

Part 1 - Appendix 3A
Greater Missouri Operation Company (GMOC) Reports

Missouri 4 CSR 240-22.030 (2) Reporting Requirements
Load Analysis and Forecasting

(2)(D) For each major class specified pursuant to subsection (2)(A), the utility shall provide, on a seasonal and annual basis for each year of the historical period --

(2)(D)(1) Its assessment of the historical enduse drivers of energy usage and peak demand, including trends in number of units and energy consumption per unit;

(3)(D)(2) Its assessment to the weather sensitivity of energy and peak demand; and

(2)(D)(3) Plots illustrating trends materially affecting electricity consumption over the historical period.

Compliance: See Plots 3A-1 through 3A-36 for base-case GMOC forecast reports designed to comply with section (2)(D) reporting requirements.

Linked Files:**Work Files**

Folder: Datalyzers/WN Class
CombineAccrCCOSSales.NDMetrix Project
ActPeakSumWin
WNPeakSumWin

Project Files

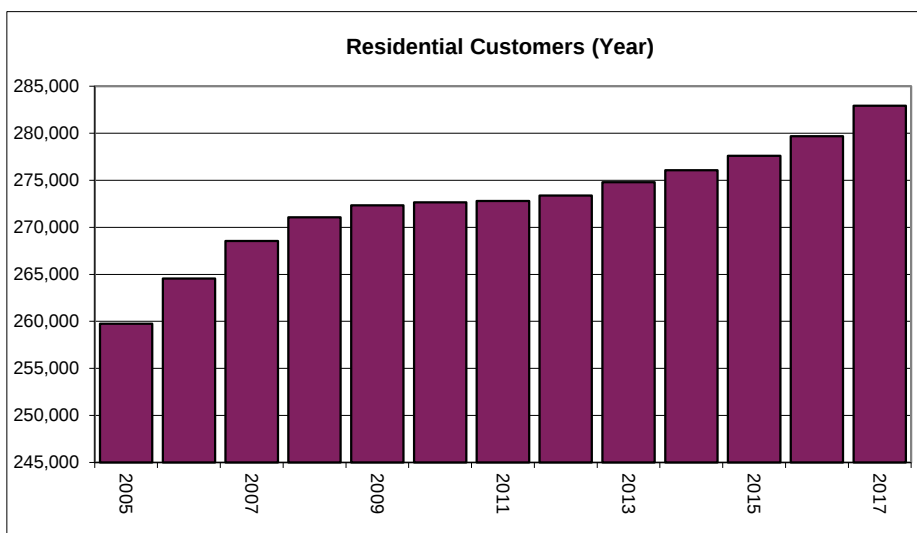
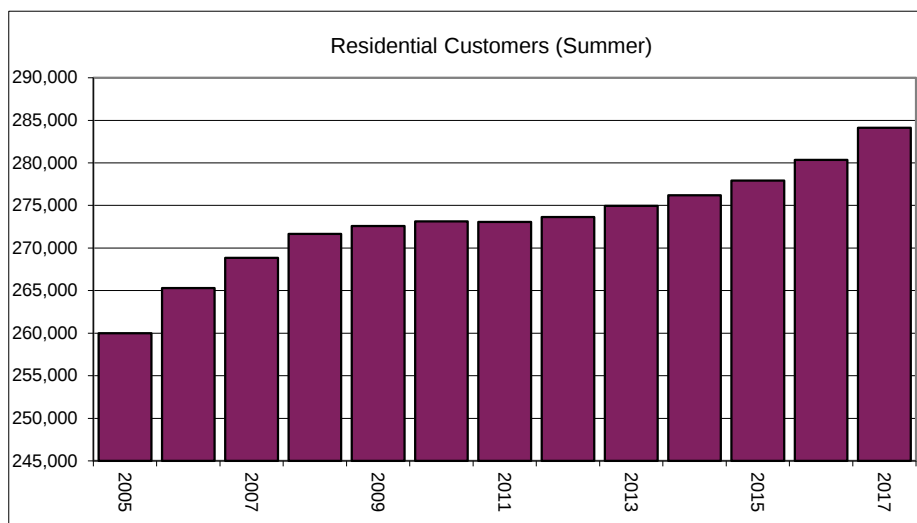
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IRP_2D_GMO_AvgUse
IRP_2D_GMO_EndUse_AvgUse.xls
IRP_2D_GMO_PeakPerCust
IRP_2D_GMO_Peak_EndUse
IRP_2D_GMO_PeakPerCust_EndUse

Plot 3A-1 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	259,987	259,628	259,748
2006	265,302	264,162	264,542
2007	268,853	268,372	268,532
2008	271,648	270,778	271,068
2009	272,602	272,183	272,322
2010	273,133	272,424	272,660
2011	273,081	272,675	272,810
2012	273,628	273,262	273,384
2013	274,956	274,698	274,784
2014	276,197	276,025	276,082
2015	277,911	277,446	277,601
2016	280,366	279,322	279,670
2017	284,129	282,314	282,919

07-'12	0.4%	0.4%	0.4%
12-'17	0.8%	0.7%	0.7%
07-'17	0.6%	0.5%	0.5%

*2017 is 6 months actual and 6 months projected

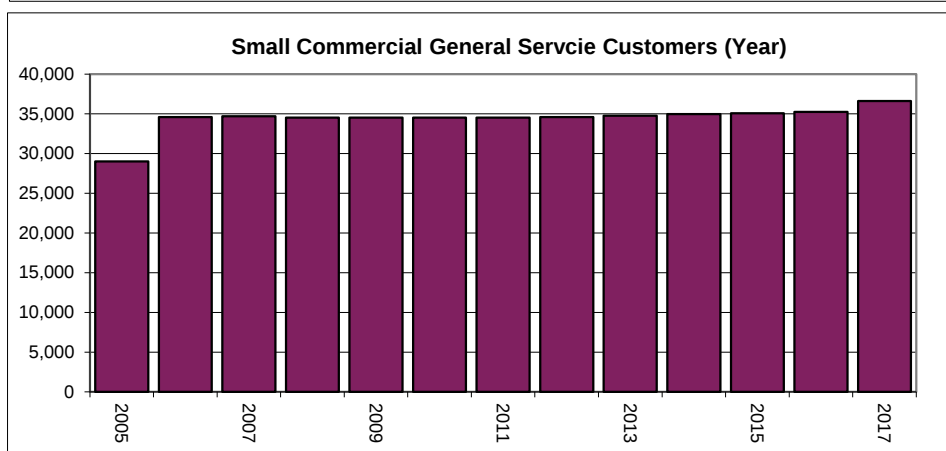
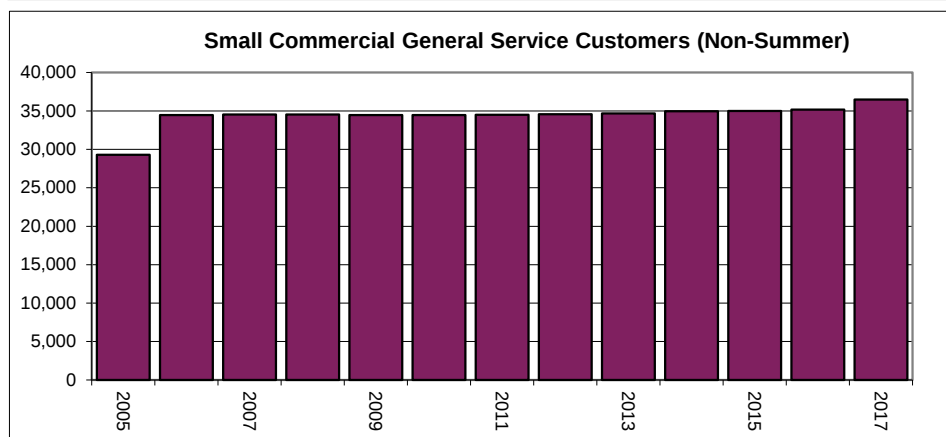
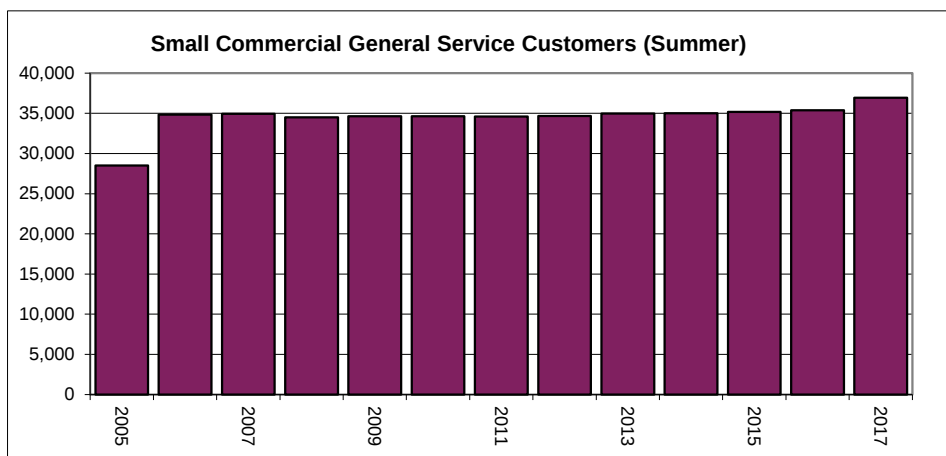


Plot 3A-2 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	28,516	29,284	29,028
2006	34,840	34,476	34,598
2007	34,955	34,548	34,683
2008	34,490	34,525	34,513
2009	34,652	34,454	34,520
2010	34,636	34,464	34,521
2011	34,611	34,500	34,537
2012	34,668	34,584	34,612
2013	34,981	34,679	34,780
2014	35,018	34,965	34,982
2015	35,162	35,008	35,059
2016	35,375	35,169	35,238
2017	36,923	36,472	36,622

07-'12	-0.2%	0.0%	0.0%
12-'17	1.3%	1.1%	1.1%
07-'17	0.5%	0.5%	0.5%

*2017 is 6 months actual and 6 months projected



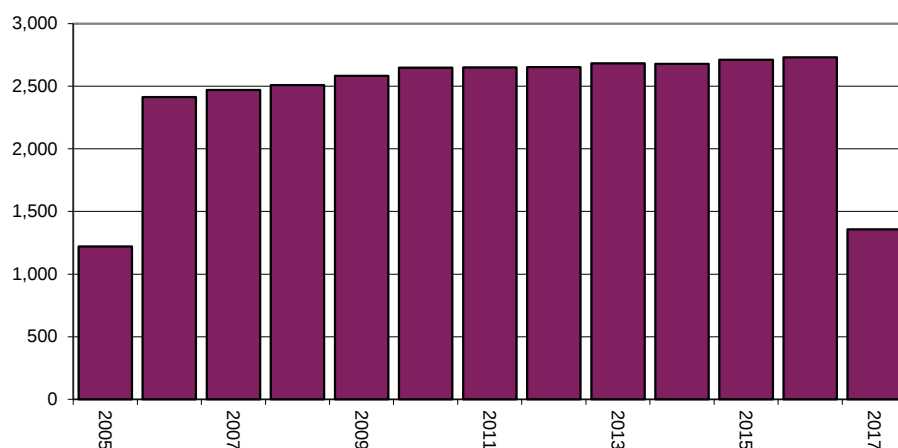
Plot 3A-3 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	1,221	1,288	1,266
2006	2,414	2,403	2,407
2007	2,471	2,470	2,470
2008	2,509	2,523	2,518
2009	2,583	2,581	2,582
2010	2,649	2,628	2,635
2011	2,651	2,649	2,650
2012	2,652	2,669	2,663
2013	2,684	2,669	2,674
2014	2,679	2,698	2,692
2015	2,711	2,697	2,702
2016	2,731	2,720	2,724
2017	1,357	1,665	1,563

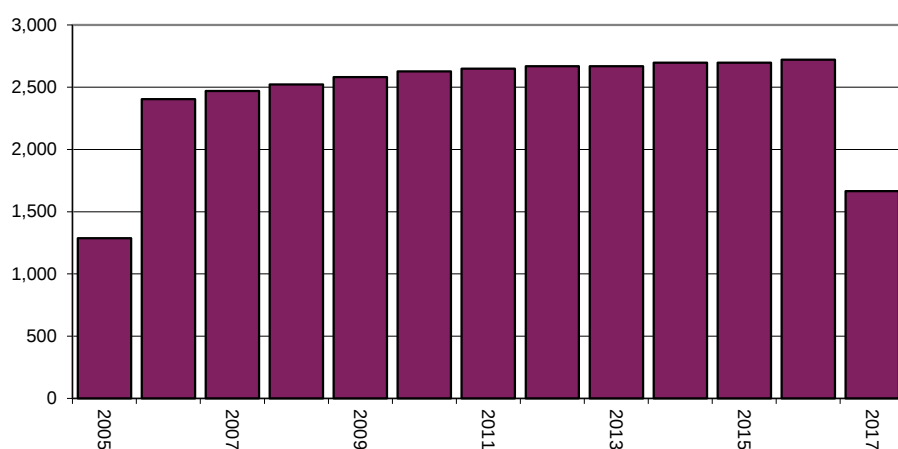
07-'12	1.4%	1.6%	1.5%
12-'17	-12.5%	-9.0%	-10.1%
07-'17	-5.8%	-3.9%	-4.5%

*2017 is 6 months actual and 6 months projected

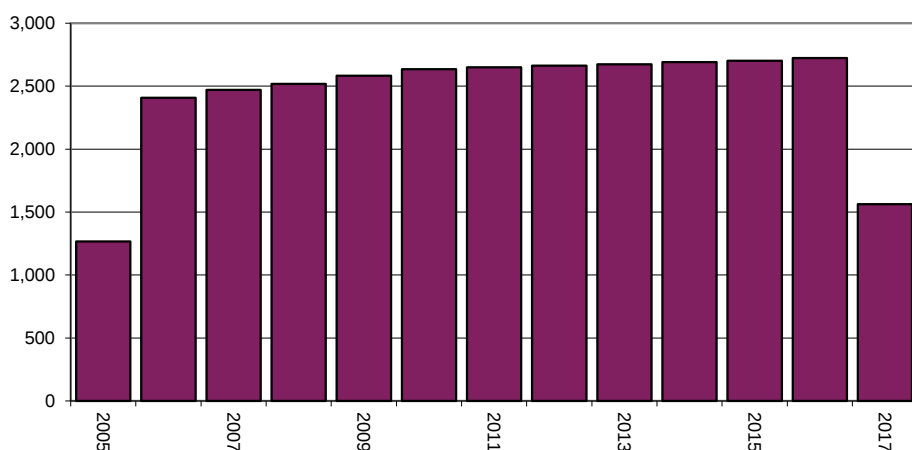
Big Commercial Service Customers (Summer)



Big Commercial Service Customers (Non-Summer)



Big Commercial Service Customers (Year)



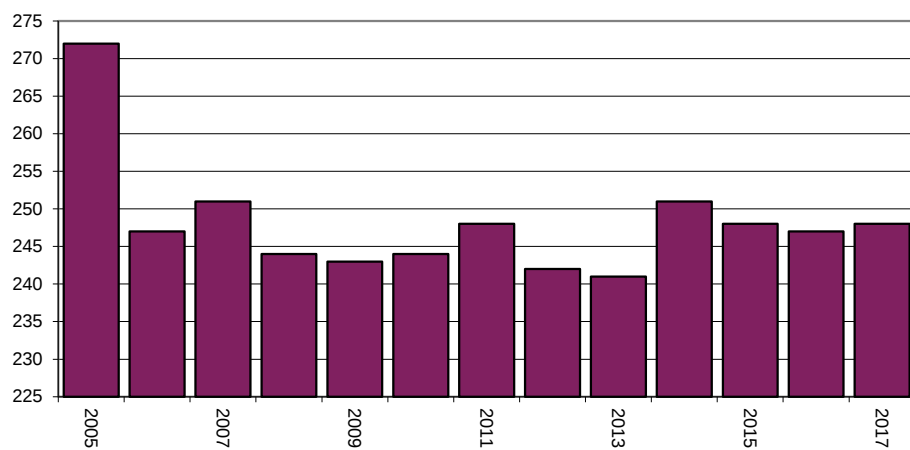
Plot 3A-4 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	272	274	273
2006	247	249	248
2007	251	245	247
2008	244	244	244
2009	243	244	244
2010	244	244	244
2011	248	245	246
2012	242	239	240
2013	241	240	240
2014	251	249	250
2015	248	248	248
2016	247	246	246
2017	248	250	249

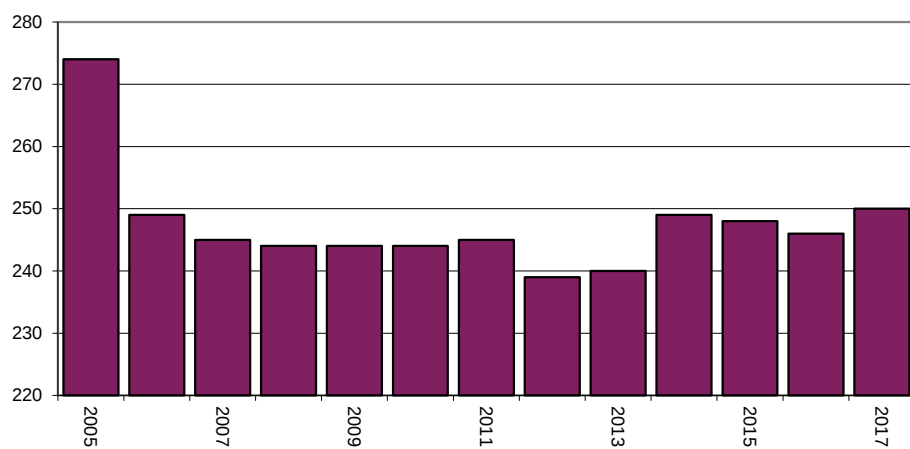
07-'12	-0.7%	-0.5%	-0.6%
12-'17	0.5%	0.9%	0.7%
07-'17	-0.1%	0.2%	0.1%

*2017 is 6 months actual and 6 months projected

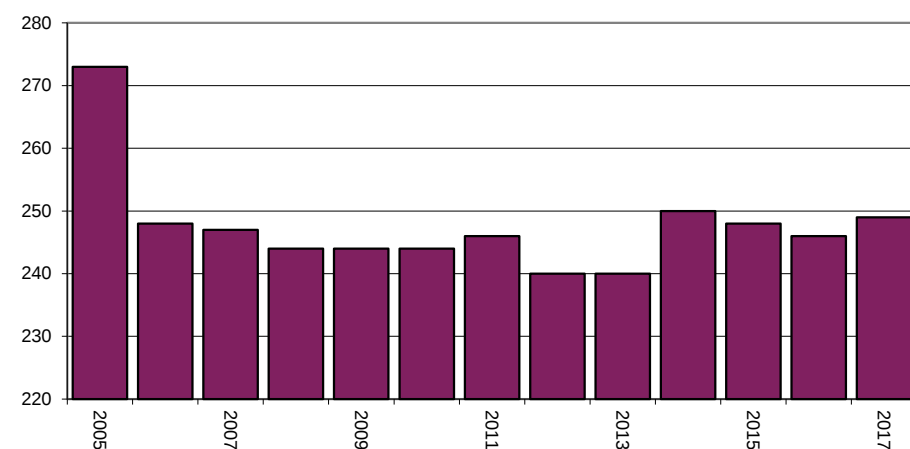
Industrial Customers (Summer)



Industrial Customers (Non-Summer)



Industrial Customers (Year)

