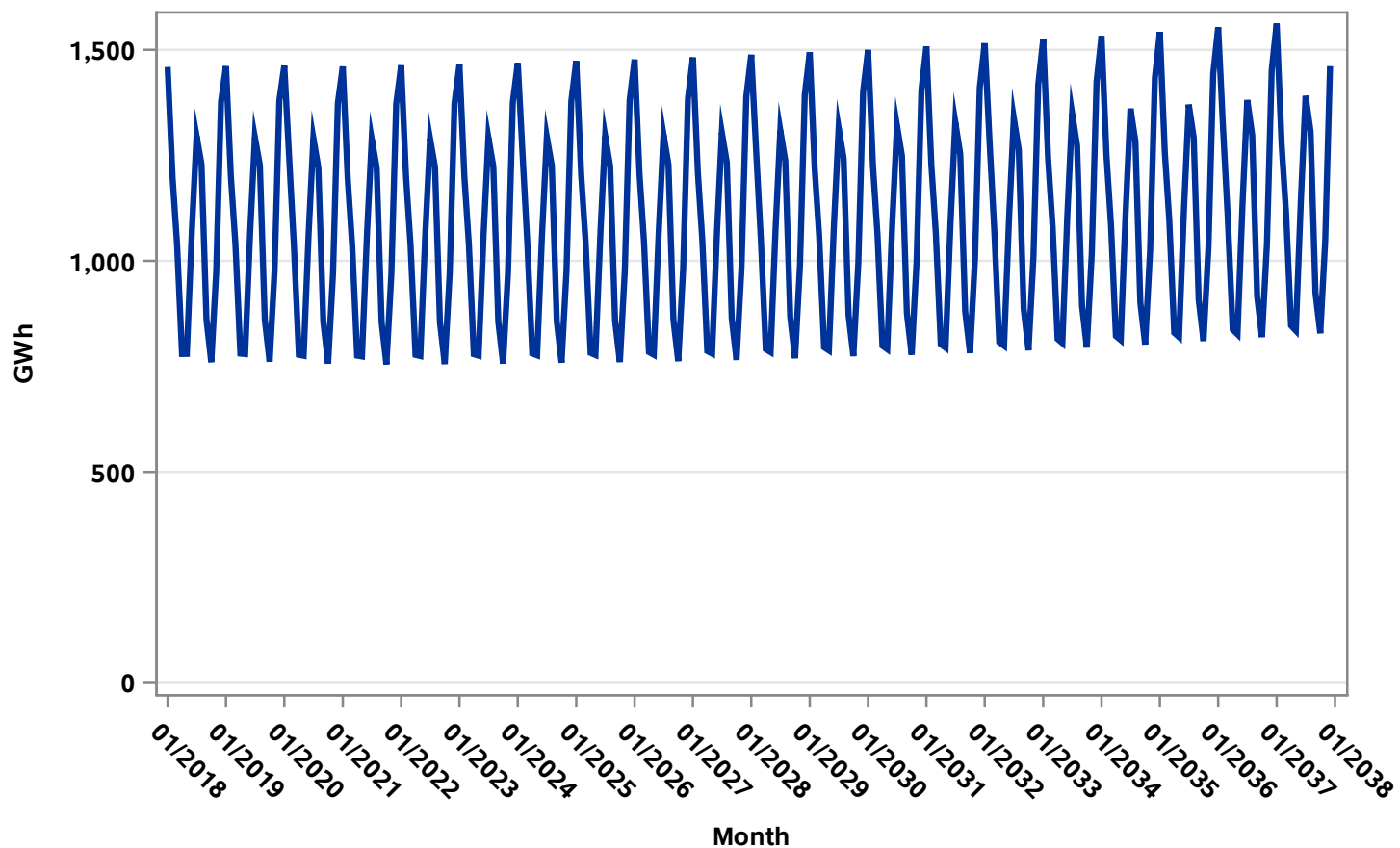
Annual Industrial Energy Sales Forecast (MWh)



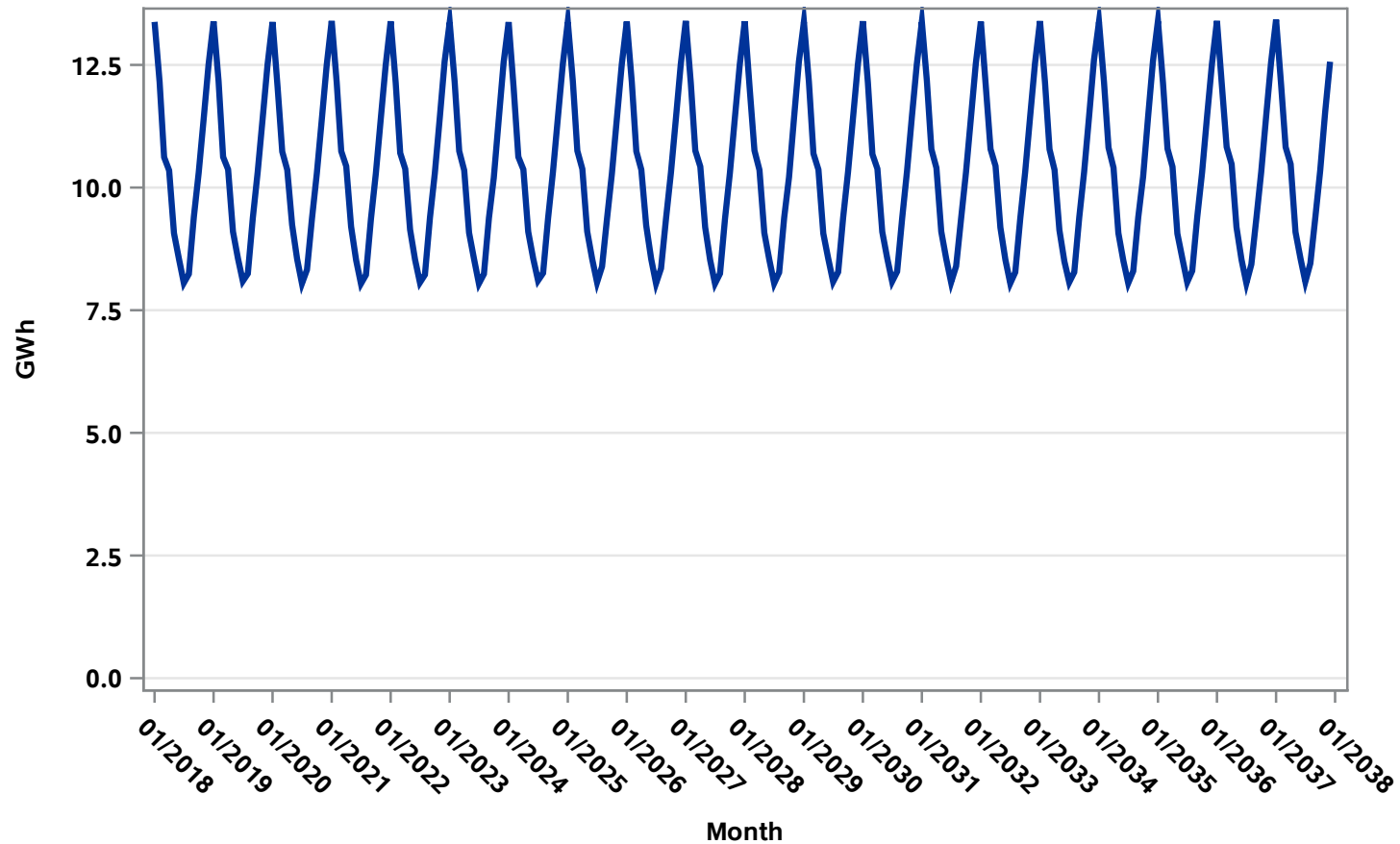
Annual Lighting Energy Sales Forecast (MWh)



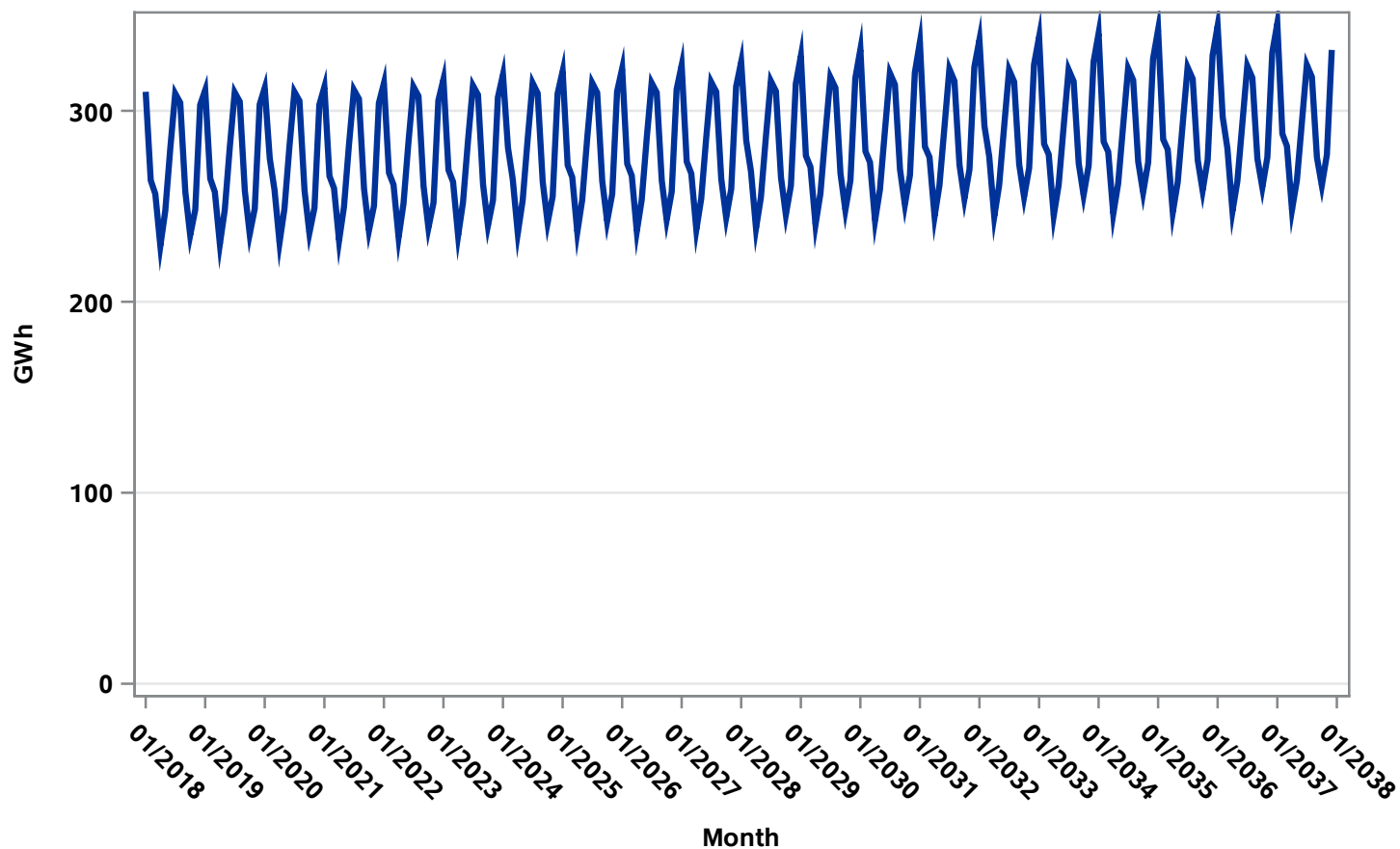
Residential Monthly Energy Forecast (GWh)



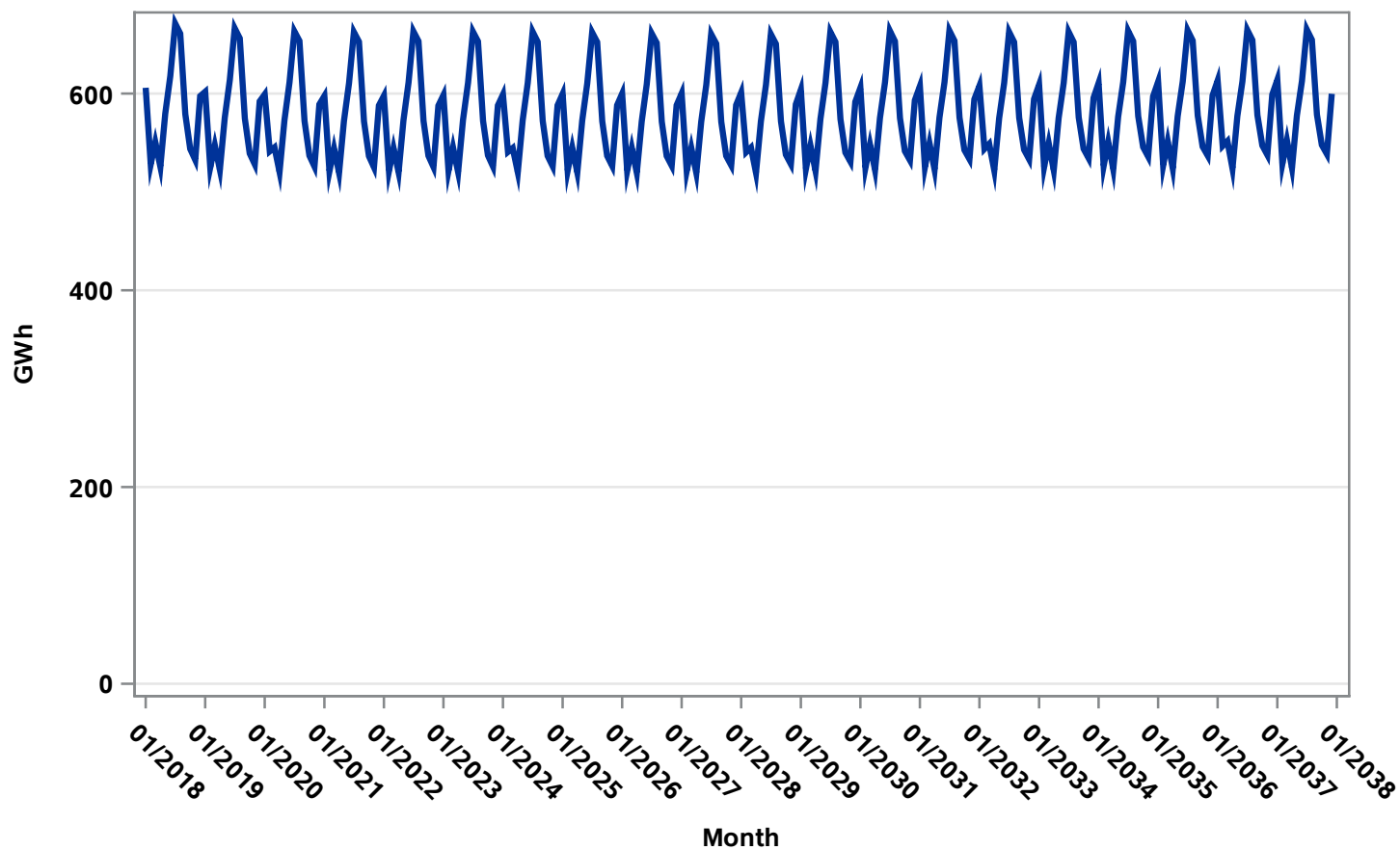
Lighting Monthly Energy Forecast (GWh)



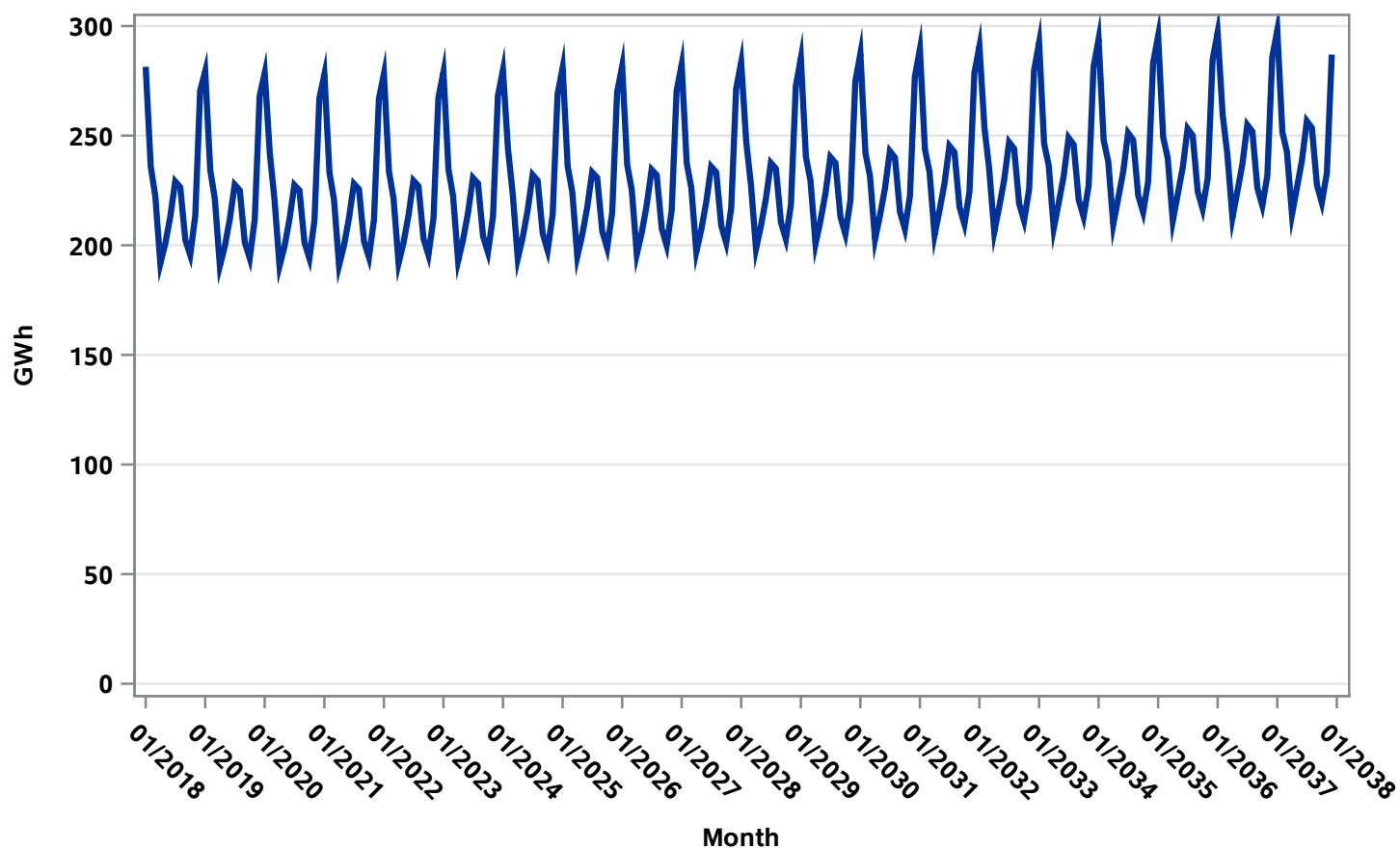
Commercial SGS Monthly Energy Forecast (GWh)



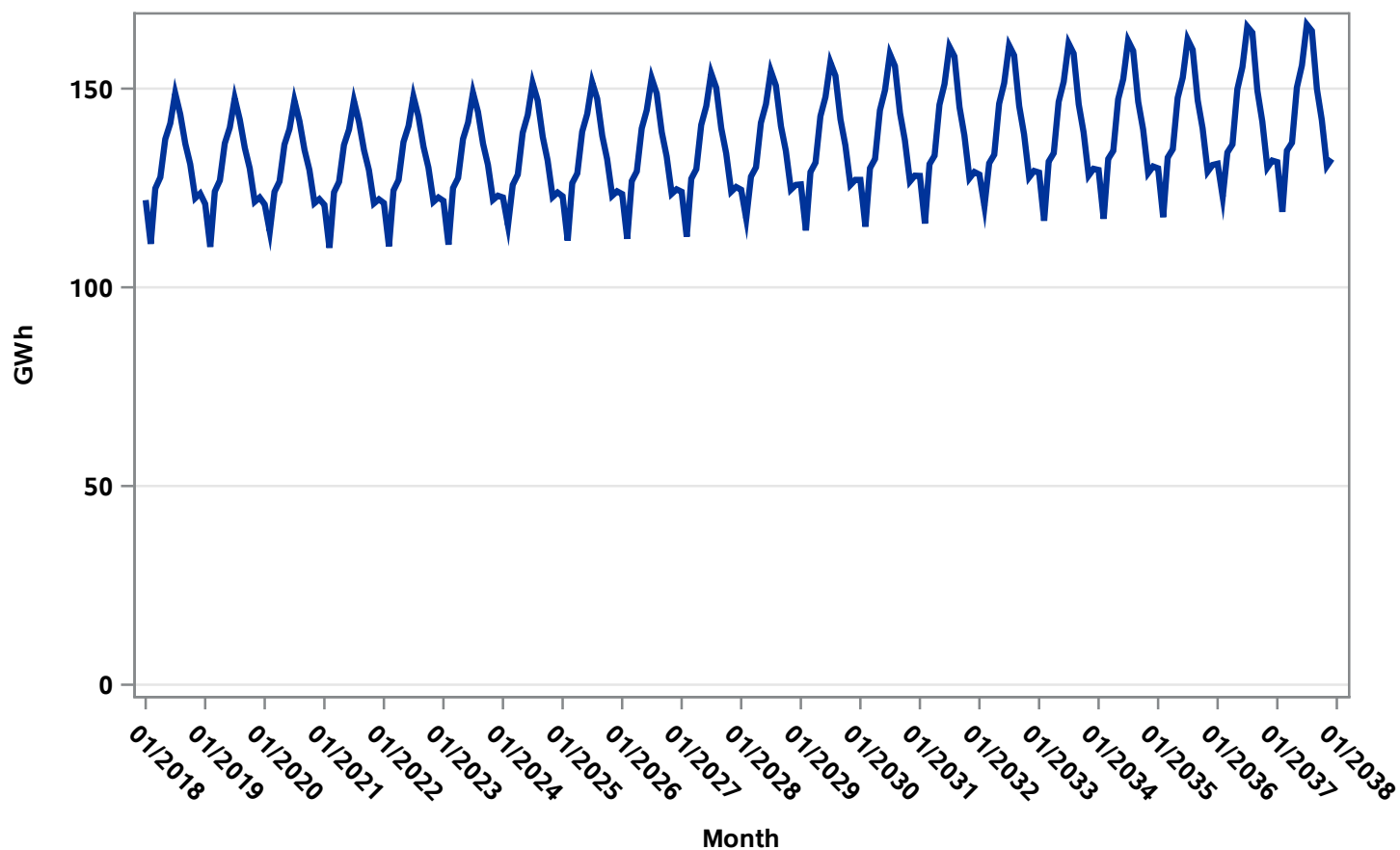
Commercial LGS Monthly Energy Forecast (GWh)



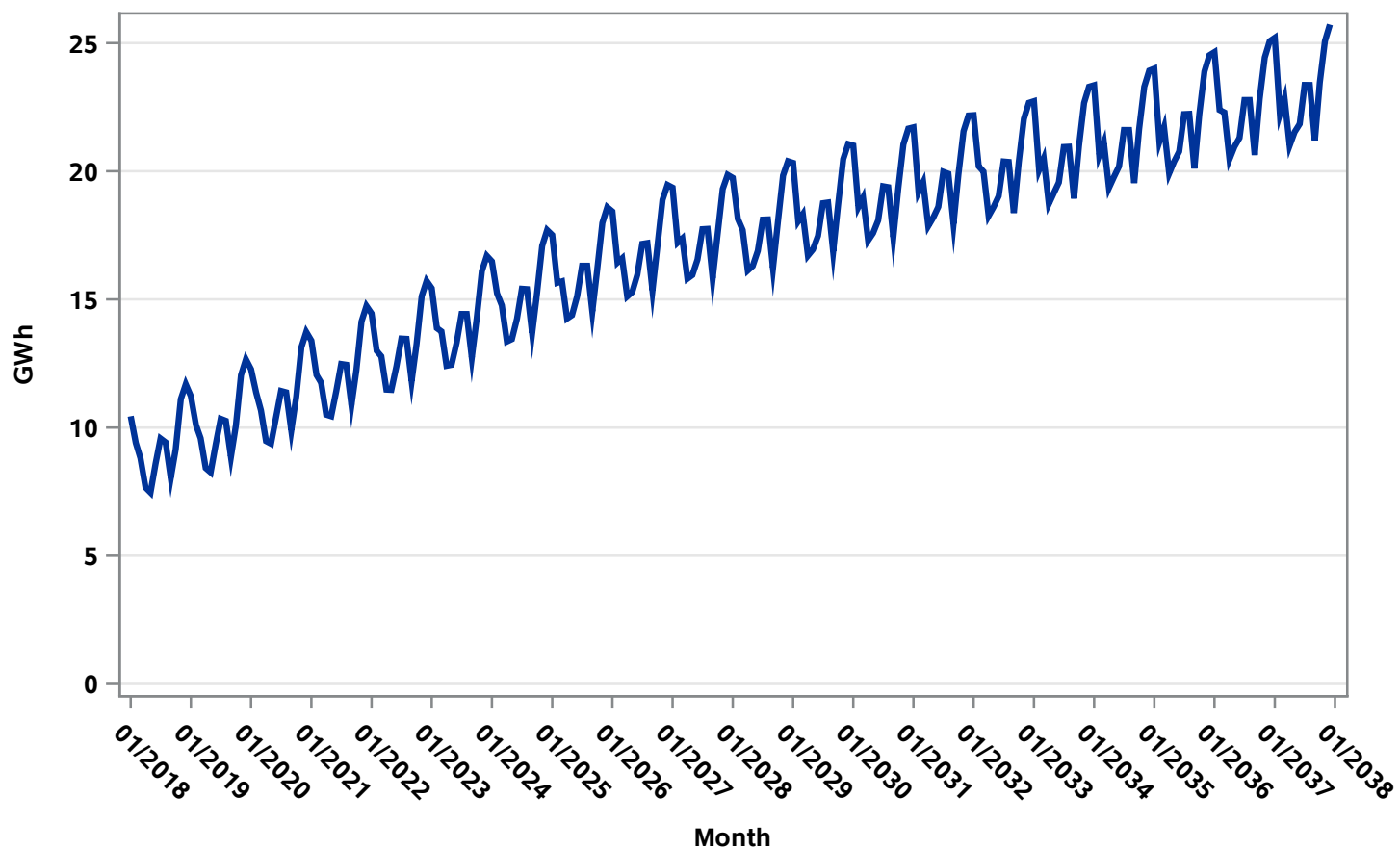
Commercial SPS Monthly Energy Forecast (GWh)



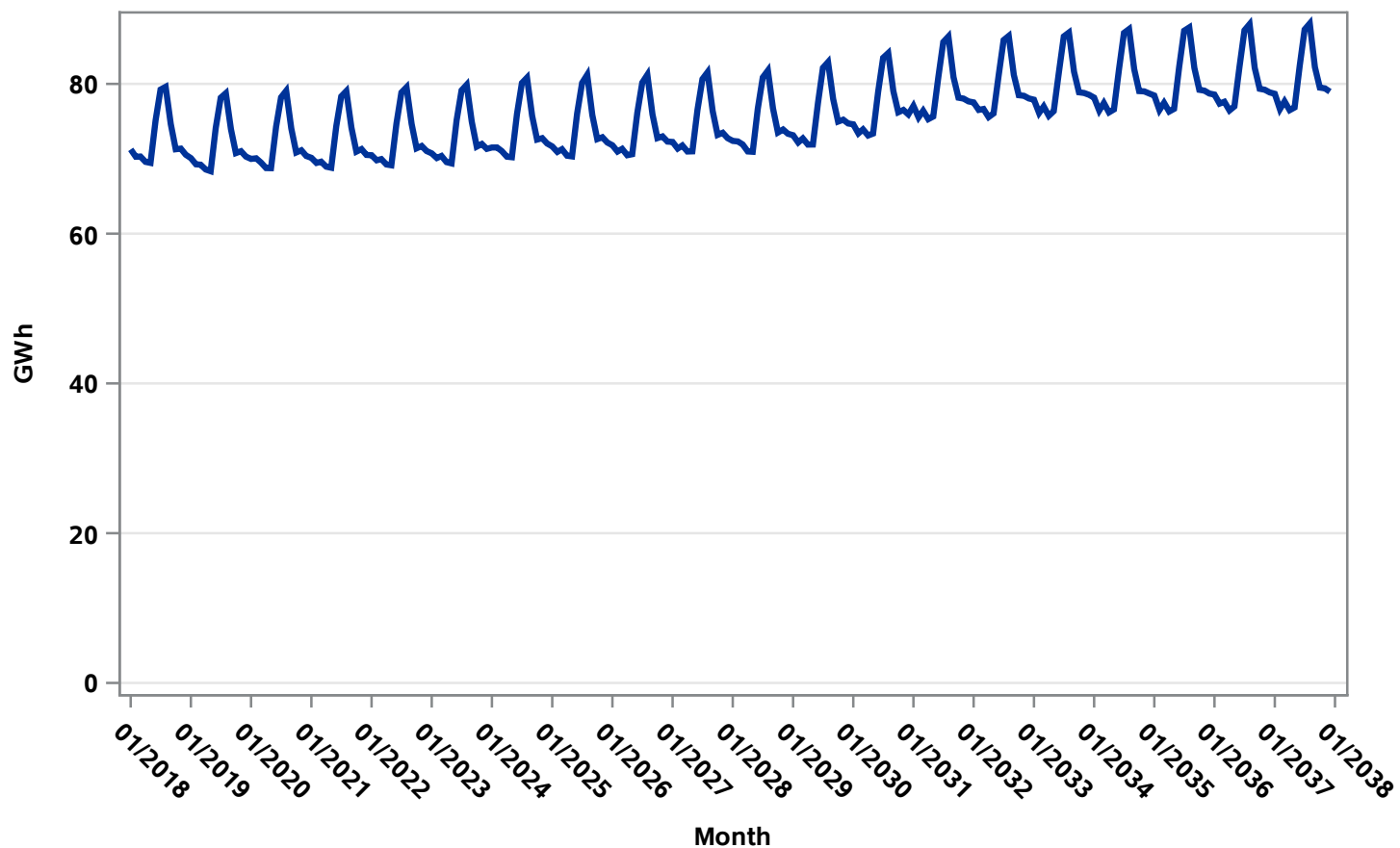
Commercial LPS Monthly Energy Forecast (GWh)



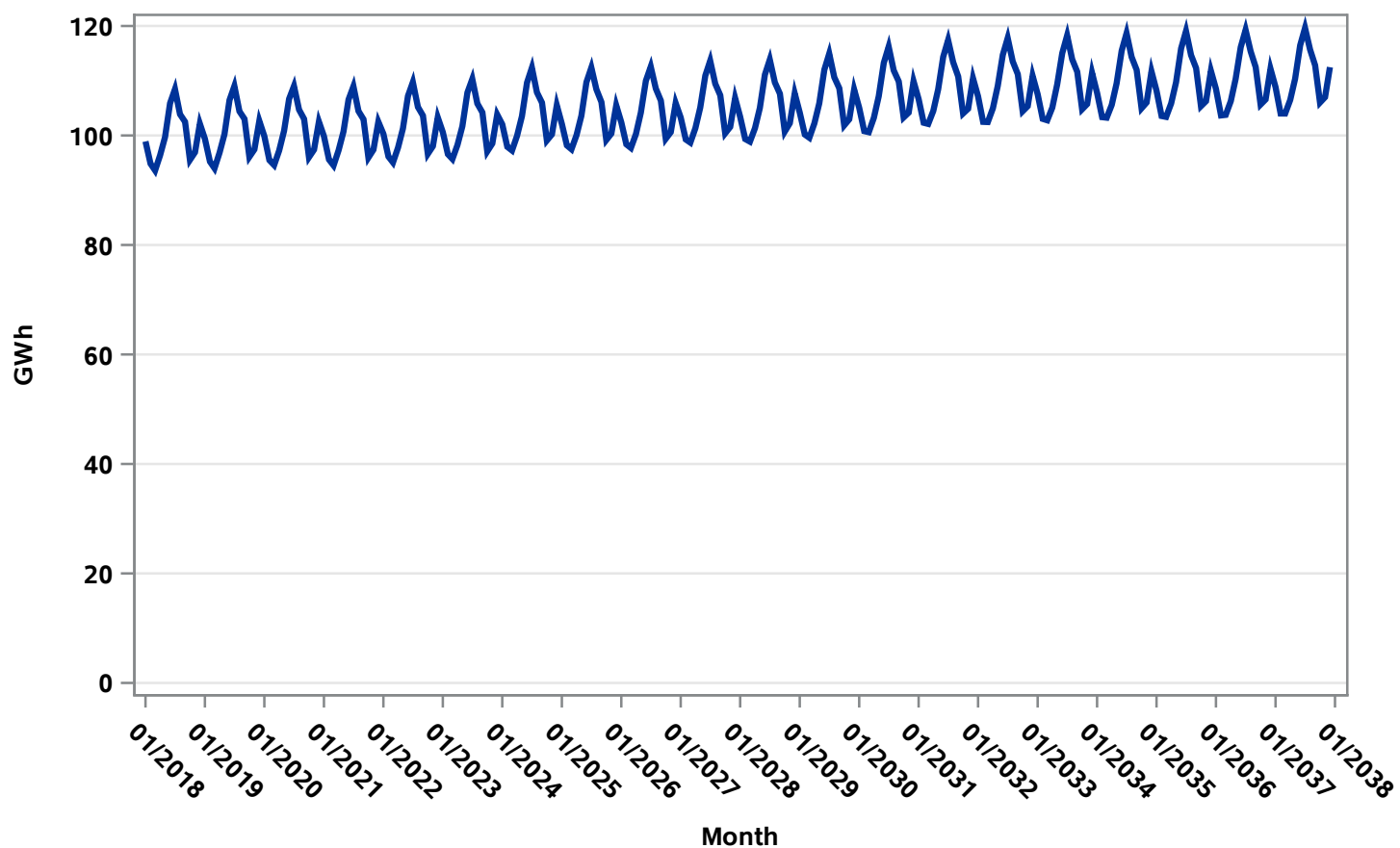
Industrial SGS Monthly Energy Forecast (GWh)



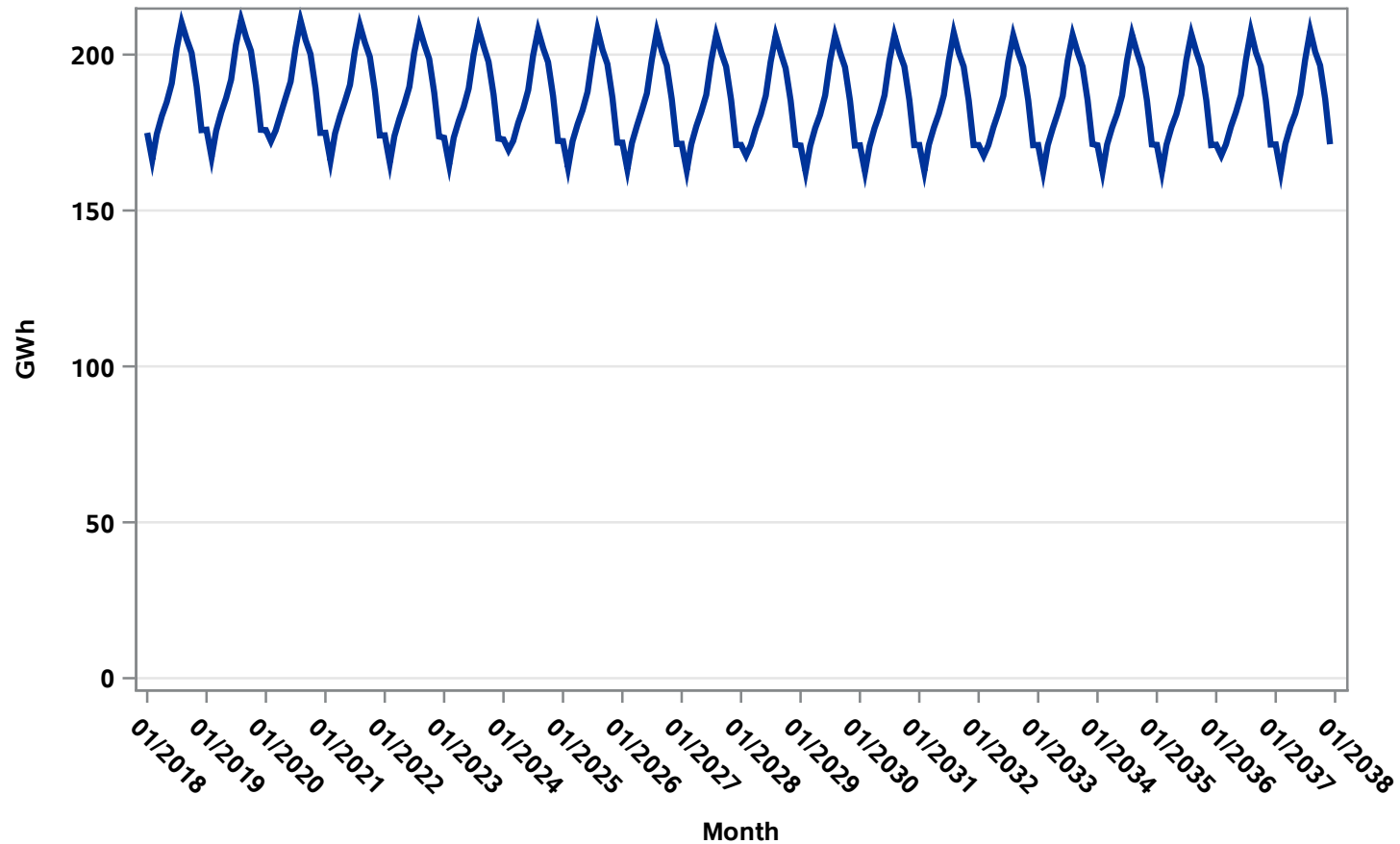
Industrial LGS Monthly Energy Forecast (GWh)



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
2018	12,817,240	3,244,255	6,992,416	2,682,755	1,569,514	111,358	872,650	1,198,782	2,254,672	124,025
2019	12,820,976	3,252,268	6,942,799	2,664,945	1,557,493	121,200	862,511	1,204,791	2,265,065	124,166
2020	12,823,225	3,268,991	6,931,025	2,669,181	1,557,685	134,310	865,017	1,207,397	2,264,046	124,222
2021	12,759,907	3,269,941	6,900,847	2,663,207	1,552,541	146,501	865,568	1,206,742	2,247,467	124,256
2022	12,776,882	3,289,286	6,905,844	2,674,353	1,560,610	158,426	870,465	1,214,311	2,239,294	124,237
2023	12,795,832	3,302,871	6,908,111	2,687,464	1,568,889	169,893	874,171	1,220,445	2,231,106	124,047
2024	12,865,571	3,330,377	6,926,411	2,708,343	1,589,313	182,078	884,528	1,241,369	2,230,070	124,038
2025	12,840,315	3,329,014	6,906,269	2,712,192	1,589,015	192,531	885,457	1,243,105	2,219,557	124,380
2026	12,871,527	3,335,762	6,902,183	2,724,124	1,597,694	202,975	886,668	1,246,323	2,213,785	124,396
2027	12,916,357	3,347,380	6,899,738	2,737,478	1,607,389	210,281	891,867	1,257,825	2,208,705	124,311
2028	13,013,382	3,369,811	6,924,344	2,763,271	1,617,762	215,628	895,329	1,260,900	2,210,091	124,011
2029	13,034,284	3,386,707	6,931,822	2,781,486	1,632,134	222,460	907,245	1,271,425	2,204,732	124,197
2030	13,086,535	3,415,288	6,945,962	2,807,957	1,648,736	229,796	922,636	1,285,418	2,205,740	124,314
2031	13,145,175	3,445,318	6,955,212	2,833,083	1,663,967	236,566	947,493	1,299,267	2,207,358	124,494
2032	13,273,583	3,460,521	6,968,709	2,858,911	1,671,281	242,446	951,878	1,303,972	2,211,186	124,352
2033	13,324,503	3,459,077	6,956,634	2,870,891	1,672,638	248,483	955,622	1,308,545	2,206,331	124,420
2034	13,422,874	3,472,478	6,971,681	2,893,737	1,680,218	256,043	959,651	1,312,613	2,206,525	124,304
2035	13,521,631	3,485,067	6,980,335	2,913,345	1,684,498	263,150	961,468	1,316,094	2,207,298	124,410
2036	13,667,160	3,507,181	7,005,516	2,940,315	1,711,885	270,585	964,025	1,320,191	2,214,589	124,703
2037	13,730,349	3,508,129	6,993,867	2,948,297	1,712,871	276,863	964,160	1,323,753	2,210,607	124,865

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2018	1	1,459	310	606	281	122	10	71	99	175	13
2018	2	1,196	264	528	236	111	9	70	95	166	12
2018	3	1,039	256	550	222	125	9	70	94	175	11
2018	4	779	229	526	192	128	8	70	96	180	10
2018	5	780	248	580	201	137	7	69	100	185	9
2018	6	1,067	280	618	213	141	9	75	106	191	9
2018	7	1,296	309	671	229	149	10	79	108	202	8
2018	8	1,229	304	661	226	144	9	80	104	210	8
2018	9	861	258	579	202	136	8	75	102	205	9
2018	10	760	235	544	196	131	9	71	96	201	10
2018	11	974	248	533	213	122	11	71	97	190	11
2018	12	1,377	303	597	271	124	12	71	102	176	13
2019	1	1,461	311	602	279	121	11	70	99	176	13
2019	2	1,198	264	525	234	110	10	69	95	167	12
2019	3	1,040	258	547	221	124	10	69	94	176	11
2019	4	780	230	523	191	127	8	69	97	181	10
2019	5	779	248	576	199	136	8	68	100	186	9
2019	6	1,065	281	614	212	140	9	74	106	192	9
2019	7	1,293	310	666	228	148	10	78	109	203	8
2019	8	1,227	305	656	225	142	10	79	104	211	8

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2019	9	860	258	575	201	135	9	74	103	206	9
2019	10	761	236	539	194	130	10	71	96	201	10
2019	11	977	249	528	212	122	12	71	97	190	11
2019	12	1,380	303	592	268	123	13	70	103	176	13
2020	1	1,462	312	599	279	121	12	70	100	176	13
2020	2	1,240	275	541	242	114	11	70	95	172	12
2020	3	1,037	259	545	221	124	11	70	95	176	11
2020	4	778	231	520	191	127	9	69	97	181	10
2020	5	775	249	573	199	136	9	69	101	186	9
2020	6	1,062	282	611	212	140	10	74	107	191	9
2020	7	1,290	310	663	227	147	11	78	109	202	8
2020	8	1,221	305	654	225	142	11	79	105	211	8
2020	9	856	258	572	201	135	10	74	103	205	9
2020	10	757	236	537	194	130	11	71	96	200	10
2020	11	971	249	526	211	121	13	71	97	189	11
2020	12	1,373	303	589	267	122	14	70	103	175	12
2021	1	1,460	313	597	278	121	13	70	100	175	13
2021	2	1,195	266	521	233	110	12	69	96	166	12
2021	3	1,035	259	544	221	124	12	70	95	175	11
2021	4	775	232	520	191	127	11	69	97	180	10

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2021	5	774	250	572	200	136	10	69	101	185	9
2021	6	1,061	282	610	212	140	11	74	107	190	9
2021	7	1,289	311	662	228	147	12	78	109	201	8
2021	8	1,221	306	653	226	142	12	79	104	209	8
2021	9	854	259	572	202	135	11	74	103	204	9
2021	10	755	237	536	195	129	12	71	96	199	10
2021	11	970	250	525	212	121	14	71	97	188	11
2021	12	1,372	304	588	267	122	15	71	102	174	12
2022	1	1,463	314	598	278	121	14	70	100	174	13
2022	2	1,197	268	521	234	110	13	70	96	165	12
2022	3	1,037	261	544	221	124	13	70	95	174	11
2022	4	777	234	520	192	127	11	69	98	179	10
2022	5	775	251	573	201	137	11	69	101	184	9
2022	6	1,062	284	611	214	141	12	75	107	190	9
2022	7	1,290	313	663	229	148	13	79	110	201	8
2022	8	1,222	308	653	227	143	13	80	105	209	8
2022	9	855	261	572	203	135	12	75	104	203	9
2022	10	755	239	537	196	130	13	71	97	199	10
2022	11	971	252	525	212	122	15	72	98	188	11
2022	12	1,373	305	588	267	123	16	71	103	174	13

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2023	1	1,465	316	598	279	122	15	71	101	173	13
2023	2	1,199	269	522	235	111	14	70	97	165	12
2023	3	1,039	263	545	222	125	14	70	96	173	11
2023	4	779	235	520	193	128	12	70	98	179	10
2023	5	775	252	573	202	137	12	69	102	183	9
2023	6	1,063	285	611	215	141	13	75	108	189	9
2023	7	1,292	313	663	231	149	14	79	110	200	8
2023	8	1,224	308	653	228	144	14	80	106	208	8
2023	9	856	261	572	204	136	13	75	104	203	9
2023	10	756	240	537	197	131	14	72	97	198	10
2023	11	973	253	526	213	122	16	72	99	187	11
2023	12	1,375	307	588	268	123	17	71	104	173	13
2024	1	1,469	319	599	280	123	16	72	102	173	13
2024	2	1,245	281	541	244	116	15	72	98	169	12
2024	3	1,042	264	545	223	126	15	71	97	172	11
2024	4	781	236	520	194	128	13	70	100	178	10
2024	5	776	253	573	204	139	13	70	104	183	9
2024	6	1,064	286	611	216	143	14	76	110	189	9
2024	7	1,293	315	663	232	151	15	80	112	200	8
2024	8	1,225	309	653	229	147	15	81	108	208	8

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2024	9	857	263	572	205	138	14	76	106	202	9
2024	10	759	241	537	198	132	15	73	99	198	10
2024	11	976	255	526	214	123	17	73	100	187	11
2024	12	1,378	309	588	269	124	18	72	106	172	13
2025	1	1,473	321	600	281	123	18	72	102	172	13
2025	2	1,203	272	522	236	112	16	71	98	164	12
2025	3	1,042	265	545	224	126	16	71	97	172	11
2025	4	782	237	520	195	129	14	70	100	178	10
2025	5	777	253	572	205	139	14	70	104	182	9
2025	6	1,065	286	610	217	144	15	76	110	188	9
2025	7	1,296	315	662	233	152	16	80	112	199	8
2025	8	1,225	310	652	231	147	16	81	108	208	8
2025	9	858	263	572	206	138	15	76	106	202	9
2025	10	760	242	537	199	132	16	73	99	197	10
2025	11	978	256	526	215	123	18	73	100	186	11
2025	12	1,381	310	588	270	124	19	72	105	172	13
2026	1	1,477	322	600	282	123	18	72	102	172	13
2026	2	1,206	272	521	237	112	16	71	98	163	12
2026	3	1,045	266	545	225	127	17	71	98	172	11
2026	4	784	237	519	196	129	15	70	100	177	10

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2026	5	778	253	572	206	140	15	71	104	182	9
2026	6	1,068	286	610	219	145	16	76	110	188	9
2026	7	1,299	315	661	234	153	17	80	113	198	8
2026	8	1,228	310	651	232	149	17	81	109	207	8
2026	9	860	263	571	208	139	15	76	106	201	9
2026	10	762	243	537	200	133	17	73	99	197	10
2026	11	981	258	527	216	124	19	73	101	186	11
2026	12	1,384	311	588	270	125	19	72	106	171	13
2027	1	1,482	324	600	282	124	19	72	103	171	13
2027	2	1,209	273	521	237	113	17	71	99	163	12
2027	3	1,048	267	545	226	127	17	72	99	171	11
2027	4	786	238	519	197	130	16	71	101	177	10
2027	5	780	254	571	207	141	16	71	105	182	9
2027	6	1,071	286	609	220	146	17	77	111	187	9
2027	7	1,304	315	660	236	154	18	81	114	198	8
2027	8	1,233	310	651	233	150	18	82	109	206	8
2027	9	863	264	571	209	140	16	76	107	201	9
2027	10	765	244	537	201	134	18	73	100	196	10
2027	11	985	259	527	217	124	19	73	102	185	11
2027	12	1,388	313	588	271	125	20	73	107	171	13

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2028	1	1,488	326	601	283	125	20	72	103	171	13
2028	2	1,257	284	540	247	117	18	72	99	168	12
2028	3	1,053	268	545	228	128	18	72	99	171	11
2028	4	791	239	519	198	130	16	71	101	176	10
2028	5	784	255	572	209	141	16	71	105	181	9
2028	6	1,075	287	609	221	146	17	77	111	187	9
2028	7	1,309	316	660	238	154	18	81	114	198	8
2028	8	1,238	310	650	235	151	18	82	110	206	8
2028	9	867	265	572	210	141	16	77	108	201	9
2028	10	769	246	538	203	134	18	74	101	196	10
2028	11	990	261	528	218	125	20	74	102	185	11
2028	12	1,393	314	589	273	126	20	73	108	171	13
2029	1	1,494	329	604	285	126	20	73	104	171	13
2029	2	1,219	276	523	240	114	18	72	100	162	12
2029	3	1,059	271	547	230	129	18	73	100	171	11
2029	4	795	240	521	201	131	17	72	102	176	10
2029	5	788	257	574	211	143	17	72	106	181	9
2029	6	1,080	288	611	224	148	17	77	112	187	9
2029	7	1,315	318	663	240	157	19	82	115	198	8
2029	8	1,243	312	652	238	153	19	83	111	206	8

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2029	9	871	267	574	213	142	17	78	109	201	9
2029	10	774	248	540	205	136	19	75	102	196	10
2029	11	995	264	531	220	126	20	75	103	185	11
2029	12	1,400	317	592	275	127	21	75	108	171	13
2030	1	1,500	332	606	287	127	21	75	105	171	13
2030	2	1,223	279	525	242	115	19	73	101	162	12
2030	3	1,063	273	548	232	130	19	74	101	171	11
2030	4	799	243	522	203	132	17	73	103	176	10
2030	5	791	259	575	213	145	18	73	107	181	9
2030	6	1,084	290	611	226	150	18	79	113	187	9
2030	7	1,321	320	664	243	159	19	83	116	198	8
2030	8	1,249	314	653	240	156	19	84	112	206	8
2030	9	875	269	575	215	144	17	79	110	201	9
2030	10	778	251	541	207	137	19	76	103	196	10
2030	11	999	266	532	222	127	21	77	104	185	11
2030	12	1,405	320	593	277	128	22	76	110	171	13
2031	1	1,508	336	607	289	128	22	77	107	171	13
2031	2	1,228	281	525	244	116	19	76	102	163	12
2031	3	1,066	276	549	233	131	20	76	102	171	11
2031	4	803	245	523	205	133	18	75	104	177	10

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2031	5	794	261	576	216	146	18	76	108	181	9
2031	6	1,090	292	611	228	151	19	81	114	187	9
2031	7	1,328	322	664	245	161	20	86	117	198	8
2031	8	1,253	316	654	242	158	20	86	113	207	8
2031	9	880	272	576	217	145	18	81	111	201	9
2031	10	782	254	543	210	138	20	78	104	196	10
2031	11	1,004	269	533	224	127	22	78	105	185	11
2031	12	1,410	323	594	279	129	22	78	110	171	13
2032	1	1,515	337	608	291	128	22	78	107	171	13
2032	2	1,279	292	544	254	120	20	77	102	168	12
2032	3	1,072	276	549	235	131	20	77	102	171	11
2032	4	807	245	522	206	133	18	76	105	177	10
2032	5	799	261	575	217	146	19	76	109	181	9
2032	6	1,098	292	611	230	151	19	81	115	187	9
2032	7	1,338	321	663	247	161	20	86	118	198	8
2032	8	1,264	315	652	244	158	20	86	114	206	8
2032	9	886	272	575	219	146	18	81	111	201	9
2032	10	788	255	543	211	138	20	78	104	196	10
2032	11	1,009	270	533	226	128	22	78	105	185	11
2032	12	1,417	324	594	280	129	23	78	111	171	13

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

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2033	1	1,524	339	609	292	129	23	78	108	171	13
2033	2	1,241	283	526	246	117	20	76	103	162	12
2033	3	1,080	277	549	236	132	20	77	103	171	11
2033	4	815	245	522	208	134	19	76	105	176	10
2033	5	805	261	575	219	147	19	76	109	181	9
2033	6	1,107	292	611	232	152	20	82	115	187	8
2033	7	1,349	322	663	249	161	21	86	118	198	8
2033	8	1,274	315	652	246	159	21	87	114	206	8
2033	9	893	272	576	221	146	19	82	112	201	9
2033	10	795	256	544	213	139	21	79	105	196	10
2033	11	1,017	271	534	227	128	23	79	106	185	11
2033	12	1,425	326	596	281	130	23	79	111	171	13
2034	1	1,533	340	611	294	130	23	78	108	171	13
2034	2	1,249	284	526	248	117	21	76	103	162	12
2034	3	1,087	279	551	238	132	21	77	103	171	11
2034	4	822	246	523	210	134	19	76	106	177	10
2034	5	812	262	576	221	147	20	77	110	181	9
2034	6	1,116	293	612	234	152	20	82	115	187	9
2034	7	1,361	322	664	251	162	22	87	119	198	8
2034	8	1,283	316	653	248	160	22	87	114	206	8

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

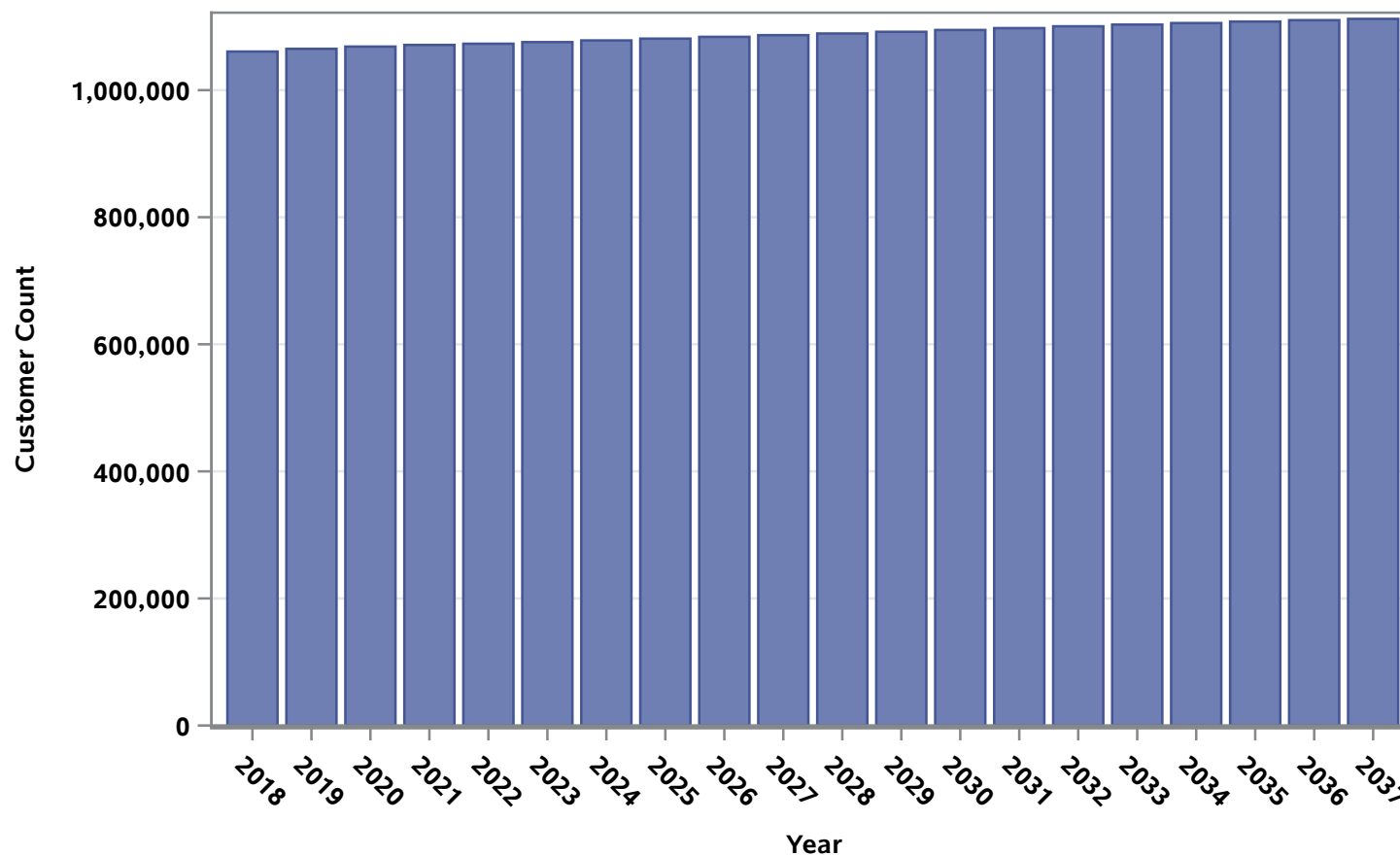
Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2034	9	901	273	577	223	147	20	82	112	201	9
2034	10	802	257	546	215	140	22	79	105	196	10
2034	11	1,024	273	536	229	129	23	79	106	185	11
2034	12	1,434	327	597	283	130	24	79	112	171	13
2035	1	1,542	342	612	295	130	24	78	108	171	13
2035	2	1,257	285	527	249	118	21	77	104	162	12
2035	3	1,096	280	551	240	133	22	77	103	171	11
2035	4	830	247	524	211	135	20	76	106	177	10
2035	5	819	262	577	223	148	20	77	110	181	9
2035	6	1,123	293	612	235	153	21	82	116	187	9
2035	7	1,370	323	664	253	162	22	87	119	198	8
2035	8	1,292	317	654	250	160	22	88	115	207	8
2035	9	908	274	578	224	147	20	82	112	201	9
2035	10	810	258	546	217	140	22	79	105	196	10
2035	11	1,032	274	537	231	129	24	79	106	185	11
2035	12	1,443	329	598	284	131	25	79	112	171	13
2036	1	1,553	344	613	297	131	25	79	109	171	13
2036	2	1,311	297	547	259	123	22	77	104	168	12
2036	3	1,103	280	552	241	134	22	78	104	171	11
2036	4	837	247	524	213	136	20	76	106	177	10

Monthly Energy Sales Forecast by Rate Class (GWh)

Year	Month	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2036	5	826	263	577	224	150	21	77	110	181	9
2036	6	1,131	294	612	237	155	21	82	116	187	9
2036	7	1,381	323	665	255	166	23	87	119	198	8
2036	8	1,298	317	654	252	164	23	88	115	207	8
2036	9	916	275	578	226	149	21	82	112	201	9
2036	10	819	260	547	218	142	23	79	106	196	10
2036	11	1,040	276	538	232	130	24	79	107	185	11
2036	12	1,452	330	599	286	132	25	79	112	171	13
2037	1	1,562	346	614	298	132	25	79	109	171	13
2037	2	1,276	288	529	252	119	22	77	104	162	12
2037	3	1,112	281	552	243	134	23	78	104	171	11
2037	4	847	248	524	214	136	21	76	106	177	10
2037	5	835	264	578	226	150	22	77	110	181	9
2037	6	1,139	294	613	239	156	22	82	116	187	9
2037	7	1,391	324	665	257	166	23	87	120	198	8
2037	8	1,307	318	655	254	165	23	88	116	208	8
2037	9	923	276	579	228	150	21	82	113	201	9
2037	10	828	261	548	219	142	23	80	106	197	10
2037	11	1,048	277	539	233	131	25	79	107	186	12
2037	12	1,461	332	600	287	132	26	79	112	171	13

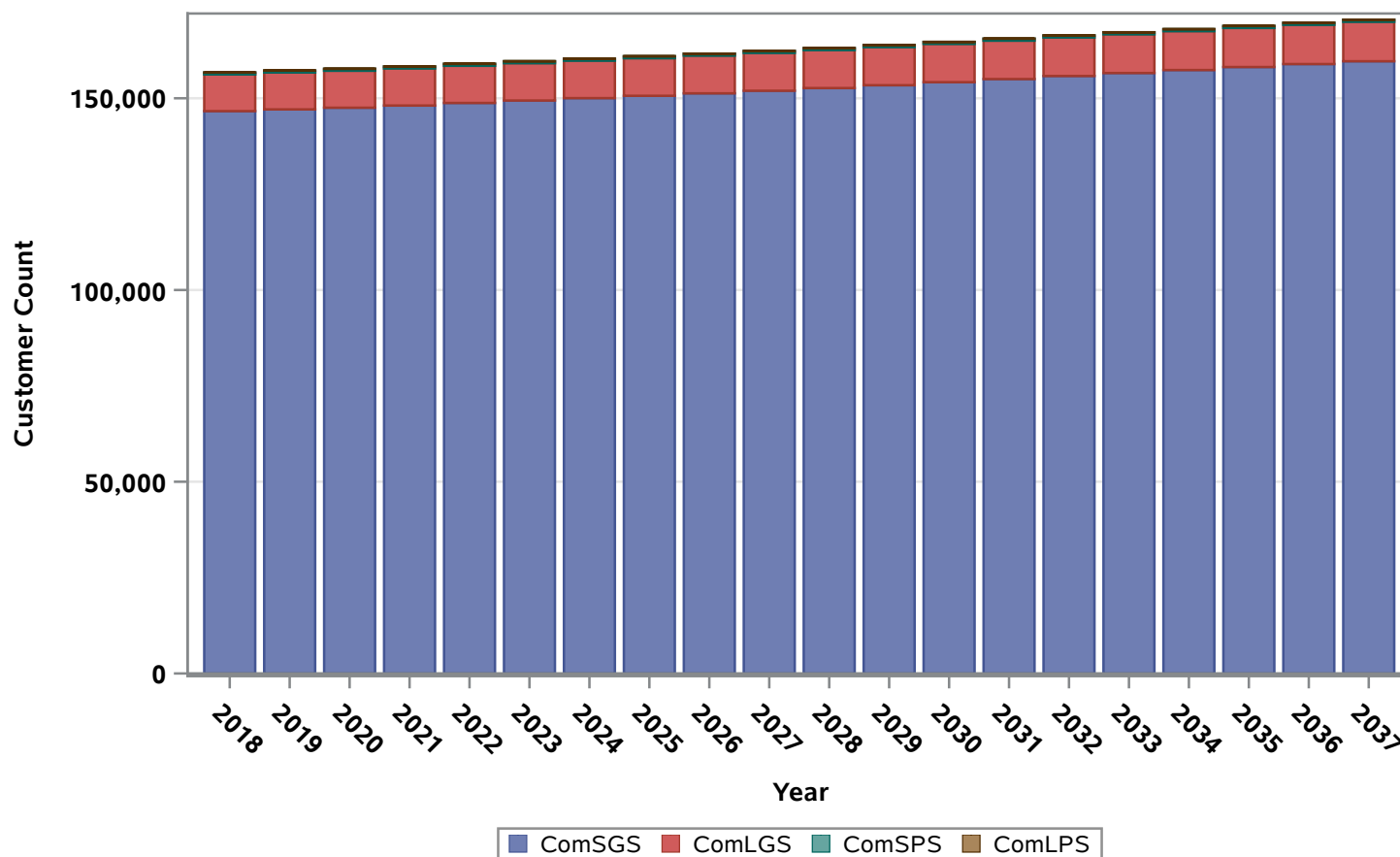
Forecast Customer Count - Base Case¹⁵

Forecast of Residential Class Customer Count

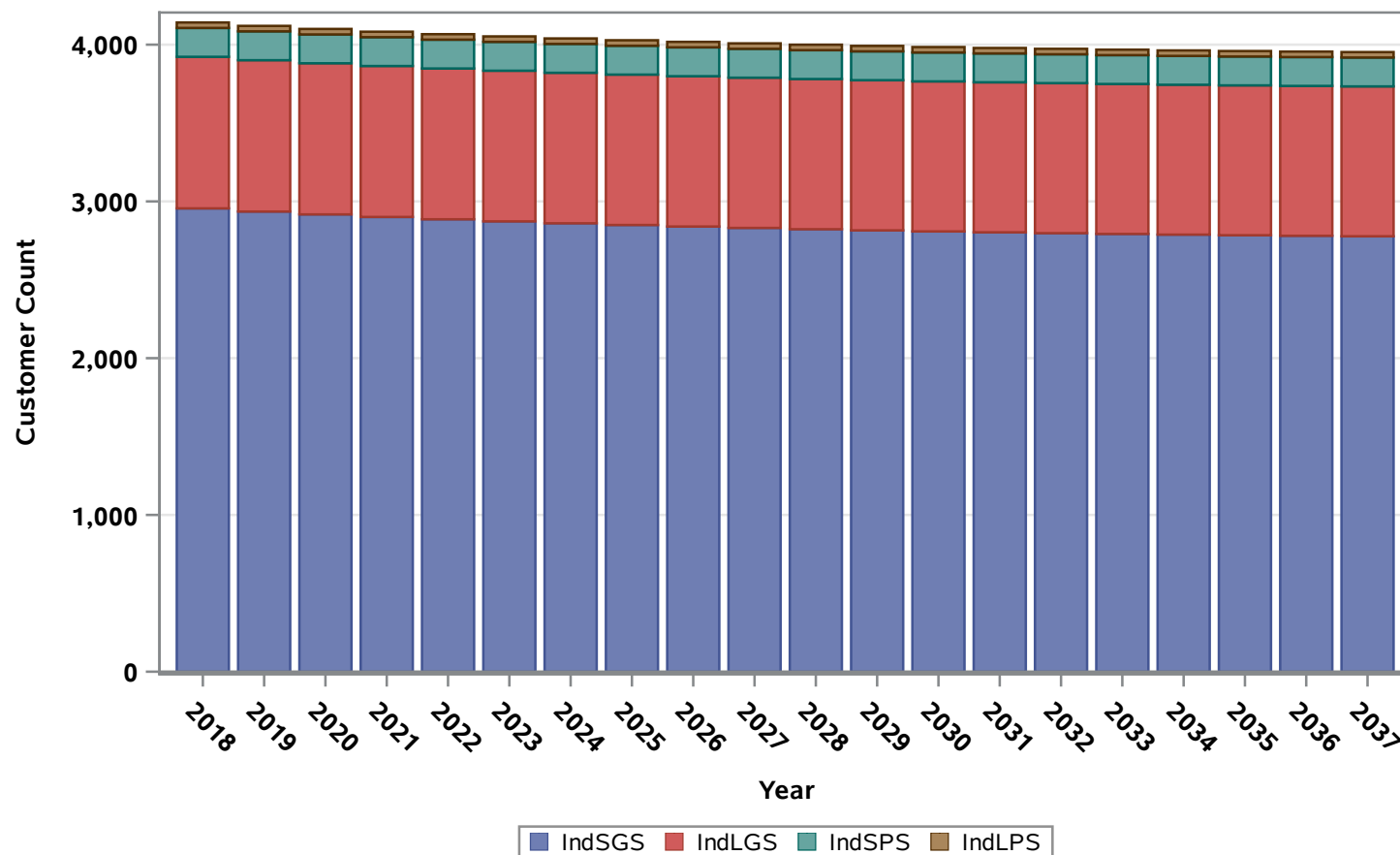


¹⁵⁴ CSR 240-22.030(7)(A)6

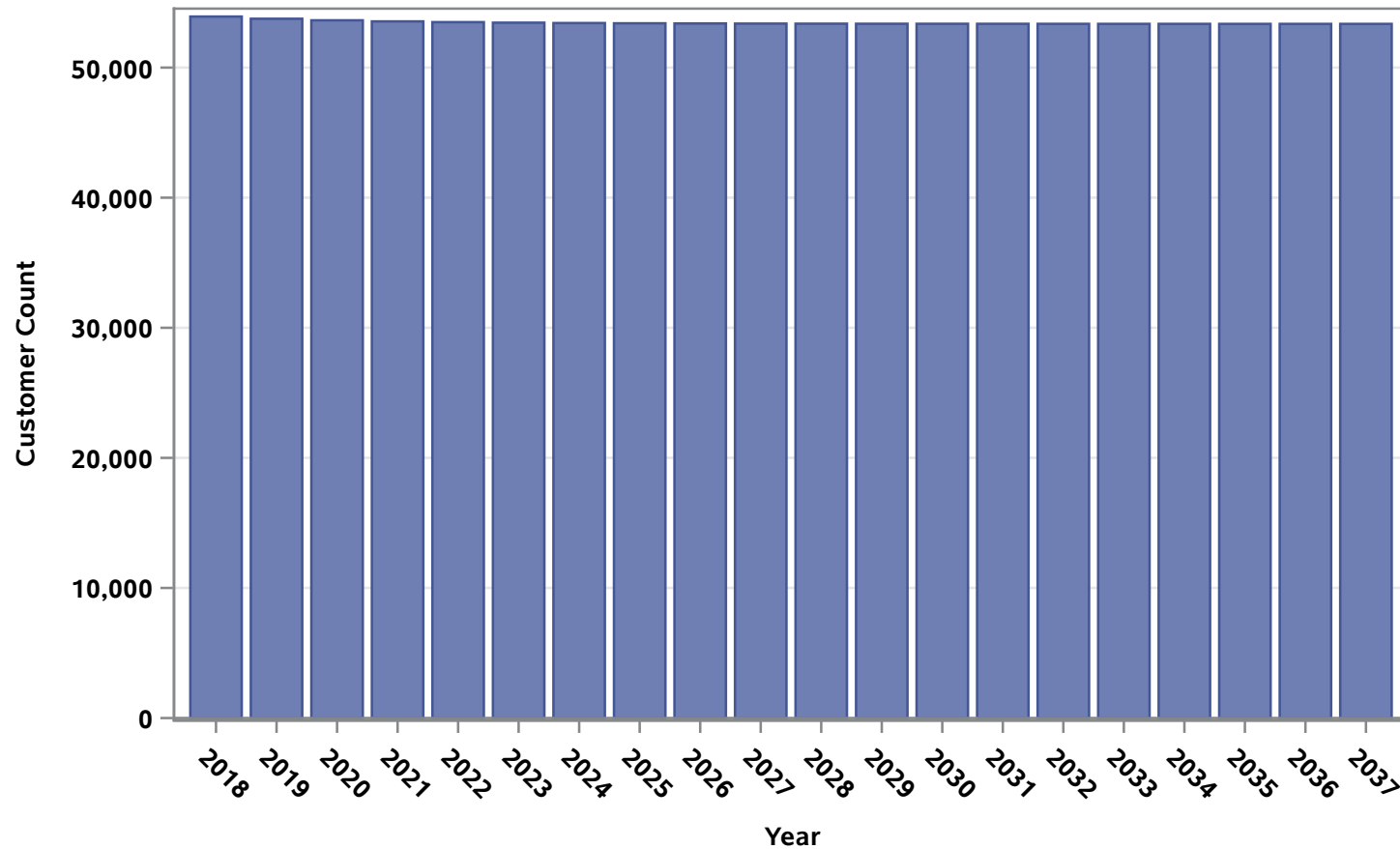
Forecast of Commercial Class Customer Count



