

Kansas City Power & Light

Appendix 5L End-Use Measure Screening Test

MMP End-use Measure Screening Test Results
4_CSR_240-22.050_Appendix_5M.pdf

MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's)					Utility		Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Probable Environmental Benefits Test	
					Admin	Implem	Incent	Avoid Cost	Environmental Benefits	Cost	Test						
1	Aggressive	Aggressive	C&I Lighting	T-8 2ft 1 lamp_AG	\$ -	\$ -	\$ -	64,039 \$	77,941 \$	7,340	1.22	0.96	0.85	1.13	0.85	1.05	1.05
1	Aggressive	Normal	C&I Lighting	T-8 2ft 1 lamp_AG	\$ -	\$ -	\$ -	11,643 \$	77,941 \$	7,340	6.69	0.96	1.96	0.49	1.96	1.05	1.05
1	Normal	Aggressive	C&I Lighting	T-8 2ft 1 lamp_N	\$ -	\$ -	\$ -	42,605 \$	51,634 \$	4,883	1.21	0.96	0.84	1.14	0.84	1.05	1.05
1	Normal	Normal	C&I Lighting	T-8 2ft 1 lamp_N	\$ -	\$ -	\$ -	7,746 \$	51,634 \$	4,883	6.67	0.96	1.96	0.49	1.96	1.05	1.05
2	Aggressive	Aggressive	C&I Lighting	T-8 2ft 2 lamp_AG	\$ -	\$ -	\$ -	83,832 \$	116,911 \$	11,010	1.39	1.10	0.93	1.19	0.93	1.20	1.20
2	Aggressive	Normal	C&I Lighting	T-8 2ft 2 lamp_AG	\$ -	\$ -	\$ -	128,639 \$	116,911 \$	11,010	1.92	1.10	0.92	1.19	0.92	1.20	1.20
2	Normal	Aggressive	C&I Lighting	T-8 2ft 2 lamp_N	\$ -	\$ -	\$ -	46,479 \$	64,542 \$	6,104	1.39	1.10	0.93	1.19	0.93	1.20	1.20
2	Normal	Normal	C&I Lighting	T-8 2ft 2 lamp_N	\$ -	\$ -	\$ -	10,329 \$	64,542 \$	6,104	6.25	1.10	1.92	0.57	1.92	1.20	1.20
3	Aggressive	Aggressive	C&I Lighting	T-8 2ft 3 lamp_AG	\$ -	\$ -	\$ -	83,832 \$	155,881 \$	14,680	1.86	1.47	1.11	1.32	1.11	1.60	1.60
3	Aggressive	Normal	C&I Lighting	T-8 2ft 3 lamp_AG	\$ -	\$ -	\$ -	13,041 \$	155,881 \$	14,680	11.95	1.47	2.25	0.65	2.25	1.60	1.60
3	Normal	Aggressive	C&I Lighting	T-8 2ft 3 lamp_N	\$ -	\$ -	\$ -	55,774 \$	103,268 \$	9,766	1.95	1.47	1.11	1.32	1.11	1.61	1.61
3	Normal	Normal	C&I Lighting	T-8 2ft 3 lamp_N	\$ -	\$ -	\$ -	8,676 \$	103,268 \$	9,766	11.90	1.47	2.25	0.65	2.25	1.61	1.61
4	Aggressive	Aggressive	C&I Lighting	T-8 2ft 4 lamp_AG	\$ -	\$ -	\$ -	44,245 \$	85,735 \$	8,074	1.94	1.53	1.14	1.34	1.14	1.67	1.67
4	Aggressive	Normal	C&I Lighting	T-8 2ft 4 lamp_AG	\$ -	\$ -	\$ -	9,315 \$	85,735 \$	8,074	9.20	1.53	2.13	0.72	2.13	1.67	1.67
4	Normal	Aggressive	C&I Lighting	T-8 2ft 4 lamp_N	\$ -	\$ -	\$ -	29,437 \$	56,797 \$	5,372	1.93	1.53	1.14	1.34	1.14	1.67	1.67
4	Normal	Normal	C&I Lighting	T-8 2ft 4 lamp_N	\$ -	\$ -	\$ -	6,167 \$	56,797 \$	5,372	9.17	1.53	2.13	0.72	2.13	1.67	1.67
5	Aggressive	Aggressive	C&I Lighting	T-8 3ft 1 lamp_AG	\$ -	\$ -	\$ -	25,615 \$	42,867 \$	4,037	1.67	1.32	1.04	1.26	1.04	1.44	1.44
5	Aggressive	Normal	C&I Lighting	T-8 3ft 1 lamp_AG	\$ -	\$ -	\$ -	4,657 \$	42,867 \$	4,037	9.20	1.32	2.13	0.62	2.13	1.44	1.44
5	Normal	Aggressive	C&I Lighting	T-8 3ft 1 lamp_N	\$ -	\$ -	\$ -	17,042 \$	28,399 \$	2,686	1.67	1.32	1.04	1.27	1.04	1.44	1.44
5	Normal	Normal	C&I Lighting	T-8 3ft 1 lamp_N	\$ -	\$ -	\$ -	3,099 \$	28,399 \$	2,686	9.17	1.32	2.13	0.62	2.13	1.44	1.44
6	Aggressive	Aggressive	C&I Lighting	T-8 3ft 2 lamp_AG	\$ -	\$ -	\$ -	27,944 \$	38,970 \$	3,670	1.39	1.10	0.93	1.19	0.93	1.20	1.20
6	Aggressive	Normal	C&I Lighting	T-8 3ft 2 lamp_AG	\$ -	\$ -	\$ -	6,210 \$	38,970 \$	3,670	6.28	1.10	1.92	0.57	1.92	1.20	1.20
6	Normal	Aggressive	C&I Lighting	T-8 3ft 2 lamp_N	\$ -	\$ -	\$ -	18,591 \$	25,817 \$	2,442	1.39	1.10	0.93	1.19	0.93	1.20	1.20
6	Normal	Normal	C&I Lighting	T-8 3ft 2 lamp_N	\$ -	\$ -	\$ -	4,131 \$	25,817 \$	2,442	6.25	1.10	1.92	0.57	1.92	1.20	1.20
7	Aggressive	Aggressive	C&I Lighting	T-8 3ft 3 lamp_AG	\$ -	\$ -	\$ -	41,916 \$	46,764 \$	4,404	1.12	0.88	0.80	1.11	0.80	0.96	0.96
7	Aggressive	Normal	C&I Lighting	T-8 3ft 3 lamp_AG	\$ -	\$ -	\$ -	10,091 \$	46,764 \$	4,404	6.74	0.88	0.80	1.11	0.80	0.96	0.96
7	Normal	Aggressive	C&I Lighting	T-8 3ft 3 lamp_N	\$ -	\$ -	\$ -	27,887 \$	30,980 \$	2,930	1.11	0.88	0.79	1.11	0.79	0.96	0.96
7	Normal	Normal	C&I Lighting	T-8 3ft 3 lamp_N	\$ -	\$ -	\$ -	6,714 \$	30,980 \$	2,930	4.61	0.88	1.73	0.51	1.73	0.96	0.96
8	Aggressive	Aggressive	C&I Lighting	T-8 3ft 4 lamp_AG	\$ -	\$ -	\$ -	132,735 \$	233,822 \$	22,019	1.76	1.39	1.08	1.29	1.08	1.52	1.52
8	Aggressive	Normal	C&I Lighting	T-8 3ft 4 lamp_AG	\$ -	\$ -	\$ -	46,574 \$	233,822 \$	22,019	5.02	1.39	1.79	0.78	1.79	1.52	1.52
8	Normal	Aggressive	C&I Lighting	T-8 3ft 4 lamp_N	\$ -	\$ -	\$ -	80,309 \$	154,902 \$	14,650	1.78	1.39	1.07	1.29	1.07	1.52	1.52
8	Normal	Normal	C&I Lighting	T-8 3ft 4 lamp_N	\$ -	\$ -	\$ -	30,986 \$	154,902 \$	14,650	5.00	1.39	1.78	0.78	1.78	1.52	1.52
9	Aggressive	Aggressive	C&I Lighting	T-8 4ft 1 lamp_AG	\$ -	\$ -	\$ -	128,077 \$	272,792 \$	25,689	2.13	1.68	1.20	1.39	1.20	1.84	1.84
9	Aggressive	Normal	C&I Lighting	T-8 4ft 1 lamp_AG	\$ -	\$ -	\$ -	23,287 \$	272,792 \$	25,689	11.71	1.68	2.24	0.75	2.24	1.84	1.84
9	Normal	Aggressive	C&I Lighting	T-8 4ft 1 lamp_N	\$ -	\$ -	\$ -	85,211 \$	180,719 \$	17,091	2.12	1.68	1.20	1.40	1.20	1.84	1.84
9	Normal	Normal	C&I Lighting	T-8 4ft 1 lamp_N	\$ -	\$ -	\$ -	15,493 \$	180,719 \$	17,091	11.66	1.68	2.24	1.40	2.24	1.84	1.84
10	Aggressive	Aggressive	C&I Lighting	T-8 4ft 2 lamp_AG	\$ -	\$ -	\$ -	698,603 \$	1,656,237 \$	155,971	2.37	1.87	1.28	1.46	1.28	2.05	2.05
10	Aggressive	Normal	C&I Lighting	T-8 4ft 2 lamp_AG	\$ -	\$ -	\$ -	155,245 \$	1,656,237 \$	155,971	10.67	1.87	2.20	0.85	2.20	2.05	2.05
10	Normal	Aggressive	C&I Lighting	T-8 4ft 2 lamp_N	\$ -	\$ -	\$ -	464,787 \$	1,097,220 \$	103,769	2.36	1.87	1.28	1.47	1.28	2.05	2.05
10	Normal	Normal	C&I Lighting	T-8 4ft 2 lamp_N	\$ -	\$ -	\$ -	103,286 \$	1,097,220 \$	103,769	10.62	1.87	2.20	0.85	2.20	2.05	2.05
11	Aggressive	Aggressive	C&I Lighting	T-8 4ft 3 lamp_AG	\$ -	\$ -	\$ -	209,951 \$	623,524 \$	58,719	2.98	2.35	1.44	1.63	1.44	2.57	2.57
11	Aggressive	Normal	C&I Lighting	T-8 4ft 3 lamp_AG	\$ -	\$ -	\$ -	69,860 \$	623,524 \$	58,719	8.93	2.35	2.12	1.11	2.12	2.57	2.57
11	Normal	Aggressive	C&I Lighting	T-8 4ft 3 lamp_N	\$ -	\$ -	\$ -	139,436 \$	413,071 \$	39,066	2.96	2.35	1.43	1.64	1.43	2.57	2.57
11	Normal	Normal	C&I Lighting	T-8 4ft 3 lamp_N	\$ -	\$ -	\$ -	46,479 \$	413,071 \$	39,066	8.89	2.35	2.11	1.11	2.11	2.57	2.57
12	Aggressive	Aggressive	C&I Lighting	T-8 4ft 4 lamp_AG	\$ -	\$ -	\$ -	884,897 \$	2,961,741 \$	278,913	3.35	2.64	1.52	1.74	1.52	2.89	2.89
12	Aggressive	Normal	C&I Lighting	T-8 4ft 4 lamp_AG	\$ -	\$ -	\$ -	341,539 \$	2,961,741 \$	278,913	6.71	2.64	2.10	1.26	2.10	2.89	2.89
12	Normal	Aggressive	C&I Lighting	T-8 4ft 4 lamp_N	\$ -	\$ -	\$ -	588,730 \$	1,962,087 \$	185,563	3.33	2.64	1.51	1.74	1.51	2.89	2.89
12	Normal	Normal	C&I Lighting	T-8 4ft 4 lamp_N	\$ -	\$ -	\$ -	227,229 \$	1,962,087 \$	185,563	8.63	2.64	2.10	1.26	2.10	2.89	2.89
13	Aggressive	Aggressive	C&I Lighting	T-8 8ft 2 lamp_AG	\$ -	\$ -	\$ -	62,874 \$	116,911 \$	11,010	1.86	1.47	1.11	1.32	1.11	1.60	1.60
13	Aggressive	Normal	C&I Lighting	T-8 8ft 2 lamp_AG	\$ -	\$ -	\$ -	16,301 \$	116,911 \$	11,010	7.17	1.47	2.00	0.73	2.00	1.60	1.60
13	Normal	Aggressive	C&I Lighting	T-8 8ft 2 lamp_N	\$ -	\$ -	\$ -	41,931 \$	77,451 \$	7,325	1.85	1.47	1.11	1.32	1.11	1.61	1.61
13	Normal	Normal	C&I Lighting	T-8 8ft 2 lamp_N	\$ -	\$ -	\$ -	10,845 \$	77,451 \$	7,325	7.14	1.47	2.00	0.73	2.00	1.61	1.61
14	Aggressive	Aggressive	C&I Lighting	T-8 8ft 1 lamp_AG	\$ -	\$ -	\$ -	58,217 \$	64,301 \$	6,055	1.10	0.87	0.79	1.10	0.79	0.96	0.96
14	Aggressive	Normal	C&I Lighting	T-8 8ft 1 lamp_AG	\$ -	\$ -	\$ -	11,643 \$	64,301 \$	6,055	5.52	0.87	1.85	0.47	1.85	0.96	0.96
14	Normal	Aggressive	C&I Lighting	T-8 8ft 1 lamp_N	\$ -	\$ -	\$ -	38,732 \$	42,598 \$	4,029	1.10	0.87	0.79	1.11	0.79	0.96	0.96
14	Normal	Normal	C&I Lighting	T-8 8ft 1 lamp_N	\$ -	\$ -	\$ -	7,746 \$	42,598 \$	4,029	5.50	0.87	1.84	0.47	1.84	0.96	0.96
15	Aggressive	Aggressive	C&I Lighting	T-8 HO 8 ft 1 Lamp_AG	\$ -	\$ -	\$ -	51,231 \$	97,426 \$	9,175	1.90	1.50	1.13	1.33	1.13	1.64	1.64
15	Aggressive	Normal	C&I Lighting	T-8 HO 8 ft 1 Lamp_AG	\$ -	\$ -	\$ -	15,525 \$	97,426 \$	9,175	6.28	1.50	1.92	0.78	1.92	1.64	1.64
15	Normal	Aggressive	C&I Lighting	T-8 HO 8 ft 1 Lamp_N	\$ -	\$ -	\$ -	34,084 \$	64,542 \$	6,104	1.89	1.50	1.13	1.33	1.13	1.64	1.64
15	Normal	Normal	C&I Lighting	T-8 HO 8 ft 1 Lamp_N	\$ -	\$ -	\$ -	10,329 \$	64,542 \$	6,104	6.25	1.50	1.92	0.78	1.92	1.64	1.64
16	Aggressive	Aggressive	C&I Lighting	T-8 HO 8 ft 2 Lamp_AG	\$ -	\$ -	\$ -	55,888 \$	194,851 \$	18,350	3.49	2.75	1.54	1.78	1.54	3.01	3.01
16	Aggressive	Normal	C&I Lighting	T-8 HO 8 ft 2 Lamp_AG	\$ -	\$ -	\$ -	21,734 \$	194,851 \$	18,350	8.97	2.75	2.12	1.30	2.12	3.01	3.01
16	Normal	Aggressive	C&I Lighting	T-8 HO 8 ft 2 Lamp_N	\$ -	\$ -	\$ -	37,183 \$	129,085 \$	12,208	3.47	2.75	1.54	1.78	1.54	3.01	3.01
16	Normal	Normal	C&I Lighting	T-8 HO 8 ft 2 Lamp_N	\$ -	\$ -	\$ -	14,460 \$	129,085 \$	12,208	8.93	2.75	2.12	1.30	2.12	3.01	3.01
17	Aggressive	Aggressive	C&I Lighting	Low Watt T8 lamps_AG	\$ -	\$ -	\$ -	19,406 \$	221,275 \$	21,939	11.40	4.50	2.23	2.02	2.23	4.94	4.94
17	Aggressive	Normal	C&I Lighting	Low Watt T8 lamps_AG	\$ -	\$ -	\$ -	19,406 \$	221,275 \$	21,939	11.40	4.50	2.23	2.02	2.23	4.94	4.94
17	Normal	Aggressive	C&I Lighting	Low Watt T8 lamps_N	\$ -	\$ -	\$ -	12,911 \$	146,590 \$	14,596	11.35	4.50	2.23	2.02	2.23	4.95	4.95
17	Normal	Normal	C&I Lighting	Low Watt T8 lamps_N	\$ -	\$ -	\$ -	12,911 \$	146,590 \$	14,596	11.35	4.50	2.23	2.02	2.23	4.95	4.95
18	Aggressive	Aggressive	C&I Lighting	1 Lamp T-5 with Elec Ballast replacing T-12_AC	\$ -	\$ -	\$ -	5,297 \$	5,284 \$	501	1.00	0.80	0.73	1.09	0.73	0.88	0.88
18	Aggressive	Normal	C&I Lighting	1 Lamp T-5 with Elec Ballast replacing T-12_AC	\$ -	\$ -	\$ -	883 \$	5,284 \$	501	5.99	0.80	1.90	0.42	1.90	0.88	0.88
18	Normal	Aggressive	C&I Lighting	1 Lamp T-5 with Elec Ballast replacing T-12_N	\$ -	\$ -	\$ -	3,967 \$	3,967 \$	377	1.00	0.73	0.66	1.09	0.66	0.88	0.88
18	Normal	Normal	C&I Lighting	1 Lamp T-5 with Elec Ballast replacing T-12_N	\$ -	\$ -	\$ -	664 \$	3,967 \$	377	5.97	0.80	1.89	0.42	1.89	0.88	0.88
19	Aggressive	Aggressive	C&I Lighting	2 Lamp T-5 replacing T-12_AG	\$ -	\$ -	\$ -	6,533 \$	5,284 \$	501	0.81	0.64	0.63	1.02	0.63	0.70	0.

MMP End-use Measure Screening Test Results
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MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's)	NPV (Today's)	NPV (Today's)	NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits	Utility	Total	RIM	Participant Test	RIM Net Fuel	Probable			
					Admin	Implem	Incent			Cost						Test	Resource Cost	Environmental
24	Normal	Aggressive	C&I Lighting	3 Lamp T-5HO replacing T-12_N	\$	\$	\$	5,842	\$	4,132	\$	392	0.71	0.57	0.56	1.00	0.56	0.62
24	Normal	Normal	C&I Lighting	3 Lamp T-5HO replacing T-12_N	\$	\$	\$	730	\$	4,132	\$	392	0.56	0.57	1.86	0.30	1.86	0.62
25	Aggressive	Aggressive	C&I Lighting	4 Lamp T-5HO replacing T-12_AG	\$	\$	\$	9,888	\$	11,449	\$	1,085	1.16	0.92	0.82	1.12	0.82	1.00
25	Aggressive	Normal	C&I Lighting	4 Lamp T-5HO replacing T-12_AG	\$	\$	\$	1,148	\$	11,449	\$	1,085	0.98	0.92	2.17	0.42	2.17	1.00
25	Normal	Aggressive	C&I Lighting	4 Lamp T-5HO replacing T-12_N	\$	\$	\$	7,435	\$	8,594	\$	816	1.16	0.92	0.82	1.12	0.82	1.00
25	Normal	Normal	C&I Lighting	4 Lamp T-5HO replacing T-12_N	\$	\$	\$	863	\$	8,594	\$	816	0.96	0.92	2.17	0.42	2.17	1.00
26	Aggressive	Aggressive	C&I Lighting	High Bay 3L T5HO_AG	\$	\$	\$	55,888	\$	209,043	\$	20,779	3.74	2.53	1.62	1.56	2.78	2.78
26	Aggressive	Normal	C&I Lighting	High Bay 3L T5HO_AG	\$	\$	\$	24,839	\$	209,043	\$	20,779	8.42	2.53	2.13	1.19	2.13	2.78
26	Normal	Aggressive	C&I Lighting	High Bay 3L T5HO_N	\$	\$	\$	31,866	\$	118,208	\$	11,847	3.71	2.53	1.61	1.57	1.61	2.78
26	Normal	Normal	C&I Lighting	High Bay 3L T5HO_N	\$	\$	\$	14,163	\$	118,208	\$	11,847	8.35	2.53	2.12	1.19	2.12	2.78
27	Aggressive	Aggressive	C&I Lighting	High Bay 4LT5HO_AG	\$	\$	\$	745,176	\$	5,080,918	\$	505,036	16.92	4.61	2.01	2.30	2.01	5.07
27	Aggressive	Normal	C&I Lighting	High Bay 4LT5HO_AG	\$	\$	\$	388,113	\$	5,080,918	\$	505,036	13.09	4.61	2.34	1.97	2.34	5.07
27	Normal	Aggressive	C&I Lighting	High Bay 4LT5HO_N	\$	\$	\$	424,883	\$	2,873,121	\$	287,960	6.76	4.61	2.00	2.30	2.00	5.07
27	Normal	Normal	C&I Lighting	High Bay 4LT5HO_N	\$	\$	\$	221,293	\$	2,873,121	\$	287,960	12.98	4.61	2.34	1.97	2.34	5.07
28	Aggressive	Aggressive	C&I Lighting	High Bay 6L T5HO_AG	\$	\$	\$	679,197	\$	1,088,768	\$	108,222	1.60	1.08	1.03	1.06	1.03	1.19
28	Aggressive	Normal	C&I Lighting	High Bay 6L T5HO_AG	\$	\$	\$	155,245	\$	1,088,768	\$	108,222	7.01	1.08	2.03	0.54	2.03	1.19
28	Normal	Aggressive	C&I Lighting	High Bay 6L T5HO_N	\$	\$	\$	387,263	\$	615,669	\$	61,706	1.59	1.08	1.02	1.06	1.02	1.19
28	Normal	Normal	C&I Lighting	High Bay 6L T5HO_N	\$	\$	\$	88,517	\$	615,669	\$	61,706	6.96	1.08	2.02	0.54	2.02	1.19
29	Aggressive	Aggressive	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_AC	\$	\$	\$	271,679	\$	846,820	\$	84,173	3.12	2.11	1.49	1.42	1.49	2.32
29	Aggressive	Normal	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_AC	\$	\$	\$	93,147	\$	846,820	\$	84,173	9.09	2.11	2.17	0.97	2.17	2.32
29	Normal	Aggressive	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_I	\$	\$	\$	154,905	\$	478,854	\$	47,993	3.09	2.11	1.48	1.42	1.48	2.32
29	Normal	Normal	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_I	\$	\$	\$	53,110	\$	478,854	\$	47,993	9.02	2.11	2.16	0.97	2.16	2.32
30	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 4LF32T8_AC	\$	\$	\$	155,245	\$	895,209	\$	88,982	5.77	3.90	1.91	2.05	1.91	4.29
30	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 4LF32T8_AC	\$	\$	\$	77,623	\$	895,209	\$	88,982	11.53	3.90	2.28	1.71	2.28	4.29
30	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 4LF32T8_N	\$	\$	\$	88,517	\$	506,217	\$	50,736	5.72	3.90	1.90	2.05	1.90	4.29
30	Normal	Normal	C&I Lighting	High Bay Fluorescent 4LF32T8_N	\$	\$	\$	14,259	\$	506,217	\$	50,736	11.44	3.90	2.28	1.71	2.28	4.29
31	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 6LF32T8_AC	\$	\$	\$	2,328,676	\$	27,945,049	\$	2,777,697	12.00	6.08	2.30	2.64	2.30	6.69
31	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 6LF32T8_AC	\$	\$	\$	1,940,564	\$	27,945,049	\$	2,777,697	14.40	6.08	2.38	2.56	2.38	6.69
31	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 6LF32T8_N	\$	\$	\$	1,327,759	\$	15,802,168	\$	1,583,780	11.90	6.08	2.30	2.65	2.30	6.69
31	Normal	Normal	C&I Lighting	High Bay Fluorescent 6LF32T8_N	\$	\$	\$	1,106,465	\$	15,802,168	\$	1,583,780	14.28	6.08	2.37	2.56	2.37	6.69
32	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8_AC	\$	\$	\$	1,552,451	\$	7,548,792	\$	750,339	14.86	6.08	2.37	2.56	2.37	6.69
32	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8_AC	\$	\$	\$	620,980	\$	7,548,792	\$	750,339	12.16	6.08	2.31	1.42	2.31	3.61
32	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8_N	\$	\$	\$	885,172	\$	4,268,638	\$	427,826	4.82	3.29	1.79	1.84	1.79	3.62
32	Normal	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8_N	\$	\$	\$	354,069	\$	4,268,638	\$	427,826	12.06	3.29	2.30	1.43	2.30	3.62
33	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_AC	\$	\$	\$	310,490	\$	2,332,383	\$	231,835	7.51	5.08	2.06	2.46	2.06	5.58
33	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_AC	\$	\$	\$	186,294	\$	2,332,383	\$	231,835	12.52	5.08	2.32	2.19	2.32	5.58
33	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_I	\$	\$	\$	177,034	\$	1,318,900	\$	132,187	7.45	5.08	2.06	2.47	2.06	5.59
33	Normal	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_I	\$	\$	\$	106,221	\$	1,318,900	\$	132,187	12.42	5.08	2.32	2.19	2.32	5.59
34	Aggressive	Aggressive	C&I Lighting	42W 8 Lamp Hi Bay CFL_AG	\$	\$	\$	23,543	\$	32,488	\$	3,080	1.38	0.83	0.92	0.90	0.92	0.91
34	Aggressive	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_AG	\$	\$	\$	5,886	\$	32,488	\$	3,080	5.52	0.83	1.85	0.45	1.85	0.91
34	Normal	Aggressive	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	\$	\$	\$	17,703	\$	24,387	\$	2,316	1.38	0.83	0.92	0.90	0.92	0.91
34	Normal	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	\$	\$	\$	4,426	\$	24,387	\$	2,316	5.51	0.83	1.84	0.45	1.84	0.91
35	Aggressive	Aggressive	C&I Lighting	Pulse Start Metal Halide -retrofit only_AC	\$	\$	\$	154,503	\$	445,789	\$	45,465	2.89	2.29	1.42	1.61	1.42	2.52
35	Aggressive	Normal	C&I Lighting	Pulse Start Metal Halide -retrofit only_AC	\$	\$	\$	51,501	\$	445,789	\$	45,465	8.66	2.29	2.12	1.08	2.12	2.52
35	Normal	Aggressive	C&I Lighting	Pulse Start Metal Halide -retrofit only_I	\$	\$	\$	116,179	\$	334,636	\$	34,188	2.88	2.29	1.42	1.61	1.42	2.52
35	Normal	Normal	C&I Lighting	Pulse Start Metal Halide -retrofit only_I	\$	\$	\$	38,726	\$	334,636	\$	34,188	6.94	2.29	2.12	1.08	2.12	2.52
36	Aggressive	Aggressive	C&I Lighting	CFL Fixture_AG	\$	\$	\$	42,692	\$	667,820	\$	61,722	15.64	8.04	2.36	3.41	2.36	8.79
36	Aggressive	Normal	C&I Lighting	CFL Fixture_AG	\$	\$	\$	42,692	\$	667,820	\$	61,722	15.64	8.04	2.36	3.41	2.36	8.79
36	Normal	Aggressive	C&I Lighting	CFL Fixture_N	\$	\$	\$	24,342	\$	377,634	\$	35,193	15.51	8.04	2.35	3.42	2.35	8.79
36	Normal	Normal	C&I Lighting	CFL Fixture_N	\$	\$	\$	24,342	\$	377,634	\$	35,193	15.51	8.04	2.35	3.42	2.35	8.79
37	Aggressive	Aggressive	C&I Lighting	CFL Screw_in_AG	\$	\$	\$	232,868	\$	4,311,520	\$	442,335	18.51	12.98	2.41	5.38	2.41	14.31
37	Aggressive	Normal	C&I Lighting	CFL Screw_in_AG	\$	\$	\$	132,776	\$	2,438,047	\$	252,209	18.51	12.98	2.41	5.38	2.41	14.31
37	Normal	Aggressive	C&I Lighting	CFL Screw_in_N	\$	\$	\$	132,776	\$	2,438,047	\$	252,209	18.36	12.98	2.41	5.39	2.41	14.32
37	Normal	Normal	C&I Lighting	CFL Screw_in_N	\$	\$	\$	132,776	\$	2,438,047	\$	252,209	18.36	12.98	2.41	5.39	2.41	14.32
38	Aggressive	Aggressive	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AC	\$	\$	\$	194,056	\$	2,582,078	\$	224,545	13.31	8.39	2.42	3.47	2.42	9.12
38	Aggressive	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AC	\$	\$	\$	194,056	\$	2,582,078	\$	224,545	13.31	8.39	2.42	3.47	2.42	9.12
38	Normal	Aggressive	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_I	\$	\$	\$	129,107	\$	1,710,569	\$	149,392	13.25	8.39	2.42	3.47	2.42	9.13
38	Normal	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_I	\$	\$	\$	129,107	\$	1,710,569	\$	149,392	13.25	8.39	2.42	3.47	2.42	9.13
39	Aggressive	Aggressive	C&I Lighting	Occupancy Sensors under 500 W_AG	\$	\$	\$	11,772	\$	150,921	\$	14,040	12.82	2.71	2.28	1.19	2.28	2.97
39	Aggressive	Normal	C&I Lighting	Occupancy Sensors under 500 W_AG	\$	\$	\$	5,886	\$	150,921	\$	14,040	25.64	2.71	2.50	1.08	2.50	2.97
39	Normal	Aggressive	C&I Lighting	Occupancy Sensors under 500 W_N	\$	\$	\$	8,952	\$	113,290	\$	10,558	12.82	5.43	2.28	2.38	2.28	5.93
39	Normal	Normal	C&I Lighting	Occupancy Sensors under 500 W_N	\$	\$	\$</											