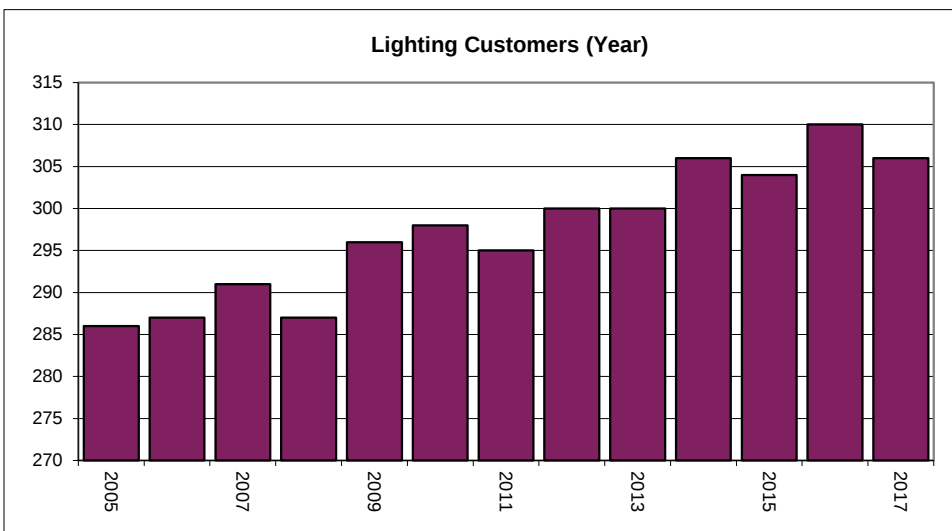
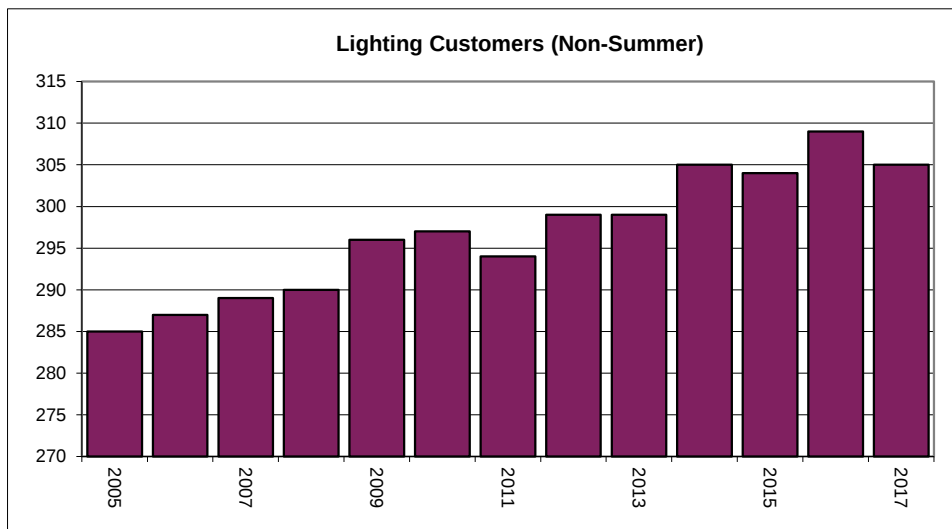
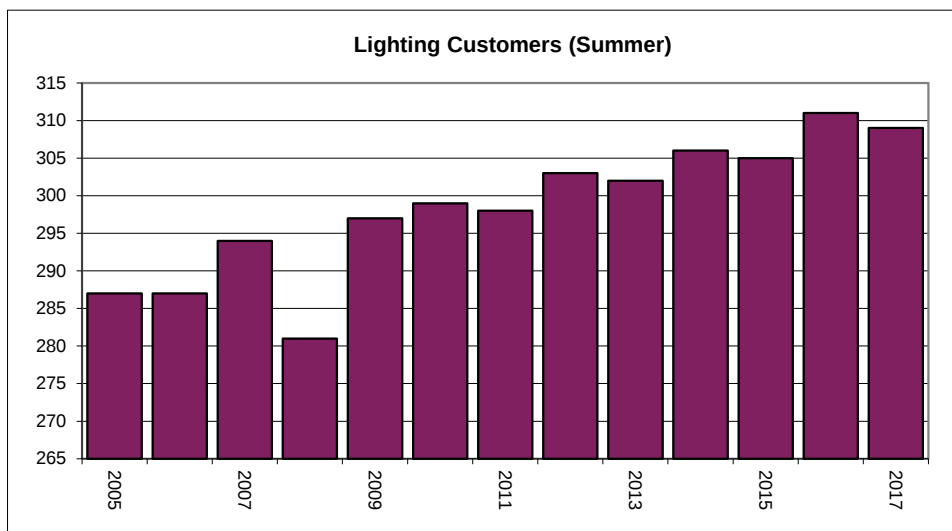


Plot 3A-5 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	287	285	286
2006	287	287	287
2007	294	289	291
2008	281	290	287
2009	297	296	296
2010	299	297	298
2011	298	294	295
2012	303	299	300
2013	302	299	300
2014	306	305	306
2015	305	304	304
2016	311	309	310
2017	309	305	306

07-'12	0.6%	0.7%	0.6%
12-'17	0.4%	0.4%	0.4%
07-'17	0.5%	0.5%	0.5%

*2017 is 6 months actual and 6 months projected

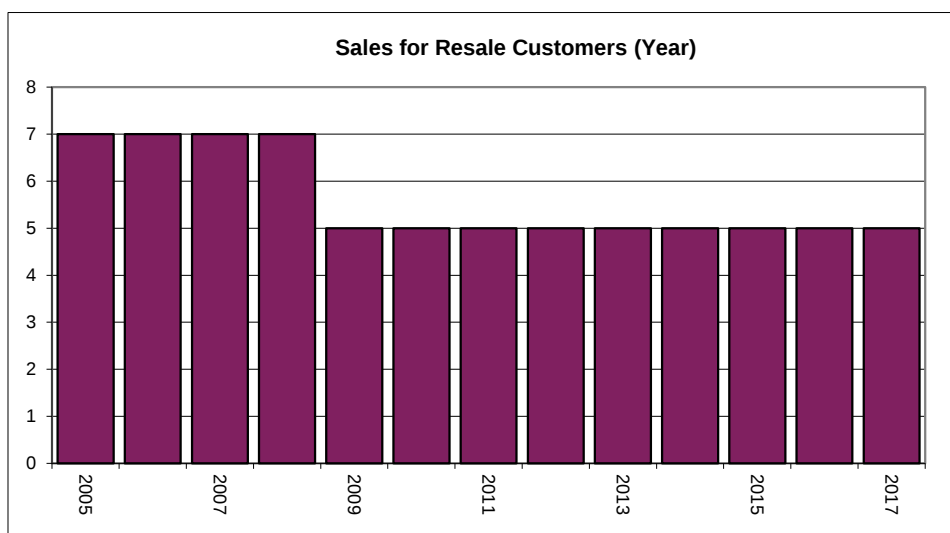
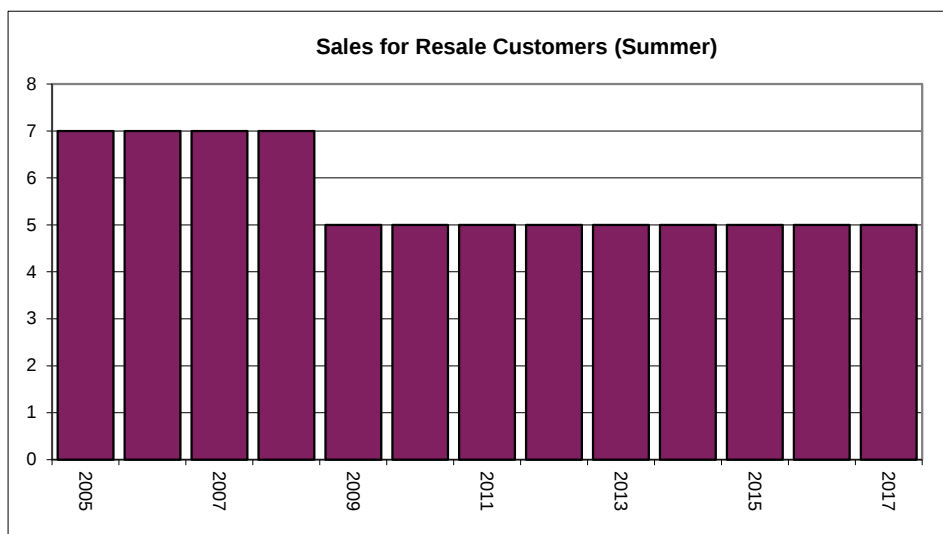


Plot 3A-6 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	7	7	7
2006	7	7	7
2007	7	7	7
2008	7	7	7
2009	5	5	5
2010	5	5	5
2011	5	5	5
2012	5	5	5
2013	5	5	5
2014	5	5	5
2015	5	5	5
2016	5	5	5
2017	5	5	5

07-'12	-6.5%	-6.5%	-6.5%
12-'17	0.0%	0.0%	0.0%
07-'17	-3.3%	-3.3%	-3.3%

*2017 is 6 months actual and 6 months projected

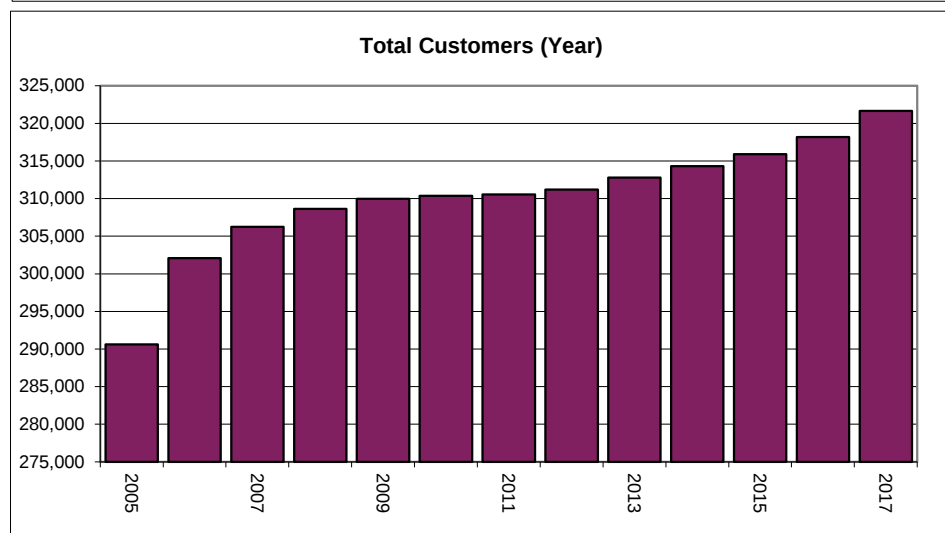
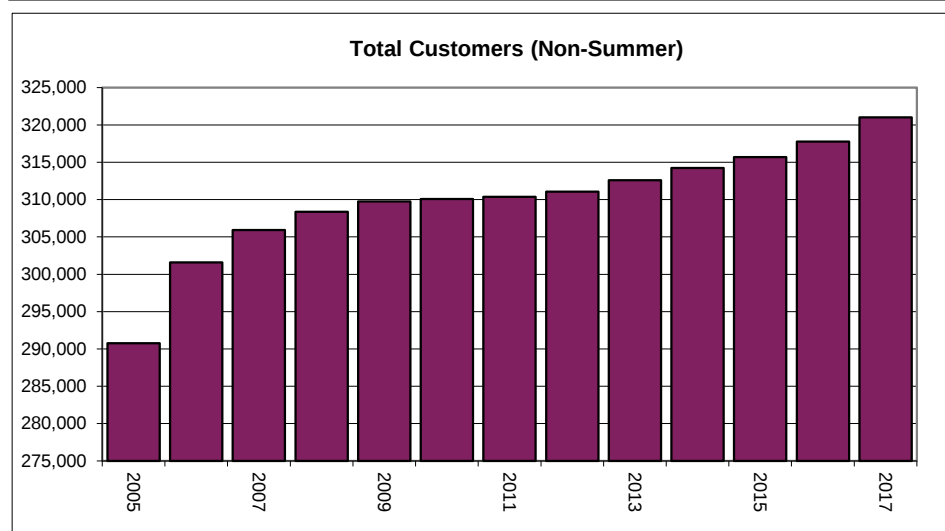
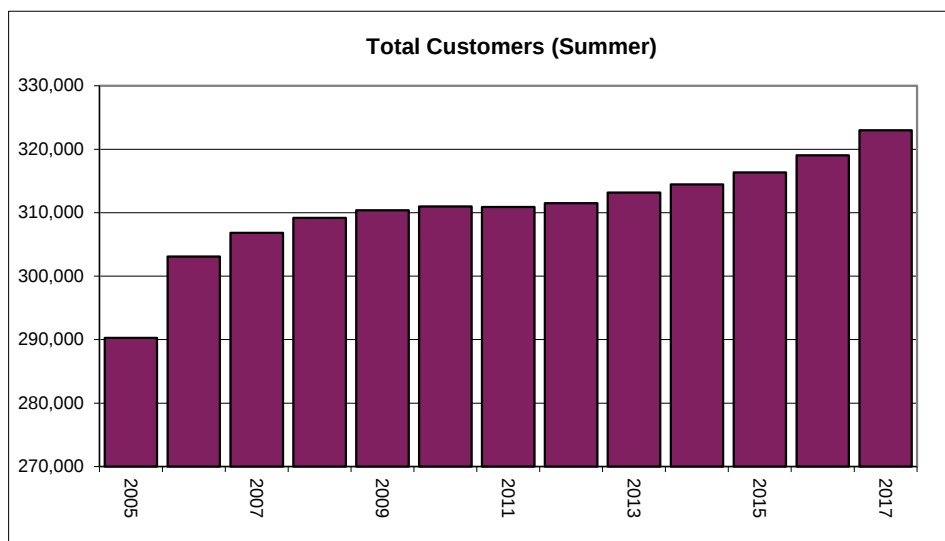


Plot 3A-7 GMO Residential Customers

Year	GMO Summer Jun-Sep	GMO Non-Summer Oct-May	GMO Total Jan -Dec
2005	290,290	290,766	290,608
2006	303,097	301,582	302,089
2007	306,831	305,942	306,230
2008	309,179	308,358	308,637
2009	310,382	309,763	309,969
2010	310,966	310,064	310,363
2011	310,894	310,375	310,543
2012	311,498	311,065	311,204
2013	313,169	312,594	312,783
2014	314,456	314,250	314,317
2015	316,342	315,709	315,919
2016	319,035	317,774	318,193
2017	322,971	321,013	321,664

07-'12	0.3%	0.3%	0.3%
12-'17	0.7%	0.6%	0.7%
07-'17	0.5%	0.5%	0.5%

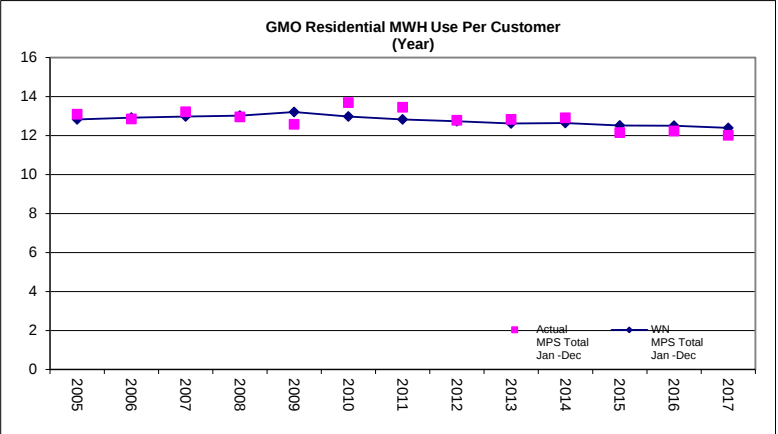
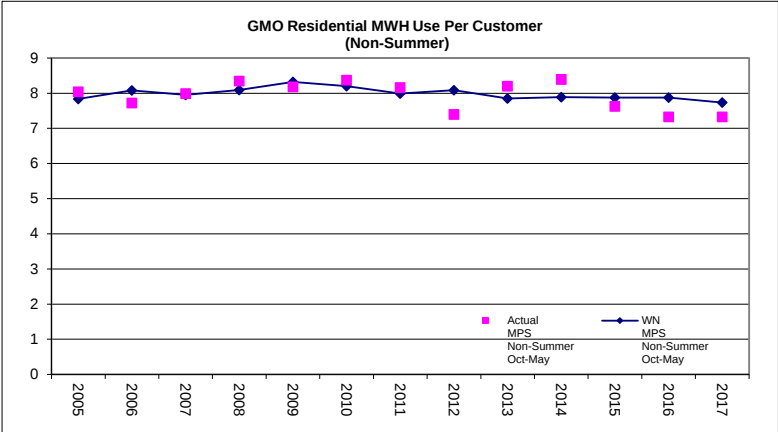
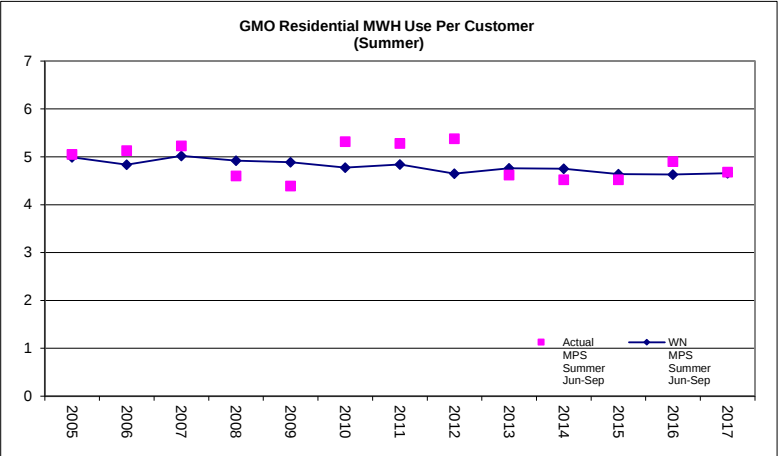
*2017 is 6 months actual and 6 months projected



Plot 3A-8 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)

Year	Actual	WN	Actual	WN	Actual	WN
	MPS	MPS	MPS	MPS	MPS	MPS
	Summer Jun-Sep	Summer Jun-Sep	Non-Summer Oct-May	Non-Summer Oct-May	Total Jan -Dec	Total Jan -Dec
2005	5.05	4.99	8.04	7.8	13.09	12.83
2006	5.13	4.83	7.72	8.1	12.85	12.91
2007	5.23	5.02	7.99	8.0	13.22	12.97
2008	4.60	4.92	8.35	8.1	12.95	13.01
2009	4.39	4.88	8.18	8.3	12.57	13.21
2010	5.32	4.77	8.37	8.2	13.69	12.97
2011	5.28	4.84	8.16	8.0	13.44	12.83
2012	5.38	4.65	7.40	8.1	12.78	12.73
2013	4.62	4.76	8.20	7.9	12.82	12.61
2014	4.52	4.75	8.39	7.9	12.91	12.64
2015	4.52	4.64	7.63	7.9	12.15	12.51
2016	4.90	4.63	7.33	7.9	12.23	12.50
2017	4.68	4.66	7.33	7.7	12.01	12.39

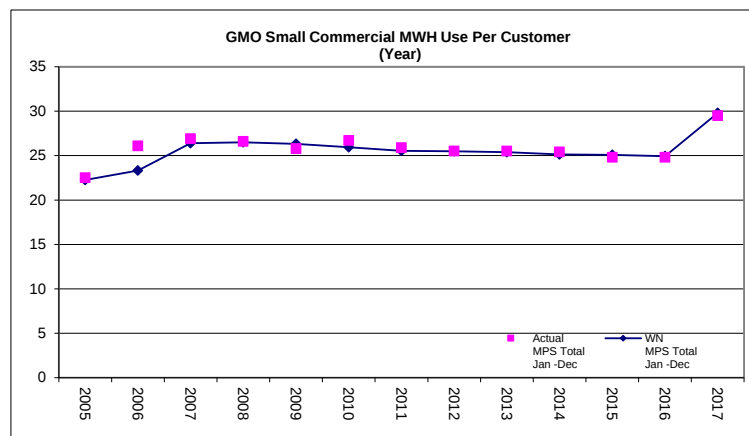
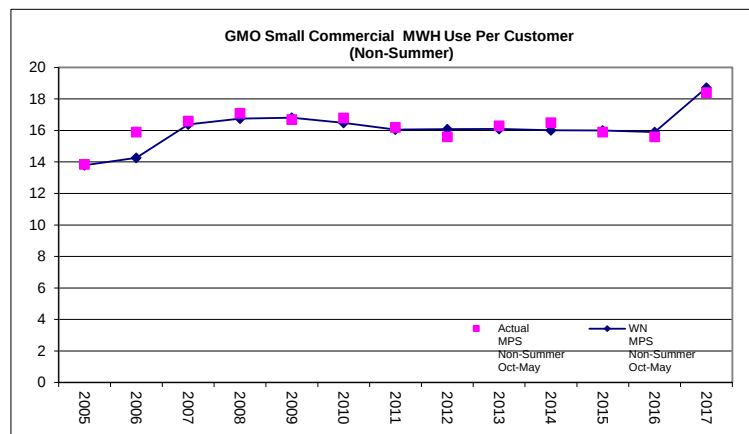
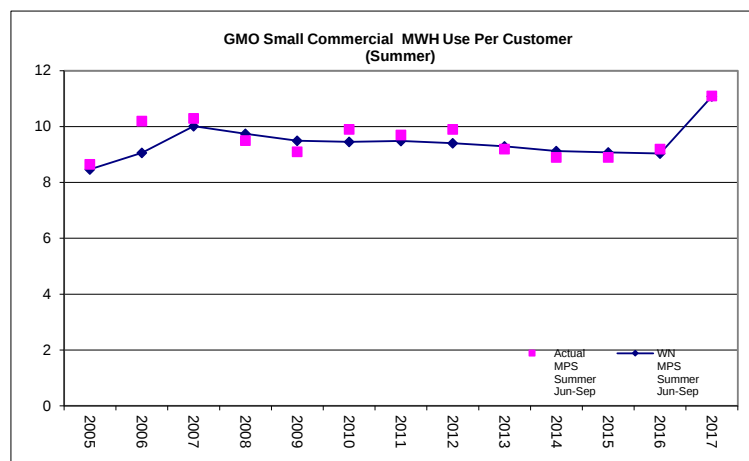
06-'11	0.6%	0.0%	1.1%	-0.2%	0.9%	-0.1%
11-'16	-1.5%	-0.9%	-2.1%	-0.3%	-1.9%	-0.5%
06-'16	-0.5%	-0.4%	-0.5%	-0.3%	-0.5%	-0.3%