Forecast of Industrial Class Customer Count



Forecast of Lighting Class Customer Count

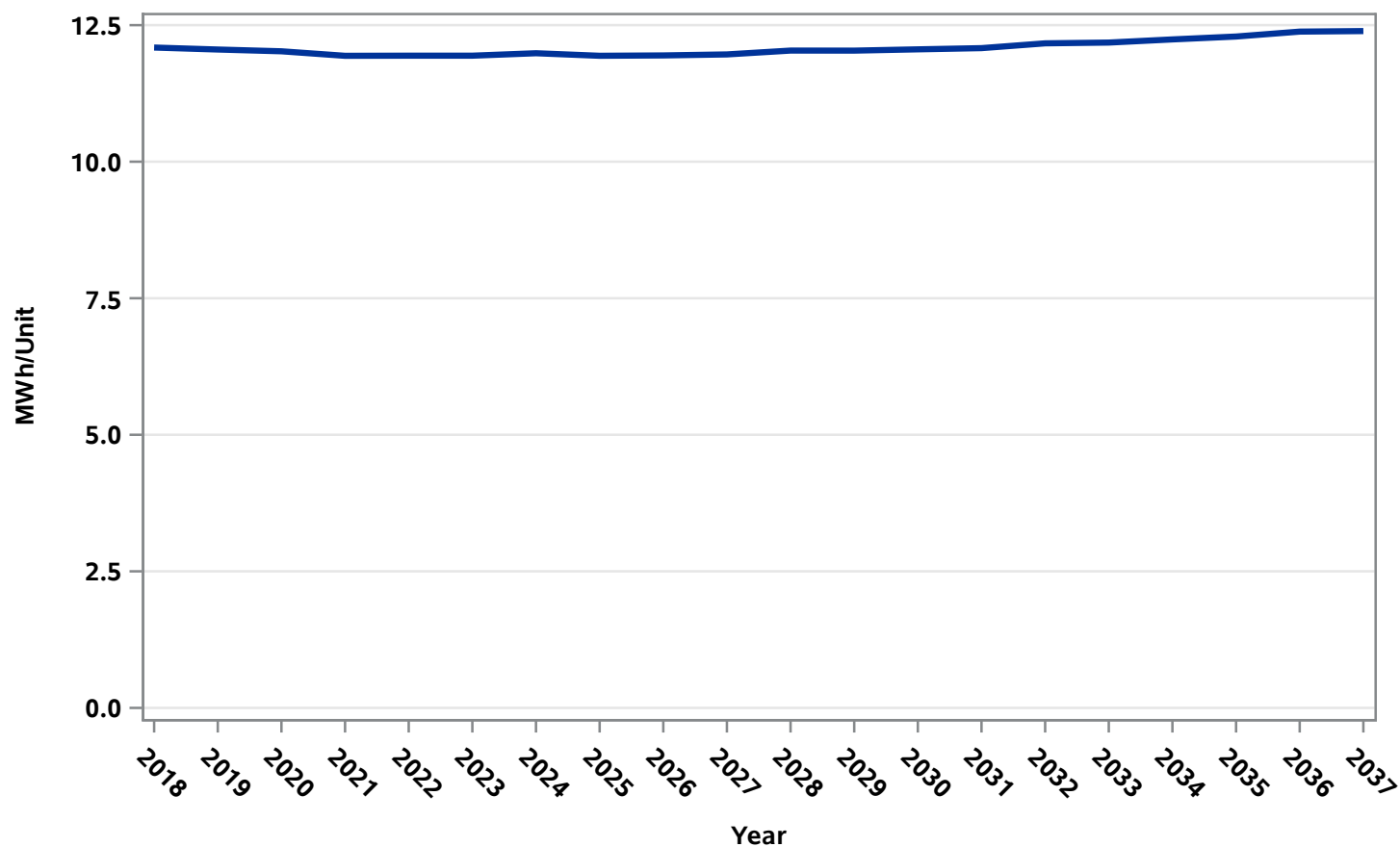


Forecast of Ameren Missouri's Customer Counts

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2017	1,055,277	145,870	9,477	481	30	2,977	969	184	35	54,057
2018	1,060,703	146,650	9,580	484	30	2,955	967	184	35	53,923
2019	1,065,041	147,097	9,634	486	30	2,935	965	184	35	53,753
2020	1,068,542	147,532	9,656	487	30	2,917	964	184	35	53,634
2021	1,071,157	148,099	9,677	487	30	2,901	963	184	35	53,551
2022	1,073,053	148,767	9,710	488	30	2,886	962	184	35	53,494
2023	1,075,597	149,409	9,743	490	30	2,873	961	184	35	53,453
2024	1,078,243	150,030	9,775	491	30	2,860	960	184	35	53,424
2025	1,081,083	150,645	9,807	492	30	2,849	960	184	35	53,405
2026	1,083,863	151,279	9,839	493	30	2,840	959	184	35	53,391
2027	1,086,515	151,955	9,873	494	30	2,831	958	184	35	53,381
2028	1,089,123	152,659	9,908	495	30	2,823	958	184	35	53,375
2029	1,091,842	153,400	9,945	496	30	2,815	958	184	35	53,370
2030	1,094,681	154,195	9,984	498	30	2,809	957	184	35	53,366
2031	1,097,612	155,006	10,024	499	30	2,803	957	184	35	53,364
2032	1,100,469	155,802	10,064	500	30	2,797	957	184	35	53,363
2033	1,103,163	156,576	10,105	502	30	2,792	957	184	35	53,362
2034	1,105,590	157,354	10,150	503	30	2,788	956	184	35	53,361
2035	1,107,931	158,145	10,196	505	30	2,784	956	184	35	53,360
2036	1,110,150	158,918	10,244	507	30	2,781	956	184	35	53,360
2037	1,112,133	159,650	10,294	508	30	2,778	956	184	35	53,359

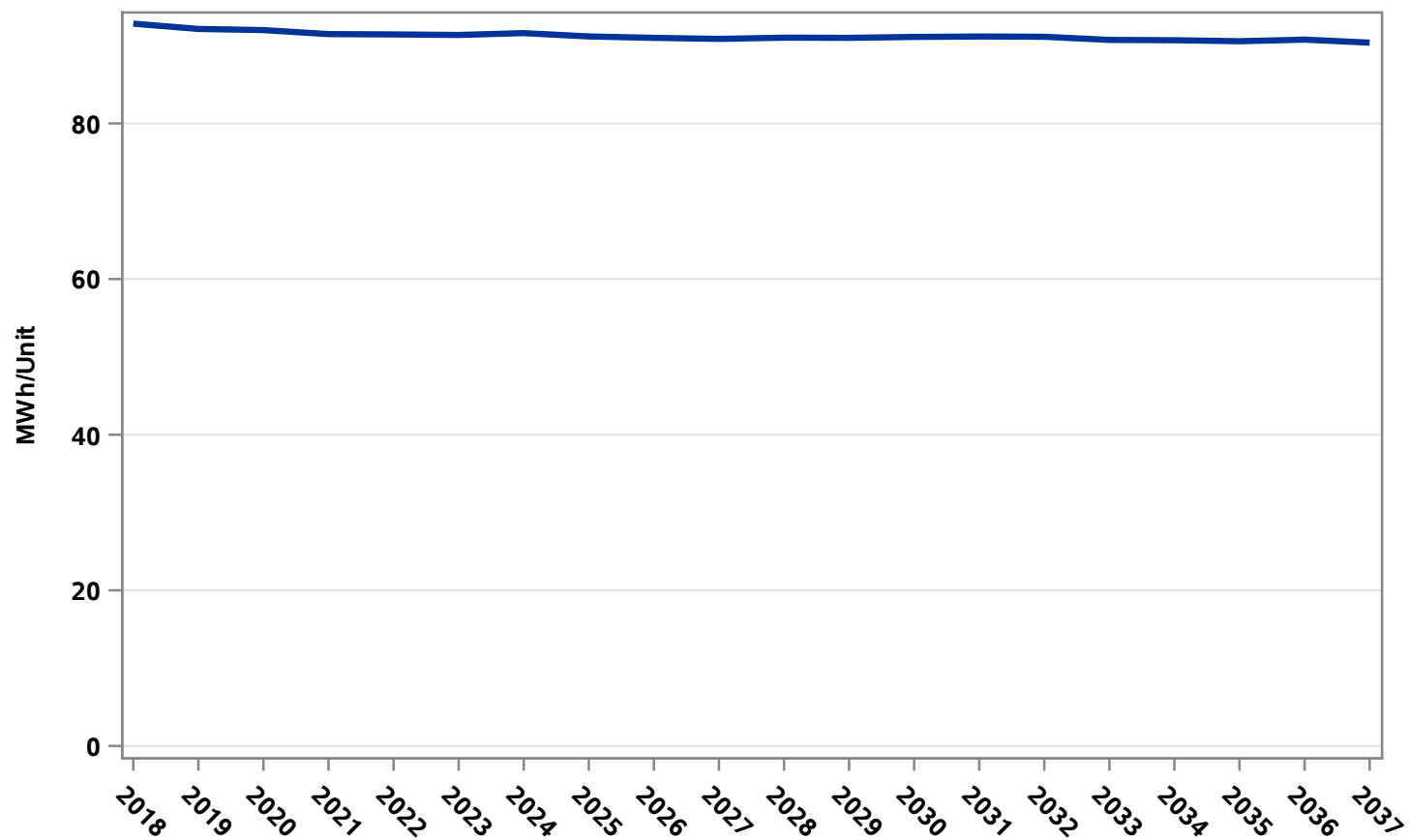
Class Energy Use per Unit Forecast - Base Case¹⁶

Forecast of Residential Annual Energy Use (MWh/Unit)

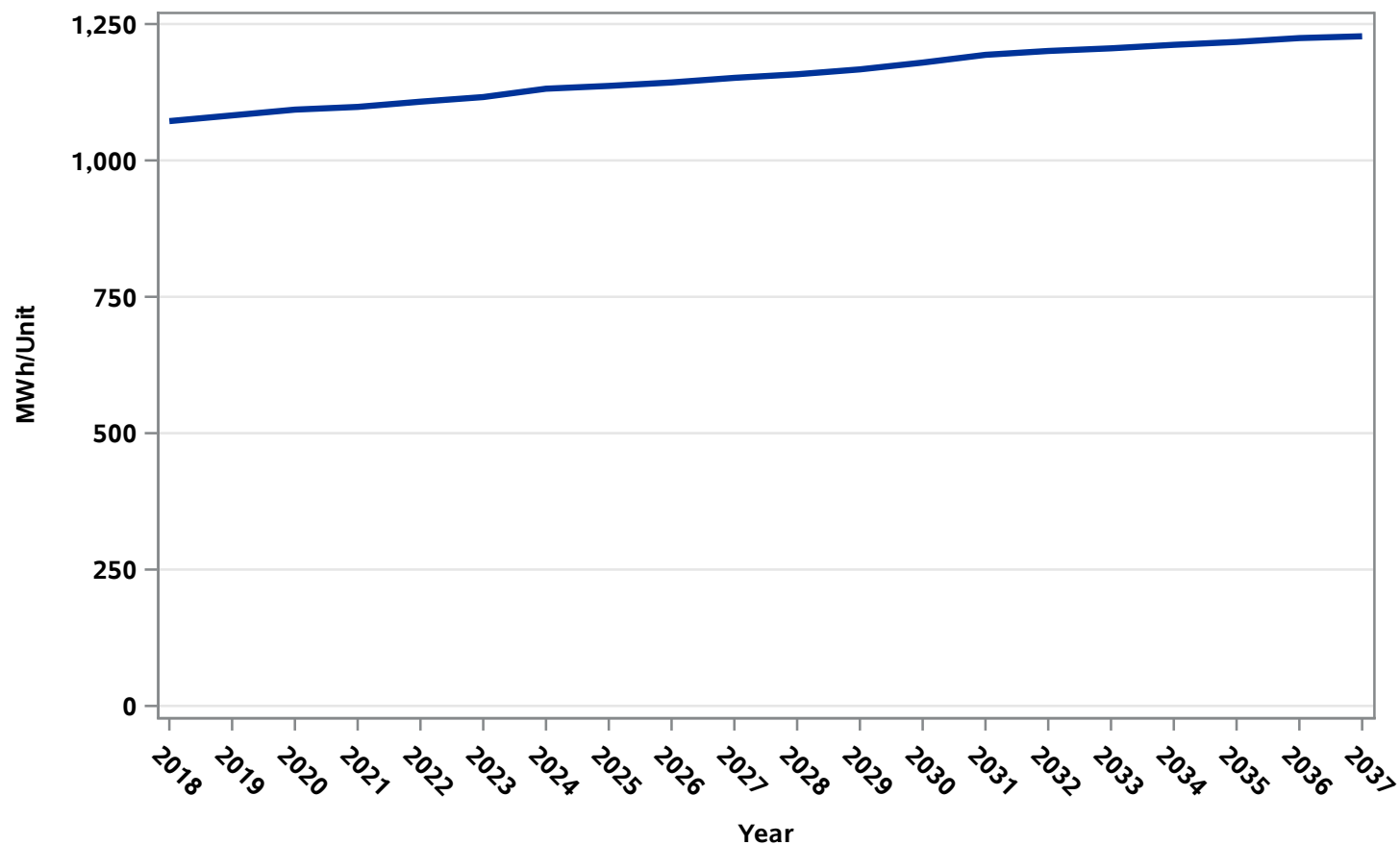


¹⁶4 CSR 240-22.030(7)(A)6

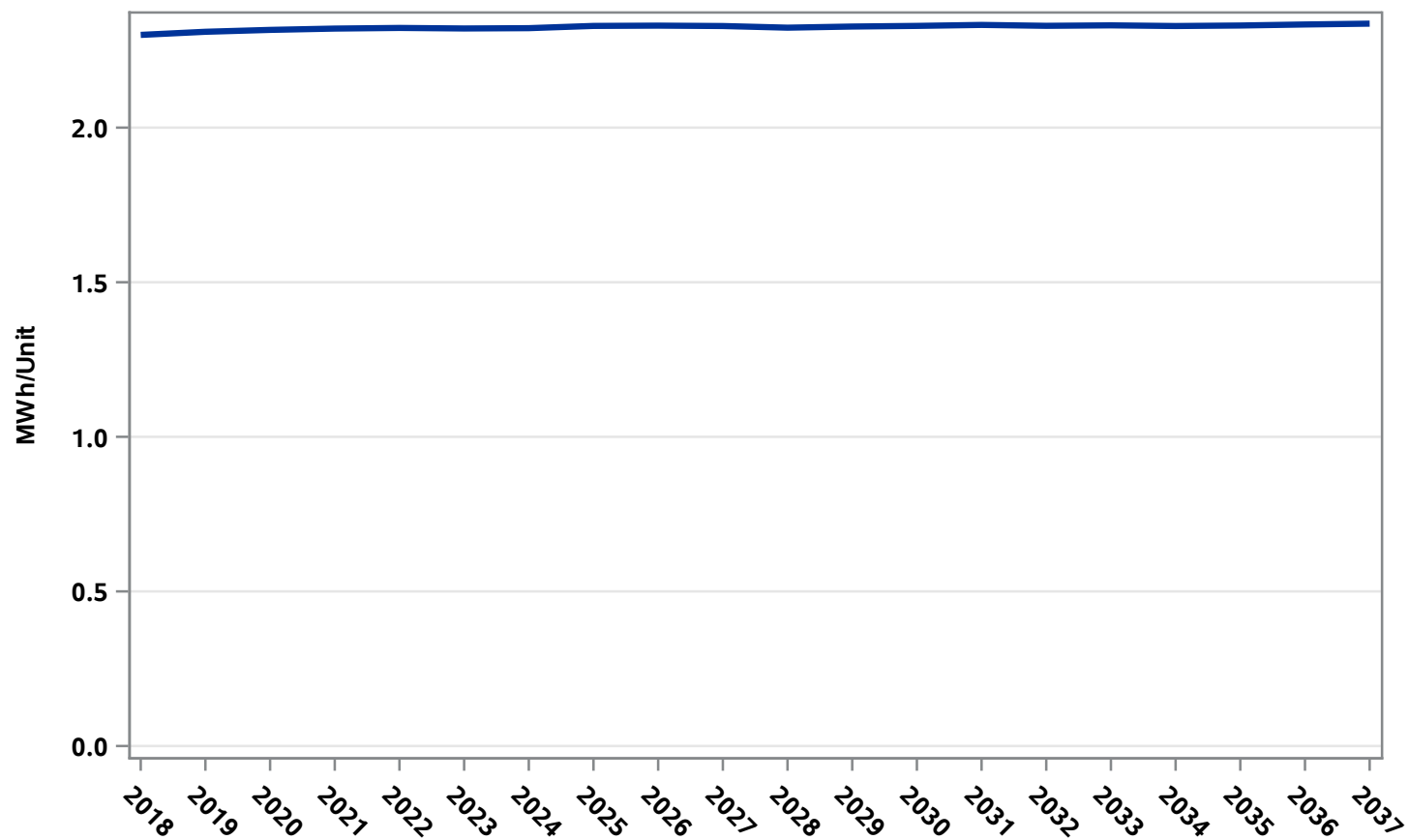
Forecast of Commercial Annual Use (MWh/Unit)



Forecast of Industrial Annual Use (MWh/Unit)



Forecast of Lighting Annual Use (MWh/Unit)

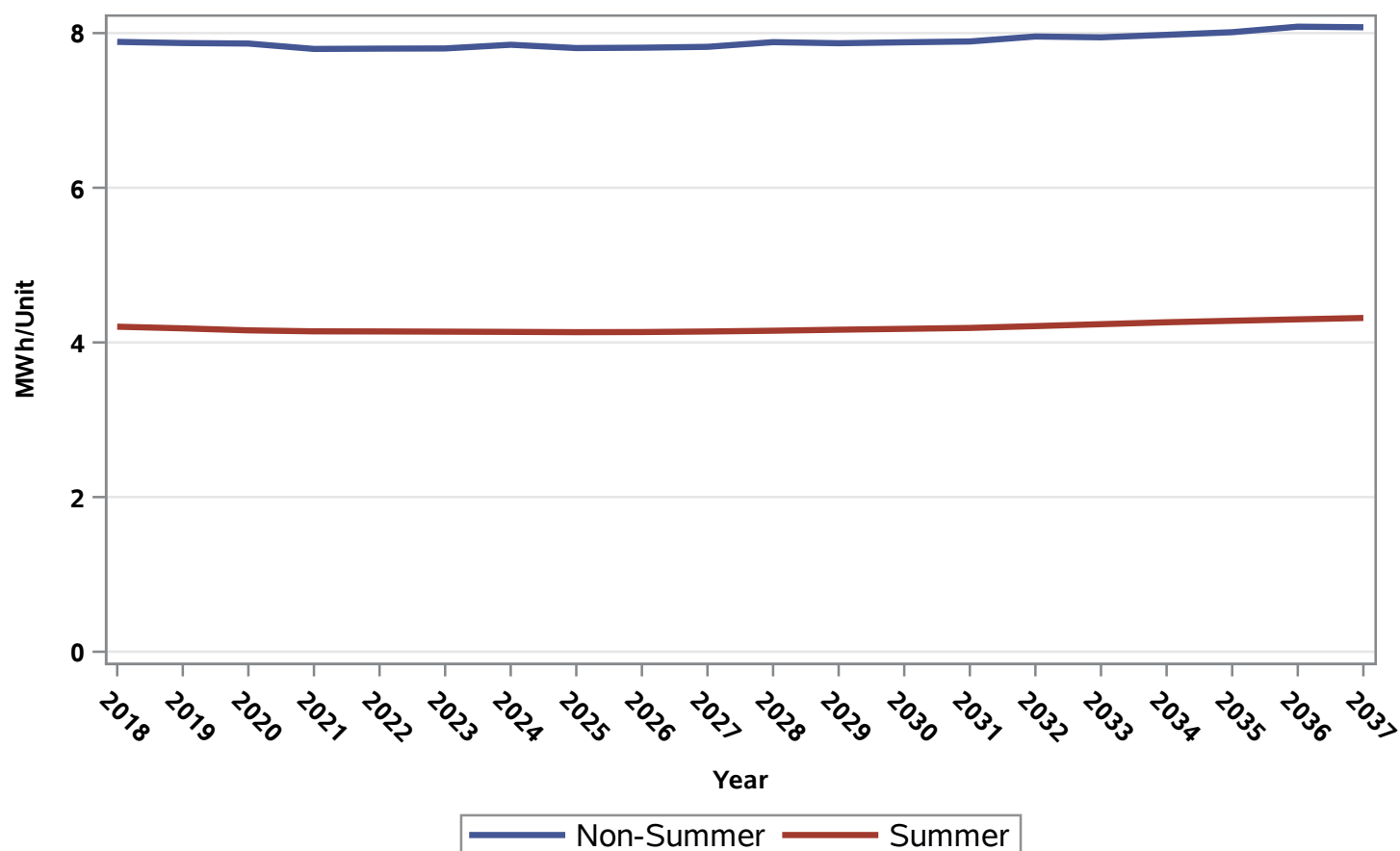


Forecast of Energy Use per Unit by Revenue Class (MWh/Unit)

	Annual				Non-Summer				Summer			
Year	Residential	Commercial	Industrial	Lighting	Residential	Commercial	Industrial	Lighting	Residential	Commercial	Industrial	Lighting
2018	12.09	92.82	1,072	2.30	7.89	60.06	692	1.66	4.20	32.75	380	0.64
2019	12.05	92.14	1,082	2.31	7.87	59.62	698	1.67	4.18	32.52	384	0.64
2020	12.02	91.99	1,093	2.32	7.86	59.61	706	1.68	4.16	32.38	387	0.64
2021	11.94	91.47	1,098	2.32	7.80	59.17	709	1.68	4.14	32.30	389	0.64
2022	11.94	91.43	1,108	2.32	7.80	59.14	715	1.68	4.14	32.30	392	0.64
2023	11.94	91.36	1,116	2.32	7.80	59.11	721	1.68	4.14	32.25	395	0.64
2024	11.99	91.60	1,131	2.32	7.85	59.35	731	1.68	4.14	32.25	400	0.64
2025	11.94	91.17	1,137	2.33	7.81	59.00	734	1.68	4.13	32.17	403	0.64
2026	11.95	90.99	1,143	2.33	7.81	58.90	738	1.69	4.13	32.10	405	0.64
2027	11.96	90.86	1,151	2.33	7.82	58.82	744	1.69	4.14	32.03	407	0.64
2028	12.03	91.02	1,158	2.32	7.88	59.04	749	1.68	4.15	31.98	409	0.64
2029	12.03	90.99	1,167	2.33	7.87	58.94	754	1.68	4.16	32.05	413	0.64
2030	12.06	91.11	1,179	2.33	7.88	59.03	762	1.69	4.18	32.08	417	0.64
2031	12.08	91.17	1,194	2.33	7.89	59.09	772	1.69	4.19	32.08	422	0.65
2032	12.17	91.13	1,201	2.33	7.96	59.18	777	1.69	4.21	31.95	423	0.64
2033	12.18	90.73	1,205	2.33	7.95	58.85	780	1.69	4.24	31.88	426	0.64
2034	12.24	90.69	1,212	2.33	7.98	58.85	784	1.69	4.26	31.84	428	0.64
2035	12.29	90.56	1,217	2.33	8.01	58.77	787	1.69	4.28	31.78	430	0.64
2036	12.38	90.77	1,224	2.33	8.08	58.98	792	1.69	4.30	31.78	432	0.65
2037	12.39	90.38	1,228	2.34	8.08	58.66	794	1.69	4.32	31.72	434	0.65

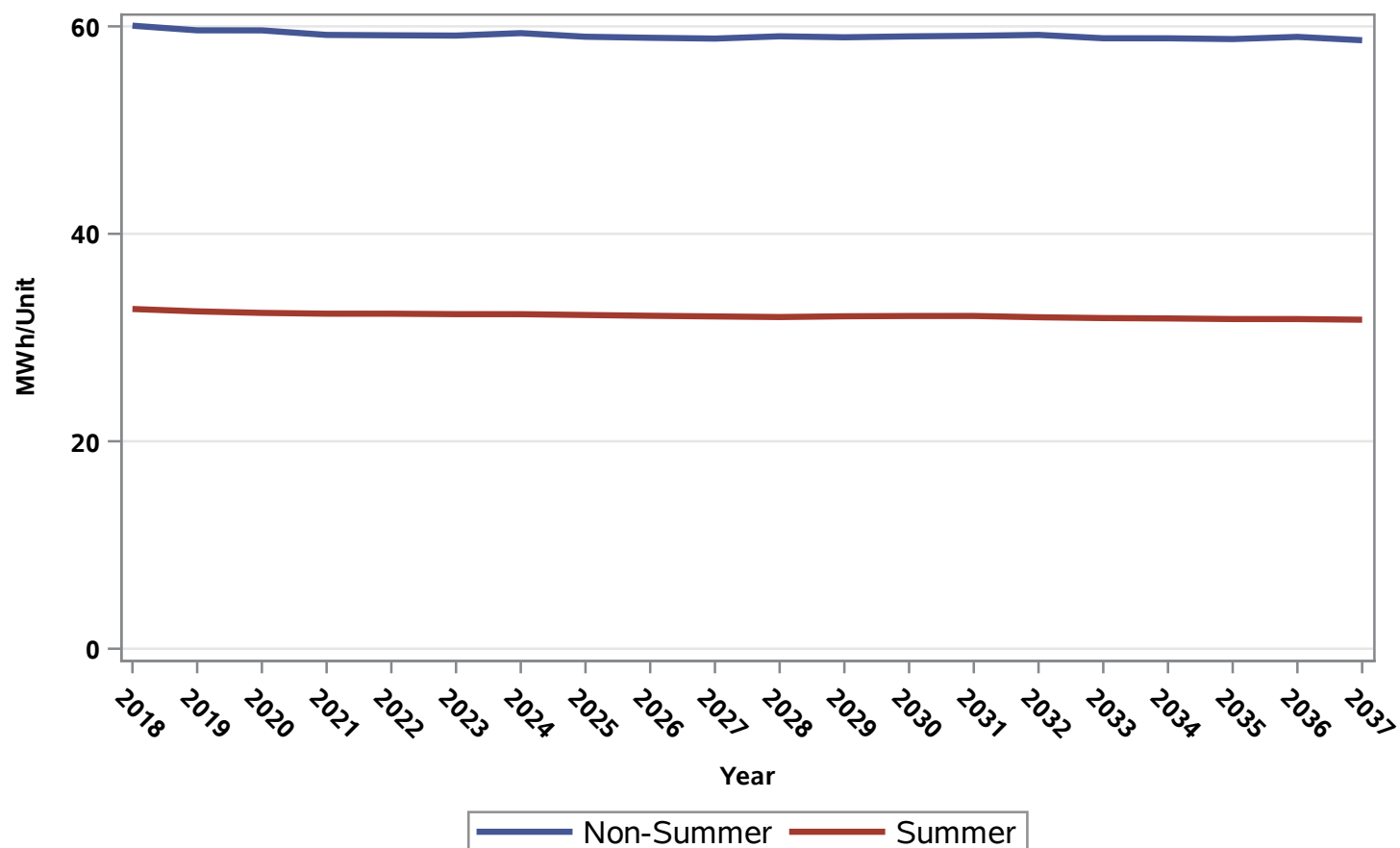
Summer and Non-Summer Class Energy Use per Unit Forecast - Base Case¹⁷

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

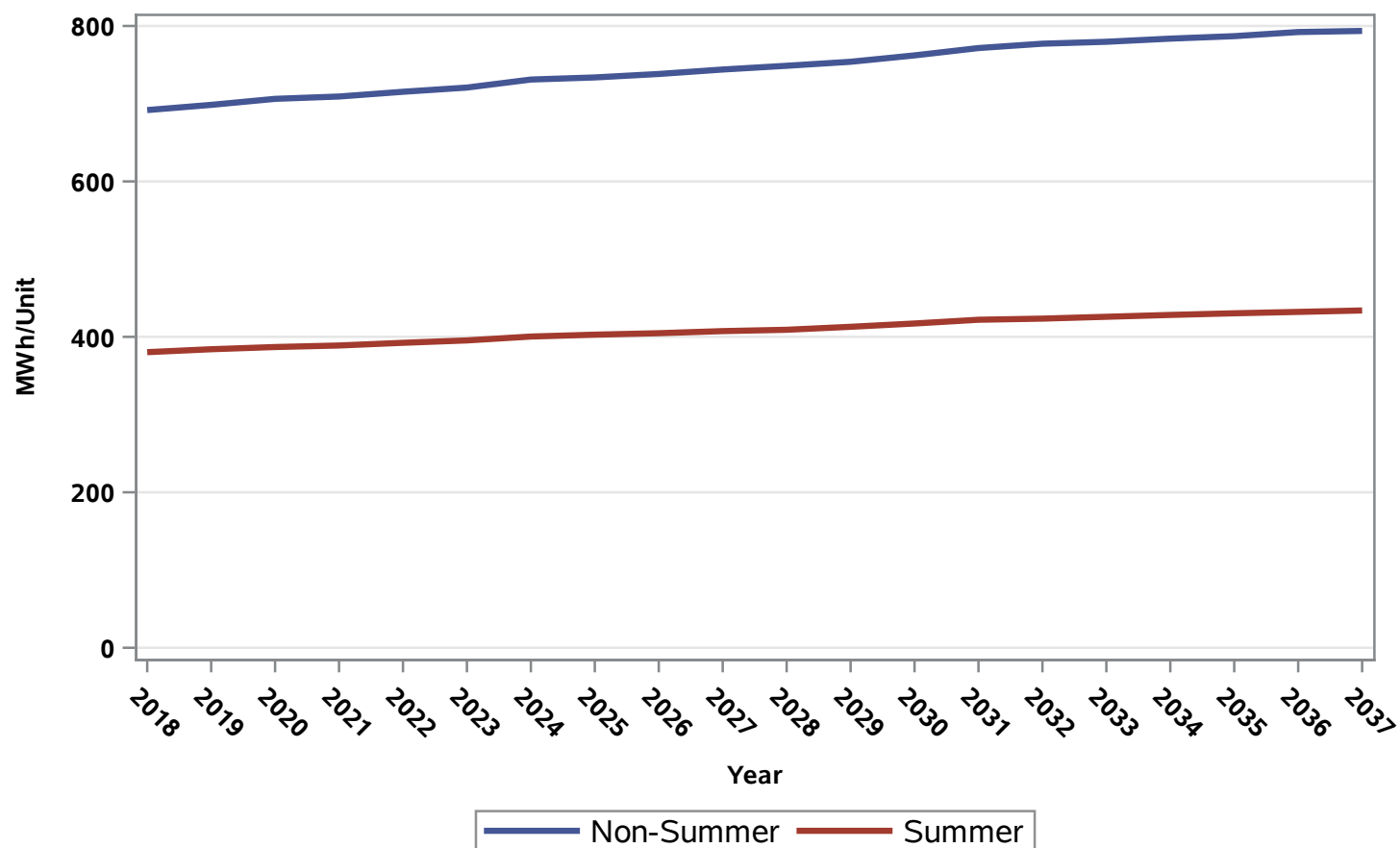


¹⁷4 CSR 240-22.030(7)(A)6

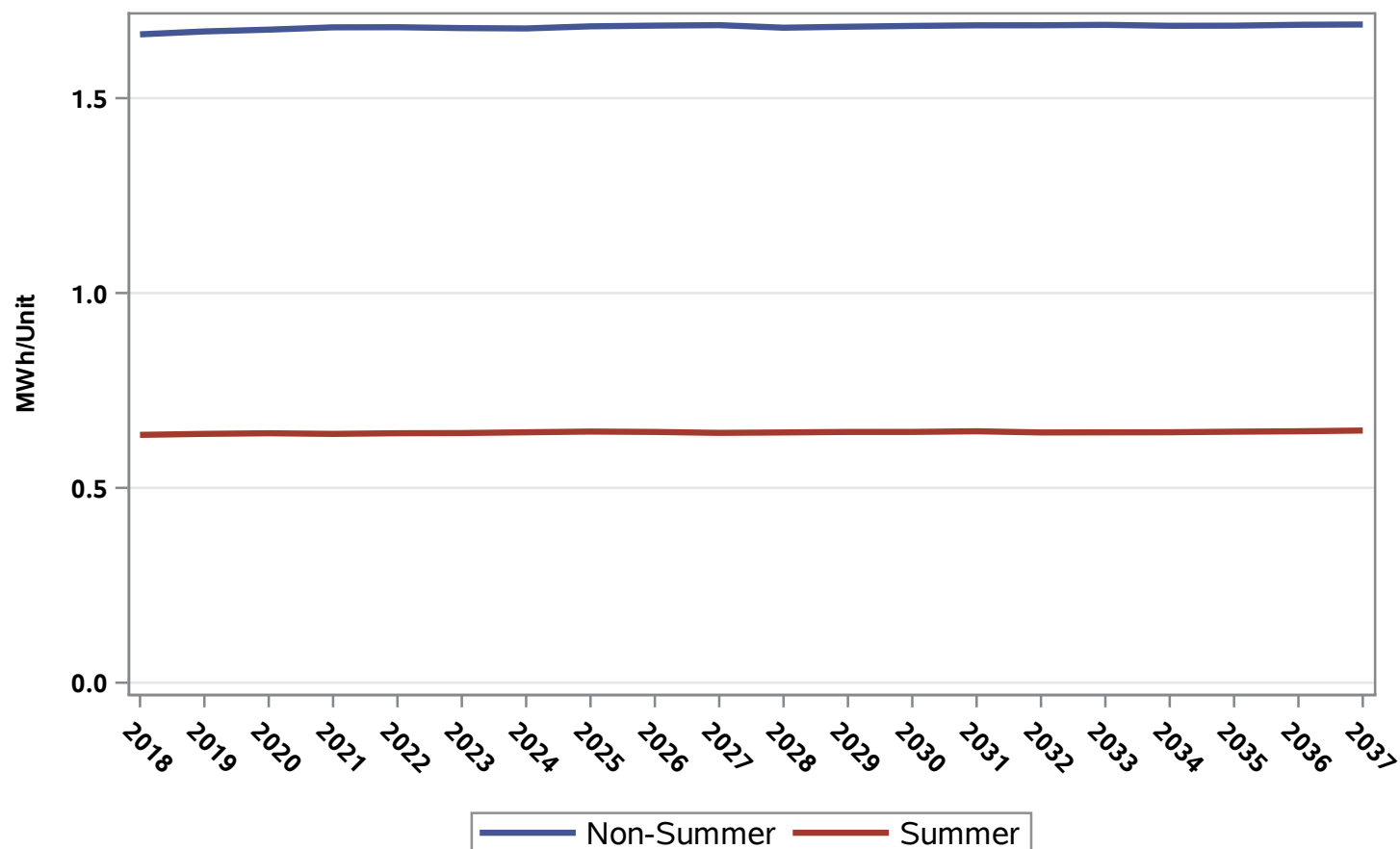
Forecast of Commercial Energy Use per Unit (MWh/Unit)



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

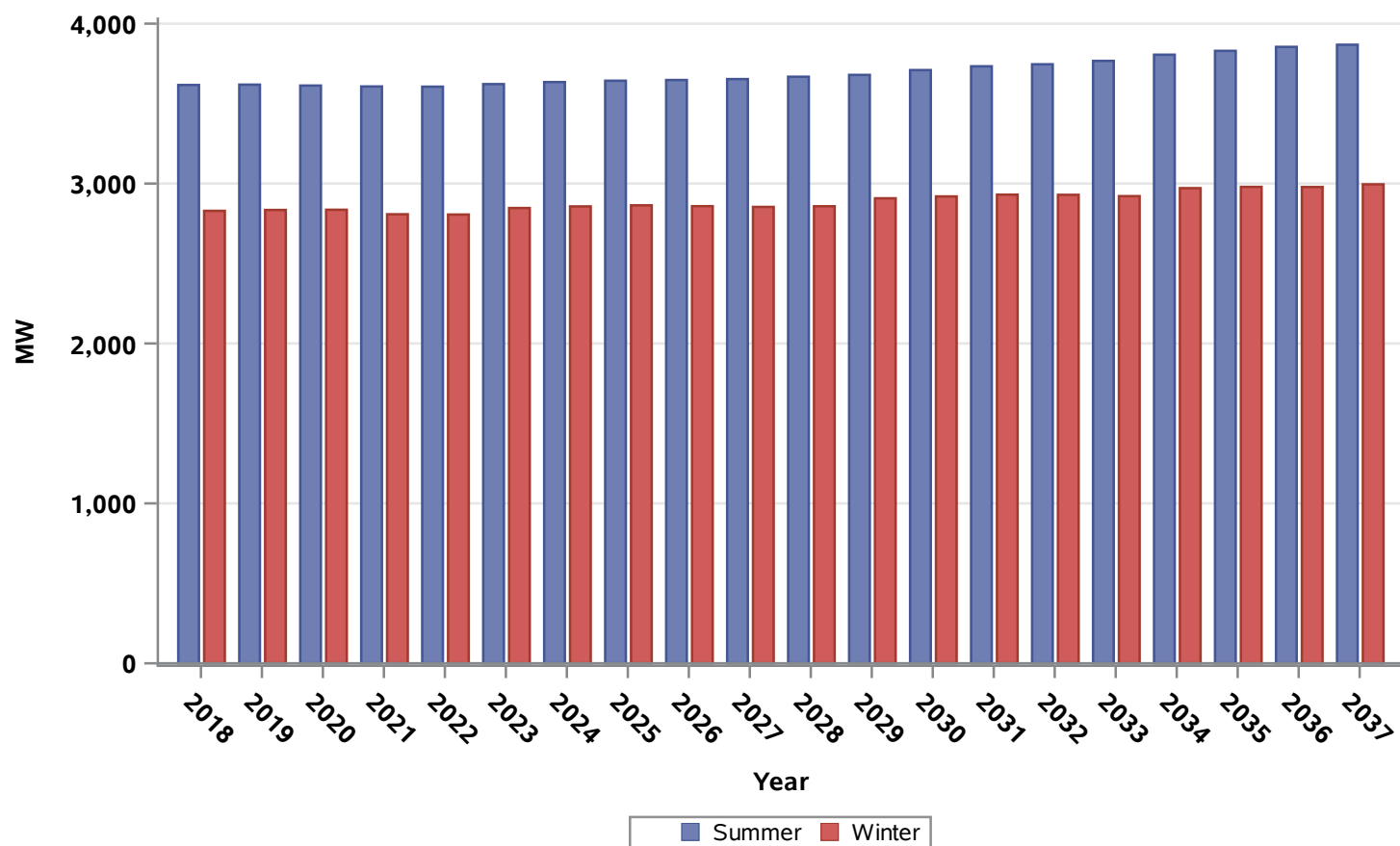


Forecast of Lighting Energy Use per Unit (MWh/Unit)



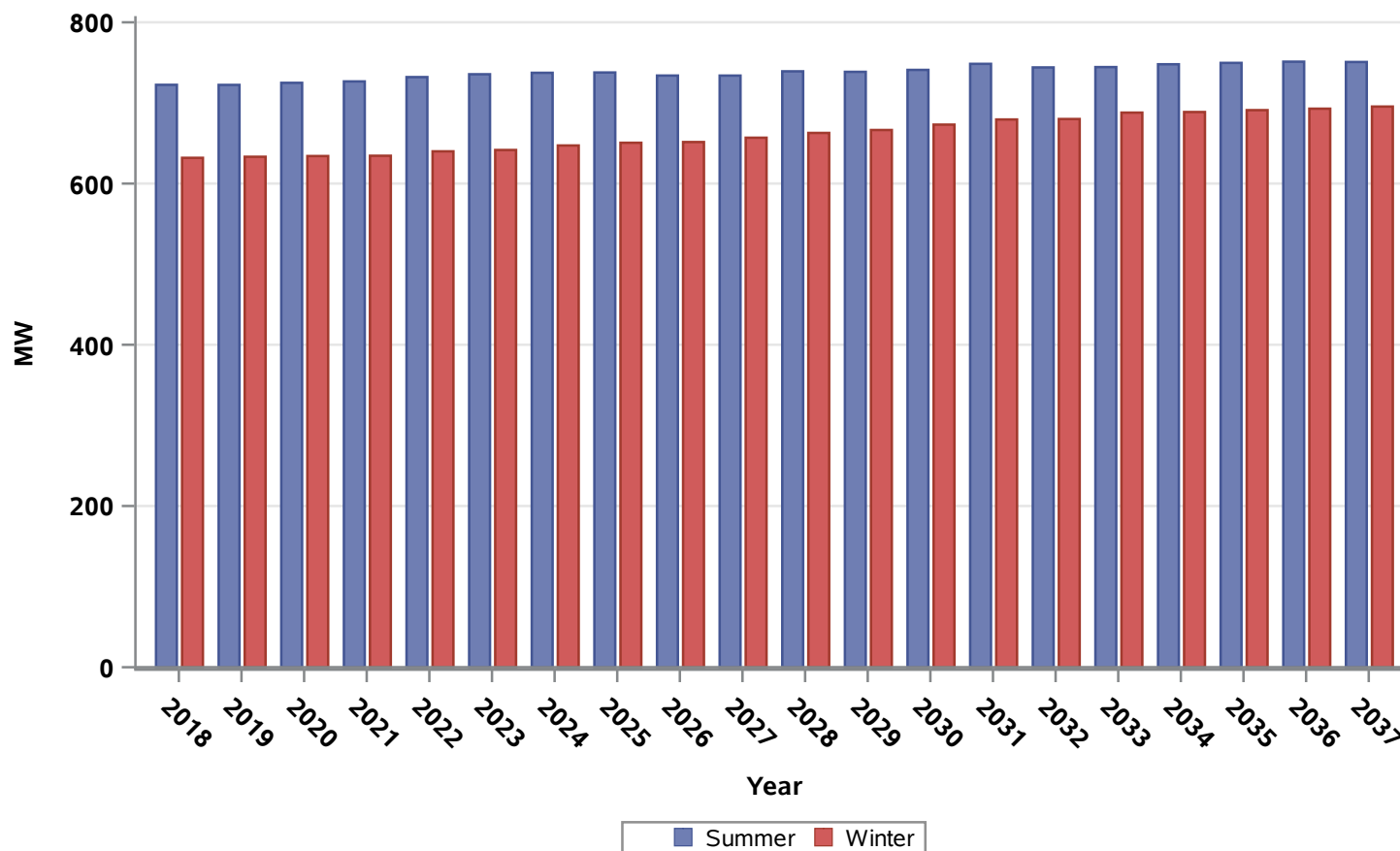
Forecasted Total Demand at the time of Summer and Winter System Peak for Planning Case¹⁸

Forecast of Residential Coincident Peak Demand (MW)

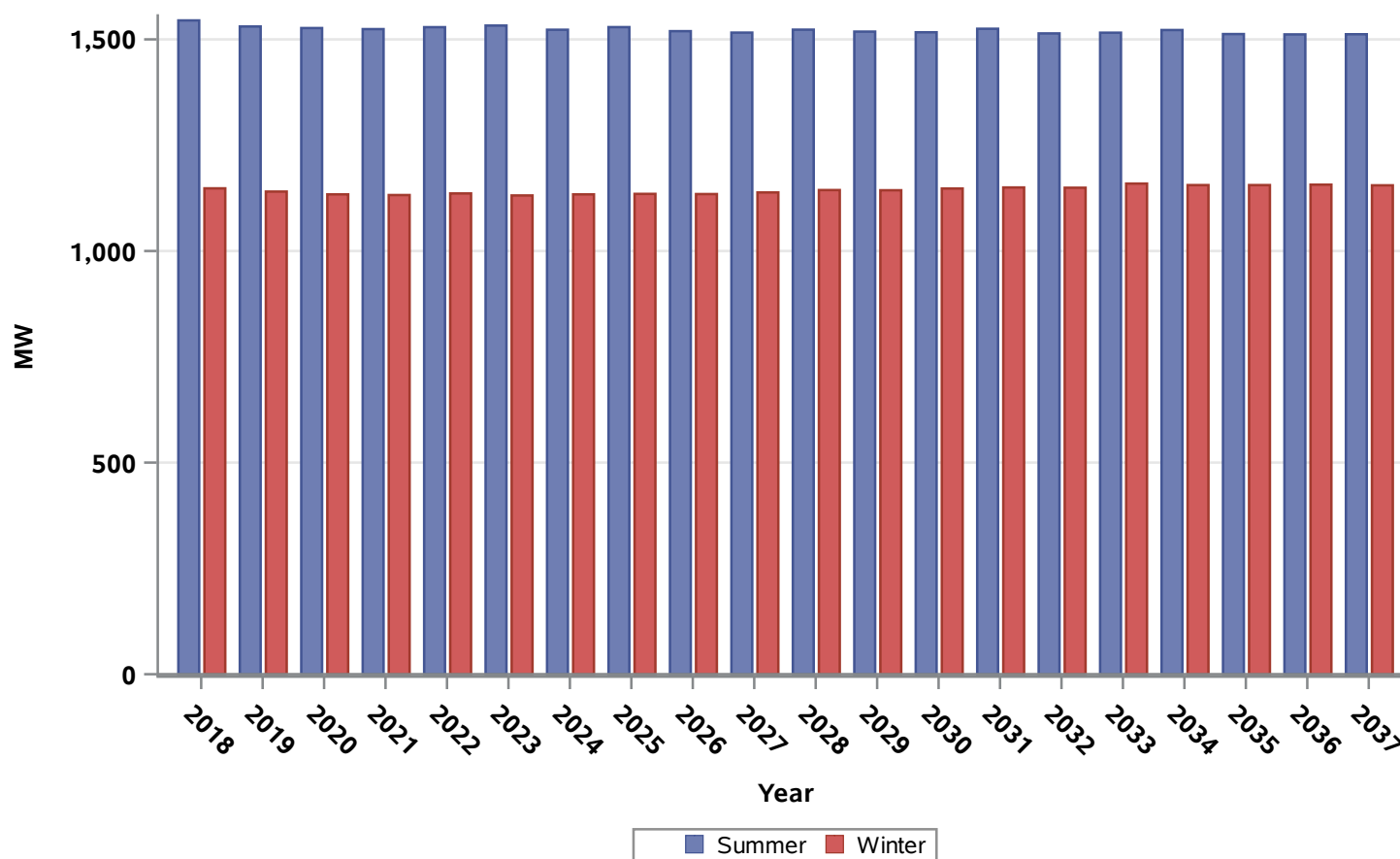


¹⁸4 CSR 240-22.030(7)(A)6

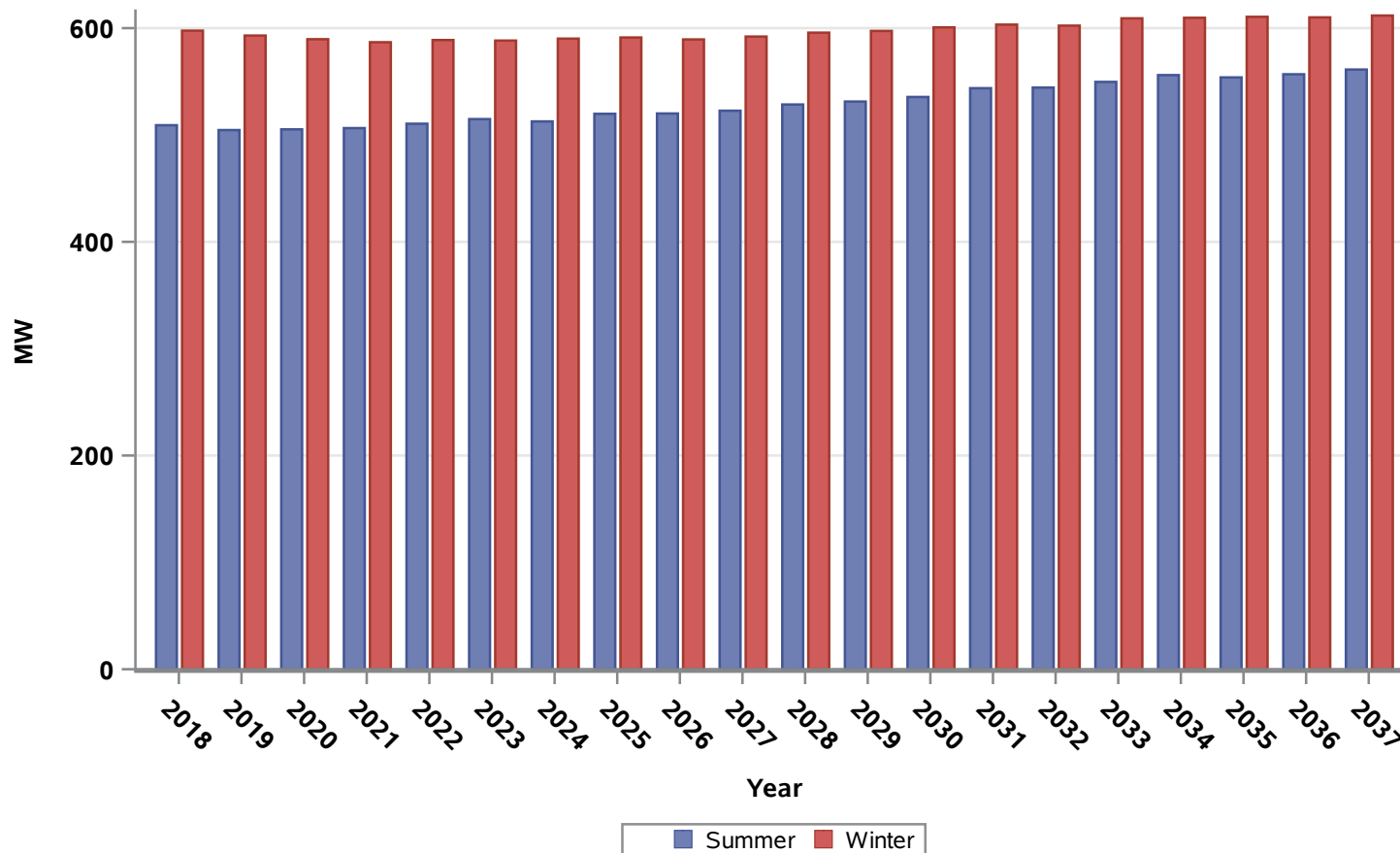
Forecast of Commercial SGS Coincident Peak Demand (MW)



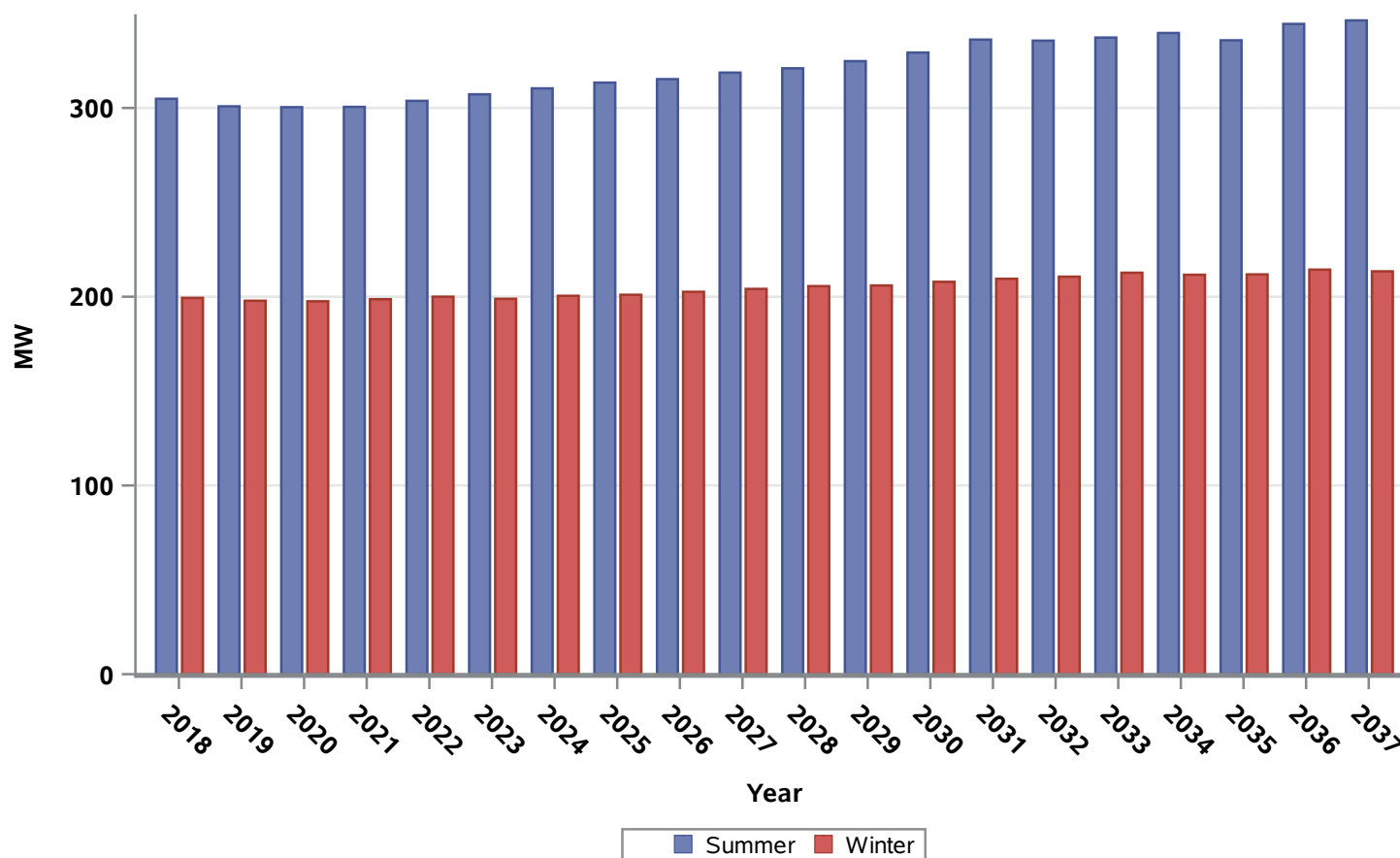
Forecast of Commercial LGS Coincident Peak Demand (MW)



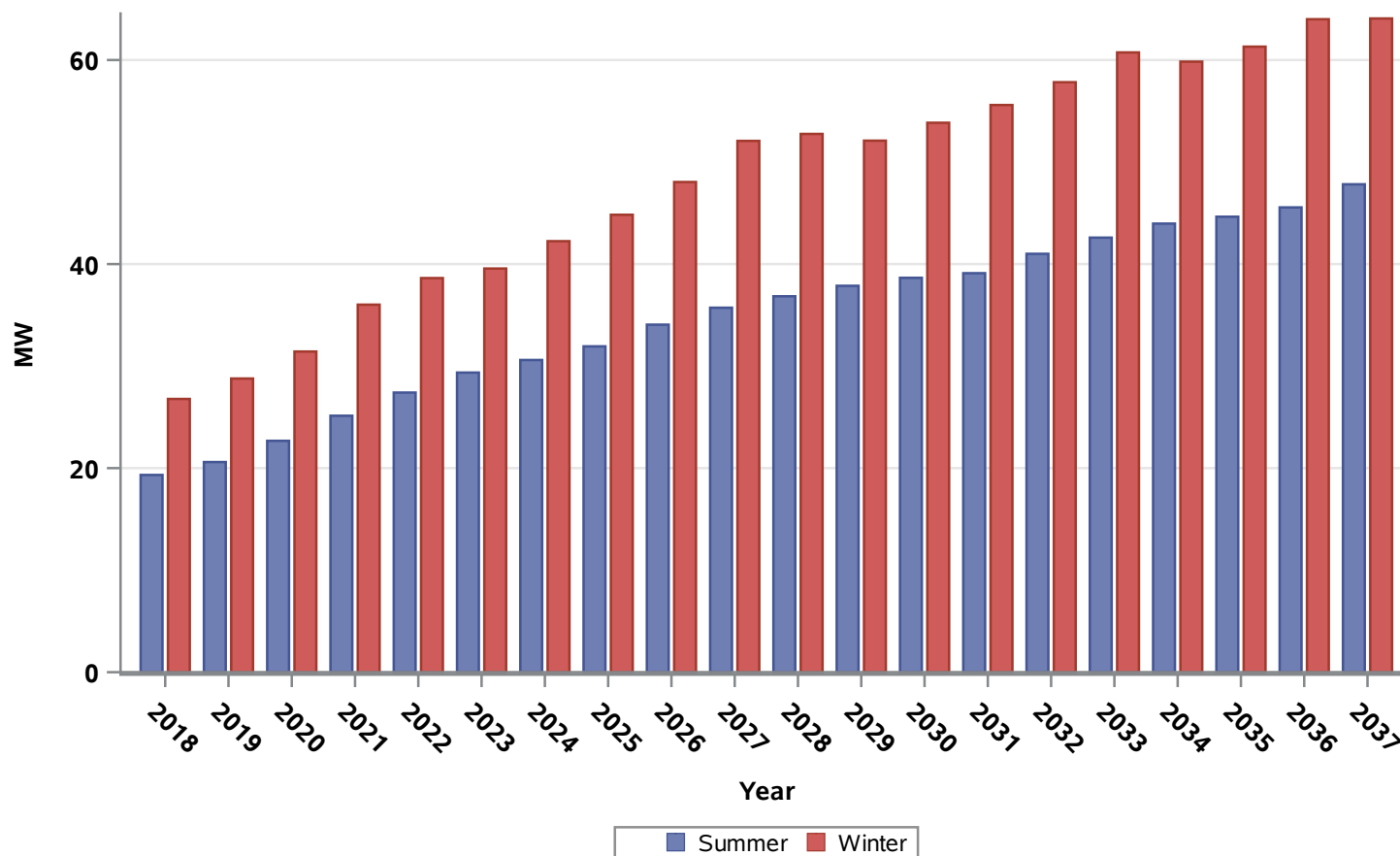
Forecast of Commercial SPS Coincident Peak Demand (MW)



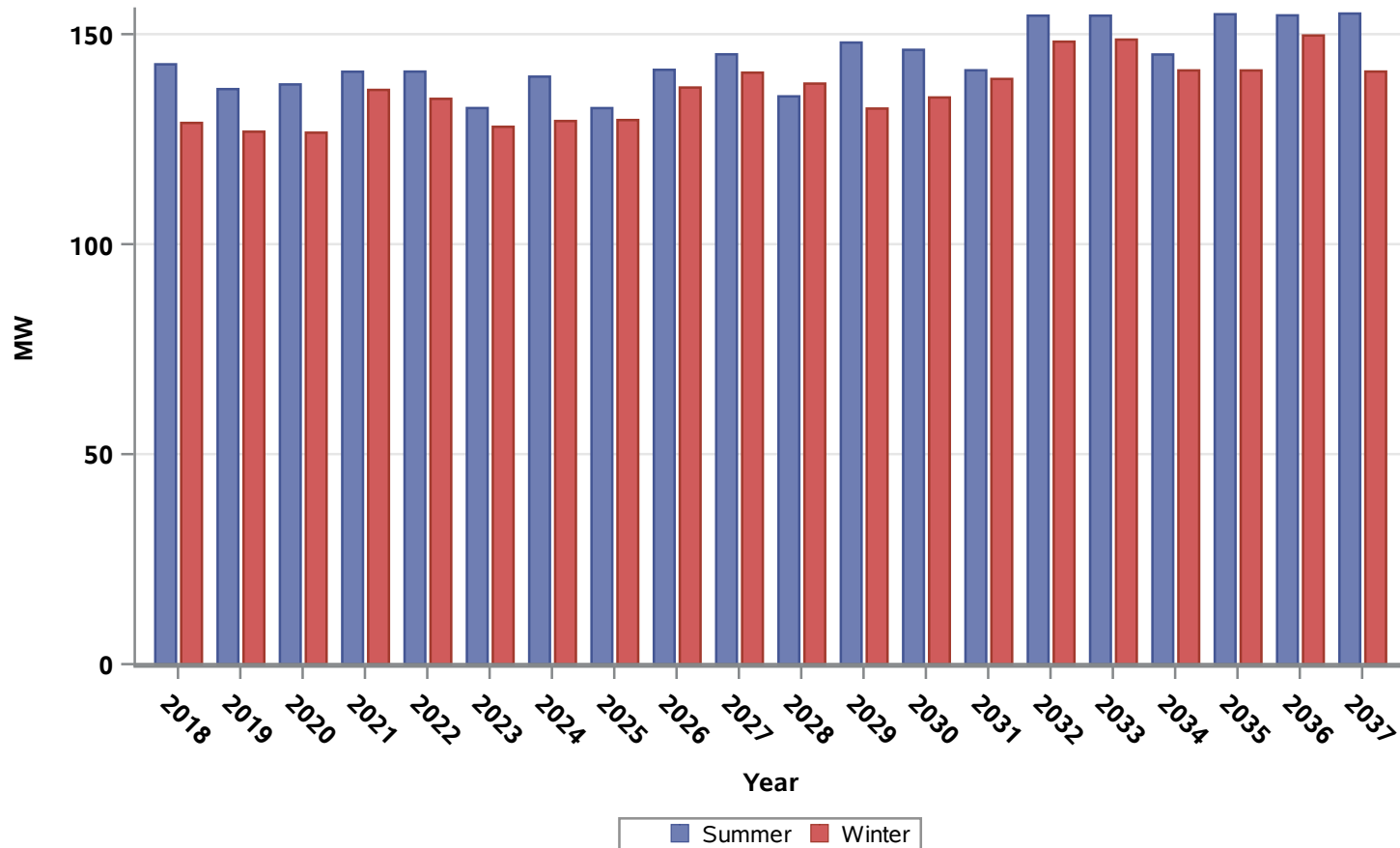
Forecast of Commercial LPS Coincident Peak Demand (MW)



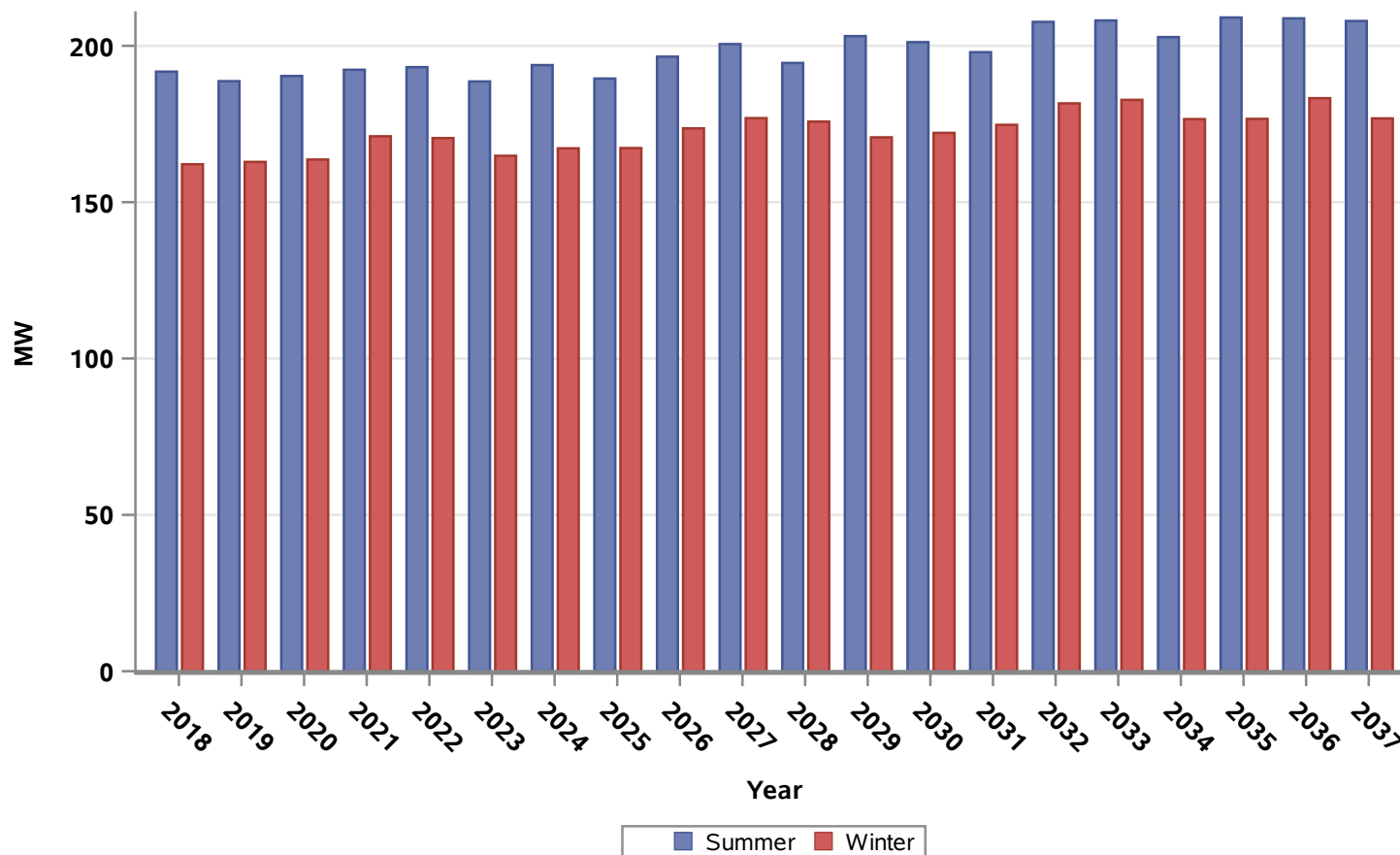
Forecast of Industrial SGS Coincident Peak Demand (MW)



