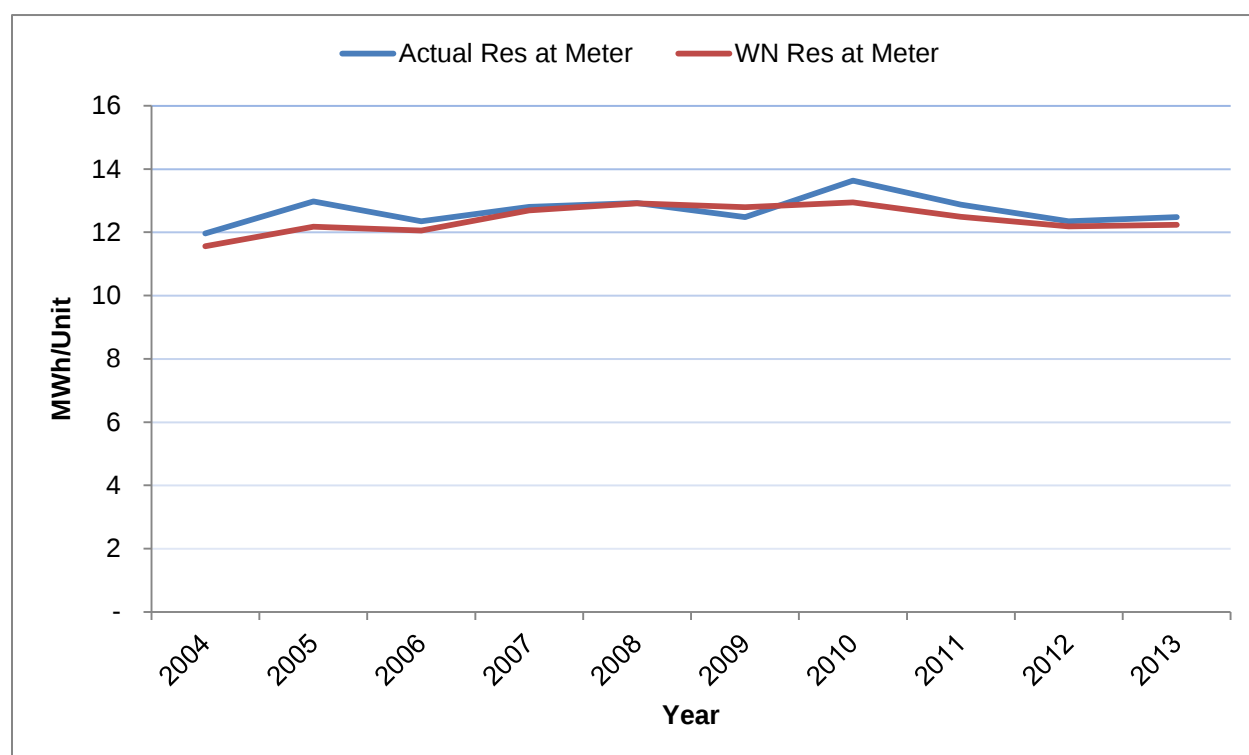


Chapter 3 – Appendix A

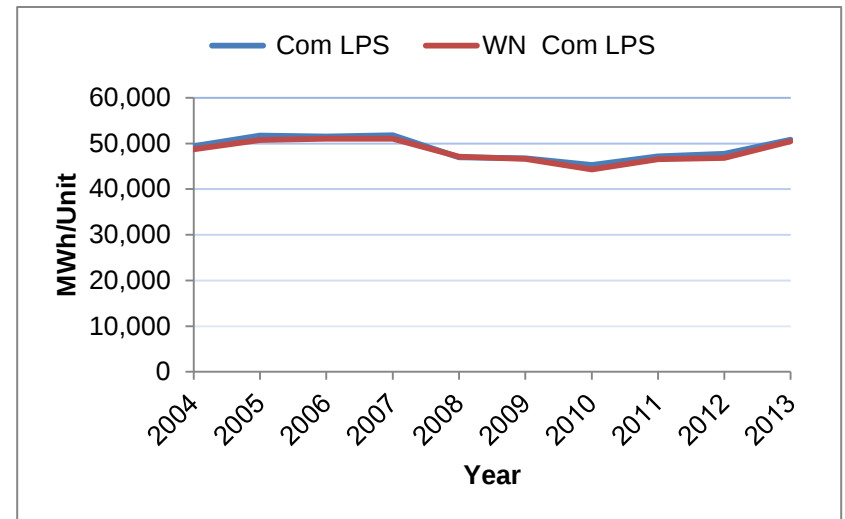
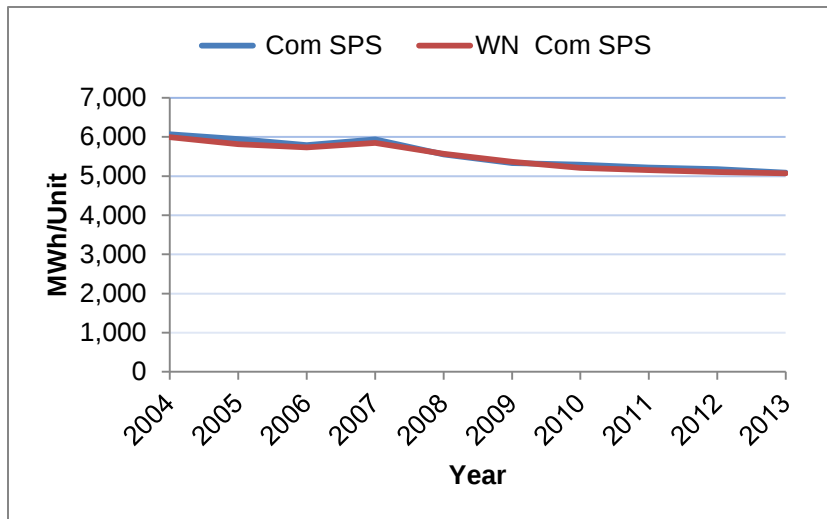
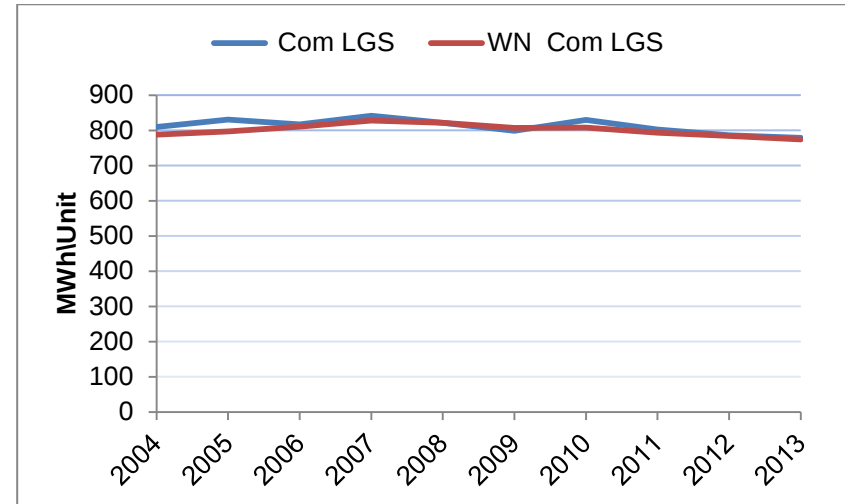
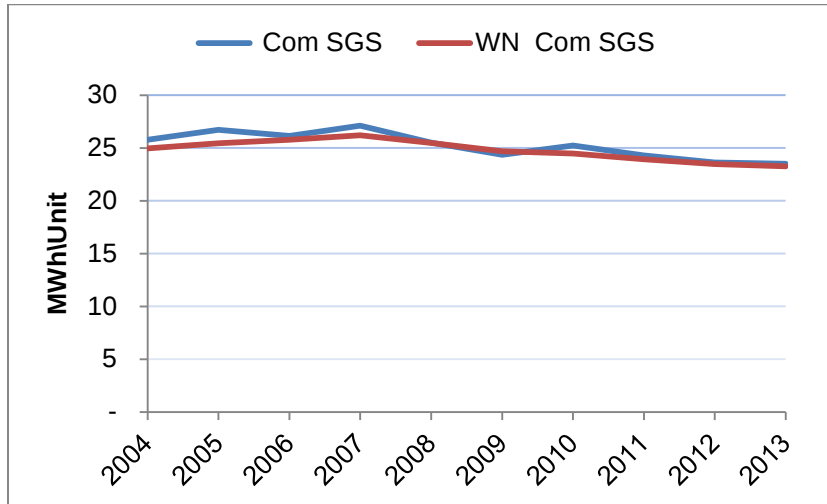
Annual Historical Actual and Weather Normalized Energy Use per Customer by Class (2004-2013)¹

Annual Residential Use per Customer (2004-2013)

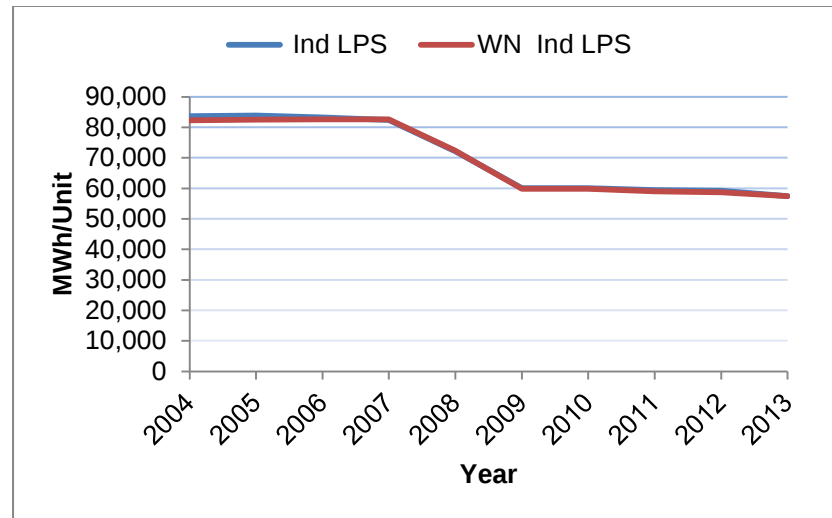
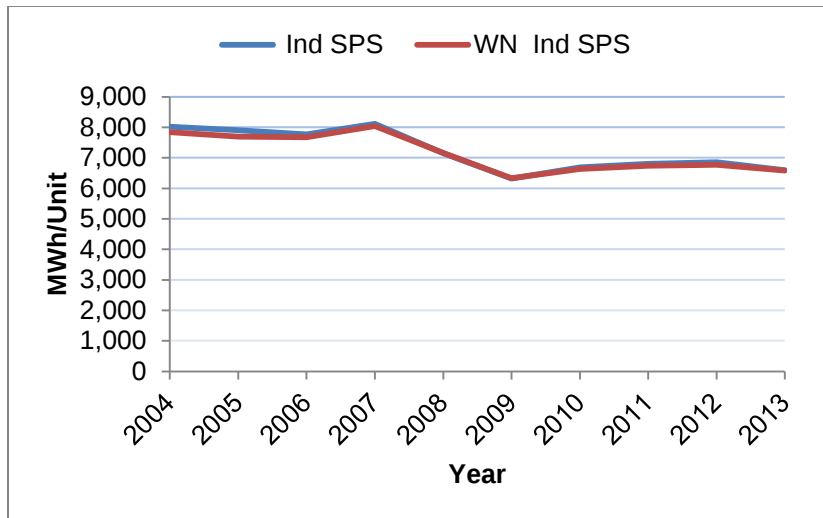
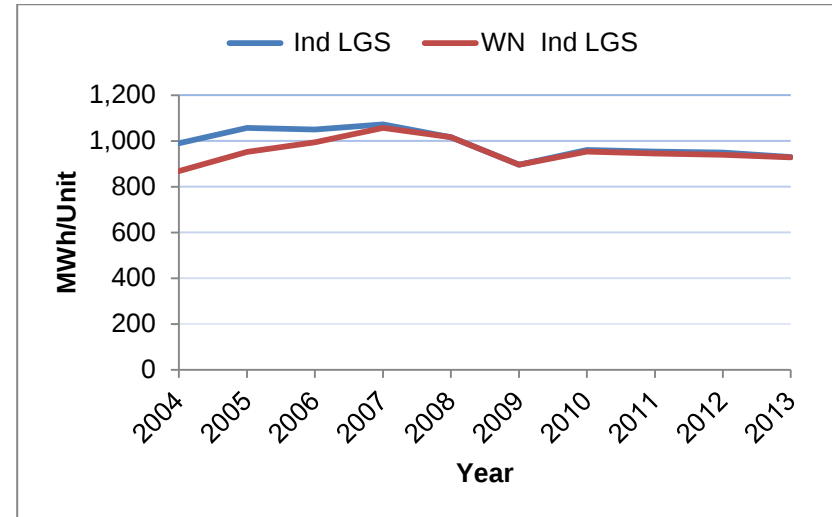
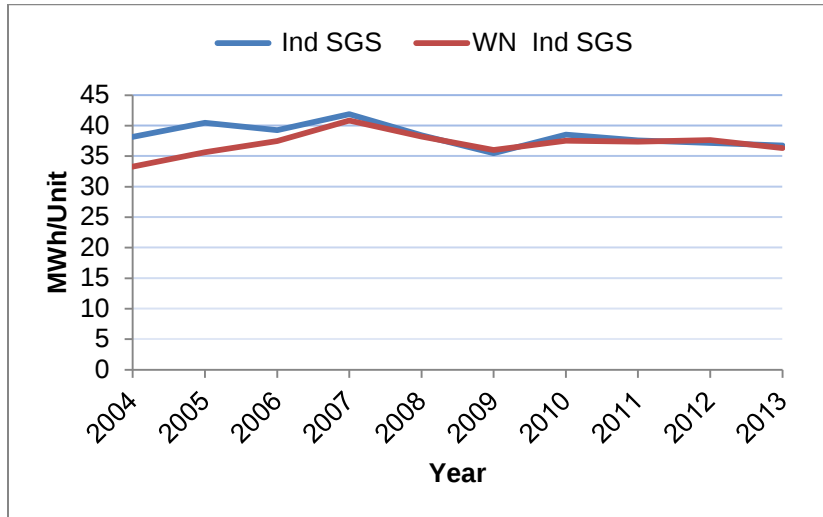


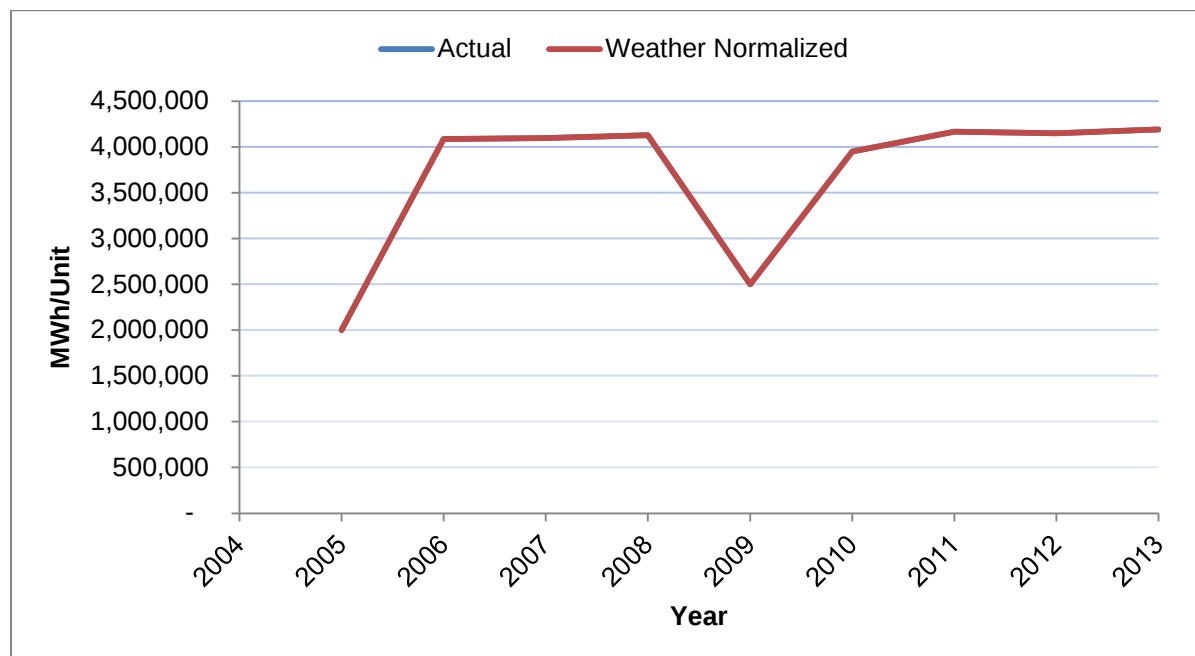
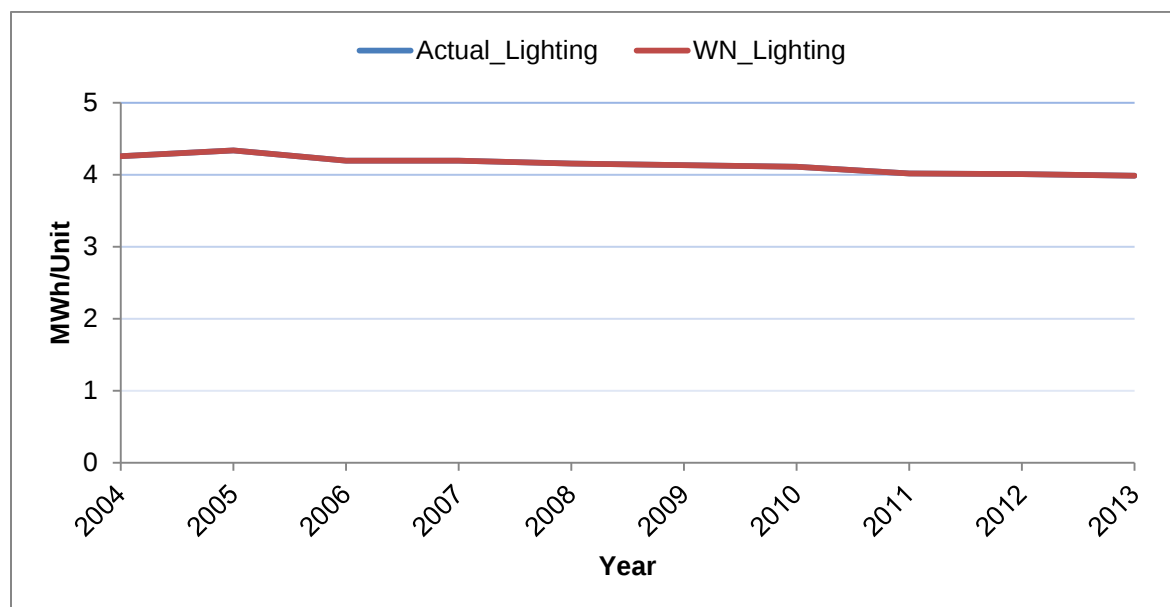
¹ 4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

Annual Commercial Use per Customer (2004-2013)



Annual Industrial Use per Customer (2004-2013)



Annual Large Transmission Service Use per Customer (2004-2013)**Annual Lighting Use per Customer (2004-2013)**

Historical Annual Use per Customer (MWh/Customer)

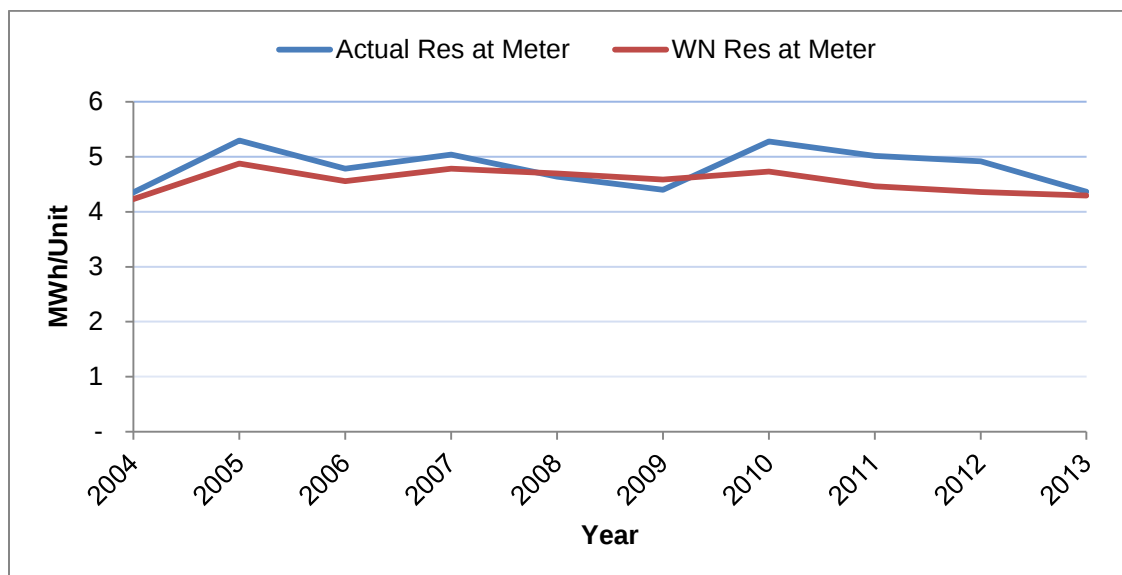
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	11.97	25.78	810	6,071	49,428	38.18	991	8,022	83,714	4.26	
2005	12.97	26.72	830	5,948	51,737	40.49	1,057	7,908	83,907	4.34	2,000,773
2006	12.35	26.14	817	5,793	51,505	39.29	1,050	7,776	83,240	4.20	4,086,126
2007	12.80	27.12	842	5,939	51,790	41.90	1,072	8,117	82,454	4.19	4,096,908
2008	12.93	25.50	822	5,554	46,953	38.46	1,016	7,157	72,194	4.15	4,128,768
2009	12.48	24.36	799	5,333	46,724	35.47	897	6,322	60,092	4.13	2,500,029
2010	13.64	25.22	829	5,293	45,312	38.55	961	6,686	60,068	4.11	3,952,399
2011	12.87	24.28	803	5,220	47,183	37.59	953	6,809	59,408	4.02	4,168,775
2012	12.35	23.64	786	5,179	47,731	37.15	950	6,857	59,274	4.01	4,150,227
2013	12.48	23.51	779	5,086	50,837	36.75	929	6,598	57,494	3.99	4,190,713

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

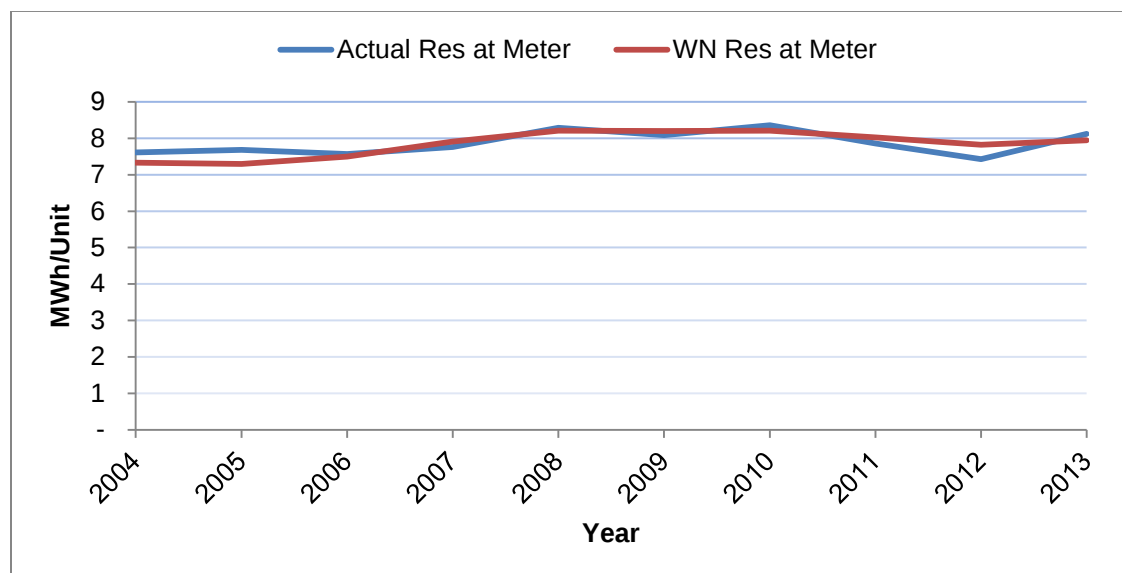
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	11.56	24.97	788	5,990	48,709	33.28	868	7,848	82,339	4.26	
2005	12.17	25.45	797	5,815	50,768	35.67	953	7,699	82,495	4.34	2,000,773
2006	12.05	25.78	811	5,733	51,052	37.51	995	7,677	82,658	4.20	4,086,126
2007	12.70	26.22	828	5,846	51,026	40.83	1,057	8,041	82,614	4.19	4,096,908
2008	12.91	25.47	821	5,567	47,065	38.25	1,017	7,165	72,326	4.15	4,128,768
2009	12.79	24.71	807	5,364	46,595	36.05	896	6,337	59,868	4.13	2,500,029
2010	12.94	24.48	808	5,211	44,307	37.56	953	6,639	59,845	4.11	3,952,399
2011	12.49	23.95	794	5,151	46,552	37.37	945	6,746	59,057	4.02	4,168,775
2012	12.18	23.48	784	5,103	46,797	37.63	940	6,769	58,707	4.01	4,150,227
2013	12.24	23.27	774	5,069	50,446	36.36	928	6,588	57,440	3.99	4,190,713

Historical Actual and Weather Normalized Energy Use per Customer for Major Class for Summer and Non Summer (2004-2013)

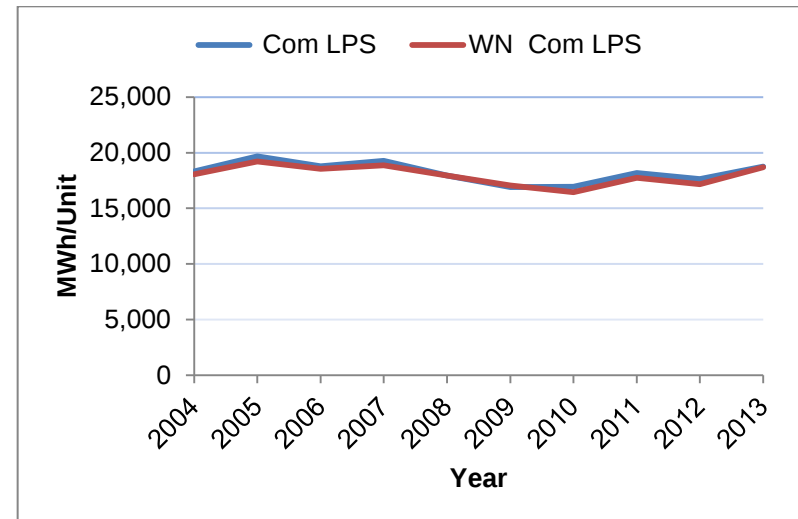
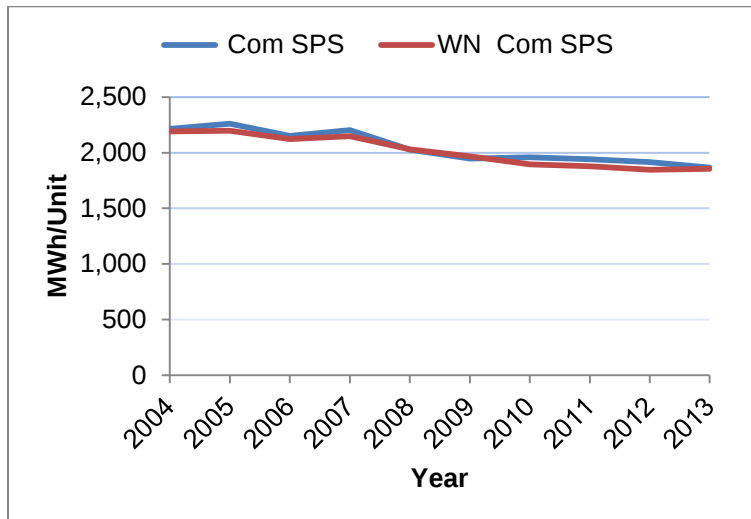
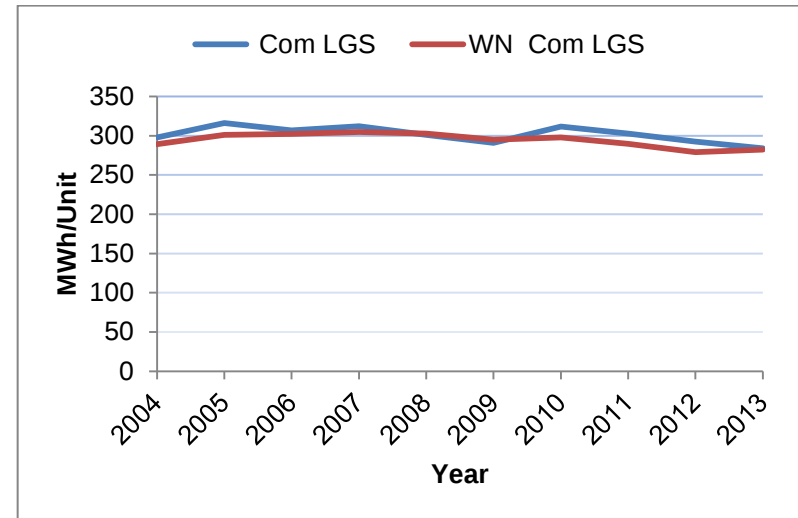
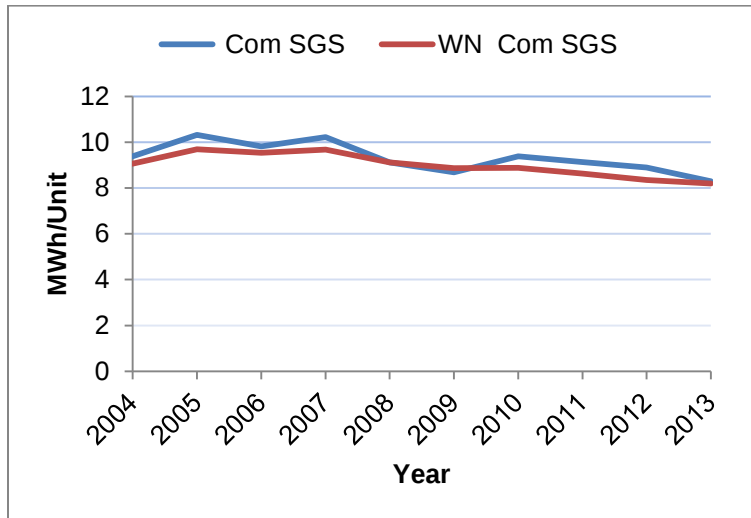
Residential Use per Customer for Summer Months (2004-2013)



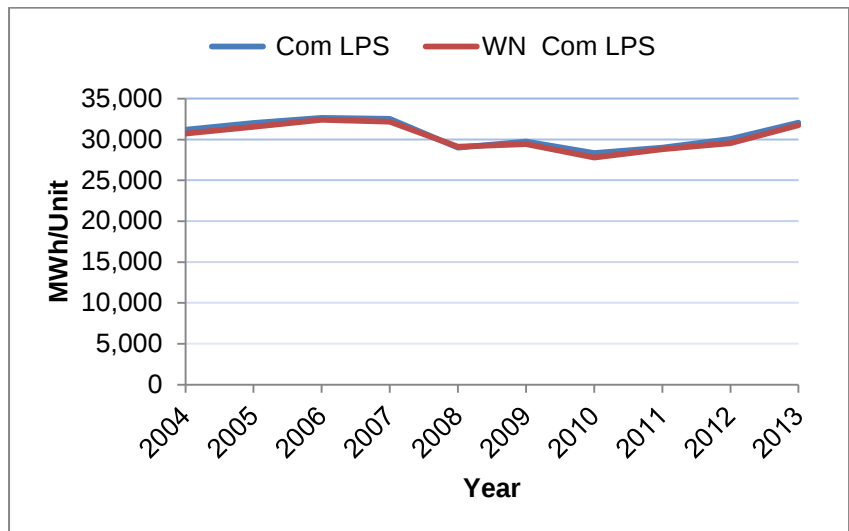
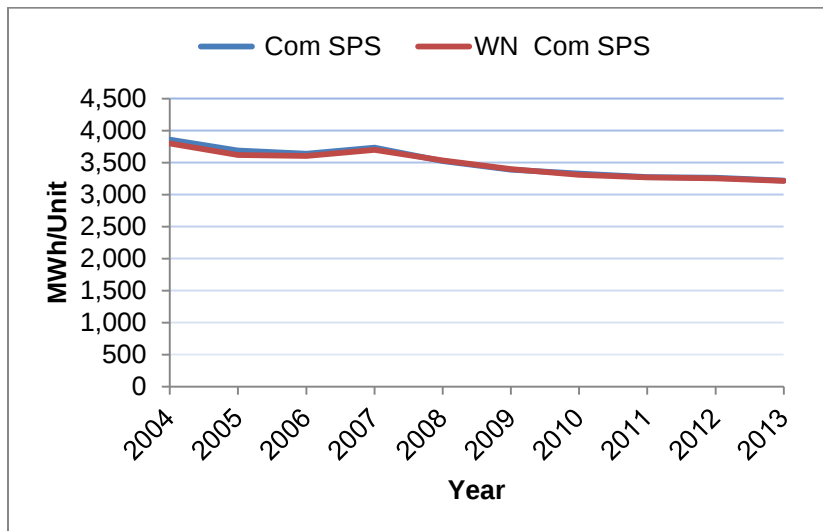
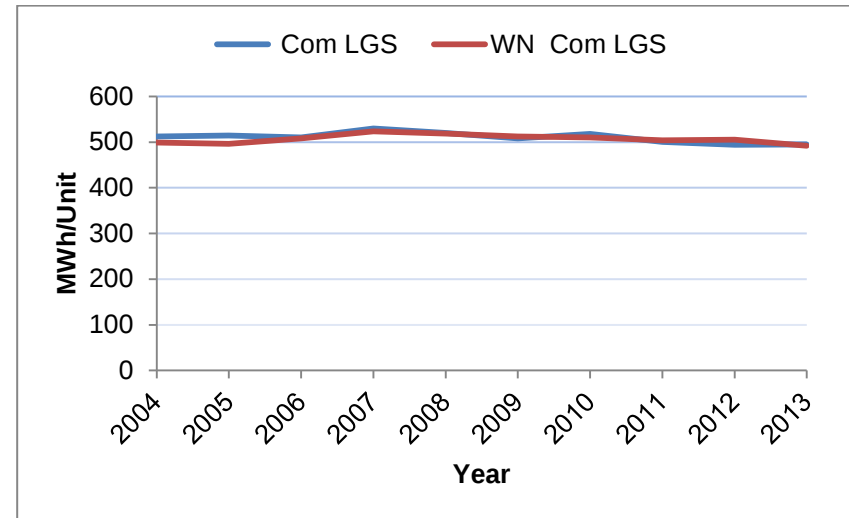
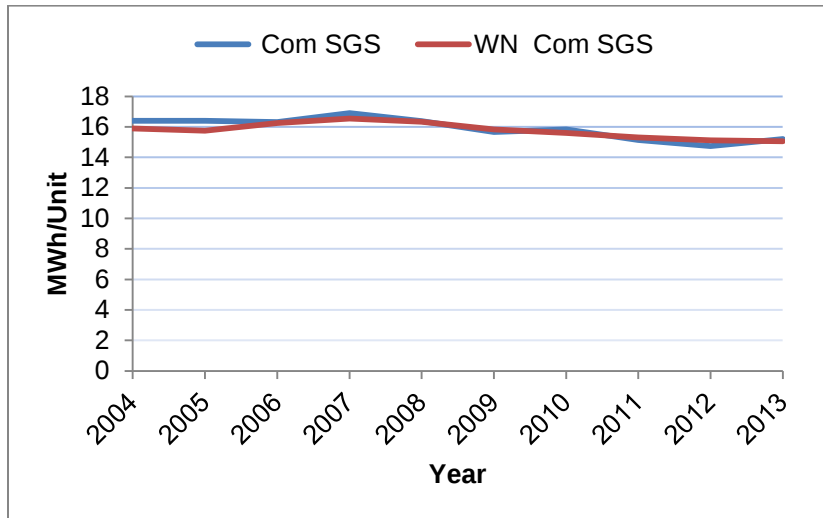
Residential Use per Customer for Non-Summer Months (2004-2013)



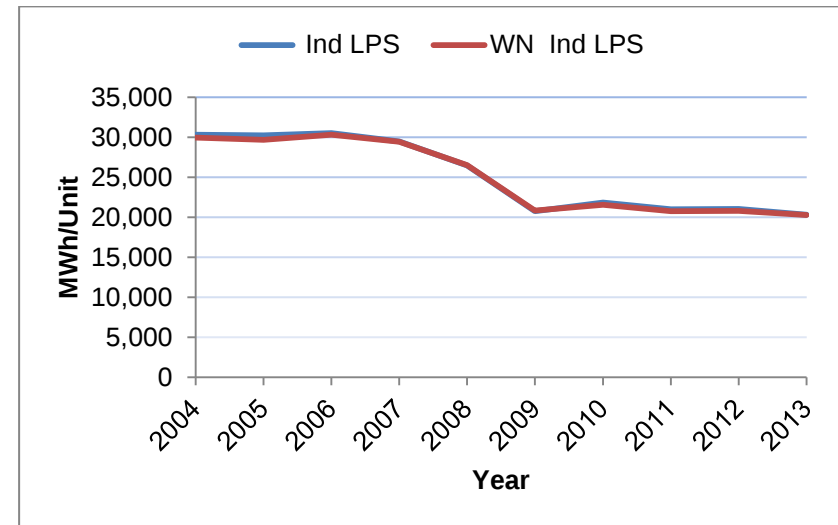
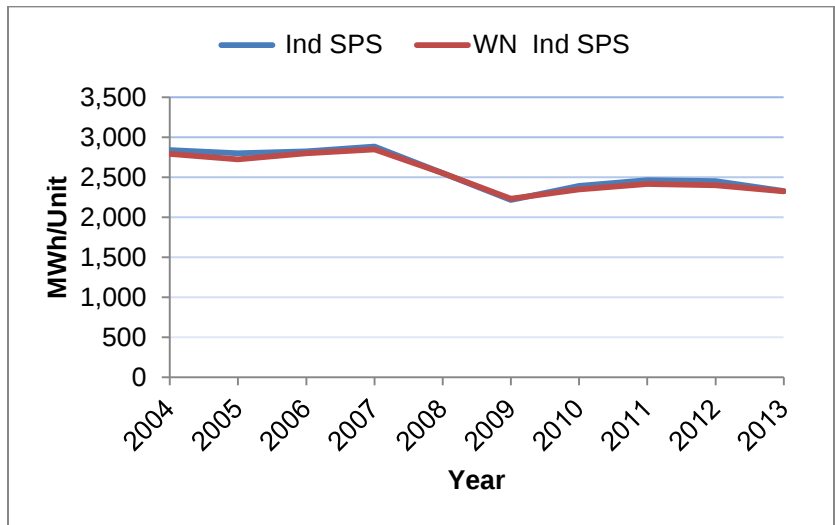
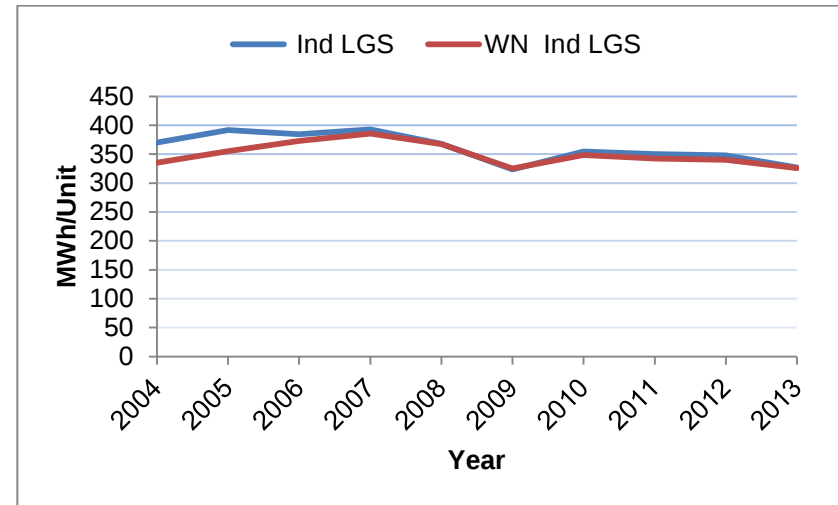
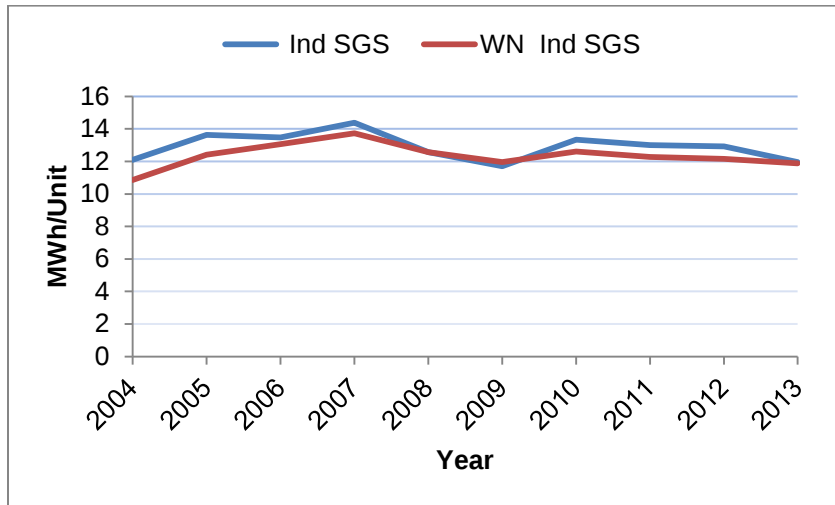
Commercial Use per Customer for Summer Months (2004-2013)



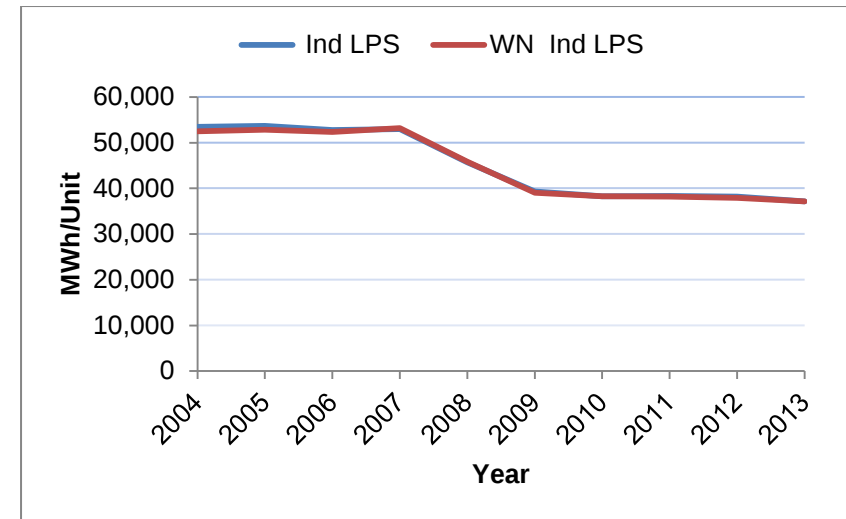
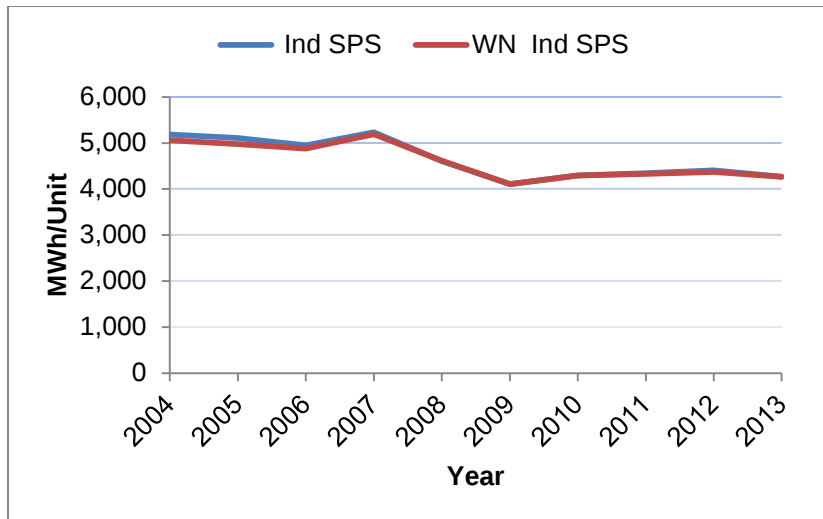
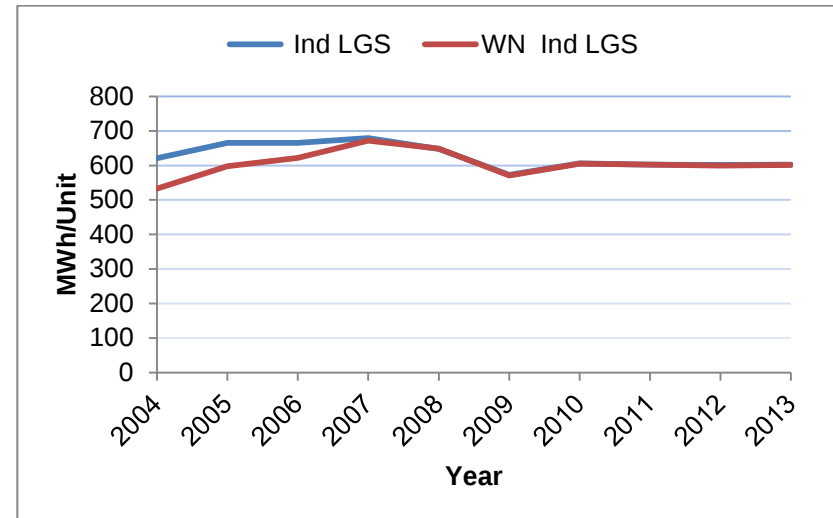
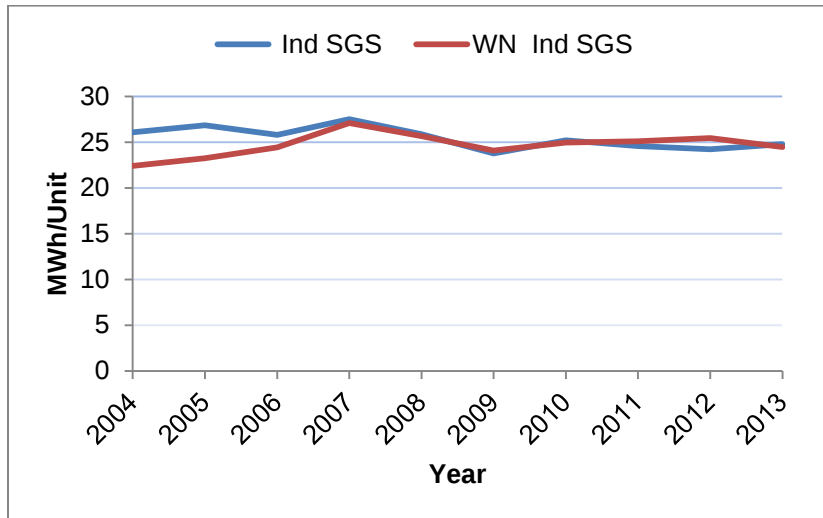
Commercial Use per Customer for Non-Summer Months (2004-2013)



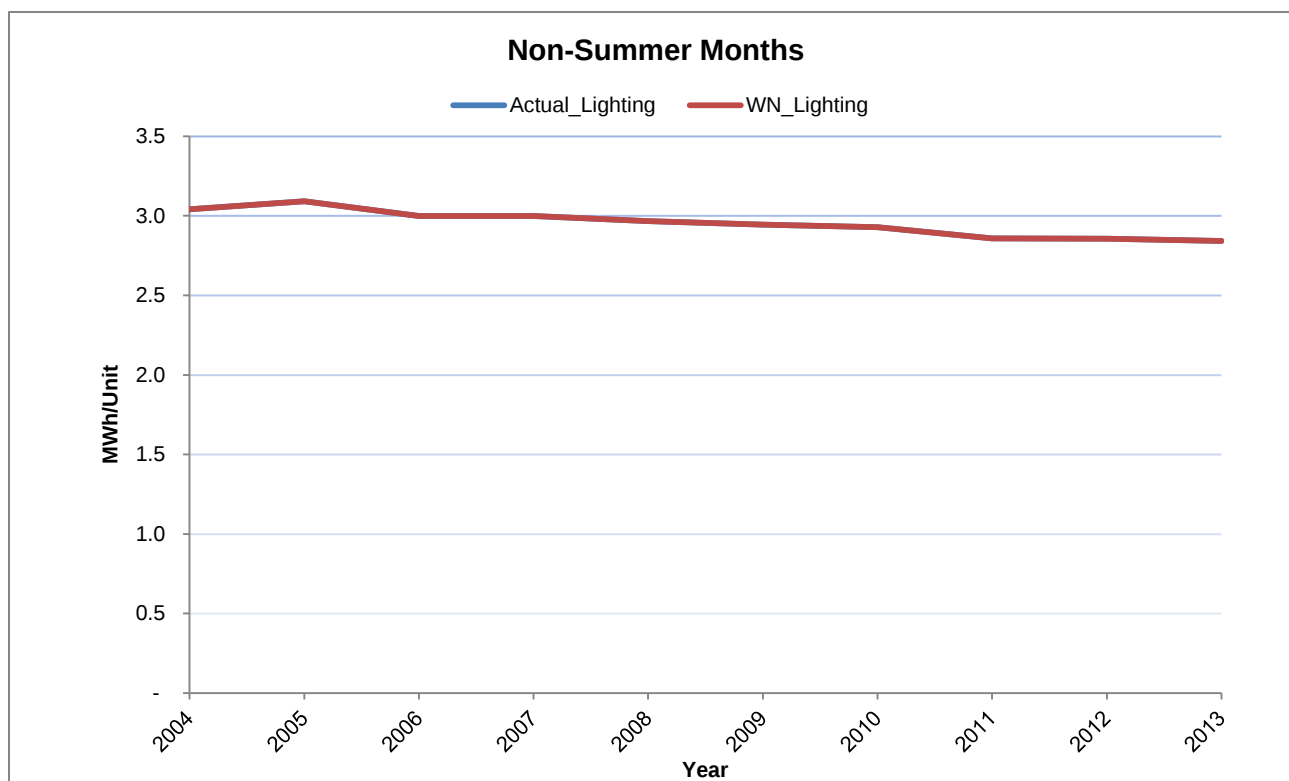
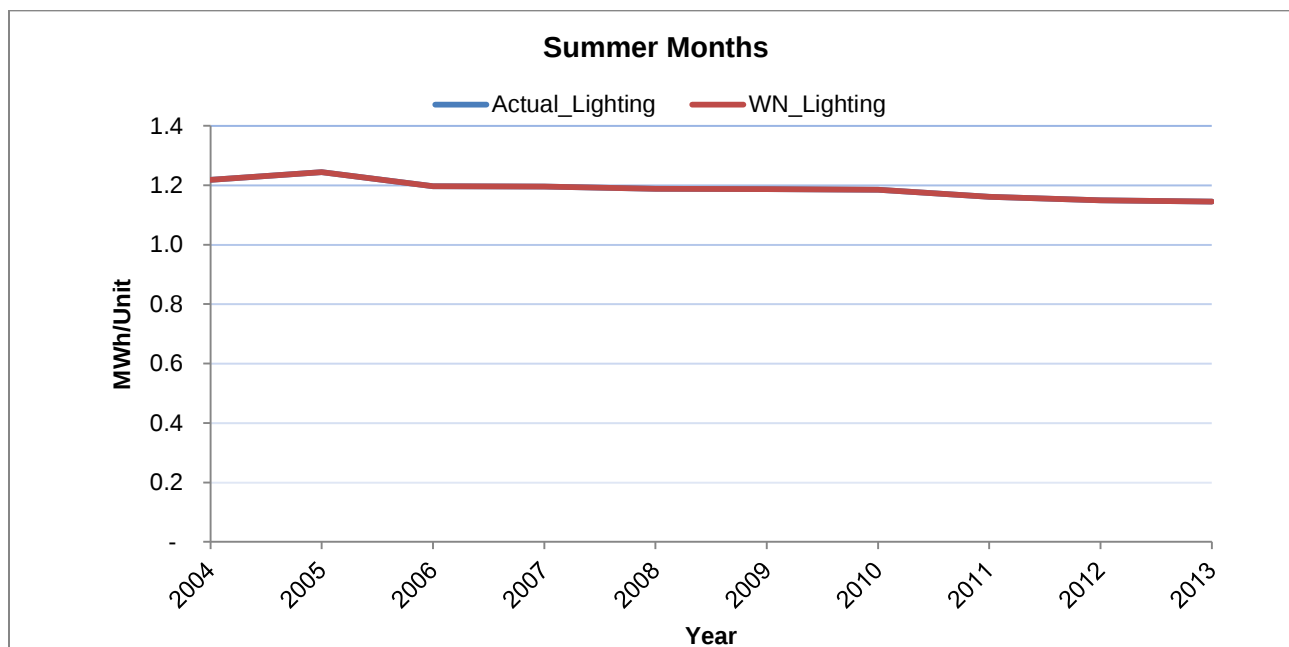
Industrial Use per Customer for Summer Months (2004-2013)

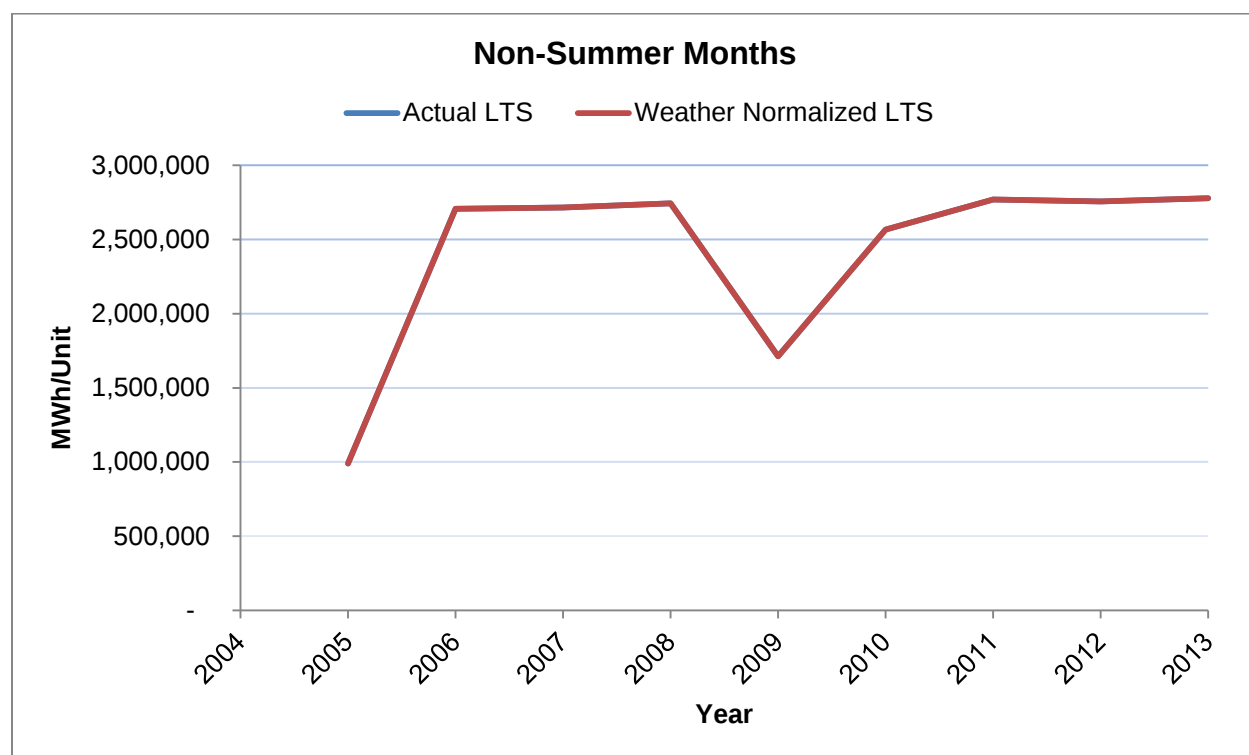
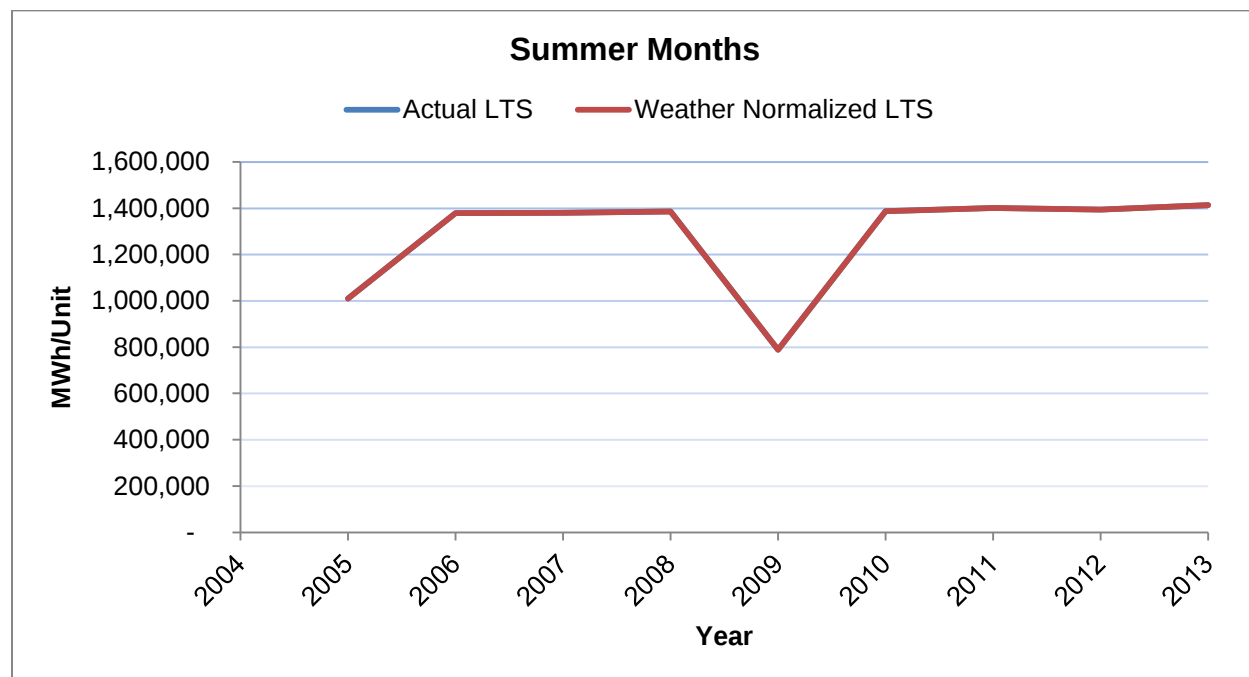


Industrial Use per Customer for Non-Summer Months (2004-2013)



Lighting per Customer (2004-2013)



Large Transmission Service Use per Customer for Summer and Non Summer months (2004-2013)

Historical Summer Use per Customer (MWh/Unit)

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	11.97	9.38	298	2,214	18,312	12.10	370	2,839	30,323	1.22	
2005	12.98	10.32	316	2,260	19,668	13.63	392	2,799	30,216	1.24	1,009,942
2006	12.35	9.82	307	2,150	18,769	13.48	385	2,823	30,508	1.20	1,379,053
2007	12.80	10.22	312	2,205	19,282	14.38	393	2,883	29,468	1.20	1,380,696
2008	12.93	9.11	301	2,028	17,953	12.58	368	2,551	26,491	1.19	1,385,442
2009	12.49	8.68	291	1,946	16,913	11.71	324	2,214	20,771	1.19	788,135
2010	13.65	9.39	312	1,959	16,931	13.34	355	2,391	21,836	1.18	1,386,649
2011	12.88	9.13	303	1,941	18,167	13.01	350	2,464	20,991	1.16	1,400,457
2012	12.34	8.89	292	1,916	17,628	12.92	348	2,451	21,056	1.15	1,393,769
2013	12.49	8.30	284	1,866	18,766	11.96	327	2,330	20,313	1.15	1,413,937

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

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	11.56	9.07	289	2,193	18,066	10.87	335	2,793	29,956	1.22	
2005	12.18	9.69	301	2,197	19,200	12.41	355	2,724	29,673	1.24	1,009,942
2006	12.05	9.53	302	2,122	18,557	13.07	373	2,799	30,334	1.20	1,379,053
2007	12.69	9.68	305	2,150	18,865	13.74	386	2,849	29,420	1.20	1,380,696
2008	12.91	9.12	303	2,031	17,938	12.57	367	2,551	26,510	1.19	1,385,442
2009	12.80	8.87	295	1,966	17,059	11.96	325	2,231	20,840	1.19	788,135
2010	12.95	8.88	298	1,896	16,462	12.61	348	2,346	21,564	1.18	1,386,649
2011	12.50	8.64	290	1,879	17,743	12.28	343	2,417	20,765	1.16	1,400,457
2012	12.18	8.36	279	1,848	17,184	12.17	340	2,400	20,803	1.15	1,393,769
2013	12.24	8.20	282	1,854	18,694	11.89	326	2,322	20,271	1.15	1,413,937

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

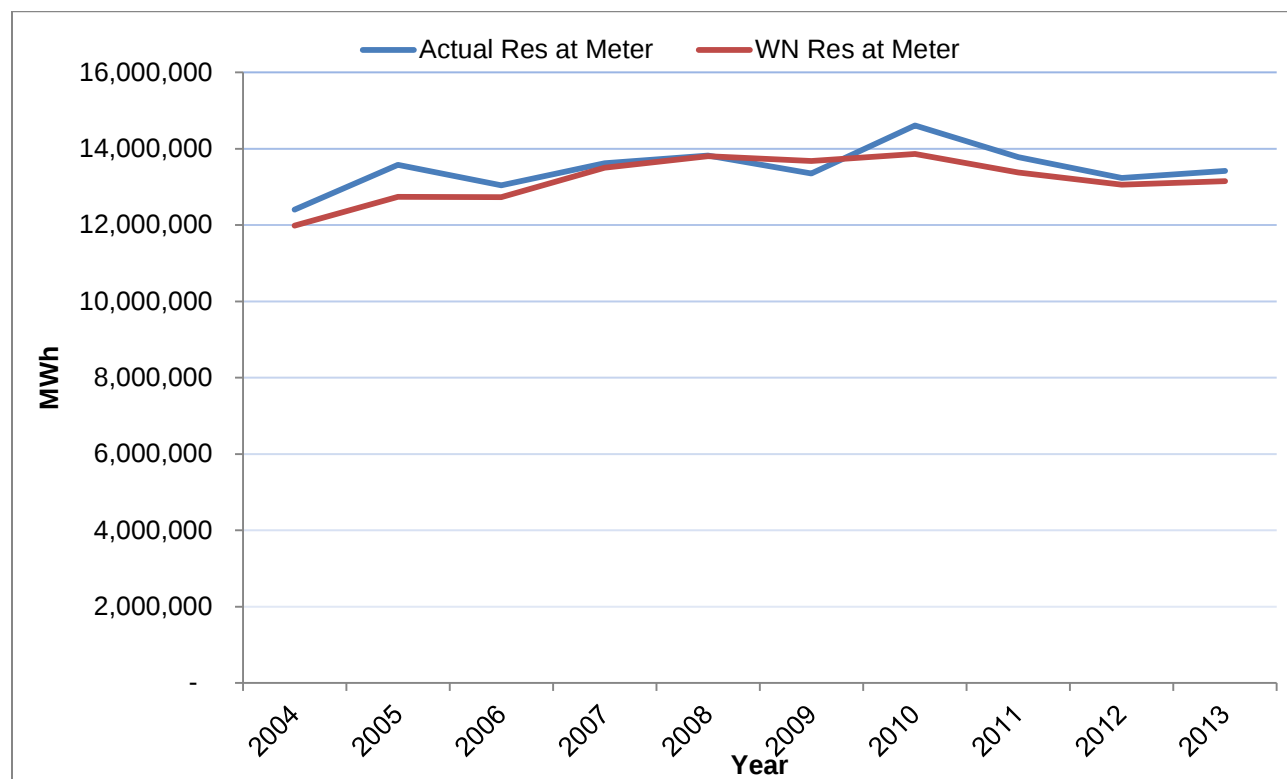
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	7.61	16.40	512	3,858	31,196	26.08	621	5,184	53,503	3.04	
2005	7.68	16.40	514	3,688	32,032	26.86	666	5,108	53,699	3.09	990,830
2006	7.56	16.32	511	3,638	32,653	25.81	665	4,951	52,741	3.00	2,707,074
2007	7.76	16.90	530	3,736	32,508	27.52	679	5,235	52,979	3.00	2,716,212
2008	8.29	16.39	520	3,523	29,010	25.88	648	4,608	45,695	2.97	2,743,326
2009	8.08	15.67	508	3,389	29,736	23.77	573	4,106	39,314	2.94	1,711,894
2010	8.36	15.83	518	3,330	28,341	25.22	606	4,294	38,250	2.93	2,565,751
2011	7.85	15.15	500	3,276	28,999	24.58	603	4,343	38,351	2.86	2,768,319
2012	7.43	14.75	494	3,263	30,054	24.23	601	4,406	38,213	2.86	2,756,457
2013	8.12	15.21	495	3,220	32,064	24.79	602	4,269	37,159	2.84	2,776,776

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

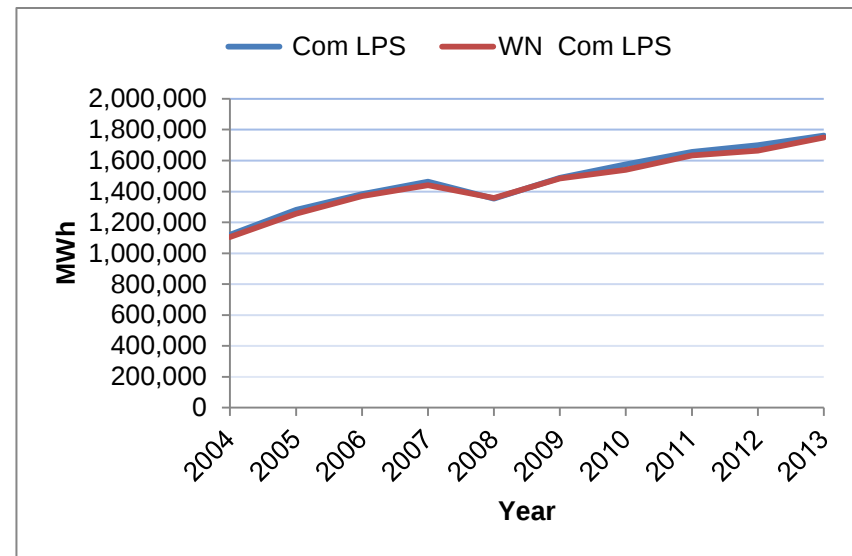
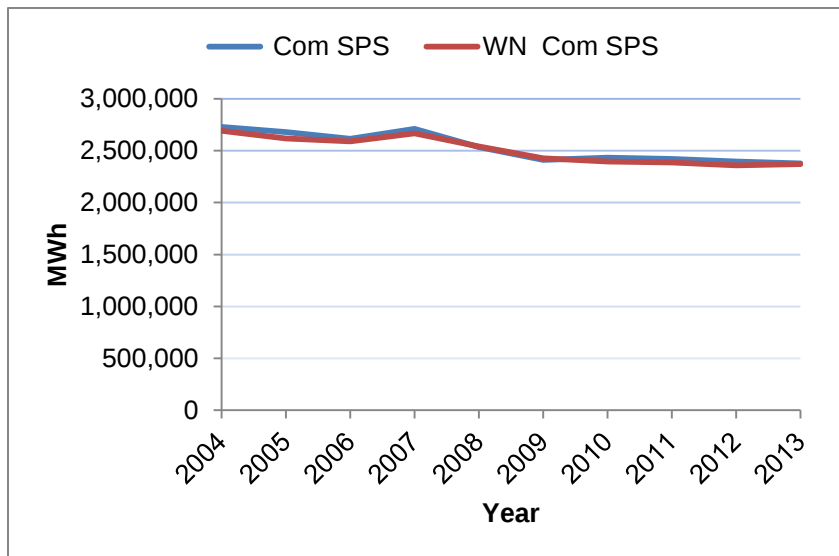
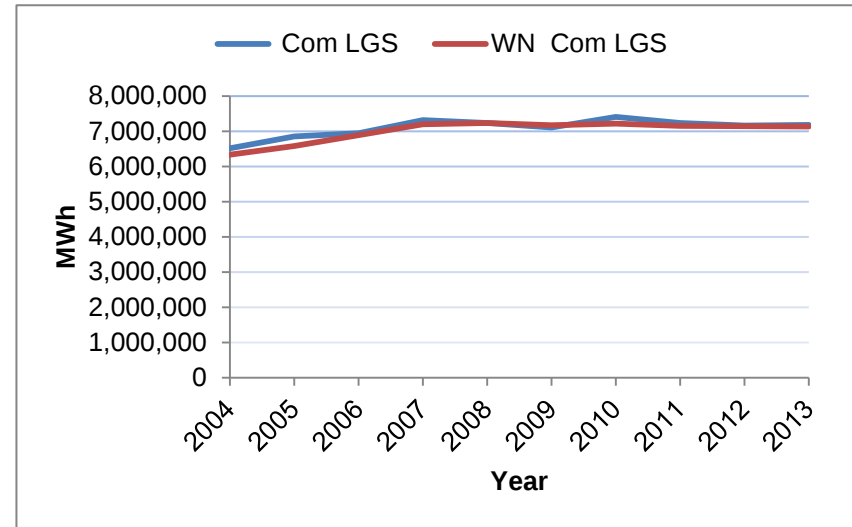
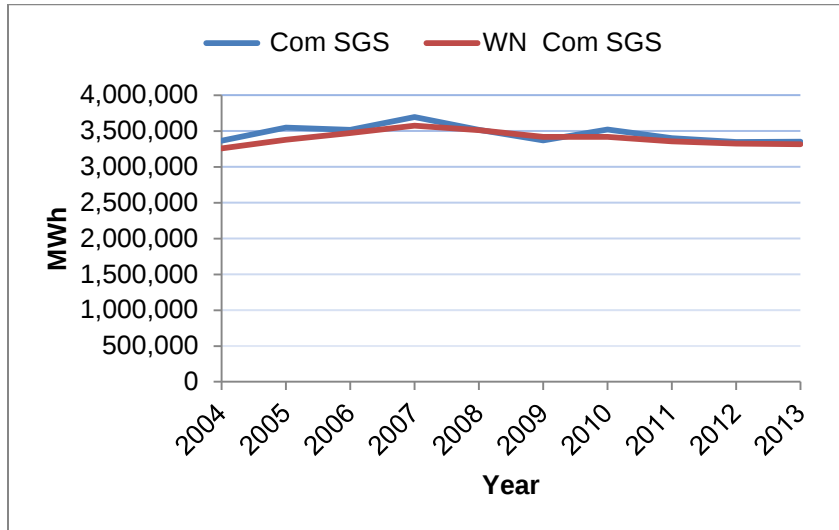
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	7.33	15.91	499	3,798	30,723	22.41	533	5,058	52,500	3.04	
2005	7.30	15.76	496	3,619	31,533	23.26	597	4,975	52,830	3.09	990,830
2006	7.50	16.25	508	3,607	32,415	24.44	622	4,877	52,334	3.00	2,707,074
2007	7.91	16.54	523	3,697	32,161	27.09	672	5,193	53,187	3.00	2,716,212
2008	8.21	16.35	519	3,533	29,137	25.67	649	4,616	45,808	2.97	2,743,326
2009	8.20	15.83	512	3,401	29,450	24.09	571	4,104	39,019	2.94	1,711,894
2010	8.21	15.60	511	3,312	27,808	24.95	605	4,292	38,297	2.93	2,565,751
2011	8.03	15.31	504	3,269	28,794	25.08	602	4,329	38,232	2.86	2,768,319
2012	7.83	15.12	505	3,255	29,568	25.46	600	4,369	37,900	2.86	2,756,457
2013	7.94	15.07	492	3,215	31,745	24.47	602	4,267	37,147	2.84	2,776,776

Historical Actual and Weather Normalized Total Annual Energy Usage by Classes (2004-2013)

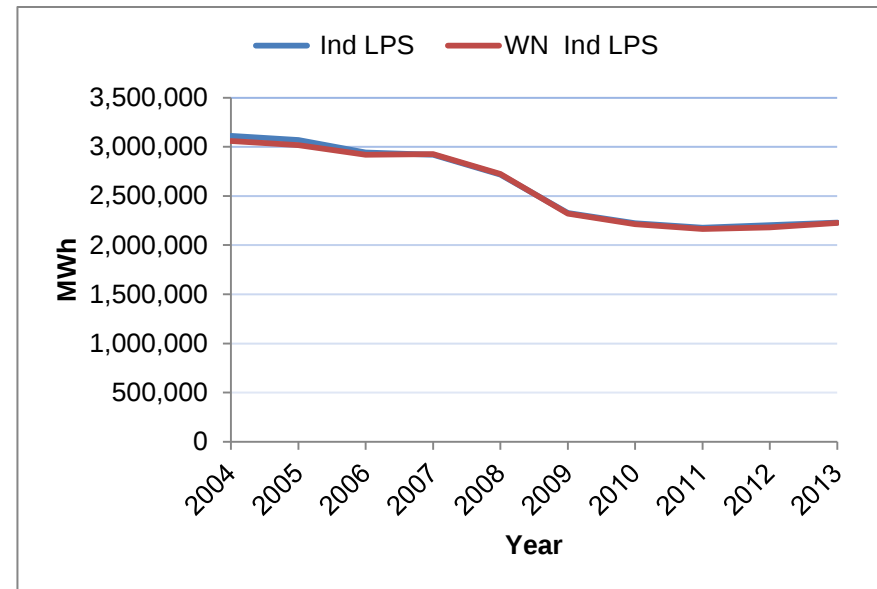
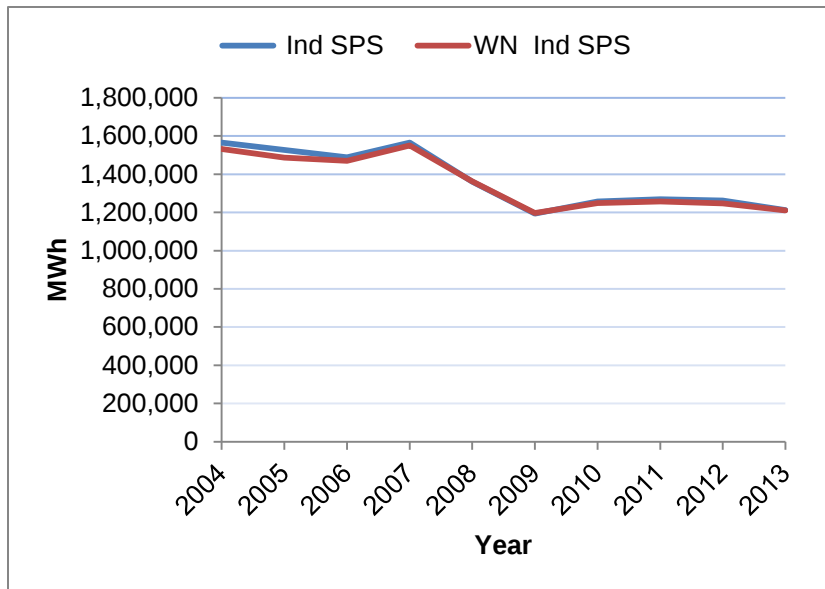
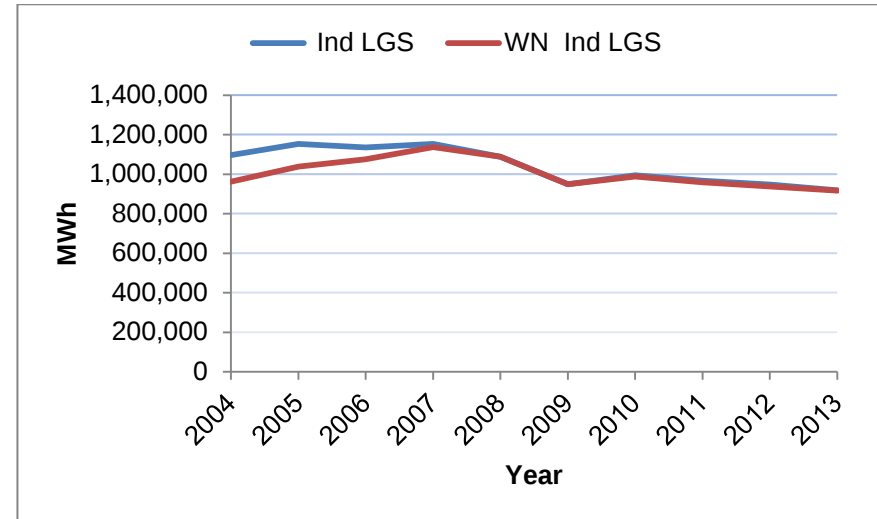
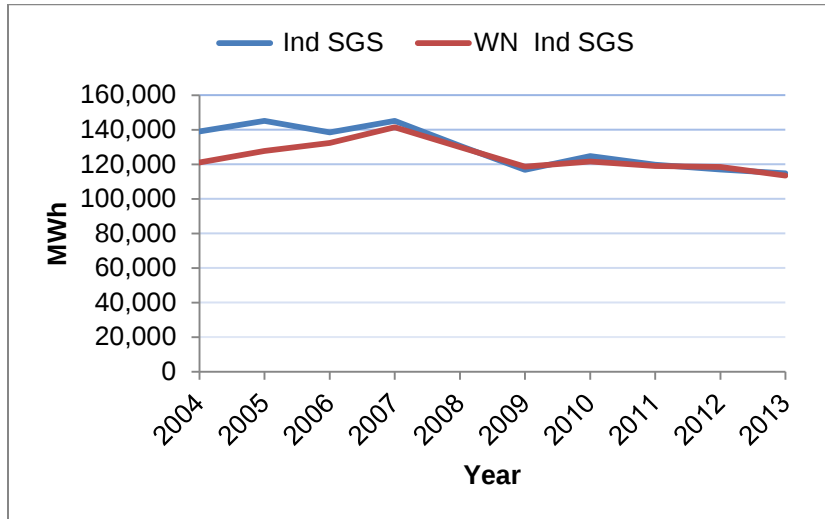
Residential Annual Energy Usage (2004-2013)

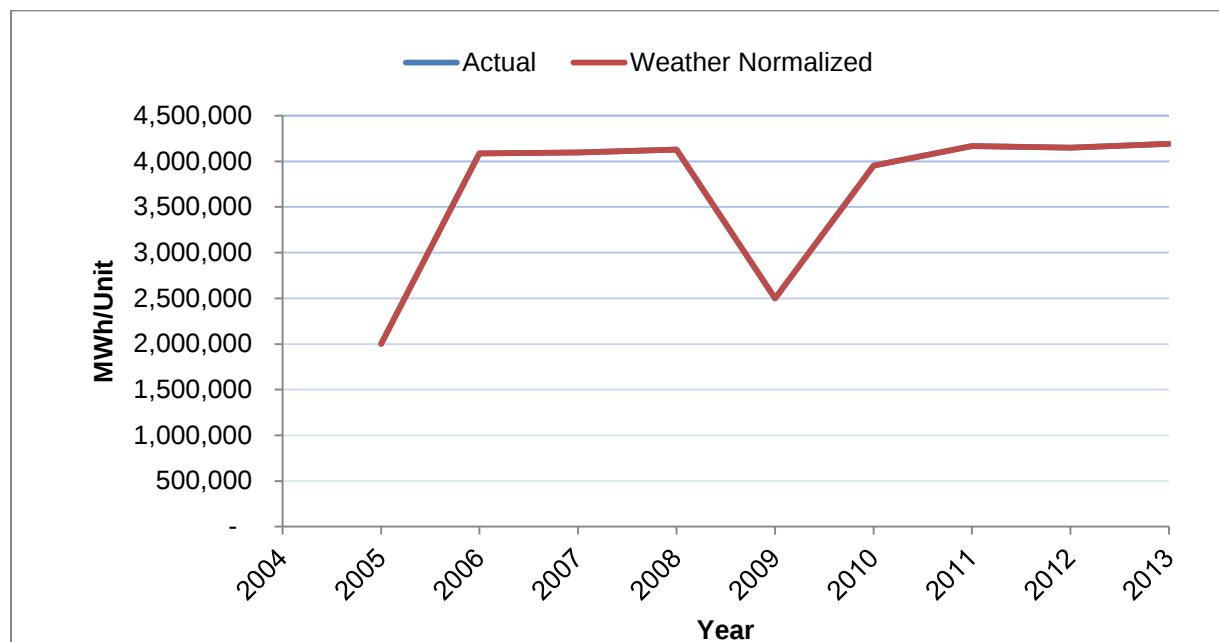
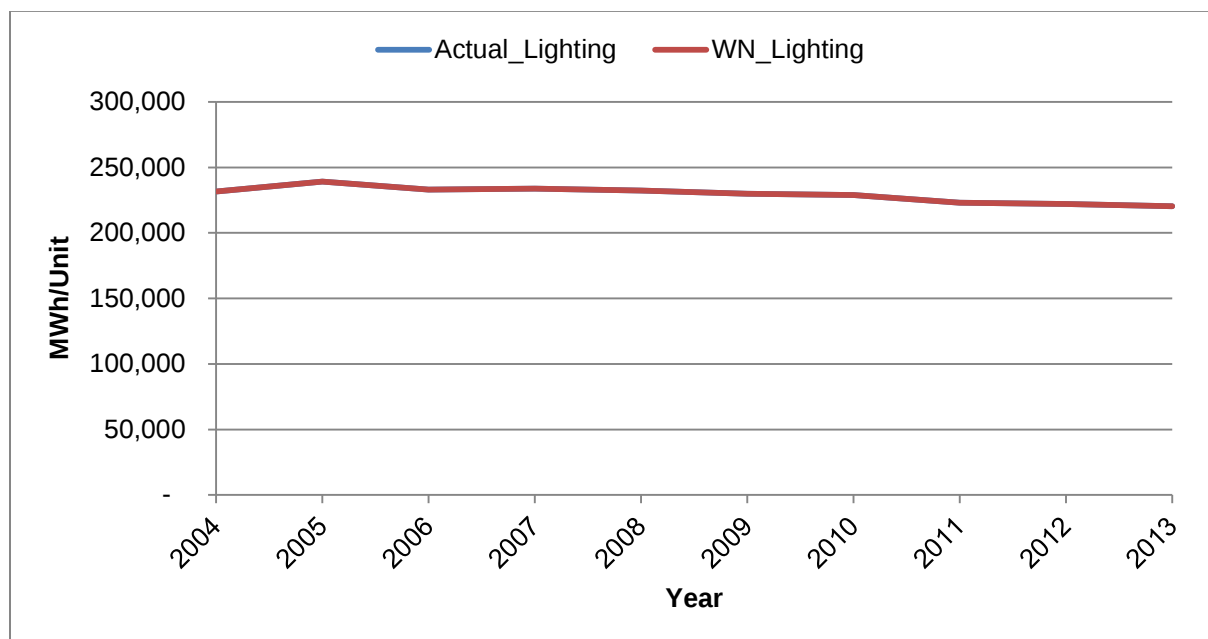


Commercial Annual Energy Usage (2004-2013)



Industrial Annual Energy Usage (2004-2013)



Large Transmission Service Annual Energy Use (2004-2013)**Lighting Annual Energy Usage (2004-2013)**

Historical Actual Total Annual Energy Usage by Classes (MWh)

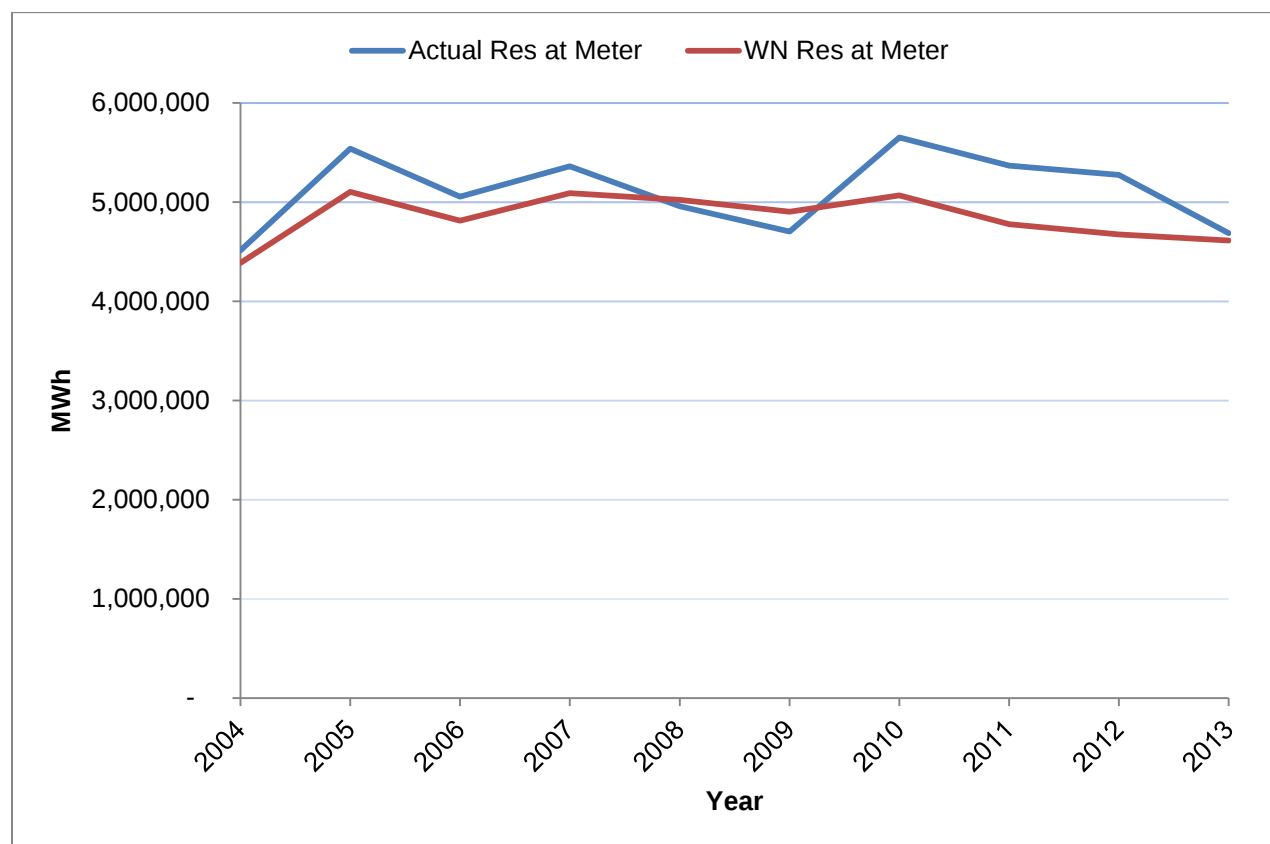
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	LTS
2004	12,403,229	3,364,220	6,512,919	2,727,405	1,120,361	138,970	1,097,169	1,564,960	3,111,370	231,690	
2005	13,575,629	3,546,340	6,851,516	2,678,401	1,280,489	145,113	1,153,456	1,526,149	3,069,602	239,078	2,000,773
2006	13,043,239	3,518,803	6,947,197	2,615,321	1,382,051	138,579	1,135,613	1,488,399	2,941,135	233,062	4,086,126
2007	13,616,322	3,697,015	7,314,347	2,709,866	1,463,078	145,198	1,153,866	1,565,156	2,920,250	233,841	4,096,908
2008	13,817,769	3,518,470	7,236,083	2,533,332	1,353,805	130,691	1,088,971	1,360,968	2,719,290	232,270	4,128,768
2009	13,348,387	3,371,859	7,103,803	2,411,569	1,487,390	116,857	949,468	1,193,726	2,328,566	229,823	2,500,029
2010	14,611,855	3,522,780	7,410,600	2,432,138	1,574,575	124,780	995,031	1,257,537	2,222,528	228,975	3,952,399
2011	13,777,478	3,403,034	7,235,641	2,419,184	1,655,332	119,792	967,790	1,268,083	2,178,293	223,060	4,168,775
2012	13,236,917	3,347,956	7,162,158	2,395,403	1,698,440	116,979	947,345	1,262,739	2,203,012	222,153	4,150,227
2013	13,416,521	3,350,005	7,179,583	2,377,527	1,762,354	114,718	918,197	1,211,198	2,227,900	220,409	4,190,713

Historical Weather Normalized Total Annual Energy Usage by Classes (MWh)

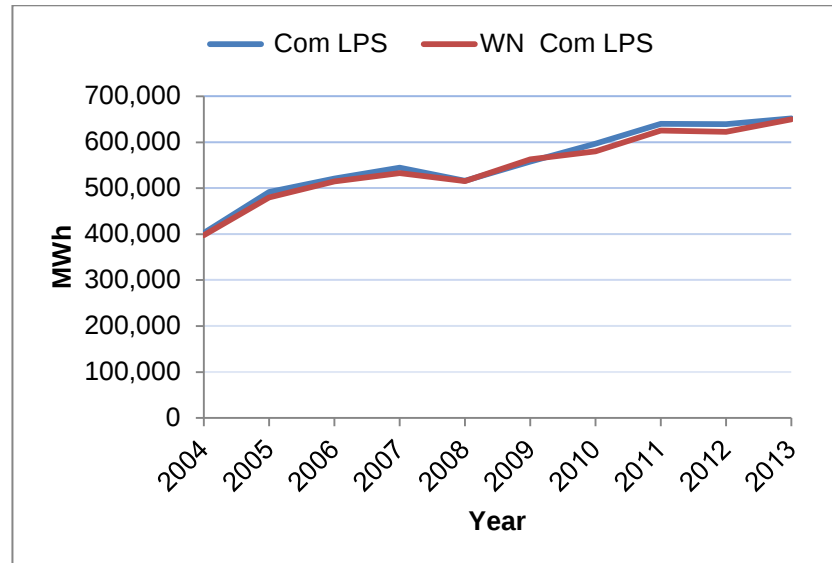
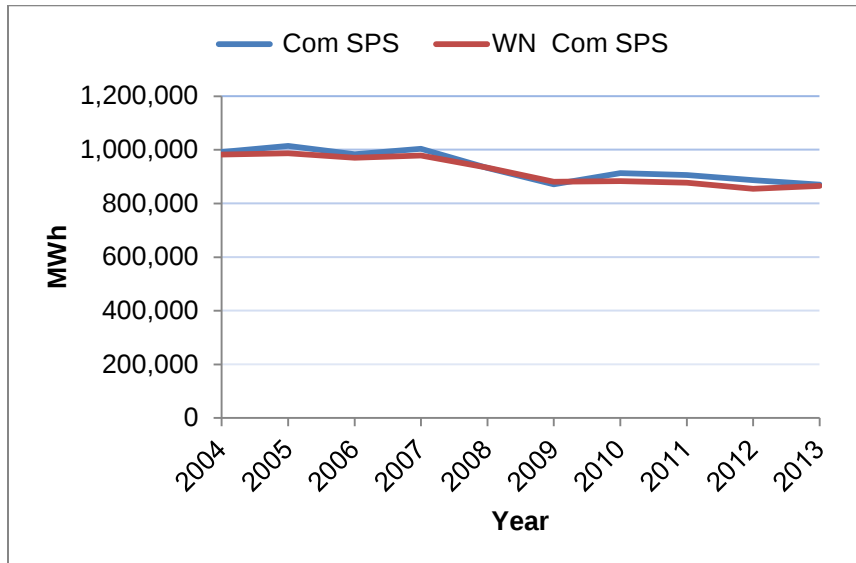
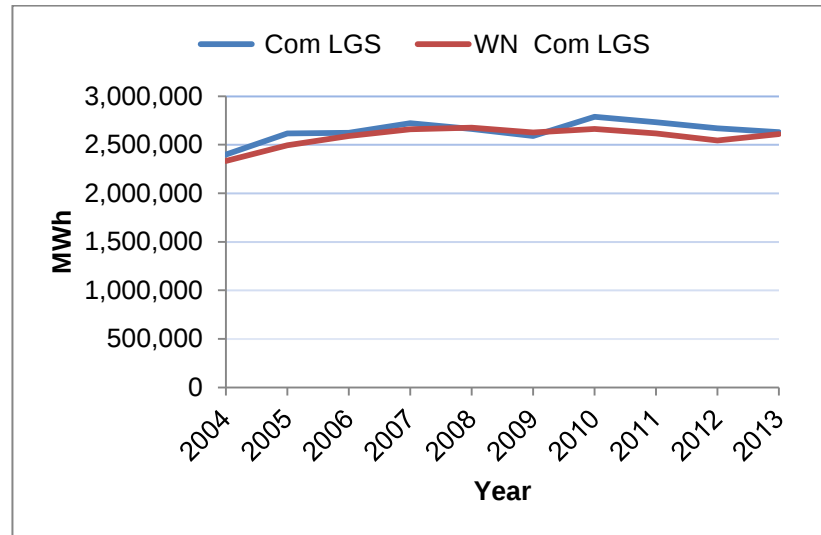
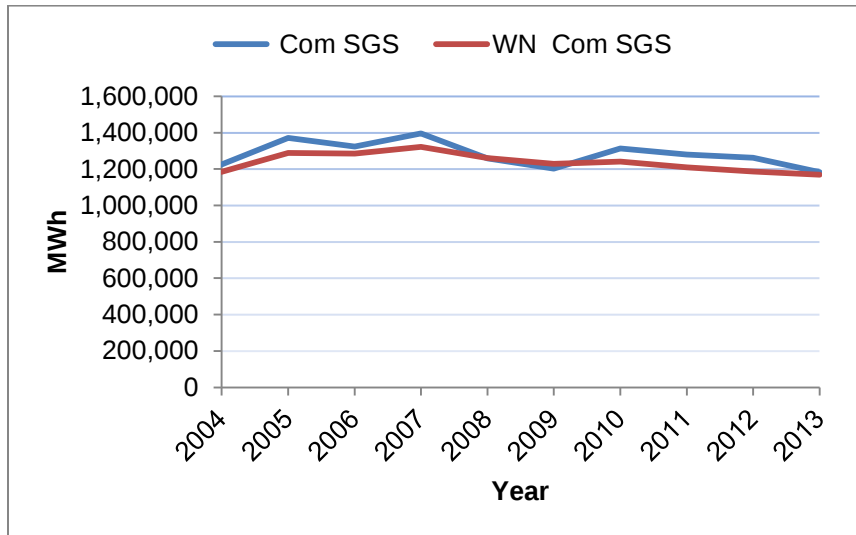
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	LTS
2004	11,981,363	3,258,874	6,337,545	2,690,887	1,104,075	121,136	961,783	1,531,078	3,060,277	231,690	
2005	12,738,041	3,377,837	6,578,650	2,618,585	1,256,497	127,840	1,039,154	1,486,000	3,017,953	239,078	2,000,773
2006	12,730,320	3,470,773	6,888,738	2,588,604	1,369,891	132,322	1,075,788	1,469,577	2,920,600	233,062	4,086,126
2007	13,503,920	3,574,814	7,196,586	2,667,288	1,441,485	141,486	1,137,736	1,550,486	2,925,919	233,841	4,096,908
2008	13,800,391	3,514,614	7,233,999	2,539,347	1,357,040	129,976	1,089,380	1,362,584	2,724,266	232,270	4,128,768
2009	13,677,386	3,420,259	7,174,790	2,425,580	1,483,262	118,741	949,118	1,196,605	2,319,873	229,823	2,500,029
2010	13,866,862	3,418,752	7,220,700	2,394,565	1,539,673	121,584	987,569	1,248,712	2,214,250	228,975	3,952,399
2011	13,375,370	3,356,074	7,151,942	2,386,831	1,633,210	119,079	959,290	1,256,522	2,165,431	223,060	4,168,775
2012	13,061,922	3,325,169	7,142,340	2,360,007	1,665,182	118,474	937,495	1,246,676	2,181,950	222,153	4,150,227
2013	13,151,796	3,315,946	7,134,595	2,369,875	1,748,783	113,495	916,919	1,209,423	2,225,782	220,409	4,190,713

Historical Actual and Weather Normalized Total Energy Usage by Classes for Summer Months (2004-2013)

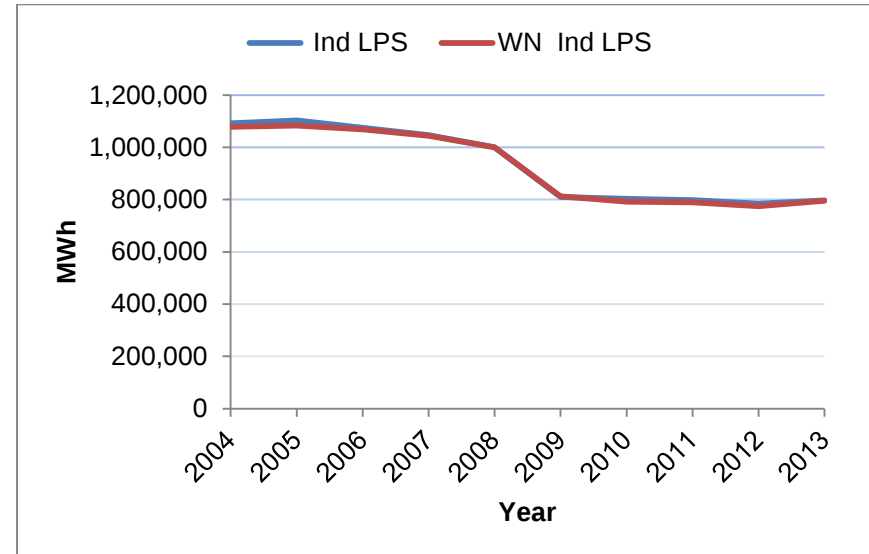
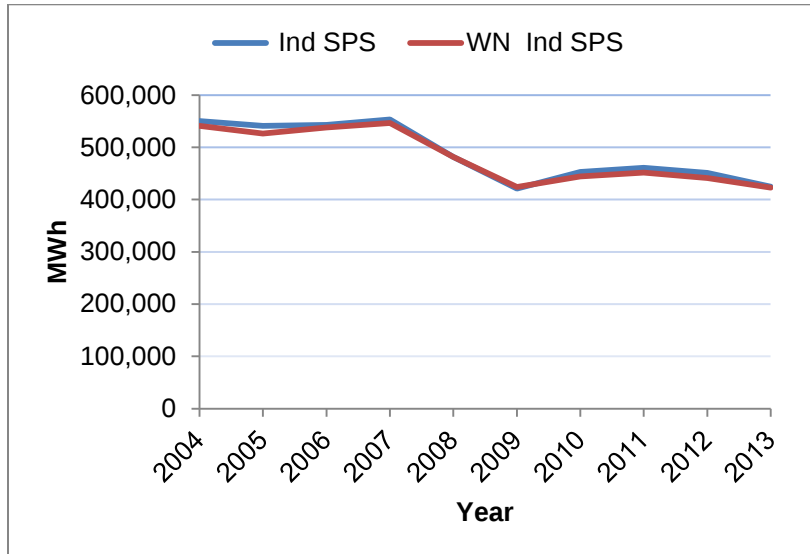
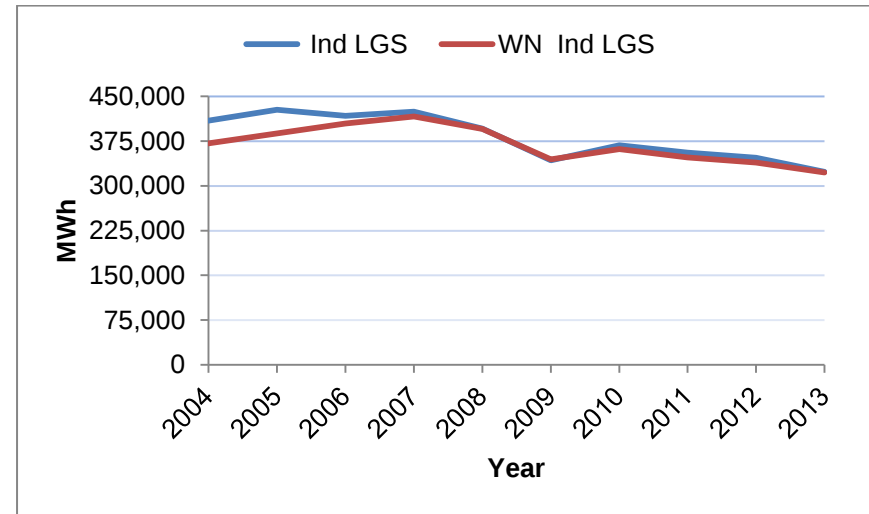
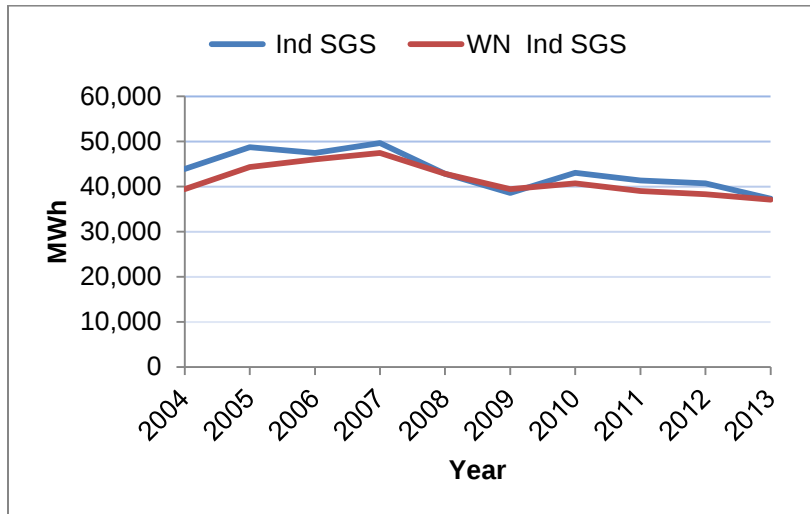
Residential Summer Energy Usage (2004-2013)