Plot 3A-9 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)

Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan-Dec	WN MPS Total Jan-Dec
2005	8.65	8.47	13.85	13.79	22.50	22.26
2006	10.20	9.06	15.90	14.26	26.10	23.32
2007	10.30	10.01	16.60	16.38	26.90	26.39
2008	9.50	9.74	17.10	16.75	26.60	26.49
2009	9.10	9.50	16.70	16.82	25.80	26.31
2010	9.90	9.45	16.80	16.49	26.70	25.94
2011	9.70	9.49	16.20	16.06	25.90	25.54
2012	9.90	9.40	15.60	16.08	25.50	25.49
2013	9.20	9.30	16.30	16.10	25.50	25.40
2014	8.90	9.13	16.50	16.02	25.40	25.14
2015	8.90	9.08	15.90	15.99	24.80	25.07
2016	9.20	9.04	15.60	15.90	24.80	24.94
2017	11.10	11.08	18.40	18.71	29.50	29.79

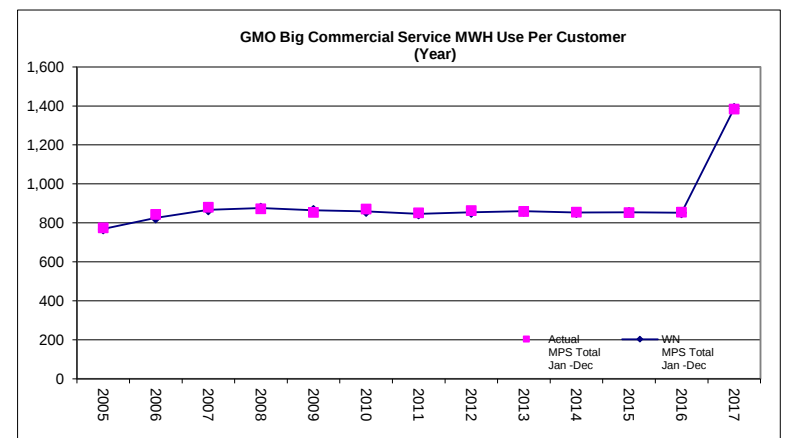
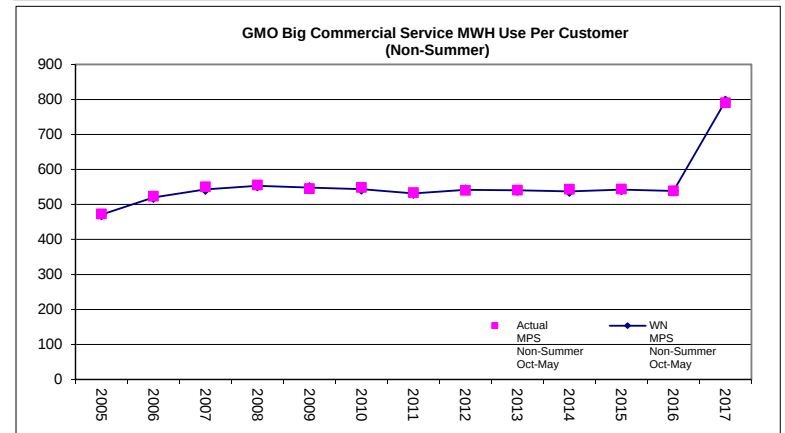
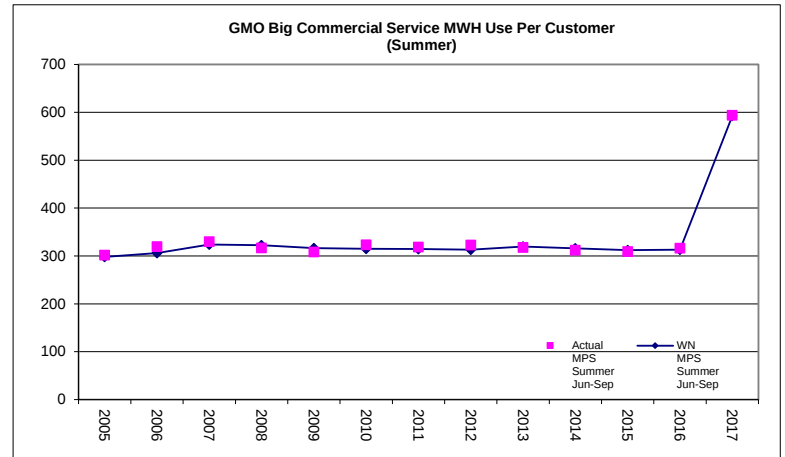
06-'11	-1.0%	0.9%	0.4%	2.4%	-0.2%	1.8%
11-'16	-1.1%	-1.0%	-0.8%	-0.2%	-0.9%	-0.5%
06-'16	-1.0%	0.0%	-0.2%	1.1%	-0.5%	0.7%



Plot 3A-10 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)

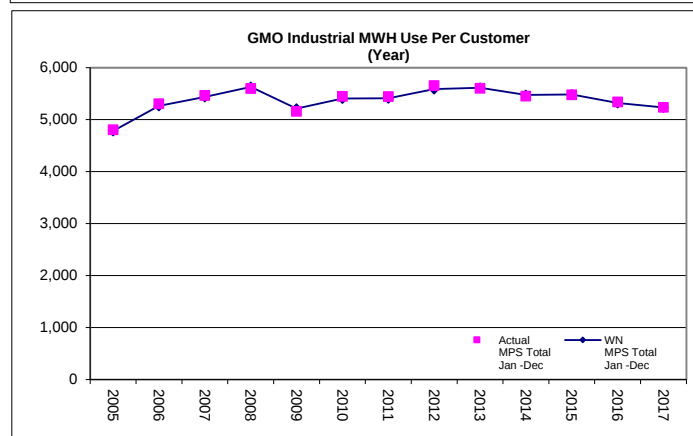
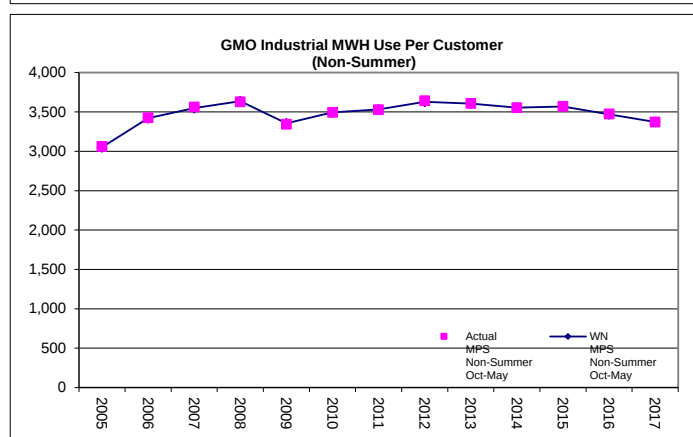
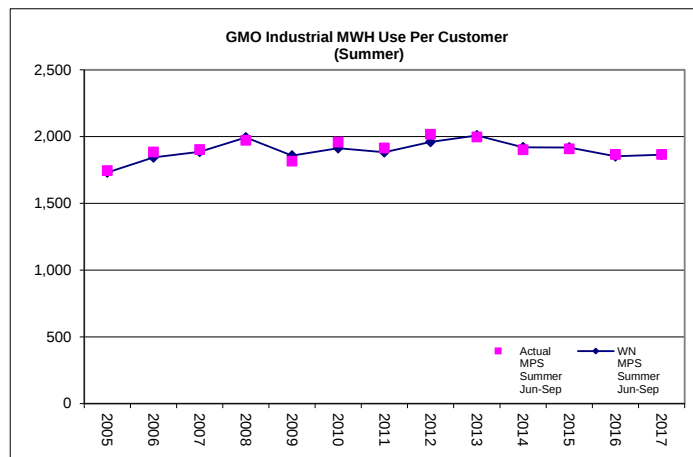
Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan-Dec	WN MPS Total Jan-Dec
2005	302	298	473	471	775	769
2006	320	306	524	520	844	826
2007	330	324	551	543	881	867
2008	317	322	556	553	873	876
2009	309	317	546	548	854	865
2010	323	315	549	544	872	859
2011	319	314	534	532	853	846
2012	323	313	540	542	863	855
2013	318	320	541	541	859	860
2014	312	316	544	537	856	853
2015	309	312	544	543	854	855
2016	316	313	540	539	856	852
2017	594	592	791	795	1,384	1,388

06-'11	-0.1%	0.5%	0.4%	0.4%	0.2%	0.5%
11-'16	-0.1%	-0.1%	0.2%	0.3%	0.1%	0.1%
06-'16	-0.1%	0.2%	0.3%	0.4%	0.1%	0.3%



**Plot 3A-11 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan-Dec	WN MPS Total Jan-Dec
2005	1,746	1,731	3,063	3,052	4,809	4,783
2006	1,884	1,844	3,425	3,421	5,309	5,266
2007	1,903	1,886	3,563	3,549	5,465	5,436
2008	1,972	1,994	3,629	3,636	5,601	5,630
2009	1,816	1,857	3,344	3,355	5,160	5,211
2010	1,957	1,912	3,494	3,496	5,451	5,408
2011	1,914	1,882	3,530	3,531	5,445	5,413
2012	2,017	1,959	3,641	3,629	5,658	5,589
2013	1,997	2,008	3,608	3,607	5,605	5,615
2014	1,902	1,919	3,553	3,555	5,455	5,474
2015	1,909	1,917	3,571	3,567	5,480	5,485
2016	1,867	1,852	3,476	3,468	5,343	5,320
2017	1,866	1,865	3,372	3,371	5,238	5,236

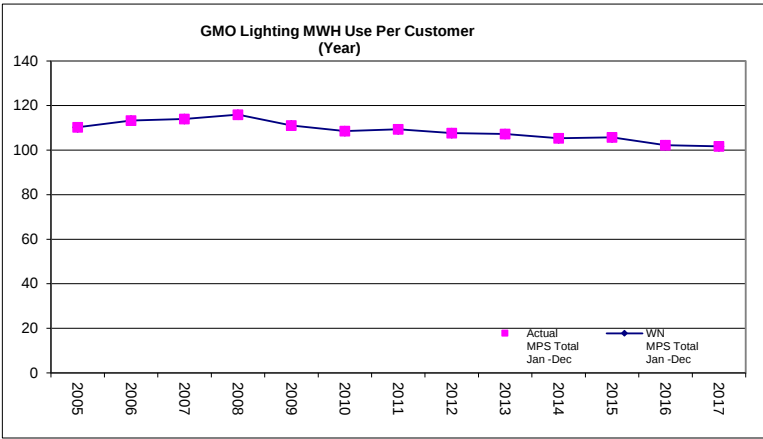
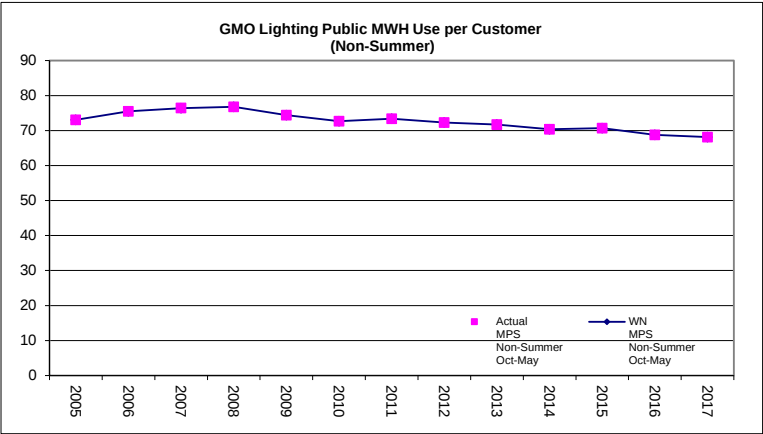
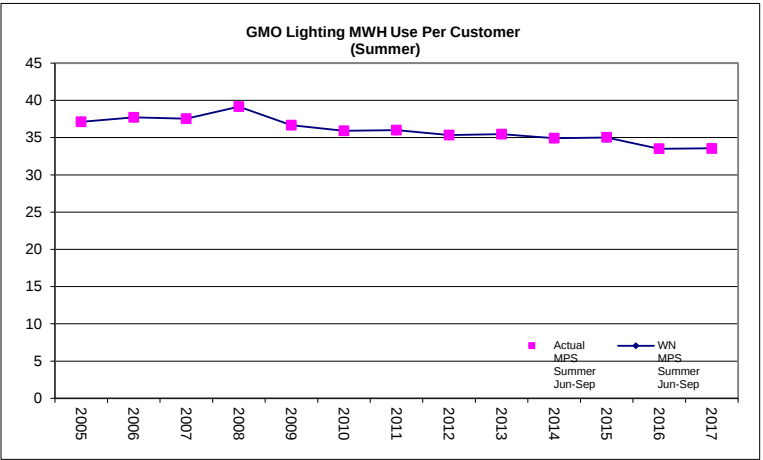


06-'11	0.3%	0.4%	0.6%	0.6%	0.5%	0.6%
11-'16	-0.5%	-0.3%	-0.3%	-0.4%	-0.4%	-0.3%
06-'16	-0.1%	0.0%	0.1%	0.1%	0.1%	0.1%

Plot 3A-12 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)

Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan -Dec	WN MPS Total Jan -Dec
	Jun-Sep	Jun-Sep	Oct-May	Oct-May	Jan -Dec	Jan -Dec
2005	37.13	37.13	73.09	73.09	110.22	110.22
2006	37.72	37.72	75.52	75.52	113.24	113.24
2007	37.54	37.54	76.42	76.42	113.95	113.96
2008	39.16	39.16	76.78	76.78	115.92	115.94
2009	36.66	36.66	74.42	74.42	111.09	111.09
2010	35.91	35.91	72.69	72.69	108.60	108.60
2011	36.00	36.00	73.38	73.38	109.38	109.38
2012	35.36	35.36	72.32	72.32	107.66	107.67
2013	35.48	35.48	71.74	71.74	107.21	107.21
2014	34.93	34.93	70.34	70.38	105.31	105.31
2015	35.03	35.03	70.71	70.71	105.73	105.73
2016	33.50	33.50	68.74	68.74	102.24	102.24
2017	33.55	33.57	68.11	68.14	101.70	101.70

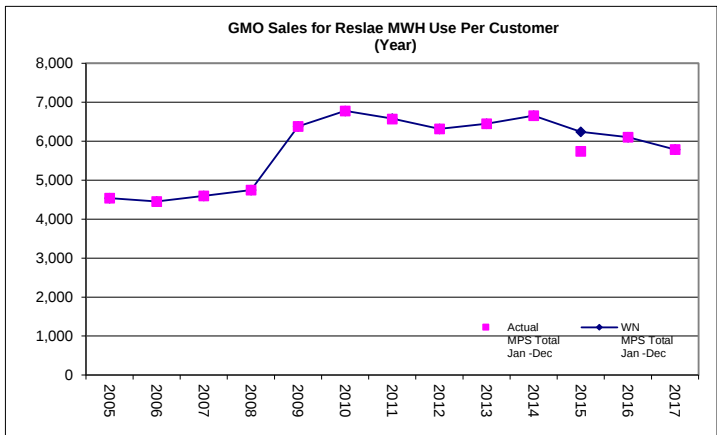
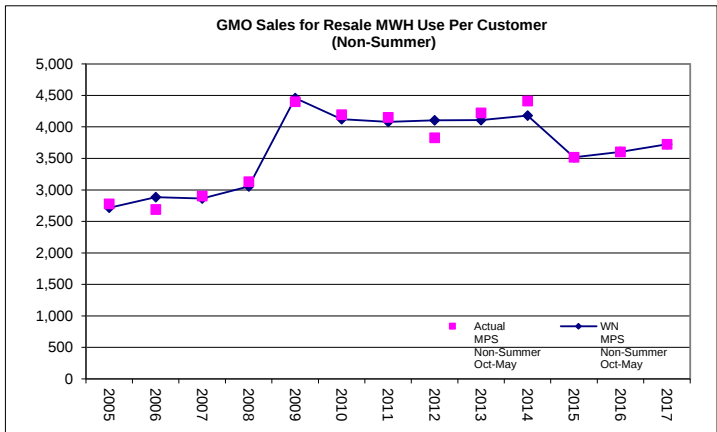
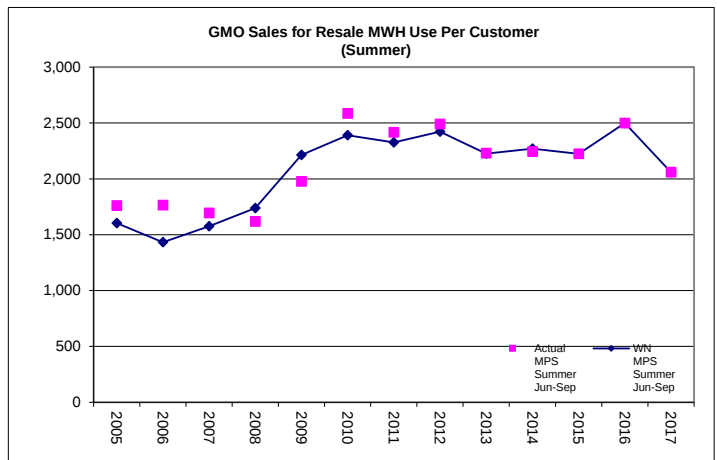
06-'11	-0.9%	-0.9%	-0.6%	-0.6%	-0.7%	-0.7%
11-'16	-1.4%	-1.4%	-1.3%	-1.3%	-1.3%	-1.3%
06-'16	-1.2%	-1.2%	-0.9%	-0.9%	-1.0%	-1.0%



**Plot 3A-13 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan-Dec	WN MPS Total Jan-Dec
2005	1,760.6	1,605.1	2,777.7	2,716.1	4,538.3	4,538.3
2006	1,763.9	1,432.6	2,689.9	2,883.4	4,453.8	4,453.8
2007	1,694.7	1,575.8	2,904.0	2,862.9	4,598.7	4,598.7
2008	1,617.9	1,738.1	3,128.8	3,057.0	4,746.7	4,748.0
2009	1,977.5	2,213.6	4,399.7	4,458.2	6,377.1	6,377.1
2010	2,584.3	2,389.8	4,194.9	4,123.9	6,779.2	6,779.2
2011	2,415.9	2,326.3	4,152.4	4,080.6	6,568.3	6,579.4
2012	2,490.4	2,422.1	3,828.7	4,103.3	6,319.1	6,319.1
2013	2,230.4	2,225.0	4,221.1	4,108.3	6,451.4	6,451.4
2014	2,243.4	2,269.4	4,410.5	4,179.2	6,653.9	6,653.9
2015	2,224.2	2,224.2	3,518.2	3,518.2	5,742.4	6,242.4
2016	2,499.5	2,499.5	3,602.5	3,602.5	6,102.0	6,102.0
2017	2,060.1	2,060.1	3,725.3	3,725.3	5,785.4	5,785.4

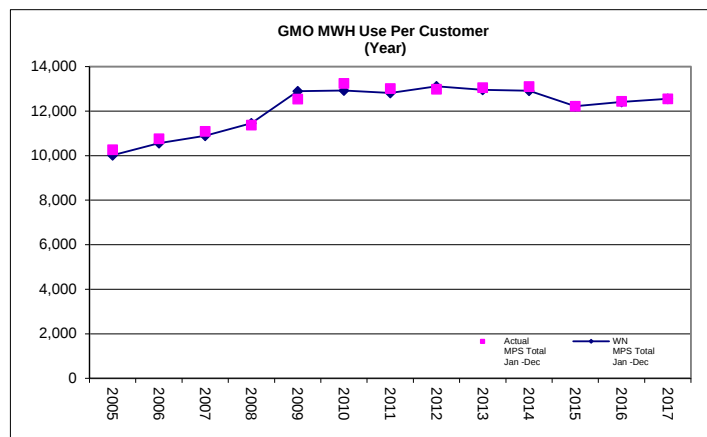
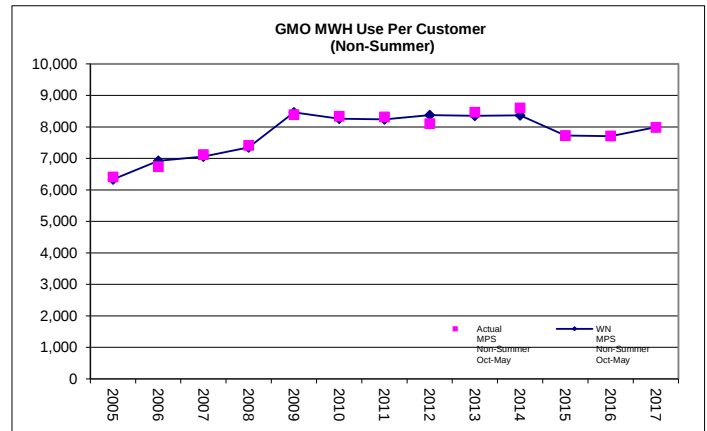
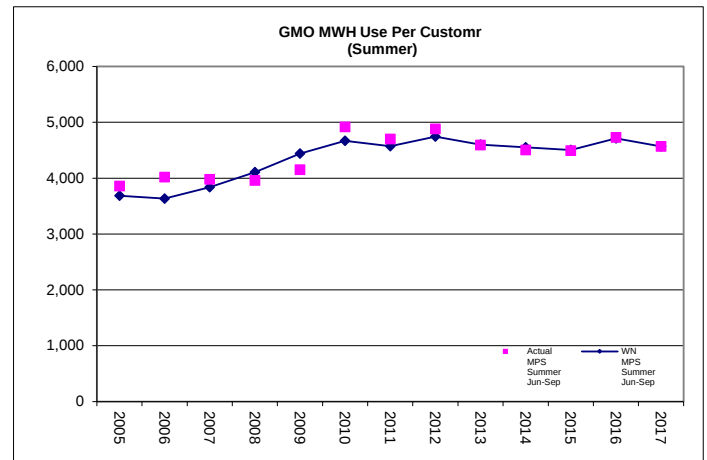
06-'11	6.5%	10.2%	9.1%	7.2%	8.1%	8.1%
11-'16	0.7%	1.4%	-2.8%	-2.5%	-1.5%	-1.5%
06-'16	3.5%	5.7%	3.0%	2.3%	3.2%	3.2%