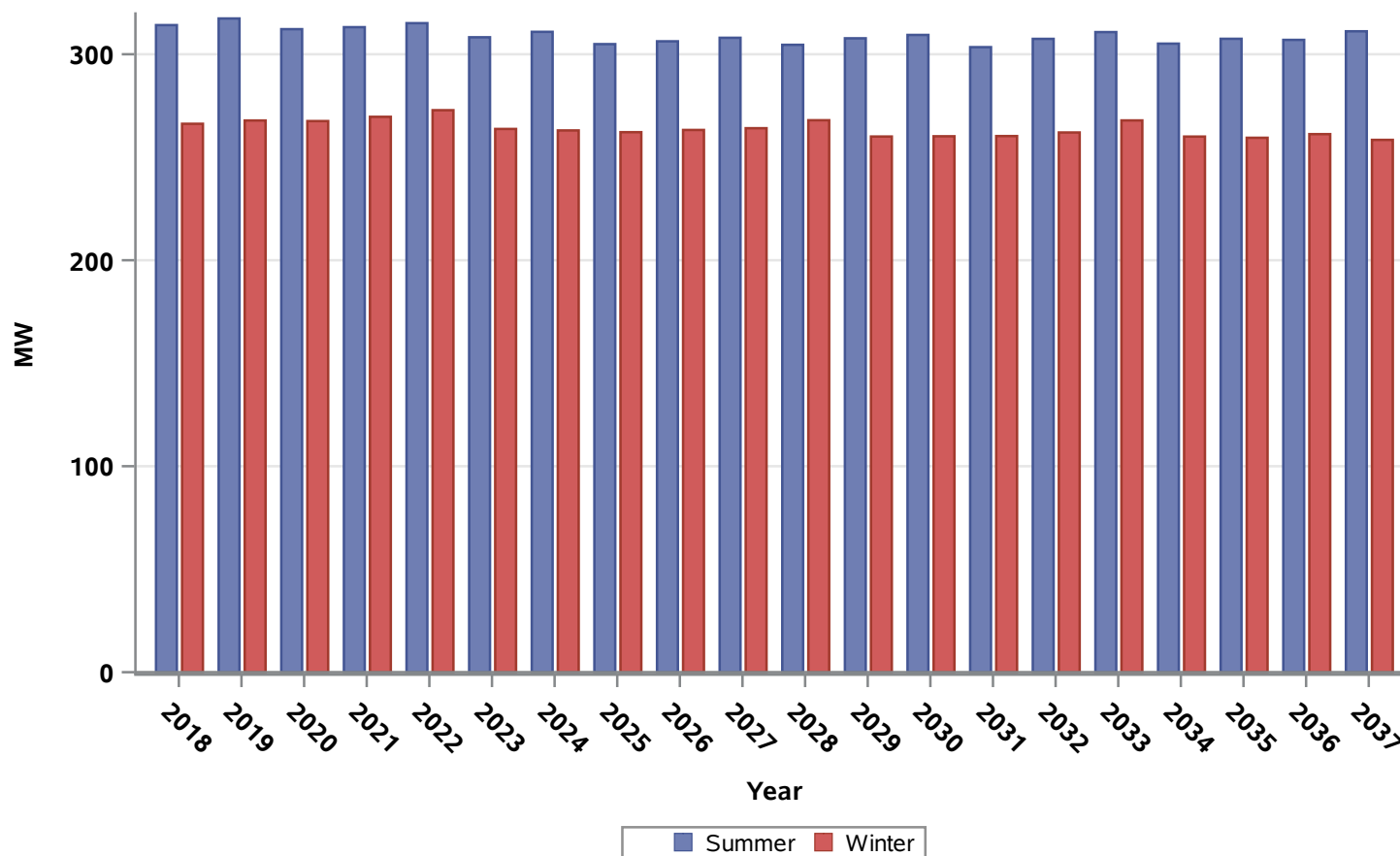
Forecast of Industrial LGS Coincident Peak Demand (MW)



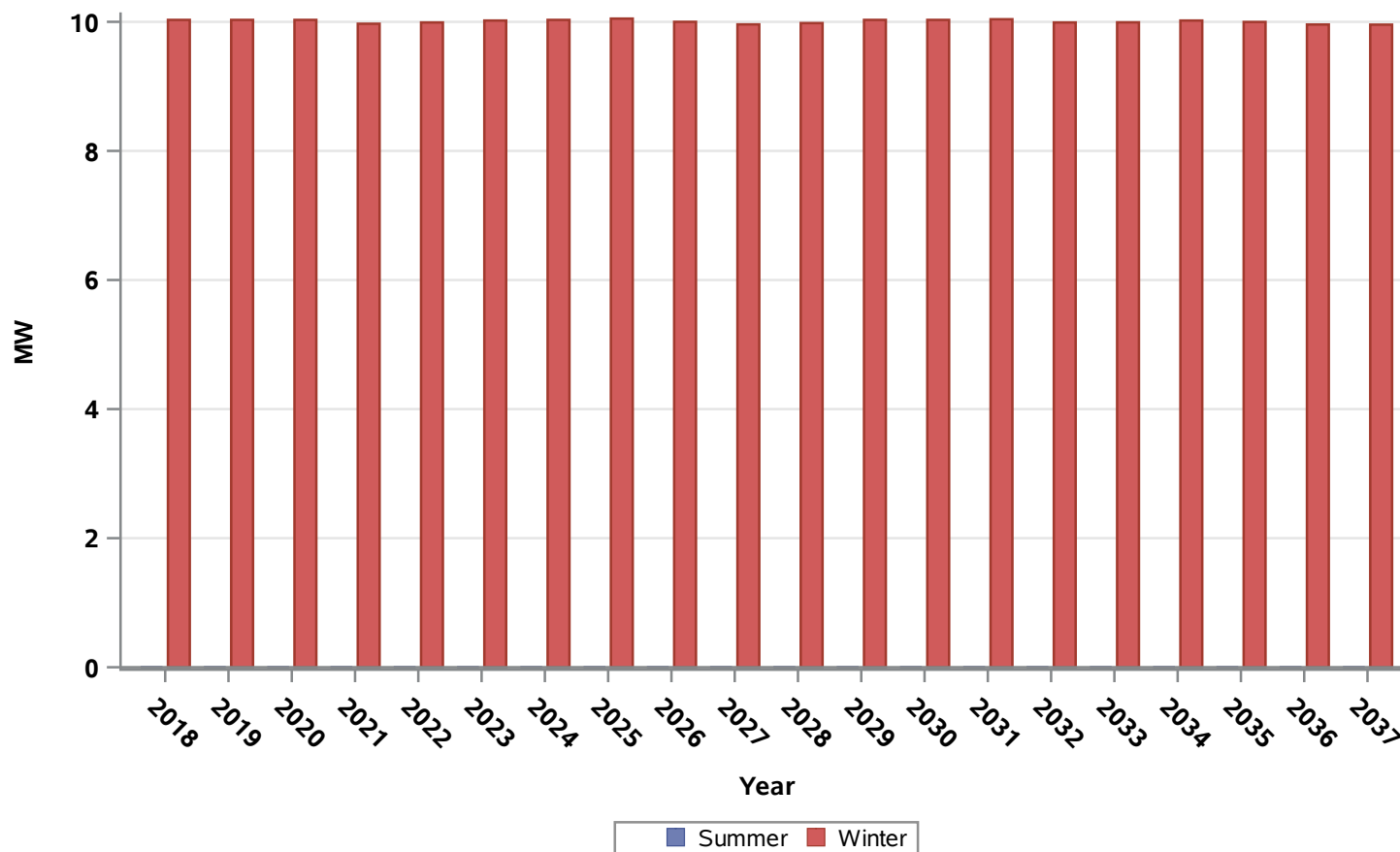
Forecast of Industrial SPS Coincident Peak Demand (MW)



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)

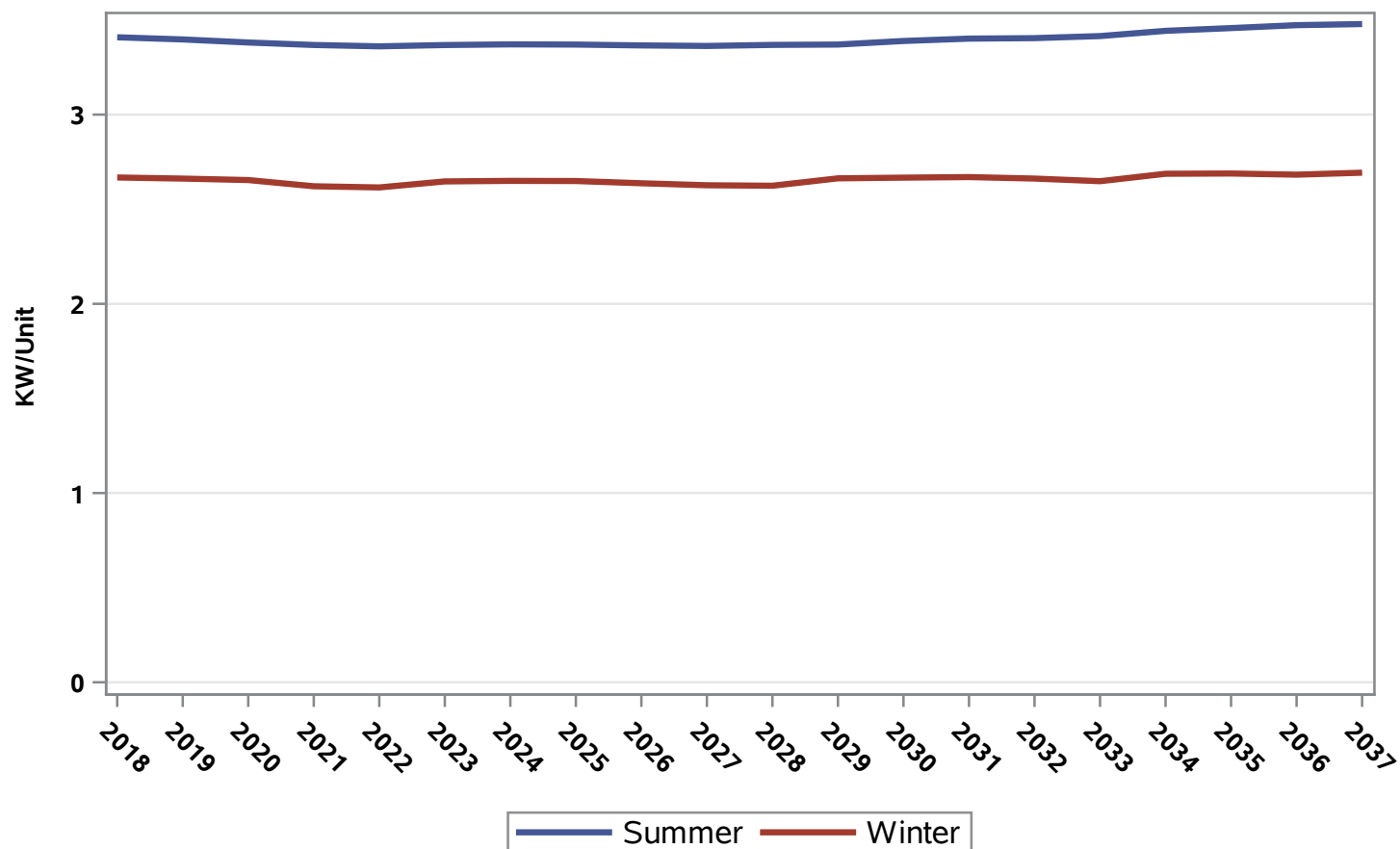
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	Sys Demand
2018	3,616	722	1,545	509	305	19	143	192	314	0	7,365
2019	3,619	722	1,530	505	301	21	137	189	317	0	7,340
2020	3,613	725	1,527	505	300	23	138	190	312	0	7,333
2021	3,607	727	1,524	506	301	25	141	192	313	0	7,337
2022	3,606	732	1,529	511	304	27	141	193	315	0	7,358
2023	3,622	736	1,533	515	307	29	132	189	308	0	7,371
2024	3,634	737	1,523	513	310	31	140	194	311	0	7,393
2025	3,643	738	1,529	520	313	32	132	190	305	0	7,402
2026	3,647	734	1,519	520	315	34	142	197	306	0	7,415
2027	3,653	734	1,516	523	319	36	145	201	308	0	7,434
2028	3,668	739	1,523	529	321	37	135	195	305	0	7,451
2029	3,679	739	1,518	531	325	38	148	203	308	0	7,489
2030	3,710	741	1,517	536	329	39	146	201	309	0	7,528
2031	3,733	748	1,525	544	336	39	141	198	303	0	7,569
2032	3,746	744	1,514	544	336	41	154	208	307	0	7,595
2033	3,767	744	1,516	550	337	43	154	208	311	0	7,630
2034	3,806	748	1,522	556	340	44	145	203	305	0	7,669
2035	3,830	750	1,513	554	336	45	155	209	308	0	7,698
2036	3,855	751	1,512	557	345	46	154	209	307	0	7,735
2037	3,868	751	1,512	561	346	48	155	208	311	0	7,760

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
2018	2,829	632	1,148	598	199	27	129	162	266	10	6,000
2019	2,835	633	1,140	593	198	29	127	163	268	10	5,996
2020	2,836	634	1,134	590	198	31	127	164	268	10	5,990
2021	2,808	634	1,132	587	199	36	137	171	270	10	5,983
2022	2,806	640	1,136	589	200	39	135	170	273	10	5,997
2023	2,847	642	1,131	588	199	40	128	165	264	10	6,013
2024	2,857	647	1,134	590	200	42	129	167	263	10	6,040
2025	2,864	651	1,135	591	201	45	130	167	262	10	6,055
2026	2,858	651	1,134	589	203	48	137	174	263	10	6,068
2027	2,854	657	1,138	592	204	52	141	177	264	10	6,089
2028	2,858	663	1,144	596	206	53	138	176	268	10	6,111
2029	2,908	666	1,143	597	206	52	132	171	260	10	6,146
2030	2,919	673	1,148	601	208	54	135	172	260	10	6,180
2031	2,930	679	1,150	603	209	56	139	175	260	10	6,213
2032	2,929	680	1,149	602	211	58	148	182	262	10	6,231
2033	2,921	688	1,159	609	213	61	149	183	268	10	6,260
2034	2,971	689	1,156	610	212	60	141	177	260	10	6,285
2035	2,979	691	1,156	611	212	61	141	177	259	10	6,297
2036	2,978	693	1,157	610	214	64	150	183	261	10	6,320
2037	2,995	695	1,155	612	213	64	141	177	258	10	6,321

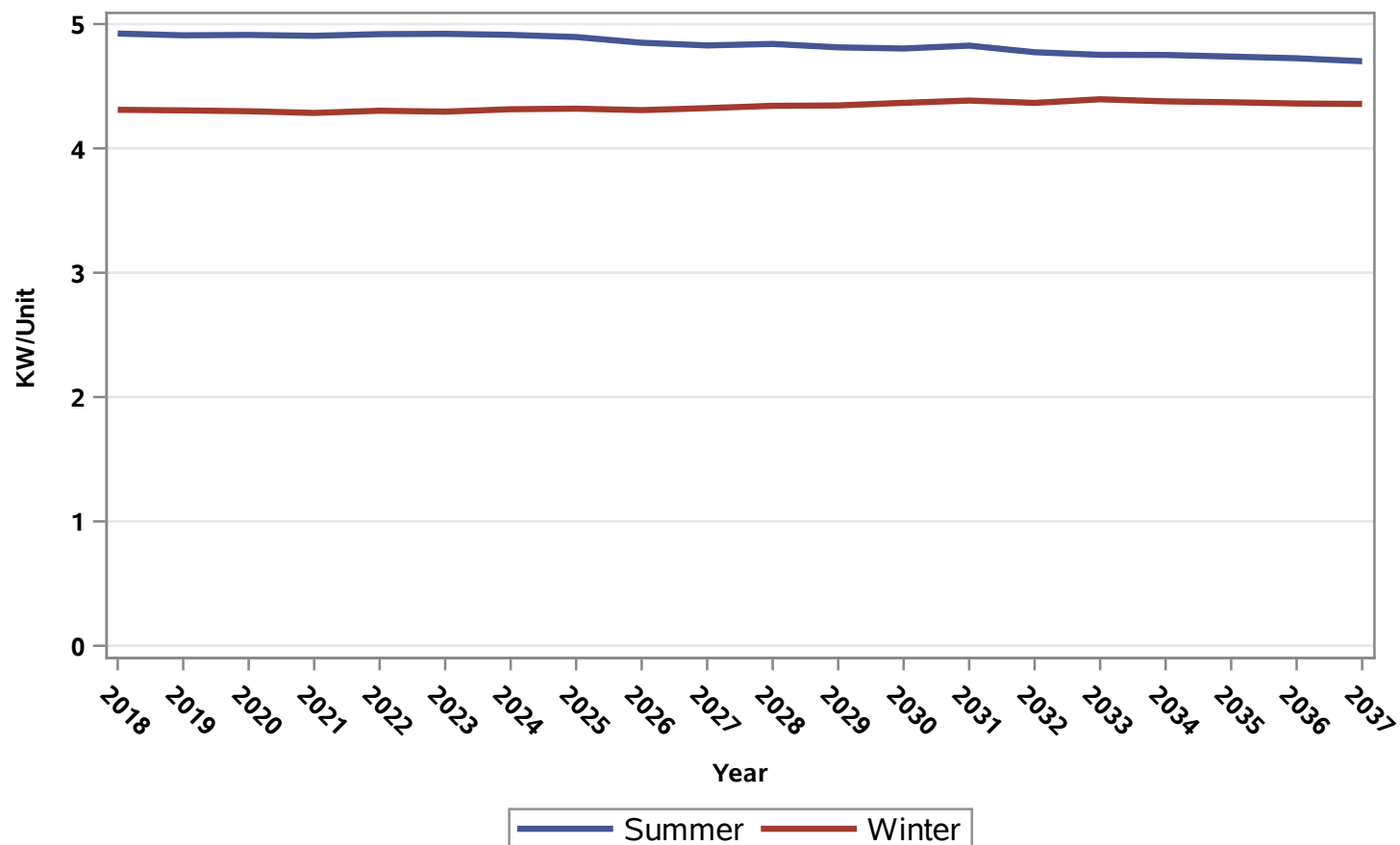
Forecasted Demand per Unit at the time of Summer and Winter System Peak for Planning Case¹⁹

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

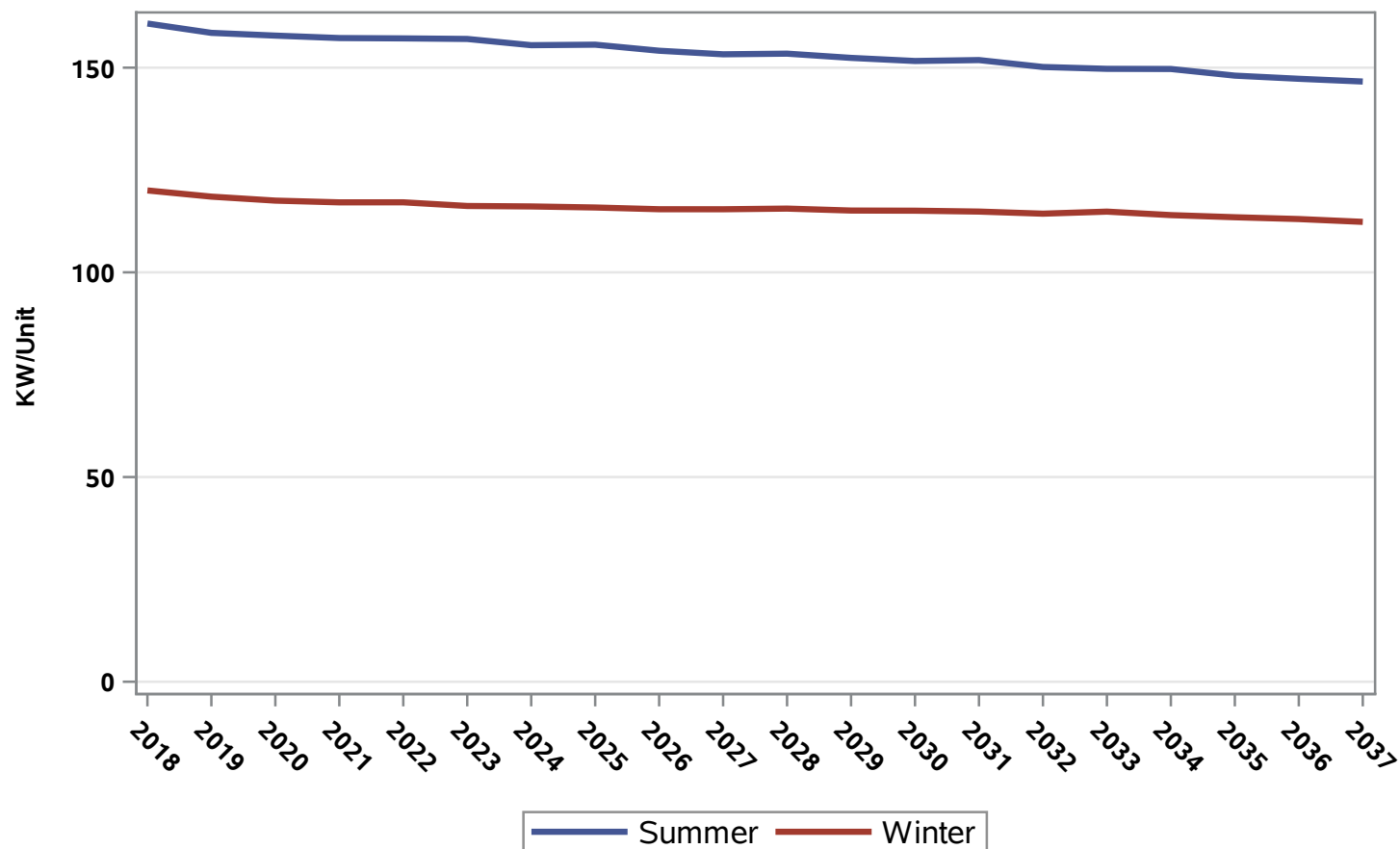


¹⁹4 CSR 240-22.030(7)(A)6

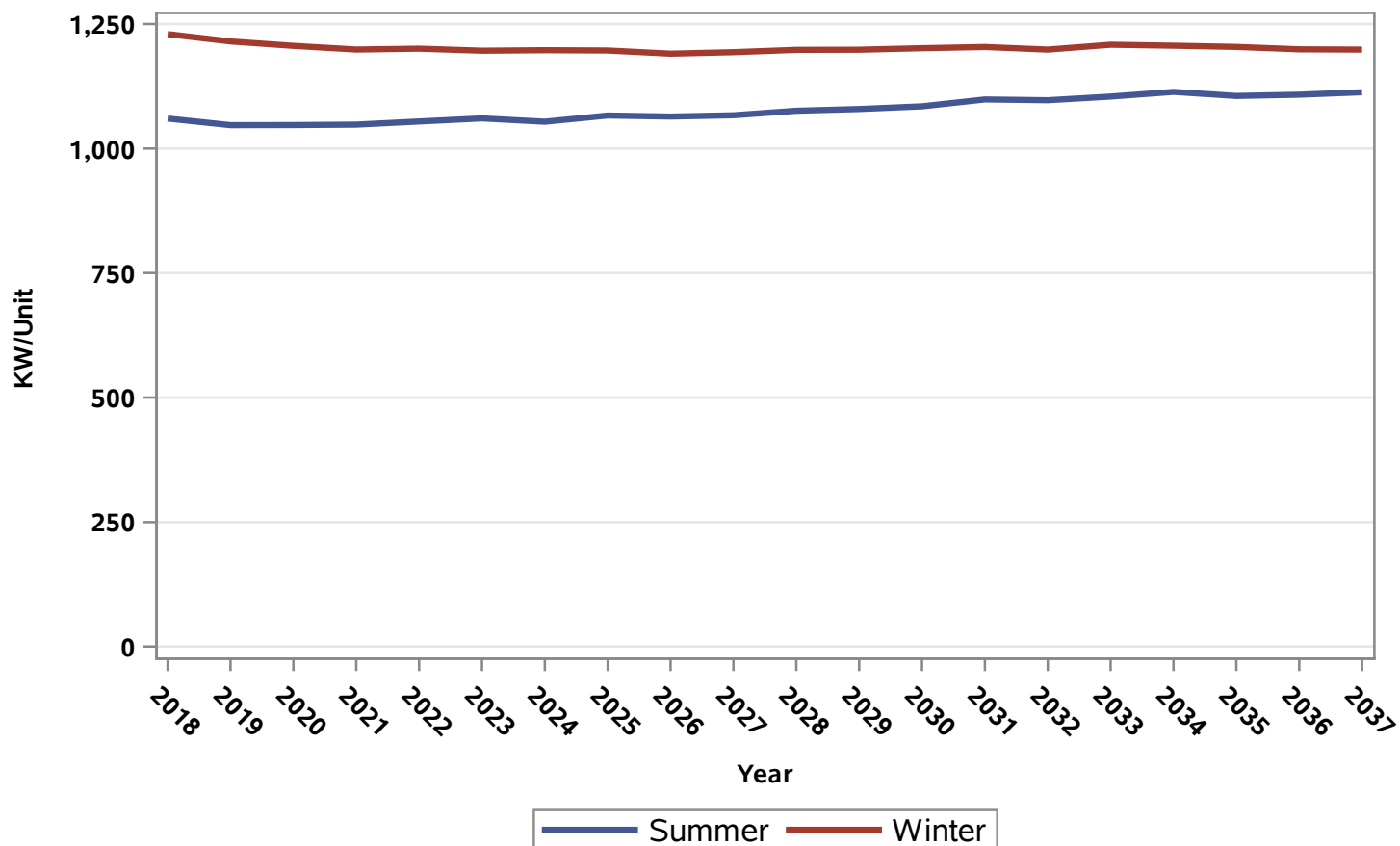
Forecast of Commercial SGS Coincident Demand per Unit (KW/Unit)



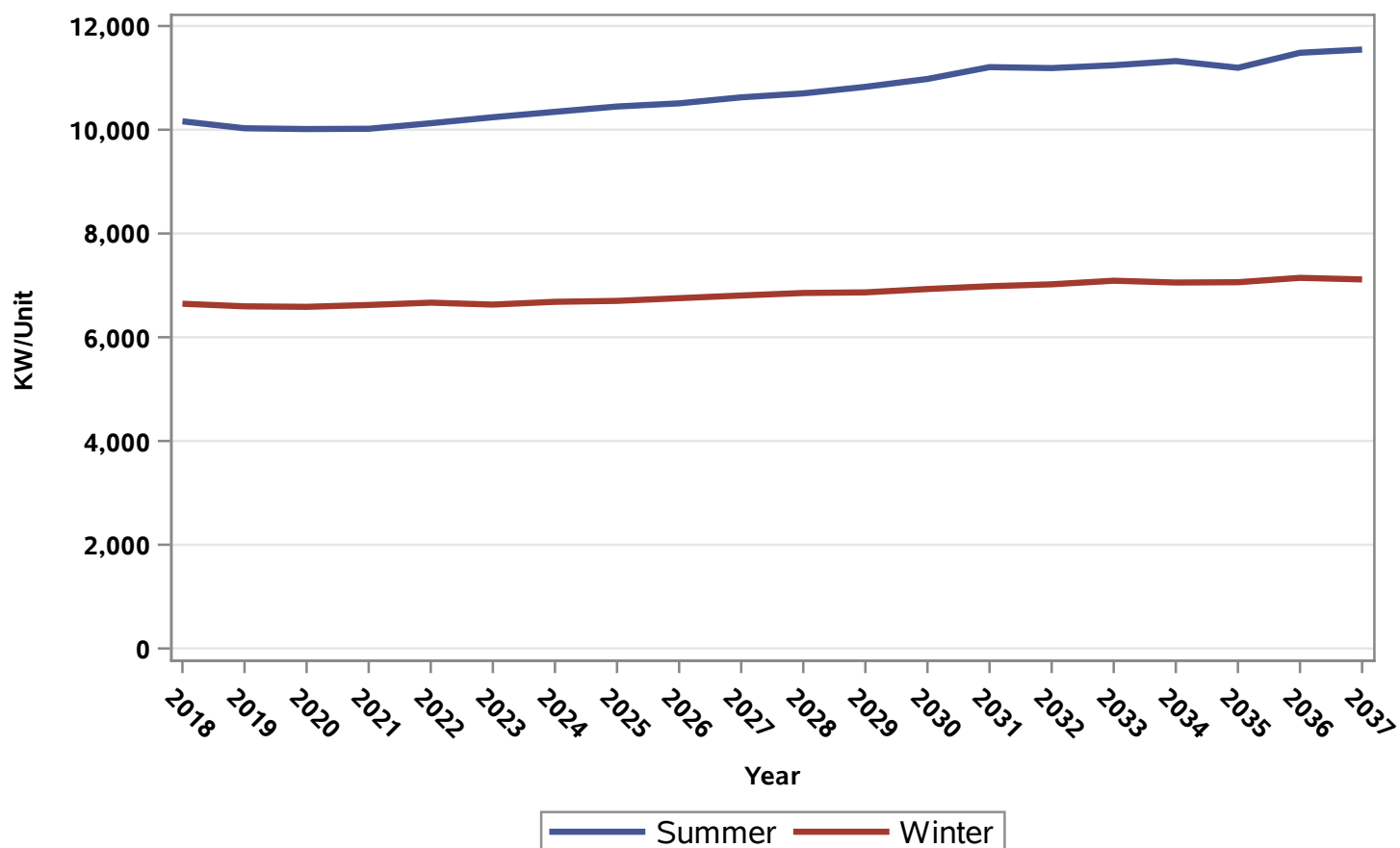
Forecast of Commercial LGS Coincident Demand per Unit (KW/Unit)



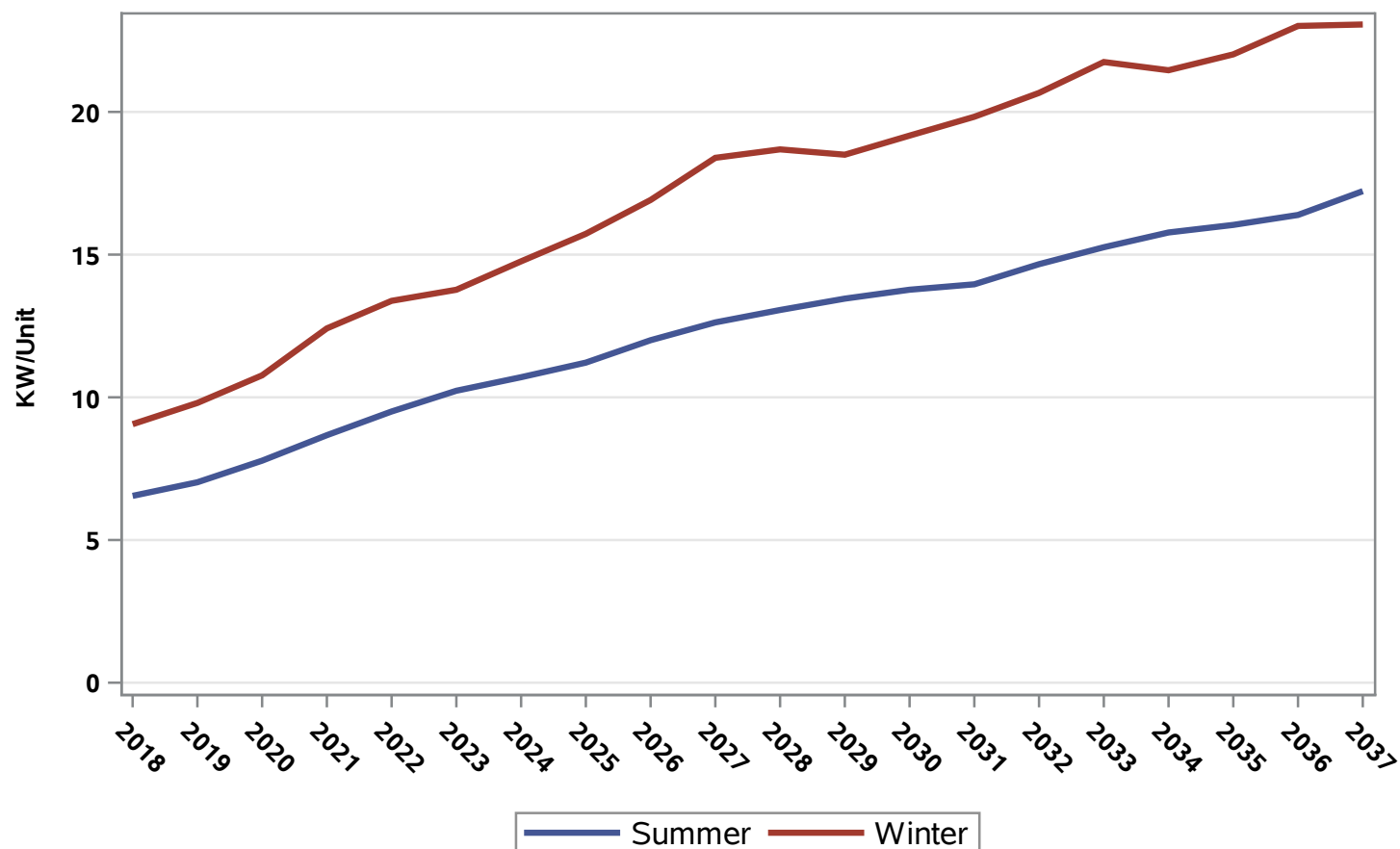
Forecast of Commercial SPS Coincident Demand per Unit (KW/Unit)



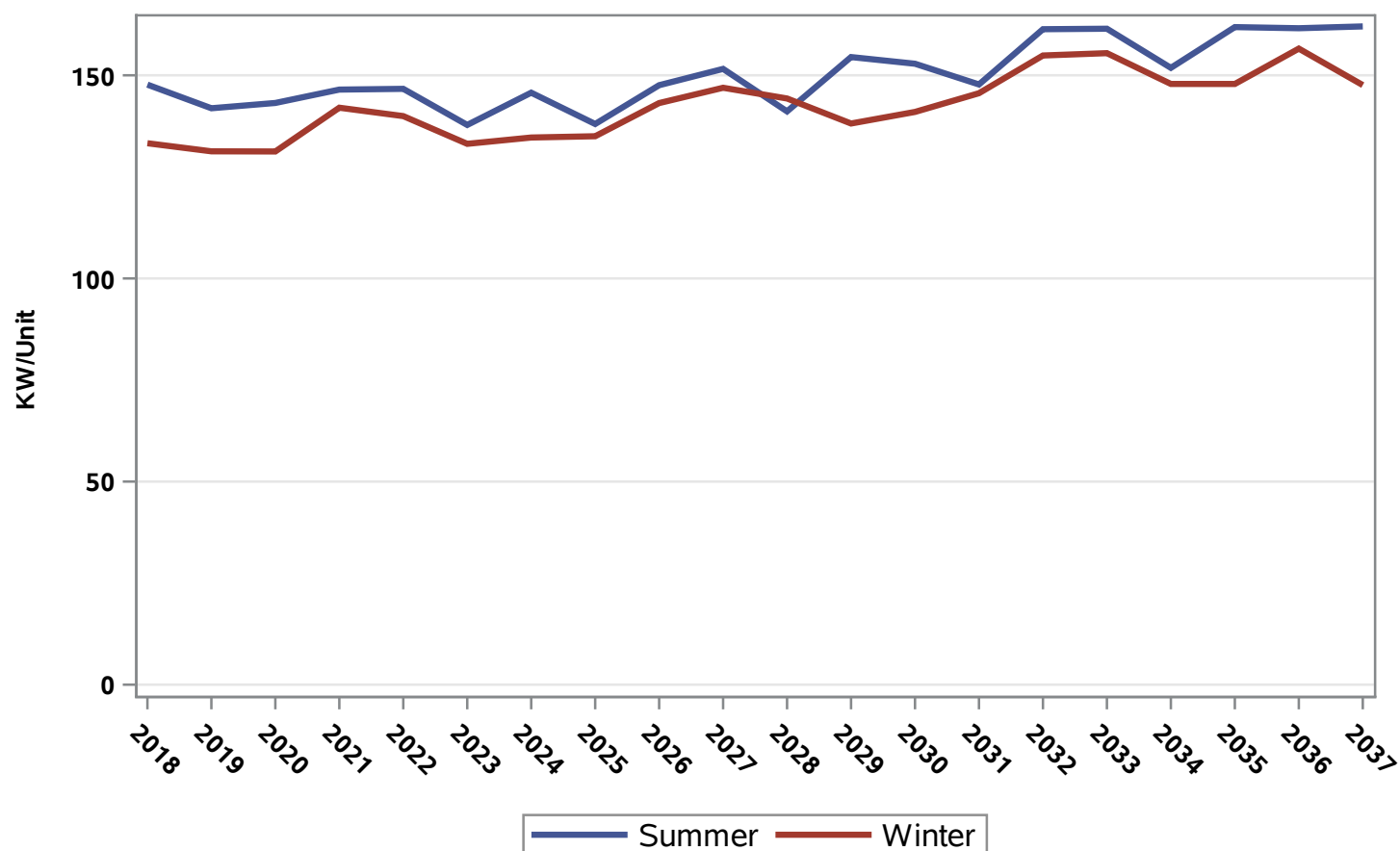
Forecast of Commercial LPS Coincident Demand per Unit (KW/Unit)



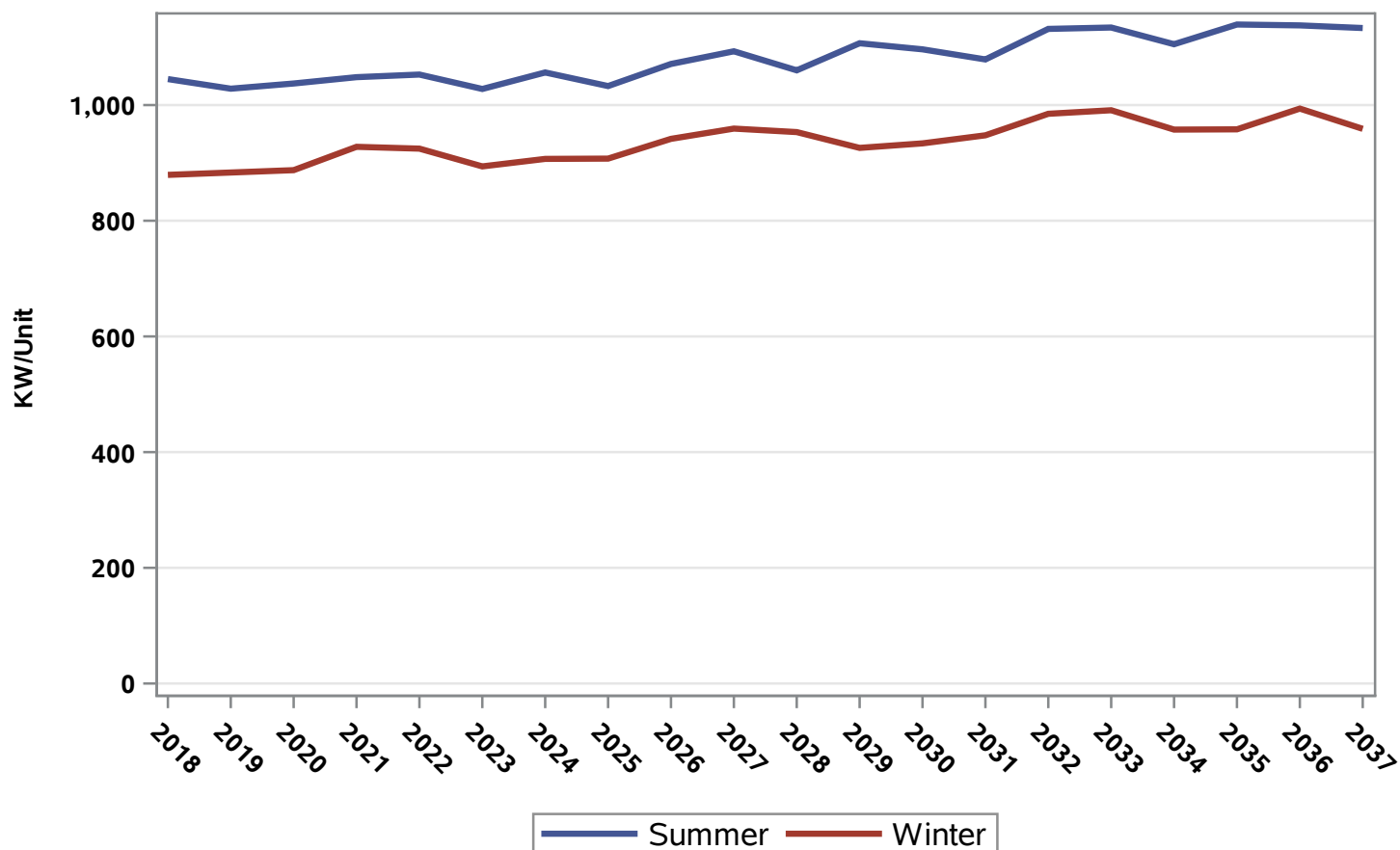
Forecast of Industrial SGS Coincident Demand per Unit (KW/Unit)



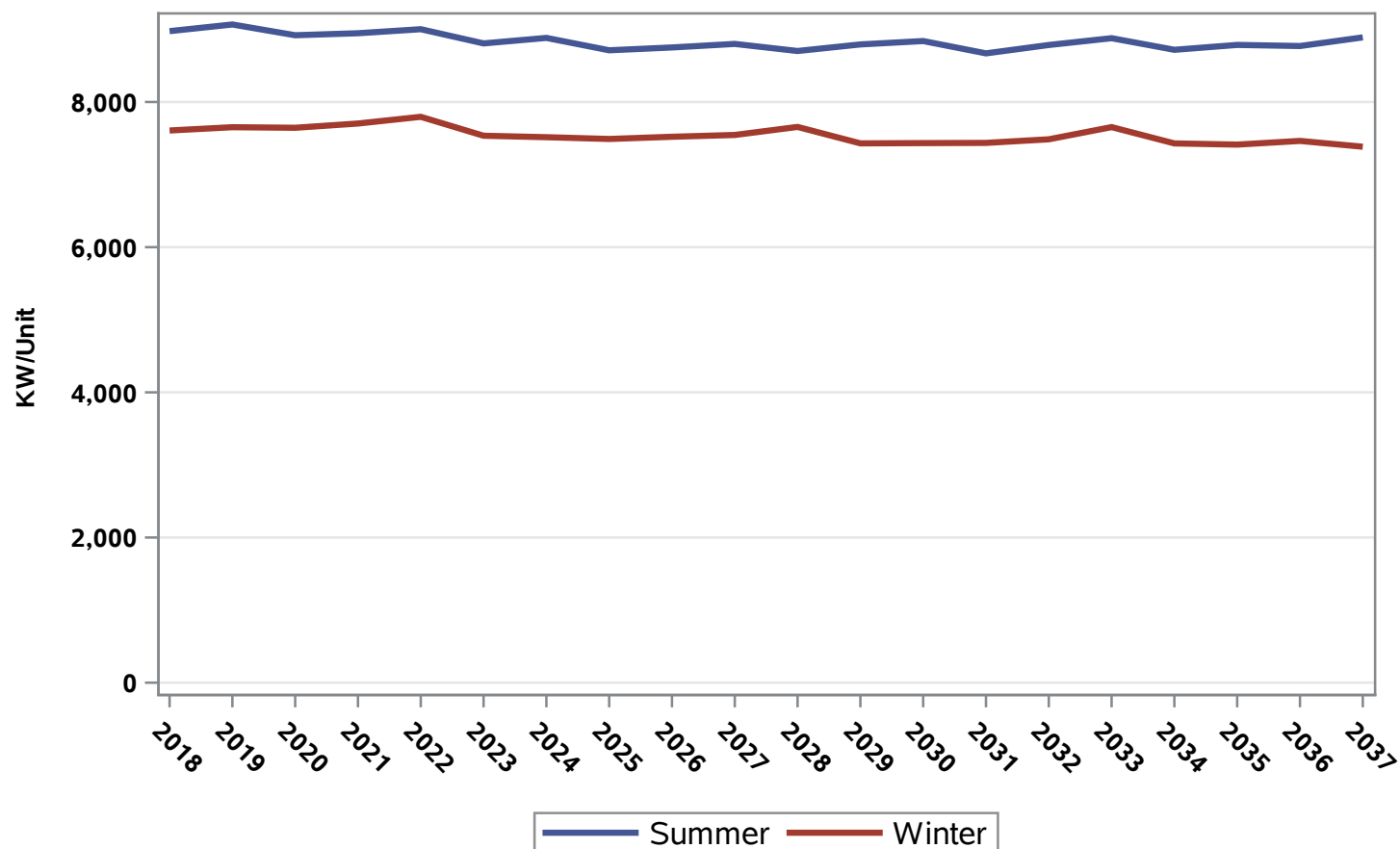
Forecast of Industrial LGS Coincident Demand per Unit (KW/Unit)



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)

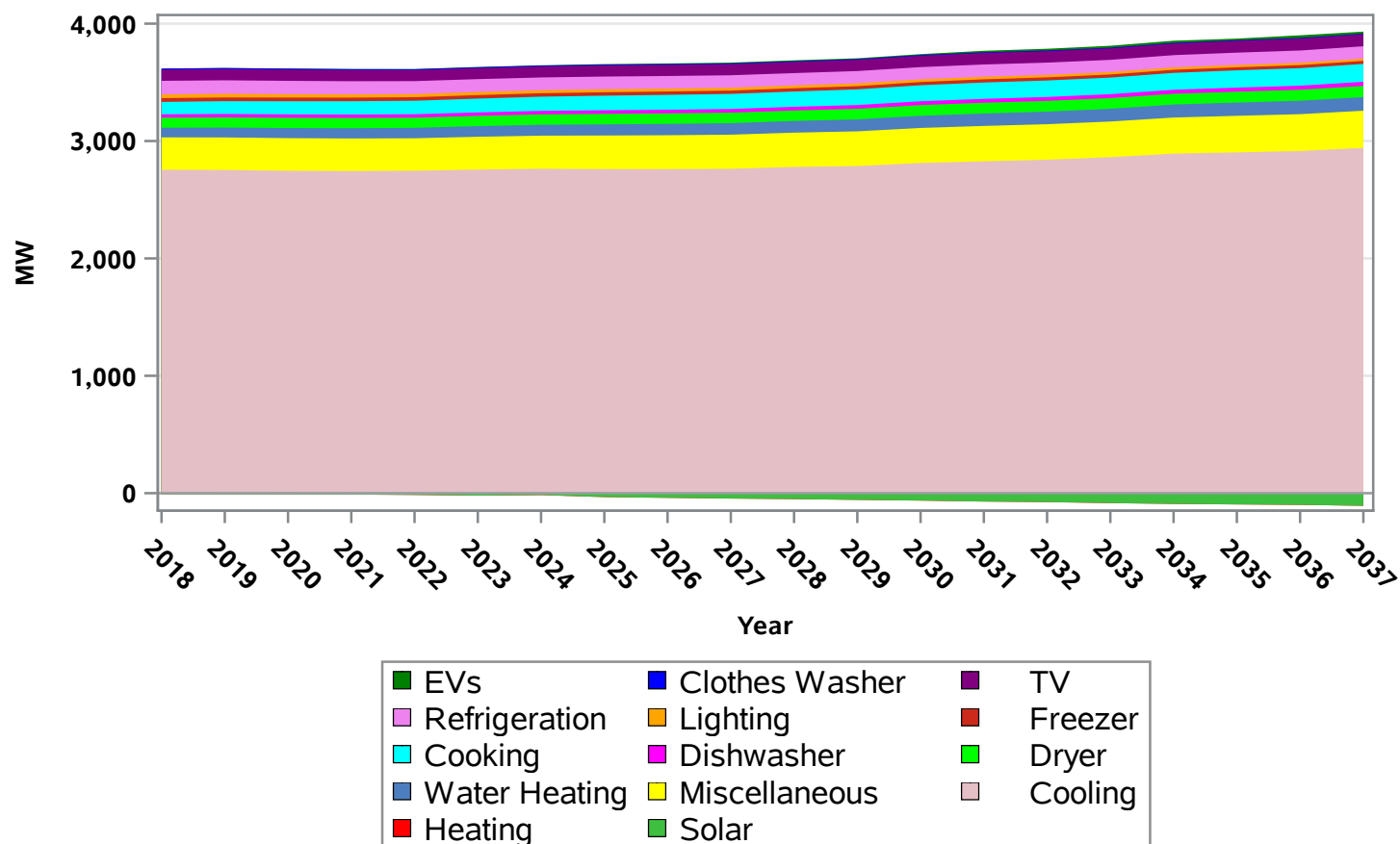
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2018	3.41	4.92	161	1,060	10,162	6.55	148	1,045	8,976	0
2019	3.40	4.91	158	1,047	10,028	7.02	142	1,028	9,068	0
2020	3.38	4.91	158	1,047	10,013	7.78	143	1,037	8,919	0
2021	3.37	4.91	157	1,048	10,019	8.67	146	1,048	8,947	0
2022	3.36	4.92	157	1,054	10,125	9.50	147	1,053	9,003	0
2023	3.37	4.92	157	1,061	10,241	10.23	138	1,028	8,807	0
2024	3.37	4.91	155	1,054	10,345	10.70	146	1,056	8,883	0
2025	3.37	4.90	156	1,066	10,448	11.22	138	1,033	8,712	0
2026	3.37	4.85	154	1,064	10,509	12.00	148	1,071	8,751	0
2027	3.36	4.83	153	1,067	10,624	12.62	152	1,093	8,800	0
2028	3.37	4.84	153	1,076	10,700	13.06	141	1,060	8,702	0
2029	3.37	4.81	152	1,079	10,826	13.46	154	1,107	8,793	0
2030	3.39	4.80	152	1,085	10,978	13.77	153	1,096	8,839	0
2031	3.40	4.83	152	1,099	11,207	13.96	148	1,079	8,670	0
2032	3.40	4.77	150	1,097	11,189	14.66	161	1,132	8,785	0
2033	3.41	4.75	150	1,104	11,243	15.26	161	1,134	8,879	0
2034	3.44	4.75	150	1,114	11,324	15.78	152	1,105	8,719	0
2035	3.46	4.74	148	1,106	11,194	16.04	162	1,139	8,786	0
2036	3.47	4.72	147	1,108	11,484	16.39	162	1,138	8,771	0
2037	3.48	4.70	147	1,113	11,546	17.22	162	1,133	8,890	0

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

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2018	2.67	4.31	120	1,230	6,646	9.06	133	879	7,607	0
2019	2.66	4.31	118	1,215	6,596	9.80	131	883	7,653	0
2020	2.65	4.30	118	1,206	6,586	10.77	131	887	7,645	0
2021	2.62	4.28	117	1,199	6,622	12.41	142	928	7,703	0
2022	2.62	4.30	117	1,200	6,666	13.38	140	925	7,796	0
2023	2.65	4.30	116	1,196	6,629	13.77	133	894	7,535	0
2024	2.65	4.31	116	1,197	6,683	14.76	135	907	7,515	0
2025	2.65	4.32	116	1,197	6,701	15.73	135	907	7,490	0
2026	2.64	4.31	115	1,190	6,753	16.91	143	942	7,521	0
2027	2.63	4.32	115	1,193	6,804	18.39	147	959	7,546	0
2028	2.62	4.34	116	1,198	6,853	18.69	144	953	7,656	0
2029	2.66	4.35	115	1,198	6,865	18.50	138	926	7,430	0
2030	2.67	4.37	115	1,201	6,929	19.17	141	934	7,434	0
2031	2.67	4.38	115	1,204	6,983	19.83	146	948	7,436	0
2032	2.66	4.37	114	1,199	7,020	20.67	155	985	7,486	0
2033	2.65	4.39	115	1,208	7,090	21.75	155	991	7,654	0
2034	2.69	4.38	114	1,206	7,054	21.46	148	958	7,429	0
2035	2.69	4.37	113	1,204	7,060	22.02	148	958	7,413	0
2036	2.68	4.36	113	1,199	7,145	23.01	157	994	7,463	0
2037	2.69	4.36	112	1,199	7,114	23.06	148	959	7,384	0

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

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

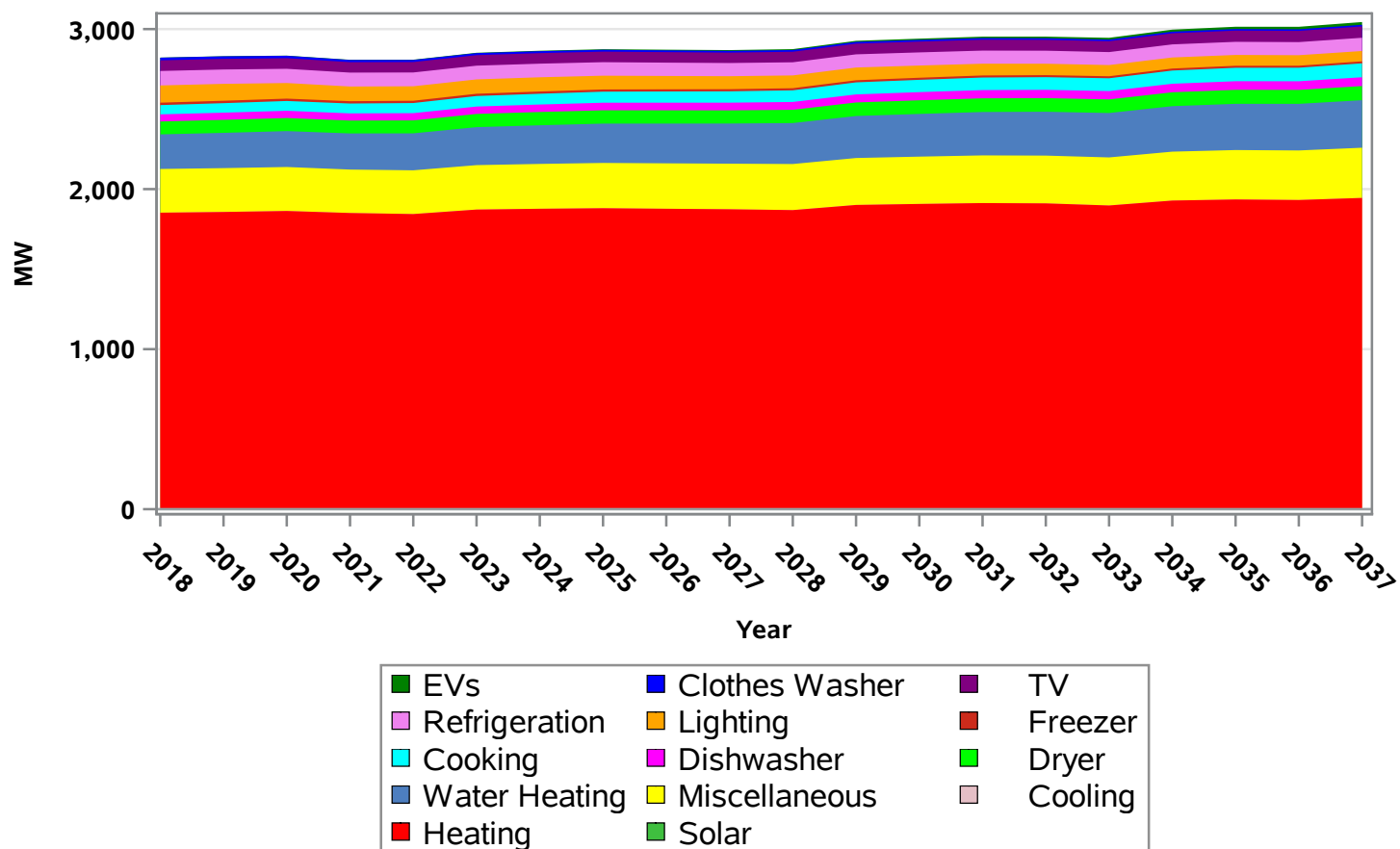


¹⁹4 CSR 240-22.030(7)(A)6

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	Miscellaneous	EVs
2018	0	2,765	82	105	116	32	29	9	86	95	32	-10	276	1
2019	0	2,764	84	109	115	32	29	9	87	96	31	-11	277	1
2020	0	2,757	86	112	114	31	29	8	88	96	29	-11	278	2
2021	0	2,756	87	113	112	31	29	8	87	95	27	-12	277	2
2022	0	2,762	89	115	111	30	29	7	87	94	27	-15	277	2
2023	0	2,778	91	118	110	30	29	7	87	94	26	-21	280	3
2024	0	2,780	93	121	108	29	30	7	88	94	26	-16	282	3
2025	0	2,794	95	125	108	29	30	6	89	95	26	-33	286	5
2026	0	2,800	97	127	107	29	31	6	90	95	25	-40	289	6
2027	0	2,809	98	129	106	28	31	6	89	95	24	-46	291	7
2028	0	2,830	100	130	105	28	32	6	89	95	24	-50	292	8
2029	0	2,844	102	133	105	28	32	6	90	96	24	-57	296	7
2030	0	2,876	104	136	105	27	33	6	91	97	23	-63	299	8
2031	0	2,898	106	139	105	27	33	6	92	98	22	-71	302	13
2032	0	2,916	107	140	104	27	33	6	92	98	21	-76	303	15
2033	0	2,947	108	141	104	26	34	5	91	98	21	-85	304	17
2034	0	2,984	110	144	104	26	34	5	92	99	20	-91	308	19
2035	0	2,999	113	147	105	26	34	5	93	100	20	-96	312	14
2036	0	3,014	114	149	105	26	35	5	94	101	20	-100	314	23
2037	0	3,049	116	152	105	26	35	5	95	102	19	-108	317	17

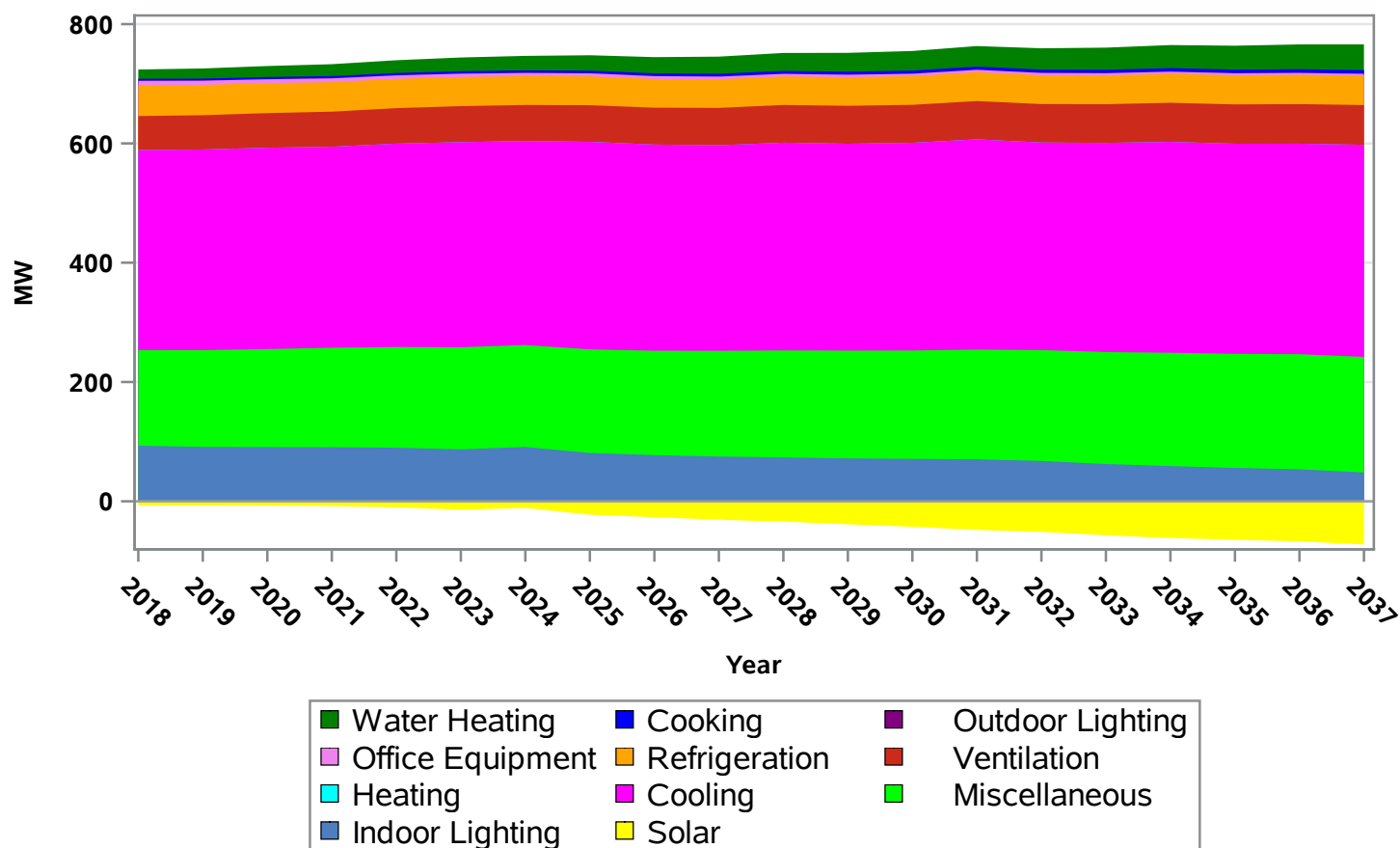
Forecast for Winter Coincident Peaks for Residential End Use (MW)



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	Miscellaneous	EVs
2018	1,853	0	216	58	91	15	45	16	80	66	108	-0	273	1
2019	1,857	0	220	59	90	15	45	16	81	66	106	-0	274	1
2020	1,863	0	224	61	89	15	45	15	82	66	97	-0	275	1
2021	1,851	0	226	61	87	14	45	14	80	65	92	-0	271	1
2022	1,844	0	231	63	86	14	45	13	81	65	90	-0	273	2
2023	1,872	0	237	66	86	14	46	13	82	66	90	-0	278	2
2024	1,877	0	242	67	85	14	47	12	83	66	89	-0	280	3
2025	1,881	0	246	69	85	14	47	12	83	66	86	-0	283	3
2026	1,877	0	249	70	83	14	48	11	83	66	83	-0	284	4
2027	1,874	0	251	71	82	13	48	11	82	65	81	-0	285	5
2028	1,869	0	256	73	82	13	49	11	83	66	80	-0	288	6
2029	1,901	0	263	75	82	13	50	11	85	67	80	-0	293	7
2030	1,907	0	267	77	82	13	51	11	85	67	76	-0	296	8
2031	1,913	0	271	78	82	13	52	10	85	68	73	-0	298	9
2032	1,911	0	274	79	82	13	52	10	85	68	71	-0	299	10
2033	1,898	0	278	80	81	13	52	10	85	68	70	-0	300	11
2034	1,929	0	284	83	82	12	53	10	87	69	69	-0	305	13
2035	1,936	0	289	84	82	12	54	10	87	70	68	-0	309	14
2036	1,932	0	291	85	82	12	54	10	87	70	66	-0	310	16
2037	1,945	0	297	87	83	12	55	10	88	71	65	-0	314	17

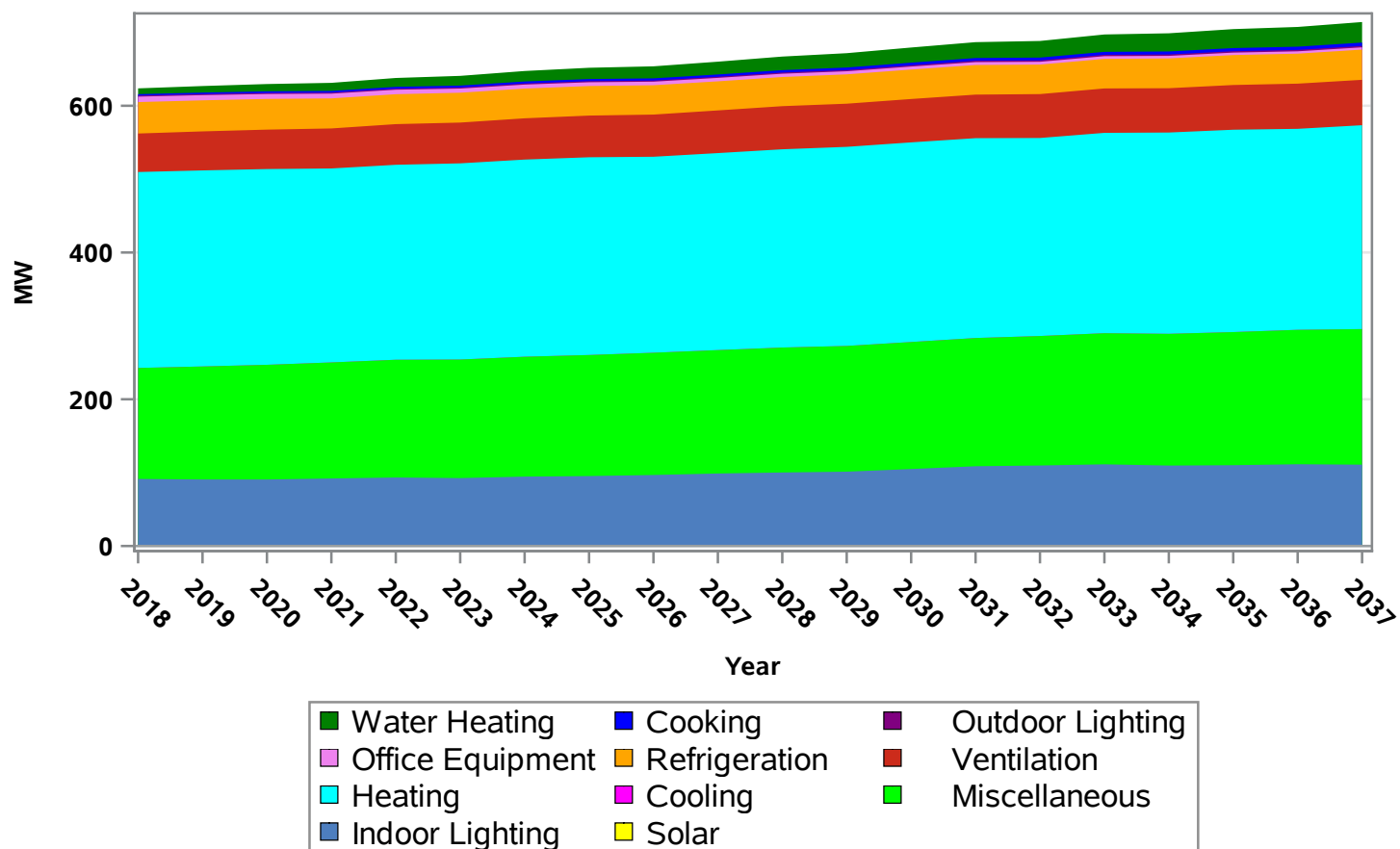
Forecast for Summer Coincident Peaks for Commercial SGS End Use (MW)