MMP End-use Measure Screening Test Results
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MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's)		NPV (Today's)		NPV (Today's)		NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits	Utility Cost		Total	Participant Test	RIM Net Fuel	Environmental Benefits Test
					Admin	Implem	Incent	Cost	Resource Cost	RIM								
48	Aggressive	Aggressive	C&I HVAC	Sleeve AC over 14,000 Btu/hr_AC	\$	-	\$	2,207	\$	35,684	\$	2,299	16.17	8.56	2.96	2.89	2.96	9.11
48	Aggressive	Normal	C&I HVAC	Sleeve AC over 14,000 Btu/hr_AC	\$	-	\$	2,207	\$	35,684	\$	2,299	16.17	8.56	2.96	2.89	2.96	9.11
48	Normal	Aggressive	C&I HVAC	Sleeve AC over 14,000 Btu/hr_	\$	-	\$	1,660	\$	26,786	\$	1,729	16.14	8.56	2.96	2.89	2.96	9.11
48	Normal	Normal	C&I HVAC	Sleeve AC over 14,000 Btu/hr_	\$	-	\$	1,660	\$	26,786	\$	1,729	16.14	8.56	2.96	2.89	2.96	9.11
49	Aggressive	Aggressive	C&I HVAC	HP Water Heater 500 gal_day_AC	\$	-	\$	206,003	\$	592,951	\$	40,906	2.86	1.52	1.47	1.04	1.47	1.63
49	Aggressive	Normal	C&I HVAC	HP Water Heater 500 gal_day_AC	\$	-	\$	206,003	\$	592,951	\$	40,906	2.88	1.52	1.47	1.04	1.47	1.63
49	Normal	Aggressive	C&I HVAC	HP Water Heater 500 gal_day_	\$	-	\$	154,905	\$	445,104	\$	30,759	2.87	1.52	1.47	1.04	1.47	1.63
49	Normal	Normal	C&I HVAC	HP Water Heater 500 gal_day_	\$	-	\$	154,905	\$	445,104	\$	30,759	2.87	1.52	1.47	1.04	1.47	1.63
50	Aggressive	Aggressive	C&I HVAC	HP Water Heater 1000 gal_day_AC	\$	-	\$	147,145	\$	1,358,305	\$	96,258	9.23	4.89	2.55	1.91	2.55	5.23
50	Aggressive	Normal	C&I HVAC	HP Water Heater 1000 gal_day_AC	\$	-	\$	147,145	\$	1,358,305	\$	96,258	9.23	4.89	2.55	1.91	2.55	5.23
50	Normal	Aggressive	C&I HVAC	HP Water Heater 1000 gal_day_	\$	-	\$	110,647	\$	1,019,625	\$	71,629	9.22	4.89	2.55	1.91	2.55	5.23
50	Normal	Normal	C&I HVAC	HP Water Heater 1000 gal_day_	\$	-	\$	110,647	\$	1,019,625	\$	71,629	9.22	4.89	2.55	1.91	2.55	5.23
51	Aggressive	Aggressive	C&I HVAC	HP Water Heater 1500 gal_day_AC	\$	-	\$	123,602	\$	1,225,902	\$	85,972	9.92	5.25	2.60	2.02	2.60	5.62
51	Aggressive	Normal	C&I HVAC	HP Water Heater 1500 gal_day_AC	\$	-	\$	123,602	\$	1,225,902	\$	85,972	9.92	5.25	2.60	2.02	2.60	5.62
51	Normal	Aggressive	C&I HVAC	HP Water Heater 1500 gal_day_	\$	-	\$	92,943	\$	920,235	\$	64,647	9.90	5.25	2.60	2.02	2.60	5.62
51	Normal	Normal	C&I HVAC	HP Water Heater 1500 gal_day_	\$	-	\$	92,943	\$	920,235	\$	64,647	9.90	5.25	2.60	2.02	2.60	5.62
52	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 1-5 HP - Incentives per HP_AC	\$	-	\$	1,368	\$	3,372	\$	309	2.46	1.68	1.29	1.30	1.29	1.83
52	Aggressive	Normal	C&I Motors	DRIVES_Motors 1-5 HP - Incentives per HP_AC	\$	-	\$	853	\$	3,372	\$	309	3.95	1.68	1.61	1.04	1.61	1.83
52	Normal	Aggressive	C&I Motors	DRIVES_Motors 1-5 HP - Incentives per HP_	\$	-	\$	1,029	\$	2,531	\$	233	2.46	1.68	1.29	1.30	1.29	1.83
52	Normal	Normal	C&I Motors	DRIVES_Motors 1-5 HP - Incentives per HP_	\$	-	\$	842	\$	2,531	\$	233	3.94	1.68	1.61	1.04	1.61	1.83
53	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_AC	\$	-	\$	3,084	\$	9,103	\$	825	2.95	1.58	1.43	1.10	1.43	1.72
53	Aggressive	Normal	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_AC	\$	-	\$	3,084	\$	9,103	\$	825	2.95	1.58	1.43	1.10	1.43	1.72
53	Normal	Aggressive	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_	\$	-	\$	2,319	\$	6,133	\$	620	2.95	1.58	1.43	1.10	1.43	1.72
53	Normal	Normal	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_	\$	-	\$	2,319	\$	6,133	\$	620	2.95	1.58	1.43	1.10	1.43	1.72
54	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_AC	\$	-	\$	4,785	\$	18,965	\$	1,794	3.96	2.07	1.65	1.26	1.65	2.26
54	Aggressive	Normal	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_AC	\$	-	\$	4,785	\$	18,965	\$	1,794	3.96	2.07	1.65	1.26	1.65	2.26
54	Normal	Aggressive	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_	\$	-	\$	3,598	\$	14,236	\$	1,349	3.96	2.07	1.64	1.26	1.64	2.26
54	Normal	Normal	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_	\$	-	\$	3,598	\$	14,236	\$	1,349	3.96	2.07	1.64	1.26	1.64	2.26
55	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_AC	\$	-	\$	9,653	\$	28,774	\$	2,953	7.22	2.07	1.45	1.43	1.45	2.27
55	Aggressive	Normal	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_AC	\$	-	\$	9,653	\$	28,774	\$	2,953	7.22	2.07	1.45	1.43	1.45	2.27
55	Normal	Aggressive	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_	\$	-	\$	7,258	\$	21,600	\$	2,047	2.98	2.07	1.45	1.43	1.45	2.27
55	Normal	Normal	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_	\$	-	\$	7,258	\$	21,600	\$	2,047	2.98	2.07	1.45	1.43	1.45	2.27
56	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 1.5, AG	\$	-	\$	22,722	\$	17,522	\$	1,609	0.77	0.52	0.60	0.87	0.60	0.57
56	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 1.5, AG	\$	-	\$	22,722	\$	17,522	\$	1,609	0.77	0.52	0.60	0.87	0.60	0.57
56	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 1.5, N	\$	-	\$	17,085	\$	13,153	\$	1,210	0.77	0.52	0.60	0.87	0.60	0.57
56	Normal	Normal	C&I Motors	DRIVES_VFD HP 1.5, N	\$	-	\$	17,085	\$	13,153	\$	1,210	0.77	0.52	0.60	0.87	0.60	0.57
57	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 2, AG	\$	-	\$	23,370	\$	23,339	\$	2,145	1.00	0.68	0.73	0.93	0.73	0.74
57	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 2, AG	\$	-	\$	23,370	\$	23,339	\$	2,145	1.00	0.68	0.73	0.93	0.73	0.74
57	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 2, N	\$	-	\$	17,522	\$	17,522	\$	1,613	1.00	0.68	0.73	0.93	0.73	0.74
57	Normal	Normal	C&I Motors	DRIVES_VFD HP 2, N	\$	-	\$	17,522	\$	17,522	\$	1,613	1.00	0.68	0.73	0.93	0.73	0.74
58	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 3, AG	\$	-	\$	24,104	\$	34,825	\$	3,217	1.44	0.98	0.94	1.04	0.94	1.07
58	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 3, AG	\$	-	\$	24,104	\$	34,825	\$	3,217	1.44	0.98	0.94	1.04	0.94	1.07
58	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 3, N	\$	-	\$	18,125	\$	26,142	\$	2,419	1.44	0.98	0.94	1.05	0.94	1.07
58	Normal	Normal	C&I Motors	DRIVES_VFD HP 3, N	\$	-	\$	18,125	\$	26,142	\$	2,419	1.44	0.98	0.94	1.05	0.94	1.07
59	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 5, AG	\$	-	\$	46,052	\$	143,433	\$	13,406	2.24	1.52	1.22	1.25	1.22	1.67
59	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 5, AG	\$	-	\$	46,052	\$	143,433	\$	13,406	2.24	1.52	1.22	1.25	1.22	1.67
59	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 5, N	\$	-	\$	31,866	\$	176,614	\$	16,087	5.29	3.61	1.83	2.02	1.83	3.94
59	Normal	Normal	C&I Motors	DRIVES_VFD HP 5, N	\$	-	\$	31,866	\$	176,614	\$	16,087	5.29	3.61	1.83	2.02	1.83	3.94
60	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 7.5, AG	\$	-	\$	80,874	\$	221,891	\$	20,109	2.74	1.96	1.38	1.38	2.03	2.50
60	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 7.5, AG	\$	-	\$	80,874	\$	221,891	\$	20,109	2.74	1.96	1.38	1.38	2.03	2.50
60	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 7.5, N	\$	-	\$	60,889	\$	166,565	\$	15,121	2.74	1.86	1.38	1.38	2.03	2.50
60	Normal	Normal	C&I Motors	DRIVES_VFD HP 7.5, N	\$	-	\$	60,889	\$	166,565	\$	15,121	2.74	1.86	1.38	1.38	2.03	2.50
61	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 10, AG	\$	-	\$	84,285	\$	258,048	\$	26,812	3.51	2.39	1.55	2.41	2.61	3.55
61	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 10, AG	\$	-	\$	84,285	\$	258,048	\$	26,812	3.51	2.39	1.55	2.41	2.61	3.55
61	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 10, N	\$	-	\$	63,378	\$	222,081	\$	20,162	3.50	2.39	1.55	1.54	1.55	2.61
61	Normal	Normal	C&I Motors	DRIVES_VFD HP 10, N	\$	-	\$	63,378	\$	222,081	\$	20,162	3.50	2.39	1.55	1.54	1.55	2.61
62	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 15, AG	\$	-	\$	105,371	\$	443,321	\$	40,218	4.21	2.86	1.67	1.71	1.67	3.12
62	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 15, AG	\$	-	\$	105,371	\$	443,321	\$	40,218	4.21	2.86	1.67	1.71	1.67	3.12
62	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 15, N	\$	-	\$	79,234	\$	332,783	\$	30,242	4.20	2.96	1.67	1.71	1.67	3.12
62	Normal	Normal	C&I Motors	DRIVES_VFD HP 15, N	\$	-	\$	79,234	\$	332,783	\$	30,242	4.20	2.96	1.67	1.71	1.67	3.12
63	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 20, AG	\$	-	\$	16,597	\$	332,783	\$	30,242	20.05	2.86	2.44	1.17	2.44	3.43
63	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 20, AG	\$	-	\$	16,597	\$	332,783	\$	30,242	20.05	2.86	2.44	1.17	2.44	3.43
63	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 20, N	\$	-	\$	23,723	\$	117,876	\$	10,725	4.97	3.38	1.78	1.90	1.78	3.69
63	Normal	Normal	C&I Motors	DRIVES_VFD HP 20, N	\$	-	\$	23,723	\$	117,876	\$	10,725	4.97	3.38	1.78	1.90	1.78	3.69
64	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 25, AG	\$	-	\$	4,426	\$	88,485	\$	8,065	19.99	3.38	2.44	1.35	2.44	3.69
64	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 25, AG	\$	-	\$	4,426	\$	88,485	\$	8,065	19.99	3.38	2.44	1.35	2.44	3.69
64	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 25, N	\$	-	\$	20,826	\$	110,241	\$	10,081	5.29	3.61	1.83	1.97	1.83	3.94
64	Normal	Normal	C&I Motors	DRIVES_VFD HP 25, N	\$	-	\$	20,826	\$	110,241	\$	10,081	5.29	3.61	1.83	1.97	1.83	3.94
65	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 30, AG	\$	-	\$	31,866	\$	176,614	\$	16,087	5.31	3.75	1.86	2.02	1.86	3.94
65	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 30, AG	\$	-	\$	31,866	\$	176,614	\$	16,087	5.31	3.75	1.86	2.02	1.86	3.94
65	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 30, N	\$	-	\$	7,063	\$	176,614	\$	16,087	24.86	3.75	2.51	1.49	2.51	4.09
65	Normal	Normal	C&I Motors	DRIVES_VFD HP 30, N	\$	-	\$	7,063	\$	176,614	\$	16,087	24.86	3.75	2.51	1.49	2.51	4.09
66	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 40, AG	\$	-	\$	6,939	\$	131,826	\$	12,097	5.90	3.75	1.85	2.02	1.85	4.09
66	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 40, AG	\$	-	\$	6,939	\$	131,826	\$	12,097	5.90	3.75	1.85	2.02	1.85	4.09
66	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 40, N	\$	-	\$	31,866	\$	176,614	\$	16,087	5.31	3.75	1.86	2.02	1.86	3.9