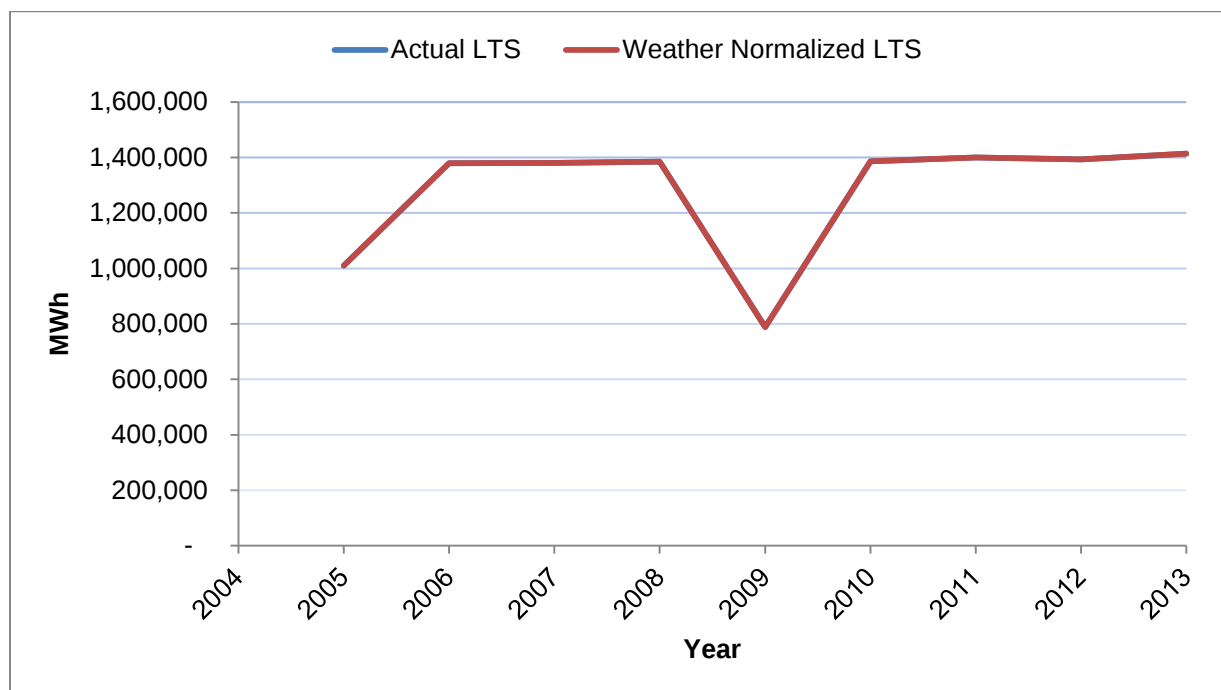
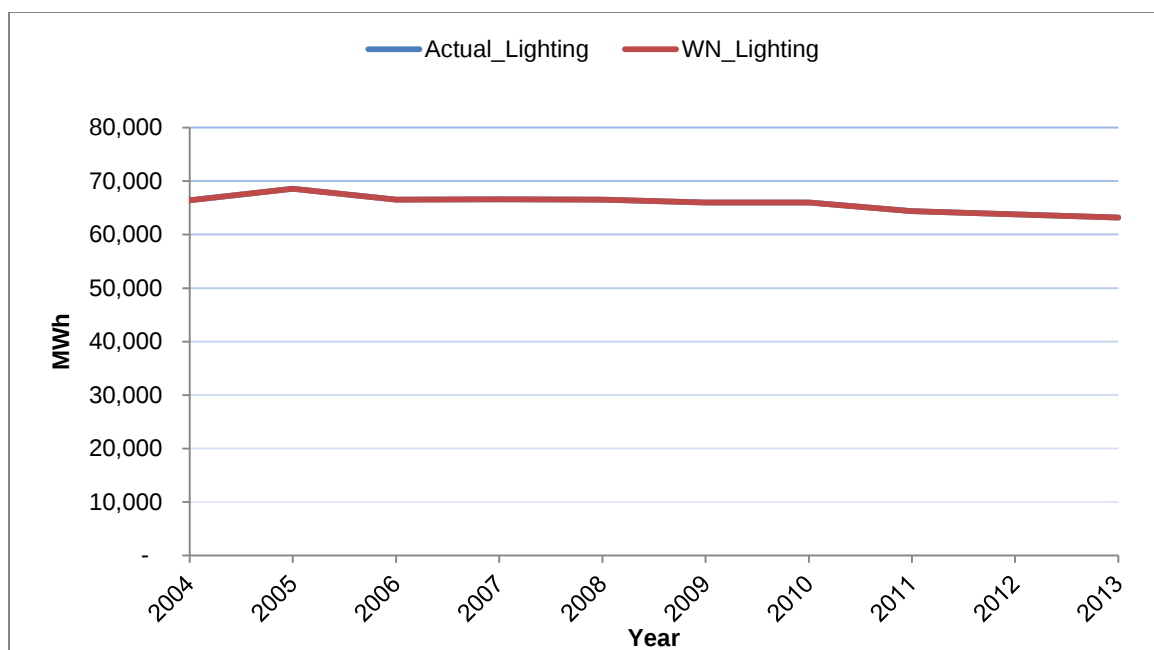


Commercial Summer Energy Usage (2004-2013)



Industrial Summer Energy Usage (2004-2013)



Large Transmission Service Summer Energy Usage (2004-2013)**Lighting Summer Energy Use (2004-2013)**

Historical Actual Total Energy Usage for Summer Months

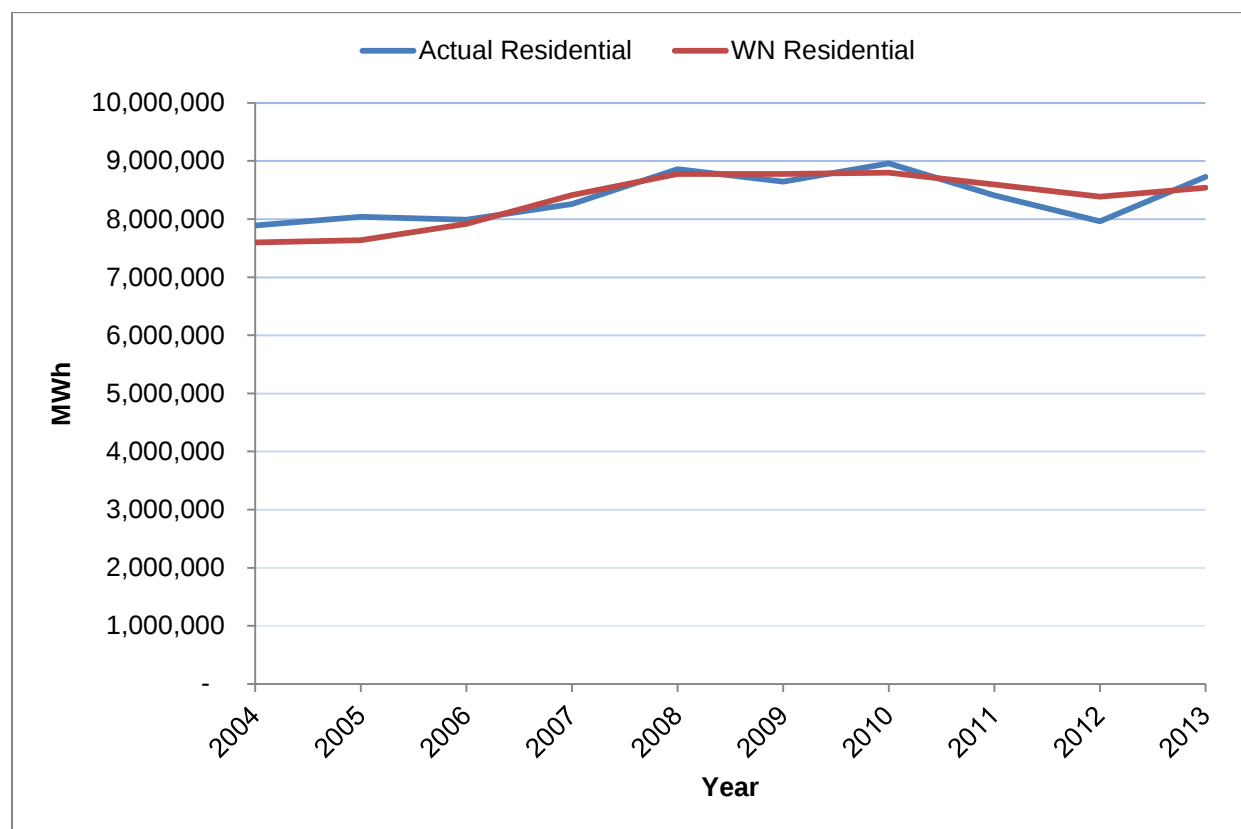
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	In LGS	IndSPS	IndLPS	Lighting	LTS
2004	4,510,750	1,224,976	2,400,469	991,938	402,858	43,871	409,238	550,139	1,091,638	66,398	
2005	5,538,946	1,371,103	2,618,280	1,015,416	491,710	48,690	427,420	540,959	1,102,883	68,586	1,009,942
2006	5,054,331	1,323,557	2,624,157	983,828	520,841	47,467	417,025	542,668	1,075,410	66,530	1,379,053
2007	5,359,337	1,395,386	2,723,054	1,003,605	544,714	49,668	424,009	553,500	1,046,131	66,600	1,380,696
2008	4,956,993	1,259,113	2,664,394	931,979	516,134	42,813	395,885	481,444	1,000,017	66,564	1,385,442
2009	4,702,333	1,202,570	2,589,208	872,016	558,134	38,599	342,705	421,294	810,069	66,012	788,135
2010	5,651,561	1,313,259	2,786,898	912,943	596,827	43,061	367,728	453,001	802,486	66,005	1,386,649
2011	5,367,606	1,278,940	2,731,070	906,677	640,380	41,337	355,516	460,858	797,656	64,394	1,400,457
2012	5,272,882	1,261,524	2,668,670	887,229	639,020	40,701	346,918	451,009	784,345	63,766	1,393,769
2013	4,687,694	1,183,315	2,628,567	870,880	652,123	37,295	323,426	424,573	797,268	63,211	1,413,937

Historical Weather Normalized Total Energy Usage for Summer Months

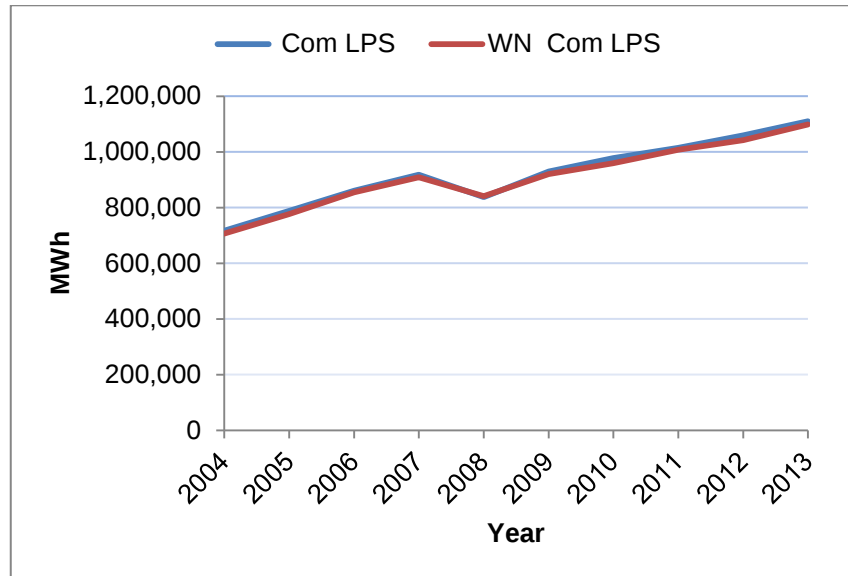
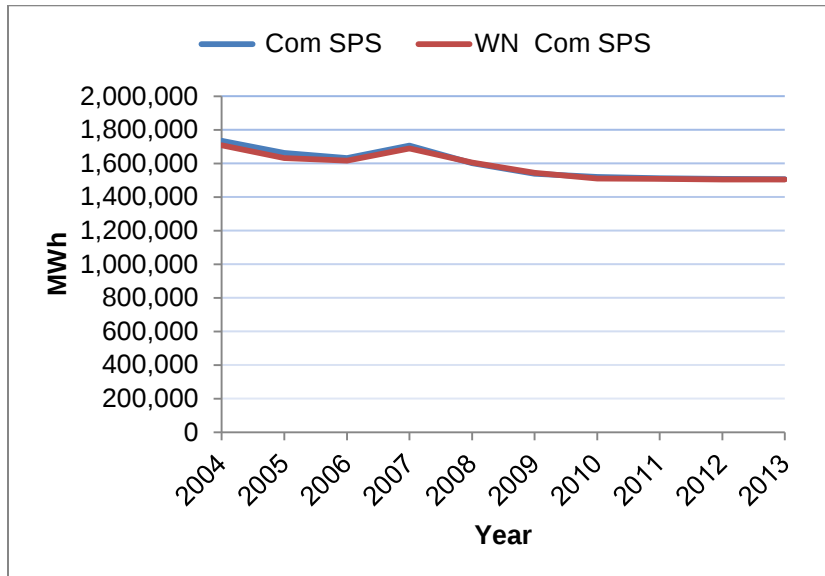
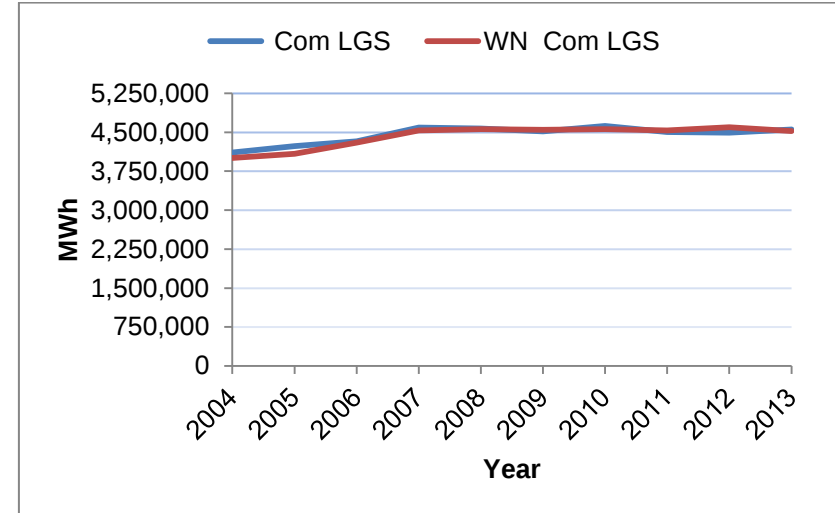
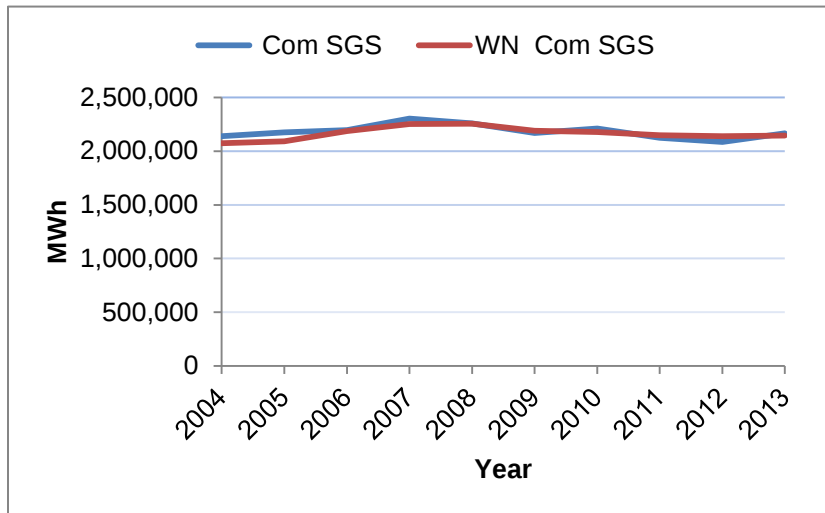
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	LTS
2004	4,385,387	1,183,941	2,333,043	982,470	397,448	39,410	370,873	541,049	1,078,399	66,398	
2005	5,101,183	1,287,669	2,494,943	987,047	480,001	44,328	387,767	526,490	1,083,064	68,586	1,009,942
2006	4,813,614	1,285,195	2,589,017	970,876	514,957	46,036	404,347	538,115	1,069,290	66,530	1,379,053
2007	5,090,793	1,321,746	2,659,277	978,682	532,949	47,453	416,035	546,919	1,044,418	66,600	1,380,696
2008	5,022,182	1,260,353	2,675,945	933,443	515,718	42,811	395,261	481,566	1,000,738	66,564	1,385,442
2009	4,901,823	1,229,147	2,627,708	880,739	562,954	39,434	344,281	424,452	812,755	66,012	788,135
2010	5,068,442	1,241,181	2,662,225	883,632	580,294	40,720	361,280	444,517	792,461	66,005	1,386,649
2011	4,777,989	1,209,248	2,616,104	877,653	625,425	39,016	347,610	451,958	789,078	64,394	1,400,457
2012	4,673,584	1,185,878	2,545,908	855,477	622,916	38,315	338,696	441,596	774,928	63,766	1,393,769
2013	4,611,986	1,169,365	2,610,717	865,511	649,601	37,069	322,439	423,240	795,638	63,211	1,413,937

Historical Actual and Weather Normalized Total Energy Usage by Classes for Non-Summer Months (2004-2013)

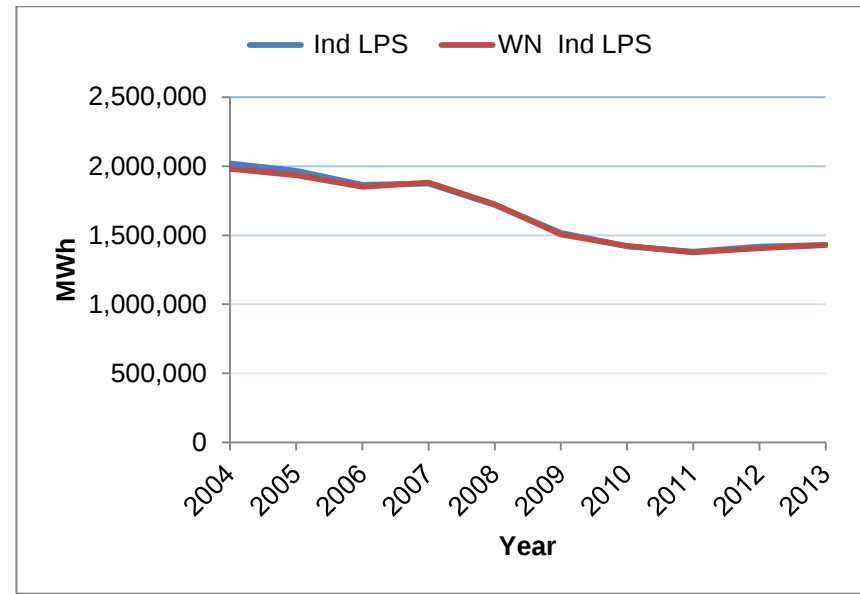
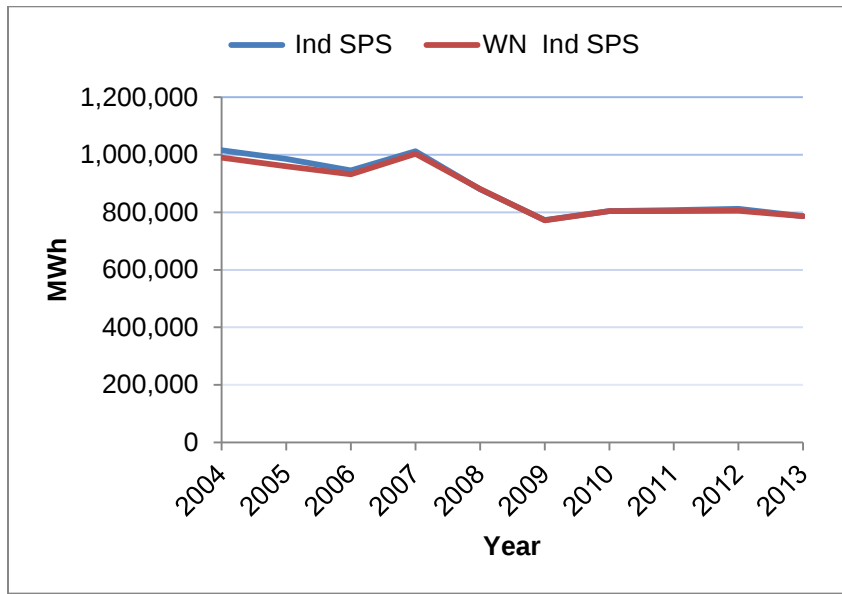
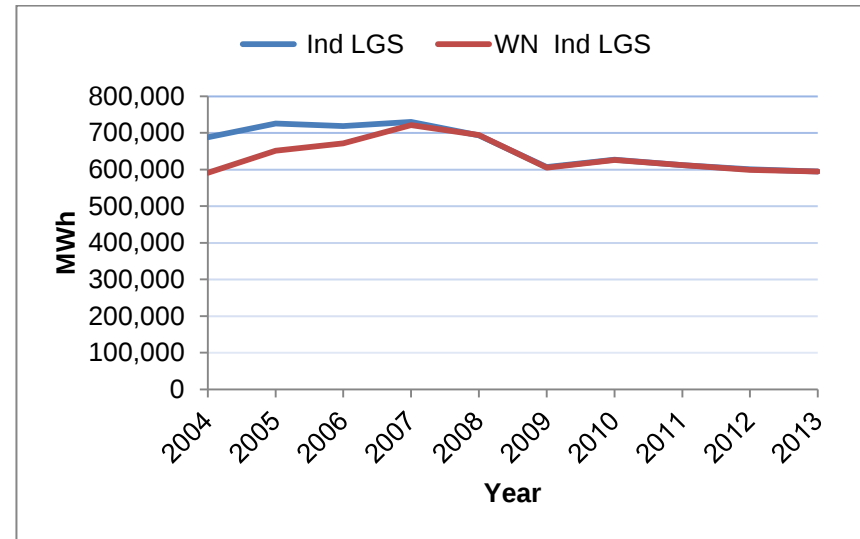
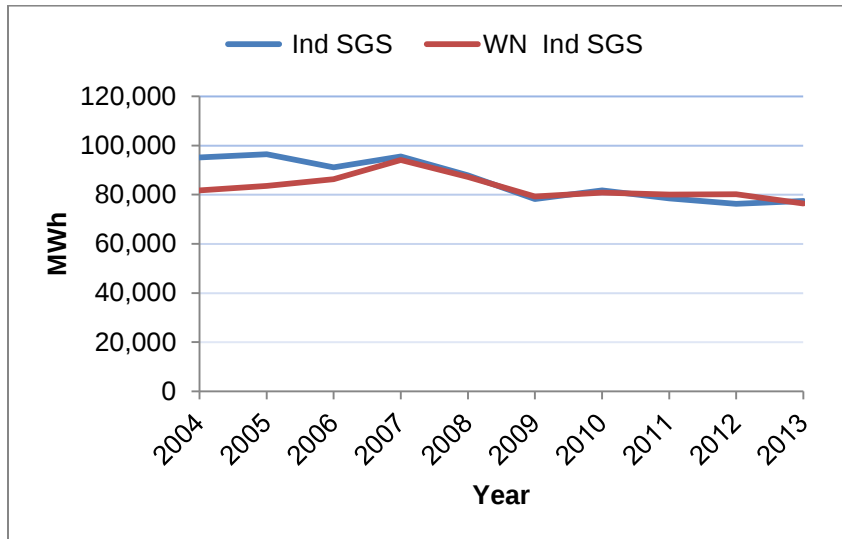
Residential Non-Summer Energy Usage (2004-2013)

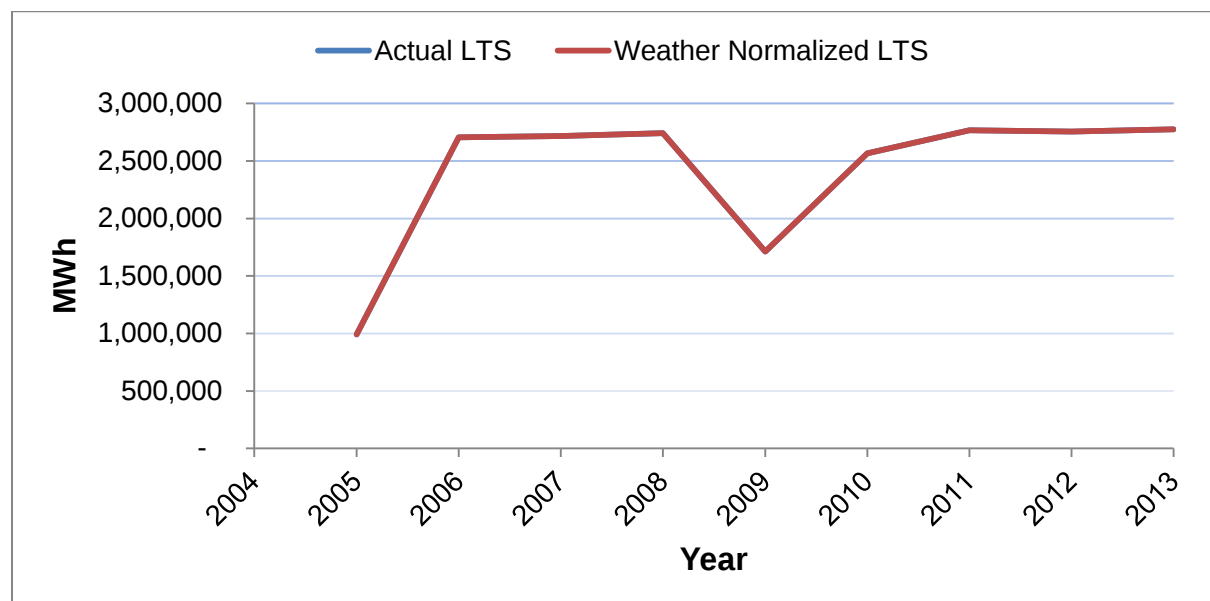
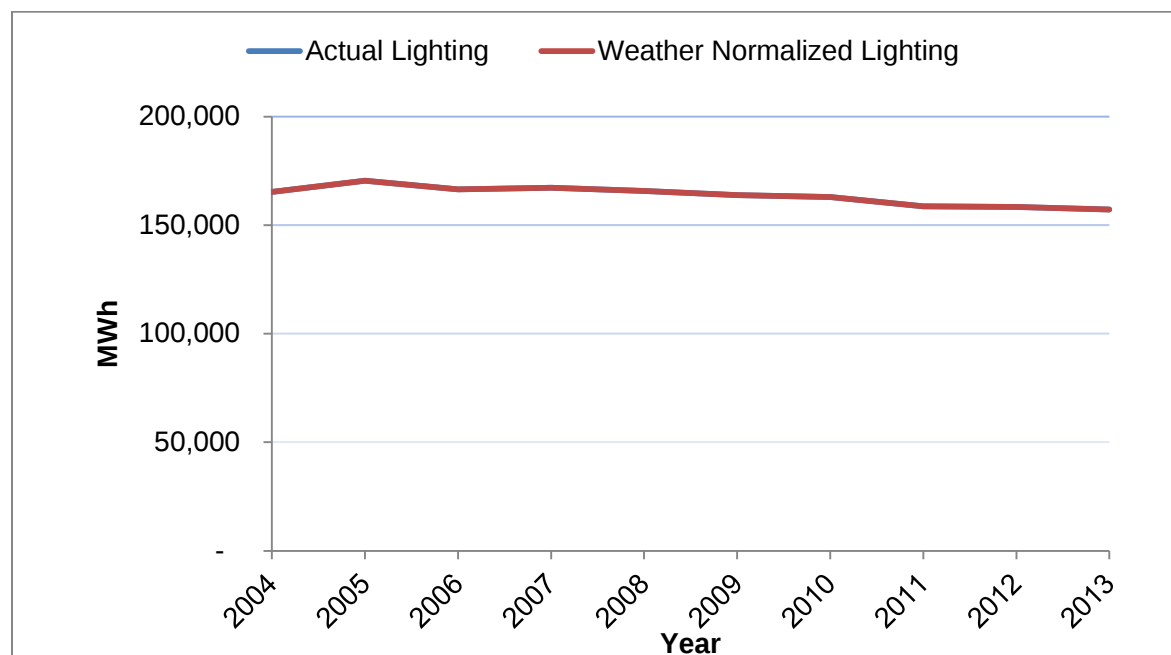


Commercial Non-Summer Energy Usage (2004-2013)



Industrial Non-Summer Energy Usage (2004-2013)



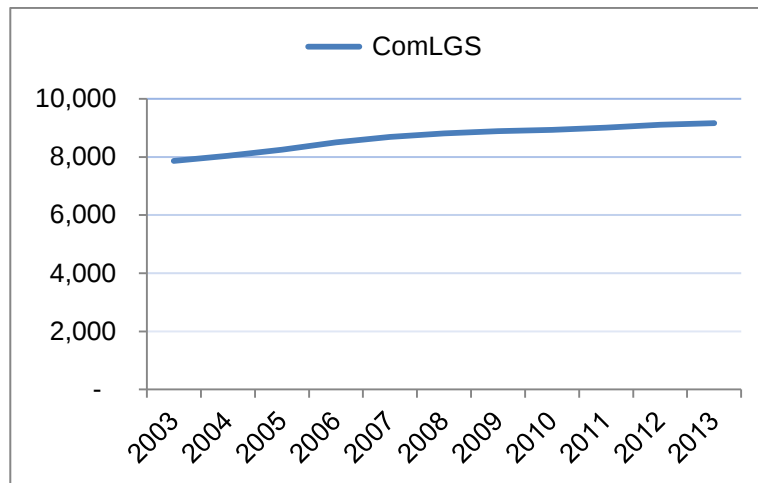
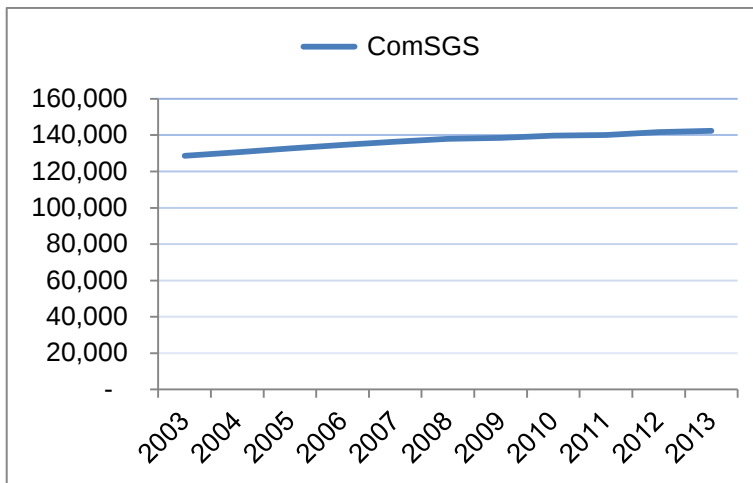
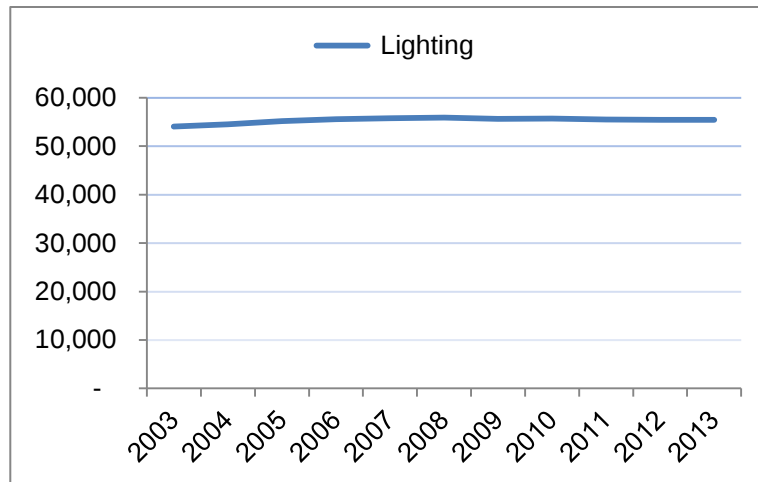
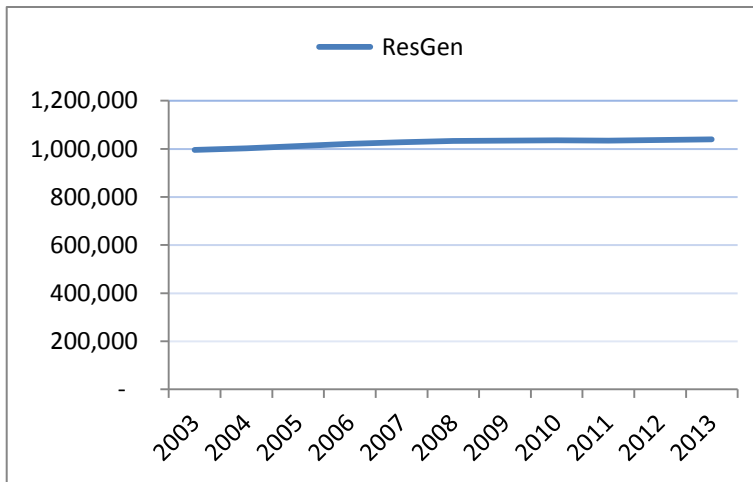
Large Transmission Service Non-Summer Energy Usage (2004-2013)**Lighting Non-Summer Energy Usage (2004-2013)**

Historical Actual Total Energy Usage for Non-Summer Months (MWh)

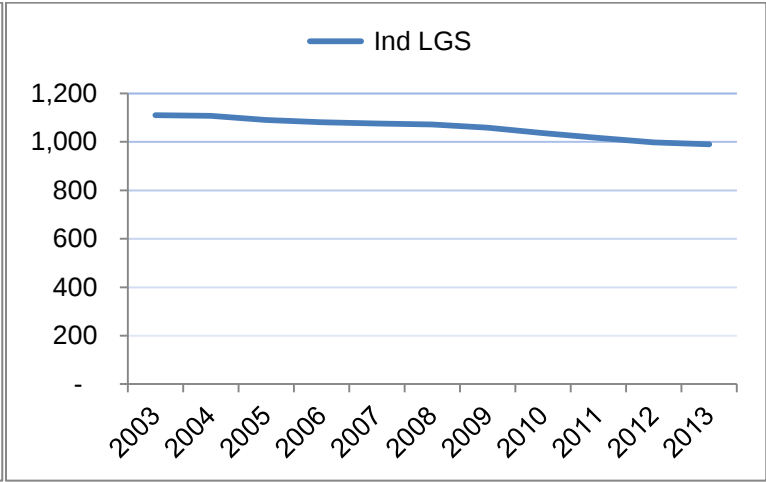
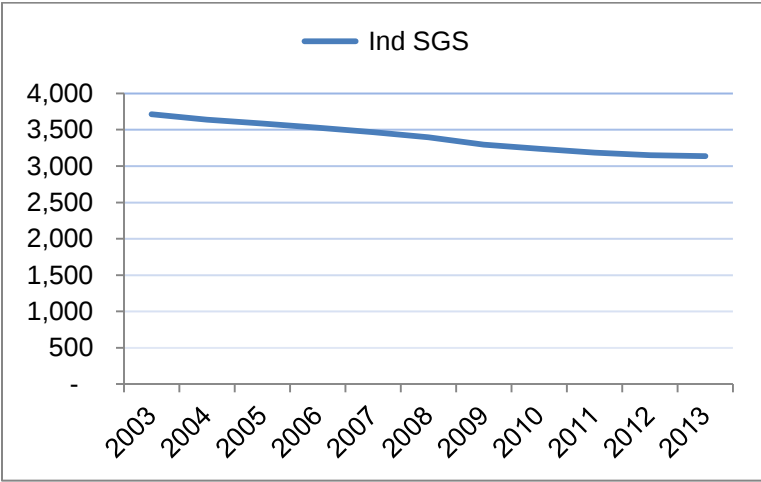
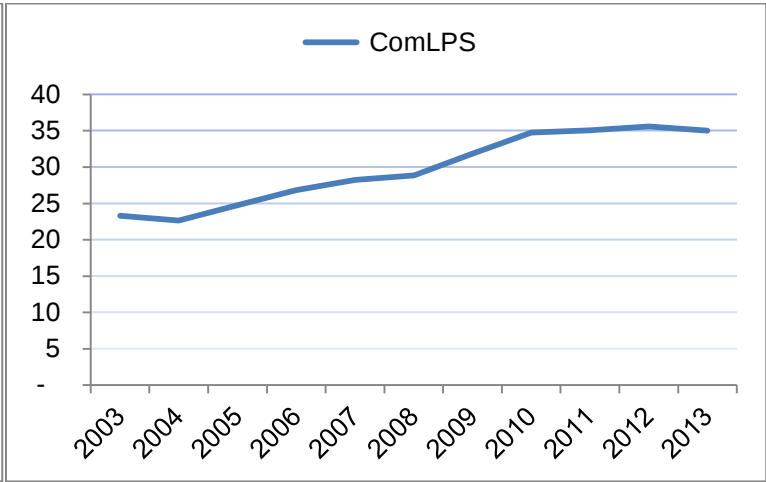
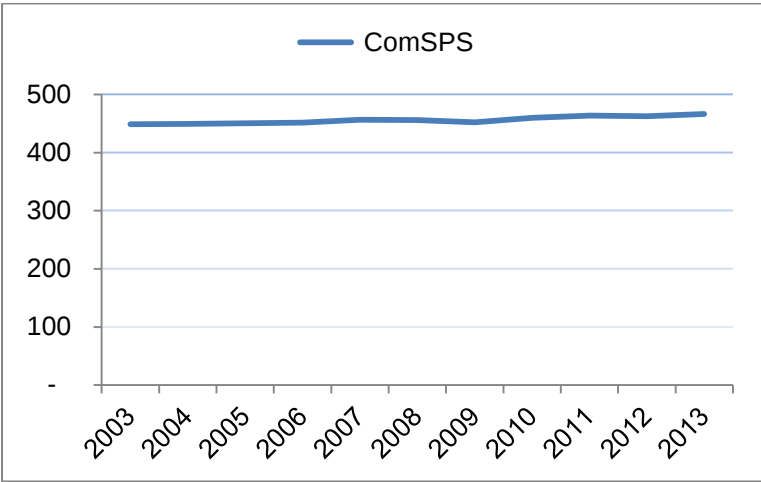
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	LTS
2004	7,892,479	2,139,245	4,112,450	1,735,468	717,503	95,099	687,931	1,014,822	2,019,732	165,292	
2005	8,036,682	2,175,238	4,233,237	1,662,985	788,779	96,423	726,036	985,190	1,966,719	170,492	990,830
2006	7,988,908	2,195,247	4,323,040	1,631,493	861,210	91,112	718,589	945,731	1,865,726	166,532	2,707,074
2007	8,256,985	2,301,629	4,591,293	1,706,261	918,364	95,531	729,856	1,011,657	1,874,119	167,241	2,716,212
2008	8,860,776	2,259,358	4,571,689	1,601,353	837,671	87,878	693,085	879,525	1,719,273	165,706	2,743,326
2009	8,646,054	2,169,289	4,514,595	1,539,553	929,256	78,258	606,763	772,432	1,518,497	163,811	1,711,894
2010	8,960,295	2,209,521	4,623,702	1,519,196	977,748	81,719	627,304	804,536	1,420,042	162,970	2,565,751
2011	8,409,872	2,124,094	4,504,571	1,512,508	1,014,953	78,455	612,273	807,226	1,380,638	158,666	2,768,319
2012	7,964,035	2,086,432	4,493,488	1,508,174	1,059,420	76,278	600,427	811,730	1,418,668	158,387	2,756,457
2013	8,728,827	2,166,689	4,551,016	1,506,648	1,110,231	77,423	594,772	786,625	1,430,632	157,198	2,776,776

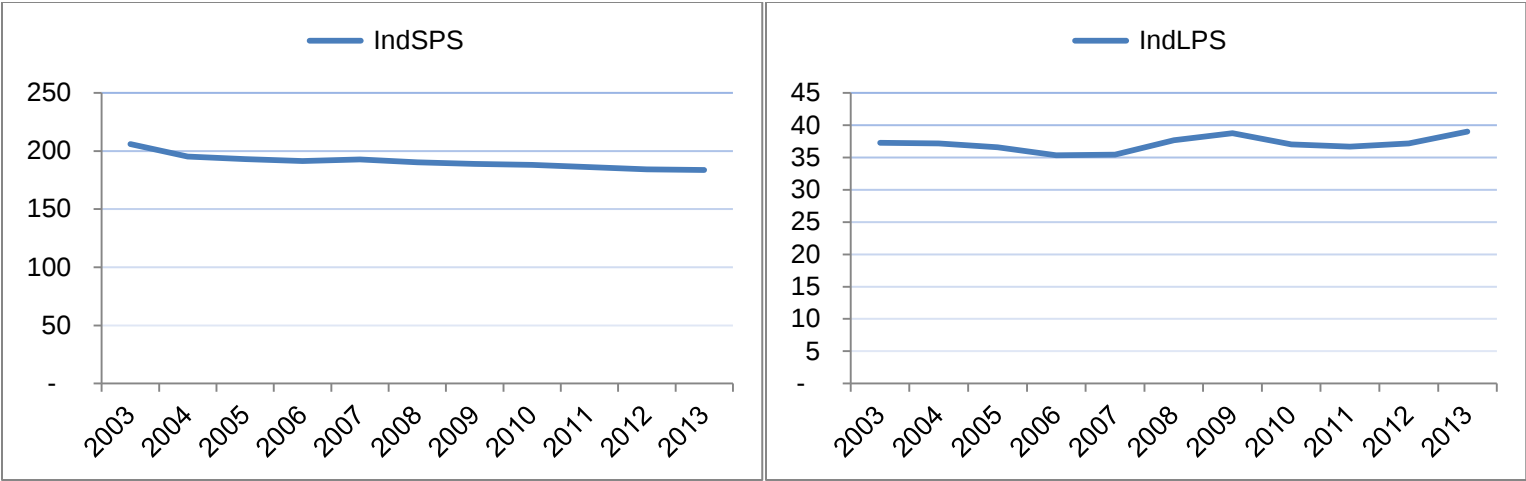
Historical Weather Normalized Energy Usage for Non-Summer Months (MWh)

Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting	LTS
2004	7,595,975	2,074,933	4,004,502	1,708,418	706,627	81,727	590,910	990,029	1,981,878	165,292	
2005	7,636,859	2,090,167	4,083,706	1,631,538	776,496	83,512	651,387	959,510	1,934,889	170,492	990,830
2006	7,916,706	2,185,579	4,299,721	1,617,727	854,934	86,286	671,441	931,461	1,851,310	166,532	2,707,074
2007	8,413,127	2,253,069	4,537,308	1,688,606	908,536	94,034	721,702	1,003,567	1,881,501	167,241	2,716,212
2008	8,778,209	2,254,261	4,558,055	1,605,904	841,322	87,165	694,119	881,018	1,723,528	165,706	2,743,326
2009	8,775,563	2,191,113	4,547,082	1,544,841	920,308	79,308	604,837	772,153	1,507,118	163,811	1,711,894
2010	8,798,420	2,177,570	4,558,476	1,510,933	959,379	80,864	626,289	804,195	1,421,789	162,970	2,565,751
2011	8,597,381	2,146,826	4,535,838	1,509,177	1,007,785	80,063	611,681	804,564	1,376,353	158,666	2,768,319
2012	8,388,338	2,139,291	4,596,432	1,504,531	1,042,266	80,158	598,799	805,080	1,407,022	158,387	2,756,457
2013	8,539,810	2,146,581	4,523,878	1,504,364	1,099,182	76,427	594,480	786,183	1,430,144	157,198	2,776,776

Number of Annual Units (Billed Customer Counts) by Class²

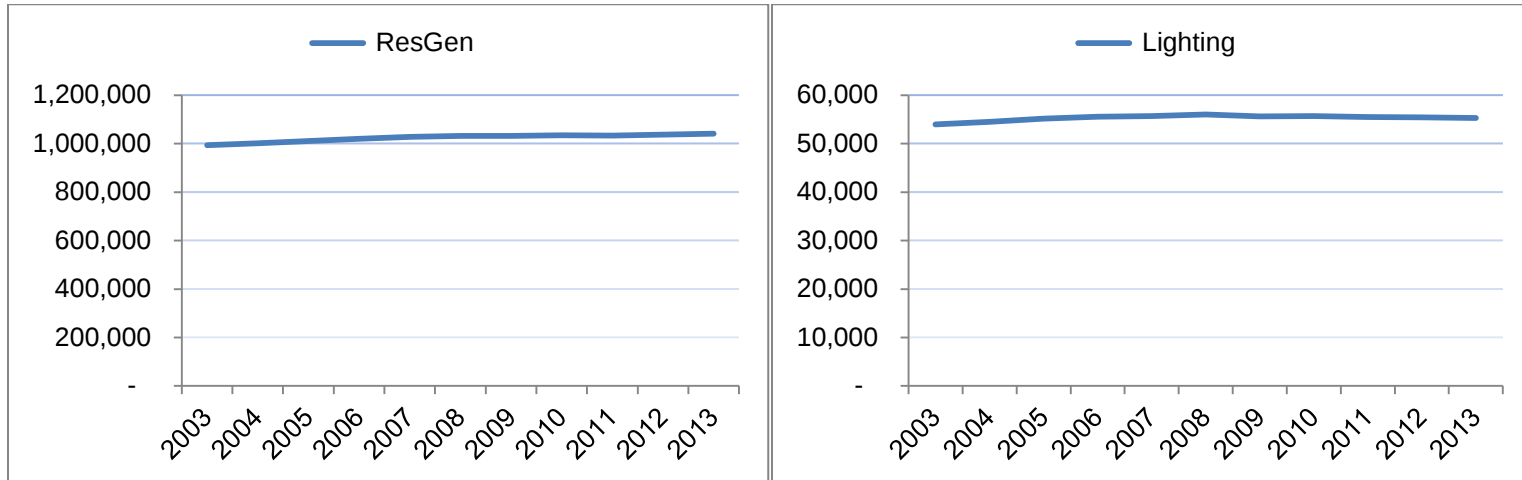
² 4 CSR 240-22.030(2)(D)1; 4 CSR 240-22.030(2)(D)3

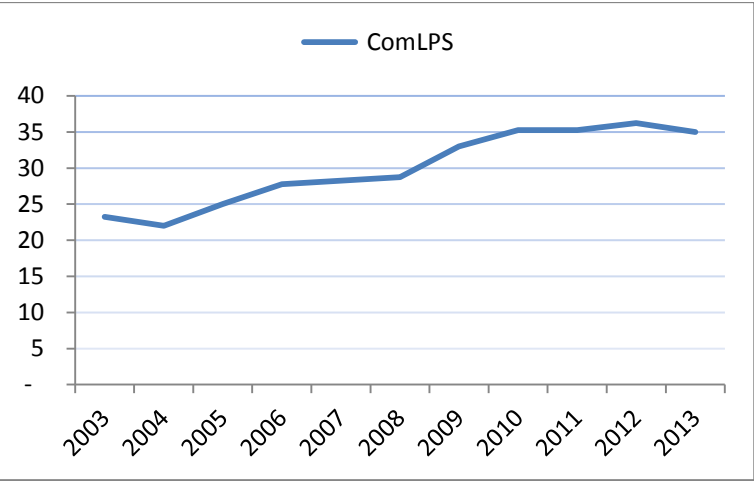
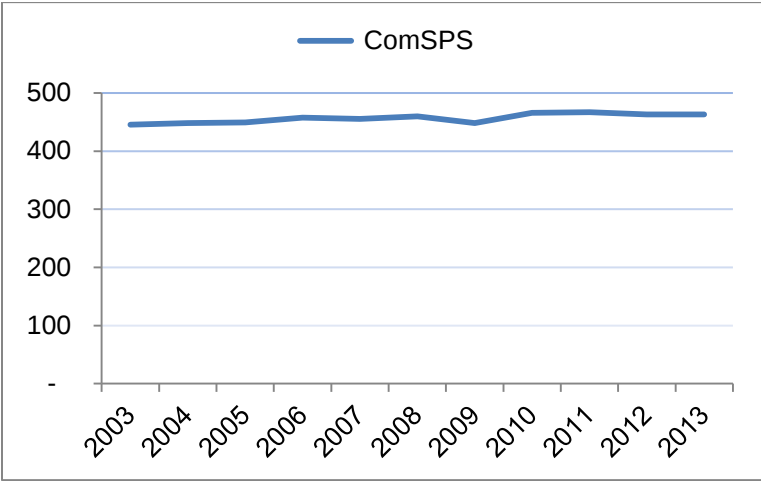
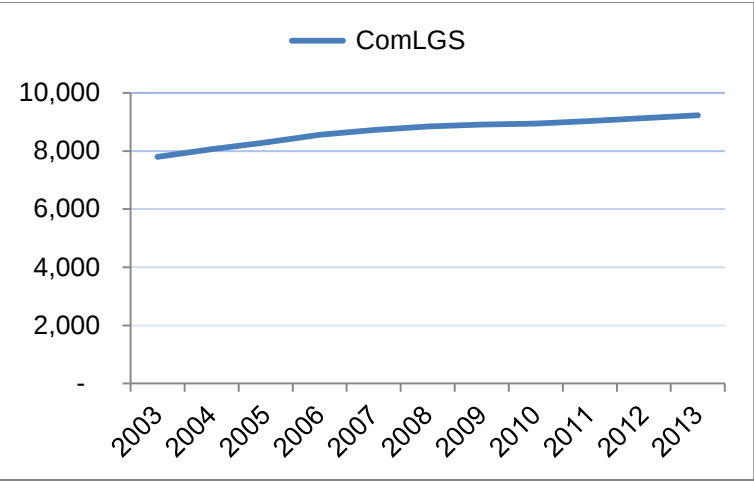
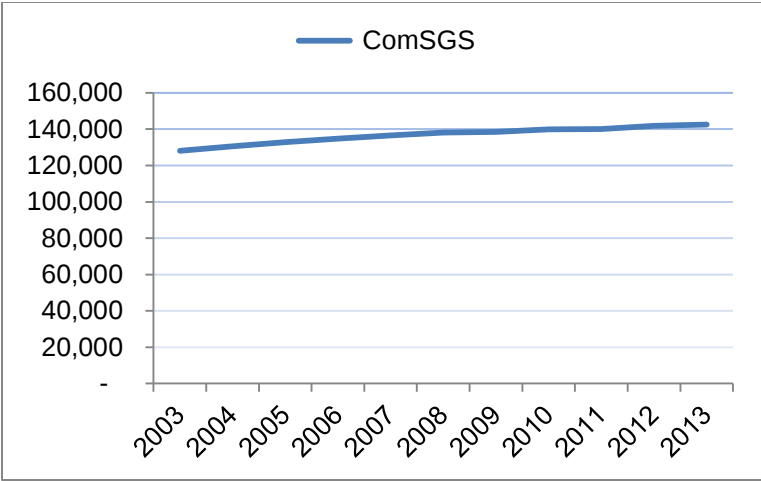


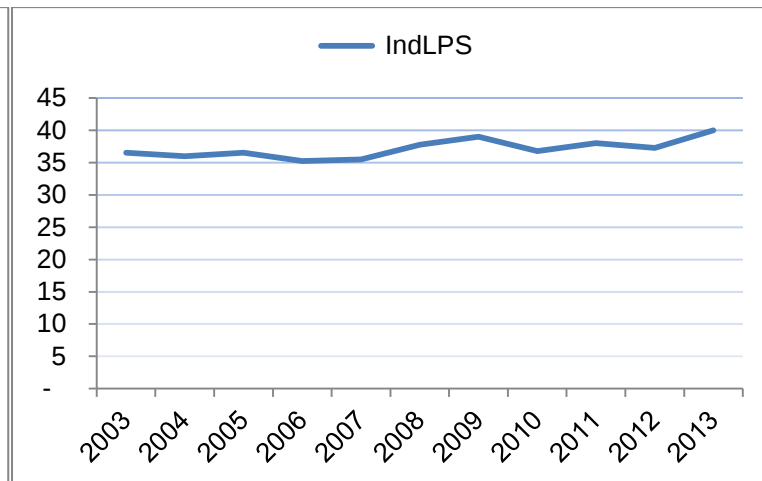
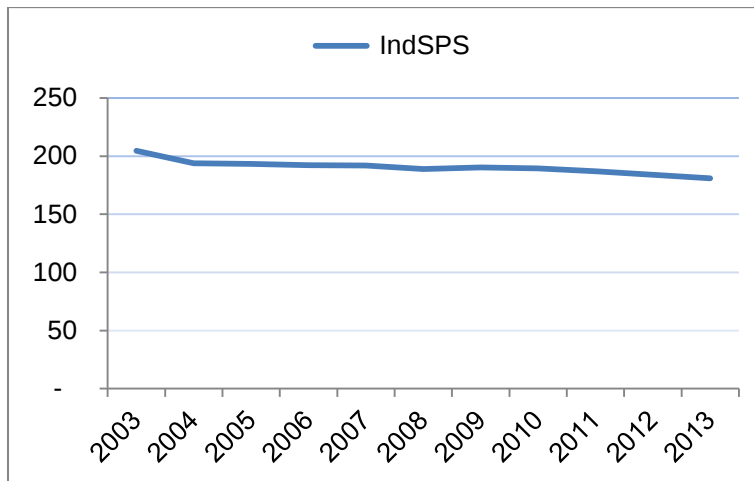
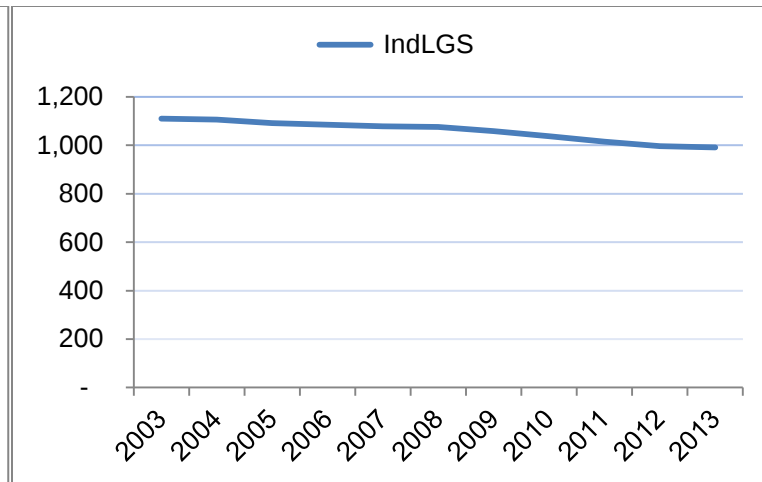
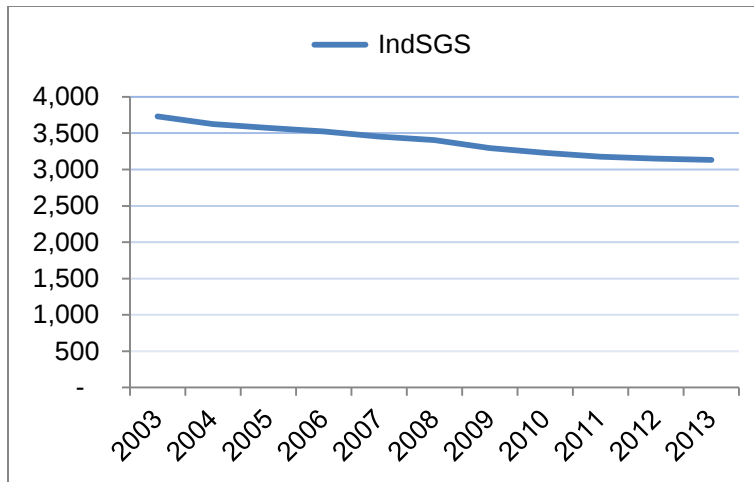


Number of Annual Units (Billed Customer Counts) by Class

	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting
2003	994,984	128,615	7,863	449	23	3,714	1,110	206	37	-	54,016
2004	1,001,447	130,506	8,038	449	23	3,640	1,108	195	37	-	54,528
2005	1,010,857	132,718	8,251	450	25	3,584	1,091	193	37	1	55,148
2006	1,020,482	134,612	8,498	452	27	3,527	1,082	191	35	1	55,538
2007	1,027,667	136,332	8,689	456	28	3,465	1,076	193	35	1	55,762
2008	1,032,902	137,974	8,808	456	29	3,398	1,072	190	38	1	55,911
2009	1,033,360	138,443	8,888	452	32	3,294	1,059	189	39	1	55,634
2010	1,035,425	139,662	8,935	460	35	3,237	1,036	188	37	1	55,679
2011	1,034,549	140,135	9,012	463	35	3,187	1,016	186	37	1	55,506
2012	1,036,216	141,603	9,109	463	36	3,148	998	184	37	1	55,449
2013	1,039,697	142,391	9,166	466	35	3,135	989	184	39	1	55,410

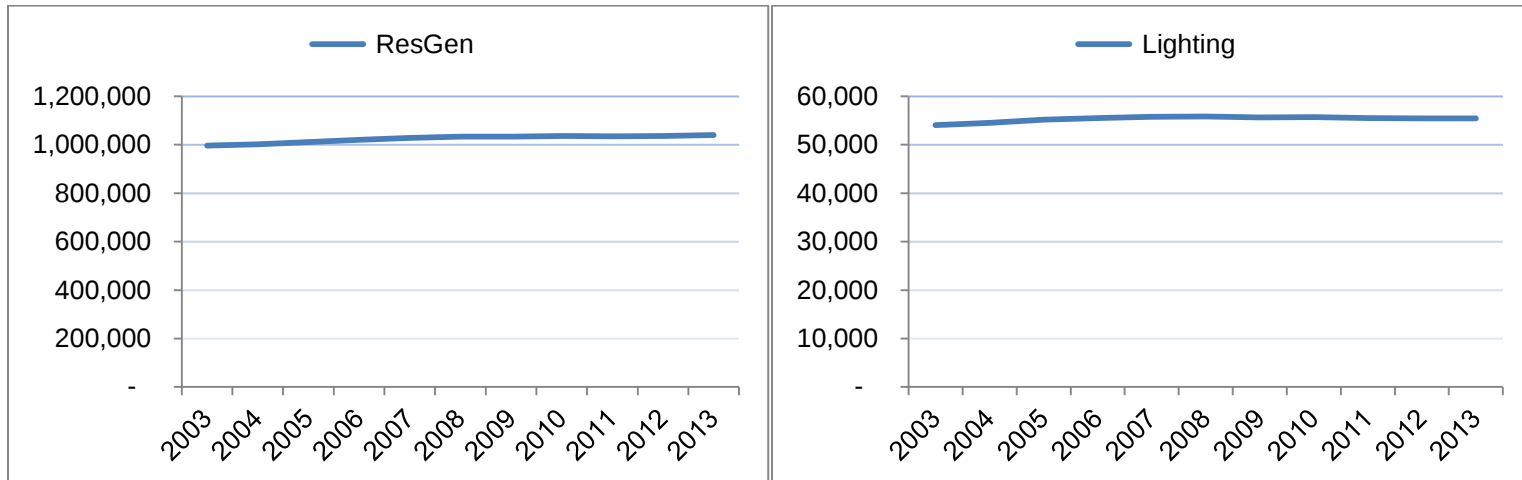
Number of Units (Billed Customer Counts) for Summer Months

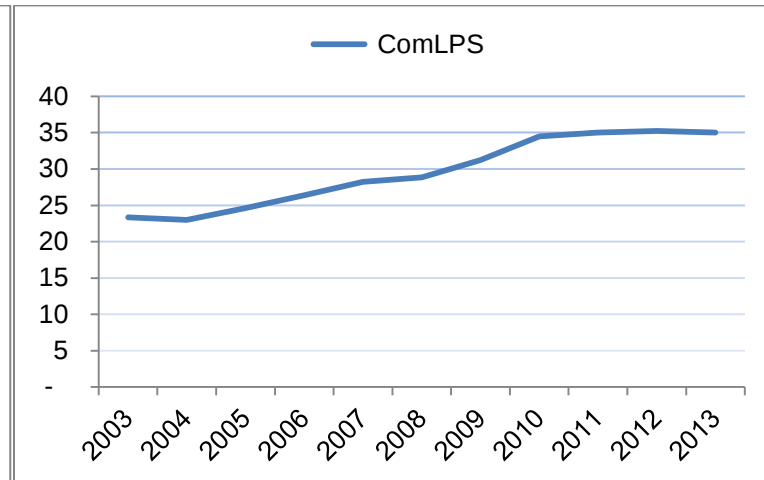
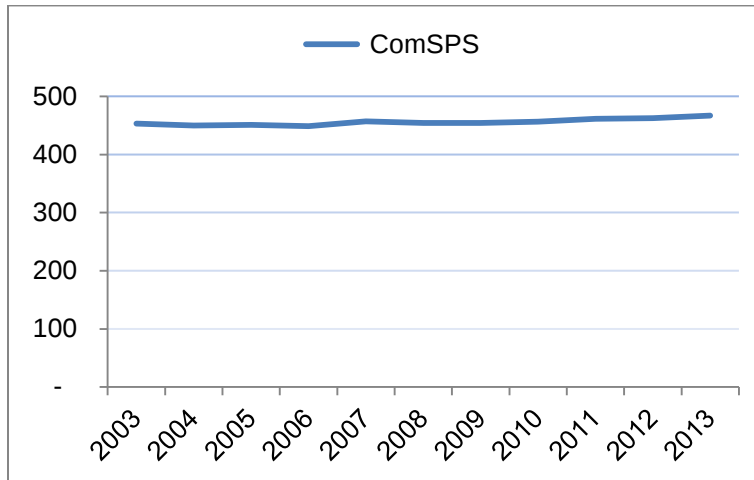
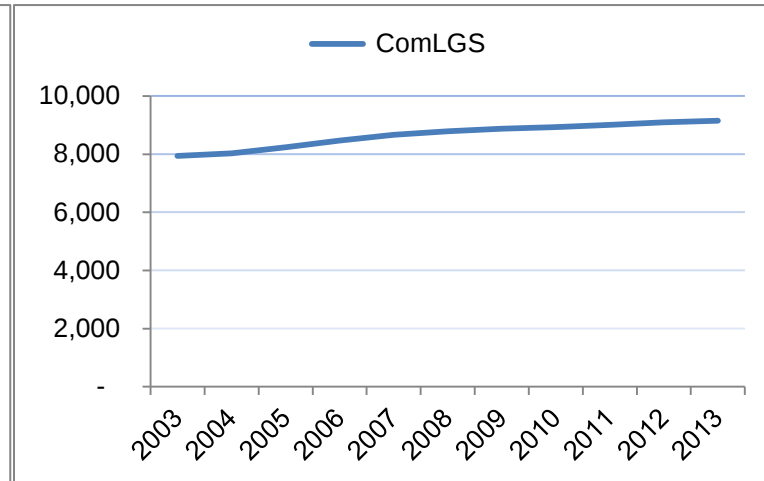
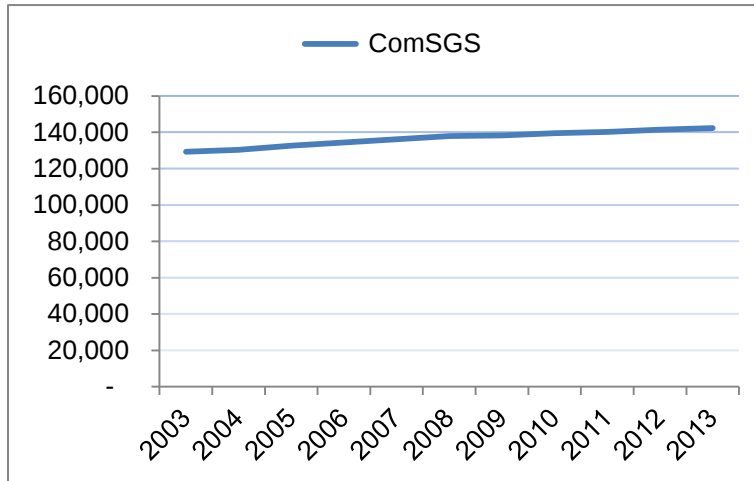


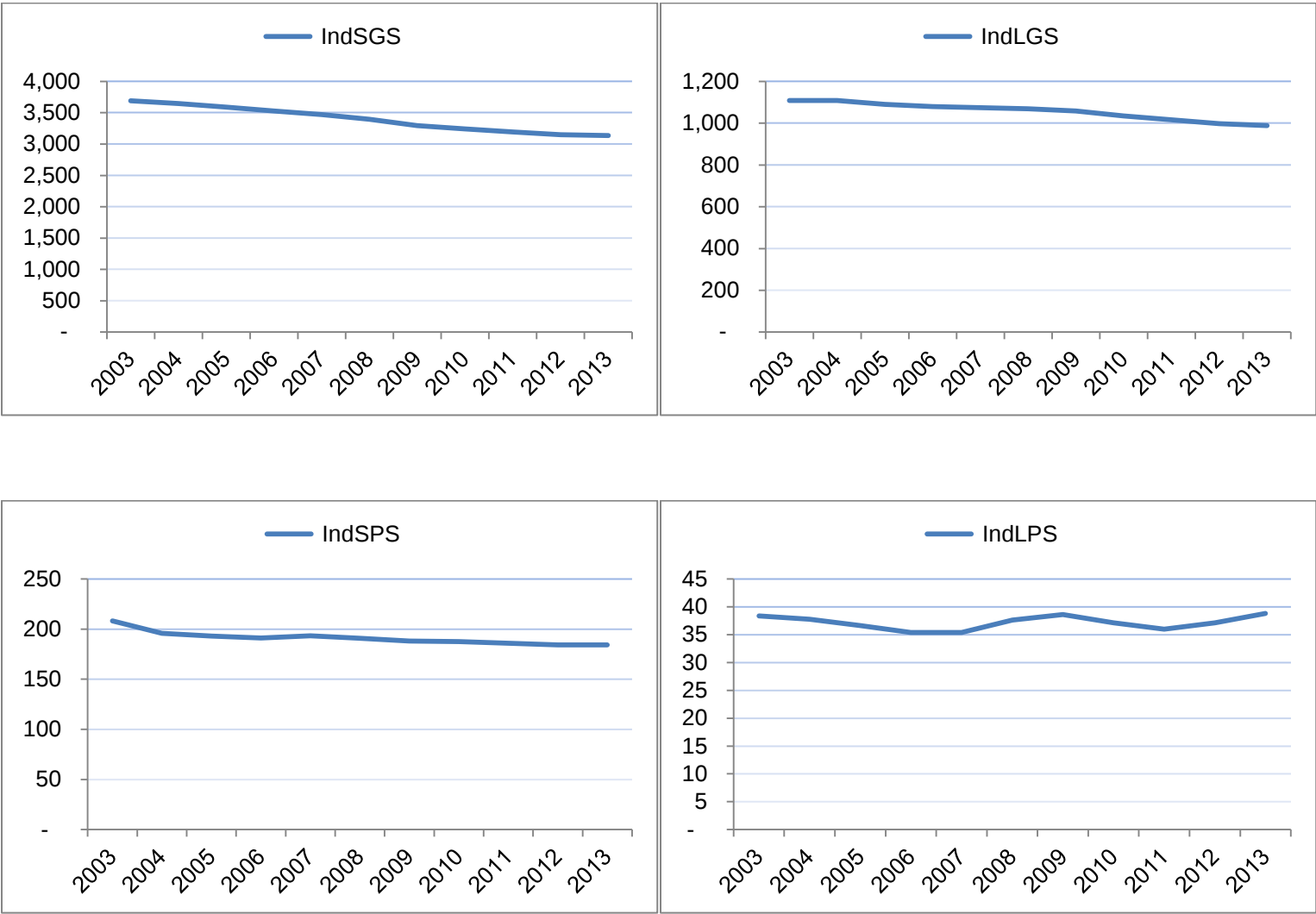


Number of Units (Billed Customer Counts) for Summer Months

	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting
2003	993,485	128,116	7,801	445	23	3,730	1,110	205	36	-	53,980
2004	1,001,343	130,604	8,063	448	22	3,626	1,106	194	36	-	54,531
2005	1,010,365	132,833	8,288	449	25	3,572	1,091	193	37	1	55,148
2006	1,020,511	134,794	8,560	458	28	3,523	1,084	192	35	1	55,587
2007	1,027,781	136,569	8,727	455	28	3,453	1,079	192	36	1	55,725
2008	1,032,636	138,147	8,845	460	29	3,405	1,076	189	38	1	56,019
2009	1,032,708	138,529	8,905	448	33	3,297	1,058	190	39	1	55,601
2010	1,034,608	139,840	8,946	466	35	3,229	1,037	190	37	1	55,701
2011	1,033,999	140,007	9,028	467	35	3,177	1,015	187	38	1	55,476
2012	1,036,804	141,880	9,129	463	36	3,150	996	184	37	1	55,463
2013	1,040,928	142,592	9,231	463	35	3,133	991	181	40	1	55,323

Number of Units (Billed Customer Counts) for Non-Summer Months



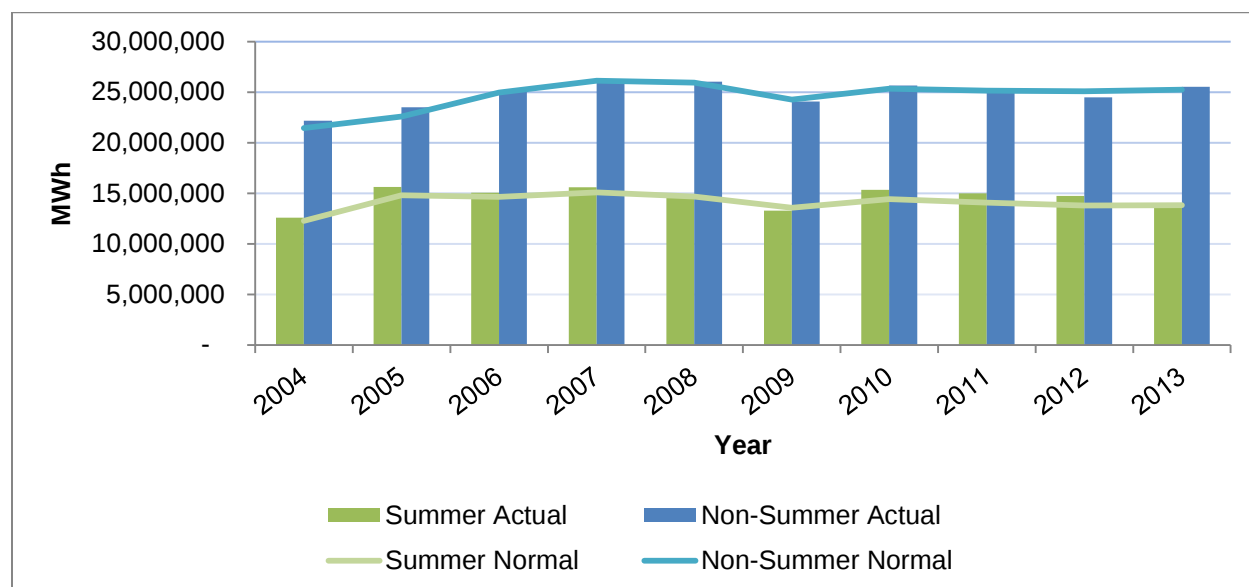


Number of Units (Billed Customer Counts) for Non-Summer Months

	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting
2003	996,983	129,280	7,944	453	23	3,691	1,109	208	38	-	54,065
2004	1,001,499	130,457	8,026	450	23	3,647	1,108	196	38	-	54,526
2005	1,011,103	132,661	8,233	451	25	3,590	1,091	193	37	1	55,149
2006	1,020,468	134,522	8,468	449	26	3,530	1,080	191	35	1	55,514
2007	1,027,611	136,214	8,671	457	28	3,471	1,075	193	35	1	55,781
2008	1,033,036	137,888	8,790	455	29	3,395	1,070	191	38	1	55,856
2009	1,033,686	138,399	8,879	454	31	3,293	1,059	188	39	1	55,651
2010	1,035,834	139,573	8,929	456	35	3,241	1,035	187	37	1	55,668
2011	1,034,824	140,199	9,004	462	35	3,192	1,016	186	36	1	55,521
2012	1,035,923	141,464	9,099	462	35	3,148	998	184	37	1	55,442
2013	1,039,450	142,351	9,153	467	35	3,135	989	184	39	1	55,428

Historical Net System Load³

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

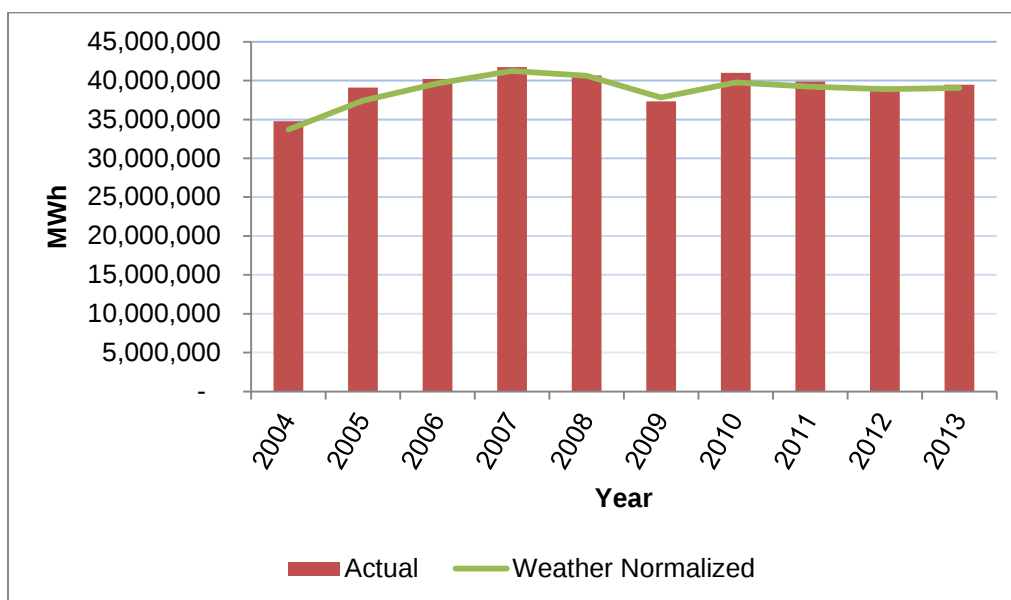


Historical Actual and Weather Normalized Summer and Non-Summer Net System Energy (MWh)

Year	Summer Actual	Summer Normal	Non-Summer Actual	Non-Summer Normal
2004	12,598,825	12,258,670	22,169,097	21,433,308
2005	15,621,885	14,794,314	23,493,231	22,601,169
2006	15,040,807	14,652,429	25,184,569	24,962,452
2007	15,596,739	15,096,543	26,121,358	26,139,706
2008	14,599,723	14,685,282	26,047,180	25,952,651
2009	13,267,862	13,576,591	24,072,791	24,254,530
2010	15,343,740	14,424,364	25,647,150	25,338,841
2011	14,979,884	14,067,996	24,918,726	25,162,538
2012	14,742,258	13,797,594	24,486,894	25,076,398
2013	13,958,150	13,829,107	25,519,482	25,247,442

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

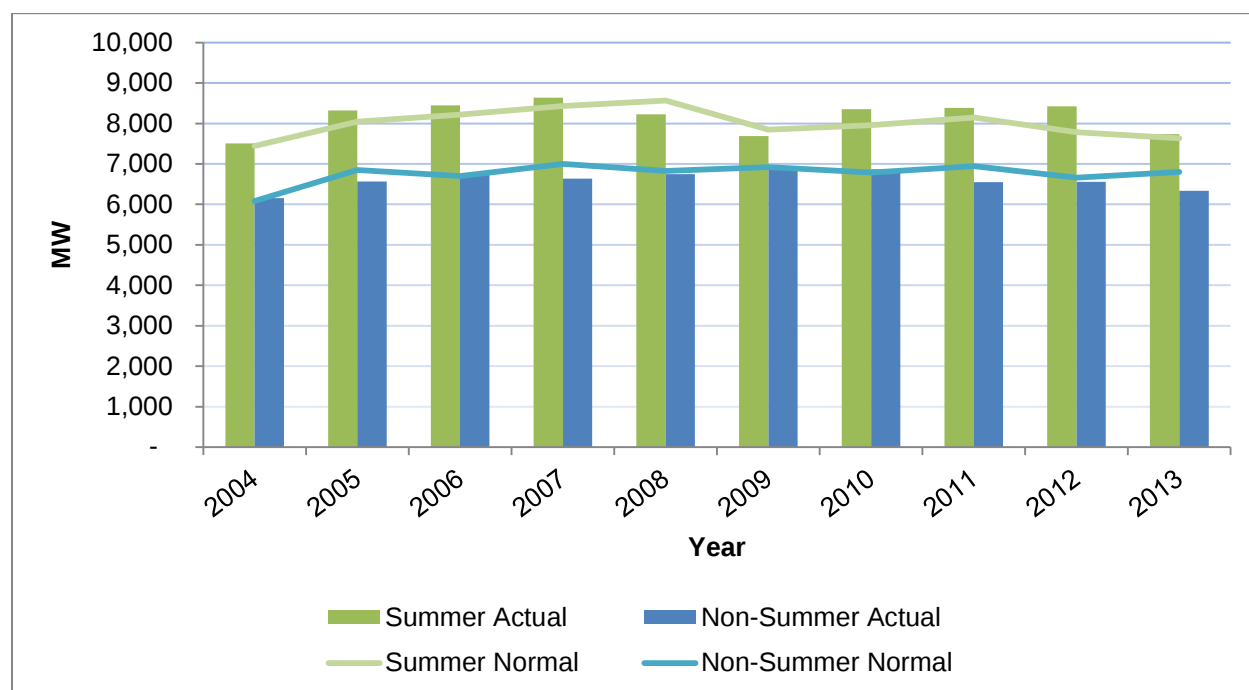
Annual Actual and Weather Normalized Net System Energy (MWh)



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

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

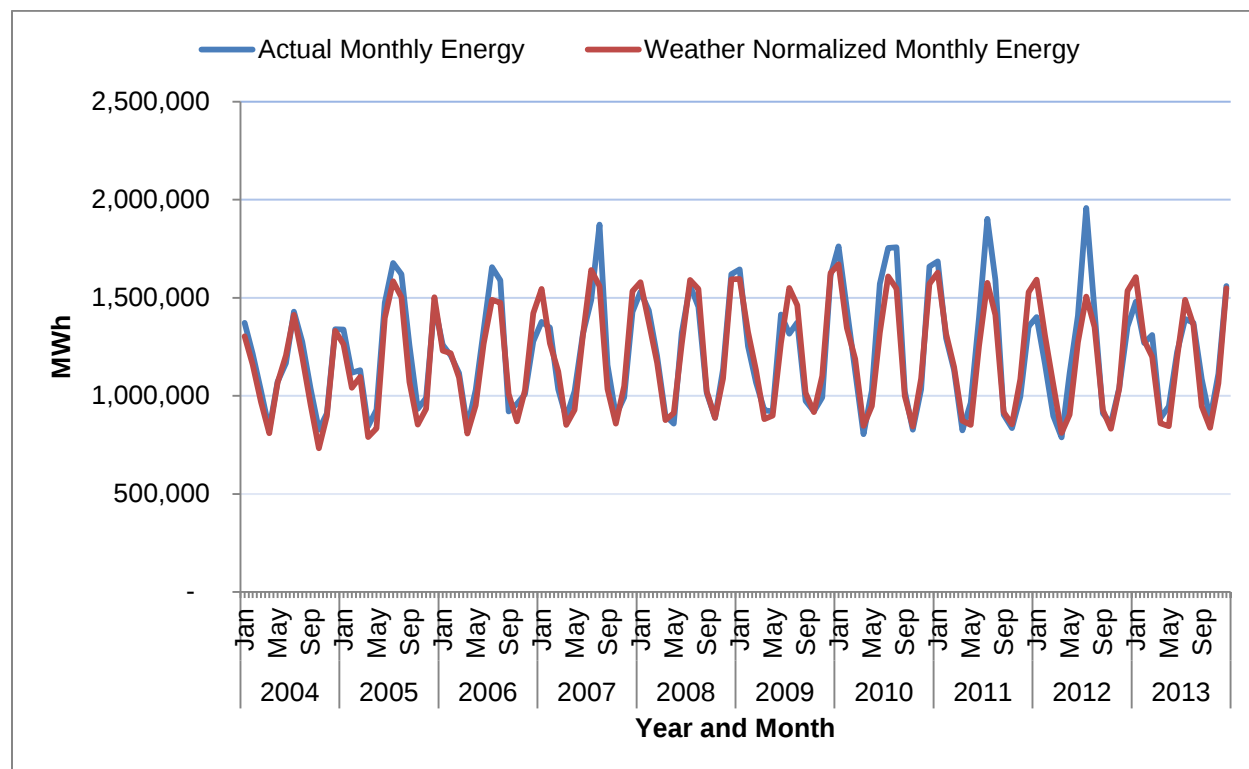


Actual System Peak: Actual and Weather Normalized (MW)

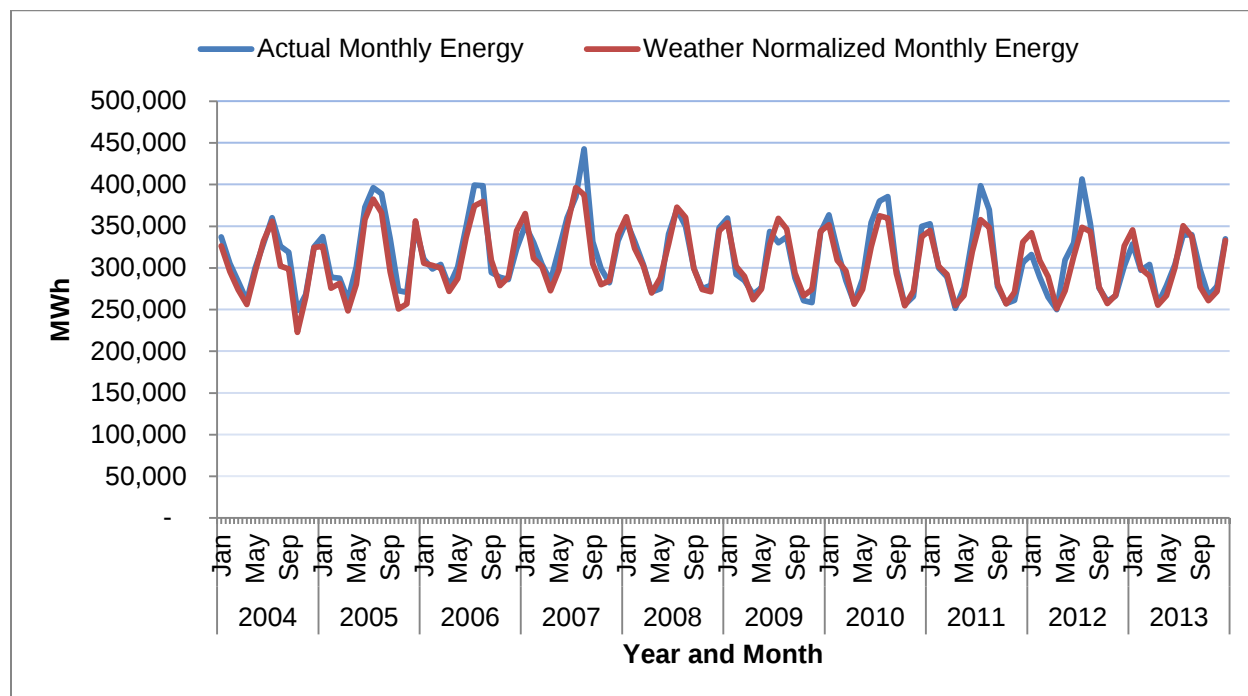
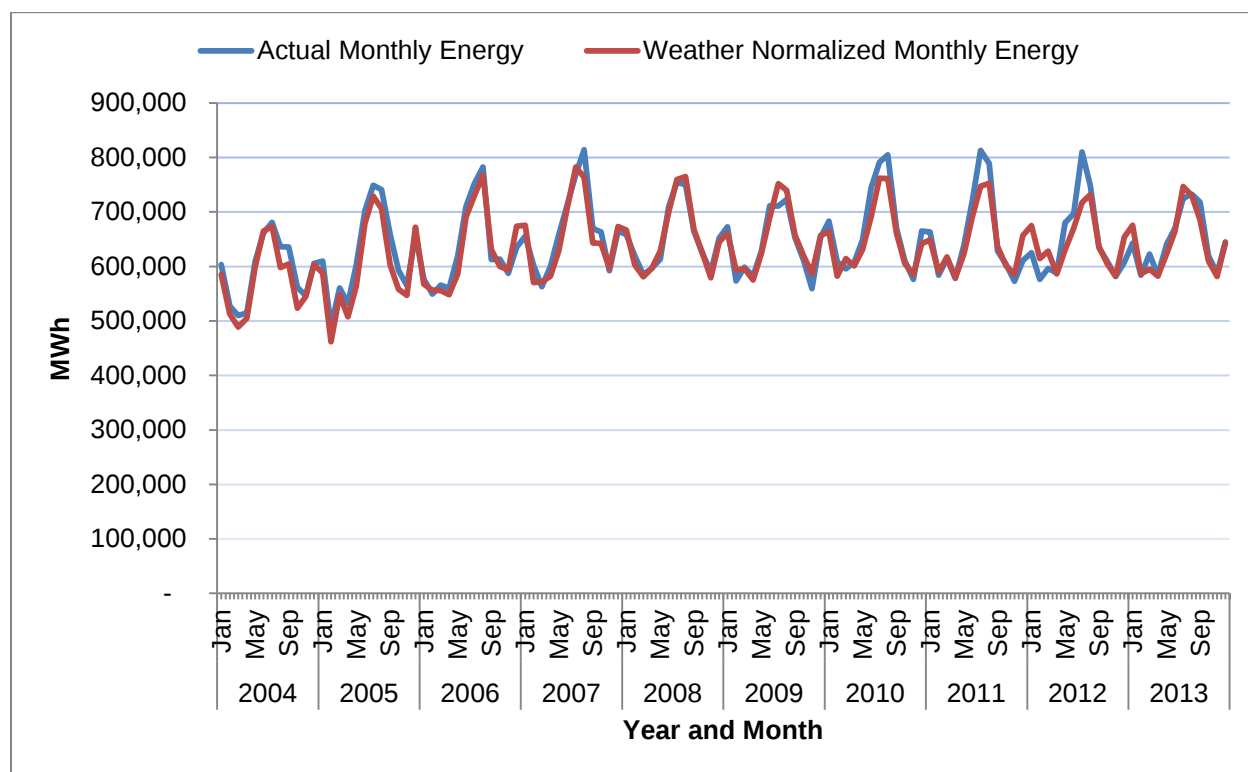
Year	Summer Actual	Summer Normal	Non-Summer Actual	Non-Summer Normal
2004	7,506	7,445	6,153	6,081
2005	8,321	8,046	6,564	6,848
2006	8,446	8,217	6,734	6,697
2007	8,638	8,433	6,635	6,998
2008	8,228	8,567	6,749	6,827
2009	7,688	7,843	6,850	6,917
2010	8,353	7,956	6,864	6,790
2011	8,384	8,146	6,553	6,944
2012	8,423	7,783	6,554	6,660
2013	7,736	7,633	6,336	6,802

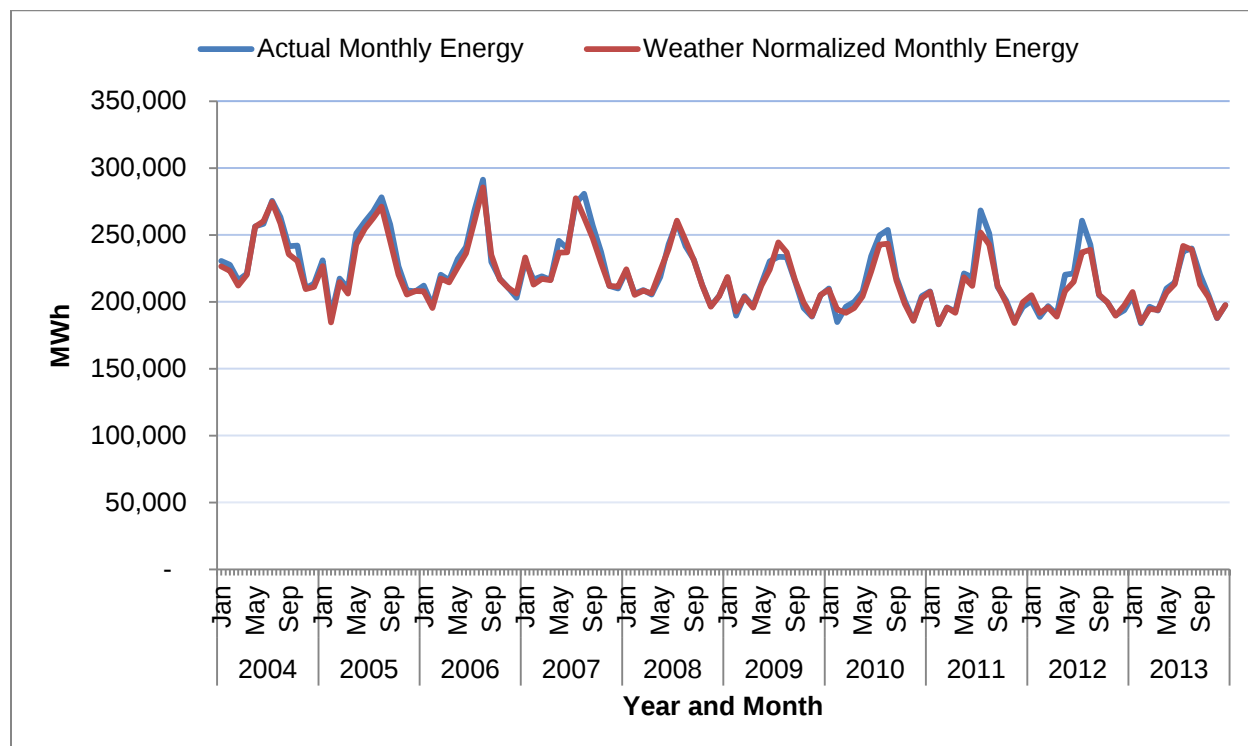
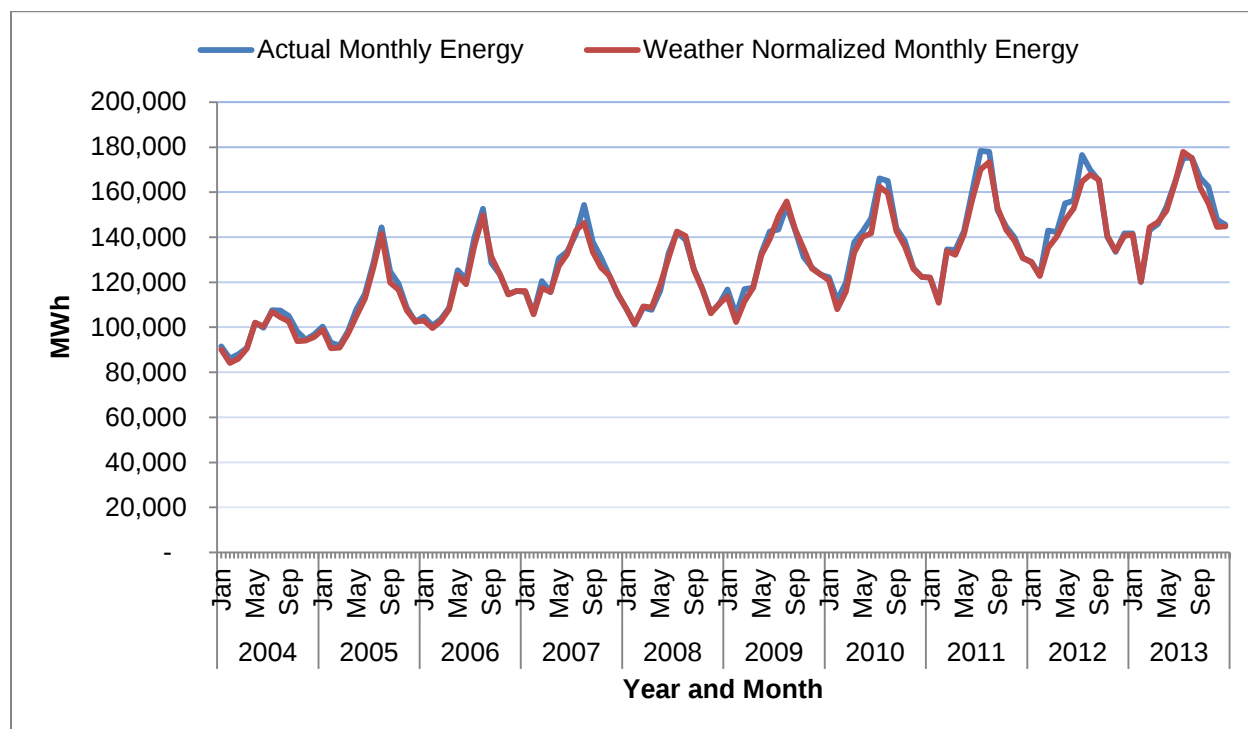
Historical Actual and Weather Normalized Energy Usage by Classes for All Months (2004-2013)⁴

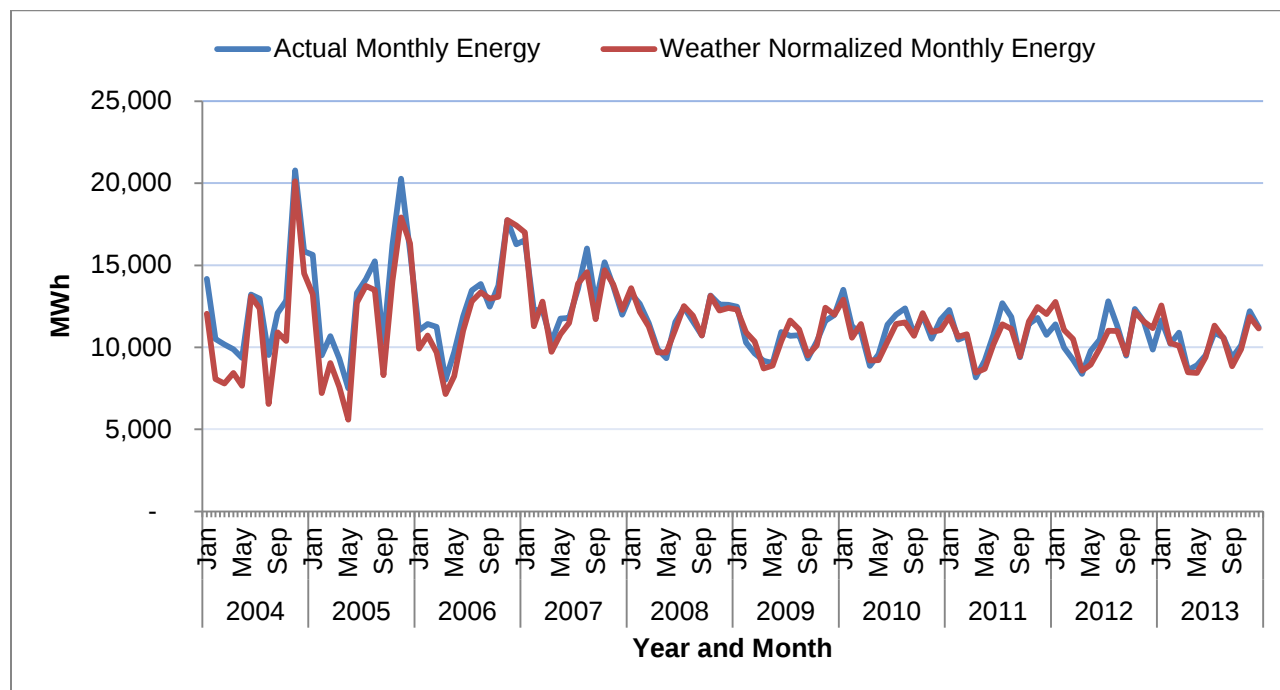
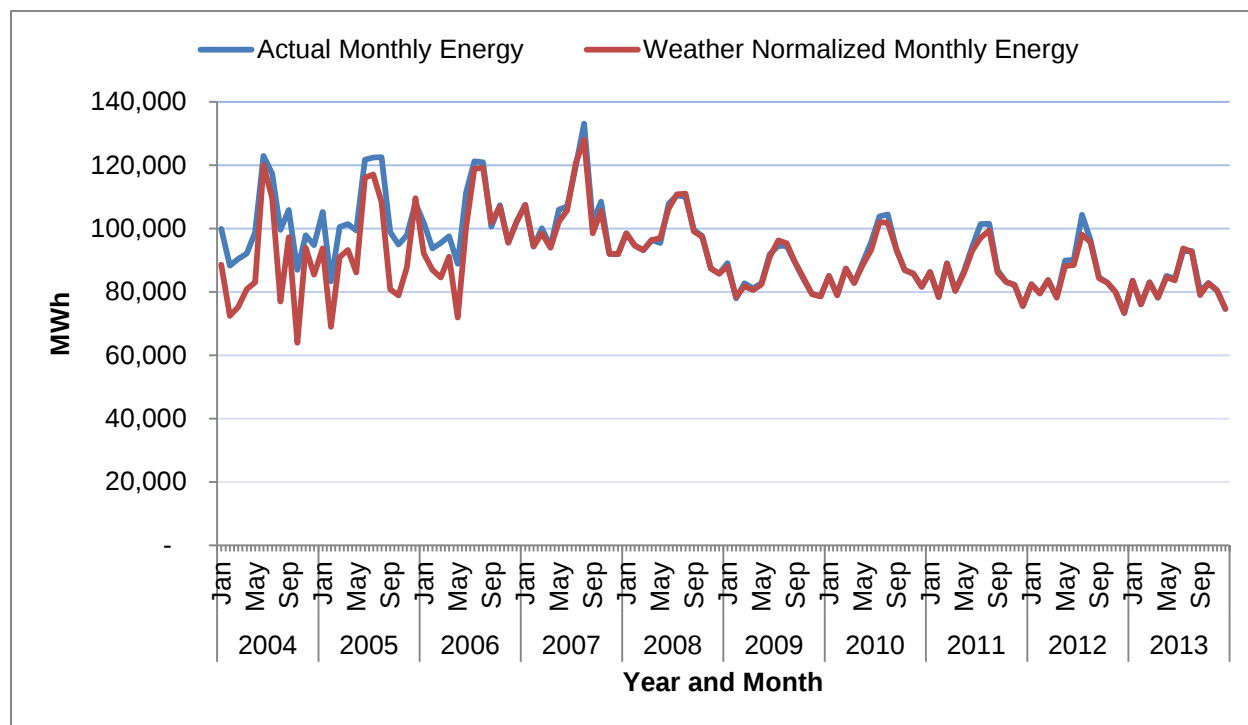
Residential Actual and Weather Normalized Monthly Sales (MWh)

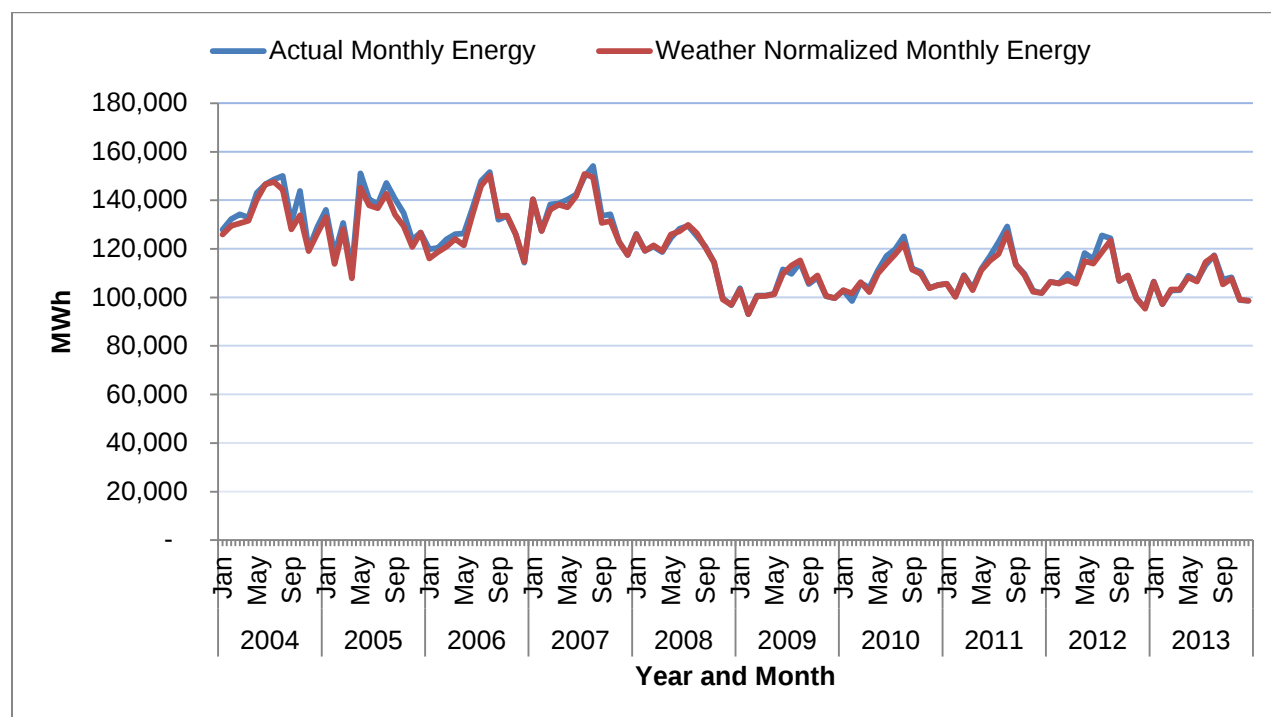
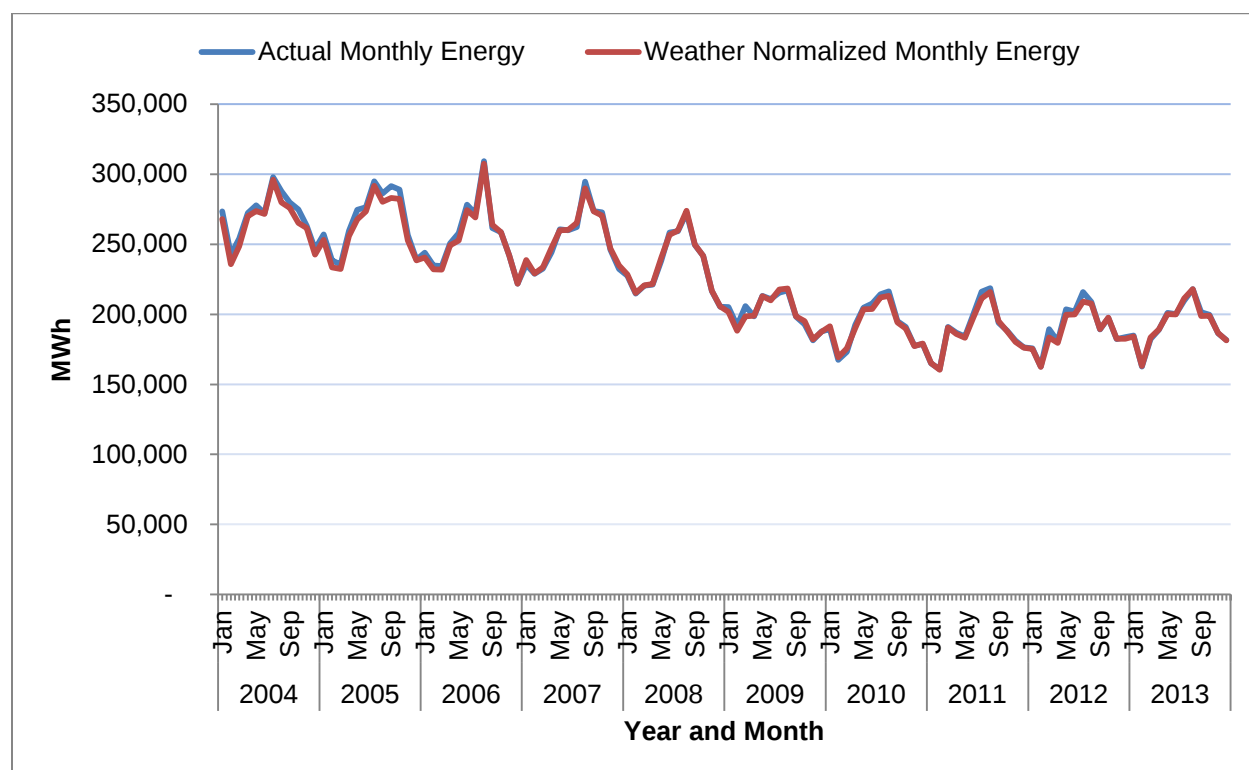