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	Miscellaneous
2018	0	335	16	57	3	52	0	100	7	-7	160
2019	0	336	17	57	3	51	0	98	7	-7	162
2020	0	338	18	58	3	50	0	98	7	-7	164
2021	0	337	20	59	4	50	0	99	6	-8	167
2022	0	341	21	60	4	49	0	100	6	-10	169
2023	0	344	23	60	4	49	0	101	6	-14	171
2024	0	342	24	60	4	48	0	102	5	-11	171
2025	0	348	26	61	4	48	0	104	5	-22	174
2026	0	346	27	62	4	48	0	104	5	-27	175
2027	0	345	29	63	4	48	0	106	5	-31	177
2028	0	348	30	63	5	48	0	108	4	-34	179
2029	0	347	32	64	5	48	0	111	4	-39	181
2030	0	348	33	64	5	48	0	114	4	-43	182
2031	0	353	34	64	5	48	0	118	4	-48	184
2032	0	348	36	65	5	48	0	119	4	-51	186
2033	0	351	37	65	5	48	0	120	4	-57	188
2034	0	354	39	66	6	49	0	121	3	-62	190
2035	0	352	40	66	6	49	0	120	3	-64	191
2036	0	353	42	66	6	49	0	121	3	-67	193
2037	0	356	43	67	6	49	0	121	3	-72	194

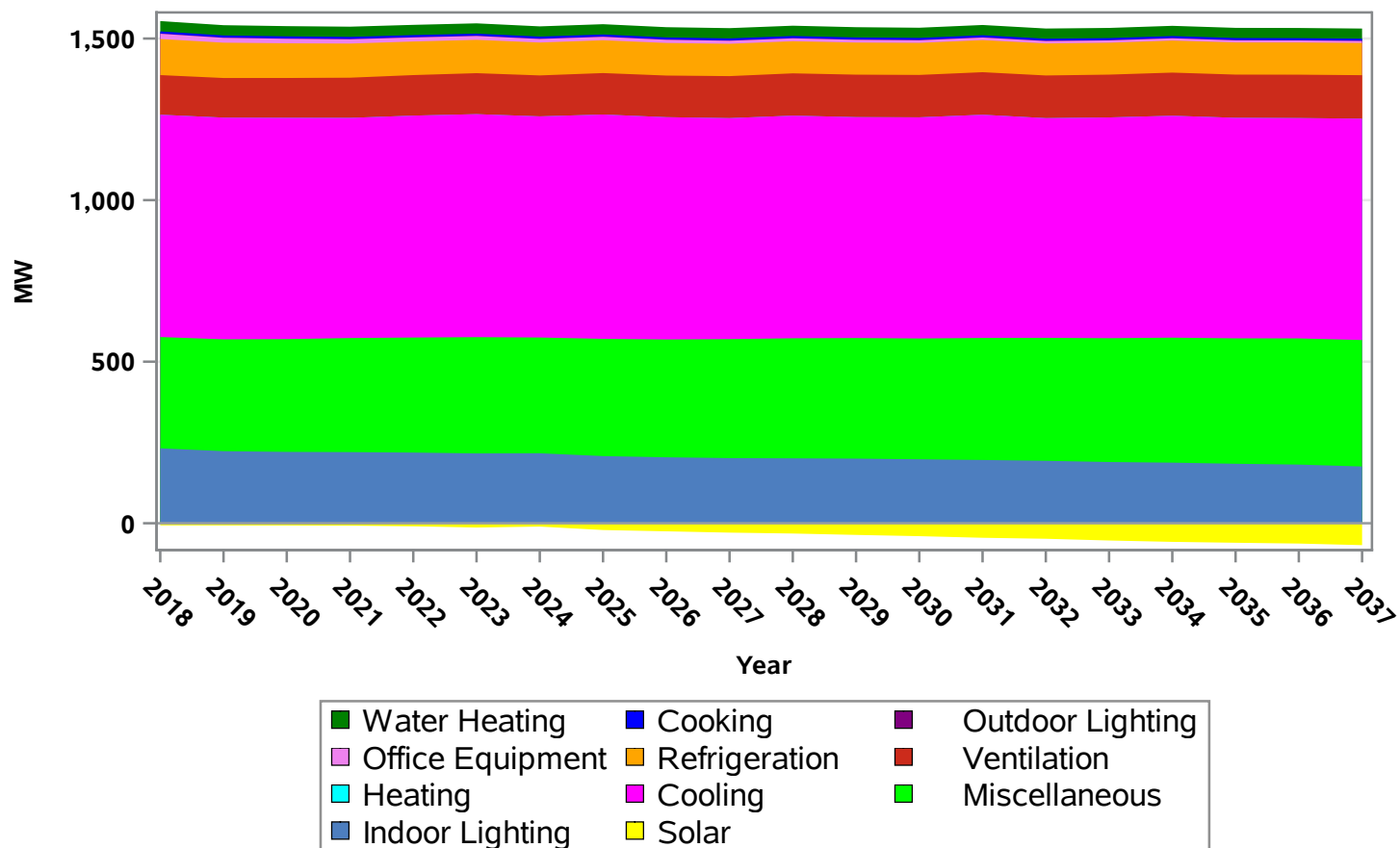
Forecast for Winter Coincident Peaks for Commercial SGS End Use (MW)



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	Miscellaneous
2018	267	0	8	53	2	43	1	91	7	-0	151
2019	267	0	9	53	2	42	1	91	7	-0	154
2020	267	0	10	54	2	42	1	91	7	-0	156
2021	264	0	11	55	2	41	1	92	6	-0	158
2022	266	0	12	55	2	41	1	93	6	-0	160
2023	267	0	13	56	3	41	1	93	6	-0	162
2024	269	0	14	56	3	40	1	95	5	-0	163
2025	269	0	15	57	3	40	1	95	5	-0	165
2026	267	0	16	58	3	40	1	97	5	-0	167
2027	268	0	17	58	3	40	1	99	5	-0	168
2028	270	0	19	59	3	40	2	100	5	-0	170
2029	271	0	20	59	3	40	2	101	4	-0	171
2030	272	0	21	59	4	40	2	105	4	-0	173
2031	272	0	22	59	4	40	2	109	4	-0	175
2032	270	0	23	60	4	40	2	110	4	-0	176
2033	273	0	24	61	4	40	2	111	4	-0	179
2034	274	0	25	60	4	41	2	110	3	-0	179
2035	276	0	26	61	4	41	2	110	3	-0	181
2036	274	0	27	62	4	41	2	112	3	-0	183
2037	278	0	28	62	5	41	2	111	3	-0	185

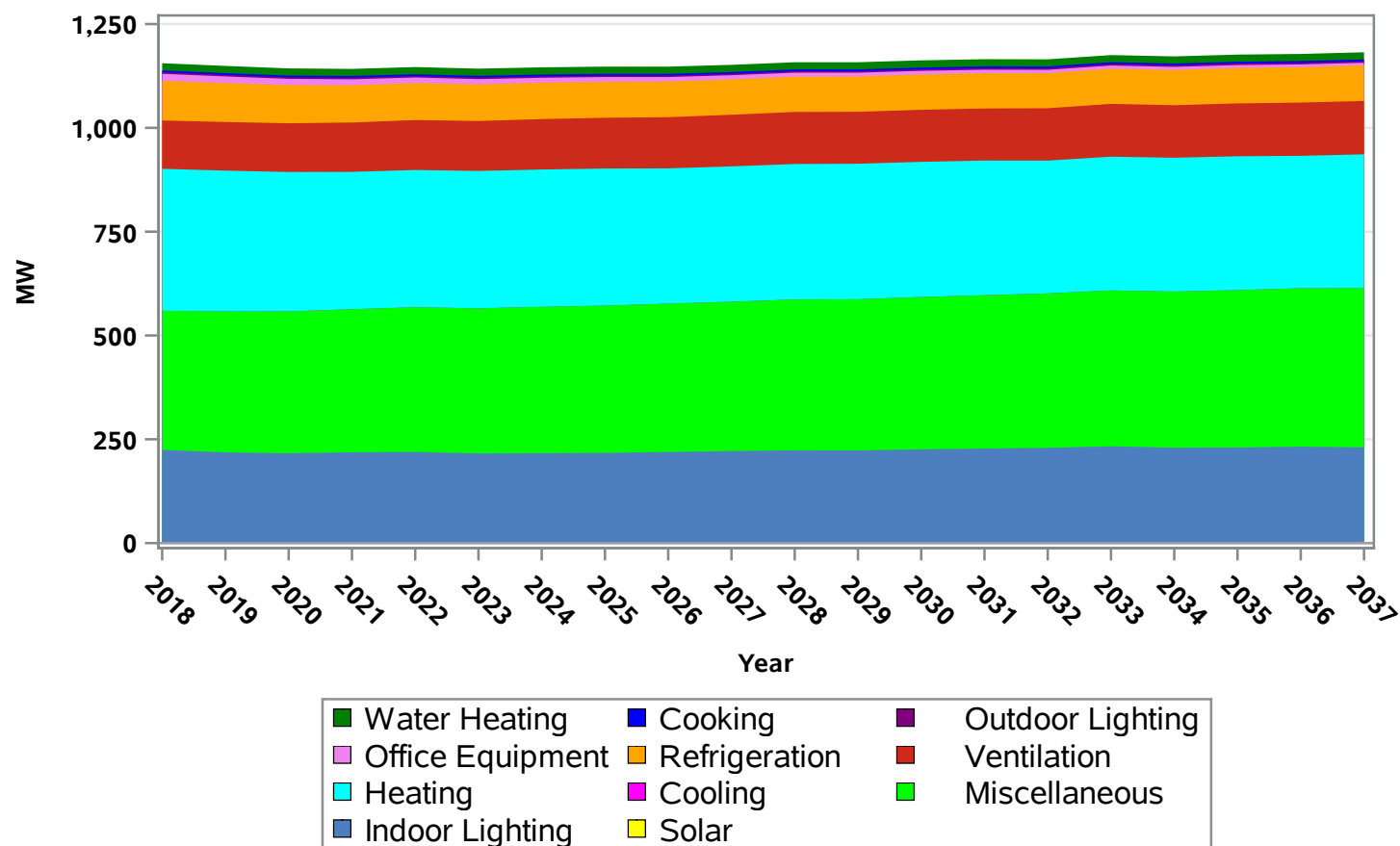
Forecast for Summer Coincident Peaks for Commercial LGS End Use (MW)



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	Miscellaneous
2018	0	688	32	123	7	112	1	238	16	-6	344
2019	0	686	32	123	7	109	1	230	15	-7	346
2020	0	685	32	123	6	107	1	228	14	-7	349
2021	0	681	32	124	6	106	1	228	13	-7	353
2022	0	687	32	126	6	104	1	228	13	-9	356
2023	0	690	32	127	6	103	1	229	12	-13	360
2024	0	684	32	127	6	102	1	227	11	-10	358
2025	0	694	32	128	6	102	1	229	11	-21	363
2026	0	688	32	129	6	101	1	229	10	-25	365
2027	0	684	32	130	6	100	1	231	10	-29	368
2028	0	689	32	131	6	99	1	233	9	-32	372
2029	0	684	32	132	6	99	1	236	9	-36	373
2030	0	684	32	131	6	99	1	238	8	-40	374
2031	0	691	32	132	6	99	1	241	8	-45	378
2032	0	680	32	132	6	99	1	241	8	-48	381
2033	0	683	32	133	6	99	1	243	7	-53	383
2034	0	687	32	134	6	99	1	245	7	-58	387
2035	0	682	32	134	6	99	1	244	7	-60	388
2036	0	682	32	134	6	100	1	244	6	-63	390
2037	0	685	31	135	6	100	1	243	6	-68	391

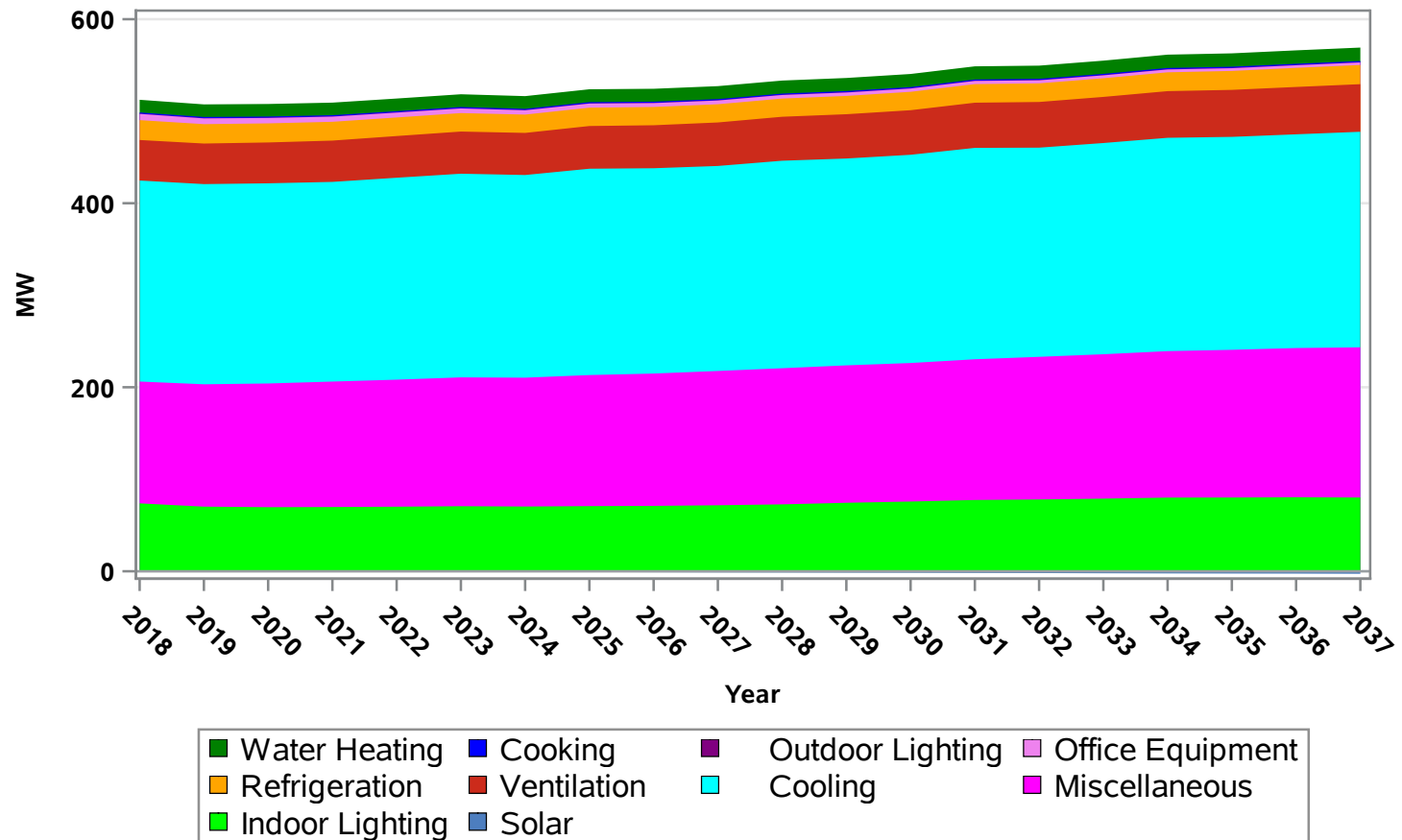
Forecast for Winter Coincident Peaks for Commercial LGS End Use (MW)



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	Miscellaneous
2018	342	0	17	116	4	96	4	224	17	-0	335
2019	339	0	17	117	4	94	4	219	16	-0	339
2020	335	0	17	117	4	92	4	216	15	-0	342
2021	331	0	17	119	4	90	4	219	14	-0	345
2022	331	0	17	120	4	89	4	220	14	-0	348
2023	331	0	17	120	4	88	4	216	13	-0	350
2024	331	0	17	121	4	88	4	217	12	-0	352
2025	330	0	17	122	4	87	4	217	11	-0	355
2026	326	0	17	123	4	86	4	219	11	-0	357
2027	326	0	17	124	4	85	4	222	10	-0	360
2028	326	0	17	125	4	85	4	223	10	-0	363
2029	326	0	17	125	4	85	4	223	9	-0	364
2030	325	0	17	125	4	85	4	226	9	-0	367
2031	324	0	17	125	4	85	4	228	8	-0	369
2032	320	0	17	126	4	85	4	230	8	-0	372
2033	322	0	17	127	4	85	4	233	8	-0	375
2034	322	0	17	127	4	85	4	230	7	-0	376
2035	322	0	17	127	4	85	4	230	7	-0	379
2036	319	0	17	128	4	85	4	232	7	-0	382
2037	322	0	17	129	4	86	4	231	6	-0	384

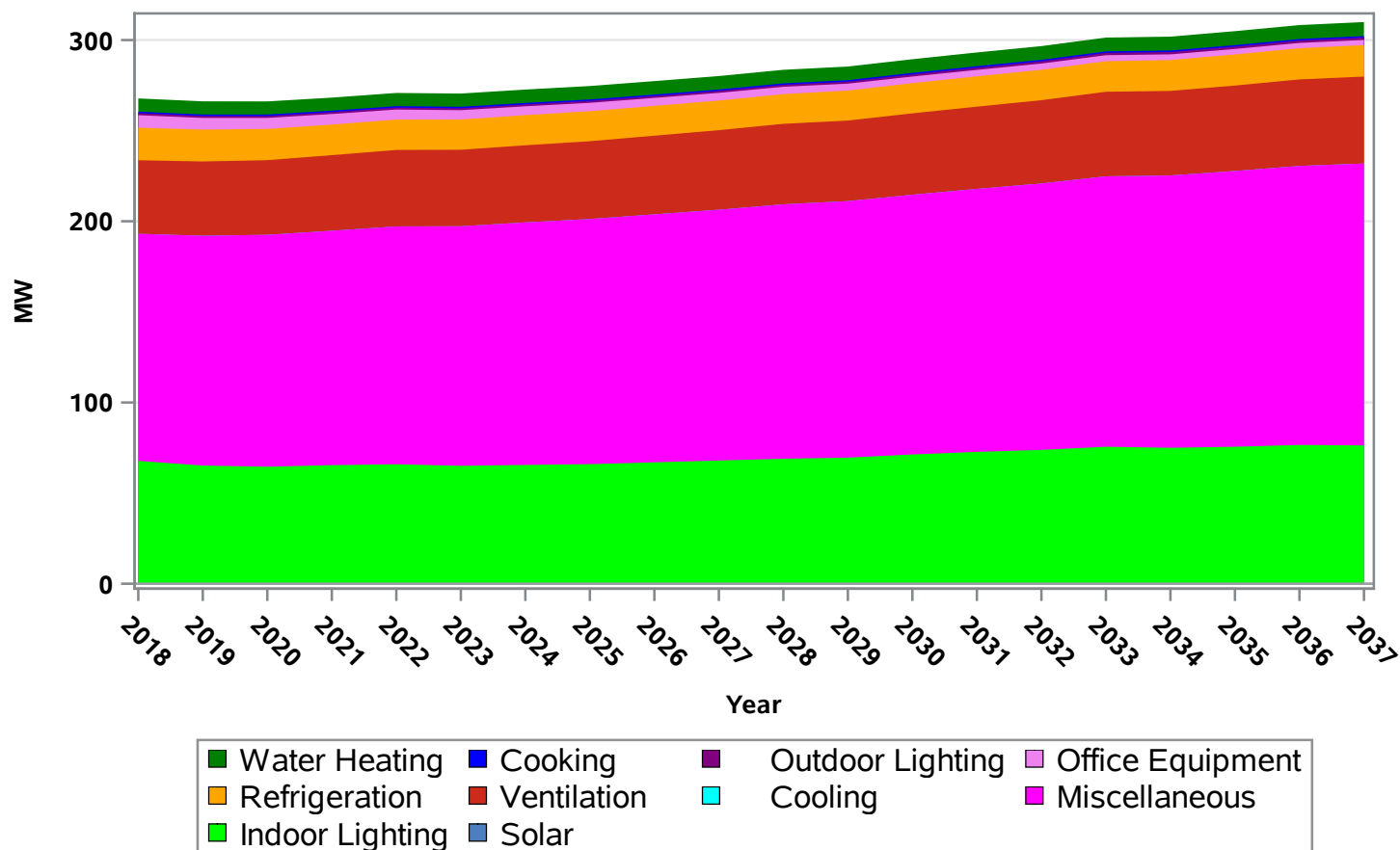
Forecast for Summer Coincident Peaks for Commercial SPS End Use (MW)



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
2018	218	14	44	1	22	0	74	7	-0	132
2019	218	14	44	1	21	0	71	6	-0	133
2020	218	14	44	1	21	0	70	6	-0	134
2021	217	14	45	1	20	0	70	6	-0	136
2022	219	14	45	1	20	0	71	5	-0	138
2023	221	14	46	1	20	0	71	5	-1	140
2024	220	14	46	1	20	0	71	5	-0	140
2025	224	14	46	1	20	0	72	5	-1	142
2026	223	14	47	1	20	0	72	4	-1	144
2027	223	14	47	1	20	0	73	4	-1	146
2028	225	14	48	1	20	0	74	4	-1	148
2029	225	14	48	1	20	0	76	4	-1	149
2030	226	14	48	1	20	0	77	4	-2	151
2031	230	14	49	1	20	0	79	3	-2	153
2032	227	14	50	1	20	0	80	3	-2	155
2033	230	14	50	1	20	0	81	3	-2	157
2034	232	14	51	1	20	0	82	3	-2	159
2035	231	15	51	1	21	0	83	3	-2	161
2036	232	15	51	1	21	0	83	3	-3	162
2037	234	15	52	1	21	0	83	3	-3	163

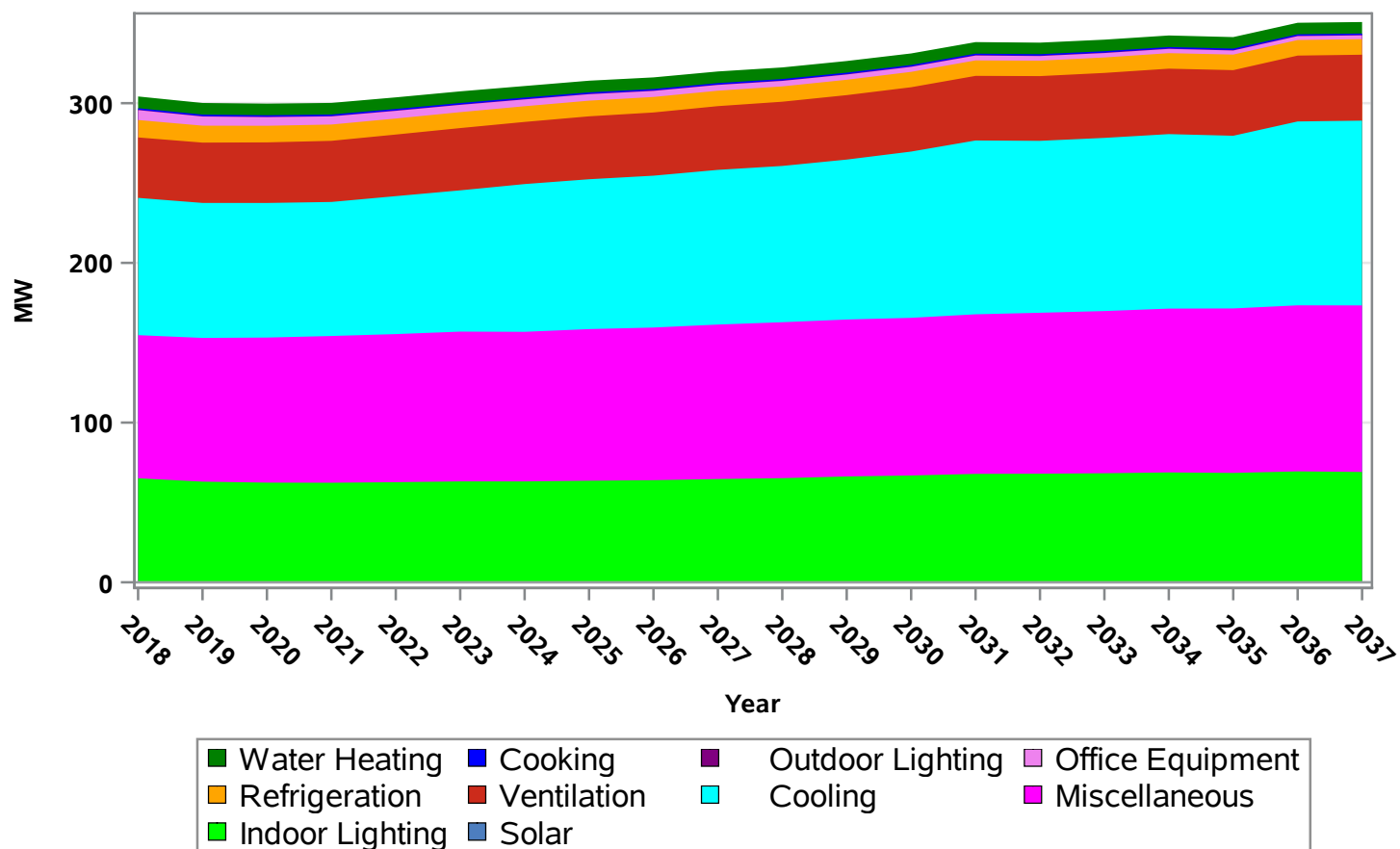
Forecast for Winter Coincident Peaks for Commercial SPS End Use (MW)



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
2018	0	7	41	1	18	1	68	7	0	125
2019	0	7	41	1	18	1	65	6	0	127
2020	0	7	41	1	17	1	65	6	0	128
2021	0	7	42	1	17	1	65	6	0	129
2022	0	7	42	1	17	1	66	6	0	131
2023	0	7	42	1	17	1	65	5	0	132
2024	0	7	43	1	17	1	66	5	0	134
2025	0	7	43	1	17	1	66	5	0	135
2026	0	7	43	1	16	1	67	4	0	137
2027	0	7	44	1	16	1	68	4	0	138
2028	0	7	44	1	16	1	69	4	0	140
2029	0	8	44	1	17	1	70	4	0	142
2030	0	8	45	1	17	1	71	4	0	143
2031	0	8	45	1	17	1	73	4	0	145
2032	0	8	46	1	17	1	74	3	0	147
2033	0	8	47	1	17	1	76	3	0	149
2034	0	8	47	1	17	1	75	3	-0	150
2035	0	8	47	1	17	1	76	3	-0	152
2036	0	8	48	1	17	1	77	3	-0	154
2037	0	8	48	1	17	1	76	3	-0	156

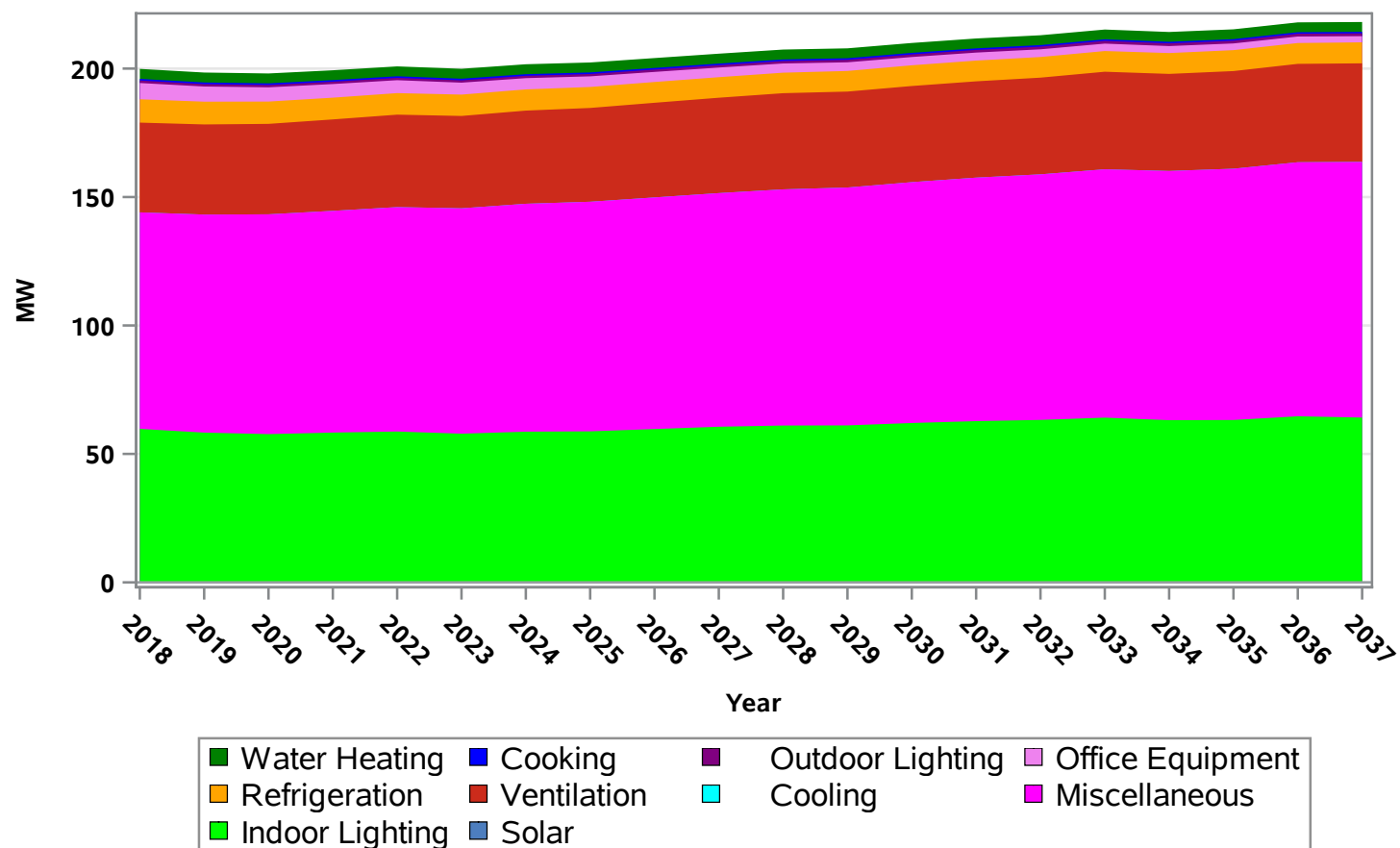
Forecast for Summer Coincident Peaks for Commercial LPS End Use (MW)



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
2018	86	7	38	1	11	0	65	6	-0	90
2019	85	7	38	1	11	0	63	6	-0	90
2020	84	7	38	1	10	0	62	5	-0	91
2021	84	7	38	1	10	0	62	5	-0	92
2022	86	7	39	1	10	0	63	5	-0	93
2023	88	7	39	1	10	0	63	5	-0	94
2024	93	7	39	1	10	0	63	4	-0	94
2025	94	7	39	1	10	0	64	4	-0	95
2026	95	7	40	1	10	0	64	4	-0	96
2027	97	7	40	1	10	0	65	4	-0	97
2028	98	7	40	1	10	0	65	3	-0	98
2029	100	7	40	1	10	0	67	3	-0	98
2030	104	7	40	1	10	0	67	3	-0	99
2031	109	7	40	1	10	0	68	3	-0	100
2032	108	7	41	1	10	0	68	3	-0	101
2033	108	7	41	1	10	0	69	3	-0	102
2034	109	7	41	1	10	0	69	3	-0	103
2035	108	7	41	1	10	0	69	3	-0	103
2036	115	7	41	1	10	0	70	2	-0	104
2037	116	7	41	1	10	0	70	2	-0	104

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

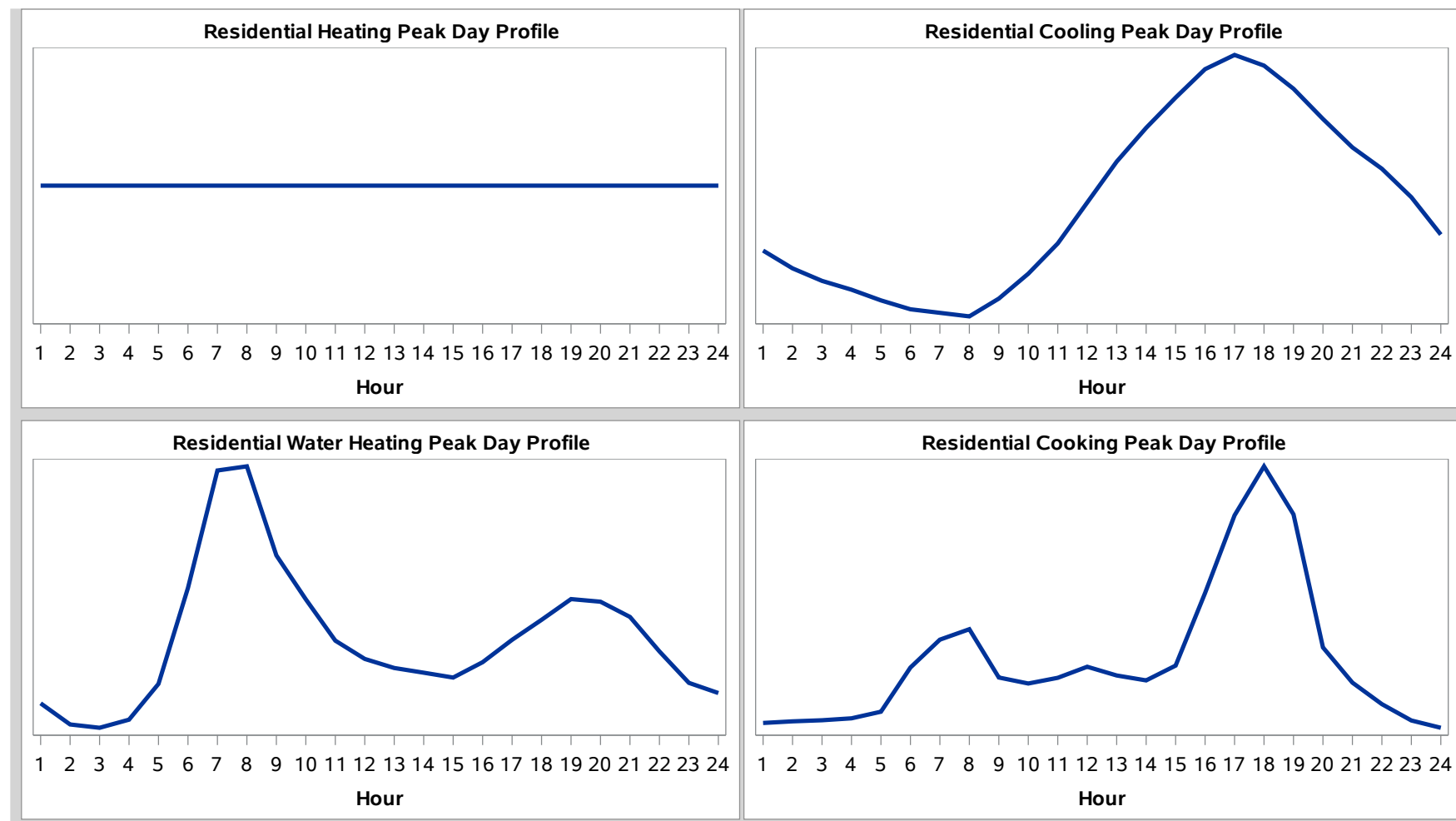


Forecast for Winter Coincident Peaks for Commercial LPS End Use (MW)

Year	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
2018	0	4	35	1	9	1	60	6	0	84
2019	0	4	35	1	9	1	58	6	0	85
2020	0	4	35	1	9	1	58	6	0	86
2021	0	4	36	1	8	1	58	5	0	86
2022	0	4	36	1	8	1	59	5	0	87
2023	0	4	36	1	8	1	58	5	0	88
2024	0	4	36	1	8	1	59	4	0	89
2025	0	4	37	1	8	1	59	4	0	89
2026	0	4	37	1	8	1	60	4	0	90
2027	0	4	37	1	8	1	61	4	0	91
2028	0	4	37	1	8	1	61	4	0	92
2029	0	4	37	1	8	1	61	3	0	93
2030	0	4	37	1	8	1	62	3	0	94
2031	0	4	37	1	8	1	63	3	0	95
2032	0	4	38	1	8	1	63	3	0	96
2033	0	4	38	1	8	1	64	3	0	97
2034	0	4	38	1	8	1	63	3	0	97
2035	0	4	38	1	8	1	63	3	0	98
2036	0	4	38	1	8	1	65	3	0	99
2037	0	4	38	1	8	1	64	2	0	100

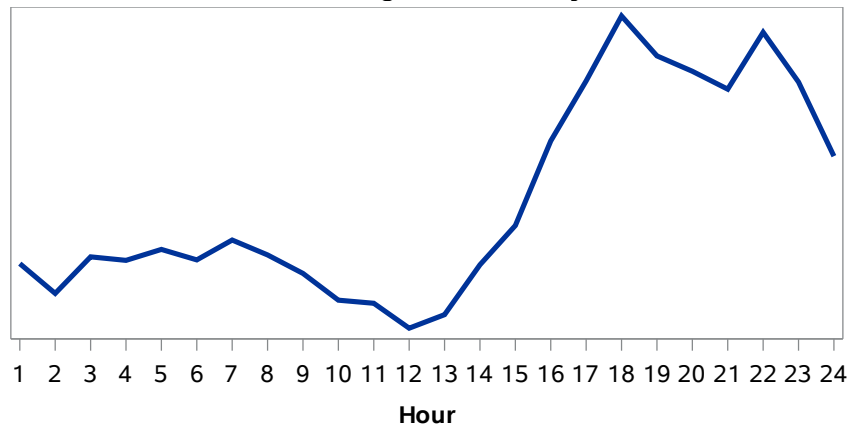
Load Profile by Class and End Uses on System Peak Days²⁰

Profile Shapes for Residential End Uses

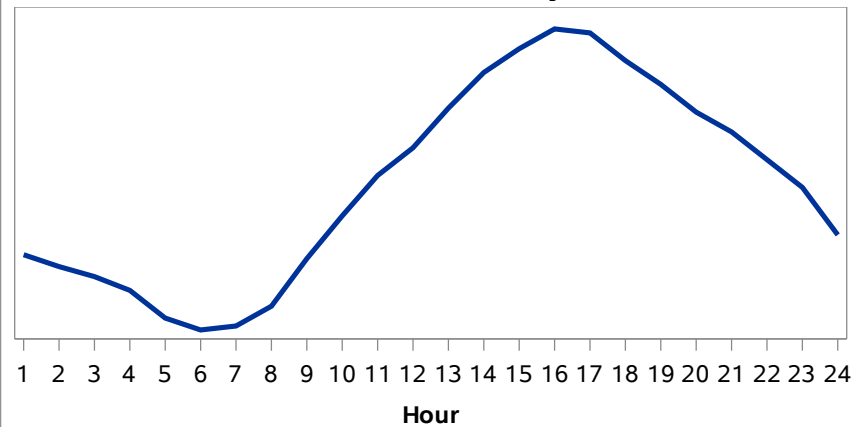


²⁰4 CSR 240-22.030(7)(A)7

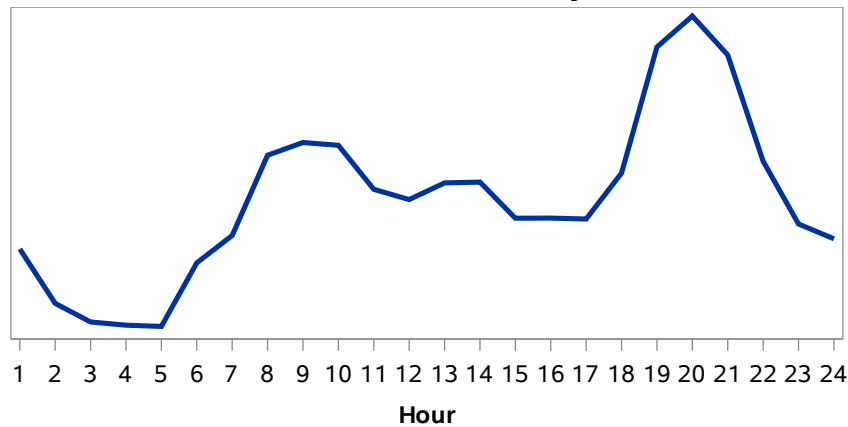
Residential Refrigerator Peak Day Profile



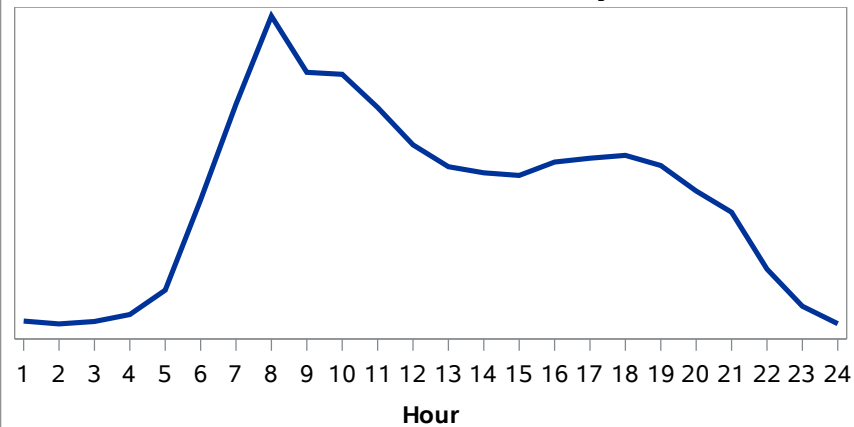
Residential Freezer Peak Day Profile

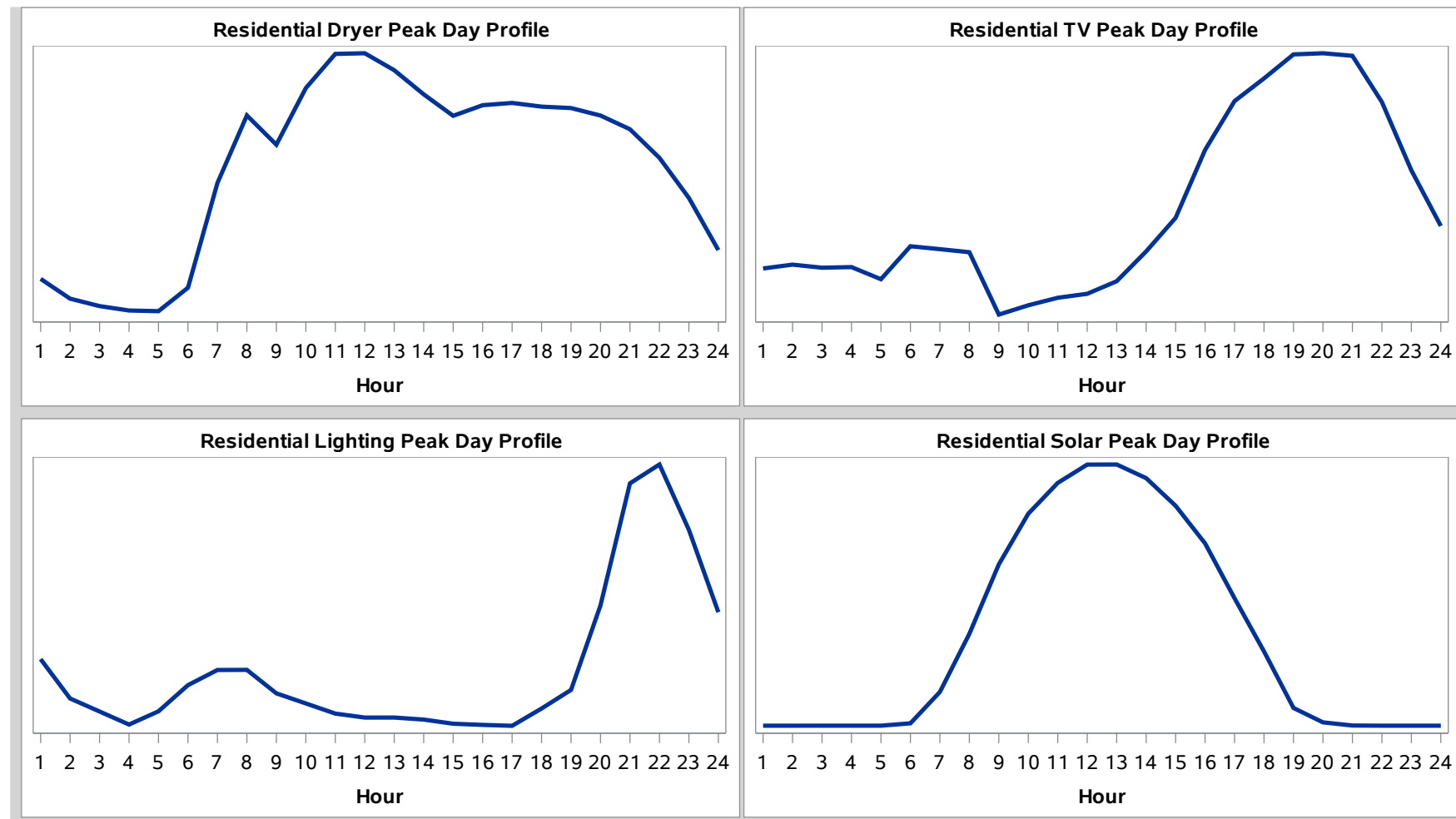


Residential Dishwasher Peak Day Profile



Residential Clothes Washer Peak Day Profile





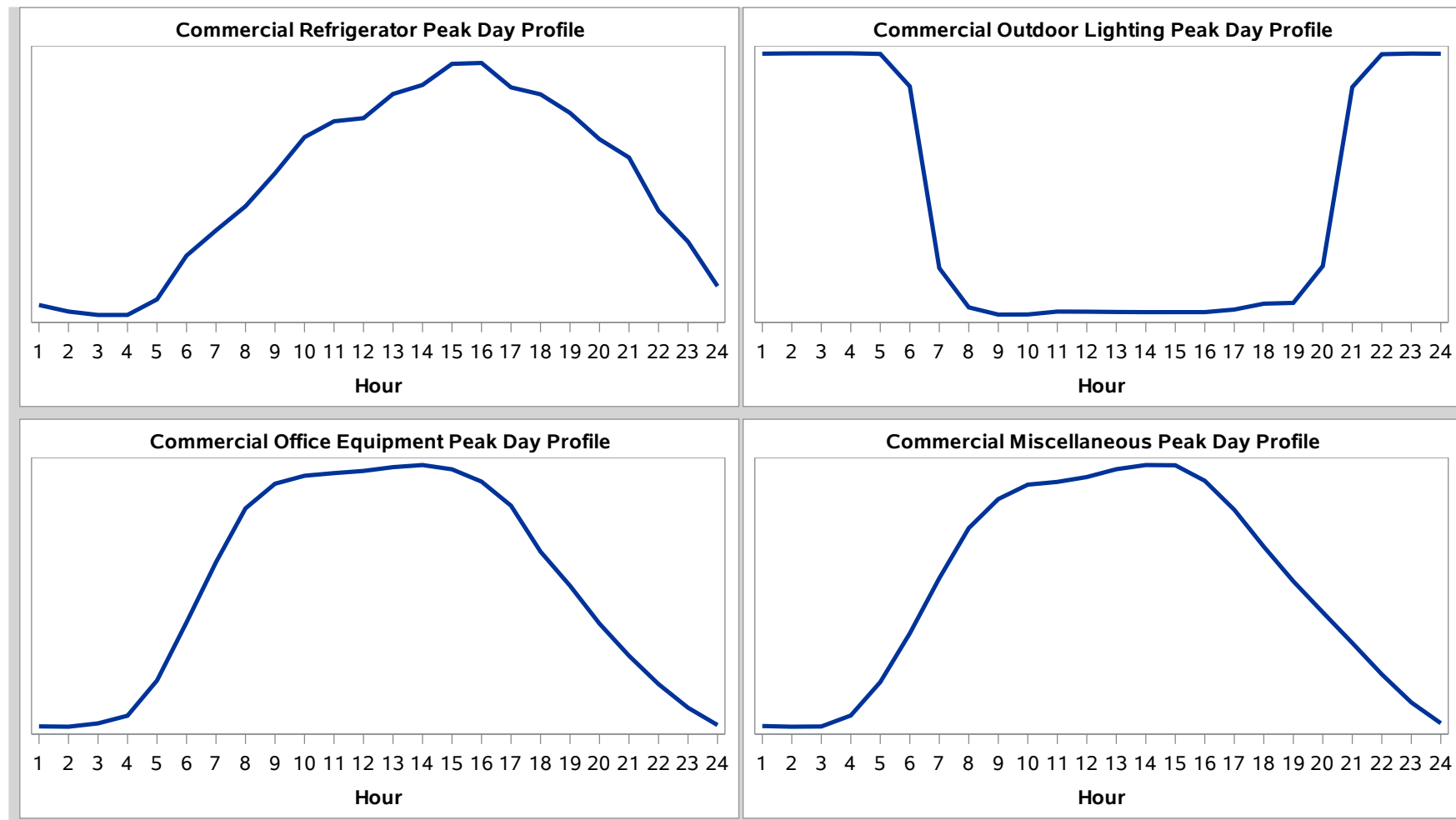


System Peak Day by Residential End Use (MW)

HE	Heating	Cooling	Water Heating	Cooking	Refrigerator	Freezer	Dishwashing	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	Electric Vehicles
1	0	1,419	69	25	112	21	21	0	19	75	104	-0	271	5
2	0	1,322	57	21	110	20	8	0	8	71	74	-0	271	3
3	0	1,237	53	20	109	20	2	0	4	69	56	-0	271	2
4	0	1,161	48	20	109	19	1	1	1	62	36	-0	271	0
5	0	1,097	47	18	110	18	1	1	1	60	35	-0	259	0
6	0	1,021	48	20	109	17	5	3	5	60	46	-0	239	0
7	0	1,000	78	49	107	17	12	6	14	75	58	-3	264	0
8	0	1,011	107	61	112	18	21	11	38	74	70	-7	263	0
9	0	1,064	128	72	114	20	49	17	63	83	80	-13	310	0
10	0	1,204	133	66	114	23	63	18	90	79	67	-17	304	1
11	0	1,387	131	66	114	24	69	17	125	83	59	-20	306	0
12	0	1,613	113	66	116	26	57	16	144	88	54	-21	301	4
13	0	1,871	102	71	115	28	48	14	145	90	50	-21	302	1
14	0	2,086	97	72	115	29	47	13	141	90	50	-20	302	0
15	0	2,290	95	65	116	31	42	13	131	88	50	-18	298	0
16	0	2,484	94	73	117	32	36	12	124	87	49	-15	286	1
17	0	2,634	90	98	118	31	32	11	113	90	46	-10	267	1
18	0	2,677	94	111	120	30	35	10	102	97	52	-6	274	1
19	0	2,591	95	99	119	29	61	10	92	102	68	-1	274	1
20	0	2,398	96	58	118	28	72	8	87	102	117	-0	273	0
21	0	2,215	89	40	117	27	67	6	83	102	204	-0	273	0
22	0	2,054	77	30	118	25	48	4	73	94	211	-0	273	0
23	0	1,849	69	28	117	24	31	2	53	85	168	-0	271	0
24	0	1,613	65	26	114	22	26	1	29	82	124	-0	272	1

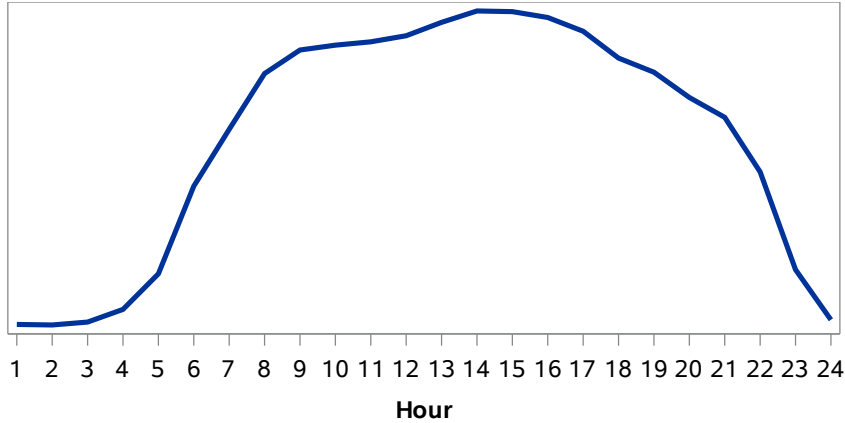
Load Profile by Class and End Uses on System Peak Days²⁰

Profile Shapes for Commercial End Uses

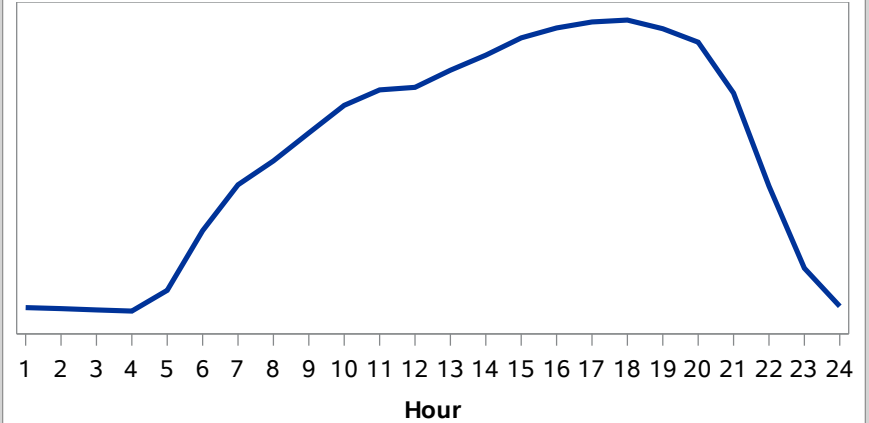


²⁰4 CSR 240-22.030(7)(A)7

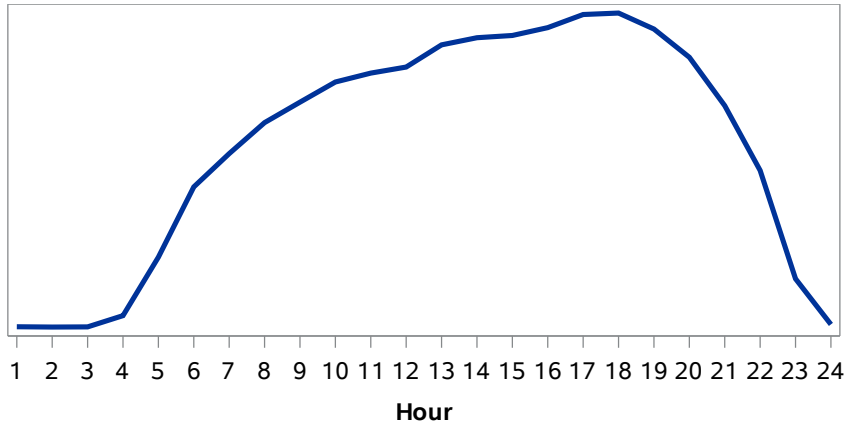
Commercial Indoor Lighting Peak Day Profile



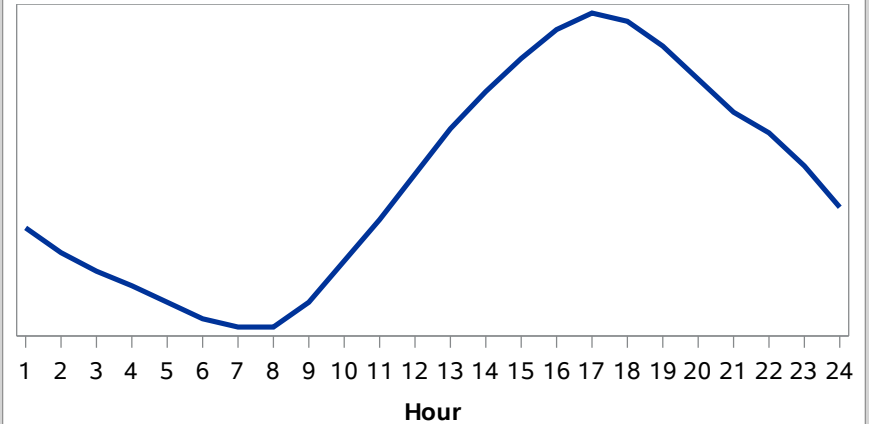
Commercial Water Heating Peak Day Profile

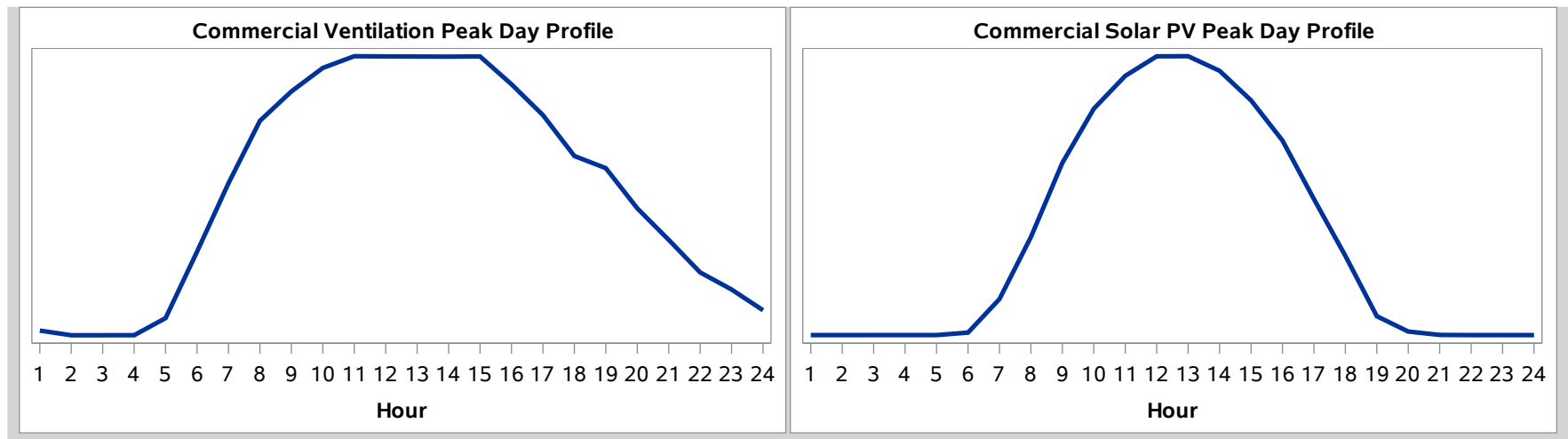


Commercial Cooking Peak Day Profile



Commercial Cooling Peak Day Profile



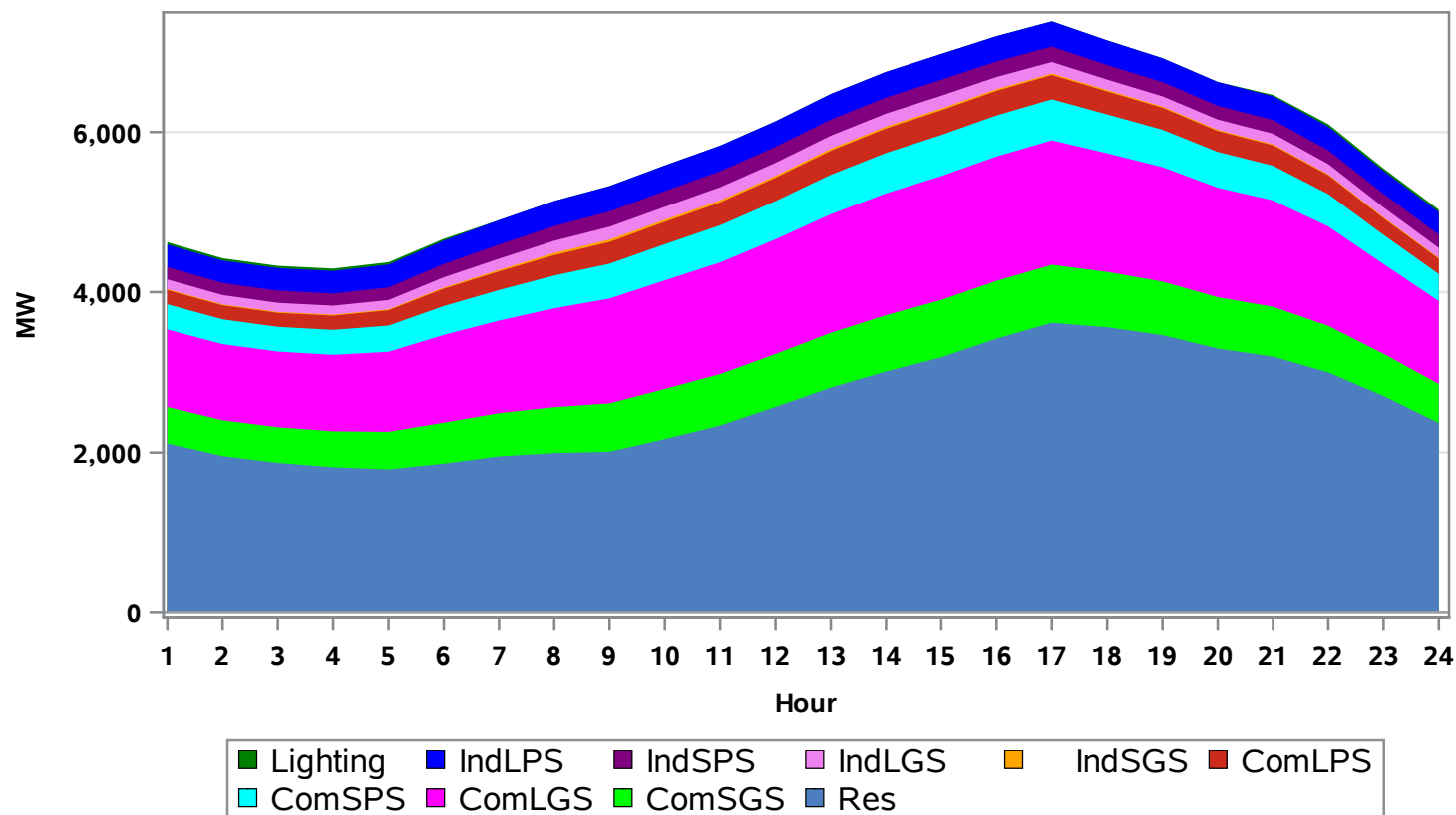


System Peak Day by Commercial End Use (MW)

HE	Refrigerator	Outdoor_Lighting	Office_Equipment	Miscellaneous	Indoor_Lighting	Water_Heating	Cooking	Cooling	Ventilation	Solar_PV
1	134	80	26	429	106	4	0	750	205	-0
2	133	80	26	428	105	4	0	721	204	-0
3	132	80	25	427	108	3	0	701	204	-0
4	132	80	26	440	120	3	0	682	204	-0
5	136	80	26	467	152	7	2	665	203	-0
6	147	70	27	497	244	20	5	642	204	-0
7	154	14	27	523	281	29	6	636	204	-4
8	160	2	28	558	317	33	7	642	206	-10
9	169	0	28	579	341	38	8	659	209	-17
10	179	0	28	587	347	44	9	699	213	-23
11	183	1	28	590	351	47	9	744	216	-26
12	184	1	29	597	359	48	9	790	216	-28
13	190	1	29	608	376	52	10	846	216	-28
14	192	1	29	616	389	55	10	886	216	-27
15	198	1	29	620	389	59	10	926	216	-24
16	198	1	29	607	384	62	11	966	218	-20
17	192	2	29	591	376	63	11	994	218	-14
18	190	3	29	574	371	64	11	1,006	220	-8
19	185	4	29	565	372	63	11	988	220	-2
20	178	15	29	553	367	60	10	949	224	-0
21	173	70	29	533	353	50	8	915	227	-0
22	159	80	28	498	293	30	6	881	230	-0
23	151	80	26	460	174	12	2	835	226	-0
24	139	80	26	432	111	4	0	790	218	-0

Summer & Winter Peak Day Profiles – System by Class, Class by End Use – 2018, 2023, 2028, 2037²¹

Load Profiles for Summer 2018 System Peak Day (MW)