MMP End-use Measure Screening Test Results
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MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's)					Utility		Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Probable Environmental Benefits Test		
					Admin	Implement	Incent	Avoid Cost	Environmental Benefits	Cost	Resource Cost					Environmental	Benefits Test	
71	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 5_N	\$	\$	\$	2,124	\$	10,795	\$	993	5.08	4.88	1.77	2.75	1.77	5.32
71	Normal	Normal	C&I Motors	DRIVES_Pumps HP 5_N	\$	\$	\$	2,124	\$	10,795	\$	993	5.08	4.88	1.77	2.75	1.77	5.32
72	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 7.5_AG	\$	\$	\$	2,943	\$	21,848	\$	1,980	7.42	5.07	2.02	2.51	2.02	5.53
72	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 7.5_AG	\$	\$	\$	2,943	\$	21,848	\$	1,980	7.42	5.07	2.02	2.51	2.02	5.53
72	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 7.5_N	\$	\$	\$	2,213	\$	26,130	\$	1,489	7.41	5.07	2.02	2.51	2.02	5.53
72	Normal	Normal	C&I Motors	DRIVES_Pumps HP 7.5_N	\$	\$	\$	2,213	\$	26,130	\$	1,489	7.41	5.07	2.02	2.51	2.02	5.53
73	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 10_AG	\$	\$	\$	3,061	\$	29,300	\$	2,640	9.52	10.14	2.15	4.72	2.15	11.06
73	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 10_AG	\$	\$	\$	3,061	\$	29,300	\$	2,640	9.52	10.14	2.15	4.72	2.15	11.06
73	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 10_N	\$	\$	\$	2,301	\$	21,867	\$	1,985	9.50	10.14	2.15	4.72	2.15	11.06
73	Normal	Normal	C&I Motors	DRIVES_Pumps HP 10_N	\$	\$	\$	2,301	\$	21,867	\$	1,985	9.50	10.14	2.15	4.72	2.15	11.06
74	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 15_AG	\$	\$	\$	1,766	\$	21,848	\$	1,980	12.37	8.64	2.27	3.81	2.27	9.42
74	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 15_AG	\$	\$	\$	1,766	\$	21,848	\$	1,980	12.37	8.64	2.27	3.81	2.27	9.42
74	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 15_N	\$	\$	\$	1,328	\$	16,400	\$	1,489	12.35	8.64	2.26	3.81	2.26	9.42
74	Normal	Normal	C&I Motors	DRIVES_Pumps HP 15_N	\$	\$	\$	1,328	\$	16,400	\$	1,489	12.35	8.64	2.26	3.81	2.26	9.42
75	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 20_AG	\$	\$	\$	2,354	\$	29,130	\$	2,640	12.37	7.92	2.27	3.50	2.27	8.64
75	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 20_AG	\$	\$	\$	2,354	\$	29,130	\$	2,640	12.37	7.92	2.27	3.50	2.27	8.64
75	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 20_N	\$	\$	\$	1,770	\$	21,867	\$	1,985	12.35	7.92	2.26	3.50	2.26	8.64
75	Normal	Normal	C&I Motors	DRIVES_Pumps HP 20_N	\$	\$	\$	1,770	\$	21,867	\$	1,985	12.35	7.92	2.26	3.50	2.26	8.64
76	Aggressive	Aggressive	C&I Appliance	Commercial Clothes Washers - Washer Only_AC	\$	\$	\$	38,258	\$	42,013	\$	3,877	1.10	0.87	0.79	1.11	0.79	0.95
76	Aggressive	Normal	C&I Appliance	Commercial Clothes Washers - Washer Only_AC	\$	\$	\$	14,715	\$	42,013	\$	3,877	2.86	0.87	1.40	0.62	1.40	0.95
76	Normal	Aggressive	C&I Appliance	Commercial Clothes Washers - Washer Only_h	\$	\$	\$	28,768	\$	31,537	\$	2,915	1.10	0.87	0.78	1.11	0.78	0.95
76	Normal	Normal	C&I Appliance	Commercial Clothes Washers - Washer Only_h	\$	\$	\$	11,065	\$	31,537	\$	2,915	2.85	0.87	1.40	0.62	1.40	0.95
77	Aggressive	Aggressive	C&I Office & Computer equipmen	Plug Load Occupancy Sensors Document Stations_Ac	\$	\$	\$	11,772	\$	124,296	\$	12,214	10.56	2.98	2.34	1.27	2.34	3.27
77	Aggressive	Normal	C&I Office & Computer equipmen	Plug Load Occupancy Sensors Document Stations_Ac	\$	\$	\$	7,357	\$	124,296	\$	12,214	16.89	2.98	2.56	1.17	2.56	3.27
77	Normal	Aggressive	C&I Office & Computer equipmen	Plug Load Occupancy Sensors Document Stations_f	\$	\$	\$	8,852	\$	93,304	\$	9,185	10.54	2.98	2.34	1.27	2.34	3.27
77	Normal	Normal	C&I Office & Computer equipmen	Plug Load Occupancy Sensors Document Stations_f	\$	\$	\$	2,304	\$	93,304	\$	5,532	16.89	2.98	2.56	1.17	2.56	3.27
78	Aggressive	Aggressive	C&I Refrigerator	Vending Equipment Controller_AC	\$	\$	\$	29,429	\$	200,449	\$	18,929	6.81	2.90	2.02	1.44	2.02	3.17
78	Aggressive	Normal	C&I Refrigerator	Vending Equipment Controller_AC	\$	\$	\$	29,429	\$	200,449	\$	18,929	6.81	2.90	2.02	1.44	2.02	3.17
78	Normal	Aggressive	C&I Refrigerator	Vending Equipment Controller_h	\$	\$	\$	22,129	\$	150,469	\$	14,234	6.80	2.90	2.02	1.44	2.02	3.17
78	Normal	Normal	C&I Refrigerator	Vending Equipment Controller_h	\$	\$	\$	22,129	\$	150,469	\$	14,234	6.80	2.90	2.02	1.44	2.02	3.17
79	Aggressive	Aggressive	C&I HVAC	Window Film_AC	\$	\$	\$	44,145	\$	150,219	\$	13,570	40.84	2.03	2.73	0.74	2.73	2.21
79	Aggressive	Normal	C&I HVAC	Window Film_AC	\$	\$	\$	3,679	\$	150,219	\$	13,570	40.84	2.03	2.73	0.74	2.73	2.21
79	Normal	Aggressive	C&I HVAC	Window Film_N	\$	\$	\$	33,194	\$	112,763	\$	10,204	3.40	2.03	1.57	1.29	1.57	2.21
79	Normal	Normal	C&I HVAC	Window Film_N	\$	\$	\$	11,065	\$	112,763	\$	10,204	10.19	2.03	2.27	0.89	2.27	2.21
80	Aggressive	Aggressive	C&I Office & Computer equipmen	80Plus NC_Desktop Unit_AC	\$	\$	\$	147,145	\$	1,242,328	\$	119,292	8.44	5.74	2.17	2.65	2.17	6.30
80	Aggressive	Normal	C&I Office & Computer equipmen	80Plus NC_Desktop Unit_AC	\$	\$	\$	147,145	\$	1,242,328	\$	119,292	8.44	5.74	2.17	2.65	2.17	6.30
80	Normal	Aggressive	C&I Office & Computer equipmen	80Plus NC_Desktop Unit_N	\$	\$	\$	110,647	\$	932,565	\$	89,702	8.43	5.74	2.17	2.65	2.17	6.30
80	Normal	Normal	C&I Office & Computer equipmen	80Plus NC_Desktop Unit_N	\$	\$	\$	110,647	\$	932,565	\$	89,702	8.43	5.74	2.17	2.65	2.17	6.30
81	Aggressive	Aggressive	C&I Office & Computer equipmen	80Plus NC_Server Unit_AC	\$	\$	\$	5,886	\$	86,659	\$	8,449	14.72	5.39	2.46	2.19	2.46	5.92
81	Aggressive	Normal	C&I Office & Computer equipmen	80Plus NC_Server Unit_AC	\$	\$	\$	5,886	\$	86,659	\$	8,449	14.72	5.39	2.46	2.19	2.46	5.92
81	Normal	Aggressive	C&I Office & Computer equipmen	80Plus NC_Server Unit_N	\$	\$	\$	4,426	\$	65,051	\$	6,353	14.70	5.39	2.46	2.19	2.46	5.92
81	Normal	Normal	C&I Office & Computer equipmen	80Plus NC_Server Unit_N	\$	\$	\$	4,426	\$	65,051	\$	6,353	14.70	5.39	2.46	2.19	2.46	5.92
82	Aggressive	Aggressive	C&I Office & Computer equipmen	CompPowerMgr_AC	\$	\$	\$	706,297	\$	14,184,222	\$	1,364,139	20.08	10.63	2.55	4.17	2.55	11.65
82	Aggressive	Normal	C&I Office & Computer equipmen	CompPowerMgr_AC	\$	\$	\$	706,297	\$	14,184,222	\$	1,364,139	20.08	10.63	2.55	4.17	2.55	11.65
82	Normal	Aggressive	C&I Office & Computer equipmen	CompPowerMgr_N	\$	\$	\$	331,940	\$	6,654,700	\$	641,107	20.05	10.63	2.55	4.17	2.55	11.65
82	Normal	Normal	C&I Office & Computer equipmen	CompPowerMgr_N	\$	\$	\$	331,940	\$	6,654,700	\$	641,107	20.05	10.63	2.55	4.17	2.55	11.65
83	Aggressive	Aggressive	C&I Refrigerator	Anti Sweat Heater Controls_AC	\$	\$	\$	2,354	\$	80,586	\$	8,558	34.23	6.52	2.56	2.54	2.56	7.21
83	Aggressive	Normal	C&I Refrigerator	Anti Sweat Heater Controls_AC	\$	\$	\$	2,354	\$	80,586	\$	8,558	34.23	6.52	2.56	2.54	2.56	7.21
83	Normal	Aggressive	C&I Refrigerator	Anti Sweat Heater Controls_h	\$	\$	\$	1,770	\$	60,493	\$	6,435	34.17	6.52	2.56	2.54	2.56	7.22
83	Normal	Normal	C&I Refrigerator	Anti Sweat Heater Controls_h	\$	\$	\$	1,770	\$	60,493	\$	6,435	34.17	6.52	2.56	2.54	2.56	7.22
84	Aggressive	Aggressive	C&I Refrigerator	Efficient Refrigeration Condensor_AC	\$	\$	\$	206	\$	1,573	\$	138	11.14	4.55	1.56	2.92	1.56	4.95
84	Aggressive	Normal	C&I Refrigerator	Efficient Refrigeration Condensor_AC	\$	\$	\$	141	\$	1,573	\$	138	11.14	4.55	1.56	2.92	1.56	4.95
84	Normal	Aggressive	C&I Refrigerator	Efficient Refrigeration Condensor_h	\$	\$	\$	155	\$	1,181	\$	104	7.62	4.55	1.46	3.11	1.46	4.95
84	Normal	Normal	C&I Refrigerator	Efficient Refrigeration Condensor_h	\$	\$	\$	106	\$	1,181	\$	104	11.12	4.55	1.56	2.92	1.56	4.95
85	Aggressive	Aggressive	C&I Refrigerator	Night covers for displays_AC	\$	\$	\$	3,090	\$	10,035	\$	1,178	3.25	1.93	1.51	1.28	1.51	2.16
85	Aggressive	Normal	C&I Refrigerator	Night covers for displays_AC	\$	\$	\$	1,766	\$	10,035	\$	1,178	5.68	1.93	1.89	1.02	1.89	2.16
85	Normal	Aggressive	C&I Refrigerator	Night covers for displays_N	\$	\$	\$	2,324	\$	7,533	\$	886	3.24	1.93	1.51	1.28	1.51	2.16
85	Normal	Normal	C&I Refrigerator	Night covers for displays_N	\$	\$	\$	1,328	\$	7,533	\$	886	5.67	1.93	1.89	1.03	1.89	2.16
86	Aggressive	Aggressive	C&I Refrigerator	Head Pressure Control_AC	\$	\$	\$	70,630	\$	1,197,154	\$	127,130	16.95	17.30	2.38	7.26	2.38	19.14
86	Aggressive	Normal	C&I Refrigerator	Head Pressure Control_AC	\$	\$	\$	70,630	\$	1,197,154	\$	127,130	16.95	17.30	2.38	7.26	2.38	19.14
86	Normal	Aggressive	C&I Refrigerator	Head Pressure Control_h	\$	\$	\$	53,110	\$	898,655	\$	95,596	16.92	17.30	2.38	7.26	2.38	19.14
86	Normal	Normal	C&I Refrigerator	Head Pressure Control_h	\$	\$	\$	53,110	\$	898,655	\$	95,596	16.92	17.30	2.38	7.26	2.38	19.14
87	Aggressive	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators less than20ft3_AC	\$	\$	\$	11,036	\$	30,016	\$	3,198	2.72	1.62	1.38	1.17	1.38	1.79
87	Aggressive	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators less than20ft3_AC	\$	\$	\$	4,414	\$	30,016	\$	3,198	6.80	1.62	1.99	0.81	1.99	1.79
87	Normal	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators less than20ft3_f	\$	\$	\$	8,298	\$	22,532	\$	2,405	2.72	1.62	1.38	1.17	1.38	1.79
87	Normal	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators less than20ft3_f	\$	\$	\$	3,319	\$	22,532	\$	2,405	6.79	1.62	1.99	0.81	1.99	1.79
88	Aggressive	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators 20-48 ft3_AC	\$	\$	\$	22,072	\$	44,021	\$	4,690	1.99	1.19	1.17	1.02	1.17	1.31
88	Aggressive	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators 20-48 ft3_AC	\$	\$	\$	4,414	\$	44,021	\$	4,690	9.97	1.19	2.19	0.54	2.19	1.31
88	Normal	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators 20-48 ft3_f	\$	\$	\$	16,597	\$	33,045	\$	3,527	1.99	1.19	1.17	1.02	1.17	1.31
88	Normal	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators 20-48 ft3_f	\$	\$	\$	3,319	\$	33,045	\$	3,527	9.96	1.19	2.19	0.54	2.19	1.31
89	Aggressive	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators more than 48ft3_AC	\$	\$	\$	2,983	\$	44,887	\$	4,782	1.06	1.01	1.06	0.96	1.06	1.12
89	Aggressive	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators more than 48ft3_AC	\$	\$	\$	5,297	\$	44,887	\$	4,782	8.47	1.01	2.11	0.48	2.11	1.12
89	Normal	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Refrigerators more than 48ft3_f	\$	\$	\$	19,916	\$	33,695	\$	3,596	1.69	1.01	1.06	0.96	1.06	1.12
89	Normal	Normal	C&I Refrigerator	ENERGY STAR Commercial Solid Door Refrigerators more than 48ft3_f	\$	\$	\$	3,983	\$	33,695	\$	3,596	8.46	1.01	2.11	0.48	2.11	1.12
90	Aggressive	Aggressive	C&I Refrigerator	ENERGY STAR Solid Door Freezers less than 20ft3_AC	\$	\$	\$											

MMP End-use Measure Screening Test Results
4_CSR_240-22.050_Appendix_5M.pdf

															Procurement	
															Environmental	
MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's) Admin	NPV (Today's) Implement	NPV (Today's) Incent	NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits	Unitary Cost Test	Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Environmental Benefits Test	
95	Aggressive	Aggressive	C&I Refrigerator	Energy Efficient Ice Machines more than 1000 lbs./AC	\$ -	\$ -	\$ 11,772	\$ 65,887	\$ 5,598	5.60	3.33	1.90	1.75	1.90	3.62	
95	Aggressive	Normal	C&I Refrigerator	Energy Efficient Ice Machines more than 1000 lbs./AC	\$ -	\$ -	\$ 5,886	\$ 65,887	\$ 5,598	11.19	3.33	2.29	1.46	2.29	3.62	
95	Normal	Aggressive	C&I Refrigerator	Energy Efficient Ice Machines more than 1000 lbs./AC	\$ -	\$ -	\$ 8,895	\$ 459	\$ 5,598	1.90	3.33	1.90	1.75	1.90	3.62	
95	Normal	Normal	C&I Refrigerator	Energy Efficient Ice Machines more than 1000 lbs./AC	\$ -	\$ -	\$ 1,426	\$ 459	\$ 1,429	11.17	3.33	2.29	1.46	2.29	3.62	
96	Aggressive	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR_AC	\$ -	\$ -	\$ 2,354	\$ 850,685	\$ 73,854	361.33	122.94	2.46	50.03	2.46	133.61	
96	Aggressive	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR_AC	\$ -	\$ -	\$ 2,354	\$ 850,685	\$ 73,854	361.33	122.94	2.46	50.03	2.46	133.61	
96	Normal	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR_N	\$ -	\$ -	\$ 1,770	\$ 638,575	\$ 55,535	360.71	122.94	2.46	50.03	2.46	133.63	
96	Normal	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR_N	\$ -	\$ -	\$ 1,770	\$ 638,575	\$ 55,535	360.71	122.94	2.46	50.03	2.46	133.63	
97	Aggressive	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders_AC	\$ -	\$ -	\$ 2,943	\$ 66,413	\$ 5,143	22.57	13.44	2.63	5.11	2.63	14.81	
97	Aggressive	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders_AC	\$ -	\$ -	\$ 2,943	\$ 66,413	\$ 5,143	22.57	13.44	2.63	5.11	2.63	14.81	
97	Normal	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders_N	\$ -	\$ -	\$ 2,213	\$ 49,854	\$ 5,083	22.53	13.44	2.63	5.11	2.63	14.81	
97	Normal	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders_N	\$ -	\$ -	\$ 2,213	\$ 49,854	\$ 5,083	22.53	13.44	2.63	5.11	2.63	14.81	
98	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia.AC	\$ -	\$ -	\$ 441	\$ 1,140	\$ 116	2.58	1.61	1.38	1.17	1.38	1.78	
98	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia.AC	\$ -	\$ -	\$ 441	\$ 1,140	\$ 116	2.58	1.61	1.38	1.17	1.38	1.78	
98	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia.N	\$ -	\$ -	\$ 332	\$ 856	\$ 87	2.58	1.61	1.38	1.17	1.38	1.78	
98	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia.N	\$ -	\$ -	\$ 332	\$ 856	\$ 87	2.58	1.61	1.38	1.17	1.38	1.78	
99	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia.AC	\$ -	\$ -	\$ 589	\$ 1,565	\$ 159	2.66	1.67	1.39	1.20	1.39	1.84	
99	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia.AC	\$ -	\$ -	\$ 589	\$ 1,565	\$ 159	2.66	1.67	1.39	1.20	1.39	1.84	
99	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia.N	\$ -	\$ -	\$ 443	\$ 1,175	\$ 119	2.66	1.67	1.39	1.20	1.39	1.84	
99	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia.N	\$ -	\$ -	\$ 443	\$ 1,175	\$ 119	2.66	1.67	1.39	1.20	1.39	1.84	
100	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia.AC	\$ -	\$ -	\$ 736	\$ 2,046	\$ 207	2.78	1.75	1.42	1.23	1.42	1.93	
100	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia.AC	\$ -	\$ -	\$ 736	\$ 2,046	\$ 207	2.78	1.75	1.42	1.23	1.42	1.93	
100	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia.N	\$ -	\$ -	\$ 553	\$ 1,536	\$ 156	2.78	1.75	1.42	1.23	1.42	1.93	
100	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia.N	\$ -	\$ -	\$ 553	\$ 1,536	\$ 156	2.78	1.75	1.42	1.23	1.42	1.93	
101	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia.AC	\$ -	\$ -	\$ 883	\$ 2,527	\$ 256	2.86	1.81	1.44	1.25	1.44	1.99	
101	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia.AC	\$ -	\$ -	\$ 883	\$ 2,527	\$ 256	2.86	1.81	1.44	1.25	1.44	1.99	
101	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia.N	\$ -	\$ -	\$ 664	\$ 1,897	\$ 192	2.86	1.81	1.44	1.25	1.44	1.99	
101	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia.N	\$ -	\$ -	\$ 664	\$ 1,897	\$ 192	2.86	1.81	1.44	1.25	1.44	1.99	
102	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia.AC	\$ -	\$ -	\$ 1,177	\$ 3,581	\$ 360	3.04	1.92	1.47	1.30	1.47	2.11	
102	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia.AC	\$ -	\$ -	\$ 1,177	\$ 3,581	\$ 360	3.04	1.92	1.47	1.30	1.47	2.11	
102	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia.N	\$ -	\$ -	\$ 885	\$ 2,688	\$ 270	3.04	1.92	1.47	1.30	1.47	2.11	
102	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia.N	\$ -	\$ -	\$ 885	\$ 2,688	\$ 270	3.04	1.92	1.47	1.30	1.47	2.11	
103	Aggressive	Aggressive	C&I HVAC	WLHP 17,000_N	\$ -	\$ -	\$ 94	\$ 195	\$ 12	2.07	1.37	1.32	1.03	1.32	1.45	
103	Aggressive	Normal	C&I HVAC	WLHP 17,000_N	\$ -	\$ -	\$ 94	\$ 195	\$ 12	2.07	1.37	1.32	1.03	1.32	1.45	
103	Normal	Aggressive	C&I HVAC	WLHP 17,000_N	\$ -	\$ -	\$ 71	\$ 146	\$ 9	2.07	1.37	1.32	1.04	1.32	1.45	
103	Normal	Normal	C&I HVAC	WLHP 17,000_N	\$ -	\$ -	\$ 71	\$ 146	\$ 9	2.07	1.37	1.32	1.04	1.32	1.45	
104	Aggressive	Aggressive	C&I HVAC	WLHP 17,000-65,000_N	\$ -	\$ -	\$ 271	\$ 517	\$ 32	1.91	1.30	1.25	1.04	1.25	1.38	
104	Aggressive	Normal	C&I HVAC	WLHP 17,000-65,000_N	\$ -	\$ -	\$ 271	\$ 517	\$ 32	1.91	1.30	1.25	1.04	1.25	1.38	
104	Normal	Aggressive	C&I HVAC	WLHP 17,000-65,000_N	\$ -	\$ -	\$ 204	\$ 388	\$ 24	1.91	1.30	1.25	1.04	1.25	1.38	
104	Normal	Normal	C&I HVAC	WLHP 17,000-65,000_N	\$ -	\$ -	\$ 204	\$ 388	\$ 24	1.91	1.30	1.25	1.04	1.25	1.38	
105	Aggressive	Aggressive	C&I HVAC	WLHP 65,000-135,000_N	\$ -	\$ -	\$ 677	\$ 1,285	\$ 80	1.90	1.29	1.21	1.07	1.21	1.37	
105	Aggressive	Normal	C&I HVAC	WLHP 65,000-135,000_N	\$ -	\$ -	\$ 677	\$ 1,285	\$ 80	1.90	1.29	1.21	1.07	1.21	1.37	
105	Normal	Aggressive	C&I HVAC	WLHP 65,000-135,000_N	\$ -	\$ -	\$ 509	\$ 965	\$ 60	1.90	1.29	1.20	1.07	1.20	1.37	
105	Normal	Normal	C&I HVAC	WLHP 65,000-135,000_N	\$ -	\$ -	\$ 509	\$ 965	\$ 60	1.90	1.29	1.20	1.07	1.20	1.37	
106	Aggressive	Aggressive	C&I HVAC	Setback_Programmable Thermostat_AC	\$ -	\$ -	\$ 12,360	\$ 3,673,069	\$ 256,534	297.17	110.10	3.51	31.33	3.51	117.79	
106	Aggressive	Normal	C&I HVAC	Setback_Programmable Thermostat_AC	\$ -	\$ -	\$ 12,360	\$ 3,673,069	\$ 256,534	297.17	110.10	3.51	31.33	3.51	117.79	
106	Normal	Aggressive	C&I HVAC	Setback_Programmable Thermostat_N	\$ -	\$ -	\$ 7,745	\$ 2,297,687	\$ 160,752	296.66	110.10	3.51	31.33	3.51	117.80	
106	Normal	Normal	C&I HVAC	Setback_Programmable Thermostat_N	\$ -	\$ -	\$ 7,745	\$ 2,297,687	\$ 160,752	296.66	110.10	3.51	31.33	3.51	117.80	
107	Aggressive	Aggressive	C&I HVAC	Ground Source HP Closed Loop_AC	\$ -	\$ -	\$ 1,766	\$ 2,591	\$ 171	1.47	0.78	1.03	0.76	1.03	0.93	
107	Aggressive	Normal	C&I HVAC	Ground Source HP Closed Loop_AC	\$ -	\$ -	\$ 883	\$ 2,591	\$ 171	2.93	0.78	1.58	0.49	1.58	0.83	
107	Normal	Aggressive	C&I HVAC	Ground Source HP Closed Loop_N	\$ -	\$ -	\$ 1,328	\$ 1,945	\$ 128	1.46	0.78	1.03	0.76	1.03	0.93	
107	Normal	Normal	C&I HVAC	Ground Source HP Closed Loop_N	\$ -	\$ -	\$ 66	\$ 1,945	\$ 128	29.29	0.78	3.07	0.25	3.07	0.87	
108	Aggressive	Aggressive	C&I HVAC	AC 65,000 1 Ph_AC	\$ -	\$ -	\$ 23,543	\$ 53,992	\$ 1,431	3.07	2.29	1.85	1.41	1.85	1.97	
108	Aggressive	Normal	C&I HVAC	AC 65,000 1 Ph_AC	\$ -	\$ -	\$ 23,543	\$ 53,992	\$ 1,431	3.07	2.29	1.85	1.41	1.85	1.97	
108	Normal	Aggressive	C&I HVAC	AC 65,000 1 Ph_N	\$ -	\$ -	\$ 17,703	\$ 40,454	\$ 2,487	2.29	1.85	1.41	1.32	1.41	1.97	
108	Normal	Normal	C&I HVAC	AC 65,000 1 Ph_N	\$ -	\$ -	\$ 17,703	\$ 40,454	\$ 2,487	2.29	1.85	1.41	1.32	1.41	1.97	
109	Aggressive	Aggressive	C&I HVAC	AC 65,000 3 Ph_AC	\$ -	\$ -	\$ 11,772	\$ 20,172	\$ 1,738	1.71	1.05	1.17	0.90	1.17	1.11	
109	Aggressive	Normal	C&I HVAC	AC 65,000 3 Ph_AC	\$ -	\$ -	\$ 11,772	\$ 20,172	\$ 1,738	1.71	1.05	1.17	0.90	1.17	1.11	
109	Normal	Aggressive	C&I HVAC	AC 65,000 3 Ph_N	\$ -	\$ -	\$ 8,852	\$ 15,143	\$ 931	1.71	1.05	1.17	0.90	1.17	1.11	
109	Normal	Normal	C&I HVAC	AC 65,000 3 Ph_N	\$ -	\$ -	\$ 8,852	\$ 15,143	\$ 931	1.71	1.05	1.17	0.90	1.17	1.11	
110	Aggressive	Aggressive	C&I HVAC	AC 65,000 - 135,000_N	\$ -	\$ -	\$ 23,543	\$ 42,466	\$ 3,860	2.65	1.73	1.46	1.18	1.46	1.83	
110	Aggressive	Normal	C&I HVAC	AC 65,000 - 135,000_N	\$ -	\$ -	\$ 23,543	\$ 42,466	\$ 3,860	2.65	1.73	1.46	1.18	1.46	1.83	
110	Normal	Aggressive	C&I HVAC	AC 65,000 - 135,000_N	\$ -	\$ -	\$ 17,703	\$ 46,890	\$ 2,903	2.65	1.73	1.46	1.18	1.46	1.83	
110	Normal	Normal	C&I HVAC	AC 65,000 - 135,000_N	\$ -	\$ -	\$ 17,703	\$ 46,890	\$ 2,903	2.65	1.73	1.46	1.18	1.46	1.83	
111	Aggressive	Aggressive	C&I HVAC	AC 135,000 - 240,000_N	\$ -	\$ -	\$ 47,086	\$ 195,585	\$ 12,067	4.15	2.60	1.83	1.42	1.83	2.76	
111	Aggressive	Normal	C&I HVAC	AC 135,000 - 240,000_N	\$ -	\$ -	\$ 47,086	\$ 195,585	\$ 12,067	4.15	2.60	1.83	1.42	1.83	2.76	
111	Normal	Aggressive	C&I HVAC	AC 135,000 - 240,000_N	\$ -	\$ -	\$ 35,407	\$ 146,818	\$ 9,074	4.15	2.60	1.83	1.42	1.83	2.76	
111	Normal	Normal	C&I HVAC	AC 135,000 - 240,000_N	\$ -	\$ -	\$ 35,407	\$ 146,818	\$ 9,074	4.15	2.60	1.83	1.42	1.83	2.76	
112	Aggressive	Aggressive	C&I HVAC	AC 240,000 - 760,000_N	\$ -	\$ -	\$ 11,772	\$ 23,965	\$ 1,582	2.04	1.29	1.18	1.10	1.18	1.38	
112	Aggressive	Normal	C&I HVAC	AC 240,000 - 760,000_N	\$ -	\$ -	\$ 11,772	\$ 23,965	\$ 1,582	2.04	1.29	1.18	1.10	1.18	1.38	
112	Normal	Aggressive	C&I HVAC	AC 240,000 - 760,000_N	\$ -	\$ -	\$ 8,852	\$ 17,990	\$ 1,190	2.03	1.29	1.17	1.10	1.17	1.38	
112	Normal	Normal	C&I HVAC	AC 240,000 - 760,000_N	\$ -	\$ -	\$ 8,852	\$ 17,990	\$ 1,190	2.03	1.29	1.17	1.10	1.17	1.38	
113	Aggressive	Aggressive	C&I HVAC	AC 760,000_N	\$ -	\$ -	\$ 15,303	\$ 45,979	\$ 3,035	3.00	2.19	1.44	1.51	1.44	2.33	
113	Aggressive	Normal	C&I HVAC	AC 760,000_N	\$ -	\$ -	\$ 15,303	\$ 45,979	\$ 3,035	3.00	2.19	1.44	1.51	1.44	2.33	
113	Normal	Aggressive	C&I HVAC	AC 760,000_N	\$ -	\$ -	\$ 11,507	\$ 34,515	\$ 2,282	3.00	2.19	1.44	1.52	1.44	2.33	
113	Normal	Normal	C&I HVAC	AC 760,000_N	\$ -	\$ -	\$ 11,507	\$ 34,515	\$ 2,282	3.00	2.19	1.44	1.52	1.44	2.33	
114	Aggressive	Aggressive	C&I HVAC	HP 65,000 1 Ph_AC	\$ -	\$ -	\$ 5,886	\$ 19,215	\$ 1,205	3.26	3.29	1.71	1.92	1.71	3.50	
114	Aggressive	Normal	C&I HVAC	HP 65,000 1 Ph_AC	\$ -	\$ -	\$ 5,886	\$ 19,215	\$ 1,205	3.26	3.29	1.71	1.92	1.71	3.50	
114	Normal	Aggressive	C&I HVAC	HP 65,000 1 Ph_N	\$ -	\$ -	\$ 4,426	\$ 14,424	\$ 906	3.26	3.29	1.71	1.92	1.71	3.50	
114	Normal	Normal	C&I HVAC	HP 65,000 1 Ph_N	\$ -	\$ -	\$ 4,426	\$ 14,424	\$ 906	3.26	3.29	1.71	1.92	1.71	3.50	
115	Aggressive	Aggressive	C&I HVAC	HP 65,000 3 Ph_AC	\$ -	\$ -	\$ 5,886	\$ 11,829	\$ 735	2.01						