**Plot 3A-14 GMO Residential MWH Use Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer Jun-Sep	WN MPS Summer Jun-Sep	Actual MPS Non-Summer Oct-May	WN MPS Non-Summer Oct-May	Actual MPS Total Jan -Dec	WN MPS Total Jan -Dec
2005	3,859.16	3,684.88	6,408.95	6,333.47	10,268.11	10,018.35
2006	4,020.52	3,634.70	6,738.40	6,922.48	10,758.92	10,557.19
2007	3,980.38	3,838.51	7,118.49	7,056.07	11,098.87	10,894.58
2008	3,959.71	4,108.06	7,416.16	7,348.53	11,375.87	11,456.59
2009	4,152.30	4,438.01	8,388.83	8,460.54	12,541.13	12,898.55
2010	4,916.35	4,667.31	8,335.07	8,260.73	13,251.42	12,928.04
2011	4,699.96	4,572.83	8,314.12	8,240.89	13,014.08	12,813.72
2012	4,881.00	4,744.10	8,105.56	8,370.65	12,986.56	13,114.75
2013	4,594.31	4,602.29	8,466.58	8,351.52	13,060.89	12,953.81
2014	4,505.33	4,553.51	8,602.48	8,365.72	13,107.81	12,919.24
2015	4,490.42	4,502.37	7,728.26	7,723.00	12,218.68	12,225.37
2016	4,729.99	4,711.50	7,709.65	7,702.17	12,439.64	12,413.68
2017	4,569.01	4,566.72	7,981.93	7,986.33	12,550.94	12,553.05

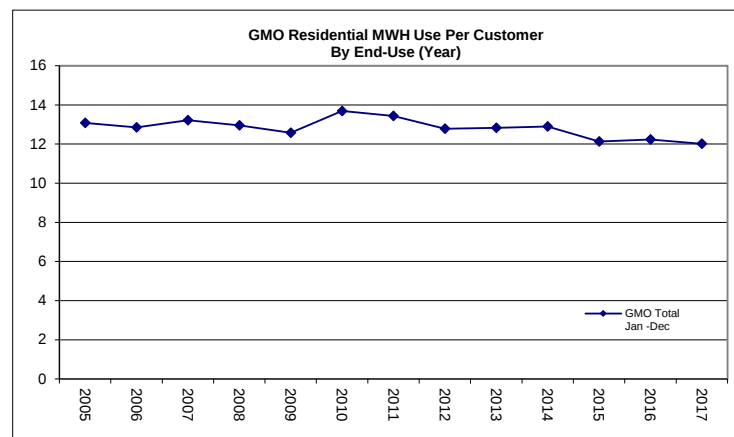
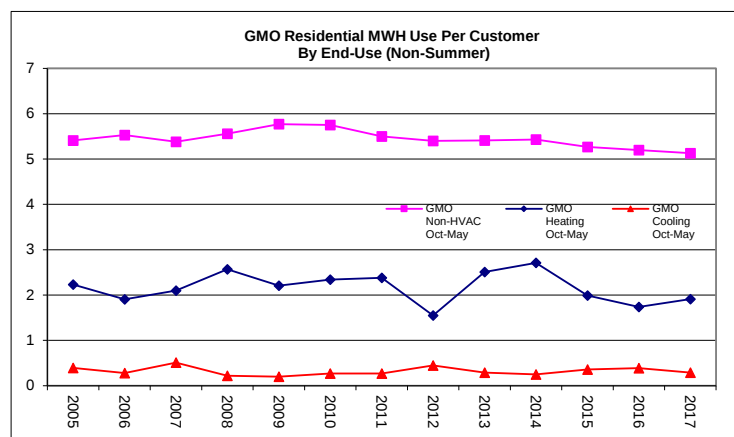
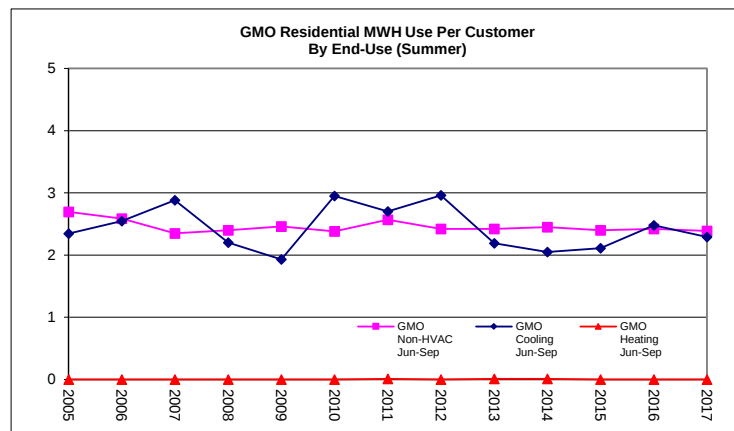
06-'11	3.2%	4.7%	4.3%	3.5%	3.9%	4.0%
11-'16	0.1%	0.6%	-1.5%	-1.3%	-0.9%	-0.6%
06-'16	1.6%	2.6%	1.4%	1.1%	1.5%	1.6%



Plot 3A-15 MPS & SJ Residential MWH Use Per Customer By End-Use

Year	GMO Cooling Jun-Sep	GMO Cooling Oct-May	GMO Heating Jun-Sep	GMO Heating Oct-May	GMO Non-HVAC Jun-Sep	GMO Non-HVAC Oct-May	GMO Total Jan-Dec
2005	2.35	0.40	-	2.24	2.70	5.41	13.08
2006	2.55	0.28	-	1.91	2.59	5.53	12.85
2007	2.88	0.51	-	2.10	2.35	5.38	13.22
2008	2.20	0.22	-	2.57	2.40	5.56	12.95
2009	1.93	0.20	-	2.21	2.46	5.77	12.57
2010	2.95	0.27	-	2.34	2.38	5.75	13.69
2011	2.70	0.27	0.01	2.38	2.57	5.50	13.43
2012	2.96	0.45	-	1.55	2.42	5.40	12.78
2013	2.19	0.29	0.01	2.51	2.42	5.41	12.83
2014	2.05	0.25	0.01	2.71	2.45	5.43	12.90
2015	2.11	0.36	-	1.99	2.40	5.27	12.13
2016	2.48	0.39	-	1.74	2.42	5.20	12.23
2017	2.29	0.29	-	1.91	2.39	5.13	12.01

06-'11	1.2%	-0.7%	#DIV/0!	4.6%	-0.1%	-0.1%	0.9%
11-'16	-1.7%	7.6%	-100.0%	-6.1%	-1.2%	-1.1%	-1.9%
06-'16	-0.3%	3.4%	#DIV/0!	-0.9%	-0.7%	-0.6%	-0.5%

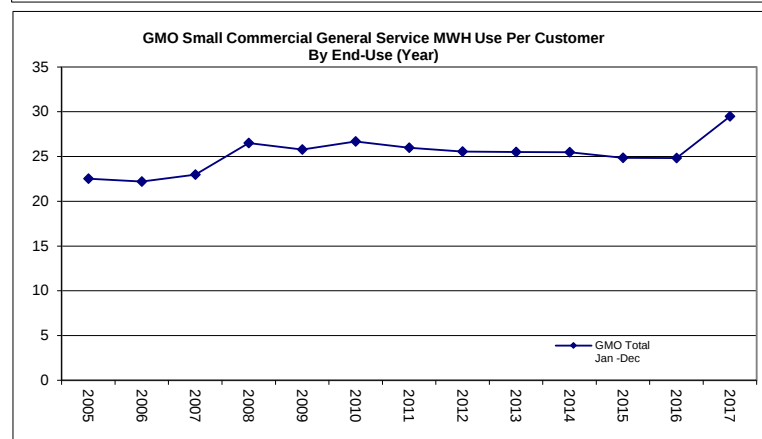
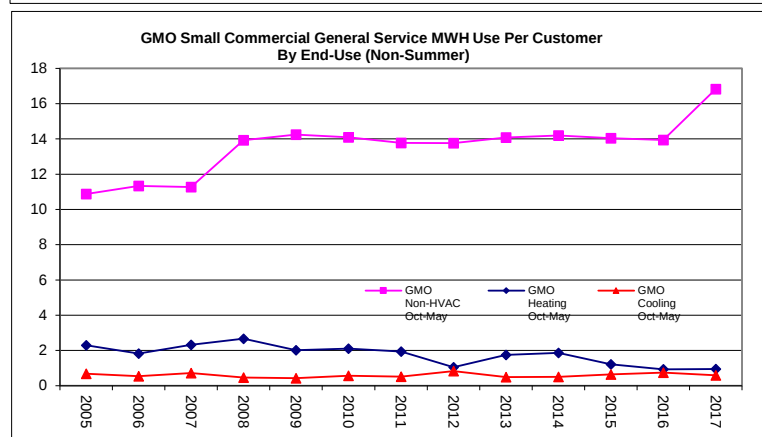
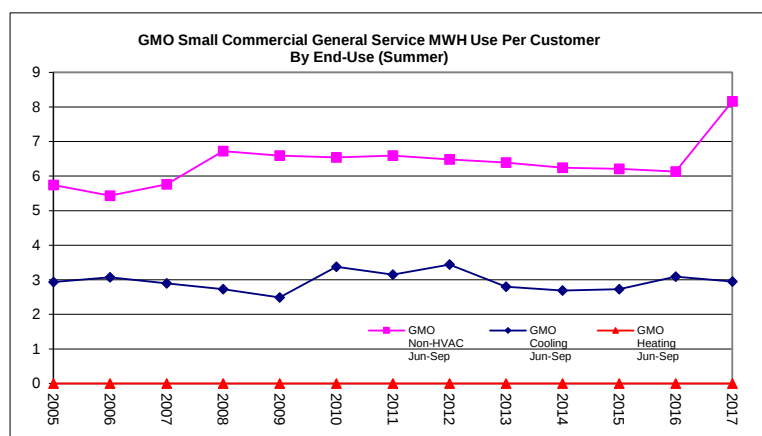


Plot 3A-16 GMO Small Commercial General Service MWH Use Per Customer By End-Use

Year	GMO Cooling Jun-Sep	GMO Cooling Oct-May	GMO Heating Jun-Sep	GMO Heating Oct-May	GMO Non-HVAC Jun-Sep	GMO Non-HVAC Oct-May	GMO Total Jan-Dec
2005	2.94	0.68	0	2.30	5.75	10.88	22.54
2006	3.07	0.55	0	1.82	5.44	11.34	22.21
2007	2.90	0.73	0	2.32	5.76	11.27	22.97
2008	2.73	0.46	0	2.67	6.72	13.93	26.51
2009	2.49	0.43	0	2.02	6.59	14.25	25.78
2010	3.38	0.57	0	2.10	6.54	14.09	26.68
2011	3.15	0.52	0	1.94	6.59	13.78	25.98
2012	3.44	0.83	0	1.05	6.48	13.76	25.56
2013	2.80	0.49	0	1.75	6.39	14.08	25.51
2014	2.69	0.50	0	1.87	6.24	14.19	25.49
2015	2.73	0.65	0	1.22	6.21	14.04	24.85
2016	3.09	0.74	0	0.93	6.13	13.94	24.83
2017	2.95	0.59	0	0.95	8.16	16.83	29.48

06-'11	0.5%	-0.9%	#DIV/0!	1.3%	3.9%	4.0%	3.2%
11-'16	-0.4%	7.3%	#DIV/0!	-13.7%	-1.4%	0.2%	-0.9%
06-'16	0.1%	3.1%	#DIV/0!	-6.5%	1.2%	2.1%	1.1%

*Increase in Small commercial and decline in Big Commercial customers caused MWh use per customer to spike in 2017 due to consolidation and rate switchers,

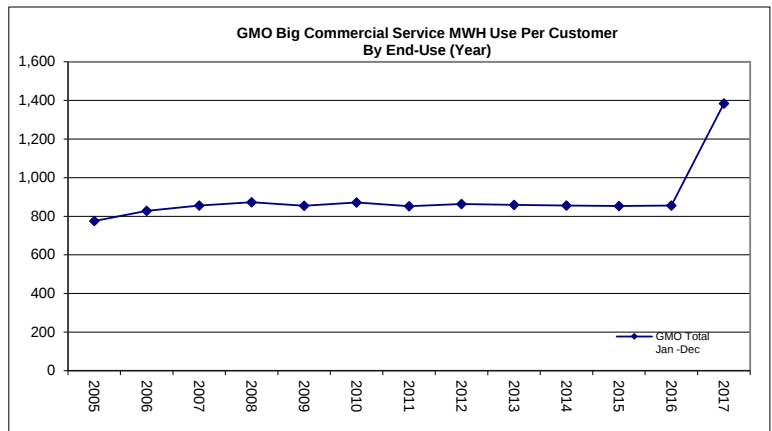
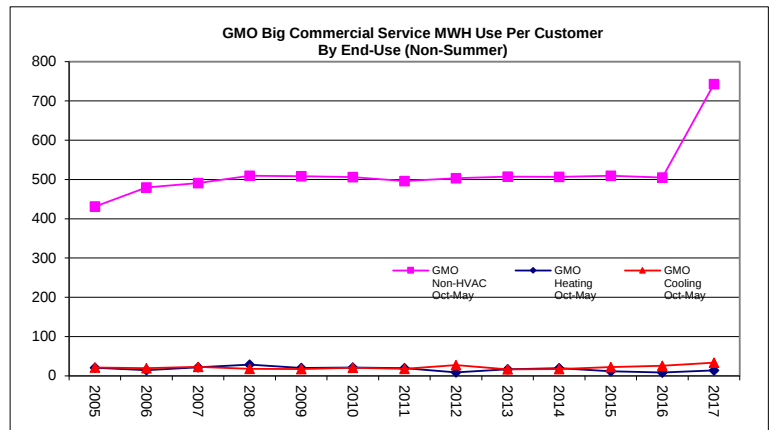
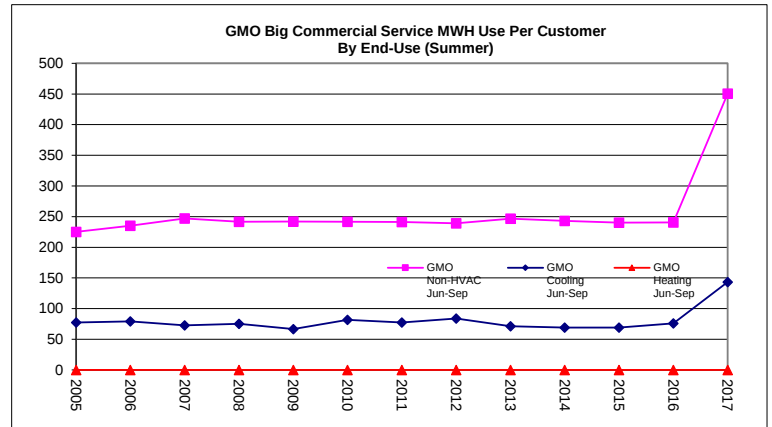


Plot 3A-17 GMO Small Commercial General Service MWH Use Per Customer By End-Use

Year	GMO Cooling Jun-Sep	GMO Cooling Oct-May	GMO Heating Jun-Sep	GMO Heating Oct-May	GMO Non-HVAC Jun-Sep	GMO Non-HVAC Oct-May	GMO Total Jan-Dec
2005	77.27	21.15	0.00	20.64	225.13	431.08	775.26
2006	79.06	19.44	0.00	14.44	235.30	479.93	828.16
2007	72.67	23.13	0.00	21.99	247.21	490.89	855.88
2008	75.30	17.88	0.00	28.71	241.50	509.47	872.86
2009	66.64	17.41	0.00	20.24	241.91	508.11	854.31
2010	81.76	20.80	0.00	21.58	241.71	506.31	872.16
2011	77.36	18.03	0.00	19.70	241.38	496.09	852.56
2012	83.74	27.79	0.00	9.04	239.24	503.38	863.19
2013	71.30	16.64	0.02	16.97	246.66	507.32	858.91
2014	68.90	17.46	0.00	19.39	243.17	506.83	855.75
2015	69.03	22.72	0.00	12.01	240.22	509.72	853.70
2016	75.83	26.11	0.00	8.63	240.54	504.75	855.86
2017	143.31	33.70	0.00	14.21	450.45	742.72	1,384.39

06-'11	-0.4%	-1.5%	#DIV/0!	6.4%	0.5%	0.7%	0.6%
11-'16	-0.4%	7.7%	#DIV/0!	-15.2%	-0.1%	0.3%	0.1%
06-'16	-0.4%	3.0%	#DIV/0!	-5.0%	0.2%	0.5%	0.3%

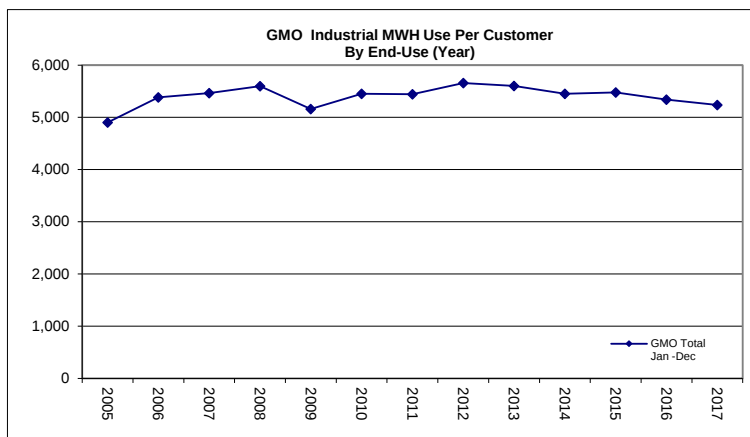
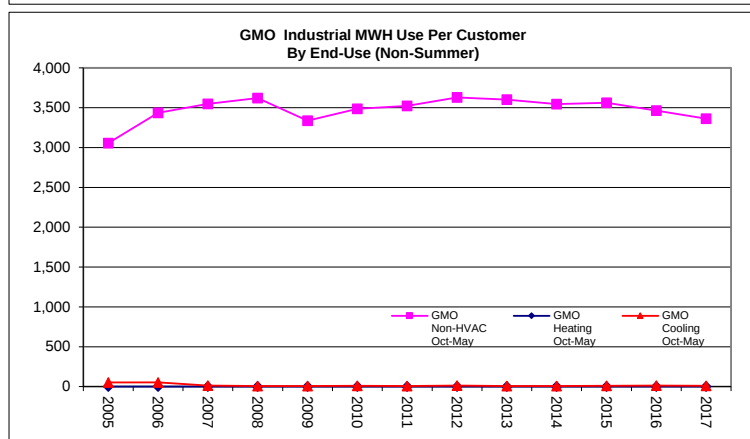
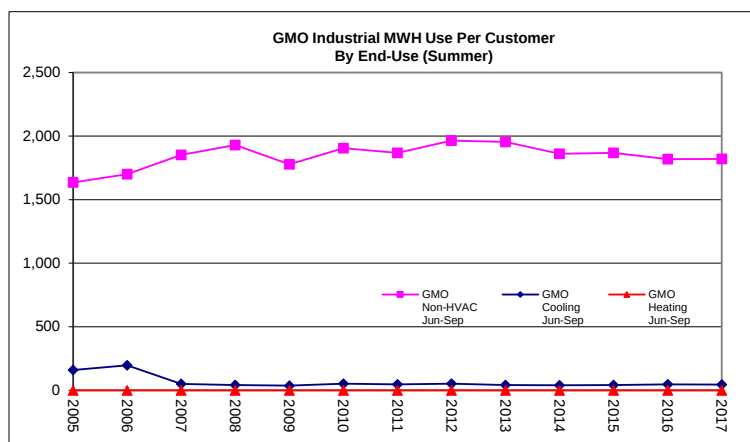
*Increase in Small commercial and decline in Big Commercial customers caused MWh use per customer to spike in 2017 due to consolidation and rate switchers,