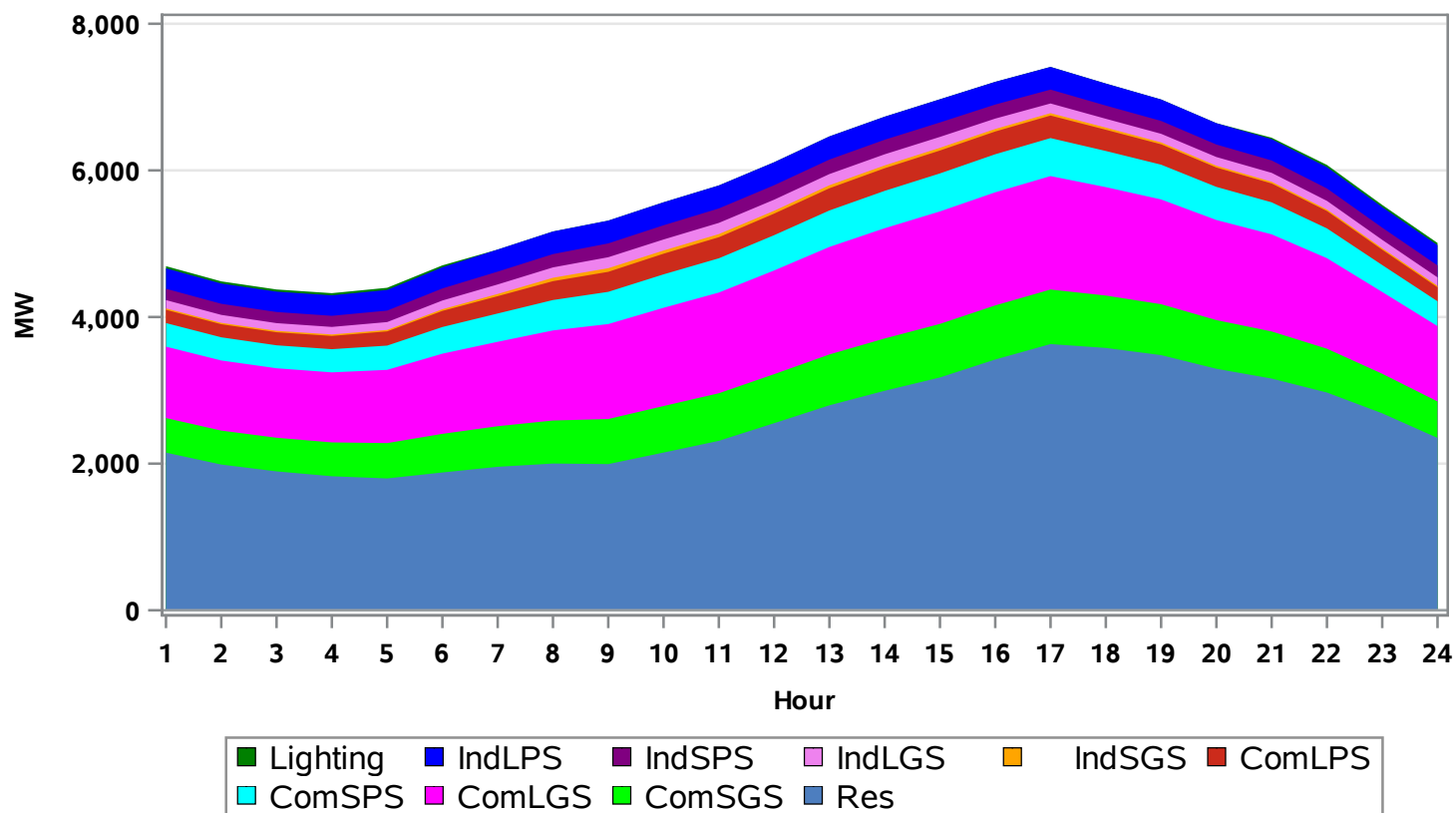


²¹4 CSR 240-22.030(7)(A)7

Load Profiles for Summer 2018 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,114	455	965	315	177	12	122	155	281	29
2	1,955	447	949	309	175	11	117	152	279	29
3	1,871	444	943	308	175	12	114	152	281	29
4	1,816	449	953	311	178	12	111	152	283	29
5	1,790	468	998	327	191	12	117	158	286	29
6	1,861	511	1,095	359	217	14	128	166	293	23
7	1,952	539	1,154	381	233	18	139	177	305	0
8	1,993	573	1,233	409	254	28	152	183	313	0
9	2,009	604	1,307	435	271	30	161	191	316	0
10	2,168	625	1,355	451	280	26	162	197	319	0
11	2,336	642	1,392	464	285	26	164	200	319	0
12	2,568	661	1,432	477	291	23	163	200	319	0
13	2,809	684	1,480	492	300	25	164	200	321	0
14	3,010	703	1,520	505	306	23	163	201	320	0
15	3,187	716	1,546	512	309	22	160	200	321	0
16	3,420	721	1,553	513	307	21	153	194	315	0
17	3,618	724	1,554	512	304	20	143	192	314	0
18	3,562	692	1,480	486	286	18	130	182	306	0
19	3,463	669	1,428	468	275	16	127	178	298	0
20	3,296	641	1,367	447	262	15	129	173	296	0
21	3,196	621	1,328	433	255	14	132	171	297	17
22	2,999	581	1,241	404	235	12	128	172	296	30
23	2,705	527	1,120	364	207	12	124	169	286	30
24	2,367	488	1,034	337	189	12	126	165	283	30

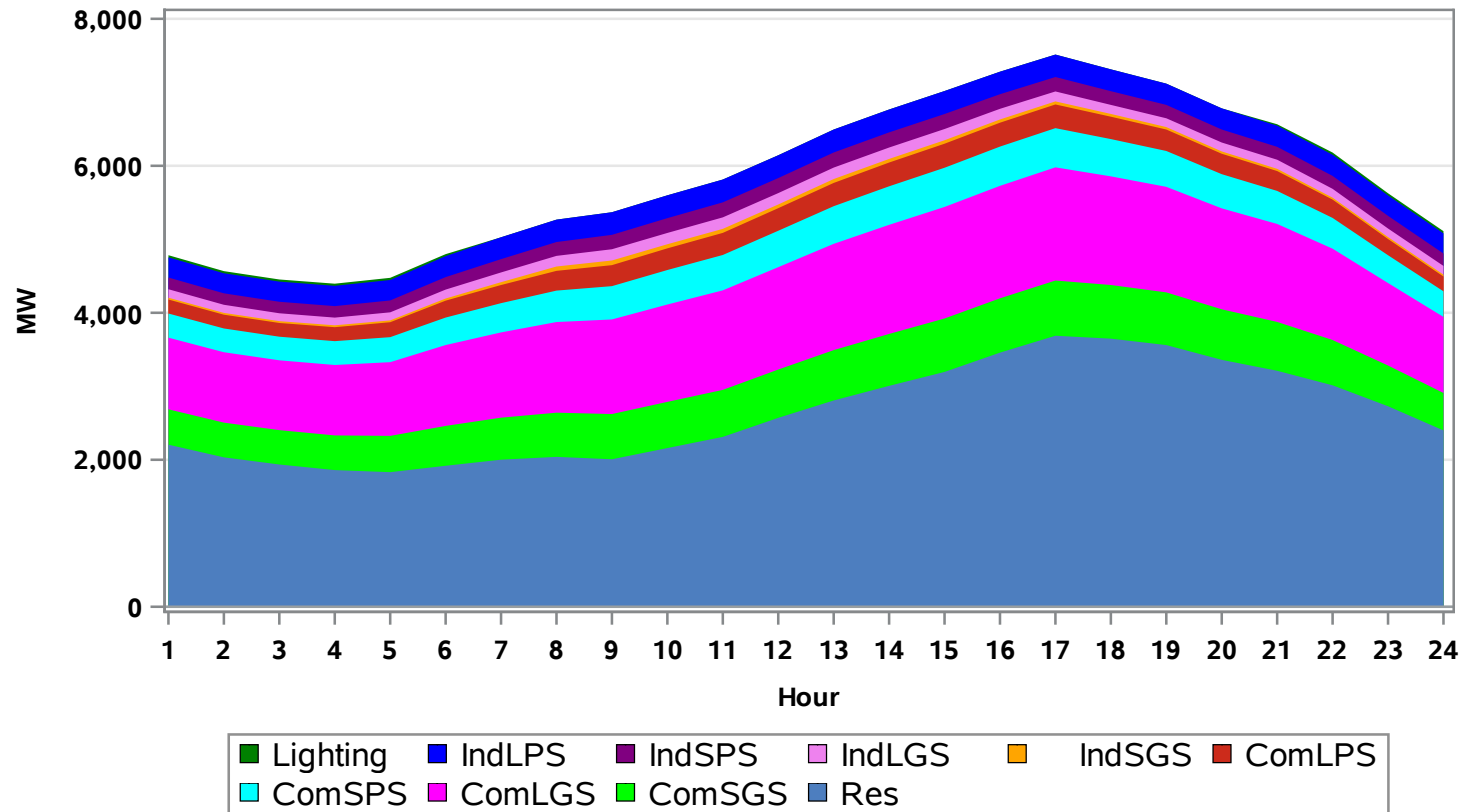
Load Profiles for Summer 2023 System Peak Day (MW)



Load Profiles for Summer 2023 System Peak Day (MW)

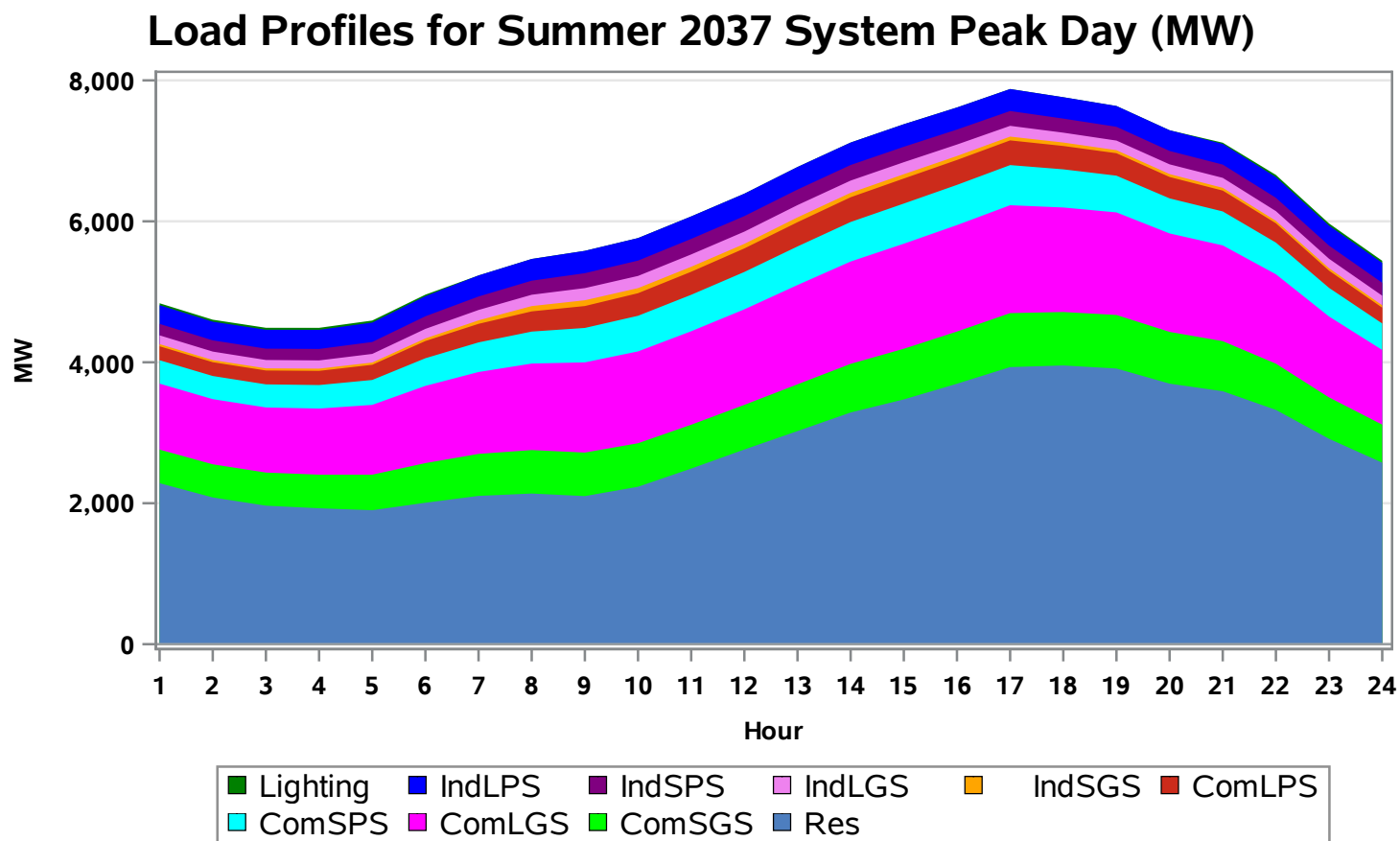
Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,150	472	974	322	181	19	113	155	279	29
2	1,988	463	957	316	179	19	108	151	277	29
3	1,894	459	948	313	178	19	105	151	278	29
4	1,828	462	955	316	181	20	103	152	279	29
5	1,798	482	999	331	194	19	108	157	282	30
6	1,880	527	1,094	364	220	23	119	164	289	26
7	1,957	554	1,151	386	236	30	130	175	301	0
8	2,002	587	1,228	415	257	46	142	182	308	0
9	1,994	615	1,295	440	273	49	150	189	311	0
10	2,151	635	1,340	456	282	43	151	194	314	0
11	2,311	649	1,373	467	287	42	153	197	313	0
12	2,552	669	1,415	481	294	39	152	197	313	0
13	2,796	694	1,466	498	303	41	153	198	316	0
14	2,994	713	1,504	510	309	38	152	199	314	0
15	3,175	731	1,534	518	312	36	149	197	316	0
16	3,421	738	1,543	519	310	34	142	192	310	0
17	3,631	744	1,547	518	307	32	132	189	309	0
18	3,578	715	1,479	493	290	29	120	180	300	0
19	3,480	694	1,429	474	278	26	117	176	292	0
20	3,294	664	1,365	452	264	25	119	171	291	0
21	3,160	643	1,325	437	257	23	122	169	291	20
22	2,970	598	1,235	407	237	21	118	170	291	30
23	2,686	540	1,115	367	209	21	114	166	280	30
24	2,351	498	1,027	339	191	20	116	163	277	30

Load Profiles for Summer 2028 System Peak Day (MW)



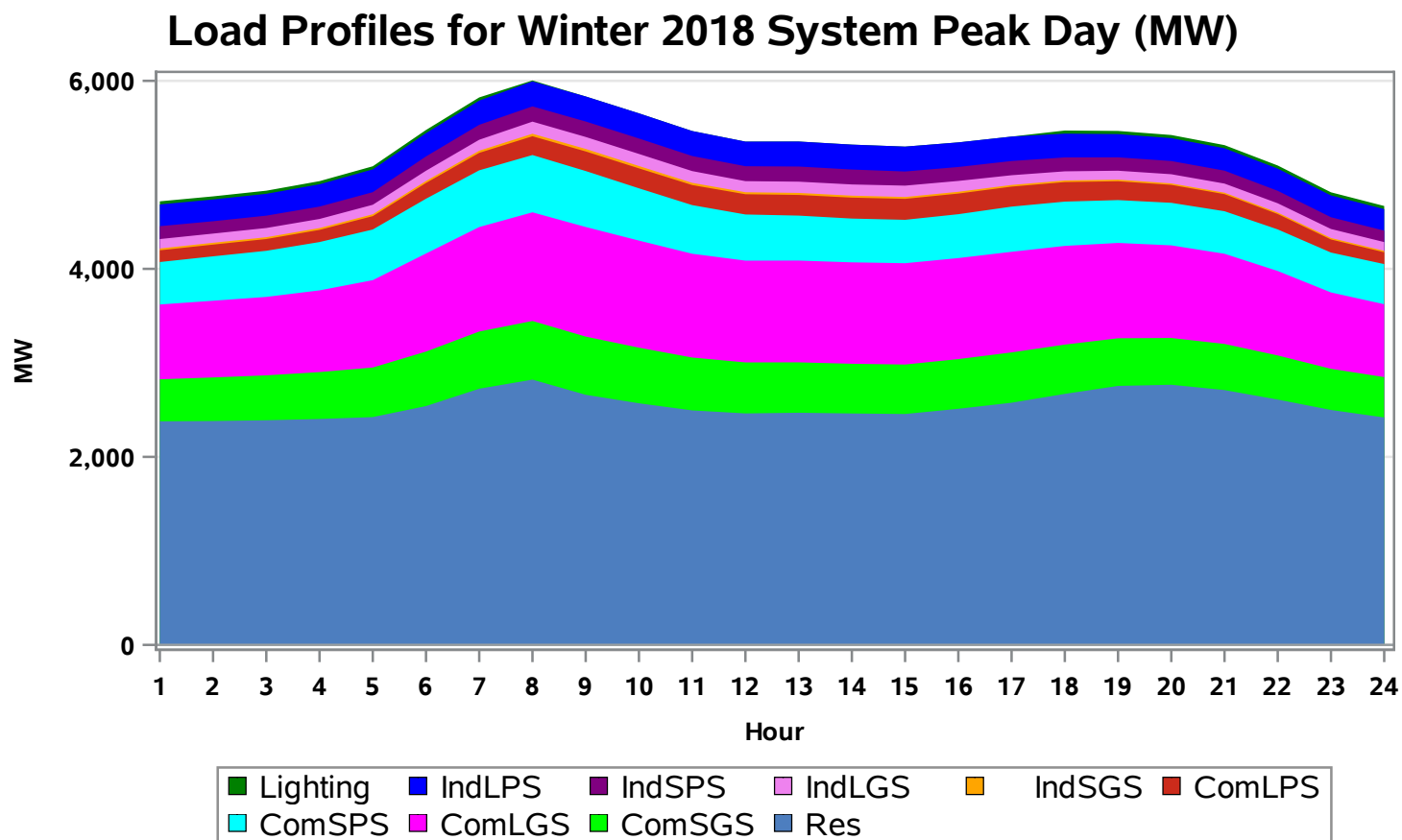
Load Profiles for Summer 2028 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,206	481	975	329	190	25	115	160	275	29
2	2,033	472	958	324	188	24	110	156	273	29
3	1,936	468	950	321	187	25	107	156	274	29
4	1,860	472	958	324	190	26	105	157	276	29
5	1,831	494	1,003	340	203	25	110	162	278	29
6	1,918	543	1,100	374	230	29	121	170	286	27
7	2,001	572	1,160	398	247	39	132	181	298	0
8	2,039	601	1,233	428	269	59	145	188	305	0
9	2,007	615	1,287	453	285	64	153	196	308	0
10	2,159	628	1,325	470	295	56	154	201	311	0
11	2,311	640	1,354	481	301	55	156	204	310	0
12	2,571	657	1,393	495	308	50	155	205	310	0
13	2,807	685	1,446	512	317	53	156	205	312	0
14	3,006	706	1,484	524	323	49	156	206	311	0
15	3,195	727	1,518	533	327	47	153	204	313	0
16	3,458	739	1,530	534	325	44	145	199	306	0
17	3,688	752	1,540	533	322	42	135	196	306	0
18	3,648	730	1,478	507	304	38	123	186	297	0
19	3,561	717	1,436	488	292	33	120	182	289	0
20	3,360	688	1,374	465	278	32	121	177	288	0
21	3,211	665	1,333	450	270	30	124	175	288	20
22	3,013	617	1,243	418	249	27	120	176	288	30
23	2,728	555	1,122	378	220	27	117	172	277	30
24	2,399	510	1,034	349	201	26	118	169	274	30



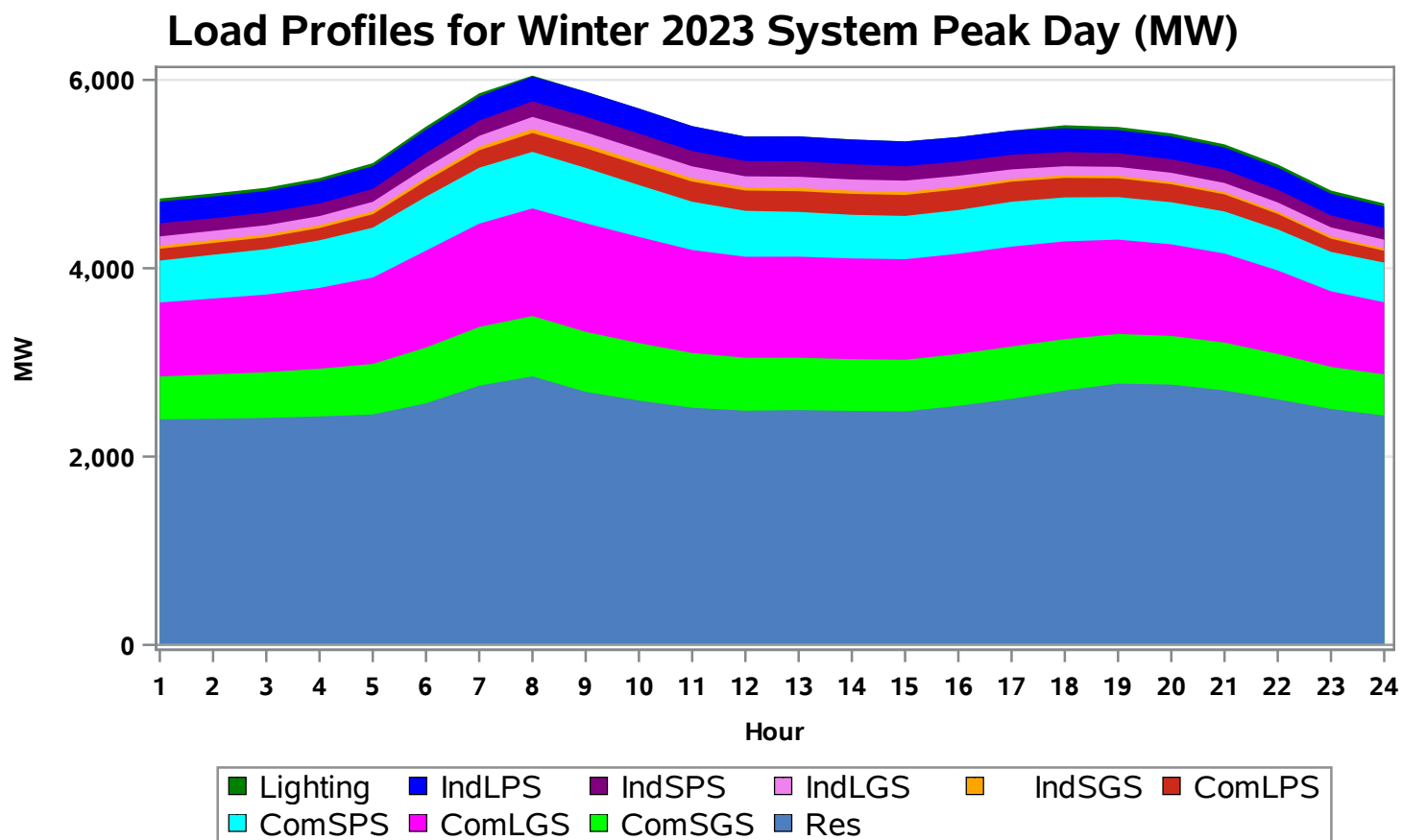
Load Profiles for Summer 2037 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,284	476	936	332	198	31	125	163	265	28
2	2,082	470	925	328	196	30	120	160	265	28
3	1,966	470	924	328	197	31	118	161	268	28
4	1,929	477	938	334	201	32	116	163	271	28
5	1,901	505	990	353	216	31	123	169	276	29
6	2,007	562	1,096	392	244	37	135	179	285	22
7	2,104	596	1,162	420	263	49	147	191	299	0
8	2,138	617	1,228	453	287	75	161	200	308	0
9	2,101	618	1,280	489	310	82	173	212	317	0
10	2,234	617	1,303	505	320	72	173	217	320	0
11	2,492	622	1,326	518	327	70	176	220	319	0
12	2,762	633	1,356	530	334	64	174	220	318	0
13	3,024	664	1,409	548	344	68	175	220	320	0
14	3,288	690	1,452	561	351	63	174	221	318	0
15	3,473	719	1,490	570	355	60	171	219	320	0
16	3,696	741	1,510	570	354	56	163	213	313	0
17	3,932	766	1,531	569	351	54	153	210	312	0
18	3,955	759	1,483	541	331	49	140	200	303	0
19	3,911	760	1,455	521	318	43	137	195	295	0
20	3,697	734	1,397	498	303	41	138	190	294	0
21	3,589	710	1,359	482	296	39	142	188	294	17
22	3,325	656	1,268	449	274	35	138	189	294	30
23	2,914	588	1,148	406	244	35	134	186	284	30
24	2,575	540	1,060	376	224	34	136	183	282	30



Load Profiles for Winter 2018 System Peak Day (MW)

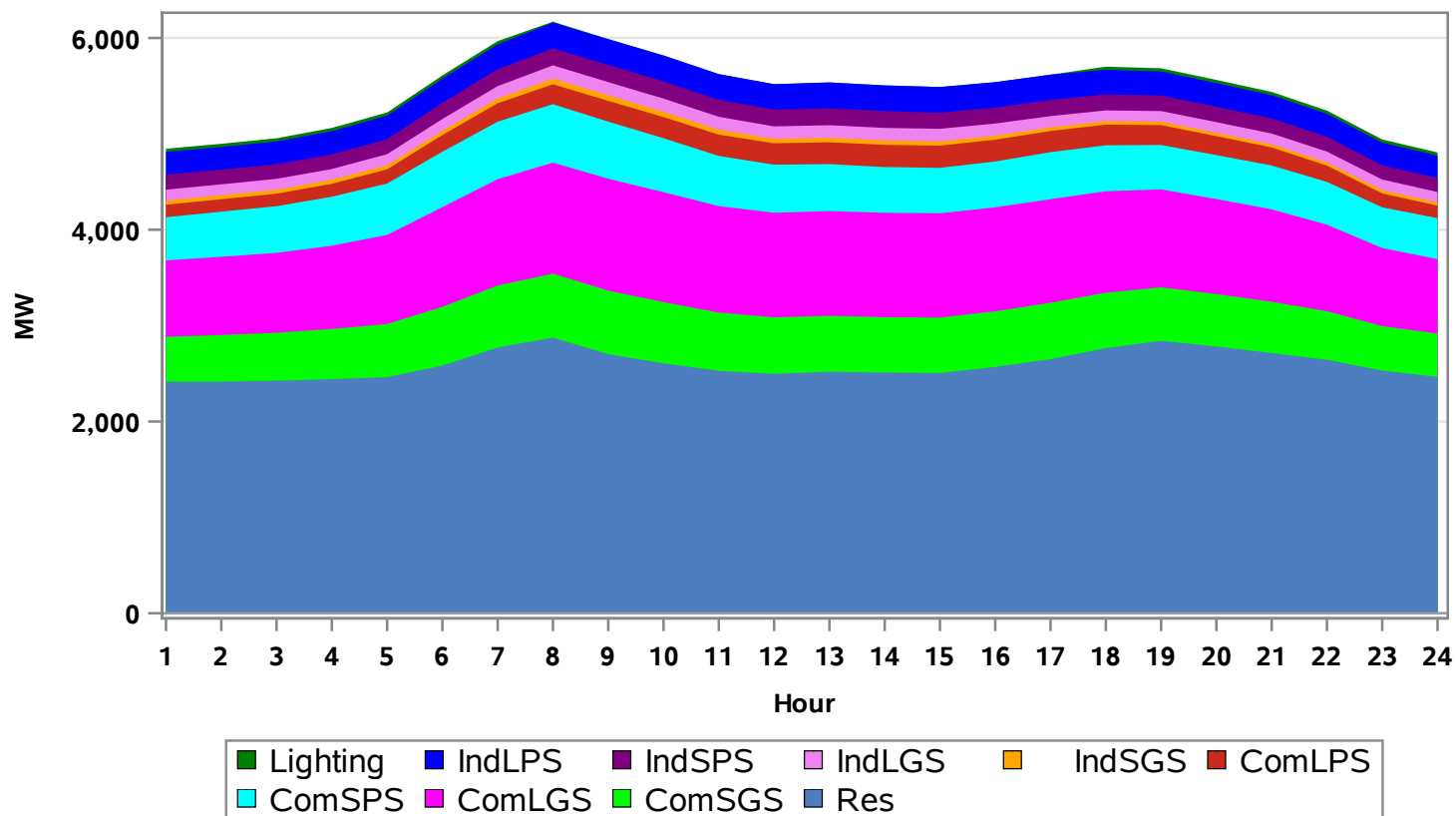
Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,378	447	796	452	125	19	101	137	231	33
2	2,381	463	816	473	125	20	98	131	231	33
3	2,390	478	834	490	125	19	98	131	232	33
4	2,403	499	869	514	129	20	97	132	238	33
5	2,423	527	929	539	142	20	101	134	242	33
6	2,540	580	1,043	583	168	21	109	152	248	33
7	2,725	608	1,111	603	186	23	117	159	258	33
8	2,822	624	1,156	610	200	27	129	162	266	10
9	2,661	619	1,166	595	208	27	127	165	266	0
10	2,570	592	1,139	556	212	25	129	164	268	0
11	2,494	562	1,104	517	213	23	125	160	266	0
12	2,462	543	1,083	491	215	21	118	159	262	0
13	2,469	536	1,083	478	220	22	120	161	266	0
14	2,462	529	1,079	466	223	21	119	159	265	0
15	2,456	527	1,077	462	223	20	121	150	265	0
16	2,511	529	1,075	467	220	19	116	148	262	0
17	2,576	535	1,070	481	213	18	103	151	260	0
18	2,670	524	1,050	471	208	17	97	148	253	33
19	2,755	507	1,014	456	201	17	95	142	247	33
20	2,767	497	985	452	191	16	97	140	243	33
21	2,711	491	959	453	182	16	97	137	238	33
22	2,609	469	898	442	164	15	99	133	236	33
23	2,499	438	812	424	139	16	96	125	232	33
24	2,419	429	775	427	125	15	93	122	229	33



Load Profiles for Winter 2023 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,395	455	786	445	125	31	100	140	229	33
2	2,401	471	806	465	125	31	97	134	230	33
3	2,411	486	824	483	126	31	98	134	231	33
4	2,426	507	858	506	130	31	96	134	236	33
5	2,447	537	917	530	143	32	100	137	240	33
6	2,566	592	1,029	573	168	33	109	155	246	33
7	2,753	624	1,097	594	185	37	116	162	256	33
8	2,852	641	1,143	601	200	43	128	165	264	10
9	2,687	637	1,153	588	209	43	127	168	264	0
10	2,595	611	1,128	550	212	40	128	168	266	0
11	2,519	582	1,094	513	213	37	125	164	264	0
12	2,487	562	1,073	488	215	34	117	162	260	0
13	2,494	556	1,073	475	220	35	119	164	264	0
14	2,485	549	1,070	463	223	34	119	162	263	0
15	2,480	548	1,068	459	223	32	120	154	263	0
16	2,539	550	1,065	464	219	30	115	151	260	0
17	2,612	557	1,060	477	213	28	103	155	258	0
18	2,702	546	1,038	467	207	27	97	152	251	33
19	2,775	527	1,002	451	200	27	95	146	245	33
20	2,765	517	973	447	191	25	97	143	242	33
21	2,703	508	946	447	181	25	96	140	236	33
22	2,608	482	887	436	164	24	98	135	234	33
23	2,506	447	802	419	139	25	95	128	230	33
24	2,435	437	766	421	126	25	93	124	227	33

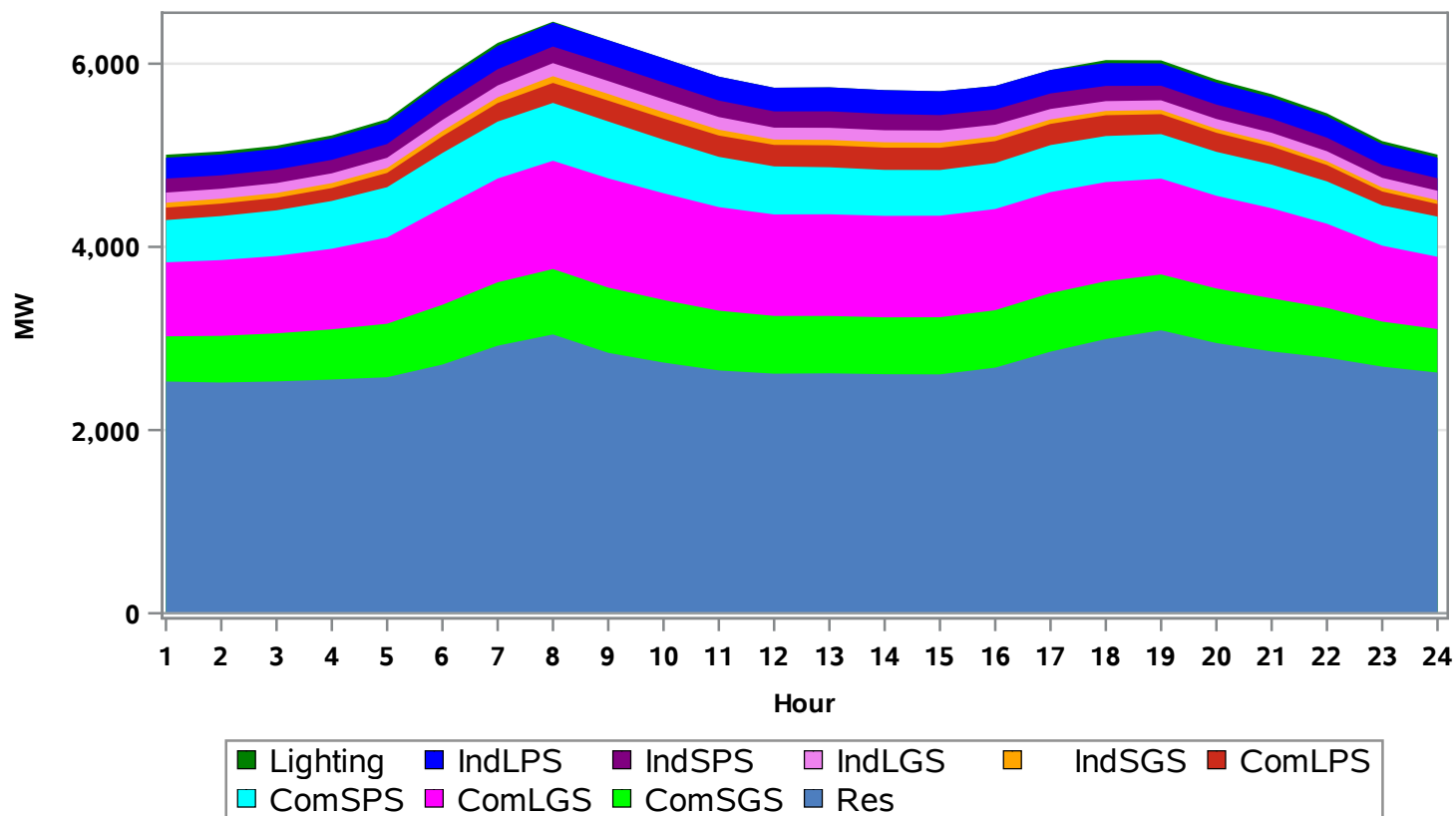
Load Profiles for Winter 2028 System Peak Day (MW)



Load Profiles for Winter 2028 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,414	470	796	450	130	43	115	157	236	33
2	2,416	486	816	471	130	43	113	153	237	33
3	2,426	500	833	487	130	42	113	153	237	33
4	2,442	523	868	511	135	43	112	153	242	33
5	2,463	555	928	536	148	43	115	155	247	33
6	2,584	613	1,039	578	174	46	122	170	252	33
7	2,772	646	1,109	600	192	50	128	175	261	33
8	2,875	667	1,158	610	207	59	138	177	268	10
9	2,702	662	1,167	595	216	59	137	180	269	0
10	2,607	639	1,146	563	220	55	138	179	270	0
11	2,529	608	1,110	524	222	51	136	176	269	0
12	2,497	589	1,091	501	224	47	129	175	265	0
13	2,519	584	1,092	489	228	48	131	177	269	0
14	2,510	578	1,089	477	231	47	130	175	268	0
15	2,506	578	1,088	474	231	44	132	168	268	0
16	2,569	580	1,084	478	228	41	127	166	265	0
17	2,650	588	1,080	490	221	39	117	169	263	0
18	2,766	578	1,058	480	215	37	112	167	257	33
19	2,841	558	1,021	463	208	36	110	162	251	33
20	2,782	547	991	459	198	34	112	160	247	33
21	2,714	535	963	458	188	34	112	158	243	33
22	2,644	506	902	446	170	33	113	154	241	33
23	2,531	464	814	425	145	35	111	148	237	33
24	2,466	452	777	427	131	34	109	145	234	33

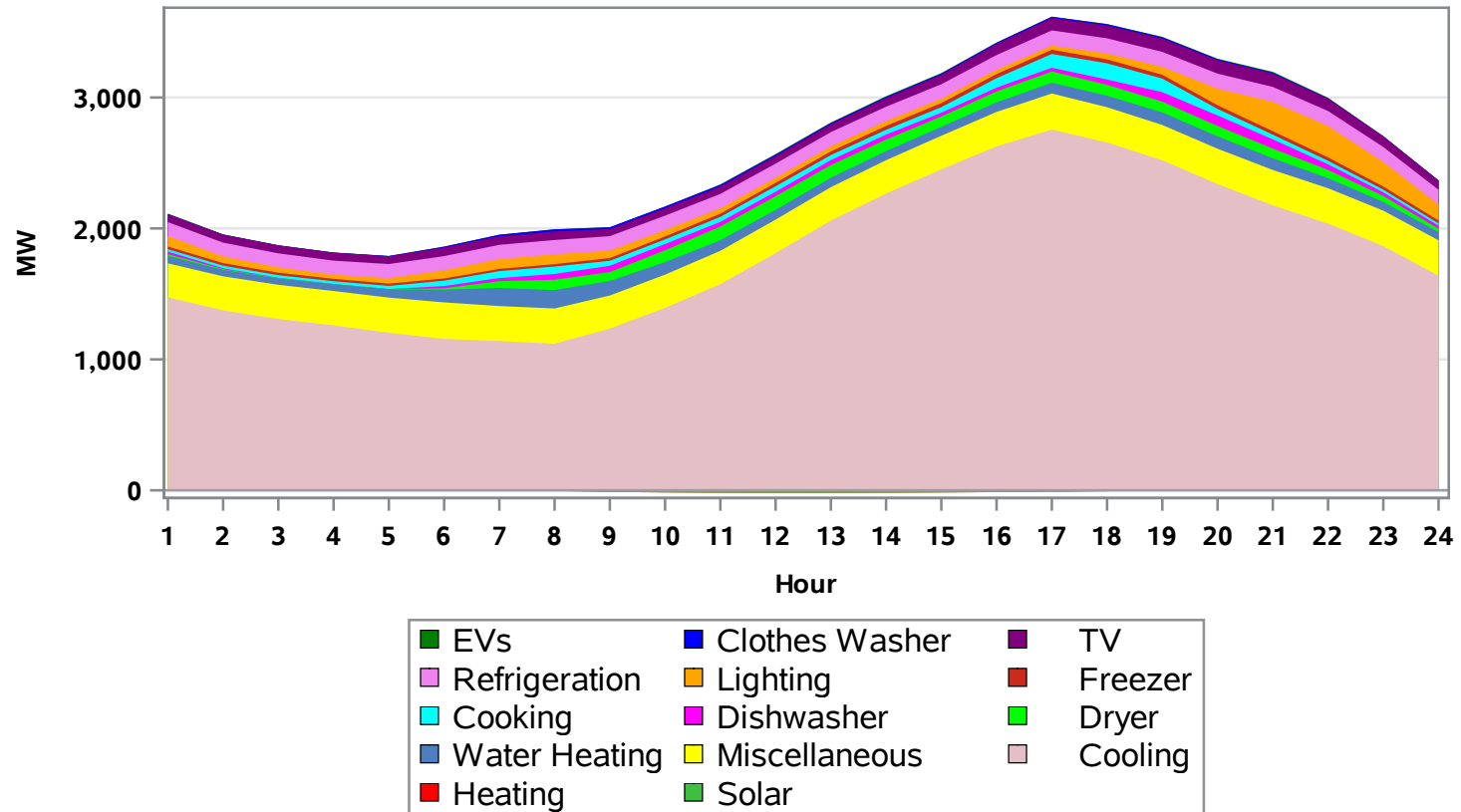
Load Profiles for Winter 2037 System Peak Day (MW)



Load Profiles for Winter 2037 System Peak Day (MW)

Hour	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
1	2,530	493	808	461	136	53	111	153	227	33
2	2,519	510	827	481	136	54	108	147	228	33
3	2,531	525	845	498	137	53	108	147	229	33
4	2,552	548	880	522	141	54	107	147	234	33
5	2,577	584	942	549	156	54	112	150	238	33
6	2,715	653	1,060	597	183	57	121	170	244	33
7	2,921	692	1,133	622	202	63	129	178	254	33
8	3,044	714	1,182	632	218	74	142	181	262	10
9	2,843	712	1,193	621	227	73	141	184	262	0
10	2,737	683	1,165	585	232	68	142	184	263	0
11	2,651	653	1,131	549	233	64	138	180	261	0
12	2,616	630	1,108	524	235	58	130	177	258	0
13	2,620	626	1,110	513	239	59	132	180	262	0
14	2,610	621	1,108	502	243	58	132	178	261	0
15	2,608	624	1,109	499	243	55	134	168	260	0
16	2,682	627	1,105	502	239	52	128	166	258	0
17	2,856	639	1,103	514	232	49	114	170	256	0
18	2,994	631	1,083	503	227	47	107	166	249	33
19	3,089	610	1,046	486	218	46	105	160	244	33
20	2,950	596	1,013	480	208	43	108	157	240	33
21	2,858	580	983	477	197	43	107	154	234	33
22	2,791	542	920	462	178	42	109	148	233	33
23	2,692	492	829	439	152	44	106	140	228	33
24	2,627	475	789	439	137	43	103	136	225	33

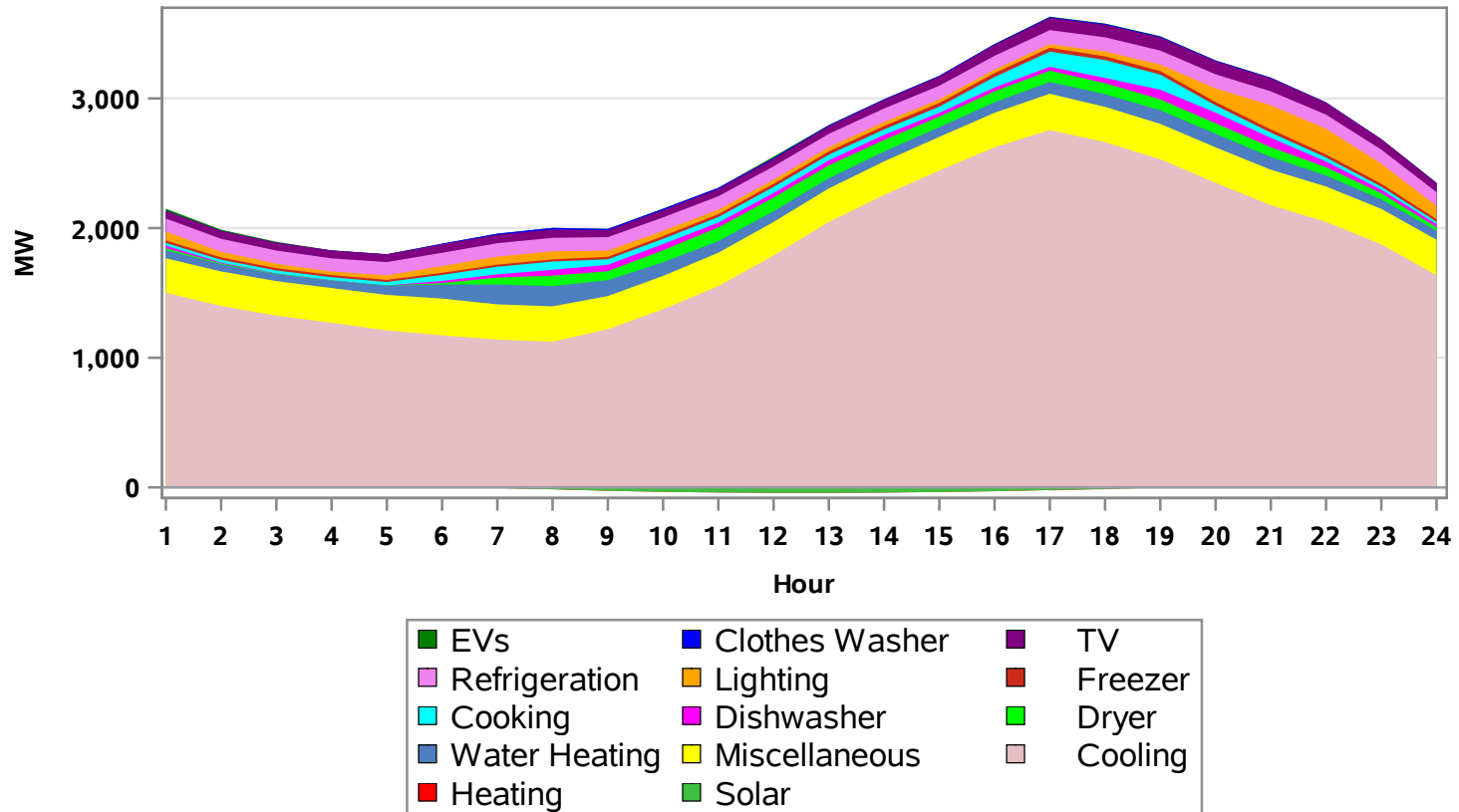
Summer 2018 System Peak Day: Residential End-Use Profiles (MW)



Summer 2018 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	0	1,474	56	19	106	20	20	0	14	60	81	-0	260	4
2	0	1,374	49	19	105	19	7	0	6	61	51	-0	260	2
3	0	1,308	48	20	107	19	2	0	3	61	41	-0	261	0
4	0	1,260	51	21	107	18	1	1	2	61	31	-0	262	0
5	0	1,203	64	23	108	17	1	2	1	60	42	-0	269	0
6	0	1,157	97	41	108	17	17	7	11	66	62	-0	279	0
7	0	1,141	139	53	109	17	24	12	52	66	75	-1	267	0
8	0	1,124	141	57	109	18	44	16	79	65	75	-5	269	0
9	0	1,247	111	38	110	21	48	13	68	55	57	-12	253	0
10	0	1,409	95	36	110	23	47	13	91	56	49	-16	254	0
11	0	1,593	81	38	110	25	36	12	105	58	41	-19	254	4
12	0	1,831	74	42	109	26	33	10	105	58	38	-20	256	5
13	0	2,079	71	39	109	28	37	8	98	61	38	-19	255	4
14	0	2,284	69	37	110	30	38	8	88	66	36	-19	255	6
15	0	2,468	68	43	111	31	28	8	80	72	33	-17	257	5
16	0	2,641	73	72	113	32	29	9	84	85	32	-14	263	2
17	0	2,765	82	105	116	32	29	9	86	95	32	-10	276	1
18	0	2,662	88	124	116	30	40	9	83	98	45	-6	269	2
19	0	2,522	95	104	115	29	72	9	83	103	60	-1	269	4
20	0	2,339	94	50	115	28	80	7	80	103	127	-0	270	4
21	0	2,177	89	36	114	27	70	6	74	102	224	-0	270	7
22	0	2,037	77	27	115	25	43	3	63	94	239	-0	270	5
23	0	1,865	66	21	114	24	27	1	47	81	187	-0	271	0
24	0	1,639	62	18	113	22	23	0	26	71	122	-0	271	0

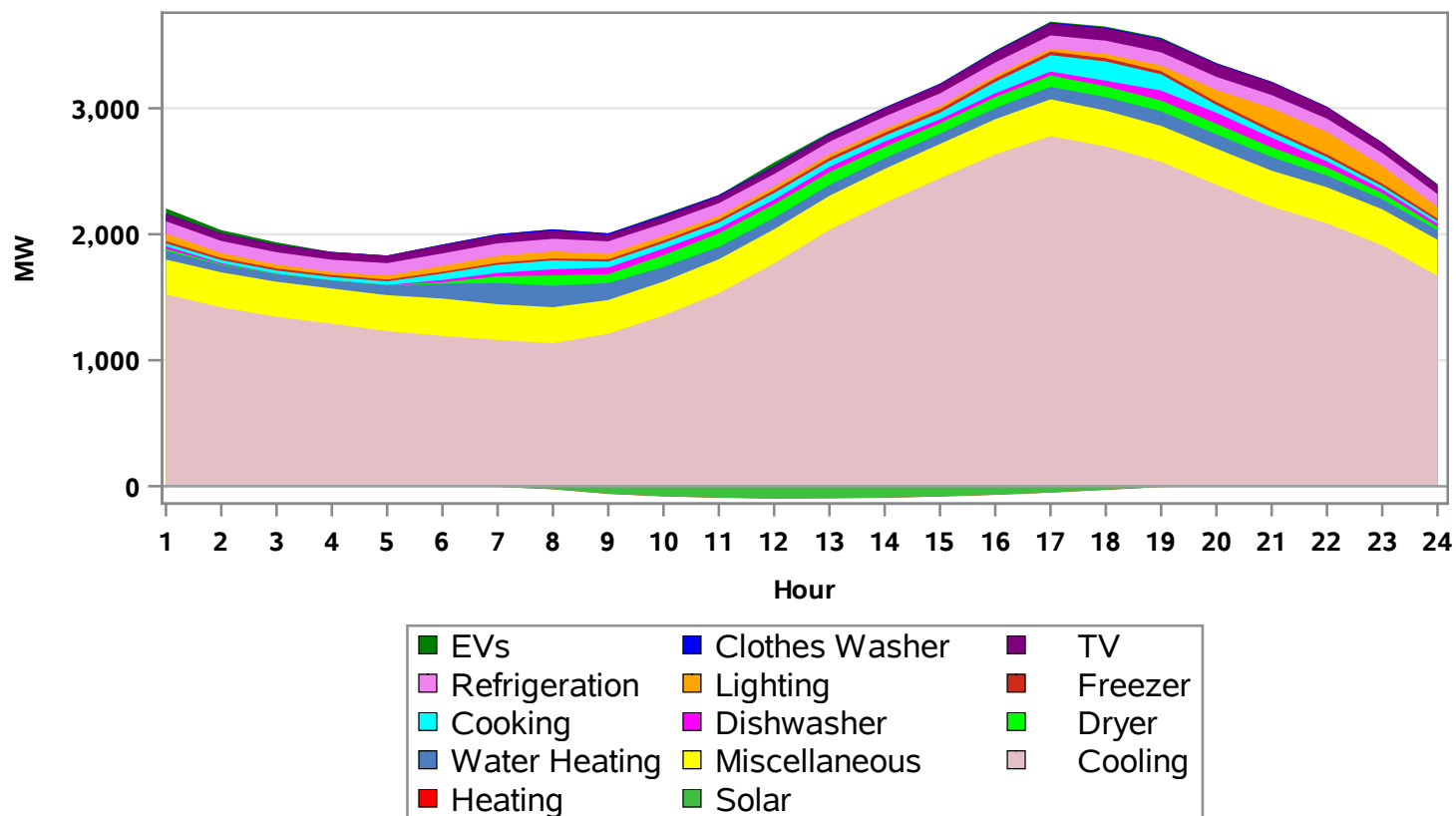
Summer 2023 System Peak Day: Residential End-Use Profiles (MW)



Summer 2023 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	0	1,501	63	21	101	19	21	0	14	60	68	-0	266	16
2	0	1,399	55	22	101	18	7	0	6	61	43	-0	266	9
3	0	1,324	54	22	102	18	2	0	3	61	35	-0	267	6
4	0	1,270	57	23	102	17	1	1	2	61	26	-0	268	0
5	0	1,211	71	26	103	16	1	2	1	59	35	-0	274	0
6	0	1,173	108	46	103	16	17	5	11	65	52	-0	284	0
7	0	1,145	154	59	104	16	24	9	53	65	62	-5	272	0
8	0	1,138	156	64	104	17	45	12	80	64	62	-15	273	0
9	0	1,246	123	42	104	19	49	10	69	54	48	-26	256	0
10	0	1,409	105	40	104	21	48	10	92	55	41	-35	257	3
11	0	1,593	89	42	104	23	37	9	106	57	34	-40	257	0
12	0	1,831	82	47	103	24	34	7	106	57	32	-43	259	11
13	0	2,090	79	43	103	26	39	6	100	60	32	-43	258	3
14	0	2,296	77	41	104	28	39	6	90	65	30	-40	259	0
15	0	2,480	75	48	105	29	29	6	81	71	27	-36	260	0
16	0	2,653	81	81	107	30	29	7	85	84	27	-30	267	1
17	0	2,778	91	118	110	30	29	7	87	94	26	-21	280	3
18	0	2,674	97	138	109	28	41	7	85	97	37	-12	273	3
19	0	2,534	105	117	109	27	74	7	84	101	50	-3	273	3
20	0	2,350	104	56	108	26	82	5	81	101	105	-1	273	1
21	0	2,177	99	40	108	25	72	5	75	101	186	-0	273	0
22	0	2,047	85	30	109	24	44	2	64	92	198	-0	273	0
23	0	1,875	73	23	108	22	28	1	48	80	155	-0	274	0
24	0	1,637	69	20	107	20	24	0	26	70	101	-0	274	4

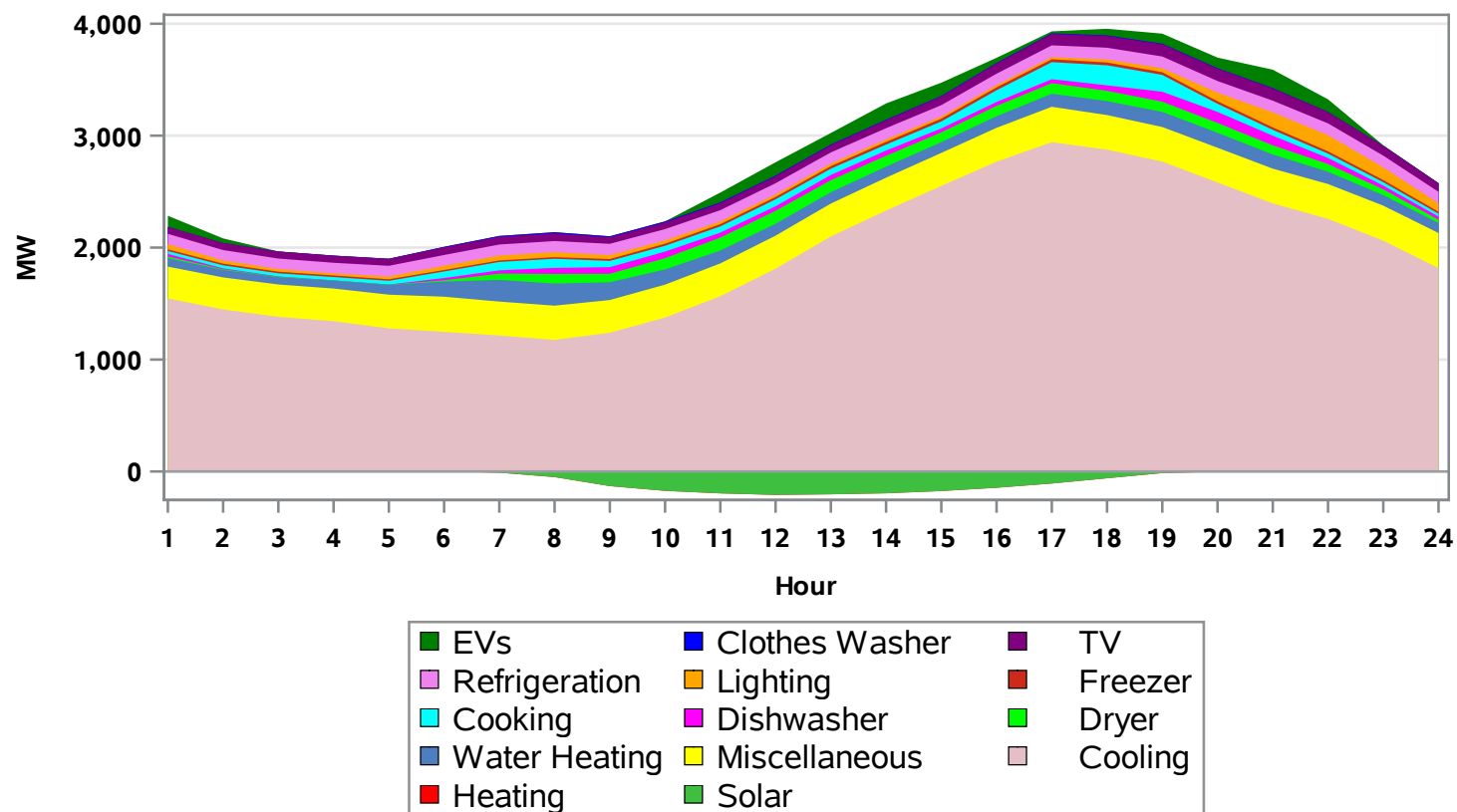
Summer 2028 System Peak Day: Residential End-Use Profiles (MW)



Summer 2028 System Peak Day: Residential End-Use Profiles (MW)

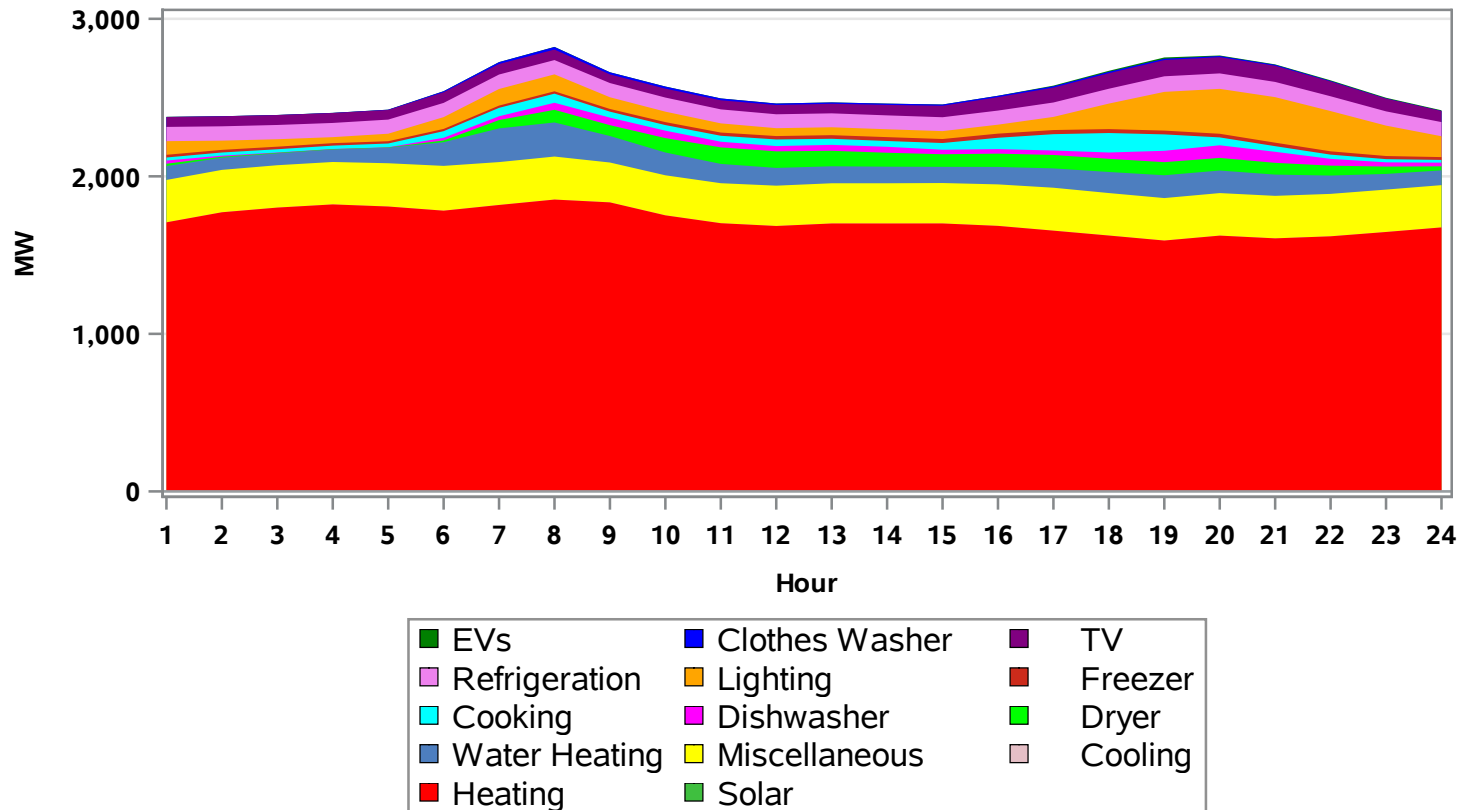
Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	0	1,523	69	23	97	17	22	0	14	60	61	-0	277	42
2	0	1,420	60	24	97	17	7	0	6	61	38	-0	277	25
3	0	1,345	59	25	98	17	2	0	3	61	31	-0	278	17
4	0	1,290	62	26	98	16	1	1	2	61	24	-0	279	0
5	0	1,231	78	29	99	15	1	1	1	59	31	-0	286	0
6	0	1,193	118	51	99	15	19	4	11	66	47	-0	296	0
7	0	1,166	168	65	100	15	26	8	54	65	56	-5	284	0
8	0	1,159	171	71	100	16	49	11	82	65	56	-24	285	0
9	0	1,271	134	47	100	18	53	9	71	54	43	-61	268	0
10	0	1,436	116	44	100	20	52	9	94	56	37	-81	269	8
11	0	1,624	98	47	100	21	40	8	108	57	31	-91	269	0
12	0	1,866	90	52	99	23	37	6	109	58	28	-98	271	29
13	0	2,130	86	48	99	24	41	6	102	60	28	-95	270	7
14	0	2,340	84	45	100	26	41	5	92	66	27	-91	270	0
15	0	2,527	82	53	101	27	31	5	83	72	25	-82	272	0
16	0	2,703	89	89	103	28	31	6	87	84	24	-68	279	4
17	0	2,830	100	130	105	28	32	6	89	95	24	-50	292	8
18	0	2,725	107	153	105	26	44	6	86	98	34	-28	285	8
19	0	2,582	116	129	105	25	79	6	86	102	45	-7	285	9
20	0	2,395	115	62	104	24	88	5	83	102	95	-1	286	3
21	0	2,219	108	44	104	23	77	4	77	102	167	-0	286	0
22	0	2,087	93	34	105	22	47	2	65	93	178	-0	286	0
23	0	1,912	80	25	104	21	30	1	49	81	140	-0	287	0
24	0	1,670	76	22	103	19	26	0	27	71	91	-0	286	10

Summer 2037 System Peak Day: Residential End-Use Profiles (MW)



Summer 2037 System Peak Day: Residential End-Use Profiles (MW)

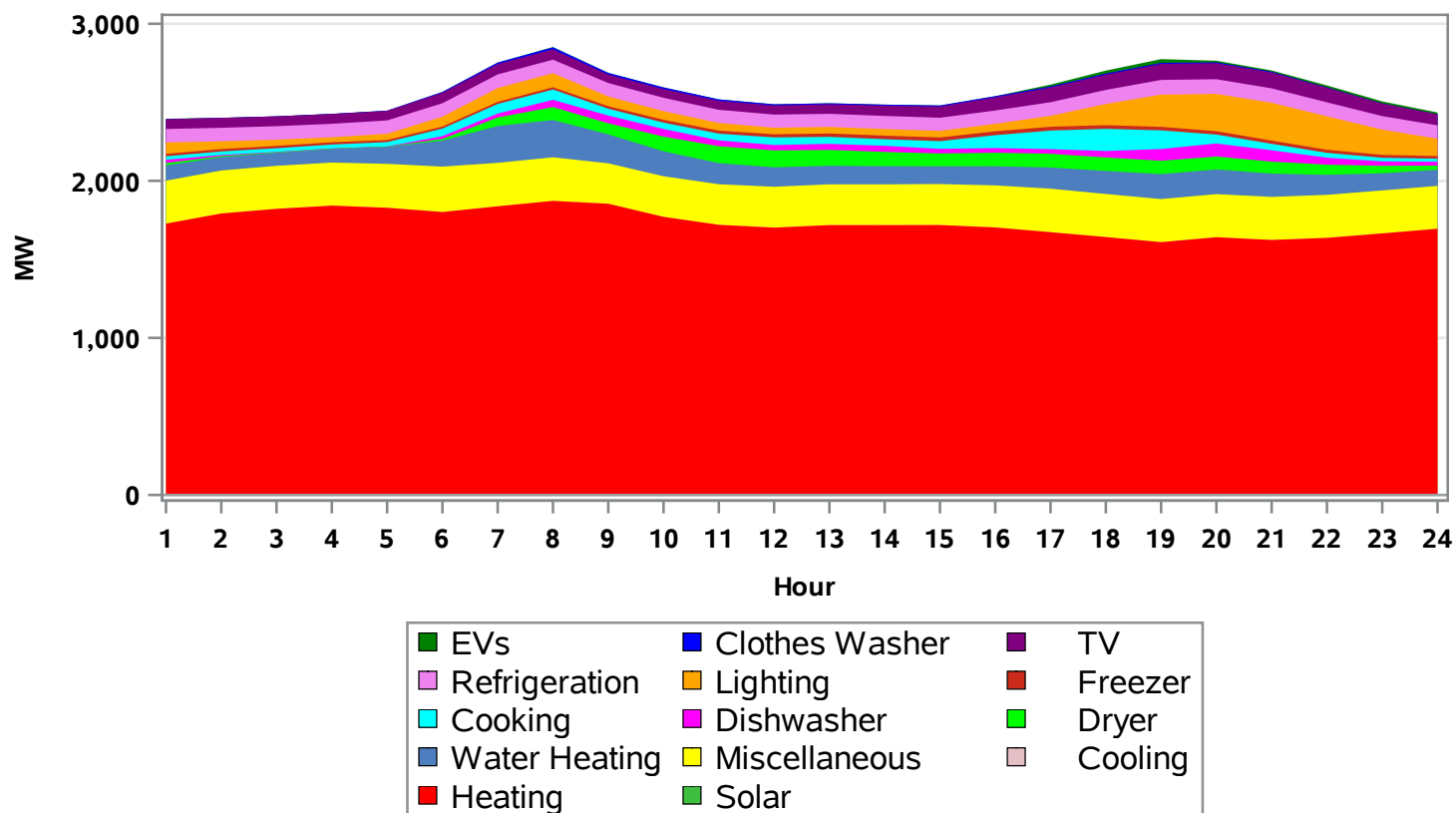
Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	0	1,546	76	26	92	15	23	0	14	62	46	-0	284	99
2	0	1,447	67	27	92	15	8	0	6	63	29	-0	286	41
3	0	1,382	66	28	94	15	2	0	3	63	24	-0	289	0
4	0	1,342	70	29	95	14	1	0	2	64	18	-0	292	0
5	0	1,279	88	33	96	14	1	1	1	62	25	-0	301	0
6	0	1,248	135	59	97	13	20	4	11	69	37	-0	314	0
7	0	1,225	194	75	98	14	29	7	56	69	44	-11	303	0
8	0	1,225	197	82	99	14	54	10	86	69	45	-50	306	0
9	0	1,370	158	56	101	17	59	8	76	59	35	-131	293	0
10	0	1,548	136	52	101	18	58	8	101	61	30	-173	294	0
11	0	1,761	115	55	100	20	44	7	116	62	25	-196	293	88
12	0	2,021	106	62	100	21	41	6	116	63	23	-209	295	119
13	0	2,303	101	56	100	23	46	5	108	65	23	-204	294	103
14	0	2,526	99	53	101	24	46	5	97	71	22	-195	294	145
15	0	2,726	96	62	101	25	35	5	88	78	20	-175	295	118
16	0	2,913	104	105	103	26	35	5	92	91	19	-145	302	45
17	0	3,049	116	152	105	26	35	5	95	102	19	-108	317	17
18	0	2,936	125	179	105	24	49	5	92	105	27	-61	309	59
19	0	2,782	135	151	105	23	89	5	91	110	36	-14	309	89
20	0	2,584	134	73	104	22	98	4	88	110	76	-2	310	94
21	0	2,395	126	52	104	22	86	4	82	110	135	-0	310	163
22	0	2,257	109	39	105	21	53	2	69	101	144	-0	311	112
23	0	2,062	94	30	105	20	33	1	52	88	113	-0	313	4
24	0	1,817	89	26	104	18	29	0	29	77	74	-0	313	0

Winter 2018 System Peak Day: Residential End-Use Profiles (MW)

Winter 2018 System Peak Day: Residential End-Use Profiles (MW)