MMP End-use Measure Screening Test Results
4_CSR_240-22.050_Appendix_5M.pdf

MMP ID#	Penetration	Incentive	Characteristic	End-Use Measure	NPV (Today's)		NPV (Today's)		NPV (Today's)		NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits		Only Cost		Total	RIM	Participant Test	RIM Net Fuel	Probable Environmental Benefits Test	
					Admin	Implem	Incent	NPV (Today's)	Cost Test	Total Resource Cost		Cost Test	Resource Cost	Cost Test	Resource Cost						
118	Normal	Aggressive	C&I HVAC	HP 240,000_N	\$	-	\$	8,852	\$	42,116	\$	2,843	4.76	3.60	1.85	1.94	1.85	3.84			
118	Normal	Normal	C&I HVAC	HP 240,000_N	\$	-	\$	8,852	\$	42,116	\$	2,843	4.76	3.60	1.85	1.94	1.85	3.84			
119	Aggressive	Aggressive	C&I HVAC	PTAC_AG	\$	-	\$	17,657	\$	10,747	\$	706	0.61	0.41	0.52	0.79	0.52	0.44			
119	Aggressive	Normal	C&I HVAC	PTAC_AG	\$	-	\$	5,886	\$	10,747	\$	706	1.83	0.41	1.19	0.34	1.19	0.44			
119	Normal	Aggressive	C&I HVAC	PTAC_N	\$	-	\$	13,278	\$	8,068	\$	531	0.61	0.41	0.52	0.80	0.52	0.44			
119	Normal	Normal	C&I HVAC	PTAC_N	\$	-	\$	4,426	\$	8,068	\$	531	1.82	0.41	1.19	0.34	1.19	0.44			
120	Aggressive	Aggressive	C&I HVAC	PTAC-HP_AG	\$	-	\$	8,829	\$	8,566	\$	566	0.97	0.65	0.76	0.87	0.76	0.70			
120	Aggressive	Normal	C&I HVAC	PTAC-HP_AG	\$	-	\$	2,943	\$	8,566	\$	566	2.91	0.65	1.57	0.42	1.57	0.70			
120	Normal	Aggressive	C&I HVAC	PTAC-HP_N	\$	-	\$	6,639	\$	6,430	\$	425	0.97	0.65	0.75	0.87	0.75	0.70			
120	Normal	Normal	C&I HVAC	PTAC-HP_N	\$	-	\$	2,213	\$	6,430	\$	425	2.91	0.65	1.57	0.42	1.57	0.70			
121	Aggressive	Aggressive	C&I HVAC	Economizer_AG	\$	-	\$	100,059	\$	1,234,289	\$	79,859	12.34	16.79	2.70	6.21	2.70	17.87			
121	Aggressive	Normal	C&I HVAC	Economizer_AG	\$	-	\$	29,429	\$	1,234,289	\$	79,859	41.94	16.79	3.20	5.25	3.20	17.87			
121	Normal	Aggressive	C&I HVAC	Economizer_N	\$	-	\$	109,956	\$	1,365,323	\$	87,758	12.42	16.79	2.71	6.21	2.71	17.87			
121	Normal	Normal	C&I HVAC	Economizer_N	\$	-	\$	109,956	\$	1,365,323	\$	87,758	12.42	16.79	2.71	6.21	2.71	17.87			
122	Aggressive	Aggressive	C&I HVAC	Tuneup - Refrigerant Charge_AC	\$	-	\$	5,592	\$	222,934	\$	14,387	39.87	54.26	3.02	17.95	3.02	57.77			
122	Aggressive	Normal	C&I HVAC	Tuneup - Refrigerant Charge_AC	\$	-	\$	2,207	\$	222,934	\$	14,387	101.00	54.26	3.17	17.13	3.17	57.77			
122	Normal	Aggressive	C&I HVAC	Tuneup - Refrigerant Charge_N	\$	-	\$	8,481	\$	343,565	\$	21,821	40.51	54.26	3.03	17.93	3.03	57.71			
122	Normal	Normal	C&I HVAC	Tuneup - Refrigerant Charge_N	\$	-	\$	8,481	\$	343,565	\$	21,821	40.51	54.26	3.03	17.93	3.03	57.71			
123	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_AC	\$	-	\$	9,712	\$	25,152	\$	1,825	2.59	1.76	1.47	1.19	1.47	1.89			
123	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_AC	\$	-	\$	8,829	\$	25,152	\$	1,825	2.85	1.76	1.56	1.13	1.56	1.89			
123	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_f	\$	-	\$	7,303	\$	18,880	\$	1,372	2.59	1.76	1.47	1.20	1.47	1.89			
123	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_f	\$	-	\$	6,639	\$	18,880	\$	1,372	2.84	1.76	1.55	1.13	1.55	1.89			
124	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 100-200 tons_AC	\$	-	\$	44,144	\$	250,137	\$	18,252	5.67	5.26	2.19	2.40	2.19	5.64			
124	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 100-200 tons_AC	\$	-	\$	44,144	\$	250,137	\$	18,252	5.67	5.26	2.19	2.40	2.19	5.64			
124	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 100-200 tons_f	\$	-	\$	33,194	\$	187,768	\$	13,725	5.66	5.26	2.19	2.40	2.19	5.64			
124	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 100-200 tons_f	\$	-	\$	33,194	\$	187,768	\$	13,725	5.66	5.26	2.19	2.40	2.19	5.64			
125	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 200-300 tons_AC	\$	-	\$	51,501	\$	416,881	\$	30,421	8.09	8.76	2.48	3.54	2.48	9.40			
125	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 200-300 tons_AC	\$	-	\$	51,501	\$	416,881	\$	30,421	8.09	8.76	2.48	3.54	2.48	9.40			
125	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 200-300 tons_f	\$	-	\$	38,726	\$	312,936	\$	22,875	8.08	8.76	2.47	3.54	2.47	9.40			
125	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 200-300 tons_f	\$	-	\$	38,726	\$	312,936	\$	22,875	8.08	8.76	2.47	3.54	2.47	9.40			
126	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_AC	\$	-	\$	25,750	\$	271,342	\$	21,295	10.54	11.41	2.94	3.88	2.94	12.30			
126	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_AC	\$	-	\$	25,750	\$	271,342	\$	21,295	10.54	11.41	2.94	3.88	2.94	12.30			
126	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_f	\$	-	\$	19,383	\$	203,686	\$	16,013	10.52	11.41	2.94	3.88	2.94	12.30			
126	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_f	\$	-	\$	19,383	\$	203,686	\$	16,013	10.52	11.41	2.94	3.88	2.94	12.30			
127	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AC	\$	-	\$	10,594	\$	139,550	\$	10,952	13.17	14.67	3.12	4.71	3.12	15.82			
127	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AC	\$	-	\$	10,594	\$	139,550	\$	10,952	13.17	14.67	3.12	4.71	3.12	15.82			
127	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_f	\$	-	\$	7,967	\$	104,754	\$	8,235	13.15	14.67	3.11	4.71	3.11	15.82			
127	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_f	\$	-	\$	7,967	\$	104,754	\$	8,235	13.15	14.67	3.11	4.71	3.11	15.82			
128	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AC	\$	-	\$	14,715	\$	165,816	\$	12,100	11.27	6.97	2.71	2.57	2.71	7.48			
128	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AC	\$	-	\$	14,715	\$	165,816	\$	12,100	11.27	6.97	2.71	2.57	2.71	7.48			
128	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_f	\$	-	\$	11,065	\$	124,471	\$	9,099	11.25	6.97	2.71	2.57	2.71	7.48			
128	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_f	\$	-	\$	11,065	\$	124,471	\$	9,099	11.25	6.97	2.71	2.57	2.71	7.48			
129	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AC	\$	-	\$	4,414	\$	92,500	\$	7,260	20.95	19.44	3.42	5.69	3.42	20.97			
129	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AC	\$	-	\$	4,414	\$	92,500	\$	7,260	20.95	19.44	3.42	5.69	3.42	20.97			
129	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_f	\$	-	\$	3,319	\$	69,436	\$	5,459	20.92	19.44	3.42	5.69	3.42	20.97			
129	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_f	\$	-	\$	3,319	\$	69,436	\$	5,459	20.92	19.44	3.42	5.69	3.42	20.97			
130	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AC	\$	-	\$	5,150	\$	154,165	\$	12,099	29.93	32.41	3.59	9.02	3.59	34.95			
130	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AC	\$	-	\$	5,150	\$	154,165	\$	12,099	29.93	32.41	3.59	9.02	3.59	34.95			
130	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_f	\$	-	\$	3,873	\$	115,725	\$	9,098	29.88	32.41	3.59	9.02	3.59	34.95			
130	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_f	\$	-	\$	3,873	\$	115,725	\$	9,098	29.88	32.41	3.59	9.02	3.59	34.95			
131	Aggressive	Aggressive	C&I HVAC	Air Cooled Chillers_AC	\$	-	\$	29,429	\$	29,536	\$	1,773	1.00	0.68	0.77	0.89	0.77	0.72			
131	Aggressive	Normal	C&I HVAC	Air Cooled Chillers_AC	\$	-	\$	4,709	\$	29,536	\$	1,773	6.27	0.68	2.17	0.32	2.17	0.72			
131	Normal	Aggressive	C&I HVAC	Air Cooled Chillers_N	\$	-	\$	21,495	\$	21,495	\$	1,294	1.00	0.68	0.77	0.89	0.77	0.72			
131	Normal	Normal	C&I HVAC	Air Cooled Chillers_N	\$	-	\$	3,435	\$	21,495	\$	1,294	6.26	0.68	2.17	0.32	2.17	0.72			
132	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_AC	\$	-	\$	117,716	\$	427,016	\$	25,800	3.63	2.47	1.74	1.42	1.74	2.62			
132	Aggressive	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_AC	\$	-	\$	94,173	\$	427,016	\$	25,800	4.53	2.47	1.92	1.28	1.92	2.62			
132	Normal	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_f	\$	-	\$	88,517	\$	320,544	\$	19,400	3.62	2.47	1.74	1.42	1.74	2.62			
132	Normal	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_f	\$	-	\$	70,814	\$	320,544	\$	19,400	4.53	2.47	1.92	1.28	1.92	2.62			
133	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AC	\$	-	\$	270,747	\$	2,042,557	\$	123,738	7.54	8.21	2.25	3.66	2.25	8.71			
133	Aggressive	Normal	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AC	\$	-	\$	270,747	\$	2,042,557	\$	123,738	7.54	8.21	2.25	3.66	2.25	8.71			
133																					

Residential Test Results

Variable:	Program	NPV										Utility Cost	Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Probable Environmental Benefits Test
		(Today's) Admin	(Today's) Implem	(Today's) Incent	(Today's) Avoid Cst	(Today's) I Benefits	(Today's) Environmenta	(Today's) Test	(Today's) Cost	(Today's) RIM	(Today's) Test	(Today's) Fuel	(Today's) Test	(Today's) Fuel	(Today's) Test	(Today's) Fuel	(Today's) Test
RLW 1, Avg Home	Under charged-Add refrigerant	\$ -	\$ -	\$ 1,646,748	\$ 7,692,465	\$ 469,044		4.67	2.60	1.53	1.70	1.53			1.70	1.53	2.75
RLW 2, Avg Home	Over charged-Remove refrigerant	\$ -	\$ -	\$ 778,985	\$ 2,368,051	\$ 141,980		3.04	1.69	1.31	1.29	1.31			1.29	1.31	1.79
RLW 3, Avg Home	Increase duct sizes or add new ducts	\$ -	\$ -	\$ 3,451,226	\$ 12,152,789	\$ 895,021		3.52	1.96	1.28	1.53	1.28			1.53	1.28	2.10
RLW 4, Avg Home	Increase blower speed	\$ -	\$ -	\$ 603,338	\$ 5,962,903	\$ 503,326		9.88	5.49	1.67	3.29	1.67			3.29	1.67	5.95
RLW 5, Avg Home	Reduce duct leakage to 5%	\$ -	\$ -	\$ 2,717,649	\$ 9,224,637	\$ 689,934		3.39	1.89	1.25	1.51	1.25			1.51	1.25	2.03
RLW 6, Avg Home	Size AC units (A) to 100% of Manual J	\$ -	\$ -	\$ 107,523	\$ 411,203	\$ 22,249		3.82	2.39	1.44	1.66	1.44			1.66	1.44	2.52
RLW 7, Avg Home	Size AC units (B) to 100% of Manual J	\$ -	\$ -	\$ 142,566	\$ 2,567,287	\$ 138,977		18.01	11.25	2.05	5.48	2.05			5.48	2.05	11.86
RLW 8, Avg Home	Add two more inches of insulation to ducts in attic	\$ -	\$ -	\$ 716,054	\$ 901,508	\$ 64,462		1.26	0.79	0.78	1.00	0.78			1.00	0.78	0.94
RLW 9, Avg Home	Install Heat Pump SEER = 13 to 16	\$ -	\$ -	\$ 31,184	\$ 77,829	\$ 7,664		2.50	2.08	0.96	2.16	0.96			2.16	0.96	2.28
RLW 10, Avg Home	Install AC SEER = 16 vs 13 SEER	\$ -	\$ -	\$ 282,692	\$ 1,075,061	\$ 60,532		3.80	2.38	1.40	1.69	1.40			1.69	1.40	2.51
RLW 11, Avg Home	Elec strip-Install Heat Pump SEER = 16	\$ -	\$ -	\$ 80,018	\$ 130,259	\$ 12,227		1.63	1.02	0.82	1.24	0.82			1.24	0.82	1.11
RLW 12, Avg Home	Add another R-23 attic insulation	\$ -	\$ -	\$ 902,184	\$ 1,911,629	\$ 146,474		2.12	1.51	1.01	1.50	1.01			1.50	1.01	1.63
RLW 13, Avg Home	Add another R-19 attic insulation	\$ -	\$ -	\$ 698,922	\$ 1,026,058	\$ 78,285		1.47	1.22	0.84	1.46	0.84			1.46	0.84	1.32
RLW 14, Avg Home	Add R-11 wall insulation	\$ -	\$ -	\$ 812,991	\$ 1,248,917	\$ 102,435		1.54	1.28	0.83	1.54	0.83			1.54	0.83	1.39
RLW 15, Avg Home	Add R-19 Insulation to floor	\$ -	\$ -	\$ 1,622,121	\$ (2,269,288)	\$ (179,751)		(1.40)	(1.00)	(0.65)	0.18	(0.65)			0.18	(0.65)	(1.08)
RLW 16, Avg Home	Reduce infiltration to 0.35 ACH	\$ -	\$ -	\$ 2,541,832	\$ 18,615,608	\$ 1,484,230		7.32	4.58	1.48	3.09	1.48			3.09	1.48	4.94
RLW 17, Avg Home	Add storm windows	\$ -	\$ -	\$ 203,556	\$ 373,483	\$ 30,346		1.83	1.53	0.91	1.67	0.91			1.67	0.91	1.65
RLW 18, Avg Home	Single pane to Low E double pane window 2904	\$ -	\$ -	\$ 78,059	\$ 775,608	\$ 62,220		9.94	7.10	1.56	4.56	1.56			4.56	1.56	7.67
RLW 19, Avg Home	Standard double pane to Low E double pane window 2904	\$ -	\$ -	\$ 1,145,642	\$ 4,758,818	\$ 372,590		4.15	2.60	1.30	1.99	1.30			1.99	1.30	2.80
RLW 20, Avg Home	Add solar screens to E & W glass	\$ -	\$ -	\$ 2,005,004	\$ 3,228,097	\$ 179,273		1.61	1.15	0.96	1.20	0.96			1.20	0.96	1.21
RLW 21, Avg Home	Plant deciduous trees on E & W sides	\$ -	\$ -	\$ 3,788,096	\$ 6,137,837	\$ 355,180		1.62	1.16	0.94	1.22	0.94			1.22	0.94	1.22
RLW 22, Avg Home	Use 10 more CFLs throughout house	\$ -	\$ -	\$ 2,700,351	\$ 19,453,999	\$ 2,211,439		7.20	4.50	1.25	3.61	1.25			3.61	1.25	5.01
RLW 23, Avg Home	Purchase Energy Star refrigerator	\$ -	\$ -	\$ 629,377	\$ 588,408	\$ 57,267		0.93	1.17	0.59	1.99	0.59			1.99	0.59	1.28
RLW 24, Avg Home	Removed refrigerator unit uses no energy	\$ -	\$ -	\$ 474,373	\$ 3,277,073	\$ 370,698		6.91	6.91	1.29	5.37	1.29			5.37	1.29	7.69
RLW 25, Avg Home	Purchase Energy Star dishwasher	\$ -	\$ -	\$ 1,302,434	\$ 1,412,017	\$ 126,394		1.08	0.90	0.67	1.35	0.67			1.35	0.67	0.98
RLW 26, Avg Home	Purchase Energy Star clothes washer	\$ -	\$ -	\$ 2,219,315	\$ 983,894	\$ 86,510		0.44	0.37	0.35	1.04	0.35			1.04	0.35	0.40
RLW 27, Avg Home	Install programmable thermostat	\$ -	\$ -	\$ 6,099,980	\$ 17,485,521	\$ 1,821,732		2.87	2.39	1.02	2.33	1.02			2.33	1.02	2.64
RLW 28, Avg Home	Install faucet aerators	\$ -	\$ -	\$ 299,164	\$ 1,996,494	\$ 179,972		6.67	4.17	1.41	2.95	1.41			2.95	1.41	4.55
RLW 29, Avg Home	Install low flow shower heads	\$ -	\$ -	\$ 712,296	\$ 5,997,697	\$ 569,232		8.42	5.26	1.48	3.56	1.48			3.56	1.48	5.76
RLW 30, Avg Home	Insulate hot water pipes	\$ -	\$ -	\$ 3,838,938	\$ 4,827,291	\$ 435,152		1.26	0.90	0.74	1.22	0.74			1.22	0.74	0.98
RLW 31, Avg Home	Wrap electric water heater	\$ -	\$ -	\$ 253,756	\$ 753,140	\$ 67,891		2.97	2.47	1.12	2.21	1.12			2.21	1.12	2.70
KCP&L 1	Install AC SEER = 14 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 1,745,548	\$ 141,382	\$ 8,278		0.08	0.88	0.08	11.21	0.08			11.21	0.08	0.93
KCP&L 2	Install AC SEER = 15 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 1,745,548	\$ 263,913	\$ 15,453		0.15	0.55	0.14	3.84	0.14			3.84	0.14	0.88
KCP&L 3	Install AC SEER = 16 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 253,127	\$ 41,156	\$ 2,410		0.16	0.58	0.15	3.79	0.15			3.79	0.15	0.61
KCP&L 4	Install AC SEER = 9 to 14 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 946,857	\$ 5,576,785	\$ 320,364		5.89	25.95	1.66	15.65	1.66			15.65	1.66	27.44
KCP&L 5	Install AC SEER = 9 to 15 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 946,857	\$ 5,576,785	\$ 320,364		5.89	5.77	1.66	3.48	1.66			3.48	1.66	6.10
KCP&L 6	Install AC SEER = 9 to 16 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 270,104	\$ 1,296,361	\$ 74,462		4.80	4.52	1.56	2.90	1.56			2.90	1.56	4.78
KCP&L 7	Recommissioning (9 SEER based on CSG Cool Homes assumptions) no bulbs	\$ -	\$ -	\$ 886,598	\$ 8,175,524	\$ 472,986		9.22	11.53	1.82	6.33	1.82			6.33	1.82	12.19
KCP&L 8	Refrig Turn In	\$ -	\$ -	\$ 1,291,074	\$ 9,398,640	\$ 915,010		7.28	7.28	1.43	1.43	1.43			1.43	1.43	7.99
KCP&L 9	Freezer Turn In	\$ -	\$ -	\$ 645,537	\$ 4,699,320	\$ 457,505		7.28	7.28	1.43	1.43	1.43			1.43	1.43	7.99
KCP&L 10	Dehumidifier Turn In	\$ -	\$ -	\$ 129,107	\$ 420,167	\$ 26,376		3.25	3.25	1.33	1.33	1.33			1.33	1.33	3.46
KCP&L 11	Room AC Turn In	\$ -	\$ -	\$ 322,769	\$ 604,282	\$ 36,687		1.87	1.87	1.04	1.04	1.04			1.04	1.04	1.99
KCP&L 12	Blue Line - in home monitor KCPL pays full cost.	\$ -	\$ -	\$ 9,164,664	\$ 28,968,346	\$ 2,833,517		3.16	3.51	1.14	3.08	1.14			3.08	1.14	3.86
KCP&L 12	Blue Line - in home monitor KCPL pays half incremental cost.	\$ -	\$ -	\$ 4,582,332	\$ 28,968,346	\$ 2,833,517		6.32	7.02	1.39	5.04	1.39			5.04	1.39	7.71
KCP&L 13 /19	On Line Audit with Kits	\$ -	\$ -	\$ 516,430	\$ 3,810,566	\$ 359,732		7.38	7.38	1.43	5.17	1.43			5.17	1.43	8.08
KCP&L 14	New Home Energy Star - Above standard	\$ -	\$ -	\$ 774,645	\$ 3,586,463	\$ 307,431		4.63	2.31	1.26	1.84	1.26			1.84	1.26	2.51
KCP&L 16	Energy Star New Homes	\$ -	\$ -	\$ 2,265,508	\$ 9,059,651	\$ 721,157		4.00	13.06	1.26	10.39	1.26			10.39	1.26	14.10
KCP&L 20	Optimizer	\$ 917,499	\$ 26,113,437		\$ 100,978,198	\$ -		3.69	3.69	3.69		3.69				3.69	3.69