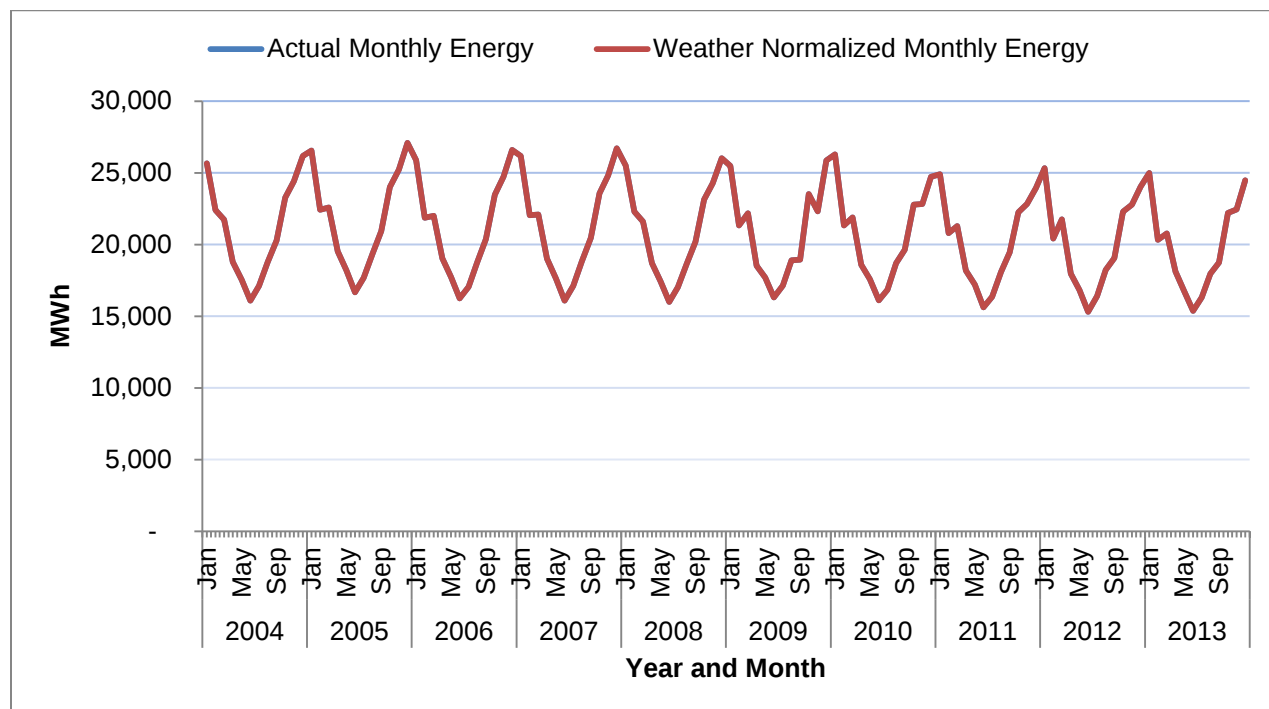
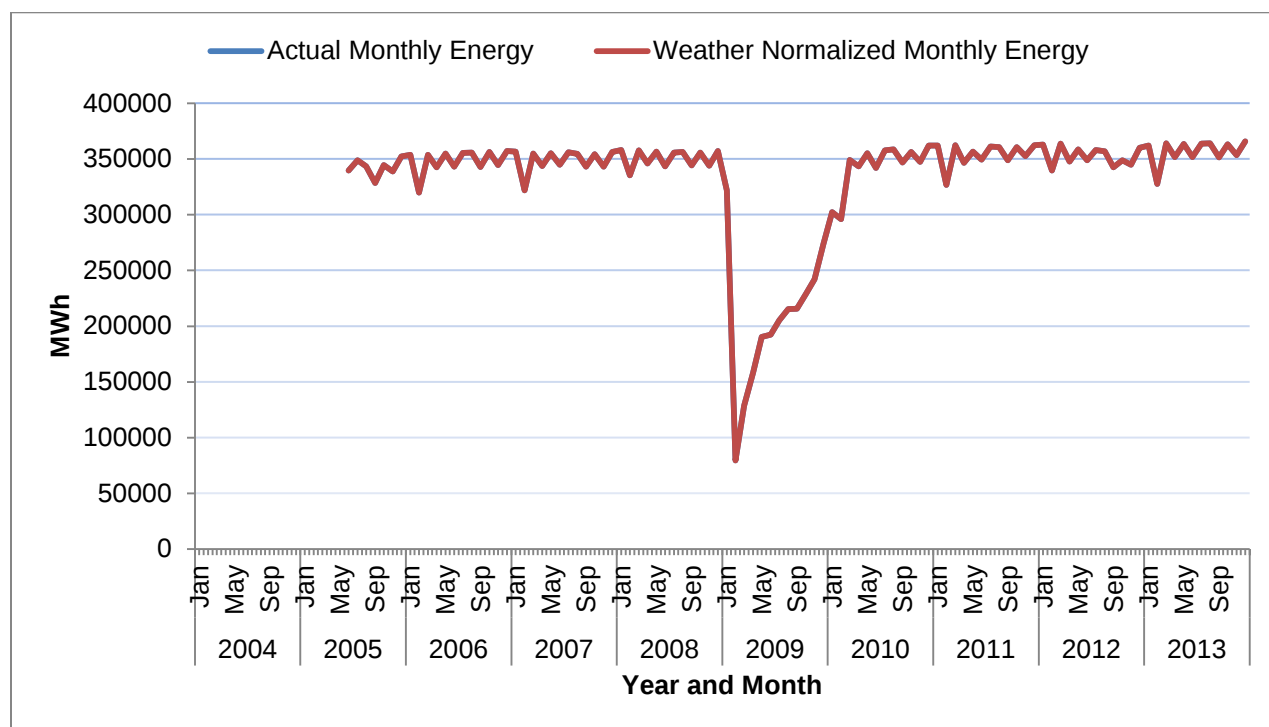
⁴ 4 CSR 240-22.030(7)(A)6

Commercial SGS Actual and Weather Normalized Monthly Sales (MWh)**Commercial LGS Actual and Weather Normalized Monthly Sales (MWh)**

Commercial SPS Actual and Weather Normalized Monthly Sales (MWh)**Commercial LPS Actual and Weather Normalized Monthly Sales (MWh)**

Ind SGS Actual and Weather Normalized Monthly Sales (MWh)**Ind LGS Actual and Weather Normalized Monthly Sales (MWh)**

Ind SPS Actual and Weather Normalized Monthly Sales (MWh)**Ind LPS Actual and Weather Normalized Monthly Sales (MWh)**

Lighting Actual and Weather Normalized Monthly Sales (MWh)**Noranda Actual and Weather Normalized Monthly Sales (MWh)**

Actual Monthly Sales (MWh)

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	1	1,372,160	337,082	603,407	230,541	91,502	14,176	99,924	127,869	273,569	25,658	
2004	2	1,216,681	305,221	527,283	227,763	86,118	10,509	88,275	132,200	242,633	22,418	
2004	3	1,026,876	283,910	510,034	216,158	87,909	10,166	90,442	134,177	254,141	21,734	
2004	4	829,118	260,928	514,515	221,077	90,836	9,885	92,139	132,965	272,285	18,799	
2004	5	1,072,718	299,987	609,468	256,417	102,007	9,356	98,845	143,067	277,747	17,537	
2004	6	1,167,466	329,105	661,378	258,362	99,798	13,211	122,914	146,607	272,004	16,102	
2004	7	1,429,755	360,258	680,784	275,601	107,594	12,960	117,361	148,671	297,944	17,123	
2004	8	1,276,904	325,911	636,403	263,464	107,415	9,519	99,564	149,996	287,832	18,779	
2004	9	1,038,133	318,733	635,548	241,642	104,997	12,086	105,820	131,003	279,775	20,302	
2004	10	827,641	249,017	561,501	242,154	98,019	12,848	86,942	143,898	274,794	23,272	
2004	11	910,420	268,088	546,522	210,316	94,529	20,780	97,886	119,874	263,088	24,411	
2004	12	1,339,326	325,411	605,730	213,499	96,763	15,842	94,702	128,990	246,431	26,173	
2005	1	1,338,313	337,702	610,077	230,947	100,390	15,639	105,218	136,108	257,023	26,565	
2005	2	1,118,577	288,857	489,720	189,549	93,088	9,518	83,345	117,738	238,616	22,444	
2005	3	1,131,110	287,667	560,188	217,437	91,885	10,687	100,519	130,738	235,544	22,581	
2005	4	846,025	261,656	532,211	210,268	98,263	9,306	101,444	111,164	259,442	19,535	
2005	5	928,102	301,209	602,842	251,059	107,897	7,499	99,373	151,130	274,503	18,208	
2005	6	1,475,137	372,851	702,265	259,958	114,902	13,319	121,694	140,391	276,531	16,679	339,664
2005	7	1,678,387	396,290	749,259	267,649	128,299	14,158	122,394	138,484	294,854	17,691	348,798
2005	8	1,620,497	389,155	741,042	278,250	144,442	15,242	122,540	147,216	286,332	19,376	343,425
2005	9	1,257,934	334,844	658,745	257,805	124,749	10,306	98,832	140,571	291,557	20,943	328,429
2005	10	933,815	272,569	592,666	226,408	119,325	16,237	94,916	134,738	288,928	24,019	344,690
2005	11	989,824	270,695	564,936	208,544	108,587	20,268	97,841	123,681	256,520	25,222	338,704
2005	12	1,466,213	348,487	657,362	207,789	102,523	15,852	107,997	126,703	238,869	27,090	352,287
2006	1	1,260,456	310,593	576,913	212,123	104,794	11,034	101,795	119,862	243,942	25,883	353,622
2006	2	1,205,543	298,624	549,540	197,302	100,751	11,422	93,742	120,423	234,946	21,867	319,732

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2006	3	1,116,637	304,045	565,732	220,380	103,621	11,246	95,462	123,891	234,366	22,001	353,811
2006	4	840,942	277,956	560,001	216,291	108,521	8,023	97,549	126,050	250,666	19,033	342,433
2006	5	1,029,990	301,206	619,364	231,941	125,375	9,704	88,913	126,331	257,892	17,740	354,848
2006	6	1,337,221	349,183	710,415	241,223	121,356	11,882	111,350	136,788	278,241	16,251	343,069
2006	7	1,656,563	399,181	752,083	268,062	139,921	13,476	121,224	147,990	271,923	17,046	355,330
2006	8	1,589,144	398,441	782,664	291,319	152,635	13,863	120,931	151,689	309,342	18,763	355,664
2006	9	921,092	294,508	612,452	229,931	128,617	12,470	100,620	131,964	261,561	20,387	342,974
2006	10	959,086	288,717	613,297	217,248	123,385	13,766	107,388	133,595	258,580	23,485	356,202
2006	11	1,008,646	286,313	587,515	210,578	114,651	17,738	95,528	126,107	241,978	24,735	344,607
2006	12	1,278,537	323,137	635,347	203,116	116,105	16,286	102,148	114,388	221,733	26,604	357,150
2007	1	1,377,376	351,116	655,696	230,373	115,640	16,538	107,479	140,418	235,613	26,172	356,717
2007	2	1,347,250	330,712	601,941	216,727	106,139	12,254	94,322	127,396	228,968	22,056	321,968
2007	3	1,032,987	304,382	562,939	219,013	120,594	12,255	100,118	138,305	232,617	22,104	354,942
2007	4	888,987	284,643	600,289	216,449	115,597	10,338	94,380	138,655	244,305	19,028	343,742
2007	5	1,022,922	321,850	658,331	245,669	130,577	11,748	105,978	140,262	260,728	17,642	355,275
2007	6	1,316,034	360,035	712,582	239,937	133,669	11,799	106,975	142,412	259,943	16,107	344,738
2007	7	1,488,549	385,334	769,222	273,669	141,223	13,561	119,676	149,720	262,318	17,112	355,985
2007	8	1,873,790	442,731	813,897	280,824	154,377	16,027	133,127	154,086	294,724	18,836	354,592
2007	9	1,157,716	331,416	669,572	256,810	138,066	12,699	101,949	133,553	273,664	20,467	343,218
2007	10	901,688	299,027	663,252	237,209	130,880	15,179	108,499	134,233	272,665	23,576	354,206
2007	11	991,811	282,201	592,225	211,915	122,767	13,733	92,060	122,843	245,982	24,831	343,084
2007	12	1,428,465	332,436	665,018	209,889	114,220	11,983	91,939	117,559	232,459	26,707	356,292
2008	1	1,530,556	356,182	658,429	223,072	108,287	13,268	98,432	126,199	227,651	25,521	358,183
2008	2	1,436,540	331,958	619,922	206,280	101,237	12,655	94,636	119,270	214,684	22,299	335,439
2008	3	1,203,467	304,339	584,846	208,704	108,656	11,471	93,121	120,905	220,462	21,618	357,620
2008	4	898,675	271,250	596,231	205,418	107,750	9,871	96,321	118,716	221,141	18,698	345,846
2008	5	858,961	274,903	613,103	218,648	116,294	9,325	95,472	124,534	238,305	17,443	356,734
2008	6	1,322,365	340,602	709,310	242,972	132,930	11,541	107,759	128,254	258,273	16,016	343,403
2008	7	1,563,361	370,252	754,350	259,514	142,109	12,430	110,527	129,523	259,401	17,032	355,693

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2008	8	1,454,312	349,918	750,284	241,540	138,829	11,570	110,019	125,303	272,270	18,679	356,444
2008	9	1,015,926	299,680	664,880	231,497	125,924	10,718	99,441	120,857	249,481	20,193	344,343
2008	10	888,420	275,051	625,316	212,594	117,243	13,154	97,643	114,494	241,626	23,148	355,642
2008	11	1,136,657	279,202	589,869	196,837	106,647	12,607	87,514	99,641	216,659	24,280	343,899
2008	12	1,620,627	348,301	651,892	204,614	110,321	12,600	85,723	96,855	205,403	26,033	357,123
2009	1	1,645,692	359,708	672,671	217,957	116,759	12,477	89,130	103,831	205,224	25,501	321,889
2009	2	1,253,082	292,394	573,175	189,735	105,540	10,283	77,955	93,111	191,992	21,333	79,661
2009	3	1,069,049	285,024	598,744	204,304	116,972	9,631	82,703	100,781	205,799	22,188	128,564
2009	4	927,160	268,601	582,052	196,706	117,594	9,183	81,088	100,794	198,522	18,538	158,328
2009	5	919,923	276,020	627,776	213,599	133,035	9,042	82,760	101,609	213,278	17,709	190,508
2009	6	1,415,018	343,601	711,376	230,321	142,524	10,932	91,950	111,541	210,861	16,310	192,369
2009	7	1,316,609	330,232	710,534	233,595	143,377	10,709	94,504	109,698	215,379	17,150	205,200
2009	8	1,373,993	337,322	722,889	233,344	153,814	10,742	94,514	114,285	217,102	18,910	215,322
2009	9	975,186	288,200	652,784	215,498	143,227	9,323	89,316	105,453	198,375	18,954	215,523
2009	10	921,454	260,835	610,908	195,388	131,235	10,351	83,978	108,177	192,950	23,521	228,901
2009	11	991,990	258,494	559,096	188,913	126,458	11,617	79,372	100,478	181,456	22,329	242,151
2009	12	1,613,552	342,794	653,496	204,878	123,406	11,973	78,607	99,737	187,723	25,876	274,017
2010	1	1,762,339	363,748	683,285	210,085	122,247	13,512	85,037	102,844	189,406	26,284	302,266
2010	2	1,441,909	322,270	608,362	184,770	111,981	11,268	79,150	98,553	167,494	21,348	296,055
2010	3	1,125,007	285,149	595,658	196,447	119,820	10,928	87,327	106,043	173,140	21,895	349,044
2010	4	804,614	258,245	607,729	199,990	137,769	8,861	82,809	103,916	192,294	18,606	343,485
2010	5	1,027,374	286,399	648,424	207,709	142,619	9,565	89,178	111,157	204,703	17,588	355,238
2010	6	1,571,591	354,601	744,471	234,083	148,385	11,378	95,722	117,128	207,787	16,110	341,926
2010	7	1,754,514	380,367	791,347	249,804	166,213	11,990	103,868	119,915	214,253	16,852	357,676
2010	8	1,756,958	385,568	804,643	253,688	165,032	12,370	104,451	125,196	216,323	18,715	358,664
2010	9	1,023,357	298,418	670,724	218,022	144,031	10,789	93,281	111,927	195,206	19,638	346,762
2010	10	827,530	255,979	610,619	200,863	138,482	11,952	86,888	110,531	191,123	22,799	356,245
2010	11	1,033,363	265,611	576,525	186,143	126,292	10,516	85,738	103,938	177,469	22,840	347,553
2010	12	1,659,296	349,939	665,208	204,166	122,359	11,695	81,660	105,141	178,940	24,724	362,080

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2011	1	1,686,363	352,764	663,482	207,876	122,043	12,287	86,292	105,606	165,087	24,905	362,012
2011	2	1,294,588	299,847	584,127	183,296	111,501	10,473	78,414	100,434	160,943	20,799	326,897
2011	3	1,131,255	289,100	615,130	195,811	134,613	10,687	88,983	109,218	191,068	21,296	362,221
2011	4	824,387	251,767	577,859	192,742	134,301	8,156	80,390	103,755	186,878	18,203	346,593
2011	5	965,296	276,607	639,377	221,273	142,685	9,189	86,548	111,753	184,141	17,203	356,474
2011	6	1,400,864	335,653	720,164	218,403	160,609	10,750	94,334	116,951	199,919	15,637	349,418
2011	7	1,902,909	398,627	812,914	268,416	178,425	12,680	101,383	122,711	216,155	16,367	361,102
2011	8	1,592,263	369,982	788,940	251,082	177,982	11,851	101,518	129,184	218,596	18,098	360,586
2011	9	903,592	277,613	628,847	211,137	151,948	9,384	86,891	113,543	194,081	19,473	348,900
2011	10	835,958	257,210	603,271	200,975	144,631	11,424	83,090	109,660	188,381	22,259	360,694
2011	11	994,951	261,264	572,953	185,131	139,804	11,797	82,248	102,758	181,138	22,827	352,536
2011	12	1,353,962	306,490	610,906	196,073	130,722	10,755	75,581	101,757	176,348	23,943	362,230
2012	1	1,402,208	316,141	624,883	200,562	129,034	11,402	82,400	106,449	175,727	25,327	362,913
2012	2	1,163,050	288,649	576,166	188,759	122,965	9,983	79,505	105,757	162,699	20,416	339,688
2012	3	897,980	264,846	596,144	196,752	142,959	9,244	83,688	109,711	189,507	21,756	363,791
2012	4	788,102	250,010	588,013	190,715	142,337	8,382	78,260	106,322	180,698	17,973	347,634
2012	5	1,114,664	309,600	680,132	220,298	155,127	9,777	89,916	118,275	203,501	16,837	358,640
2012	6	1,408,204	329,828	696,562	221,254	156,220	10,462	90,060	115,817	201,966	15,306	348,958
2012	7	1,957,375	406,583	809,985	260,644	176,486	12,806	104,343	125,573	215,931	16,407	357,911
2012	8	1,431,316	352,892	747,729	242,809	169,915	11,303	96,586	124,402	208,903	18,248	356,799
2012	9	910,382	276,151	634,243	205,058	165,223	9,483	84,508	106,840	189,223	19,057	342,508
2012	10	861,078	260,191	609,439	199,782	140,162	12,344	82,965	108,883	197,412	22,295	348,918
2012	11	1,039,628	266,604	581,615	189,798	133,403	11,574	79,846	99,545	182,321	22,798	344,844
2012	12	1,353,520	302,295	607,316	193,828	141,701	9,858	73,314	95,713	183,592	24,033	360,003
2013	1	1,479,499	328,894	642,943	204,282	141,741	11,654	83,553	106,572	184,780	25,001	361,924
2013	2	1,270,456	297,142	583,775	183,929	120,079	10,204	76,023	97,229	162,789	20,336	327,601
2013	3	1,310,120	304,086	622,694	196,353	143,177	10,896	83,068	102,880	182,265	20,772	364,130
2013	4	886,189	256,714	583,469	193,590	145,894	8,608	78,217	102,928	188,958	18,131	351,821
2013	5	946,928	278,910	640,513	210,102	153,612	8,909	85,018	108,911	201,043	16,759	363,460

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2013	6	1,223,897	303,633	669,625	214,668	164,373	9,501	84,105	106,966	200,218	15,374	351,689
2013	7	1,392,038	339,580	725,007	237,719	175,157	10,895	92,830	113,244	209,674	16,321	363,723
2013	8	1,373,334	339,681	732,382	239,872	175,409	10,593	92,949	117,397	217,979	17,974	364,020
2013	9	1,084,692	297,924	718,127	220,383	166,484	9,379	80,188	107,325	201,509	18,749	351,563
2013	10	881,810	266,542	619,700	205,292	162,456	10,113	82,824	108,247	199,749	22,207	363,267
2013	11	1,112,541	277,891	587,577	187,665	147,883	12,194	80,446	98,905	186,527	22,466	353,334
2013	12	1,560,482	335,029	645,308	197,682	145,496	11,224	74,626	98,675	181,653	24,476	365,663

Weather Normalized Monthly Sales (MWh)

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	1	1,304,417	326,521	585,052	226,471	90,135	12,048	88,572	125,888	267,891	25,658	
2004	2	1,159,651	295,708	512,133	223,275	84,145	8,069	72,463	129,524	235,707	22,418	
2004	3	970,081	273,730	488,713	212,085	85,925	7,797	75,240	130,551	248,477	21,734	
2004	4	809,031	256,300	504,528	220,277	90,562	8,433	80,935	131,584	270,093	18,799	
2004	5	1,067,643	295,369	599,028	256,080	102,068	7,654	83,029	140,324	273,622	17,537	
2004	6	1,206,764	332,105	664,833	260,136	100,337	13,094	119,953	146,673	271,698	16,102	
2004	7	1,413,525	356,032	673,174	274,716	106,843	12,372	109,698	147,606	296,176	17,123	
2004	8	1,199,422	302,226	598,124	258,591	104,395	6,535	76,968	144,408	279,955	18,779	
2004	9	956,021	298,955	604,555	235,708	102,591	10,916	97,261	128,068	275,931	20,302	
2004	10	732,377	222,660	523,324	230,623	93,745	10,381	63,894	133,899	265,176	23,272	
2004	11	897,732	264,853	544,883	209,625	94,137	20,116	93,915	119,012	261,577	24,411	
2004	12	1,331,113	324,468	603,245	211,153	95,632	14,503	85,450	126,285	242,698	26,173	
2005	1	1,263,478	325,965	587,816	226,638	98,917	13,237	93,692	133,090	253,082	26,565	
2005	2	1,042,027	275,945	462,090	184,651	90,738	7,208	69,013	113,822	233,474	22,444	

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2005	3	1,097,295	281,442	548,378	214,702	90,968	9,051	91,035	128,167	232,423	22,581	
2005	4	789,348	248,679	507,760	206,277	97,101	7,580	93,230	107,920	255,840	19,535	
2005	5	834,747	280,392	564,092	242,989	104,864	5,590	86,193	145,228	267,795	18,208	
2005	6	1,396,807	358,126	679,153	254,772	112,669	12,722	116,083	137,966	273,351	16,679	339,664
2005	7	1,584,936	382,411	728,882	262,564	126,202	13,750	117,020	136,687	291,820	17,691	348,798
2005	8	1,502,939	366,540	706,288	271,156	141,498	13,498	108,384	142,708	280,352	19,376	343,425
2005	9	1,070,539	295,204	602,671	245,453	119,823	8,303	80,790	134,144	283,097	20,943	328,429
2005	10	853,492	250,759	558,084	220,374	116,725	14,031	78,910	129,313	282,418	24,019	344,690
2005	11	933,205	256,824	546,872	205,414	107,384	17,915	87,653	120,791	252,652	25,222	338,704
2005	12	1,502,973	356,192	672,070	208,011	102,461	16,334	109,635	126,770	238,592	27,090	352,287
2006	1	1,230,006	305,753	567,233	207,910	103,045	9,919	92,102	116,106	240,627	25,883	353,622
2006	2	1,217,746	302,861	556,393	195,322	99,560	10,719	86,962	118,686	232,173	21,867	319,732
2006	3	1,093,212	299,968	555,990	217,401	102,608	9,682	84,528	120,909	231,899	22,001	353,811
2006	4	807,720	271,737	547,850	214,585	108,047	7,143	91,111	124,111	249,184	19,033	342,433
2006	5	952,436	287,461	586,490	225,881	123,245	8,236	71,929	121,495	252,670	17,740	354,848
2006	6	1,265,790	336,155	690,613	236,212	119,149	11,009	100,295	134,068	274,378	16,251	343,069
2006	7	1,490,433	374,516	729,769	260,016	136,224	12,813	118,899	145,939	269,064	17,046	355,330
2006	8	1,476,005	379,601	768,020	285,548	149,755	13,357	119,178	150,260	307,443	18,763	355,664
2006	9	1,009,662	309,266	630,946	235,194	131,272	12,954	101,946	133,396	263,804	20,387	342,974
2006	10	869,474	278,669	600,095	216,725	123,515	13,086	106,874	133,646	258,576	23,485	356,202
2006	11	1,028,863	288,953	594,237	210,476	114,592	17,757	95,528	126,072	241,998	24,735	344,607
2006	12	1,421,728	344,657	674,021	206,260	116,050	17,421	102,148	114,672	221,955	26,604	357,150
2007	1	1,546,149	365,322	675,419	233,143	116,104	17,005	107,479	140,420	238,768	26,172	356,717
2007	2	1,268,360	311,588	570,231	212,817	105,797	11,275	94,322	127,319	229,246	22,056	321,968
2007	3	1,123,871	301,757	571,628	217,244	117,335	12,792	98,526	136,156	233,449	22,104	354,942
2007	4	851,428	272,773	582,284	216,238	115,630	9,722	93,911	138,227	247,537	19,028	343,742
2007	5	929,329	297,458	628,999	236,777	127,153	10,805	102,162	137,126	259,974	17,642	355,275
2007	6	1,306,778	350,129	706,448	237,031	132,407	11,488	105,794	141,787	260,214	16,107	344,738
2007	7	1,641,932	396,177	782,256	277,485	142,841	13,887	120,679	150,857	265,312	17,112	355,985

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2007	8	1,559,467	387,948	763,787	263,135	146,437	14,581	128,065	149,494	289,966	18,836	354,592
2007	9	1,035,490	305,074	643,334	247,483	133,395	11,718	98,503	130,739	273,367	20,467	343,218
2007	10	858,937	280,080	642,232	229,183	126,494	14,692	105,571	131,534	270,397	23,576	354,206
2007	11	1,049,867	284,564	597,092	211,812	123,011	13,838	92,051	122,907	246,864	24,831	343,084
2007	12	1,533,575	339,946	673,019	211,538	114,655	12,271	91,874	117,511	234,796	26,707	356,292
2008	1	1,579,509	361,380	666,565	224,417	108,171	13,613	98,432	125,926	228,380	25,521	358,183
2008	2	1,375,890	323,357	603,139	205,283	101,368	12,155	94,636	119,215	215,191	22,299	335,439
2008	3	1,168,922	302,525	581,238	208,312	109,327	11,255	93,198	121,467	220,669	21,618	357,620
2008	4	876,471	270,054	596,189	206,474	108,687	9,678	96,310	119,116	221,716	18,698	345,846
2008	5	912,004	288,062	627,774	223,371	118,966	9,688	96,969	125,974	240,260	17,443	356,734
2008	6	1,264,634	328,710	699,023	239,363	130,771	11,098	106,252	127,192	256,741	16,016	343,403
2008	7	1,591,704	373,046	759,400	260,666	142,510	12,517	110,757	129,885	259,857	17,032	355,693
2008	8	1,545,884	360,693	765,031	245,969	140,542	11,925	111,022	126,465	273,854	18,679	356,444
2008	9	1,024,182	299,343	667,851	231,056	125,534	10,716	99,040	120,523	249,723	20,193	344,343
2008	10	888,260	274,304	625,504	212,375	117,146	13,143	97,334	114,412	241,601	23,148	355,642
2008	11	1,088,893	271,416	579,289	196,378	106,143	12,241	87,375	99,190	216,908	24,280	343,899
2008	12	1,594,748	344,580	645,179	204,321	110,447	12,406	85,723	96,877	205,626	26,033	357,123
2009	1	1,596,413	353,988	661,187	218,511	113,675	12,306	88,076	103,281	201,814	25,501	321,889
2009	2	1,327,646	301,768	593,206	192,813	102,401	10,920	78,398	93,153	188,363	21,333	79,661
2009	3	1,131,807	290,135	596,198	203,619	111,460	10,352	81,833	100,453	198,513	22,188	128,564
2009	4	881,302	262,056	575,008	195,546	117,485	8,713	80,599	100,560	198,893	18,538	158,328
2009	5	899,949	274,466	624,023	212,233	132,024	8,886	82,322	101,332	212,844	17,709	190,508
2009	6	1,269,681	327,822	689,758	224,043	139,154	10,377	90,957	109,657	209,995	16,310	192,369
2009	7	1,550,291	359,431	752,148	244,421	149,240	11,639	96,302	113,184	217,669	17,150	205,200
2009	8	1,461,782	346,917	739,699	237,093	155,891	11,089	95,386	115,269	218,409	18,910	215,322
2009	9	1,014,600	293,902	657,576	216,331	143,690	9,502	89,342	106,172	198,435	18,954	215,523
2009	10	916,807	266,511	619,461	199,515	134,950	10,111	84,362	109,083	195,019	23,521	228,901
2009	11	1,100,936	274,363	587,110	189,484	126,122	12,418	79,314	100,662	182,092	22,329	242,151
2009	12	1,626,977	344,162	656,828	205,294	123,522	11,984	78,607	99,704	187,592	25,876	274,017

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2010	1	1,670,969	351,853	664,042	209,136	120,773	12,903	84,998	102,998	191,577	26,284	302,266
2010	2	1,346,811	309,067	582,244	194,240	108,032	10,577	78,880	101,611	169,264	21,348	296,055
2010	3	1,187,535	296,352	614,468	191,895	115,894	11,412	87,328	106,352	175,762	21,895	349,044
2010	4	847,771	256,710	600,990	195,333	133,173	9,196	82,784	102,256	190,032	18,606	343,485
2010	5	948,184	274,127	630,844	204,015	140,168	9,217	88,415	109,910	203,537	17,588	355,238
2010	6	1,321,700	325,467	691,682	222,727	141,660	10,349	93,241	113,878	203,696	16,110	341,926
2010	7	1,609,682	362,652	762,067	242,762	162,489	11,419	102,010	117,798	212,078	16,852	357,676
2010	8	1,546,719	359,856	761,468	243,503	159,560	11,528	101,827	122,129	213,112	18,715	358,664
2010	9	998,278	293,101	661,262	215,924	142,671	10,701	93,278	111,479	194,269	19,638	346,762
2010	10	844,693	254,650	605,493	198,417	136,004	12,090	86,888	109,669	189,900	22,799	356,245
2010	11	1,089,353	272,389	584,937	185,782	125,956	10,927	85,738	103,824	177,262	22,840	347,553
2010	12	1,571,212	337,671	642,316	202,707	122,378	11,051	81,660	105,147	179,049	24,724	362,080
2011	1	1,628,868	344,838	648,529	207,410	122,068	11,854	86,292	105,607	165,192	24,905	362,012
2011	2	1,317,623	302,023	589,683	183,210	110,886	10,634	78,414	100,228	160,354	20,799	326,897
2011	3	1,148,194	292,239	617,571	195,649	133,867	10,804	88,983	108,931	190,636	21,296	362,221
2011	4	873,197	255,089	579,356	191,836	132,233	8,457	80,344	103,018	185,905	18,203	346,593
2011	5	851,923	266,790	623,023	218,315	141,311	8,696	85,954	111,152	183,324	17,203	356,474
2011	6	1,254,359	319,415	690,604	211,822	156,804	10,169	93,047	115,113	197,533	15,637	349,418
2011	7	1,576,020	357,992	747,350	251,982	170,084	11,405	97,015	117,834	211,293	16,367	361,102
2011	8	1,413,993	348,572	752,405	242,714	173,357	11,137	99,378	126,637	215,877	18,098	360,586
2011	9	918,182	280,593	636,287	212,139	153,087	9,446	86,143	113,490	195,135	19,473	348,900
2011	10	855,974	256,840	600,854	199,328	143,309	11,580	83,090	109,159	187,704	22,259	360,694
2011	11	1,085,006	270,909	585,140	184,188	138,437	12,461	82,248	102,299	180,346	22,827	352,536
2011	12	1,528,558	330,881	656,731	199,756	130,704	12,021	75,581	101,761	176,071	23,943	362,230
2012	1	1,592,394	342,124	675,100	204,877	128,857	12,768	82,400	106,363	175,238	25,327	362,913
2012	2	1,308,873	308,591	614,731	191,686	122,763	11,047	79,505	105,697	162,350	20,416	339,688
2012	3	1,058,244	289,766	628,299	195,970	135,300	10,511	83,688	107,062	183,528	21,756	363,791
2012	4	811,068	251,008	586,264	188,932	140,242	8,581	78,218	105,600	179,578	17,973	347,634
2012	5	904,029	272,824	630,457	208,208	147,551	8,944	88,196	114,924	199,777	16,837	358,640

Year	Month	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2012	6	1,272,747	313,837	670,036	214,964	152,849	9,913	88,510	113,980	199,915	15,306	348,958
2012	7	1,506,282	348,697	717,534	237,064	164,786	11,013	98,071	118,656	209,096	16,407	357,911
2012	8	1,351,975	343,810	731,740	239,065	167,889	10,987	95,723	123,369	207,701	18,248	356,799
2012	9	927,608	277,232	636,333	205,398	165,489	9,559	84,294	106,763	189,513	19,057	342,508
2012	10	832,608	257,460	604,754	199,807	140,571	12,170	82,965	109,017	197,712	22,295	348,918
2012	11	1,035,875	267,210	581,930	189,784	133,935	11,576	79,846	99,712	182,657	22,798	344,844
2012	12	1,536,394	326,568	653,600	197,412	140,541	11,165	73,314	95,310	182,503	24,033	360,003
2013	1	1,605,715	345,656	675,688	207,369	141,222	12,557	83,553	106,397	184,152	25,001	361,924
2013	2	1,282,447	299,077	586,406	184,578	120,219	10,258	76,023	97,266	163,043	20,336	327,601
2013	3	1,199,153	290,494	595,172	194,689	144,449	10,104	83,068	103,317	183,463	20,772	364,130
2013	4	860,153	255,465	582,087	194,026	146,659	8,475	78,217	103,212	189,283	18,131	351,821
2013	5	845,222	267,004	622,452	206,894	151,825	8,439	84,670	108,246	200,046	16,759	363,460
2013	6	1,194,332	299,917	664,079	213,289	163,679	9,387	83,662	106,503	199,811	15,374	351,689
2013	7	1,490,055	350,801	746,775	241,849	177,911	11,324	93,757	114,576	211,309	16,321	363,723
2013	8	1,361,128	337,737	730,155	239,046	175,139	10,564	92,613	117,137	217,883	17,974	364,020
2013	9	946,495	277,262	684,811	212,832	162,057	8,848	78,971	105,320	198,680	18,749	351,563
2013	10	838,120	260,906	610,288	203,555	155,064	9,879	82,765	107,758	199,102	22,207	363,267
2013	11	1,064,201	271,826	581,459	187,920	144,538	11,856	80,529	99,064	186,708	22,466	353,334
2013	12	1,548,421	333,014	643,053	197,472	144,816	11,155	74,634	98,624	181,459	24,476	365,663

Year	Month	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	Noranda	Residential
2004	1	585,052	90,135	326,521	226,471	88,572	267,891	12,048	125,888	25,658		1,304,417
2004	2	512,133	84,145	295,708	223,275	72,463	235,707	8,069	129,524	22,418		1,159,651
2004	3	488,713	85,925	273,730	212,085	75,240	248,477	7,797	130,551	21,734		970,081
2004	4	504,528	90,562	256,300	220,277	80,935	270,093	8,433	131,584	18,799		809,031
2004	5	599,028	102,068	295,369	256,080	83,029	273,622	7,654	140,324	17,537		1,067,643
2004	6	664,833	100,337	332,105	260,136	119,953	271,698	13,094	146,673	16,102		1,206,764
2004	7	673,174	106,843	356,032	274,716	109,698	296,176	12,372	147,606	17,123		1,413,525
2004	8	598,124	104,395	302,226	258,591	76,968	279,955	6,535	144,408	18,779		1,199,422
2004	9	604,555	102,591	298,955	235,708	97,261	275,931	10,916	128,068	20,302		956,021
2004	10	523,324	93,745	222,660	230,623	63,894	265,176	10,381	133,899	23,272		732,377
2004	11	544,883	94,137	264,853	209,625	93,915	261,577	20,116	119,012	24,411		897,732
2004	12	603,245	95,632	324,468	211,153	85,450	242,698	14,503	126,285	26,173		1,331,113
2005	1	587,816	98,917	325,965	226,638	93,692	253,082	13,237	133,090	26,565		1,263,478
2005	2	462,090	90,738	275,945	184,651	69,013	233,474	7,208	113,822	22,444		1,042,027
2005	3	548,378	90,968	281,442	214,702	91,035	232,423	9,051	128,167	22,581		1,097,295
2005	4	507,760	97,101	248,679	206,277	93,230	255,840	7,580	107,920	19,535		789,348
2005	5	564,092	104,864	280,392	242,989	86,193	267,795	5,590	145,228	18,208		834,747
2005	6	679,153	112,669	358,126	254,772	116,083	273,351	12,722	137,966	16,679	339,664	1,396,807
2005	7	728,882	126,202	382,411	262,564	117,020	291,820	13,750	136,687	17,691	348,798	1,584,936
2005	8	706,288	141,498	366,540	271,156	108,384	280,352	13,498	142,708	19,376	343,425	1,502,939
2005	9	602,671	119,823	295,204	245,453	80,790	283,097	8,303	134,144	20,943	328,429	1,070,539
2005	10	558,084	116,725	250,759	220,374	78,910	282,418	14,031	129,313	24,019	344,690	853,492
2005	11	546,872	107,384	256,824	205,414	87,653	252,652	17,915	120,791	25,222	338,704	933,205
2005	12	672,070	102,461	356,192	208,011	109,635	238,592	16,334	126,770	27,090	352,287	1,502,973
2006	1	567,233	103,045	305,753	207,910	92,102	240,627	9,919	116,106	25,883	353,622	1,230,006
2006	2	556,393	99,560	302,861	195,322	86,962	232,173	10,719	118,686	21,867	319,732	1,217,746
2006	3	555,990	102,608	299,968	217,401	84,528	231,899	9,682	120,909	22,001	353,811	1,093,212
2006	4	547,850	108,047	271,737	214,585	91,111	249,184	7,143	124,111	19,033	342,433	807,720
2006	5	586,490	123,245	287,461	225,881	71,929	252,670	8,236	121,495	17,740	354,848	952,436

Year	Month	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	Noranda	Residential
2006	6	690,613	119,149	336,155	236,212	100,295	274,378	11,009	134,068	16,251	343,069	1,265,790
2006	7	729,769	136,224	374,516	260,016	118,899	269,064	12,813	145,939	17,046	355,330	1,490,433
2006	8	768,020	149,755	379,601	285,548	119,178	307,443	13,357	150,260	18,763	355,664	1,476,005
2006	9	630,946	131,272	309,266	235,194	101,946	263,804	12,954	133,396	20,387	342,974	1,009,662
2006	10	600,095	123,515	278,669	216,725	106,874	258,576	13,086	133,646	23,485	356,202	869,474
2006	11	594,237	114,592	288,953	210,476	95,528	241,998	17,757	126,072	24,735	344,607	1,028,863
2006	12	674,021	116,050	344,657	206,260	102,148	221,955	17,421	114,672	26,604	357,150	1,421,728
2007	1	675,419	116,104	365,322	233,143	107,479	238,768	17,005	140,420	26,172	356,717	1,546,149
2007	2	570,231	105,797	311,588	212,817	94,322	229,246	11,275	127,319	22,056	321,968	1,268,360
2007	3	571,628	117,335	301,757	217,244	98,526	233,449	12,792	136,156	22,104	354,942	1,123,871
2007	4	582,284	115,630	272,773	216,238	93,911	247,537	9,722	138,227	19,028	343,742	851,428
2007	5	628,999	127,153	297,458	236,777	102,162	259,974	10,805	137,126	17,642	355,275	929,329
2007	6	706,448	132,407	350,129	237,031	105,794	260,214	11,488	141,787	16,107	344,738	1,306,778
2007	7	782,256	142,841	396,177	277,485	120,679	265,312	13,887	150,857	17,112	355,985	1,641,932
2007	8	763,787	146,437	387,948	263,135	128,065	289,966	14,581	149,494	18,836	354,592	1,559,467
2007	9	643,334	133,395	305,074	247,483	98,503	273,367	11,718	130,739	20,467	343,218	1,035,490
2007	10	642,232	126,494	280,080	229,183	105,571	270,397	14,692	131,534	23,576	354,206	858,937
2007	11	597,092	123,011	284,564	211,812	92,051	246,864	13,838	122,907	24,831	343,084	1,049,867
2007	12	673,019	114,655	339,946	211,538	91,874	234,796	12,271	117,511	26,707	356,292	1,533,575
2008	1	666,565	108,171	361,380	224,417	98,432	228,380	13,613	125,926	25,521	358,183	1,579,509
2008	2	603,139	101,368	323,357	205,283	94,636	215,191	12,155	119,215	22,299	335,439	1,375,890
2008	3	581,238	109,327	302,525	208,312	93,198	220,669	11,255	121,467	21,618	357,620	1,168,922
2008	4	596,189	108,687	270,054	206,474	96,310	221,716	9,678	119,116	18,698	345,846	876,471
2008	5	627,774	118,966	288,062	223,371	96,969	240,260	9,688	125,974	17,443	356,734	912,004
2008	6	699,023	130,771	328,710	239,363	106,252	256,741	11,098	127,192	16,016	343,403	1,264,634
2008	7	759,400	142,510	373,046	260,666	110,757	259,857	12,517	129,885	17,032	355,693	1,591,704
2008	8	765,031	140,542	360,693	245,969	111,022	273,854	11,925	126,465	18,679	356,444	1,545,884
2008	9	667,851	125,534	299,343	231,056	99,040	249,723	10,716	120,523	20,193	344,343	1,024,182
2008	10	625,504	117,146	274,304	212,375	97,334	241,601	13,143	114,412	23,148	355,642	888,260

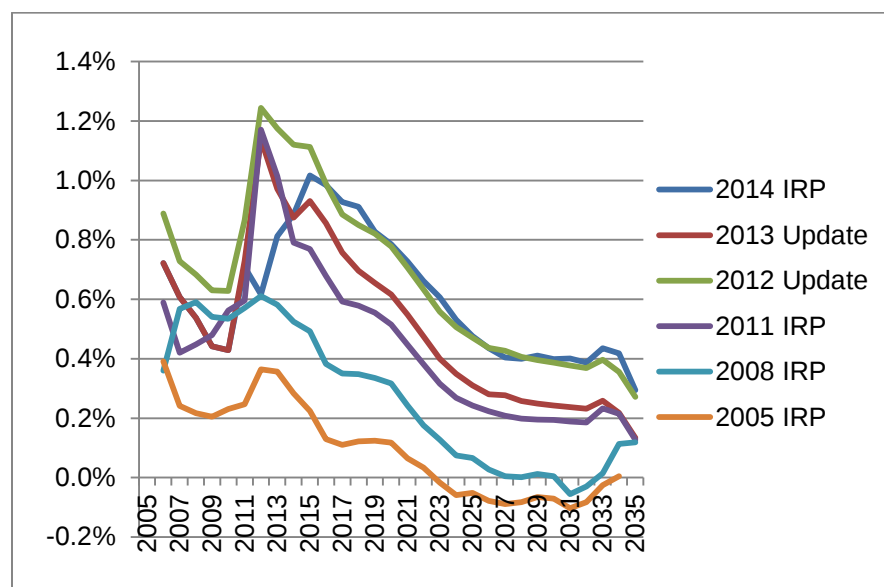
Year	Month	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	Noranda	Residential
2008	11	579,289	106,143	271,416	196,378	87,375	216,908	12,241	99,190	24,280	343,899	1,088,893
2008	12	645,179	110,447	344,580	204,321	85,723	205,626	12,406	96,877	26,033	357,123	1,594,748
2009	1	661,187	113,675	353,988	218,511	88,076	201,814	12,306	103,281	25,501	321,889	1,596,413
2009	2	593,206	102,401	301,768	192,813	78,398	188,363	10,920	93,153	21,333	79,661	1,327,646
2009	3	596,198	111,460	290,135	203,619	81,833	198,513	10,352	100,453	22,188	128,564	1,131,807
2009	4	575,008	117,485	262,056	195,546	80,599	198,893	8,713	100,560	18,538	158,328	881,302
2009	5	624,023	132,024	274,466	212,233	82,322	212,844	8,886	101,332	17,709	190,508	899,949
2009	6	689,758	139,154	327,822	224,043	90,957	209,995	10,377	109,657	16,310	192,369	1,269,681
2009	7	752,148	149,240	359,431	244,421	96,302	217,669	11,639	113,184	17,150	205,200	1,550,291
2009	8	739,699	155,891	346,917	237,093	95,386	218,409	11,089	115,269	18,910	215,322	1,461,782
2009	9	657,576	143,690	293,902	216,331	89,342	198,435	9,502	106,172	18,954	215,523	1,014,600
2009	10	619,461	134,950	266,511	199,515	84,362	195,019	10,111	109,083	23,521	228,901	916,807
2009	11	587,110	126,122	274,363	189,484	79,314	182,092	12,418	100,662	22,329	242,151	1,100,936
2009	12	656,828	123,522	344,162	205,294	78,607	187,592	11,984	99,704	25,876	274,017	1,626,977
2010	1	664,042	120,773	351,853	209,136	84,998	191,577	12,903	102,998	26,284	302,266	1,670,969
2010	2	582,244	108,032	309,067	194,240	78,880	169,264	10,577	101,611	21,348	296,055	1,346,811
2010	3	614,468	115,894	296,352	191,895	87,328	175,762	11,412	106,352	21,895	349,044	1,187,535
2010	4	600,990	133,173	256,710	195,333	82,784	190,032	9,196	102,256	18,606	343,485	847,771
2010	5	630,844	140,168	274,127	204,015	88,415	203,537	9,217	109,910	17,588	355,238	948,184
2010	6	691,682	141,660	325,467	222,727	93,241	203,696	10,349	113,878	16,110	341,926	1,321,700
2010	7	762,067	162,489	362,652	242,762	102,010	212,078	11,419	117,798	16,852	357,676	1,609,682
2010	8	761,468	159,560	359,856	243,503	101,827	213,112	11,528	122,129	18,715	358,664	1,546,719
2010	9	661,262	142,671	293,101	215,924	93,278	194,269	10,701	111,479	19,638	346,762	998,278
2010	10	605,493	136,004	254,650	198,417	86,888	189,900	12,090	109,669	22,799	356,245	844,693
2010	11	584,937	125,956	272,389	185,782	85,738	177,262	10,927	103,824	22,840	347,553	1,089,353
2010	12	642,316	122,378	337,671	202,707	81,660	179,049	11,051	105,147	24,724	362,080	1,571,212
2011	1	648,529	122,068	344,838	207,410	86,292	165,192	11,854	105,607	24,905	362,012	1,628,868
2011	2	589,683	110,886	302,023	183,210	78,414	160,354	10,634	100,228	20,799	326,897	1,317,623
2011	3	617,571	133,867	292,239	195,649	88,983	190,636	10,804	108,931	21,296	362,221	1,148,194

Year	Month	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	Noranda	Residential
2011	4	579,356	132,233	255,089	191,836	80,344	185,905	8,457	103,018	18,203	346,593	873,197
2011	5	623,023	141,311	266,790	218,315	85,954	183,324	8,696	111,152	17,203	356,474	851,923
2011	6	690,604	156,804	319,415	211,822	93,047	197,533	10,169	115,113	15,637	349,418	1,254,359
2011	7	747,350	170,084	357,992	251,982	97,015	211,293	11,405	117,834	16,367	361,102	1,576,020
2011	8	752,405	173,357	348,572	242,714	99,378	215,877	11,137	126,637	18,098	360,586	1,413,993
2011	9	636,287	153,087	280,593	212,139	86,143	195,135	9,446	113,490	19,473	348,900	918,182
2011	10	600,854	143,309	256,840	199,328	83,090	187,704	11,580	109,159	22,259	360,694	855,974
2011	11	585,140	138,437	270,909	184,188	82,248	180,346	12,461	102,299	22,827	352,536	1,085,006
2011	12	656,731	130,704	330,881	199,756	75,581	176,071	12,021	101,761	23,943	362,230	1,528,558
2012	1	675,100	128,857	342,124	204,877	82,400	175,238	12,768	106,363	25,327	362,913	1,592,394
2012	2	614,731	122,763	308,591	191,686	79,505	162,350	11,047	105,697	20,416	339,688	1,308,873
2012	3	628,299	135,300	289,766	195,970	83,688	183,528	10,511	107,062	21,756	363,791	1,058,244
2012	4	586,264	140,242	251,008	188,932	78,218	179,578	8,581	105,600	17,973	347,634	811,068
2012	5	630,457	147,551	272,824	208,208	88,196	199,777	8,944	114,924	16,837	358,640	904,029
2012	6	670,036	152,849	313,837	214,964	88,510	199,915	9,913	113,980	15,306	348,958	1,272,747
2012	7	717,534	164,786	348,697	237,064	98,071	209,096	11,013	118,656	16,407	357,911	1,506,282
2012	8	731,740	167,889	343,810	239,065	95,723	207,701	10,987	123,369	18,248	356,799	1,351,975
2012	9	636,333	165,489	277,232	205,398	84,294	189,513	9,559	106,763	19,057	342,508	927,608
2012	10	604,754	140,571	257,460	199,807	82,965	197,712	12,170	109,017	22,295	348,918	832,608
2012	11	581,930	133,935	267,210	189,784	79,846	182,657	11,576	99,712	22,798	344,844	1,035,875
2012	12	653,600	140,541	326,568	197,412	73,314	182,503	11,165	95,310	24,033	360,003	1,536,394
2013	1	675,688	141,222	345,656	207,369	83,553	184,152	12,557	106,397	25,001	361,924	1,605,715
2013	2	586,406	120,219	299,077	184,578	76,023	163,043	10,258	97,266	20,336	327,601	1,282,447
2013	3	595,172	144,449	290,494	194,689	83,068	183,463	10,104	103,317	20,772	364,130	1,199,153
2013	4	582,087	146,659	255,465	194,026	78,217	189,283	8,475	103,212	18,131	351,821	860,153
2013	5	622,452	151,825	267,004	206,894	84,670	200,046	8,439	108,246	16,759	363,460	845,222
2013	6	664,079	163,679	299,917	213,289	83,662	199,811	9,387	106,503	15,374	351,689	1,194,332
2013	7	746,775	177,911	350,801	241,849	93,757	211,309	11,324	114,576	16,321	363,723	1,490,055
2013	8	730,155	175,139	337,737	239,046	92,613	217,883	10,564	117,137	17,974	364,020	1,361,128

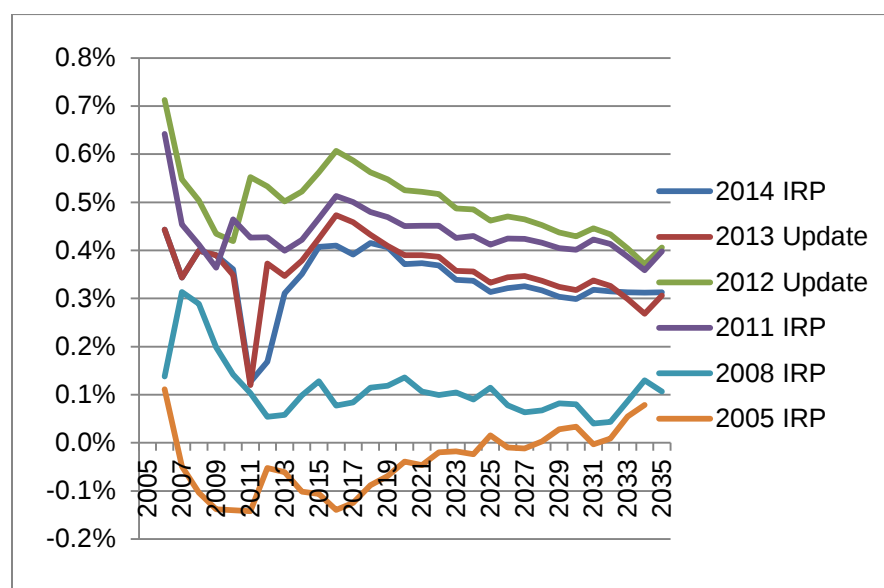
Year	Month	Com LGS	Com LPS	Com SGS	Com SPS	Ind LGS	Ind LPS	Ind SGS	Ind SPS	Lighting	Noranda	Residential
2013	9	684,811	162,057	277,262	212,832	78,971	198,680	8,848	105,320	18,749	351,563	946,495
2013	10	610,288	155,064	260,906	203,555	82,765	199,102	9,879	107,758	22,207	363,267	838,120
2013	11	581,459	144,538	271,826	187,920	80,529	186,708	11,856	99,064	22,466	353,334	1,064,201
2013	12	643,053	144,816	333,014	197,472	74,634	181,459	11,155	98,624	24,476	365,663	1,548,421

Archive of Previous Forecasts Independent Variables⁵

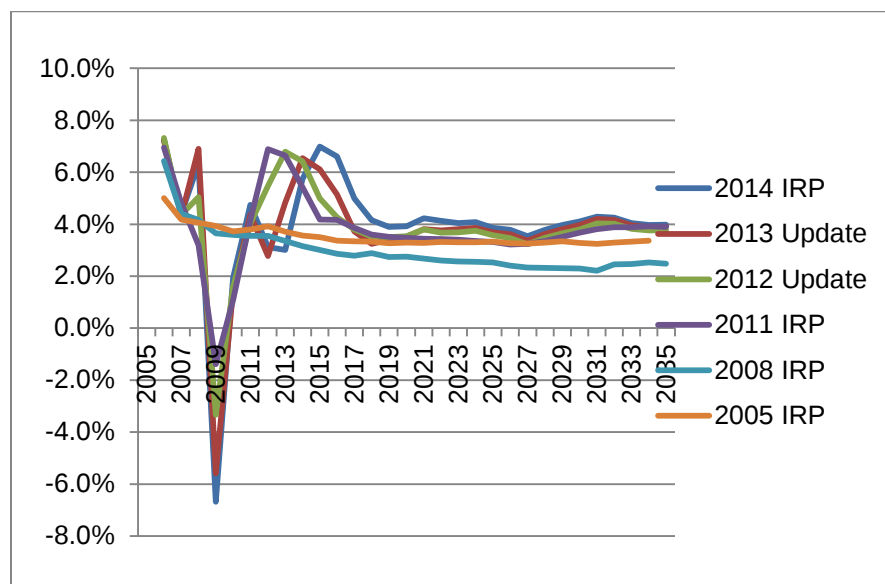
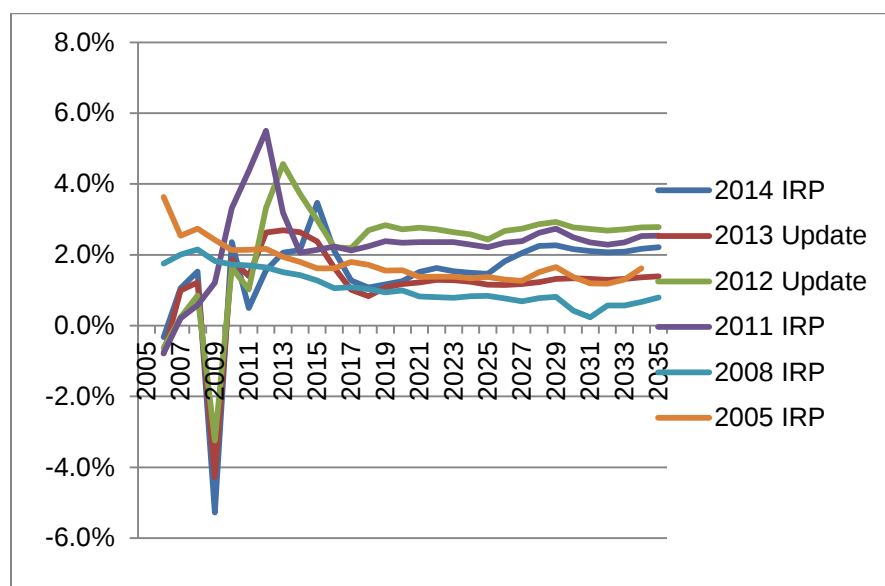
Historical/Forecast Growth Rate in Service Territory Households

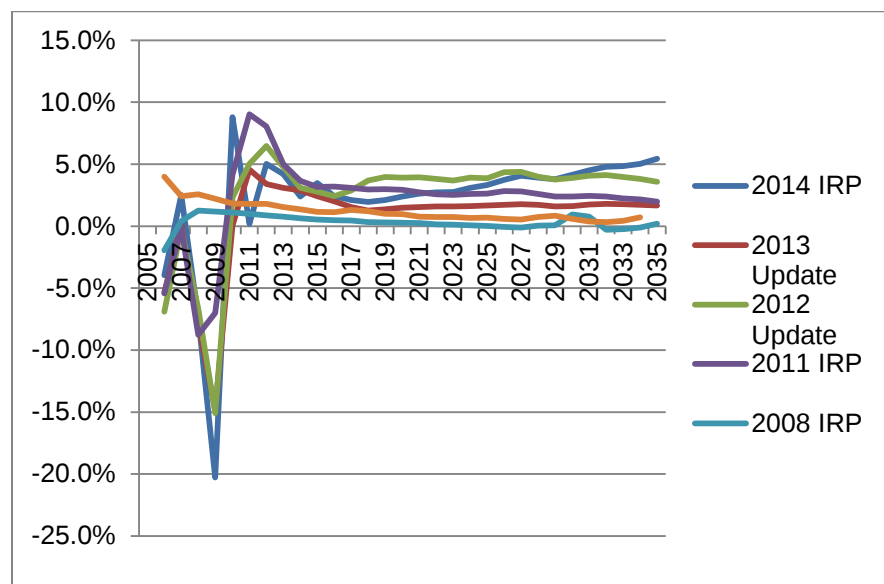
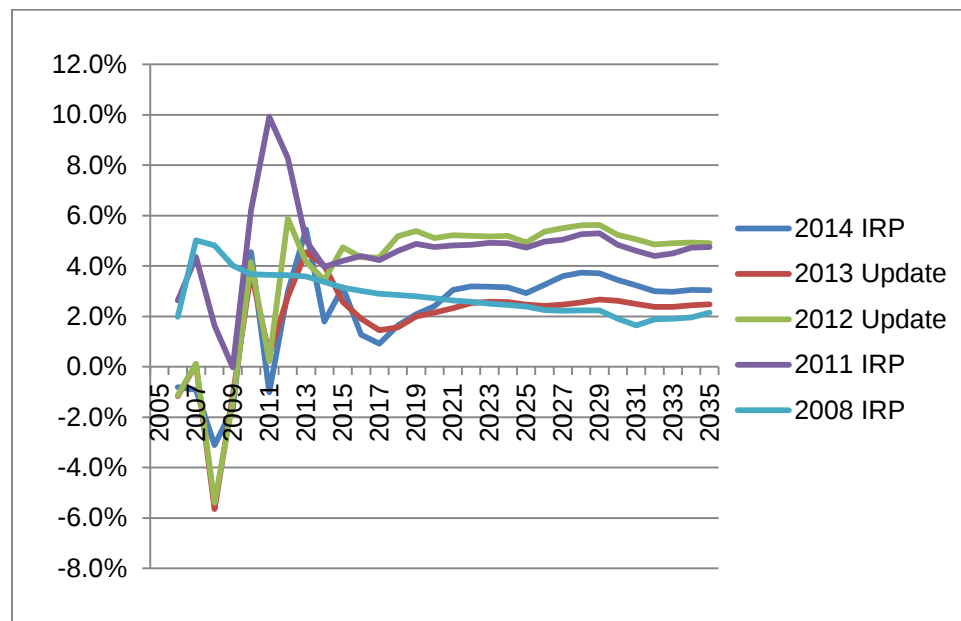


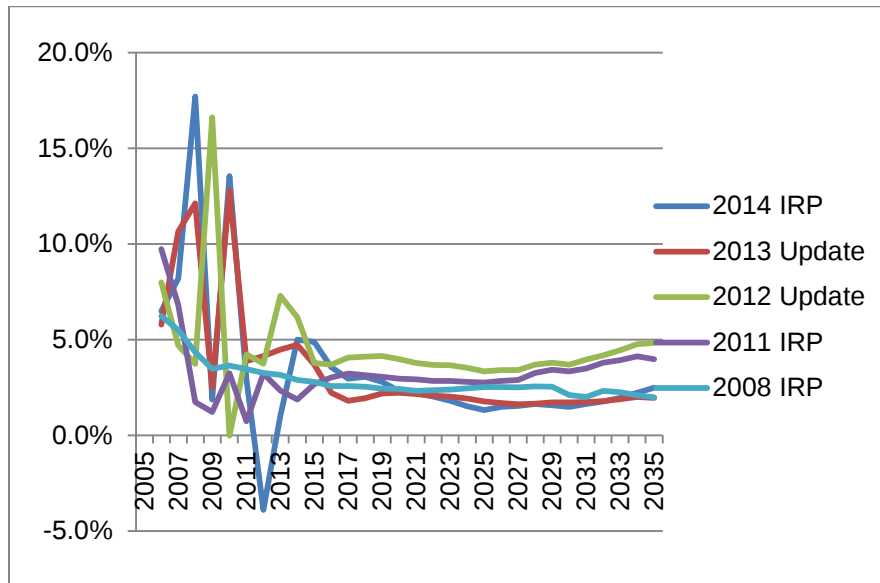
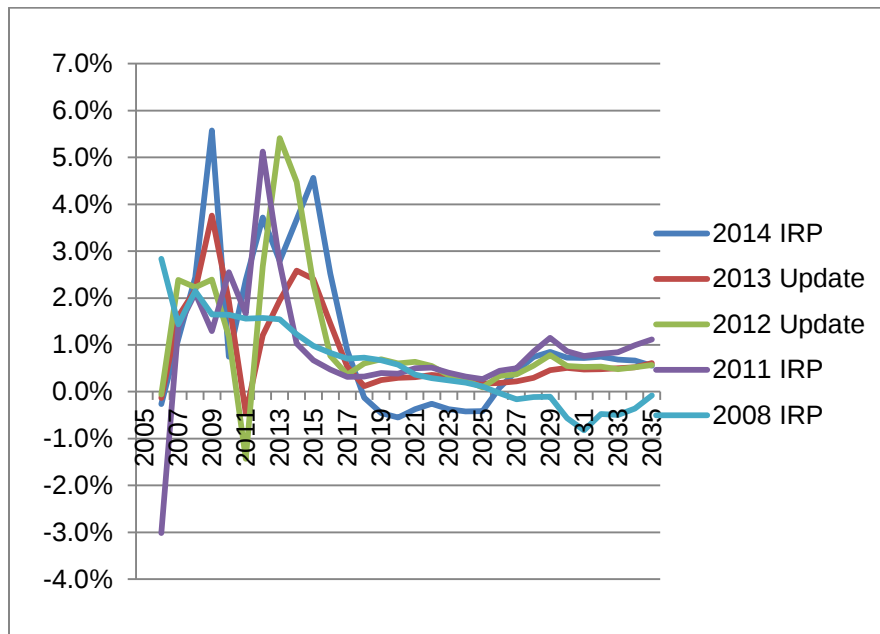
Historical/Forecast Growth Rate in Service Territory Population

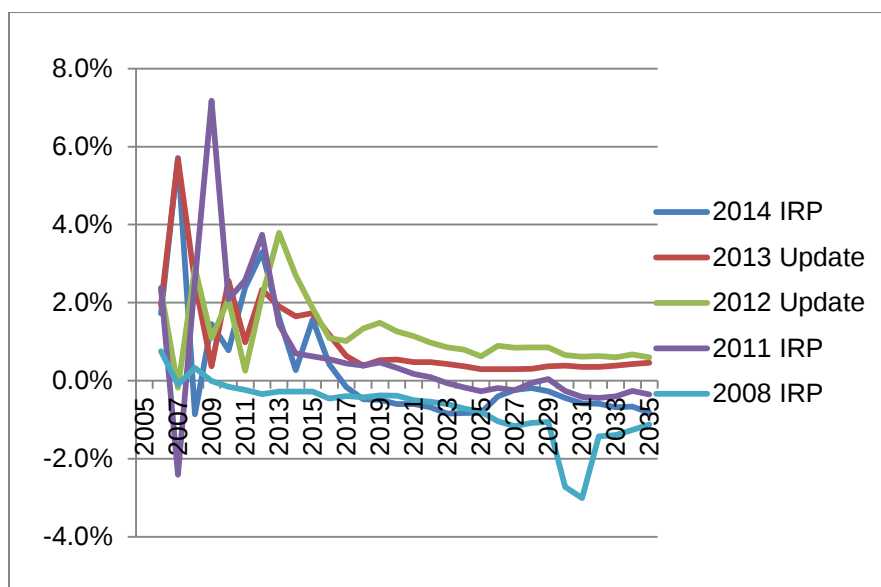
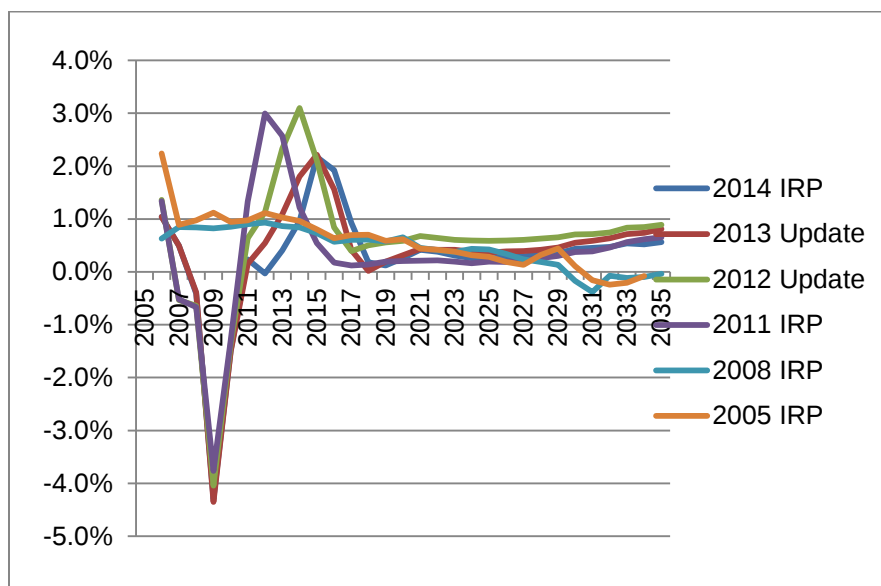


⁵ 4 CSR 240-22.030(6)(C)3

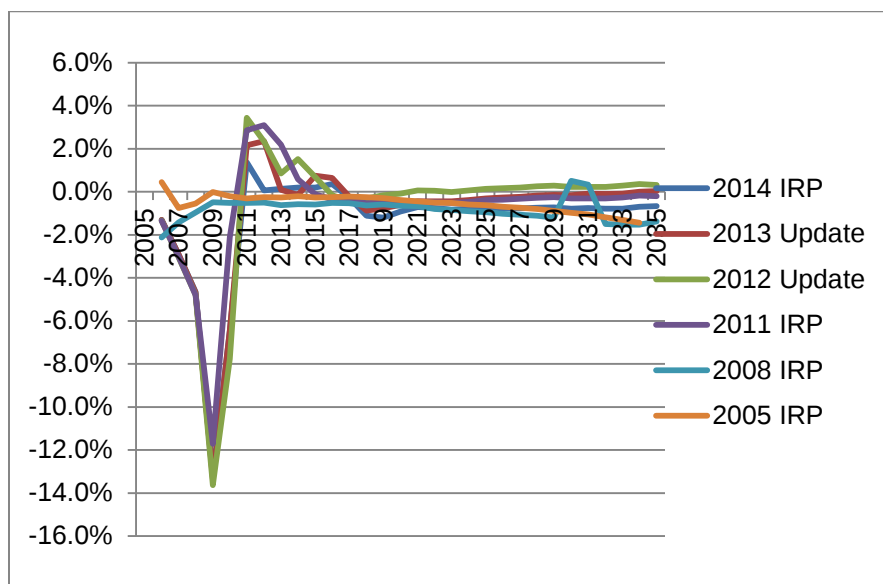
Historical/Forecast Growth Rate in Service Territory Personal Income**Historical/Forecast Growth Rate in Service Territory GDP**

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

Historical/Forecast Growth Rate in Service Territory Information Services GDP**Historical/Forecast Growth Rate in Service Territory Financial Services GDP**

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

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	0.7%	0.7%	0.9%	0.6%	0.4%	0.4%
2007	0.6%	0.6%	0.7%	0.4%	0.6%	0.2%
2008	0.5%	0.5%	0.7%	0.4%	0.6%	0.2%
2009	0.4%	0.4%	0.6%	0.5%	0.5%	0.2%
2010	0.4%	0.4%	0.6%	0.6%	0.5%	0.2%
2011	0.7%	0.7%	0.9%	0.6%	0.6%	0.2%
2012	0.6%	1.1%	1.2%	1.2%	0.6%	0.4%
2013	0.8%	1.0%	1.2%	1.0%	0.6%	0.4%
2014	0.9%	0.9%	1.1%	0.8%	0.5%	0.3%
2015	1.0%	0.9%	1.1%	0.8%	0.5%	0.2%
2016	1.0%	0.9%	1.0%	0.7%	0.4%	0.1%
2017	0.9%	0.8%	0.9%	0.6%	0.4%	0.1%
2018	0.9%	0.7%	0.9%	0.6%	0.3%	0.1%
2019	0.8%	0.7%	0.8%	0.6%	0.3%	0.1%
2020	0.8%	0.6%	0.8%	0.5%	0.3%	0.1%
2021	0.7%	0.5%	0.7%	0.4%	0.2%	0.1%
2022	0.7%	0.5%	0.6%	0.4%	0.2%	0.0%
2023	0.6%	0.4%	0.6%	0.3%	0.1%	0.0%
2024	0.5%	0.3%	0.5%	0.3%	0.1%	-0.1%
2025	0.5%	0.3%	0.5%	0.2%	0.1%	-0.1%
2026	0.4%	0.3%	0.4%	0.2%	0.0%	-0.1%
2027	0.4%	0.3%	0.4%	0.2%	0.0%	-0.1%
2028	0.4%	0.3%	0.4%	0.2%	0.0%	-0.1%
2029	0.4%	0.2%	0.4%	0.2%	0.0%	-0.1%
2030	0.4%	0.2%	0.4%	0.2%	0.0%	-0.1%
2031	0.4%	0.2%	0.4%	0.2%	-0.1%	-0.1%
2032	0.4%	0.2%	0.4%	0.2%	0.0%	-0.1%
2033	0.4%	0.3%	0.4%	0.2%	0.0%	0.0%
2034	0.4%	0.2%	0.4%	0.2%	0.1%	0.0%

Historical/Forecast Growth Rate in Service Territory Population

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	0.4%	0.4%	0.7%	0.6%	0.1%	0.1%
2007	0.3%	0.3%	0.5%	0.5%	0.3%	0.0%
2008	0.4%	0.4%	0.5%	0.4%	0.3%	-0.1%
2009	0.4%	0.4%	0.4%	0.4%	0.2%	-0.1%
2010	0.4%	0.3%	0.4%	0.5%	0.1%	-0.1%
2011	0.1%	0.1%	0.6%	0.4%	0.1%	-0.1%
2012	0.2%	0.4%	0.5%	0.4%	0.1%	-0.1%
2013	0.3%	0.3%	0.5%	0.4%	0.1%	-0.1%
2014	0.4%	0.4%	0.5%	0.4%	0.1%	-0.1%
2015	0.4%	0.4%	0.6%	0.5%	0.1%	-0.1%
2016	0.4%	0.5%	0.6%	0.5%	0.1%	-0.1%
2017	0.4%	0.5%	0.6%	0.5%	0.1%	-0.1%
2018	0.4%	0.4%	0.6%	0.5%	0.1%	-0.1%
2019	0.4%	0.4%	0.5%	0.5%	0.1%	-0.1%
2020	0.4%	0.4%	0.5%	0.5%	0.1%	0.0%
2021	0.4%	0.4%	0.5%	0.5%	0.1%	0.0%
2022	0.4%	0.4%	0.5%	0.5%	0.1%	0.0%
2023	0.3%	0.4%	0.5%	0.4%	0.1%	0.0%
2024	0.3%	0.4%	0.5%	0.4%	0.1%	0.0%
2025	0.3%	0.3%	0.5%	0.4%	0.1%	0.0%
2026	0.3%	0.3%	0.5%	0.4%	0.1%	0.0%
2027	0.3%	0.3%	0.5%	0.4%	0.1%	0.0%
2028	0.3%	0.3%	0.5%	0.4%	0.1%	0.0%
2029	0.3%	0.3%	0.4%	0.4%	0.1%	0.0%
2030	0.3%	0.3%	0.4%	0.4%	0.1%	0.0%
2031	0.3%	0.3%	0.4%	0.4%	0.0%	0.0%
2032	0.3%	0.3%	0.4%	0.4%	0.0%	0.0%
2033	0.3%	0.3%	0.4%	0.4%	0.1%	0.1%
2034	0.3%	0.3%	0.4%	0.4%	0.1%	0.1%

Historical/Forecast Growth Rate in Service Territory Personal Income

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	7.2%	7.2%	7.3%	7.0%	6.4%	5.0%
2007	4.4%	4.3%	4.4%	4.8%	4.4%	4.2%
2008	6.3%	6.9%	5.0%	3.2%	4.2%	4.1%
2009	-6.7%	-5.6%	-3.3%	-1.4%	3.6%	3.9%
2010	1.9%	1.4%	1.6%	1.1%	3.6%	3.7%
2011	4.7%	4.4%	4.0%	4.2%	3.6%	3.8%
2012	3.1%	2.8%	5.5%	6.9%	3.5%	3.9%
2013	3.0%	4.8%	6.8%	6.6%	3.3%	3.7%
2014	5.7%	6.5%	6.4%	5.4%	3.2%	3.6%
2015	7.0%	6.1%	5.0%	4.2%	3.0%	3.5%
2016	6.6%	5.1%	4.3%	4.2%	2.9%	3.4%
2017	5.0%	3.7%	3.8%	3.9%	2.8%	3.3%
2018	4.2%	3.2%	3.5%	3.6%	2.9%	3.3%
2019	3.9%	3.4%	3.5%	3.5%	2.7%	3.3%
2020	3.9%	3.5%	3.5%	3.5%	2.7%	3.3%
2021	4.2%	3.8%	3.8%	3.4%	2.7%	3.3%
2022	4.1%	3.8%	3.7%	3.4%	2.6%	3.3%
2023	4.0%	3.8%	3.7%	3.4%	2.6%	3.3%
2024	4.1%	3.9%	3.7%	3.3%	2.6%	3.3%
2025	3.9%	3.7%	3.6%	3.3%	2.5%	3.3%
2026	3.8%	3.6%	3.5%	3.2%	2.4%	3.3%
2027	3.5%	3.4%	3.2%	3.2%	2.3%	3.3%
2028	3.8%	3.6%	3.5%	3.4%	2.3%	3.3%
2029	4.0%	3.8%	3.6%	3.5%	2.3%	3.3%
2030	4.1%	4.0%	3.8%	3.7%	2.3%	3.3%
2031	4.3%	4.2%	4.0%	3.8%	2.2%	3.2%
2032	4.2%	4.2%	4.0%	3.9%	2.5%	3.3%
2033	4.0%	4.0%	3.8%	3.9%	2.5%	3.3%
2034	4.0%	3.9%	3.8%	3.9%	2.5%	3.4%

Historical/Forecast Growth Rate in Service Territory GDP

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	-0.3%	-0.8%	-0.6%	-0.8%	1.8%	3.6%
2007	1.1%	1.0%	0.2%	0.2%	2.0%	2.5%
2008	1.5%	1.2%	0.8%	0.6%	2.1%	2.7%
2009	-5.3%	-4.3%	-3.2%	1.2%	1.8%	2.4%
2010	2.4%	1.9%	1.6%	3.3%	1.7%	2.1%
2011	0.5%	1.4%	1.0%	4.4%	1.7%	2.1%
2012	1.6%	2.6%	3.3%	5.5%	1.6%	2.2%
2013	2.1%	2.7%	4.6%	3.2%	1.5%	1.9%
2014	2.1%	2.6%	3.7%	2.1%	1.4%	1.8%
2015	3.5%	2.4%	3.0%	2.1%	1.3%	1.6%
2016	2.1%	1.6%	2.2%	2.2%	1.1%	1.6%
2017	1.3%	1.0%	2.2%	2.1%	1.1%	1.8%
2018	1.1%	0.8%	2.7%	2.2%	1.0%	1.7%
2019	1.2%	1.1%	2.8%	2.4%	0.9%	1.6%
2020	1.3%	1.2%	2.7%	2.3%	1.0%	1.6%
2021	1.5%	1.2%	2.8%	2.4%	0.8%	1.4%
2022	1.6%	1.3%	2.7%	2.4%	0.8%	1.4%
2023	1.5%	1.3%	2.6%	2.4%	0.8%	1.4%
2024	1.5%	1.2%	2.6%	2.3%	0.8%	1.3%
2025	1.5%	1.2%	2.4%	2.2%	0.8%	1.4%
2026	1.8%	1.2%	2.7%	2.3%	0.8%	1.3%
2027	2.1%	1.2%	2.7%	2.4%	0.7%	1.3%
2028	2.2%	1.2%	2.9%	2.6%	0.8%	1.5%
2029	2.3%	1.3%	2.9%	2.7%	0.8%	1.7%
2030	2.2%	1.3%	2.8%	2.5%	0.4%	1.4%
2031	2.1%	1.3%	2.7%	2.4%	0.2%	1.2%
2032	2.1%	1.3%	2.7%	2.3%	0.6%	1.2%
2033	2.1%	1.3%	2.7%	2.4%	0.6%	1.3%
2034	2.2%	1.4%	2.8%	2.5%	0.7%	1.6%

Historical/Forecast Growth Rate in Service Territory Manufacturing GDP

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	-4.0%	-5.4%	-6.9%	-5.4%	-1.9%	4.0%
2007	2.5%	0.2%	-0.2%	-0.1%	0.4%	2.4%
2008	-7.4%	-7.9%	-6.6%	-8.8%	1.3%	2.6%
2009	-20.3%	-14.8%	-15.1%	-7.0%	1.2%	2.2%
2010	8.8%	0.1%	2.3%	4.1%	1.1%	1.8%
2011	0.2%	4.6%	5.0%	9.0%	1.0%	1.8%
2012	5.0%	3.4%	6.5%	8.0%	0.9%	1.8%
2013	4.2%	3.1%	4.8%	5.0%	0.8%	1.5%
2014	2.4%	2.9%	3.1%	3.7%	0.6%	1.4%
2015	3.5%	2.4%	2.8%	3.2%	0.5%	1.2%
2016	2.4%	2.0%	2.4%	3.2%	0.5%	1.1%
2017	2.1%	1.5%	2.9%	3.1%	0.5%	1.3%
2018	1.9%	1.2%	3.7%	3.0%	0.3%	1.2%
2019	2.1%	1.4%	4.0%	3.0%	0.3%	1.0%
2020	2.4%	1.5%	3.9%	2.9%	0.3%	1.0%
2021	2.6%	1.5%	4.0%	2.7%	0.2%	0.8%
2022	2.7%	1.6%	3.8%	2.6%	0.2%	0.7%
2023	2.8%	1.6%	3.7%	2.5%	0.1%	0.7%
2024	3.1%	1.6%	3.9%	2.6%	0.1%	0.7%
2025	3.3%	1.7%	3.9%	2.6%	0.0%	0.7%
2026	3.7%	1.7%	4.3%	2.8%	0.0%	0.6%
2027	4.1%	1.8%	4.4%	2.8%	-0.1%	0.5%
2028	3.9%	1.7%	4.0%	2.6%	0.0%	0.7%
2029	3.8%	1.6%	3.8%	2.4%	0.1%	0.9%
2030	4.1%	1.6%	3.9%	2.4%	1.0%	0.6%
2031	4.5%	1.7%	4.1%	2.4%	0.8%	0.4%
2032	4.8%	1.8%	4.1%	2.4%	-0.3%	0.3%
2033	4.8%	1.8%	4.0%	2.2%	-0.2%	0.4%
2034	5.0%	1.7%	3.8%	2.1%	-0.1%	0.7%

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

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	-0.8%	-1.2%	-1.1%	2.6%	2.0%
2007	-0.9%	0.1%	0.1%	4.4%	5.0%
2008	-3.1%	-5.6%	-5.4%	1.6%	4.8%
2009	-1.7%	-1.2%	-1.4%	0.0%	4.0%
2010	4.6%	3.8%	4.2%	6.2%	3.7%
2011	-1.0%	0.5%	0.2%	9.9%	3.6%
2012	3.0%	2.8%	5.9%	8.3%	3.6%
2013	5.5%	4.6%	4.2%	5.0%	3.6%
2014	1.8%	4.0%	3.4%	4.0%	3.4%
2015	3.2%	2.6%	4.7%	4.2%	3.1%
2016	1.3%	1.9%	4.4%	4.4%	3.0%
2017	0.9%	1.5%	4.3%	4.2%	2.9%
2018	1.6%	1.6%	5.2%	4.6%	2.8%
2019	2.1%	2.0%	5.4%	4.9%	2.8%
2020	2.4%	2.2%	5.1%	4.8%	2.7%
2021	3.1%	2.3%	5.2%	4.8%	2.6%
2022	3.2%	2.5%	5.2%	4.8%	2.6%
2023	3.2%	2.6%	5.2%	4.9%	2.5%
2024	3.1%	2.6%	5.2%	4.9%	2.5%
2025	2.9%	2.5%	4.9%	4.7%	2.4%
2026	3.3%	2.4%	5.4%	5.0%	2.3%
2027	3.6%	2.5%	5.5%	5.0%	2.2%
2028	3.7%	2.6%	5.6%	5.3%	2.2%
2029	3.7%	2.7%	5.6%	5.3%	2.2%
2030	3.5%	2.6%	5.2%	4.8%	1.9%
2031	3.2%	2.5%	5.1%	4.6%	1.6%
2032	3.0%	2.4%	4.9%	4.4%	1.9%
2033	3.0%	2.4%	4.9%	4.5%	1.9%
2034	3.0%	2.4%	4.9%	4.7%	2.0%

Historical/Forecast Growth Rate in Service Territory Information Services GDP

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	6.5%	5.8%	8.0%	9.7%	6.2%
2007	8.2%	10.7%	4.7%	6.8%	5.5%
2008	17.7%	12.1%	3.7%	1.7%	4.4%
2009	1.9%	2.5%	16.6%	1.2%	3.5%
2010	13.6%	12.8%	0.0%	3.3%	3.7%
2011	2.9%	3.9%	4.2%	0.7%	3.5%
2012	-3.9%	4.1%	3.8%	3.2%	3.3%
2013	1.0%	4.5%	7.3%	2.3%	3.2%
2014	5.0%	4.7%	6.2%	1.9%	2.9%
2015	4.9%	3.7%	3.8%	2.7%	2.8%
2016	3.6%	2.2%	3.7%	3.0%	2.6%
2017	3.0%	1.8%	4.1%	3.2%	2.6%
2018	3.1%	1.9%	4.1%	3.1%	2.5%
2019	2.8%	2.2%	4.1%	3.1%	2.4%
2020	2.3%	2.2%	4.0%	3.0%	2.4%
2021	2.2%	2.2%	3.8%	2.9%	2.3%
2022	2.0%	2.1%	3.7%	2.9%	2.4%
2023	1.8%	2.0%	3.7%	2.8%	2.4%
2024	1.5%	1.9%	3.5%	2.8%	2.5%
2025	1.3%	1.8%	3.3%	2.8%	2.5%
2026	1.5%	1.7%	3.4%	2.8%	2.5%
2027	1.5%	1.6%	3.4%	2.9%	2.5%
2028	1.6%	1.7%	3.7%	3.3%	2.6%
2029	1.6%	1.7%	3.8%	3.4%	2.5%
2030	1.5%	1.7%	3.7%	3.4%	2.1%
2031	1.6%	1.7%	4.0%	3.5%	2.0%
2032	1.8%	1.8%	4.2%	3.8%	2.3%
2033	2.0%	1.9%	4.5%	3.9%	2.3%
2034	2.2%	2.0%	4.8%	4.1%	2.1%

Historical/Forecast Growth Rate in Service Territory Financial Services GDP

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	-0.3%	-0.1%	-0.1%	-3.0%	2.8%
2007	1.1%	1.6%	2.4%	1.4%	1.4%
2008	2.4%	2.2%	2.2%	2.1%	2.1%
2009	5.6%	3.8%	2.4%	1.3%	1.7%
2010	0.7%	1.9%	1.2%	2.6%	1.6%
2011	2.4%	-0.5%	-1.4%	1.7%	1.6%
2012	3.7%	1.2%	2.7%	5.1%	1.6%
2013	2.8%	1.9%	5.4%	2.7%	1.5%
2014	3.7%	2.6%	4.5%	1.0%	1.2%
2015	4.6%	2.4%	2.3%	0.7%	1.0%
2016	2.5%	1.5%	0.8%	0.5%	0.8%
2017	0.9%	0.5%	0.4%	0.3%	0.7%
2018	-0.1%	0.1%	0.6%	0.3%	0.7%
2019	-0.5%	0.2%	0.7%	0.4%	0.7%
2020	-0.5%	0.3%	0.6%	0.4%	0.6%
2021	-0.4%	0.3%	0.6%	0.5%	0.4%
2022	-0.3%	0.4%	0.5%	0.5%	0.3%
2023	-0.4%	0.3%	0.3%	0.4%	0.2%
2024	-0.4%	0.3%	0.2%	0.3%	0.2%
2025	-0.4%	0.2%	0.1%	0.3%	0.1%
2026	0.1%	0.2%	0.3%	0.4%	0.0%
2027	0.4%	0.2%	0.4%	0.5%	-0.2%
2028	0.7%	0.3%	0.6%	0.9%	-0.1%
2029	0.8%	0.5%	0.8%	1.1%	-0.1%
2030	0.7%	0.5%	0.6%	0.9%	-0.6%
2031	0.7%	0.5%	0.5%	0.8%	-0.8%
2032	0.8%	0.5%	0.5%	0.8%	-0.5%
2033	0.7%	0.5%	0.5%	0.8%	-0.5%
2034	0.7%	0.5%	0.5%	1.0%	-0.4%

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

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP
2006	1.7%	1.9%	2.3%	2.4%	0.8%
2007	5.7%	5.7%	-0.2%	-2.4%	-0.1%
2008	-0.9%	2.5%	2.9%	2.6%	0.3%
2009	1.4%	0.4%	1.1%	7.2%	0.0%
2010	0.8%	2.6%	2.1%	2.1%	-0.2%
2011	2.4%	1.0%	0.3%	2.6%	-0.2%
2012	3.3%	2.3%	2.2%	3.7%	-0.3%
2013	1.6%	1.9%	3.8%	1.4%	-0.3%
2014	0.3%	1.6%	2.7%	0.7%	-0.3%
2015	1.6%	1.7%	1.9%	0.6%	-0.3%
2016	0.4%	1.2%	1.1%	0.6%	-0.5%
2017	-0.2%	0.6%	1.0%	0.4%	-0.4%
2018	-0.5%	0.4%	1.3%	0.4%	-0.4%
2019	-0.5%	0.5%	1.5%	0.5%	-0.4%
2020	-0.6%	0.5%	1.3%	0.3%	-0.4%
2021	-0.6%	0.5%	1.1%	0.2%	-0.5%
2022	-0.7%	0.5%	1.0%	0.1%	-0.5%
2023	-0.8%	0.4%	0.9%	-0.1%	-0.6%
2024	-0.8%	0.4%	0.8%	-0.2%	-0.7%
2025	-0.8%	0.3%	0.6%	-0.3%	-0.8%
2026	-0.4%	0.3%	0.9%	-0.2%	-1.0%
2027	-0.2%	0.3%	0.8%	-0.2%	-1.2%
2028	-0.2%	0.3%	0.9%	-0.1%	-1.1%
2029	-0.3%	0.4%	0.9%	0.0%	-1.1%
2030	-0.4%	0.4%	0.7%	-0.3%	-2.7%
2031	-0.6%	0.4%	0.6%	-0.4%	-3.0%
2032	-0.6%	0.4%	0.6%	-0.4%	-1.4%
2033	-0.7%	0.4%	0.6%	-0.4%	-1.4%
2034	-0.7%	0.4%	0.7%	-0.3%	-1.3%

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

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	1.0%	1.0%	1.4%	1.3%	0.6%	2.2%
2007	0.5%	0.5%	-0.5%	-0.5%	0.8%	0.9%
2008	-0.4%	-0.4%	-0.6%	-0.7%	0.8%	1.0%
2009	-4.3%	-4.4%	-4.0%	-3.8%	0.8%	1.1%
2010	-1.5%	-1.5%	-1.4%	-1.3%	0.9%	0.9%
2011	0.2%	0.2%	0.6%	1.3%	0.9%	1.0%
2012	0.0%	0.5%	1.1%	3.0%	0.9%	1.1%
2013	0.4%	1.1%	2.3%	2.6%	0.9%	1.0%
2014	1.0%	1.8%	3.1%	1.2%	0.8%	1.0%
2015	2.2%	2.2%	2.1%	0.5%	0.7%	0.8%
2016	1.9%	1.6%	0.8%	0.2%	0.6%	0.6%
2017	0.9%	0.4%	0.4%	0.1%	0.6%	0.7%
2018	0.2%	0.0%	0.5%	0.1%	0.6%	0.7%
2019	0.1%	0.2%	0.6%	0.2%	0.6%	0.6%
2020	0.3%	0.3%	0.6%	0.2%	0.7%	0.6%
2021	0.4%	0.4%	0.7%	0.2%	0.5%	0.4%
2022	0.4%	0.4%	0.6%	0.2%	0.4%	0.4%
2023	0.3%	0.4%	0.6%	0.2%	0.4%	0.4%
2024	0.3%	0.4%	0.6%	0.2%	0.4%	0.3%
2025	0.2%	0.4%	0.6%	0.2%	0.4%	0.3%
2026	0.3%	0.4%	0.6%	0.2%	0.3%	0.2%
2027	0.3%	0.4%	0.6%	0.2%	0.2%	0.1%
2028	0.3%	0.4%	0.6%	0.3%	0.2%	0.3%
2029	0.4%	0.5%	0.7%	0.3%	0.1%	0.4%
2030	0.4%	0.6%	0.7%	0.4%	-0.2%	0.1%
2031	0.5%	0.6%	0.7%	0.4%	-0.4%	-0.2%
2032	0.5%	0.6%	0.7%	0.5%	-0.1%	-0.2%
2033	0.5%	0.7%	0.8%	0.6%	-0.1%	-0.2%
2034	0.5%	0.7%	0.8%	0.6%	-0.1%	-0.1%

Historical/Forecast Growth Rate in Service Territory Manufacturing Employment

Year	2014 IRP	2013 Update	2012 Update	2011 IRP	2008 IRP	2005 IRP
2006	-1.3%	-1.3%	-1.3%	-1.3%	-2.1%	0.5%
2007	-2.9%	-2.9%	-3.1%	-3.0%	-1.4%	-0.8%
2008	-4.6%	-4.7%	-4.8%	-4.8%	-1.0%	-0.5%
2009	-13.2%	-13.3%	-13.6%	-11.7%	-0.5%	0.0%
2010	-6.5%	-6.5%	-7.8%	-2.1%	-0.5%	-0.2%
2011	1.4%	2.2%	3.4%	2.9%	-0.5%	-0.3%
2012	0.1%	2.4%	2.3%	3.1%	-0.5%	-0.3%
2013	0.1%	0.1%	0.8%	2.2%	-0.6%	-0.3%
2014	0.2%	-0.1%	1.5%	0.6%	-0.6%	-0.2%
2015	0.2%	0.7%	0.7%	-0.1%	-0.6%	-0.3%
2016	0.4%	0.6%	-0.2%	-0.4%	-0.5%	-0.3%
2017	-0.3%	-0.2%	-0.4%	-0.4%	-0.5%	-0.2%
2018	-1.1%	-0.9%	-0.3%	-0.5%	-0.6%	-0.3%
2019	-1.2%	-0.8%	-0.2%	-0.5%	-0.6%	-0.3%
2020	-0.9%	-0.6%	-0.1%	-0.4%	-0.6%	-0.4%
2021	-0.7%	-0.4%	0.1%	-0.5%	-0.7%	-0.4%
2022	-0.8%	-0.4%	0.0%	-0.5%	-0.8%	-0.5%
2023	-0.8%	-0.4%	0.0%	-0.5%	-0.8%	-0.5%
2024	-0.8%	-0.4%	0.1%	-0.5%	-0.9%	-0.6%
2025	-0.7%	-0.3%	0.1%	-0.4%	-0.9%	-0.6%
2026	-0.8%	-0.3%	0.2%	-0.4%	-1.0%	-0.7%
2027	-0.8%	-0.2%	0.2%	-0.3%	-1.1%	-0.7%
2028	-0.7%	-0.2%	0.3%	-0.3%	-1.1%	-0.8%
2029	-0.7%	-0.1%	0.3%	-0.2%	-1.2%	-0.9%
2030	-0.8%	-0.2%	0.2%	-0.3%	0.5%	-1.0%
2031	-0.7%	-0.1%	0.2%	-0.3%	0.3%	-1.0%
2032	-0.8%	-0.1%	0.2%	-0.3%	-1.5%	-1.2%
2033	-0.8%	-0.1%	0.3%	-0.3%	-1.5%	-1.3%
2034	-0.7%	0.0%	0.4%	-0.2%	-1.5%	-1.4%

Archive of Previous Energy and Peak Demand Forecasts⁶

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

Year	Actual	2005 IRP	2008 IRP	2011 IRP	2012 Update	2013 Update	2014 IRP
2004	32,272						
2005	36,427						
2006	37,562	37,894					
2007	38,915	38,377	38,580				
2008	38,122	38,890	39,165				
2009	34,947	38,731	39,059				
2010	38,420	39,237	39,623	37,768			
2011	37,417	39,747	40,192	38,476			
2012	36,741	40,307	40,821	39,217	37,086	36,902	
2013	36,975	40,797	41,332	39,462	37,477	36,735	
2014		41,301	41,899	39,758	37,844	36,913	36,160
2015		41,802	42,467	40,103	38,146	37,168	36,169
2016		42,342	43,085	40,555	38,553	37,470	36,382
2017		42,816	43,618	40,761	38,776	37,593	36,457
2018		43,318	44,211	41,130	39,260	37,852	36,638
2019		43,820	44,805	41,572	39,709	38,118	36,831
2020		44,340	45,465	42,092	40,062	38,366	36,899
2021		44,791	45,996	42,412	40,303	38,518	37,008
2022		45,280	46,593	42,865	40,662	38,832	37,392
2023		45,769	47,202	43,332	41,020	39,073	37,670
2024		46,293	47,873	43,939	41,543	39,490	38,058
2025			48,450	44,295	41,654	39,617	38,136
2026			49,088	44,796	41,927	39,919	38,430
2027			49,732	45,313	42,303	40,306	38,872
2028			50,471	45,976	42,786	40,720	39,290
2029			51,095	46,379	42,813	40,789	39,432
2030			51,744	46,923	42,999	41,014	39,658
2031							39,891
2032							40,232
2033							40,397
2034							40,667

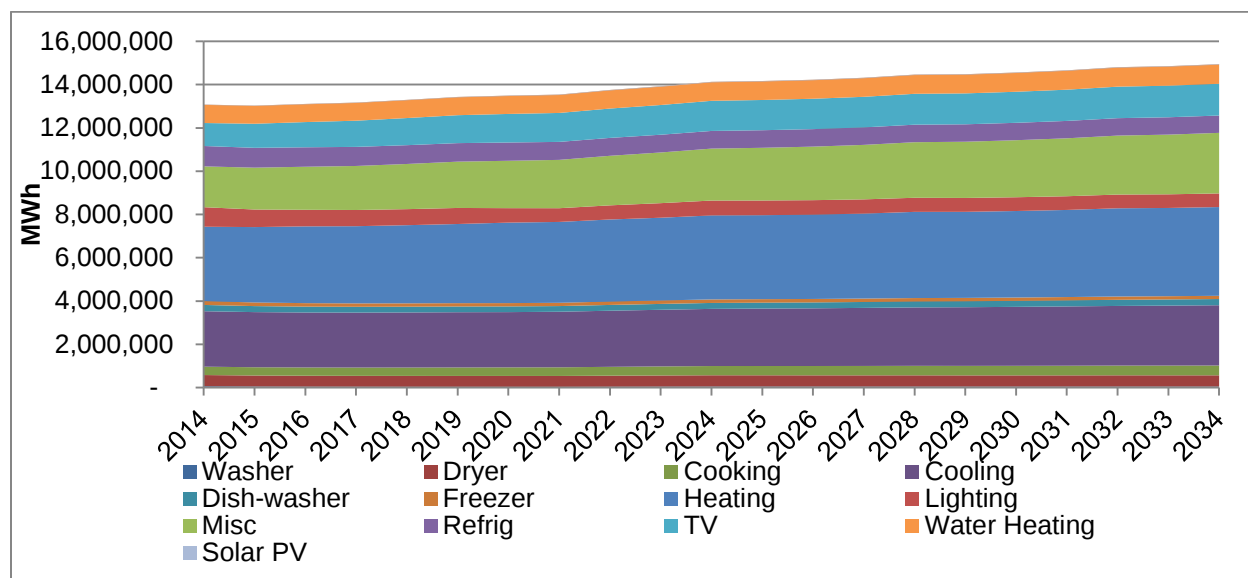
⁶ 4 CSR 240-22.030(6)(C)4

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

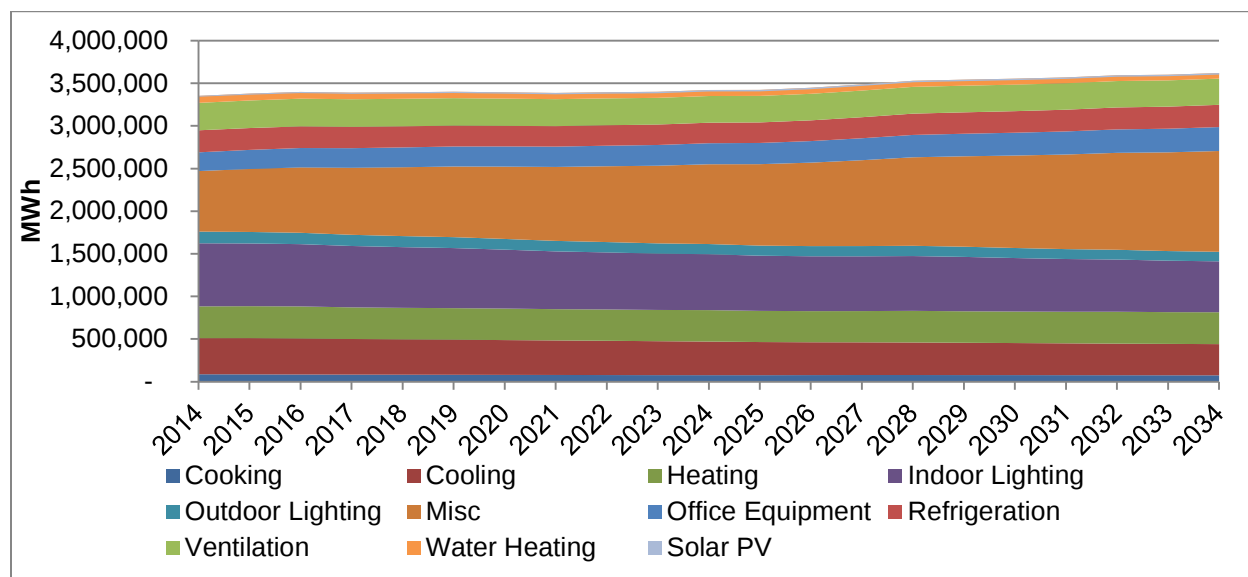
Year	Actual	2005 IRP	2008 IRP	2011 IRP	2012 Update	2013 Update	2014 IRP
2004	7,506						
2005	8,321						
2006	8,446	8,396					
2007	8,638	8,489	8,553				
2008	8,228	8,582	8,643				
2009	7,688	8,543	8,619				
2010	8,353	8,636	8,724				
2011	8,384	8,729	8,831				
2012	8,423	8,822	8,932	8,501	8,056	7,999	
2013	7,736	8,915	9,043	8,565	8,165	8,039	
2014		9,008	9,149	8,610	8,227	8,078	8,004
2015		9,101	9,258	8,668	8,280	8,111	8,015
2016		9,194	9,360	8,728	8,322	8,138	8,030
2017		9,287	9,483	8,785	8,388	8,181	8,029
2018		9,380	9,602	8,855	8,484	8,237	8,046
2019		9,473	9,722	8,943	8,570	8,291	8,072
2020		9,566	9,833	9,018	8,608	8,311	8,074
2021		9,659	9,959	9,098	8,691	8,380	8,105
2022		9,752	10,080	9,181	8,765	8,447	8,152
2023		9,845	10,203	9,265	8,843	8,507	8,191
2024		9,944	10,320	9,352	8,926	8,574	8,243
2025			10,461	9,436	8,981	8,629	8,267
2026			10,595	9,527	9,043	8,701	8,322
2027			10,731	9,621	9,127	8,790	8,401
2028			10,863	9,720	9,203	8,857	8,466
2029			11,015	9,820	9,245	8,902	8,499
2030			11,150	9,923	9,291	8,959	8,537
2031							8,580
2032							8,627
2033							8,661
2034							8,706

Annual Energy Forecast by End Use Component of Major Classes⁷

Residential Annual Energy Sales Forecast by End Use (MWh)

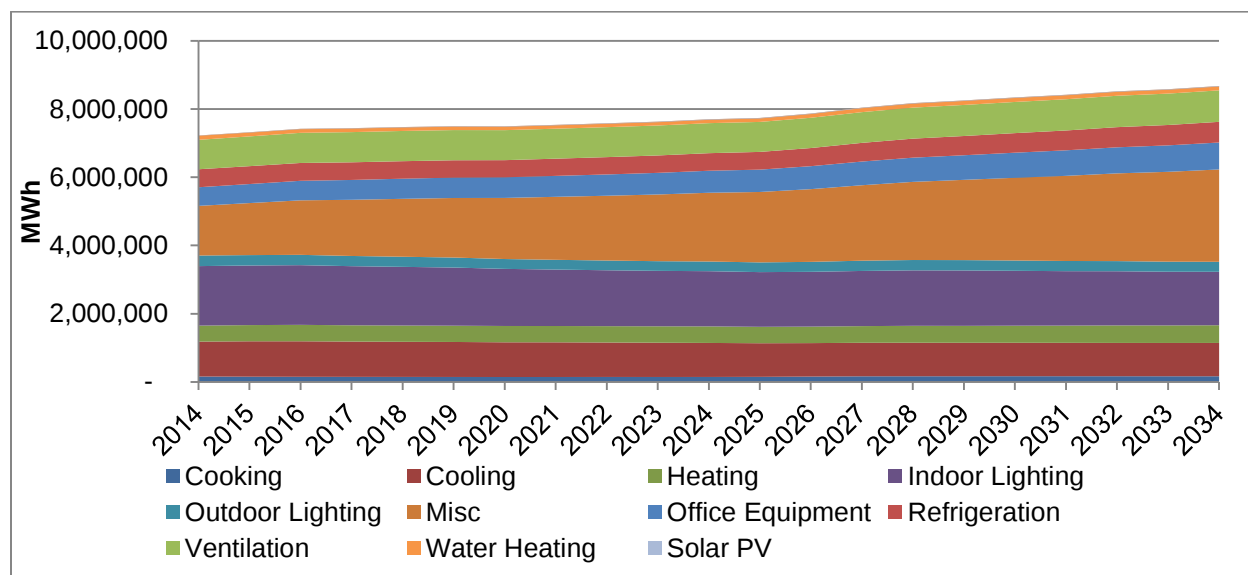


Commercial SGS Annual Energy Sales Forecast by End Use (MWh)