Plot 3A-18 GMO Small Commercial General Service MWH Use Per Customer By End-Use

Year	GMO Cooling Jun-Sep	GMO Cooling Oct-May	GMO Heating Jun-Sep	GMO Heating Oct-May	GMO Non-HVAC Jun-Sep	GMO Non-HVAC Oct-May	GMO Total Jan-Dec
2005	160.44	51.45	-	-	1,635.48	3,055.51	4,902.87
2006	197.06	52.42	-	-	1,700.11	3,436.15	5,385.74
2007	50.15	13.55	-	-	1,852.65	3,548.96	5,465.31
2008	41.81	7.01	-	-	1,929.96	3,622.04	5,600.82
2009	37.36	6.50	-	-	1,778.78	3,337.62	5,160.26
2010	52.84	8.80	-	-	1,904.62	3,484.82	5,451.08
2011	46.81	7.81	-	-	1,867.50	3,522.38	5,444.50
2012	52.61	12.76	-	-	1,964.36	3,628.59	5,658.32
2013	41.58	7.28	-	-	1,955.07	3,601.07	5,605.00
2014	40.05	7.37	-	-	1,861.45	3,545.73	5,454.60
2015	40.97	9.89	-	-	1,867.54	3,561.45	5,479.85
2016	47.38	11.29	-	-	1,819.17	3,464.68	5,342.52
2017	44.78	8.82	-	-	1,821.08	3,363.29	5,237.97

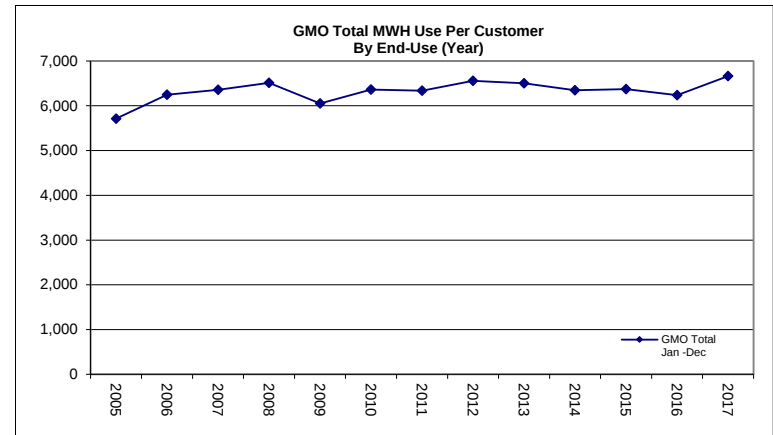
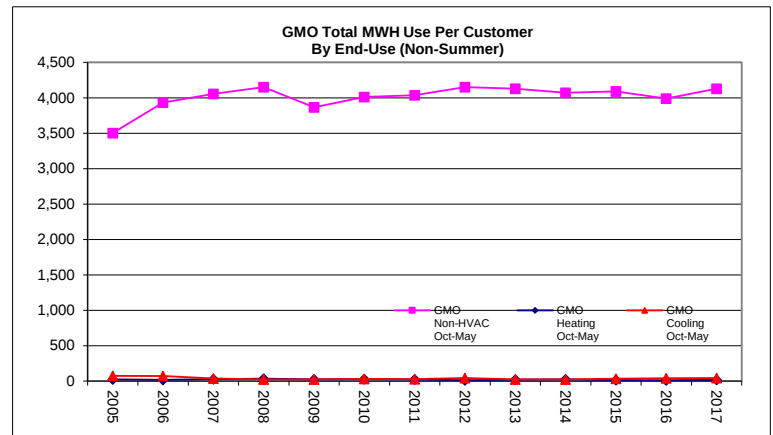
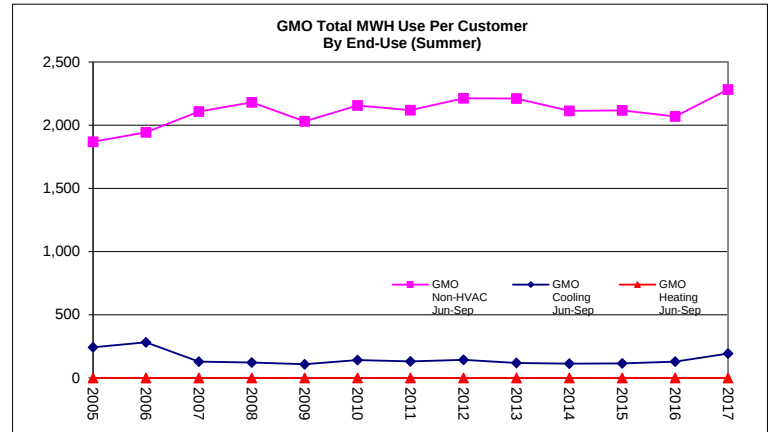
06-'11	-25.0%	-31.7%	#DIV/0!	#DIV/0!	1.9%	0.5%	0.2%
11-'16	0.2%	7.6%	#DIV/0!	#DIV/0!	-0.5%	-0.3%	-0.4%
06-'16	-13.3%	-14.2%	#DIV/0!	#DIV/0!	0.7%	0.1%	-0.1%



Plot 3A-19 GMO Small Commercial General Service MWH Use Per Customer By End-Use
For classes that have end-use sales

Year	GMO Cooling Jun-Sep	GMO Cooling Oct-May	GMO Heating Jun-Sep	GMO Heating Oct-May	GMO Non-HVAC Jun-Sep	GMO Non-HVAC Oct-May	GMO Total Jan-Dec
2005	242.98	73.67	0.00	25.17	1,869.05	3,502.87	5,713.74
2006	281.73	72.69	0.00	18.17	1,943.43	3,932.94	6,248.95
2007	128.59	37.92	0.00	26.41	2,107.97	4,056.50	6,357.38
2008	122.04	25.57	0.00	33.95	2,180.58	4,151.00	6,513.14
2009	108.42	24.54	0.00	24.47	2,029.74	3,865.75	6,052.92
2010	140.93	30.44	0.00	26.02	2,155.25	4,010.97	6,363.61
2011	130.02	26.63	0.01	24.02	2,118.04	4,037.75	6,336.47
2012	142.75	41.83	0.00	11.64	2,212.50	4,151.13	6,559.85
2013	117.87	24.70	0.03	21.23	2,210.54	4,127.88	6,502.25
2014	113.69	25.58	0.01	23.97	2,113.31	4,072.18	6,348.74
2015	114.84	33.62	0.00	15.22	2,116.37	4,090.48	6,370.53
2016	128.78	38.53	0.00	11.30	2,068.26	3,988.57	6,235.44
2017	193.33	43.40	0.00	17.07	2,282.08	4,127.97	6,663.85

06-'11	-14.3%	-18.2%	#DIV/0!	5.7%	1.7%	0.5%	0.3%
11-'16	-0.2%	7.7%	-100.0%	-14.0%	-0.5%	-0.2%	-0.3%
06-'16	-7.5%	-6.1%	#DIV/0!	-4.6%	0.6%	0.1%	0.0%



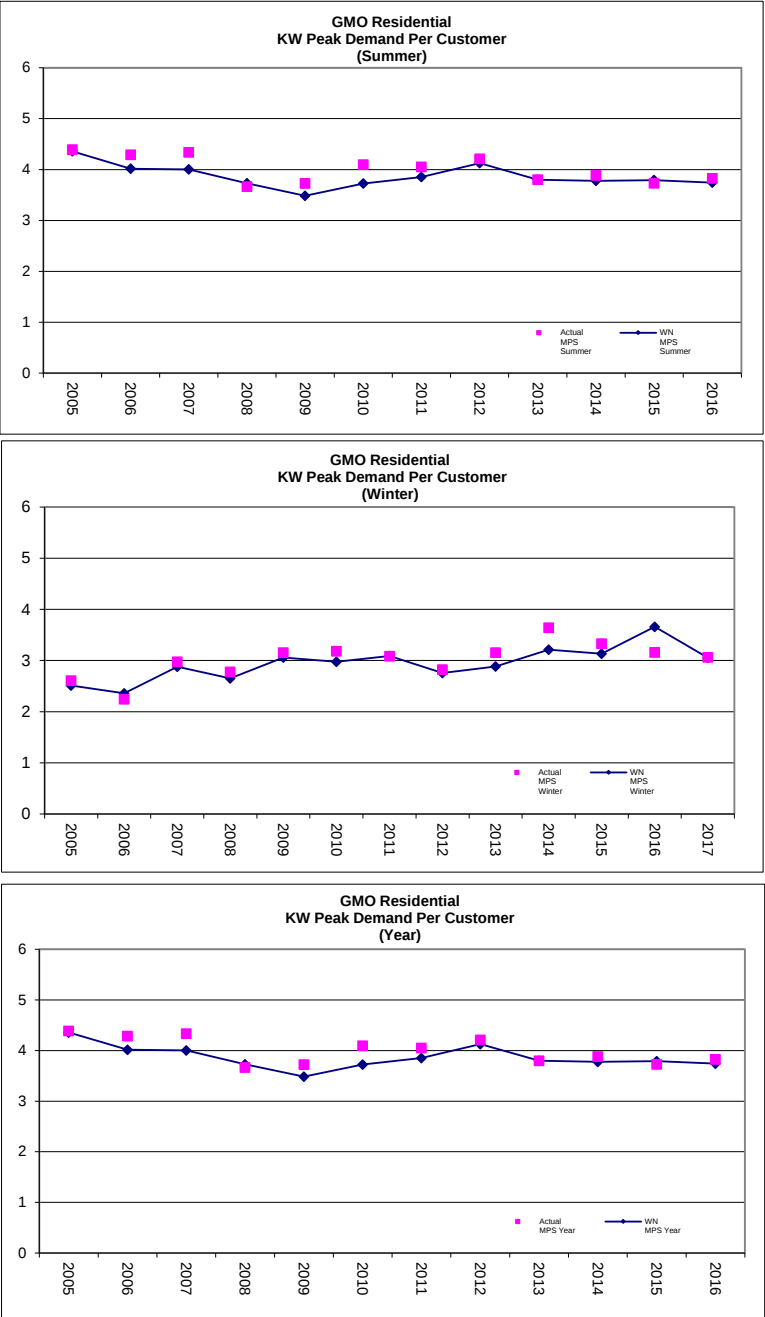
Plot 3A-20 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	4.4	4.4	2.6	2.5	4.4	4.4
2006	4.3	4.0	2.2	2.4	4.3	4.0
2007	4.3	4.0	3.0	2.9	4.3	4.0
2008	3.7	3.7	2.8	2.7	3.7	3.7
2009	3.7	3.5	3.2	3.1	3.7	3.5
2010	4.1	3.7	3.2	3.0	4.1	3.7
2011	4.1	3.9	3.1	3.1	4.1	3.9
2012	4.2	4.1	2.8	2.8	4.2	4.1
2013	3.8	3.8	3.2	2.9	3.8	3.8
2014	3.9	3.8	3.6	3.2	3.9	3.8
2015	3.7	3.8	3.3	3.1	3.7	3.8
2016	3.8	3.7	3.2	3.7	3.8	3.7
2017			3.1	3.1	0.0	0.0

06-'11	-1.1%	-0.8%	6.6%	5.5%	-1.1%	-0.8%
11-'16	-1.1%	-0.6%	0.5%	3.4%	-1.1%	-0.6%
06-'16	-1.1%	-0.7%	3.5%	4.5%	-1.1%	-0.7%

* July 2009 was the coolest July since 1980 for CDD

* 2017 Summer peaks are not include since they are projections.
The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

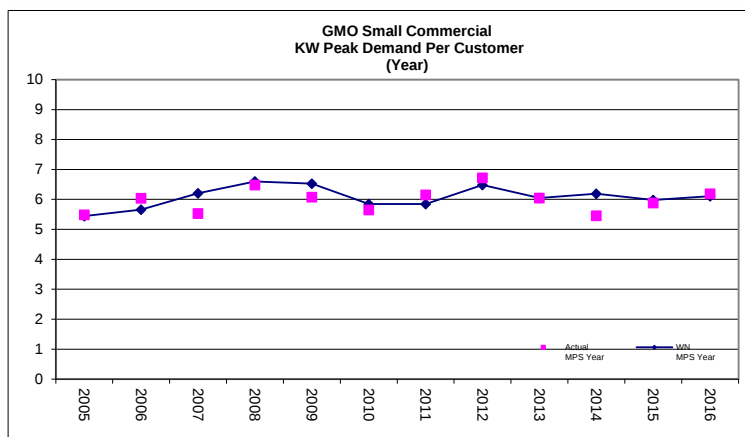
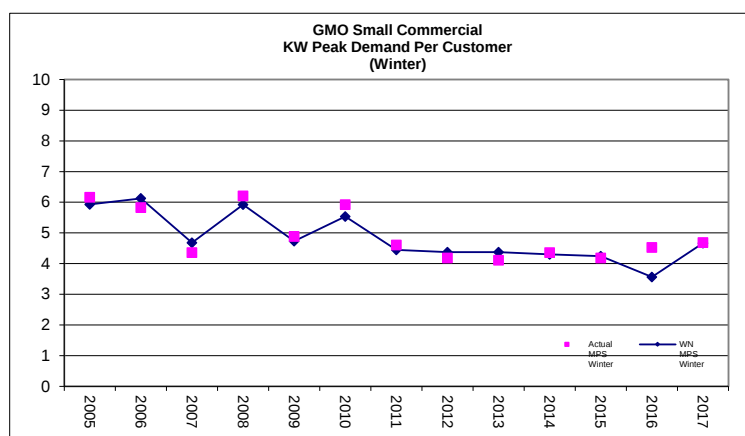
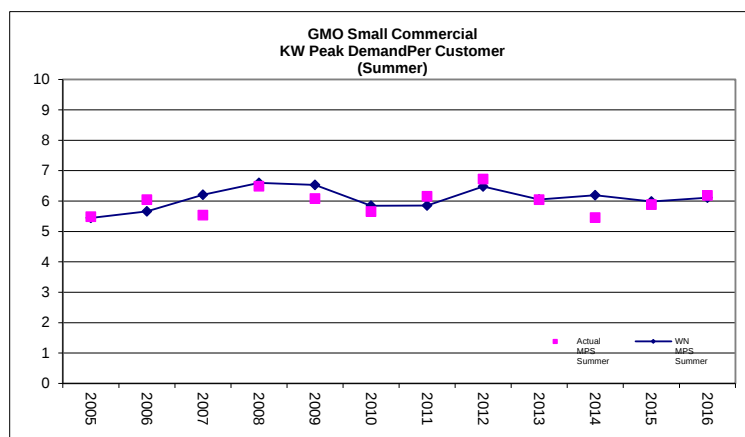


* July 2009 was the coolest July since 1980 for CDD

**Plot 3A-21 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	5.5	5.4	6.2	5.9	5.5	5.4
2006	6.0	5.7	5.8	6.1	6.0	5.7
2007	5.5	6.2	4.4	4.7	5.5	6.2
2008	6.5	6.6	6.2	5.9	6.5	6.6
2009	6.1	6.5	4.9	4.7	6.1	6.5
2010	5.7	5.8	5.9	5.5	5.7	5.8
2011	6.2	5.9	4.6	4.4	6.2	5.9
2012	6.7	6.5	4.2	4.4	6.7	6.5
2013	6.0	6.1	4.1	4.4	6.0	6.1
2014	5.5	6.2	4.4	4.3	5.5	6.2
2015	5.9	6.0	4.2	4.2	5.9	6.0
2016	6.2	6.1	4.5	3.6	6.2	6.1
2017			4.7	4.7	-	-

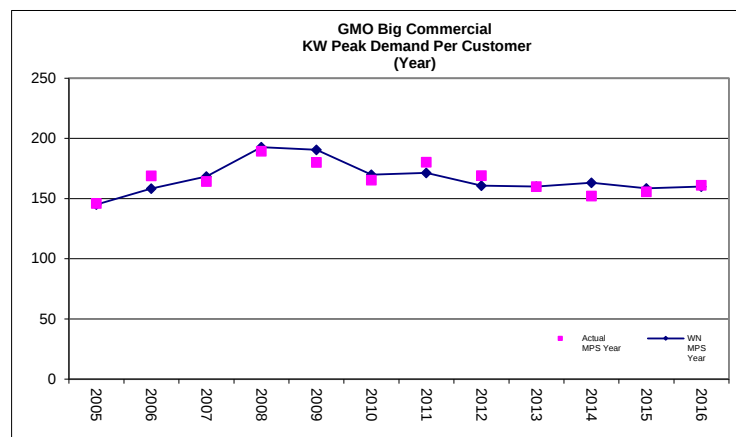
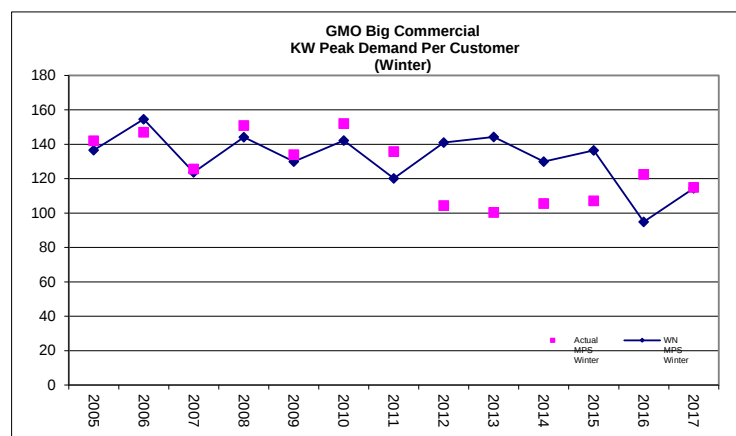
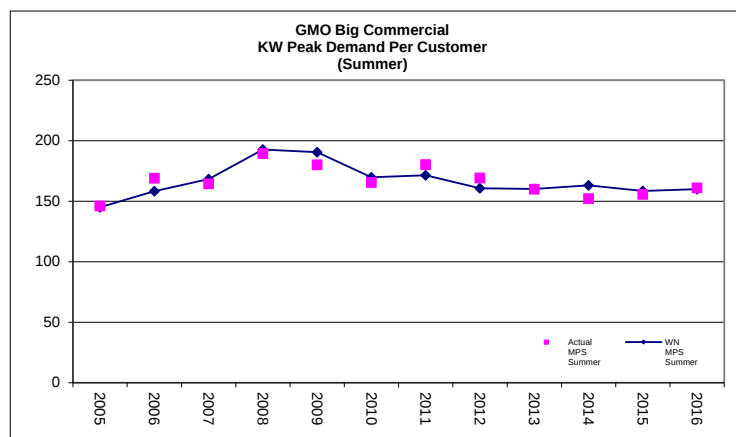
06-'11	0.4%	0.7%	-4.6%	-6.2%	0.4%	0.7%
11-'16	0.1%	0.9%	-0.3%	-4.3%	0.1%	0.9%
06-'16	0.2%	0.8%	-2.5%	-5.3%	0.2%	0.8%



**Plot 3A-22 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	146.1	145.1	142.0	136.6	146.1	145.1
2006	169.0	158.3	147.0	154.6	169.0	158.3
2007	164.4	168.4	125.6	123.6	164.4	168.4
2008	189.4	192.7	151.0	144.1	189.4	192.7
2009	180.1	190.5	134.0	129.9	180.1	190.5
2010	165.5	169.9	152.1	142.1	165.5	169.9
2011	180.3	171.4	135.8	120.2	180.3	171.4
2012	169.2	160.7	104.3	141.0	169.2	160.7
2013	160.0	160.1	100.3	144.3	160.0	160.1
2014	152.3	163.1	105.5	129.9	152.3	163.1
2015	155.8	158.5	107.2	136.5	155.8	158.5
2016	161.1	160.1	122.5	94.9	161.1	160.1
2017			114.9	114.5	-	-

06-'11	1.3%	1.6%	-1.6%	-4.9%	1.3%	1.6%
11-'16	-2.2%	-1.4%	-2.0%	-4.6%	-2.2%	-1.4%
06-'16	-0.5%	0.1%	-1.8%	-4.8%	-0.5%	0.1%