Residential End-Use Measure Test Results

Variable:	Program	NPV (Today's) Admin	NPV (Today's) Implem	NPV (Today's) Incant	NPV (Today's) Avoid Cst	NPV (Today's) Environmental Benefits	Utility Cost Test	Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Probable Environmental Benefits	
												Test	Test
RLW 1, Electric Strip Heated Home	Under charged-Add refrigerant (ESH)	\$ -	\$ -	\$ 1,646,748	\$ 9,105,065	\$ 549,149	5.53	3.07	1.62	1.90	1.62	3.26	
RLW 2, Electric Strip Heated Home	Over charged-Remove refrigerant (ESH)	\$ -	\$ -	\$ 778,985	\$ 2,552,453	\$ 152,911	3.28	1.82	1.35	1.34	1.35	1.93	
RLW 3, Electric Strip Heated Home	Increase duct sizes or add new ducts (ESH)	\$ -	\$ -	\$ 3,451,226	\$ 14,173,485	\$ 1,066,692	4.11	2.28	1.33	1.72	1.33	2.45	
RLW 4, Electric Strip Heated Home	Increase blower speed (ESH)	\$ -	\$ -	\$ 603,338	\$ 7,794,118	\$ 671,617	12.92	7.18	1.71	4.20	1.71	7.80	
RLW 5, Electric Strip Heated Home	Reduce duct leakage to 5% (ESH)	\$ -	\$ -	\$ 2,717,649	\$ 15,774,972	\$ 1,293,388	5.80	3.22	1.38	2.34	1.38	3.49	
RLW 6, Electric Strip Heated Home	Size AC units (A) to 100% of Manual J (ESH)	\$ -	\$ -	\$ 107,523	\$ 379,070	\$ 19,352	3.53	2.20	1.45	1.52	1.45	2.32	
RLW 7, Electric Strip Heated Home	Size AC units (B) to 100% of Manual J (ESH)	\$ -	\$ -	\$ 142,566	\$ 2,686,151	\$ 143,819	18.84	11.78	2.08	5.65	2.08	12.41	
RLW 8, Electric Strip Heated Home	Add two more inches of insulation to ducts in attic (ESH)	\$ -	\$ -	\$ 716,054	\$ 2,013,680	\$ 158,706	2.81	1.76	1.13	1.56	1.13	1.90	
RLW 9, Electric Strip Heated Home	Install Heat Pump SEER = 13 to 16 (ESH)	\$ -	\$ -	\$ 31,184	\$ -	\$ -	-	-	-	0.83	-	#DIV/0!	
RLW 10, Electric Strip Heated Home	Install AC SEER = 16 vs 13 SEER (ESH)	\$ -	\$ -	\$ 282,692	\$ -	\$ -	-	-	-	0.63	-	#DIV/0!	
RLW 11, Electric Strip Heated Home	Elec strip-Install Heat Pump SEER = 16 (ESH)	\$ -	\$ -	\$ 80,018	\$ 130,259	\$ 12,227	1.63	1.02	0.82	1.24	0.82	1.11	
RLW 12, Electric Strip Heated Home	Add another R-23 attic insulation (ESH)	\$ -	\$ -	\$ 902,184	\$ 5,863,885	\$ 493,492	6.50	4.64	1.38	3.36	1.38	5.03	
RLW 13, Electric Strip Heated Home	Add another R-19 attic insulation (ESH)	\$ -	\$ -	\$ 698,922	\$ 3,118,971	\$ 260,541	4.46	3.72	1.27	2.93	1.27	4.03	
RLW 14, Electric Strip Heated Home	Add R-11 wall insulation (ESH)	\$ -	\$ -	\$ 812,991	\$ 4,527,979	\$ 389,155	5.57	4.64	1.26	3.69	1.26	5.04	
RLW 15, Electric Strip Heated Home	Add R-19 Insulation to floor (ESH)	\$ -	\$ -	\$ 1,622,121	\$ 4,937,224	\$ 456,511	3.04	2.17	1.05	2.07	1.05	2.38	
RLW 16, Electric Strip Heated Home	Reduce infiltration to 0.35 ACH (ESH)	\$ -	\$ -	\$ 2,541,832	\$ 86,966,614	\$ 7,405,042	34.21	21.38	1.64	13.07	1.64	23.20	
RLW 17, Electric Strip Heated Home	Add storm windows (ESH)	\$ -	\$ -	\$ 203,556	\$ 1,691,446	\$ 144,492	8.31	6.92	1.43	4.86	1.43	7.52	
RLW 18, Electric Strip Heated Home	Single pane to Low E double pane window 2904 (ESH)	\$ -	\$ -	\$ 78,059	\$ 2,371,349	\$ 200,050	30.38	21.70	1.65	13.18	1.65	23.53	
RLW 19, Electric Strip Heated Home	Standard double pane to Low E double pane window 2904 (ESH)	\$ -	\$ -	\$ 1,145,642	\$ 2,730,087	\$ 191,734	2.38	1.49	1.12	1.33	1.12	1.59	
RLW 20, Electric Strip Heated Home	Add solar screens to E & W glass (ESH)	\$ -	\$ -	\$ 2,005,004	\$ 3,512,029	\$ 195,225	1.75	1.25	1.01	1.24	1.01	1.32	
RLW 21, Electric Strip Heated Home	Plant deciduous trees on E & W sides (ESH)	\$ -	\$ -	\$ 3,788,096	\$ 7,117,210	\$ 412,353	1.88	1.34	1.03	1.31	1.03	1.42	
RLW 22, Electric Strip Heated Home	Use 10 more CFLs throughout house (ESH)	\$ -	\$ -	\$ 2,700,351	\$ 19,453,999	\$ 2,211,439	7.20	4.50	1.25	3.61	1.25	5.01	
RLW 23, Electric Strip Heated Home	Purchase Energy Star refrigerator (ESH)	\$ -	\$ -	\$ 629,377	\$ 588,408	\$ 57,267	0.93	1.17	0.59	1.99	0.59	1.28	
RLW 24, Electric Strip Heated Home	Removed refrigerator unit uses no energy (ESH)	\$ -	\$ -	\$ 474,373	\$ 3,277,073	\$ 370,698	6.91	6.91	1.29	5.37	1.29	7.69	
RLW 25, Electric Strip Heated Home	Purchase Energy Star dishwasher (ESH)	\$ -	\$ -	\$ 1,302,434	\$ 3,286,145	\$ 296,244	2.52	2.10	1.03	2.04	1.03	2.29	
RLW 26, Electric Strip Heated Home	Purchase Energy Star clothes washer (ESH)	\$ -	\$ -	\$ 2,219,315	\$ 3,456,348	\$ 306,980	1.56	1.30	0.82	1.57	0.82	1.41	
RLW 27, Electric Strip Heated Home	Install programmable thermostat (ESH)	\$ -	\$ -	\$ 6,099,980	\$ 29,724,631	\$ 2,951,159	4.87	4.06	1.24	3.26	1.24	4.46	
RLW 28, Electric Strip Heated Home	Install faucet aerators (ESH)	\$ -	\$ -	\$ 299,164	\$ 7,592,017	\$ 684,376	25.38	15.86	1.67	9.47	1.67	17.29	
RLW 29, Electric Strip Heated Home	Install low flow shower heads (ESH)	\$ -	\$ -	\$ 712,296	\$ 24,633,075	\$ 2,337,884	34.58	21.61	1.70	12.71	1.70	23.67	
RLW 30, Electric Strip Heated Home	Insulate hot water pipes (ESH)	\$ -	\$ -	\$ 3,838,938	\$ 20,943,853	\$ 1,887,967	5.46	3.90	1.35	2.89	1.35	4.25	
RLW 31, Electric Strip Heated Home	Wrap electric water heater (ESH)	\$ -	\$ -	\$ 253,756	\$ 3,187,225	\$ 294,555	12.56	10.47	1.53	6.82	1.53	11.43	
RLW 1, Heat Pump Home	Under charged-Add refrigerant (EHP)	\$ -	\$ -	\$ 1,646,748	\$ 15,151,447	\$ 923,293	9.20	5.11	1.82	2.81	1.82	5.42	
RLW 2, Heat Pump Home	Over charged-Remove refrigerant (EHP)	\$ -	\$ -	\$ 778,985	\$ 3,625,035	\$ 220,827	4.65	2.59	1.52	1.70	1.52	2.74	
RLW 3, Heat Pump Home	Increase duct sizes or add new ducts (EHP)	\$ -	\$ -	\$ 3,451,226	\$ 13,462,273	\$ 1,040,330	3.90	2.17	1.28	1.69	1.28	2.33	
RLW 4, Heat Pump Home	Increase blower speed (EHP)	\$ -	\$ -	\$ 603,338	\$ 7,771,119	\$ 688,842	12.88	7.16	1.66	4.30	1.66	7.79	
RLW 5, Heat Pump Home	Reduce duct leakage to 5% (EHP)	\$ -	\$ -	\$ 2,717,649	\$ 11,003,001	\$ 882,772	4.05	2.25	1.27	1.77	1.27	2.43	
RLW 6, Heat Pump Home	Size AC units (A) to 100% of Manual J (EHP)	\$ -	\$ -	\$ 107,523	\$ 999,472	\$ 55,324	9.30	5.81	1.82	3.19	1.82	6.13	
RLW 7, Heat Pump Home	Size AC units (B) to 100% of Manual J (EHP)	\$ -	\$ -	\$ 142,566	\$ 5,204,553	\$ 286,846	36.51	22.82	2.14	10.65	2.14	24.07	
RLW 8, Heat Pump Home	Add two more inches of insulation to ducts in attic (EHP)	\$ -	\$ -	\$ 716,054	\$ 1,249,313	\$ 95,706	1.74	1.09	0.92	1.19	0.92	1.17	
RLW 9, Heat Pump Home	Install Heat Pump SEER = 13 to 16 (EHP)	\$ -	\$ -	\$ 31,184	\$ 77,829	\$ 7,664	2.50	2.08	0.96	2.16	0.96	2.28	
RLW 10, Heat Pump Home	Install AC SEER = 16 vs 13 SEER (EHP)	\$ -	\$ -	\$ 282,692	\$ 1,450,270	\$ 82,713	5.13	3.21	1.54	0.63	1.54	3.39	
RLW 11, Heat Pump Home	Elec strip-Install Heat Pump SEER = 16 (EHP)	\$ -	\$ -	\$ 80,018	\$ 77,829	\$ 7,664	2.50	2.08	0.96	0.63	0.96	2.28	
RLW 12, Heat Pump Home	Add another R-23 attic insulation (EHP)	\$ -	\$ -	\$ 902,184	\$ 2,330,904	\$ 189,196	2.58	1.85	1.07	1.73	1.07	2.00	
RLW 13, Heat Pump Home	Add another R-19 attic insulation (EHP)	\$ -	\$ -	\$ 698,922	\$ 1,231,787	\$ 99,906	1.76	1.47	0.90	1.64	0.90	1.59	
RLW 14, Heat Pump Home	Add R-11 wall insulation (EHP)	\$ -	\$ -	\$ 812,991	\$ 2,661,055	\$ 224,379	3.27	2.73	1.13	2.41	1.13	2.96	
RLW 15, Heat Pump Home	Add R-19 Insulation to floor (EHP)	\$ -	\$ -	\$ 1,622,121	\$ (2,619,675)	\$ (199,571)	(1.61)	(1.15)	(0.79)	0.12	(0.79)	(1.24)	
RLW 16, Heat Pump Home	Reduce infiltration to 0.35 ACH (EHP)	\$ -	\$ -	\$ 2,541,832	\$ 48,865,863	\$ 4,105,954	19.22	12.02	1.61	7.47	1.61	13.03	
RLW 17, Heat Pump Home	Add storm windows (EHP)	\$ -	\$ -	\$ 203,556	\$ 927,653	\$ 77,661	4.56	3.80	1.27	2.99	1.27	4.12	
RLW 18, Heat Pump Home	Single pane to Low E double pane window 2904 (EHP)	\$ -	\$ -	\$ 78,059	\$ 1,517,640	\$ 125,067	19.44	13.89	1.64	8.47	1.64	15.03	
RLW 19, Heat Pump Home	Standard double pane to Low E double pane window 2904 (EHP)	\$ -	\$ -	\$ 1,145,642	\$ 5,116,931	\$ 387,045	4.47	2.79	1.36	2.05	1.36	3.00	
RLW 20, Heat Pump Home	Add solar screens to E & W glass (EHP)	\$ -	\$ -	\$ 2,005,004	\$ 4,556,114	\$ 252,769	2.27	1.62	1.16	1.40	1.16	1.71	
RLW 21, Heat Pump Home	Plant deciduous trees on E & W sides (EHP)	\$ -	\$ -	\$ 3,788,096	\$ 8,646,170	\$ 500,867	2.28	1.63	1.14	1.43	1.14	1.72	
RLW 22, Heat Pump Home	Use 10 more CFLs throughout house (EHP)	\$ -	\$ -	\$ 2,700,351	\$ 19,453,999	\$ 2,211,439	7.20	4.50	1.25	3.61	1.25	5.01	
RLW 23, Heat Pump Home	Purchase Energy Star refrigerator (EHP)	\$ -	\$ -	\$ 629,377	\$ 588,408	\$ 57,267	0.93	1.17	0.59	1.99	0.59	1.28	
RLW 24, Heat Pump Home	Removed refrigerator unit uses no energy (EHP)	\$ -	\$ -	\$ 474,373	\$ 3,277,073	\$ 370,698	6.91	6.91	1.29	5.37	1.29	7.69	
RLW 25, Heat Pump Home	Purchase Energy Star dishwasher (EHP)	\$ -	\$ -	\$ 1,302,434	\$ 3,383,254	\$ 305,875	2.60	2.16	1.04	2.08	1.04	2.36	
RLW 26, Heat Pump Home	Purchase Energy Star clothes washer (EHP)	\$ -	\$ -	\$ 2,219,315	\$ 3,577,124	\$ 318,022	1.61	1.34	0.84	1.60	0.84	1.46	
RLW 27, Heat Pump Home	Install programmable thermostat (EHP)	\$ -	\$ -	\$ 6,099,980	\$ 26,490,023	\$ 2,747,845	4.34	3.62	1.17	3.10	1.17	3.99	
RLW 28, Heat Pump Home	Install faucet aerators (EHP)	\$ -	\$ -	\$ 299,164	\$ 7,865,106	\$ 708,994	26.29	16.43	1.68	9.79	1.68	17.91	
RLW 29, Heat Pump Home	Install low flow shower heads (EHP)	\$ -	\$ -	\$ 712,296	\$ 24,442,389	\$ 2,421,980	34.31	21.45	1.63	13.15	1.63	23.57	
RLW 30, Heat Pump Home	Insulate hot water pipes (EHP)	\$ -	\$ -	\$ 3,838,938	\$ 21,697,217	\$ 1,955,878	5.65	4.04	1.36	2.97	1.36	4.40	
RLW 31, Heat Pump Home	Wrap electric water heater (EHP)	\$ -	\$ -	\$ 253,756	\$ 3,299,804	\$ 305,150	13.00	10.84	1.54	7.04	1.54	11.84	

NOTE: Electric Strip Heat (ESH), Electric Heat Pump (EHP)

TESS renewable Projects

Program	Incremental Costs YR1	Today's Admin	Today's Implem	Today's Incent	Today's Avoid Cst	Today's Environ	Utility Cost Test	Total Resource Cost	RIM	Participant Test	RIM Net Fuel	Probable
						mental Benefits						Environm ental Benefitis Test
2.16kW PV North - BUY	26,900	-	-	13,450	595	137	0.04	0.02	0.04	0.53	0.04	0.03
2.16kW PV North 10P	26,900	-	-	3,388	1,521	319	0.56	0.06	0.35	0.19	0.40	0.07
2.16kW PV North	26,900	-	-	14,148	1,521	319	0.11	0.06	0.10	0.59	0.10	0.07
2.16kW PV South - BUY	22,900	-	-	11,500	406	95	0.04	0.02	0.03	0.52	0.03	0.02
2.16kW PV South 10P	22,900	-	-	2,776	1,577	333	0.69	0.07	0.40	0.20	0.46	0.09
2.16kW PV South	22,900	-	-	11,936	1,577	333	0.14	0.07	0.12	0.60	0.13	0.09
3.024kW PV North - BUY	32,900	-	-	16,450	1,155	264	0.07	0.04	0.06	0.54	0.07	0.04
3.024kW PV North 10P	32,900	-	-	4,632	1,806	375	0.54	0.06	0.35	0.20	0.40	0.07
3.024kW PV North	32,900	-	-	17,792	1,806	375	0.11	0.06	0.10	0.60	0.10	0.07
3.024kW PV South - BUY	32,900	-	-	16,450	1,198	273	0.07	0.04	0.07	0.54	0.07	0.04
3.024kW PV South 10P	22,900	-	-	3,681	1,822	378	0.78	0.08	0.43	0.24	0.51	0.10
3.024kW PV South	22,900	-	-	12,841	1,822	378	0.16	0.08	0.14	0.64	0.14	0.10
Wind Bergey NE - BUY	63,000	-	-	31,500	2,143	549	0.07	0.03	0.06	0.54	0.06	0.04
Wind Bergey NE 10P	63,000	-	-	9,095	3,406	718	0.48	0.06	0.32	0.20	0.36	0.07
Wind Bergey NE	63,000	-	-	34,295	3,406	718	0.11	0.06	0.09	0.60	0.10	0.07
Wind Bergey NE - BUY	63,000	-	-	31,500	1,316	351	0.04	0.02	0.04	0.53	0.04	0.03
Wind Bergey South West 10P	63,000	-	-	8,088	3,104	677	0.45	0.05	0.30	0.18	0.34	0.06
Wind Bergey South West	63,000	-	-	33,288	3,104	677	0.10	0.05	0.09	0.58	0.09	0.06
Skystream NE Buy	22,900	-	-	11,500	250	66	0.02	0.01	0.02	0.52	0.02	0.01
Skystream NE 10P	22,900	-	-	2,627	1,594	351	0.66	0.07	0.37	0.20	0.44	0.09
Skystream NE	22,900	-	-	11,787	1,594	351	0.14	0.07	0.12	0.60	0.12	0.09
Skystream SW Buy	22,900	-	-	11,500	188	51	0.02	0.01	0.02	0.51	0.02	0.01
Skystream SW 10P	22,900	-	-	2,551	1,402	315	0.59	0.06	0.35	0.18	0.41	0.08
Skystream SW	22,900	-	-	11,711	1,402	315	0.12	0.06	0.11	0.58	0.11	0.08
SDHW NE	7,500	-	-	3,750	3,665	685	0.98	0.49	0.50	0.98	0.60	0.58
SDHW SW	7,500	-	-	3,750	3,665	685	0.98	0.49	0.50	0.98	0.60	0.58
Solar Space Heat NE	2,300	-	-	1,150	2,041	438	1.77	0.89	0.60	1.49	0.77	1.08
Solar Space Heat SW	2,300	-	-	1,150	2,041	438	1.77	0.89	0.60	1.49	0.77	1.08

MMP - C and I End-use measures Load Impact

MMP (Def Penetration, Incentive)		Characteristic	Program	Participants YR1	Participants YR2	Participants YR3	Participants YR4	Participants YR5	Target kWh	Target kW	Percent	Measure life (wkt)	Net (Freq)	Y1 kwh	(Net Freq)	Y2 kwh	(Net Freq)	Y3 kwh	(Net Freq)	Y4 kwh	(Net Freq)	Y5 Annual kW (net Freq)	Y1 Annual kW (net Freq)	Y2 Annual kW (net Freq)	Y3 Annual kW (net Freq)	Y4 Annual kW (net Freq)	Y5
1	Aggressive	Aggressive	C&I Lighting	T-8 2R 1 lamp, AG	625	750	900	1,080	1,296	25.44	0.01	10	13,165	28,963	47,921	70,670	97,969	3.2	7.1	11.7	23.9						
1	Aggressive	Normal	C&I Lighting	T-8 2R 1 lamp, AG	625	750	900	1,080	1,296	29.44	0.01	10	13,165	28,963	47,921	70,670	97,969	3.2	7.1	11.7	23.9						
1	Aggressive	Normal	C&I Lighting	T-8 2R 1 lamp, AG	625	750	900	1,080	1,296	29.44	0.01	10	13,165	28,963	47,921	70,670	97,969	3.2	7.1	11.7	23.9						
1	Normal	Normal	C&I Lighting	T-8 2R 1 lamp, AG	600	550	605	666	732	29.44	0.01	10	13,032	22,117	34,861	48,879	64,299	2.6	5.4	8.5	11.9						
2	Aggressive	Aggressive	C&I Lighting	T-8 2R 2 lamp, AG	750	900	1,080	1,296	1,565	36.80	0.01	10	19,748	43,445	71,881	106,005	146,954	4.8	10.6	17.5	25.8						
2	Aggressive	Normal	C&I Lighting	T-8 2R 2 lamp, AG	750	900	1,080	1,296	1,565	36.80	0.01	10	19,748	43,445	71,881	106,005	146,954	4.8	10.6	17.5	25.8						
2	Normal	Aggressive	C&I Lighting	T-8 2R 2 lamp, AG	500	550	605	666	732	36.80	0.01	10	13,165	27,627	43,576	61,099	80,374	3.2	6.7	10.6	14.9						
2	Normal	Normal	C&I Lighting	T-8 2R 2 lamp, AG	500	550	605	666	732	36.80	0.01	10	13,165	27,627	43,576	61,099	80,374	3.2	6.7	10.6	14.9						
3	Aggressive	Aggressive	C&I Lighting	T-8 2R 3 lamp, AG	500	600	720	864	1,037	73.60	0.02	10	26,330	59,842	99,842	141,340	195,939	6.4	14.1	23.4	34.5						
3	Aggressive	Normal	C&I Lighting	T-8 2R 3 lamp, AG	500	600	720	864	1,037	73.60	0.02	10	26,330	59,842	99,842	141,340	195,939	6.4	14.1	23.4	34.5						
3	Normal	Aggressive	C&I Lighting	T-8 2R 3 lamp, AG	400	440	484	532	586	73.60	0.02	10	21,064	44,235	69,722	87,759	128,599	5.1	10.8	17.0	23.8						
3	Normal	Normal	C&I Lighting	T-8 2R 3 lamp, AG	400	440	484	532	586	73.60	0.02	10	21,064	44,235	69,722	87,759	128,599	5.1	10.8	17.0	23.8						
4	Aggressive	Aggressive	C&I Lighting	T-8 2R 4 lamp, AG	250	300	360	432	518	80.96	0.02	10	14,482	31,860	52,713	77,737	107,766	3.5	7.8	12.9	19.0						
4	Aggressive	Normal	C&I Lighting	T-8 2R 4 lamp, AG	250	300	360	432	518	80.96	0.02	10	14,482	31,860	52,713	77,737	107,766	3.5	7.8	12.9	19.0						
4	Normal	Aggressive	C&I Lighting	T-8 2R 4 lamp, AG	200	220	242	266	293	80.96	0.02	10	11,585	24,329	38,347	53,767	70,729	2.8	5.9	9.4	13.1						
4	Normal	Normal	C&I Lighting	T-8 2R 4 lamp, AG	200	220	242	266	293	80.96	0.02	10	11,585	24,329	38,347	53,767	70,729	2.8	5.9	9.4	13.1						
5	Aggressive	Aggressive	C&I Lighting	T-8 3R 1 lamp, AG	250	300	360	432	518	40.48	0.01	10	7,241	15,930	26,357	38,869	53,883	1.8	3.9	6.4	9.5						
5	Aggressive	Normal	C&I Lighting	T-8 3R 1 lamp, AG	250	300	360	432	518	40.48	0.01	10	7,241	15,930	26,357	38,869	53,883	1.8	3.9	6.4	9.5						
5	Normal	Aggressive	C&I Lighting	T-8 3R 1 lamp, AG	200	220	242	266	293	40.48	0.01	10	5,793	12,165	19,174	26,884	35,365	1.4	3.0	4.7	6.6						
5	Normal	Normal	C&I Lighting	T-8 3R 1 lamp, AG	200	220	242	266	293	40.48	0.01	10	5,793	12,165	19,174	26,884	35,365	1.4	3.0	4.7	6.6						
6	Aggressive	Aggressive	C&I Lighting	T-8 3R 2 lamp, AG	250	300	360	432	518	36.80	0.01	10	6,983	14,402	23,960	35,335	48,985	1.6	3.5	5.8	8.6						
6	Aggressive	Normal	C&I Lighting	T-8 3R 2 lamp, AG	250	300	360	432	518	36.80	0.01	10	6,983	14,402	23,960	35,335	48,985	1.6	3.5	5.8	8.6						
6	Normal	Aggressive	C&I Lighting	T-8 3R 2 lamp, AG	200	220	242	266	293	36.80	0.01	10	5,566	11,059	17,431	24,440	32,150	1.3	2.7	4.3	6.0						
6	Normal	Normal	C&I Lighting	T-8 3R 2 lamp, AG	200	220	242	266	293	36.80	0.01	10	5,566	11,059	17,431	24,440	32,150	1.3	2.7	4.3	6.0						
7	Aggressive	Aggressive	C&I Lighting	T-8 3R 3 lamp, AG	250	300	360	432	518	44.16	0.01	10	7,899	17,378	28,753	42,402	58,782	1.9	4.2	7.0	10.3						
7	Aggressive	Normal	C&I Lighting	T-8 3R 3 lamp, AG	250	300	360	432	518	44.16	0.01	10	7,899	17,378	28,753	42,402	58,782	1.9	4.2	7.0	10.3						
7	Normal	Aggressive	C&I Lighting	T-8 3R 3 lamp, AG	200	220	242	266	293	44.16	0.01	10	6,319	13,270	20,917	29,328	38,580	1.5	3.2	5.1	7.4						
7	Normal	Normal	C&I Lighting	T-8 3R 3 lamp, AG	200	220	242	266	293	44.16	0.01	10	6,319	13,270	20,917	29,328	38,580	1.5	3.2	5.1	7.4						
8	Aggressive	Aggressive	C&I Lighting	T-8 3R 4 lamp, AG	750	900	1,080	1,296	1,565	73.60	0.02	10	39,495	86,890	143,763	212,011	293,908	9.6	21.2	35.1	51.7						
8	Aggressive	Normal	C&I Lighting	T-8 3R 4 lamp, AG	750	900	1,080	1,296	1,565	73.60	0.02	10	39,495	86,890	143,763	212,011	293,908	9.6	21.2	35.1	51.7						
8	Normal	Aggressive	C&I Lighting	T-8 4 lamp, N	600	650	705	765	830	73.60	0.02	10	31,596	68,562	108,802	146,938	192,898	7.7	17.1	28.1	41.7						
9	Aggressive	Aggressive	C&I Lighting	T-8 4R 1 lamp, AG	1,250	1,500	1,800	2,160	2,592	51.52	0.01	10	167,373	372,831	607,373	842,931	1,103,449	16.2	35.8	58.1	84.3						
9	Aggressive	Normal	C&I Lighting	T-8 4R 1 lamp, AG	1,250	1,500	1,800	2,160	2,592	51.52	0.01	10	167,373	372,831	607,373	842,931	1,103,449	16.2	35.8	58.1	84.3						
9	Normal	Aggressive	C&I Lighting	T-8 4R 1 lamp, AG	1,000	1,100	1,210	1,331	1,464	51.52	0.01	10	136,802	298,468	479,949	704,799	938,686	11.2	24.7	40.3	60.3						
9	Normal	Normal	C&I Lighting	T-8 4R 1 lamp, AG	1,000	1,100	1,210	1,331	1,464	51.52	0.01	10	136,802	298,468	479,949	704,799	938,686	11.2	24.7	40.3	60.3						
10	Aggressive	Aggressive	C&I Lighting	T-8 4R 2 lamp, AG	6250	7,500	9,000	10,800	12,960	62.56	0.02	10	278,758	615,468	1,018,319	1,501,741	2,061,848	68.2	150.1	248.3	366.2						
10	Aggressive	Normal	C&I Lighting	T-8 4R 2 lamp, AG	6250	7,500	9,000	10,800	12,960	62.56	0.02	10	278,758	615,468	1,018,319	1,501,741	2,061,848	68.2	150.1	248.3	366.2						
10	Normal	Aggressive	C&I Lighting	T-8 4R 2 lamp, AG	5,000	5,500	6,050	6,665	7,321	62.56	0.02	10	222,806	499,994	806,994	1,186,361	1,596,361	54.6	114.6	180.6	263.3						
10	Normal	Normal	C&I Lighting	T-8 4R 2 lamp, AG	5,000	5,500	6,050	6,665	7,321	62.56	0.02	10	222,806	499,994	806,994	1,186,361	1,596,361	54.6	114.6	180.6	263.3						
11	Aggressive	Aggressive	C&I Lighting	T-8 4R 3 lamp, AG	1,250	1,500	1,800	2,160	2,592	117.76	0.03	10	166,892	365,367	585,367	842,931	1,103,449	17.1	37.5	60.3	87.5						
11	Aggressive	Normal	C&I Lighting	T-8 4R 3 lamp, AG	1,250	1,500	1,800	2,160	2,592	117.76	0.03	10	166,892	365,367	585,367	842,931	1,103,449	17.1	37.5	60.3	87.5						
11	Normal	Aggressive	C&I Lighting	T-8 4R 3 lamp, AG	1,000	1,100	1,210	1,331	1,464	117.76	0.03	10	127,899	278,889	451,389	671,939	892,439	13.1	28.1	45.1	67.1						
11	Normal	Normal	C&I Lighting	T-8 4R 3 lamp, AG	1,000	1,100	1,210	1,331	1,464	117.76	0.03	10	127,899	278,889	451,389	671,939	892,439	13.1	28.1	45.1	67.1						
12	Aggressive	Aggressive	C&I Lighting	T-8 4R 4 lamp, AG	5,000	6,000	7,200	8,400	10,080	139.84	0.04	10	500,273	1,100,601	1,800,995	2,685,467	3,722,833	122.0	268.4	444.0	664.8						
12	Aggressive	Normal	C&I Lighting	T-8 4R 4 lamp, AG	5,000	6,000	7,200	8,400	10,080	139.84	0.04	10	500,273	1,100,601	1,800,995	2,685,467	3,722,833	122.0	268.4	444.0	664.8						
12	Normal	Aggressive	C&I Lighting	T-8 4R 4 lamp, AG	4,000	4,400	4,840	5,324	5,856	139.84	0.04	10	400,219	840,459	1,324,724	1,957,415	2,643,375	97.6	204.9	323.0	462.9						
12	Normal	Normal	C&I Lighting	T-8 4R 4 lamp, AG	4,000	4,400	4,840	5,324	5,856	139.84	0.04	10	400,219	840,459	1,324,724	1,957,415	2,643,375	97.6	204.9	323.0	462.9						
13	Aggressive	Aggressive	C&I Lighting	T-8 8R 2 lamp, AG	375	450	540	648	778	73.60	0.02	10	18,748	43,445	71,881	106,005	146,954	4.8	10.6	17.5	25.8						
13	Aggressive	Normal	C&I Lighting	T-8 8R 2 lamp, AG	375	450	540	648	778	73.60	0.02	10	18,748	43,445	71,881	106,005	146,954	4.8	10.6	17.5	25.8						
13	Normal	Aggressive	C&I Lighting	T-8 8R 2 lamp, AG	300	330	363	399	439	73.60	0.02	10	15,748	33,146	53,146	73,319	93,449	3.9	8.3	12.8	17.9						
13	Normal	Normal	C&I Lighting	T-8 8R 2 lamp, AG	300	330	363	399	439	73.60	0.02	10	15,748	33,146	53,146	73,319	93,449	3.9	8.3	12.8	17.9						
14	Aggressive	Aggressive	C&I Lighting	T-8 8R 1 lamp, AG	375	450	540	648	778	40.48	0.01	10	9,374	20,723	33,935	50,303	68,825	2.6	5.8	9.4	13.7						
14	Aggressive	Normal	C&I Lighting	T-8 8R 1 lamp, AG	375	450	540	648	778	40.48	0.01	10	9,374	20,723	33,935	50,303	68,825	2.6	5.8	9.4	13.7						
14	Normal	Aggressive	C&I Lighting	T-8 8R 1 lamp, AG	300	330	363	399	439	40.48	0.01	10	8,099	18,247	28,760	40,325	53,047	2.1	4.8	7.0	9.8						
14	Normal	Normal	C&I Lighting	T-8 8R 1 lamp, AG	300	330	363	399	439	40.48	0.01	10	8,099	18,247	28,760	40,325	53,047	2.1	4.8	7.0	9.8						
15	Aggressive	Aggressive	C&I Lighting	T-8 HO 8 R 1 Lamp, AG	250	300	360	432	518	92.00	0.03	10	16,455	36,204	59,901	88,328	122,462	4.0	8.9	14.6	21.5						
15	Aggressive	Normal	C&I Lighting	T-8 HO 8 R 1 Lamp, AG	250	300	360	432	518	92.00	0.03	10	16,455	36,204	59,901	88,328	122,462	4.0	8.9	14.6	21.5						
15	Normal	Aggressive	C&I Lighting	T-8 HO 8 R 1 Lamp, AG	200	220	242	266	293	92.00	0.03	1															