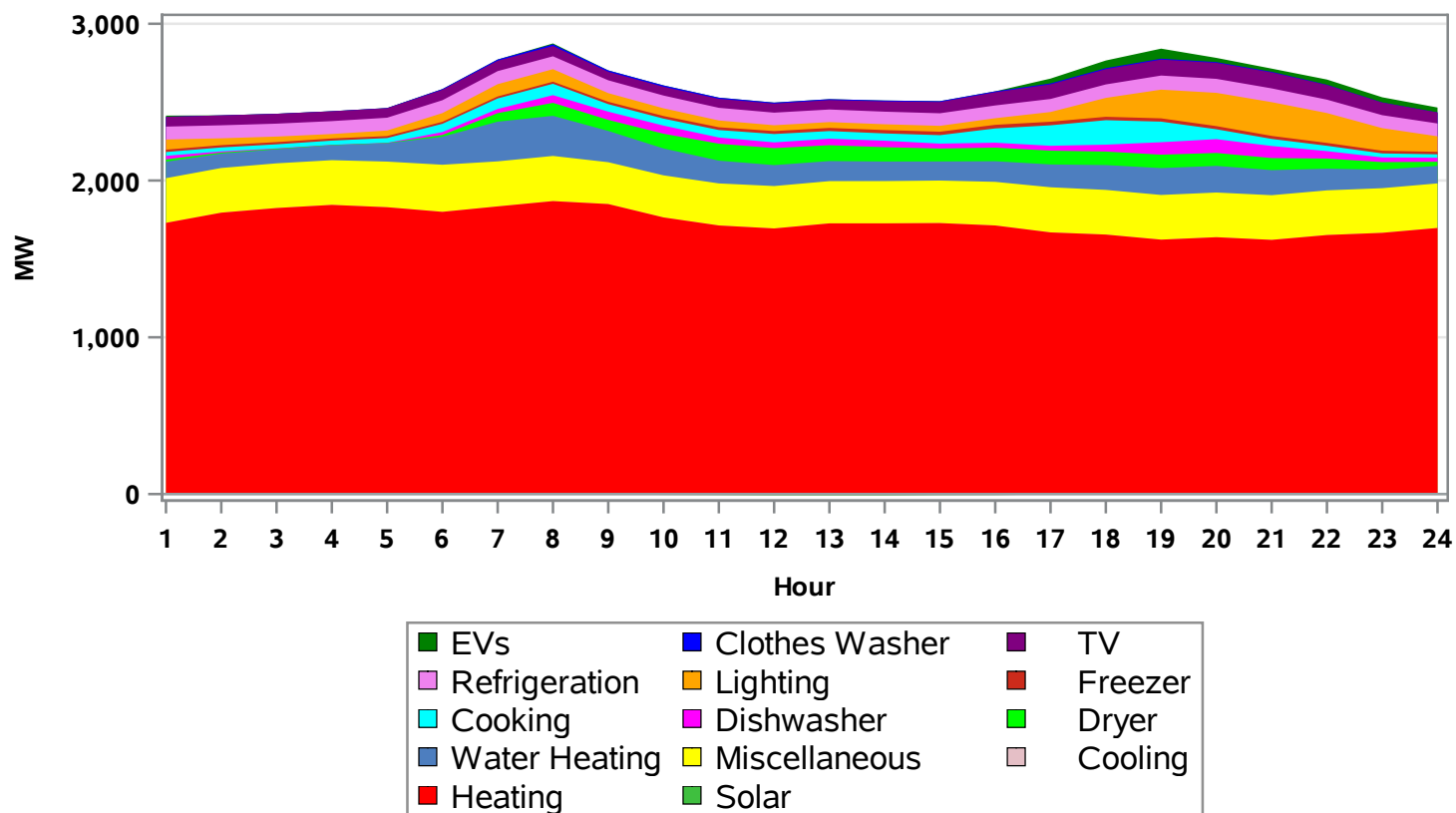
Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	1,708	0	88	19	90	17	21	0	14	63	87	-0	269	1
2	1,772	0	77	20	91	17	7	0	6	64	59	-0	269	0
3	1,802	0	75	20	91	16	2	0	3	63	47	-0	269	0
4	1,822	0	80	21	90	16	1	1	2	63	38	-0	269	0
5	1,808	0	99	24	90	15	1	2	1	61	48	-0	275	0
6	1,782	0	151	42	90	14	17	7	11	67	75	-0	284	0
7	1,818	0	214	53	92	14	24	12	53	67	105	-0	272	0
8	1,853	0	216	58	91	15	45	16	80	66	108	-0	273	1
9	1,835	0	168	38	90	17	48	13	69	55	74	-0	253	0
10	1,754	0	145	35	90	19	47	13	91	56	66	-1	254	0
11	1,704	0	122	38	89	20	36	12	105	58	58	-2	254	0
12	1,687	0	113	42	88	21	33	10	105	59	50	-2	256	0
13	1,703	0	108	39	88	23	38	9	98	61	50	-2	255	0
14	1,703	0	105	37	88	25	38	8	89	66	50	-2	255	0
15	1,702	0	103	43	88	25	29	8	80	73	50	-2	257	0
16	1,687	0	111	72	90	26	29	9	84	85	57	-1	263	0
17	1,656	0	123	104	92	26	28	9	85	94	83	-1	272	4
18	1,624	0	134	124	94	25	40	9	84	99	162	-0	270	6
19	1,592	0	145	104	99	24	72	9	83	103	246	-0	270	8
20	1,624	0	143	50	98	23	80	7	80	103	285	-0	270	3
21	1,606	0	135	36	97	22	70	6	75	103	289	-0	270	3
22	1,619	0	116	27	94	21	43	3	63	94	255	-0	269	4
23	1,647	0	99	20	91	20	27	1	47	81	193	-0	269	4
24	1,676	0	94	17	90	18	23	0	26	71	132	-0	268	4

Winter 2023 System Peak Day: Residential End-Use Profiles (MW)



Winter 2023 System Peak Day: Residential End-Use Profiles (MW)

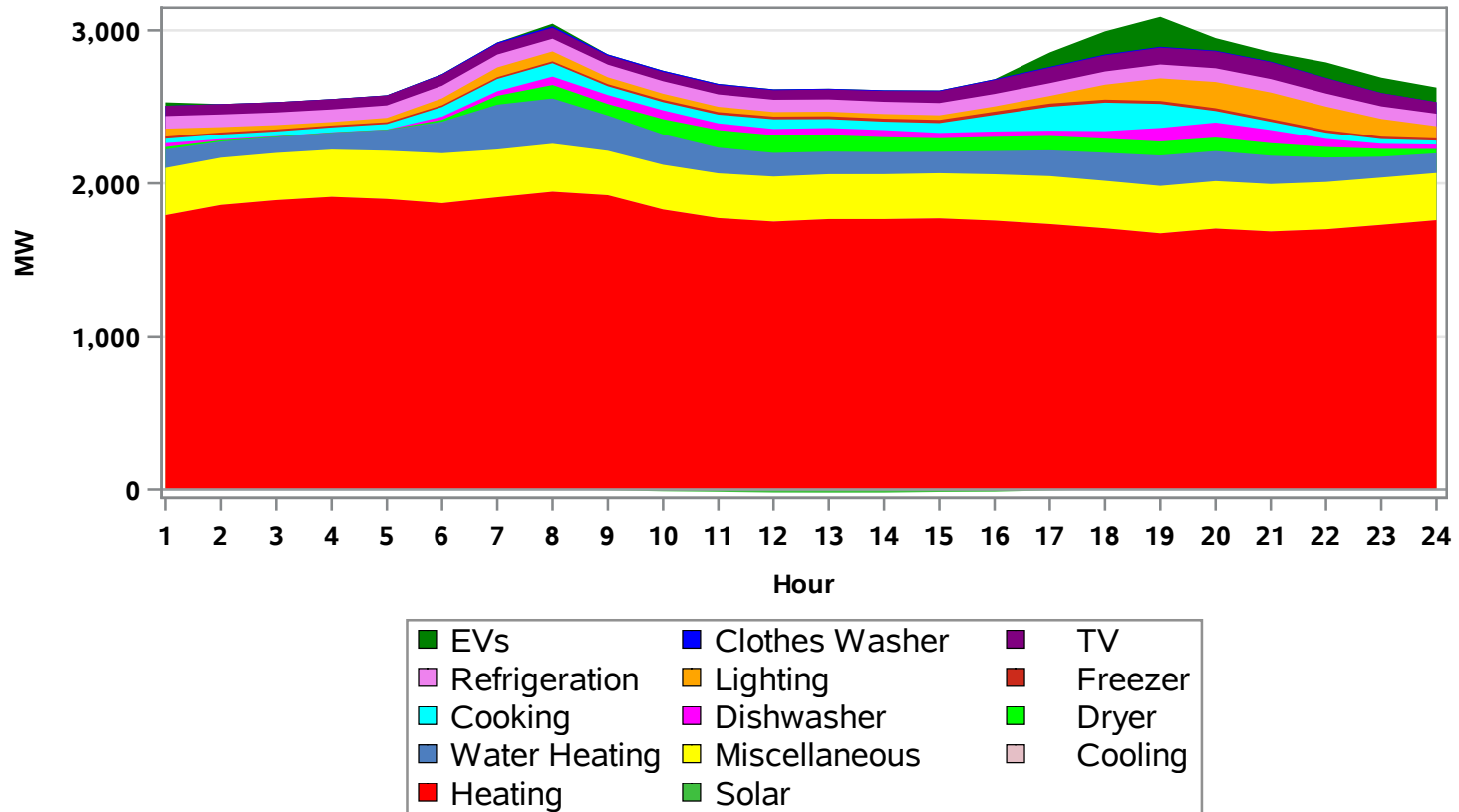
Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	1,727	0	97	22	86	16	21	0	15	62	72	-0	274	3
2	1,792	0	85	23	86	15	7	0	7	63	49	-0	274	0
3	1,822	0	83	23	86	15	2	0	3	62	39	-0	274	0
4	1,842	0	88	24	86	15	1	1	2	63	32	-0	274	0
5	1,828	0	109	27	85	14	1	2	1	60	40	-0	280	0
6	1,801	0	165	48	86	13	18	5	11	67	63	-0	289	0
7	1,838	0	235	61	87	13	25	9	54	66	88	-0	277	0
8	1,872	0	237	66	86	14	46	13	82	66	90	-0	278	2
9	1,855	0	185	43	86	16	50	10	70	54	62	-1	257	0
10	1,772	0	159	40	85	18	49	10	94	56	55	-2	259	0
11	1,722	0	134	43	84	19	37	9	108	57	49	-3	258	0
12	1,705	0	124	48	84	20	34	7	108	58	42	-3	260	0
13	1,722	0	118	44	84	22	39	7	101	60	42	-3	259	0
14	1,721	0	116	42	84	23	39	6	91	66	42	-3	260	0
15	1,721	0	113	49	84	24	29	6	82	72	42	-3	261	0
16	1,705	0	122	82	85	24	30	7	86	84	47	-2	268	0
17	1,674	0	135	118	87	24	29	7	87	93	69	-1	277	11
18	1,642	0	147	141	90	23	41	7	86	98	135	-0	274	18
19	1,610	0	159	119	94	22	75	7	85	102	205	-0	274	24
20	1,641	0	157	57	93	21	83	6	82	102	238	-0	274	10
21	1,623	0	148	41	92	21	72	5	76	102	241	-0	274	8
22	1,637	0	128	31	89	20	44	2	65	93	213	-0	274	12
23	1,665	0	109	23	86	18	28	1	48	80	161	-0	274	12
24	1,695	0	103	20	85	17	24	0	26	70	111	-0	273	12

Winter 2028 System Peak Day: Residential End-Use Profiles (MW)

Winter 2028 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	1,730	0	105	24	82	15	23	0	15	62	65	-0	285	7
2	1,795	0	92	25	83	14	7	0	7	63	44	-0	285	0
3	1,825	0	90	26	83	14	2	0	4	63	35	-0	285	0
4	1,845	0	95	27	82	14	1	1	2	63	28	-0	285	0
5	1,830	0	118	30	82	13	1	1	1	61	35	-0	291	0
6	1,800	0	178	53	82	12	19	4	11	67	56	-0	301	0
7	1,835	0	253	67	83	12	26	8	55	66	78	-0	287	0
8	1,869	0	256	73	82	13	49	11	83	66	80	-0	288	6
9	1,852	0	199	48	82	15	53	9	71	54	55	-2	267	0
10	1,770	0	171	45	81	16	52	9	94	56	49	-5	268	0
11	1,720	0	145	48	81	18	39	8	108	57	43	-7	268	0
12	1,703	0	134	53	80	19	37	6	108	58	37	-9	270	0
13	1,736	0	128	49	80	20	41	6	101	60	37	-9	270	0
14	1,736	0	125	46	80	21	41	5	91	66	37	-9	270	0
15	1,736	0	122	54	80	22	31	5	82	72	37	-7	271	0
16	1,720	0	131	91	81	23	31	6	87	84	42	-6	278	0
17	1,671	0	146	131	83	23	31	6	88	93	62	-2	288	31
18	1,655	0	158	156	86	22	44	6	86	98	121	-0	285	49
19	1,623	0	172	131	90	21	79	6	86	102	183	-0	285	64
20	1,638	0	170	63	89	20	88	5	83	102	212	-0	285	27
21	1,621	0	160	45	88	19	77	4	77	102	215	-0	285	20
22	1,652	0	138	34	85	18	47	2	65	93	191	-0	285	33
23	1,666	0	118	26	82	17	30	1	48	80	144	-0	285	33
24	1,697	0	112	22	82	16	25	0	27	70	99	-0	284	31

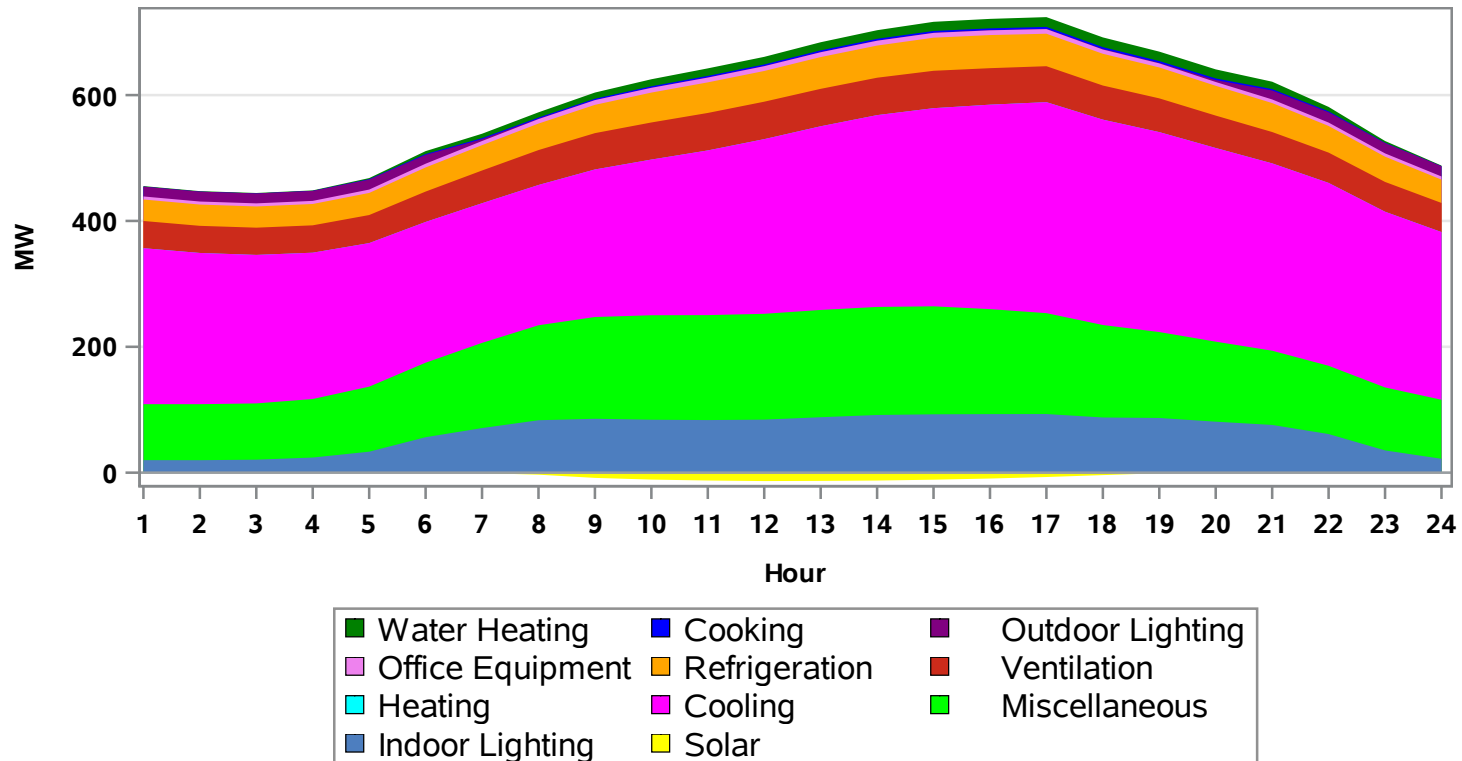
Winter 2037 System Peak Day: Residential End-Use Profiles (MW)



Winter 2037 System Peak Day: Residential End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Cooking	Refrigeration	Freezer	Dishwasher	Clothes Washer	Dryer	TV	Lighting	Solar	Miscellaneous	EVs
1	1,792	0	121	29	82	14	25	0	16	67	52	-0	309	23
2	1,859	0	106	30	83	13	8	0	7	68	35	-0	309	0
3	1,890	0	104	31	83	13	3	0	4	67	28	-0	309	0
4	1,912	0	110	32	82	13	2	0	2	68	23	-0	309	0
5	1,898	0	136	36	82	12	1	1	2	65	29	-0	316	0
6	1,871	0	207	63	82	11	21	4	12	72	45	-0	327	0
7	1,909	0	294	80	84	12	30	7	58	72	63	-0	313	0
8	1,945	0	297	87	83	12	55	10	88	71	65	-0	314	17
9	1,927	0	231	57	82	14	59	8	75	59	45	-4	291	0
10	1,841	0	199	54	82	15	58	8	100	60	40	-12	292	0
11	1,789	0	168	57	81	17	44	7	115	62	35	-15	292	0
12	1,771	0	155	64	81	17	41	6	115	63	30	-20	294	0
13	1,788	0	148	58	81	19	46	5	108	65	30	-21	293	0
14	1,787	0	145	55	80	20	46	5	97	71	30	-21	293	0
15	1,787	0	141	64	80	21	35	5	88	78	30	-16	295	0
16	1,771	0	152	109	82	21	35	5	93	91	34	-14	302	0
17	1,740	0	169	156	84	21	35	5	94	101	50	-5	313	94
18	1,707	0	184	187	86	20	49	5	92	106	98	-1	310	151
19	1,673	0	199	157	90	20	89	5	91	110	148	-0	310	196
20	1,705	0	197	76	89	19	98	4	88	110	172	-0	310	82
21	1,686	0	185	54	88	18	86	4	82	110	174	-0	310	62
22	1,700	0	160	41	86	17	53	2	69	100	154	-0	309	101
23	1,729	0	137	31	83	16	33	1	51	87	116	-0	309	101
24	1,760	0	129	26	82	14	28	0	28	76	80	-0	308	96

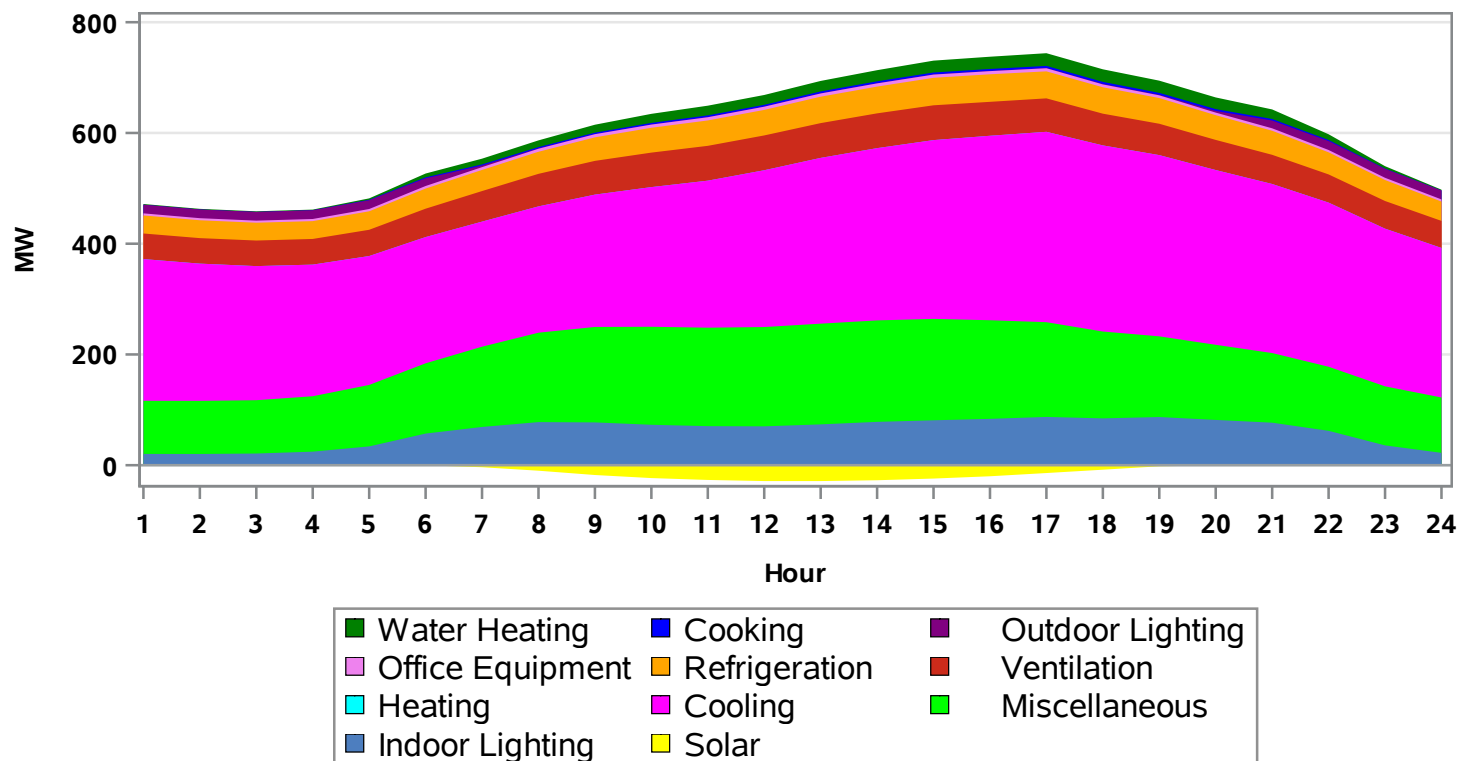
Summer 2018 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2018 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	248	1	43	0	34	16	20	5	-0	89
2	0	240	1	43	0	34	16	20	5	-0	89
3	0	236	1	43	0	34	16	21	5	-0	89
4	0	233	1	43	0	34	16	24	5	-0	93
5	0	228	2	45	1	35	16	33	5	-0	103
6	0	224	5	48	1	38	14	56	6	-0	118
7	0	222	7	52	2	40	3	72	7	-1	135
8	0	223	8	55	2	42	0	87	7	-3	151
9	0	234	10	58	2	45	0	94	8	-8	162
10	0	247	11	59	2	48	0	95	8	-11	166
11	0	262	12	60	2	49	0	96	8	-12	167
12	0	278	12	59	3	49	0	98	8	-13	168
13	0	292	13	59	3	51	0	101	8	-13	170
14	0	305	14	59	3	51	0	104	8	-12	172
15	0	315	15	59	3	53	0	104	8	-11	172
16	0	325	15	58	3	53	0	102	8	-9	167
17	0	335	16	57	3	52	0	100	7	-7	160
18	0	326	15	54	3	50	1	92	7	-4	147
19	0	318	15	54	3	49	1	88	6	-1	137
20	0	308	14	51	3	47	3	81	6	-0	127
21	0	298	12	50	2	46	14	76	6	-0	118
22	0	291	7	48	2	42	16	61	5	-0	108
23	0	279	3	47	0	40	16	35	5	-0	100
24	0	266	1	46	0	37	16	22	5	-0	94

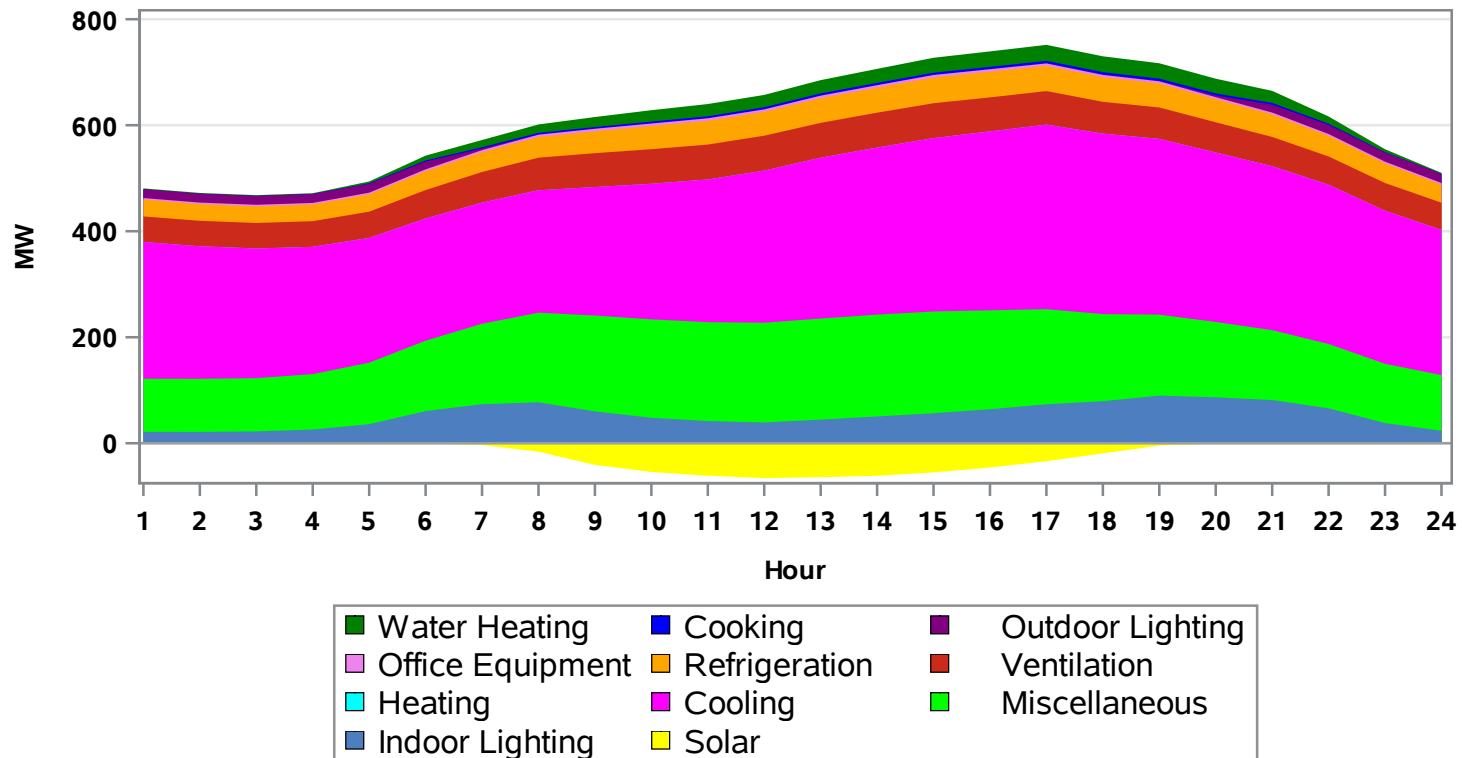
Summer 2023 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2023 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	256	1	46	0	33	16	20	4	-0	96
2	0	248	1	46	0	32	16	20	4	-0	96
3	0	242	1	46	0	32	16	21	4	-0	96
4	0	238	1	46	0	32	16	25	4	-0	100
5	0	233	3	47	1	33	16	34	4	-0	111
6	0	228	7	51	2	36	14	57	5	-0	127
7	0	226	10	55	2	38	3	73	5	-4	145
8	0	228	12	59	2	40	0	88	5	-10	161
9	0	239	14	61	3	42	0	95	6	-18	172
10	0	252	16	62	3	45	0	96	6	-23	177
11	0	266	18	63	3	46	0	97	6	-27	178
12	0	283	18	63	3	46	0	99	6	-29	179
13	0	299	19	63	3	48	0	102	6	-29	182
14	0	311	20	63	4	48	0	105	6	-27	183
15	0	323	21	63	4	50	0	105	6	-24	183
16	0	333	22	61	4	50	0	104	6	-20	178
17	0	344	23	60	4	49	0	101	6	-14	171
18	0	336	23	57	4	48	1	93	5	-8	157
19	0	327	22	57	4	46	1	89	5	-2	146
20	0	316	21	54	3	45	3	82	5	-0	136
21	0	305	17	53	3	43	14	77	4	-0	126
22	0	296	10	51	2	40	16	62	4	-0	116
23	0	285	4	50	1	38	16	36	4	-0	107
24	0	270	1	49	0	35	16	22	4	-0	100

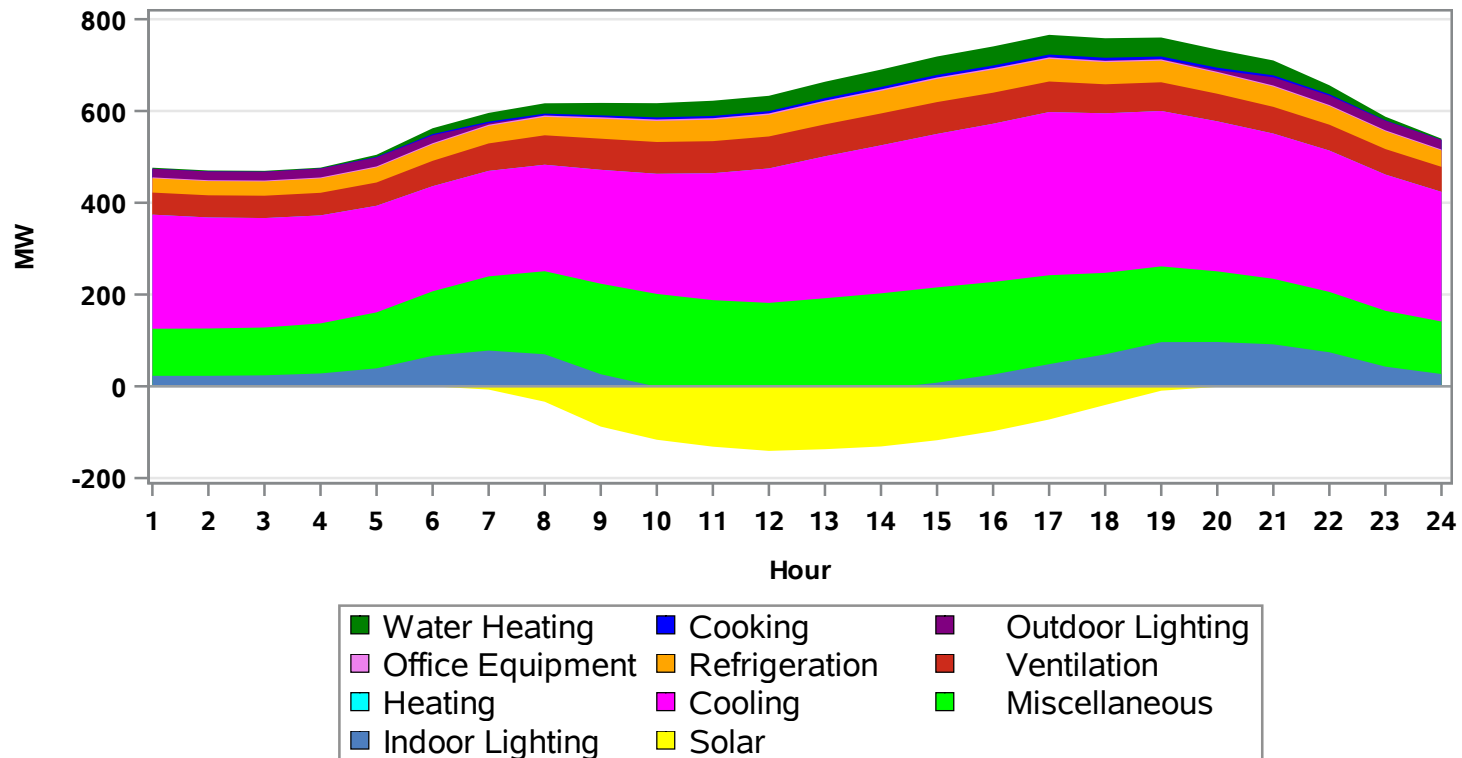
Summer 2028 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2028 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	258	2	48	0	32	17	22	3	-0	100
2	0	250	2	48	0	32	17	21	3	-0	100
3	0	245	1	48	0	31	17	22	3	-0	101
4	0	240	1	48	0	32	17	26	3	-0	105
5	0	235	3	50	1	33	17	36	3	-0	116
6	0	231	9	54	2	36	15	61	4	-0	133
7	0	229	14	58	2	37	3	77	4	-3	152
8	0	231	16	61	3	39	1	93	4	-16	169
9	0	242	19	64	3	42	0	101	4	-41	181
10	0	256	22	65	4	44	0	102	4	-54	186
11	0	269	23	66	4	45	0	103	4	-61	187
12	0	287	23	66	4	45	0	105	5	-66	188
13	0	303	25	66	4	47	0	109	5	-64	191
14	0	315	26	66	4	47	0	112	5	-61	192
15	0	327	28	66	4	49	0	112	5	-55	192
16	0	338	29	64	4	49	0	110	4	-46	187
17	0	348	30	63	5	48	0	108	4	-34	179
18	0	341	30	60	5	47	1	98	4	-19	164
19	0	332	29	59	4	45	1	94	4	-5	153
20	0	320	28	57	4	44	3	87	4	-1	142
21	0	309	23	55	3	43	15	82	3	-0	132
22	0	301	14	53	2	39	17	66	3	-0	121
23	0	289	6	52	1	37	17	38	3	-0	112
24	0	274	2	51	0	34	17	24	3	-0	105

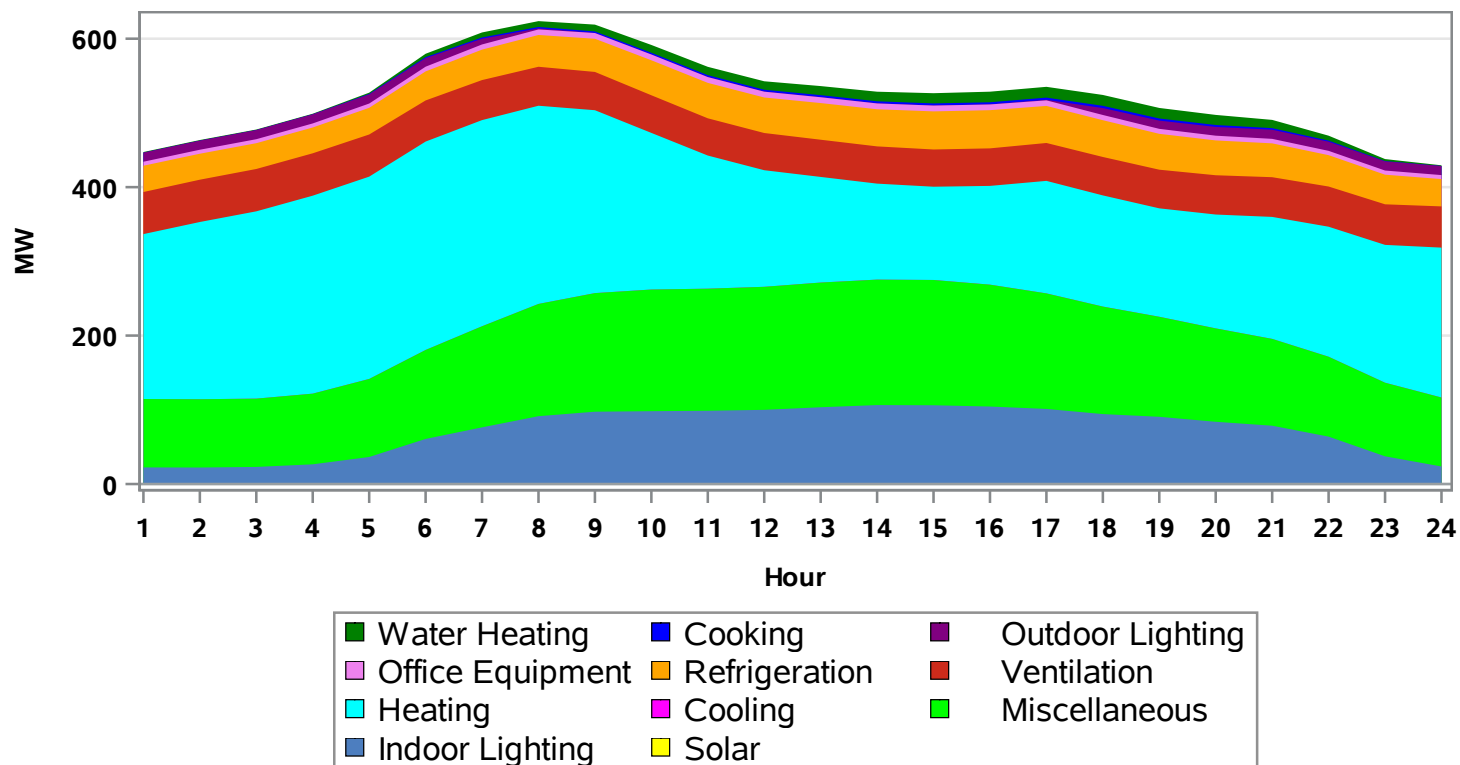
Summer 2037 System Peak Day: Commercial SGS End-Use Profiles (MW)



Summer 2037 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	249	2	48	0	31	19	23	2	-0	103
2	0	242	2	48	0	31	19	23	2	-0	103
3	0	239	2	49	0	31	19	24	2	-0	104
4	0	235	2	49	0	31	19	28	2	-0	109
5	0	232	5	51	1	33	20	39	2	-0	122
6	0	229	13	55	3	36	17	67	2	-0	141
7	0	230	19	60	3	38	4	85	3	-7	162
8	0	232	22	64	4	40	1	103	3	-34	181
9	0	248	27	68	4	43	0	114	3	-88	197
10	0	262	31	69	5	46	0	116	3	-117	202
11	0	277	33	70	5	47	0	116	3	-132	203
12	0	293	33	70	5	47	0	118	3	-141	204
13	0	309	36	70	5	48	0	122	3	-137	207
14	0	323	38	69	5	49	0	126	3	-131	208
15	0	334	40	69	5	50	0	125	3	-118	208
16	0	345	41	68	6	50	0	123	3	-98	202
17	0	356	43	67	6	49	0	121	3	-72	194
18	0	348	43	63	6	48	1	110	3	-41	178
19	0	339	41	63	6	47	1	106	3	-10	165
20	0	327	40	60	5	45	4	98	2	-1	154
21	0	316	32	58	4	44	18	92	2	-0	143
22	0	308	19	56	3	41	21	74	2	-0	132
23	0	297	8	56	1	39	21	43	2	-0	122
24	0	282	3	54	0	36	21	27	2	-0	115

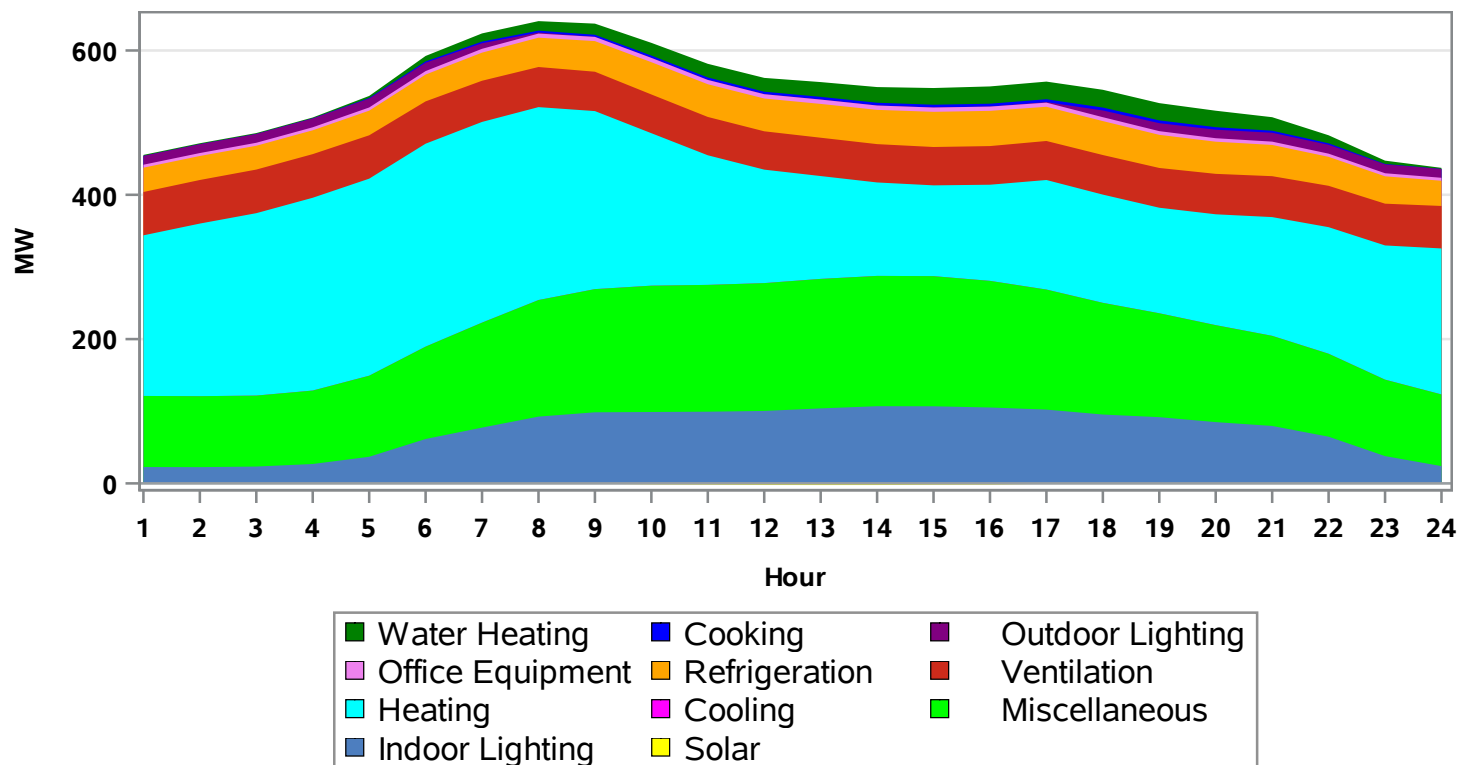
Winter 2018 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2018 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	222	0	1	57	0	35	12	22	5	0	92
2	239	0	1	57	0	35	12	22	5	0	92
3	252	0	1	57	0	35	12	23	5	0	92
4	267	0	1	57	0	35	12	27	5	0	95
5	273	0	2	57	1	36	12	36	6	0	105
6	281	0	5	55	1	39	12	61	6	0	120
7	278	0	7	54	2	41	8	76	7	0	136
8	267	0	8	53	2	43	1	91	7	-0	151
9	246	0	9	52	2	45	0	98	8	-0	160
10	211	0	11	51	2	47	0	99	8	-1	164
11	179	0	11	50	2	48	0	100	8	-1	165
12	157	0	11	50	2	48	0	101	8	-1	166
13	142	0	12	50	3	49	0	105	8	-1	168
14	129	0	13	50	3	50	0	108	8	-1	169
15	126	0	14	50	3	51	0	107	8	-1	169
16	133	0	14	51	3	51	0	105	8	-1	164
17	152	0	15	51	3	50	1	102	7	-0	156
18	150	0	15	52	3	50	9	94	7	-0	145
19	146	0	14	52	3	48	11	91	7	-0	135
20	153	0	14	53	3	47	12	84	6	0	126
21	164	0	11	54	2	46	12	79	6	0	117
22	175	0	7	54	1	42	12	64	6	0	108
23	186	0	3	55	0	40	12	37	6	0	99
24	202	0	1	56	0	37	12	24	5	0	93

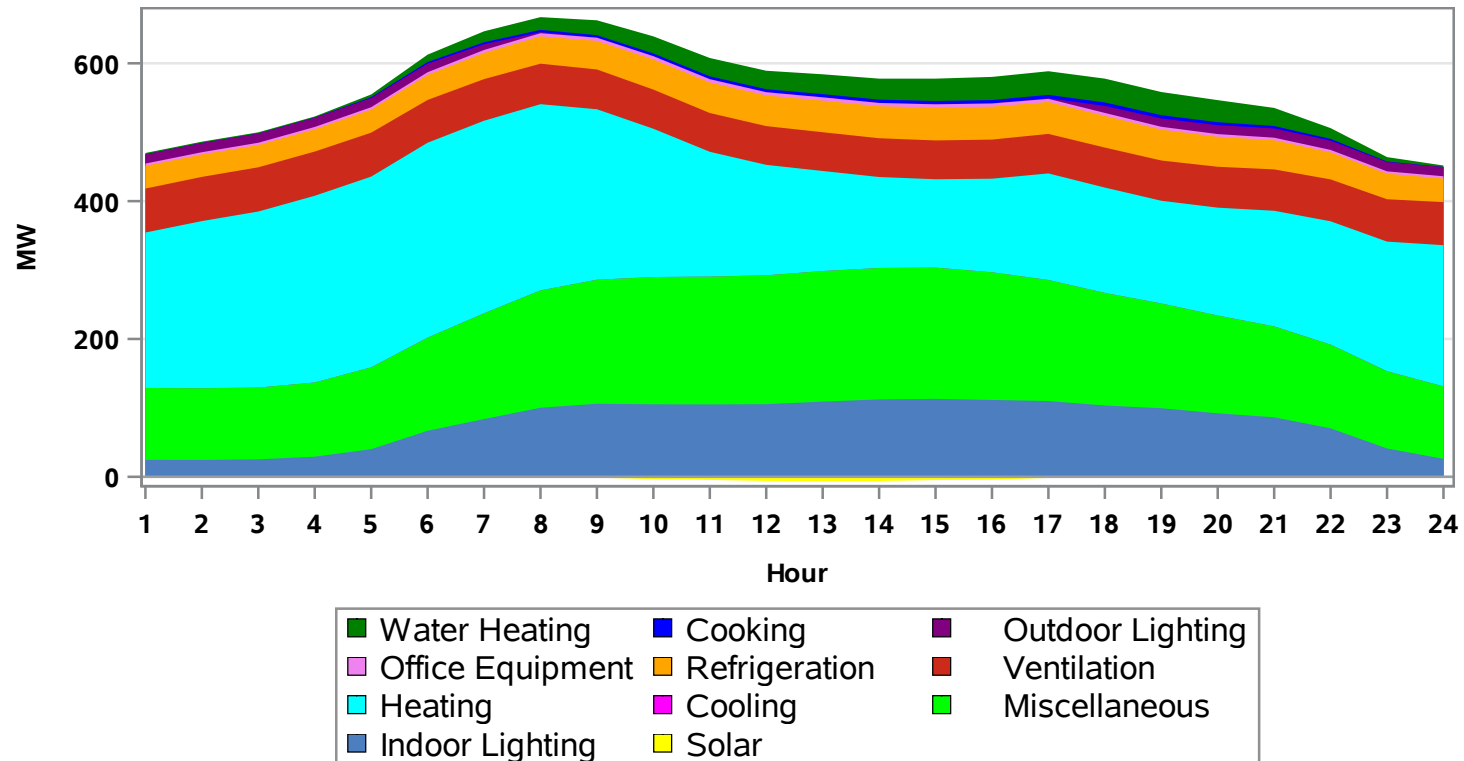
Winter 2023 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2023 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	223	0	1	60	0	34	12	23	4	-0	99
2	239	0	1	60	0	33	12	23	4	-0	98
3	253	0	1	60	0	33	12	23	4	-0	98
4	267	0	1	60	0	33	12	27	4	-0	102
5	273	0	3	60	1	34	12	37	4	-0	112
6	281	0	8	59	2	37	12	62	5	-0	128
7	278	0	11	57	2	39	8	77	5	-0	146
8	267	0	13	56	3	41	1	93	6	-0	162
9	247	0	15	55	3	42	0	99	6	-0	171
10	211	0	18	54	3	45	0	100	6	-1	175
11	180	0	19	53	3	45	0	101	6	-2	176
12	157	0	19	53	3	45	0	103	6	-2	177
13	143	0	21	53	4	47	0	106	6	-2	180
14	130	0	22	53	4	47	0	109	6	-2	181
15	126	0	23	53	4	49	0	109	6	-2	180
16	133	0	24	54	4	49	0	107	6	-2	175
17	152	0	24	54	4	47	1	103	6	-1	166
18	150	0	25	55	4	47	9	96	5	-0	155
19	146	0	24	55	4	46	11	92	5	-0	144
20	154	0	23	56	3	45	12	85	5	-0	134
21	165	0	19	57	3	43	12	80	5	-0	125
22	175	0	11	57	2	40	12	65	4	-0	115
23	186	0	5	58	1	38	12	38	4	-0	106
24	202	0	2	59	0	35	12	24	4	-0	99

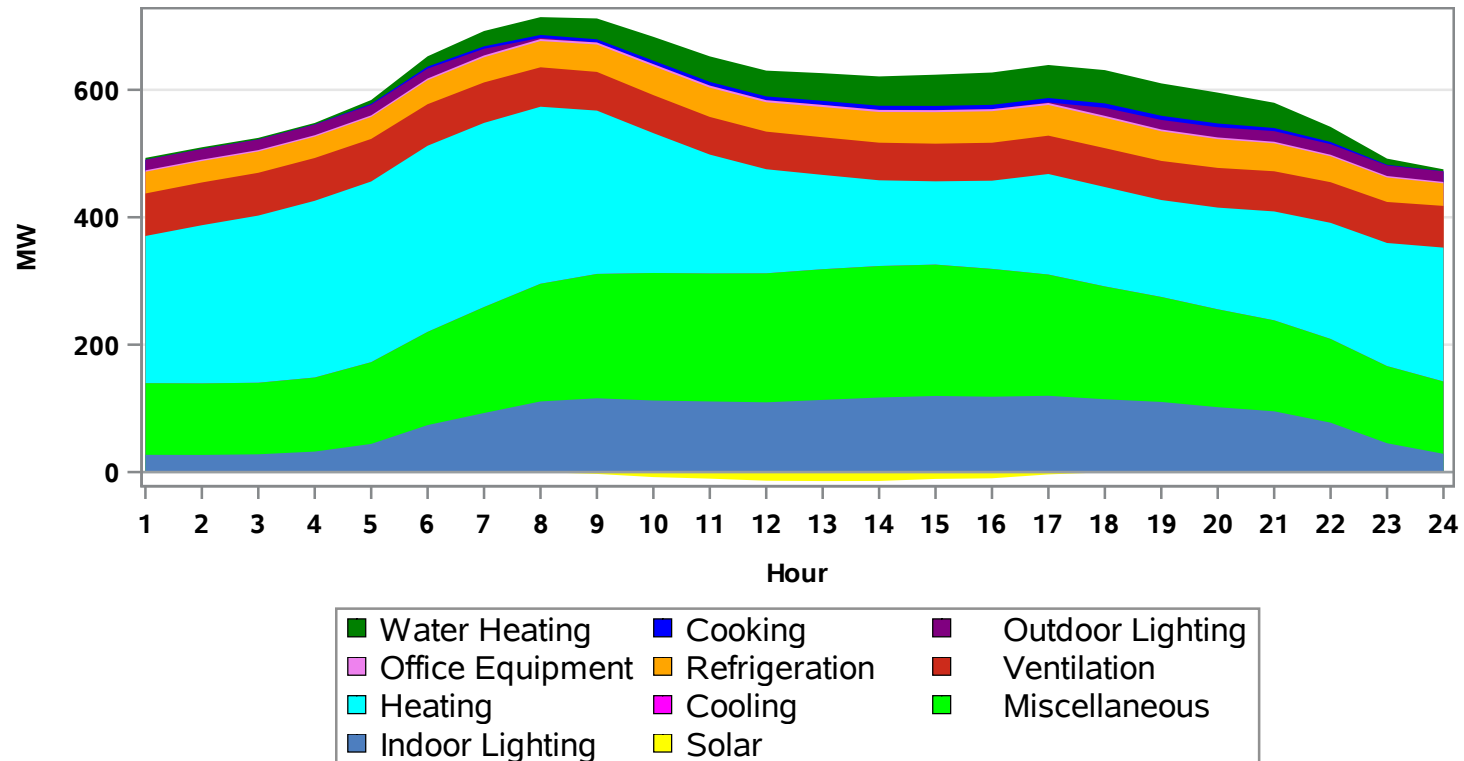
Winter 2028 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2028 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	226	0	2	64	0	33	13	25	3	-0	104
2	243	0	2	64	0	33	13	24	3	-0	104
3	256	0	2	64	0	32	13	25	3	-0	104
4	271	0	2	64	0	32	13	29	3	-0	108
5	277	0	4	64	1	33	13	40	4	-0	119
6	283	0	11	62	2	36	13	67	4	-0	135
7	279	0	16	60	3	38	8	84	4	-0	153
8	270	0	19	59	3	40	2	100	5	-0	170
9	247	0	22	58	4	41	0	107	5	-1	180
10	215	0	25	57	4	44	0	109	5	-3	185
11	181	0	26	56	4	44	0	110	5	-5	185
12	160	0	27	56	4	44	0	111	5	-6	187
13	145	0	29	56	5	46	0	115	5	-6	189
14	132	0	30	56	5	46	0	118	5	-6	191
15	128	0	32	56	5	48	0	118	5	-5	190
16	136	0	34	57	5	48	0	116	5	-4	185
17	155	0	34	57	5	46	1	112	5	-2	176
18	153	0	35	58	5	46	10	104	4	-0	163
19	149	0	34	58	5	45	12	100	4	-0	152
20	157	0	32	59	4	44	13	92	4	-0	142
21	168	0	26	60	4	42	13	86	4	-0	132
22	179	0	16	61	3	39	13	70	4	-0	122
23	188	0	6	61	1	37	13	41	3	-0	112
24	205	0	2	63	0	34	13	26	3	-0	105

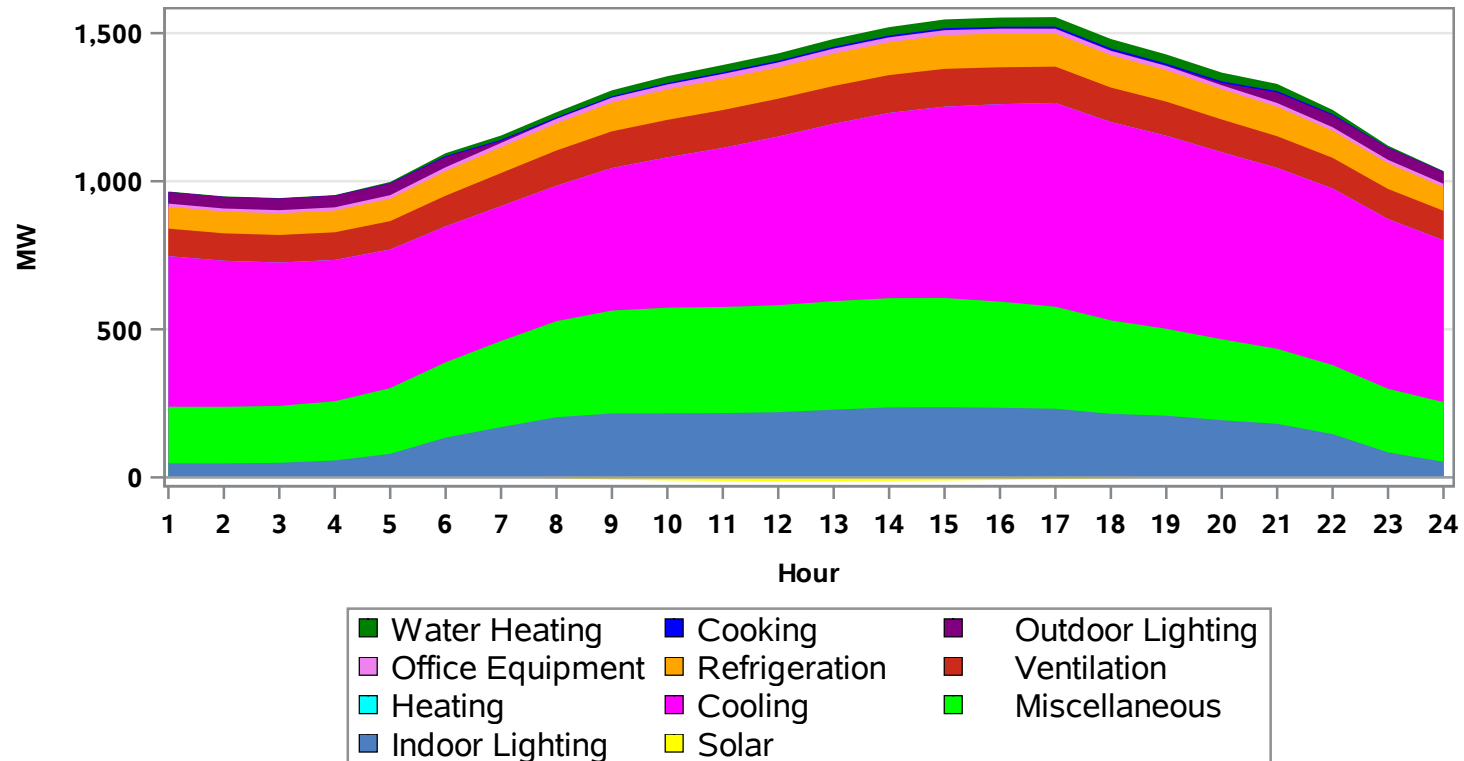
Winter 2037 System Peak Day: Commercial SGS End-Use Profiles (MW)



Winter 2037 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	231	0	3	67	0	34	17	27	2	-0	112
2	248	0	3	67	0	34	17	27	2	-0	112
3	262	0	3	67	0	33	17	28	2	-0	112
4	277	0	2	67	0	33	17	32	2	-0	116
5	283	0	6	67	2	35	17	44	2	-0	128
6	292	0	16	65	3	38	16	74	3	-0	146
7	289	0	24	64	4	40	10	93	3	-0	166
8	278	0	28	62	5	41	2	111	3	-0	185
9	256	0	33	61	5	43	0	119	3	-3	195
10	219	0	37	60	5	45	0	120	3	-8	200
11	187	0	40	59	6	46	0	121	3	-10	201
12	163	0	40	59	6	46	0	123	3	-14	202
13	148	0	43	59	6	48	0	127	3	-14	205
14	135	0	46	59	6	48	0	131	3	-14	206
15	131	0	49	59	6	49	0	130	3	-11	206
16	138	0	51	60	7	50	0	128	3	-10	201
17	158	0	52	60	7	48	1	123	3	-4	190
18	156	0	52	61	7	48	13	115	3	-0	177
19	152	0	51	61	7	47	15	110	3	-0	165
20	160	0	48	62	6	45	16	102	3	-0	154
21	171	0	40	63	5	44	17	95	3	-0	143
22	182	0	24	64	3	41	17	78	2	-0	131
23	193	0	10	64	1	38	17	45	2	-0	121
24	210	0	3	65	0	35	17	29	2	-0	114

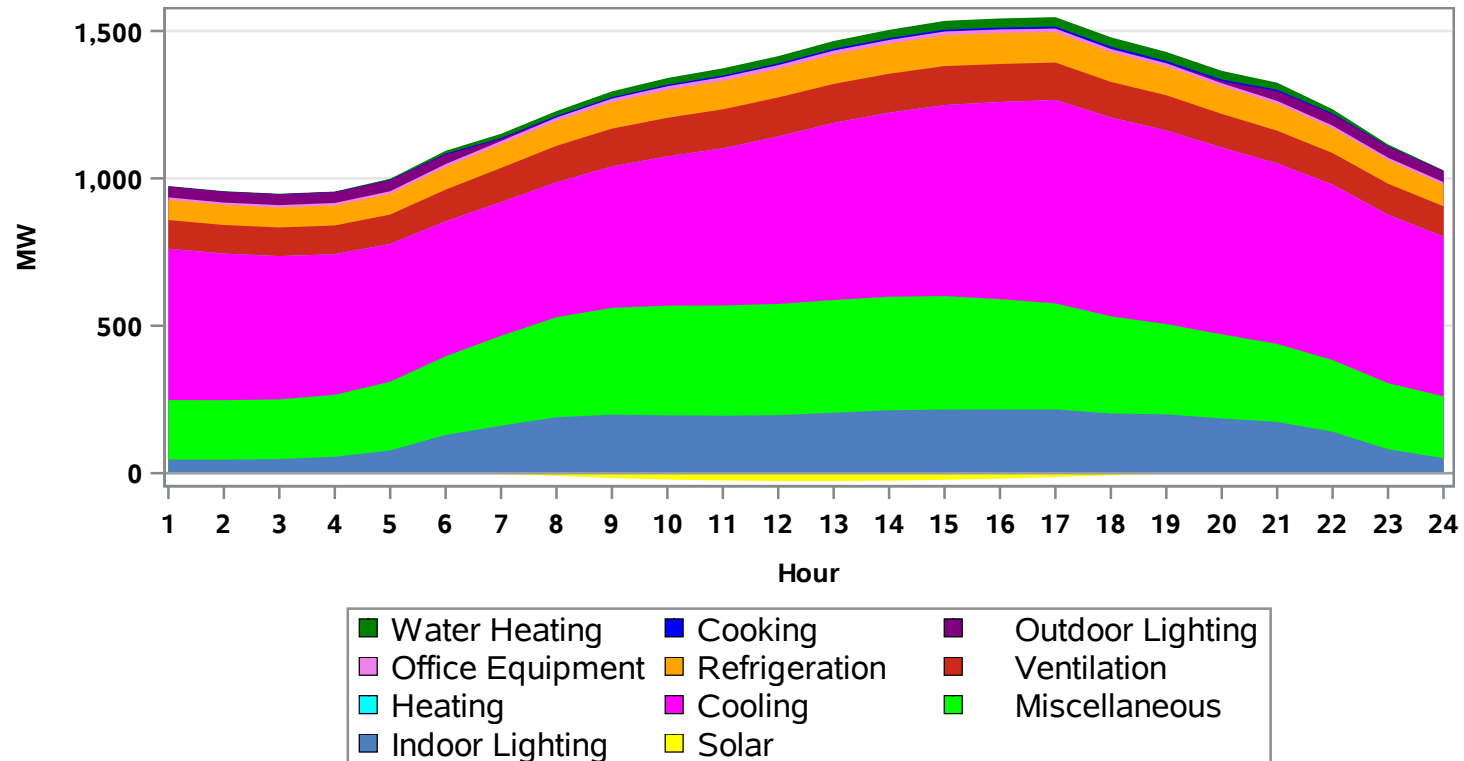
Summer 2018 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2018 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	509	2	93	0	74	39	47	11	-0	191
2	0	493	2	93	0	73	39	47	11	-0	191
3	0	484	2	93	0	73	39	49	11	-0	192
4	0	477	1	93	0	73	40	57	11	-0	200
5	0	468	4	96	1	76	40	79	12	-0	222
6	0	459	10	104	3	83	35	134	13	-0	254
7	0	455	14	112	4	87	7	170	14	-1	291
8	0	457	17	119	4	91	1	206	16	-3	324
9	0	481	20	124	5	97	0	224	16	-8	347
10	0	508	23	127	5	103	0	227	17	-10	357
11	0	537	24	128	5	105	1	229	17	-12	358
12	0	569	25	128	5	106	1	232	17	-12	361
13	0	599	27	128	6	109	0	241	17	-12	366
14	0	625	28	128	6	111	0	248	17	-12	369
15	0	646	30	128	6	114	0	248	17	-10	369
16	0	667	31	125	6	114	0	244	16	-9	359
17	0	688	32	123	7	112	1	238	16	-6	344
18	0	670	32	116	6	109	2	218	15	-4	316
19	0	652	31	115	6	106	2	209	14	-1	293
20	0	631	29	111	6	102	8	193	13	-0	273
21	0	611	24	107	5	100	36	181	13	-0	253
22	0	596	14	103	3	92	41	146	12	-0	233
23	0	573	6	102	1	87	41	84	11	-0	215
24	0	547	2	99	0	80	41	53	11	-0	202

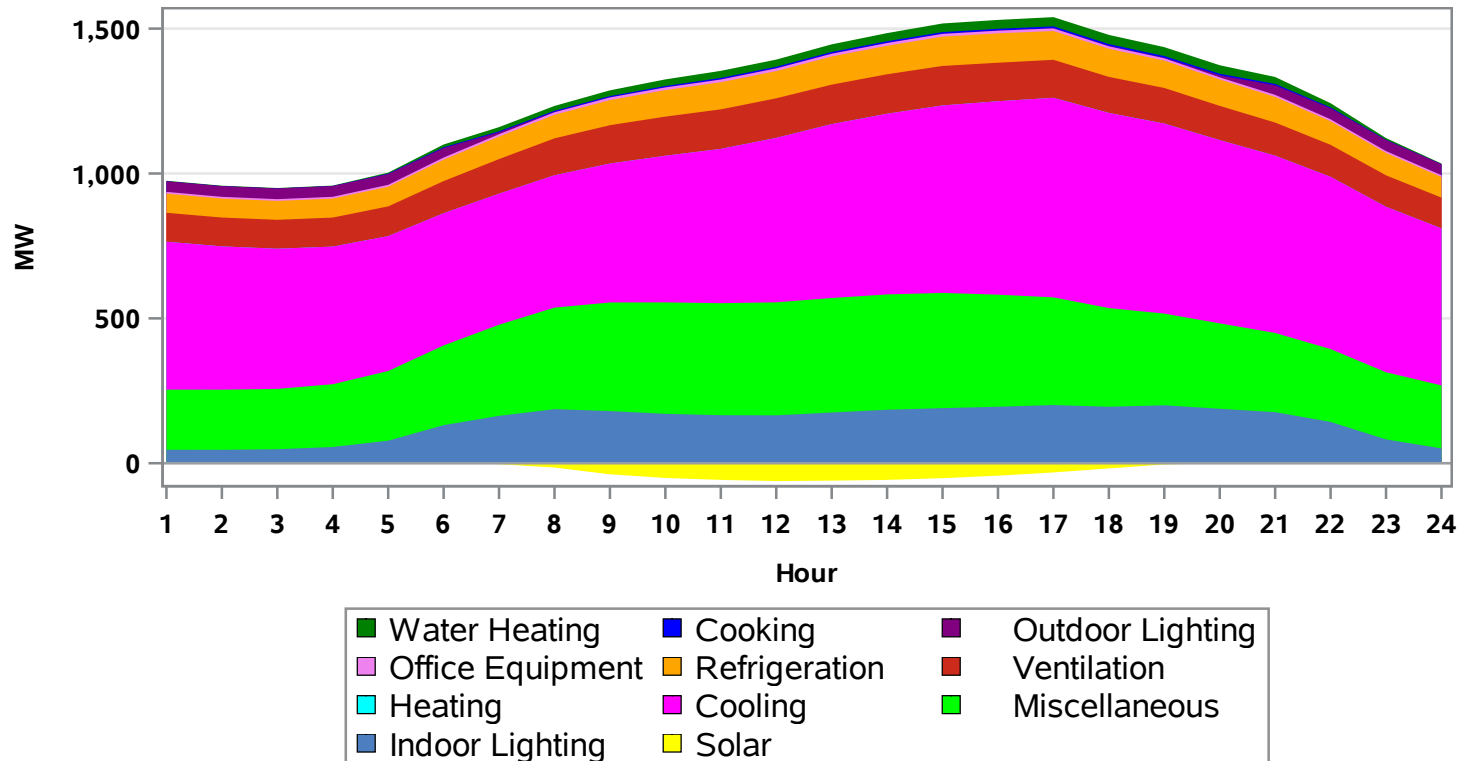
Summer 2023 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2023 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	514	2	97	0	69	37	46	8	-0	202
2	0	497	2	97	0	68	37	46	8	-0	202
3	0	486	2	97	0	68	37	48	8	-0	202
4	0	477	1	97	0	68	37	55	8	-0	210
5	0	467	4	100	1	71	37	77	9	-0	233
6	0	458	10	108	3	77	33	130	10	-0	267
7	0	453	14	116	3	81	7	165	11	-3	305
8	0	458	17	124	4	84	1	199	12	-9	339
9	0	480	20	128	5	90	0	215	12	-17	362
10	0	506	23	131	5	95	0	218	12	-22	372
11	0	533	24	132	5	97	0	220	12	-25	374
12	0	568	25	132	5	97	0	224	12	-27	377
13	0	601	26	132	6	101	0	232	12	-27	382
14	0	624	28	132	6	102	0	239	12	-25	385
15	0	648	30	132	6	105	0	238	12	-23	385
16	0	669	31	129	6	105	0	235	12	-19	374
17	0	690	32	127	6	103	1	229	12	-13	360
18	0	675	32	120	6	101	2	210	11	-8	330
19	0	657	31	119	6	98	2	201	10	-2	306
20	0	633	29	114	5	94	7	186	10	-0	285
21	0	613	24	111	5	92	33	174	9	-0	264
22	0	595	14	107	3	84	38	141	9	-0	243
23	0	571	6	105	1	80	38	81	8	-0	224
24	0	542	2	103	0	74	38	50	8	-0	210