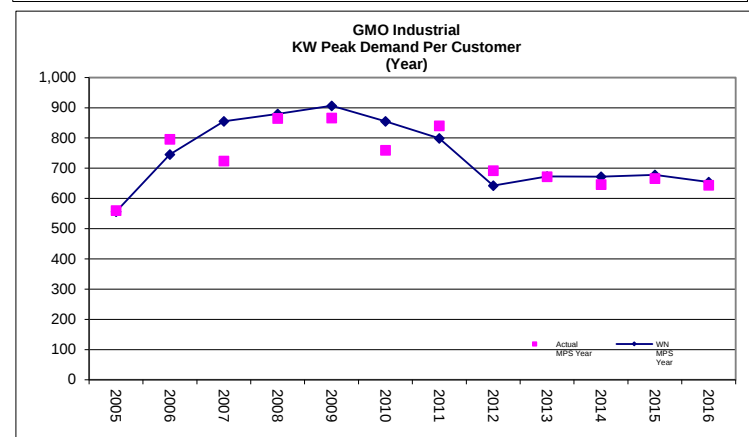
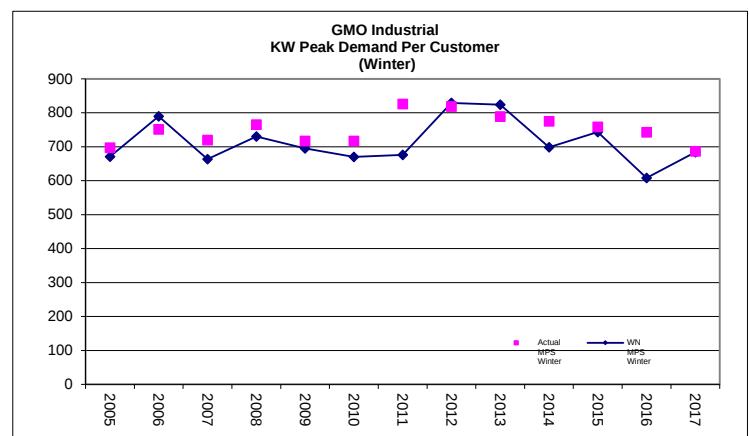
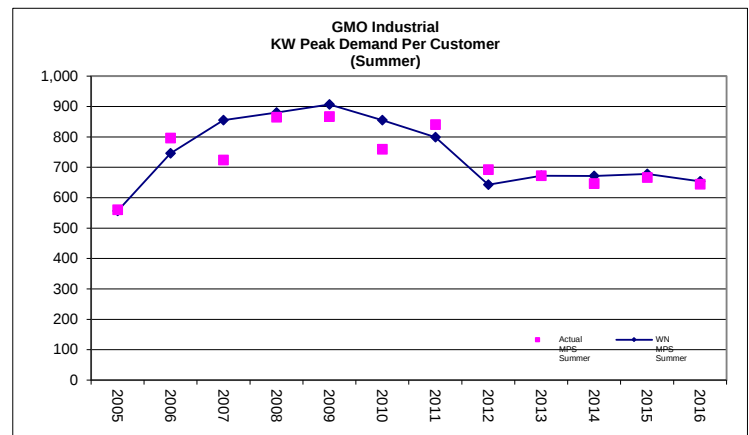


* July 2009 was the coolest July since 1980 for CDD

**Plot 3A-23 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	560.4	556.3	697.3	670.9	560.4	556.3
2006	796.0	745.8	751.3	789.8	796.0	745.8
2007	724.0	855.2	719.9	663.2	724.0	855.2
2008	864.7	879.9	765.4	730.5	864.7	879.9
2009	866.6	906.7	717.0	695.0	866.6	906.7
2010	759.3	854.9	717.0	670.2	759.3	854.9
2011	840.3	798.9	825.6	676.3	840.3	798.9
2012	692.3	642.5	818.7	829.0	692.3	642.5
2013	672.1	672.5	788.8	823.9	672.1	672.5
2014	646.3	671.8	774.9	698.3	646.3	671.8
2015	666.4	678.0	758.4	743.1	666.4	678.0
2016	644.1	654.1	742.8	608.1	644.1	654.1
2017			686.7	684.1	-	-

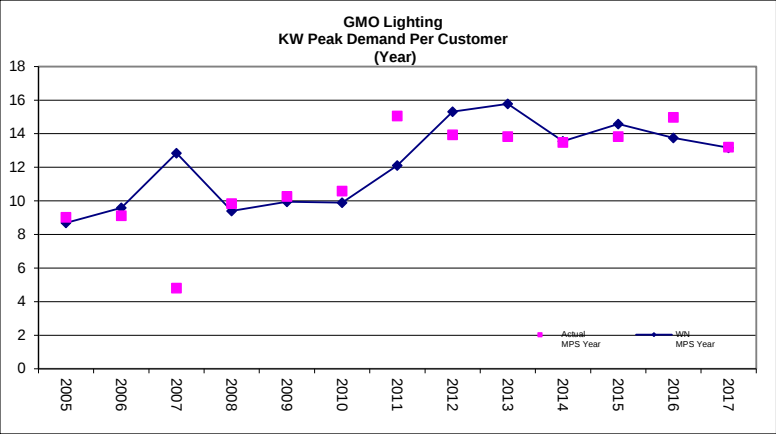
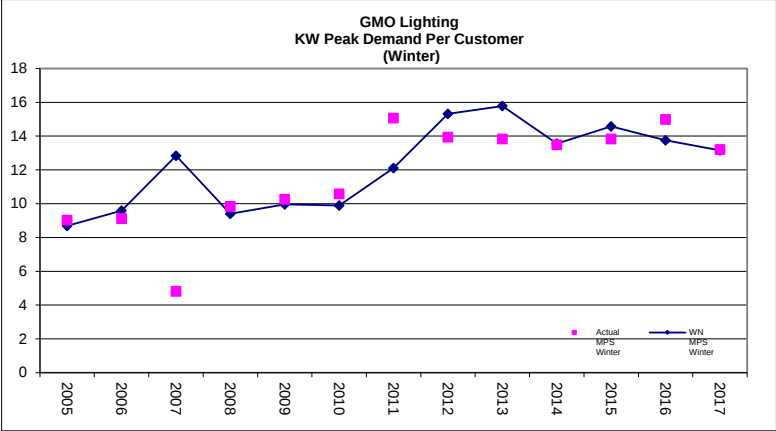
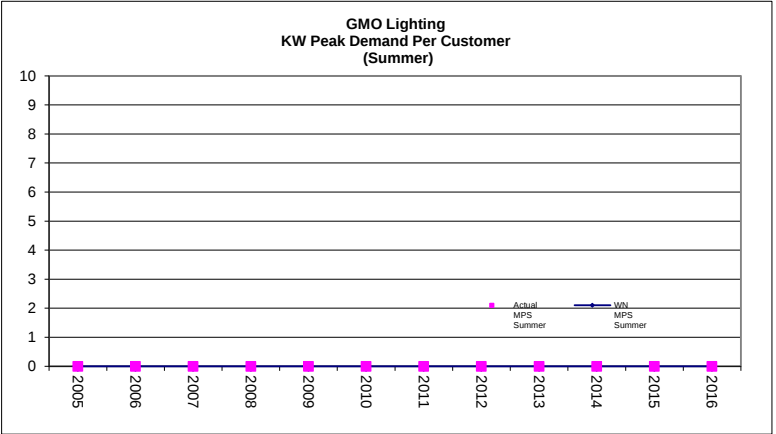
06-'11	1.1%	1.4%	1.9%	-3.1%	1.1%	1.4%
11-'16	-5.2%	-3.9%	-2.1%	-2.1%	-5.2%	-3.9%
06-'16	-2.1%	-1.3%	-0.1%	-2.6%	-2.1%	-1.3%



Plot 3A-24 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	-	-	9.0	8.7	9.0	8.7
2006	-	-	9.1	9.6	9.1	9.6
2007	-	-	4.8	12.8	4.8	12.8
2008	-	-	9.8	9.4	9.8	9.4
2009	-	-	10.3	10.0	10.3	10.0
2010	-	-	10.6	9.9	10.6	9.9
2011	-	-	15.1	12.1	15.1	12.1
2012	-	-	13.9	15.3	13.9	15.3
2013	-	-	13.8	15.8	13.8	15.8
2014	-	-	13.5	13.5	13.5	13.5
2015	-	-	13.8	14.6	13.8	14.6
2016	-	-	15.0	13.8	15.0	13.8
2017	-	-	13.2	13.2	13.2	13.2

06-'11	10.6%	4.8%	10.6%	4.8%
11-'16	-0.1%	2.6%	-0.1%	2.6%
06-'16	5.1%	3.7%	5.1%	3.7%

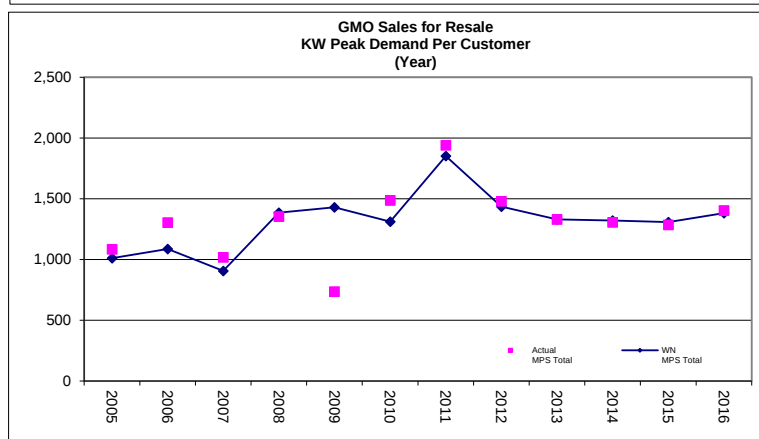
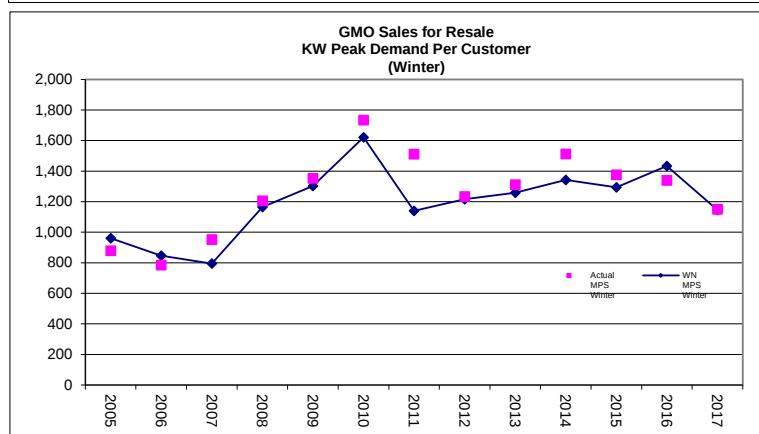
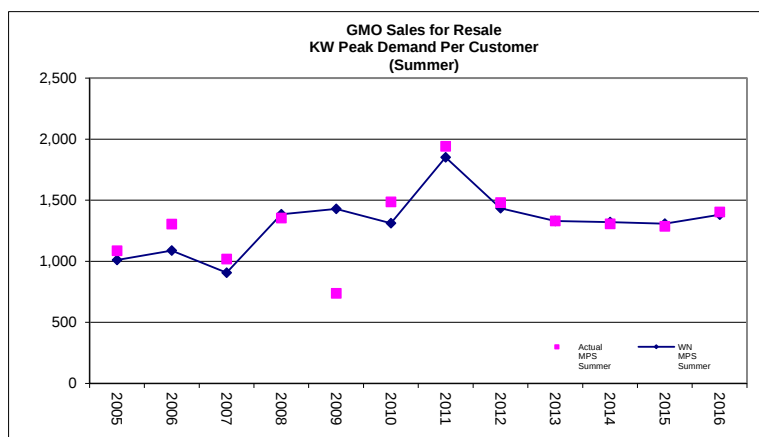


**Data points that are zero are from differences in system coincident peak time falling later (Morning) or early (Early Evening) in day when there is no lighting load

**Plot 3A-25 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Total	WN MPS Total
2005	1,085.3	1,010.7	878.9	961.0	1,085.3	1,010.7
2006	1,304.1	1,087.5	784.7	846.5	1,304.1	1,087.5
2007	1,018.7	906.8	952.9	794.7	1,018.7	906.8
2008	1,354.6	1,384.9	1,206.6	1,164.7	1,354.6	1,384.9
2009	737.1	1,429.3	1,353.0	1,302.7	737.1	1,429.3
2010	1,486.5	1,311.6	1,734.6	1,621.3	1,486.5	1,311.6
2011	1,940.8	1,851.5	1,510.8	1,139.5	1,940.8	1,851.5
2012	1,480.0	1,435.0	1,234.0	1,216.8	1,480.0	1,435.0
2013	1,330.0	1,330.8	1,312.0	1,259.1	1,330.0	1,330.8
2014	1,306.0	1,321.6	1,512.0	1,342.8	1,306.0	1,321.6
2015	1,286.0	1,308.4	1,376.0	1,294.6	1,286.0	1,308.4
2016	1,404.0	1,382.2	1,340.0	1,433.6	1,404.0	1,382.2
2017			1,150.0	1,145.5	-	-

06-'11	8.3%	11.2%	14.0%	6.1%	8.3%	11.2%
11-'16	-6.3%	-5.7%	-2.4%	4.7%	-6.3%	-5.7%
06-'16	0.7%	2.4%	5.5%	5.4%	0.7%	2.4%



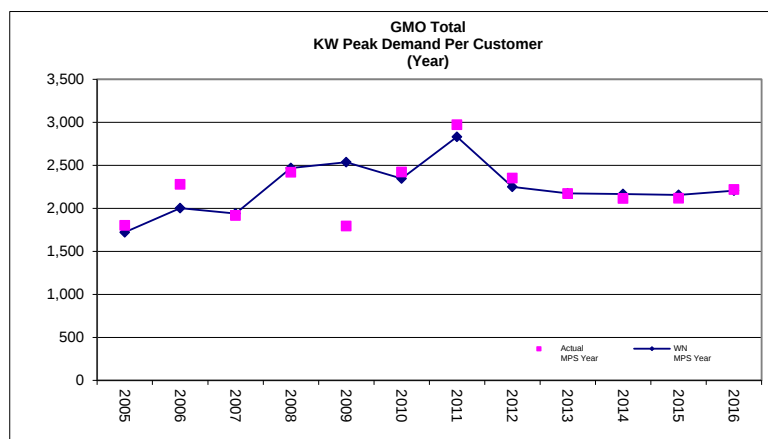
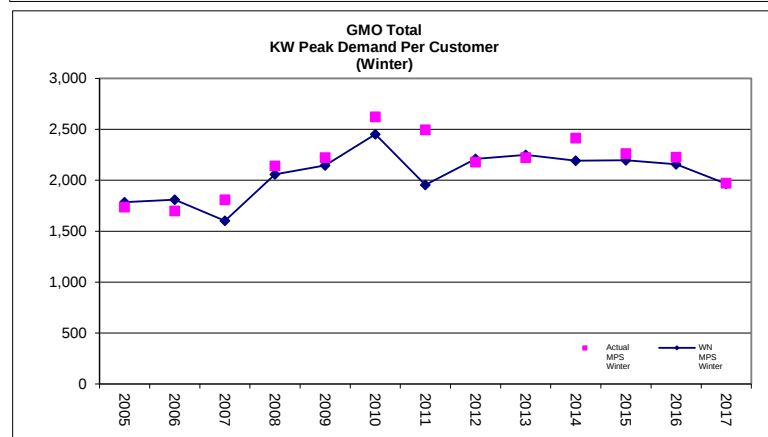
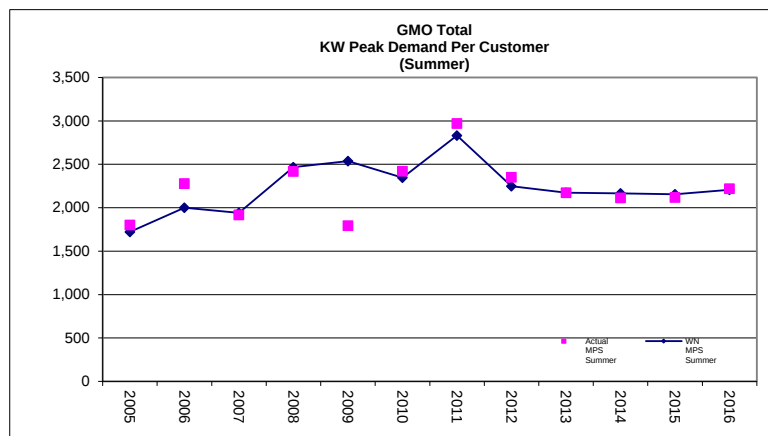
* July 2009 was the coolest July since 1980 for CDD

**In 2004/2005, El Dorado Springs, Odessa, and Harrisonville were no longer Sales for Resale customers.

**Plot 3A-26 GMO Residential KW Peak Demand Per Customer
(Actual vs. Weather Normalized)**

Year	Actual MPS Summer	WN MPS Summer	Actual MPS Winter	WN MPS Winter	Actual MPS Year	WN MPS Year
2005	1,801.8	1,721.8	1,736.0	1,785.6	1,801.8	1,721.8
2006	2,279.4	2,001.3	1,700.2	1,808.9	2,279.4	2,001.3
2007	1,916.9	1,940.7	1,810.5	1,601.9	1,916.9	1,940.7
2008	2,418.9	2,468.0	2,141.8	2,057.3	2,418.9	2,468.0
2009	1,793.5	2,536.6	2,222.3	2,145.3	1,793.5	2,536.6
2010	2,421.1	2,346.0	2,623.4	2,452.0	2,421.1	2,346.0
2011	2,971.6	2,831.6	2,494.9	1,955.6	2,971.6	2,831.6
2012	2,352.4	2,248.8	2,178.0	2,209.2	2,352.4	2,248.8
2013	2,171.9	2,173.3	2,222.2	2,250.3	2,171.9	2,173.3
2014	2,113.9	2,166.5	2,413.9	2,192.1	2,113.9	2,166.5
2015	2,117.8	2,154.7	2,262.9	2,196.1	2,117.8	2,154.7
2016	2,219.2	2,206.3	2,228.0	2,157.6	2,219.2	2,206.3
2017	0.0	0.0	1,972.6	1,964.9	0.0	0.0

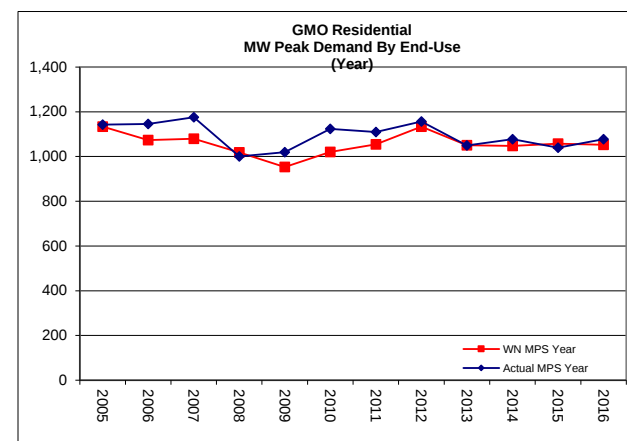
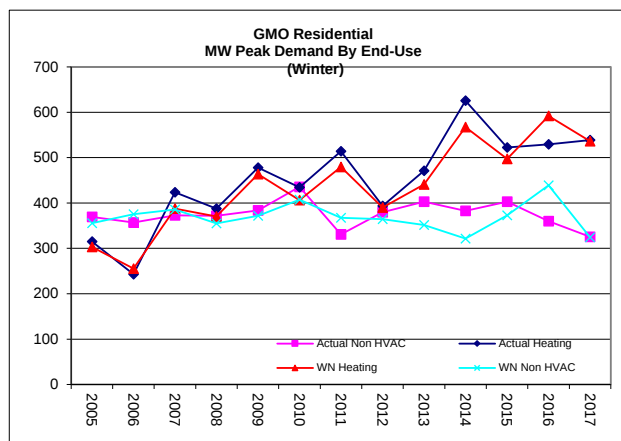
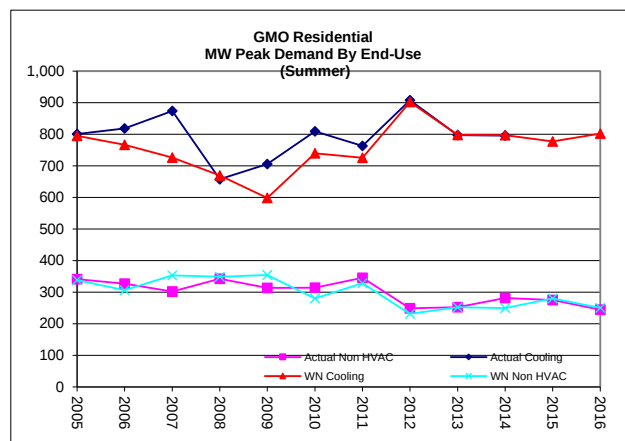
06-'11	5.4%	7.2%	8.0%	1.6%	5.4%	7.2%
11-'16	-5.7%	-4.9%	-2.2%	2.0%	-5.7%	-4.9%
06-'16	-0.3%	1.0%	2.7%	1.8%	-0.3%	1.0%