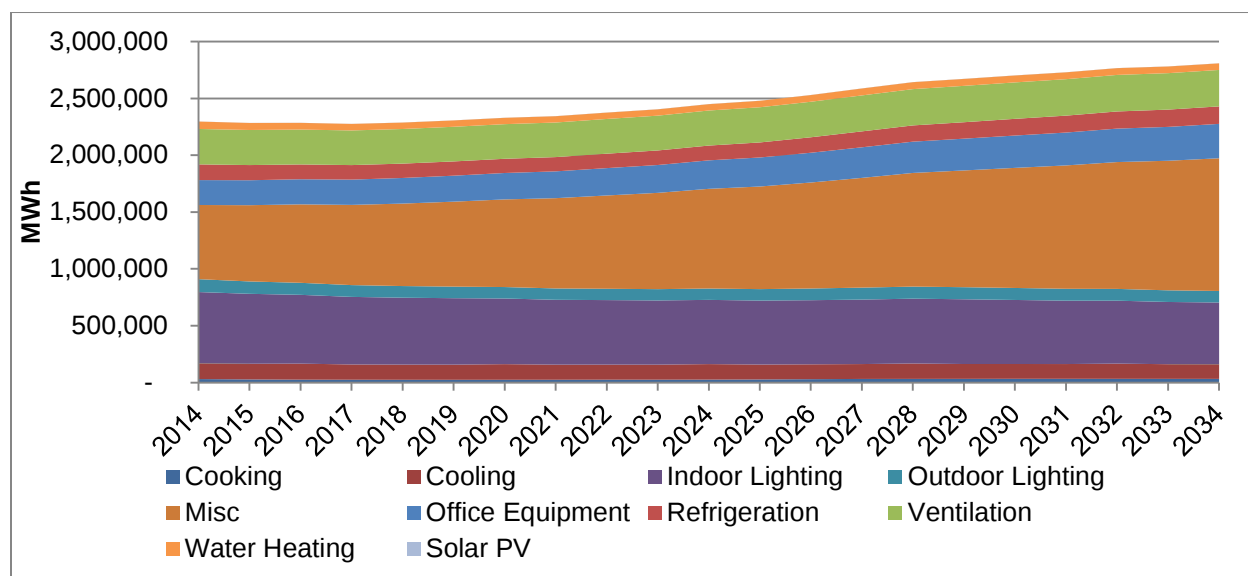


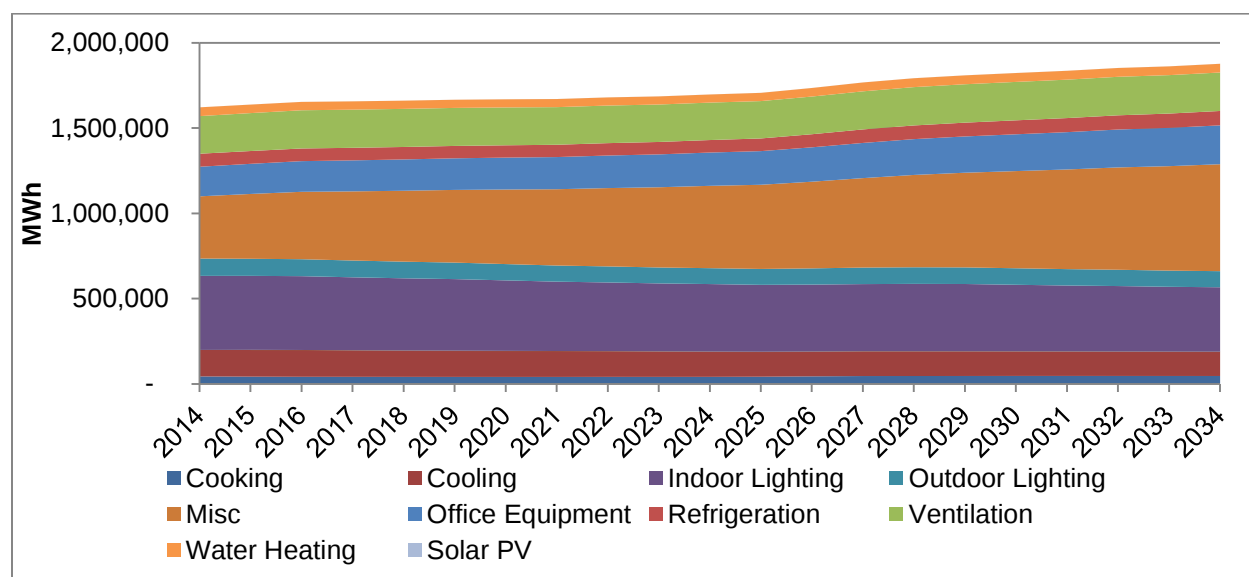
⁷ 4 CSR 240-22.030(7)(A)4

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



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



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

Residential Annual Energy Sales Forecast by End Use (MWh)

Year	Washer	Dryer	Cooking	Cooling	Dish-washer	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
2014	66,142	515,929	387,389	2,561,628	289,682	180,125	3,433,245	903,005	1,885,450	941,466	1,061,557	850,634	(13,454)
2015	52,006	508,880	381,923	2,546,842	277,969	168,020	3,482,346	811,586	1,933,212	916,751	1,111,986	837,825	(17,203)
2016	45,129	505,523	381,608	2,539,115	271,743	161,324	3,546,971	766,156	1,987,697	899,045	1,164,819	838,044	(18,054)
2017	42,060	503,216	383,297	2,538,734	267,995	158,100	3,565,917	748,178	2,033,953	881,619	1,209,916	837,188	(18,795)
2018	39,579	503,247	386,823	2,543,799	266,229	155,806	3,610,237	740,856	2,086,864	868,366	1,253,450	840,182	(19,590)
2019	37,867	503,707	391,000	2,552,110	264,903	154,114	3,656,447	741,505	2,138,879	856,136	1,290,332	843,623	(20,385)
2020	36,753	504,430	395,441	2,552,937	263,742	152,888	3,717,810	667,948	2,189,419	844,103	1,319,463	847,651	(21,164)
2021	36,198	504,165	399,175	2,567,349	262,156	151,815	3,735,188	633,750	2,232,979	830,956	1,336,968	848,536	(21,978)
2022	41,444	511,155	409,612	2,591,898	266,965	156,683	3,791,215	653,196	2,289,206	826,417	1,356,179	858,630	(22,773)
2023	46,155	516,701	418,533	2,615,988	270,793	160,551	3,821,154	673,561	2,341,086	820,545	1,372,561	866,737	(23,568)
2024	49,553	522,381	427,035	2,640,093	274,330	163,220	3,880,031	687,351	2,399,040	816,174	1,391,780	876,817	(23,568)
2025	49,763	521,336	429,378	2,653,113	273,465	161,944	3,877,452	679,673	2,434,557	811,968	1,396,906	876,593	(23,568)
2026	48,865	520,376	431,414	2,664,192	272,699	159,813	3,896,639	667,405	2,473,390	808,774	1,403,566	877,655	(23,568)
2027	48,141	520,446	434,387	2,681,724	273,276	158,097	3,924,664	657,854	2,516,784	807,948	1,412,869	880,887	(23,568)
2028	47,607	522,027	438,609	2,699,001	275,230	156,847	3,981,445	651,225	2,567,286	809,481	1,426,145	887,527	(23,568)
2029	47,166	519,765	439,598	2,709,702	275,718	154,765	3,975,726	641,562	2,597,109	805,168	1,428,125	886,613	(23,568)
2030	47,498	519,584	442,307	2,722,959	277,746	153,641	3,996,563	636,254	2,634,777	803,692	1,434,689	889,334	(23,568)
2031	47,925	520,046	445,411	2,739,465	280,160	152,605	4,023,944	633,656	2,676,114	803,264	1,443,137	893,527	(23,568)
2032	48,496	521,794	449,512	2,755,019	283,204	151,853	4,077,023	633,671	2,724,410	804,651	1,455,149	900,594	(23,568)
2033	48,830	520,614	450,982	2,770,081	284,587	150,245	4,075,976	630,354	2,757,648	801,876	1,458,987	902,040	(23,568)
2034	49,297	520,689	453,501	2,784,197	286,583	148,978	4,100,290	629,643	2,797,670	801,019	1,466,278	906,340	(23,568)

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

Year	Cooking	Cooling	Heating	Indoor Lighting	Outdoor Lighting	Misc	Office Equipment	Refrigeration	Ventilation	Water Heating	Solar PV
2014	87,130	422,933	373,272	740,151	137,044	709,825	219,872	258,481	321,646	82,398	(10,002)
2015	85,634	425,116	374,814	735,784	134,873	738,705	223,824	256,259	323,558	80,712	(12,788)
2016	84,094	422,584	376,129	730,459	133,183	766,688	227,658	253,968	324,877	79,067	(13,421)
2017	82,781	417,877	370,975	720,053	131,176	786,163	229,987	250,214	323,736	77,507	(13,972)
2018	81,707	414,540	369,747	712,166	129,620	807,343	232,663	247,467	323,131	76,316	(14,563)
2019	80,774	412,485	369,229	704,760	128,193	828,380	235,007	244,801	322,150	75,250	(15,154)
2020	79,697	408,177	369,902	690,994	125,647	848,087	236,882	241,429	319,477	74,161	(15,733)
2021	78,776	405,134	366,537	677,845	123,290	867,224	238,456	240,083	316,519	73,103	(16,338)
2022	77,856	401,884	367,081	669,218	121,647	889,327	241,005	239,922	315,046	72,227	(16,929)
2023	76,832	398,034	366,542	660,724	120,082	910,966	243,278	239,658	313,323	71,146	(17,520)
2024	76,448	394,126	368,913	655,747	119,372	935,852	246,678	240,724	312,983	70,623	(17,520)
2025	76,238	388,666	365,445	647,371	118,673	955,001	248,872	240,945	311,045	70,357	(17,520)
2026	77,351	385,067	365,118	643,442	119,359	978,950	252,893	243,287	311,283	71,145	(17,520)
2027	78,198	383,437	366,490	642,348	120,266	1,007,125	257,679	246,603	312,600	71,939	(17,520)
2028	78,120	381,706	371,069	642,704	120,379	1,038,158	262,193	249,760	313,868	71,597	(17,520)
2029	77,559	378,931	369,228	638,031	119,633	1,060,282	264,612	251,004	312,633	70,752	(17,520)
2030	77,237	375,822	369,719	627,477	117,838	1,084,511	267,695	252,952	311,227	69,876	(17,520)
2031	76,528	373,222	370,733	618,502	116,083	1,109,581	270,857	254,960	310,048	68,811	(17,520)
2032	75,907	370,245	374,287	612,125	114,817	1,136,889	274,806	257,621	309,823	67,849	(17,520)
2033	75,178	367,982	372,521	603,382	113,110	1,157,885	277,312	258,914	308,006	66,585	(17,520)
2034	74,431	366,127	373,965	596,991	111,845	1,182,517	280,738	261,026	307,107	65,578	(17,520)

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

Year	Cooking	Cooling	Heating	Indoor Lighting	Outdoor Lighting	Misc	Office Equipment	Refrigeration	Ventilation	Water Heating	Solar PV
2014	157,769	1,022,537	469,268	1,745,129	310,699	1,455,754	546,087	527,802	862,354	127,850	(9,663)
2015	152,251	1,038,372	474,848	1,747,327	304,989	1,525,747	558,188	524,147	872,721	121,705	(12,356)
2016	149,000	1,041,727	481,743	1,750,473	302,590	1,598,523	572,499	522,902	883,988	118,155	(12,967)
2017	147,354	1,034,579	477,530	1,733,477	299,427	1,647,551	581,530	517,559	885,171	116,247	(13,499)
2018	145,679	1,029,617	477,673	1,720,083	296,666	1,698,276	590,526	513,400	886,487	114,522	(14,070)
2019	144,162	1,026,253	477,635	1,704,786	293,789	1,745,987	597,736	508,597	885,246	112,957	(14,642)
2020	143,133	1,017,292	478,979	1,674,518	288,905	1,791,695	604,445	503,006	879,925	112,163	(15,201)
2021	143,485	1,016,471	478,422	1,655,182	286,297	1,846,928	614,032	504,878	878,910	112,329	(15,785)
2022	144,627	1,010,024	479,494	1,638,905	285,457	1,899,897	624,431	508,060	878,724	113,757	(16,356)
2023	143,779	1,004,799	481,214	1,626,050	283,469	1,956,264	633,944	510,461	878,450	112,945	(16,927)
2024	144,569	997,394	485,431	1,618,705	283,488	2,016,252	645,587	515,253	880,578	113,588	(16,927)
2025	147,657	985,579	481,772	1,603,781	285,086	2,065,030	655,297	519,874	879,130	116,855	(16,927)
2026	155,479	981,552	483,849	1,606,259	292,265	2,132,720	673,158	532,285	887,695	124,092	(16,927)
2027	163,395	983,150	488,714	1,617,791	300,915	2,212,635	694,496	547,923	900,921	131,873	(16,927)
2028	164,390	983,289	496,802	1,626,275	302,917	2,291,478	710,200	557,860	908,936	132,287	(16,927)
2029	164,791	981,761	496,935	1,623,955	303,287	2,353,972	721,283	564,420	910,861	132,180	(16,927)
2030	166,219	980,525	501,363	1,609,405	301,675	2,426,100	735,715	573,818	913,990	132,478	(16,927)
2031	165,745	979,341	505,624	1,595,604	298,991	2,496,579	748,806	581,815	915,872	131,307	(16,927)
2032	165,353	977,141	513,402	1,588,306	297,445	2,572,871	764,140	591,307	920,515	130,218	(16,927)
2033	164,704	976,758	513,953	1,574,618	294,702	2,635,469	775,551	597,701	920,382	128,520	(16,927)
2034	164,065	977,804	519,080	1,567,472	293,189	2,708,019	789,950	606,272	923,314	127,347	(16,927)

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

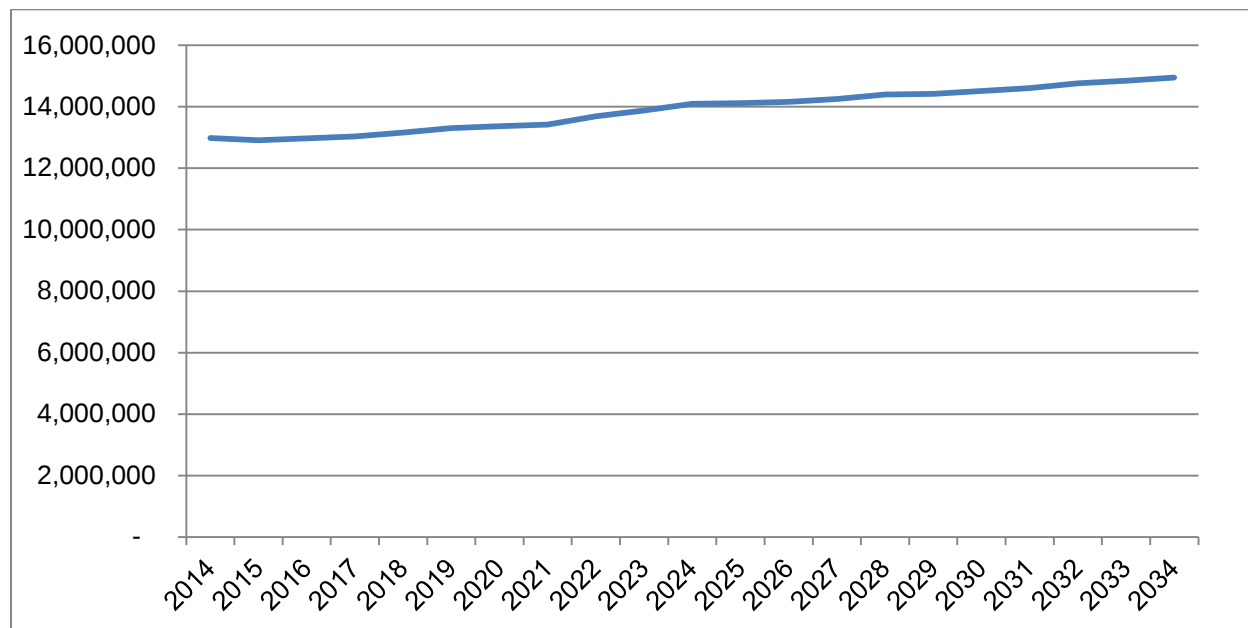
Year	Cooking	Cooling	Heating	Indoor Lighting	Outdoor Lighting	Misc	Office Equipment	Refrigeration	Ventilation	Water Heating	Solar PV
2014	30,760	138,673	-	626,794	113,468	652,463	219,137	138,222	311,480	65,596	(568)
2015	27,510	138,051	-	615,186	108,848	670,785	219,474	133,509	308,749	61,866	(727)
2016	25,527	141,034	-	605,208	105,772	690,268	220,879	130,198	306,917	59,200	(763)
2017	24,915	134,250	-	594,534	103,729	705,593	222,423	127,736	304,792	57,705	(794)
2018	24,503	133,375	-	588,603	102,530	725,535	225,297	126,382	304,536	56,779	(828)
2019	24,330	133,229	-	584,675	101,800	747,426	228,534	125,508	304,802	56,198	(861)
2020	24,542	137,509	-	577,491	100,762	770,981	232,360	124,987	304,697	56,096	(894)
2021	24,772	132,688	-	570,667	99,787	794,275	235,844	125,515	304,228	55,934	(928)
2022	25,285	132,494	-	567,730	99,733	820,662	240,655	126,968	305,464	56,263	(962)
2023	25,356	132,188	-	564,844	99,368	847,150	244,970	128,046	306,241	56,014	(996)
2024	25,897	136,561	-	564,995	99,826	877,059	250,538	130,041	308,437	56,332	(996)
2025	27,355	131,036	-	562,838	100,799	902,688	255,363	132,344	309,530	57,372	(996)
2026	29,752	130,685	-	564,095	102,985	932,425	261,884	136,047	312,528	59,370	(996)
2027	31,932	130,827	-	567,154	105,332	965,359	269,060	140,126	316,348	61,393	(996)
2028	32,288	135,518	-	570,306	106,100	999,968	275,225	142,820	319,280	61,559	(996)
2029	32,597	130,612	-	569,516	106,273	1,027,137	279,511	144,661	319,990	61,418	(996)
2030	33,100	130,218	-	563,351	105,541	1,056,442	284,529	146,979	320,502	61,296	(996)
2031	33,004	129,844	-	557,642	104,468	1,085,379	289,152	148,833	320,674	60,681	(996)
2032	32,842	133,831	-	553,700	103,666	1,115,742	294,333	150,884	321,491	60,027	(996)
2033	32,627	128,832	-	547,498	102,442	1,139,912	297,950	152,119	320,607	59,089	(996)
2034	32,394	128,552	-	543,267	101,588	1,167,539	302,509	153,807	320,598	58,362	(996)

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

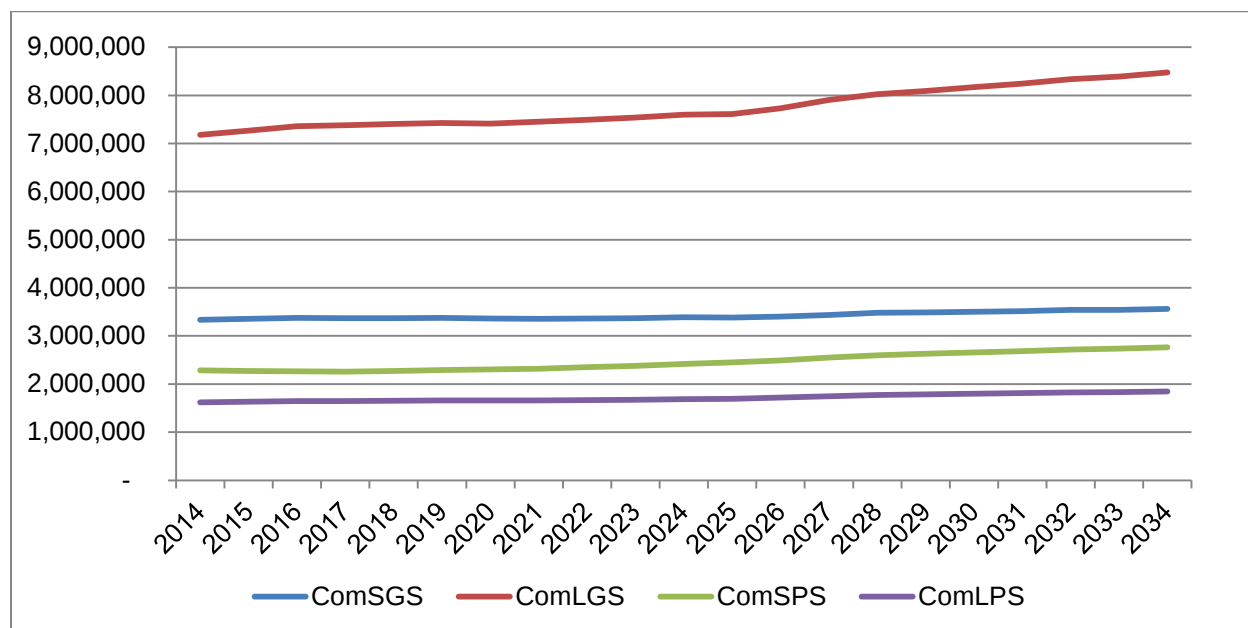
Year	Cooking	Cooling	Heating	Indoor Lighting	Outdoor Lighting	Misc	Office Equipment	Refrigeration	Ventilation	Water Heating	Solar PV
2014	43,806	155,381	-	434,254	101,649	364,803	173,538	76,423	220,592	51,397	(141)
2015	42,388	157,352	-	433,820	100,256	380,107	176,662	75,071	222,427	49,974	(180)
2016	41,575	157,260	-	432,896	99,425	395,320	179,901	74,311	224,094	49,090	(189)
2017	41,352	155,792	-	427,918	98,470	405,528	181,804	73,684	223,812	48,663	(197)
2018	41,098	154,562	-	423,572	97,591	415,858	183,627	73,119	223,461	48,263	(205)
2019	40,922	153,909	-	419,667	96,835	426,301	185,306	72,628	222,976	47,947	(214)
2020	40,812	152,872	-	413,310	95,672	437,304	187,134	72,183	222,023	47,731	(222)
2021	40,798	151,973	-	406,777	94,564	447,573	188,584	72,169	220,663	47,567	(230)
2022	41,107	150,948	-	402,787	94,184	459,282	190,961	72,686	220,427	47,796	(239)
2023	41,041	149,651	-	398,541	93,480	470,482	192,793	72,835	219,684	47,600	(247)
2024	41,188	148,257	-	395,962	93,203	482,931	195,234	73,305	219,622	47,627	(247)
2025	42,021	146,446	-	392,314	93,378	493,635	197,341	74,309	219,144	48,311	(247)
2026	44,129	145,594	-	392,517	95,171	508,324	201,645	76,796	221,028	50,259	(247)
2027	46,005	145,302	-	393,896	96,990	524,586	206,322	79,271	223,369	52,069	(247)
2028	46,185	145,114	-	395,279	97,354	541,494	210,049	80,225	224,828	52,157	(247)
2029	46,350	144,810	-	394,618	97,399	555,276	212,757	80,959	225,172	52,175	(247)
2030	46,614	144,261	-	390,366	96,826	569,953	215,861	81,870	225,316	52,214	(247)
2031	46,620	143,754	-	386,533	96,154	584,476	218,830	82,582	225,355	52,046	(247)
2032	46,538	143,122	-	384,082	95,655	600,132	222,268	83,331	225,897	51,804	(247)
2033	46,430	142,719	-	380,218	94,891	612,683	224,702	83,791	225,418	51,457	(247)
2034	46,321	142,532	-	377,790	94,397	627,314	227,855	84,444	225,573	51,200	(247)

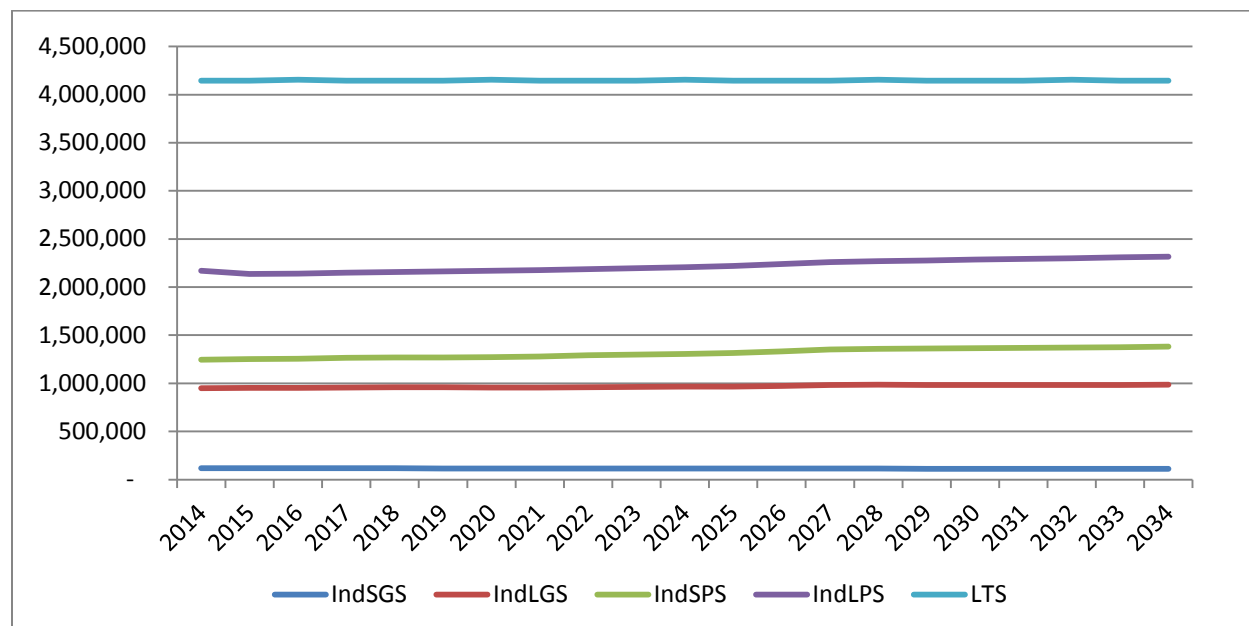
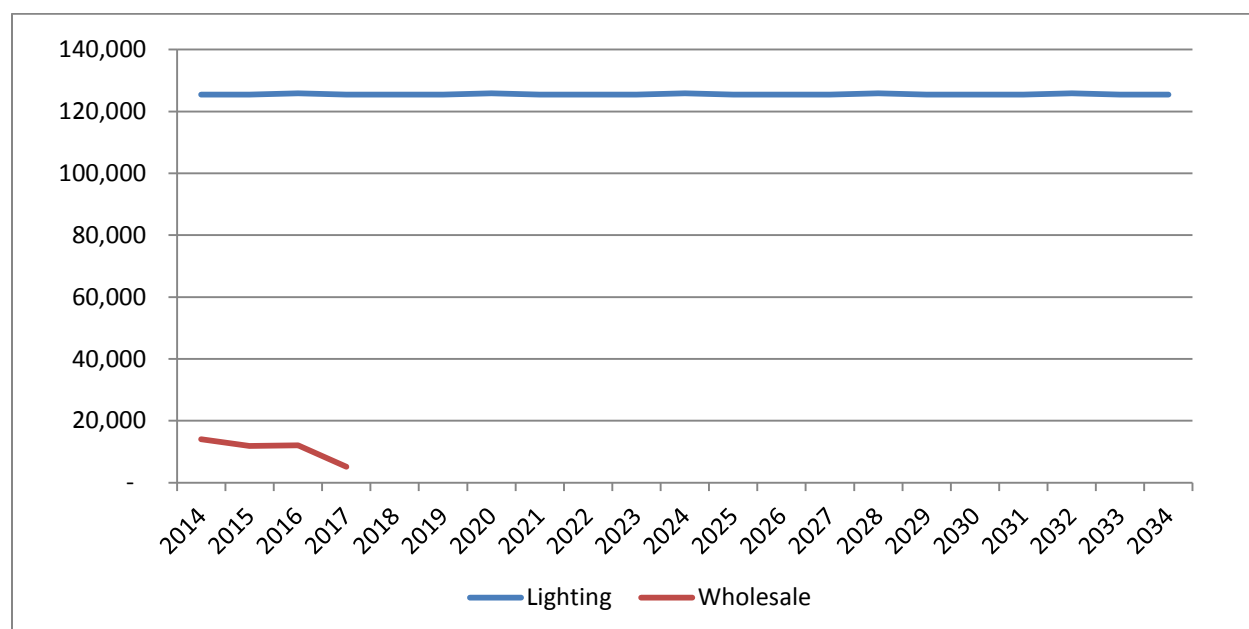
Total Probability Weighted Average Annual Class Energy Forecast

Annual Residential Energy Sales Forecast (MWh)



Annual Commercial Energy Sales Forecast (MWh)

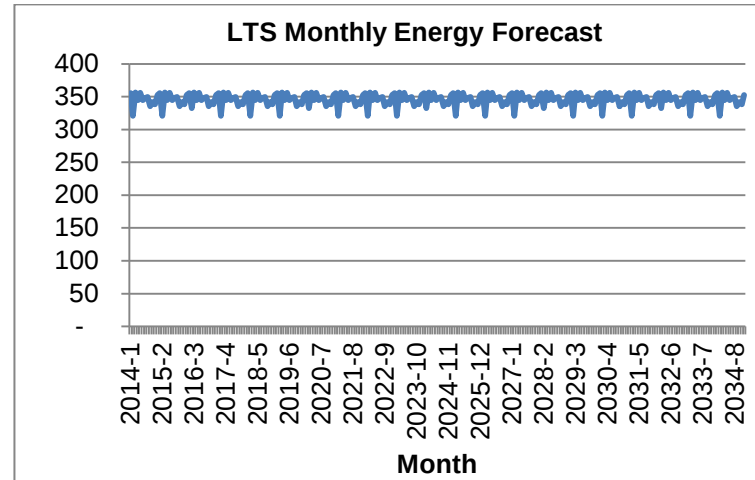
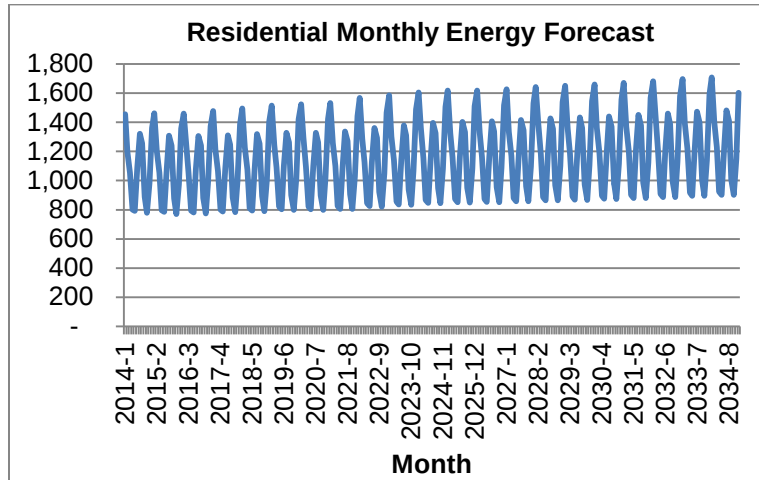


Annual Industrial Energy Sales Forecast (MWh)**Annual Lighting and Wholesale Energy Sales Forecast (MWh)**

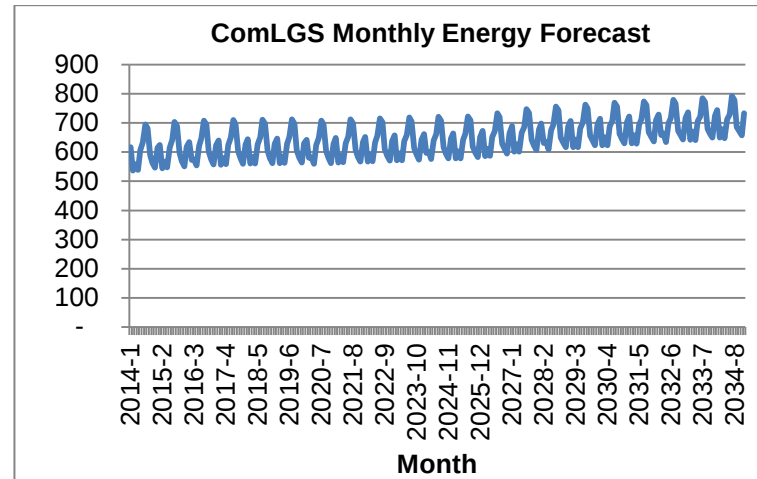
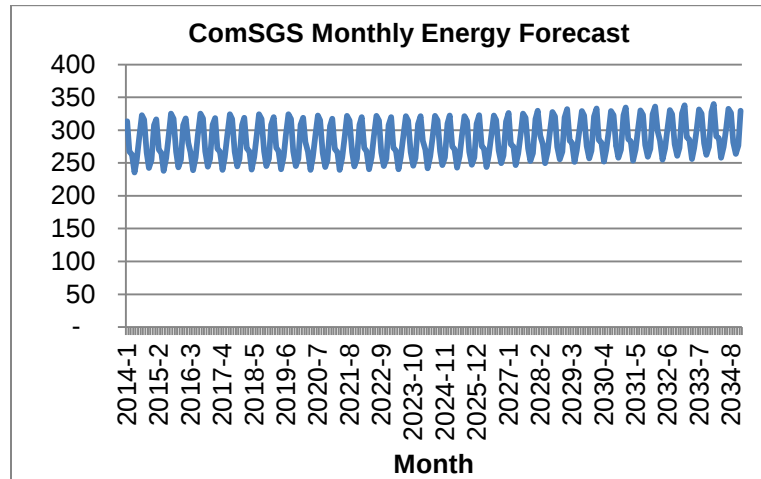
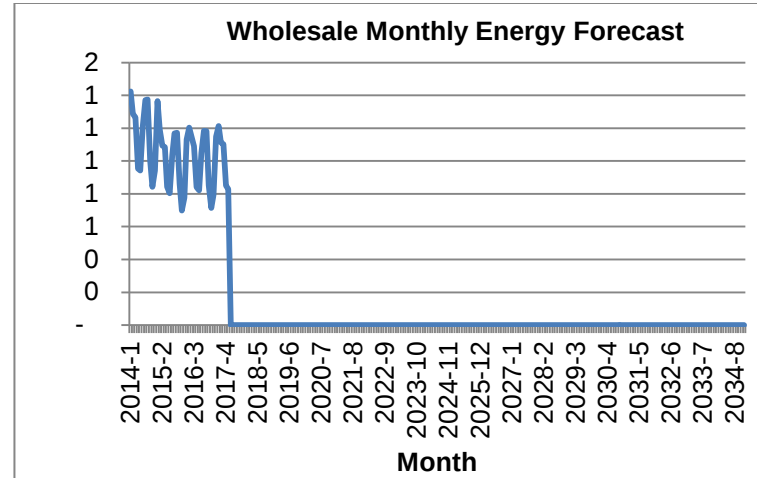
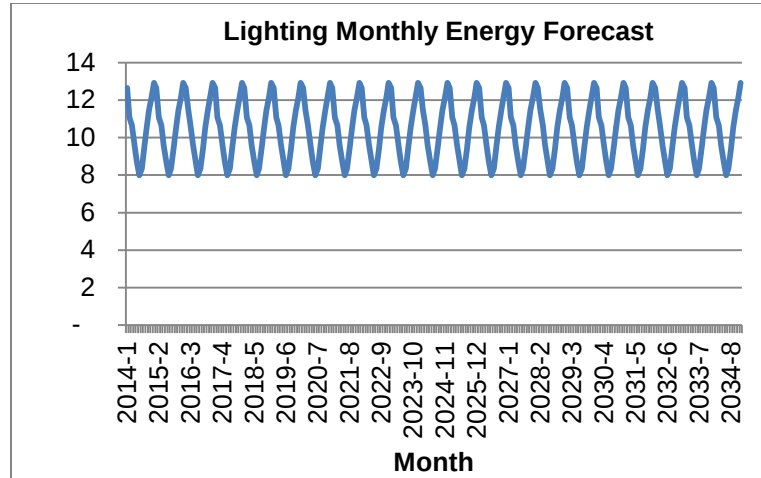
Annual Energy Sales Forecast by Rate Class (MWh)

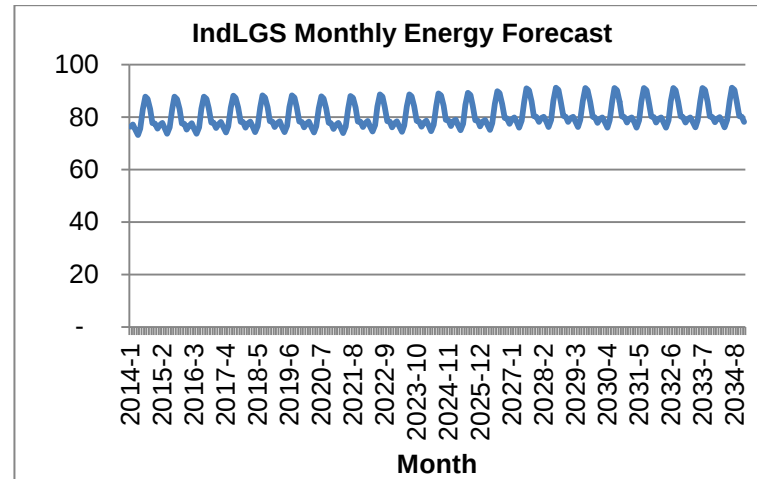
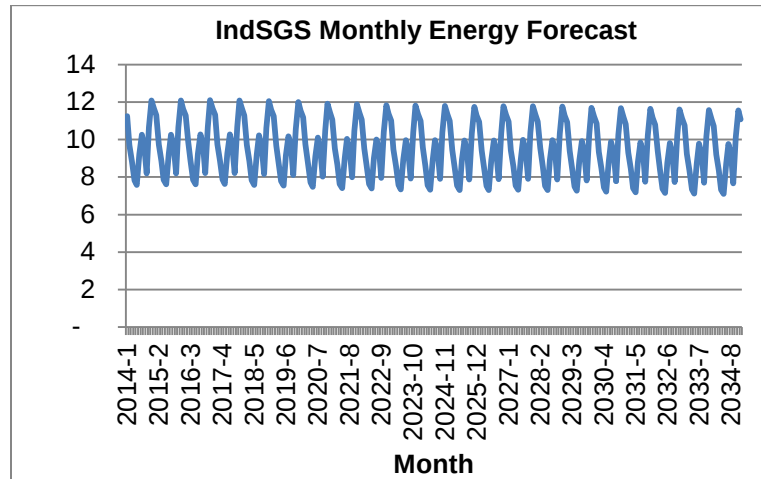
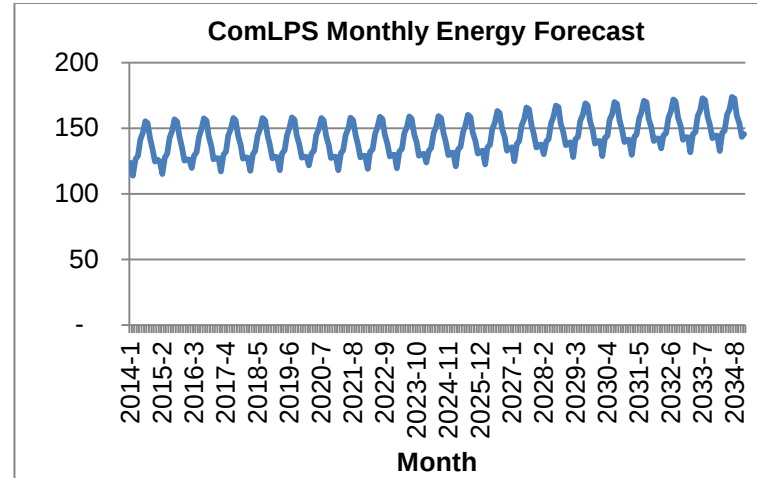
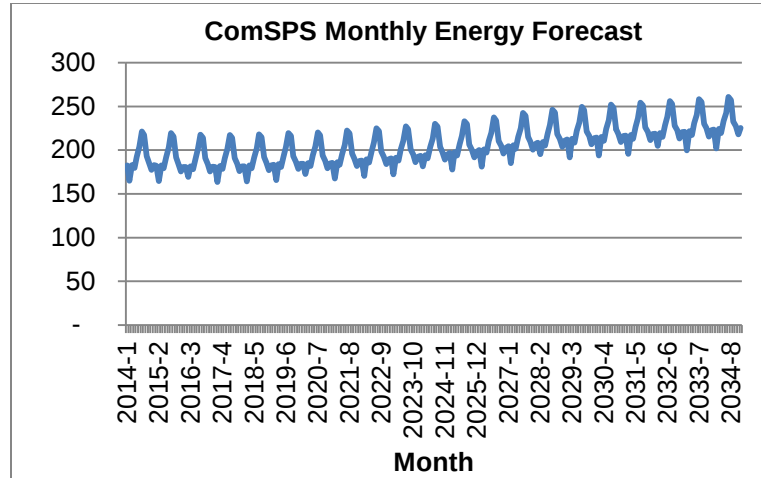
Year	ResGen	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale
2014	12,978,731	3,334,350	7,180,725	2,284,430	1,616,949	116,946	948,776	1,245,066	2,169,213	4,145,341	125,486	13,987
2015	12,907,296	3,357,003	7,264,521	2,270,609	1,632,354	117,105	951,314	1,251,227	2,135,344	4,145,341	125,486	11,867
2016	12,972,156	3,374,756	7,362,125	2,265,123	1,646,972	117,363	952,736	1,256,907	2,139,549	4,156,806	125,882	12,028
2017	13,036,948	3,365,673	7,377,387	2,259,908	1,649,576	117,310	957,078	1,266,151	2,150,694	4,145,341	125,486	5,110
2018	13,162,699	3,369,014	7,408,327	2,271,241	1,653,386	116,827	959,107	1,268,731	2,157,649	4,145,341	125,486	-
2019	13,302,432	3,374,247	7,427,244	2,289,254	1,658,132	116,213	959,043	1,269,916	2,164,010	4,145,341	125,486	-
2020	13,365,734	3,365,207	7,410,344	2,304,252	1,658,637	115,472	954,983	1,272,652	2,168,719	4,156,806	125,882	-
2021	13,420,043	3,356,172	7,453,740	2,321,443	1,659,080	114,606	956,011	1,279,795	2,176,447	4,145,341	125,486	-
2022	13,689,609	3,363,391	7,491,889	2,351,875	1,667,824	114,303	961,202	1,293,427	2,187,416	4,145,341	125,486	-
2023	13,874,498	3,367,508	7,536,787	2,379,310	1,672,717	113,870	961,638	1,297,215	2,195,516	4,145,341	125,486	-
2024	14,093,914	3,388,103	7,602,015	2,419,227	1,683,224	113,794	965,119	1,304,078	2,205,964	4,156,806	125,882	-
2025	14,117,864	3,381,680	7,612,229	2,448,515	1,690,490	113,379	967,378	1,313,788	2,219,775	4,145,341	125,486	-
2026	14,158,185	3,399,899	7,733,768	2,494,047	1,716,587	113,317	972,552	1,330,953	2,239,556	4,145,341	125,486	-
2027	14,252,133	3,437,417	7,902,113	2,550,713	1,747,968	113,564	983,404	1,353,083	2,261,038	4,145,341	125,486	-
2028	14,401,601	3,479,084	8,026,577	2,600,569	1,771,738	113,449	985,749	1,358,892	2,270,127	4,156,806	125,882	-
2029	14,423,864	3,490,521	8,092,805	2,631,815	1,786,533	112,808	984,210	1,361,044	2,277,624	4,145,341	125,486	-
2030	14,509,587	3,500,652	8,172,545	2,660,267	1,798,321	112,315	983,387	1,364,084	2,286,293	4,145,341	125,486	-
2031	14,609,201	3,514,543	8,242,548	2,687,091	1,809,853	111,895	983,280	1,368,122	2,293,567	4,145,341	125,486	-
2032	14,763,345	3,538,953	8,336,417	2,718,820	1,824,795	111,610	983,379	1,371,592	2,300,653	4,156,806	125,882	-
2033	14,842,720	3,545,054	8,389,425	2,737,903	1,832,819	111,106	983,807	1,375,636	2,308,219	4,145,341	125,486	-
2034	14,948,737	3,564,509	8,477,540	2,765,813	1,846,430	110,805	985,050	1,380,958	2,316,615	4,145,341	125,486	-

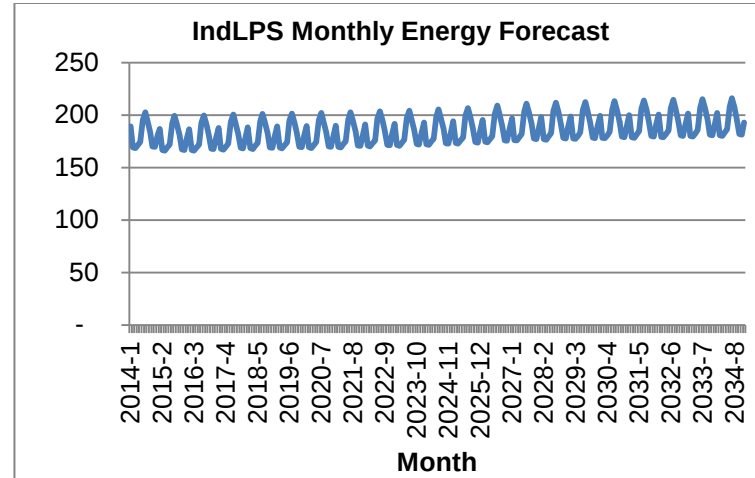
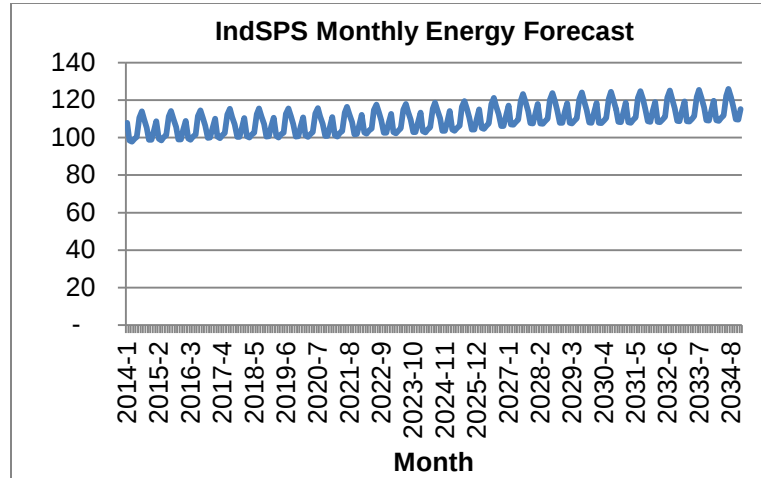
Total Probability Weighted Average Monthly Class Energy Forecast (GWh)⁸



⁸ 4 CSR 240-22.030(7)(A)6







Monthly Energy Sales Forecast by Rate Class (GWh)

Year	Month	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale
2014	1	1,456	314	617	183	124	11	76	108	189	356	13	1
2014	2	1,197	267	537	165	114	10	77	98	169	321	11	1
2014	3	1,055	263	559	183	126	9	75	98	169	356	11	1
2014	4	801	235	539	180	129	8	73	99	171	345	10	1
2014	5	792	255	605	192	141	8	76	100	174	356	9	1
2014	6	1,093	290	633	204	147	9	83	111	195	345	8	1
2014	7	1,322	323	695	221	155	10	88	114	203	348	8	1
2014	8	1,255	316	681	217	154	10	87	110	194	350	9	1
2014	9	888	266	589	193	142	8	83	105	184	336	11	1
2014	10	779	243	563	186	135	11	78	99	170	342	11	1

2014	11	981	254	547	177	125	12	78	99	170	338	12	1
2014	12	1,361	308	614	183	126	12	76	104	180	353	13	1
2015	1	1,461	317	624	182	125	11	77	109	187	356	13	1
2015	2	1,200	270	544	164	115	10	78	99	167	321	11	1
2015	3	1,054	265	567	183	128	9	76	99	166	356	11	1
2015	4	796	238	547	179	131	8	74	100	169	345	10	1
2015	5	785	258	615	192	143	8	76	101	172	356	9	1
2015	6	1,083	293	642	203	148	9	83	111	192	345	8	1
2015	7	1,308	325	703	219	157	10	88	114	199	348	8	1
2015	8	1,241	318	689	216	155	10	87	110	191	350	9	1
2015	9	878	267	596	192	143	8	83	106	181	336	11	1
2015	10	770	244	569	184	136	11	78	99	167	342	11	1
2015	11	975	255	551	176	125	12	77	99	167	338	12	1
2015	12	1,356	308	618	181	126	12	75	104	177	353	13	1
2016	1	1,459	318	634	181	126	11	77	109	187	356	13	1
2016	2	1,244	281	573	169	120	10	78	100	167	332	11	1
2016	3	1,053	267	575	181	129	9	76	99	166	356	11	1
2016	4	794	239	554	178	132	8	74	100	169	345	10	1
2016	5	782	258	621	191	144	8	76	102	172	356	9	1
2016	6	1,080	293	647	201	149	9	83	112	193	345	8	1
2016	7	1,306	325	708	218	157	10	88	115	200	348	8	1
2016	8	1,241	318	694	214	156	10	87	110	191	350	9	1
2016	9	880	268	601	191	144	8	83	106	182	336	11	1
2016	10	776	244	574	184	137	11	78	100	168	342	11	1
2016	11	985	256	557	176	126	12	78	100	168	338	12	1
2016	12	1,372	308	623	181	127	12	76	105	178	353	13	1
2017	1	1,477	319	640	181	127	11	77	110	188	356	13	1
2017	2	1,214	272	557	164	117	10	78	101	168	321	11	1
2017	3	1,064	267	580	182	130	9	76	100	167	356	11	1
2017	4	802	239	558	178	132	8	74	101	170	345	10	1

2017	5	788	259	625	191	144	8	76	102	173	356	9	1
2017	6	1,086	293	649	201	149	9	84	112	194	345	8	-
2017	7	1,311	325	710	217	158	10	88	115	201	348	8	-
2017	8	1,246	317	695	214	156	10	87	111	192	350	9	-
2017	9	885	268	603	191	144	8	84	107	182	336	11	-
2017	10	783	245	577	184	137	11	78	100	169	342	11	-
2017	11	995	256	559	176	127	12	78	100	168	338	12	-
2017	12	1,386	308	625	181	128	12	76	106	179	353	13	-
2018	1	1,494	319	644	182	128	11	78	110	189	356	13	-
2018	2	1,228	272	560	164	118	10	78	101	169	321	11	-
2018	3	1,076	268	583	182	130	9	76	100	168	356	11	-
2018	4	810	240	561	179	133	8	74	102	171	345	10	-
2018	5	795	259	627	192	145	8	77	103	174	356	9	-
2018	6	1,093	293	651	202	150	9	84	113	194	345	8	-
2018	7	1,319	324	711	218	158	10	88	115	201	348	8	-
2018	8	1,254	317	696	215	156	10	87	111	193	350	9	-
2018	9	893	268	605	192	144	8	84	107	183	336	11	-
2018	10	791	245	579	186	137	11	78	101	169	342	11	-
2018	11	1,006	256	562	177	127	12	78	101	169	338	12	-
2018	12	1,403	308	628	183	128	12	76	106	180	353	13	-
2019	1	1,514	320	646	183	128	11	78	111	189	356	13	-
2019	2	1,244	273	562	166	118	10	78	101	169	321	11	-
2019	3	1,090	268	585	184	131	9	76	100	168	356	11	-
2019	4	820	241	563	181	133	8	74	102	171	345	10	-
2019	5	804	260	629	193	145	8	77	103	174	356	9	-
2019	6	1,102	293	652	203	150	9	84	113	195	345	8	-
2019	7	1,328	324	712	220	158	10	88	116	202	348	8	-
2019	8	1,263	317	697	216	156	10	87	111	193	350	9	-
2019	9	900	268	606	193	145	8	84	107	183	336	11	-
2019	10	800	245	581	187	138	11	78	101	170	342	11	-

2019	11	1,018	257	564	179	127	12	78	101	169	338	12	-
2019	12	1,419	308	630	184	129	12	76	106	180	353	13	-
2020	1	1,524	319	642	184	128	11	78	111	190	356	13	-
2020	2	1,297	282	580	173	122	10	78	101	170	332	11	-
2020	3	1,094	267	582	185	131	9	76	100	169	356	11	-
2020	4	821	240	560	182	133	8	74	102	172	345	10	-
2020	5	803	258	625	194	145	7	76	103	174	356	9	-
2020	6	1,101	291	648	204	150	9	83	113	195	345	8	-
2020	7	1,328	322	708	220	158	10	88	116	202	348	8	-
2020	8	1,262	315	693	217	156	10	87	111	193	350	9	-
2020	9	898	266	603	194	144	8	83	107	184	336	11	-
2020	10	798	244	579	188	137	10	78	101	170	342	11	-
2020	11	1,018	255	562	179	127	12	78	101	170	338	12	-
2020	12	1,421	306	628	185	128	11	75	106	180	353	13	-
2021	1	1,532	318	648	185	128	11	77	111	190	356	13	-
2021	2	1,258	271	564	168	118	10	78	101	170	321	11	-
2021	3	1,100	267	588	186	131	9	76	101	169	356	11	-
2021	4	825	239	565	183	133	8	74	102	172	345	10	-
2021	5	807	258	630	196	145	7	76	103	175	356	9	-
2021	6	1,107	291	653	206	150	9	83	113	196	345	8	-
2021	7	1,337	322	713	222	158	10	88	116	203	348	8	-
2021	8	1,271	315	698	219	156	10	87	112	194	350	9	-
2021	9	906	267	608	196	145	8	84	108	185	336	11	-
2021	10	806	245	584	190	138	10	78	102	171	342	11	-
2021	11	1,030	256	568	182	128	12	78	102	171	338	12	-
2021	12	1,441	308	634	188	129	11	76	107	181	353	13	-
2022	1	1,567	320	651	188	129	11	78	112	191	356	13	-
2022	2	1,286	273	568	170	119	10	79	103	171	321	11	-
2022	3	1,125	268	591	189	132	9	76	102	170	356	11	-
2022	4	844	240	568	186	134	8	74	104	173	345	10	-

2022	5	824	259	634	198	146	7	77	105	176	356	9	-
2022	6	1,128	291	656	208	151	9	84	115	197	345	8	-
2022	7	1,361	322	716	225	159	10	89	118	204	348	8	-
2022	8	1,293	315	702	222	157	9	88	113	195	350	9	-
2022	9	922	267	611	198	145	8	84	109	185	336	11	-
2022	10	822	245	587	193	139	10	78	103	172	342	11	-
2022	11	1,050	256	570	184	128	12	78	103	171	338	12	-
2022	12	1,467	308	637	190	130	11	76	108	182	353	13	-
2023	1	1,585	320	657	190	130	11	78	113	192	356	13	-
2023	2	1,300	273	572	172	119	9	78	103	172	321	11	-
2023	3	1,139	269	596	191	132	9	76	102	171	356	11	-
2023	4	856	241	572	188	134	8	74	104	174	345	10	-
2023	5	836	259	637	201	146	7	77	105	177	356	9	-
2023	6	1,143	291	659	211	151	9	84	115	197	345	8	-
2023	7	1,379	322	718	227	159	10	89	118	204	348	8	-
2023	8	1,311	315	705	224	157	9	88	114	196	350	9	-
2023	9	936	267	614	201	146	8	84	110	186	336	11	-
2023	10	835	246	591	195	139	10	79	103	172	342	11	-
2023	11	1,066	257	574	186	129	12	78	103	172	338	12	-
2023	12	1,488	309	642	192	130	11	76	108	183	353	13	-
2024	1	1,604	321	661	193	130	11	78	113	193	356	13	-
2024	2	1,364	284	597	181	124	10	79	103	172	332	11	-
2024	3	1,154	270	600	194	133	9	77	103	172	356	11	-
2024	4	867	242	576	191	135	8	75	104	175	345	10	-
2024	5	847	260	640	204	147	7	77	105	177	356	9	-
2024	6	1,157	291	662	213	151	9	84	115	198	345	8	-
2024	7	1,396	322	721	230	159	10	89	119	205	348	8	-
2024	8	1,327	315	708	227	158	9	88	114	197	350	9	-
2024	9	948	268	617	204	146	8	84	110	187	336	11	-
2024	10	846	247	595	198	140	10	79	104	173	342	11	-

2024	11	1,079	258	579	189	130	12	79	104	173	338	12	-
2024	12	1,505	310	646	195	131	11	77	109	184	353	13	-
2025	1	1,617	323	664	197	131	11	78	114	194	356	13	-
2025	2	1,326	275	579	178	121	9	79	104	173	321	11	-
2025	3	1,162	271	603	198	134	9	77	104	173	356	11	-
2025	4	873	243	578	194	136	8	75	105	176	345	10	-
2025	5	852	260	642	207	147	7	77	106	179	356	9	-
2025	6	1,163	291	663	216	152	9	85	116	199	345	8	-
2025	7	1,403	321	722	233	160	10	89	120	207	348	8	-
2025	8	1,332	314	709	230	158	9	88	115	198	350	9	-
2025	9	951	267	619	206	147	8	84	111	188	336	11	-
2025	10	849	247	599	201	141	10	79	104	174	342	11	-
2025	11	1,082	259	583	192	131	12	79	104	174	338	12	-
2025	12	1,509	310	651	198	132	11	76	110	185	353	13	-
2026	1	1,618	323	673	200	133	11	78	115	195	356	13	-
2026	2	1,328	276	587	181	122	9	79	105	175	321	11	-
2026	3	1,164	272	612	201	136	9	77	105	174	356	11	-
2026	4	874	244	587	197	137	8	75	106	177	345	10	-
2026	5	854	262	651	210	149	7	78	108	180	356	9	-
2026	6	1,166	292	672	220	154	9	85	118	201	345	8	-
2026	7	1,407	322	733	237	163	10	90	121	209	348	8	-
2026	8	1,336	316	720	234	162	9	89	117	201	350	9	-
2026	9	955	269	629	210	150	8	85	112	190	336	11	-
2026	10	852	250	610	205	143	10	80	106	176	342	11	-
2026	11	1,087	261	595	196	133	12	79	106	175	338	12	-
2026	12	1,517	313	665	202	135	11	77	112	187	353	13	-
2027	1	1,627	326	689	205	136	11	79	117	197	356	13	-
2027	2	1,335	279	601	185	125	9	80	107	176	321	11	-
2027	3	1,170	275	627	206	138	9	78	107	176	356	11	-
2027	4	879	247	601	202	140	8	76	108	179	345	10	-

2027	5	859	265	666	215	152	7	79	110	182	356	9	-
2027	6	1,173	295	686	225	157	9	86	120	203	345	8	-
2027	7	1,416	325	748	243	166	10	91	123	211	348	8	-
2027	8	1,346	319	734	239	164	9	90	119	202	350	9	-
2027	9	962	272	642	215	152	8	86	114	192	336	11	-
2027	10	859	253	623	210	146	10	80	108	178	342	11	-
2027	11	1,096	265	607	200	135	12	80	108	177	338	12	-
2027	12	1,530	317	677	207	137	11	78	113	188	353	13	-
2028	1	1,641	330	698	209	137	11	80	118	198	356	13	-
2028	2	1,395	292	631	195	130	10	80	108	177	332	11	-
2028	3	1,180	278	636	209	140	9	78	107	177	356	11	-
2028	4	886	250	609	205	142	8	76	109	180	345	10	-
2028	5	865	267	674	219	154	7	79	110	183	356	9	-
2028	6	1,181	297	694	228	159	9	86	120	204	345	8	-
2028	7	1,426	328	756	246	167	10	91	124	212	348	8	-
2028	8	1,354	321	743	243	166	9	90	119	203	350	9	-
2028	9	968	275	650	218	154	8	86	115	192	336	11	-
2028	10	864	255	632	213	147	10	80	108	178	342	11	-
2028	11	1,103	267	616	204	137	12	80	108	178	338	12	-
2028	12	1,539	319	687	211	139	11	78	113	189	353	13	-
2029	1	1,651	332	707	212	139	11	80	118	199	356	13	-
2029	2	1,354	284	617	192	128	9	80	108	178	321	11	-
2029	3	1,187	281	644	213	142	9	78	108	177	356	11	-
2029	4	891	252	617	209	143	7	76	109	180	345	10	-
2029	5	870	269	682	222	156	7	79	110	183	356	9	-
2029	6	1,187	299	701	232	160	9	86	120	205	345	8	-
2029	7	1,432	329	763	249	169	10	91	124	212	348	8	-
2029	8	1,360	322	749	246	168	9	90	120	204	350	9	-
2029	9	972	276	657	221	155	8	86	115	193	336	11	-
2029	10	867	257	639	216	149	10	80	108	179	342	11	-

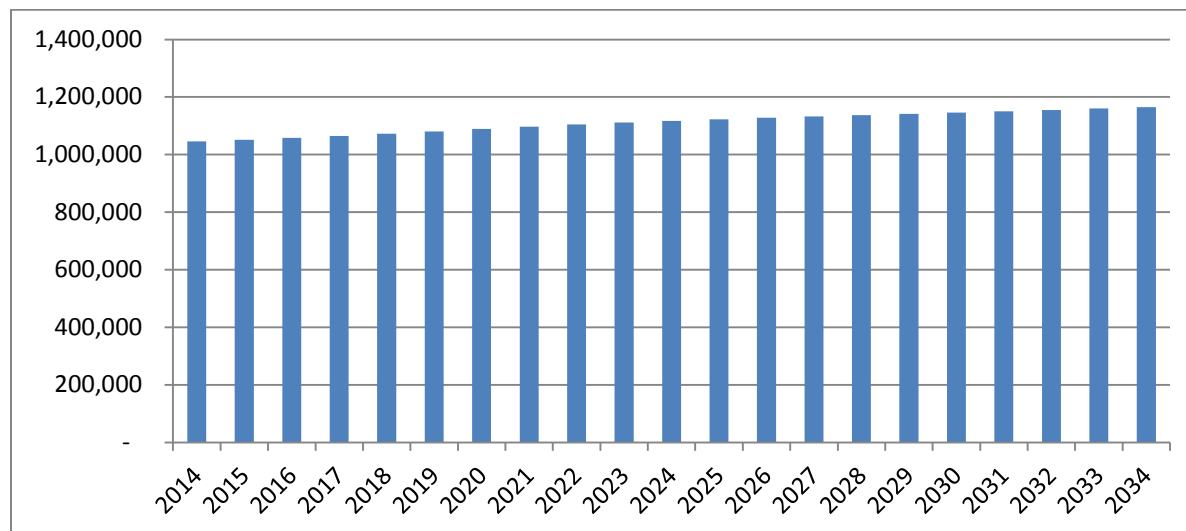
2029	11	1,107	269	624	207	138	12	80	108	178	338	12	-
2029	12	1,544	321	695	213	140	11	78	113	189	353	13	-
2030	1	1,658	333	715	214	140	11	79	118	199	356	13	-
2030	2	1,361	285	623	194	129	9	80	108	178	321	11	-
2030	3	1,193	282	651	215	143	8	78	108	178	356	11	-
2030	4	896	252	623	211	144	7	76	109	181	345	10	-
2030	5	875	270	688	224	156	7	79	110	184	356	9	-
2030	6	1,194	299	707	234	161	9	86	121	206	345	8	-
2030	7	1,441	329	769	252	170	10	91	124	213	348	8	-
2030	8	1,369	323	756	248	169	9	90	120	205	350	9	-
2030	9	978	277	663	224	156	8	86	115	194	336	11	-
2030	10	874	258	645	219	150	10	80	108	180	342	11	-
2030	11	1,115	270	630	209	139	12	80	108	179	338	12	-
2030	12	1,556	323	703	216	141	11	78	114	190	353	13	-
2031	1	1,670	335	722	217	141	11	79	119	200	356	13	-
2031	2	1,370	286	630	196	130	9	80	108	179	321	11	-
2031	3	1,201	283	657	217	144	8	78	108	178	356	11	-
2031	4	902	254	629	213	145	7	76	109	181	345	10	-
2031	5	881	271	694	227	157	7	79	111	185	356	9	-
2031	6	1,202	300	712	236	162	9	86	121	206	345	8	-
2031	7	1,450	330	774	254	171	10	91	125	214	348	8	-
2031	8	1,378	323	761	251	170	9	90	120	205	350	9	-
2031	9	985	278	668	226	157	8	86	115	194	336	11	-
2031	10	880	259	651	221	151	10	80	109	180	342	11	-
2031	11	1,123	272	636	211	140	12	80	108	179	338	12	-
2031	12	1,567	324	710	218	142	11	78	114	191	353	13	-
2032	1	1,682	336	729	219	142	11	79	119	201	356	13	-
2032	2	1,430	298	659	205	135	9	80	108	179	332	11	-
2032	3	1,210	284	663	220	145	8	78	108	179	356	11	-
2032	4	909	255	635	215	146	7	76	110	182	345	10	-

2032	5	888	272	699	229	158	7	79	111	185	356	9	-
2032	6	1,210	301	717	238	163	9	86	121	207	345	8	-
2032	7	1,460	331	779	256	172	10	91	125	215	348	8	-
2032	8	1,387	324	766	253	171	9	90	121	206	350	9	-
2032	9	992	279	673	228	158	8	86	116	195	336	11	-
2032	10	887	261	657	223	152	10	80	109	181	342	11	-
2032	11	1,131	273	643	213	141	12	80	109	180	338	12	-
2032	12	1,578	326	717	220	143	11	78	114	191	353	13	-
2033	1	1,697	338	736	221	143	11	79	119	201	356	13	-
2033	2	1,392	289	642	200	132	9	80	109	180	321	11	-
2033	3	1,221	286	670	222	146	8	78	109	180	356	11	-
2033	4	918	256	641	217	147	7	76	110	183	345	10	-
2033	5	896	273	705	231	159	7	79	111	186	356	9	-
2033	6	1,221	302	722	240	164	9	86	122	207	345	8	-
2033	7	1,472	332	785	258	173	10	91	125	215	348	8	-
2033	8	1,399	325	772	255	172	9	90	121	207	350	9	-
2033	9	1,001	280	679	230	159	8	86	116	196	336	11	-
2033	10	895	262	664	225	153	10	80	109	181	342	11	-
2033	11	1,141	275	649	216	142	12	80	109	181	338	12	-
2033	12	1,591	328	724	223	144	11	78	115	192	353	13	-
2034	1	1,708	340	744	223	144	11	79	120	202	356	13	-
2034	2	1,402	291	649	202	133	9	80	109	181	321	11	-
2034	3	1,230	288	678	224	147	8	78	109	180	356	11	-
2034	4	924	258	648	219	148	7	76	110	183	345	10	-
2034	5	903	275	713	233	160	7	79	112	186	356	9	-
2034	6	1,229	303	729	242	165	9	86	122	208	345	8	-
2034	7	1,482	333	792	261	174	10	91	126	216	348	8	-
2034	8	1,408	326	779	257	173	9	90	122	207	350	9	-
2034	9	1,008	281	686	232	160	8	86	117	196	336	11	-
2034	10	902	264	671	228	154	10	80	110	182	342	11	-

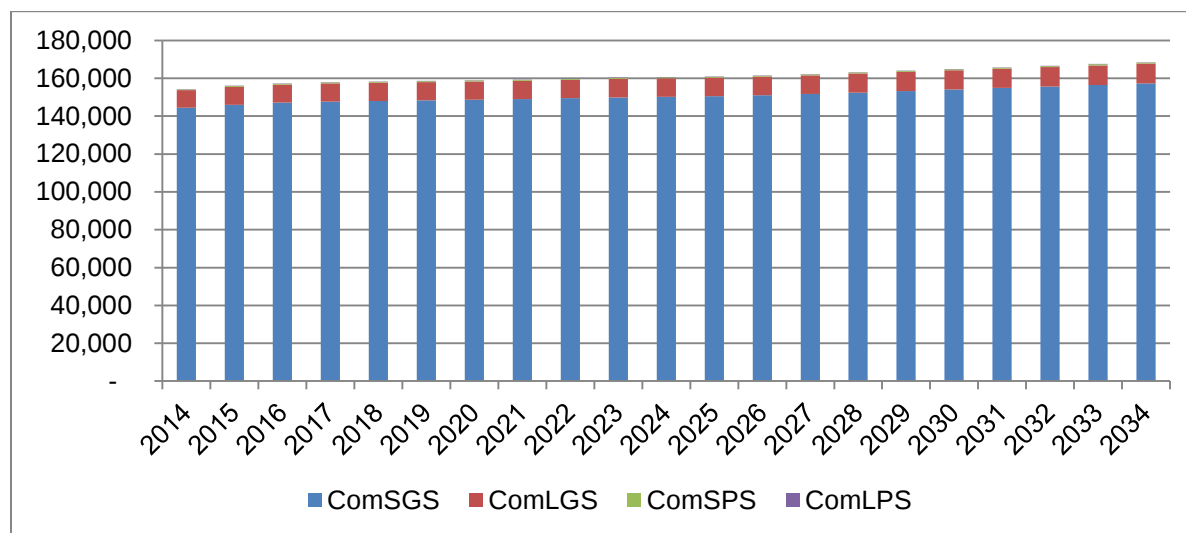
2034	11	1,150	276	657	218	143	12	80	110	181	338	12	-
2034	12	1,603	330	733	225	146	11	78	115	193	353	13	-

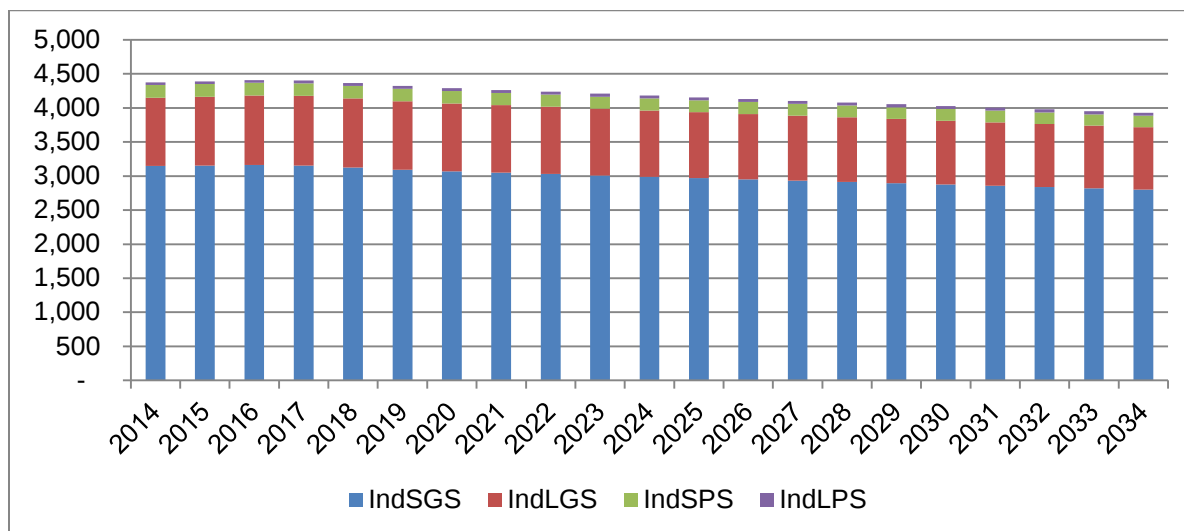
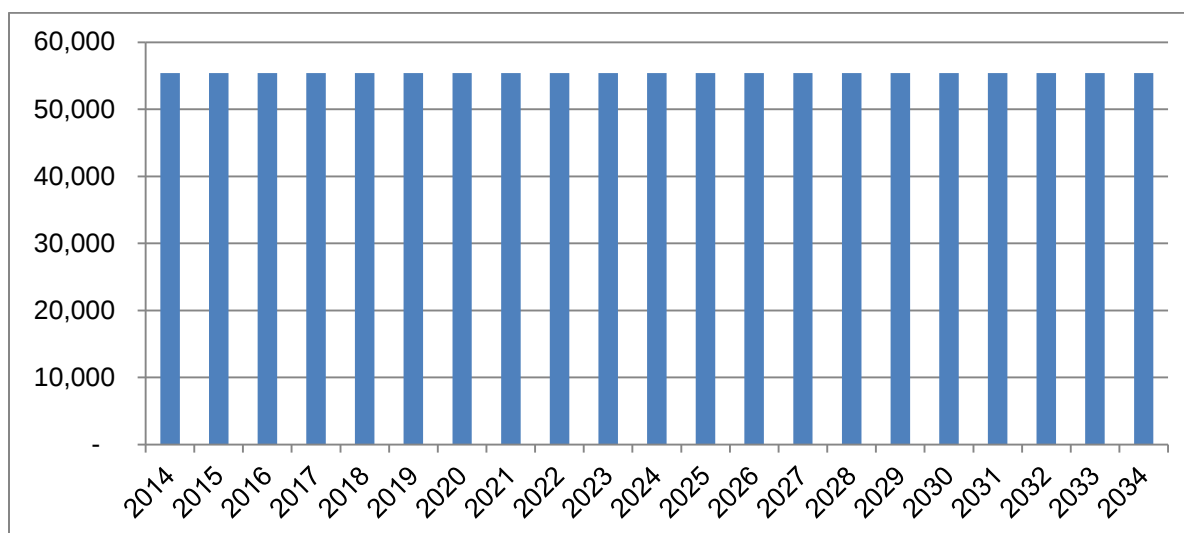
Forecast Customer Count

Forecast of Residential Class Customer Count



Forecast of Commercial Class Customer Count



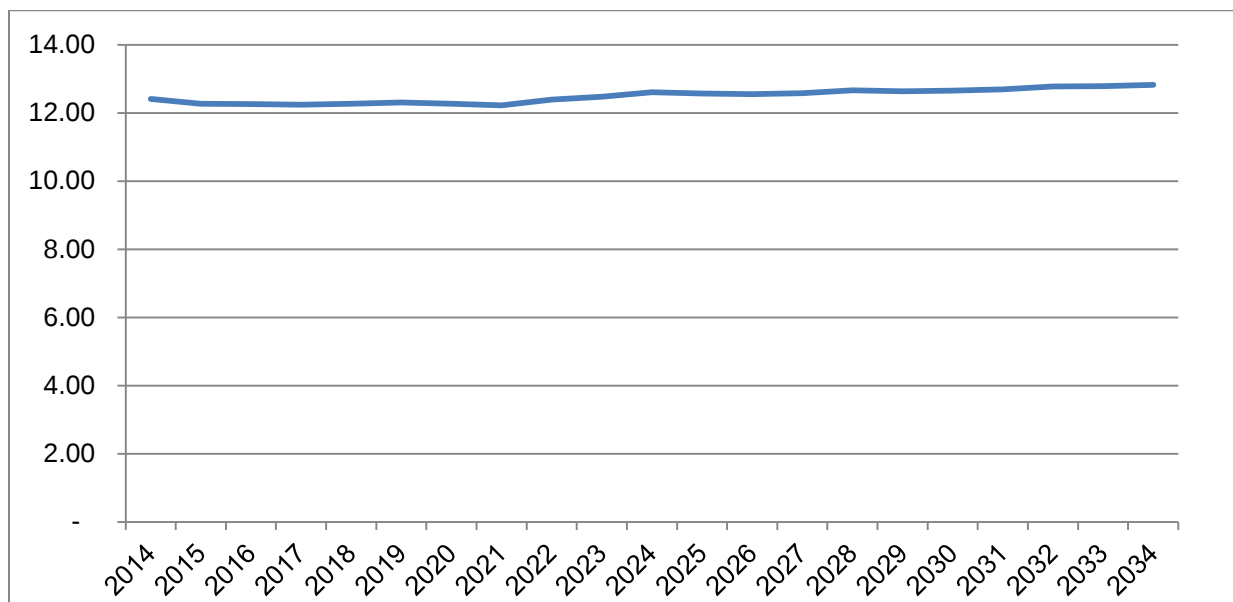
Forecast of Industrial Class Customer Count**Forecast of Lighting Class Customer Count**

Forecast of Ameren Missouri's Customer Counts

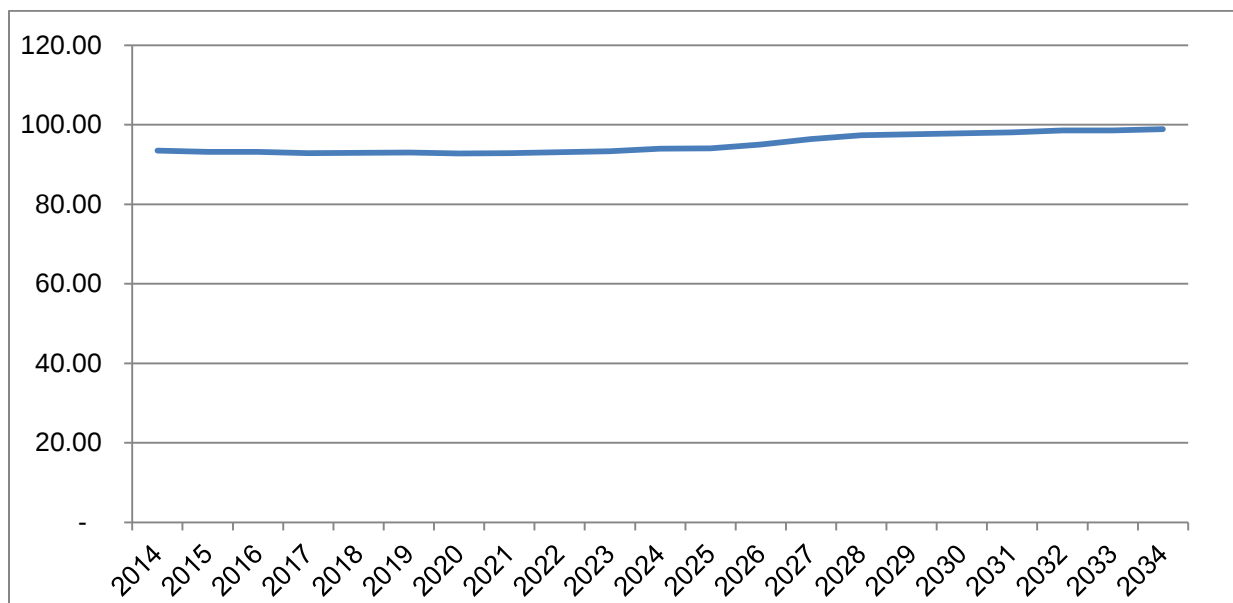
Year	Residential	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	Lighting
2014	1,045,667	144,378	9,304	467	37	3,146	1,004	186	40	55,414
2015	1,051,627	145,945	9,447	477	38	3,152	1,013	186	40	55,414
2016	1,058,042	147,071	9,535	486	39	3,161	1,020	186	41	55,414
2017	1,064,708	147,651	9,583	490	40	3,155	1,021	186	41	55,414
2018	1,072,480	148,035	9,618	490	40	3,124	1,013	184	41	55,414
2019	1,080,631	148,349	9,648	491	41	3,092	1,004	183	42	55,414
2020	1,089,384	148,622	9,676	492	41	3,068	997	181	42	55,414
2021	1,097,446	149,011	9,711	494	42	3,048	992	180	42	55,414
2022	1,104,799	149,442	9,750	496	42	3,029	986	179	42	55,414
2023	1,111,538	149,822	9,785	498	42	3,007	980	178	43	55,414
2024	1,117,540	150,160	9,818	499	43	2,987	974	177	43	55,414
2025	1,122,905	150,459	9,847	501	43	2,969	968	176	43	55,414
2026	1,127,845	150,973	9,893	502	44	2,949	962	175	44	55,414
2027	1,132,469	151,646	9,950	504	44	2,930	956	174	44	55,414
2028	1,136,999	152,452	10,017	506	45	2,912	950	173	44	55,414
2029	1,141,661	153,295	10,087	508	46	2,894	945	172	45	55,414
2030	1,146,228	154,077	10,153	511	46	2,874	939	171	45	55,414
2031	1,150,813	154,862	10,220	513	47	2,856	933	170	45	55,414
2032	1,155,301	155,660	10,288	516	47	2,837	927	169	46	55,414
2033	1,160,384	156,476	10,357	519	48	2,818	921	168	46	55,414
2034	1,165,258	157,358	10,432	522	48	2,801	916	167	46	55,414

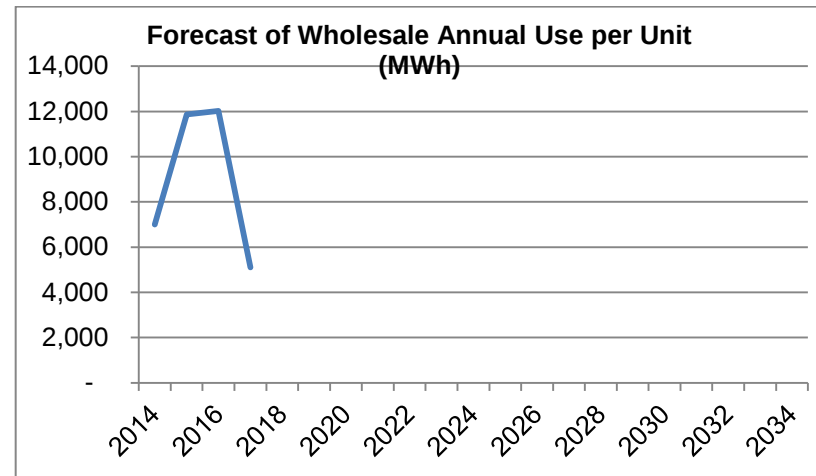
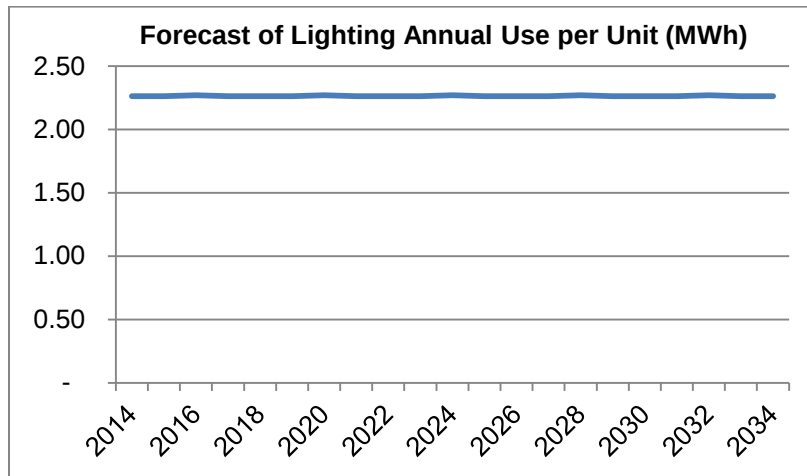
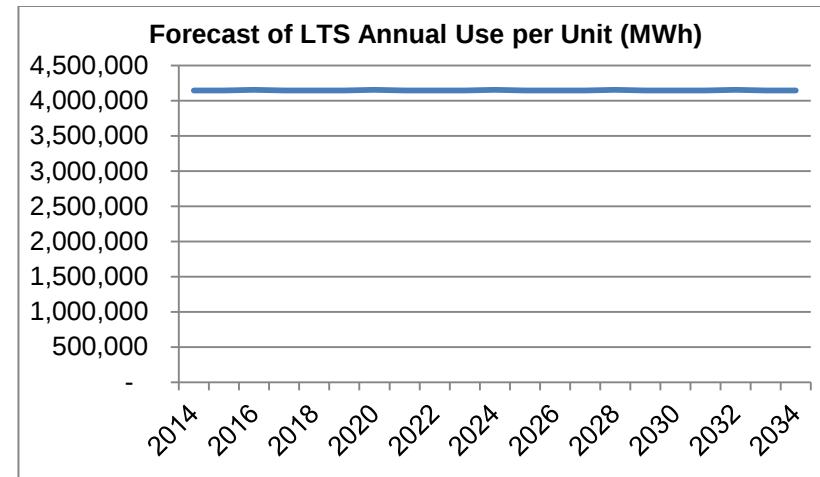
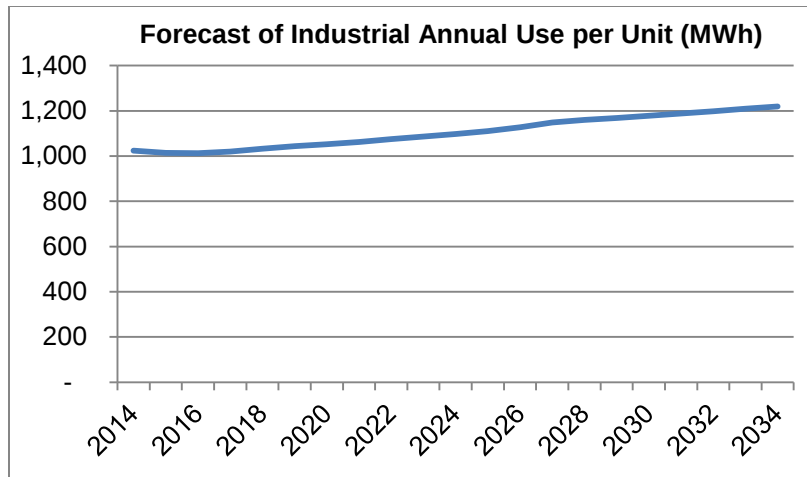
Annual Class Energy Use per Unit Forecast

Forecast of Residential Annual Use per Unit (MWh)



Forecast of Commercial Annual Use per Unit (MWh)



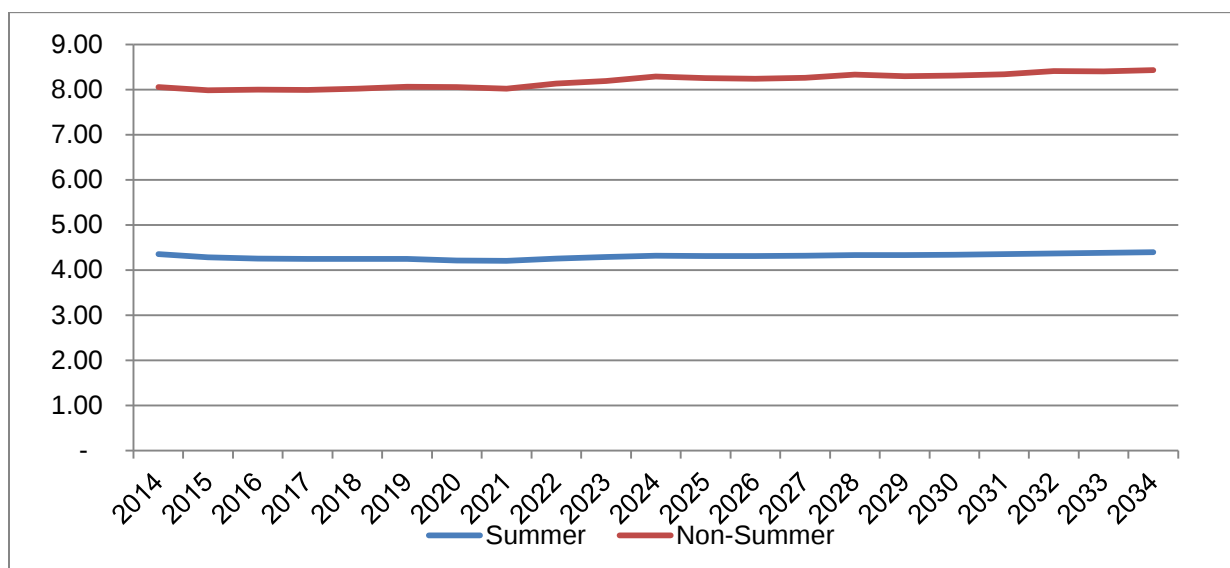


Forecast of Annual Energy Use per Unit by Revenue Class (MWh/Unit)

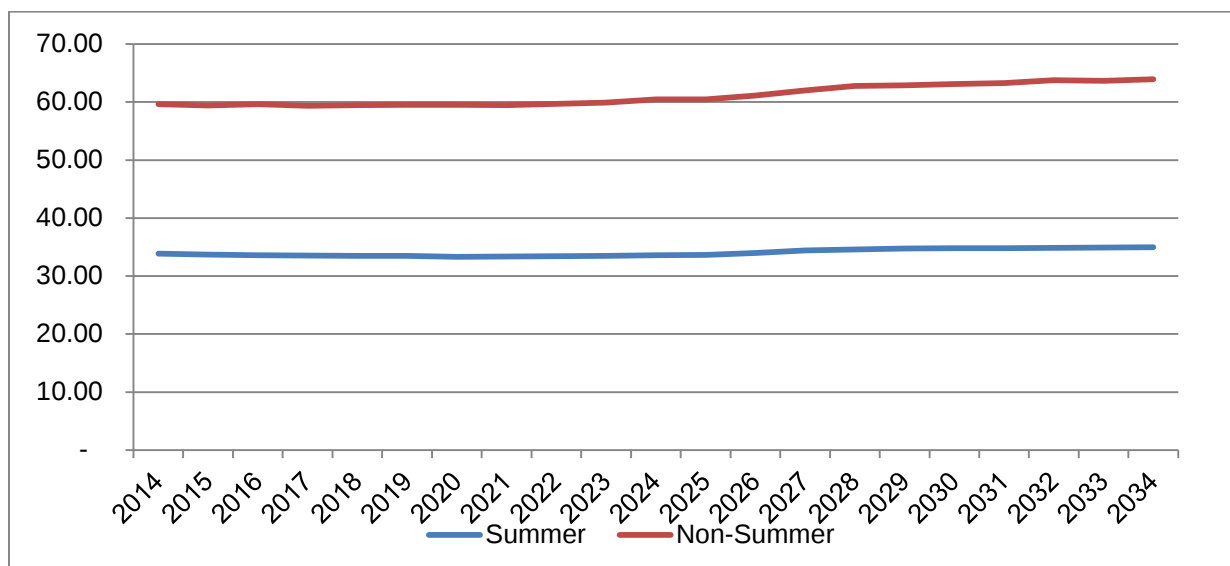
Year	Residential	Commercial	Industrial	LTS	Lighting	Wholesale
2014	12.41	93.50	1,024	4,145,341	2.26	6,993
2015	12.27	93.16	1,015	4,145,341	2.26	11,867
2016	12.26	93.23	1,013	4,156,806	2.27	12,028
2017	12.24	92.88	1,020	4,145,341	2.26	5,110
2018	12.27	92.94	1,032	4,145,341	2.26	-
2019	12.31	93.04	1,044	4,145,341	2.26	-
2020	12.27	92.79	1,052	4,156,806	2.27	-
2021	12.23	92.87	1,062	4,145,341	2.26	-
2022	12.39	93.13	1,076	4,145,341	2.26	-
2023	12.48	93.39	1,086	4,145,341	2.26	-
2024	12.61	94.02	1,098	4,156,806	2.27	-
2025	12.57	94.08	1,110	4,145,341	2.26	-
2026	12.55	95.06	1,128	4,145,341	2.26	-
2027	12.59	96.45	1,148	4,145,341	2.26	-
2028	12.67	97.40	1,159	4,156,806	2.27	-
2029	12.63	97.61	1,168	4,145,341	2.26	-
2030	12.66	97.90	1,178	4,145,341	2.26	-
2031	12.69	98.13	1,188	4,145,341	2.26	-
2032	12.78	98.61	1,198	4,156,806	2.27	-
2033	12.79	98.60	1,209	4,145,341	2.26	-
2034	12.83	98.92	1,220	4,145,341	2.26	-

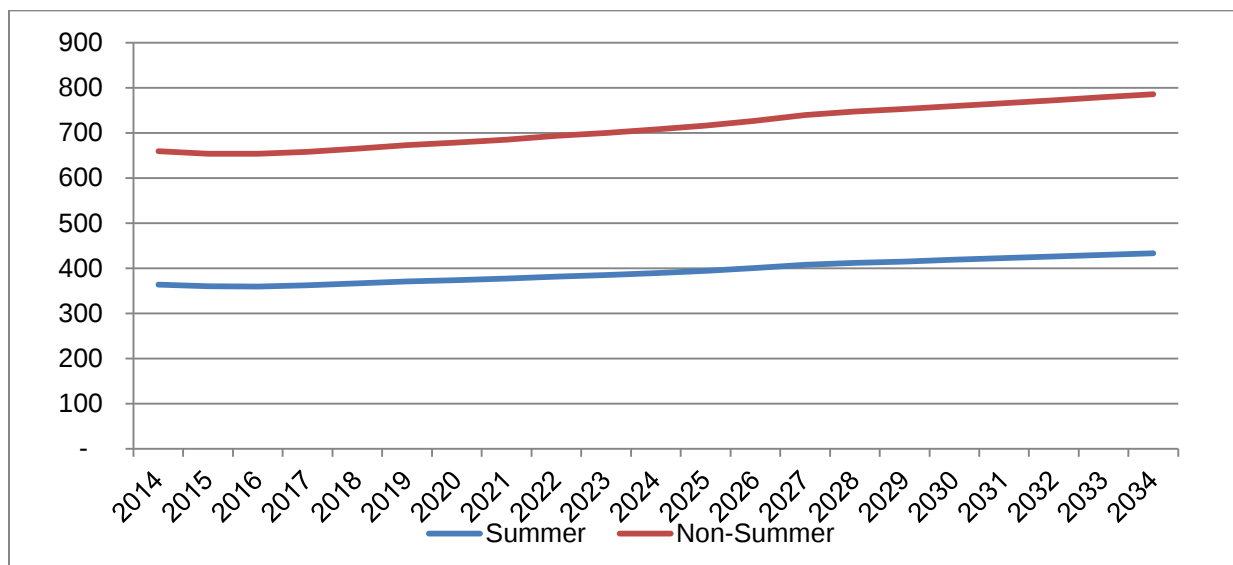
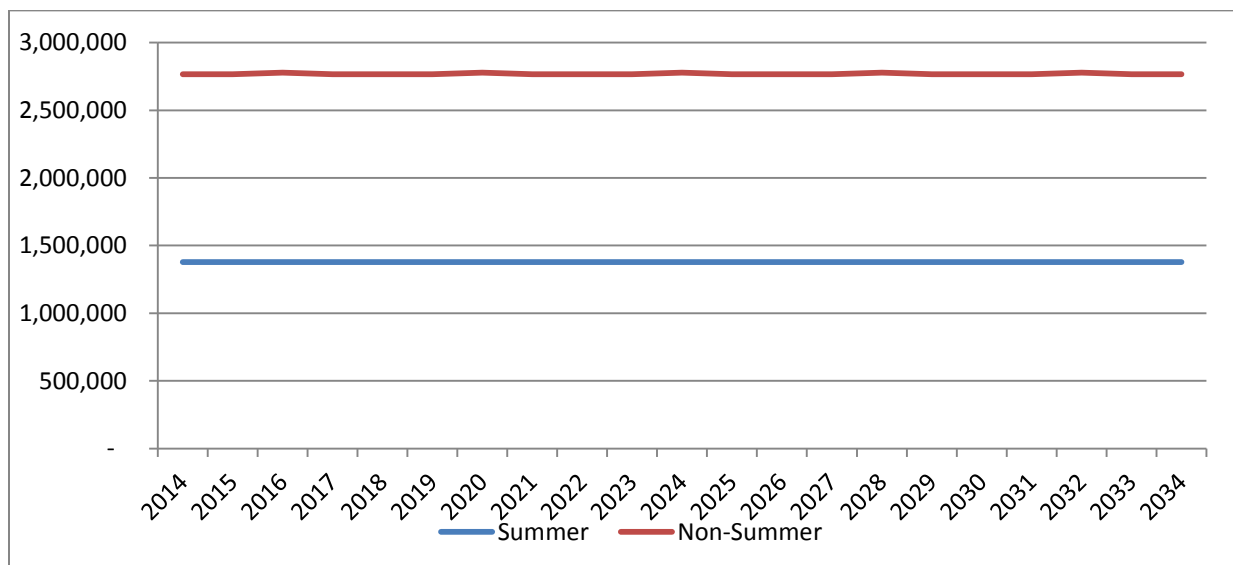
Summer and Non-Summer Class Energy Use per Unit Forecast

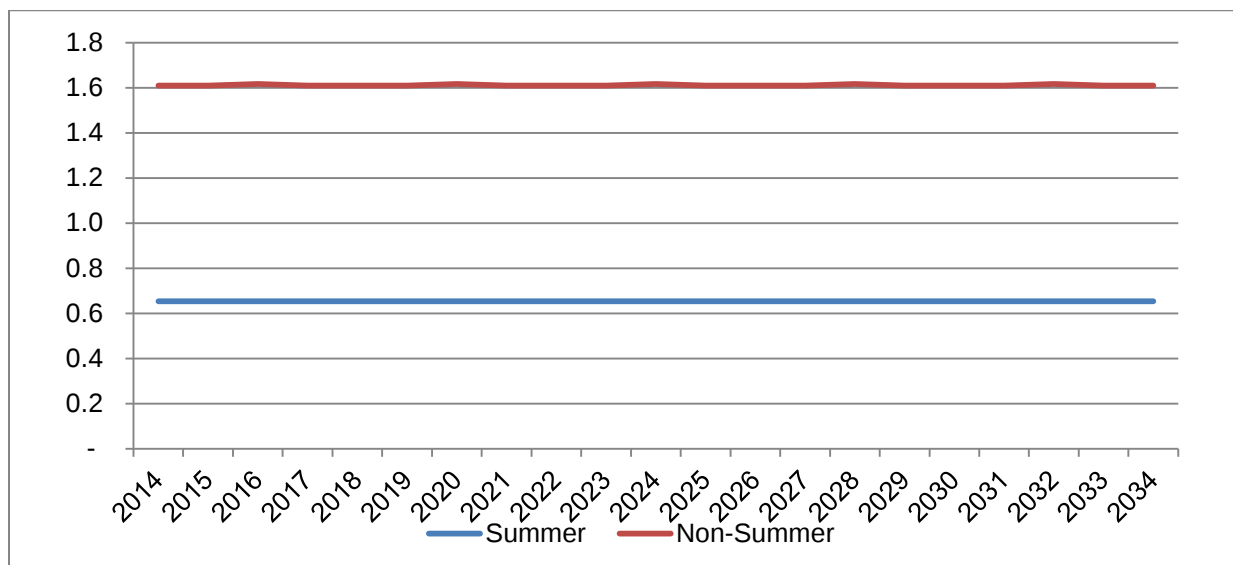
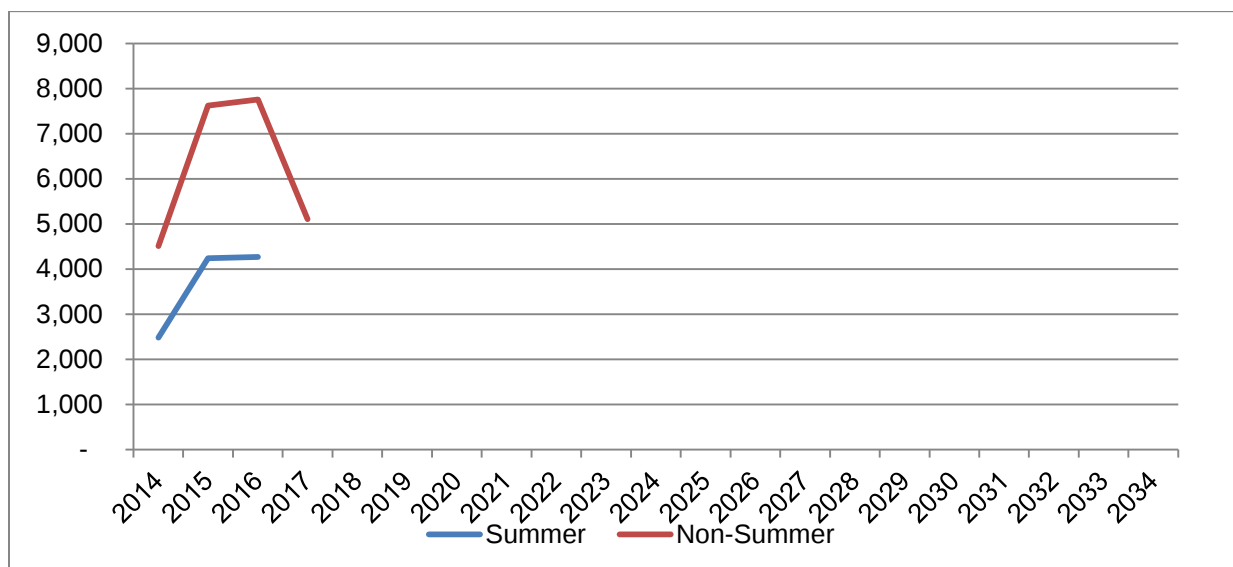
Forecast of Residential Energy Use per Unit (MWh/Unit)



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



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

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

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

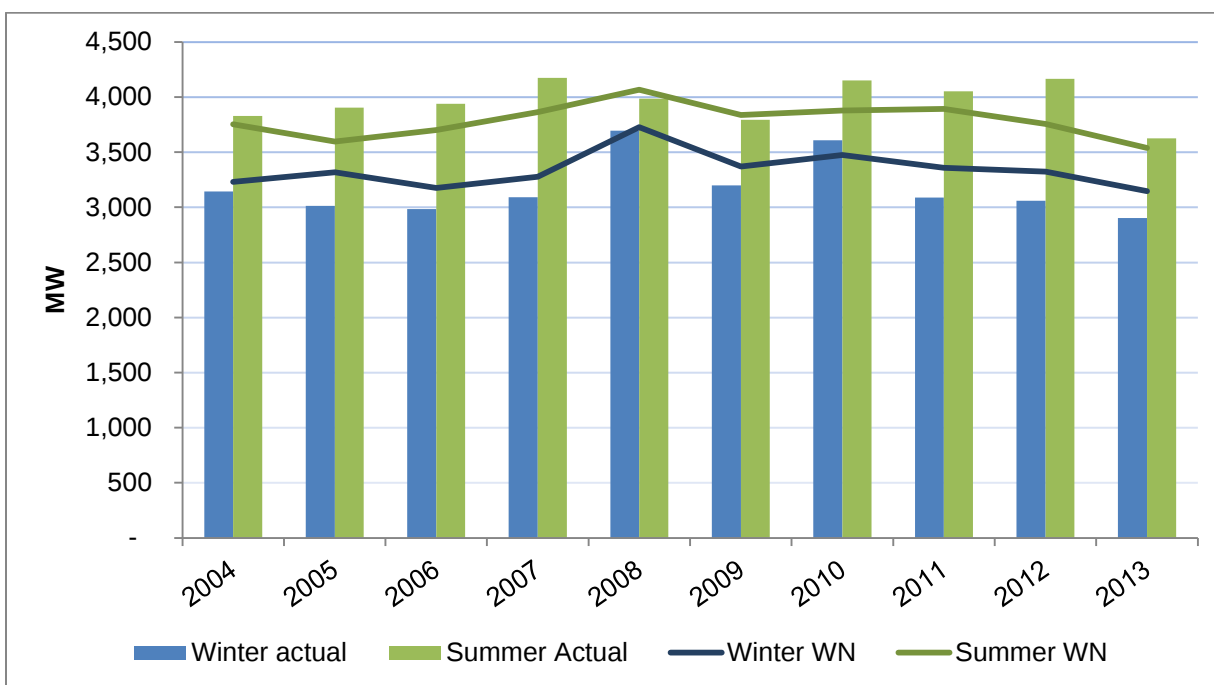
Year	Residential	Commercial	Industrial	LTS	Lighting	Wholesale
2014	4.36	33.88	364	1,378,332	0.65	2,482
2015	4.29	33.72	361	1,378,332	0.65	4,239
2016	4.26	33.60	360	1,378,332	0.65	4,268
2017	4.25	33.51	362	1,378,332	0.65	-
2018	4.25	33.50	367	1,378,332	0.65	-
2019	4.25	33.50	371	1,378,332	0.65	-
2020	4.21	33.29	373	1,378,332	0.65	-
2021	4.21	33.38	377	1,378,332	0.65	-
2022	4.26	33.44	382	1,378,332	0.65	-
2023	4.29	33.49	385	1,378,332	0.65	-
2024	4.32	33.58	390	1,378,332	0.65	-
2025	4.32	33.63	394	1,378,332	0.65	-
2026	4.31	33.96	401	1,378,332	0.65	-
2027	4.32	34.41	408	1,378,332	0.65	-
2028	4.33	34.61	412	1,378,332	0.65	-
2029	4.33	34.73	415	1,378,332	0.65	-
2030	4.34	34.79	419	1,378,332	0.65	-
2031	4.36	34.83	422	1,378,332	0.65	-
2032	4.37	34.86	426	1,378,332	0.65	-
2033	4.39	34.91	430	1,378,332	0.65	-
2034	4.40	34.98	434	1,378,332	0.65	-