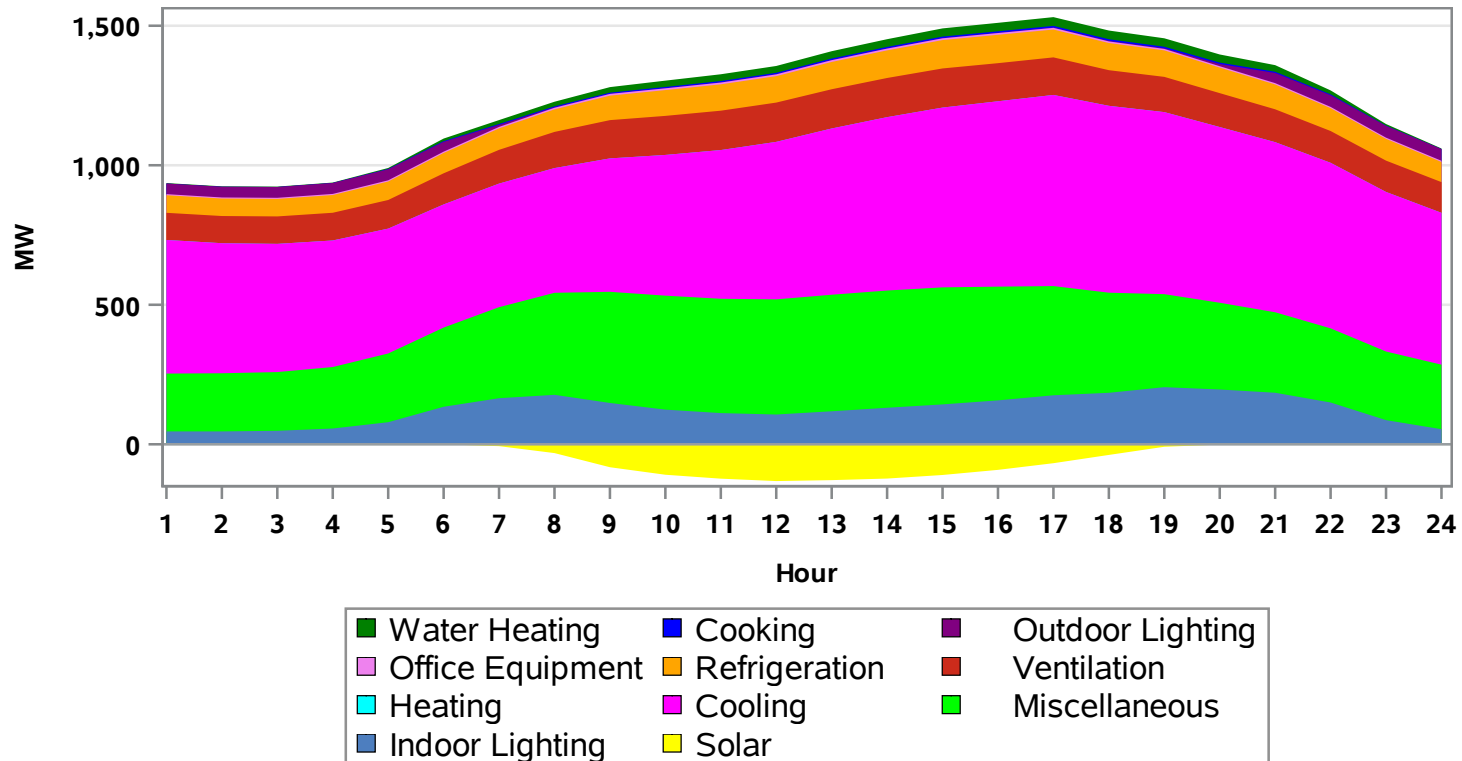
Summer 2028 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2028 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	511	2	100	0	66	37	47	6	-0	208
2	0	495	2	99	0	66	37	46	6	-0	208
3	0	484	2	100	0	65	37	48	6	-0	208
4	0	475	1	100	0	66	37	56	6	-0	217
5	0	466	4	103	1	68	37	78	7	-0	241
6	0	456	10	111	3	74	33	132	7	-0	275
7	0	452	14	120	3	78	7	167	8	-3	315
8	0	457	17	127	4	81	1	202	9	-15	351
9	0	480	20	132	4	87	0	218	9	-38	375
10	0	506	23	135	5	91	0	221	9	-51	385
11	0	532	24	136	5	94	0	223	9	-57	387
12	0	568	25	136	5	94	0	227	9	-62	390
13	0	600	26	136	6	97	0	235	9	-60	395
14	0	624	28	136	6	98	0	242	9	-58	398
15	0	647	30	136	6	101	0	242	9	-52	398
16	0	668	31	133	6	101	0	238	9	-43	387
17	0	689	32	131	6	99	1	233	9	-32	372
18	0	673	32	124	6	97	2	213	8	-18	341
19	0	656	31	123	6	95	2	204	8	-4	316
20	0	632	29	118	5	91	7	189	7	-1	295
21	0	612	24	114	4	89	33	176	7	-0	273
22	0	594	14	110	3	81	38	143	7	-0	251
23	0	571	6	108	1	77	38	82	6	-0	232
24	0	542	2	106	0	71	38	51	6	-0	217

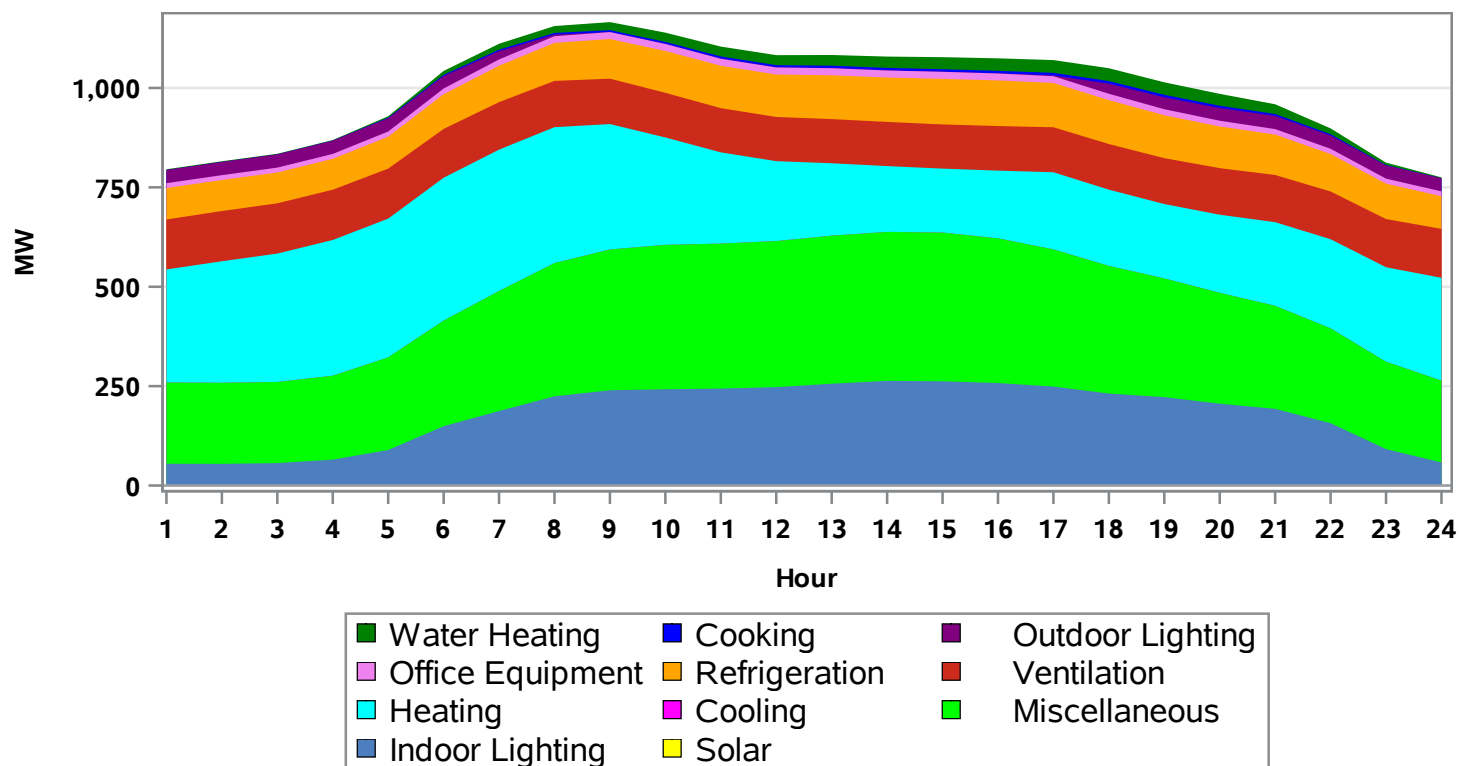
Summer 2037 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2037 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	479	2	97	0	63	38	46	4	-0	207
2	0	466	2	97	0	63	38	46	4	-0	208
3	0	459	1	98	0	63	39	48	4	-0	210
4	0	453	1	99	0	64	39	57	4	-0	220
5	0	447	3	103	1	66	40	79	4	-0	246
6	0	441	9	112	3	73	35	135	5	-0	284
7	0	443	14	121	3	77	7	172	5	-7	326
8	0	447	17	130	4	81	1	209	6	-32	366
9	0	478	20	137	4	88	0	230	6	-82	398
10	0	504	23	140	5	93	0	233	6	-109	409
11	0	533	24	141	5	95	1	235	6	-123	410
12	0	564	24	141	5	95	1	239	6	-132	413
13	0	596	26	141	5	98	0	247	6	-128	418
14	0	621	28	140	6	99	0	254	6	-123	420
15	0	644	29	140	6	102	0	253	6	-110	419
16	0	664	30	137	6	102	0	249	6	-92	408
17	0	685	31	135	6	100	1	243	6	-68	391
18	0	670	31	128	6	97	2	223	6	-38	359
19	0	652	30	126	6	95	2	214	5	-9	333
20	0	630	29	121	5	92	8	198	5	-1	311
21	0	610	24	118	4	89	36	185	5	-0	288
22	0	593	14	114	3	82	42	150	5	-0	266
23	0	572	6	112	1	78	42	87	4	-0	246
24	0	544	2	110	0	72	42	54	4	-0	231

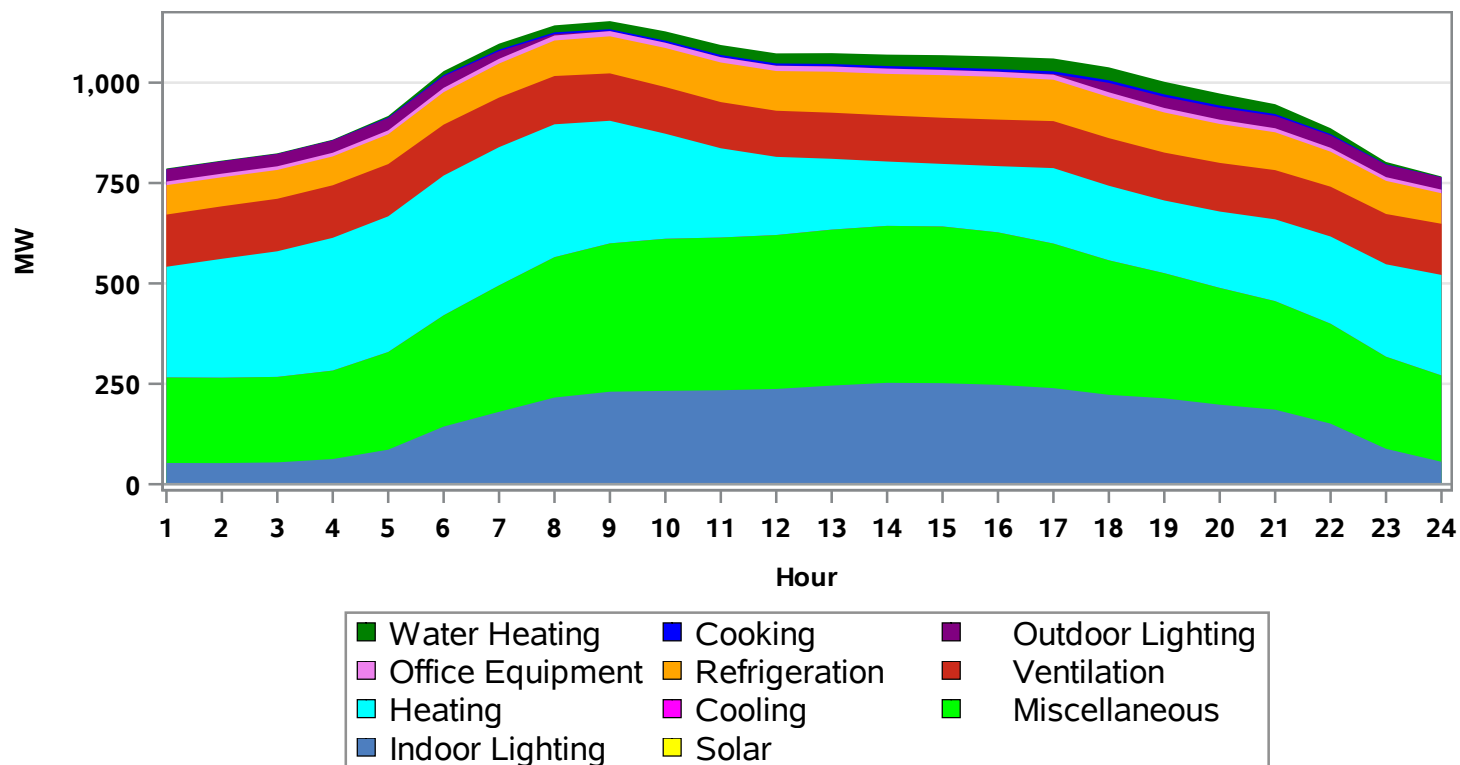
Winter 2018 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2018 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	284	0	2	126	0	79	33	55	12	0	204
2	306	0	2	126	0	78	33	55	12	0	204
3	323	0	2	126	0	78	33	57	12	0	204
4	341	0	1	126	0	78	33	65	12	0	211
5	349	0	4	126	1	80	33	89	13	0	233
6	359	0	10	123	3	87	31	149	14	0	266
7	355	0	15	119	4	92	21	187	16	0	302
8	342	0	17	116	4	96	4	224	17	-0	335
9	315	0	20	114	5	100	0	240	17	-0	354
10	270	0	23	112	5	105	0	243	18	-1	363
11	230	0	25	111	5	107	0	245	18	-1	365
12	201	0	25	111	5	107	0	249	18	-1	367
13	182	0	27	111	6	110	0	257	18	-1	372
14	166	0	29	111	6	112	0	265	18	-1	375
15	161	0	30	111	6	115	0	263	18	-1	374
16	170	0	31	112	6	115	0	259	17	-1	364
17	194	0	32	113	7	111	2	249	17	-0	345
18	192	0	32	115	7	111	25	231	16	-0	321
19	187	0	31	115	6	108	30	222	15	-0	299
20	196	0	30	117	6	105	32	206	14	0	279
21	210	0	25	119	5	102	33	193	14	0	259
22	224	0	15	120	3	94	33	157	13	0	239
23	238	0	6	121	1	89	33	92	13	0	220
24	258	0	2	123	0	82	33	58	12	0	206

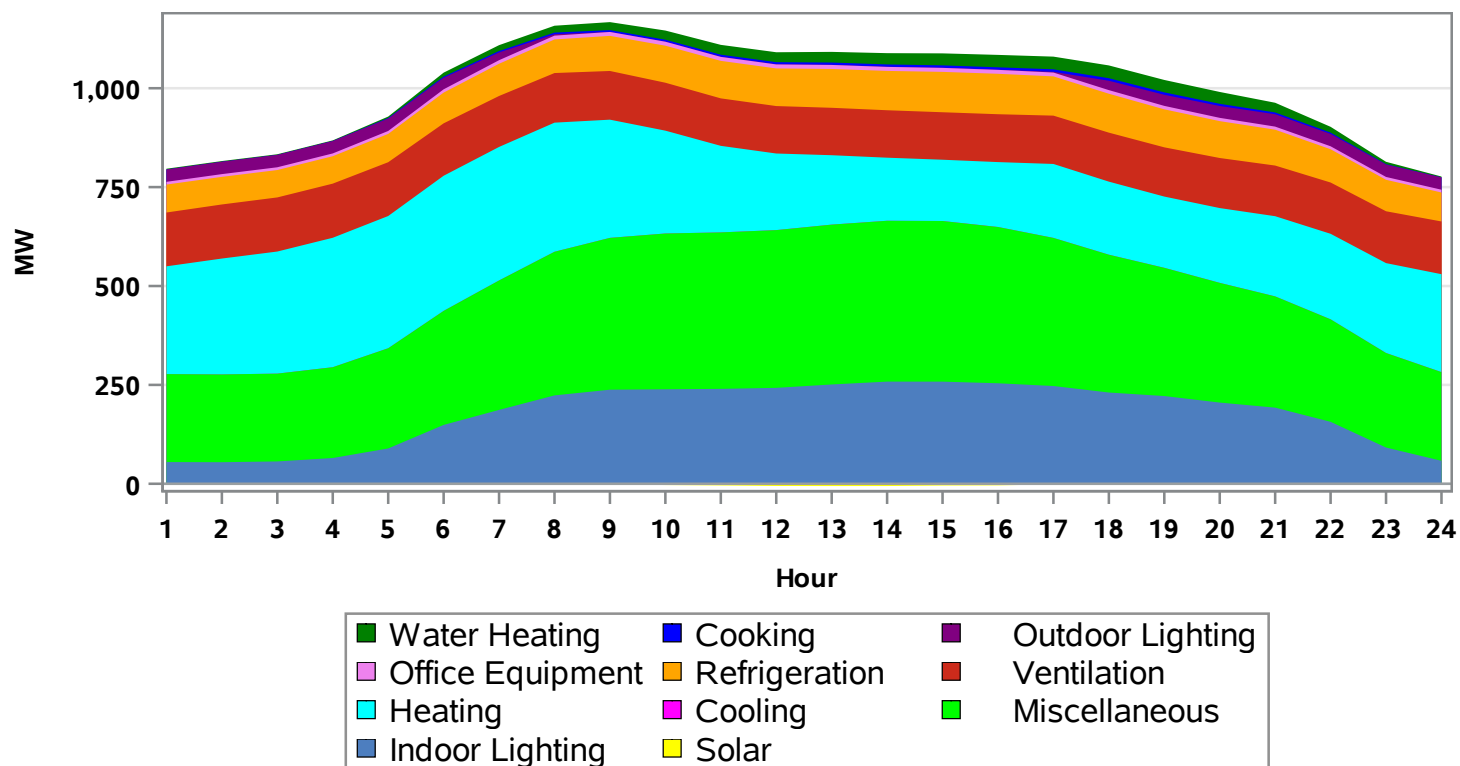
Winter 2023 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2023 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	275	0	2	130	0	73	31	53	9	-0	213
2	296	0	2	131	0	72	31	53	9	-0	213
3	313	0	2	131	0	72	31	54	9	-0	213
4	331	0	1	131	0	72	31	63	9	-0	220
5	338	0	4	130	1	74	31	86	10	-0	243
6	348	0	10	127	3	81	29	144	11	-0	277
7	344	0	15	124	4	85	19	180	12	-0	315
8	331	0	17	120	4	88	4	216	13	-0	350
9	305	0	20	118	5	92	0	231	13	-0	369
10	261	0	23	116	5	97	0	234	13	-1	379
11	222	0	25	115	5	99	0	236	13	-2	380
12	195	0	25	115	5	99	0	239	13	-2	383
13	176	0	27	115	6	102	0	248	13	-2	388
14	160	0	28	115	6	103	0	255	13	-2	391
15	156	0	30	115	6	106	0	253	13	-2	390
16	165	0	31	116	6	106	0	249	13	-1	380
17	188	0	32	117	7	103	2	240	13	-1	360
18	186	0	32	119	7	102	23	223	12	-0	335
19	181	0	31	119	6	100	28	214	11	-0	312
20	190	0	30	121	6	97	30	198	11	-0	291
21	204	0	25	123	5	94	31	186	10	-0	270
22	217	0	15	124	3	87	31	151	10	-0	249
23	230	0	6	125	1	83	31	88	9	-0	229
24	250	0	2	127	0	76	31	56	9	-0	215

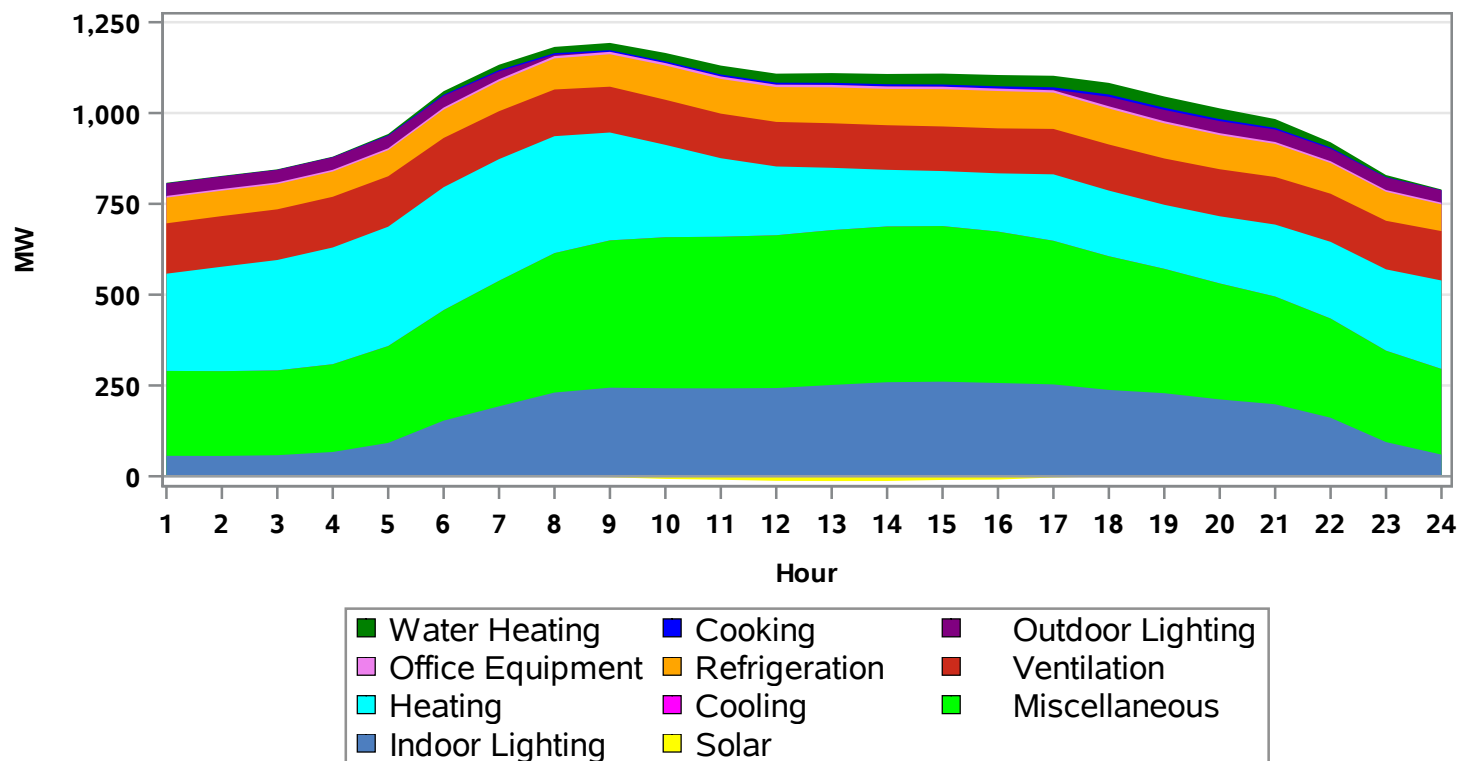
Winter 2028 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2028 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	272	0	2	136	0	71	31	55	7	-0	222
2	293	0	2	137	0	70	31	55	7	-0	222
3	309	0	2	137	0	69	31	57	7	-0	222
4	327	0	1	137	0	69	31	65	7	-0	230
5	334	0	4	136	1	72	31	89	8	-0	253
6	342	0	10	132	3	78	29	149	8	-0	288
7	338	0	15	129	4	81	20	187	9	-0	327
8	326	0	17	125	4	85	4	223	10	-0	363
9	299	0	20	123	5	89	0	239	10	-1	384
10	260	0	23	121	5	94	0	242	10	-3	394
11	219	0	25	120	5	95	0	244	10	-4	396
12	194	0	25	120	5	95	0	248	10	-6	399
13	175	0	27	120	6	98	0	257	10	-6	404
14	159	0	29	120	6	99	0	264	10	-6	407
15	155	0	30	120	6	102	0	263	10	-4	406
16	164	0	31	121	6	102	0	258	10	-4	395
17	187	0	32	122	6	99	2	249	10	-2	375
18	185	0	32	124	6	98	24	231	9	-0	348
19	180	0	31	125	6	96	28	222	9	-0	324
20	189	0	30	127	5	93	30	205	8	-0	303
21	203	0	25	128	5	91	31	193	8	-0	281
22	216	0	15	130	3	84	31	157	8	-0	259
23	227	0	6	131	1	80	31	92	7	-0	239
24	247	0	2	133	0	73	31	58	7	-0	224

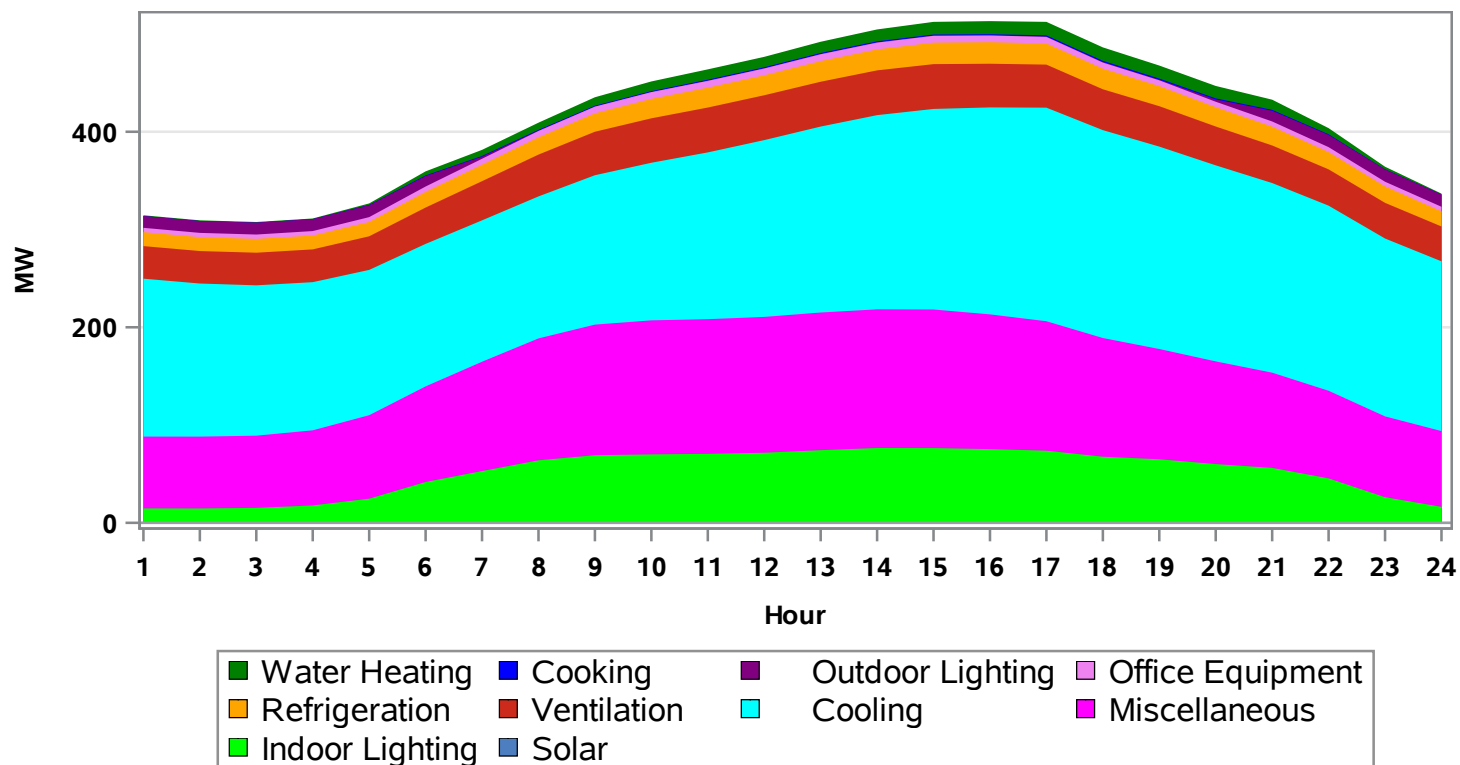
Winter 2037 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2037 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Heating	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	268	0	2	139	0	71	34	56	5	-0	234
2	288	0	2	139	0	70	34	56	5	-0	233
3	304	0	2	139	0	69	34	58	5	-0	233
4	321	0	1	140	0	70	34	67	5	-0	242
5	328	0	4	139	1	72	35	92	5	-0	267
6	338	0	10	136	3	78	32	153	5	-0	304
7	335	0	15	132	3	82	22	193	6	-0	346
8	322	0	17	129	4	86	4	231	6	-0	384
9	297	0	20	126	4	89	0	247	7	-3	406
10	254	0	23	124	5	94	0	250	7	-7	416
11	216	0	25	123	5	95	0	252	7	-10	417
12	189	0	25	123	5	96	0	256	7	-13	421
13	171	0	27	123	6	99	0	265	7	-13	426
14	156	0	28	123	6	100	0	272	7	-13	429
15	151	0	30	123	6	103	0	271	7	-10	428
16	160	0	31	124	6	103	0	266	7	-9	417
17	183	0	32	125	6	100	2	256	6	-3	395
18	181	0	32	127	6	99	26	238	6	-0	368
19	176	0	31	128	6	97	31	229	6	-0	342
20	185	0	30	129	5	94	33	212	5	-0	319
21	198	0	24	131	4	91	34	198	5	-0	297
22	211	0	15	132	3	84	35	161	5	-0	273
23	224	0	6	134	1	80	34	94	5	-0	252
24	243	0	2	136	0	74	34	60	5	-0	236

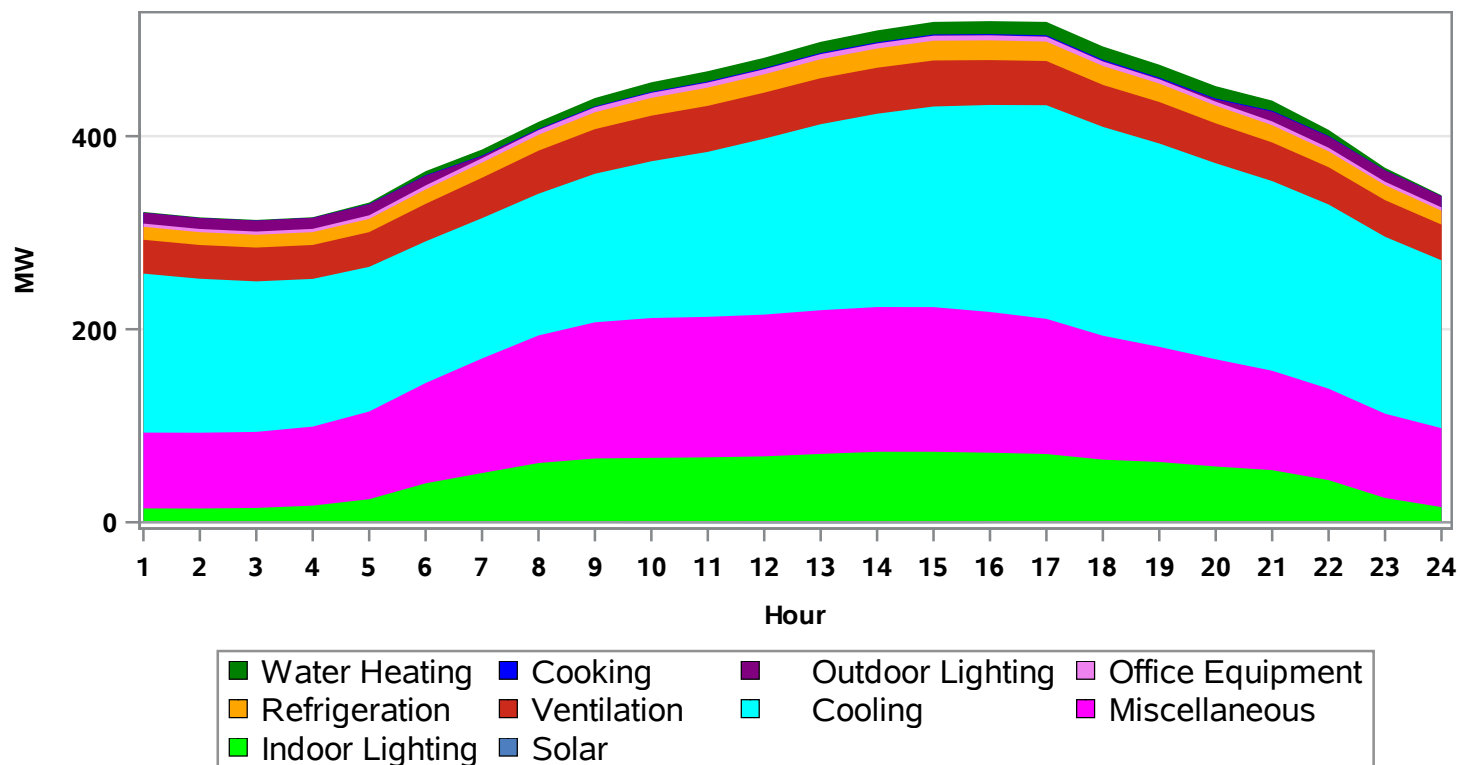
Summer 2018 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2018 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	162	1	33	0	14	12	15	4	0	73
2	157	1	33	0	14	12	15	4	0	74
3	154	1	33	0	14	12	15	4	0	74
4	152	1	34	0	14	12	18	5	0	77
5	149	2	34	0	15	12	25	5	0	85
6	146	4	37	1	16	11	42	5	0	98
7	145	6	40	1	17	2	53	6	-0	112
8	145	7	43	1	18	0	64	7	-0	125
9	153	9	44	1	19	0	70	7	-0	134
10	161	10	45	1	20	0	70	7	-1	137
11	171	11	46	1	20	0	71	7	-1	138
12	181	11	46	1	20	0	72	7	-1	139
13	190	11	46	1	21	0	75	7	-1	141
14	199	12	46	1	21	0	77	7	-1	142
15	205	13	46	1	22	0	77	7	-1	142
16	212	13	45	1	22	0	76	7	-0	138
17	218	14	44	1	22	0	74	7	-0	132
18	213	14	42	1	21	1	68	6	-0	121
19	207	13	41	1	21	1	65	6	-0	113
20	201	13	40	1	20	2	60	6	-0	105
21	194	10	38	1	19	11	56	5	0	97
22	189	6	37	1	18	13	45	5	0	90
23	182	3	36	0	17	13	26	5	0	83
24	174	1	36	0	16	13	16	5	0	78

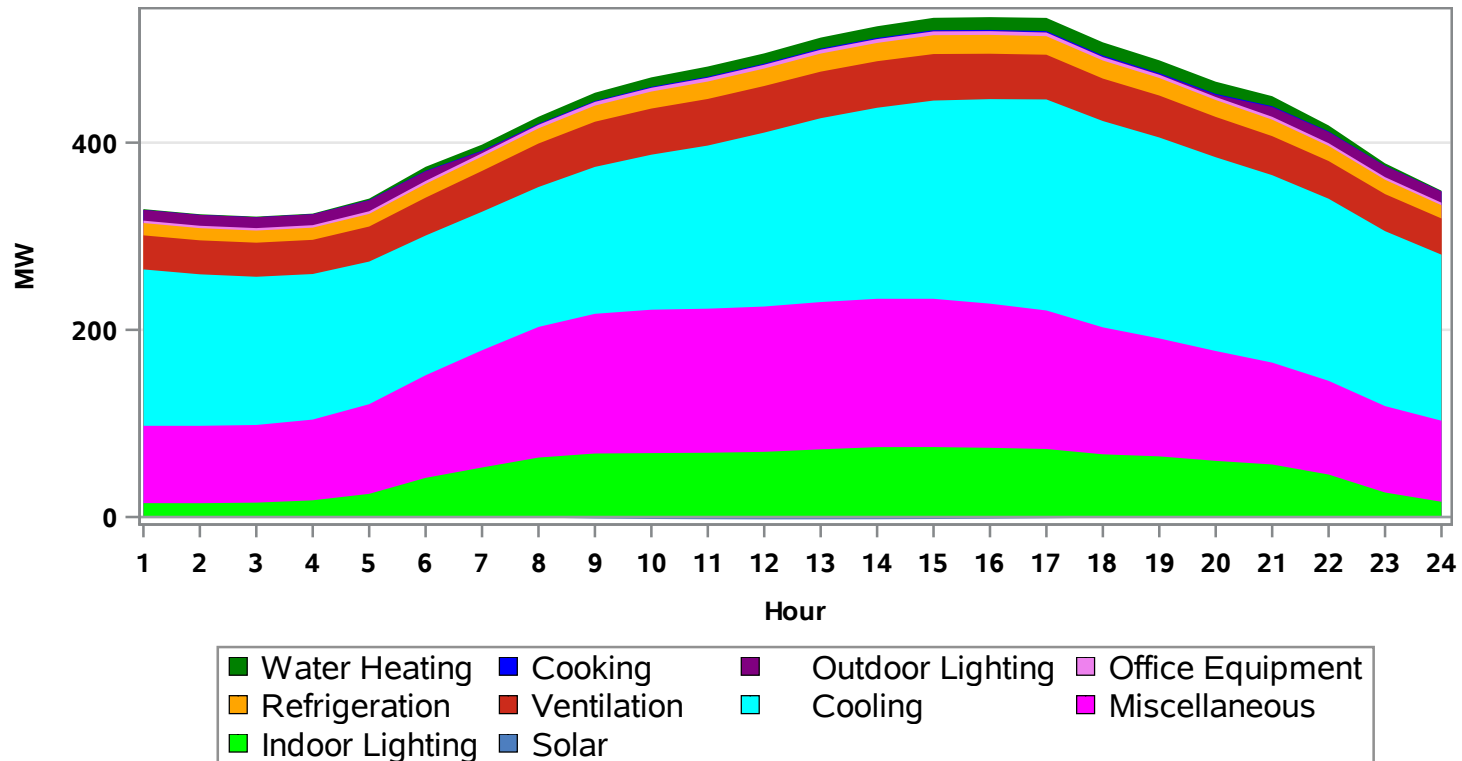
Summer 2023 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2023 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	165	1	35	0	13	11	14	3	0	79
2	160	1	35	0	13	11	14	3	0	79
3	156	1	35	0	13	11	15	3	0	79
4	153	1	35	0	13	11	17	3	0	82
5	150	2	36	0	14	11	24	4	0	91
6	147	4	39	1	15	10	40	4	-0	104
7	145	6	42	1	16	2	51	5	-0	119
8	147	7	45	1	16	0	62	5	-0	132
9	154	9	46	1	17	0	67	5	-1	141
10	162	10	47	1	18	0	68	5	-1	145
11	171	11	48	1	19	0	68	5	-1	146
12	182	11	48	1	19	0	69	5	-1	147
13	193	12	48	1	20	0	72	5	-1	149
14	200	12	48	1	20	0	74	5	-1	150
15	208	13	48	1	20	0	74	5	-1	150
16	214	13	47	1	20	0	73	5	-1	146
17	221	14	46	1	20	0	71	5	-1	140
18	216	14	43	1	20	1	65	5	-0	128
19	211	13	43	1	19	1	63	4	-0	119
20	203	13	41	1	18	2	58	4	-0	111
21	197	10	40	1	18	10	54	4	0	103
22	191	6	39	1	16	12	44	4	0	95
23	183	3	38	0	16	12	25	4	0	87
24	174	1	37	0	14	12	16	3	0	82

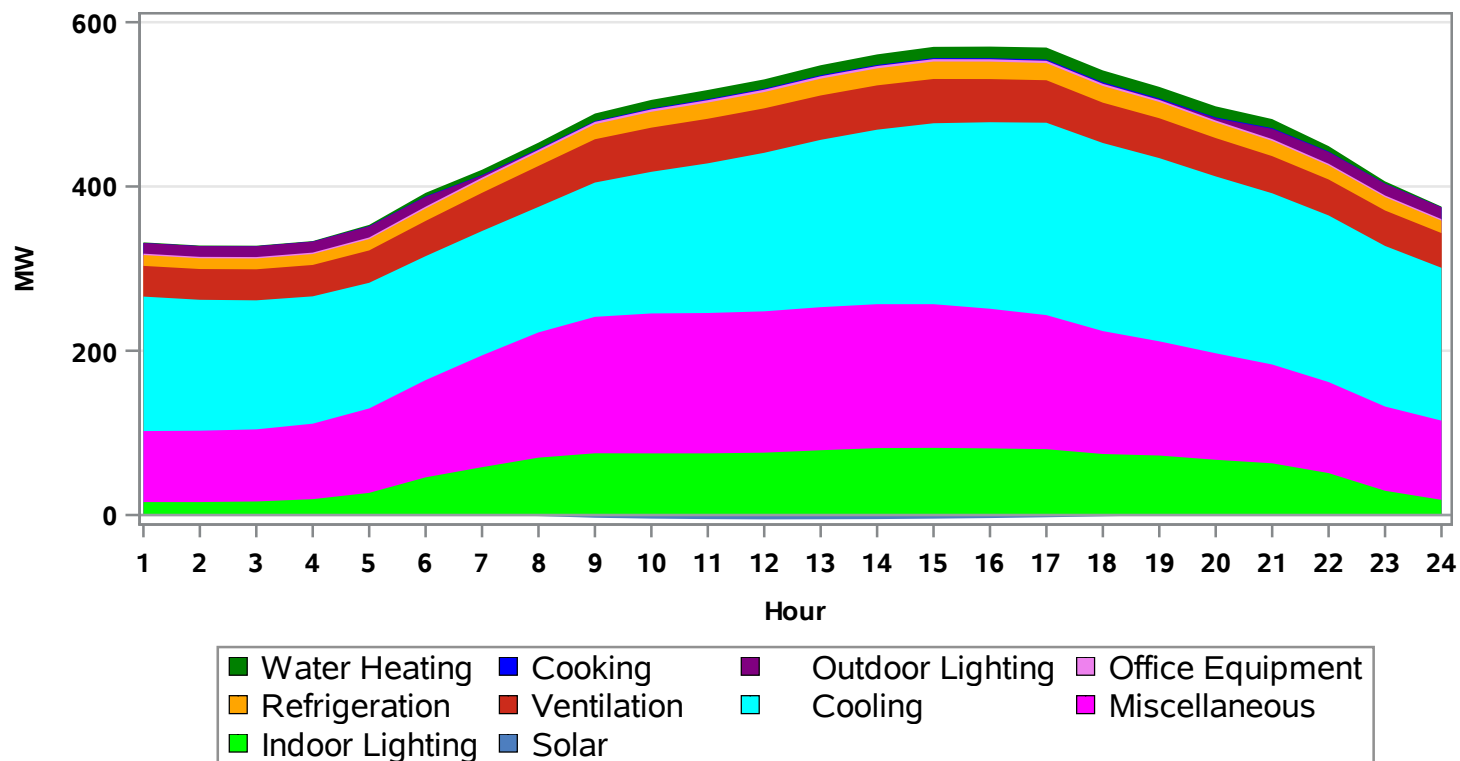
Summer 2028 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2028 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	167	1	36	0	13	12	15	3	0	83
2	162	1	36	0	13	12	15	3	0	83
3	158	1	36	0	13	12	15	3	0	83
4	156	1	37	0	13	12	18	3	0	86
5	152	2	37	0	13	12	25	3	0	96
6	149	4	40	1	15	10	42	3	-0	110
7	148	6	44	1	15	2	53	4	-0	125
8	150	7	46	1	16	0	64	4	-1	140
9	157	9	48	1	17	0	69	4	-2	149
10	166	10	49	1	18	0	70	4	-2	153
11	174	11	50	1	19	0	71	4	-2	154
12	186	11	50	1	19	0	72	4	-3	155
13	196	12	50	1	19	0	75	4	-3	157
14	204	12	50	1	20	0	77	4	-2	159
15	212	13	50	1	20	0	77	4	-2	158
16	219	14	48	1	20	0	76	4	-2	154
17	225	14	48	1	20	0	74	4	-1	148
18	220	14	45	1	19	1	68	4	-1	136
19	215	14	45	1	19	1	65	3	-0	126
20	207	13	43	1	18	2	60	3	-0	117
21	200	11	42	1	18	10	56	3	0	109
22	195	6	40	1	16	12	45	3	0	100
23	187	3	40	0	15	12	26	3	0	92
24	177	1	39	0	14	12	16	3	0	87

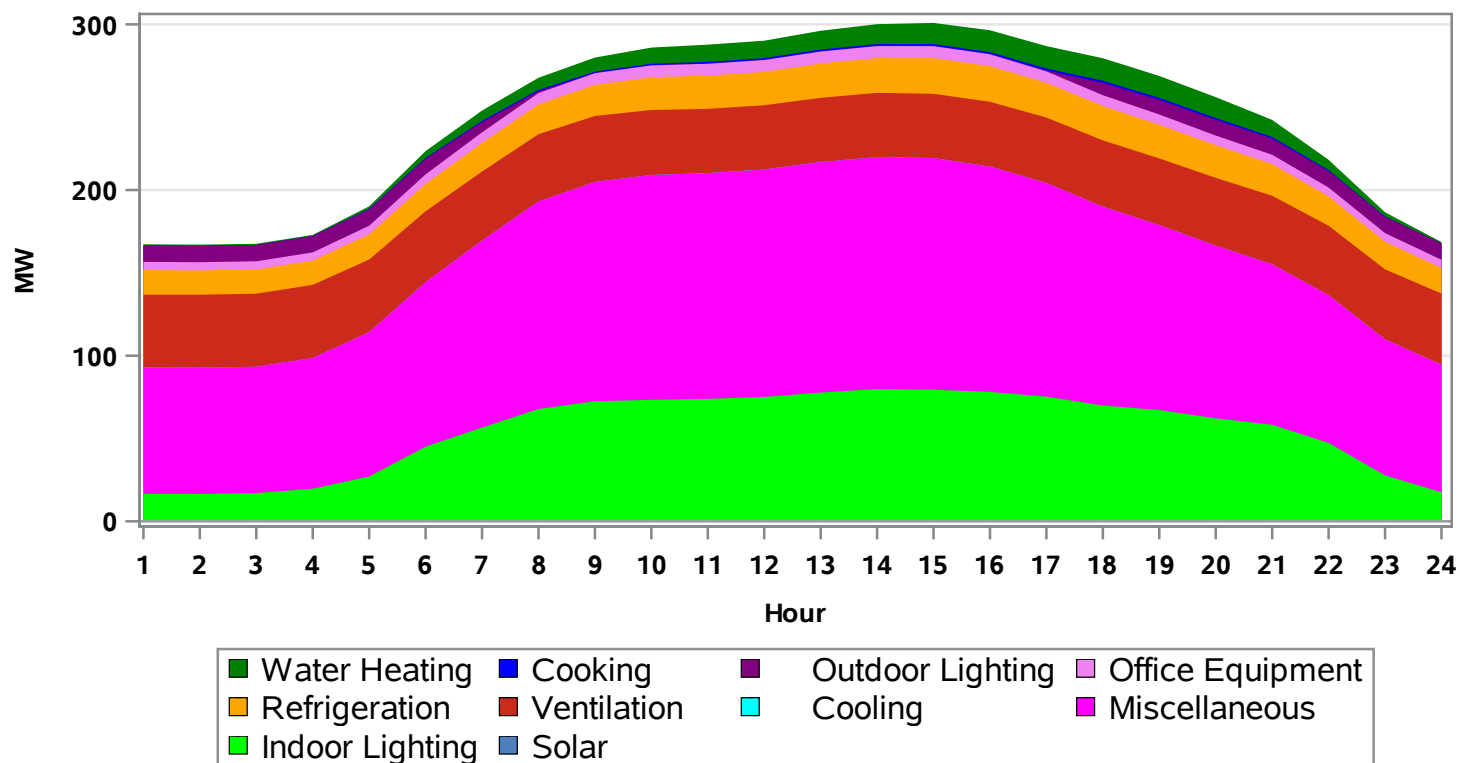
Summer 2037 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2037 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	164	1	37	0	13	13	16	2	0	86
2	159	1	37	0	13	13	16	2	0	87
3	157	1	38	0	13	13	16	2	0	88
4	155	1	38	0	13	13	19	2	0	92
5	153	2	39	0	14	13	27	2	0	103
6	151	4	43	1	15	12	46	2	-0	118
7	151	6	46	1	16	2	59	2	-0	136
8	153	8	50	1	17	0	71	3	-1	152
9	164	9	53	1	18	0	78	3	-3	166
10	172	11	54	1	19	0	79	3	-4	170
11	182	11	54	1	20	0	80	3	-5	171
12	193	11	54	1	20	0	81	3	-5	172
13	204	12	54	1	20	0	84	3	-5	174
14	212	13	54	1	21	0	86	3	-5	175
15	220	14	54	1	21	0	86	3	-4	175
16	227	14	53	1	21	0	85	3	-4	170
17	234	15	52	1	21	0	83	3	-3	163
18	229	15	49	1	20	1	76	3	-2	150
19	223	14	49	1	20	1	73	2	-0	139
20	215	13	47	1	19	3	67	2	-0	130
21	208	11	45	1	19	12	63	2	0	120
22	203	7	44	1	17	14	51	2	0	111
23	196	3	43	0	16	14	30	2	0	103
24	186	1	42	0	15	14	18	2	0	96

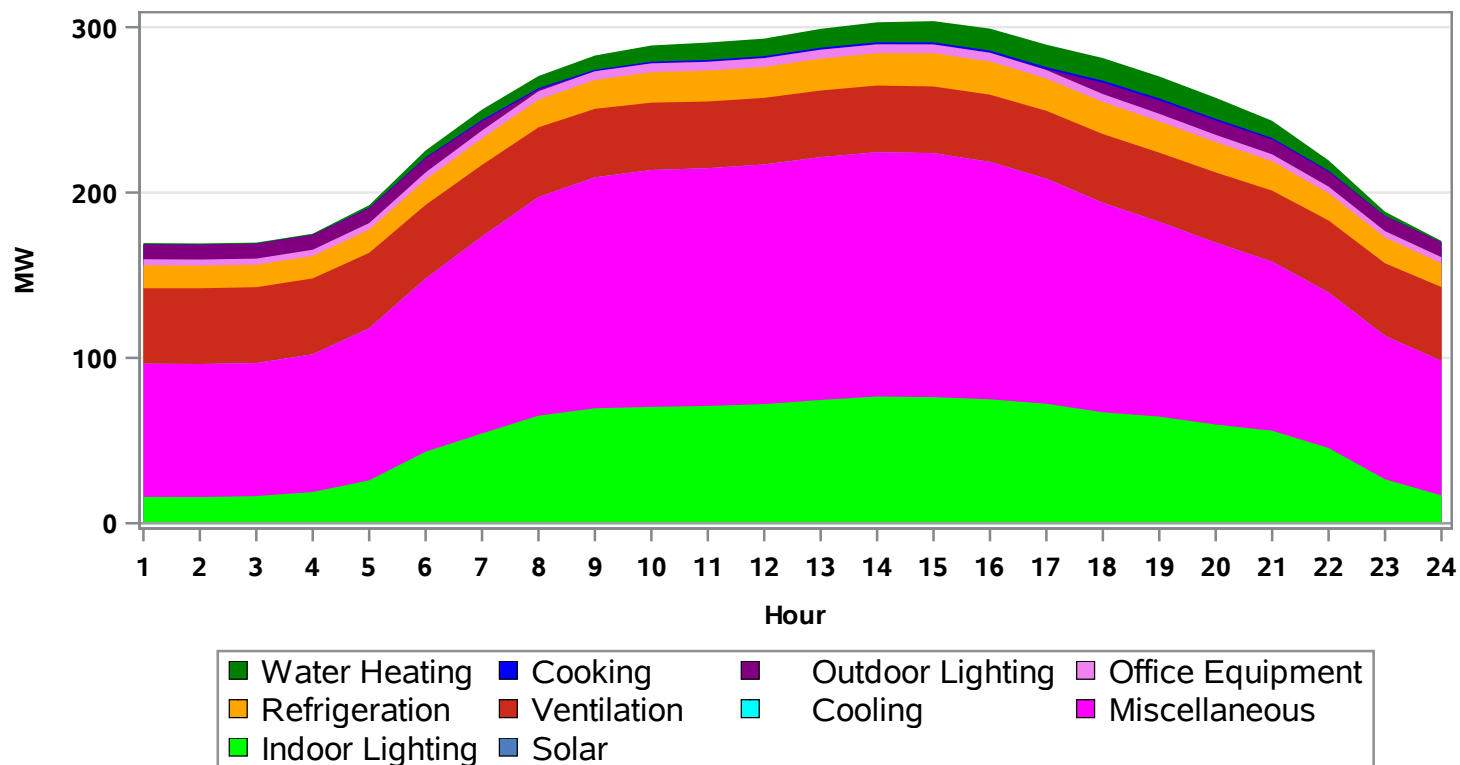
Winter 2018 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2018 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	44	0	15	10	17	5	0	76
2	0	1	44	0	15	10	16	5	0	76
3	0	1	44	0	15	10	17	5	0	76
4	0	1	44	0	15	10	20	5	0	79
5	0	2	44	0	15	10	27	5	0	87
6	0	4	43	1	16	9	45	6	0	99
7	0	6	42	1	17	6	57	6	0	113
8	0	7	41	1	18	1	68	7	0	125
9	0	8	40	1	19	0	72	7	-0	132
10	0	10	39	1	20	0	73	7	-0	136
11	0	10	39	1	20	0	74	7	-0	136
12	0	11	39	1	20	0	75	7	-0	137
13	0	11	39	1	21	0	78	7	-0	139
14	0	12	39	1	21	0	80	7	-0	140
15	0	13	39	1	22	0	80	7	-0	140
16	0	13	39	1	22	0	78	7	-0	136
17	0	13	39	1	21	1	75	7	-0	129
18	0	14	40	1	21	8	70	7	0	120
19	0	13	40	1	20	9	67	6	0	112
20	0	13	41	1	20	10	62	6	0	104
21	0	10	41	1	19	10	58	6	0	97
22	0	6	42	1	18	10	47	5	0	89
23	0	3	42	0	17	10	28	5	0	82
24	0	1	43	0	15	10	18	5	0	77

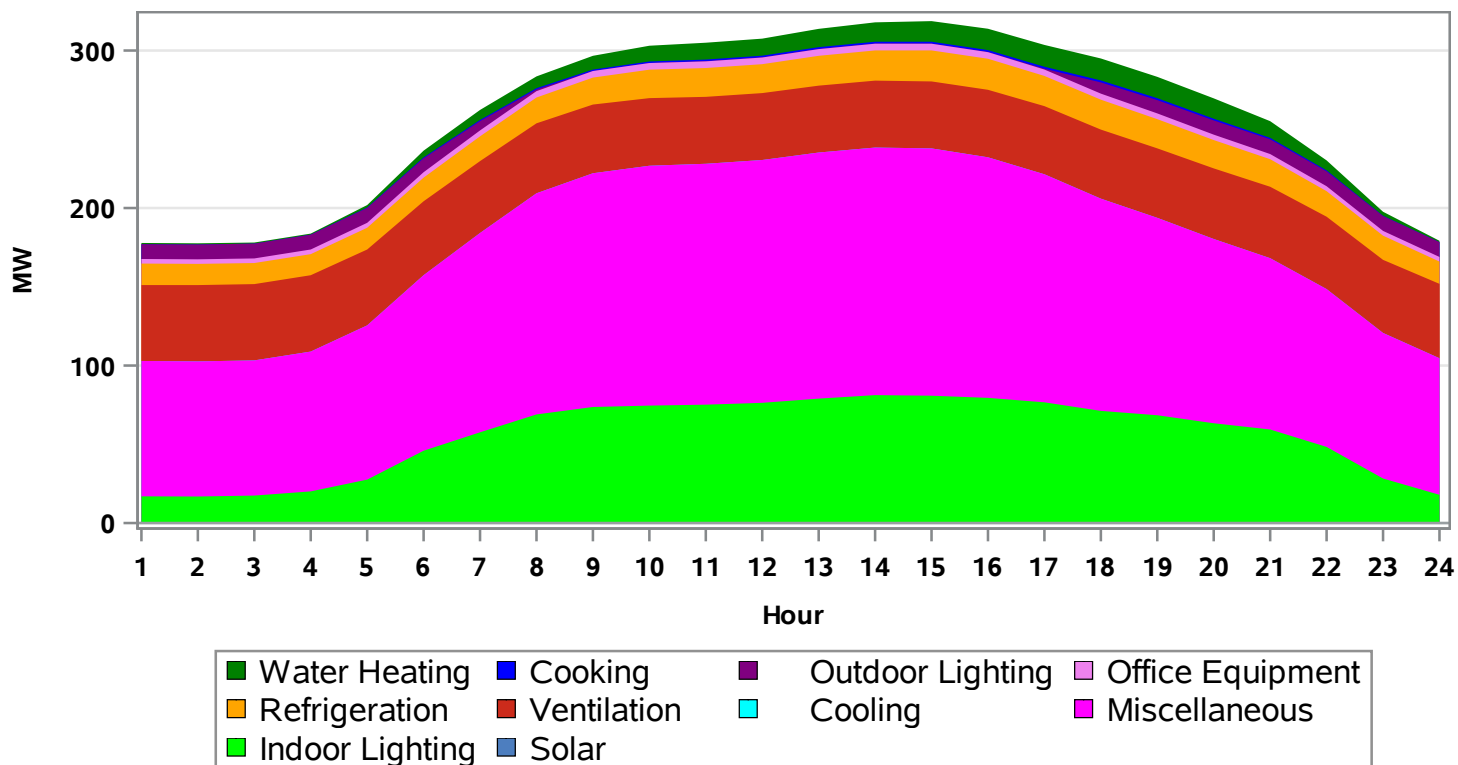
Winter 2023 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2023 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	46	0	14	9	16	4	0	81
2	0	1	46	0	14	9	16	4	0	80
3	0	1	46	0	14	9	16	4	0	81
4	0	1	46	0	14	9	19	4	0	83
5	0	2	46	0	14	9	26	4	0	92
6	0	4	44	1	15	8	43	4	0	105
7	0	6	43	1	16	6	54	5	0	119
8	0	7	42	1	17	1	65	5	0	132
9	0	9	41	1	17	0	70	5	-0	140
10	0	10	41	1	18	0	70	5	-0	143
11	0	10	40	1	19	0	71	5	-0	144
12	0	11	40	1	19	0	72	5	-0	145
13	0	11	40	1	19	0	75	5	-0	147
14	0	12	40	1	20	0	77	5	-0	148
15	0	13	40	1	20	0	76	5	-0	148
16	0	13	41	1	20	0	75	5	-0	144
17	0	14	41	1	20	1	72	5	-0	136
18	0	14	42	1	19	7	67	5	0	127
19	0	13	42	1	19	8	64	5	0	118
20	0	13	42	1	18	9	60	4	0	110
21	0	10	43	1	18	9	56	4	0	102
22	0	6	44	1	17	9	45	4	0	94
23	0	3	44	0	16	9	27	4	0	87
24	0	1	45	0	14	9	17	4	0	81

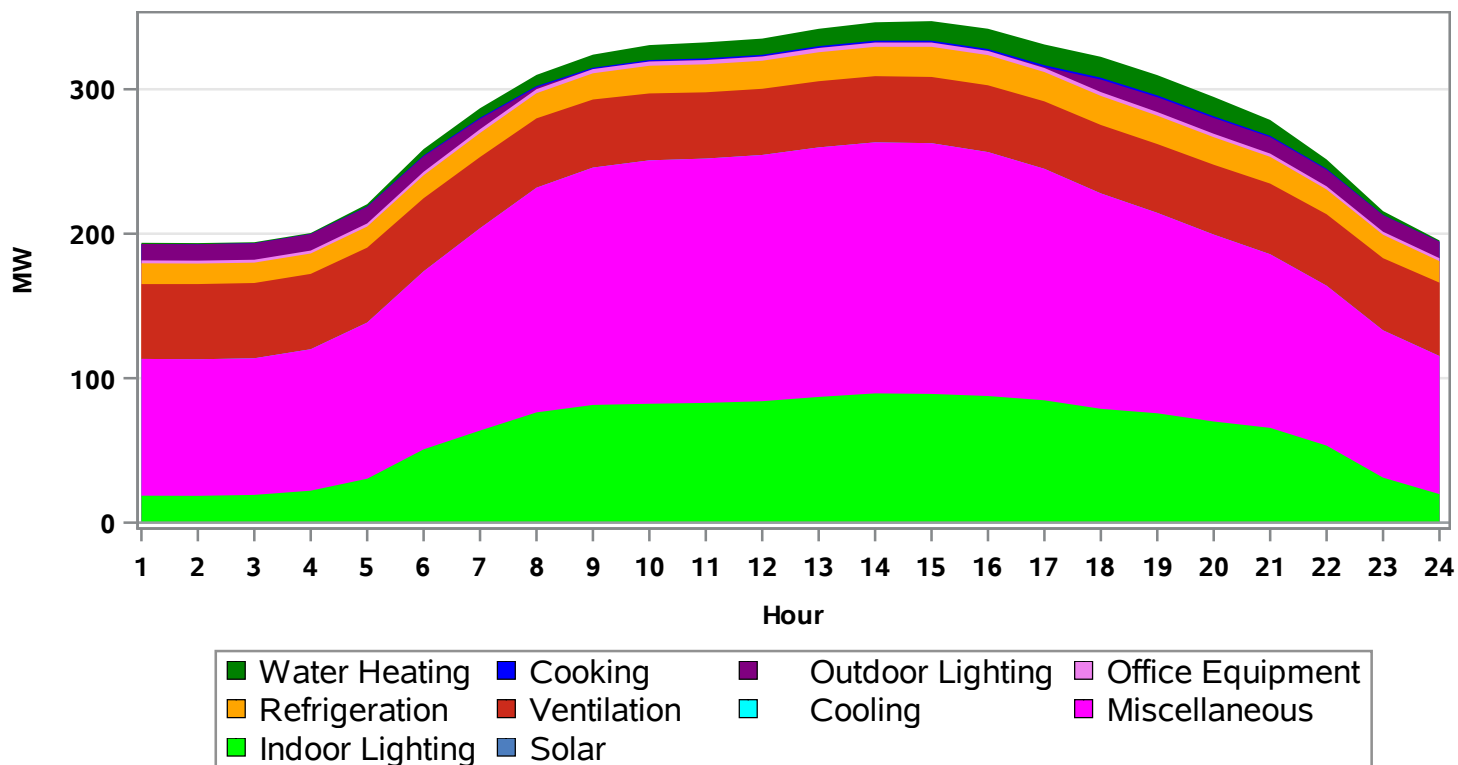
Winter 2028 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2028 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	9	17	3	0	86
2	0	1	48	0	13	9	17	3	0	86
3	0	1	48	0	13	9	17	3	0	86
4	0	1	48	0	13	9	20	3	0	89
5	0	2	48	0	14	9	28	3	0	98
6	0	4	47	1	15	9	46	3	0	111
7	0	6	46	1	16	6	58	4	0	127
8	0	7	44	1	16	1	69	4	0	140
9	0	9	44	1	17	0	74	4	-0	148
10	0	10	43	1	18	0	75	4	-0	152
11	0	11	43	1	18	0	75	4	-0	153
12	0	11	42	1	18	0	77	4	-0	154
13	0	12	42	1	19	0	79	4	-0	156
14	0	12	42	1	19	0	81	4	-0	157
15	0	13	43	1	20	0	81	4	-0	157
16	0	14	43	1	20	0	80	4	-0	153
17	0	14	43	1	19	1	77	4	-0	145
18	0	14	44	1	19	7	71	4	-0	135
19	0	14	44	1	19	8	68	4	0	125
20	0	13	45	1	18	9	63	3	0	117
21	0	11	45	1	17	9	59	3	0	109
22	0	6	46	1	16	9	48	3	0	100
23	0	3	46	0	15	9	28	3	0	92
24	0	1	47	0	14	9	18	3	0	87