MMP - C and End-use measures Load Impact

MMP Dec Penetration		Incentive	Characteristic	Program	Participants YR1	Participants YR2	Participants YR3	Participants YR4	Participants YR5	Target kWh	Target kW	Target W percent	Measure life (wkt)	Net Free	Y1	kWh (Net Free)	Y2	kWh (Net Free)	Y3	kWh (Net Free)	Y4	kWh (Net Free)	Y5	Annual kW (Net Free)	Y1	Annual kW (Net Free)	Y2	Annual kW (Net Free)	Y3	Annual kW (Net Free)	Y4	Annual kW (Net Free)	Y5				
32	Normal	Aggressive	Normal	C&I Lighting	High Bay Fluorescent BLF3278_N	2500	2,000	3,000	4,200	5,104	1890	0.16	10	1,345,890	4,886,887	1,224,513	10,015,254	282	1	4247.6	1,063.5	1,585.0	2,173.8	2500	2,040	2,080	2,100	2,110	2,120	2,130	2,140	2,150	2,160	2,170			
32	Normal	Aggressive	Normal	C&I Lighting	High Bay Fluorescent BLF3278_N	2500	2,040	2,080	2,100	2,110	649.00	0.16	10	1,076,679	2,174,891	3,294,436	4,425,149	5,561,045	233.7	1	472.0	715.1	960.5	1,207.0	2500	2,040	2,080	2,100	2,110	2,120	2,130	2,140	2,150	2,160	2,170		
33	Aggressive	Aggressive	Normal	C&I Lighting	High Bay Fluorescent BLF3278_N	250	300	360	432	518	2,005.00	0.48	10	415,833	914,432	1,513,631	2,232,189	3,094,440	90.3	1	186.6	328.5	484.5	671.6	250	300	360	432	518	608	708	808	908	1,008	1,108		
33	Aggressive	Normal	Normal	C&I Lighting	High Bay Fluorescent BLF3278 - Double fixture replace 1000W HD_N	250	300	360	432	518	2,005.00	0.48	10	415,833	914,432	1,513,631	2,232,189	3,094,440	90.3	1	186.6	328.5	484.5	671.6	250	300	360	432	518	608	708	808	908	1,008	1,108		
33	Normal	Aggressive	Normal	C&I Lighting	High Bay Fluorescent BLF3278 - Double fixture replace 1000W HD_N	250	300	360	432	518	2,005.00	0.48	10	415,833	914,432	1,513,631	2,232,189	3,094,440	90.3	1	186.6	328.5	484.5	671.6	250	300	360	432	518	608	708	808	908	1,008	1,108		
33	Normal	Normal	Normal	C&I Lighting	High Bay Fluorescent BLF3278 - Double fixture replace 1000W HD_N	200	204	208	210	211	2,005.00	0.48	10	332,666	671,985	1,017,988	1,367,257	1,718,220	72.2	1	145.9	220.9	296.8	372.9	200	204	208	210	211	212	213	214	215	216	217		
34	Aggressive	Aggressive	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	25	26	26	26	26	345.00	0.08	10	14,934	21,994	31,296	40,352	50,404	3.6	1	5.6	8.6	11.6	14.6	25	26	26	26	26	26	26	26	26	26	26		
34	Aggressive	Normal	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	25	26	26	26	26	345.00	0.08	10	14,934	21,994	31,296	40,352	50,404	3.6	1	5.6	8.6	11.6	14.6	25	26	26	26	26	26	26	26	26	26	26		
34	Normal	Aggressive	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	20	21	21	21	21	345.00	0.08	10	5,828	11,772	17,833	23,892	30,100	1.4	1	2.3	4.3	6.3	8.3	20	21	21	21	21	21	21	21	21	21	21		
34	Normal	Normal	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	20	21	21	21	21	345.00	0.08	10	5,828	11,772	17,833	23,892	30,100	1.4	1	2.3	4.3	6.3	8.3	20	21	21	21	21	21	21	21	21	21	21		
35	Aggressive	Aggressive	Normal	C&I Lighting	Pulse Start Metal Halide - retrofit only_N	437.5	459	482	506	532	430.00	0.12	7	138,233	283,378	435,761	595,803	763,827	33.7	1	69.1	106.3	146.3	186.3	437.5	459	482	506	532	556	580	604	628	652	676		
35	Aggressive	Normal	Normal	C&I Lighting	Pulse Start Metal Halide - retrofit only_N	437.5	459	482	506	532	430.00	0.12	7	138,233	283,378	435,761	595,803	763,827	33.7	1	69.1	106.3	146.3	186.3	437.5	459	482	506	532	556	580	604	628	652	676		
35	Normal	Aggressive	Normal	C&I Lighting	Pulse Start Metal Halide - retrofit only_N	350	357	364	368	369	430.00	0.12	7	110,567	223,385	338,395	454,511	571,180	27.0	1	54.5	82.5	110.8	139.3	350	357	364	368	369	370	371	372	373	374	375	376	
35	Normal	Normal	Normal	C&I Lighting	Pulse Start Metal Halide - retrofit only_N	350	357	364	368	369	430.00	0.12	7	110,567	223,385	338,395	454,511	571,180	27.0	1	54.5	82.5	110.8	139.3	350	357	364	368	369	370	371	372	373	374	375	376	
36	Aggressive	Aggressive	Normal	C&I Lighting	CFL Fixture_N	312.5	375	450	540	648	294.40	0.08	12	98,738	217,224	359,407	530,026	734,770	24.1	1	53.0	87.6	129.2	179.2	312.5	375	450	540	648	789.4	950.4	1,111.4	1,272.4	1,433.4	1,594.4	1,755.4	
36	Normal	Aggressive	Normal	C&I Lighting	CFL Fixture_N	312.5	375	450	540	648	294.40	0.08	12	98,738	217,224	359,407	530,026	734,770	24.1	1	53.0	87.6	129.2	179.2	312.5	375	450	540	648	789.4	950.4	1,111.4	1,272.4	1,433.4	1,594.4	1,755.4	
36	Normal	Normal	Normal	C&I Lighting	CFL Fixture_N	250	255	260	263	264	294.40	0.08	12	78,991	159,561	241,711	324,651	407,586	19.3	1	38.9	58.9	79.2	99.5	250	255	260	263	264	265	266	267	268	269	270	271	
37	Aggressive	Aggressive	Normal	C&I Lighting	CFL Screw in_N	18750	22,500	27,000	32,400	38,880	147.20	0.04	2	2,962,144	6,516,717	7,820,061	9,384,073	11,260,887	722.3	1	1,689.0	1,906.7	2,288.1	2,745.7	18750	22,500	27,000	32,400	38,880	46,656	54,432	62,208	70,000	77,776	85,552	93,328	
37	Aggressive	Normal	Normal	C&I Lighting	CFL Screw in_N	18750	22,500	27,000	32,400	38,880	147.20	0.04	2	2,962,144	6,516,717	7,820,061	9,384,073	11,260,887	722.3	1	1,689.0	1,906.7	2,288.1	2,745.7	18750	22,500	27,000	32,400	38,880	46,656	54,432	62,208	70,000	77,776	85,552	93,328	
37	Normal	Aggressive	Normal	C&I Lighting	CFL Screw in_N	15000	15,300	15,600	15,750	15,900	147.20	0.04	2	2,389,715	4,786,825	4,881,614	4,952,705	4,988,251	577.8	1	1,167.2	1,190.3	1,216.3	1,242.3	15000	15,300	15,600	15,750	15,900	16,050	16,200	16,350	16,500	16,650	16,800	16,950	
37	Normal	Normal	Normal	C&I Lighting	CFL Screw in_N	15000	15,300	15,600	15,750	15,900	147.20	0.04	2	2,389,715	4,786,825	4,881,614	4,952,705	4,988,251	577.8	1	1,167.2	1,190.3	1,216.3	1,242.3	15000	15,300	15,600	15,750	15,900	16,050	16,200	16,350	16,500	16,650	16,800	16,950	
38	Aggressive	Aggressive	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AG	3125	3,750	4,500	5,400	6,480	158.00	0.02	15	318,967	697,372	1,153,834	1,701,589	2,358,894	36.1	1	79.4	131.4	193.9	268.7	3125	3,750	4,500	5,400	6,480	7,740	9,000	10,260	11,520	12,780	14,040	15,300	
38	Aggressive	Normal	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AG	3125	3,750	4,500	5,400	6,480	158.00	0.02	15	318,967	697,372	1,153,834	1,701,589	2,358,894	36.1	1	79.4	131.4	193.9	268.7	3125	3,750	4,500	5,400	6,480	7,740	9,000	10,260	11,520	12,780	14,040	15,300	
38	Normal	Aggressive	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_N	2,750	3,375	4,125	4,950	5,940	158.00	0.02	15	253,980	532,539	839,363	1,176,911	1,548,132	28.9	1	60.7	95.6	134.1	176.4	2,750	3,375	4,125	4,950	5,940	7,125	8,310	9,495	10,680	11,865	13,050	14,235	
38	Normal	Normal	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_N	2,500	2,750	3,025	3,328	3,650	158.00	0.02	15	253,980	532,539	839,363	1,176,911	1,548,132	28.9	1	60.7	95.6	134.1	176.4	2,500	2,750	3,025	3,328	3,650	4,000	4,350	4,700	5,050	5,400	5,750	6,100	
39	Aggressive	Aggressive	Normal	C&I Lighting	Occupancy Sensors under 500 W_N	62.5	66	69	72	76	427.00	0.12	12	29,621	60,724	93,362	127,672	163,677	7.2	1	14.8	22.8	31.1	39.9	62.5	66	69	72	76	80	84	88	92	96	100	104	
39	Aggressive	Normal	Normal	C&I Lighting	Occupancy Sensors under 500 W_N	50	51	52	53	53	427.00	0.12	12	27,687	47,668	72,513	97,395	122,396	5.8	1	11.7	17.7	23.7	29.8	50	51	52	53	53	54	55	56	57	58	59	60	
40	Aggressive	Aggressive	Normal	C&I Lighting	Occupancy Sensors over 500 W_N	125	131	138	145	152	1,068.00	0.29	12	143,170	293,499	451,344	617,082	791,106	34.9	1	71.6	110.0	150.5	192.9	125	131	138	145	152	160	168	176	184	192	200	208	
40	Aggressive	Normal	Normal	C&I Lighting	Occupancy Sensors over 500 W_N	125	131	138	145	152	1,068.00	0.29	12	143,170	293,499	451,344	617,082	791,106	34.9	1	71.6	110.0	150.5	192.9	125	131	138	145	152	160	168	176	184	192	200	208	
40	Normal	Aggressive	Normal	C&I Lighting	Occupancy Sensors over 500 W_N	100	102	104	105	106	1,068.00	0.29	12	114,536	231,363	350,481	470,744	591,580	27.9	1	56.4	85.5	114.8	144.2	100	102	104	105	106	108	110	112	114	116	118	120	
41	Aggressive	Aggressive	Normal	C&I Lighting	LTG_LED Auto Traffic Signals_N	100	102	104	105	106	1,068.00	0.29	12	114,536	231,363	350,481	470,744	591,580	27.9	1	56.4	85.5	114.8	144.2	100	102	104	105	106	108	110	112	114	116	118	120	
41	Aggressive	Normal	Normal	C&I Lighting	LTG_LED Auto Traffic Signals_N	975	994	1,013	1,032	1,051	275.00	0.09	6	88,275	180,964	278,287	380,476	487,775	27.3	1	55.9	86.0	117.6	150.8	975	994	1,013	1,032	1,051	1,070	1,090	1,110	1,130	1,150	1,170	1,190	1,210
41	Aggressive	Normal	Normal	C&I Lighting	LTG_LED Auto Traffic Signals_N	300	306	312	315	317	275.00	0.09	6	70,620	142,652	216,097	290,248	364,752	21.8	1	44.1	66.8	89.7	112.7	300	306	312	315	317	319	321	323	325	327	329	331	
42	Aggressive	Aggressive	Normal	C&I Lighting	LED Pedestrian Signals_N	125	131	138	145	152	150.00	0.04	8	10,540	22,903	35,908	50,598	66,698	4.7	1	9.7	14.8	20.3	26.0	125	131	138	145	152	160	168	176	184	192	200	208	
42	Aggressive	Normal	Normal	C&I Lighting	LED Pedestrian Signals_N	125	131	138	145	152	150.00	0.04	8	10,540	22,903	35,908	50,598	66,698	4.7	1	9.7	14.8	20.3	26.0	125	131	138	145	152	160	168	176	184	192	200	208	
42	Normal	Aggressive	Normal	C&I Lighting	LED Pedestrian Signals_N	100	102	104	1																												

MMP - C and End-use measures Load Impact

MMP (Dr Penetration, Incentive)			Characteristic	Program	Participants YR1 Participants YR2 Participants YR3 Participants YR4 Participants YR5										Target kW Percent Measure Use kwh (Net Free) Yr1 kwh (Net Free) Yr2 kwh (Net Free) Yr3 kwh (Net Free) Yr4 kwh (Net Free) Yr5 kwh (Net Free)										Yr1 Annual kW (net Free) Yr2 Annual kW (net Free) Yr3 Annual kW (net Free) Yr4 Annual kW (net Free) Yr5 Annual kW (net Free)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
63	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 20_N	1	1	1	1	1	1	1	1	1	1	1	19,140.00	5.20	15	15,974	32,267	48,879	65,652	82,504	3.9	7.9	11.9	16.0	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1</

MMP - C and End-use measures Load Impact

MMP Dr Penetration		Incentive	Characteristic	Program	Participants YR1	Participants YR2	Participants YR3	Participants YR4	Participants YR5	Target kWh	Target kW percent	Measure Use (kwh (Net Freq))	Y1 kwh (Net Freq)	Y2 kwh (Net Freq)	Y3 kwh (Net Freq)	Y4 kwh (Net Freq)	Y5 kwh (Net Freq)	Y1 Annual kW (net Freq)	Y2 Annual kW (net Freq)	Y3 Annual kW (net Freq)	Y4 Annual kW (net Freq)	Y5 Annual kW (net Freq)	Y1 Annual kW (net Freq)	Y2 Annual kW (net Freq)	Y3 Annual kW (net Freq)	Y4 Annual kW (net Freq)	Y5 Annual kW (net Freq)	
94	Normal	Normal	C&I Refrigeration	Energy Efficient Ice Machines 500-1000 lbs./N	5	5	5	5	5	1,750.00	0.48	15	7,490	15,130	22,515	30,794	38,086	2.1	4.6	8.3	8.4	10.6						
95	Aggressive	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs./AG	2.5	3	3	3	3	4,870.00	1.28	15	21,365	42,870	62,955	84,919	97,587	2.7	5.1	8.6	8.6	11.8	15.1					
95	Aggressive	Normal	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs./AG	2.5	3	3	3	3	4,870.00	1.28	15	21,365	42,870	62,955	84,919	97,587	2.7	5.1	8.6	8.6	11.8	15.1					
95	Normal	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs./N	2	2	2	2	2	4,870.00	1.28	15	8,337	16,642	25,513	34,267	43,063	2.2	4.4	6.7	9.0	11.3						
95	Normal	Normal	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs./N	2	2	2	2	2	4,870.00	1.28	15	8,337	16,642	25,513	34,267	43,063	2.2	4.4	6.7	9.0	11.3						
96	Aggressive	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR, AG	20	28	30	30	30	7,343.00	3.68	15	137,498	281,870	431,400	592,332	709,761	68.9	207.6	297.0	380.8	468.9						
96	Aggressive	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR, N	20	28	30	30	30	7,343.00	3.68	15	137,498	281,870	431,400	592,332	709,761	68.9	207.6	297.0	380.8	468.9						
96	Normal	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR, N	20	28	30	30	30	7,343.00	3.68	15	137,498	281,870	431,400	592,332	709,761	68.9	207.6	297.0	380.8	468.9						
96	Normal	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR, N	20	28	30	30	30	7,343.00	3.68	15	137,498	281,870	431,400	592,332	709,761	68.9	207.6	297.0	380.8	468.9						
97	Aggressive	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders, AG	625	656	689	724	760	50.00	0.01	5	26,750	54,838	84,329	115,296	147,811	5.4	11.0	16.9	22.1	29.6						
97	Aggressive	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders, AG	625	656	689	724	760	50.00	0.01	5	26,750	54,838	84,329	115,296	147,811	5.4	11.0	16.9	22.1	29.6						
97	Normal	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders, N	500	510	520	525	528	50.00	0.01	5	21,400	43,228	65,484	87,954	110,531	4.3	8.6	13.1	17.6	23.1						
97	Normal	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders, N	500	510	520	525	528	50.00	0.01	5	21,400	43,228	65,484	87,954	110,531	4.3	8.6	13.1	17.6	23.1						
98	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia, AG	6.25	7	7	7	8	98.00	0.02	5	469	940	1,446	1,977	2,535	0.1	0.2	0.3	0.4	0.5						
98	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia, AG	6.25	7	7	7	8	98.00	0.02	5	469	940	1,446	1,977	2,535	0.1	0.2	0.3	0.4	0.5						
98	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia, N	6.25	7	7	7	8	98.00	0.02	5	469	940	1,446	1,977	2,535	0.1	0.2	0.3	0.4	0.5						
98	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia, N	6.25	7	7	7	8	98.00	0.02	5	469	940	1,446	1,977	2,535	0.1	0.2	0.3	0.4	0.5						
99	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia, AG	6.25	7	7	7	8	134.00	0.03	5	627	1,286	1,978	2,704	3,466	0.1	0.3	0.4	0.6	0.8						
99	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia, AG	6.25	7	7	7	8	134.00	0.03	5	627	1,286	1,978	2,704	3,466	0.1	0.3	0.4	0.6	0.8						
99	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia, N	6.25	7	7	7	8	134.00	0.03	5	627	1,286	1,978	2,704	3,466	0.1	0.3	0.4	0.6	0.8						
99	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia, N	6.25	7	7	7	8	134.00	0.03	5	627	1,286	1,978	2,704	3,466	0.1	0.3	0.4	0.6	0.8						
100	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia, AG	6.25	7	7	7	8	175.00	0.04	5	819	1,679	2,583	3,531	4,527	0.2	0.4	0.6	0.8	1.0						
100	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia, AG	6.25	7	7	7	8	175.00	0.04	5	819	1,679	2,583	3,531	4,527	0.2	0.4	0.6	0.8	1.0						
100	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia, N	6.25	7	7	7	8	175.00	0.04	5	819	1,679	2,583	3,531	4,527	0.2	0.4	0.6	0.8	1.0						
100	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia, N	6.25	7	7	7	8	175.00	0.04	5	819	1,679	2,583	3,531	4,527	0.2	0.4	0.6	0.8	1.0						
101	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia, AG	6.25	7	7	7	8	216.00	0.05	5	1,011	2,073	3,188	4,358	5,587	0.2	0.5	0.7	0.9	1.3						
101	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia, AG	6.25	7	7	7	8	216.00	0.05	5	1,011	2,073	3,188	4,358	5,587	0.2	0.5	0.7	0.9	1.3						
101	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia, N	6.25	7	7	7	8	216.00	0.05	5	1,011	2,073	3,188	4,358	5,587	0.2	0.5	0.7	0.9	1.3						
101	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia, N	6.25	7	7	7	8	216.00	0.05	5	1,011	2,073	3,188	4,358	5,587	0.2	0.5	0.7	0.9	1.3						
102	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia, AG	6.25	7	7	7	8	304.00	0.08	5	1,423	2,917	4,486	6,134	7,864	0.4	0.8	1.2	1.6	2.1						
102	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia, AG	6.25	7	7	7	8	304.00	0.08	5	1,423	2,917	4,486	6,134	7,864	0.4	0.8	1.2	1.6	2.1						
102	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia, N	6.25	7	7	7	8	304.00	0.08	5	1,423	2,917	4,486	6,134	7,864	0.4	0.8	1.2	1.6	2.1						
102	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia, N	6.25	7	7	7	8	304.00	0.08	5	1,423	2,917	4,486	6,134	7,864	0.4	0.8	1.2	1.6	2.1						
103	Aggressive	Aggressive	C&I HVAC	W/HP 17,000, AG	1.25	1	1	1	2	23.98	0.02	15	22	46	71	97	124	0.0	0.0	0.1	0.1	0.1						
103	Aggressive	Normal	C&I HVAC	W/HP 17,000, AG	1.25	1	1	1	2	23.98	0.02	15	22	46	71	97	124	0.0	0.0	0.1	0.1	0.1						
103	Normal	Aggressive	C&I HVAC	W/HP 17,000, AG	1	1	1	1	2	23.98	0.02	15	22	46	71	97	124	0.0	0.0	0.1	0.1	0.1						
103	Normal	Normal	C&I HVAC	W/HP 17,000, AG	1	1	1	1	2	23.98	0.02	15	22	46	71	97	124	0.0	0.0	0.1	0.1	0.1						
104	Aggressive	Aggressive	C&I HVAC	W/HP 17,000-65,000, AG	1.25	1	1	1	2	63.67	0.06	15	60	96	155	217	299	0.1	0.2	0.3	0.4	0.6						
104	Aggressive	Normal	C&I HVAC	W/HP 17,000-65,000, AG	1.25	1	1	1	2	63.67	0.06	15	60	96	155	217	299	0.1	0.2	0.3	0.4	0.6						
104	Normal	Aggressive	C&I HVAC	W/HP 17,000-65,000, AG	1	1	1	1	2	63.67	0.06	15	60	96	155	217	299	0.1	0.2	0.3	0.4	0.6						
104	Normal	Normal	C&I HVAC	W/HP 17,000-65,000, AG	1	1	1	1	2	63.67	0.06	15	60	96	155	217	299	0.1	0.2	0.3	0.4	0.6						
105	Aggressive	Aggressive	C&I HVAC	W/HP 65,000-135,000, AG	1.25	1	1	1	2	159.17	0.16	15	149	306	462	642	823	0.6	1.0	1.5	2.1	2.9						
105	Aggressive	Normal	C&I HVAC	W/HP 65,000-135,000, AG	1.25	1	1	1	2	159.17	0.16	15	149	306	462	642	823	0.6	1.0	1.5	2.1	2.9						
105	Normal	Aggressive	C&I HVAC	W/HP 65,000-135,000, AG	1	1	1	1	2	159.17	0.16	15	149	306	462	642	823	0.6	1.0	1.5	2.1	2.9						
105	Normal	Normal	C&I HVAC	W/HP 65,000-135,000, AG	1	1	1	1	2	159.17	0.16	15	149	306	462	642	823	0.6	1.0	1.5	2.1	2.9						
106	Aggressive	Aggressive	C&I HVAC	Setback, Programmable Thermostat, AG	75	83	87	91	97	9,017.00	1.75	9	651,253	1,335,058	2,053,075	2,806,981	3,598,083	126.4	259.1	398.5	544.8	688.4						
106	Aggressive	Normal	C&I HVAC	Setback, Programmable Thermostat, AG	75	83	87	91	97	9,017.00	1.75	9	651,253	1,335,058	2,053,075	2,806,981	3,598,083	126.4	259.1	398.5	544.8	688.4						
106	Normal	Aggressive	C&I HVAC	Setback, Programmable Thermostat, N	50	51	52	53	53	9,017.00	1.75	9	438,169	877,020	1,328,556	1,784,433	2,242,481	84.3	170.2	257.8	346.3	435.2						
106	Normal	Normal	C&I HVAC	Setback, Programmable Thermostat, N	50	51	52	53	53	9,017.00	1.75	9	438,169	877,020	1,328,556	1,784,433	2,242,481	84.3	170.2	257.8	346.3	435.2						
107	Aggressive	Aggressive	C&I HVAC	Ground Source HP Closed Loop, AG	1.25	1	1	1	2	264.00	0.04	15	318	651	1,002	1,370	1,756	0.1	0.2	0.3	0.4	0.6						
107	Aggressive	Normal	C&I HVAC	Ground Source HP Closed Loop, AG	1.25	1	1	1	2	264.00	0.04	15	318	651	1,002	1,370	1,756	0.1	0.2	0.3	0.4	0.6						
107	Normal	Aggressive	C&I HVAC	Ground Source HP Closed Loop, N	1	1	1	1	2	264.00	0.04	15	254	514	778	1,045	1,313	0.0	0.1	0.2	0.3	0.4						
107	Normal	Normal	C&I HVAC	Ground Source HP Closed Loop, N	1	1	1	1	2	264.00	0.04	15	254	514	778	1,045												