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

Year	Residential	Commercial	Industrial	LTS	Lighting	Wholesale
2014	8.06	59.62	660	2,767,009	1.61	4,512
2015	7.99	59.43	654	2,767,009	1.61	7,627
2016	8.00	59.62	654	2,778,474	1.62	7,760
2017	7.99	59.36	658	2,767,009	1.61	5,110
2018	8.02	59.45	665	2,767,009	1.61	-
2019	8.06	59.54	673	2,767,009	1.61	-
2020	8.06	59.50	679	2,778,474	1.62	-
2021	8.02	59.49	685	2,767,009	1.61	-
2022	8.13	59.69	694	2,767,009	1.61	-
2023	8.19	59.90	700	2,767,009	1.61	-
2024	8.29	60.44	708	2,778,474	1.62	-
2025	8.26	60.45	716	2,767,009	1.61	-
2026	8.24	61.10	727	2,767,009	1.61	-
2027	8.26	62.03	740	2,767,009	1.61	-
2028	8.33	62.79	747	2,778,474	1.62	-
2029	8.30	62.88	753	2,767,009	1.61	-
2030	8.31	63.10	759	2,767,009	1.61	-
2031	8.34	63.29	766	2,767,009	1.61	-
2032	8.41	63.75	772	2,778,474	1.62	-
2033	8.40	63.69	779	2,767,009	1.61	-
2034	8.43	63.94	786	2,767,009	1.61	-

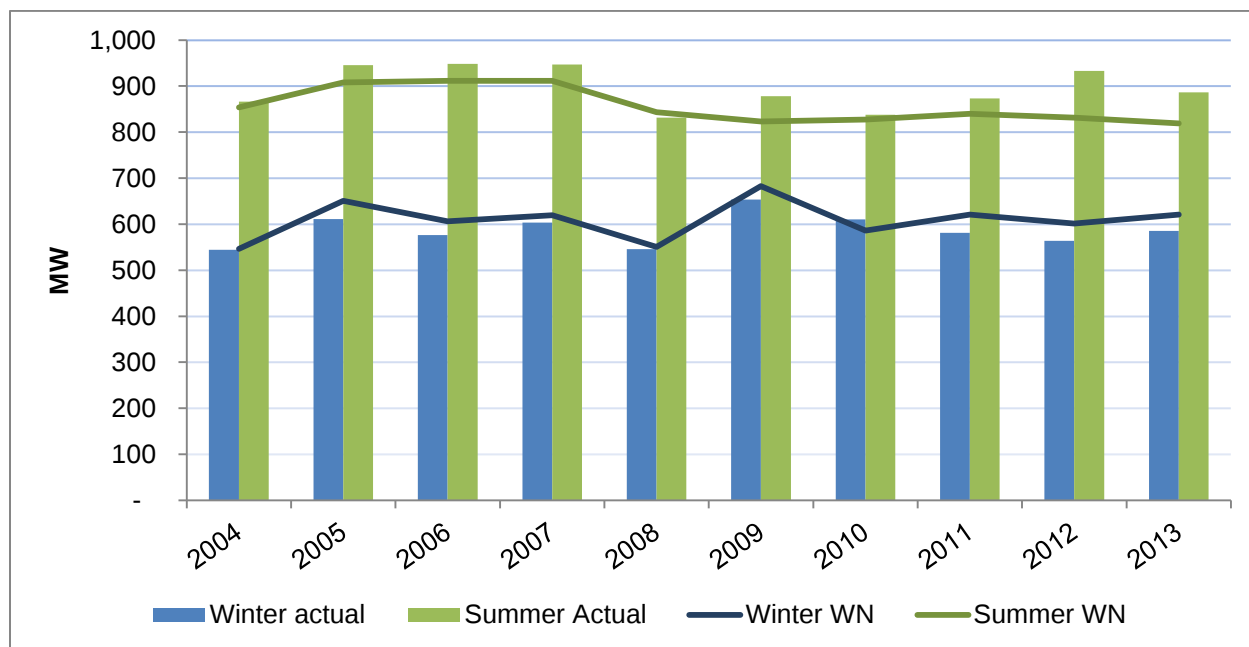
Class Demand per Unit and Total Demand at the time of Summer and Winter System Peak⁹

Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Residential Class (MW)

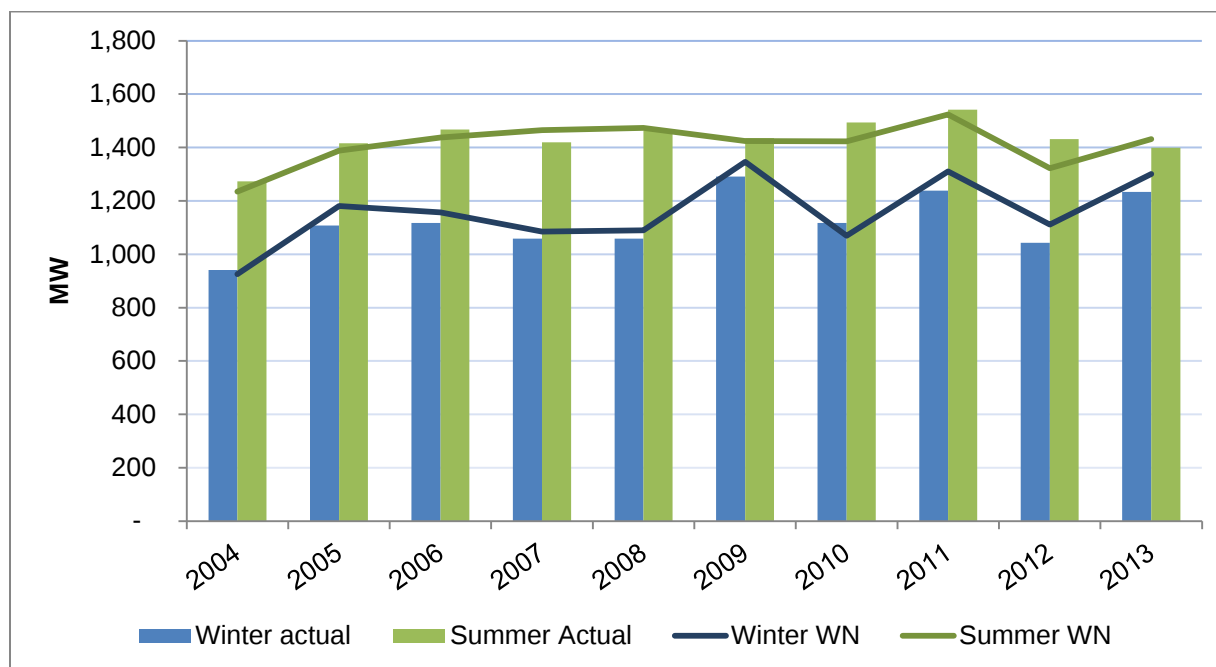


⁹ 4 CSR 240-22.030(7)(A)6

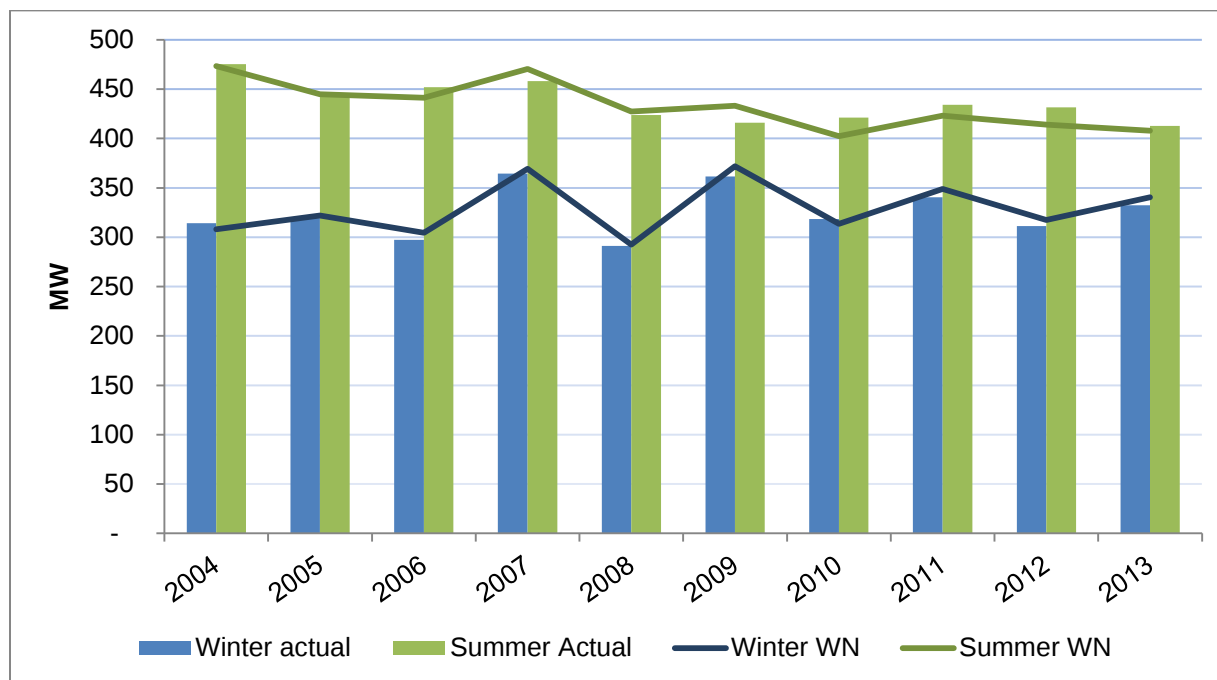
Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Commercial SGS (MW)



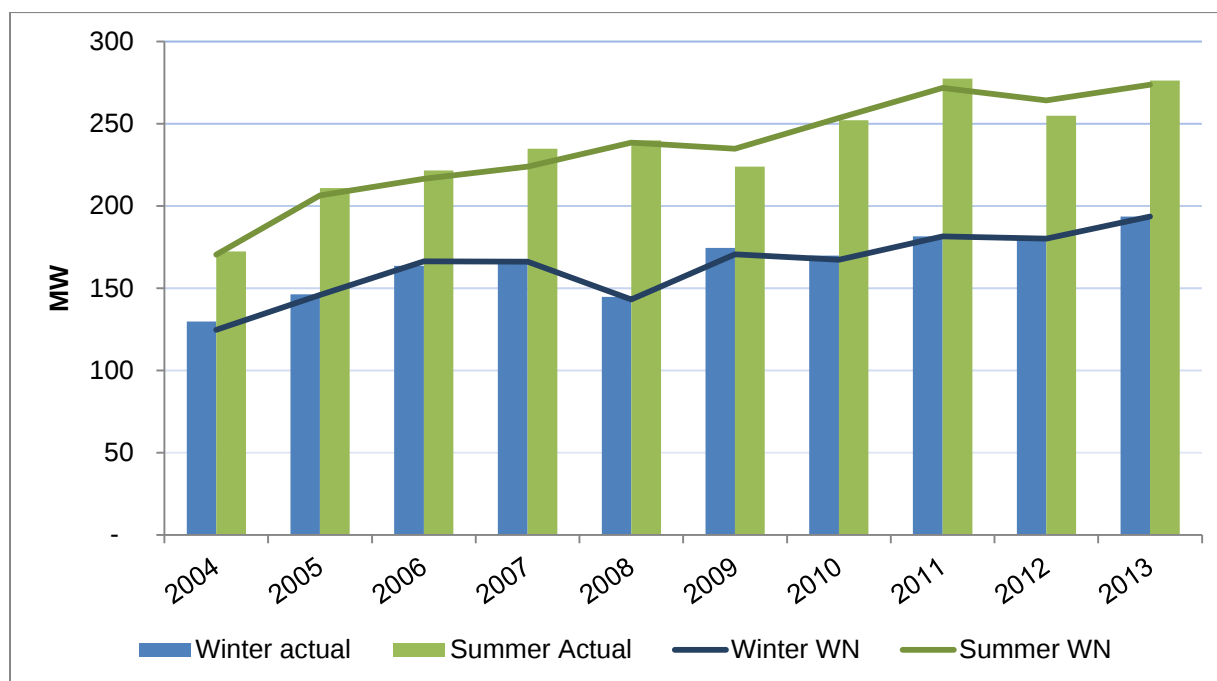
Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Commercial LGS (MW)



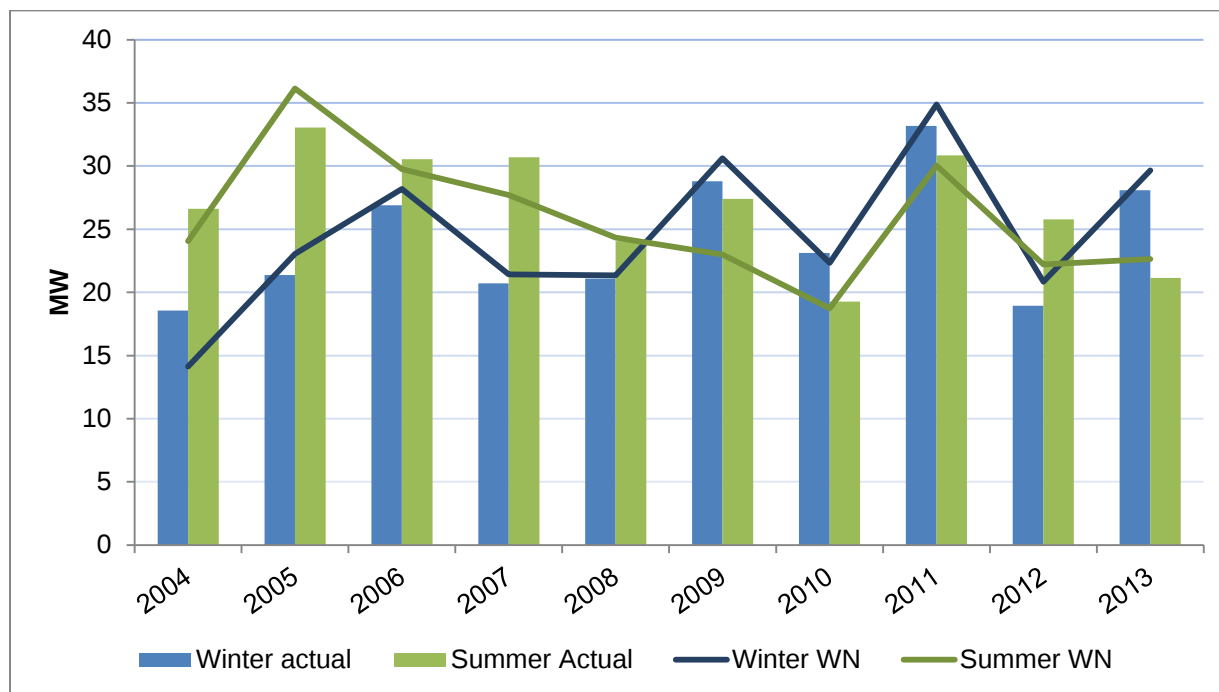
Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Commercial SPS (MW)



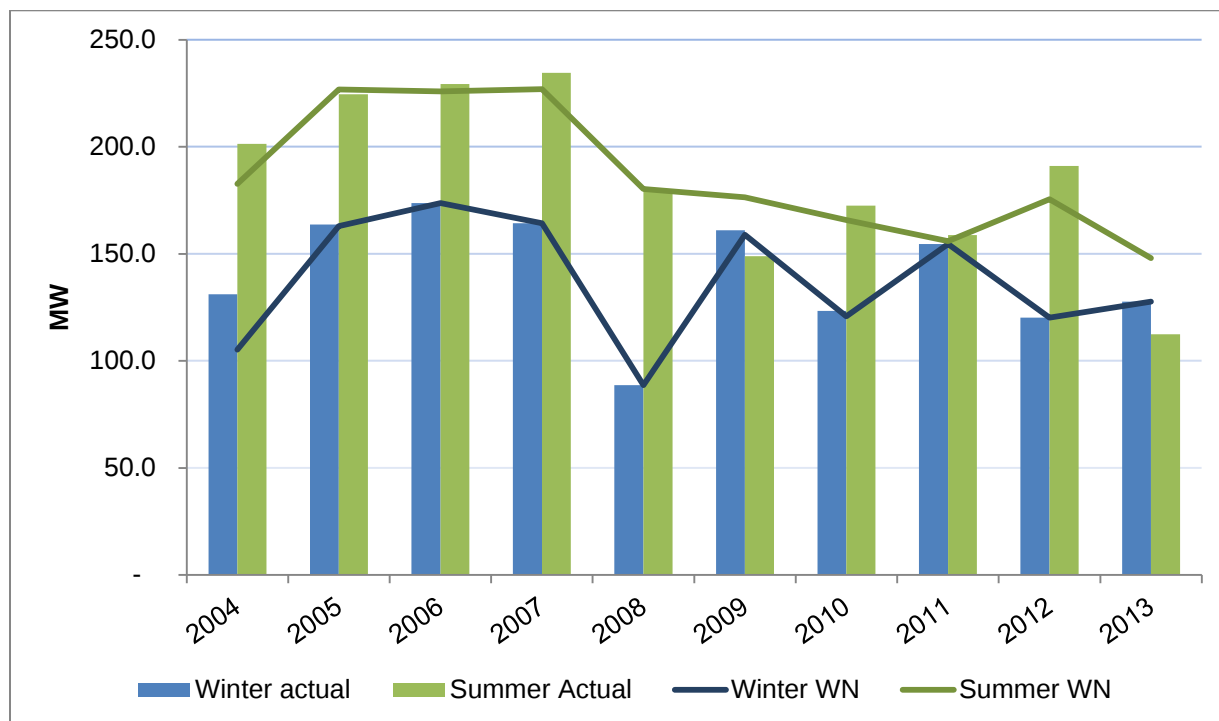
Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Commercial LPS (MW)

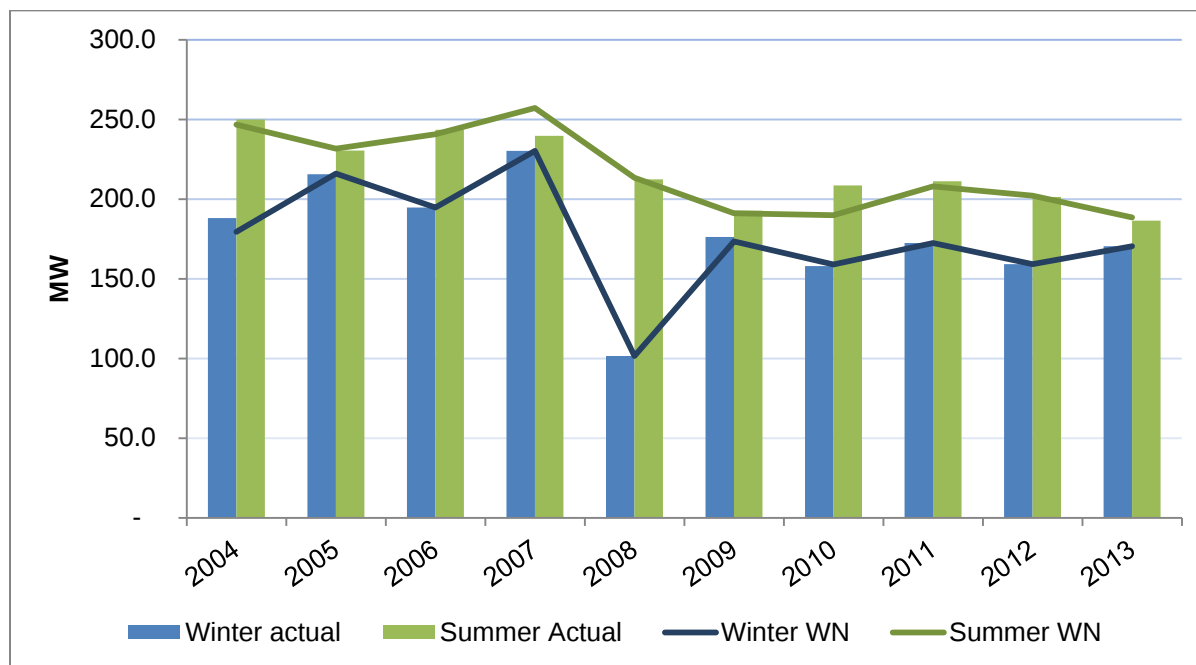
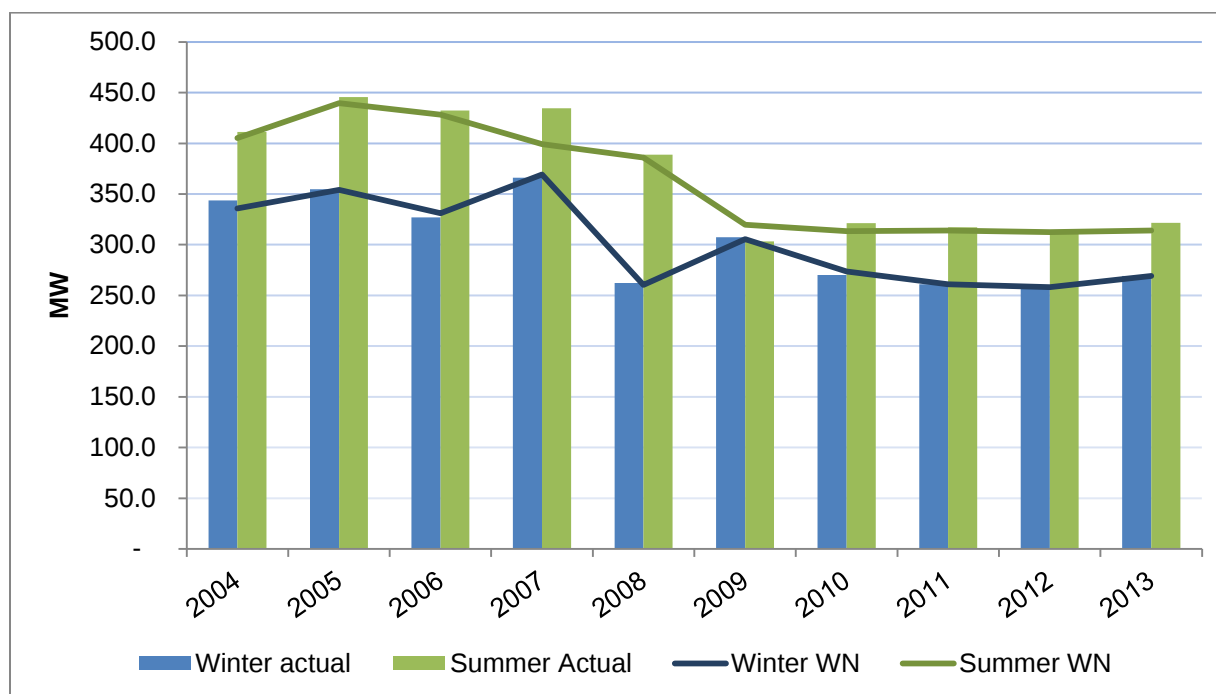


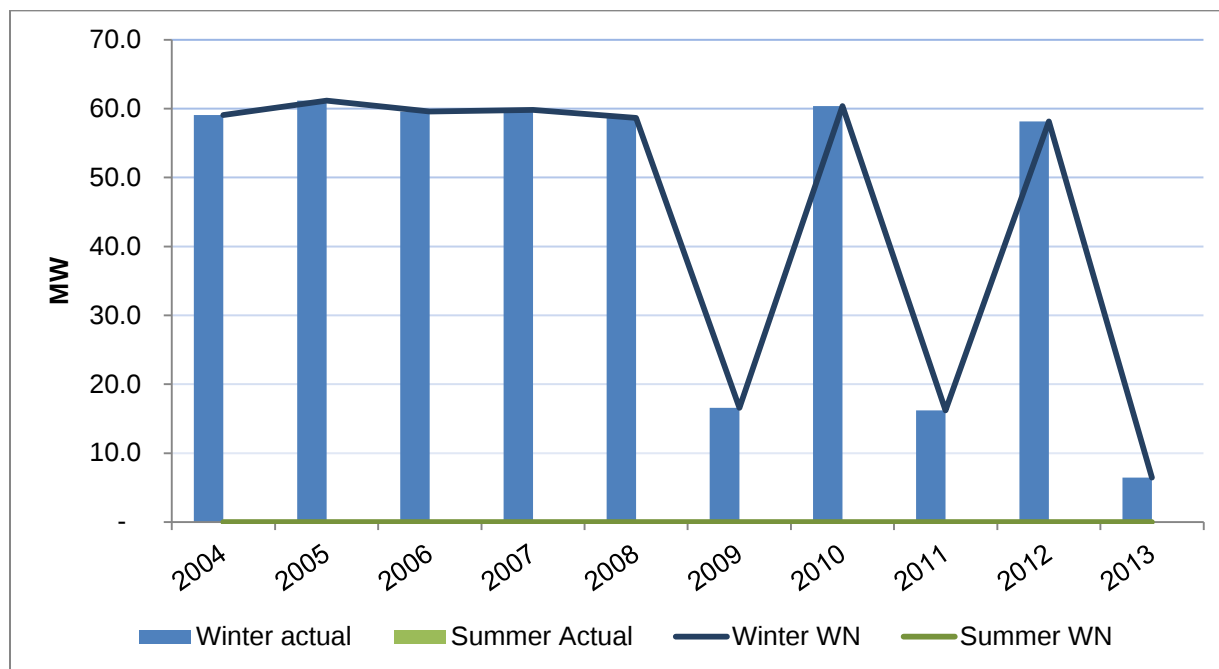
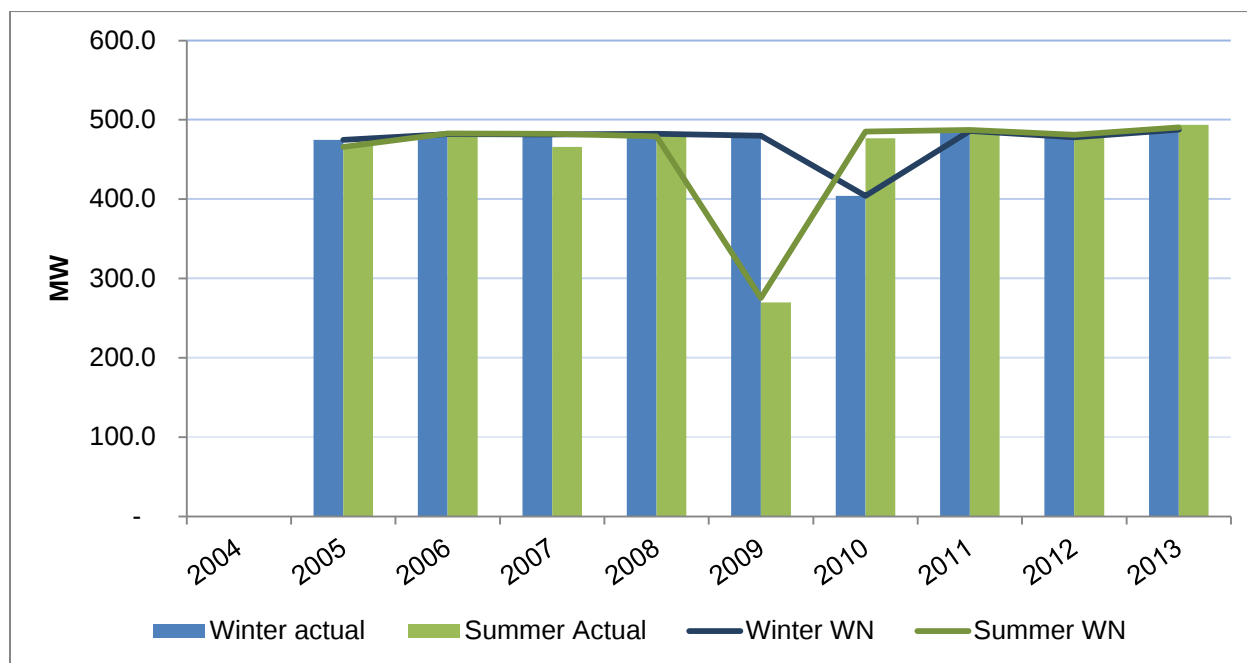
Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Industrial SGS (MW)



Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Industrial LGS (MW)



Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Industrial SPS (MW)**Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Industrial LPS (MW)**

Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Lighting (MW)**Historical Actual and Weather Normalized Summer and Winter Coincident Peak for Noranda (MW)**

Historical Summer Coincident Peak by Class (MW)

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	3,830	866	1,273	475	172	27	201	250	411	-	
2005	3,904	945	1,415	442	211	33	225	231	446	-	468
2006	3,938	948	1,468	452	222	31	229	244	432	-	483
2007	4,174	947	1,419	458	235	31	235	240	435	-	466
2008	3,986	831	1,463	424	240	24	179	212	389	-	479
2009	3,793	878	1,435	416	224	27	149	193	303	-	270
2010	4,151	838	1,494	421	252	19	173	209	321	-	477
2011	4,052	874	1,542	434	277	31	159	211	317	-	487
2012	4,166	933	1,432	432	255	26	191	201	311	-	477
2013	3,626	887	1,399	413	276	21	112	187	321	-	494

Historical Winter Coincident Peak by Class (MW)

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	3,142	544.3	941	314.2	129.8	18.6	131.1	188.1	343.6	59.1	
2005	3,013	611.4	1,108	319.3	146.3	21.4	163.8	215.7	354.9	61.2	474.9
2006	2,984	576.6	1,118	297.3	163.7	26.9	173.8	194.7	327.1	59.6	482.0
2007	3,092	603.8	1,059	364.4	165.6	20.7	164.3	230.3	366.1	59.8	481.8
2008	3,694	545.5	1,059	291.2	144.8	21.1	88.6	101.5	262.4	58.7	482.5
2009	3,199	653.3	1,291	361.5	174.6	28.8	161.0	176.2	307.4	16.6	479.9
2010	3,609	610.6	1,117	318.5	169.9	23.1	123.3	158.0	270.1	60.4	404.1
2011	3,088	581.2	1,238	340.3	181.6	33.2	154.6	172.4	260.9	16.2	486.2
2012	3,059	563.7	1,043	311.3	180.2	18.9	120.3	159.2	258.1	58.2	478.2
2013	2,901	585.7	1,234	332.4	193.6	28.1	127.7	170.4	269.2	6.5	487.6

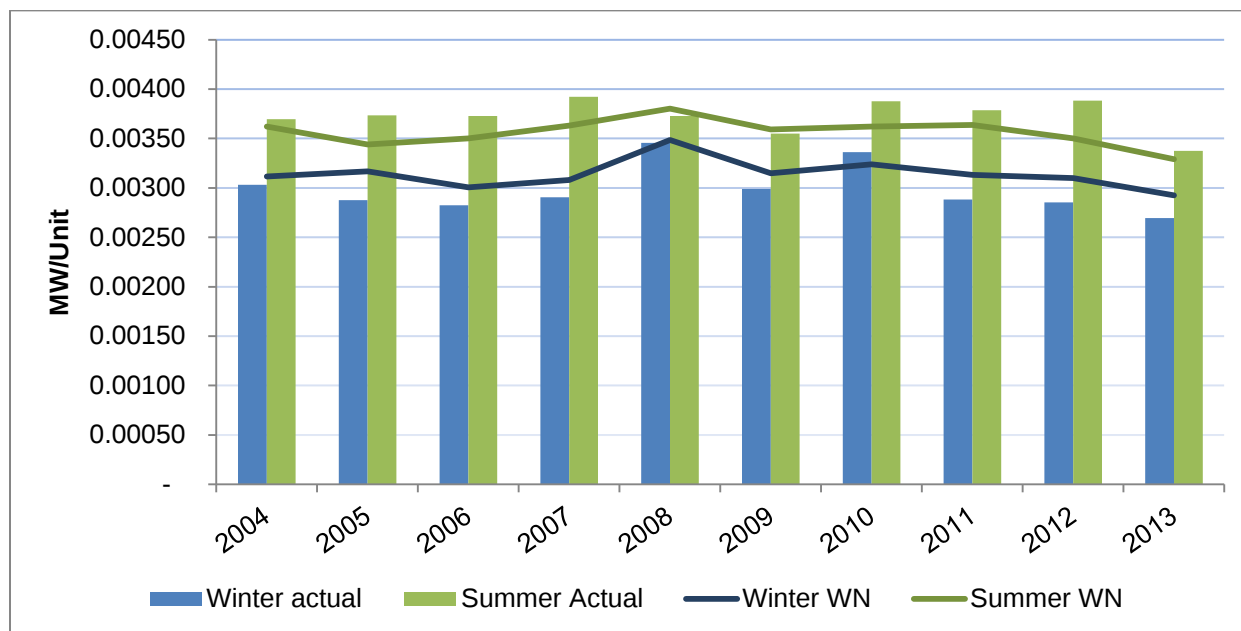
Historical Weather Normalized Summer Coincident Peak by Class (MW)

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	3,752	854.0	1,235	473.2	170.4	24.1	182.7	246.8	405.2	-	
2005	3,597	908.3	1,389	444.9	206.4	36.1	226.8	231.7	439.7	-	465.7
2006	3,700	911.3	1,438	441.2	216.5	29.8	225.9	240.8	428.3	-	483.0
2007	3,862	911.7	1,465	470.4	223.8	27.7	226.9	257.1	399.3	-	482.3
2008	4,065	843.6	1,473	427.2	238.5	24.3	180.3	213.3	385.9	-	479.2
2009	3,838	822.8	1,424	433.2	234.7	23.0	176.5	191.1	319.8	-	275.6
2010	3,877	827.3	1,423	402.4	253.5	18.7	165.7	189.9	313.3	-	485.1
2011	3,893	839.7	1,523	423.0	271.7	30.0	155.9	208.0	314.2	-	487.4
2012	3,757	831.4	1,322	414.1	264.1	22.2	175.5	202.1	312.6	-	481.4
2013	3,538	818.8	1,432	407.7	273.7	22.6	148.1	188.5	314.0	-	490.3

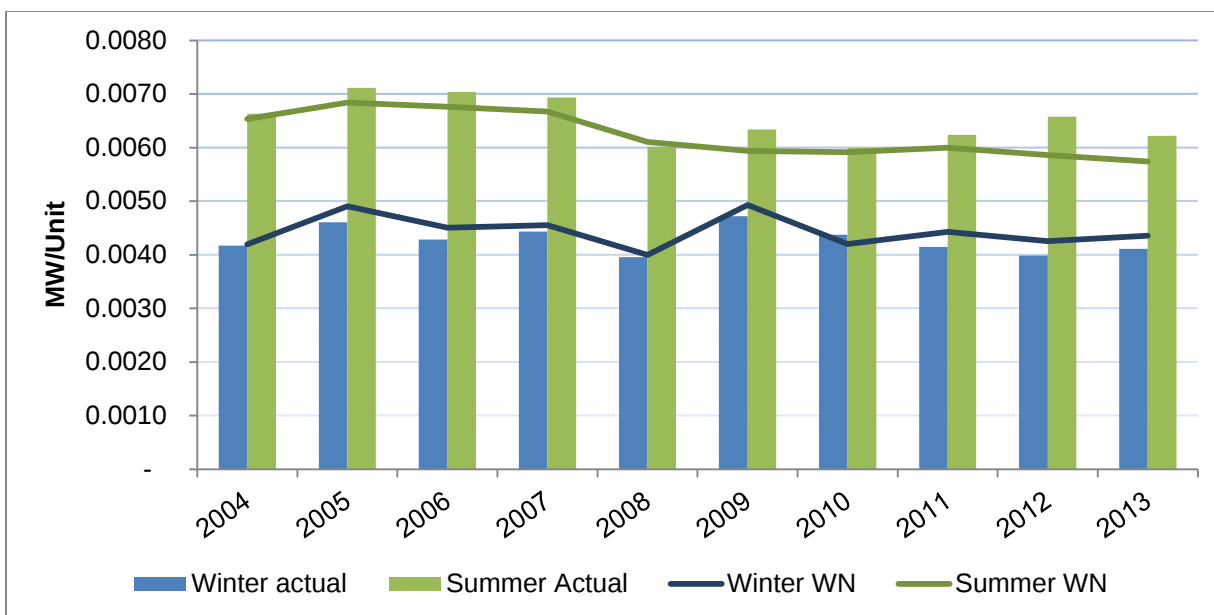
Historical Weather Normalized Winter Coincident Peak by Class (MW)

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	3,231	546.8	926	308.0	124.7	14.1	105.3	179.4	335.7	59.1	
2005	3,319	650.7	1,181	322.0	145.9	23.1	163.0	216.0	354.1	61.2	474.9
2006	3,175	606.1	1,157	304.3	166.4	28.2	173.8	194.7	331.1	59.6	482.0
2007	3,278	619.7	1,084	369.2	166.1	21.4	164.3	230.3	369.3	59.8	481.8
2008	3,726	550.9	1,089	292.6	143.1	21.3	88.6	101.5	260.5	58.7	482.5
2009	3,371	682.4	1,346	371.8	170.6	30.6	158.9	173.4	305.5	16.6	479.9
2010	3,474	586.4	1,069	313.5	167.3	22.3	120.8	159.0	273.6	60.4	404.1
2011	3,357	620.5	1,311	348.7	181.6	34.9	154.6	172.4	260.9	16.2	486.2
2012	3,323	601.4	1,112	317.4	180.2	20.8	120.3	159.2	258.1	58.2	478.2
2013	3,147	621.1	1,300	340.3	193.6	29.7	127.7	170.4	269.2	6.5	487.6

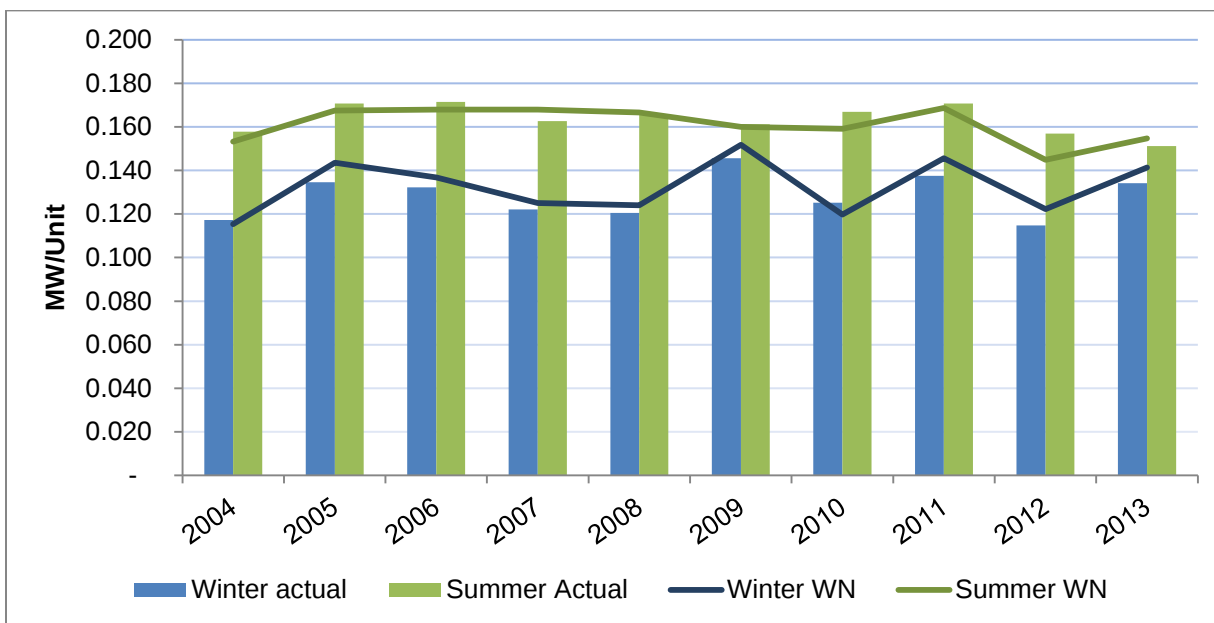
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Residential Class (MW/Unit)



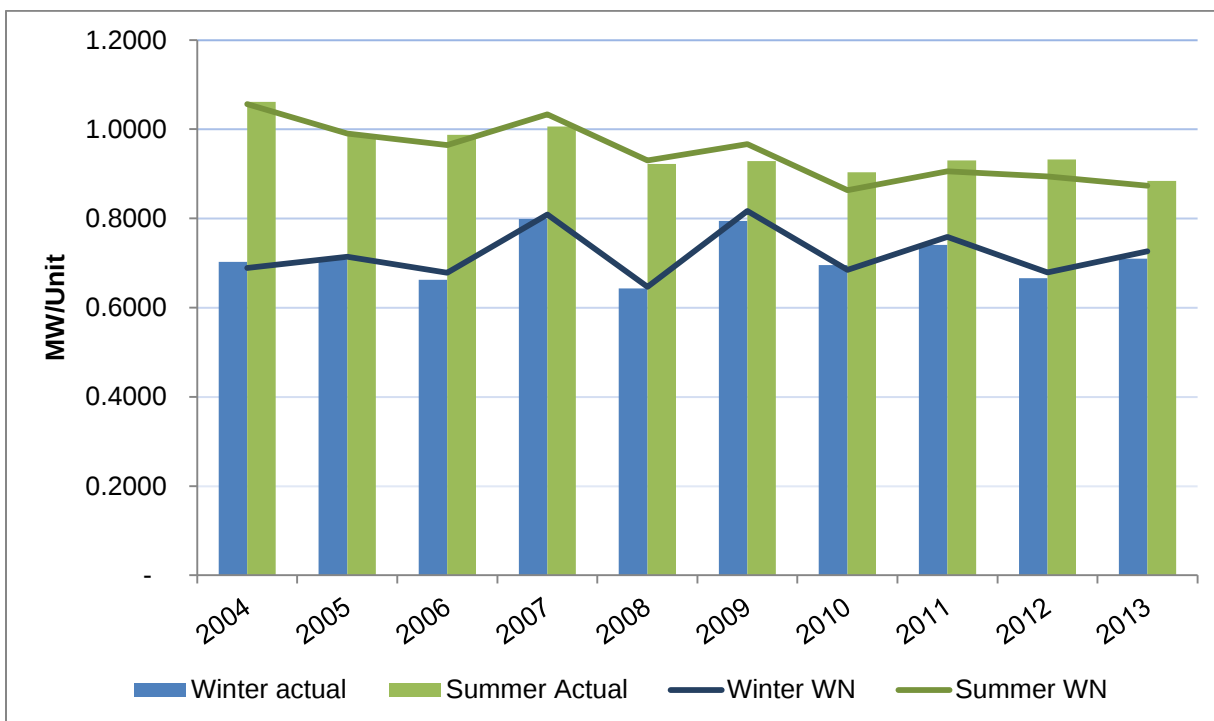
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Commercial SGS (MW/Unit)



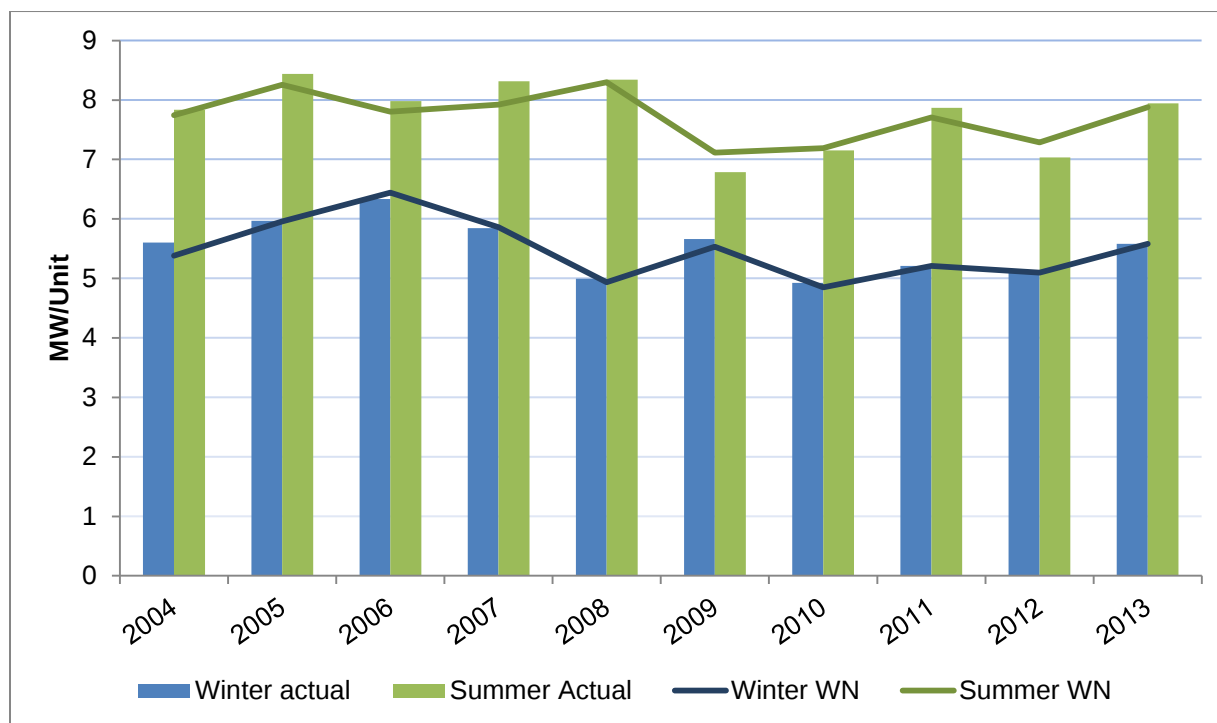
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Commercial LGS (MW/Unit)



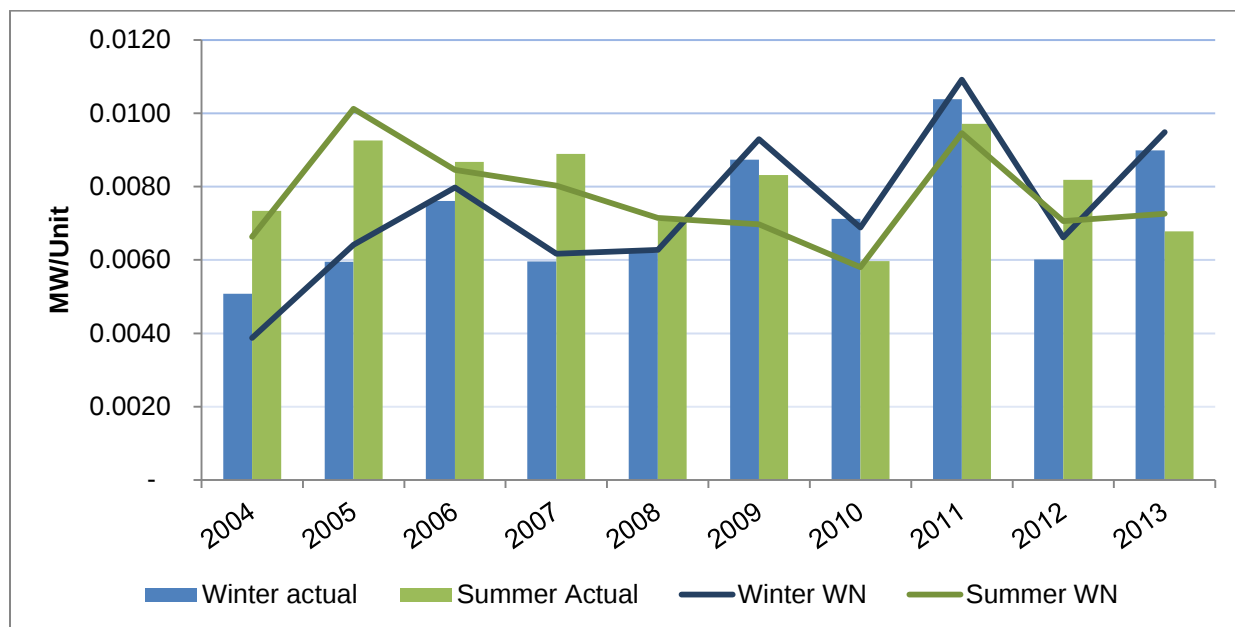
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Commercial SPS (MW/Unit)



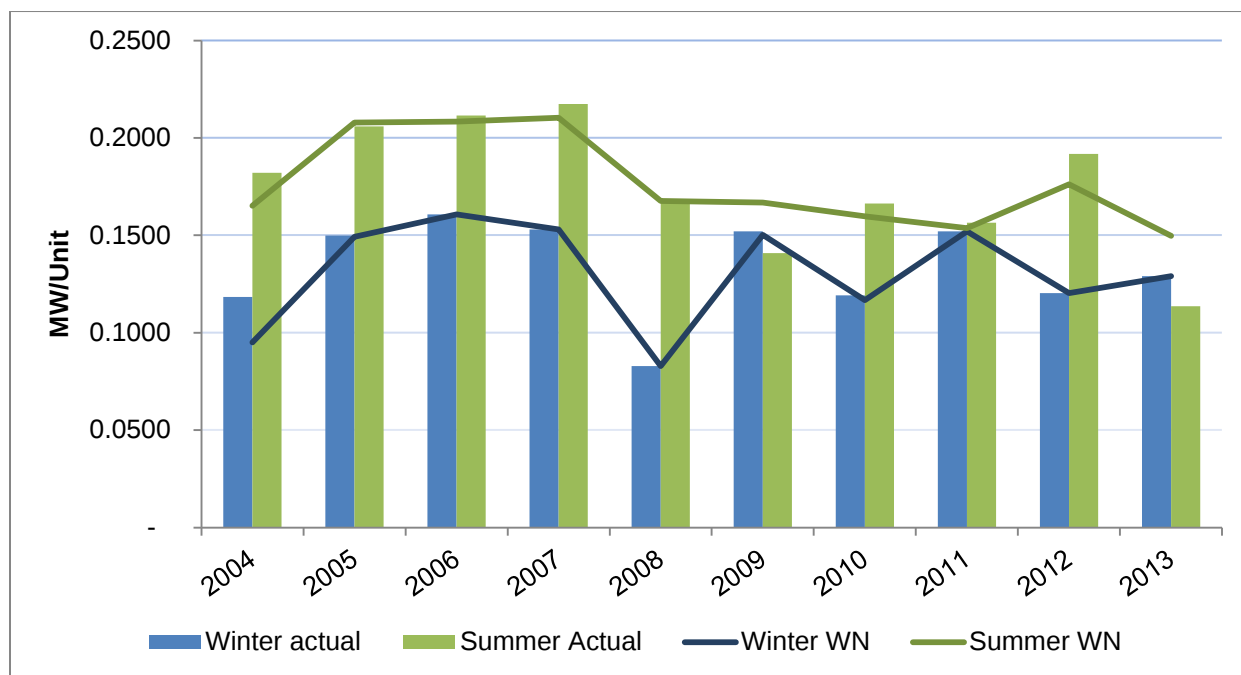
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Commercial LPS (MW/Unit)



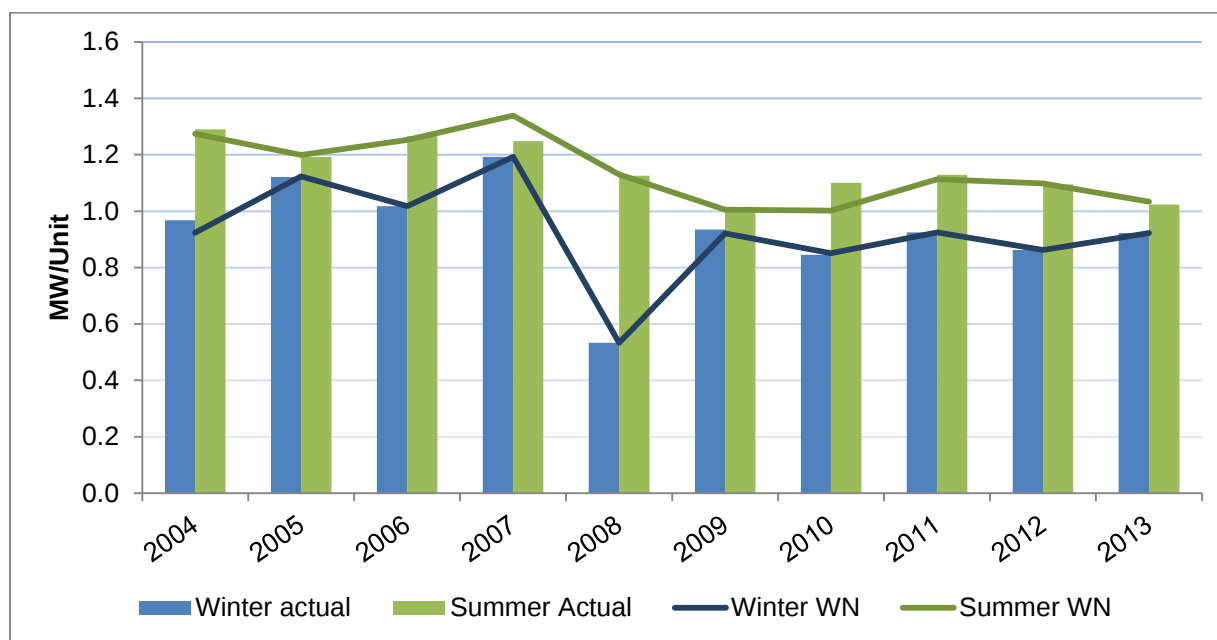
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Industrial SGS (MW/Unit)



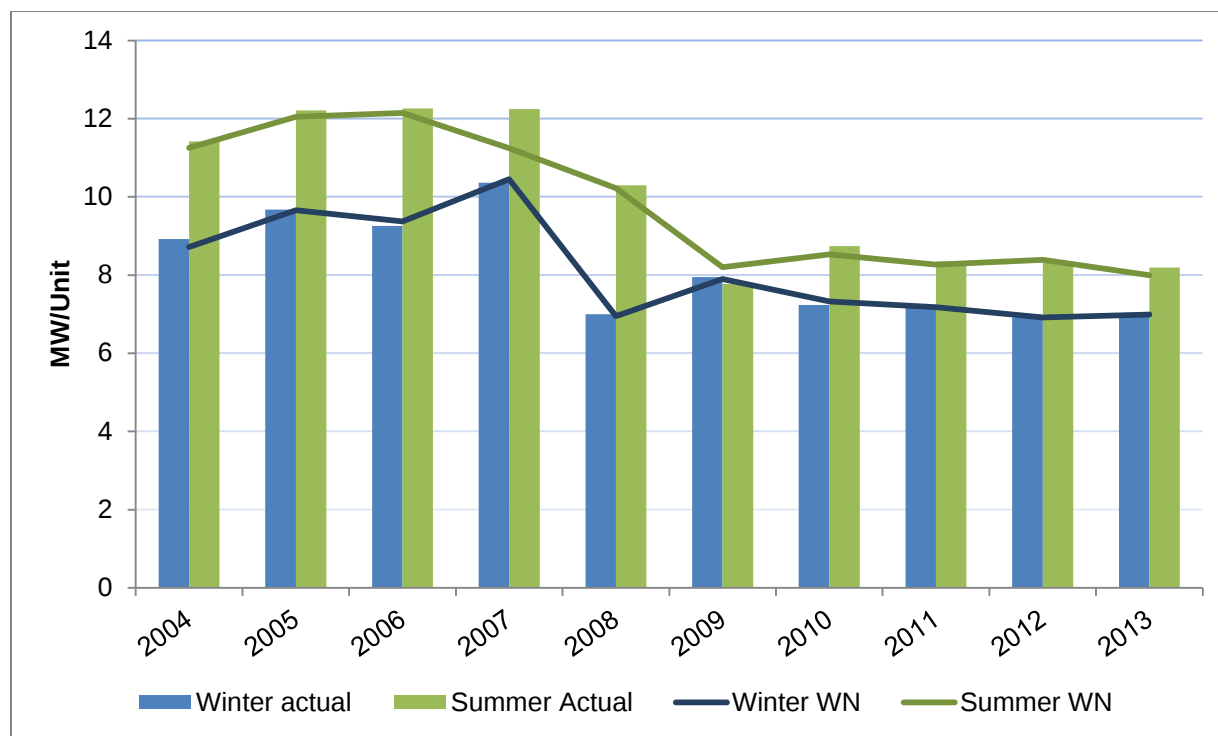
Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Industrial LGS (MW/Unit)



Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Industrial SPS (MW/Unit)



Actual and Weather Normalized Summer and Winter Coincident Peak Demand per Unit for Industrial LPS (MW/Unit)



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

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	0.00370	0.0066	0.16	1.06	7.84	0.0073	0.18	1.29	11.42	-	
2005	0.00373	0.0071	0.17	0.98	8.44	0.0093	0.21	1.19	12.21	-	468
2006	0.00373	0.0070	0.17	0.99	7.98	0.0087	0.21	1.27	12.26	-	483
2007	0.00392	0.0069	0.16	1.01	8.31	0.0089	0.22	1.25	12.24	-	466
2008	0.00373	0.0060	0.17	0.92	8.34	0.0071	0.17	1.13	10.30	-	479
2009	0.00355	0.0063	0.16	0.93	6.78	0.0083	0.14	1.01	7.77	-	270
2010	0.00388	0.0060	0.17	0.90	7.15	0.0060	0.17	1.10	8.74	-	477
2011	0.00379	0.0062	0.17	0.93	7.87	0.0097	0.16	1.13	8.35	-	487
2012	0.00388	0.0066	0.16	0.93	7.03	0.0082	0.19	1.09	8.34	-	477
2013	0.00337	0.0062	0.15	0.88	7.95	0.0068	0.11	1.02	8.19	-	494

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

Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	0.00303	0.0042	0.12	0.70	5.60	0.0051	0.12	0.97	8.92	-	
2005	0.00288	0.0046	0.13	0.71	5.97	0.0059	0.15	1.12	9.68	-	475
2006	0.00282	0.0043	0.13	0.66	6.34	0.0076	0.16	1.02	9.26	-	482
2007	0.00291	0.0044	0.12	0.80	5.85	0.0060	0.15	1.19	10.36	-	482
2008	0.00346	0.0040	0.12	0.64	4.99	0.0062	0.08	0.53	7.00	-	483
2009	0.00299	0.0047	0.15	0.79	5.66	0.0087	0.15	0.94	7.95	-	480
2010	0.00336	0.0044	0.13	0.70	4.93	0.0071	0.12	0.85	7.24	-	404
2011	0.00288	0.0041	0.14	0.74	5.21	0.0104	0.15	0.92	7.18	-	486
2012	0.00285	0.0040	0.11	0.67	5.10	0.0060	0.12	0.86	6.91	-	478
2013	0.00270	0.0041	0.13	0.71	5.58	0.0090	0.13	0.92	6.99	-	488

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

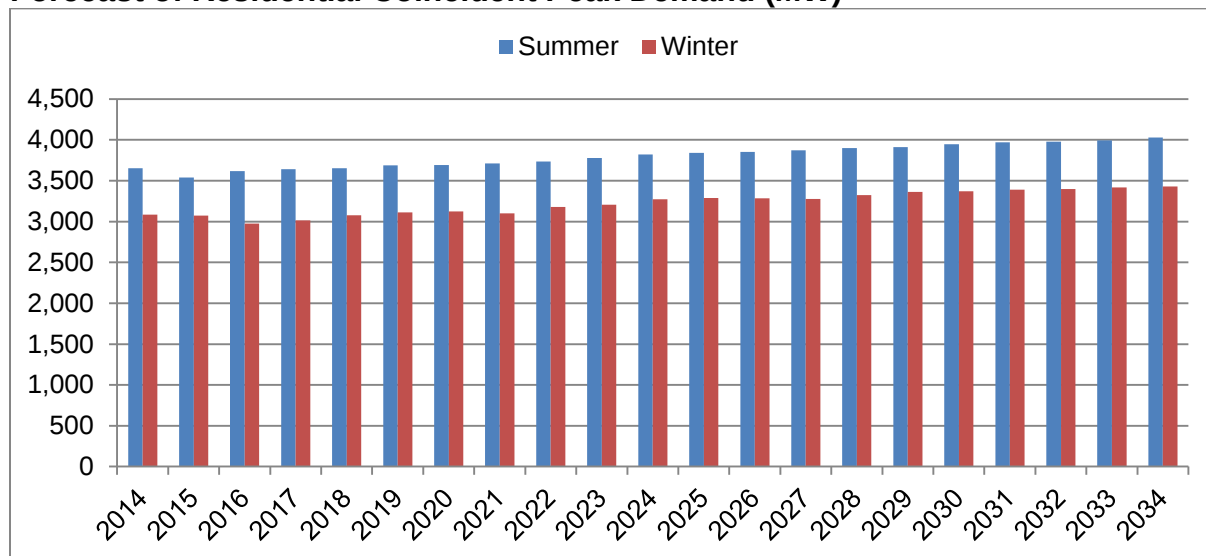
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	0.00362	0.0065	0.15	1.06	7.75	0.0066	0.17	1.27	11.26	-	
2005	0.00344	0.0068	0.17	0.99	8.25	0.0101	0.21	1.20	12.05	-	468
2006	0.00350	0.0068	0.17	0.96	7.80	0.0085	0.21	1.25	12.15	-	483
2007	0.00363	0.0067	0.17	1.03	7.92	0.0080	0.21	1.34	11.25	-	466
2008	0.00380	0.0061	0.17	0.93	8.30	0.0071	0.17	1.13	10.22	-	479
2009	0.00359	0.0059	0.16	0.97	7.11	0.0070	0.17	1.00	8.20	-	270
2010	0.00362	0.0059	0.16	0.86	7.19	0.0058	0.16	1.00	8.53	-	477
2011	0.00364	0.0060	0.17	0.91	7.71	0.0095	0.15	1.11	8.27	-	487
2012	0.00350	0.0059	0.14	0.89	7.29	0.0071	0.18	1.10	8.39	-	477
2013	0.00329	0.0057	0.15	0.87	7.88	0.0073	0.15	1.03	8.00	-	494

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

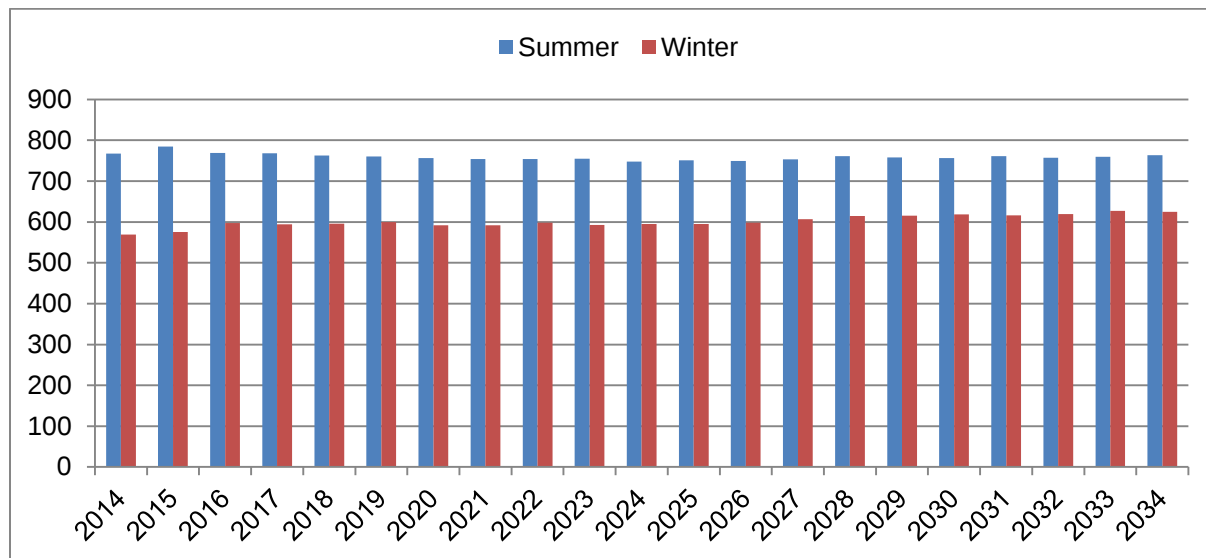
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Lighting	LTS
2004	0.00312	0.0042	0.12	0.69	5.38	0.0039	0.10	0.92	8.72	-	
2005	0.00317	0.0049	0.14	0.71	5.96	0.0064	0.15	1.12	9.66	-	475
2006	0.00300	0.0045	0.14	0.68	6.44	0.0080	0.16	1.02	9.37	-	482
2007	0.00308	0.0046	0.13	0.81	5.86	0.0062	0.15	1.19	10.45	-	482
2008	0.00349	0.0040	0.12	0.65	4.94	0.0063	0.08	0.53	6.95	-	483
2009	0.00315	0.0049	0.15	0.82	5.53	0.0093	0.15	0.92	7.90	-	480
2010	0.00324	0.0042	0.12	0.68	4.85	0.0069	0.12	0.85	7.33	-	404
2011	0.00313	0.0044	0.15	0.76	5.21	0.0109	0.15	0.92	7.18	-	486
2012	0.00310	0.0043	0.12	0.68	5.10	0.0066	0.12	0.86	6.91	-	478
2013	0.00292	0.0044	0.14	0.73	5.58	0.0095	0.13	0.92	6.99	-	488

Forecasted Total Demand at the time of Summer and Winter System Peak for Planning Case¹⁰

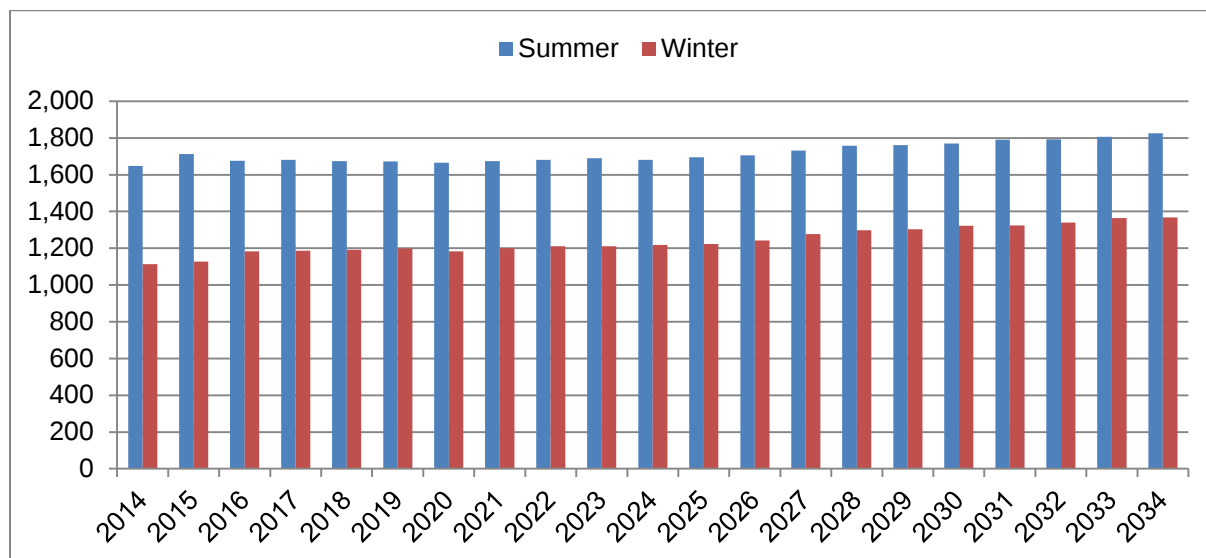
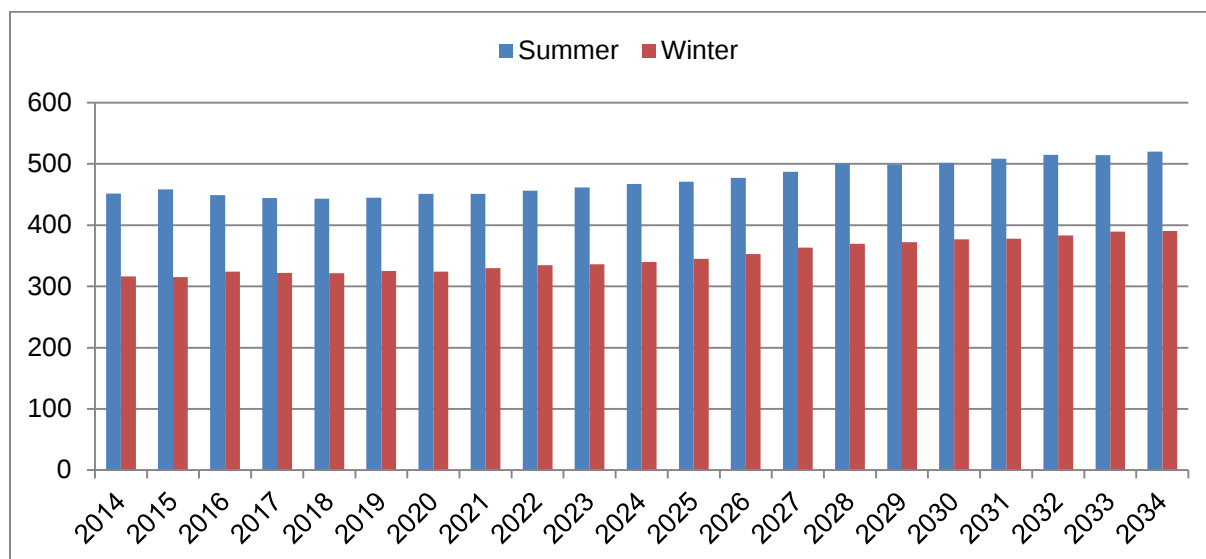
Forecast of Residential Coincident Peak Demand (MW)

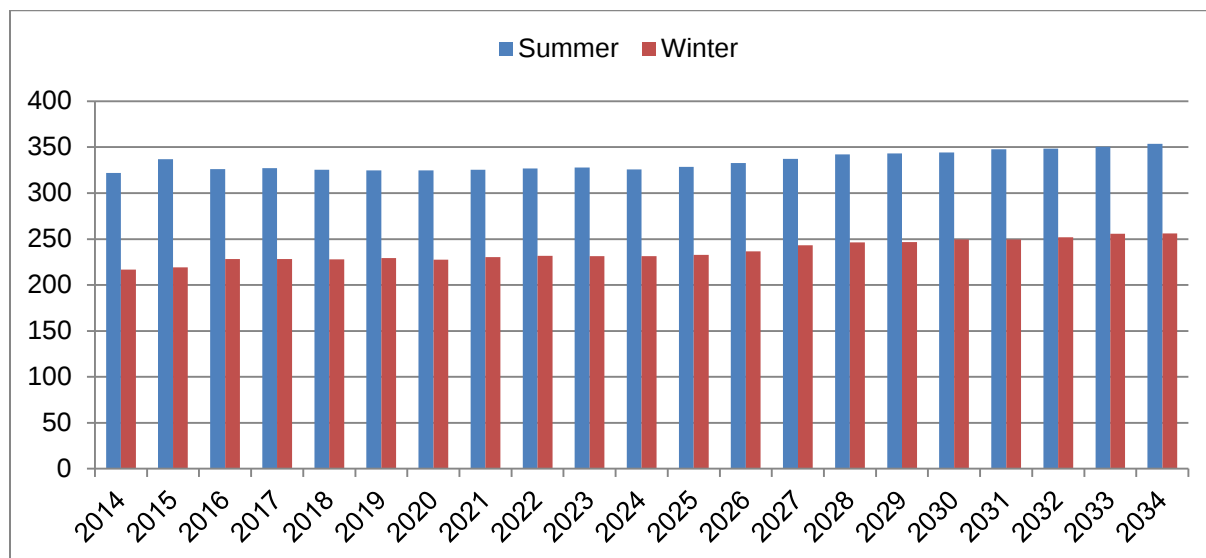
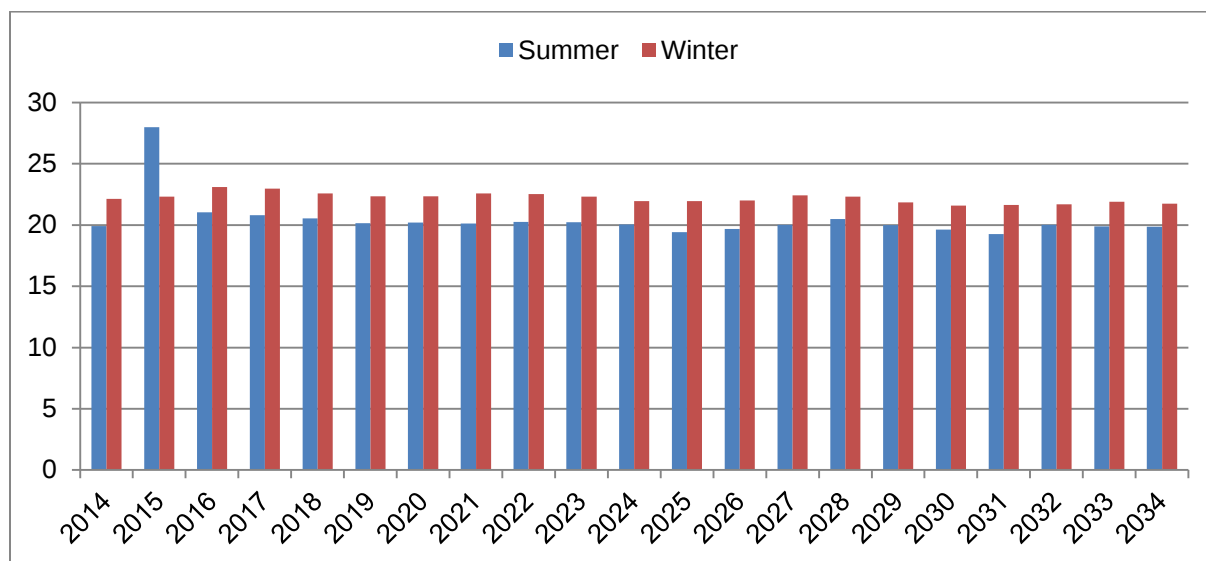


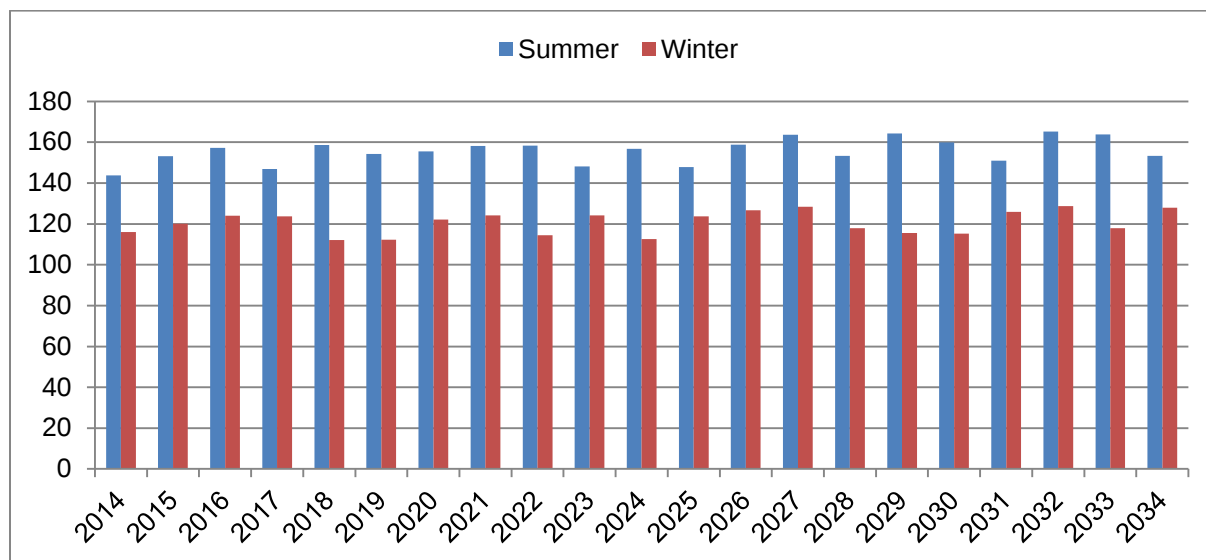
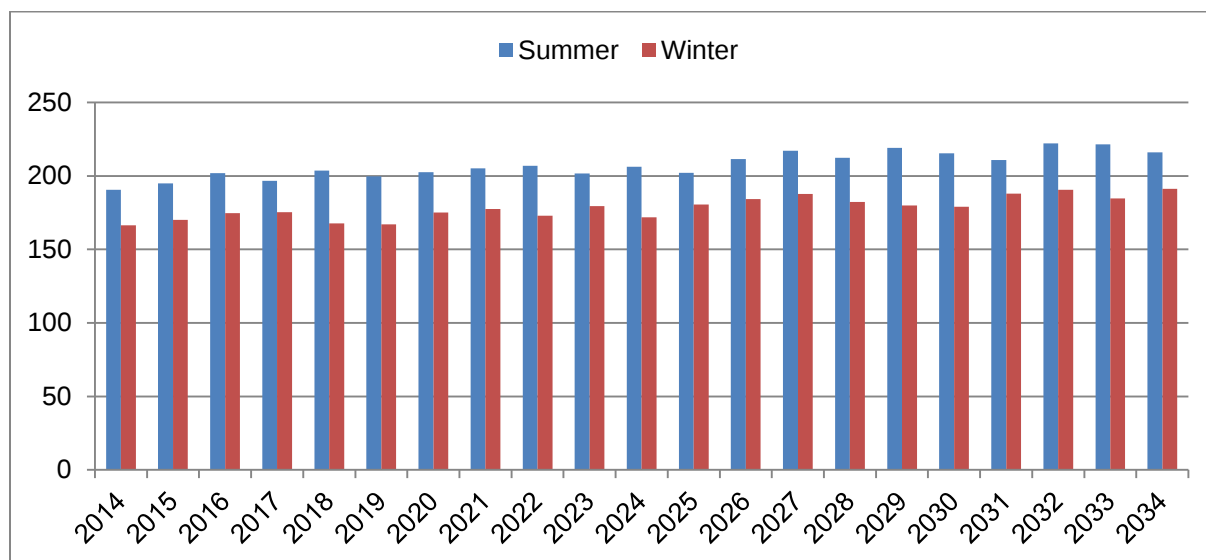
Forecast of Commercial SGS Coincident Peak Demand (MW)



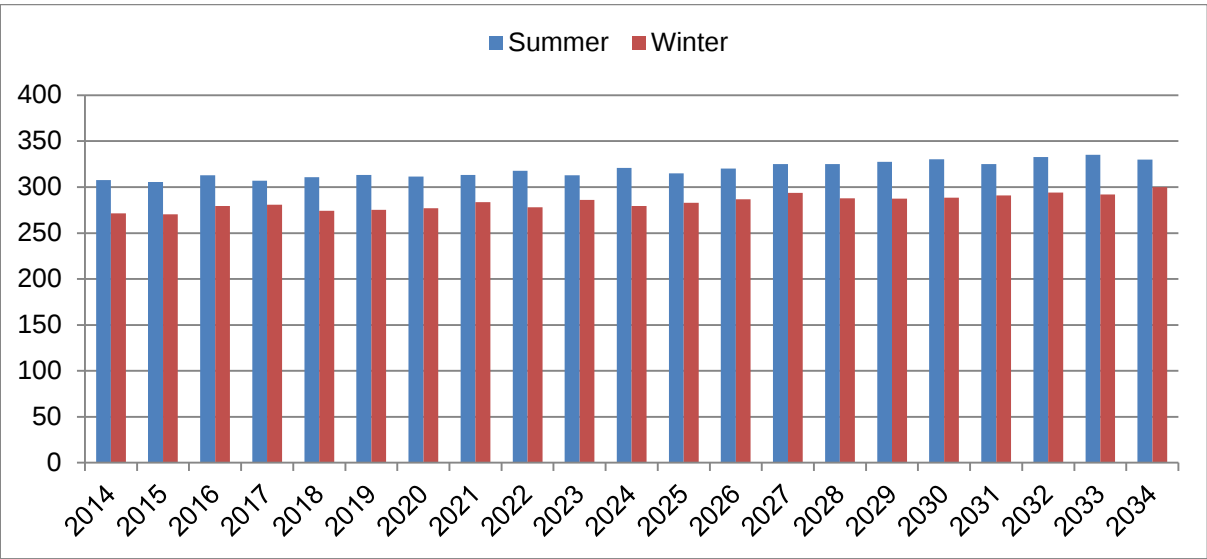
¹⁰ 4 CSR 240-22.030(7)(A)6

Forecast of Commercial LGS Coincident Peak Demand (MW)**Forecast of Commercial SPS Coincident Peak Demand (MW)**

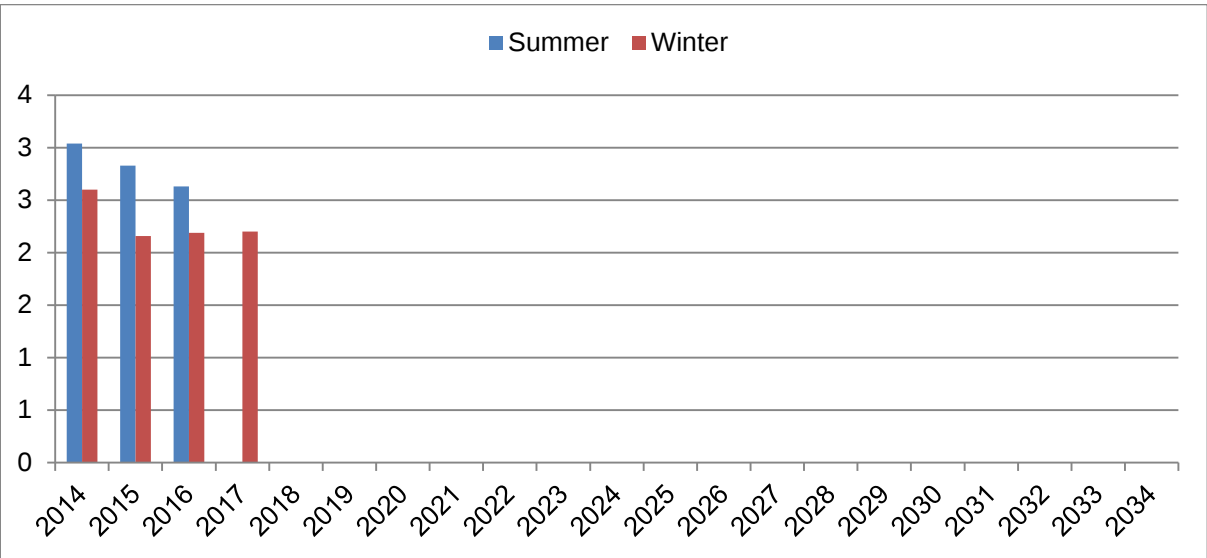
Forecast of Commercial LPS Coincident Peak Demand (MW)**Forecast of Industrial SGS Coincident Peak Demand (MW)**

Forecast of Industrial LGS Coincident Peak Demand (MW)**Forecast of Industrial SPS Coincident Peak Demand (MW)**

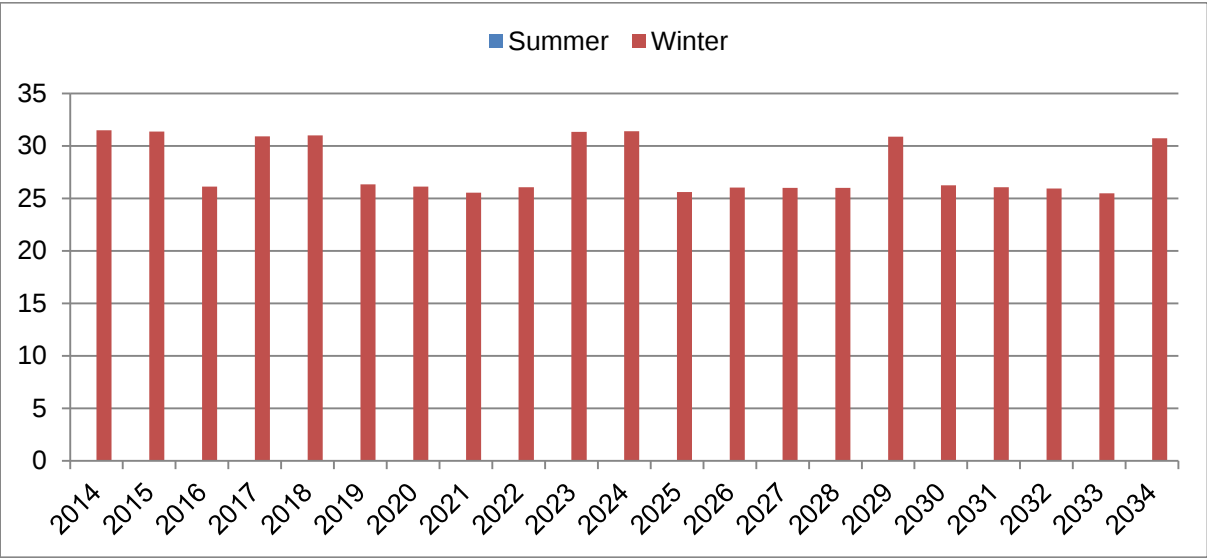
Forecast of Industrial LPS Coincident Peak Demand (MW)



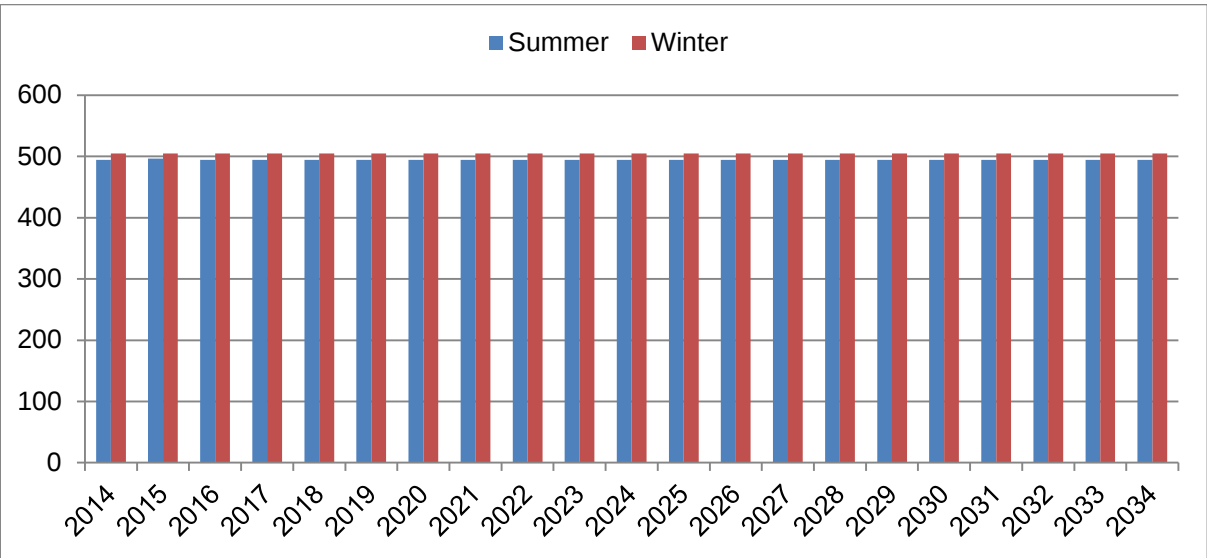
Forecast of Wholesale Coincident Peak Demand (MW)



Forecast of Lighting Coincident Peak Demand (MW)



Forecast of Noranda Coincident Peak Demand (MW)



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

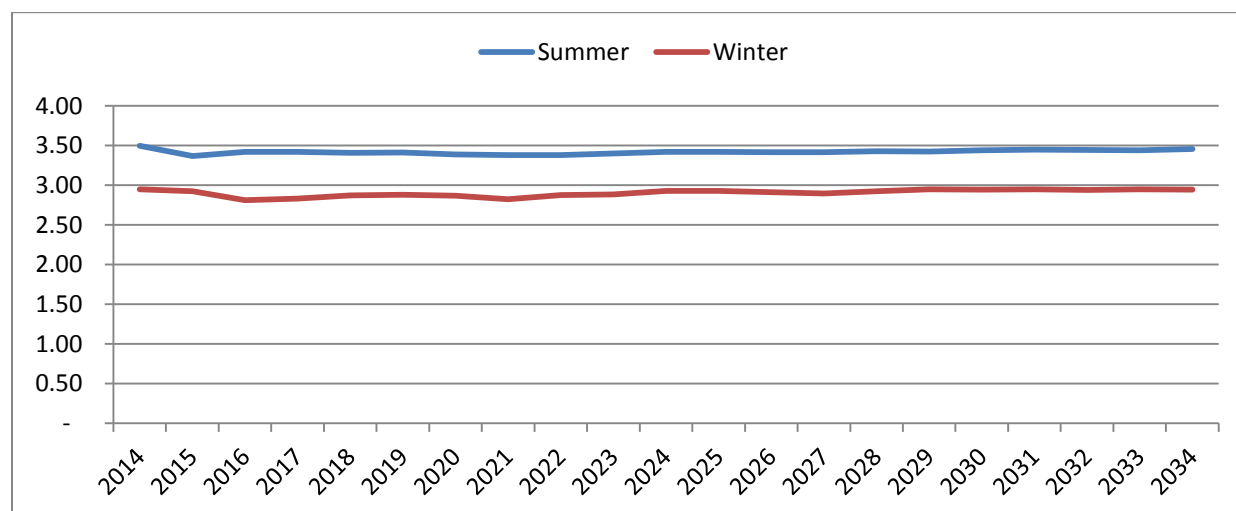
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Wholesale	Lighting	Noranda	Total
2014	3,655	768	1,648	452	322	20	144	191	308	3	-	495	8,004
2015	3,541	785	1,713	458	337	28	153	195	305	3	-	496	8,015
2016	3,620	769	1,676	449	326	21	157	202	313	3	-	495	8,030
2017	3,641	768	1,682	444	327	21	147	197	307	-	-	495	8,029
2018	3,653	762	1,674	443	325	21	159	204	311	-	-	495	8,046
2019	3,688	760	1,672	445	325	20	154	200	313	-	-	495	8,072
2020	3,691	757	1,666	451	325	20	156	202	312	-	-	495	8,074
2021	3,710	754	1,673	451	325	20	158	205	313	-	-	495	8,105
2022	3,736	754	1,681	456	327	20	158	207	318	-	-	495	8,152
2023	3,779	755	1,690	462	328	20	148	202	313	-	-	495	8,191
2024	3,823	748	1,681	467	326	20	157	206	321	-	-	495	8,243
2025	3,843	751	1,694	471	329	19	148	202	315	-	-	495	8,267
2026	3,853	749	1,705	477	333	20	159	212	320	-	-	495	8,322
2027	3,871	754	1,731	487	337	20	164	217	325	-	-	495	8,401
2028	3,900	761	1,757	500	342	20	153	212	325	-	-	495	8,466
2029	3,912	758	1,761	499	343	20	164	219	328	-	-	495	8,499
2030	3,945	756	1,770	502	344	20	160	215	330	-	-	495	8,537
2031	3,970	762	1,791	508	348	19	151	211	325	-	-	495	8,580
2032	3,980	758	1,792	515	348	20	165	222	333	-	-	495	8,627
2033	3,994	760	1,807	514	351	20	164	221	335	-	-	495	8,661
2034	4,028	764	1,826	520	354	20	153	216	330	-	-	495	8,706

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

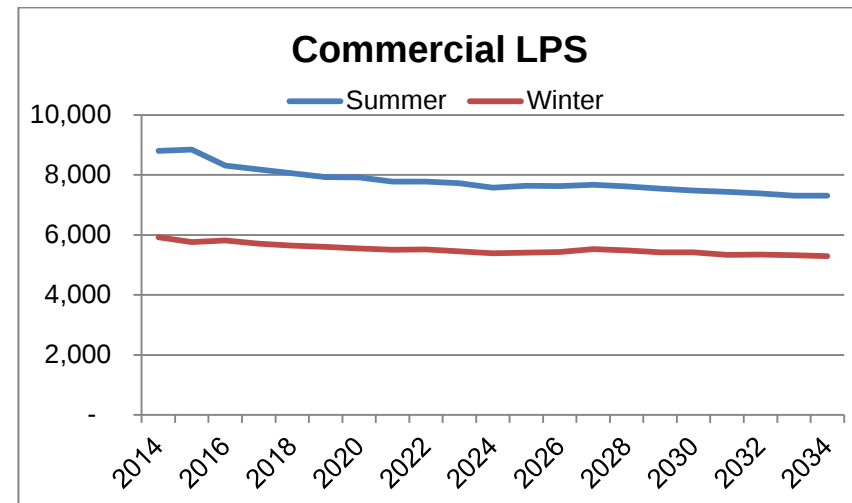
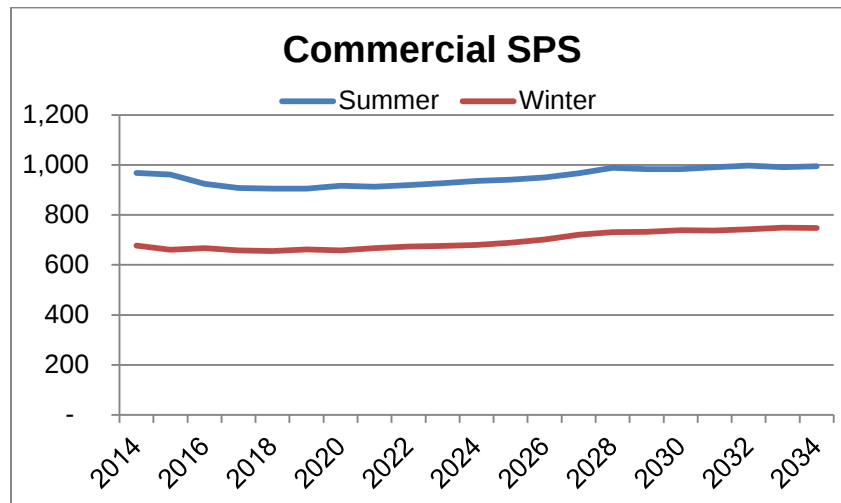
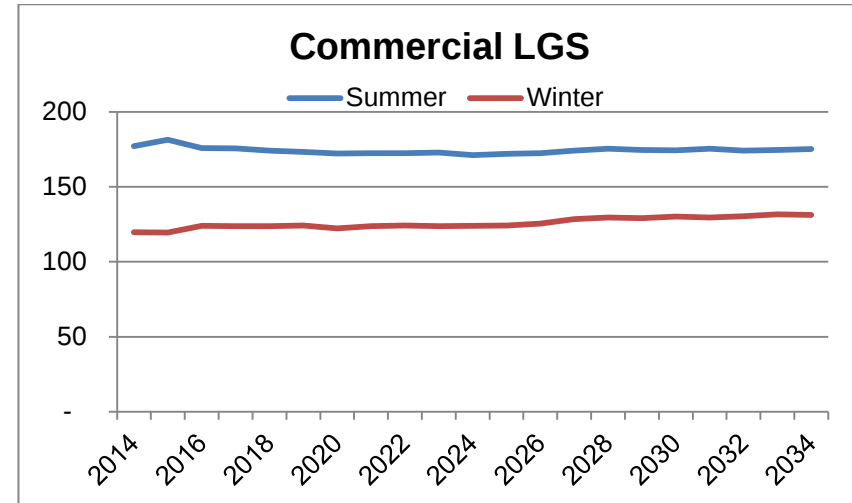
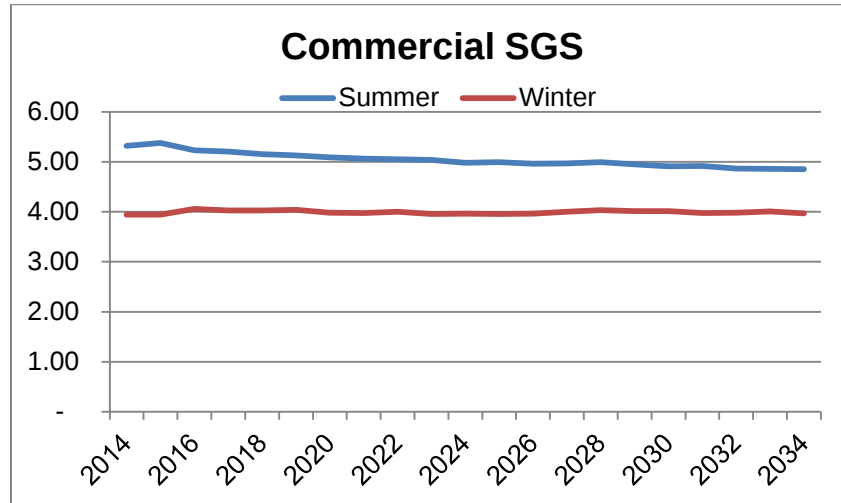
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS	Wholesale	Lighting	Noranda	Total
2014	3,085	570	1,113	316	217	22	116	166	271	3	31	505	6,415
2015	3,074	576	1,128	315	219	22	120	170	271	2	31	505	6,434
2016	2,974	597	1,183	324	228	23	124	175	280	2	26	505	6,441
2017	3,016	595	1,186	322	228	23	124	175	281	2	31	505	6,488
2018	3,079	596	1,191	321	228	23	112	168	274	-	31	505	6,527
2019	3,114	599	1,199	325	229	22	112	167	275	-	26	505	6,575
2020	3,123	592	1,183	324	228	22	122	175	277	-	26	505	6,578
2021	3,100	592	1,201	330	230	23	124	178	284	-	26	505	6,591
2022	3,179	598	1,211	334	232	23	115	173	278	-	26	505	6,673
2023	3,205	592	1,211	336	231	22	124	179	286	-	31	505	6,723
2024	3,272	595	1,217	340	232	22	113	172	280	-	31	505	6,778
2025	3,288	595	1,223	345	233	22	124	181	283	-	26	505	6,823
2026	3,284	598	1,241	353	237	22	127	184	287	-	26	505	6,864
2027	3,279	607	1,278	363	243	22	128	188	294	-	26	505	6,932
2028	3,323	615	1,298	370	246	22	118	182	288	-	26	505	6,993
2029	3,364	615	1,303	372	247	22	116	180	288	-	31	505	7,042
2030	3,373	619	1,322	377	249	22	115	179	288	-	26	505	7,075
2031	3,392	616	1,325	378	249	22	126	188	291	-	26	505	7,117
2032	3,399	619	1,340	383	252	22	129	191	294	-	26	505	7,159
2033	3,419	627	1,364	389	256	22	118	185	292	-	25	505	7,203
2034	3,430	625	1,368	390	256	22	128	191	300	-	31	505	7,246

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

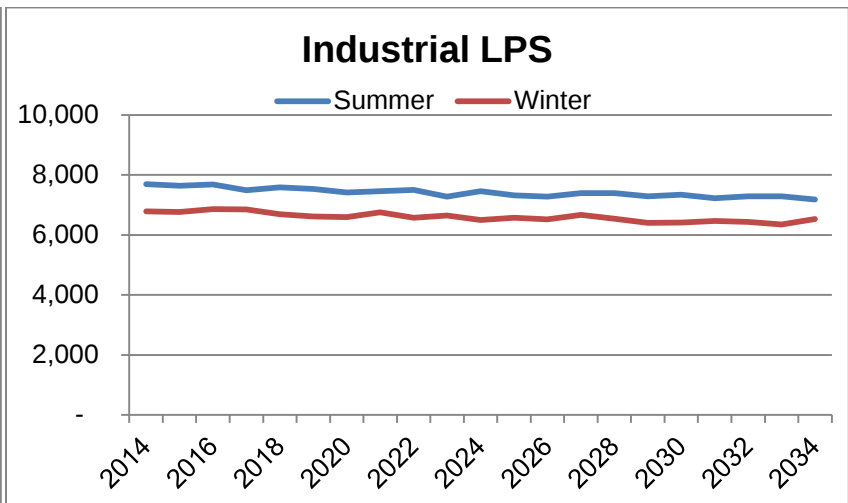
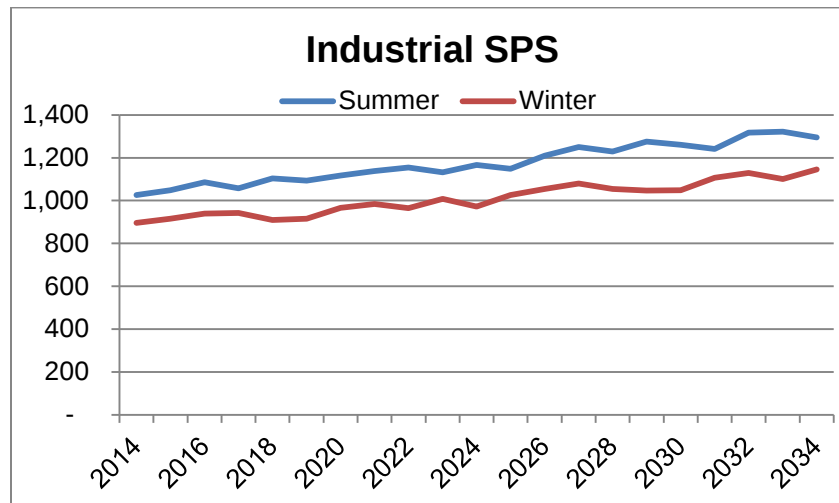
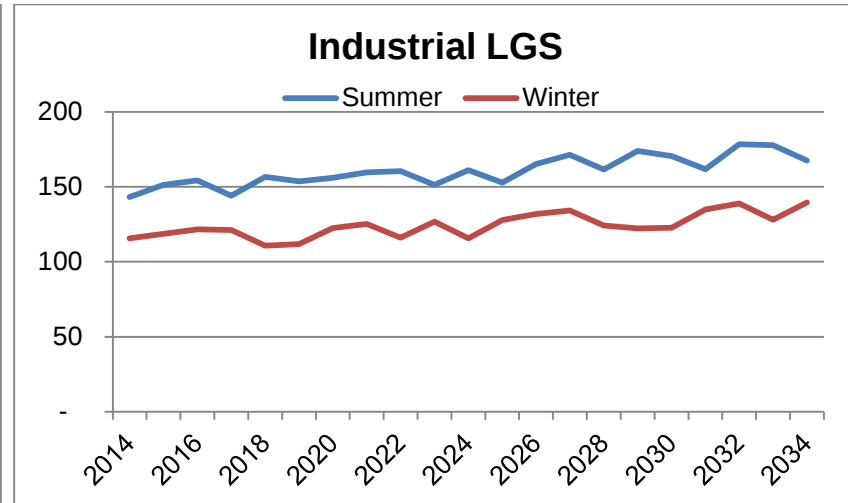
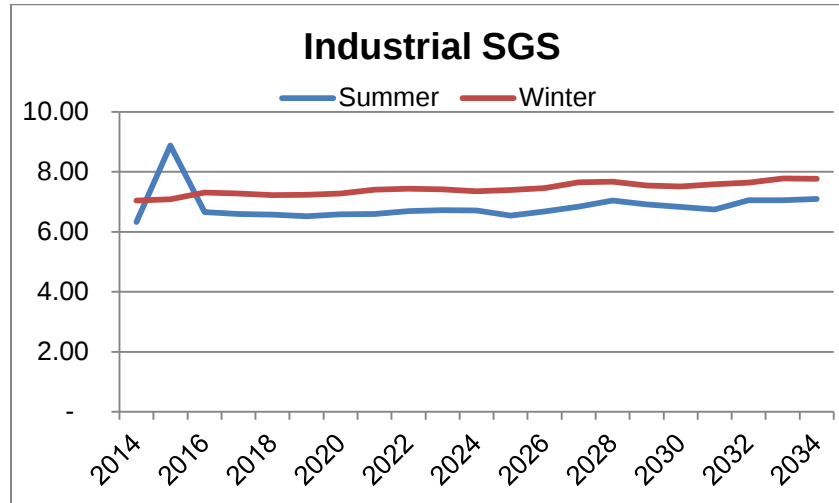
Forecast of Residential Coincident Demand per Unit (kW/Unit)