Plot 3A-27 GMO Residential MW Peak Demand By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	801.2	795.3	315.2	303.3	341.2	338.7	369.6	355.6	1,142.4	1,134.0
2006	818.7	767.1	243.0	255.5	327.4	306.7	357.2	375.5	1,146.1	1,073.8
2007	873.6	726.1	423.7	387.5	302.0	353.2	372.6	385.7	1,175.6	1,079.2
2008	657.8	669.4	387.8	370.1	342.6	348.7	372.0	355.0	1,000.5	1,018.1
2009	705.8	598.5	478.2	463.5	313.3	354.5	383.6	371.8	1,019.1	953.0
2010	809.3	739.9	434.7	406.3	314.0	280.3	435.7	407.2	1,123.4	1,020.2
2011	763.4	725.8	514.2	479.7	345.8	328.8	330.8	367.3	1,109.2	1,054.6
2012	907.8	902.2	393.4	390.2	249.2	231.5	379.5	364.6	1,157.0	1,133.7
2013	797.4	797.9	471.3	440.8	252.4	252.5	402.7	351.6	1,049.8	1,050.5
2014	796.1	797.4	625.5	567.3	281.8	249.7	382.8	321.6	1,077.9	1,047.1
2015	764.1	777.36	522.2	497.2	275.3	280.09	402.9	372.8	1,039.3	1,057.5
2016	832.8	802.12	529.4	591.9	244.5	250.58	360.2	439.0	1,077.3	1,052.7
2017			538.5	536.4			325.5	324.3	-	-

06-'11	-1.4%	-1.1%	16.2%	13.4%	1.1%	1.4%	-1.5%	-0.4%	-0.7%	-0.4%
11-'16	1.8%	2.0%	0.6%	4.3%	-6.7%	-5.3%	1.7%	3.6%	-0.6%	0.0%
06-'16	0.2%	0.4%	8.1%	8.8%	-2.9%	-2.0%	0.1%	1.6%	-0.6%	-0.2%

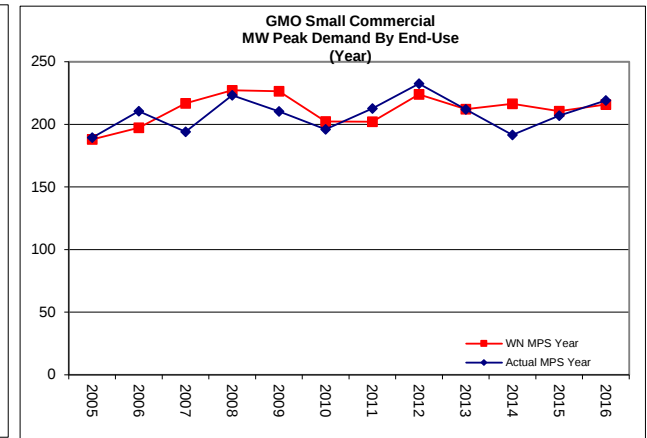
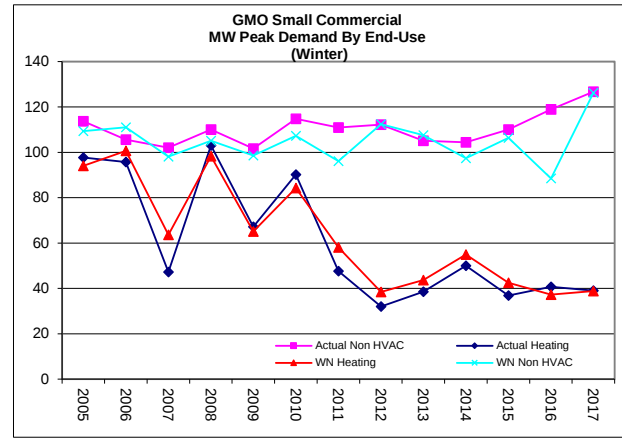
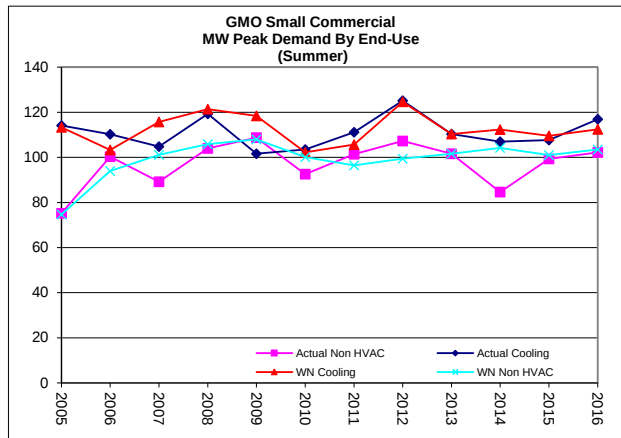


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-28 GMO Residential MW Peak Demand By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	114.1	113.3	97.7	94.0	75.2	74.7	113.7	109.4	189.3	187.9
2006	110.2	103.3	95.7	100.6	100.3	94.0	105.6	111.0	210.5	197.3
2007	104.8	115.7	47.2	63.6	89.2	101.1	102.0	98.1	194.0	216.8
2008	119.2	121.4	103.0	98.3	104.0	105.9	110.1	105.1	223.3	227.2
2009	101.6	118.4	67.1	65.1	108.7	108.0	101.7	98.5	210.4	226.4
2010	103.5	102.2	90.2	84.3	92.6	100.1	114.8	107.3	196.1	202.3
2011	111.2	105.7	47.6	58.1	101.5	96.5	110.9	96.1	212.6	202.2
2012	125.1	124.6	32.0	38.5	107.3	99.4	112.2	112.4	232.5	224.0
2013	110.3	110.4	38.6	43.7	101.6	101.7	105.1	107.6	211.9	212.0
2014	107.0	112.3	50.0	54.9	84.6	104.1	104.4	97.4	191.6	216.5
2015	107.6	109.5	36.9	42.5	99.3	101.0	110.1	106.4	207.0	210.6
2016	116.9	112.4	40.8	37.3	102.2	103.5	118.9	88.5	219.1	216.0
2017			39.0	38.8			126.7	126.2	-	-

06-'11	0.2%	0.5%	-13.0%	-10.4%	0.2%	0.5%	1.0%	-2.8%	0.2%	0.5%
11-'16	1.0%	1.2%	-3.1%	-8.5%	0.2%	1.4%	1.4%	-1.6%	0.6%	1.3%
06-'16	0.6%	0.9%	-8.2%	-9.5%	0.2%	1.0%	1.2%	-2.2%	0.4%	0.9%

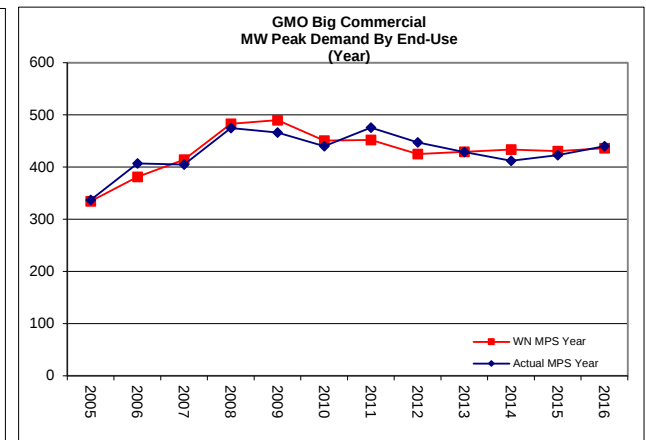
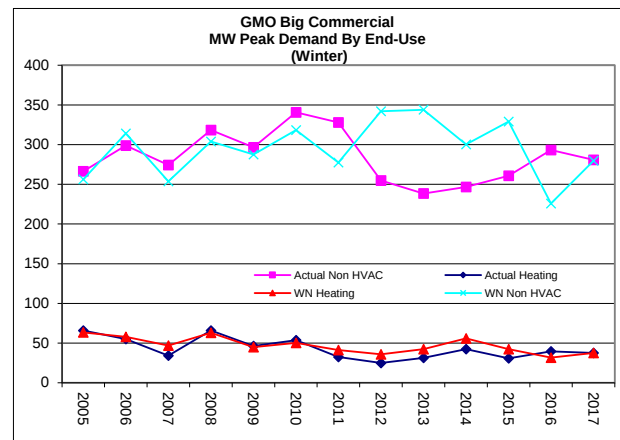
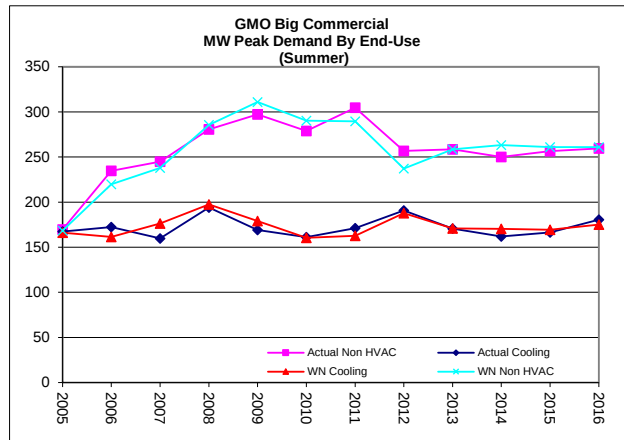


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-29 GMO Residential MW Peak Demand By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	167.3	166.1	65.9	63.4	169.7	168.4	266.5	256.4	337.0	334.5
2006	172.4	161.5	55.0	57.8	234.6	219.8	298.7	314.0	407.0	381.4
2007	159.8	176.3	34.1	47.0	244.9	237.8	274.3	253.7	404.6	414.1
2008	194.0	197.4	65.9	62.9	280.6	285.5	318.4	303.9	474.6	483.0
2009	169.0	179.0	46.4	45.0	297.3	311.0	296.7	287.6	466.4	490.0
2010	161.1	160.5	53.8	50.3	279.0	290.2	340.7	318.4	440.1	450.6
2011	171.1	162.6	32.4	41.2	304.6	289.6	327.8	277.3	475.6	452.2
2012	190.7	187.7	25.0	35.9	256.6	237.3	254.8	342.1	447.3	424.9
2013	170.6	170.7	31.5	42.2	258.4	258.6	238.3	343.9	429.0	429.3
2014	161.9	170.3	42.5	55.9	250.2	263.2	246.8	300.3	412.0	433.5
2015	166.4	169.3	30.7	42.5	256.6	261.1	260.9	328.9	423.0	430.4
2016	180.6	175.1	39.5	31.7	259.6	260.9	293.1	225.8	440.2	436.0
2017			37.7	37.5			280.7	279.6	-	-

06-'11	-0.2%	0.1%	-10.1%	-6.5%	5.4%	5.7%	1.9%	-2.5%	3.2%	3.5%
11-'16	1.1%	1.5%	4.1%	-5.1%	-3.1%	-2.1%	-2.2%	-4.0%	-1.5%	-0.7%
06-'16	0.5%	0.8%	-3.3%	-5.8%	1.0%	1.7%	-0.2%	-3.2%	0.8%	1.3%

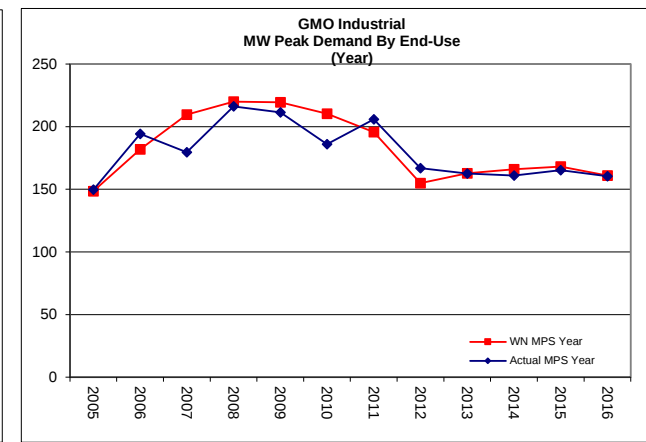
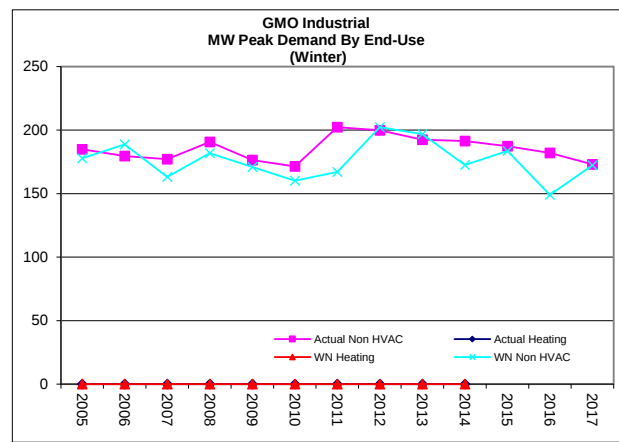
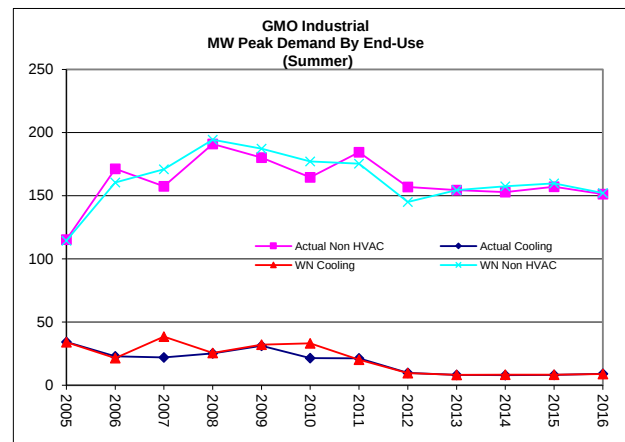


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-30 GMO Residential MW Peak Demand By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	34.3	34.0	-	-	115.3	114.5	184.8	177.8	149.6	148.5
2006	22.9	21.5	-	-	171.3	160.5	179.6	188.8	194.2	182.0
2007	22.1	38.5	-	-	157.5	171.0	177.1	163.1	179.6	209.5
2008	25.2	25.6	-	-	191.0	194.4	190.6	181.9	216.2	220.0
2009	31.3	32.1	-	-	180.2	187.3	176.4	171.0	211.4	219.4
2010	21.5	33.1	-	-	164.6	177.2	171.4	160.2	186.0	210.3
2011	21.3	20.3	-	-	184.5	175.5	202.3	167.0	205.9	195.7
2012	9.8	9.7	-	-	157.0	145.2	199.8	202.3	166.8	154.8
2013	8.2	8.2	-	-	154.4	154.5	192.5	196.9	162.6	162.7
2014	8.0	8.4	-	-	153.0	157.5	191.4	172.5	160.9	165.9
2015	8.2	8.30	-	-	157.1	159.84	187.3	183.5	165.3	168.1
2016	9.1	8.83	-	-	151.3	152.10	182.0	149.0	160.4	160.9
2017			-	-			173.1	172.4	-	-

06-'11	-1.4%	-1.1%			1.5%	1.8%	2.4%	-2.4%	1.2%	1.5%
11-'16	-15.7%	-15.3%			-3.9%	-2.8%	-2.1%	-2.3%	-4.9%	-3.8%
06-'16	-8.8%	-8.5%			-1.2%	-0.5%	0.1%	-2.3%	-1.9%	-1.2%

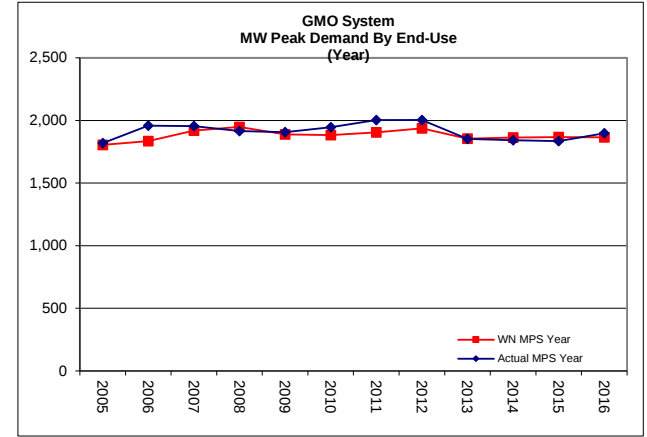
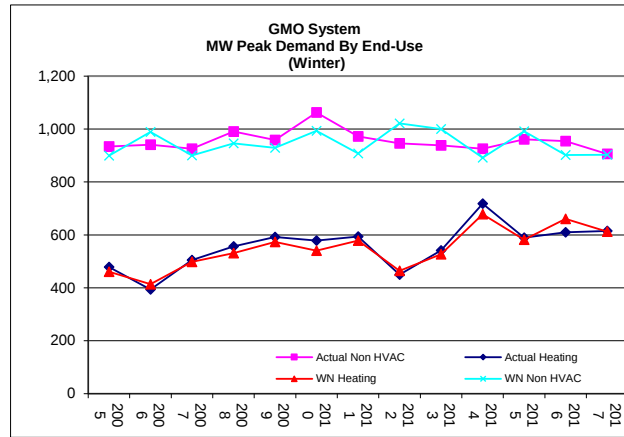
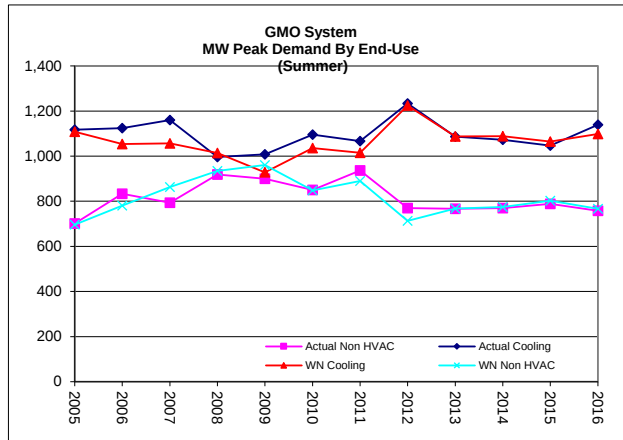


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-31 GMO Residential MW Peak Demand By End-Use
For classes that have end-use sales

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	1,117.0	1,108.7	478.8	460.7	701.4	696.2	934.5	899.1	1,818.4	1,804.9
2006	1,124.3	1,053.3	393.8	414.0	833.6	781.1	941.1	989.3	1,957.9	1,834.4
2007	1,160.3	1,056.6	505.0	498.1	793.6	863.1	926.0	900.6	1,953.9	1,919.7
2008	996.2	1,013.8	556.7	531.3	918.2	934.4	991.1	945.9	1,914.5	1,948.3
2009	1,007.8	928.1	591.8	573.6	899.5	960.8	958.4	928.9	1,907.3	1,888.9
2010	1,095.4	1,035.7	578.7	540.9	850.2	847.7	1,062.5	993.1	1,945.5	1,883.5
2011	1,066.9	1,014.5	594.2	579.0	936.3	890.3	971.9	907.7	2,003.3	1,904.7
2012	1,233.5	1,224.1	450.4	464.6	770.1	713.3	946.3	1,021.4	2,003.6	1,937.4
2013	1,086.6	1,087.3	541.4	526.7	766.8	767.2	938.7	999.9	1,853.3	1,854.5
2014	1,073.0	1,088.5	718.0	678.1	769.5	774.5	925.4	891.8	1,842.5	1,863.0
2015	1,046.2	1,064.5	589.8	582.2	788.3	802.1	961.1	991.6	1,834.6	1,866.5
2016	1,139.4	1,098.5	609.7	660.9	757.6	767.1	954.2	902.3	1,897.0	1,865.6
2017			615.1	612.7			906.0	902.4	-	-

06-'11	-1.0%	-0.7%	8.6%	6.9%	2.4%	2.7%	0.6%	-1.7%	0.5%	0.8%
11-'16	1.3%	1.6%	0.5%	2.7%	-4.1%	-2.9%	-0.4%	-0.1%	-1.1%	-0.4%
06-'16	0.1%	0.4%	4.5%	4.8%	-1.0%	-0.2%	0.1%	-0.9%	-0.3%	0.2%