MMP - C and I End-use measures Load Impact

MMP (Dr Penetration Incentive)		Characteristic	Program	Participants YR1	Participants YR2	Participants YR3	Participants YR4	Participants YR5	Target kWh per unit	Target kW per unit	Measure life	kwh/ (Net Free)	Y1 kwh/ (Net Free)	Y2 kwh/ (Net Free)	Y3 kwh/ (Net Free)	Y4 kwh/ (Net Free)	Y5 kwh/ (Net Free)	Annual kW (net Free)	Y1 Annual kW (net Free)	Y2 Annual kW (net Free)	Y3 Annual kW (net Free)	Y4 Annual kW (net Free)	Y5 Annual kW (net Free)
126	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_AG	6.25	7	7	8	18,000.00	3.00	5	84,263	172,738	265,638	363,182	465,604	14.0	28.8	44.3	60.5	77.6		
126	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_AG	6.25	7	7	7	8	18,000.00	3.00	5	84,263	172,738	265,638	363,182	465,604	14.0	28.8	44.3	60.5	77.6	
126	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_N	5	5	5	5	18,000.00	3.00	5	67,410	136,168	206,275	277,055	348,173	11.2	22.7	34.4	46.2	58.0		
126	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 300-400 tons_N	5	5	5	5	18,000.00	3.00	5	67,410	136,168	206,275	277,055	348,173	11.2	22.7	34.4	46.2	58.0		
127	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AG	2.5	3	3	3	23,143.00	3.86	5	88,837	136,614	186,780	239,455	298,465	7.2	14.8	22.8	31.2	39.9		
127	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AG	2.5	3	3	3	23,143.00	3.86	5	88,837	136,614	186,780	239,455	298,465	7.2	14.8	22.8	31.2	39.9		
127	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_N	2	2	2	2	23,143.00	3.86	5	34,668	70,030	106,085	142,486	179,061	5.8	11.7	17.7	23.8	29.9		
127	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_N	2	2	2	2	23,143.00	3.86	5	34,668	70,030	106,085	142,486	179,061	5.8	11.7	17.7	23.8	29.9		
128	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AG	6.25	7	7	7	10,228.00	1.70	5	47,880	98,154	150,941	206,368	264,566	8.0	16.3	25.1	34.3	44.0		
128	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AG	6.25	7	7	7	10,228.00	1.70	5	47,880	98,154	150,941	206,368	264,566	8.0	16.3	25.1	34.3	44.0		
128	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_N	5	5	5	5	10,228.00	1.70	5	38,304	77,374	117,210	157,429	197,839	6.4	12.9	19.5	26.2	32.9		
128	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_N	5	5	5	5	10,228.00	1.70	5	38,304	77,374	117,210	157,429	197,839	6.4	12.9	19.5	26.2	32.9		
129	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AG	1.25	1	1	1	2	30,662.00	5.10	5	28,726	58,888	90,559	123,813	158,729	4.8	9.8	15.1	20.6	26.4	
129	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AG	1.25	1	1	1	2	30,662.00	5.10	5	28,726	58,888	90,559	123,813	158,729	4.8	9.8	15.1	20.6	26.4	
129	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_N	1	1	1	1	1	30,662.00	5.10	5	22,981	46,421	70,321	94,451	118,696	3.8	7.7	11.7	15.7	19.7	
129	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_N	1	1	1	1	1	30,662.00	5.10	5	22,981	46,421	70,321	94,451	118,696	3.8	7.7	11.7	15.7	19.7	
130	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AG	1.25	1	1	1	2	51,136.00	8.50	5	47,876	98,146	150,929	206,352	264,546	8.0	16.3	25.1	34.3	44.0	
130	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AG	1.25	1	1	1	2	51,136.00	8.50	5	47,876	98,146	150,929	206,352	264,546	8.0	16.3	25.1	34.3	44.0	
130	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_N	1	1	1	1	1	51,136.00	8.50	5	38,301	77,368	117,201	157,417	197,824	6.4	12.9	19.5	26.2	32.9	
130	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_N	1	1	1	1	1	51,136.00	8.50	5	38,301	77,368	117,201	157,417	197,824	6.4	12.9	19.5	26.2	32.9	
131	Aggressive	Aggressive	C&I HVAC	Air Cooled Chillers_AG	1.25	1	1	1	2	3,084.00	2.99	20	2,887	5,919	9,103	12,445	15,955	2.8	5.7	8.8	12.1	15.5	
131	Aggressive	Normal	C&I HVAC	Air Cooled Chillers_AG	1.25	1	1	1	2	3,084.00	2.99	20	2,887	5,919	9,103	12,445	15,955	2.8	5.7	8.8	12.1	15.5	
131	Normal	Aggressive	C&I HVAC	Air Cooled Chillers_N	1	1	1	1	1	3,084.00	2.99	20	2,310	4,620	6,930	9,240	11,550	2.2	4.5	6.8	9.0	11.2	
131	Normal	Normal	C&I HVAC	Air Cooled Chillers_N	1	1	1	1	1	3,084.00	2.99	20	2,310	4,620	6,930	9,240	11,550	2.2	4.5	6.8	9.0	11.2	
132	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_AG	12.5	13	14	14	15	4,487.46	3.96	20	42,014	86,128	132,449	181,085	232,153	37.0	75.9	116.8	159.7	204.7	
132	Aggressive	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_AG	12.5	13	14	14	15	4,487.46	3.96	20	42,014	86,128	132,449	181,085	232,153	37.0	75.9	116.8	159.7	204.7	
132	Normal	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_N	10	10	10	11	11	4,487.46	3.96	20	33,611	67,894	102,850	138,142	173,601	29.6	59.9	90.7	121.8	153.1	
132	Normal	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_N	10	10	10	11	11	4,487.46	3.96	20	33,611	67,894	102,850	138,142	173,601	29.6	59.9	90.7	121.8	153.1	
133	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AG	6.25	7	7	7	8	43,044.19	36.43	20	201,501	413,076	635,231	868,493	1,113,418	170.5	349.6	537.6	795.0	942.3	
133	Aggressive	Normal	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AG	6.25	7	7	7	8	43,044.19	36.43	20	201,501	413,076	635,231	868,493	1,113,418	170.5	349.6	537.6	795.0	942.3	
133	Normal	Aggressive	C&I HVAC	Water Cooled Chillers 150 - 300 ton_N	5	5	5	5	5	43,044.19	36.43	20	161,200	325,625	493,273	662,534	832,601	136.4	275.6	417.4	600.7	704.6	
133	Normal	Normal	C&I HVAC	Water Cooled Chillers 150 - 300 ton_N	5	5	5	5	5	43,044.19	36.43	20	161,200	325,625	493,273	662,534	832,601	136.4	275.6	417.4	600.7	704.6	
134	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers more than 300 ton_AG	1.25	1	1	1	2	155,914.86	131.08	20	145,975	299,249	460,187	629,172	806,606	122.7	251.6	386.9	529.0	678.1	
134	Aggressive	Normal	C&I HVAC	Water Cooled Chillers more than 300 ton_AG	1.25	1	1	1	2	155,914.86	131.08	20	145,975	299,249	460,187	629,172	806,606	122.7	251.6	386.9	529.0	678.1	
134	Normal	Aggressive	C&I HVAC	Water Cooled Chillers more than 300 ton_N	1	1	1	1	1	155,914.86	131.08	20	116,780	233,560	350,341	467,121	583,901	98.2	196.4	294.5	392.7	480.9	
134	Normal	Normal	C&I HVAC	Water Cooled Chillers more than 300 ton_N	1	1	1	1	1	155,914.86	131.08	20	116,780	233,560	350,341	467,121	583,901	98.2	196.4	294.5	392.7	480.9	
C1	Aggressive	Aggressive	C&I Custom	Custom_RFPF_New Construction Level 1_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C1	Aggressive	Normal	C&I Custom	Custom_RFPF_New Construction Level 1_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C1	Normal	Aggressive	C&I Custom	Custom_RFPF_New Construction Level 1_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	
C1	Normal	Normal	C&I Custom	Custom_RFPF_New Construction Level 1_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	
C2	Aggressive	Aggressive	C&I Custom	Custom_RFPF_New Construction Level 2_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C2	Aggressive	Normal	C&I Custom	Custom_RFPF_New Construction Level 2_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C2	Normal	Aggressive	C&I Custom	Custom_RFPF_New Construction Level 2_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	
C2	Normal	Normal	C&I Custom	Custom_RFPF_New Construction Level 2_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	
C3	Aggressive	Aggressive	C&I Custom	Custom_RFPF_New Construction Mid Level_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C3	Aggressive	Normal	C&I Custom	Custom_RFPF_New Construction Mid Level_AG	20	40	80	120	150	80,000.00	20.00	15	1,198,400	3,595,200	5,692,400	8,388,800	15,579,200	24,567,200	299.6	898.8	2,097.2	3,894.8	6,141.8
C3	Normal	Aggressive	C&I Custom	Custom_RFPF_New Construction Mid Level_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	
C3	Normal	Normal	C&I Custom	Custom_RFPF_New Construction Mid Level_N	20	30	45	68	101	80,000.00	20.00	15	1,198,400	2,996,000	5,692,400	9,737,000	15,803,900	299.6	749.0	1,423.1	2,434.3	3,951.0	