Forecast of Coincident Demand per Unit for Commercial Classes (kW/Unit)



Forecast of Coincident Demand per Unit for Industrial Classes (kW/Unit)



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

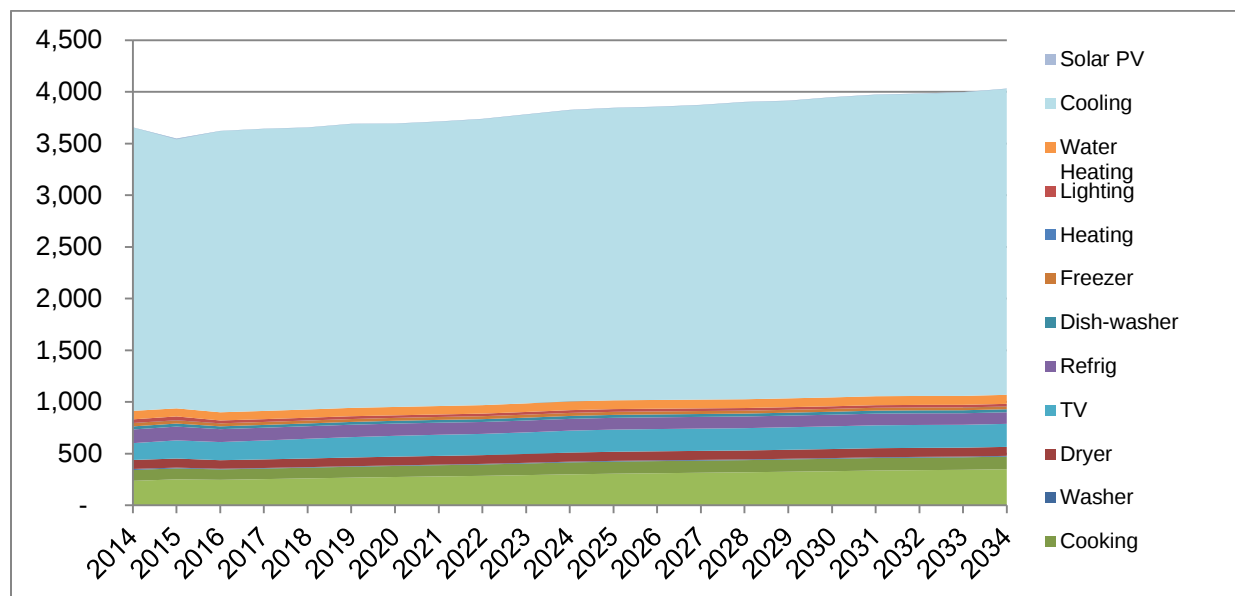
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS
2014	3.50	5.32	177	967	8,801	6.33	143	1,027	7,691
2015	3.37	5.38	181	961	8,847	8.88	151	1,048	7,635
2016	3.42	5.23	176	925	8,309	6.65	154	1,085	7,682
2017	3.42	5.20	176	908	8,179	6.59	144	1,058	7,488
2018	3.41	5.15	174	905	8,051	6.57	157	1,104	7,581
2019	3.41	5.13	173	905	7,924	6.52	154	1,094	7,532
2020	3.39	5.09	172	917	7,919	6.59	156	1,117	7,417
2021	3.38	5.06	172	913	7,776	6.60	159	1,138	7,457
2022	3.38	5.05	172	919	7,777	6.69	161	1,155	7,504
2023	3.40	5.04	173	927	7,728	6.72	151	1,133	7,280
2024	3.42	4.98	171	936	7,575	6.71	161	1,166	7,462
2025	3.42	4.99	172	941	7,642	6.55	153	1,149	7,313
2026	3.42	4.96	172	950	7,633	6.68	165	1,210	7,280
2027	3.42	4.97	174	966	7,668	6.84	171	1,250	7,388
2028	3.43	4.99	175	989	7,613	7.04	161	1,229	7,390
2029	3.43	4.95	175	983	7,544	6.91	174	1,276	7,292
2030	3.44	4.91	174	983	7,481	6.83	170	1,261	7,341
2031	3.45	4.92	175	990	7,440	6.74	162	1,242	7,227
2032	3.45	4.87	174	997	7,386	7.05	178	1,317	7,283
2033	3.44	4.86	174	991	7,304	7.06	178	1,321	7,287
2034	3.46	4.85	175	995	7,307	7.09	167	1,294	7,176

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

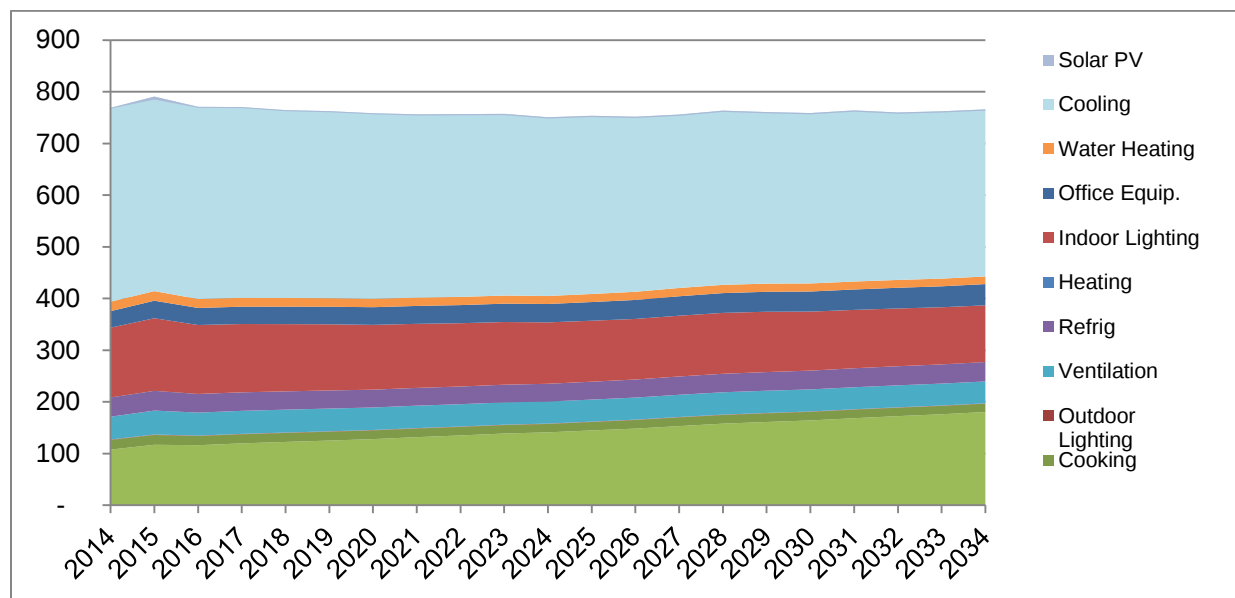
Year	Residential	Com SGS	Com LGS	Com SPS	Com LPS	Ind SGS	Ind LGS	Ind SPS	Ind LPS
2014	2.95	3.94	120	677	5,924	7.04	116	897	6,786
2015	2.92	3.94	119	661	5,759	7.08	119	915	6,764
2016	2.81	4.06	124	668	5,814	7.31	122	939	6,861
2017	2.83	4.03	124	658	5,708	7.28	121	943	6,850
2018	2.87	4.02	124	656	5,639	7.23	111	909	6,688
2019	2.88	4.04	124	662	5,597	7.23	112	915	6,618
2020	2.87	3.98	122	658	5,549	7.28	123	966	6,595
2021	2.82	3.97	124	667	5,506	7.41	125	985	6,753
2022	2.88	4.00	124	674	5,515	7.44	116	965	6,569
2023	2.88	3.95	124	676	5,455	7.42	127	1,008	6,650
2024	2.93	3.96	124	680	5,385	7.35	116	972	6,500
2025	2.93	3.96	124	689	5,413	7.39	128	1,027	6,567
2026	2.91	3.96	125	702	5,432	7.46	132	1,054	6,517
2027	2.90	4.00	128	720	5,525	7.65	134	1,080	6,672
2028	2.92	4.03	130	731	5,485	7.67	124	1,055	6,538
2029	2.95	4.01	129	733	5,425	7.55	122	1,047	6,402
2030	2.94	4.02	130	738	5,422	7.51	123	1,048	6,410
2031	2.95	3.98	130	737	5,335	7.58	135	1,107	6,466
2032	2.94	3.98	130	742	5,343	7.64	139	1,130	6,438
2033	2.95	4.01	132	750	5,328	7.78	128	1,101	6,348
2034	2.94	3.97	131	748	5,289	7.76	140	1,146	6,524

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

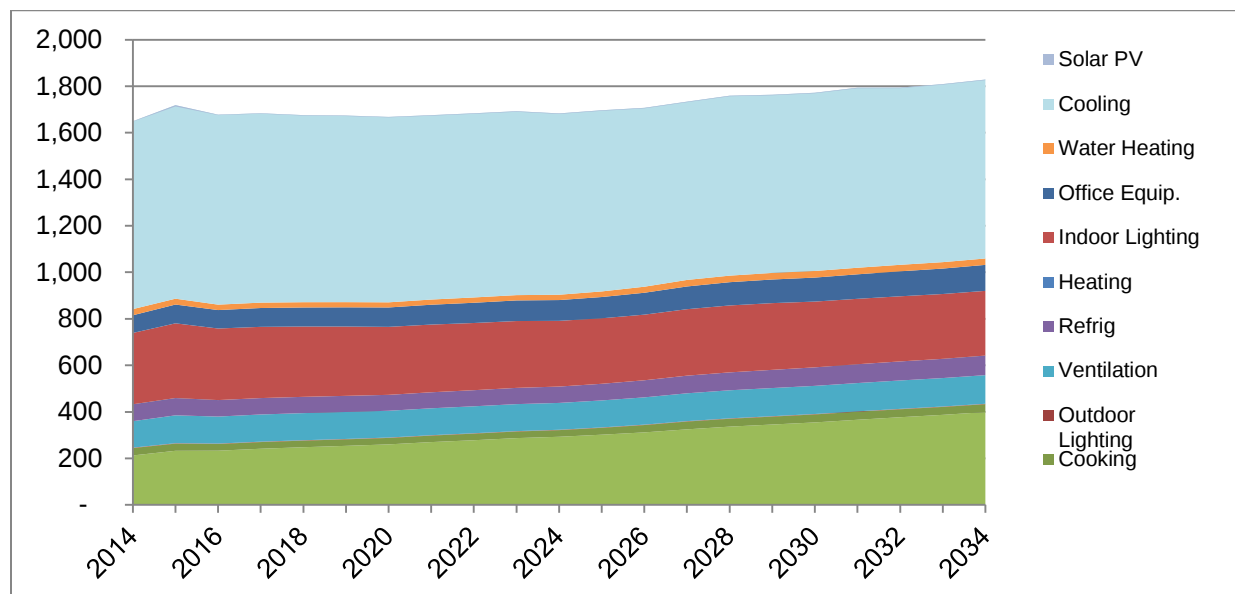
Forecast for Summer Coincident Peaks for Residential End Use (MW)



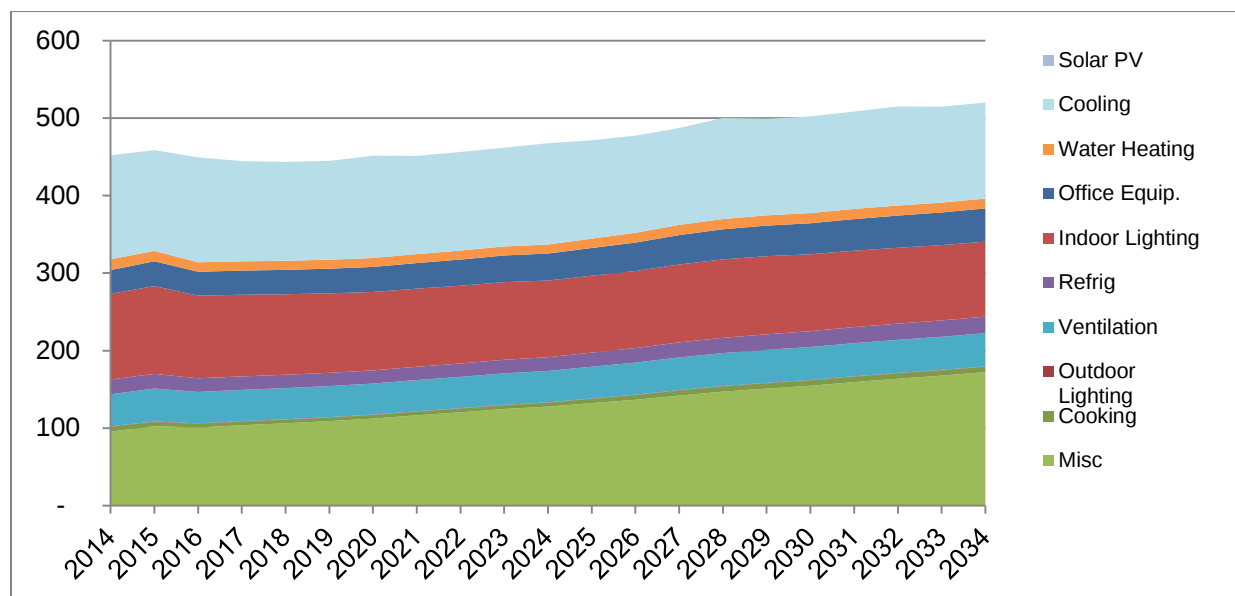
Forecast for Summer Coincident Peaks for Commercial SGS End Use (MW)



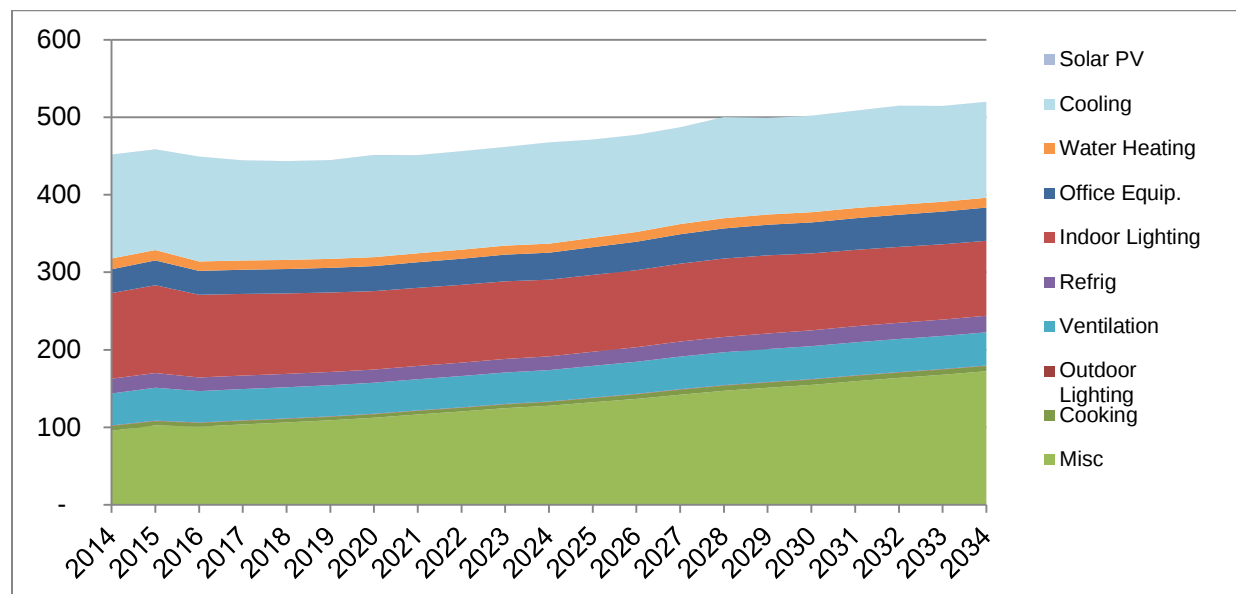
Forecast for Summer Coincident Peak for Commercial LGS End Use (MW)



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



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



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

Year	Washer	Dryer	Cooking	Cooling	Dish-washer	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
2014	10	87	105	2,743	30	33	-	35	237	132	163	82	(2)
2015	8	88	106	2,610	29	32	-	37	251	133	175	78	(8)
2016	6	83	101	2,722	27	29	-	28	247	125	175	79	(3)
2017	6	83	102	2,730	27	29	-	27	254	123	183	79	(3)
2018	5	84	104	2,728	27	28	-	27	261	121	191	80	(3)
2019	5	84	105	2,749	27	28	-	27	268	120	197	81	(3)
2020	5	85	107	2,742	27	28	-	25	274	118	202	81	(3)
2021	5	85	108	2,753	27	28	-	24	280	117	204	82	(3)
2022	6	85	110	2,770	27	29	-	25	285	115	205	82	(3)
2023	7	86	112	2,796	28	29	-	26	292	115	208	83	(3)
2024	7	88	115	2,821	28	30	-	27	300	114	212	84	(3)
2025	7	88	117	2,830	28	30	-	27	306	114	214	85	(3)
2026	7	88	117	2,837	28	29	-	26	311	113	215	85	(3)
2027	7	87	117	2,851	28	29	-	26	315	113	216	85	(3)
2028	7	87	117	2,877	28	28	-	25	320	113	216	85	(3)
2029	7	87	119	2,880	28	28	-	25	325	113	218	85	(3)
2030	7	87	120	2,904	29	28	-	25	330	112	220	86	(3)
2031	7	88	121	2,918	29	28	-	25	336	113	222	87	(3)
2032	7	87	121	2,925	29	28	-	25	340	112	222	87	(3)
2033	7	86	121	2,939	29	27	-	25	344	112	221	87	(3)
2034	7	87	122	2,963	29	27	-	25	350	112	223	87	(3)

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

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	1	19	32	375	-	135	108	37	44	18	(1)
2015	1	19	34	376	-	140	117	38	46	19	(6)
2016	1	18	33	372	-	133	116	36	44	17	(2)
2017	1	18	34	369	-	132	120	36	45	17	(2)
2018	1	17	34	363	-	130	123	35	44	17	(2)
2019	1	17	34	362	-	128	125	35	44	17	(2)
2020	1	17	34	359	-	125	128	34	44	16	(2)
2021	1	17	35	355	-	124	132	34	43	16	(2)
2022	1	16	35	354	-	122	135	34	43	16	(2)
2023	1	16	35	352	-	121	139	34	43	16	(2)
2024	1	16	36	346	-	119	141	34	43	16	(2)
2025	1	16	36	345	-	118	145	35	43	16	(2)
2026	1	17	37	339	-	117	148	35	43	16	(2)
2027	1	17	38	336	-	118	153	35	43	16	(2)
2028	1	17	38	337	-	118	158	36	43	16	(2)
2029	1	17	39	332	-	117	161	36	43	16	(2)
2030	1	17	39	330	-	114	164	36	43	16	(2)
2031	1	17	39	331	-	113	168	37	43	15	(2)
2032	1	16	40	324	-	112	172	37	43	15	(2)
2033	1	16	41	324	-	111	176	37	42	15	(2)
2034	1	16	41	323	-	110	180	38	42	15	(2)

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

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	2	32	76	808	-	307	213	73	114	26	(1)
2015	2	31	81	832	-	321	233	74	120	25	(6)
2016	2	29	79	817	-	308	233	71	116	23	(2)
2017	2	29	81	814	-	306	241	71	117	23	(2)
2018	2	28	82	804	-	302	248	70	117	23	(2)
2019	2	28	83	802	-	298	254	69	116	22	(2)
2020	2	28	83	797	-	292	260	68	115	22	(2)
2021	2	28	85	793	-	291	270	69	116	22	(2)
2022	2	28	87	792	-	289	278	69	116	23	(2)
2023	2	28	89	791	-	287	287	70	116	23	(2)
2024	2	29	89	780	-	283	293	70	115	23	(2)
2025	2	30	91	779	-	282	302	72	116	24	(2)
2026	2	32	94	769	-	282	312	74	117	26	(2)
2027	2	34	98	767	-	286	325	76	120	28	(2)
2028	2	34	100	774	-	288	337	77	121	28	(2)
2029	2	34	102	766	-	287	346	78	121	28	(2)
2030	2	34	103	766	-	283	355	80	121	28	(2)
2031	2	34	105	774	-	281	366	81	122	28	(2)
2032	2	34	107	762	-	280	377	82	122	28	(2)
2033	2	34	109	766	-	279	387	83	122	28	(2)
2034	2	34	112	769	-	278	399	84	123	27	(2)

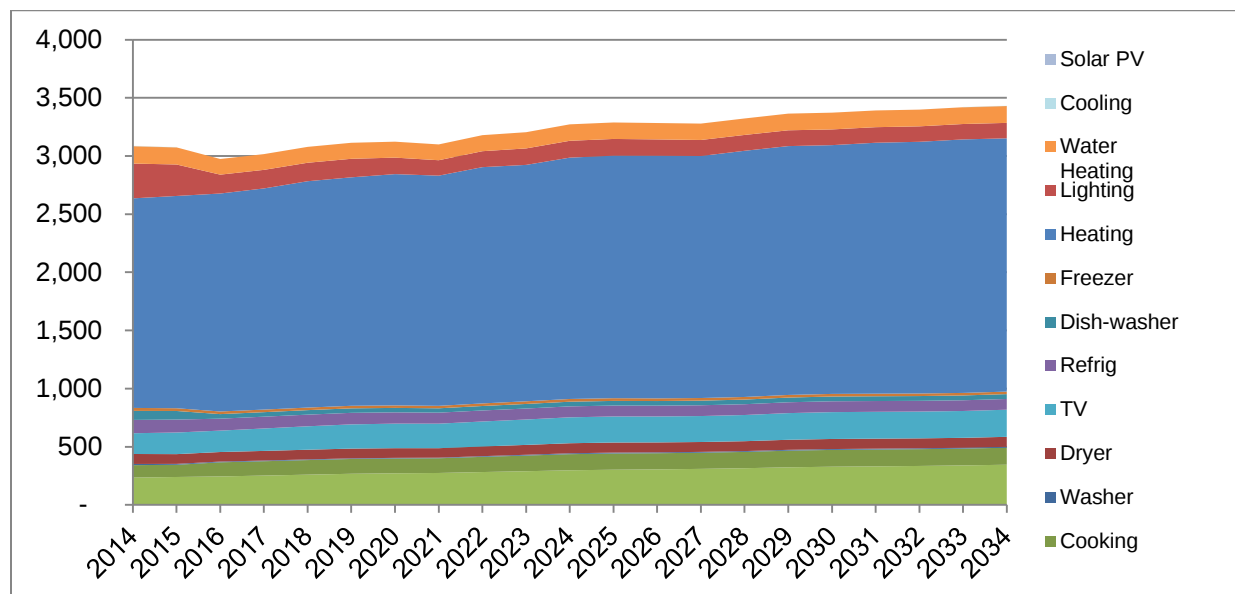
Forecast for Summer Coincident Peaks for Commercial SPS End Uses (MW)

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	1	6	31	134	110	96	19	41	14	(0)
2015	1	5	32	130	113	103	19	43	13	(0)
2016	1	5	31	135	107	101	18	40	12	(0)
2017	1	5	31	129	105	104	17	40	12	(0)
2018	1	5	31	127	104	106	17	40	12	(0)
2019	1	5	32	127	103	109	17	40	12	(0)
2020	1	5	32	132	101	112	17	40	12	(0)
2021	1	5	33	127	101	117	17	40	12	(0)
2022	1	5	34	127	100	121	17	40	12	(0)
2023	1	5	34	127	100	125	17	41	12	(0)
2024	1	5	35	131	99	128	18	41	12	(0)
2025	1	5	36	127	99	132	18	41	12	(0)
2026	1	6	37	125	99	137	19	41	13	(0)
2027	1	7	38	125	100	142	19	42	13	(0)
2028	1	7	39	130	101	147	20	42	13	(0)
2029	1	7	39	125	101	151	20	43	13	(0)
2030	1	7	40	124	99	155	20	43	13	(0)
2031	1	7	41	126	99	160	21	43	13	(0)
2032	1	7	41	128	98	164	21	43	13	(0)
2033	1	7	42	123	97	168	21	43	13	(0)
2034	1	7	43	124	97	172	21	43	13	(0)

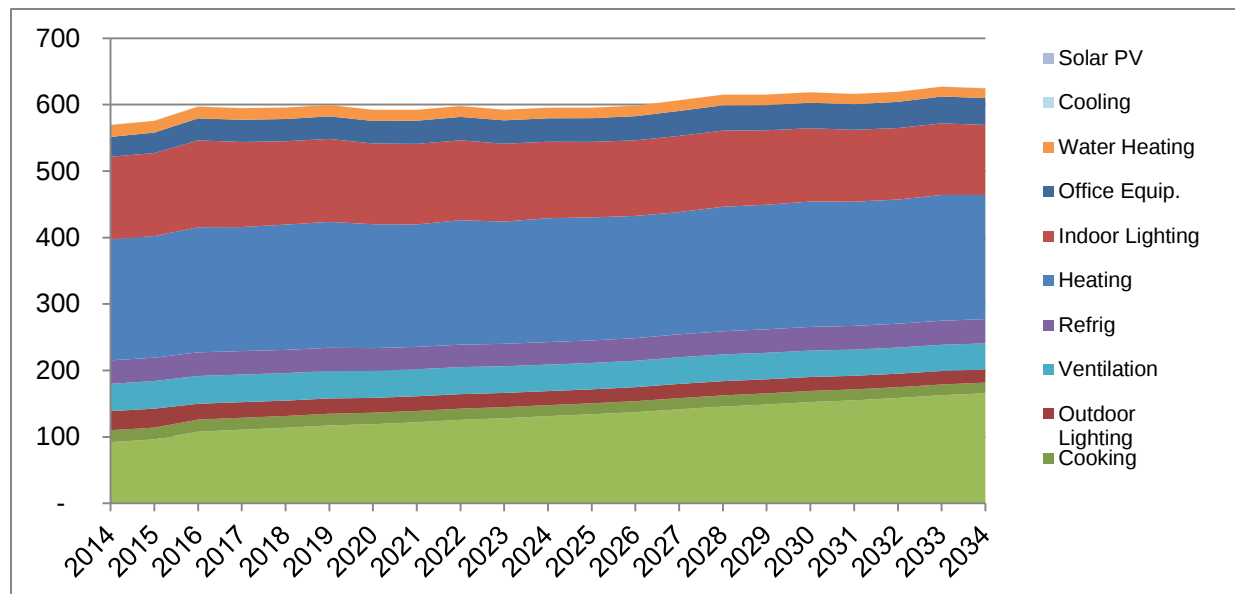
Forecast for Summer Coincident Peaks for Commercial LPS End Uses (MW)

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	1	9	24	109	76	53	10	29	11	(0)
2015	1	9	26	113	80	58	10	30	11	(0)
2016	1	8	25	109	76	58	10	29	10	(0)
2017	1	8	25	109	76	59	10	30	10	(0)
2018	1	8	26	107	74	61	10	29	10	(0)
2019	1	8	26	107	73	62	10	29	10	(0)
2020	1	8	26	106	72	63	10	29	10	(0)
2021	1	8	26	105	72	65	10	29	10	(0)
2022	1	8	27	105	71	67	10	29	10	(0)
2023	1	8	27	105	70	69	10	29	10	(0)
2024	1	8	27	103	69	70	10	29	10	(0)
2025	1	8	27	103	69	72	10	29	10	(0)
2026	1	9	28	101	69	74	11	29	11	(0)
2027	1	9	29	101	69	77	11	30	11	(0)
2028	1	9	30	101	70	79	11	30	11	(0)
2029	1	9	30	100	70	81	11	30	11	(0)
2030	1	10	30	100	68	83	11	30	11	(0)
2031	1	10	31	101	68	86	11	30	11	(0)
2032	1	10	31	99	68	88	11	30	11	(0)
2033	1	10	32	99	67	90	12	30	11	(0)
2034	1	10	32	100	67	92	12	30	11	(0)

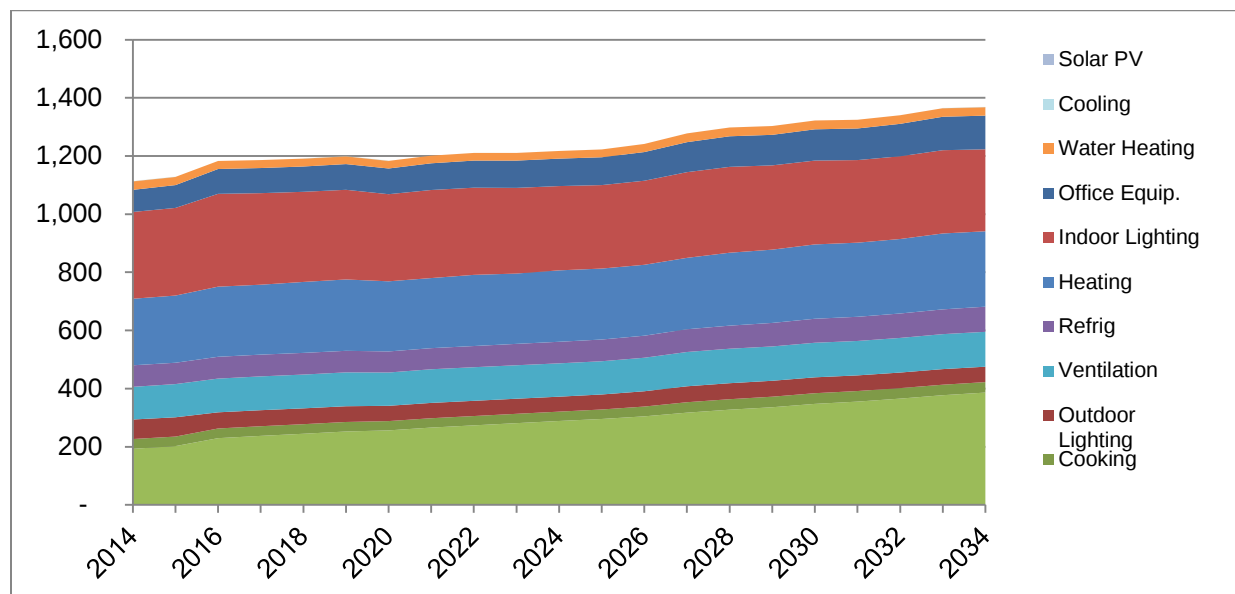
Forecast for Winter Coincident Peaks for Residential End Uses (MW)



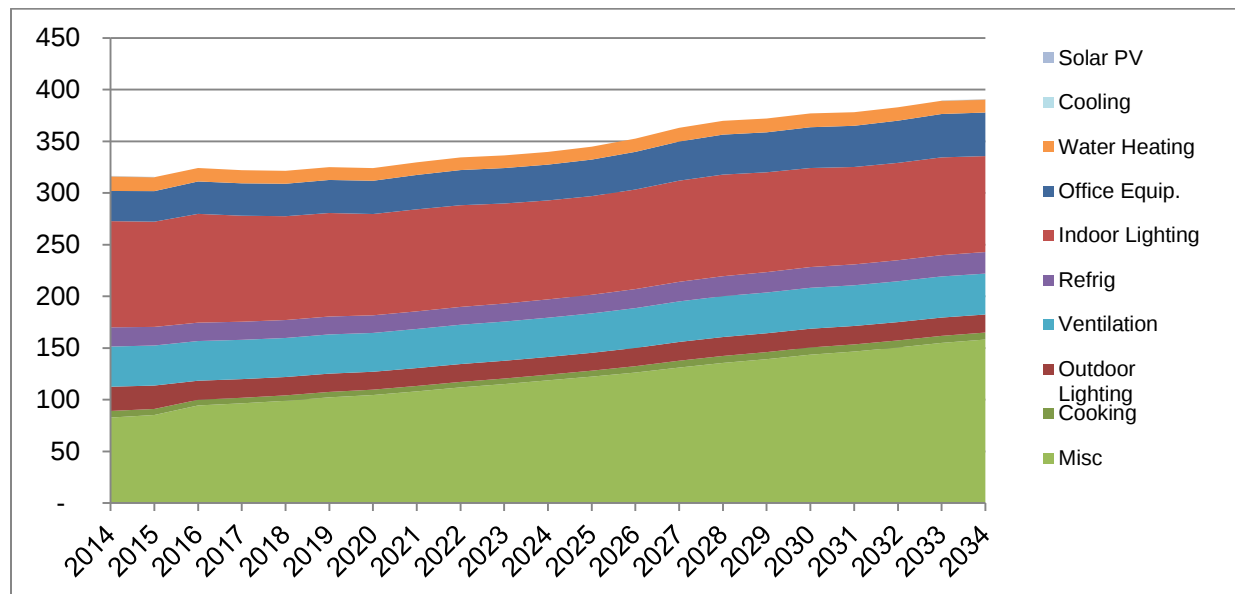
Forecast for Winter Coincident Peaks for Commercial SGS End Uses (MW)



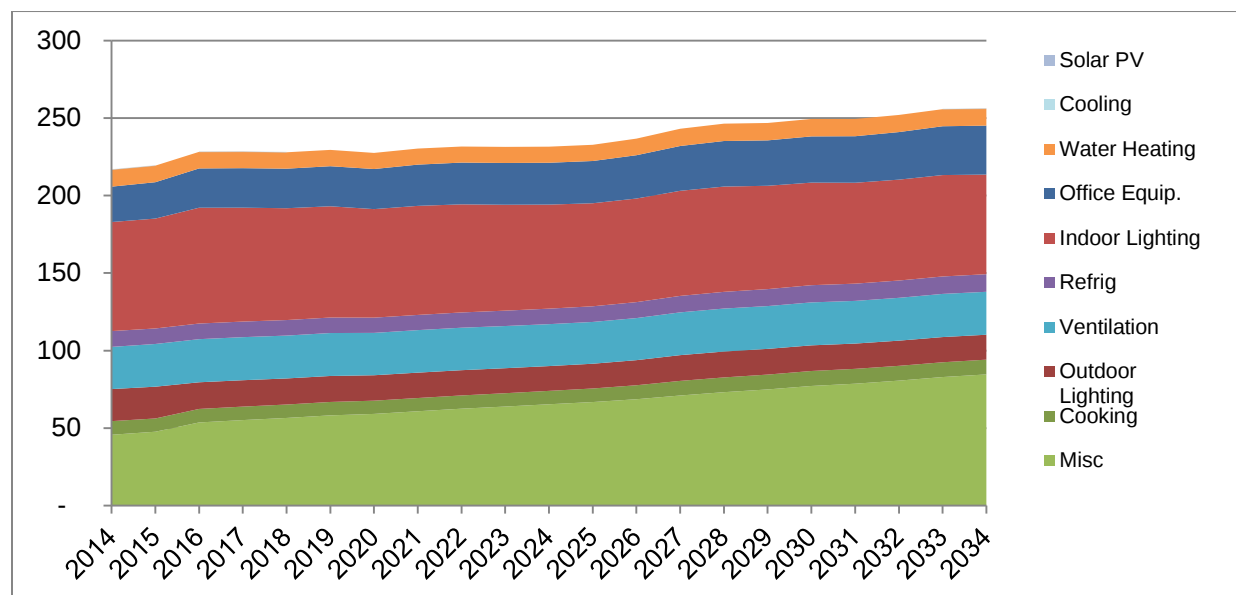
Forecast for Winter Coincident Peaks for Commercial LGS End Uses (MW)



Forecast for Commercial SPS Winter Coincident Peaks by End Uses (MW)



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



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

Year	Washer	Dryer	Cooking	Cooling	Dish-washer	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
2014	10	86	107	-	78	26	1,802	299	235	115	178	150	(0)
2015	8	84	105	-	74	24	1,825	271	240	111	186	147	(0)
2016	6	82	121	-	39	23	1,874	162	245	103	184	134	(0)
2017	6	83	123	-	39	22	1,902	160	252	101	193	135	(0)
2018	6	83	125	-	39	22	1,946	159	260	100	201	137	(0)
2019	5	84	127	-	39	22	1,965	159	268	99	208	138	(0)
2020	5	83	128	-	38	21	1,989	142	272	97	211	137	(0)
2021	5	82	126	-	37	21	1,979	133	274	95	211	136	(0)
2022	6	83	131	-	38	22	2,032	137	282	95	215	138	(0)
2023	7	85	135	-	39	23	2,033	142	290	94	218	139	(0)
2024	8	87	138	-	40	24	2,075	145	298	94	223	141	(0)
2025	8	87	140	-	40	23	2,086	144	302	94	224	142	(0)
2026	7	86	139	-	40	23	2,087	140	305	93	223	141	(0)
2027	7	85	139	-	40	23	2,081	138	310	93	223	141	(0)
2028	7	85	140	-	40	23	2,117	136	315	93	225	142	(0)
2029	7	86	143	-	40	22	2,140	136	323	93	229	143	(0)
2030	7	87	144	-	41	22	2,139	135	328	93	231	144	(0)
2031	7	86	145	-	41	22	2,158	134	331	93	231	144	(0)
2032	8	86	144	-	41	22	2,164	133	335	92	230	144	(0)
2033	8	85	144	-	41	22	2,180	133	340	92	231	144	(0)
2034	8	86	146	-	42	22	2,178	133	345	92	233	145	(0)

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

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	29	18	30	-	182	124	92	35	41	18	(0)
2015	29	18	31	-	183	125	96	35	42	18	(0)
2016	24	18	33	-	188	131	108	36	42	18	(0)
2017	23	18	33	-	187	128	111	35	42	17	(0)
2018	23	18	33	-	188	126	114	35	41	17	(0)
2019	23	18	34	-	189	125	117	35	41	17	(0)
2020	22	17	34	-	186	121	119	34	41	17	(0)
2021	22	17	35	-	184	121	122	34	41	16	(0)
2022	22	17	35	-	187	120	126	34	41	16	(0)
2023	21	17	35	-	184	117	128	34	40	16	(0)
2024	21	17	35	-	186	115	131	34	40	16	(0)
2025	21	16	36	-	185	114	134	34	40	16	(0)
2026	21	17	36	-	184	114	137	34	40	16	(0)
2027	21	17	38	-	184	115	142	34	40	16	(0)
2028	21	17	38	-	187	115	146	35	40	16	(0)
2029	21	17	38	-	187	112	149	35	40	16	(0)
2030	21	17	38	-	189	110	152	36	40	16	(0)
2031	20	16	39	-	187	108	155	36	39	15	(0)
2032	20	16	39	-	187	108	159	36	39	15	(0)
2033	20	16	40	-	189	108	163	36	40	15	(0)
2034	20	16	40	-	187	105	166	37	39	15	(0)

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

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	67	34	76	-	229	299	193	74	112	29	(0)
2015	66	33	79	-	231	301	202	73	114	28	(0)
2016	56	33	85	-	241	319	230	75	116	28	(0)
2017	55	33	86	-	241	315	237	75	116	27	(0)
2018	54	33	87	-	244	310	245	75	116	27	(0)
2019	54	33	88	-	245	308	252	74	116	27	(0)
2020	53	32	88	-	241	300	256	72	114	26	(0)
2021	53	32	92	-	241	303	266	73	116	26	(0)
2022	52	32	93	-	245	300	274	73	116	26	(0)
2023	52	32	94	-	242	295	281	74	115	26	(0)
2024	51	32	94	-	246	290	289	74	115	26	(0)
2025	52	33	96	-	244	287	296	75	114	27	(0)
2026	53	34	99	-	244	289	305	76	115	28	(0)
2027	55	36	103	-	246	295	317	78	118	30	(0)
2028	55	36	105	-	251	295	327	79	119	30	(0)
2029	55	36	105	-	252	290	336	81	118	30	(0)
2030	55	37	107	-	256	288	347	83	119	30	(0)
2031	54	36	109	-	255	284	355	83	118	30	(0)
2032	54	36	112	-	256	285	366	84	119	30	(0)
2033	54	36	115	-	261	286	377	85	120	29	(0)
2034	53	36	116	-	259	282	386	86	120	29	(0)

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

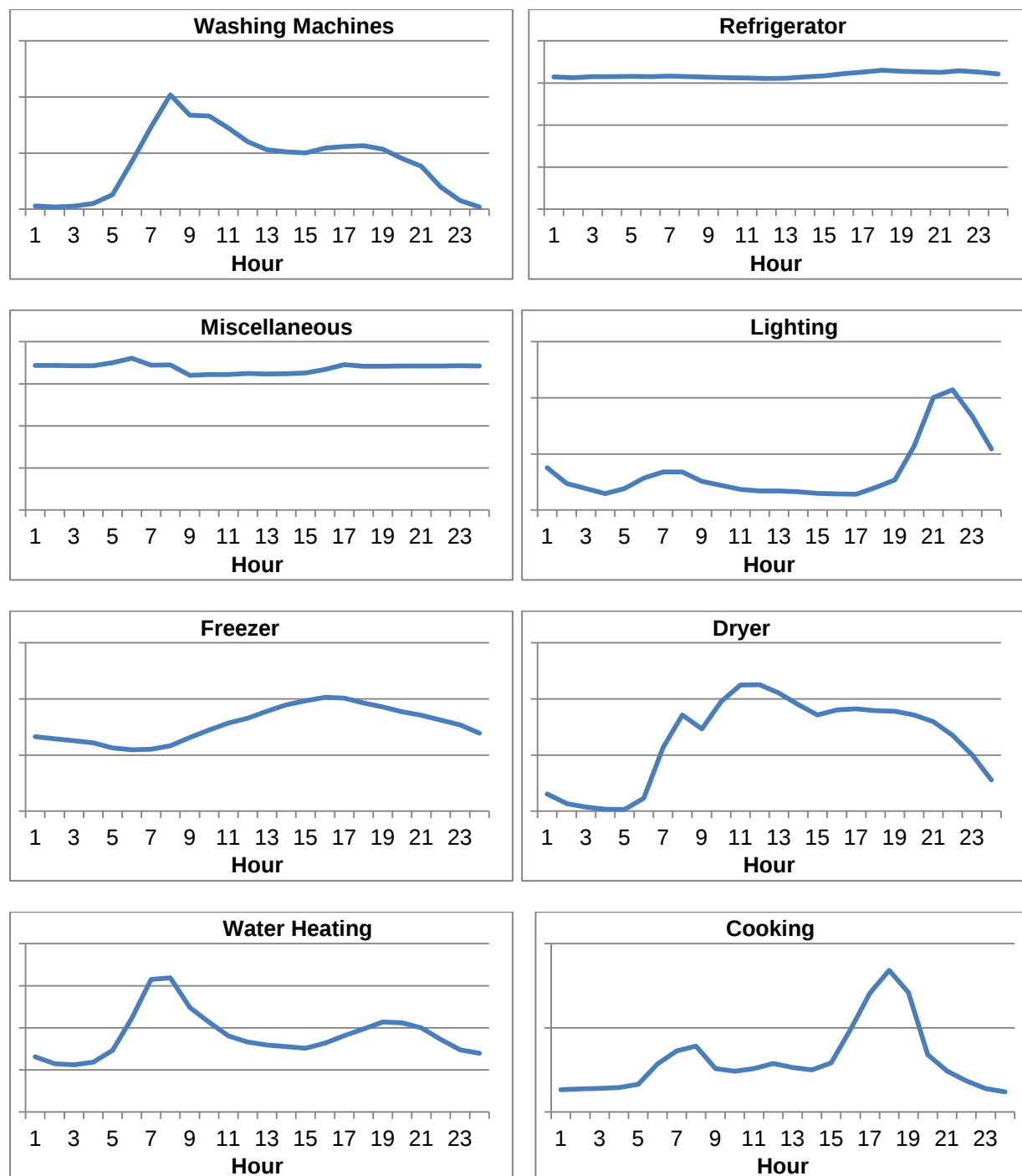
Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	23	6	29	-	103	83	19	39	14	-
2015	23	6	30	-	102	85	18	39	13	-
2016	18	5	31	-	105	94	18	38	13	-
2017	18	5	31	-	103	97	18	38	13	-
2018	18	5	31	-	100	99	17	38	13	-
2019	18	5	32	-	100	102	17	38	12	-
2020	17	5	32	-	98	105	17	38	12	-
2021	17	5	33	-	99	108	17	38	12	-
2022	17	5	34	-	98	112	17	38	12	-
2023	17	5	34	-	97	115	17	38	12	-
2024	17	5	35	-	96	119	18	38	12	-
2025	17	6	35	-	95	122	18	38	12	-
2026	18	6	36	-	96	126	18	39	13	-
2027	18	7	38	-	98	131	19	39	13	-
2028	18	7	39	-	98	136	19	40	13	-
2029	18	7	39	-	97	139	20	39	13	-
2030	18	7	39	-	96	144	20	40	13	-
2031	18	7	40	-	94	147	20	39	13	-
2032	18	7	41	-	94	151	20	40	13	-
2033	18	7	42	-	95	155	21	40	13	-
2034	17	7	42	-	93	158	21	40	13	-

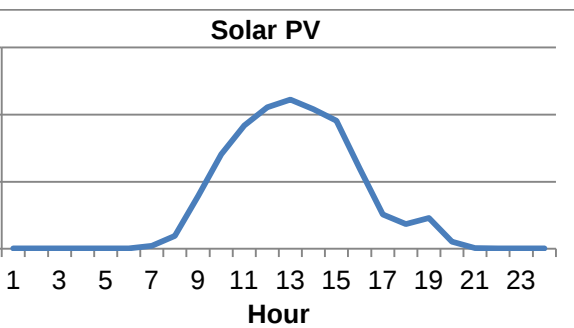
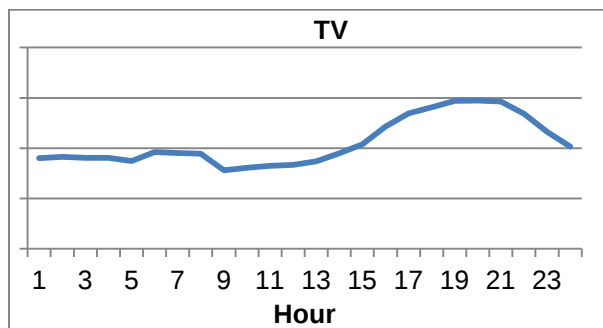
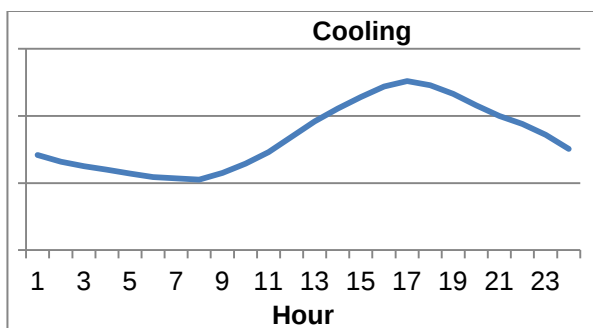
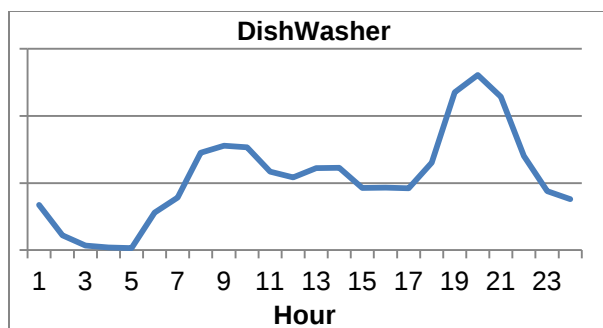
Forecast for Winter Coincident Peaks for Commercial LPS End Uses (MW)

Year	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
2014	21	9	23	-	70	46	10	27	11	-
2015	20	9	23	-	71	48	10	28	11	-
2016	17	9	25	-	75	54	10	28	11	-
2017	17	9	25	-	73	55	10	28	11	-
2018	17	9	26	-	72	57	10	28	11	-
2019	17	9	26	-	72	58	10	28	11	-
2020	16	9	26	-	70	59	10	27	10	-
2021	16	9	27	-	70	61	10	27	10	-
2022	16	9	27	-	70	63	10	27	10	-
2023	16	9	27	-	68	64	10	27	10	-
2024	16	9	27	-	67	65	10	27	10	-
2025	16	9	27	-	66	67	10	27	10	-
2026	16	9	28	-	67	69	10	27	11	-
2027	17	9	29	-	68	71	11	28	11	-
2028	17	10	29	-	68	73	11	28	11	-
2029	17	10	29	-	67	75	11	28	11	-
2030	17	10	30	-	66	77	11	28	11	-
2031	16	10	30	-	65	79	11	28	11	-
2032	16	10	31	-	65	81	11	28	11	-
2033	16	10	31	-	65	83	11	28	11	-
2034	16	10	32	-	64	85	11	28	11	-

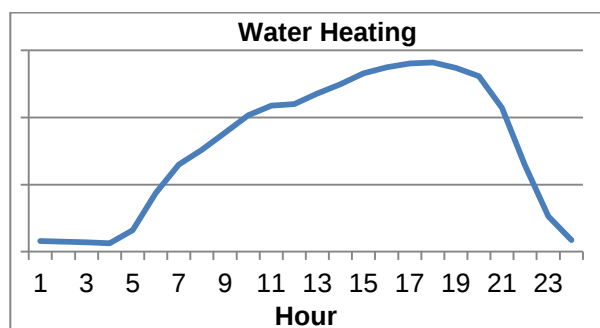
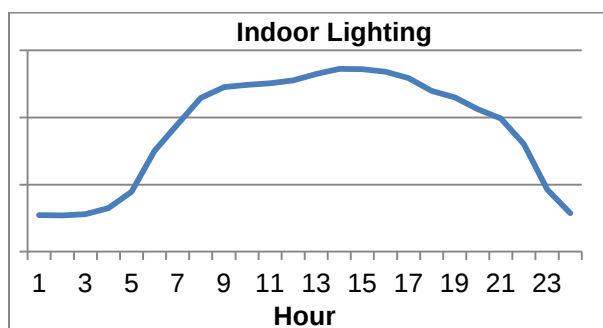
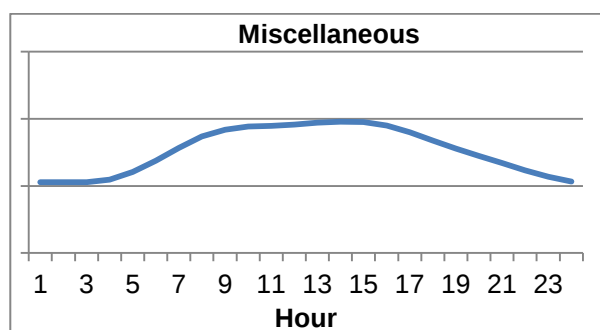
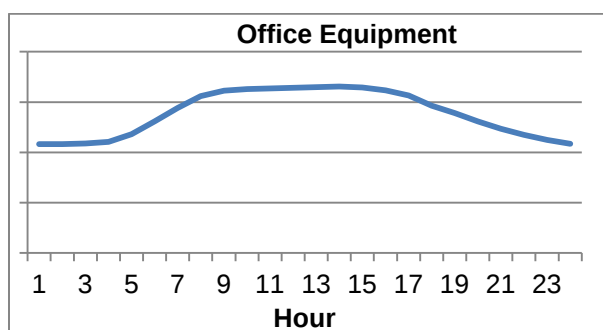
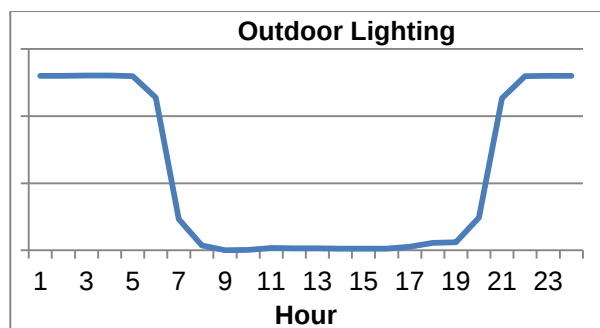
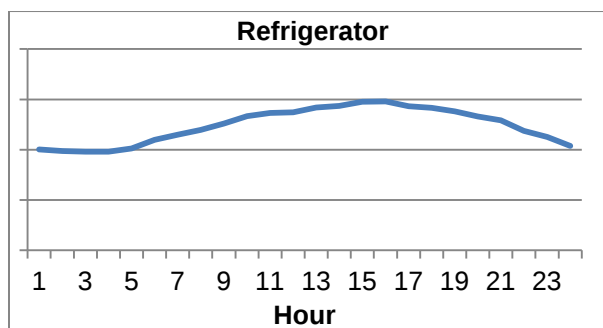
Load Profile by Class and End Uses on System Peak Days

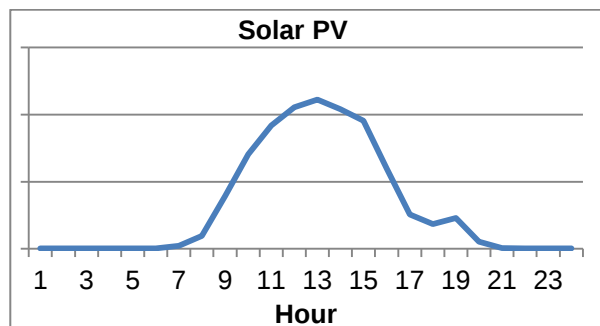
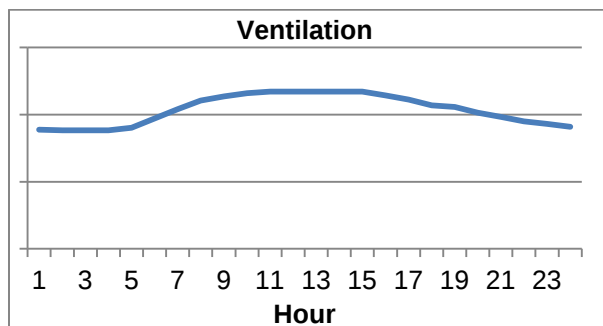
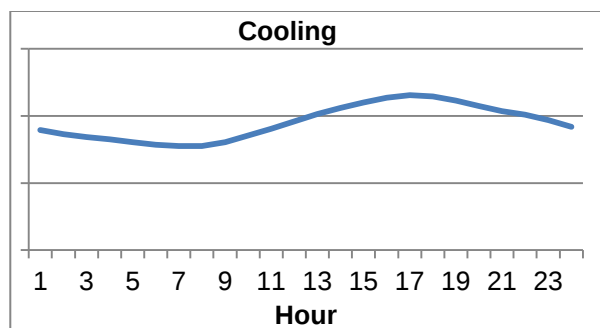
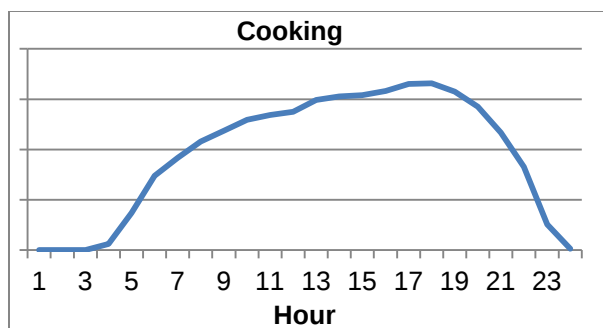
Profile Shapes for Residential End Uses





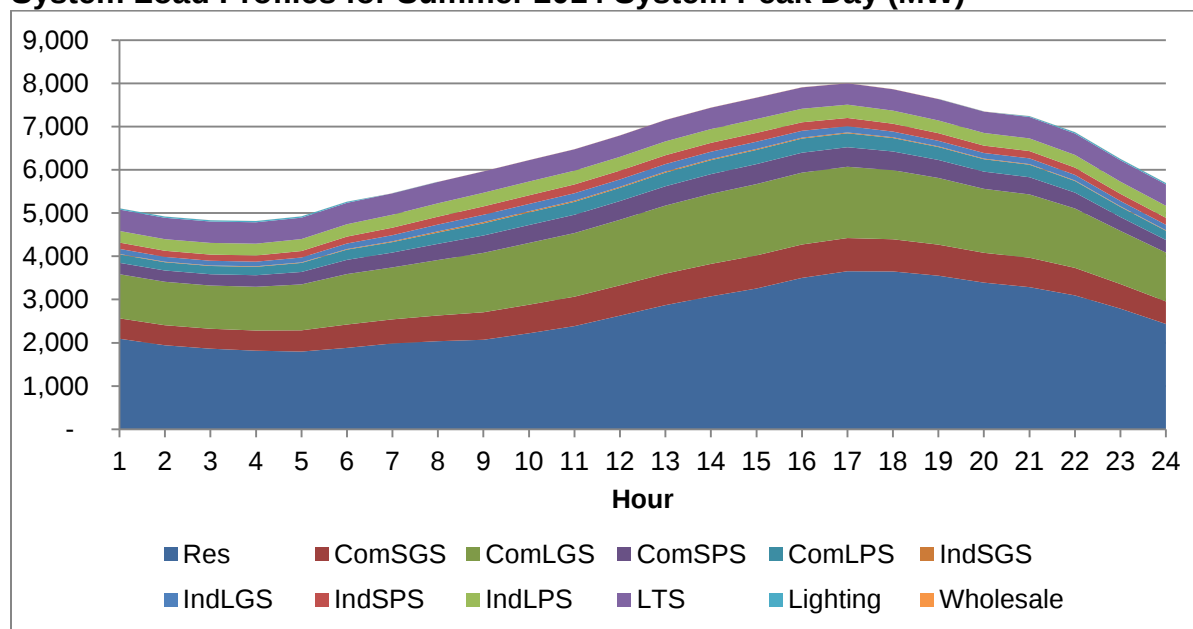
Profile Shapes for Commercial End Uses



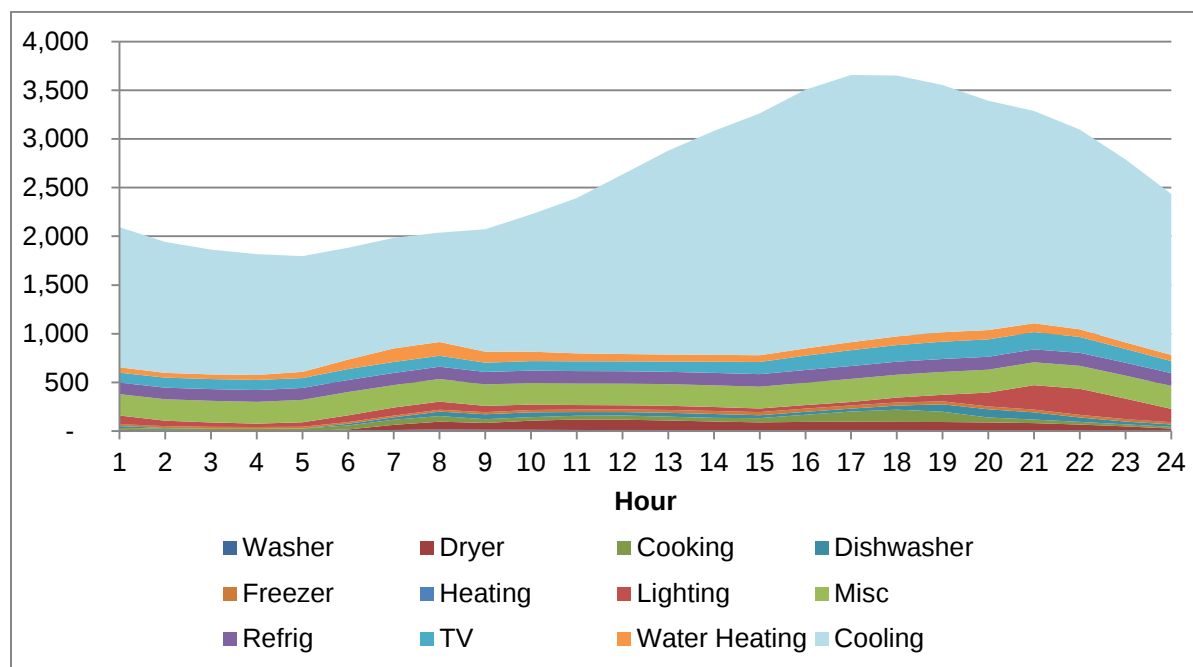


Summer and Winter Peak Day Profiles – System by Class and Class by End Use – 2014, 2019, 2024, 2034¹¹

System Load Profiles for Summer 2014 System Peak Day (MW)

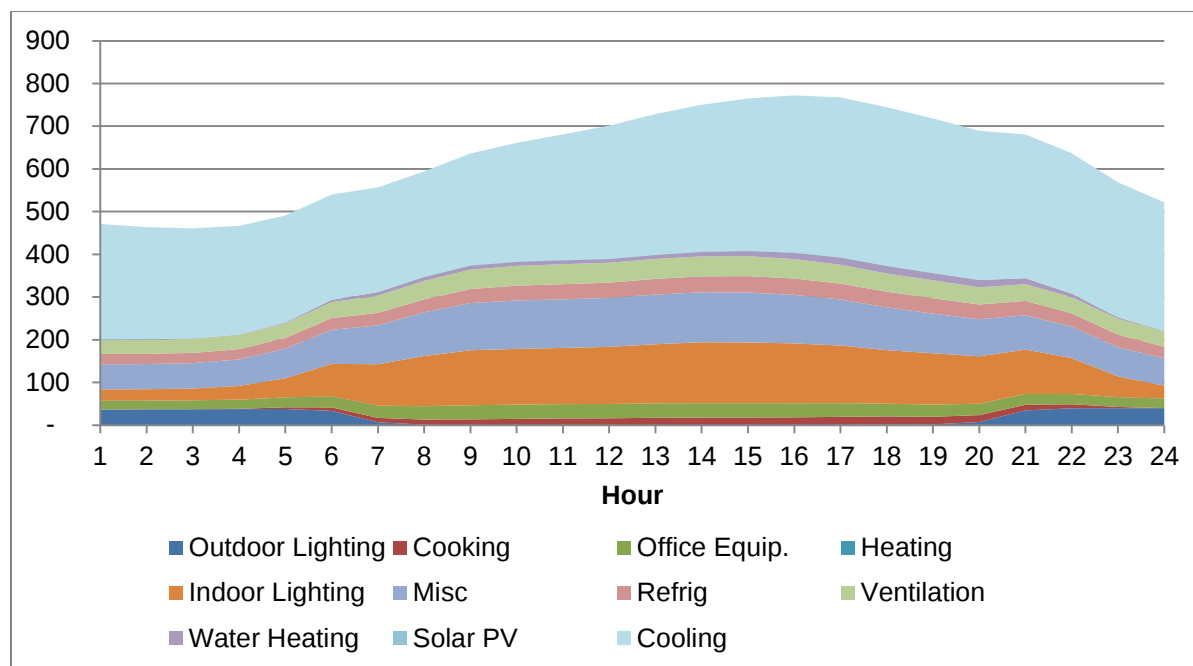


Summer 2014 System Peak Day: Residential End-Use Profiles (MW)

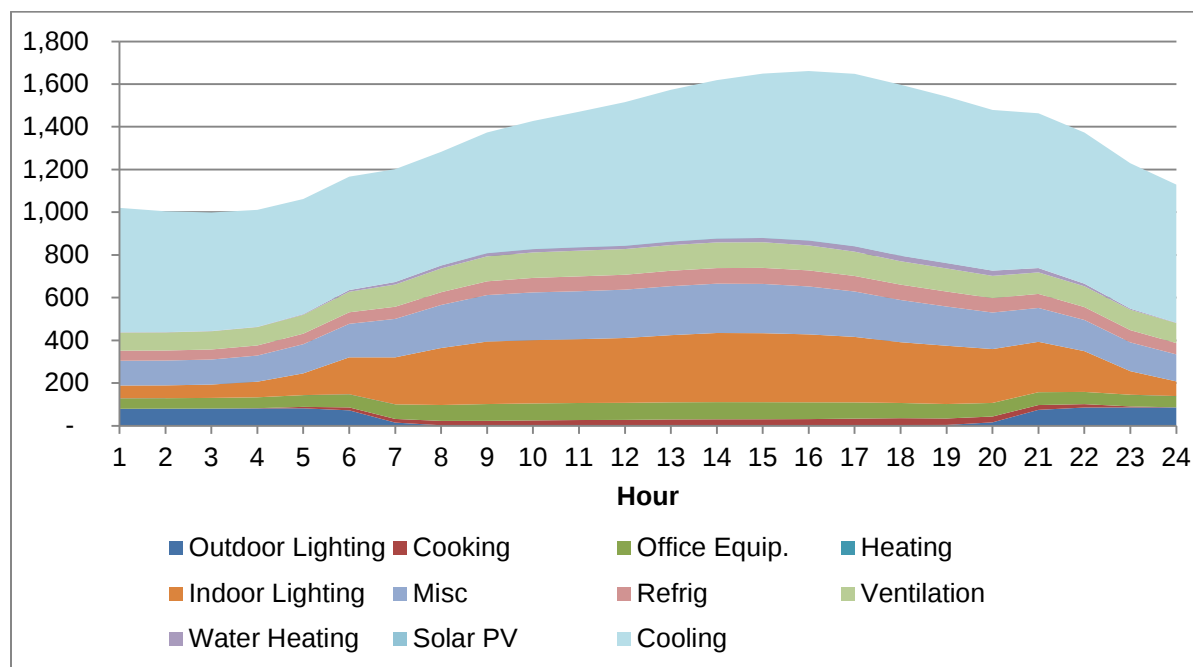


¹¹ 4 CSR 240-22.030(7)(A)7

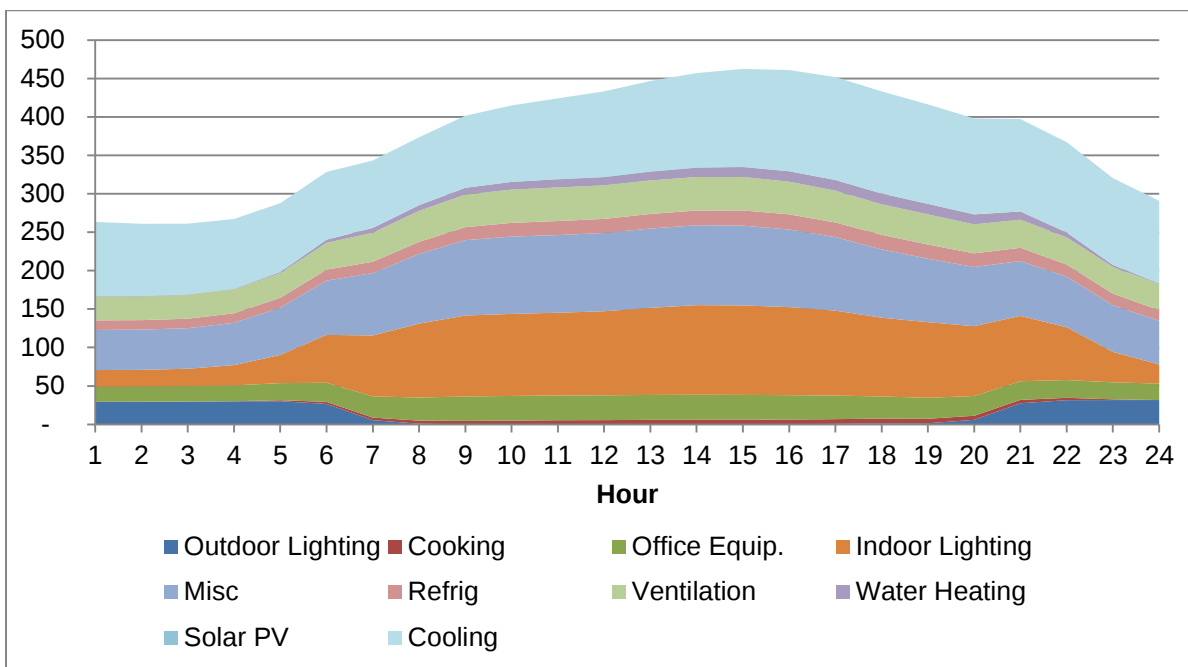
Summer 2014 System Peak Day: Commercial SGS End-Use Profiles (MW)



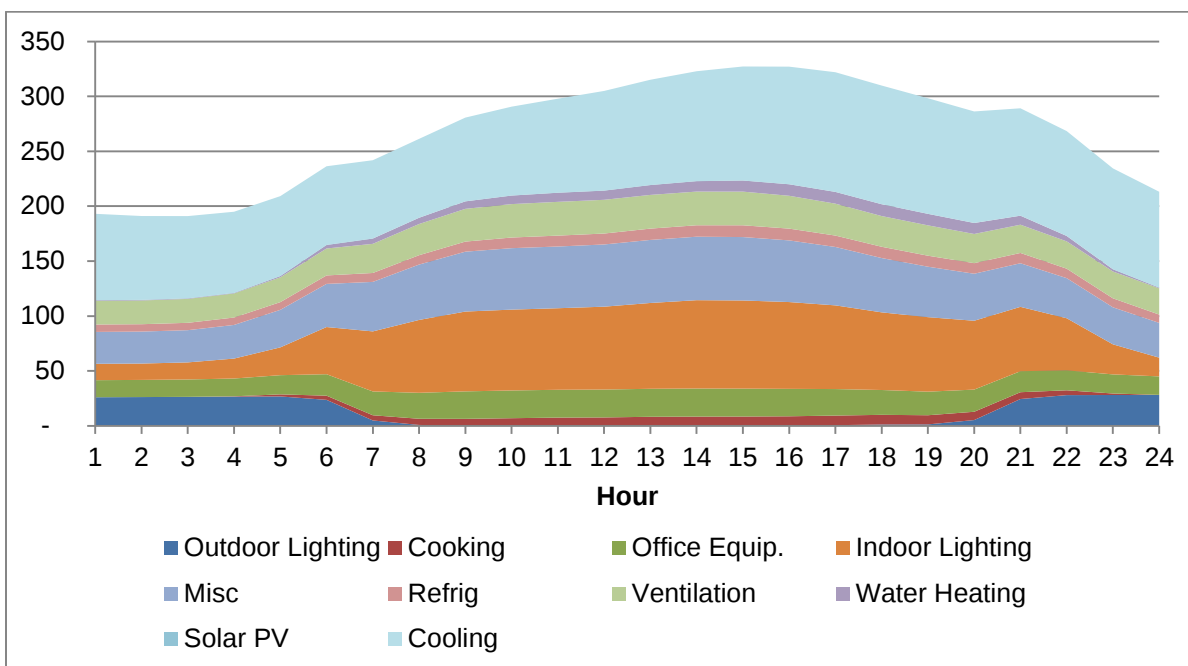
Summer 2014 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2014 System Peak Day: Commercial SPS End Use Profiles (MW)



Summer 2014 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Summer 2014 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,094	471	1,020	263	193	12	118	145	269	495	29	2	5,111
2	1,942	464	1,004	261	191	12	112	142	268	495	29	2	4,921
3	1,864	461	999	261	191	12	109	142	270	495	29	2	4,835
4	1,817	467	1,011	267	195	12	106	143	273	495	30	1	4,817
5	1,797	491	1,062	288	209	12	113	150	277	495	30	1	4,925
6	1,883	540	1,167	328	236	14	127	160	286	495	27	2	5,264
7	1,985	557	1,202	343	242	19	141	174	300	495	-	2	5,458
8	2,037	594	1,283	373	261	28	157	183	309	495	-	2	5,722
9	2,070	636	1,374	401	281	31	168	194	315	495	-	2	5,966
10	2,220	661	1,427	415	291	27	169	200	318	495	-	3	6,225
11	2,386	681	1,471	424	298	26	172	204	318	495	-	3	6,477
12	2,628	701	1,516	433	305	24	171	204	317	495	-	3	6,796
13	2,871	729	1,573	447	315	25	172	205	320	495	-	3	7,154
14	3,074	750	1,619	457	323	24	171	206	318	495	-	3	7,439
15	3,255	765	1,649	462	327	23	167	204	320	495	-	3	7,671
16	3,501	772	1,661	461	327	21	158	197	313	495	-	3	7,909
17	3,655	767	1,648	452	322	20	144	191	308	495	-	3	8,004
18	3,649	744	1,597	433	310	18	131	182	303	495	-	3	7,866
19	3,551	718	1,542	416	298	16	127	177	294	495	-	3	7,638
20	3,391	689	1,479	398	286	16	129	170	293	495	-	3	7,349
21	3,287	681	1,463	397	289	15	133	168	293	495	20	3	7,244
22	3,096	637	1,373	367	268	13	128	169	293	495	31	3	6,873
23	2,790	568	1,229	320	234	13	123	165	282	495	31	2	6,254
24	2,435	521	1,129	291	213	13	125	161	278	495	31	2	5,696

Summer 2014 System Peak Day: Profile for Residential End Uses (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	14	18	1,438	20	20	-	88	219	119	102	55	(0)
2	0	6	19	1,344	7	20	-	56	220	119	103	49	(0)
3	0	3	20	1,281	2	19	-	45	222	120	103	48	(0)
4	1	2	21	1,240	1	19	-	34	223	121	104	51	(0)
5	2	1	23	1,189	1	18	-	46	230	123	101	64	(0)
6	7	11	41	1,147	17	17	-	69	239	124	112	97	(0)
7	12	53	53	1,136	25	18	-	83	230	125	113	139	(0)
8	17	80	57	1,123	46	19	-	83	233	126	112	141	(1)
9	15	70	39	1,257	51	22	-	64	220	128	95	113	(3)
10	15	93	36	1,409	50	24	-	55	222	127	98	97	(5)
11	13	107	38	1,594	38	26	-	46	221	127	100	82	(7)
12	10	108	43	1,844	35	27	-	43	223	126	101	75	(8)
13	9	101	39	2,093	40	29	-	43	222	127	105	72	(8)
14	9	91	37	2,299	40	31	-	41	222	128	115	70	(8)
15	9	82	43	2,483	30	32	-	37	223	129	125	69	(7)
16	10	86	73	2,656	30	33	-	36	229	131	147	74	(4)
17	10	87	105	2,743	30	33	-	35	237	132	163	82	(2)
18	10	85	125	2,678	42	32	-	51	234	134	170	89	(1)
19	9	85	106	2,537	76	30	-	67	235	133	178	97	(2)
20	8	82	51	2,354	84	29	-	142	235	133	178	96	(0)
21	7	76	36	2,180	74	28	-	251	235	132	178	90	(0)
22	3	65	28	2,050	45	27	-	268	235	134	163	78	(0)
23	1	48	21	1,879	29	25	-	210	236	133	141	67	(0)
24	0	27	18	1,652	25	23	-	137	236	131	123	63	(0)

Summer 2014 System Peak Day: Profile for Commercial SGS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	37	0	21	270	-	26	59	24	33	1	(0)
2	37	-	21	263	-	26	59	24	33	1	(0)
3	37	0	21	258	-	28	59	24	33	1	(0)
4	38	1	21	254	-	32	62	24	33	1	(0)
5	38	4	23	250	-	45	69	25	34	2	(0)
6	34	8	26	247	-	76	80	28	37	6	(0)
7	7	10	29	245	-	97	91	29	40	8	(0)
8	1	12	31	247	-	118	102	31	43	10	(1)
9	0	14	33	263	-	129	110	33	45	12	(2)
10	0	15	33	279	-	130	113	35	46	13	(4)
11	1	15	34	295	-	132	114	36	47	14	(5)
12	0	16	34	312	-	134	115	36	47	14	(6)
13	0	17	34	330	-	138	116	37	47	15	(6)
14	0	17	34	345	-	143	117	37	47	16	(6)
15	0	17	34	357	-	142	117	38	47	17	(5)
16	0	18	33	369	-	140	114	38	45	18	(3)
17	1	19	32	375	-	135	108	37	44	18	(1)
18	2	19	30	372	-	125	100	37	43	18	(1)
19	2	18	28	362	-	120	93	36	42	18	(1)
20	7	16	27	349	-	111	87	35	40	17	(0)
21	35	13	25	337	-	104	80	34	39	14	(0)
22	40	9	24	329	-	84	74	31	38	8	(0)
23	40	3	23	316	-	48	68	29	37	3	(0)
24	40	0	22	300	-	30	64	27	36	1	(0)

Summer 2014 System Peak Day: Profile for Commercial LGS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	80	0	49	582	-	60	116	47	85	1	(0)
2	80	-	49	566	-	60	116	47	85	1	(0)
3	81	0	50	555	-	63	117	47	85	1	(0)
4	81	1	51	548	-	73	122	47	86	1	(0)
5	82	7	55	539	-	102	137	49	88	3	(0)
6	72	14	62	531	-	173	157	54	96	8	(0)
7	15	17	68	529	-	220	180	57	104	12	(0)
8	2	20	74	533	-	267	202	60	111	14	(1)
9	0	23	79	565	-	292	218	64	117	17	(2)
10	0	25	80	600	-	296	224	68	119	19	(4)
11	1	26	80	635	-	299	225	70	120	21	(5)
12	1	26	80	673	-	304	226	70	120	21	(6)
13	1	29	80	711	-	314	229	72	120	22	(6)
14	1	29	80	742	-	324	231	73	120	24	(6)
15	1	30	80	770	-	323	231	75	120	25	(5)
16	1	30	79	794	-	318	224	75	117	26	(3)
17	2	32	76	808	-	307	213	73	114	26	(1)
18	4	32	71	801	-	285	198	72	110	27	(1)
19	4	30	68	780	-	273	184	70	108	26	(1)
20	16	27	64	753	-	252	171	68	104	25	(0)
21	75	22	60	725	-	236	159	66	101	20	(0)
22	85	16	57	708	-	191	146	60	97	12	(0)
23	86	5	55	681	-	110	135	57	96	5	(0)
24	86	0	53	647	-	69	126	53	94	2	(0)

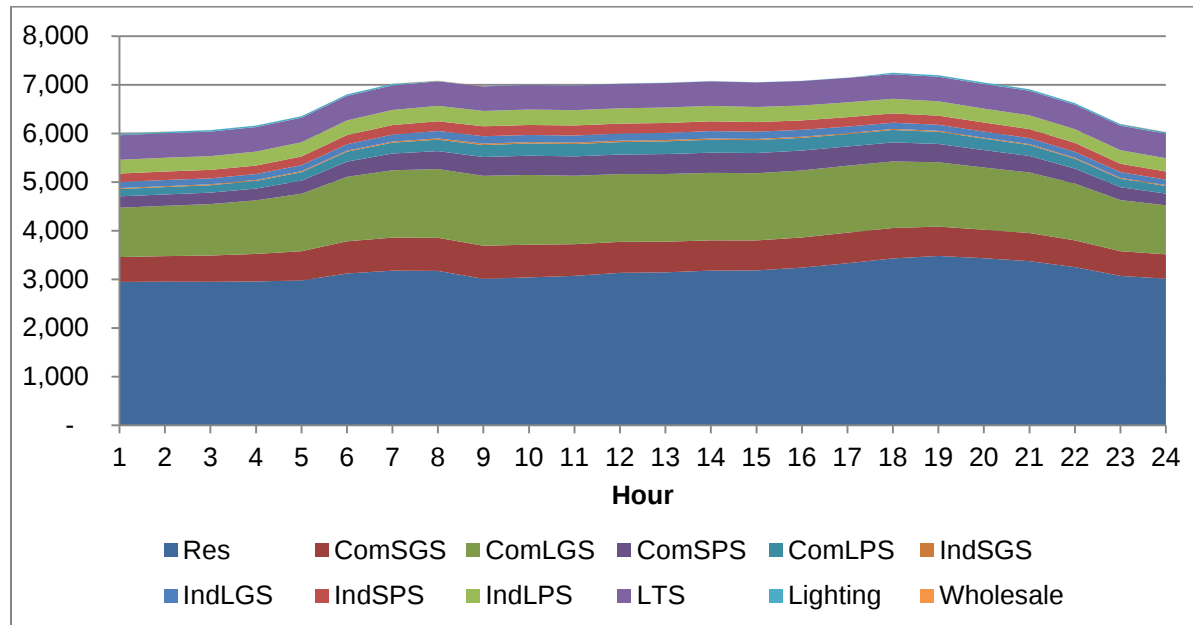
Summer 2014 System Peak Day: Profile for Commercial SPS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	29	0	20	97	22	52	12	31	1	-
2	29	-	20	94	22	52	12	31	1	-
3	30	-	20	92	23	53	12	31	1	-
4	30	0	21	91	26	55	12	31	1	-
5	30	1	22	89	37	61	13	32	2	-
6	27	3	25	88	62	71	14	35	4	-
7	6	3	28	88	79	81	15	38	6	(0)
8	1	4	30	88	96	91	16	40	7	(0)
9	0	4	32	94	105	98	17	42	9	(0)
10	0	5	32	100	107	101	18	43	10	(0)
11	0	5	32	105	108	101	18	44	11	(0)
12	0	5	32	112	109	102	18	44	11	(0)
13	0	6	32	118	113	103	19	44	12	(0)
14	0	6	32	123	117	104	19	44	12	(0)
15	0	6	32	128	116	104	20	44	13	(0)
16	0	6	32	132	115	101	20	42	14	(0)
17	1	6	31	134	110	96	19	41	14	(0)
18	1	6	29	133	102	89	19	40	14	(0)
19	1	6	27	129	98	83	18	39	14	(0)
20	6	5	26	125	91	77	18	38	13	(0)
21	27	4	24	120	85	71	17	37	11	-
22	31	3	23	117	69	66	16	35	6	-
23	32	1	22	113	40	61	15	35	3	-
24	32	0	21	107	25	57	14	34	1	-

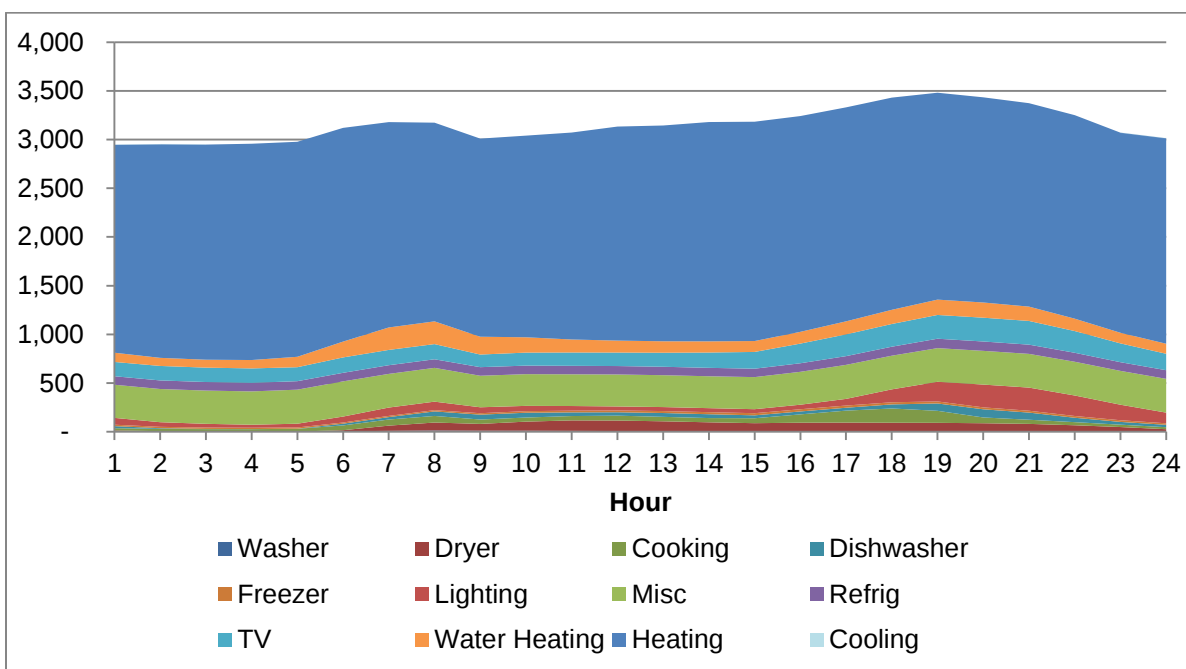
Summer 2014 System Peak Day: Profile for Commercial LPS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	26	0	16	79	15	29	7	22	1	-
2	26	-	16	76	15	29	7	22	1	-
3	26	-	16	75	16	29	7	22	1	-
4	27	0	16	74	18	31	7	22	0	-
5	27	2	17	73	25	34	7	23	1	-
6	24	4	20	72	43	39	8	25	3	-
7	5	5	22	71	55	45	8	27	5	-
8	1	6	24	72	66	50	9	28	6	(0)
9	0	6	25	76	73	55	9	30	7	(0)
10	0	7	25	81	74	56	10	30	8	(0)
11	0	7	25	86	74	56	10	31	8	(0)
12	0	7	25	91	75	57	10	31	8	(0)
13	0	8	25	96	78	57	10	31	9	(0)
14	0	8	26	100	80	58	10	31	10	(0)
15	0	8	25	104	80	58	11	31	10	(0)
16	0	8	25	107	79	56	11	30	11	(0)
17	1	9	24	109	76	53	10	29	11	(0)
18	1	9	23	108	71	49	10	28	11	(0)
19	1	8	21	105	68	46	10	28	10	(0)
20	5	8	20	102	63	43	10	27	10	-
21	24	6	19	98	59	40	9	26	8	-
22	28	4	18	95	47	37	9	25	5	-
23	28	1	17	92	27	34	8	24	2	-
24	28	0	17	87	17	32	8	24	1	-

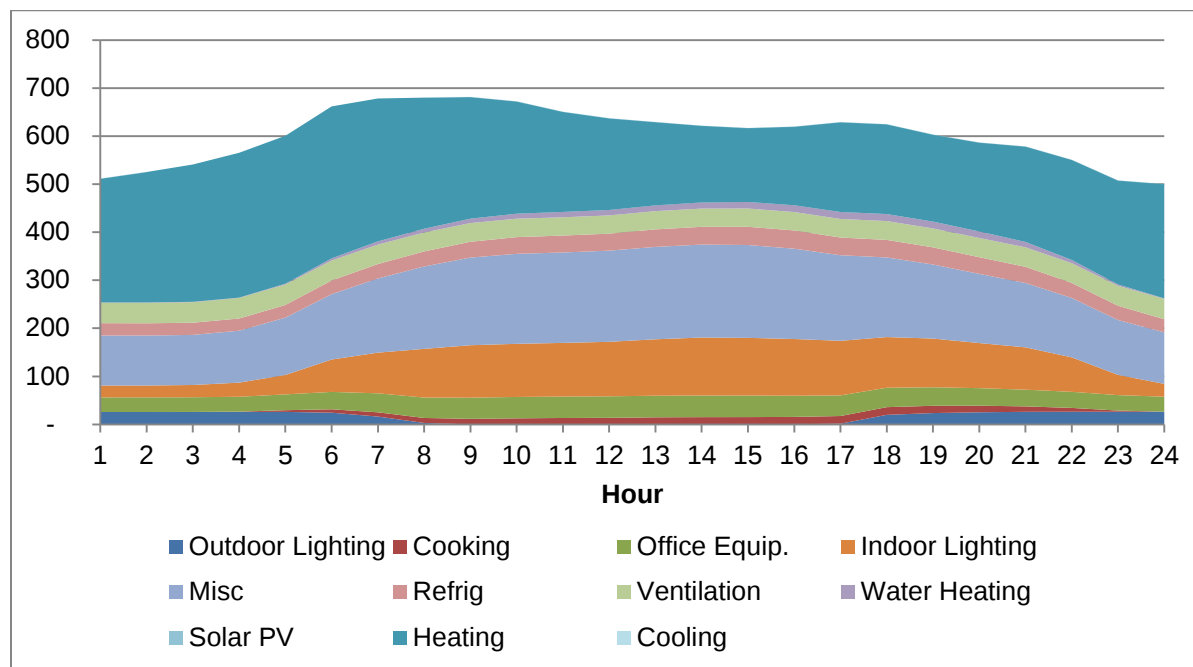
Load Profiles for Winter 2014 System Peak Day (MW)



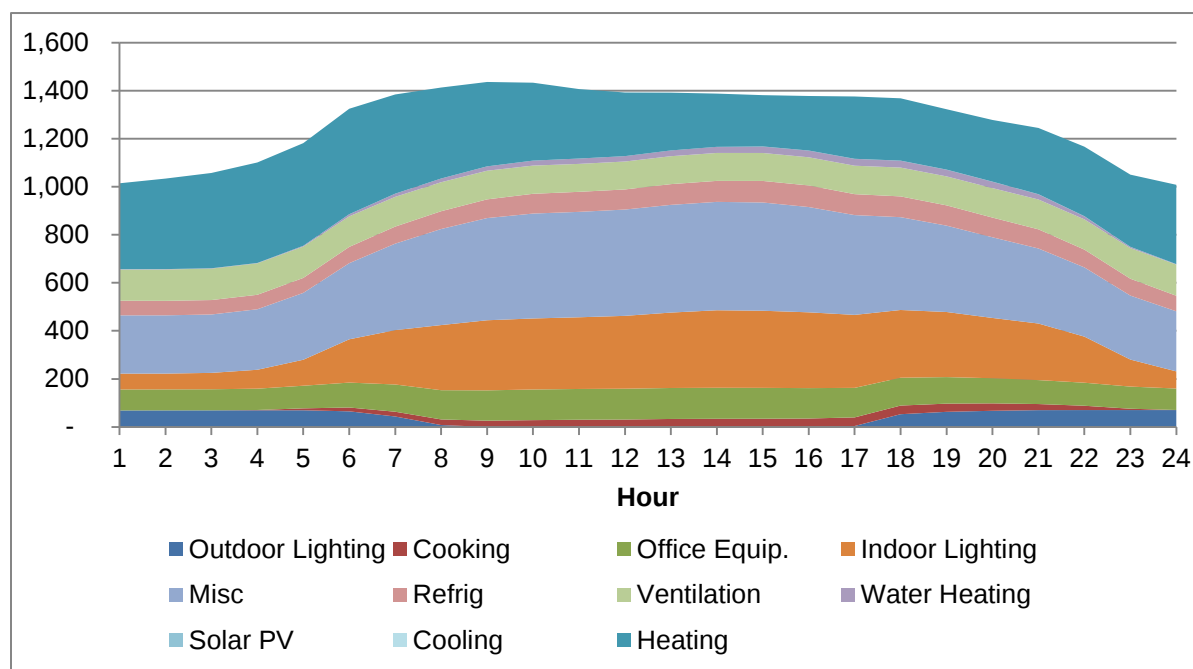
Winter 2014 System Peak Day: Residential End-Use Profiles (MW)



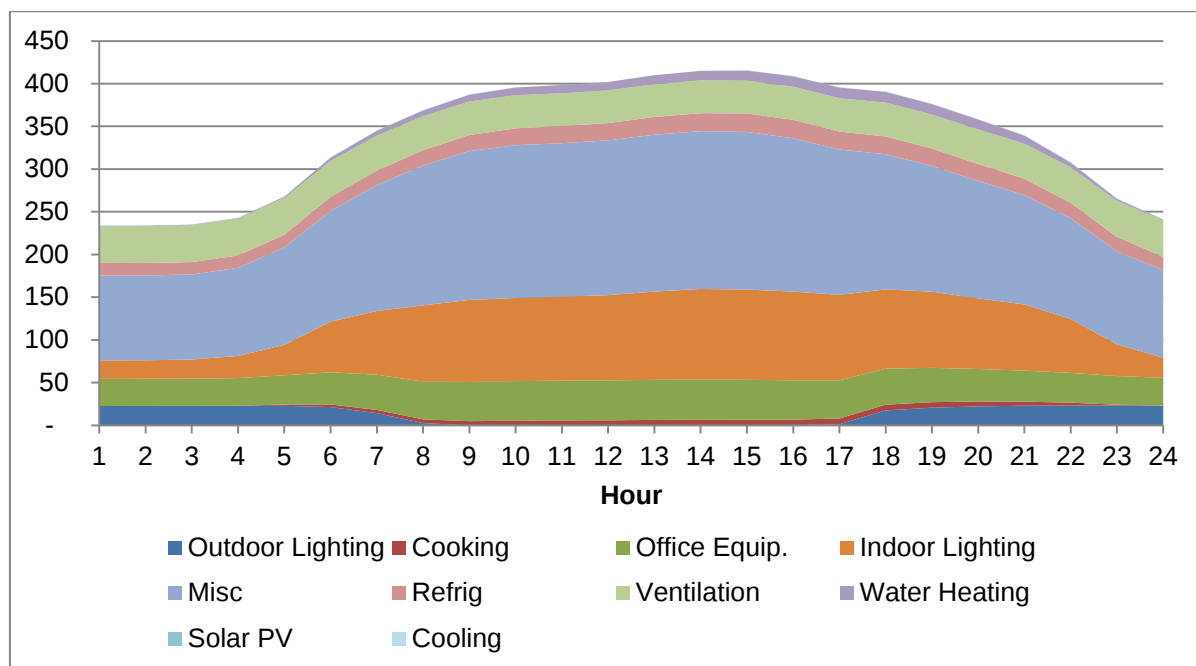
Winter 2014 System Peak Day: Commercial SGS End-Use Profiles (MW)



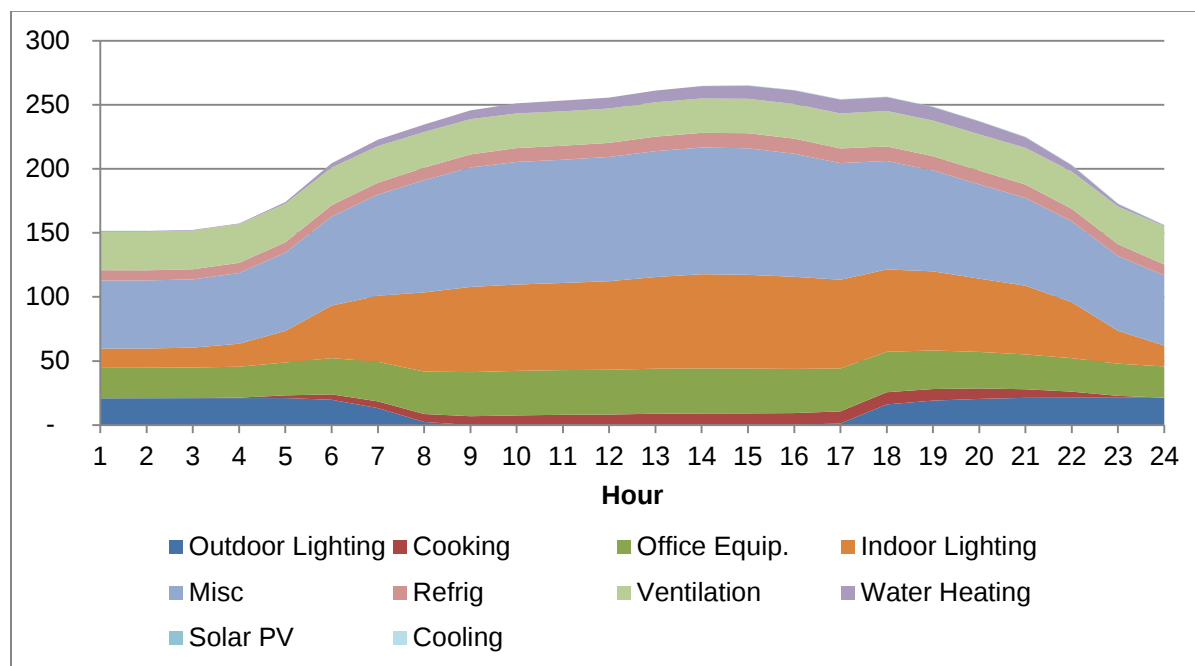
Winter 2014 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2014 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2014 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Winter 2014 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,553	483	847	188	127	20	117	156	263	505	31	2	5,293
2	2,516	495	863	188	127	19	120	156	264	505	31	2	5,287
3	2,510	510	882	188	128	21	114	156	261	505	31	2	5,309
4	2,499	531	918	195	132	20	114	156	266	505	31	2	5,368
5	2,536	567	988	216	147	22	117	160	270	505	31	2	5,561
6	2,668	628	1,118	258	176	20	125	169	278	505	31	2	5,980
7	2,770	639	1,160	282	190	24	135	176	287	505	31	3	6,204
8	2,773	632	1,169	299	198	28	145	178	292	505	8	3	6,230
9	2,598	628	1,177	311	206	31	144	181	289	505	-	3	6,072
10	2,620	616	1,169	317	210	29	138	183	290	505	-	3	6,080
11	2,639	596	1,147	320	212	30	137	184	288	505	-	3	6,062
12	2,668	581	1,132	323	214	30	139	181	288	505	-	3	6,064
13	2,692	575	1,134	331	219	28	139	181	291	505	-	3	6,098
14	2,719	569	1,132	336	223	27	144	179	290	505	-	3	6,126
15	2,717	562	1,123	336	223	26	141	175	285	505	-	3	6,094
16	2,769	569	1,127	332	221	23	134	172	280	505	-	3	6,134
17	2,843	582	1,133	323	216	21	126	172	279	505	-	3	6,203
18	2,991	586	1,144	325	222	22	120	170	276	505	26	3	6,390
19	3,085	570	1,113	316	217	22	116	166	271	505	31	3	6,415
20	3,061	555	1,078	302	207	18	118	166	263	505	31	3	6,307
21	3,005	549	1,053	287	197	19	114	165	261	505	31	2	6,188
22	2,852	519	980	256	176	21	113	163	258	505	31	2	5,876
23	2,666	468	860	213	145	19	110	151	254	505	31	2	5,425
24	2,578	458	819	190	129	19	103	146	250	505	31	2	5,228

Winter 2014 System Peak Day: Profile for Residential End Uses (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	1	15	20	-	22	18	1,834	105	234	105	109	91	(0)
2	0	7	21	-	7	18	1,864	71	234	105	110	80	(0)
3	1	4	21	-	2	17	1,883	57	234	105	109	78	(0)
4	1	2	22	-	1	17	1,880	46	234	104	109	82	(0)
5	2	1	25	-	1	15	1,883	58	239	104	106	102	(0)
6	8	11	43	-	18	15	1,858	91	247	105	116	155	(0)
7	14	55	55	-	26	15	1,800	128	236	106	116	220	(0)
8	19	83	59	-	48	16	1,739	130	237	105	115	223	(0)
9	16	70	39	-	51	18	1,722	90	219	104	95	173	(0)
10	16	94	36	-	51	20	1,753	80	221	104	98	149	(0)
11	14	108	39	-	38	22	1,798	71	221	103	100	126	(0)
12	11	108	43	-	36	23	1,844	61	222	102	101	116	(0)
13	10	101	40	-	40	25	1,875	61	222	102	105	111	(0)
14	10	91	38	-	40	26	1,906	61	222	102	115	109	(0)
15	10	82	44	-	31	27	1,905	61	223	102	126	106	(0)
16	10	87	74	-	31	28	1,875	69	229	104	148	115	(0)
17	11	88	107	-	30	28	1,846	101	237	106	163	127	(0)
18	11	86	127	-	43	27	1,848	197	235	109	171	138	(0)
19	10	86	107	-	78	26	1,802	299	235	115	178	150	(0)
20	9	83	52	-	86	24	1,786	347	235	114	179	148	(0)
21	7	77	37	-	75	24	1,769	352	235	112	178	140	(0)
22	4	65	28	-	46	22	1,750	311	234	109	163	120	(0)
23	1	48	21	-	29	21	1,729	235	234	105	140	103	(0)
24	0	27	18	-	25	19	1,772	161	233	104	122	97	(0)

Winter 2014 System Peak Day: Profile for Commercial SGS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	32	0	24	-	262	31	63	26	45	1	(0)
2	32	-	24	-	275	30	63	26	45	1	(0)
3	32	0	24	-	288	32	63	25	45	1	(0)
4	32	1	24	-	302	36	65	25	45	1	(0)
5	32	4	26	-	310	50	72	26	45	2	(0)
6	30	8	28	-	319	83	82	29	44	6	(0)
7	20	10	31	-	300	104	93	30	42	9	(0)
8	4	12	33	-	273	125	103	31	41	10	(0)
9	0	14	34	-	253	133	109	33	40	12	(0)
10	0	15	34	-	232	135	112	34	40	13	(0)
11	0	15	35	-	209	136	112	35	39	14	(0)
12	0	16	35	-	190	139	113	35	39	14	(0)
13	0	17	35	-	174	144	115	36	39	15	(0)
14	0	17	35	-	161	148	115	37	39	16	(0)
15	0	17	35	-	153	147	115	38	40	17	(0)
16	0	18	34	-	164	144	112	38	40	18	(0)
17	2	19	33	-	188	139	106	37	40	18	(0)
18	24	19	31	-	188	129	99	36	41	19	(0)
19	29	18	30	-	182	124	92	35	41	18	(0)
20	31	16	28	-	186	115	86	34	42	17	(0)
21	32	13	27	-	199	108	80	33	42	14	(0)
22	32	9	26	-	209	88	74	31	43	8	(0)
23	32	3	25	-	214	51	68	29	43	3	(0)
24	32	0	24	-	234	32	63	27	44	1	(0)

Winter 2014 System Peak Day: Profile for Commercial LGS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	74	0	61	-	329	74	132	54	122	2	(0)
2	74	-	61	-	345	73	131	54	123	2	(0)
3	74	0	61	-	362	76	131	53	123	1	(0)
4	74	1	61	-	380	87	136	53	123	1	(0)
5	75	8	65	-	390	120	150	55	122	3	(0)
6	70	16	72	-	401	200	171	60	119	9	(0)
7	47	20	79	-	377	251	194	63	116	14	(0)
8	8	23	84	-	343	300	216	65	113	16	(0)
9	0	25	87	-	318	321	228	68	111	19	(0)
10	0	28	88	-	292	325	234	72	109	22	(0)
11	1	29	88	-	262	328	235	73	108	23	(0)
12	1	29	88	-	238	333	237	73	108	23	(0)
13	1	32	89	-	219	345	240	76	108	25	(0)
14	1	33	89	-	202	355	242	77	108	27	(0)
15	1	33	88	-	192	353	241	79	108	28	(0)
16	1	34	87	-	207	347	235	79	109	29	(0)
17	4	35	85	-	236	334	223	76	110	30	(0)
18	57	36	80	-	236	311	207	76	112	30	(0)
19	67	34	76	-	229	299	193	74	112	29	(0)
20	72	30	72	-	234	276	180	72	114	28	(0)
21	75	25	69	-	250	259	167	70	116	23	(0)
22	75	18	66	-	262	211	154	65	117	14	(0)
23	74	5	63	-	268	123	142	61	118	6	(0)
24	74	0	61	-	295	78	133	56	120	2	(0)