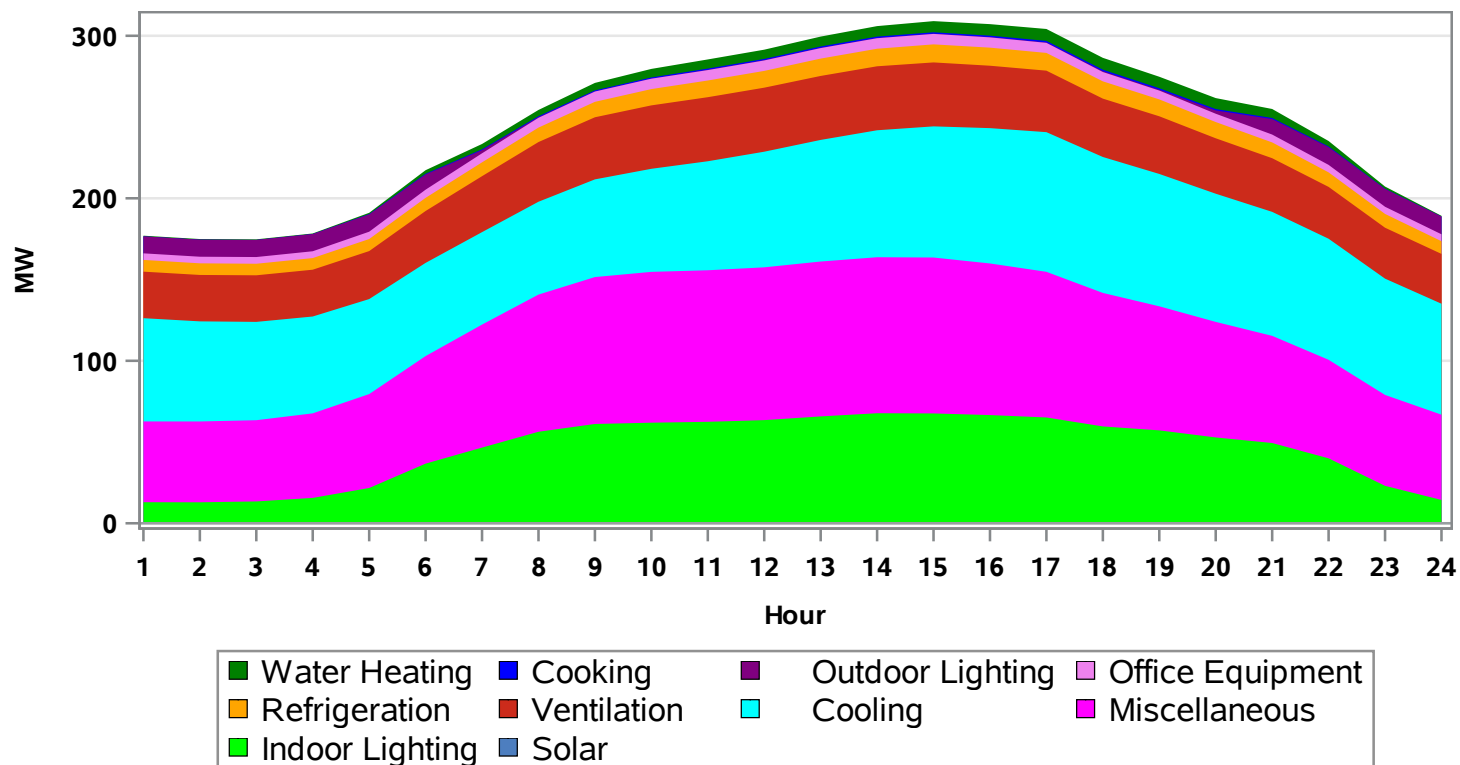
Winter 2037 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2037 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	52	0	14	11	19	2	0	95
2	0	1	52	0	14	11	19	2	0	95
3	0	1	52	0	14	11	19	2	0	95
4	0	1	52	0	14	11	22	2	0	98
5	0	2	52	0	15	11	30	2	0	108
6	0	4	51	1	16	11	51	2	0	123
7	0	7	49	1	17	7	64	3	0	140
8	0	8	48	1	17	1	76	3	-0	156
9	0	9	47	1	18	0	82	3	-0	164
10	0	10	46	1	19	0	83	3	-0	168
11	0	11	46	1	19	0	83	3	-0	169
12	0	11	46	1	19	0	85	3	-1	170
13	0	12	46	1	20	0	88	3	-1	173
14	0	13	46	1	20	0	90	3	-1	174
15	0	14	46	1	21	0	90	3	-0	174
16	0	14	46	1	21	0	88	3	-0	169
17	0	14	47	1	20	1	85	3	-0	160
18	0	14	47	1	20	9	79	3	-0	149
19	0	14	48	1	20	10	76	3	0	139
20	0	13	48	1	19	11	70	2	0	129
21	0	11	49	1	19	11	66	2	0	120
22	0	7	49	1	17	11	53	2	0	111
23	0	3	50	0	16	11	31	2	0	102
24	0	1	51	0	15	11	20	2	0	96

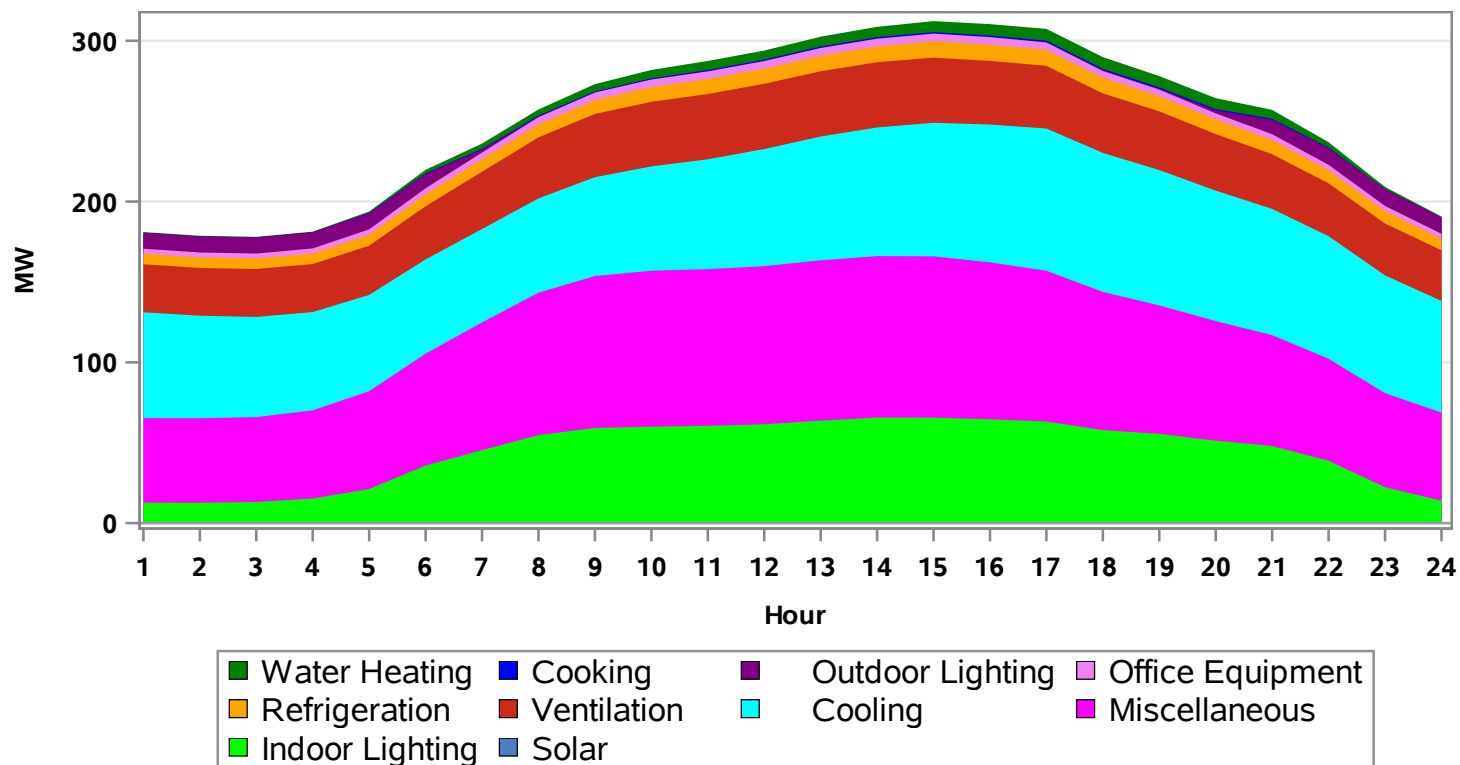
Summer 2018 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2018 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	64	0	29	0	7	10	13	4	0	50
2	62	0	29	0	7	11	13	4	0	50
3	61	0	29	0	7	11	13	4	0	50
4	60	0	29	0	7	11	16	4	0	52
5	58	1	30	0	7	11	22	5	0	58
6	57	2	32	0	8	9	37	5	0	66
7	57	3	34	1	9	2	47	6	0	76
8	57	4	37	1	9	0	56	6	-0	84
9	60	5	38	1	10	0	61	6	-0	90
10	63	5	39	1	10	0	62	6	-0	93
11	67	6	39	1	10	0	63	6	-0	93
12	71	6	39	1	10	0	64	6	-0	94
13	75	6	39	1	11	0	66	6	-0	95
14	78	6	39	1	11	0	68	6	-0	96
15	81	7	39	1	11	0	68	6	-0	96
16	83	7	38	1	11	0	67	6	-0	93
17	86	7	38	1	11	0	65	6	-0	90
18	84	7	36	1	11	0	60	6	-0	82
19	81	7	35	1	10	1	57	5	-0	76
20	79	7	34	1	10	2	53	5	0	71
21	76	6	33	1	10	10	49	5	0	66
22	74	3	32	0	9	11	40	5	0	61
23	72	1	31	0	8	11	23	4	0	56
24	68	0	31	0	8	11	14	4	0	52

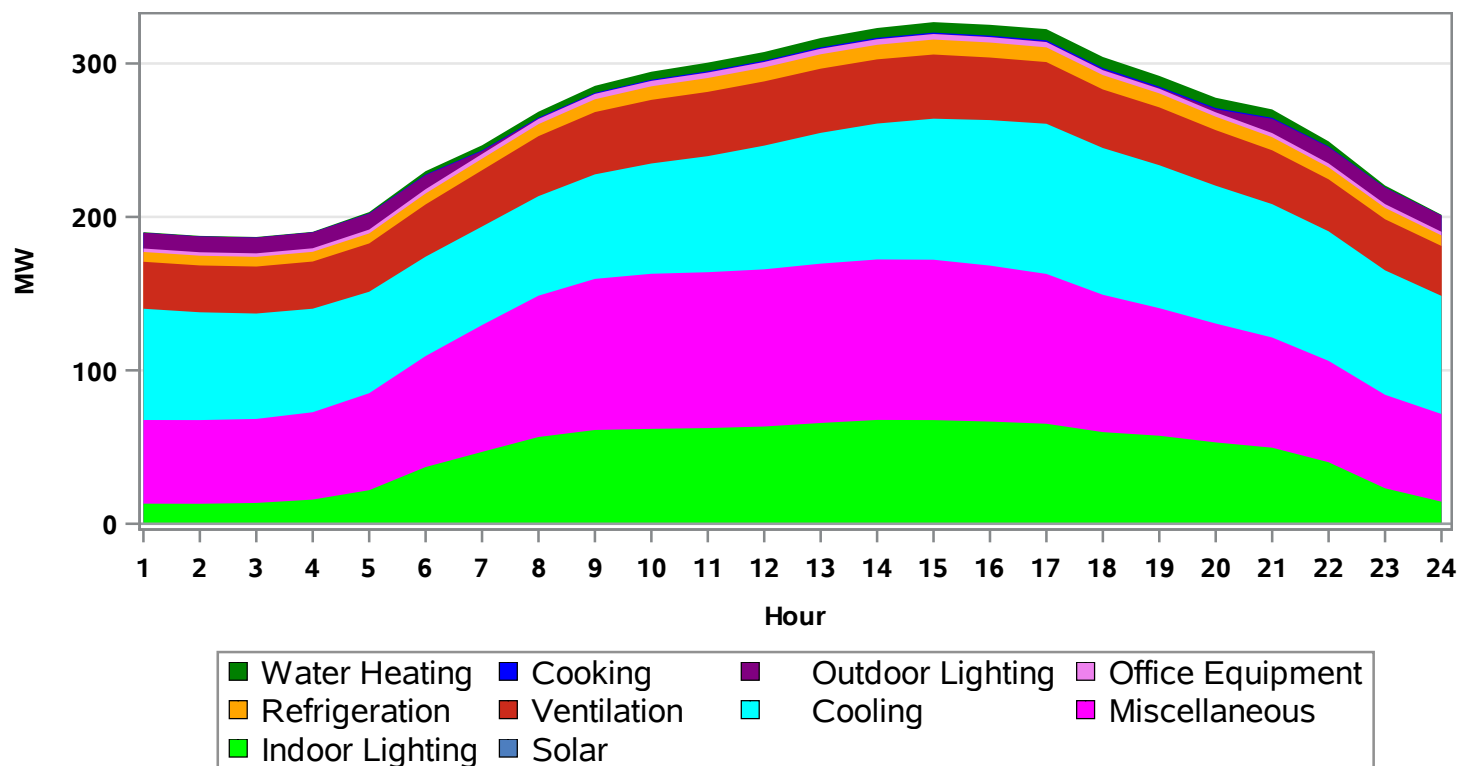
Summer 2023 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2023 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	66	0	30	0	7	10	13	3	0	53
2	64	0	30	0	7	10	13	3	0	53
3	62	0	30	0	7	10	13	3	0	53
4	61	0	30	0	7	10	15	3	0	55
5	60	1	31	0	7	10	21	3	0	61
6	59	2	33	0	7	9	36	4	0	70
7	58	3	36	1	8	2	45	4	-0	79
8	59	4	38	1	8	0	55	4	-0	89
9	61	5	39	1	9	0	59	5	-0	94
10	65	5	40	1	9	0	60	5	-0	97
11	68	6	41	1	9	0	61	5	-0	97
12	73	6	41	1	9	0	62	5	-0	98
13	77	6	41	1	10	0	64	5	-0	100
14	80	6	41	1	10	0	66	5	-0	100
15	83	7	41	1	10	0	66	5	-0	100
16	86	7	40	1	10	0	65	5	-0	98
17	88	7	39	1	10	0	63	5	-0	94
18	86	7	37	1	10	0	58	4	-0	86
19	84	7	37	1	9	0	56	4	-0	80
20	81	7	35	1	9	2	51	4	0	74
21	79	6	34	1	9	9	48	4	0	69
22	76	3	33	0	8	10	39	3	0	63
23	73	1	32	0	8	10	22	3	0	58
24	69	0	32	0	7	10	14	3	0	55

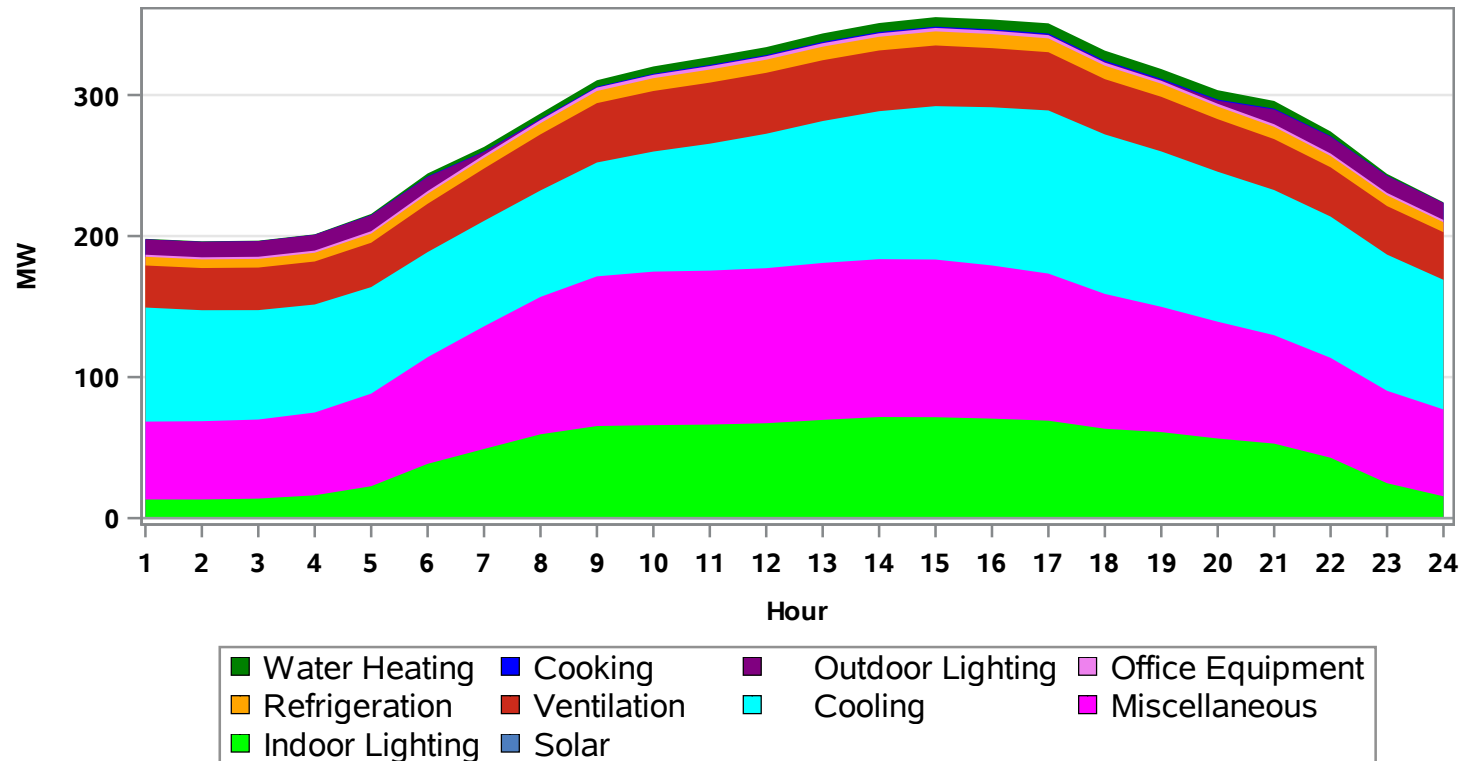
Summer 2028 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2028 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	73	0	31	0	6	10	13	2	0	55
2	70	0	31	0	6	10	13	2	0	55
3	69	0	31	0	6	10	14	2	0	55
4	67	0	31	0	6	10	16	2	0	57
5	66	1	31	0	7	10	22	3	0	63
6	65	2	34	0	7	9	37	3	0	72
7	64	3	37	1	8	2	47	3	-0	83
8	65	4	39	1	8	0	57	3	-0	92
9	68	5	41	1	8	0	61	4	-0	98
10	72	5	41	1	9	0	62	4	-0	101
11	76	6	42	1	9	0	63	4	-0	102
12	81	6	42	1	9	0	64	4	-0	102
13	85	6	42	1	9	0	66	4	-0	104
14	89	6	42	1	10	0	68	4	-0	105
15	92	7	42	1	10	0	68	4	-0	105
16	95	7	41	1	10	0	67	4	-0	102
17	98	7	40	1	10	0	65	3	-0	98
18	96	7	38	1	9	0	60	3	-0	90
19	93	7	38	1	9	0	57	3	-0	83
20	90	7	36	1	9	2	53	3	0	77
21	87	6	35	1	9	9	50	3	0	72
22	84	3	34	0	8	11	40	3	0	66
23	81	1	33	0	7	11	23	2	0	61
24	77	0	33	0	7	11	14	2	0	57

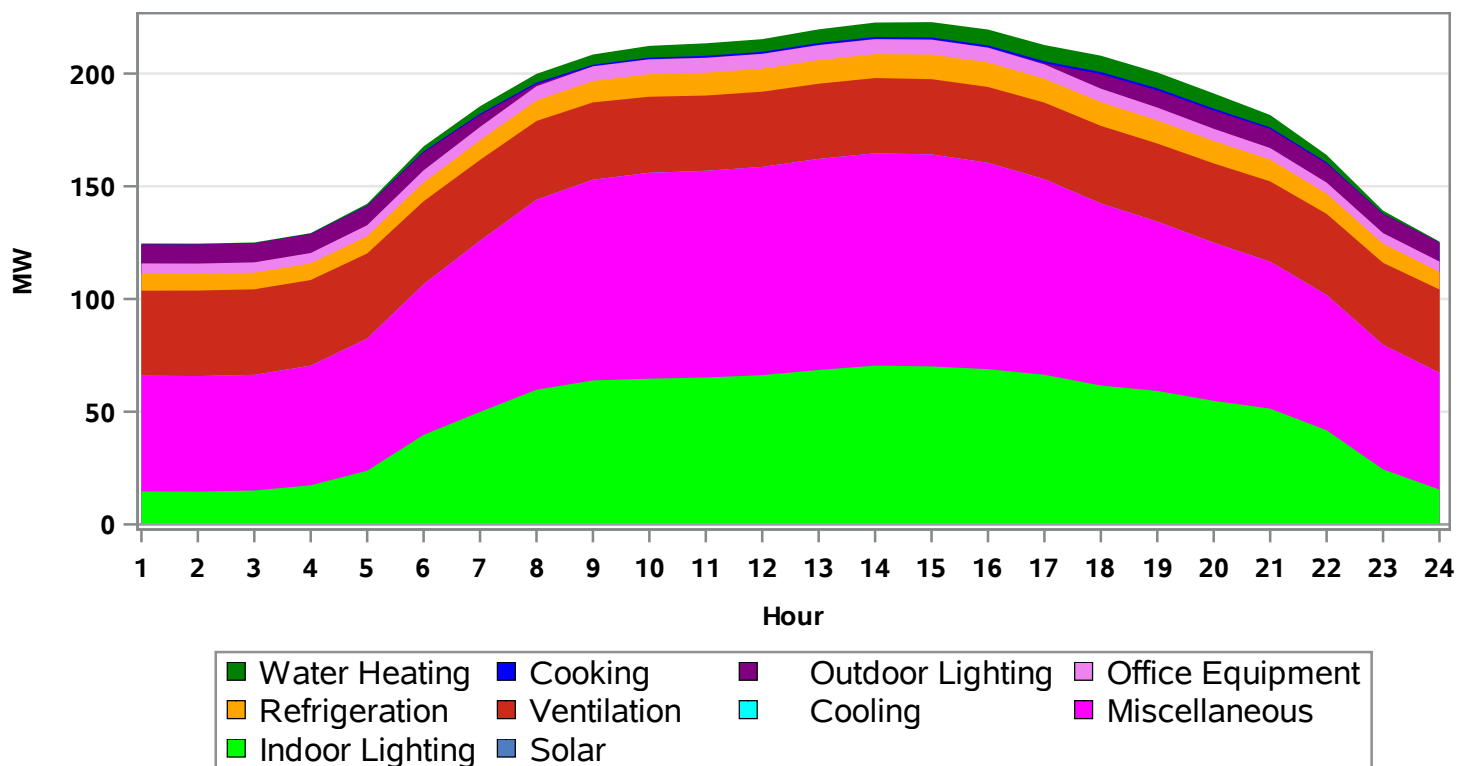
Summer 2037 System Peak Day: Commercial LPS End-Use Profiles (MW)



Summer 2037 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	30	0	6	11	13	1	0	55
2	79	0	30	0	6	11	13	1	0	56
3	78	0	30	0	6	11	14	2	0	56
4	77	0	30	0	6	11	16	2	0	59
5	76	1	31	0	6	11	23	2	0	66
6	75	2	34	0	7	10	39	2	0	76
7	75	3	37	0	8	2	49	2	-0	87
8	75	4	40	1	8	0	60	2	-0	97
9	81	5	42	1	9	0	66	2	-1	106
10	85	5	43	1	9	0	67	2	-1	109
11	90	6	43	1	9	0	67	2	-1	109
12	95	6	43	1	9	0	68	2	-1	110
13	101	6	43	1	10	0	71	2	-1	111
14	105	6	43	1	10	0	73	2	-1	112
15	109	7	43	1	10	0	72	2	-1	112
16	112	7	42	1	10	0	71	2	-1	109
17	116	7	41	1	10	0	70	2	-0	104
18	113	7	39	1	10	1	64	2	-0	96
19	110	7	39	1	9	1	61	2	-0	89
20	106	7	37	1	9	2	56	2	-0	83
21	103	5	36	1	9	10	53	2	0	77
22	100	3	35	0	8	12	43	2	0	71
23	97	1	34	0	8	12	25	2	0	66
24	92	0	34	0	7	12	15	2	0	62

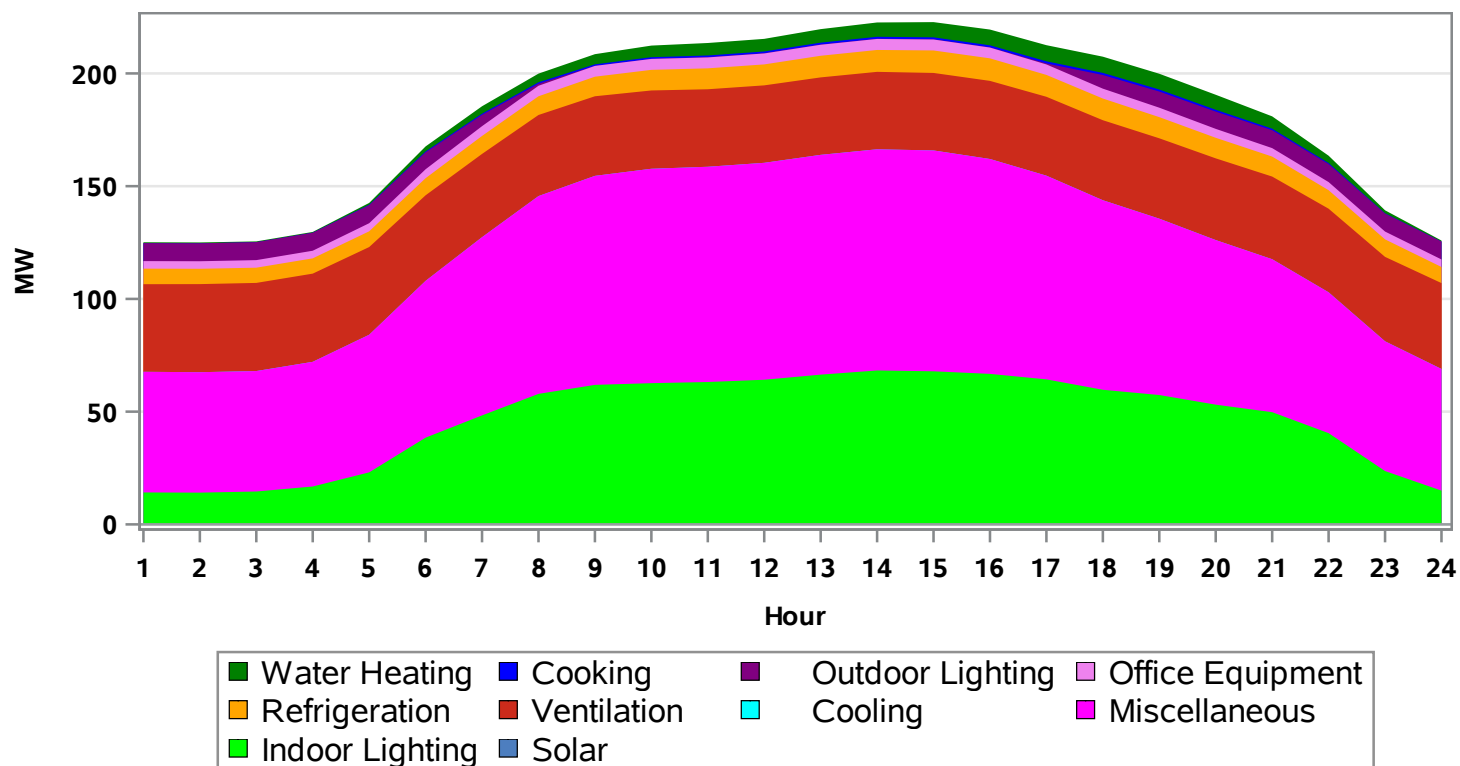
Winter 2018 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2018 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	38	0	8	8	15	5	0	51
2	0	0	38	0	7	8	15	5	0	51
3	0	0	38	0	7	8	15	5	0	51
4	0	0	38	0	7	8	17	5	0	53
5	0	1	38	0	8	8	24	5	0	59
6	0	2	37	0	8	8	40	5	0	67
7	0	3	36	1	9	5	50	6	0	76
8	0	4	35	1	9	1	60	6	0	84
9	0	5	34	1	9	0	64	7	0	89
10	0	5	34	1	10	0	65	7	-0	91
11	0	6	33	1	10	0	65	7	-0	92
12	0	6	33	1	10	0	66	7	-0	92
13	0	6	33	1	10	0	69	7	-0	94
14	0	6	33	1	11	0	70	7	-0	94
15	0	7	33	1	11	0	70	7	-0	94
16	0	7	34	1	11	0	69	7	-0	92
17	0	7	34	1	11	0	66	6	0	87
18	0	7	34	1	11	6	62	6	0	81
19	0	7	35	1	10	8	59	6	0	75
20	0	7	35	1	10	8	55	5	0	70
21	0	6	36	1	10	8	51	5	0	65
22	0	3	36	0	9	8	42	5	0	60
23	0	1	36	0	8	8	24	5	0	55
24	0	0	37	0	8	8	15	5	0	52

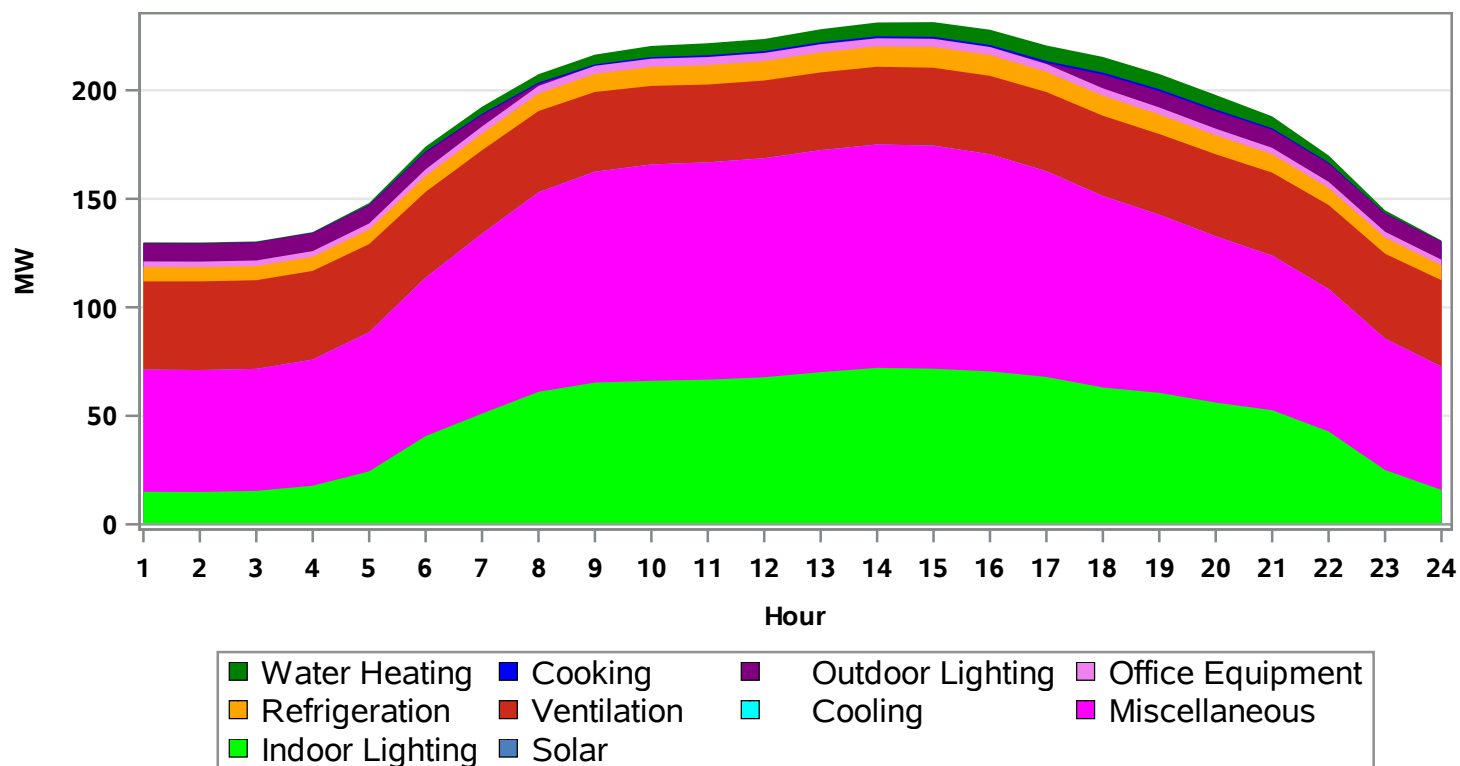
Winter 2023 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2023 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	39	0	7	8	14	3	0	54
2	0	0	39	0	7	8	14	3	0	53
3	0	0	39	0	7	8	15	3	0	53
4	0	0	39	0	7	8	17	3	0	55
5	0	1	39	0	7	8	23	4	0	61
6	0	2	38	0	8	7	38	4	0	70
7	0	3	37	1	8	5	48	4	0	79
8	0	4	36	1	8	1	58	5	0	88
9	0	5	35	1	9	0	62	5	0	93
10	0	5	35	1	9	0	63	5	-0	95
11	0	6	34	1	9	0	63	5	-0	95
12	0	6	34	1	9	0	64	5	-0	96
13	0	6	34	1	10	0	66	5	-0	97
14	0	6	34	1	10	0	68	5	-0	98
15	0	7	34	1	10	0	68	5	-0	98
16	0	7	35	1	10	0	67	5	-0	95
17	0	7	35	1	10	0	64	5	0	90
18	0	7	35	1	10	6	60	4	0	84
19	0	7	36	1	9	7	57	4	0	78
20	0	7	36	1	9	8	53	4	0	73
21	0	5	37	1	9	8	50	4	0	68
22	0	3	37	0	8	8	40	4	0	62
23	0	1	37	0	8	8	24	3	0	58
24	0	0	38	0	7	8	15	3	0	54

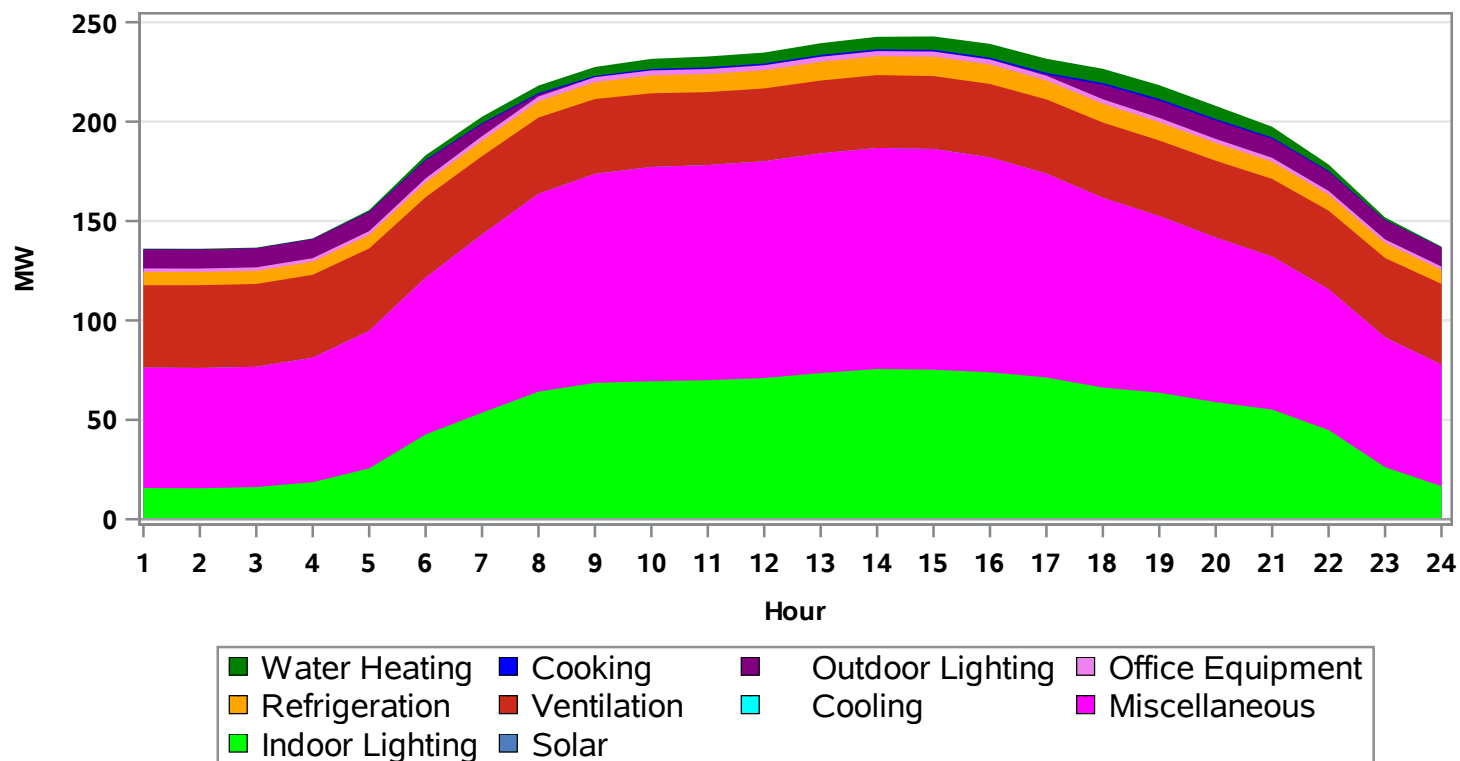
Winter 2028 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2028 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	41	0	7	8	15	3	0	56
2	0	0	41	0	7	8	15	3	0	56
3	0	0	41	0	7	8	15	3	0	56
4	0	0	41	0	7	8	18	3	0	58
5	0	1	41	0	7	8	24	3	0	64
6	0	2	40	0	7	8	41	3	0	73
7	0	3	38	1	8	5	51	3	0	83
8	0	4	37	1	8	1	61	4	0	92
9	0	5	37	1	8	0	65	4	-0	97
10	0	5	36	1	9	0	66	4	-0	100
11	0	6	36	1	9	0	67	4	-0	100
12	0	6	36	1	9	0	68	4	-0	101
13	0	6	36	1	9	0	70	4	-0	102
14	0	6	36	1	9	0	72	4	-0	103
15	0	7	36	1	10	0	72	4	-0	103
16	0	7	36	1	10	0	71	4	-0	100
17	0	7	36	1	9	0	68	4	-0	95
18	0	7	37	1	9	6	63	3	0	88
19	0	7	37	1	9	8	61	3	0	82
20	0	7	38	1	9	8	56	3	0	77
21	0	5	38	1	9	8	53	3	0	71
22	0	3	39	0	8	8	43	3	0	66
23	0	1	39	0	7	8	25	3	0	61
24	0	0	40	0	7	8	16	3	0	57

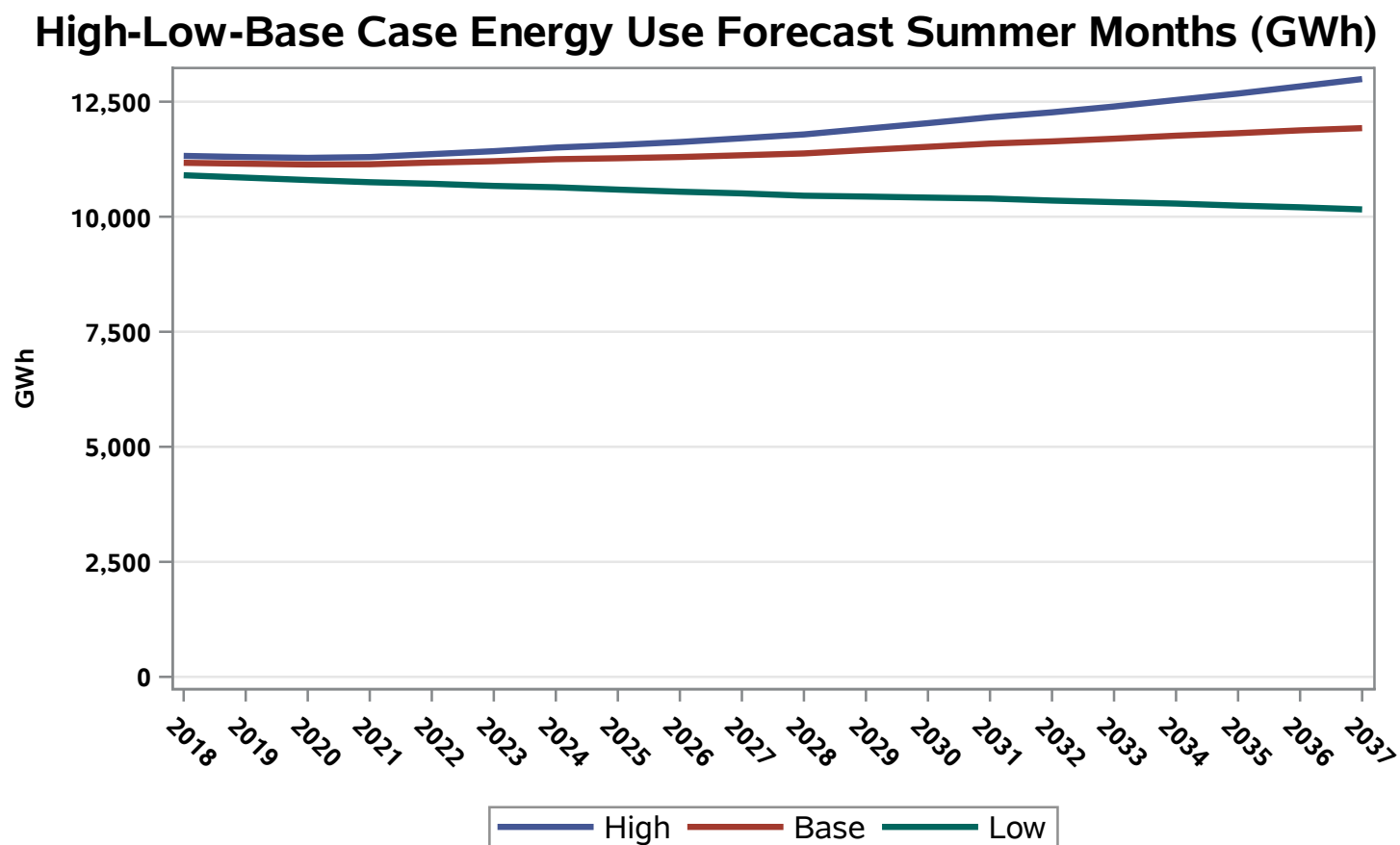
Winter 2037 System Peak Day: Commercial LPS End-Use Profiles (MW)



Winter 2037 System Peak Day: Commercial LPS End-Use Profiles (MW)

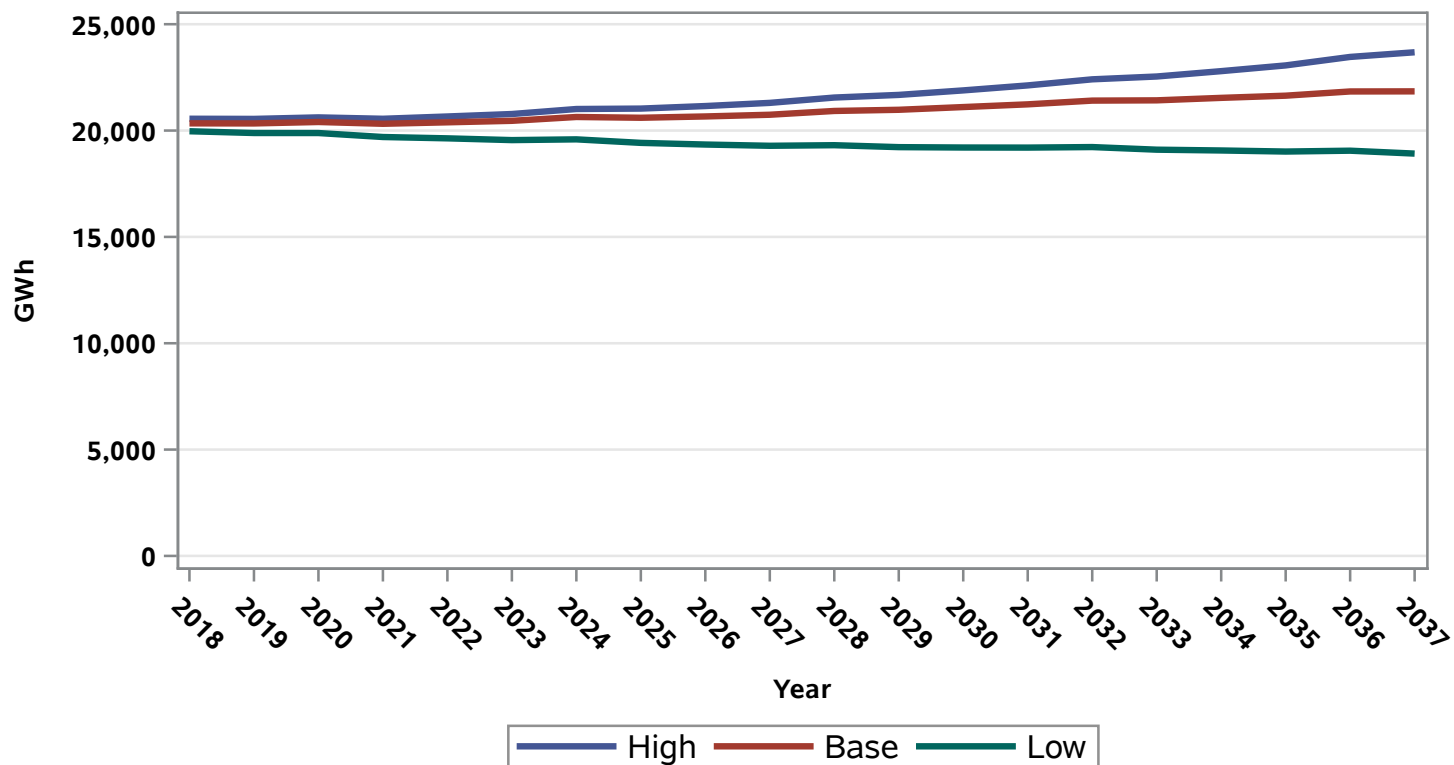
Hour	Cooling	Water Heating	Ventilation	Cooking	Refrigeration	Outdoor Lighting	Indoor Lighting	Office Equipment	Solar	Miscellaneous
1	0	0	41	0	7	10	16	2	0	61
2	0	0	42	0	7	10	16	2	0	60
3	0	0	42	0	7	10	16	2	0	61
4	0	0	42	0	7	10	19	2	0	63
5	0	1	41	0	7	10	26	2	0	69
6	0	2	40	0	7	9	43	2	0	79
7	0	3	39	0	8	6	54	2	0	90
8	0	4	38	1	8	1	64	2	0	100
9	0	4	38	1	9	0	69	2	-0	105
10	0	5	37	1	9	0	69	3	-0	108
11	0	5	37	1	9	0	70	3	-0	108
12	0	6	37	1	9	0	71	3	-0	109
13	0	6	37	1	9	0	74	3	-0	111
14	0	6	37	1	10	0	76	3	-0	111
15	0	7	37	1	10	0	75	3	-0	111
16	0	7	37	1	10	0	74	2	-0	108
17	0	7	37	1	10	1	71	2	-0	103
18	0	7	38	1	9	7	66	2	0	95
19	0	7	38	1	9	9	64	2	0	89
20	0	7	39	1	9	9	59	2	0	83
21	0	5	39	1	9	10	55	2	0	77
22	0	3	40	0	8	10	45	2	0	71
23	0	1	40	0	8	10	26	2	0	65
24	0	0	41	0	7	10	17	2	0	61

Energy Forecast for High-Low-Base Case Scenarios²²

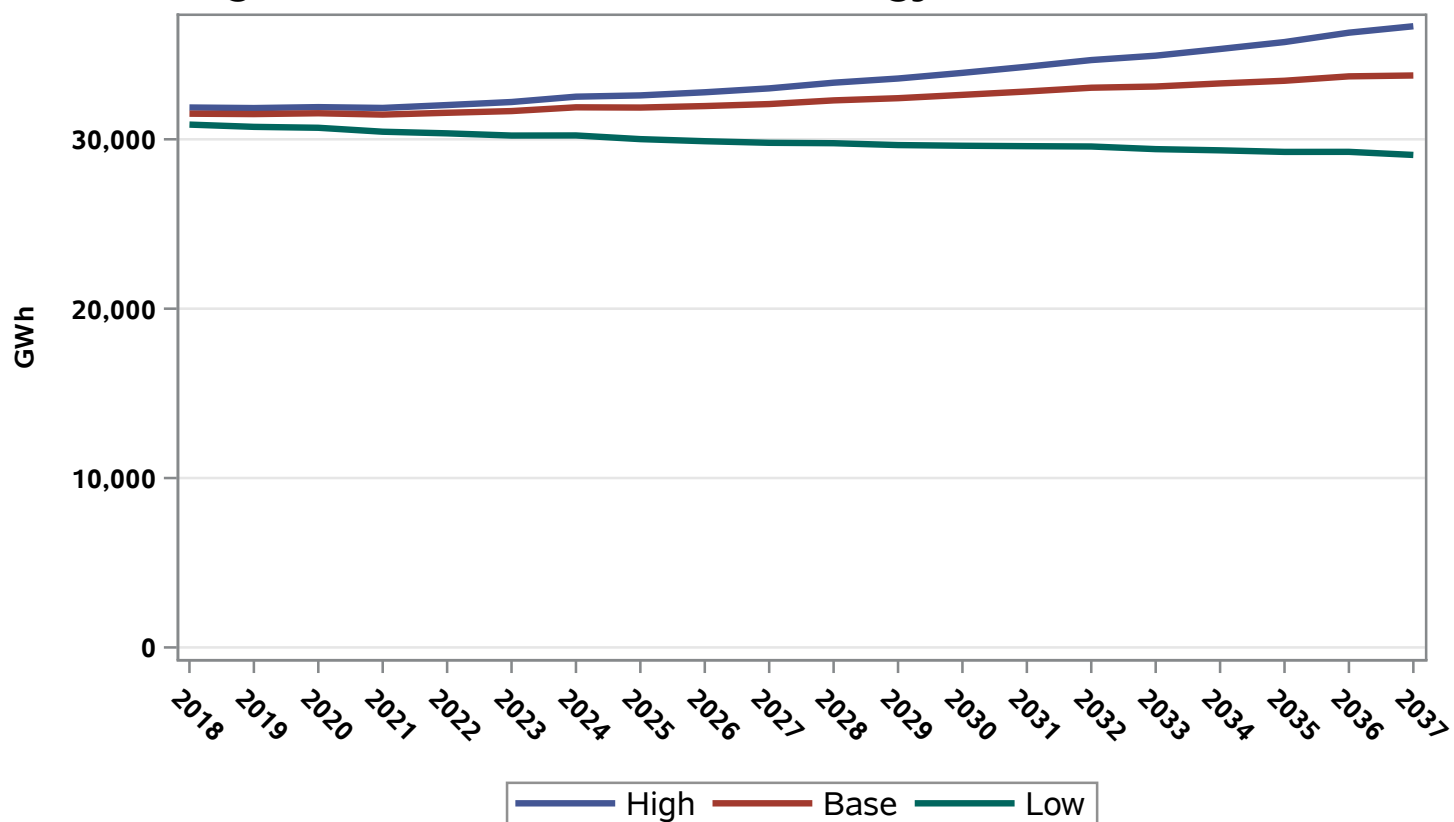


²²4 CSR 240-22.030(8)(C)1, 4 CSR 240-22.030(8)(C)2

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



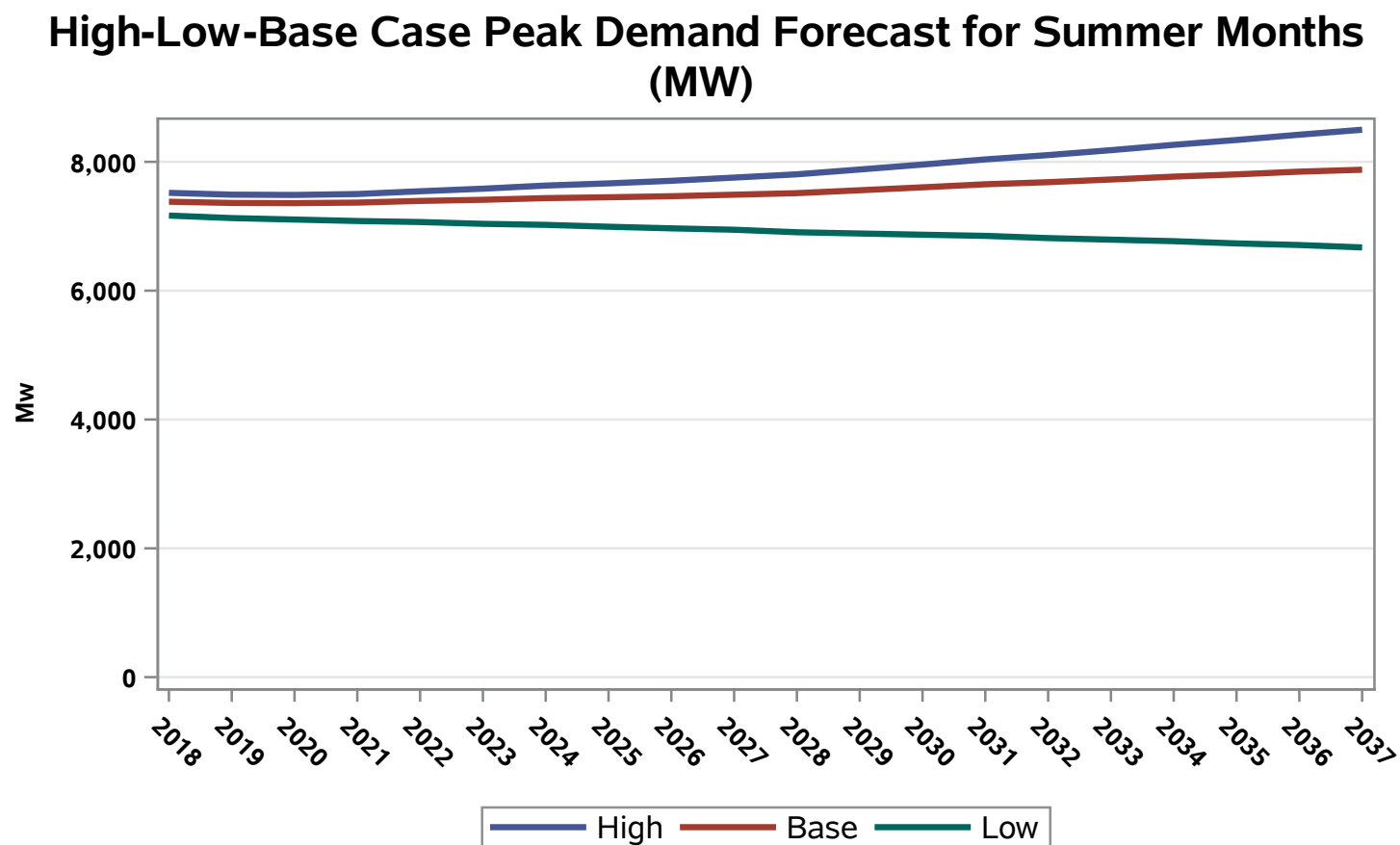
High-Low-Base Case Annual Energy Forecast (GWh)



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

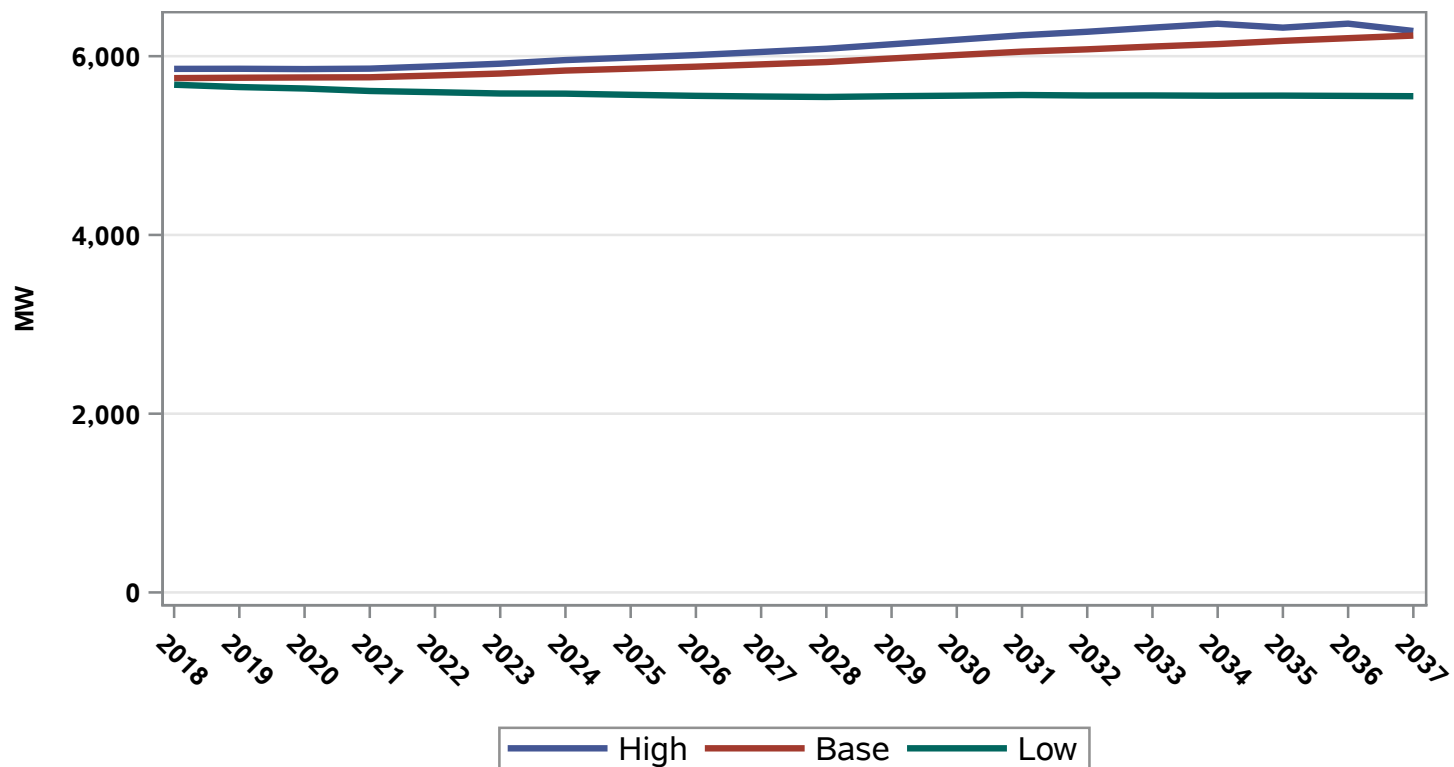
	Annual			Non-Summer			Summer		
Year	Base	High	Low	Base	High	Low	Base	High	Low
2018	31,511	31,877	30,868	20,339	20,556	19,967	11,171	11,321	10,901
2019	31,487	31,843	30,734	20,335	20,548	19,884	11,152	11,296	10,849
2020	31,537	31,898	30,680	20,402	20,619	19,883	11,135	11,279	10,797
2021	31,458	31,851	30,447	20,318	20,555	19,697	11,140	11,296	10,750
2022	31,565	32,022	30,350	20,387	20,662	19,634	11,177	11,360	10,716
2023	31,665	32,201	30,221	20,458	20,778	19,551	11,207	11,424	10,669
2024	31,888	32,516	30,227	20,638	21,013	19,587	11,250	11,503	10,640
2025	31,873	32,591	30,010	20,603	21,033	19,421	11,271	11,558	10,589
2026	31,961	32,776	29,887	20,664	21,153	19,344	11,297	11,623	10,544
2027	32,079	33,006	29,791	20,744	21,301	19,284	11,335	11,704	10,507
2028	32,297	33,341	29,769	20,922	21,553	19,312	11,375	11,788	10,457
2029	32,426	33,588	29,659	20,976	21,676	19,221	11,450	11,911	10,438
2030	32,623	33,922	29,618	21,104	21,888	19,203	11,519	12,033	10,416
2031	32,822	34,284	29,594	21,233	22,123	19,199	11,589	12,161	10,395
2032	33,045	34,677	29,575	21,408	22,409	19,224	11,636	12,269	10,351
2033	33,116	34,936	29,418	21,421	22,541	19,101	11,695	12,395	10,317
2034	33,298	35,331	29,349	21,537	22,794	19,063	11,761	12,537	10,286
2035	33,456	35,739	29,255	21,641	23,063	19,014	11,816	12,676	10,241
2036	33,716	36,295	29,258	21,839	23,462	19,053	11,877	12,833	10,205
2037	33,768	36,673	29,075	21,843	23,681	18,917	11,925	12,992	10,159

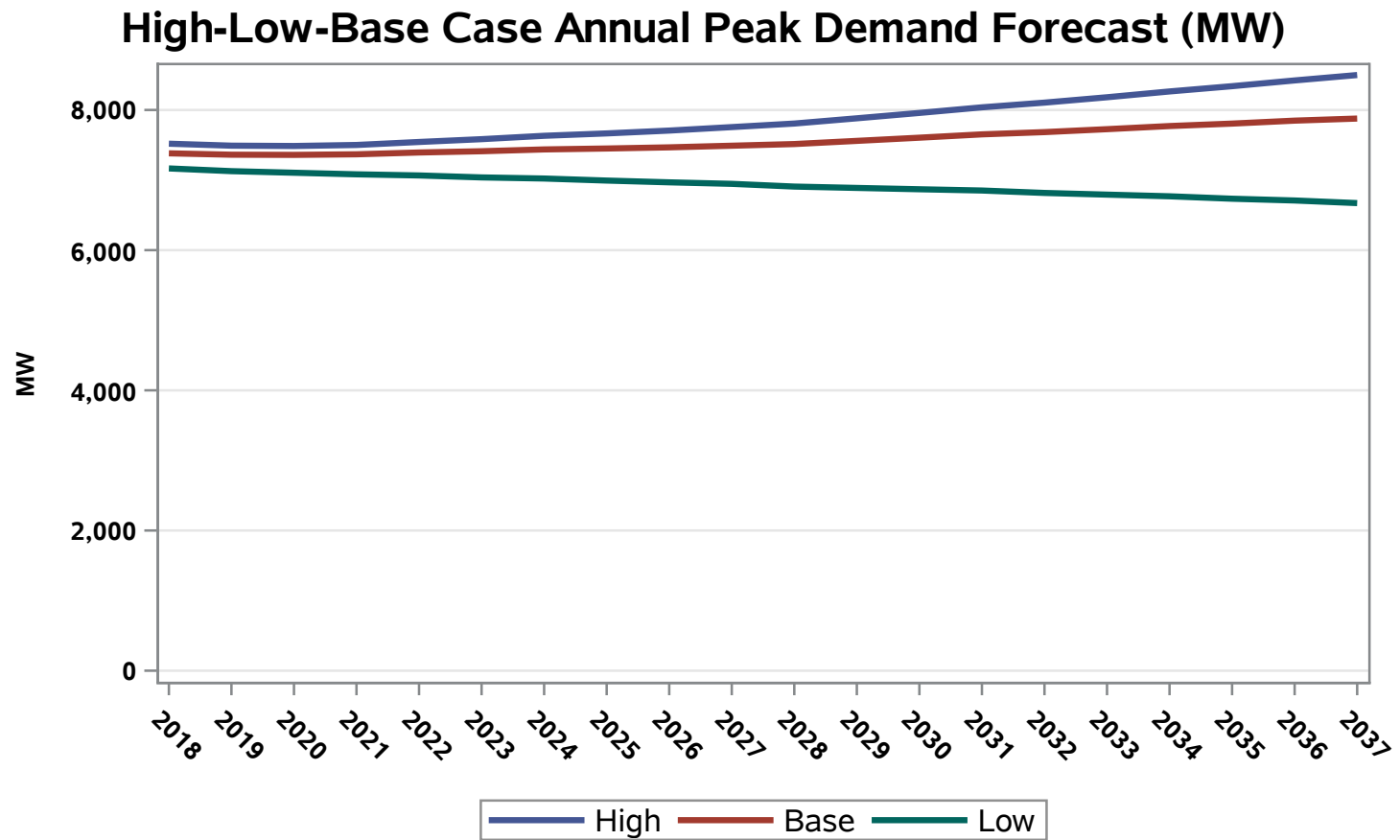
Peak Demand Forecasts for Base, High and Low Case Scenarios²³



²³4 CSR 240-22.030(8)(C)1, 4 CSR 240-22.030(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
2018	7,519	7,381	7,166	7,519	7,381	7,166	5,858	5,754	5,681
2019	7,490	7,362	7,127	7,490	7,362	7,127	5,859	5,759	5,654
2020	7,486	7,359	7,104	7,486	7,359	7,104	5,856	5,762	5,638
2021	7,500	7,367	7,081	7,500	7,367	7,081	5,861	5,764	5,611
2022	7,543	7,393	7,065	7,543	7,393	7,065	5,887	5,784	5,597
2023	7,583	7,411	7,038	7,583	7,411	7,038	5,916	5,806	5,582
2024	7,631	7,437	7,022	7,631	7,437	7,022	5,956	5,839	5,581
2025	7,665	7,450	6,993	7,665	7,450	6,993	5,984	5,861	5,568
2026	7,706	7,466	6,968	7,706	7,466	6,968	6,012	5,882	5,556
2027	7,756	7,490	6,946	7,756	7,490	6,946	6,047	5,908	5,549
2028	7,806	7,514	6,907	7,806	7,514	6,907	6,083	5,935	5,543
2029	7,881	7,559	6,888	7,881	7,559	6,888	6,133	5,974	5,552
2030	7,957	7,604	6,869	7,957	7,604	6,869	6,184	6,013	5,558
2031	8,038	7,652	6,851	8,038	7,652	6,851	6,234	6,051	5,565
2032	8,105	7,684	6,816	8,105	7,684	6,816	6,273	6,077	5,560
2033	8,181	7,726	6,792	8,181	7,726	6,792	6,319	6,108	5,560
2034	8,264	7,770	6,768	8,264	7,770	6,768	6,363	6,135	5,558
2035	8,339	7,805	6,733	8,339	7,805	6,733	6,319	6,171	5,559
2036	8,421	7,848	6,709	8,421	7,848	6,709	6,364	6,201	5,556
2037	8,498	7,877	6,671	8,498	7,877	6,671	6,282	6,230	5,552

Compliance References

4 CSR 240-22.030(2)(D)1.....	1, 14, 40, 53, 79, 91, 103
4 CSR 240-22.030(2)(D)3	1, 14, 40, 53, 79, 91, 103
4 CSR 240-22.030(7)(A)6.....	123, 142, 168
4 CSR 240-22.030(8)(C)1	115
4 CSR 240-22.030(8)(C)2	115
4 CSR 240-22.030(6)(C)3.....	194
4 CSR 240-22.030(6)(C)4.....	227
4 CSR 240-22.030(7)(A)6.....	243, 270, 275, 280, 284, 296, 307
4 CSR 240-22.030(7)(A)7	327, 332, 336
4 CSR 240-22.030(8)(C)1.....	432
4 CSR 240-22.030(8)(C)2	43