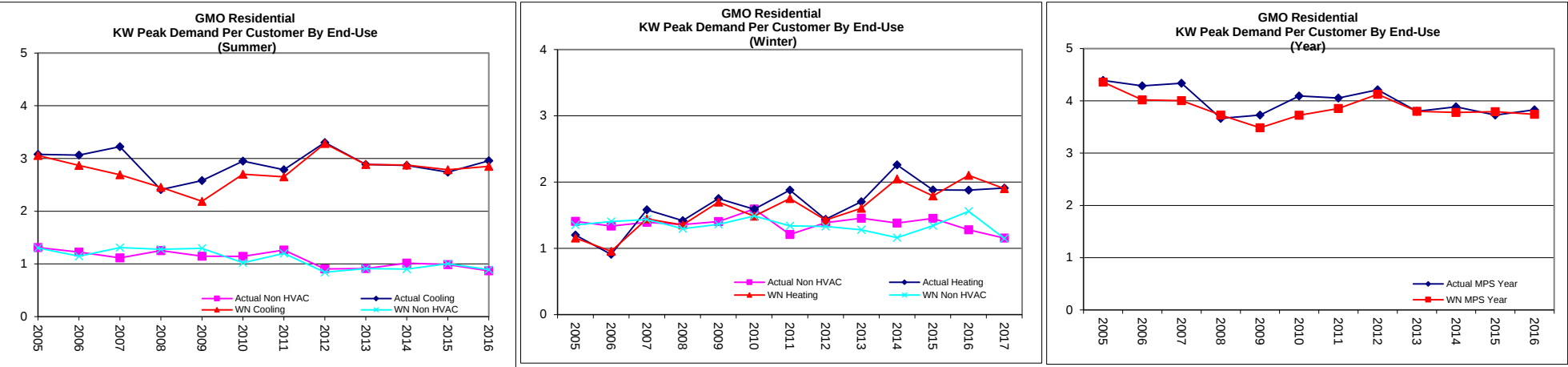


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-32 GMO Residential KW Peak Demand Per Customer By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	3.1	3.1	1.2	1.2	1.3	1.3	1.4	1.4	4.4	4.4
2006	3.1	2.9	0.9	1.0	1.2	1.1	1.3	1.4	4.3	4.0
2007	3.2	2.7	1.6	1.4	1.1	1.3	1.4	1.4	4.3	4.0
2008	2.4	2.5	1.4	1.4	1.3	1.3	1.4	1.3	3.7	3.7
2009	2.6	2.2	1.8	1.7	1.1	1.3	1.4	1.4	3.7	3.5
2010	2.9	2.7	1.6	1.5	1.1	1.0	1.6	1.5	4.1	3.7
2011	2.8	2.7	1.9	1.8	1.3	1.2	1.2	1.3	4.1	3.9
2012	3.3	3.3	1.4	1.4	0.9	0.8	1.4	1.3	4.2	4.1
2013	2.9	2.9	1.7	1.6	0.9	0.9	1.5	1.3	3.8	3.8
2014	2.9	2.9	2.3	2.0	1.0	0.9	1.4	1.2	3.9	3.8
2015	2.7	2.8	1.9	1.8	1.0	1.0	1.5	1.3	3.7	3.8
2016	3.0	2.9	1.9	2.1	0.9	0.9	1.3	1.6	3.8	3.7
2017			1.9	1.9			1.2	1.1		

06-'11	-1.9%	-1.6%	15.6%	12.9%	0.6%	0.9%	-2.0%	-0.9%	-1.1%	-0.8%
11-'16	1.2%	1.5%	0.0%	3.7%	-7.2%	-5.8%	1.1%	3.1%	-1.1%	-0.6%
06-'16	-0.3%	-0.1%	7.5%	8.2%	-3.4%	-2.5%	-0.4%	1.1%	-1.1%	-0.7%

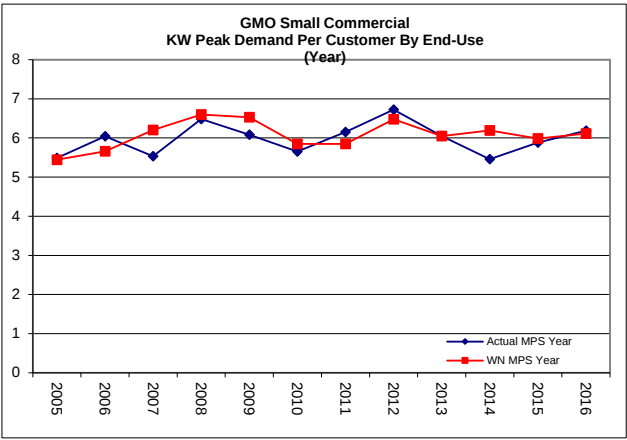
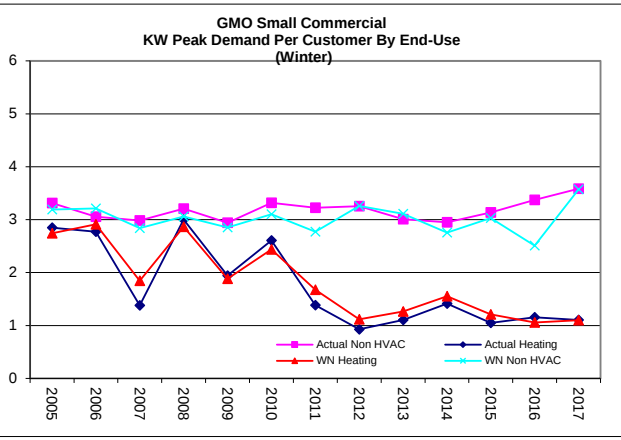
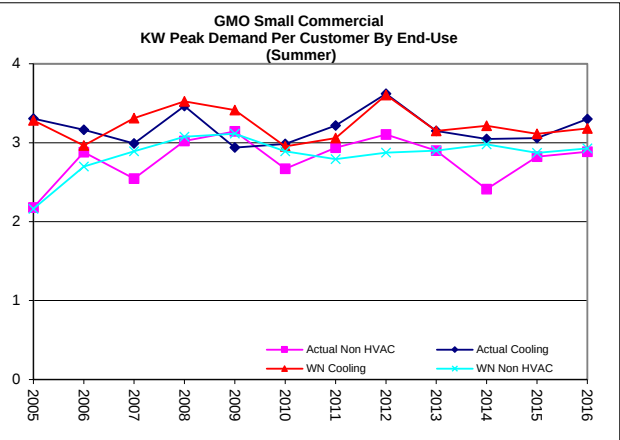


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-33 GMO Residential KW Peak Demand Per Customer By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	3.3	3.3	2.8	2.7	2.2	2.2	3.3	3.2	5.5	5.4
2006	3.2	3.0	2.8	2.9	2.9	2.7	3.1	3.2	6.0	5.7
2007	3.0	3.3	1.4	1.8	2.5	2.9	3.0	2.8	5.5	6.2
2008	3.5	3.5	3.0	2.9	3.0	3.1	3.2	3.1	6.5	6.6
2009	2.9	3.4	1.9	1.9	3.1	3.1	2.9	2.9	6.1	6.5
2010	3.0	3.0	2.6	2.4	2.7	2.9	3.3	3.1	5.7	5.8
2011	3.2	3.1	1.4	1.7	2.9	2.8	3.2	2.8	6.2	5.9
2012	3.6	3.6	0.9	1.1	3.1	2.9	3.3	3.3	6.7	6.5
2013	3.1	3.1	1.1	1.3	2.9	2.9	3.0	3.1	6.0	6.1
2014	3.0	3.2	1.4	1.6	2.4	3.0	3.0	2.8	5.5	6.2
2015	3.1	3.1	1.0	1.2	2.8	2.9	3.1	3.0	5.9	6.0
2016	3.3	3.2	1.2	1.1	2.9	2.9	3.4	2.5	6.2	6.1
2017			1.1	1.1			3.6	3.6		

06-'11	0.3%	0.6%	-13.0%	-10.5%	0.4%	0.7%	1.1%	-2.9%	0.4%	0.7%
11-'16	0.5%	0.8%	-3.5%	-8.8%	-0.3%	1.0%	0.9%	-2.0%	0.1%	0.9%
06-'16	0.4%	0.7%	-8.4%	-9.6%	0.0%	0.8%	1.0%	-2.4%	0.2%	0.8%

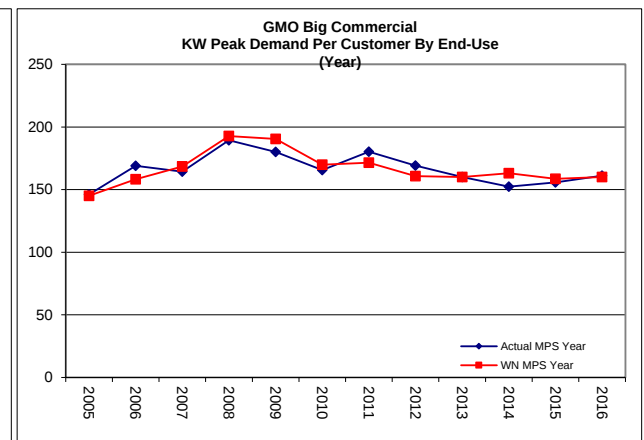
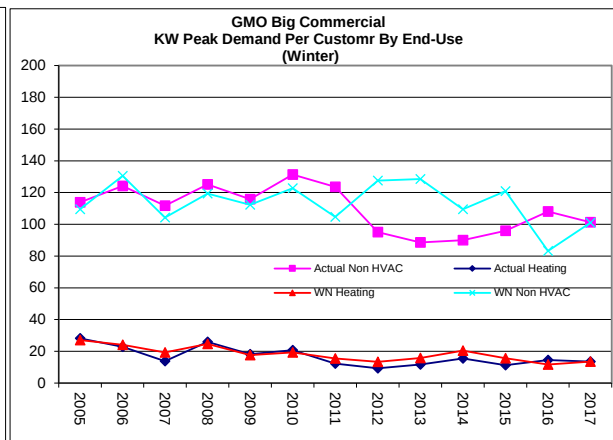
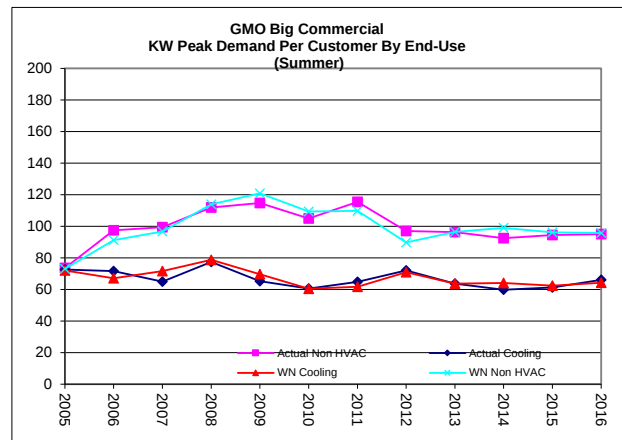


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-34 GMO Residential KW Peak Demand Per Customer By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	72.6	72.0	28.1	27.1	73.6	73.0	113.8	109.5	146.1	145.1
2006	71.6	67.1	22.9	24.0	97.4	91.3	124.2	130.5	169.0	158.3
2007	64.9	71.7	13.9	19.3	99.5	96.7	111.7	104.3	164.4	168.4
2008	77.4	78.8	25.9	24.7	112.0	113.9	125.1	119.4	189.4	192.7
2009	65.3	69.6	18.1	17.6	114.8	120.9	115.9	112.3	180.1	190.5
2010	60.6	60.5	20.7	19.4	104.9	109.4	131.3	122.7	165.5	169.9
2011	64.8	61.7	12.2	15.6	115.5	109.8	123.6	104.6	180.3	171.4
2012	72.1	71.0	9.3	13.4	97.1	89.7	95.0	127.6	169.2	160.7
2013	63.6	63.7	11.7	15.8	96.4	96.4	88.6	128.5	160.0	160.1
2014	59.8	64.1	15.5	20.4	92.5	99.0	90.0	109.5	152.3	163.2
2015	61.3	62.4	11.3	15.6	94.5	96.2	95.9	120.9	155.8	158.5
2016	66.1	64.3	14.6	11.7	95.0	95.8	108.0	83.2	161.1	160.1
2017			13.6	13.5			101.3	100.9		

06-'11	-2.0%	-1.7%	-11.8%	-8.3%	3.5%	3.8%	-0.1%	-4.3%	1.3%	1.6%
11-'16	0.4%	0.8%	3.6%	-5.6%	-3.8%	-2.7%	-2.7%	-4.5%	-2.2%	-1.4%
06-'16	-0.8%	-0.4%	-4.4%	-7.0%	-0.3%	0.5%	-1.4%	-4.4%	-0.5%	0.1%

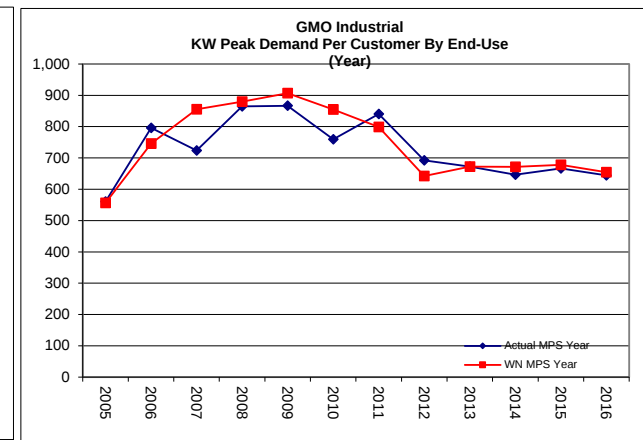
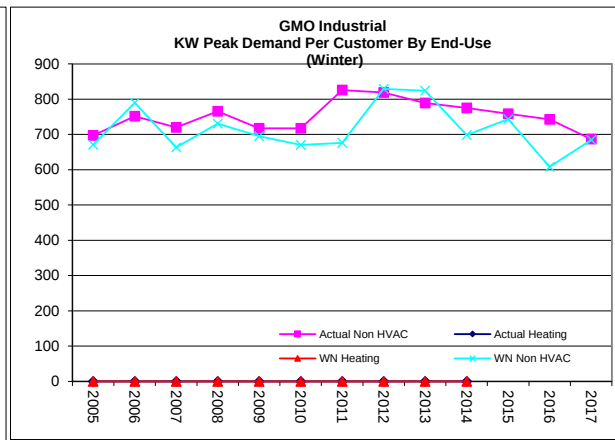
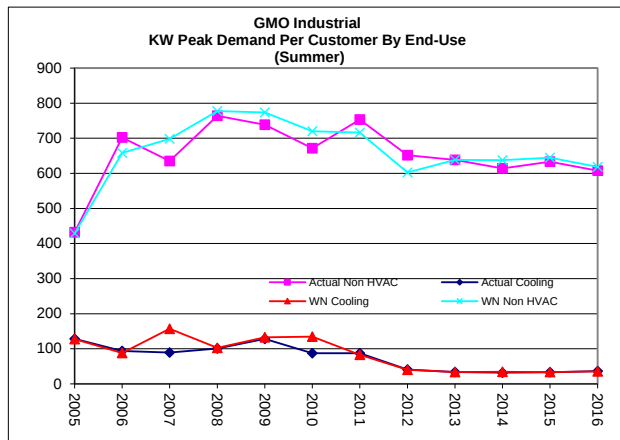


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-35 GMO Residential KW Peak Demand Per Customer By End-Use

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	128.4	127.5	-	-	432.0	428.8	697.3	670.9	560.4	556.3
2006	94.0	88.1	-	-	702.1	657.8	751.3	789.8	796.1	745.9
2007	89.1	157.1	-	-	634.9	698.2	719.9	663.2	724.0	855.3
2008	100.6	102.4	-	-	764.0	777.5	765.4	730.5	864.6	879.9
2009	128.2	132.7	-	-	738.4	774.0	717.0	695.0	866.6	906.7
2010	87.6	134.6	-	-	671.8	720.3	717.0	670.2	759.3	854.9
2011	87.1	82.8	-	-	753.2	716.1	825.6	676.3	840.3	798.9
2012	40.8	40.2	-	-	651.5	602.3	818.7	829.0	692.3	642.5
2013	34.0	34.0	-	-	638.0	638.4	788.8	823.9	672.0	672.4
2014	32.1	34.2	-	-	614.3	637.6	774.9	698.3	646.3	671.8
2015	32.9	33.5	-	-	633.5	644.5	758.4	743.1	666.4	678.0
2016	36.5	35.9	-	-	607.5	618.3	742.8	608.1	644.1	654.2
2017			-	-			686.7	684.1		

06-'11	-1.5%	-1.2%	#DIV/0!	#DIV/0!	1.4%	1.7%	1.9%	-3.1%	1.1%	1.4%
11-'16	-15.9%	-15.4%	#DIV/0!	#DIV/0!	-4.2%	-2.9%	-2.1%	-2.1%	-5.2%	-3.9%
06-'16	-9.0%	-8.6%	#DIV/0!	#DIV/0!	-1.4%	-0.6%	-0.1%	-2.6%	-2.1%	-1.3%

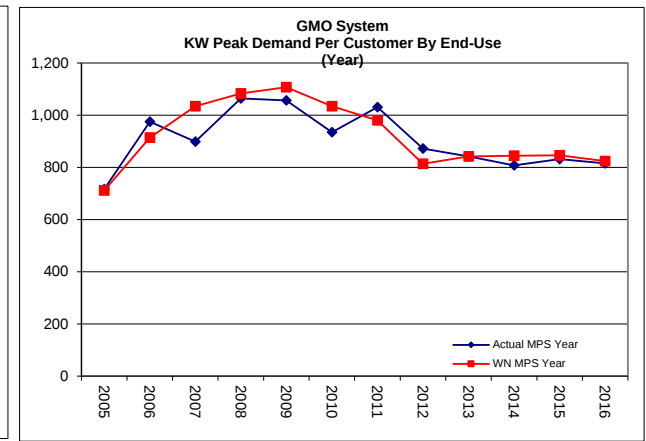
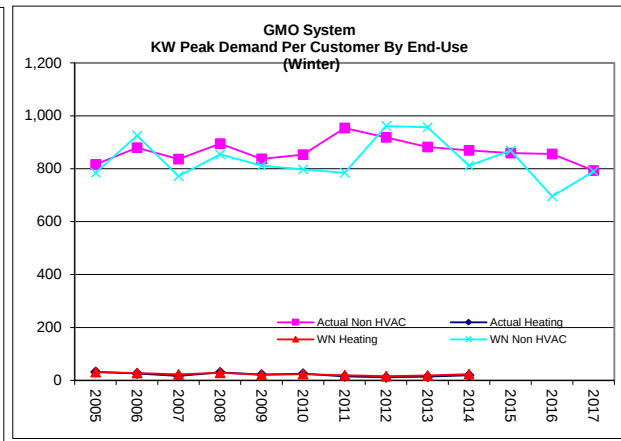
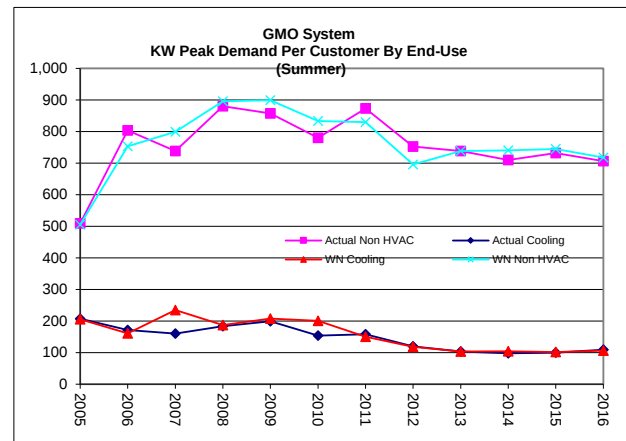


* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.

Plot 3A-36 GMO Residential KW Peak Demand Per Customer By End-Use
For classes that have end-use sales

Year	GMO									
	Cooling		Heating		Non-HVAC Summer		Non-HVAC Winter		Year	
	Actual	WN	Actual	WN	Actual	WN	Actual	WN	Actual	WN
2005	207.4	205.8	32.2	31.0	509.1	505.3	815.8	784.9	716.4	711.1
2006	171.8	160.9	26.5	27.9	803.6	752.9	879.8	924.9	975.4	913.9
2007	160.2	234.8	16.8	22.6	738.0	799.1	836.0	771.8	898.2	1,033.9
2008	183.9	187.2	30.3	28.9	880.3	895.8	895.0	854.2	1,064.2	1,083.0
2009	198.9	208.0	21.8	21.2	857.5	899.3	837.2	811.5	1,056.4	1,107.3
2010	154.1	200.8	24.9	23.3	780.5	833.6	853.3	797.5	934.6	1,034.4
2011	157.9	150.2	15.5	19.0	872.8	829.9	953.6	785.0	1,030.8	980.1
2012	119.9	118.1	11.7	15.9	752.5	695.7	918.4	961.2	872.4	813.8
2013	103.7	103.7	14.5	18.7	738.2	738.7	881.8	956.8	841.9	842.4
2014	97.8	104.4	19.2	24.0	710.1	740.5	869.3	811.8	808.0	844.9
2015	100.0	101.7	14.2	18.6	731.8	744.5	858.8	868.4	831.8	846.3
2016	108.9	106.2	17.6	14.9	706.3	717.9	855.5	695.4	815.2	824.1
2017			16.6	16.5			792.8	789.7		

06-'11	-1.7%	-1.4%	-10.2%	-7.4%	1.7%	2.0%	1.6%	-3.2%	1.1%	1.4%
11-'16	-7.2%	-6.7%	2.6%	-4.8%	-4.1%	-2.9%	-2.1%	-2.4%	-4.6%	-3.4%
06-'16	-4.5%	-4.1%	-4.0%	-6.1%	-1.3%	-0.5%	-0.3%	-2.8%	-1.8%	-1.0%



* 2017 Summer peaks are not include since they are projections. The peak month occurred after the June 2017 cut off.
Winter values are include since the peak occurred in January 2017.