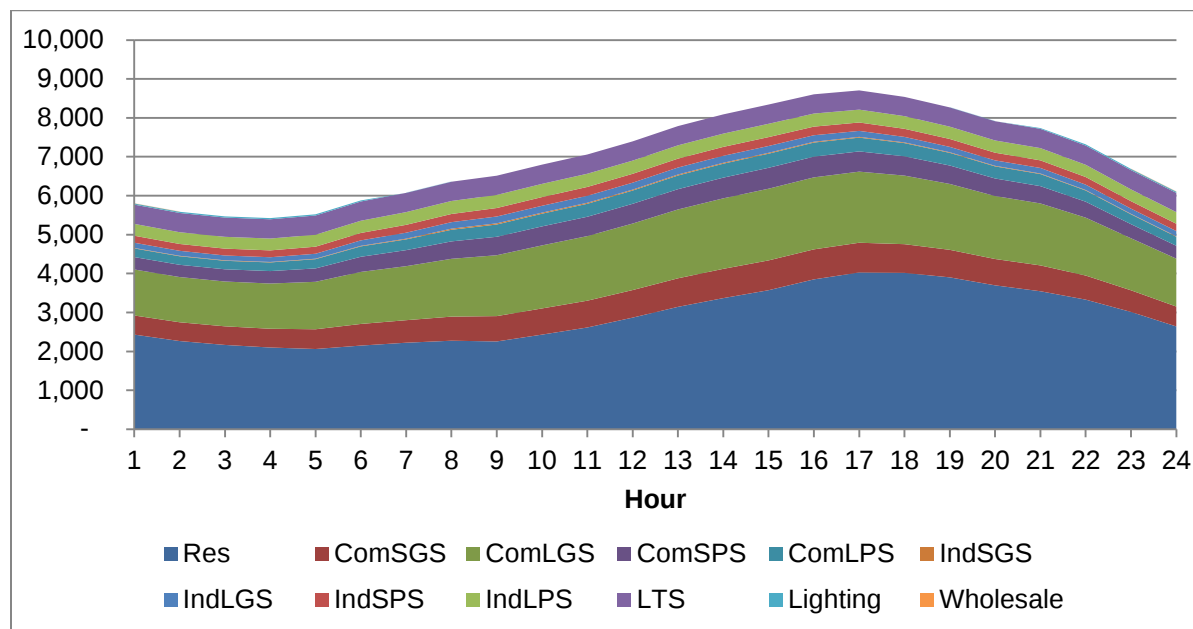
Winter 2014 System Peak Day: Profile for Commercial SPS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	26	0	23	-	25	57	14	42	1	-
2	26	-	23	-	25	56	13	43	1	-
3	26	-	23	-	26	56	13	43	1	-
4	26	0	24	-	30	58	13	43	1	-
5	26	2	25	-	41	64	14	42	2	-
6	24	3	28	-	69	73	15	41	5	-
7	16	4	30	-	86	83	16	40	7	-
8	3	4	32	-	103	92	16	39	8	-
9	0	5	33	-	110	98	17	38	9	-
10	0	5	34	-	112	100	18	38	10	-
11	0	5	34	-	113	101	18	37	11	-
12	0	6	34	-	115	102	18	37	11	-
13	0	6	34	-	119	103	19	37	12	-
14	0	6	34	-	122	104	19	37	13	(0)
15	0	6	34	-	121	104	20	37	14	-
16	0	6	33	-	119	101	20	38	14	-
17	1	7	32	-	115	95	19	38	14	-
18	20	7	31	-	107	89	19	39	15	-
19	23	6	29	-	103	83	19	39	14	-
20	25	6	28	-	95	77	18	39	14	-
21	26	5	26	-	89	72	18	40	11	-
22	26	3	25	-	72	66	16	40	7	-
23	26	1	24	-	42	61	15	41	3	-
24	26	0	23	-	27	57	14	41	1	-

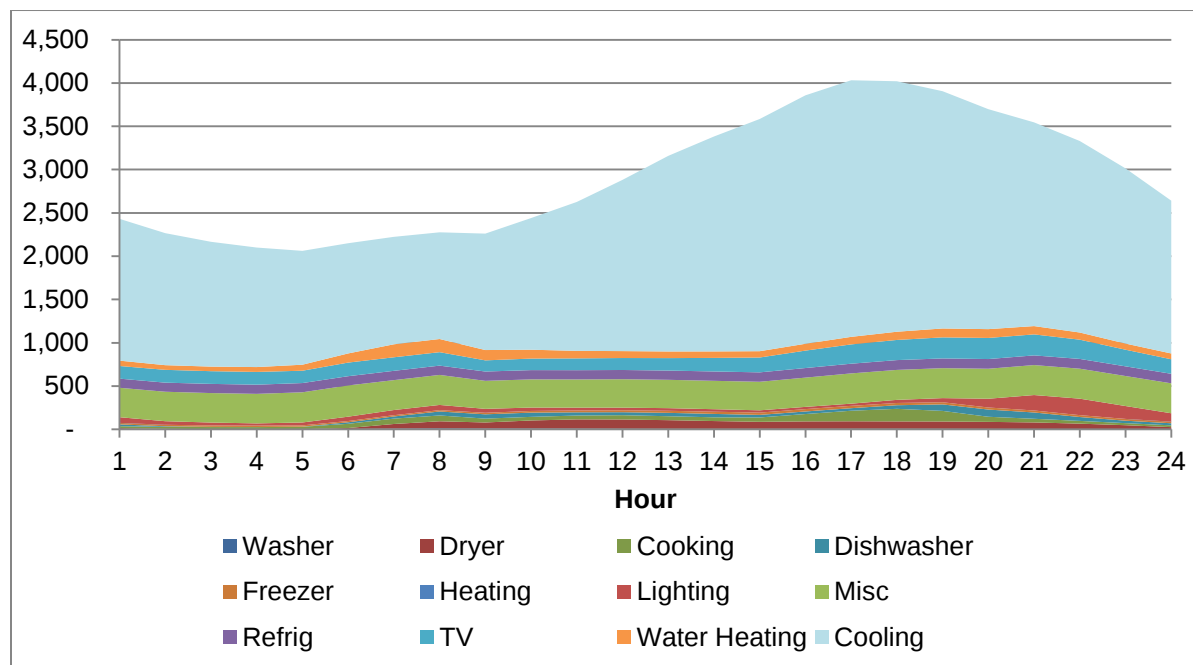
Winter 2014 System Peak Day: Profile for Commercial LPS End Uses (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	23	0	18	-	17	31	7	30	1	-
2	23	-	18	-	17	31	7	30	1	-
3	23	0	18	-	18	31	7	30	1	-
4	23	0	18	-	21	32	7	30	1	-
5	23	2	20	-	28	36	8	30	1	-
6	21	4	22	-	47	41	8	29	3	-
7	14	5	24	-	59	46	9	28	5	-
8	3	6	25	-	71	51	9	27	6	-
9	0	7	26	-	76	54	9	27	7	-
10	0	7	26	-	77	55	10	26	8	-
11	0	8	26	-	77	56	10	26	9	-
12	0	8	26	-	79	56	10	26	9	-
13	0	8	27	-	81	57	10	26	9	-
14	0	9	27	-	84	57	11	26	10	-
15	0	9	26	-	83	57	11	26	11	-
16	0	9	26	-	82	56	11	26	11	-
17	1	9	25	-	79	53	11	27	11	-
18	17	9	24	-	73	49	10	27	11	-
19	21	9	23	-	70	46	10	27	11	-
20	22	8	22	-	65	43	10	28	10	-
21	23	7	21	-	61	40	10	28	9	-
22	23	5	20	-	50	37	9	28	5	-
23	23	1	19	-	29	34	8	29	2	-
24	23	0	18	-	18	32	8	29	1	-

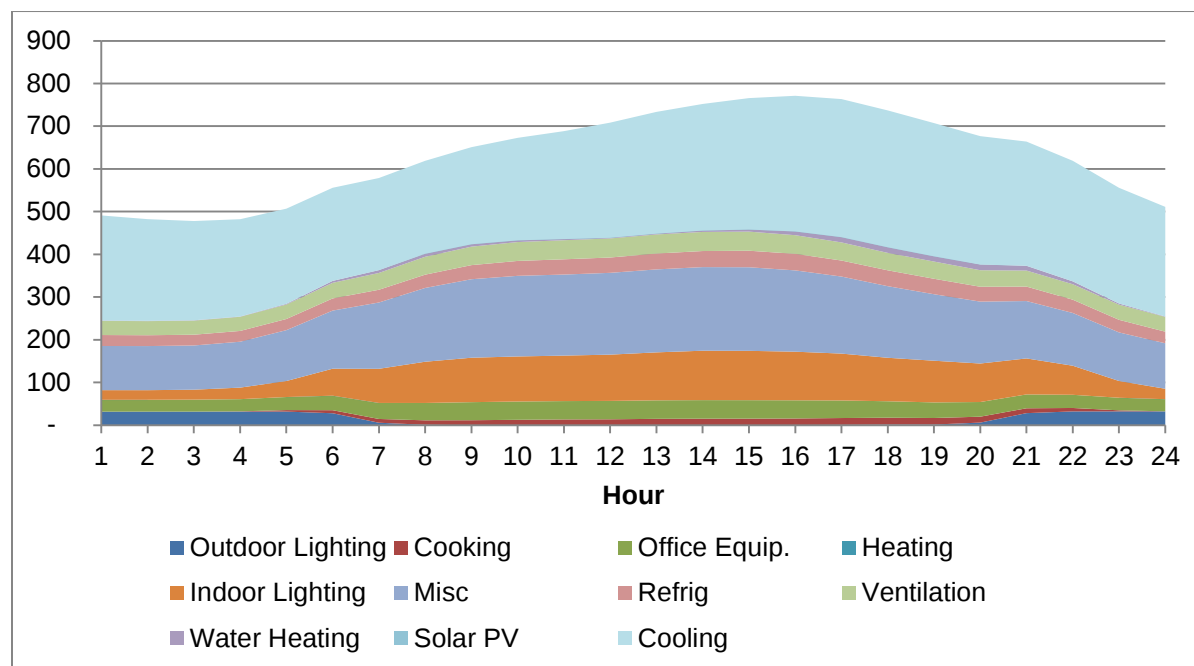
Load Profiles for Summer 2019 System Peak Day (MW)



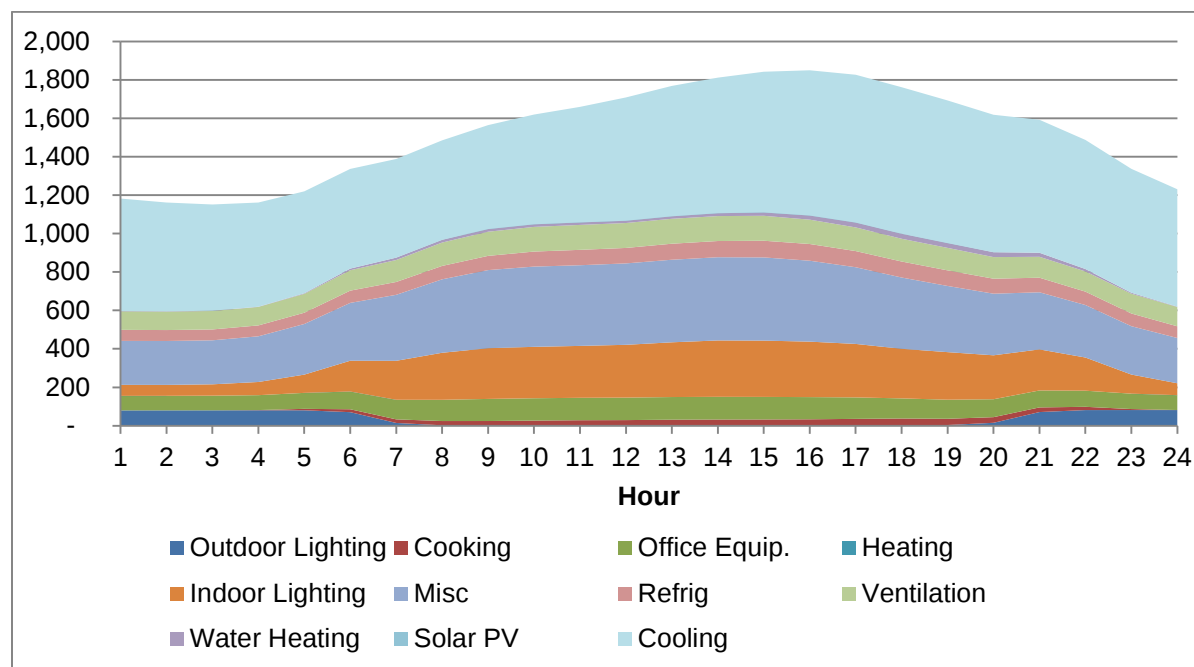
Summer 2019 System Peak Day: Residential End-Use Profiles (MW)



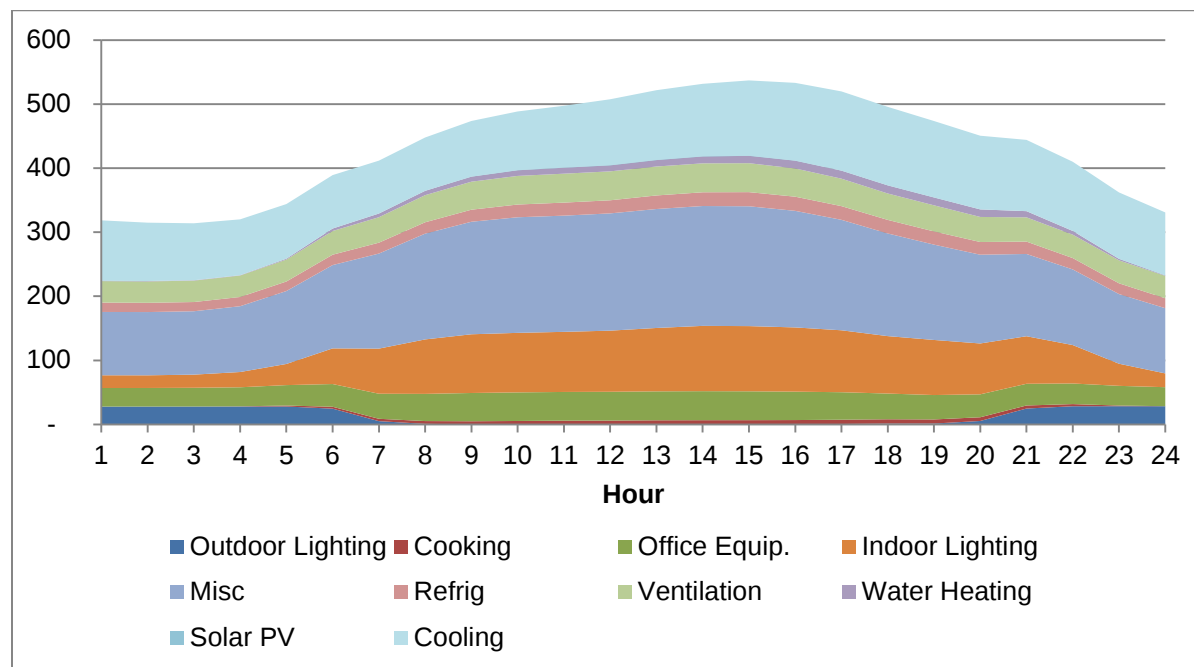
Summer 2019 System Peak Day: Commercial SGS End-Use Profiles (MW)



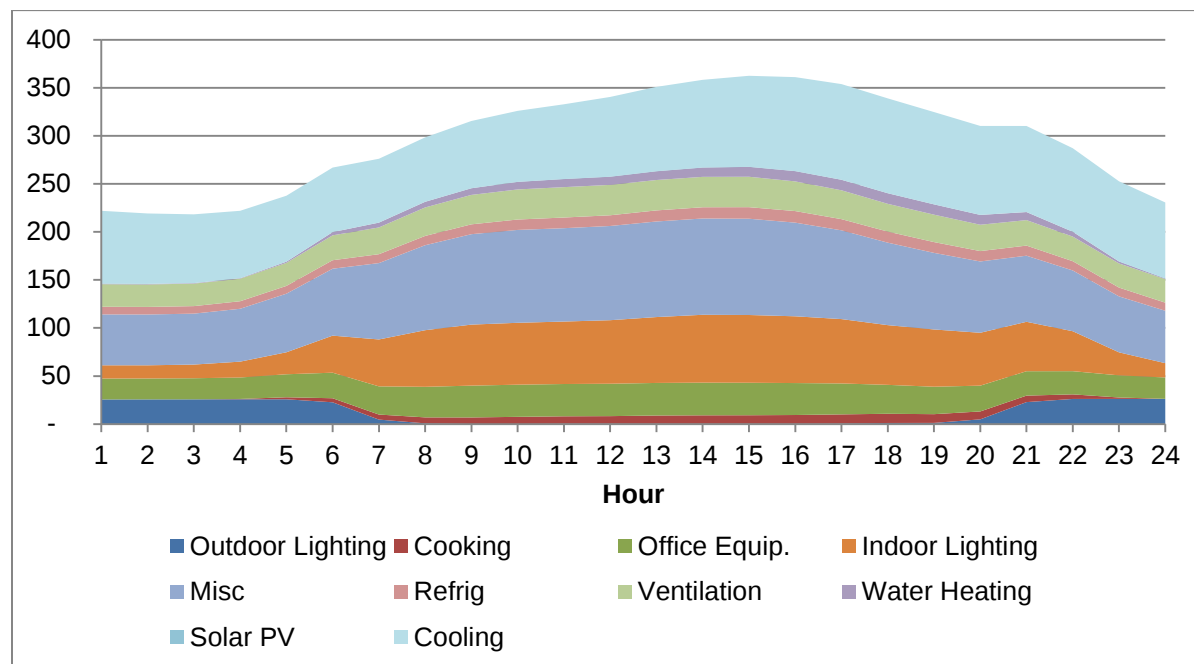
Summer 2019 System Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2019 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2019 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Summer 2019 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,074	460	1,020	256	192	12	128	157	271	495	29	-	5,091
2	1,939	454	1,006	254	190	11	123	154	270	495	29	-	4,926
3	1,867	453	1,005	255	191	12	121	155	273	495	29	-	4,857
4	1,829	459	1,018	261	195	12	119	157	277	495	29	-	4,852
5	1,800	485	1,072	282	210	12	126	163	281	495	30	-	4,954
6	1,892	534	1,180	322	238	14	139	172	290	495	23	-	5,297
7	1,977	556	1,227	340	245	19	151	184	304	495	-	-	5,497
8	2,037	594	1,313	371	266	29	165	192	314	495	-	-	5,774
9	2,068	639	1,412	401	287	31	176	203	322	495	-	-	6,034
10	2,229	660	1,461	413	296	27	177	208	325	495	-	-	6,292
11	2,408	678	1,502	421	303	27	179	212	324	495	-	-	6,550
12	2,639	698	1,546	430	310	24	178	212	324	495	-	-	6,855
13	2,892	724	1,602	442	320	26	179	212	326	495	-	-	7,216
14	3,096	744	1,647	452	327	24	178	212	324	495	-	-	7,499
15	3,280	758	1,676	457	331	23	175	211	326	495	-	-	7,731
16	3,530	765	1,687	454	331	21	167	205	319	495	-	-	7,973
17	3,688	760	1,672	445	325	20	154	200	313	495	-	-	8,072
18	3,681	737	1,618	426	312	19	143	192	309	495	-	-	7,932
19	3,579	710	1,561	409	300	16	140	188	300	495	-	-	7,700
20	3,406	682	1,498	390	288	16	142	183	299	495	-	-	7,398
21	3,280	673	1,481	388	290	15	145	181	299	495	17	-	7,265
22	3,089	629	1,388	359	270	13	141	182	300	495	31	-	6,897
23	2,788	564	1,248	315	237	13	137	179	289	495	31	-	6,297
24	2,451	519	1,151	288	216	13	139	176	286	495	31	-	5,765

Summer 2019 System Peak Day: Residential End-Use Profiles (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	13	18	1,415	18	17	-	67	244	106	121	54	(0)
2	0	6	19	1,326	6	17	-	43	246	106	124	47	(0)
3	0	3	20	1,265	2	16	-	35	248	108	124	46	(0)
4	0	2	20	1,229	1	16	-	26	251	109	125	50	(0)
5	1	1	23	1,170	1	15	-	35	258	111	122	62	(0)
6	4	10	41	1,141	16	15	-	53	269	112	136	95	(0)
7	7	51	53	1,120	22	15	-	64	260	113	136	136	(0)
8	9	78	57	1,120	42	16	-	64	263	114	136	139	(1)
9	8	68	39	1,250	46	19	-	50	250	117	115	111	(4)
10	8	91	36	1,412	45	20	-	43	251	116	119	95	(8)
11	7	105	39	1,607	34	22	-	36	251	115	122	81	(10)
12	6	105	43	1,845	32	23	-	33	253	115	123	74	(12)
13	5	98	40	2,103	36	25	-	33	252	115	128	71	(12)
14	5	88	37	2,308	36	26	-	32	252	116	139	69	(12)
15	5	79	44	2,491	27	28	-	29	253	117	152	67	(11)
16	5	84	73	2,662	27	28	-	28	259	119	178	73	(7)
17	5	84	105	2,749	27	28	-	27	268	120	197	81	(3)
18	5	83	126	2,685	38	27	-	39	265	121	206	88	(2)
19	5	82	106	2,545	69	26	-	52	265	121	216	95	(3)
20	4	80	51	2,363	77	25	-	110	266	120	216	94	(1)
21	4	74	37	2,190	67	24	-	194	266	120	215	89	(0)
22	2	63	28	2,062	41	23	-	208	267	122	198	77	(0)
23	1	47	21	1,883	26	22	-	163	268	121	172	66	(0)
24	0	26	18	1,658	22	20	-	106	268	119	150	63	(0)

Summer 2019 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	34	0	22	257	-	25	67	22	32	1	(0)
2	34	-	22	250	-	25	68	22	32	1	(0)
3	34	0	22	247	-	26	68	22	33	1	(0)
4	35	1	23	243	-	30	72	23	33	1	(0)
5	35	4	24	240	-	42	80	24	34	2	(0)
6	31	7	27	237	-	72	92	26	37	5	(0)
7	6	9	30	237	-	92	106	27	40	7	(0)
8	1	11	33	239	-	111	119	29	43	9	(1)
9	0	12	35	256	-	123	129	31	45	11	(3)
10	0	14	36	270	-	124	132	33	46	12	(6)
11	0	14	36	285	-	125	133	34	47	13	(8)
12	0	14	36	302	-	127	134	34	47	13	(9)
13	0	16	36	319	-	131	135	35	47	14	(9)
14	0	16	36	333	-	135	136	35	46	15	(9)
15	0	16	36	345	-	135	136	36	46	16	(8)
16	0	16	35	356	-	133	132	36	45	16	(5)
17	1	17	34	362	-	128	125	35	44	17	(2)
18	2	17	32	359	-	119	116	35	42	17	(2)
19	2	16	30	350	-	114	108	34	42	16	(2)
20	7	15	28	338	-	105	101	33	40	15	(0)
21	32	12	27	327	-	99	94	32	39	13	(0)
22	37	9	26	318	-	80	86	29	38	8	(0)
23	37	3	25	306	-	46	80	28	37	3	(0)
24	37	0	24	291	-	29	75	26	36	1	(0)

Summer 2019 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	73	0	52	570	-	57	137	44	85	1	(0)
2	74	-	53	555	-	58	137	44	85	1	(0)
3	74	0	54	547	-	60	139	44	86	1	(0)
4	75	1	55	539	-	70	145	45	87	1	(0)
5	76	6	59	532	-	98	162	47	90	2	(0)
6	67	12	67	524	-	167	187	51	98	7	(0)
7	14	15	74	526	-	213	215	54	106	10	(0)
8	2	18	81	531	-	259	240	57	113	12	(1)
9	0	20	86	567	-	286	261	62	120	14	(3)
10	0	22	87	597	-	289	268	65	122	16	(6)
11	1	23	87	632	-	291	269	66	123	17	(7)
12	1	23	87	669	-	296	271	67	123	18	(8)
13	1	25	87	707	-	306	274	69	123	19	(9)
14	1	26	87	737	-	315	276	70	123	20	(8)
15	1	26	87	765	-	314	276	72	123	21	(8)
16	1	27	85	789	-	309	268	72	119	22	(5)
17	2	28	83	802	-	298	254	69	116	22	(2)
18	3	28	77	796	-	277	236	69	112	22	(1)
19	4	27	73	775	-	265	219	67	110	22	(2)
20	15	24	69	748	-	245	205	64	106	21	(0)
21	69	20	65	724	-	230	190	63	103	17	(0)
22	80	14	62	704	-	186	175	58	100	10	(0)
23	80	4	60	678	-	107	162	55	98	4	(0)
24	80	0	58	645	-	67	152	51	96	1	(0)

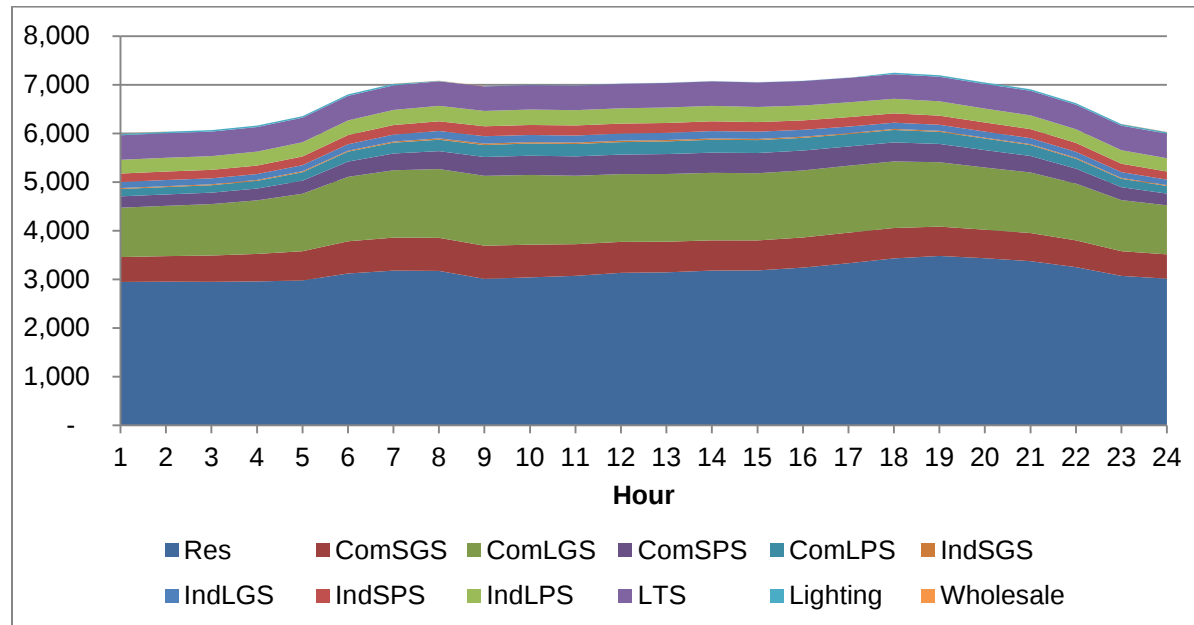
Summer 2019 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	25	-	20	90	20	59	11	29	1	-
2	26	-	20	88	20	59	11	30	1	-
3	26	-	21	87	21	60	11	30	1	-
4	26	0	21	86	24	62	11	30	1	-
5	26	1	23	84	34	70	12	31	1	-
6	23	2	26	83	58	80	13	34	3	-
7	5	2	28	84	73	92	13	37	5	(0)
8	1	3	31	84	89	103	14	39	6	(0)
9	0	3	33	90	98	112	15	41	7	(0)
10	0	4	33	95	99	115	16	42	8	(0)
11	0	4	33	100	100	116	16	43	9	(0)
12	0	4	33	106	102	116	16	43	9	(0)
13	0	4	34	112	105	118	17	42	10	(1)
14	0	4	34	117	108	119	17	42	10	(0)
15	0	4	33	121	108	119	18	42	11	(0)
16	0	4	33	125	106	115	18	41	11	(0)
17	1	5	32	127	103	109	17	40	12	(0)
18	1	5	30	126	95	101	17	39	12	(0)
19	1	4	28	123	91	94	17	38	11	(0)
20	5	4	27	119	84	88	16	37	11	(0)
21	24	3	25	115	79	82	15	36	9	-
22	28	2	24	112	64	75	14	34	5	-
23	28	1	23	108	37	69	14	34	2	-
24	28	0	22	102	23	65	13	33	1	-

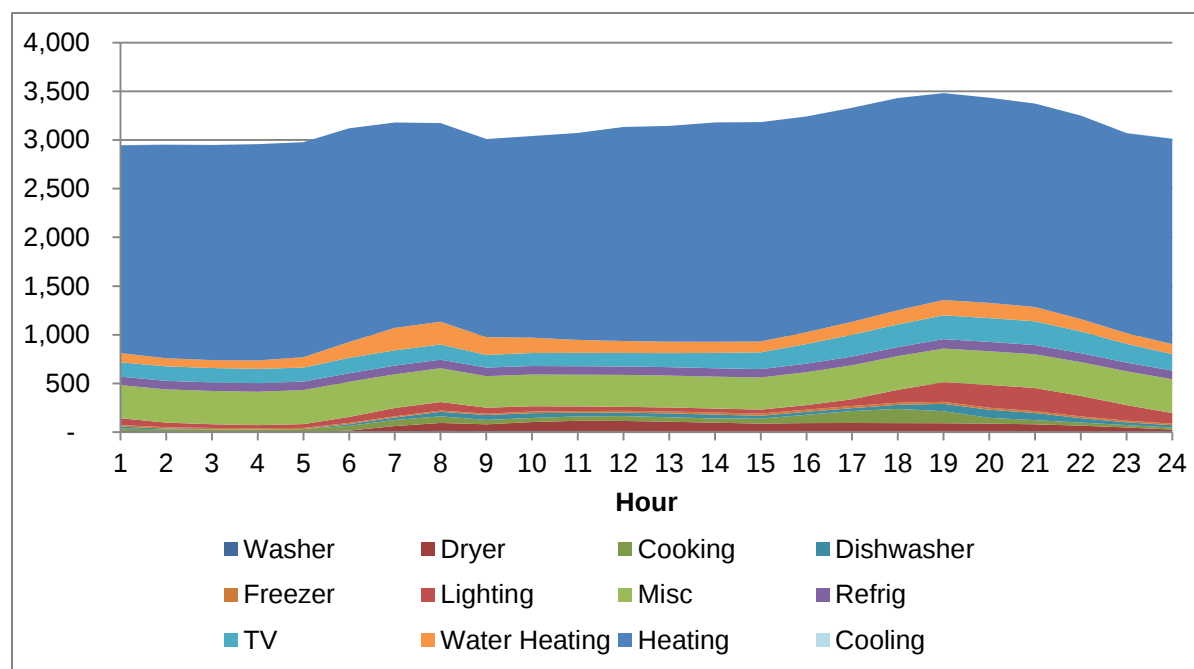
Summer 2019 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	24	0	16	76	14	33	6	21	1	-
2	24	-	16	74	14	34	6	21	0	-
3	25	-	17	73	15	34	6	22	0	-
4	25	0	17	72	17	35	6	22	0	-
5	25	2	18	71	24	40	7	23	1	-
6	22	3	21	70	41	46	7	25	3	-
7	5	4	23	70	52	52	8	27	4	-
8	1	5	25	71	64	59	8	29	5	(0)
9	0	6	27	75	70	64	9	30	6	(0)
10	0	6	27	80	71	65	9	31	7	(0)
11	0	7	27	84	72	66	9	31	8	(0)
12	0	7	27	89	73	66	9	31	8	(0)
13	0	7	27	94	75	67	10	31	8	(0)
14	0	7	27	98	77	67	10	31	9	(0)
15	0	7	27	102	77	67	10	31	9	(0)
16	0	8	27	105	76	65	10	30	10	(0)
17	1	8	26	107	73	62	10	29	10	(0)
18	1	8	24	106	68	58	10	28	10	(0)
19	1	8	23	103	65	54	9	28	10	(0)
20	5	7	21	100	60	50	9	27	9	(0)
21	23	6	20	96	56	46	9	26	8	-
22	26	4	19	94	46	43	8	25	5	-
23	27	1	19	90	26	39	8	25	2	-
24	27	0	18	86	17	37	7	24	1	-

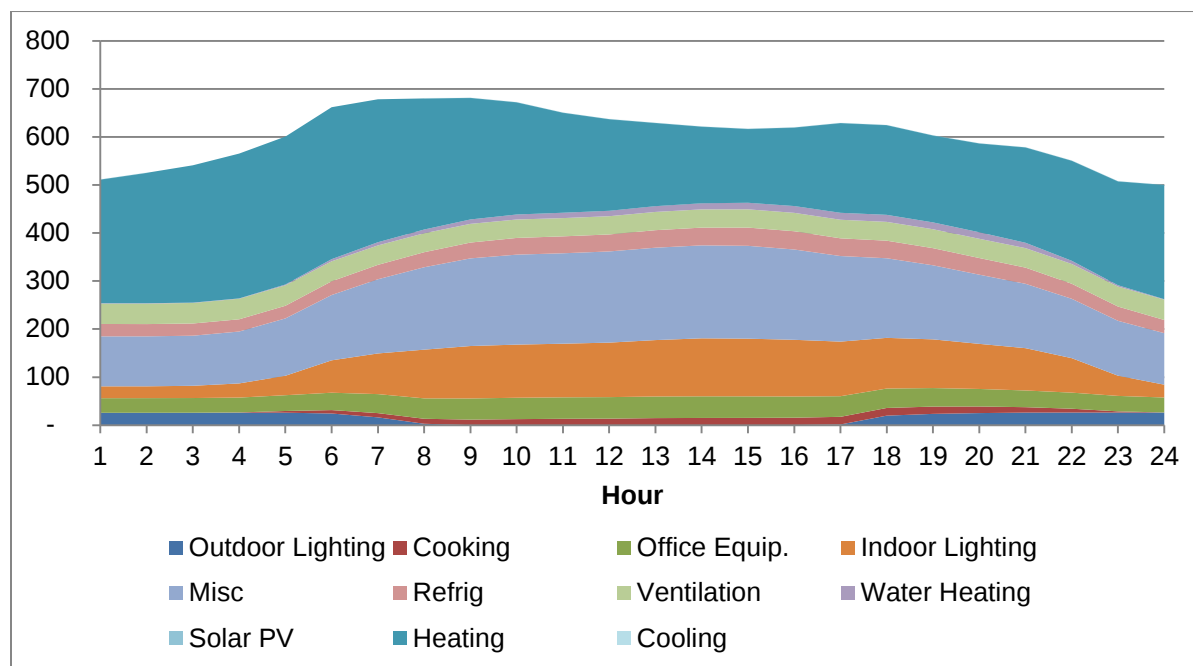
Load Profiles for Winter 2019 System Peak Day (MW)



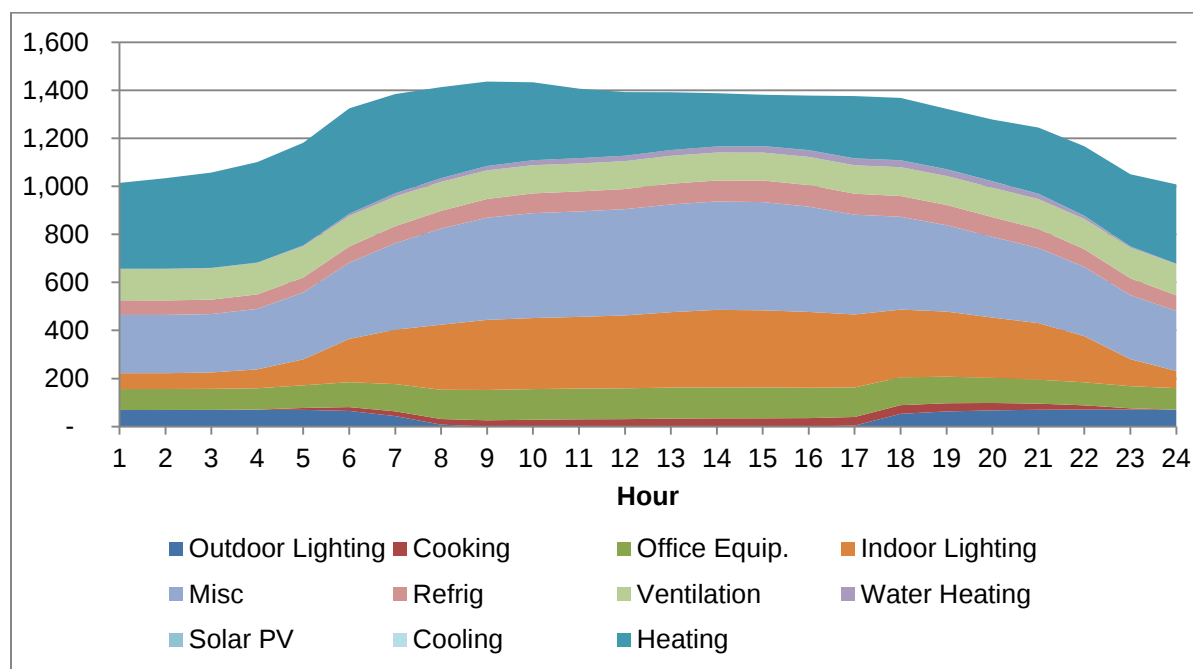
Winter 2019 Peak Day: Residential End-Use Profiles (MW)



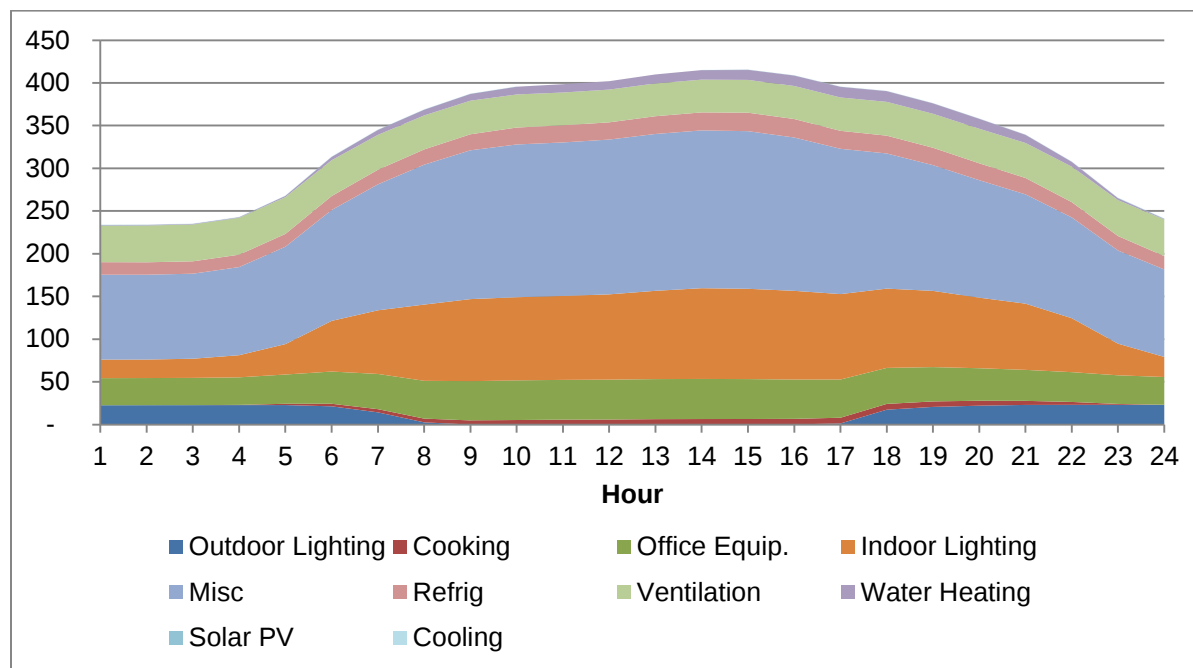
Winter 2019 Peak Day: Commercial SGS End-Use Profiles (MW)



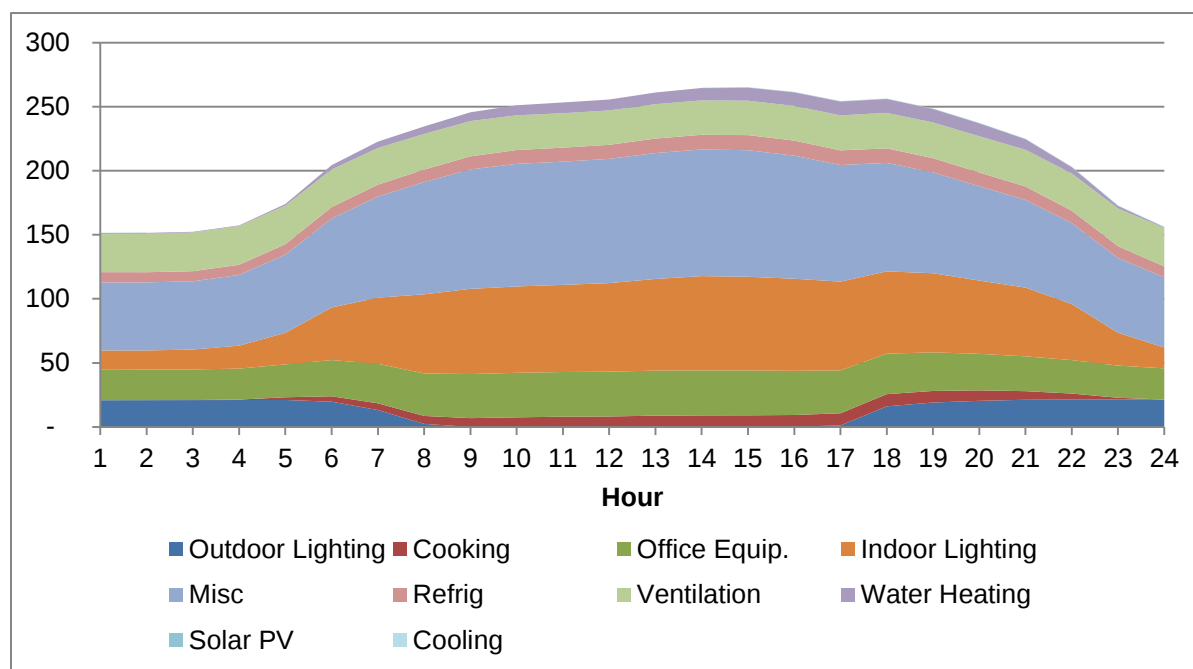
Winter 2019 Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2019 Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2019 Peak Day: Commercial LPS End Uses (MW)



Load Profiles for Winter 2019 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,517	461	833	178	124	18	102	140	243	505	29	-	5,150
2	2,514	477	856	179	125	18	106	140	246	505	29	-	5,195
3	2,540	496	884	181	127	20	100	141	245	505	30	-	5,269
4	2,562	521	927	189	132	19	100	142	252	505	30	-	5,379
5	2,599	560	1,004	210	148	21	104	148	259	505	30	-	5,589
6	2,751	624	1,140	251	177	20	115	161	269	505	31	-	6,043
7	2,833	640	1,192	278	193	23	127	171	280	505	31	-	6,272
8	2,844	638	1,213	297	203	28	139	175	287	505	8	-	6,337
9	2,735	647	1,248	316	216	31	141	183	290	505	-	-	6,312
10	2,761	635	1,240	323	221	29	135	185	292	505	-	-	6,324
11	2,788	615	1,217	325	223	30	133	186	289	505	-	-	6,311
12	2,824	600	1,201	328	225	30	135	183	289	505	-	-	6,319
13	2,850	592	1,200	335	230	28	135	182	293	505	-	-	6,349
14	2,865	585	1,196	340	233	27	141	179	292	505	-	-	6,363
15	2,867	580	1,190	340	234	25	137	174	285	505	-	-	6,338
16	2,936	584	1,190	335	231	23	129	170	280	505	-	-	6,383
17	3,004	596	1,194	326	225	20	120	171	279	505	-	-	6,440
18	3,114	599	1,199	325	229	22	112	167	275	505	26	-	6,575
19	3,182	579	1,162	315	224	22	108	163	270	505	32	-	6,561
20	3,151	567	1,128	301	214	18	110	162	261	505	32	-	6,448
21	3,098	560	1,102	286	203	19	106	161	259	505	32	-	6,331
22	2,977	532	1,031	257	183	21	105	159	257	505	32	-	6,058
23	2,815	484	915	217	152	19	102	144	254	505	32	-	5,638
24	2,747	475	875	195	136	19	94	137	250	505	32	-	5,465

Winter 2019 System Peak Day: Residential End-Use Profiles (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	13	19	-	18	14	1,829	79	248	88	123	85	(0)
2	0	6	19	-	6	14	1,875	54	250	90	126	75	(0)
3	0	3	20	-	2	13	1,916	44	252	90	126	73	(0)
4	0	2	21	-	1	13	1,939	36	255	91	127	78	(0)
5	1	1	24	-	1	12	1,941	45	262	91	124	98	(0)
6	4	10	42	-	16	12	1,944	71	273	92	137	150	(0)
7	7	52	53	-	23	12	1,879	101	262	94	137	214	(0)
8	10	79	58	-	42	13	1,827	103	265	93	137	218	(0)
9	8	69	39	-	46	15	1,851	73	251	95	116	173	(0)
10	8	91	37	-	46	16	1,884	65	252	94	119	149	(0)
11	7	105	39	-	35	18	1,933	57	252	94	122	126	(0)
12	6	106	44	-	32	19	1,982	49	254	93	124	116	(0)
13	5	99	40	-	36	20	2,015	49	253	93	129	111	(0)
14	5	89	38	-	37	21	2,031	49	254	93	140	109	(0)
15	5	80	44	-	28	22	2,031	49	255	93	154	106	(0)
16	5	85	74	-	28	23	2,014	56	262	94	180	114	(0)
17	5	85	107	-	27	23	1,981	82	271	96	199	127	(0)
18	5	84	127	-	39	22	1,965	159	268	99	208	138	(0)
19	5	83	107	-	70	21	1,916	242	268	104	218	149	(0)
20	4	80	52	-	77	20	1,900	281	268	103	218	148	(0)
21	4	75	37	-	68	19	1,884	285	268	102	217	139	(0)
22	2	63	28	-	42	18	1,885	253	268	99	199	120	(0)
23	1	47	21	-	26	17	1,870	191	269	96	172	103	(0)
24	0	26	18	-	23	16	1,920	132	269	95	151	98	(0)

Winter 2019 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	28	0	24	-	245	28	69	23	42	1	(0)
2	28	-	24	-	260	28	70	23	43	1	(0)
3	29	0	25	-	276	29	70	23	43	1	(0)
4	29	1	25	-	292	33	73	23	44	1	(0)
5	29	4	27	-	303	46	82	24	44	2	(0)
6	27	8	30	-	313	78	94	27	43	5	(0)
7	18	10	33	-	296	98	107	28	42	8	(0)
8	3	11	35	-	272	118	120	29	41	9	(0)
9	0	13	37	-	256	129	129	31	41	11	(0)
10	0	14	37	-	235	131	133	33	41	12	(0)
11	0	14	38	-	211	132	133	34	40	13	(0)
12	0	15	38	-	192	134	134	34	40	13	(0)
13	0	16	38	-	174	139	136	35	40	14	(0)
14	0	16	38	-	160	143	137	35	40	15	(0)
15	0	16	38	-	154	142	137	36	40	16	(0)
16	0	17	37	-	164	140	133	36	41	17	(0)
17	2	18	36	-	188	135	126	35	41	17	(0)
18	23	18	34	-	189	125	117	35	41	17	(0)
19	27	17	32	-	182	120	109	34	42	17	(0)
20	29	15	31	-	188	111	102	33	42	16	(0)
21	30	12	29	-	201	104	95	32	43	13	(0)
22	30	9	28	-	211	85	87	30	44	8	(0)
23	30	3	27	-	217	50	81	28	44	3	(0)
24	30	0	26	-	239	32	76	26	45	1	(0)

Winter 2019 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	66	0	63	-	318	68	149	49	119	1	(0)
2	67	-	63	-	337	68	150	49	120	1	(0)
3	67	0	64	-	358	71	152	49	121	1	(0)
4	68	1	65	-	379	83	158	50	122	1	(0)
5	69	7	70	-	392	114	176	52	123	3	(0)
6	65	14	77	-	405	192	202	57	120	8	(0)
7	44	18	85	-	384	243	230	60	118	12	(0)
8	8	21	91	-	352	292	257	63	115	14	(0)
9	0	24	96	-	332	319	278	67	116	17	(0)
10	0	26	97	-	304	324	285	71	114	19	(0)
11	1	27	98	-	273	326	287	72	113	21	(0)
12	1	27	98	-	248	332	289	72	113	21	(0)
13	1	29	98	-	225	343	293	74	113	22	(0)
14	1	30	99	-	208	353	295	75	113	24	(0)
15	1	30	98	-	200	351	295	77	113	25	(0)
16	1	31	97	-	213	345	286	77	114	26	(0)
17	4	33	94	-	243	332	271	75	115	27	(0)
18	54	33	88	-	245	308	252	74	116	27	(0)
19	64	31	84	-	235	296	235	72	117	26	(0)
20	69	28	80	-	243	275	219	70	119	25	(0)
21	71	23	76	-	261	258	204	68	121	20	(0)
22	72	16	73	-	274	210	188	63	122	12	(0)
23	72	5	70	-	281	123	174	60	124	5	(0)
24	72	0	68	-	309	78	164	56	126	2	(0)

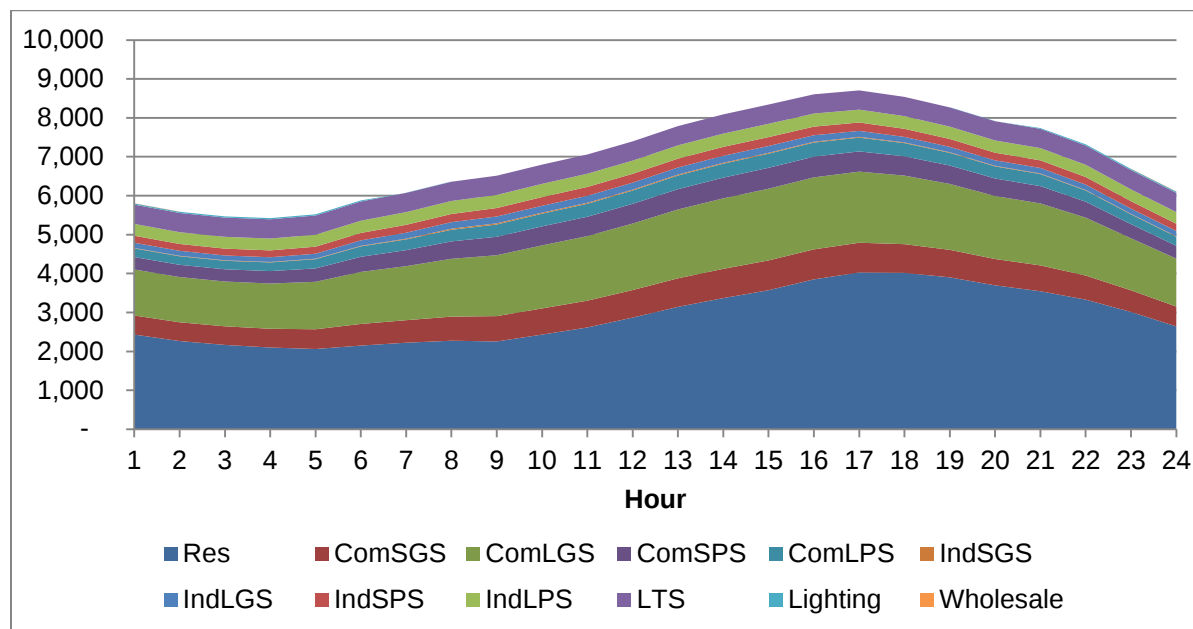
Winter 2019 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	22	-	23	-	22	61	12	39	1	-
2	22	-	23	-	22	61	11	39	1	-
3	22	-	23	-	23	61	11	39	1	-
4	22	0	23	-	27	64	12	40	1	-
5	22	1	25	-	37	71	12	40	1	-
6	21	2	28	-	62	82	13	39	4	-
7	14	3	31	-	79	93	14	38	6	-
8	3	3	33	-	95	104	15	38	7	-
9	0	4	35	-	104	113	16	38	8	-
10	0	4	35	-	105	116	16	37	9	-
11	0	4	35	-	106	116	17	37	10	-
12	0	4	35	-	108	117	17	37	10	(0)
13	0	5	36	-	112	119	17	37	10	(0)
14	0	5	36	-	115	119	17	37	11	(0)
15	0	5	35	-	114	119	18	37	12	(0)
16	0	5	35	-	112	116	18	37	12	(0)
17	1	5	34	-	108	110	17	37	12	-
18	18	5	32	-	100	102	17	38	12	-
19	21	5	30	-	96	95	17	38	12	-
20	22	4	29	-	89	89	16	39	12	-
21	23	4	28	-	84	83	16	39	9	-
22	23	3	26	-	68	76	15	40	6	-
23	23	1	25	-	40	71	14	40	2	-
24	23	0	25	-	25	66	13	41	1	-

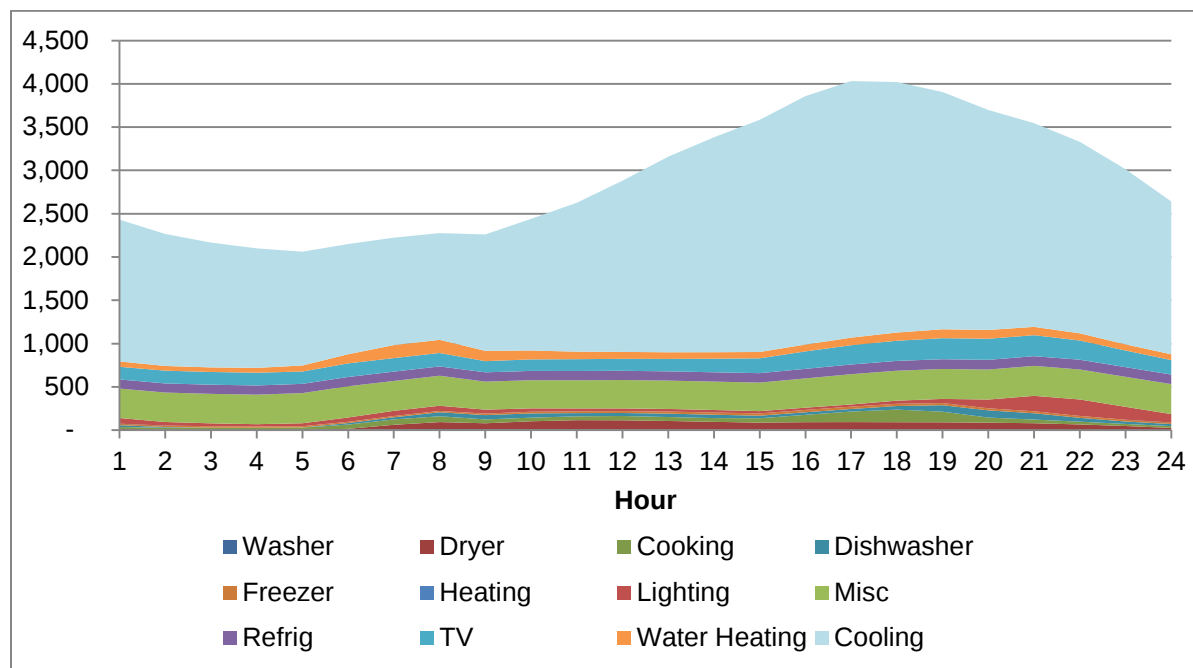
Winter 2019 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	20	0	18	-	16	34	7	28	1	-
2	21	-	18	-	16	35	7	29	1	-
3	21	-	19	-	17	35	7	29	0	-
4	21	0	19	-	19	36	7	29	0	-
5	21	2	20	-	27	41	7	29	1	-
6	20	4	23	-	45	47	8	29	3	-
7	13	5	25	-	56	53	8	28	5	-
8	2	6	27	-	68	59	8	27	6	-
9	0	6	28	-	74	64	9	28	7	-
10	0	7	28	-	75	66	10	27	8	-
11	0	7	29	-	76	66	10	27	8	-
12	0	7	29	-	77	67	10	27	8	-
13	0	8	29	-	80	68	10	27	9	-
14	0	8	29	-	82	68	10	27	9	-
15	0	8	29	-	82	68	10	27	10	-
16	0	8	28	-	80	66	10	27	10	-
17	1	9	27	-	77	63	10	27	10	-
18	17	9	26	-	72	58	10	28	11	-
19	20	8	25	-	69	54	10	28	10	-
20	21	7	23	-	64	51	9	28	10	-
21	22	6	22	-	60	47	9	29	8	-
22	22	4	21	-	49	43	9	29	5	-
23	22	1	21	-	29	40	8	29	2	-
24	22	0	20	-	18	38	7	30	1	-

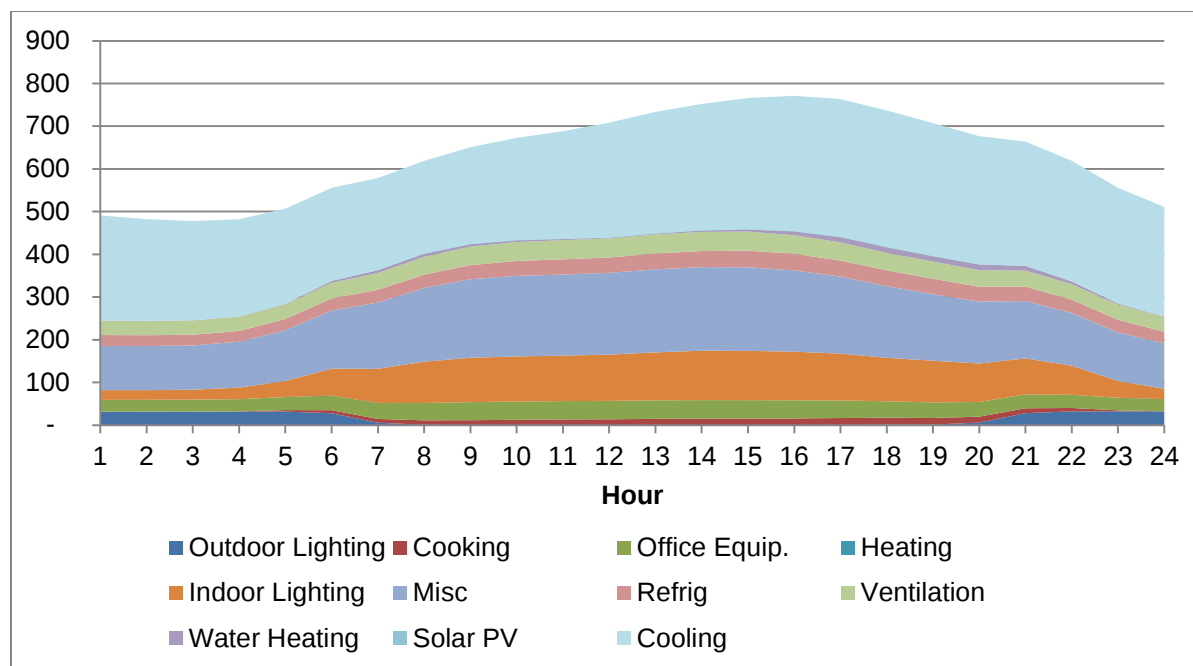
Load Profiles for Summer 2024 System Peak Day (MW)



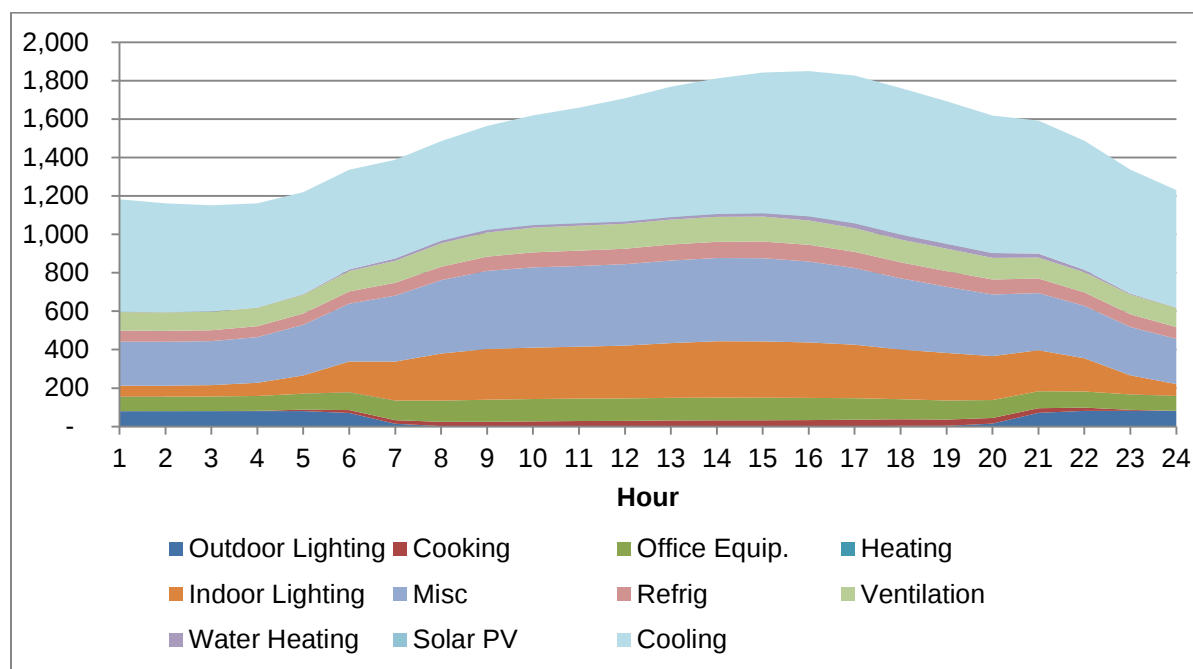
Summer 2024 Peak Day: Residential End-Use Profiles (MW)



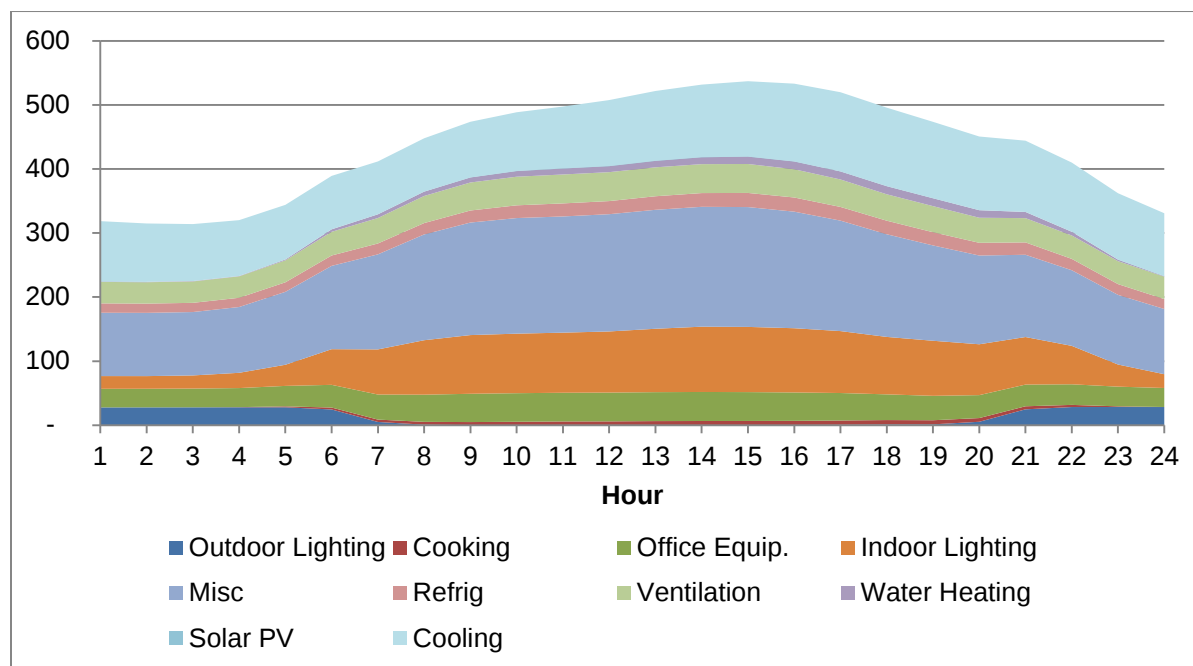
Summer 2024 Peak Day: Commercial SGS End-Use Profiles (MW)



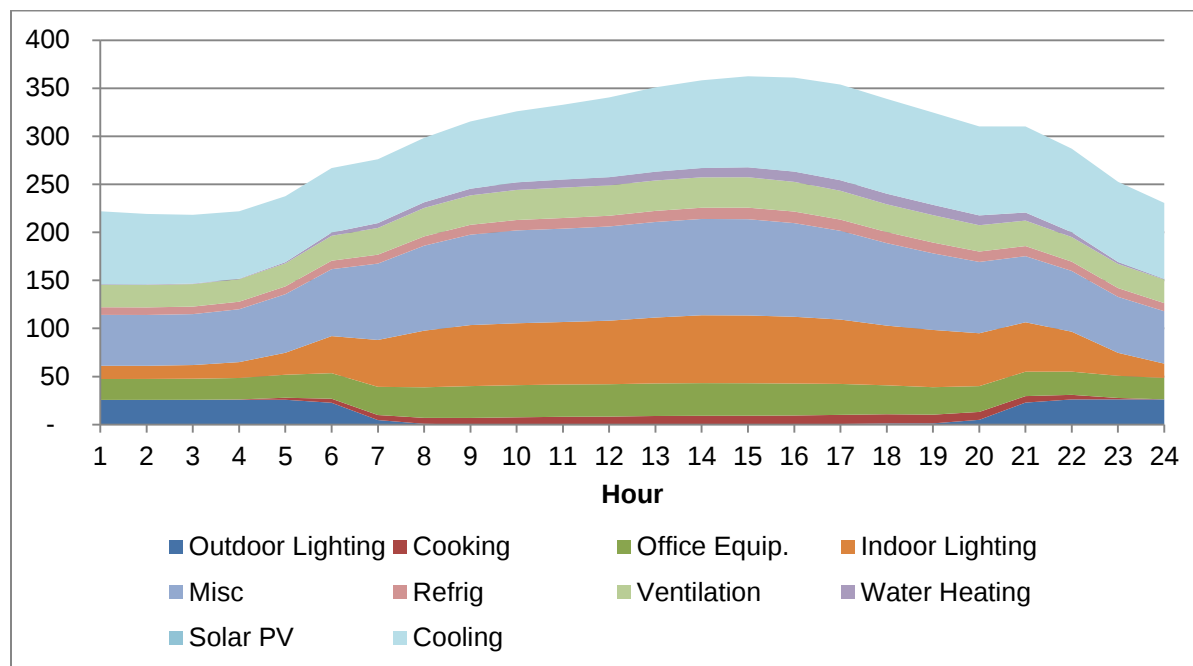
Summer 2024 Peak Day: Commercial LGS End-Use Profiles (MW)



Summer 2024 Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2024 Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Summer 2024 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,157	454	1,027	270	193	12	130	163	278	495	29	-	5,207
2	2,018	448	1,014	268	191	11	126	160	278	495	29	-	5,039
3	1,944	447	1,013	270	192	12	124	161	281	495	29	-	4,967
4	1,905	453	1,027	276	196	12	122	162	284	495	29	-	4,962
5	1,874	479	1,082	298	211	12	128	169	288	495	30	-	5,066
6	1,972	528	1,191	339	239	14	141	178	298	495	23	-	5,417
7	2,060	551	1,241	359	247	19	153	190	312	495	-	-	5,629
8	2,123	590	1,329	392	268	28	167	199	322	495	-	-	5,913
9	2,148	632	1,428	423	289	31	179	210	330	495	-	-	6,166
10	2,314	653	1,477	436	299	27	180	215	333	495	-	-	6,428
11	2,497	670	1,518	444	305	27	182	219	332	495	-	-	6,689
12	2,735	689	1,560	453	312	24	181	219	331	495	-	-	6,998
13	2,994	713	1,616	466	321	26	182	219	333	495	-	-	7,365
14	3,204	733	1,659	476	329	24	181	219	332	495	-	-	7,652
15	3,394	747	1,688	481	333	23	178	218	334	495	-	-	7,889
16	3,655	754	1,698	478	332	21	170	212	326	495	-	-	8,139
17	3,823	748	1,681	467	326	20	157	206	321	495	-	-	8,243
18	3,816	724	1,626	447	313	18	146	199	316	495	-	-	8,100
19	3,711	697	1,567	429	301	16	142	194	308	495	-	-	7,860
20	3,526	669	1,502	409	288	16	144	189	306	495	-	-	7,544
21	3,392	659	1,482	405	289	15	147	187	307	495	17	-	7,396
22	3,192	616	1,389	375	269	13	143	188	307	495	31	-	7,018
23	2,882	554	1,251	331	236	13	139	185	296	495	31	-	6,414
24	2,537	510	1,154	303	216	13	141	182	293	495	31	-	5,876

Summer 2024 System Peak Day: Residential End-Use Profiles

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	14	20	1,457	19	18	-	66	274	101	131	56	(0)
2	0	6	21	1,365	6	18	-	42	276	101	134	49	(0)
3	0	3	21	1,302	2	17	-	34	279	103	134	49	(0)
4	1	2	22	1,264	1	17	-	26	281	104	135	52	(0)
5	2	1	26	1,203	1	16	-	35	290	105	132	65	(0)
6	5	11	45	1,173	16	15	-	52	302	106	146	100	(0)
7	9	53	58	1,151	23	16	-	63	291	108	147	142	(0)
8	13	81	63	1,150	43	17	-	63	294	108	147	145	(1)
9	11	71	43	1,282	48	19	-	49	280	111	124	116	(5)
10	11	94	40	1,448	47	21	-	42	281	110	128	100	(9)
11	9	109	42	1,648	36	23	-	35	281	110	131	84	(12)
12	8	109	47	1,893	33	24	-	32	283	109	132	78	(14)
13	7	101	43	2,158	37	26	-	32	282	109	138	74	(14)
14	7	91	41	2,368	38	28	-	31	282	110	150	72	(13)
15	6	82	48	2,556	28	29	-	28	283	111	164	70	(12)
16	7	87	80	2,732	28	30	-	27	290	113	192	76	(8)
17	7	88	115	2,821	28	30	-	27	300	114	212	84	(3)
18	7	86	138	2,755	40	28	-	38	297	115	222	92	(2)
19	7	86	116	2,612	72	27	-	51	297	115	232	99	(3)
20	6	83	56	2,425	80	26	-	108	298	114	233	98	(1)
21	5	77	40	2,247	70	25	-	190	298	114	232	93	(0)
22	3	65	30	2,116	43	24	-	204	298	116	213	80	(0)
23	1	49	23	1,931	27	23	-	160	300	115	185	69	(0)
24	0	27	20	1,701	23	21	-	104	300	113	162	65	(0)

Summer 2024 System Peak Day: Commercial SGS End-Use Profiles

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	31	0	23	246	-	23	76	22	31	1	(0)
2	32	-	23	240	-	23	77	22	31	1	(0)
3	32	0	23	236	-	24	77	22	32	1	(0)
4	32	1	24	233	-	28	81	22	32	1	(0)
5	33	3	26	230	-	39	90	23	33	2	(0)
6	29	7	29	226	-	67	104	25	36	5	(0)
7	6	9	32	227	-	85	119	27	39	7	(0)
8	1	10	35	229	-	103	134	28	42	8	(1)
9	0	12	37	244	-	114	145	31	44	10	(4)
10	0	13	37	257	-	115	149	32	45	11	(7)
11	0	13	37	272	-	116	149	33	45	12	(9)
12	0	14	37	288	-	118	151	33	45	12	(10)
13	0	15	38	305	-	122	152	34	45	13	(11)
14	0	15	38	318	-	126	153	35	45	14	(10)
15	0	15	37	330	-	125	153	36	45	15	(9)
16	0	16	37	340	-	123	149	36	44	15	(6)
17	1	16	36	346	-	119	141	34	43	16	(2)
18	1	16	33	343	-	110	131	34	41	16	(2)
19	2	15	32	334	-	106	122	33	41	15	(2)
20	6	14	30	322	-	98	114	32	39	15	(1)
21	30	12	28	312	-	92	105	31	38	12	(0)
22	34	8	27	303	-	74	97	29	37	7	(0)
23	34	3	26	292	-	43	90	27	36	3	(0)
24	34	0	25	278	-	27	84	25	35	1	(0)

Summer 2024 System Peak Day: Commercial LGS End-Use Profiles

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	71	0	57	555	-	55	158	45	85	1	(0)
2	72	-	57	541	-	55	159	45	85	1	(0)
3	72	0	58	533	-	57	160	45	86	1	(0)
4	73	1	60	525	-	67	168	46	87	1	(0)
5	73	6	64	518	-	93	187	48	89	3	(0)
6	65	12	72	510	-	159	216	52	97	7	(0)
7	13	15	80	512	-	202	248	55	105	10	(0)
8	2	18	87	516	-	246	278	58	113	12	(1)
9	0	21	93	550	-	271	301	63	119	15	(4)
10	0	23	94	580	-	274	309	66	121	17	(7)
11	1	23	94	614	-	276	310	67	122	18	(9)
12	1	24	94	650	-	280	313	68	122	18	(10)
13	1	26	94	687	-	290	317	70	122	19	(10)
14	1	26	95	717	-	299	319	71	122	20	(10)
15	1	27	94	743	-	298	318	73	122	22	(9)
16	1	27	92	766	-	293	309	73	119	22	(6)
17	2	29	89	780	-	283	293	70	115	23	(2)
18	3	29	84	773	-	262	272	70	111	23	(2)
19	4	27	79	753	-	252	253	68	110	22	(2)
20	14	25	75	727	-	233	236	65	106	21	(0)
21	67	20	71	704	-	218	219	64	102	18	(0)
22	77	14	67	684	-	176	202	59	99	11	(0)
23	78	4	65	659	-	102	186	56	97	4	(0)
24	78	0	63	627	-	64	175	52	95	1	(0)

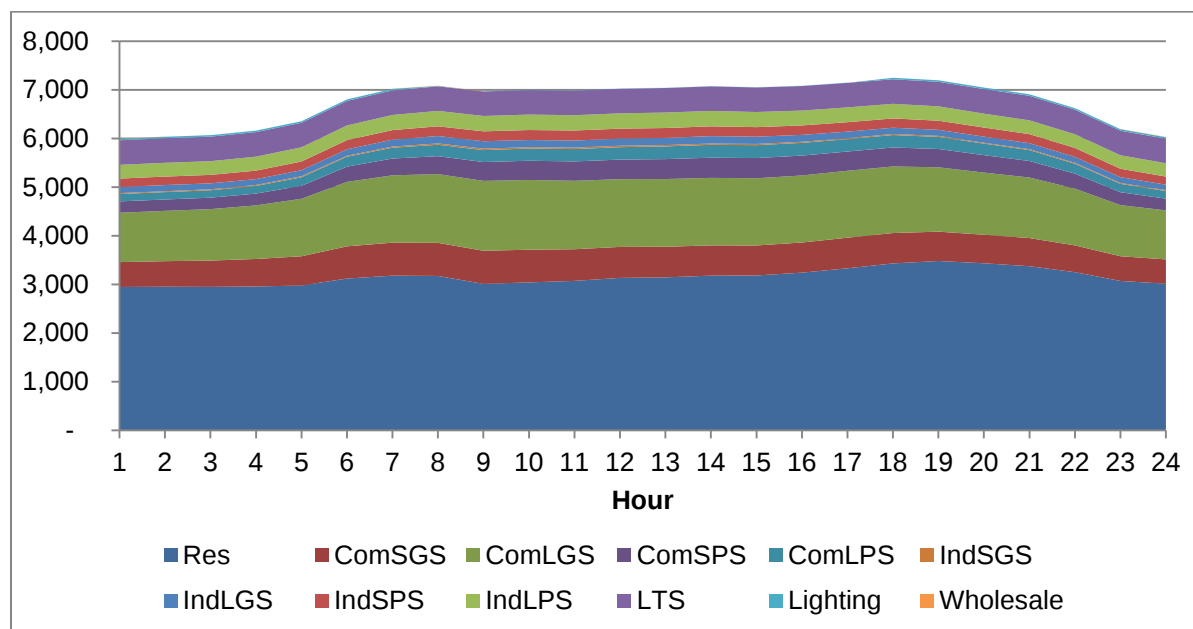
Summer 2024 System Peak Day: Commercial SPS End-Use Profiles

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	25	-	22	93	19	69	11	30	1	-
2	25	-	22	91	19	69	11	30	1	-
3	26	-	23	89	20	70	11	30	1	-
4	26	0	23	88	23	73	11	30	1	-
5	26	1	25	87	33	82	12	31	1	-
6	23	2	28	85	56	94	13	34	3	-
7	5	3	31	86	71	108	14	37	5	(0)
8	1	3	34	86	86	121	15	40	6	(0)
9	0	4	36	92	95	132	16	42	7	(0)
10	0	4	37	97	96	135	17	43	9	(0)
11	0	4	37	103	97	135	17	43	9	(0)
12	0	4	37	109	98	136	17	43	9	(1)
13	0	4	37	115	102	138	18	43	10	(1)
14	0	5	37	120	104	139	18	43	10	(1)
15	0	5	37	124	104	139	18	43	11	(1)
16	0	5	36	128	103	135	18	42	11	(0)
17	1	5	35	131	99	128	18	41	12	(0)
18	1	5	33	129	92	119	18	39	12	(0)
19	1	5	31	126	88	111	17	39	11	(0)
20	5	4	29	122	81	103	16	37	11	(0)
21	24	3	28	118	76	96	16	36	9	-
22	27	2	26	115	62	88	15	35	5	-
23	27	1	25	110	36	81	14	34	2	-
24	28	0	24	105	22	76	13	34	1	-

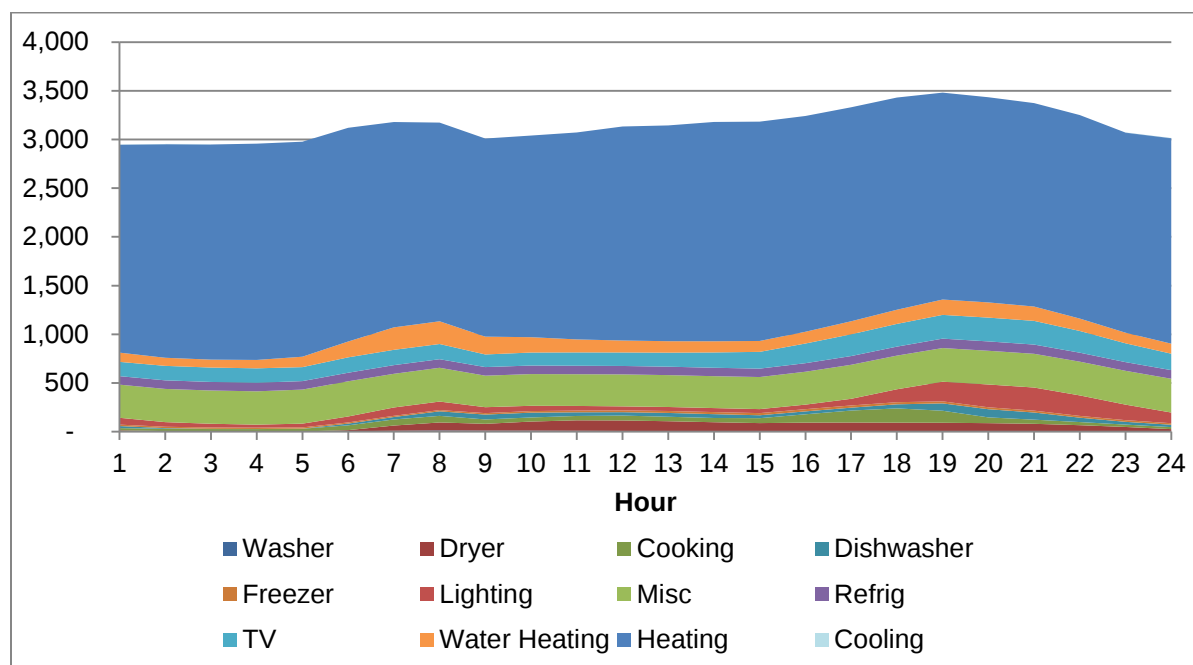
Summer 2024 System Peak Day: Commercial LPS End-Use Profiles

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	23	0	17	73	13	38	6	21	1	-
2	23	-	17	71	13	38	6	21	0	-
3	24	-	18	70	14	38	6	21	0	-
4	24	0	18	69	16	40	6	22	0	-
5	24	2	19	68	23	45	7	22	1	-
6	21	3	22	67	39	52	7	24	3	-
7	4	4	24	68	49	59	8	26	4	-
8	1	5	26	68	60	66	8	28	5	(0)
9	0	6	28	73	66	72	9	30	6	(0)
10	0	6	28	77	67	74	9	30	7	(0)
11	0	7	28	81	67	74	9	30	8	(0)
12	0	7	28	86	68	75	9	30	8	(0)
13	0	7	29	91	71	76	10	30	8	(0)
14	0	7	29	95	73	76	10	30	9	(0)
15	0	8	28	98	73	76	10	30	9	(0)
16	0	8	28	101	72	74	10	30	10	(0)
17	1	8	27	103	69	70	10	29	10	(0)
18	1	8	25	102	64	65	10	28	10	(0)
19	1	8	24	99	61	61	9	27	10	(0)
20	5	7	23	96	57	56	9	26	9	(0)
21	22	6	21	93	53	52	9	25	7	-
22	25	4	20	90	43	48	8	25	4	-
23	25	1	20	87	25	45	8	24	2	-
24	26	0	19	83	16	42	7	24	1	-

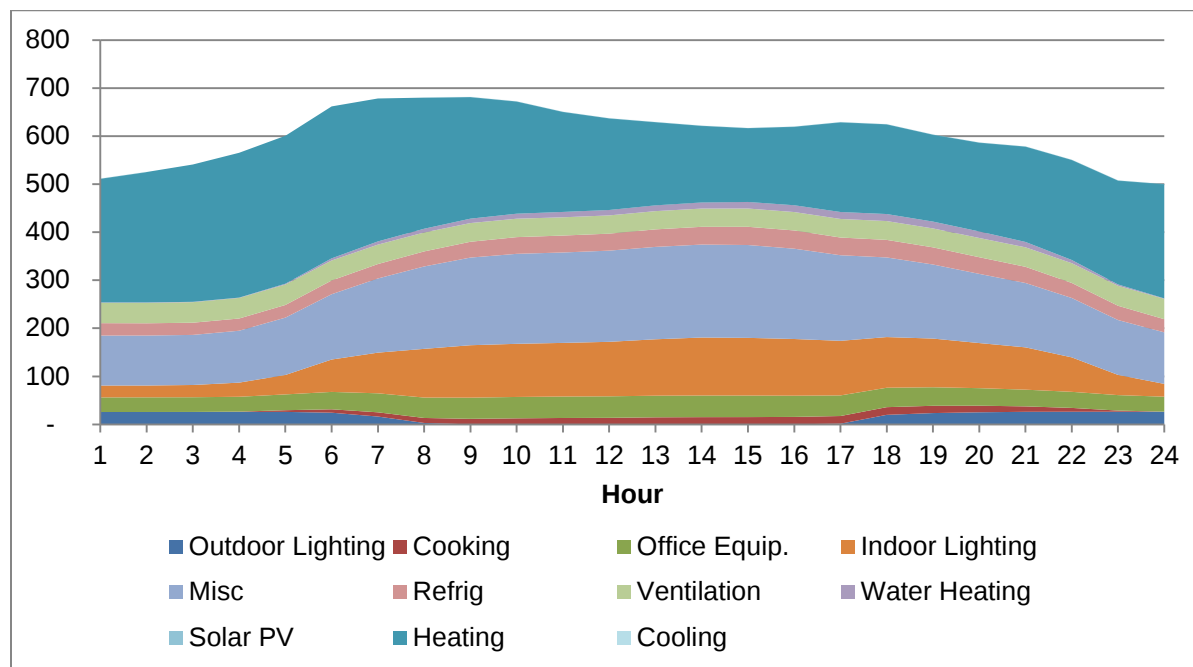
Load Profiles for Winter 2024 System Peak Day (MW)



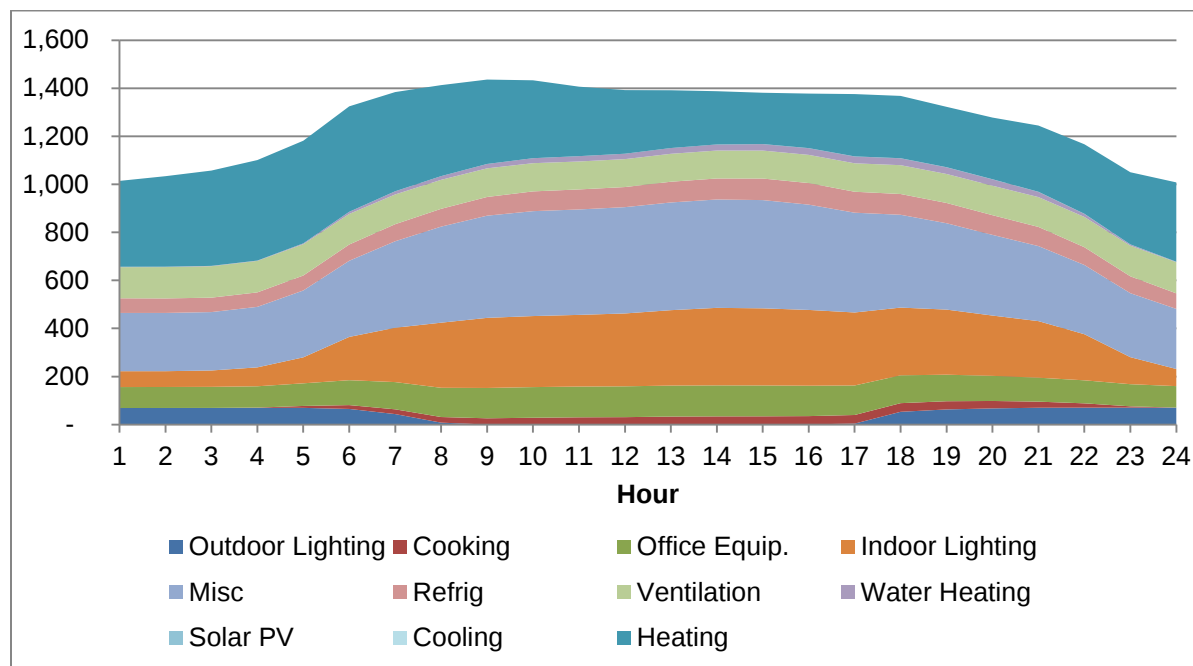
Winter 2024 System Peak Day: Residential End-Use Profiles



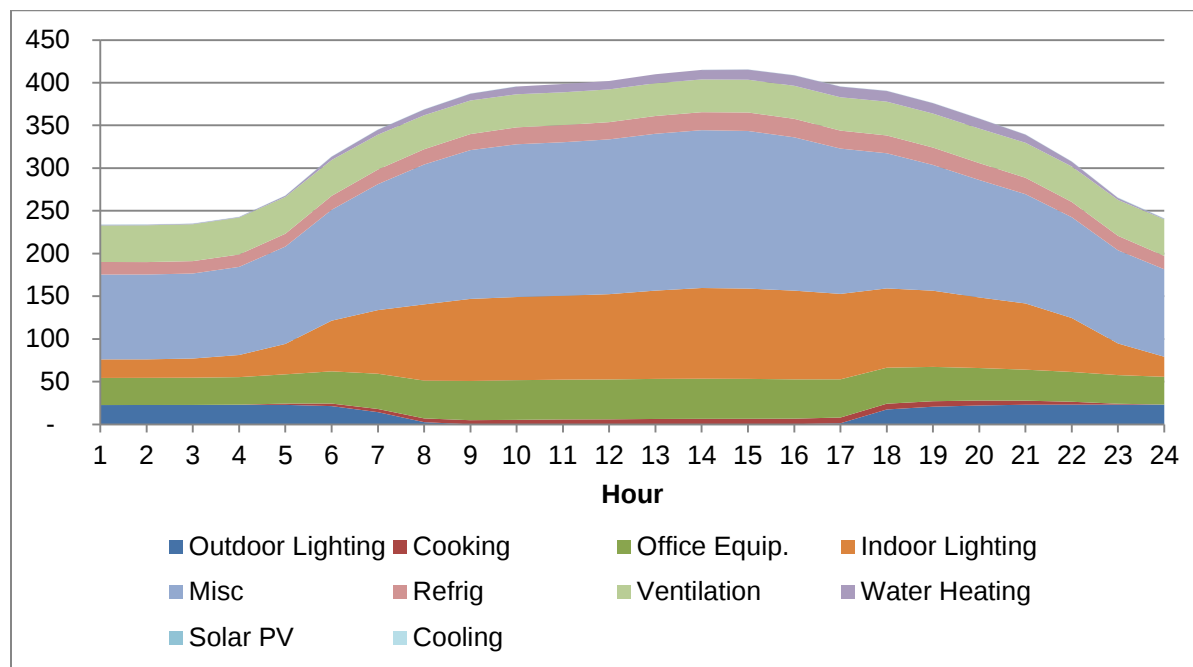
Winter 2024 System Peak Day: Commercial SGS End-Use Profiles (MW)



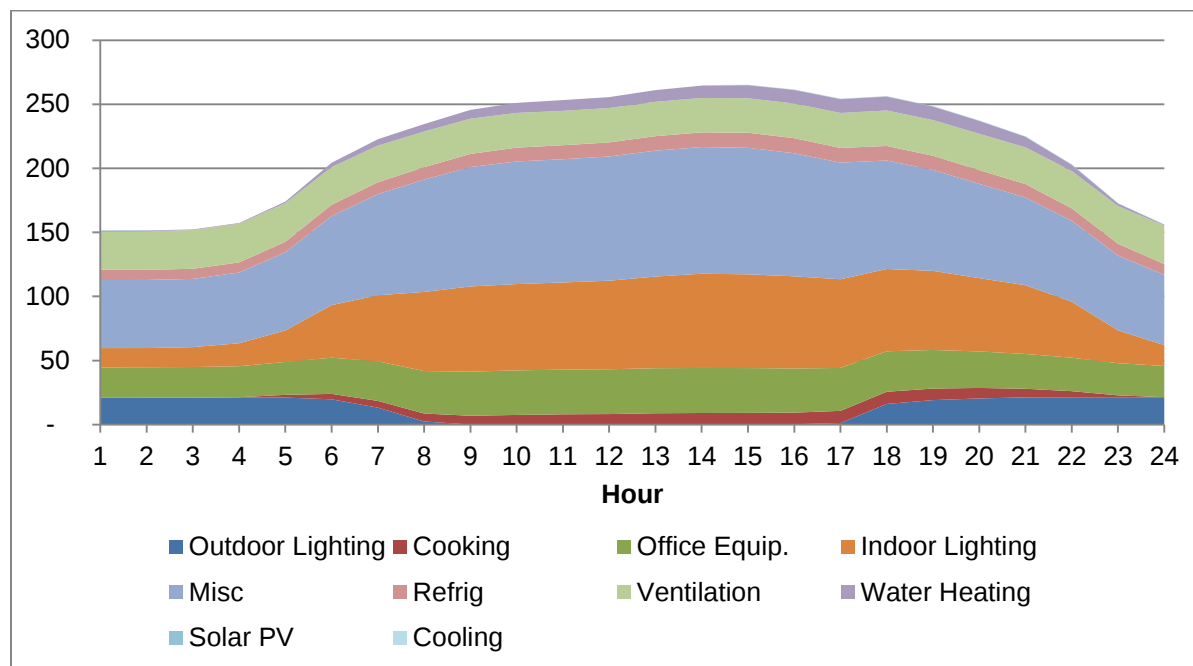
Winter 2024 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2024 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2024 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Winter 2024 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,765	482	892	197	133	19	107	155	260	505	30	-	5,546
2	2,752	496	911	198	133	18	110	155	261	505	31	-	5,570
3	2,760	511	933	199	134	21	105	156	260	505	31	-	5,614
4	2,760	534	972	206	139	19	105	156	265	505	31	-	5,692
5	2,801	570	1,048	228	154	21	108	160	270	505	31	-	5,897
6	2,930	631	1,181	270	183	20	117	170	279	505	31	-	6,315
7	3,017	646	1,231	297	199	24	126	177	288	505	31	-	6,540
8	3,016	643	1,250	317	209	28	136	179	294	505	9	-	6,586
9	2,862	645	1,272	333	219	31	136	183	293	505	-	-	6,480
10	2,890	634	1,264	340	224	29	131	185	295	505	-	-	6,496
11	2,920	614	1,241	342	226	30	129	186	292	505	-	-	6,487
12	2,959	599	1,225	345	228	30	131	183	292	505	-	-	6,499
13	2,986	593	1,227	353	233	28	131	183	296	505	-	-	6,534
14	3,020	586	1,223	357	237	27	137	181	295	505	-	-	6,566
15	3,022	579	1,214	358	237	25	133	177	289	505	-	-	6,539
16	3,078	585	1,216	352	234	23	126	174	284	505	-	-	6,578
17	3,149	596	1,218	342	228	20	119	175	283	505	-	-	6,635
18	3,272	595	1,217	340	232	22	113	172	280	505	31	-	6,778
19	3,331	576	1,180	328	225	22	109	169	275	505	31	-	6,751
20	3,289	561	1,142	313	215	17	111	168	266	505	31	-	6,619
21	3,231	554	1,114	297	204	19	107	167	264	505	31	-	6,494
22	3,089	527	1,043	268	184	20	106	166	262	505	31	-	6,200
23	2,922	480	929	228	154	18	104	155	259	505	31	-	5,783
24	2,857	472	889	205	138	19	97	149	254	505	31	-	5,617

Winter 2024 System Peak Day: Residential End-Use Profiles (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	14	21	-	20	16	2,010	76	290	88	139	91	(0)
2	0	6	22	-	7	15	2,050	51	291	89	141	80	(0)
3	0	3	22	-	2	15	2,077	42	291	89	140	78	(0)
4	1	2	23	-	1	14	2,081	33	292	89	140	83	(0)
5	2	1	26	-	1	14	2,089	42	299	88	136	103	(0)
6	6	11	46	-	17	13	2,064	66	310	89	150	157	(0)
7	10	54	59	-	24	13	2,003	93	297	91	150	223	(0)
8	13	82	64	-	44	14	1,940	95	298	90	149	226	(0)
9	11	71	42	-	48	16	1,937	66	279	90	124	178	(0)
10	11	94	40	-	47	18	1,972	59	280	89	128	153	(0)
11	10	108	42	-	36	19	2,023	52	280	89	131	130	(0)
12	8	109	47	-	33	20	2,074	45	283	88	132	119	(0)
13	7	102	43	-	38	22	2,109	45	282	88	138	114	(0)
14	7	92	41	-	38	23	2,143	45	282	88	150	111	(0)
15	7	83	48	-	29	24	2,143	45	283	88	164	109	(0)
16	7	87	81	-	29	25	2,109	51	291	90	193	117	(0)
17	7	88	116	-	28	25	2,075	75	301	91	213	130	(0)
18	8	87	138	-	40	24	2,075	145	298	94	223	141	(0)
19	7	86	117	-	72	23	2,024	220	298	99	233	153	(0)
20	6	83	56	-	80	22	2,006	255	298	98	233	152	(0)
21	5	77	40	-	70	21	1,989	259	298	97	232	143	(0)
22	3	65	30	-	43	20	1,971	229	298	94	213	123	(0)
23	1	48	23	-	27	19	1,952	174	298	91	184	106	(0)
24	0	27	20	-	23	17	2,003	119	298	90	161	100	(0)

Winter 2024 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	27	0	26	-	253	27	81	24	43	1	(0)
2	27	-	26	-	267	27	82	23	43	1	(0)
3	27	0	26	-	281	28	82	23	43	1	(0)
4	27	1	27	-	295	32	85	23	43	1	(0)
5	28	4	29	-	304	44	94	24	43	2	(0)
6	26	7	31	-	313	73	107	26	42	5	(0)
7	17	9	34	-	295	92	122	28	41	7	(0)
8	3	11	37	-	269	110	136	29	40	8	(0)
9	0	12	38	-	252	119	144	31	40	10	(0)
10	0	13	39	-	231	121	148	32	39	11	(0)
11	0	13	39	-	207	122	149	33	39	12	(0)
12	0	14	39	-	188	124	150	33	39	12	(0)
13	0	15	39	-	173	128	152	34	39	13	(0)
14	0	15	39	-	159	132	153	34	39	14	(0)
15	0	15	39	-	152	131	153	35	39	15	(0)
16	0	16	39	-	163	129	149	35	39	15	(0)
17	2	16	37	-	186	124	141	34	39	16	(0)
18	21	17	35	-	186	115	131	34	40	16	(0)
19	25	16	34	-	181	111	122	33	40	15	(0)
20	27	14	32	-	184	102	114	32	41	15	(0)
21	28	12	30	-	198	96	106	31	41	12	(0)
22	28	8	29	-	207	78	98	29	42	7	(0)
23	28	3	28	-	213	46	90	27	42	3	(0)
24	28	0	27	-	234	29	85	25	43	1	(0)

Winter 2024 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	66	0	70	-	334	67	179	52	122	1	(0)
2	66	-	70	-	352	67	179	51	123	1	(0)
3	67	0	71	-	370	69	180	51	124	1	(0)
4	67	1	72	-	389	80	187	51	124	1	(0)
5	67	7	76	-	400	110	207	53	124	3	(0)
6	63	14	84	-	412	185	236	58	121	8	(0)
7	42	18	92	-	388	232	268	61	118	12	(0)
8	8	21	99	-	354	278	298	63	115	14	(0)
9	0	23	103	-	332	300	318	67	114	16	(0)
10	0	25	104	-	304	304	326	71	112	19	(0)
11	1	26	104	-	273	307	328	71	111	20	(0)
12	1	27	105	-	248	312	330	72	111	20	(0)
13	1	29	105	-	228	323	335	74	111	22	(0)
14	1	30	105	-	210	332	337	75	111	23	(0)
15	1	30	105	-	200	330	336	77	111	25	(0)
16	1	31	103	-	215	324	327	77	112	26	(0)
17	4	32	100	-	246	312	310	75	113	26	(0)
18	51	32	94	-	246	290	289	74	115	26	(0)
19	61	30	90	-	238	279	269	72	115	26	(0)
20	65	28	85	-	243	258	251	70	117	24	(0)
21	68	23	81	-	261	242	233	68	119	20	(0)
22	68	16	78	-	273	197	215	63	120	12	(0)
23	68	5	75	-	281	115	198	60	121	5	(0)
24	68	0	73	-	308	73	186	55	124	2	(0)

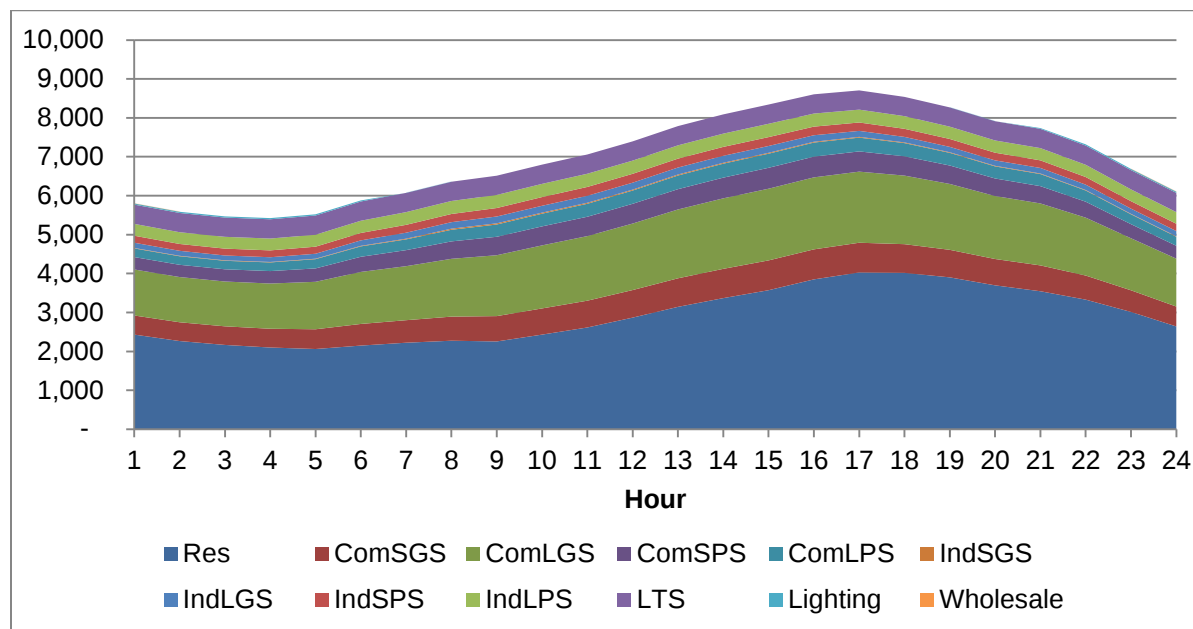
Winter 2024 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	22	-	26	-	22	74	12	41	1	-
2	22	-	26	-	22	74	12	41	1	-
3	22	-	26	-	23	74	12	41	1	-
4	22	0	26	-	27	77	12	41	1	-
5	22	1	28	-	36	85	13	41	1	-
6	21	2	31	-	61	97	14	40	4	-
7	14	3	34	-	77	110	15	39	6	-
8	3	4	36	-	92	123	15	38	7	-
9	0	4	38	-	99	131	16	38	8	-
10	0	4	38	-	100	134	17	37	9	-
11	0	4	38	-	101	135	17	37	9	(0)
12	0	5	38	-	103	136	17	37	10	(0)
13	0	5	39	-	107	138	18	37	10	(0)
14	0	5	39	-	110	139	18	37	11	(0)
15	0	5	38	-	109	138	18	37	12	(0)
16	0	5	38	-	107	135	18	37	12	(0)
17	1	5	37	-	103	128	18	37	12	(0)
18	17	5	35	-	96	119	18	38	12	-
19	20	5	33	-	92	110	17	38	12	-
20	22	5	31	-	85	103	17	39	11	-
21	23	4	30	-	80	96	16	39	9	-
22	23	3	29	-	65	88	15	40	6	-
23	23	1	27	-	38	82	14	40	2	-
24	23	0	27	-	24	77	13	41	1	-

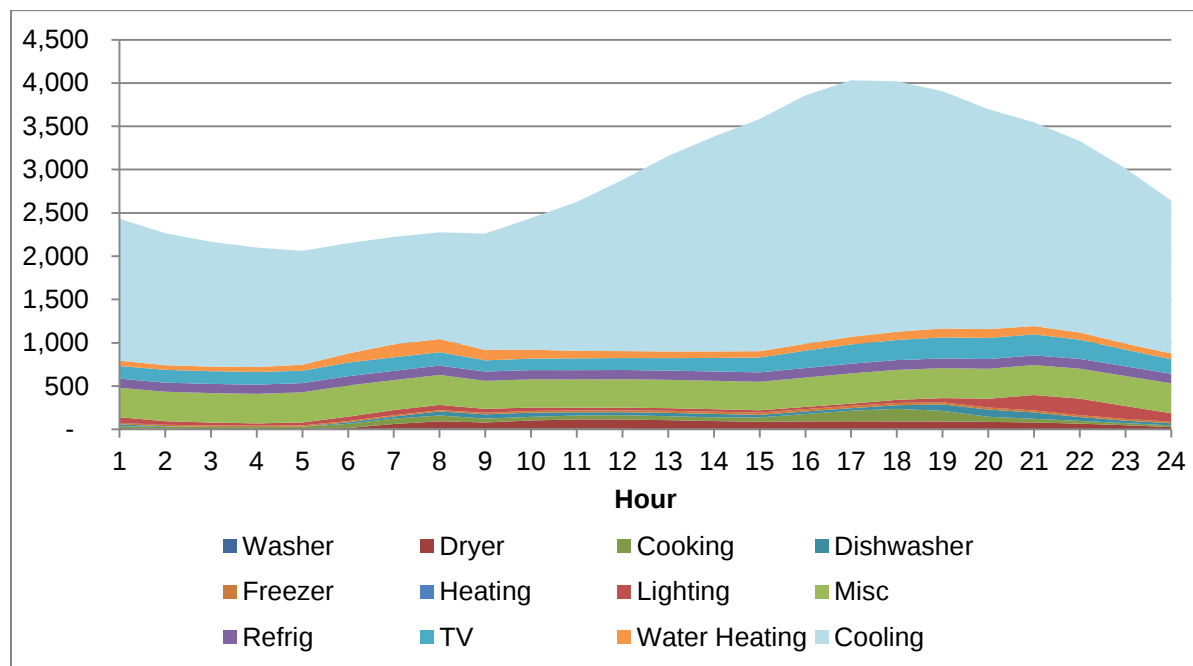
Winter 2024 System Peak Day: Commercial LPS End-Use Profiles (MW)

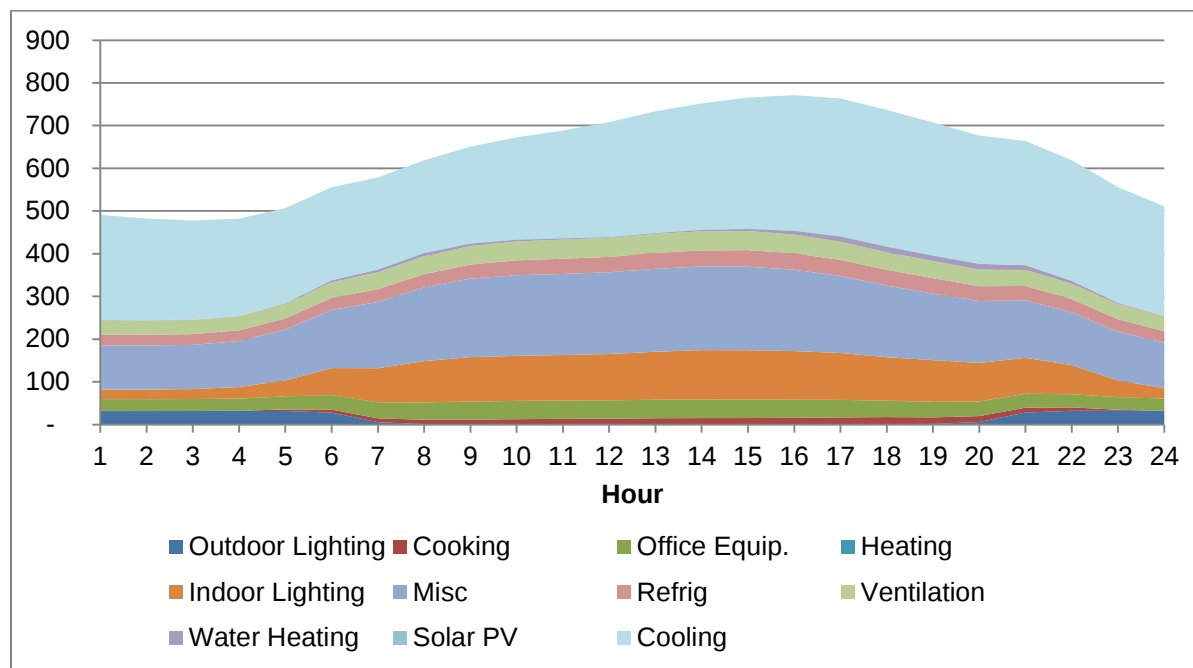
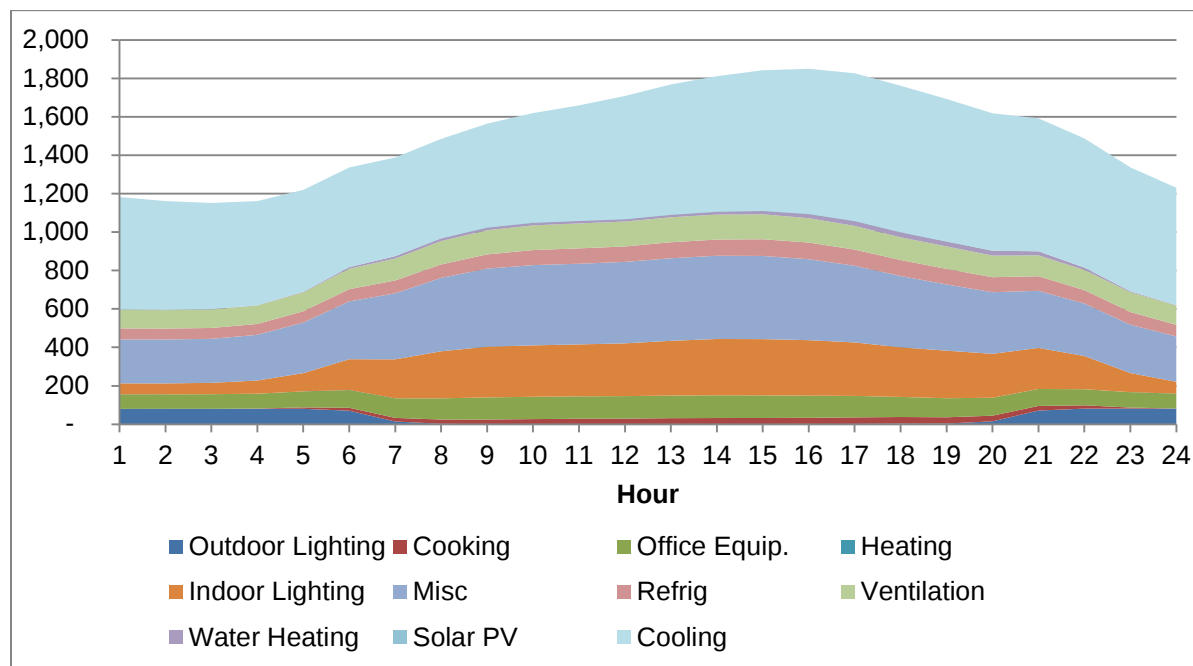
Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	20	0	20	-	16	41	7	29	1	-
2	21	-	20	-	15	41	7	29	1	-
3	21	-	20	-	16	41	7	29	1	-
4	21	0	21	-	19	42	7	29	0	-
5	21	2	22	-	26	47	7	29	1	-
6	20	4	24	-	43	53	8	29	3	-
7	13	5	26	-	54	61	8	28	5	-
8	2	6	28	-	64	68	9	27	6	-
9	0	6	29	-	69	72	9	27	6	-
10	0	7	30	-	70	74	10	26	7	-
11	0	7	30	-	71	74	10	26	8	-
12	0	7	30	-	72	75	10	26	8	-
13	0	8	30	-	75	76	10	26	9	-
14	0	8	30	-	77	76	10	26	9	-
15	0	8	30	-	76	76	10	26	10	-
16	0	8	29	-	75	74	10	26	10	-
17	1	9	29	-	72	70	10	27	10	-
18	16	9	27	-	67	65	10	27	10	-
19	19	8	26	-	64	61	10	27	10	-
20	20	7	24	-	60	57	9	28	10	-
21	21	6	23	-	56	53	9	28	8	-
22	21	4	22	-	46	49	9	28	5	-
23	21	1	21	-	27	45	8	29	2	-
24	21	0	21	-	17	42	7	29	1	-

Load Profiles for Summer 2034 System Peak Day (MW)

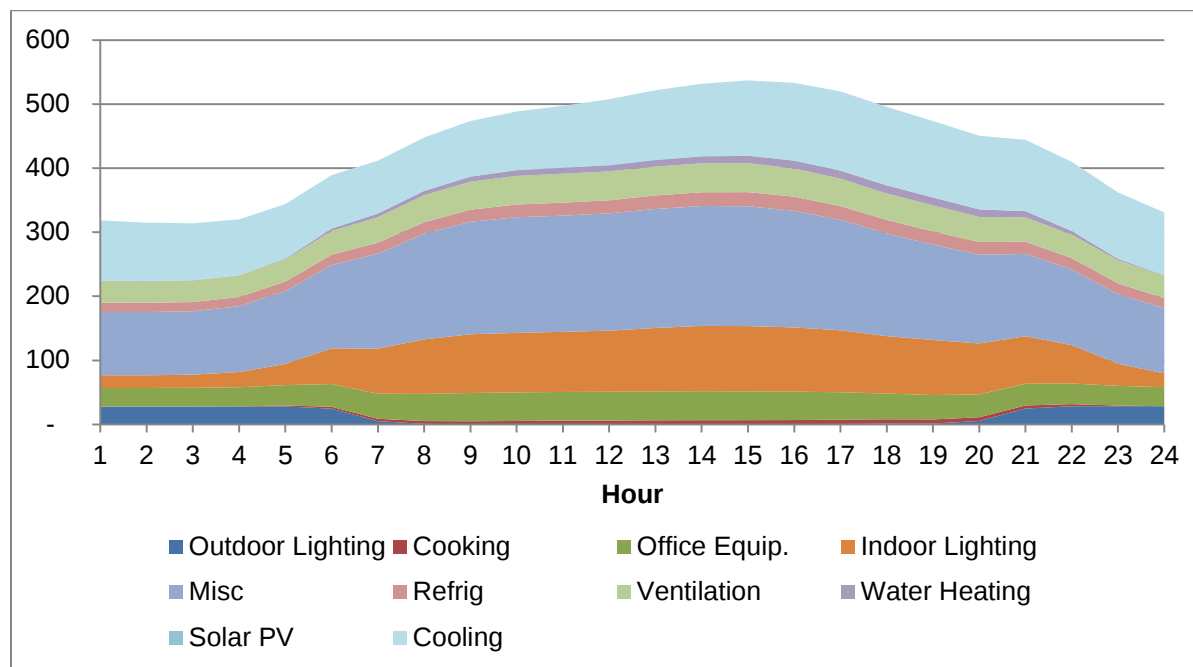


Summer 2034 System Peak Day: Residential End-Use Profiles (MW)

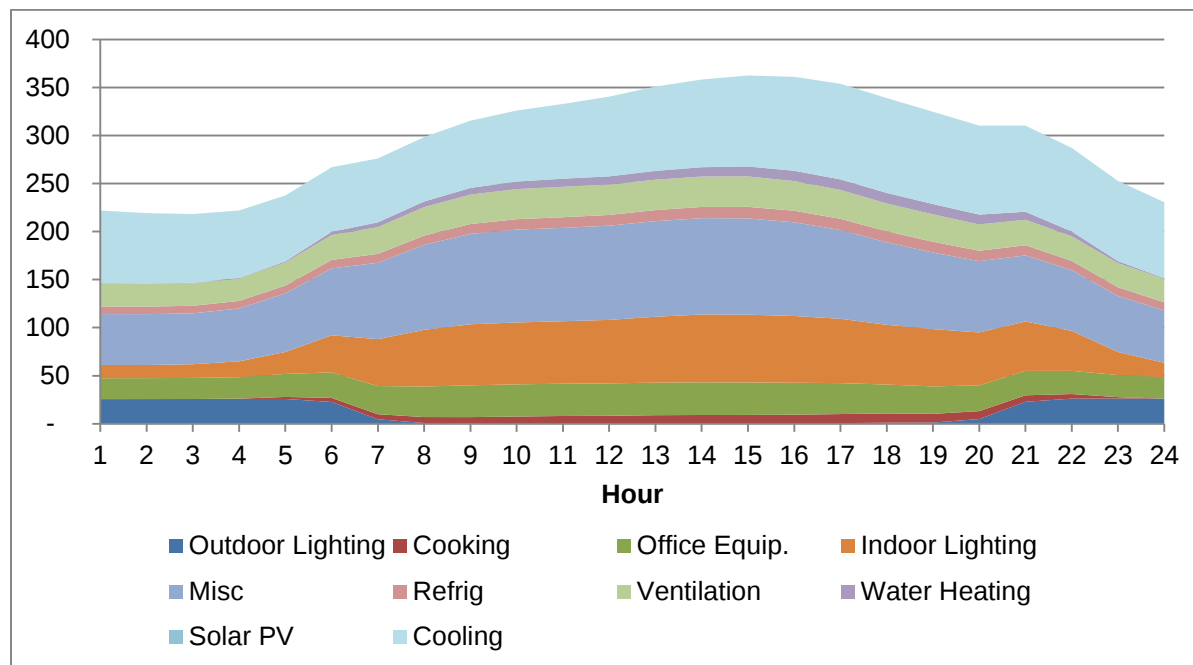


Summer 2034 System Peak Day: Commercial SGS End-Use Profiles (MW)**Figure Summer 2034 System Peak Day: Commercial LGS End-Use Profiles (MW)**

Summer 2034 System Peak Day: Commercial SPS End-Use Profiles (MW)



Summer 2034 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Summer 2034 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,432	491	1,182	318	222	12	134	180	304	495	30	-	5,801
2	2,266	482	1,161	315	219	12	128	176	302	495	30	-	5,587
3	2,167	478	1,151	314	218	12	124	176	303	495	30	-	5,469
4	2,100	482	1,161	320	222	12	121	176	304	495	31	-	5,425
5	2,062	507	1,220	344	238	12	127	182	307	495	31	-	5,522
6	2,150	556	1,336	389	267	14	140	191	314	495	27	-	5,879
7	2,224	579	1,388	412	276	19	153	203	327	495	-	-	6,073
8	2,275	619	1,485	448	298	29	167	210	334	495	-	-	6,359
9	2,256	651	1,564	474	315	31	175	218	336	495	-	-	6,514
10	2,432	673	1,619	488	326	27	176	224	339	495	-	-	6,799
11	2,615	688	1,659	497	333	26	179	228	339	495	-	-	7,059
12	2,868	708	1,708	507	340	24	178	228	339	495	-	-	7,396
13	3,145	734	1,768	522	351	26	179	229	342	495	-	-	7,789
14	3,369	752	1,811	532	358	24	179	229	340	495	-	-	8,089
15	3,572	766	1,842	537	362	23	175	228	342	495	-	-	8,342
16	3,850	771	1,850	533	361	21	167	221	335	495	-	-	8,605
17	4,028	764	1,826	520	354	20	153	216	330	495	-	-	8,706
18	4,018	737	1,761	496	339	18	141	208	325	495	-	-	8,539
19	3,902	707	1,693	474	325	16	138	203	316	495	-	-	8,269
20	3,697	677	1,618	451	310	15	139	197	315	495	-	-	7,914
21	3,546	664	1,592	444	310	15	143	195	315	495	20	-	7,738
22	3,330	619	1,487	410	287	13	138	196	314	495	31	-	7,320
23	3,014	556	1,337	362	253	13	134	192	303	495	31	-	6,688
24	2,641	511	1,230	331	231	12	135	188	299	495	31	-	6,104

Summer 2034 System Peak Day: Residential End-Use Profiles (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	14	22	1,637	21	17	-	66	340	106	146	62	(0)
2	0	6	23	1,524	7	17	-	41	340	105	148	54	(0)
3	0	3	24	1,441	2	17	-	33	340	106	147	53	(0)
4	1	2	25	1,380	1	16	-	25	341	106	147	56	(0)
5	2	1	28	1,314	1	15	-	34	348	107	142	69	(0)
6	5	11	49	1,272	18	15	-	50	361	107	157	106	(0)
7	9	53	62	1,241	25	15	-	60	345	107	156	150	(0)
8	13	81	67	1,232	46	16	-	60	347	107	155	152	(1)
9	11	70	45	1,344	50	18	-	46	323	108	129	119	(5)
10	11	93	42	1,520	49	19	-	39	325	107	133	102	(9)
11	9	107	44	1,719	37	21	-	33	325	107	136	87	(12)
12	8	107	50	1,977	35	22	-	30	328	107	138	80	(14)
13	7	100	46	2,259	39	24	-	30	327	107	144	77	(14)
14	7	90	43	2,482	39	25	-	29	328	108	157	75	(13)
15	7	81	50	2,681	30	26	-	26	329	109	172	73	(12)
16	7	86	85	2,869	30	27	-	26	338	111	201	79	(8)
17	7	87	122	2,963	29	27	-	25	350	112	223	87	(3)
18	7	85	145	2,892	42	26	-	36	346	113	233	95	(2)
19	7	85	122	2,739	75	25	-	48	346	112	243	103	(3)
20	6	82	59	2,540	83	24	-	101	346	112	244	102	(1)
21	5	76	42	2,352	73	23	-	178	346	112	242	96	(0)
22	3	64	32	2,211	45	22	-	190	346	113	222	83	(0)
23	1	48	24	2,023	28	21	-	149	346	112	192	71	(0)
24	0	26	21	1,764	24	19	-	97	346	110	168	67	(0)

Summer 2034 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	32	0	28	246	-	23	103	26	33	1	(0)
2	32	-	28	238	-	22	103	25	33	1	(0)
3	32	0	28	232	-	23	104	25	33	1	(0)
4	32	1	29	228	-	27	107	25	33	1	(0)
5	32	4	31	223	-	37	119	26	34	2	(0)
6	28	7	34	218	-	63	136	28	37	5	(0)
7	6	9	38	216	-	80	155	30	39	7	(0)
8	1	10	41	218	-	97	173	31	42	8	(1)
9	0	12	42	227	-	104	184	33	43	9	(4)
10	0	13	43	240	-	105	189	35	44	11	(7)
11	0	13	43	253	-	107	190	36	45	11	(9)
12	0	13	43	270	-	108	192	36	45	12	(10)
13	0	14	43	285	-	112	194	37	45	12	(11)
14	0	15	43	297	-	116	196	38	45	13	(10)
15	0	15	43	308	-	116	196	39	45	14	(9)
16	0	15	43	318	-	114	190	39	44	14	(6)
17	1	16	41	323	-	110	180	38	42	15	(2)
18	1	16	38	321	-	102	168	37	41	15	(2)
19	2	15	37	312	-	98	156	36	40	14	(2)
20	6	14	34	301	-	90	145	35	39	14	(1)
21	28	11	32	291	-	84	134	34	37	11	(0)
22	32	8	31	282	-	68	123	31	36	7	(0)
23	32	2	29	271	-	39	114	29	35	3	(0)
24	32	0	28	257	-	24	107	27	35	1	(0)

Summer 2034 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	80	0	76	585	-	57	229	58	96	2	(0)
2	80	-	76	566	-	57	228	57	96	1	(0)
3	80	0	76	553	-	59	229	57	96	1	(0)
4	80	1	78	542	-	69	238	57	96	1	(0)
5	80	7	83	530	-	95	263	59	98	3	(0)
6	71	15	92	519	-	160	301	64	106	8	(0)
7	15	19	102	513	-	203	343	67	114	13	(0)
8	2	22	110	518	-	245	382	70	122	15	(1)
9	0	24	115	541	-	264	406	74	126	17	(4)
10	0	27	116	571	-	267	418	78	128	20	(6)
11	1	28	117	601	-	270	420	80	130	21	(8)
12	1	28	117	642	-	275	424	80	130	22	(10)
13	1	31	118	679	-	285	430	83	130	23	(10)
14	1	32	118	705	-	293	433	84	130	24	(10)
15	1	32	117	732	-	293	433	87	130	26	(9)
16	1	33	115	756	-	289	421	87	127	27	(6)
17	2	34	112	769	-	278	399	84	123	27	(2)
18	4	34	105	763	-	258	371	83	118	28	(2)
19	4	32	99	742	-	248	344	81	117	27	(2)
20	15	29	93	715	-	229	321	78	112	26	(0)
21	71	24	88	692	-	214	297	76	109	21	(0)
22	81	17	84	672	-	173	273	70	105	13	(0)
23	82	5	80	645	-	99	252	66	103	5	(0)
24	82	0	77	611	-	62	236	61	101	2	(0)

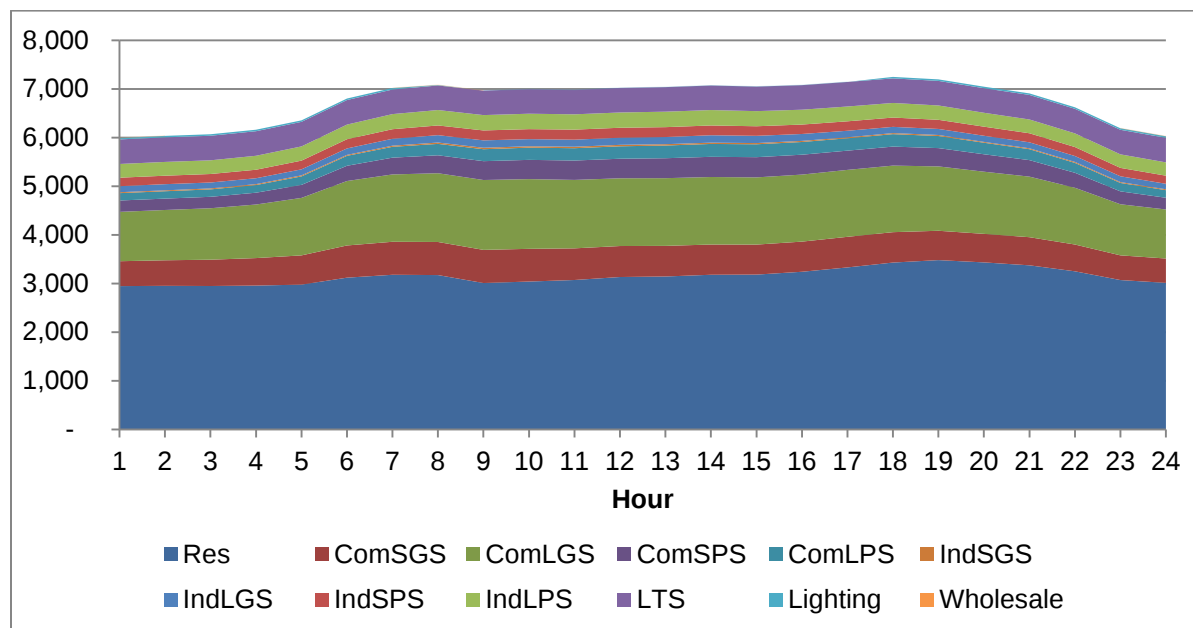
Summer 2034 System Peak Day: Commercial SPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	28	0	29	94	20	99	15	34	1	-
2	28	-	29	91	20	99	14	33	1	-
3	28	-	29	89	21	99	14	33	1	-
4	28	0	30	87	24	103	14	33	1	-
5	28	1	32	85	33	114	15	34	1	-
6	25	3	35	83	56	130	16	37	4	-
7	5	4	39	83	70	148	17	40	6	(0)
8	1	4	42	83	85	165	18	42	7	(0)
9	0	5	44	87	92	176	19	44	8	(0)
10	0	5	45	92	93	180	20	45	9	(0)
11	0	5	45	97	94	181	20	45	10	(0)
12	0	6	45	103	95	183	20	45	10	(1)
13	0	6	45	109	99	186	21	45	11	(1)
14	0	6	45	113	102	187	21	45	11	(1)
15	0	6	45	118	102	187	22	45	12	(1)
16	0	6	44	122	100	182	22	44	12	(0)
17	1	7	43	124	97	172	21	43	13	(0)
18	1	7	40	123	90	160	21	41	13	(0)
19	1	6	38	119	86	149	21	41	12	(0)
20	5	6	36	115	79	139	20	39	12	(0)
21	25	5	34	111	74	128	19	38	10	-
22	28	3	32	108	60	118	18	37	6	-
23	28	1	31	104	35	109	17	36	2	-
24	28	0	30	98	21	102	15	35	1	-

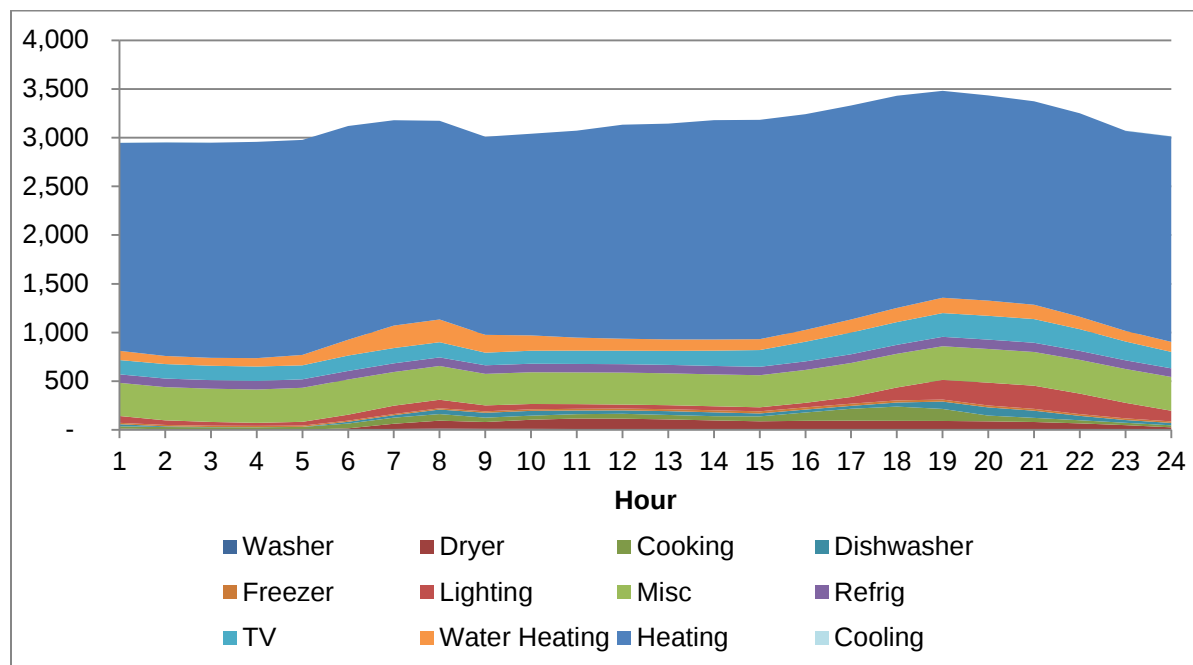
Summer 2034 System Peak Day: Commercial LPS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	26	0	22	76	14	53	8	23	1	-
2	26	-	22	73	14	53	8	23	1	-
3	26	0	22	72	14	53	8	23	1	-
4	26	0	22	70	17	55	8	23	0	-
5	26	2	24	69	23	61	8	24	1	-
6	23	4	27	67	39	70	9	26	3	-
7	5	5	29	66	49	79	9	28	5	-
8	1	6	32	67	59	88	10	30	6	(0)
9	0	7	33	70	64	94	10	31	7	(0)
10	0	7	33	74	64	97	11	31	8	(0)
11	0	8	34	78	65	97	11	32	9	(0)
12	0	8	34	83	66	98	11	32	9	(0)
13	0	9	34	88	69	99	12	32	9	(0)
14	0	9	34	91	71	100	12	32	10	(0)
15	0	9	34	95	71	100	12	32	10	(0)
16	0	9	33	98	69	97	12	31	11	(0)
17	1	10	32	100	67	92	12	30	11	(0)
18	1	10	30	99	62	86	12	29	11	(0)
19	1	9	29	96	60	80	11	29	11	(0)
20	5	8	27	93	55	74	11	27	10	(0)
21	23	7	25	90	51	69	11	27	8	-
22	26	5	24	87	42	63	10	26	5	-
23	26	1	23	83	24	58	9	25	2	-
24	26	0	22	79	15	55	8	25	1	-

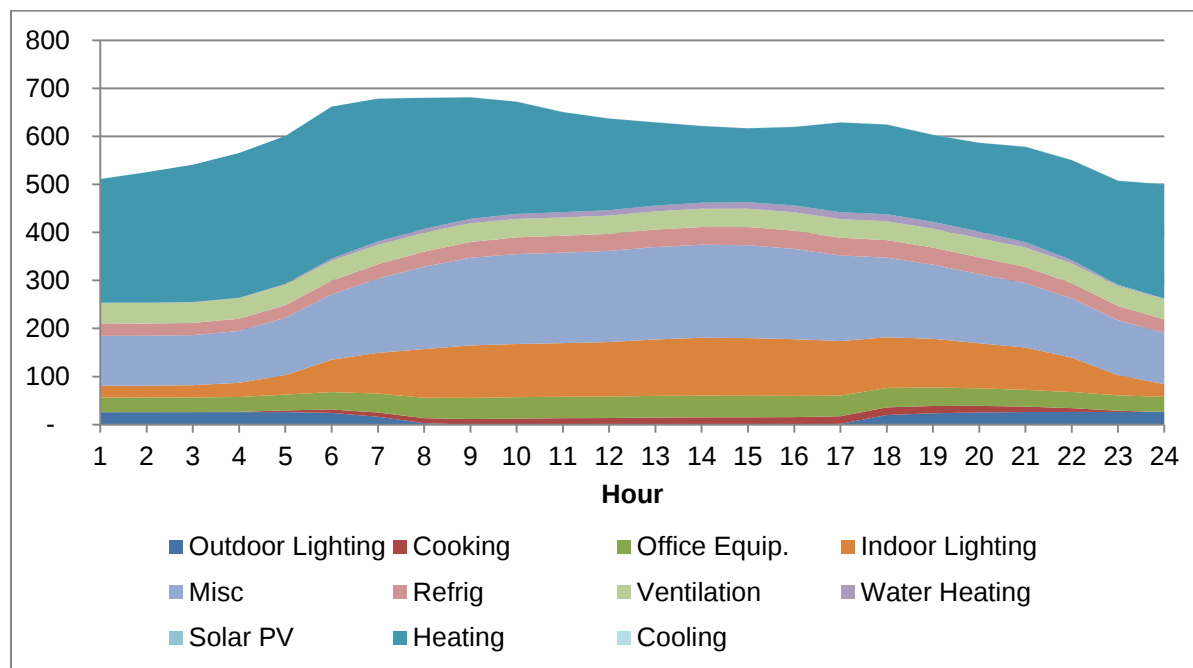
Load Profiles for Winter 2034 System Peak Day (MW)



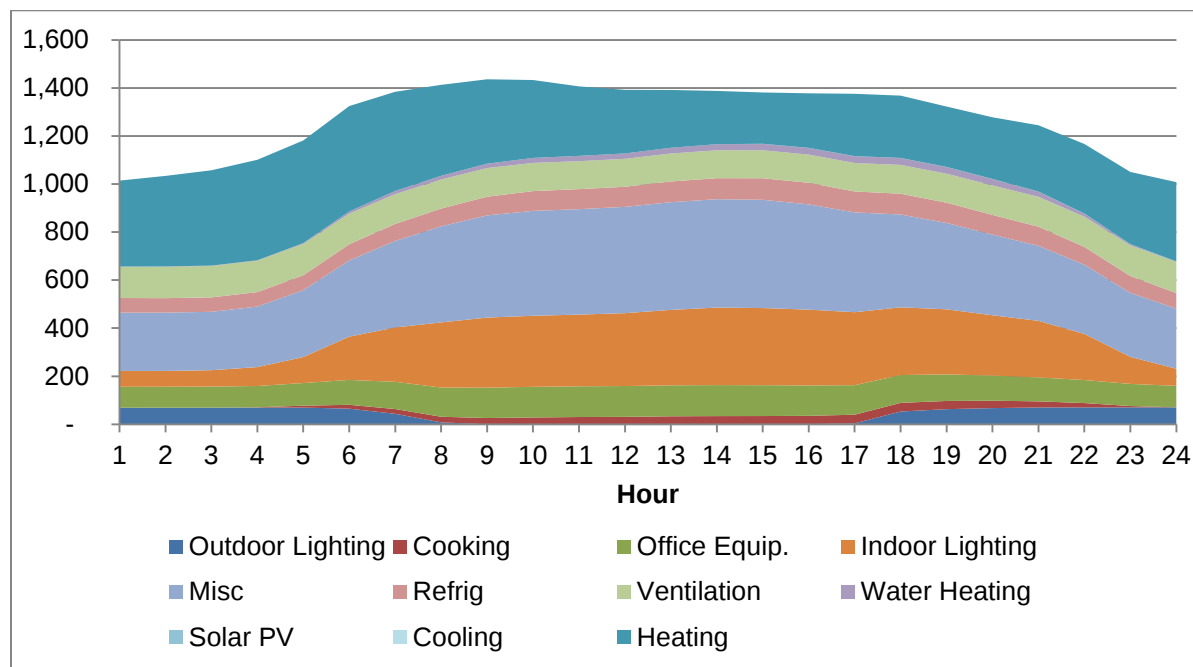
Winter 2034 System Peak Day: Residential End-Use Profiles (MW)



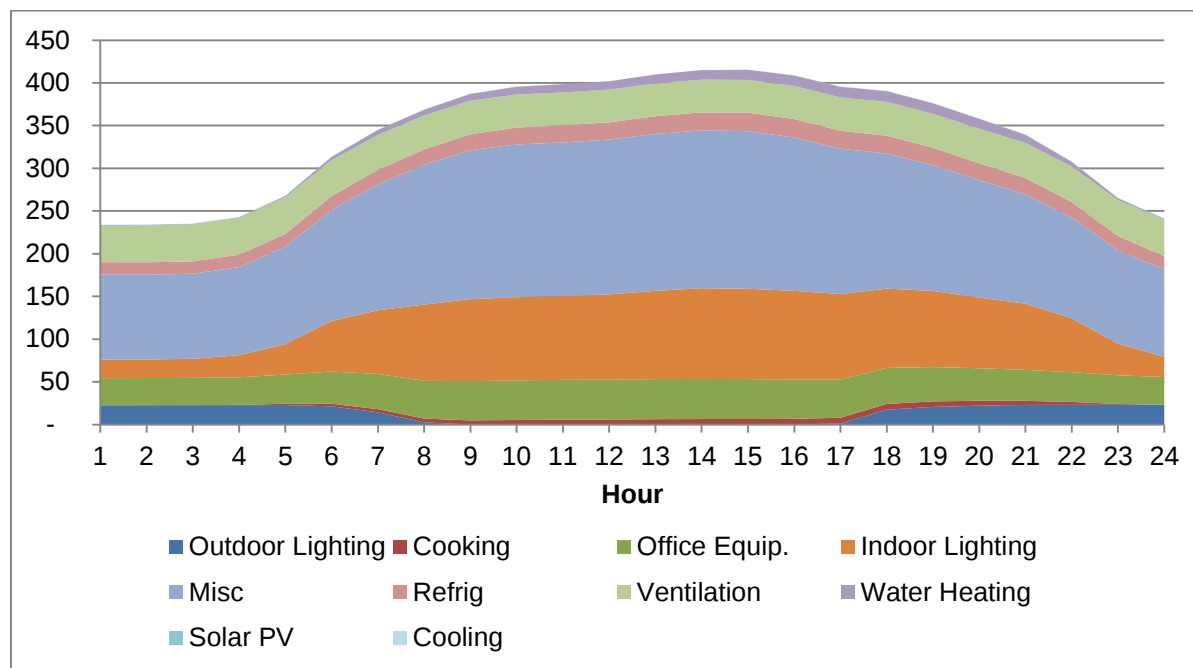
Winter 2034 System Peak Day: Commercial SGS End-Use Profiles (MW)



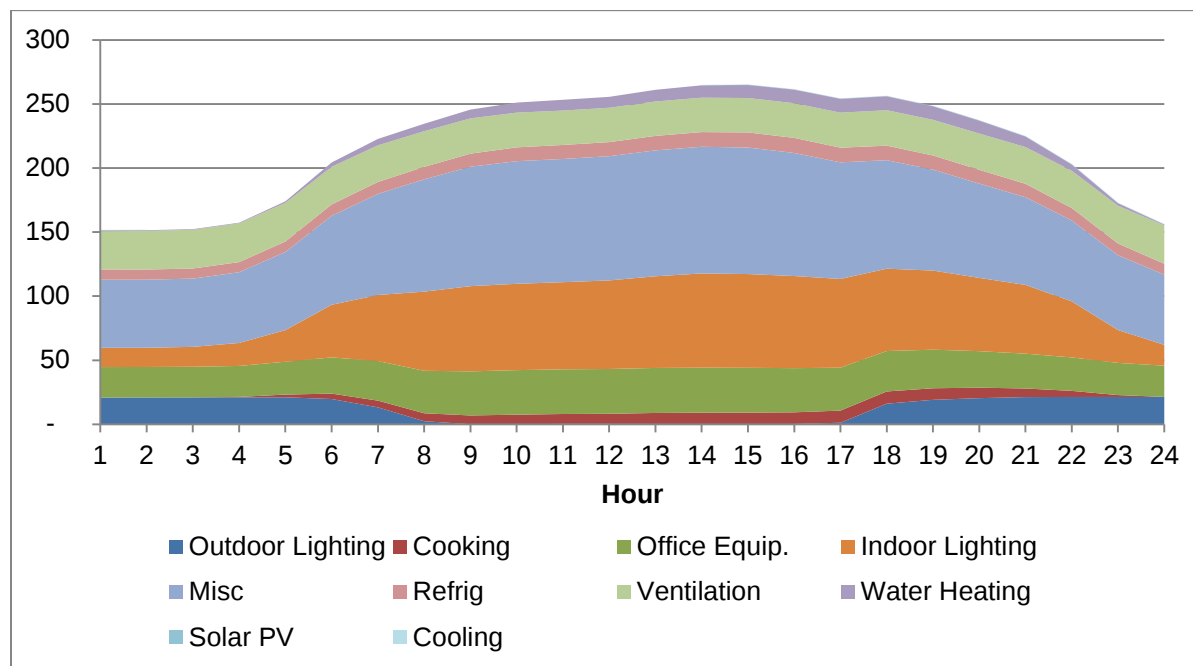
Winter 2034 System Peak Day: Commercial LGS End-Use Profiles (MW)



Winter 2034 System Peak Day: Commercial SPS End-Use Profiles (MW)



Winter 2034 System Peak Day: Commercial LPS End-Use Profiles (MW)



Load Profiles for Winter 2034 System Peak Day (MW)

Hour	Res	ComSGS	ComLGS	ComSPS	ComLPS	IndSGS	IndLGS	IndSPS	IndLPS	LTS	Lighting	Wholesale	Total
1	2,946	511	1,014	234	151	19	124	175	282	505	31	-	5,992
2	2,952	525	1,034	234	151	18	127	174	283	505	31	-	6,034
3	2,949	541	1,057	235	152	21	121	175	281	505	31	-	6,067
4	2,957	565	1,101	243	157	19	121	175	287	505	31	-	6,160
5	2,977	601	1,181	268	174	21	124	179	292	505	31	-	6,353
6	3,120	662	1,325	313	204	20	132	189	300	505	31	-	6,801
7	3,179	678	1,384	345	223	23	142	197	310	505	31	-	7,017
8	3,173	680	1,413	369	235	28	152	199	317	505	9	-	7,079
9	3,010	681	1,436	387	246	30	152	204	315	505	-	-	6,966
10	3,040	672	1,433	396	251	28	147	206	317	505	-	-	6,994
11	3,072	650	1,406	398	253	30	145	207	314	505	-	-	6,982
12	3,133	637	1,392	402	256	30	147	204	314	505	-	-	7,019
13	3,144	629	1,391	410	261	27	147	203	318	505	-	-	7,036
14	3,179	622	1,388	415	265	26	152	201	317	505	-	-	7,069
15	3,183	617	1,381	415	265	25	149	197	311	505	-	-	7,047
16	3,241	620	1,378	409	261	23	142	194	305	505	-	-	7,077
17	3,330	629	1,376	395	254	20	135	194	304	505	-	-	7,142
18	3,430	625	1,368	390	256	22	128	191	300	505	31	-	7,246
19	3,481	603	1,322	376	248	21	124	188	295	505	31	-	7,195
20	3,433	587	1,278	358	237	17	126	187	286	505	31	-	7,045
21	3,373	578	1,245	339	225	19	123	186	283	505	31	-	6,907
22	3,250	551	1,167	308	203	20	121	184	281	505	31	-	6,621
23	3,071	508	1,050	265	173	18	119	173	278	505	31	-	6,190
24	3,013	500	1,008	241	156	19	112	167	273	505	31	-	6,025

Winter 2034 System Peak Day: Residential End-Use Profiles (MW)

Hour	Washer	Dryer	Cooking	Cooling	Dishwasher	Freezer	Heating	Lighting	Misc	Refrig	TV	Water Heating	Solar PV
1	0	14	23	-	21	15	2,134	70	340	87	147	95	(0)
2	0	6	23	-	7	14	2,192	48	341	88	149	83	(0)
3	0	3	24	-	2	14	2,208	38	341	88	148	81	(0)
4	1	2	25	-	1	13	2,220	31	342	88	148	86	(0)
5	2	1	28	-	1	13	2,207	39	349	87	143	107	(0)
6	6	11	49	-	18	12	2,194	61	361	88	158	162	(0)
7	10	54	63	-	25	12	2,108	86	346	89	157	231	(0)
8	14	82	68	-	46	13	2,039	87	347	88	156	233	(0)
9	11	70	45	-	50	15	2,033	61	324	88	129	183	(0)
10	11	93	42	-	49	16	2,070	54	325	88	134	157	(0)
11	10	108	45	-	38	18	2,124	48	326	87	137	133	(0)
12	8	108	50	-	35	19	2,197	41	328	87	139	123	(0)
13	7	101	46	-	39	20	2,215	41	327	87	144	117	(0)
14	7	91	43	-	39	21	2,251	41	327	86	157	115	(0)
15	7	82	51	-	30	22	2,251	41	329	86	172	112	(0)
16	7	86	85	-	30	23	2,215	47	338	88	202	121	(0)
17	8	87	123	-	30	23	2,196	68	349	90	223	134	(0)
18	8	86	146	-	42	22	2,178	133	345	92	233	145	(0)
19	7	85	123	-	75	21	2,124	202	346	97	244	157	(0)
20	6	82	59	-	84	20	2,106	234	346	96	244	156	(0)
21	5	76	42	-	73	19	2,088	237	346	95	243	147	(0)
22	3	65	32	-	45	18	2,089	210	346	92	223	127	(0)
23	1	48	24	-	28	17	2,054	159	347	89	193	109	(0)
24	0	27	21	-	24	16	2,109	110	347	89	169	103	(0)

Winter 2034 System Peak Day: Commercial SGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	26	0	30	-	257	25	104	26	42	1	(0)
2	26	-	30	-	271	25	104	26	43	1	(0)
3	26	0	31	-	286	26	104	25	43	1	(0)
4	26	1	31	-	301	29	108	25	43	1	(0)
5	26	4	33	-	308	40	119	26	43	2	(0)
6	24	7	36	-	316	67	136	29	42	5	(0)
7	16	9	40	-	298	85	154	30	40	7	(0)
8	3	10	42	-	273	101	171	31	39	8	(0)
9	0	12	44	-	253	109	182	33	39	9	(0)
10	0	13	45	-	234	111	187	35	38	11	(0)
11	0	13	45	-	208	112	188	35	38	11	(0)
12	0	13	45	-	191	113	190	35	38	11	(0)
13	0	14	45	-	173	117	192	36	38	12	(0)
14	0	15	45	-	160	121	193	37	38	13	(0)
15	0	15	45	-	154	120	193	38	38	14	(0)
16	0	15	44	-	164	118	188	38	38	14	(0)
17	1	16	43	-	187	114	178	37	39	15	(0)
18	20	16	40	-	187	105	166	37	39	15	(0)
19	24	15	39	-	181	101	154	36	39	14	(0)
20	25	14	36	-	185	94	144	35	40	14	(0)
21	26	11	35	-	199	88	134	34	41	11	(0)
22	26	8	33	-	208	72	124	31	41	7	(0)
23	26	2	32	-	216	42	114	30	42	3	(0)
24	26	0	31	-	238	27	107	27	42	1	(0)

Winter 2034 System Peak Day: Commercial LGS End-Use Profiles (MW)

Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Heating	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	69	0	87	-	357	66	242	61	130	2	(0)
2	69	-	87	-	377	66	243	60	131	2	(0)
3	69	0	88	-	397	68	243	60	131	1	(0)
4	69	1	89	-	418	79	252	60	131	1	(0)
5	69	8	94	-	427	108	278	62	131	3	(0)
6	65	16	104	-	439	180	317	68	127	9	(0)
7	44	20	113	-	413	226	360	71	124	13	(0)
8	8	23	122	-	379	271	400	74	121	15	(0)
9	0	26	126	-	351	292	425	78	119	18	(0)
10	0	28	128	-	324	296	437	82	117	21	(0)
11	1	29	128	-	289	298	439	83	116	22	(0)
12	1	30	128	-	265	303	442	84	116	23	(0)
13	1	32	129	-	241	314	448	86	116	24	(0)
14	1	33	129	-	222	323	451	87	116	26	(0)
15	1	33	128	-	213	321	451	90	116	27	(0)
16	1	34	127	-	227	315	438	90	117	28	(0)
17	4	36	123	-	259	304	415	87	118	29	(0)
18	53	36	116	-	259	282	386	86	120	29	(0)
19	63	34	110	-	251	271	359	84	121	28	(0)
20	67	31	105	-	257	251	336	82	123	27	(0)
21	70	25	100	-	276	235	312	80	124	22	(0)
22	70	18	96	-	289	192	288	74	126	13	(0)
23	70	6	92	-	300	112	266	70	128	5	(0)
24	70	0	89	-	330	71	250	65	130	2	(0)

Winter 2034 System Peak Day: Commercial SPS End-Use Profiles (MW)

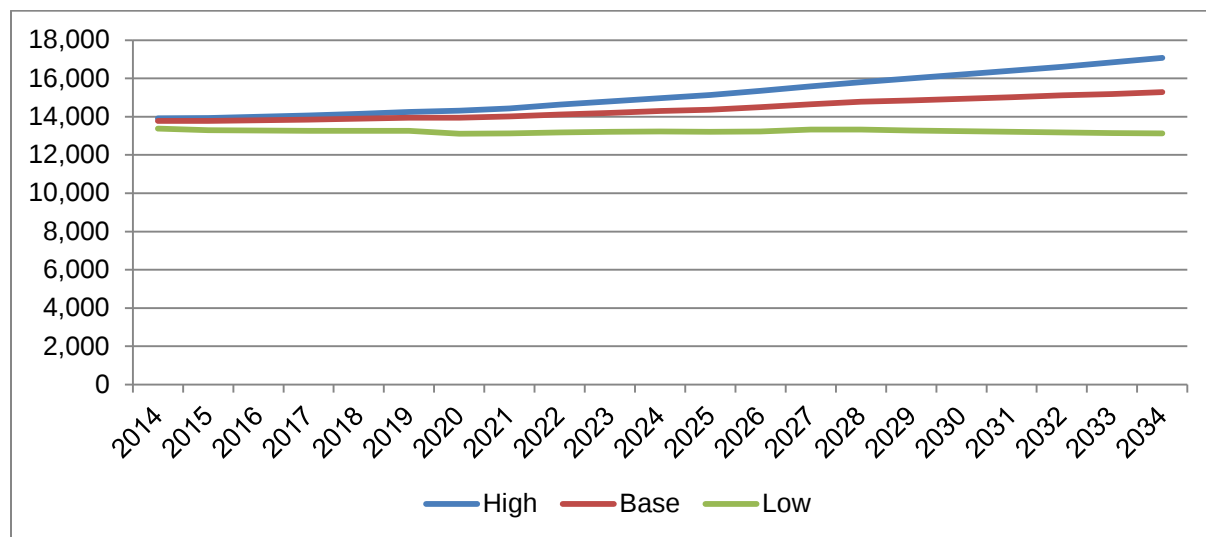
Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	23	0	32	-	22	99	15	43	1	-
2	23	-	32	-	22	99	15	43	1	-
3	23	-	32	-	22	100	14	43	1	-
4	23	0	32	-	26	103	15	43	1	-
5	23	1	34	-	36	114	15	43	1	-
6	21	3	38	-	59	130	16	42	4	-
7	14	4	41	-	74	147	17	41	6	-
8	3	4	44	-	89	164	18	40	7	-
9	0	5	46	-	96	174	19	39	8	-
10	0	5	46	-	97	179	20	39	9	-
11	0	5	47	-	98	180	20	38	10	(0)
12	0	6	47	-	100	181	20	38	10	(0)
13	0	6	47	-	103	184	21	38	11	(0)
14	0	6	47	-	106	185	21	38	11	(0)
15	0	6	47	-	106	185	22	38	12	(0)
16	0	6	46	-	104	179	22	39	12	(0)
17	1	7	45	-	100	170	21	39	13	(0)
18	17	7	42	-	93	158	21	40	13	-
19	21	6	40	-	89	147	20	40	12	-
20	22	6	38	-	83	138	20	40	12	-
21	23	5	36	-	78	128	19	41	10	-
22	23	3	35	-	63	118	18	42	6	-
23	23	1	34	-	37	109	17	42	2	-
24	23	0	33	-	23	102	16	43	1	-

Winter 2034 System Peak Day: Commercial LPS End-Use Profiles (MW)

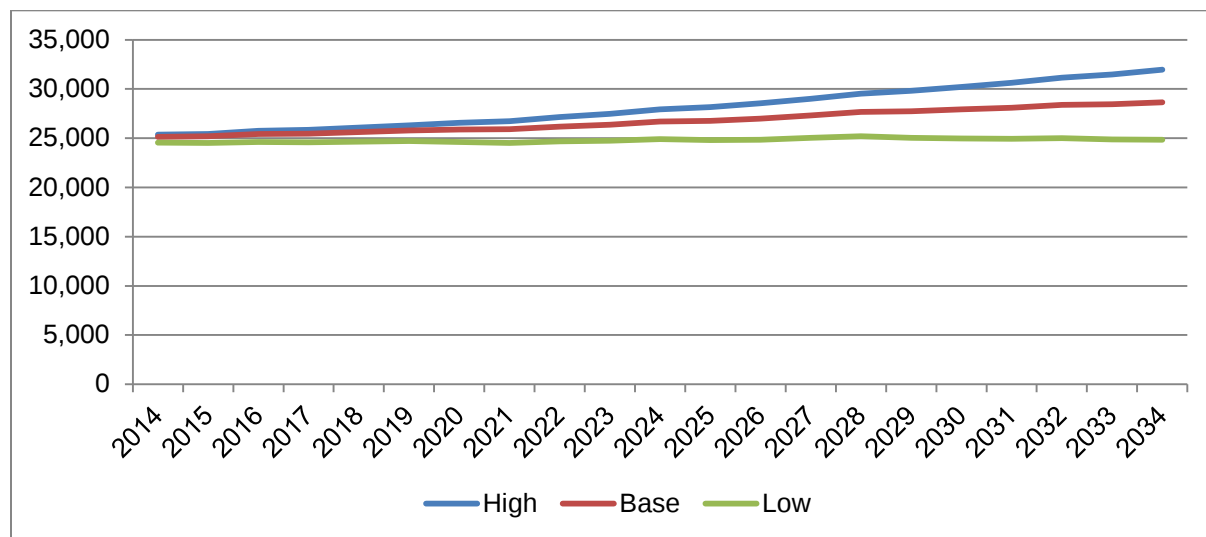
Hour	Outdoor Lighting	Cooking	Office Equip.	Cooling	Indoor Lighting	Misc	Refrig	Ventilation	Water Heating	Solar PV
1	21	0	24	-	15	53	8	30	1	-
2	21	-	24	-	15	53	8	30	1	-
3	21	0	24	-	16	53	8	30	1	-
4	21	0	24	-	18	55	8	30	0	-
5	21	2	26	-	25	61	8	30	1	-
6	20	4	28	-	41	69	9	29	3	-
7	13	5	31	-	52	79	9	29	5	-
8	2	6	33	-	62	88	10	28	6	-
9	0	7	34	-	66	93	10	28	7	-
10	0	7	35	-	67	96	11	27	8	-
11	0	8	35	-	68	96	11	27	8	-
12	0	8	35	-	69	97	11	27	9	-
13	0	9	35	-	72	98	11	27	9	-
14	0	9	35	-	74	99	11	27	10	-
15	0	9	35	-	73	99	12	27	10	-
16	0	9	34	-	72	96	12	27	11	-
17	1	9	34	-	69	91	11	27	11	-
18	16	10	32	-	64	85	11	28	11	-
19	19	9	30	-	62	79	11	28	11	-
20	20	8	28	-	57	74	11	28	10	-
21	21	7	27	-	54	68	10	29	8	-
22	21	5	26	-	44	63	10	29	5	-
23	21	1	25	-	26	58	9	29	2	-
24	21	0	24	-	16	55	8	30	1	-

Energy Forecast for High-Low-Base* Case Scenarios¹²

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



High-Low-Base Case Energy Usage Forecast for Non-summer Months (GWh)



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

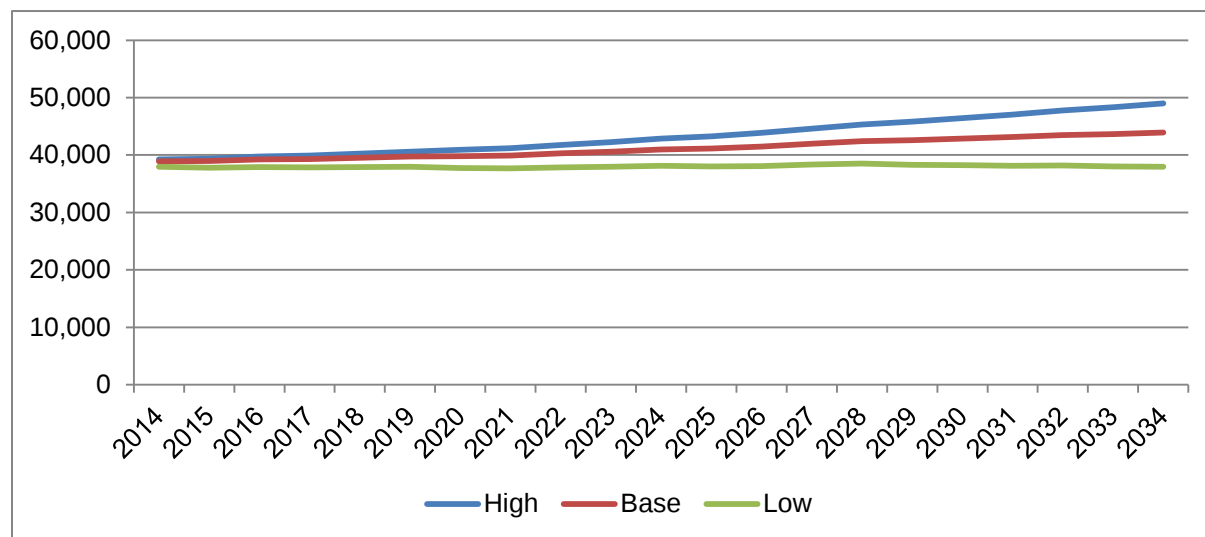
High-Low-Base Case Energy Usage Forecast for Summer Months (GWh)

Year	Base Case	High Case	Low Case
2014	13,785	13,918	13,379
2015	13,780	13,933	13,303
2016	13,820	13,995	13,272
2017	13,843	14,071	13,256
2018	13,891	14,153	13,269
2019	13,947	14,253	13,263
2020	13,944	14,311	13,115
2021	14,008	14,438	13,129
2022	14,110	14,637	13,177
2023	14,198	14,800	13,204
2024	14,302	14,968	13,231
2025	14,369	15,133	13,208
2026	14,494	15,350	13,232
2027	14,656	15,591	13,322
2028	14,778	15,796	13,336
2029	14,854	16,003	13,285
2030	14,935	16,203	13,247
2031	15,021	16,404	13,214
2032	15,113	16,607	13,179
2033	15,187	16,833	13,151
2034	15,278	17,067	13,122

High-Low-Base Case Energy Usage Forecast for Non-summer Months (GWh)

Year	Base Case	High Case	Low Case
2014	25,135	25,349	24,563
2015	25,197	25,440	24,519
2016	25,426	25,742	24,616
2017	25,473	25,868	24,577
2018	25,622	26,081	24,659
2019	25,776	26,322	24,716
2020	25,886	26,580	24,604
2021	25,920	26,739	24,530
2022	26,182	27,145	24,677
2023	26,385	27,474	24,742
2024	26,700	27,921	24,922
2025	26,771	28,146	24,816
2026	27,005	28,549	24,859
2027	27,322	29,014	25,033
2028	27,672	29,539	25,200
2029	27,751	29,831	25,040
2030	27,919	30,224	24,978
2031	28,100	30,621	24,937
2032	28,394	31,160	25,000
2033	28,462	31,486	24,874
2034	28,656	31,951	24,841

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

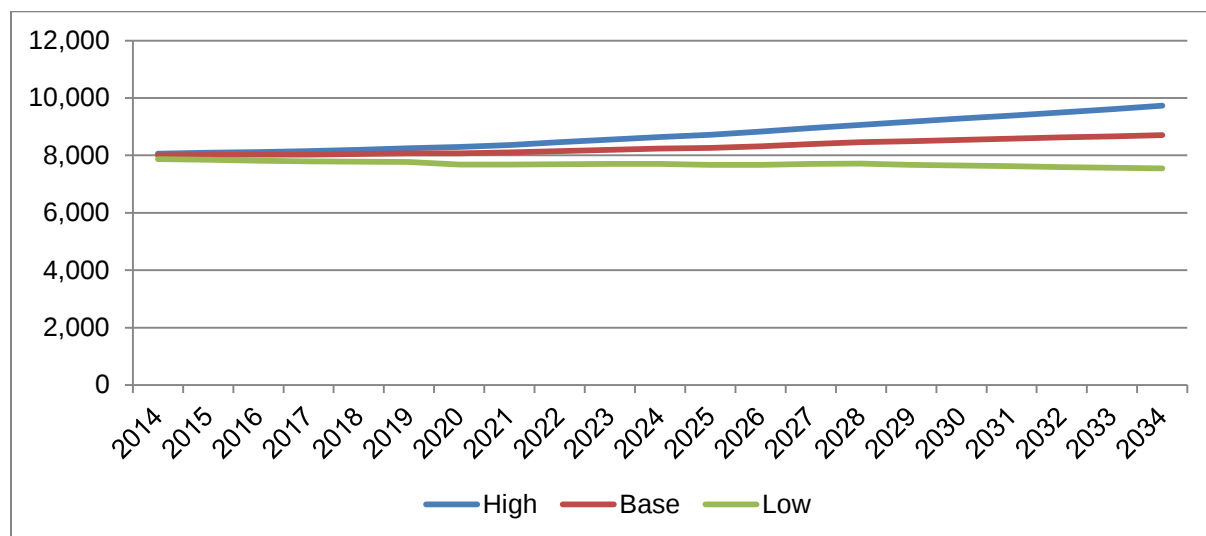


High-Low-Base Case Annual Energy Forecast (GWh)

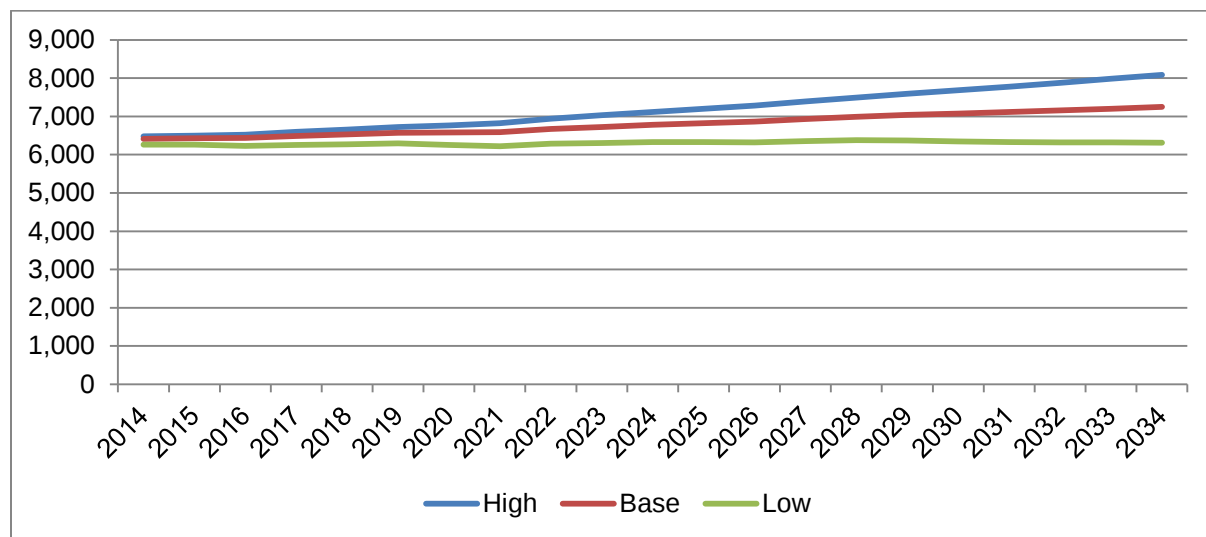
Year	Base Case	High Case	Low Case
2014	38,919	39,267	37,942
2015	38,977	39,372	37,822
2016	39,246	39,737	37,888
2017	39,316	39,938	37,833
2018	39,513	40,233	37,927
2019	39,723	40,576	37,979
2020	39,829	40,891	37,719
2021	39,929	41,177	37,660
2022	40,291	41,782	37,854
2023	40,583	42,274	37,946
2024	41,002	42,889	38,153
2025	41,140	43,280	38,024
2026	41,499	43,899	38,091
2027	41,977	44,606	38,355
2028	42,450	45,335	38,537
2029	42,605	45,834	38,325
2030	42,854	46,427	38,224
2031	43,122	47,025	38,152
2032	43,506	47,767	38,179
2033	43,649	48,319	38,026
2034	43,934	49,018	37,963

Peak Demand Forecasts for Base, High and Low Case Scenarios¹³

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



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



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

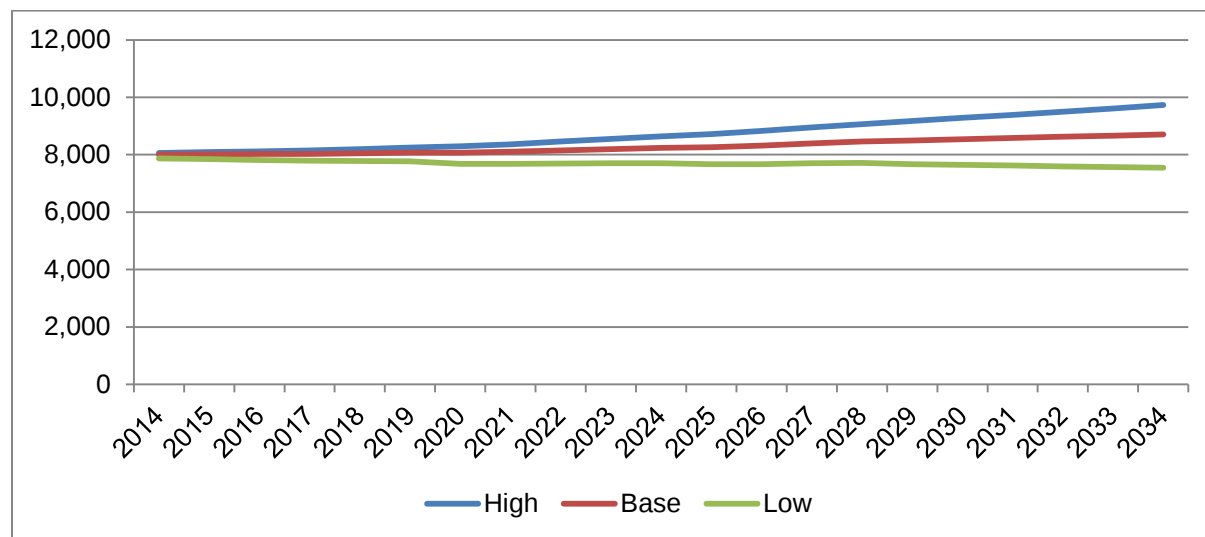
High-Low-Base Case Peak Demand Forecast for Summer Months (MWh)

Year	Base Case	High Case	Low Case
2014	8,004	8,067	7,870
2015	8,015	8,089	7,846
2016	8,030	8,119	7,821
2017	8,029	8,154	7,794
2018	8,046	8,196	7,788
2019	8,072	8,250	7,775
2020	8,074	8,291	7,687
2021	8,105	8,364	7,686
2022	8,152	8,466	7,698
2023	8,191	8,552	7,700
2024	8,243	8,641	7,704
2025	8,267	8,724	7,675
2026	8,322	8,834	7,671
2027	8,401	8,958	7,709
2028	8,466	9,068	7,712
2029	8,499	9,177	7,675
2030	8,537	9,282	7,645
2031	8,580	9,389	7,621
2032	8,627	9,495	7,597
2033	8,661	9,612	7,575
2034	8,706	9,732	7,554

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

Year	Base Case	High Case	Low Case
2014	6,415	6,477	6,260
2015	6,434	6,497	6,267
2016	6,441	6,525	6,230
2017	6,488	6,596	6,252
2018	6,527	6,656	6,270
2019	6,575	6,726	6,298
2020	6,578	6,763	6,257
2021	6,591	6,823	6,225
2022	6,673	6,941	6,292
2023	6,723	7,030	6,303
2024	6,778	7,118	6,328
2025	6,823	7,201	6,333
2026	6,864	7,286	6,323
2027	6,932	7,395	6,353
2028	6,993	7,493	6,378
2029	7,042	7,592	6,372
2030	7,075	7,683	6,345
2031	7,117	7,776	6,334
2032	7,159	7,874	6,324
2033	7,203	7,982	6,321
2034	7,246	8,088	6,310

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



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

Year	Base Case	High Case	Low Case
2014	8,004	8,067	7,870
2015	8,015	8,089	7,846
2016	8,030	8,119	7,821
2017	8,029	8,154	7,794
2018	8,046	8,196	7,788
2019	8,072	8,250	7,775
2020	8,074	8,291	7,687
2021	8,105	8,364	7,686
2022	8,152	8,466	7,698
2023	8,191	8,552	7,700
2024	8,243	8,641	7,704
2025	8,267	8,724	7,675
2026	8,322	8,834	7,671
2027	8,401	8,958	7,709
2028	8,466	9,068	7,712
2029	8,499	9,177	7,675
2030	8,537	9,282	7,645
2031	8,580	9,389	7,621
2032	8,627	9,495	7,597
2033	8,661	9,612	7,575
2034	8,706	9,732	7,554

Weather Normalized Energy Models¹⁴

Residential Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	74,899,978	795,408	94.166	0.000
DOWBinary.Monday	-2,149,720	335,006	-6.417	0.000
DOWBinary.Tuesday	-2,613,037	330,043	-7.917	0.000
DOWBinary.Wednesday	-2,884,361	333,018	-8.661	0.000
DOWBinary.Thursday	-2,745,758	331,967	-8.271	0.000
DOWBinary.Friday	-2,631,766	329,282	-7.992	0.000
DOWBinary.Saturday	-1,079,257	327,421	-3.296	0.001
MonthBinary.Feb	-1,844,856	381,180	-4.84	0.000
MonthBinary.Mar	-3,665,566	418,875	-8.751	0.000
MonthBinary.Apr	-6,770,053	488,049	-13.872	0.000
MonthBinary.May	-6,136,187	455,938	-13.458	0.000
MonthBinary.Jun	-1,560,443	418,324	-3.73	0.000
MonthBinary.Aug	-1,240,824	407,326	-3.046	0.002
MonthBinary.Sep	-6,543,679	464,465	-14.089	0.000
MonthBinary.Oct	-6,637,022	471,712	-14.07	0.000
MonthBinary.Nov	-4,623,531	452,615	-10.215	0.000
ResSplines.AvgT	-782,266	25,144	-31.111	0.000
ResSplines.CoolAvgT	126,430	40,814	3.098	0.002
ResSplines.MILDAvgT	705,030	59,994	11.752	0.000
ResSplines.WarmAvgT	1,351,176	77,152	17.513	0.000
ResSplines.HotAvgT	474,726	99,770	4.758	0.000
ResSplines.XHotAvgT	-627,822	294,153	-2.134	0.033

¹⁴ 4 CSR 240-22.030(2)(C)3

Residential Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	698
Deg. of Freedom for Error	676
R-Squared	0.967
Adjusted R-Squared	0.966
F-Statistic	930.888
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	0.0461
Durbin-Watson Statistic	1.004

Commercial SGS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	12,431,245	143,973	86.344	0.000
DOWBinary.TWT	2,073,935	58,225	35.619	0.000
DOWBinary.MonFri	1,872,723	60,789	30.807	0.000
DOWBinary.Saturday	405,980	59,006	6.88	0.000
MonthBinary.Mar	-460,442	76,739	-6	0.000
MonthBinary.Apr	-787,475	89,606	-8.788	0.000
MonthBinary.May	-1,132,040	139,334	-8.125	0.000
MonthBinary.Jul	282,493	82,184	3.437	0.001
MonthBinary.Aug	188,159	76,894	2.447	0.015
MonthBinary.Sep	-1,265,194	282,457	-4.479	0.000
MonthBinary.Oct	-866,491	88,071	-9.839	0.000
MonthBinary.Nov	-560,463	85,917	-6.523	0.000
COMSGSSplines.AvgT	-110,959	4,521	-24.543	0.000
COMSGSSplines.CoolAvgT	23,771	8,972	2.65	0.008
COMSGSSplines.MildAvgT	100,117	12,327	8.122	0.000
COMSGSSplines.WarmAvgT	92,697	14,776	6.274	0.000
COMSGSSplines.HotAvgT	108,765	12,578	8.647	0.000
COMSGSSplines.WkndMildAvgT	-14,247	2,812	-5.067	0.000
COMSGSSplines.MayMildAvgT	38,284	7,415	5.163	0.000
COMSGSSplines.SeptCool	27,750	8,116	3.419	0.001
COMSGSSplines.WinterMildAvgT	-73,550	21,873	-3.363	0.001

ComSGS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	707
Deg. of Freedom for Error	686
R-Squared	0.952
Adjusted R-Squared	0.951
F-Statistic	686.693
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	3.40%
Durbin-Watson Statistic	1.386

ComLGS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	24,565,303	348,026	70.585	0.000
DOWBinary.TWT	2,875,719	167,939	17.124	0.000
DOWBinary.MonFri	2,490,124	169,971	14.65	0.000
DOWBinary.Saturday	905,184	86,439	10.472	0.000
MonthBinary.Jan	-632,572	105,270	-6.009	0.000
MonthBinary.Mar	644,262	130,647	4.931	0.000
MonthBinary.Nov	-636,387	103,038	-6.176	0.000
COMLGSSplines.AvgT	-202,975	12,761	15.906	0.000
COMLGSSplines.CoolAvgT	89,248	15,400	5.795	0.000
COMLGSSplines.MILDAvgT	59,609	33,206	1.795	0.073
COMLGSSplines.WarmAvgT	192,948	34,675	5.564	0.000
COMLGSSplines.HotAvgT	195,452	13,503	14.475	0.000
COMLGSSplines.ShoulderMILDAvgT	-26,259	4,511	-5.821	0.000
COMLGSSplines.WinterCoolAvgT	-71,752	5,314	13.503	0.000
COMLGSSplines.WkndAvgT	-23,195	2,593	-8.944	0.000

Note: The COMLGSSplines.MILDAvgT variable was retained in the model despite being only marginally statistically significant (p-value>.05). The direction and magnitude of the coefficient are reasonable, the standard error is consistent with other variables, and the interpretation of all of the weather variables is cleaner with the inclusion of this variable.

ComLGS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	682
Deg. of Freedom for Error	667
R-Squared	0.964
Adjusted R-Squared	0.963
F-Statistic	1259.003
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	2.17%
Durbin-Watson Statistic	1.223

ComSPS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	6,702,577	76,927	87.129	0.000
DOWBinary.MonFri	741,085	20,551	36.061	0.000
DOWBinary.TWT	776,481	19,197	40.448	0.000
DOWBinary.Saturday	131,619	23,370	5.632	0.000
MonthBinary.Feb	-121,581	28,752	-4.229	0.000
MonthBinary.Mar	-204,792	37,450	-5.468	0.000
MonthBinary.Apr	-818,296	154,367	-5.301	0.000
MonthBinary.May	-649,181	154,521	-4.201	0.000
MonthBinary.Jun	-769,425	156,118	-4.928	0.000
MonthBinary.Jul	-291,920	157,179	-1.857	0.064
MonthBinary.Aug	-380,265	156,411	-2.431	0.015
MonthBinary.Sep	-548,138	156,605	-3.5	0.001
MonthBinary.Oct	-868,368	149,087	-5.825	0.000
MonthBinary.Nov	-881,293	138,160	-6.379	0.000
COMSPSSplines.AvgT	-15,181	4,370	-3.474	0.001
COMSPSSplines.WinterAvgT	-14,156	2,891	-4.897	0.000
COMSPSSplines.CoolAvgT	18,451	3,772	4.891	0.000
COMSPSSplines.WarmAvgT	44,397	3,904	11.373	0.000
COMSPSSplines.HotAvgT	43,010	4,095	10.504	0.000

Note: The MonthBinary.Jul variable was retained in the model despite being only marginally statistically significant ($p\text{-value} > .05$). The direction and magnitude of the coefficient are reasonable, the standard error is consistent with other seasonal variables, and the interpretation of all of the seasonal variables is cleaner with the inclusion of this variable.

Com SPS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	679
Deg. of Freedom for Error	660
R-Squared	0.958
Adjusted R-Squared	0.957
F-Statistic	845.731
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	1.91%
Durbin-Watson Statistic	0.781

Com LPS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	3,545,173	22,828	155.299	0.000
DOWBinary.TWT	381,651	23,025	16.576	0.000
DOWBinary.MonFri	366,972	24,519	14.967	0.000
DOWBinary.Saturday	60,960	28,108	2.169	0.030
MonthBinary.Apr	237,800	36,570	6.503	0.000
MonthBinary.May	169,382	39,523	4.286	0.000
MonthBinary.Jun	255,134	50,513	5.051	0.000
MonthBinary.Jul	489,944	56,047	8.742	0.000
MonthBinary.Aug	519,916	52,697	9.866	0.000
MonthBinary.Sep	408,154	42,793	9.538	0.000
MonthBinary.Oct	154,419	32,605	4.736	0.000
MonthBinary.Nov	166,771	31,258	5.335	0.000
COMLPSSplines.MildAvgT	20,944	1,895	11.049	0.000
COMLPSSplines.HotAvgT	22,000	3,519	6.252	0.000

Com LPS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	691
Deg. of Freedom for Error	677
R-Squared	0.899
Adjusted R-Squared	0.897
F-Statistic	462.382
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	3.42%
Durbin-Watson Statistic	0.519

Ind SGS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	419,631	10,721	39.142	0.000
DOWBinary.Monday	138,697	4,996	27.762	0.000
DOWBinary.Tuesday	145,082	4,947	29.326	0.000
DOWBinary.Wednesday	146,064	4,940	29.567	0.000
DOWBinary.Thursday	146,798	4,989	29.423	0.000
DOWBinary.Friday	145,053	5,018	28.908	0.000
DOWBinary.Saturday	33,033	4,944	6.682	0.000
MonthBinary.Jan	12,655	6,697	1.89	0.059
MonthBinary.Feb	12,043	6,724	1.791	0.074
MonthBinary.Mar	42,524	7,749	5.487	0.000
MonthBinary.Apr	26,216	9,326	2.811	0.005
MonthBinary.May	34,401	9,588	3.588	0.000
MonthBinary.Jun	38,113	11,010	3.462	0.001
MonthBinary.Jul	45,130	11,805	3.823	0.000
MonthBinary.Aug	45,085	11,344	3.974	0.000
MonthBinary.Sep	58,727	9,993	5.877	0.000
MonthBinary.Oct	91,387	8,828	10.352	0.000
MonthBinary.Nov	84,436	8,424	10.024	0.000
INDSGSSplines.AvgT	-5,420	286	-18.945	0.000
INDSGSSplines.MILDAvgT	4,551	568	8.014	0.000
INDSGSSplines.WarmAvgT	7,223	694	10.404	0.000

Note: Two monthly binary variables were retained in the model despite being marginally statistically insignificant (p-value>.05). The direction and magnitude of the coefficients are reasonable, the standard errors are consistent with other seasonal variables, and the interpretation of all of the seasonal variables is cleaner with the inclusion of these variables.

Ind SGS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	705
Deg. of Freedom for Error	684
R-Squared	0.828
Adjusted R-Squared	0.823
F-Statistic	164.676
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	9.10%
Durbin-Watson Statistic	1.186

IndLGS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	1,953,657	39,489	49.474	0.000
DOWBinary.Monday	941,022	45,179	20.829	0.000
DOWBinary.Tuesday	1,166,705	45,205	25.809	0.000
DOWBinary.Wednesday	1,204,125	45,453	26.491	0.000
DOWBinary.Thursday	1,154,554	45,307	25.483	0.000
DOWBinary.Friday	912,004	45,541	20.026	0.000
DOWBinary.Saturday	238,456	45,652	5.223	0.000
MonthBinary.Jan	-110,148	49,873	-2.209	0.028
MonthBinary.Feb	-151,988	50,820	-2.991	0.003
MonthBinary.Mar	-156,780	49,016	-3.199	0.002
MonthBinary.Apr	-239,905	49,551	-4.842	0.000
MonthBinary.May	-130,851	48,316	-2.708	0.007
MonthBinary.Jul	118,171	57,538	2.054	0.040
MonthBinary.Aug	144,791	52,937	2.735	0.006
MonthBinary.Oct	-183,512	49,023	-3.743	0.000
MonthBinary.Dec	-279,611	53,416	-5.235	0.000
INDLGSSplines.HotAvgT	23,352	4,573	5.107	0.000

IndLGS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	706
Deg. of Freedom for Error	689
R-Squared	0.706
Adjusted R-Squared	0.699
F-Statistic	103.389
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	9.69%
Durbin-Watson Statistic	0.512

IndSPS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	2,470,048	14,946	165.263	0.000
DOWBinary.Monday	1,069,730	19,012	56.267	0.000
DOWBinary.Tuesday	1,261,769	18,812	67.074	0.000
DOWBinary.Wednesday	1,278,544	18,819	67.937	0.000
DOWBinary.Thursday	1,243,927	18,771	66.267	0.000
DOWBinary.Friday	1,103,240	18,857	58.507	0.000
DOWBinary.Saturday	313,024	18,851	16.605	0.000
MonthBinary.Mar	-101,859	18,644	-5.463	0.000
MonthBinary.Apr	-106,888	19,865	-5.381	0.000
MonthBinary.Aug	150,728	19,908	7.571	0.000
MonthBinary.Sep	64,076	19,803	3.236	0.001
MonthBinary.Oct	-40,995	18,470	-2.22	0.027
INDSPSSplines.WarmAvgT	7,861	712	11.042	0.000
INDSPSSplines.HotAvgT	18,027	2,172	8.301	0.000

IndSPS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	683
Deg. of Freedom for Error	669
R-Squared	0.943
Adjusted R-Squared	0.942
F-Statistic	849.567
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	2.92%
Durbin-Watson Statistic	1.163

Ind LPS Weather Normalization Energy Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	5,302,182	37,979	139.607	0.000
DOWBinary.Monday	717,929	37,754	19.016	0.000
DOWBinary.Tuesday	783,537	36,941	21.21	0.000
DOWBinary.Wednesday	821,928	37,065	22.175	0.000
DOWBinary.Thursday	880,368	37,164	23.689	0.000
DOWBinary.Friday	730,445	37,081	19.698	0.000
DOWBinary.Saturday	140,710	36,851	3.818	0.000
MonthBinary.Jan	-328,626	45,194	-7.271	0.000
MonthBinary.Feb	-250,728	44,945	-5.578	0.000
MonthBinary.Mar	-319,301	40,937	-7.8	0.000
MonthBinary.Jul	126,344	47,780	2.644	0.008
MonthBinary.Aug	188,599	44,806	4.209	0.000
MonthBinary.Nov	-80,604	42,083	-1.915	0.056
INDLPSSplines.WarmAvgT	13,593	2,014	6.749	0.000
INDLPSSplines.HotAvgT	11,594	4,020	2.884	0.004
INDLPSSplines.ShoulderWarmAvgT	-5,051	1,467	-3.443	0.001

Note: Two monthly binary variables were retained in the model despite being only marginally statistically significant ($p\text{-value} > .05$). The direction and magnitude of the coefficients are reasonable, the standard errors are consistent with other seasonal variables, and the interpretation of all of the seasonal variables is cleaner with the inclusion of these variables.

Ind LPS Weather Normalization Energy Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	691
Deg. of Freedom for Error	675
R-Squared	0.809
Adjusted R-Squared	0.805
F-Statistic	190.358
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	3.40%
Durbin-Watson Statistic	0.474

Weather Normalized Peak Demand Models¹⁵

Residential Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	3,514,266	43,977	79.911	0.000
DOWBinary.Monday	-51,348	26,452	-1.941	0.053
DOWBinary.Tuesday	-82,143	26,074	-3.15	0.002
DOWBinary.Wednesday	-120,921	26,301	-4.598	0.000
DOWBinary.Thursday	-99,193	26,246	-3.779	0.000
DOWBinary.Friday	-144,840	26,041	-5.562	0.000
DOWBinary.Saturday	-102,364	25,863	-3.958	0.000
MonthBinary.Feb	-112,974	29,943	-3.773	0.000
MonthBinary.Mar	-193,439	32,655	-5.924	0.000
MonthBinary.Apr	-304,762	39,114	-7.792	0.000
MonthBinary.May	-307,832	33,374	-9.224	0.000
MonthBinary.Jun	-54,326	29,505	-1.841	0.066
MonthBinary.Sep	-334,068	33,893	-9.856	0.000
MonthBinary.Oct	-342,095	35,479	-9.642	0.000
MonthBinary.Nov	-214,620	35,211	-6.095	0.000
ResSplines.AvgT	-31,203	1,122	-27.8	0.000
ResSplines.MildAvgT	40,538	5,185	7.819	0.000
ResSplines.WarmAvgT	61,718	11,848	5.209	0.000
ResSplines.HotAvgT	21,217	10,157	2.089	0.037
ResSplines.XHotAvgT	-39,528	19,360	-2.042	0.042
ResSplines.ShoulderWarmAvgT	-39,221	10,043	-3.905	0.000

Note: One monthly binary variable and one weekday binary variable were retained in the model despite being statistically insignificant (p-value>.05). The direction and magnitude of the coefficients are reasonable, the standard errors are fairly consistent with other seasonal and weekday variables, and the interpretation of all of the seasonal and weekday variables is cleaner with the inclusion of these variables.

¹⁵ 4 CSR 240-22.030(2)(C)3

Residential Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	698
Deg. of Freedom for Error	677
R-Squared	0.937
Adjusted R-Squared	0.935
F-Statistic	502.474
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	6.19%
Durbin-Watson Statistic	1.397

Com SGS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	557,435	8,644	64.488	0.000
DOWBinary.TWT	156,387	4,486	34.864	0.000
DOWBinary.MonFri	144,323	4,682	30.826	0.000
DOWBinary.Saturday	24,211	4,543	5.329	0.000
MonthBinary.Mar	-18,909	5,883	-3.214	0.001
MonthBinary.Apr	-35,326	6,591	-5.36	0.000
MonthBinary.May	-50,890	10,241	-4.969	0.000
MonthBinary.Jul	18,094	6,330	2.858	0.004
MonthBinary.Aug	16,739	5,920	2.828	0.005
MonthBinary.Sep	-61,489	21,355	-2.879	0.004
MonthBinary.Oct	-20,502	6,409	-3.199	0.002
MonthBinary.Nov	-24,496	6,350	-3.858	0.000
COMSGSSplines.AvgT	-4,231	236	-17.897	0.000
COMSGSSplines.MildAvgT	6,379	699	9.131	0.000
COMSGSSplines.WarmAvgT	6,846	1,133	6.042	0.000
COMSGSSplines.HotAvgT	2,933	967	3.033	0.003
COMSGSSplines.WkndMildAvgT	-1,976	217	-9.124	0.000
COMSGSSplines.MayMildAvgT	2,275	558	4.074	0.000
COMSGSSplines.SeptCool	1,962	618	3.174	0.002
COMSGSSplines.WinterMildAvgT	-5,873	1,681	-3.493	0.001

Com SGS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	707
Deg. of Freedom for Error	687
R-Squared	0.933
Adjusted R-Squared	0.931
F-Statistic	503.02
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	4.77%
Durbin-Watson Statistic	2.053

Com LGS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	1,058,695	14,449	73.273	0.000
DOWBinary.TWT	254,964	6,748	37.785	0.000
DOWBinary.MonFri	231,431	6,990	33.111	0.000
DOWBinary.Saturday	58,755	5,893	9.971	0.000
MonthBinary.Jan	-27,542	7,145	-3.854	0.000
MonthBinary.Mar	36,035	8,410	4.285	0.000
MonthBinary.Apr	66,025	11,797	5.597	0.000
MonthBinary.May	83,976	11,980	7.01	0.000
MonthBinary.Jun	66,287	13,783	4.809	0.000
MonthBinary.Jul	87,929	14,586	6.028	0.000
MonthBinary.Aug	93,715	14,096	6.648	0.000
MonthBinary.Sep	75,027	12,503	6.001	0.000
MonthBinary.Oct	67,618	10,759	6.285	0.000
MonthBinary.Nov	43,160	9,737	4.433	0.000
COMLGSSplines.AvgT	-8,515	390	-21.849	0.000
COMLGSSplines.MildAvgT	9,313	1,511	6.162	0.000
COMLGSSplines.WarmAvgT	9,454	1,737	5.443	0.000
COMLGSSplines.HotAvgT	5,812	1,006	5.779	0.000
COMLGSSplines.XHotAvgT	-12,666	4,373	-2.896	0.004
COMLGSSplines.WkndMildAvgT	-8,272	1,550	-5.335	0.000
COMLGSSplines.WkndWarmAvgT	7,017	1,891	3.71	0.000
COMLGSSplines.WinterMildAvgT	-5,238	1,097	-4.776	0.000

Com LGS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	682
Deg. of Freedom for Error	660
R-Squared	0.956
Adjusted R-Squared	0.954
F-Statistic	679.251
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	2.95%
Durbin-Watson Statistic	1.695

Com SPS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	280,994	4,221	66.578	0.000
DOWBinary.MonFri	51,507	1,123	45.85	0.000
DOWBinary.TWT	53,525	1,051	50.923	0.000
DOWBinary.Saturday	7,120	1,276	5.581	0.000
MonthBinary.Feb	-6,287	1,461	-4.302	0.000
MonthBinary.Mar	-8,477	1,398	-6.063	0.000
MonthBinary.May	7,190	1,364	5.27	0.000
MonthBinary.Jul	20,468	1,700	12.039	0.000
MonthBinary.Aug	16,939	1,564	10.829	0.000
MonthBinary.Sep	12,782	1,409	9.07	0.000
MonthBinary.Nov	-3,804	1,516	-2.509	0.012
COMSPSSplines.AvgT	-1,003	161	-6.22	0.000
COMSPSSplines.CoolAvgT	481	212	2.262	0.024
COMSPSSplines.MildAvgT	1,136	236	4.812	0.000
COMSPSSplines.WarmAvgT	1,919	242	7.931	0.000
COMSPSSplines.HotAvgT	1,461	219	6.659	0.000

Com SPS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	679
Deg. of Freedom for Error	663
R-Squared	0.957
Adjusted R-Squared	0.956
F-Statistic	972.619
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	2.29%
Durbin-Watson Statistic	1.13

Com LPS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	151,863	1,080	140.618	0.000
DOWBinary.TWT	24,549	1,089	22.537	0.000
DOWBinary.MonFri	24,224	1,159	20.895	0.000
DOWBinary.Saturday	2,134	1,329	1.605	0.109
MonthBinary.Apr	11,382	1,678	6.783	0.000
MonthBinary.May	8,075	1,857	4.348	0.000
MonthBinary.Jun	12,253	2,422	5.06	0.000
MonthBinary.Jul	21,389	2,640	8.101	0.000
MonthBinary.Aug	22,284	2,498	8.919	0.000
MonthBinary.Sep	17,275	2,006	8.612	0.000
MonthBinary.Oct	6,976	1,511	4.616	0.000
MonthBinary.Nov	9,167	1,475	6.217	0.000
COMLPSSplines.MildAvgT	1,169	79	14.741	0.000
COMLPSSplines.HotAvgT	837	178	4.694	0.000

Note: One binary variable (day of the week) was retained in the model despite being statistically insignificant (p-value>.05). The direction and magnitude of the coefficient is reasonable, the standard error is consistent with the other similar variables, and the interpretation of all of the day of the week variables is cleaner with the inclusion of this variable.

Com LPS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	691
Deg. of Freedom for Error	677
R-Squared	0.899
Adjusted R-Squared	0.898
F-Statistic	465.824
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	3.64%
Durbin-Watson Statistic	0.766

Ind SGS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	16,704	921	18.14	0.000
DOWBinary.Monday	13,858	503	27.542	0.000
DOWBinary.Tuesday	14,186	498	28.476	0.000
DOWBinary.Wednesday	14,823	497	29.811	0.000
DOWBinary.Thursday	14,551	502	28.963	0.000
DOWBinary.Friday	14,707	505	29.106	0.000
DOWBinary.Saturday	2,356	498	4.731	0.000
MonthBinary.Mar	2,679	673	3.981	0.000
MonthBinary.Apr	2,884	859	3.357	0.001
MonthBinary.May	4,201	881	4.766	0.000
MonthBinary.Jun	3,947	1,035	3.814	0.000
MonthBinary.Jul	3,702	1,122	3.301	0.001
MonthBinary.Aug	3,997	1,072	3.727	0.000
MonthBinary.Sep	5,579	923	6.045	0.000
MonthBinary.Oct	8,601	805	10.688	0.000
MonthBinary.Nov	5,828	749	7.778	0.000
INDSGSSplines.AvgT	-199	26	-7.517	0.000
INDSGSSplines.MildAvgT	161	85	1.887	0.060
INDSGSSplines.WarmAvgT	322	97	3.334	0.001

Note: The MildAvgT variable was retained despite being marginally statistically insignificant. The temperature range represented by this variable exhibits little load-temperature response, so the coefficient is not expected to be very different from zero and the inclusion of the variable does not cause any model predictions that are unreasonable.

Ind SGS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	705
Deg. of Freedom for Error	686
R-Squared	0.774
Adjusted R-Squared	0.768
F-Statistic	130.26
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	13.98%
Durbin-Watson Statistic	1.719

Ind LGS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	83,996	1,518	55.318	0.000
DOWBinary.Monday	53,199	2,054	25.899	0.000
DOWBinary.Tuesday	59,963	2,055	29.182	0.000
DOWBinary.Wednesday	61,336	2,067	29.674	0.000
DOWBinary.Thursday	58,006	2,061	28.149	0.000
DOWBinary.Friday	48,344	2,070	23.351	0.000
DOWBinary.Saturday	9,727	2,076	4.686	0.000
MonthBinary.Jun	11,723	2,198	5.333	0.000
MonthBinary.Jul	16,808	2,675	6.284	0.000
MonthBinary.Aug	16,161	2,388	6.768	0.000
MonthBinary.Sep	7,812	2,048	3.815	0.000
MonthBinary.Nov	6,774	2,173	3.117	0.002
INDLGSSplines.HotAvgT	1,161	250	4.643	0.000

Ind LGS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	706
Deg. of Freedom for Error	693
R-Squared	0.756
Adjusted R-Squared	0.752
F-Statistic	179.031
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	8.83%
Durbin-Watson Statistic	0.757

Ind SPS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	108,936	694	157.001	0.000
DOWBinary.Monday	61,591	872	70.664	0.000
DOWBinary.Tuesday	65,790	862	76.281	0.000
DOWBinary.Wednesday	66,234	863	76.769	0.000
DOWBinary.Thursday	64,329	861	74.754	0.000
DOWBinary.Friday	58,085	864	67.198	0.000
DOWBinary.Saturday	15,719	864	18.189	0.000
MonthBinary.Jan	-4,854	893	-5.439	0.000
MonthBinary.Mar	-6,016	863	-6.973	0.000
MonthBinary.Apr	-3,019	897	-3.367	0.001
MonthBinary.Aug	7,152	912	7.844	0.000
MonthBinary.Sep	3,636	890	4.084	0.000
INDSPSSplines.WarmAvgT	498	42	11.755	0.000
INDSPSSplines.HotAvgT	649	108	6.008	0.000

Ind SPS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	683
Deg. of Freedom for Error	669
R-Squared	0.956
Adjusted R-Squared	0.955
F-Statistic	1107.31
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	2.97%
Durbin-Watson Statistic	1.823

Ind LPS Weather Normalization Peak Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	227,094	1,472	154.235	0.000
DOWBinary.Monday	40,193	1,730	23.231	0.000
DOWBinary.Tuesday	41,733	1,693	24.644	0.000
DOWBinary.Wednesday	42,904	1,698	25.261	0.000
DOWBinary.Thursday	46,529	1,702	27.34	0.000
DOWBinary.Friday	39,503	1,697	23.277	0.000
DOWBinary.Saturday	5,481	1,688	3.248	0.001
MonthBinary.Jan	-14,245	1,854	-7.682	0.000
MonthBinary.Feb	-9,358	1,876	-4.988	0.000
MonthBinary.Mar	-11,028	1,759	-6.271	0.000
MonthBinary.Jun	7,544	2,274	3.318	0.001
MonthBinary.Jul	11,072	2,659	4.164	0.000
MonthBinary.Aug	13,423	2,433	5.517	0.000
MonthBinary.Sep	3,402	1,912	1.779	0.076
INDLPSSplines.WarmAvgT	607	89	6.836	0.000
INDLPSSplines.HotAvgT	528	208	2.54	0.011

Note: The MonthBinary.Sep variable was retained in the model despite being only marginally statistically significant ($p\text{-value} > .05$). The direction and magnitude of the coefficient is reasonable, the standard error is consistent with the other variables, and the interpretation of all of the monthly variables is cleaner with the inclusion of this variable.

Ind LPS Weather Normalization Peak Models Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	691
Deg. of Freedom for Error	675
R-Squared	0.821
Adjusted R-Squared	0.817
F-Statistic	206.867
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	3.51%
Durbin-Watson Statistic	0.673

Energy Sales and Customer Forecast Models¹⁶

Note: The F-Statistic and associated probability cannot be computed in a regression model, such as the usual SAE specification, that does not include an intercept. Therefore, F-Statistic and associated probability were not reported whenever an SAE model was developed for forecasting purpose or an intercept was not included in the model.

Residential Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
ResidentialVars_Billed.XHeat	0.98	0.02	49.895	0.000
ResidentialVars_Billed.XCool	1.18	0.02	64.148	0.000
ResidentialVars_Billed.xCool_shoulders	-0.13	0.06	-2.122	0.037
ResidentialVars_Billed.XOther	0.92	0.02	57.408	0.000

Residential Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	90
Deg. of Freedom for Error	86
R-Squared	0.986
Adjusted R-Squared	0.985
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	2.16%
Durbin-Watson Statistic	1.314

¹⁶ 4 CSR 240-22.030(3)(B)

Residential Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
UtilityData.Households	1,017	11.89	85.508	0
AR(1)	0.969	0.031	30.979	0

Residential Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	89
Deg. of Freedom for Error	87
R-Squared	0.814
Adjusted R-Squared	0.812
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	0.18%
Durbin-Watson Statistic	2.408

Commercial SGS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CommercialVars_Billing.SGS_XHeat	537.66	18.48	29.096	0.000
CommercialVars_Billing.SGS_XCool	679.48	68.70	9.891	0.000
CommercialVars_Billing.SGS_XOther	38.16	0.40	95.043	0.000
CommercialVars_Billing.SGS_XCool2	83.14	40.76	2.04	0.044

Commercial SGS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	114
Deg. of Freedom for Error	110
R-Squared	0.965
Adjusted R-Squared	0.964
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	1.75%
Durbin-Watson Statistic	1.193

Commercial SGS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	95,960	2,706	35.461	0.000
Econ_Trans.SGS_Output_Index	40,203	2,889	13.914	0.000
BinaryVars.End_Shift_2008	958	439	2.183	0.031

Commercial SGS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	114
Deg. of Freedom for Error	111
R-Squared	0.904
Adjusted R-Squared	0.902
F-Statistic	520.162
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	0.65%
Durbin-Watson Statistic	0.067

Commercial LGS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CommercialVars_Billing.LGS_XCool	1,449	95.7	15.139	0.000
CommercialVars_Billing.LGS_XOther	82	0.8	101.658	0.000
CommercialVars_Billing.LGS_XHeat	628	35.5	17.681	0.000
CommercialVars_Billing.LGS_XCool2	63	45.0	1.407	0.163

Commercial LGS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	90
Deg. of Freedom for Error	86
R-Squared	0.97
Adjusted R-Squared	0.969
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	1.41%
Durbin-Watson Statistic	1.633

Commercial LGS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	5,959.98	265.72	22.429	0.000
Econ_Trans.LGS_Output	0.09	0.01	11.108	0.000
AR(1)	0.73	0.07	10.816	0.000

Commercial LGS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	89
Deg. of Freedom for Error	86
R-Squared	0.957
Adjusted R-Squared	0.956
F-Statistic	945.819
Prob (F-Statistic)	0
Mean Abs. % Err. (MAPE)	0.38%
Durbin-Watson Statistic	2.291

Commercial SPS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CommercialVars_Billing.SPS_XCool	215.19	10.42	20.647	0.000
CommercialVars_Billing.SPS_XOther	34.06	0.19	180.397	0.000

Commercial SPS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	90
Deg. of Freedom for Error	88
R-Squared	0.833
Adjusted R-Squared	0.831
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	3.07%
Durbin-Watson Statistic	1.882

Commercial SPS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.Non_Mfg_Emp	0.40	0.02	22.506	0.000
AR(1)	0.99	0.01	104.97	0.000
MA(1)	-0.70	0.05	-13.647	0.000

Commercial SPS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	221
Deg. of Freedom for Error	218
R-Squared	0.922
Adjusted R-Squared	0.922
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	1.62%
Durbin-Watson Statistic	2.133

Commercial LPS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CommercialVars_Billing.LPS_XCool	213.6	11.13	19.19	0.000
CommercialVars_Billing.LPS_XOther	18.2	0.20	91.99	0.000
BinaryVars.Endshift_2009	19,433.8	1,274.68	15.25	0.000

Commercial LPS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	90
Deg. of Freedom for Error	87
R-Squared	0.882
Adjusted R-Squared	0.879
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	3.58%
Durbin-Watson Statistic	1.712

Commercial LPS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.LPS_Output_Index	36.43	16.86	2.16	0.033
AR(1)	0.99	0.01	81.20	0.000
MA(1)	-0.48	0.08	-5.74	0.000

Commercial LPS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	120
Deg. of Freedom for Error	117
R-Squared	0.961
Adjusted R-Squared	0.96
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	2.30%
Durbin-Watson Statistic	2.092

Industrial SGS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.SGS_Index	272.19	7.95	34.251	0.000
Binary_Vars.October	3,022.34	287.67	10.506	0.000
Binary_Vars.November	3,391.85	287.36	11.803	0.000
Binary_Vars.December	1,029.32	280.33	3.672	0.000
Weather_Trans.Billed_CDD_Forecast	8.59	0.64	13.498	0.000
Weather_Trans.Billed_HDD_Forecast	4.05	0.31	12.989	0.000

Industrial SGS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	114
Deg. of Freedom for Error	108
R-Squared	0.81
Adjusted R-Squared	0.801
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	4.84%
Durbin-Watson Statistic	0.996

Industrial SGS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Binary_Vars.End_shift_September_2008	444.04	14.15	31.393	0.000
Econ_Data.Employment_Mfg	26.29	0.08	325.13	0.000
MA(1)	0.60	0.07	8.118	0.000

Industrial SGS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	120
Deg. of Freedom for Error	117
R-Squared	0.917
Adjusted R-Squared	0.915
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	0.95%
Durbin-Watson Statistic	1.229

Industrial LGS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.LGS_Index	1,764	10	178.729	0.000
Binary_Vars.January	-8,922	925	-9.644	0.000
Binary_Vars.March	-1,752	889	-1.972	0.051
Binary_Vars.April	-4,939	880	-5.612	0.000
Binary_Vars.May	-3,517	855	-4.112	0.000
Binary_Vars.June	-4,628	843	-5.491	0.000
Binary_Vars.July	-2,624	968	-2.711	0.008
Binary_Vars.December	-6,473	943	-6.861	0.000
Weather_Trans.Billed_CDD_Forecast	27.74	1.73	16.027	0.000

Industrial LGS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	114
Deg. of Freedom for Error	105
R-Squared	0.944
Adjusted R-Squared	0.94
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	2.15%
Durbin-Watson Statistic	1.202

Industrial LGS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Binary_Vars.End_shift_September_2008	176.63	25.90	6.82	0.000
Econ_Data.Employment_Mfg	8.17	0.26	31.434	0.000
AR(1)	0.96	0.04	26.253	0.000

Industrial SGS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	89
Deg. of Freedom for Error	86
R-Squared	0.965
Adjusted R-Squared	0.964
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	0.59%
Durbin-Watson Statistic	2.576

Industrial SPS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.SPS_Index	1,909.2	12.0	159.083	0.000
Weather_Trans.Billed_CDD_Forecast	33.6	2.4	13.94	0.000
Binary_Vars.Year_2009	-6358.8	1,466.1	-4.337	0.000
Binary_Vars.End_shift_2009	7,293.0	871.3	8.371	0.000

Industrial SPS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	102
Deg. of Freedom for Error	98
R-Squared	0.838
Adjusted R-Squared	0.833
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	2.98%
Durbin-Watson Statistic	1.594

Industrial SPS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Binary_Vars.End_shift_2009	37.39	1.25	29.98	0.000
Econ_Data.Employment_Mfg	1.43	0.01	232.06	0.000
AR(1)	0.38	0.09	4.29	0.000

Industrial SPS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	83
Deg. of Freedom for Error	80
R-Squared	0.289
Adjusted R-Squared	0.271
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	1.79%
Durbin-Watson Statistic	2.232

Industrial LPS Energy Sales Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
Econ_Trans.LPS_Index	6,678.7	55.3	120.73	0.000
Weather_Trans.Billed_CDD_Forecast	70.0	6.6	10.63	0.000
Binary_Vars.End_shift_2009	-18,951.9	2,385.1	-7.95	0.000

Industrial LPS Energy Sales Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	150
Deg. of Freedom for Error	147
R-Squared	0.627
Adjusted R-Squared	0.622
F-Statistic	#NA
Prob (F-Statistic)	#NA
Mean Abs. % Err. (MAPE)	5.52%
Durbin-Watson Statistic	1.944

Industrial LPS Customer Count Forecast Model Coefficients

Variable	Coefficient	StdErr	T-Stat	P-Value
CONST	0.04	0.14	0.303	0.763
AR(1)	-0.61	0.08	-7.66	0.000

Industrial LPS Customer Count Forecast Model Statistics

Model Statistic	Value of the Statistic
Adjusted Observations	101
Deg. of Freedom for Error	99
R-Squared	0.295
Adjusted R-Squared	0.288
F-Statistic	41.461
Prob (F-Statistic)	0
Mean Abs. % Err (MAPE)	2.39%
Durbin-Watson Statistic	2.532

Abbreviations

Res:	Residential
Com :	Commercial
Ind:	Industrial
SGS:	Small General Service
LGS:	Large General Service
SPS:	Small Primary Service
LPS:	Large Primary Service
WN:	Weather Normalized
LTS:	Large Transmission Service

Compliance References

4 CSR 240-22.030(2)(C)3	247, 258
4 CSR 240-22.030(2)(D)1	1, 30
4 CSR 240-22.030(2)(D)3	1, 30
4 CSR 240-22.030(3)(B)	268
4 CSR 240-22.030(6)(C)4	82
4 CSR 240-22.030(7)(A)4	84
4 CSR 240-22.030(7)(A)6	45, 95, 119, 134
4 CSR 240-22.030(7)(A)7	167
4 CSR 240-22.030(8)(C)1	42, 239, 243
4 CSR 240-22.030(8)(C)2	42, 239, 243