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's)					NPV (Today's) Environmental Benefits
						YR 1 Program Incentive Costs	YR 2 Program Incentive Costs	YR 3 Program Incentive Costs	YR 4 Program Incentive Costs	YR 5 Program Incentive Costs	NPV (Today's) Administration Cost	Program Implementation Cost	NPV (Today's) Incentive Costs	NPV (Today's) Avoid Cost		
\$ 1	Aggressive	Aggressive	C&I Lighting	T-8 2ft 1 lamp_AG	\$ 33	\$ 10,313	\$ 12,375	\$ 14,850	\$ 17,820	\$ 21,384	\$ -	\$ -	\$ 64,039	\$ 77,941	\$ 7,340	\$ 7,340
\$ 1	Aggressive	Normal	C&I Lighting	T-8 2ft 1 lamp_N	\$ 33	\$ 1,875	\$ 2,250	\$ 2,700	\$ 3,240	\$ 3,888	\$ -	\$ -	\$ 11,643	\$ 7,941	\$ 7,340	\$ 7,340
\$ 1	Normal	Aggressive	C&I Lighting	T-8 2ft 1 lamp_N	\$ 33	\$ 8,250	\$ 9,075	\$ 9,983	\$ 10,981	\$ 12,079	\$ -	\$ -	\$ 42,605	\$ 51,634	\$ 4,883	\$ 4,883
\$ 1	Normal	Normal	C&I Lighting	T-8 2ft 1 lamp_N	\$ 33	\$ 1,500	\$ 1,650	\$ 1,815	\$ 1,997	\$ 2,196	\$ -	\$ -	\$ 7,746	\$ 5,164	\$ 4,883	\$ 4,883
\$ 2	Aggressive	Aggressive	C&I Lighting	T-8 2ft 2 lamp_AG	\$ 36	\$ 13,500	\$ 16,200	\$ 19,440	\$ 23,328	\$ 27,994	\$ -	\$ -	\$ 83,832	\$ 116,911	\$ 11,010	\$ 11,010
\$ 2	Aggressive	Normal	C&I Lighting	T-8 2ft 2 lamp_AG	\$ 36	\$ 3,000	\$ 3,600	\$ 4,320	\$ 5,184	\$ 6,221	\$ -	\$ -	\$ 18,629	\$ 116,911	\$ 11,010	\$ 11,010
\$ 2	Normal	Aggressive	C&I Lighting	T-8 2ft 2 lamp_N	\$ 36	\$ 9,000	\$ 9,900	\$ 10,890	\$ 11,979	\$ 13,177	\$ -	\$ -	\$ 46,479	\$ 64,542	\$ 6,104	\$ 6,104
\$ 2	Normal	Normal	C&I Lighting	T-8 2ft 2 lamp_N	\$ 36	\$ 2,000	\$ 2,200	\$ 2,420	\$ 2,662	\$ 2,928	\$ -	\$ -	\$ 10,329	\$ 64,542	\$ 6,104	\$ 6,104
\$ 3	Aggressive	Aggressive	C&I Lighting	T-8 2ft 3 lamp_AG	\$ 54	\$ 13,500	\$ 16,200	\$ 19,440	\$ 23,328	\$ 27,994	\$ -	\$ -	\$ 83,832	\$ 155,881	\$ 14,680	\$ 14,680
\$ 3	Aggressive	Normal	C&I Lighting	T-8 2ft 3 lamp_AG	\$ 54	\$ 2,100	\$ 2,520	\$ 3,024	\$ 3,629	\$ 4,355	\$ -	\$ -	\$ 13,041	\$ 155,881	\$ 14,680	\$ 14,680
\$ 3	Normal	Aggressive	C&I Lighting	T-8 2ft 3 lamp_N	\$ 54	\$ 10,800	\$ 11,880	\$ 13,068	\$ 14,375	\$ 15,812	\$ -	\$ -	\$ 55,774	\$ 103,268	\$ 9,766	\$ 9,766
\$ 3	Normal	Normal	C&I Lighting	T-8 2ft 3 lamp_N	\$ 54	\$ 1,680	\$ 1,848	\$ 2,033	\$ 2,236	\$ 2,460	\$ -	\$ -	\$ 8,676	\$ 103,268	\$ 9,766	\$ 9,766
\$ 4	Aggressive	Aggressive	C&I Lighting	T-8 2ft 4 lamp_AG	\$ 57	\$ 7,125	\$ 8,550	\$ 10,260	\$ 12,312	\$ 14,774	\$ -	\$ -	\$ 44,245	\$ 85,735	\$ 8,074	\$ 8,074
\$ 4	Aggressive	Normal	C&I Lighting	T-8 2ft 4 lamp_AG	\$ 57	\$ 1,500	\$ 1,800	\$ 2,160	\$ 2,592	\$ 3,110	\$ -	\$ -	\$ 9,315	\$ 85,735	\$ 8,074	\$ 8,074
\$ 4	Normal	Aggressive	C&I Lighting	T-8 2ft 4 lamp_N	\$ 57	\$ 5,700	\$ 6,270	\$ 6,897	\$ 7,587	\$ 8,345	\$ -	\$ -	\$ 29,437	\$ 56,797	\$ 5,372	\$ 5,372
\$ 4	Normal	Normal	C&I Lighting	T-8 2ft 4 lamp_N	\$ 57	\$ 1,200	\$ 1,320	\$ 1,452	\$ 1,597	\$ 1,757	\$ -	\$ -	\$ 6,197	\$ 56,797	\$ 5,372	\$ 5,372
\$ 5	Aggressive	Aggressive	C&I Lighting	T-8 3ft 1 lamp_AG	\$ 33	\$ 4,125	\$ 4,950	\$ 5,940	\$ 7,128	\$ 8,554	\$ -	\$ -	\$ 25,615	\$ 42,867	\$ 4,037	\$ 4,037
\$ 5	Aggressive	Normal	C&I Lighting	T-8 3ft 1 lamp_AG	\$ 33	\$ 750	\$ 900	\$ 1,080	\$ 1,296	\$ 1,555	\$ -	\$ -	\$ 4,657	\$ 42,867	\$ 4,037	\$ 4,037
\$ 5	Normal	Aggressive	C&I Lighting	T-8 3ft 1 lamp_N	\$ 33	\$ 3,300	\$ 3,630	\$ 3,993	\$ 4,392	\$ 4,832	\$ -	\$ -	\$ 17,042	\$ 28,399	\$ 2,686	\$ 2,686
\$ 5	Normal	Normal	C&I Lighting	T-8 3ft 1 lamp_N	\$ 33	\$ 600	\$ 660	\$ 726	\$ 799	\$ 878	\$ -	\$ -	\$ 3,099	\$ 28,399	\$ 2,686	\$ 2,686
\$ 6	Aggressive	Aggressive	C&I Lighting	T-8 3ft 2 lamp_AG	\$ 36	\$ 4,500	\$ 5,400	\$ 6,480	\$ 7,776	\$ 9,331	\$ -	\$ -	\$ 27,944	\$ 38,970	\$ 3,670	\$ 3,670
\$ 6	Aggressive	Normal	C&I Lighting	T-8 3ft 2 lamp_AG	\$ 36	\$ 1,000	\$ 1,200	\$ 1,440	\$ 1,728	\$ 2,074	\$ -	\$ -	\$ 6,210	\$ 38,970	\$ 3,670	\$ 3,670
\$ 6	Normal	Aggressive	C&I Lighting	T-8 3ft 2 lamp_N	\$ 36	\$ 3,600	\$ 3,960	\$ 4,356	\$ 4,792	\$ 5,271	\$ -	\$ -	\$ 18,591	\$ 25,817	\$ 2,442	\$ 2,442
\$ 6	Normal	Normal	C&I Lighting	T-8 3ft 2 lamp_N	\$ 36	\$ 800	\$ 880	\$ 968	\$ 1,065	\$ 1,171	\$ -	\$ -	\$ 4,131	\$ 25,817	\$ 2,442	\$ 2,442
\$ 7	Aggressive	Aggressive	C&I Lighting	T-8 3ft 3 lamp_AG	\$ 54	\$ 6,750	\$ 8,100	\$ 9,720	\$ 11,664	\$ 13,997	\$ -	\$ -	\$ 41,916	\$ 46,764	\$ 4,404	\$ 4,404
\$ 7	Aggressive	Normal	C&I Lighting	T-8 3ft 3 lamp_AG	\$ 54	\$ 1,625	\$ 1,950	\$ 2,340	\$ 2,808	\$ 3,370	\$ -	\$ -	\$ 10,091	\$ 46,764	\$ 4,404	\$ 4,404
\$ 7	Normal	Aggressive	C&I Lighting	T-8 3ft 3 lamp_N	\$ 54	\$ 5,400	\$ 5,940	\$ 6,534	\$ 7,187	\$ 7,906	\$ -	\$ -	\$ 27,687	\$ 30,980	\$ 2,930	\$ 2,930
\$ 7	Normal	Normal	C&I Lighting	T-8 3ft 3 lamp_N	\$ 54	\$ 1,300	\$ 1,430	\$ 1,573	\$ 1,730	\$ 1,903	\$ -	\$ -	\$ 6,714	\$ 30,980	\$ 2,930	\$ 2,930
\$ 8	Aggressive	Aggressive	C&I Lighting	T-8 3ft 4 lamp_AG	\$ 57	\$ 21,375	\$ 25,650	\$ 30,780	\$ 36,936	\$ 44,323	\$ -	\$ -	\$ 132,735	\$ 233,822	\$ 22,019	\$ 22,019
\$ 8	Aggressive	Normal	C&I Lighting	T-8 3ft 4 lamp_AG	\$ 57	\$ 7,500	\$ 9,000	\$ 10,800	\$ 12,960	\$ 15,552	\$ -	\$ -	\$ 46,574	\$ 233,822	\$ 22,019	\$ 22,019
\$ 8	Normal	Aggressive	C&I Lighting	T-8 3ft 4 lamp_N	\$ 57	\$ 17,100	\$ 18,810	\$ 20,691	\$ 22,760	\$ 25,036	\$ -	\$ -	\$ 88,309	\$ 154,902	\$ 14,650	\$ 14,650
\$ 8	Normal	Normal	C&I Lighting	T-8 3ft 4 lamp_N	\$ 57	\$ 6,000	\$ 6,600	\$ 7,260	\$ 7,986	\$ 8,785	\$ -	\$ -	\$ 30,986	\$ 154,902	\$ 14,650	\$ 14,650
\$ 9	Aggressive	Aggressive	C&I Lighting	T-8 4ft 1 lamp_AG	\$ 33	\$ 20,625	\$ 24,750	\$ 29,700	\$ 35,640	\$ 42,768	\$ -	\$ -	\$ 128,077	\$ 272,792	\$ 25,689	\$ 25,689
\$ 9	Aggressive	Normal	C&I Lighting	T-8 4ft 1 lamp_AG	\$ 33	\$ 3,750	\$ 4,500	\$ 5,400	\$ 6,480	\$ 7,776	\$ -	\$ -	\$ 23,287	\$ 272,792	\$ 25,689	\$ 25,689
\$ 9	Normal	Aggressive	C&I Lighting	T-8 4ft 1 lamp_N	\$ 33	\$ 16,500	\$ 18,150	\$ 19,965	\$ 21,962	\$ 24,158	\$ -	\$ -	\$ 85,211	\$ 180,719	\$ 17,091	\$ 17,091
\$ 9	Normal	Normal	C&I Lighting	T-8 4ft 1 lamp_N	\$ 33	\$ 3,000	\$ 3,300	\$ 3,630	\$ 3,993	\$ 4,392	\$ -	\$ -	\$ 15,493	\$ 180,719	\$ 17,091	\$ 17,091
\$ 10	Aggressive	Aggressive	C&I Lighting	T-8 4ft 2 lamp_AG	\$ 36	\$ 112,500	\$ 135,000	\$ 162,000	\$ 194,400	\$ 233,280	\$ -	\$ -	\$ 698,603	\$ 1,656,237	\$ 155,971	\$ 155,971
\$ 10	Aggressive	Normal	C&I Lighting	T-8 4ft 2 lamp_AG	\$ 36	\$ 25,000	\$ 30,000	\$ 36,000	\$ 43,200	\$ 51,840	\$ -	\$ -	\$ 155,245	\$ 1,656,237	\$ 155,971	\$ 155,971
\$ 10	Normal	Aggressive	C&I Lighting	T-8 4ft 2 lamp_N	\$ 36	\$ 90,000	\$ 99,000	\$ 108,900	\$ 119,790	\$ 131,769	\$ -	\$ -	\$ 464,787	\$ 1,097,220	\$ 103,769	\$ 103,769
\$ 10	Normal	Normal	C&I Lighting	T-8 4ft 2 lamp_N	\$ 36	\$ 20,000	\$ 22,000	\$ 24,200	\$ 26,620	\$ 29,282	\$ -	\$ -	\$ 103,286	\$ 1,097,220	\$ 103,769	\$ 103,769
\$ 11	Aggressive	Aggressive	C&I Lighting	T-8 4ft 3 lamp_AG	\$ 54	\$ 33,750	\$ 40,500	\$ 48,600	\$ 58,320	\$ 69,984	\$ -	\$ -	\$ 209,581	\$ 623,524	\$ 58,719	\$ 58,719
\$ 11	Aggressive	Normal	C&I Lighting	T-8 4ft 3 lamp_AG	\$ 54	\$ 11,250	\$ 13,500	\$ 16,200	\$ 19,440	\$ 23,328	\$ -	\$ -	\$ 69,860	\$ 623,524	\$ 58,719	\$ 58,719
\$ 11	Normal	Aggressive	C&I Lighting	T-8 4ft 3 lamp_N	\$ 54	\$ 27,000	\$ 29,700	\$ 32,670	\$ 35,937	\$ 39,531	\$ -	\$ -	\$ 139,436	\$ 413,071	\$ 39,066	\$ 39,066
\$ 11	Normal	Normal	C&I Lighting	T-8 4ft 3 lamp_N	\$ 54	\$ 9,000	\$ 9,900	\$ 10,890	\$ 11,979	\$ 13,177	\$ -	\$ -	\$ 46,479	\$ 413,071	\$ 39,066	\$ 39,066
\$ 12	Aggressive	Aggressive	C&I Lighting	T-8 4ft 4 lamp_AG	\$ 57	\$ 142,500	\$ 171,000	\$ 205,200	\$ 246,240	\$ 295,488	\$ -	\$ -	\$ 884,897	\$ 2,961,741	\$ 278,913	\$ 278,913
\$ 12	Aggressive	Normal	C&I Lighting	T-8 4ft 4 lamp_AG	\$ 57	\$ 55,000	\$ 66,000	\$ 79,200	\$ 95,040	\$ 114,048	\$ -	\$ -	\$ 341,539	\$ 2,961,741	\$ 278,913	\$ 278,913
\$ 12	Normal	Aggressive	C&I Lighting	T-8 4ft 4 lamp_N	\$ 57	\$ 114,000	\$ 125,400	\$ 137,940	\$ 151,734	\$ 166,907	\$ -	\$ -	\$ 588,730	\$ 1,962,087	\$ 185,563	\$ 185,563
\$ 12	Normal	Normal	C&I Lighting	T-8 4ft 4 lamp_N	\$ 57	\$ 44,000	\$ 48,400	\$ 53,240	\$ 58,564	\$ 64,420	\$ -	\$ -	\$ 227,229	\$ 1,962,087	\$ 185,563	\$ 185,563
\$ 13	Aggressive	Aggressive	C&I Lighting	T-8 8ft 2 lamp_AG	\$ 54	\$ 10,125	\$ 12,150	\$ 14,580	\$ 17,496	\$ 20,995	\$ -	\$ -	\$ 62,874	\$ 116,911	\$ 11,010	\$ 11,010
\$ 13	Aggressive	Normal	C&I Lighting	T-8 8ft 2 lamp_AG	\$ 54	\$ 2,625	\$ 3,150	\$ 3,780	\$ 4,536	\$ 5,443	\$ -	\$ -	\$ 16,301	\$ 116,911	\$ 11,010	\$ 11,010
\$ 13	Normal	Aggressive	C&I Lighting	T-8 8ft 2 lamp_N	\$ 54	\$ 8,100	\$ 9,810	\$ 9,801	\$ 10,781	\$ 11,859	\$ -	\$ -	\$ 41,831	\$ 77,451	\$ 7,325	\$ 7,325
\$ 13	Normal	Normal	C&I Lighting	T-8 8ft 2 lamp_N	\$ 54	\$ 2,100	\$ 2,310	\$ 2,541	\$ 2,795	\$ 3,075	\$ -	\$ -	\$ 10,845	\$ 77,451	\$ 7,325	\$ 7,325
\$ 14	Aggressive	Aggressive	C&I Lighting	T-8 8ft 1 lamp_AG	\$ 50	\$ 9,375	\$ 11,250	\$ 13,500	\$ 16,200	\$ 19,440	\$ -	\$ -	\$ 58,217	\$ 64,301	\$ 6,055	\$ 6,055
\$ 14	Aggressive	Normal	C&I Lighting	T-8 8ft 1 lamp_AG	\$ 50	\$ 1,875	\$ 2,250	\$ 2,700	\$ 3,240	\$ 3,888	\$ -	\$ -	\$ 11,643	\$ 64,301	\$ 6,055	\$ 6,055
\$ 14	Normal	Aggressive	C&I Lighting	T-8 8ft 1 lamp_N	\$ 50	\$ 7,500	\$ 8,250	\$ 9,075	\$ 9,983	\$ 10,981	\$ -	\$ -	\$ 38,732	\$ 42,598	\$ 4,029	\$ 4,029
\$ 14	Normal	Normal	C&I Lighting	T-8 8ft 1 lamp_N	\$ 50	\$ 1,500	\$ 1,650	\$ 1,815	\$ 1,997	\$ 2,196	\$ -	\$ -	\$ 7,746	\$ 42,598	\$ 4,029	\$ 4,029
\$ 15	Aggressive	Aggressive	C&I Lighting	T-8 HO 8 ft 1 Lamp_AG	\$ 66	\$ 8,250	\$ 9,900	\$ 11,880	\$ 14,256	\$ 17,107	\$ -	\$ -	\$ 51,231	\$ 97,426	\$ 9,175	\$ 9,175
\$ 15	Aggressive	Normal	C&I Lighting	T-8 HO 8 ft 1 Lamp_AG	\$ 66	\$ 2,500	\$ 3,000	\$ 3,600	\$ 4,320	\$ 5,184	\$ -	\$ -	\$ 15,525	\$ 97,426	\$ 9,175	\$ 9,175
\$ 15	Normal	Aggressive	C&I Lighting	T-8 HO 8 ft 1 Lamp_N	\$ 66	\$ 6,600	\$ 7,260	\$ 7,986	\$ 8,785	\$ 9,663	\$ -	\$ -	\$ 34,084	\$ 64,542	\$ 6,104	\$ 6,104
\$ 15	Normal	Normal	C&I Lighting	T-8 HO 8 ft 1 Lamp_N	\$ 66	\$ 2,000	\$ 2,200	\$ 2,420	\$ 2,662	\$ 2,928	\$ -	\$ -	\$ 10,329	\$ 64,542	\$ 6,104	\$ 6,104
\$ 16	Aggressive	Aggressive	C&I Lighting	T-8 HO 8 ft 2 Lamp_AG	\$ 72	\$ 9,000	\$ 10,800	\$ 12,960	\$ 15,552	\$ 18,662	\$ -	\$ -	\$ 55,888	\$ 194,851	\$ 18,350	\$ 18,350
\$ 16	Aggressive	Normal	C&I Lighting	T-8 HO 8 ft 2 Lamp_AG	\$ 72	\$ 3,500	\$ 4,200	\$ 5,040	\$ 6,048	\$ 7,258	\$ -	\$ -	\$ 21,734	\$ 194,851	\$ 18,350	\$ 18,350
\$ 16	Normal	Aggressive	C&I Lighting	T-8 HO 8 ft 2 Lamp_N	\$ 72	\$ 7,200	\$ 7,920	\$ 8,712	\$ 9,583	\$ 10,542	\$ -	\$ -	\$ 37,183	\$ 129,085	\$ 12,208	\$ 12,208
\$ 16	Normal	Normal	C&I Lighting	T-8 HO 8 ft 2 Lamp_N	\$ 72	\$ 2,800	\$ 3,080	\$ 3,388	\$ 3,727	\$ 4,099	\$ -	\$ -	\$ 14,460	\$ 129,085	\$ 12,208	\$ 12,208
\$ 17	Aggressive	Aggressive	C&I Lighting	Low Watt T8 lamps_AG	\$ 2	\$ 3,125	\$ 3,750	\$ 4,500	\$ 5,400	\$ 6,480	\$ -	\$ -	\$ 19,406	\$ 221,275	\$ 21,939	\$ 21,939
\$ 17	Aggressive	Normal	C&I Lighting	Low Watt T8 lamps_AG	\$ 2	\$ 3,125	\$ 3,750	\$ 4,500	\$ 5,400	\$ 6,480	\$ -	\$ -	\$ 19,406	\$ 221,275	\$ 21,939	\$ 21,939
\$ 17	Normal	Aggressive	C&I Lighting	Low Watt T8 lamps_N	\$ 2	\$ 2,500	\$ 2,750	\$ 3,025	\$ 3,328	\$ 3,660	\$ -	\$ -	\$ 12,911	\$ 146,590	\$ 14,596	\$ 14,596
\$ 17	Normal	Normal	C&I Lighting	Low Watt T8 lamps_N	\$ 2	\$ 2,500	\$ 2,750	\$ 3,025	\$ 3,328	\$ 3,660	\$ -	\$ -	\$ 12,911	\$ 146,590	\$ 14,596	\$ 14,596
\$ 18	Aggressive	Aggressive	C&I Lighting	1 Lamp T-5 with Elec Ballast replacing T-12_AG	\$ 59	\$ 1,125	\$ 1,181	\$ 1,240								

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's)					NPV (Today's) Environmental Benefits	
						YR 1 Program Incremental Costs	YR 2 Program Incremental Costs	YR 3 Program Incremental Costs	YR 4 Program Incremental Costs	YR 5 Program Incremental Costs	NPV (Today's) Administration Cost	Program Implementation Cost	NPV (Today's) Incentives	NPV (Today's) Avoid Cost			
\$ 22	Aggressive	Aggressive	C&I Lighting	1 Lamp T-5 HO with Elec Ballast replacing T-12_AG	\$ 120	\$ 1,125	\$ 1,181	\$ 1,240	\$ 1,302	\$ 1,367	\$ -	\$ -	\$ 5,297	\$ 3,303	\$ 313	313	
\$ 22	Aggressive	Normal	C&I Lighting	1 Lamp T-5 HO with Elec Ballast replacing T-12_AG	\$ 120	\$ 1,113	\$ 1,18	\$ 1,24	\$ 1,30	\$ 1,37	\$ -	\$ -	\$ 5,20	\$ 3,303	\$ 313	313	
\$ 22	Normal	Aggressive	C&I Lighting	1 Lamp T-5 HO with Elec Ballast replacing T-12_N	\$ 120	\$ 900	\$ 918	\$ 936	\$ 945	\$ 950	\$ -	\$ -	\$ 3,983	\$ 2,479	\$ 235	235	
\$ 22	Normal	Normal	C&I Lighting	1 Lamp T-5 HO with Elec Ballast replacing T-12_N	\$ 120	\$ 90	\$ 92	\$ 94	\$ 95	\$ 95	\$ -	\$ -	\$ 398	\$ 2,479	\$ 235	235	
\$ 23	Aggressive	Aggressive	C&I Lighting	2 Lamp T-5HO replacing T-12_AG	\$ 140	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ 1,595	\$ -	\$ -	\$ 6,180	\$ 4,183	\$ 397	397	
\$ 23	Aggressive	Normal	C&I Lighting	2 Lamp T-5HO replacing T-12_AG	\$ 140	\$ 169	\$ 177	\$ 186	\$ 195	\$ 205	\$ -	\$ -	\$ 795	\$ 4,183	\$ 397	397	
\$ 23	Normal	Aggressive	C&I Lighting	2 Lamp T-5HO replacing T-12_N	\$ 140	\$ 1,050	\$ 1,071	\$ 1,092	\$ 1,103	\$ 1,108	\$ -	\$ -	\$ 4,647	\$ 3,140	\$ 298	298	
\$ 23	Normal	Normal	C&I Lighting	2 Lamp T-5HO replacing T-12_N	\$ 140	\$ 135	\$ 138	\$ 140	\$ 142	\$ 142	\$ -	\$ -	\$ 598	\$ 3,140	\$ 298	298	
\$ 24	Aggressive	Aggressive	C&I Lighting	3 Lamp T-5HO replacing T-12_AG	\$ 175	\$ 1,650	\$ 1,733	\$ 1,819	\$ 1,910	\$ 2,006	\$ -	\$ -	\$ 7,769	\$ 5,504	\$ 522	522	
\$ 24	Aggressive	Normal	C&I Lighting	3 Lamp T-5HO replacing T-12_AG	\$ 175	\$ 206	\$ 217	\$ 227	\$ 239	\$ 251	\$ -	\$ -	\$ 971	\$ 5,504	\$ 522	522	
\$ 24	Normal	Aggressive	C&I Lighting	3 Lamp T-5HO replacing T-12_N	\$ 175	\$ 1,320	\$ 1,346	\$ 1,373	\$ 1,386	\$ 1,393	\$ -	\$ -	\$ 5,842	\$ 4,132	\$ 392	392	
\$ 24	Normal	Normal	C&I Lighting	3 Lamp T-5HO replacing T-12_N	\$ 175	\$ 165	\$ 168	\$ 172	\$ 173	\$ 174	\$ -	\$ -	\$ 730	\$ 4,132	\$ 392	392	
\$ 25	Aggressive	Aggressive	C&I Lighting	4 Lamp T-5HO replacing T-12_AG	\$ 225	\$ 2,100	\$ 2,205	\$ 2,315	\$ 2,431	\$ 2,553	\$ -	\$ -	\$ 9,888	\$ 11,449	\$ 1,085	1,085	
\$ 25	Aggressive	Normal	C&I Lighting	4 Lamp T-5HO replacing T-12_AG	\$ 225	\$ 244	\$ 256	\$ 269	\$ 282	\$ 296	\$ -	\$ -	\$ 1,148	\$ 11,449	\$ 1,085	1,085	
\$ 25	Normal	Aggressive	C&I Lighting	4 Lamp T-5HO replacing T-12_N	\$ 225	\$ 1,680	\$ 1,714	\$ 1,747	\$ 1,764	\$ 1,772	\$ -	\$ -	\$ 7,435	\$ 8,594	\$ 816	816	
\$ 25	Normal	Normal	C&I Lighting	4 Lamp T-5HO replacing T-12_N	\$ 225	\$ 195	\$ 199	\$ 203	\$ 205	\$ 206	\$ -	\$ -	\$ 863	\$ 8,594	\$ 816	816	
\$ 26	Aggressive	Aggressive	C&I Lighting	High Bay 3L T5HO_AG	\$ 180	\$ 9,000	\$ 10,800	\$ 12,960	\$ 15,552	\$ 18,662	\$ -	\$ -	\$ 55,888	\$ 209,043	\$ 20,779	20,779	
\$ 26	Aggressive	Normal	C&I Lighting	High Bay 3L T5HO_AG	\$ 180	\$ 4,000	\$ 4,800	\$ 5,760	\$ 6,912	\$ 8,294	\$ -	\$ -	\$ 24,839	\$ 209,043	\$ 20,779	20,779	
\$ 26	Normal	Aggressive	C&I Lighting	High Bay 3L T5HO_N	\$ 180	\$ 7,200	\$ 7,344	\$ 7,488	\$ 7,560	\$ 7,596	\$ -	\$ -	\$ 31,866	\$ 118,208	\$ 11,847	11,847	
\$ 26	Normal	Normal	C&I Lighting	High Bay 3L T5HO_N	\$ 180	\$ 3,200	\$ 3,264	\$ 3,328	\$ 3,360	\$ 3,376	\$ -	\$ -	\$ 14,163	\$ 118,208	\$ 11,847	11,847	
\$ 27	Aggressive	Aggressive	C&I Lighting	High Bay 4LT5HO_AG	\$ 192	\$ 120,000	\$ 144,000	\$ 172,800	\$ 207,360	\$ 248,832	\$ -	\$ -	\$ 745,176	\$ 5,080,918	\$ 505,036	505,036	
\$ 27	Aggressive	Normal	C&I Lighting	High Bay 4LT5HO_AG	\$ 192	\$ 62,500	\$ 75,000	\$ 90,000	\$ 108,000	\$ 129,600	\$ -	\$ -	\$ 388,113	\$ 5,080,918	\$ 505,036	505,036	
\$ 27	Normal	Aggressive	C&I Lighting	High Bay 4LT5HO_N	\$ 192	\$ 96,000	\$ 97,920	\$ 99,840	\$ 100,800	\$ 101,280	\$ -	\$ -	\$ 424,883	\$ 2,873,121	\$ 287,960	287,960	
\$ 27	Normal	Normal	C&I Lighting	High Bay 4LT5HO_N	\$ 192	\$ 50,000	\$ 51,000	\$ 52,000	\$ 52,500	\$ 52,750	\$ -	\$ -	\$ 221,293	\$ 2,873,121	\$ 287,960	287,960	
\$ 28	Aggressive	Aggressive	C&I Lighting	High Bay 6L T5HO_AG	\$ 350	\$ 109,375	\$ 131,250	\$ 157,500	\$ 189,000	\$ 226,800	\$ -	\$ -	\$ 679,197	\$ 1,088,768	\$ 108,222	108,222	
\$ 28	Aggressive	Normal	C&I Lighting	High Bay 6L T5HO_AG	\$ 350	\$ 25,000	\$ 30,000	\$ 36,000	\$ 43,200	\$ 51,840	\$ -	\$ -	\$ 155,245	\$ 1,088,768	\$ 108,222	108,222	
\$ 28	Normal	Aggressive	C&I Lighting	High Bay 6L T5HO_N	\$ 350	\$ 97,350	\$ 99,250	\$ 101,150	\$ 102,050	\$ 102,950	\$ -	\$ -	\$ 387,263	\$ 615,669	\$ 61,706	61,706	
\$ 28	Normal	Normal	C&I Lighting	High Bay 6L T5HO_N	\$ 350	\$ 20,000	\$ 20,400	\$ 20,800	\$ 21,000	\$ 21,100	\$ -	\$ -	\$ 89,517	\$ 615,669	\$ 61,706	61,706	
\$ 29	Aggressive	Aggressive	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_AG	\$ 700	\$ 43,750	\$ 52,500	\$ 63,000	\$ 75,600	\$ 90,720	\$ -	\$ -	\$ 271,679	\$ 846,820	\$ 84,173	84,173	
\$ 29	Aggressive	Normal	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_AG	\$ 700	\$ 15,000	\$ 18,000	\$ 21,600	\$ 25,920	\$ 31,104	\$ -	\$ -	\$ 93,147	\$ 846,820	\$ 84,173	84,173	
\$ 29	Normal	Aggressive	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_N	\$ 700	\$ 35,000	\$ 35,700	\$ 36,400	\$ 36,750	\$ 36,925	\$ -	\$ -	\$ 154,905	\$ 478,854	\$ 47,993	47,993	
\$ 29	Normal	Normal	C&I Lighting	High Bay 6L T5HO - Double fixture replace 1000W HID_N	\$ 700	\$ 12,000	\$ 12,240	\$ 12,480	\$ 12,600	\$ 12,660	\$ -	\$ -	\$ 53,110	\$ 478,854	\$ 47,993	47,993	
\$ 30	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 4LF32T8_AG	\$ 160	\$ 25,000	\$ 30,000	\$ 36,000	\$ 43,200	\$ 51,840	\$ -	\$ -	\$ 155,245	\$ 895,209	\$ 88,982	88,982	
\$ 30	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 4LF32T8_AG	\$ 160	\$ 12,500	\$ 15,000	\$ 18,000	\$ 21,600	\$ 25,920	\$ -	\$ -	\$ 77,623	\$ 895,209	\$ 88,982	88,982	
\$ 30	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 4LF32T8_N	\$ 160	\$ 20,000	\$ 20,400	\$ 20,800	\$ 21,000	\$ 21,100	\$ -	\$ -	\$ 89,517	\$ 506,217	\$ 50,736	50,736	
\$ 30	Normal	Normal	C&I Lighting	High Bay Fluorescent 4LF32T8_N	\$ 160	\$ 10,000	\$ 10,200	\$ 10,400	\$ 10,500	\$ 10,550	\$ -	\$ -	\$ 44,259	\$ 506,217	\$ 50,736	50,736	
\$ 31	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 6LF32T8_AG	\$ 160	\$ 375,000	\$ 450,000	\$ 540,000	\$ 648,000	\$ 777,600	\$ -	\$ -	\$ 2,328,676	\$ 27,945,049	\$ 2,777,697	2,777,697	
\$ 31	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 6LF32T8_AG	\$ 160	\$ 312,500	\$ 375,000	\$ 450,000	\$ 540,000	\$ 648,000	\$ -	\$ -	\$ 1,940,564	\$ 27,945,049	\$ 2,777,697	2,777,697	
\$ 31	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 6LF32T8_N	\$ 160	\$ 300,000	\$ 306,000	\$ 312,000	\$ 315,000	\$ 316,500	\$ -	\$ -	\$ 1,327,759	\$ 15,802,168	\$ 1,583,780	1,583,780	
\$ 31	Normal	Normal	C&I Lighting	High Bay Fluorescent 6LF32T8_N	\$ 160	\$ 250,000	\$ 255,000	\$ 260,000	\$ 262,500	\$ 263,750	\$ -	\$ -	\$ 1,106,465	\$ 15,802,168	\$ 1,583,780	1,583,780	
\$ 32	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8_AG	\$ 200	\$ 250,000	\$ 300,000	\$ 360,000	\$ 432,000	\$ 518,400	\$ -	\$ -	\$ 1,552,451	\$ 7,548,792	\$ 750,339	750,339	
\$ 32	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8_AG	\$ 200	\$ 100,000	\$ 120,000	\$ 144,000	\$ 172,800	\$ 207,360	\$ -	\$ -	\$ 620,980	\$ 7,548,792	\$ 750,339	750,339	
\$ 32	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8_N	\$ 200	\$ 200,000	\$ 204,000	\$ 208,000	\$ 210,000	\$ 211,000	\$ -	\$ -	\$ 885,172	\$ 4,268,638	\$ 427,826	427,826	
\$ 32	Normal	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8_N	\$ 200	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,000	\$ 84,400	\$ -	\$ -	\$ 354,069	\$ 4,268,638	\$ 427,826	427,826	
\$ 33	Aggressive	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_AG	\$ 400	\$ 50,000	\$ 60,000	\$ 72,000	\$ 84,000	\$ 103,680	\$ -	\$ -	\$ 310,490	\$ 2,332,383	\$ 231,835	231,835	
\$ 33	Aggressive	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_AG	\$ 400	\$ 30,000	\$ 36,000	\$ 43,200	\$ 51,840	\$ 62,208	\$ -	\$ -	\$ 186,294	\$ 2,332,383	\$ 231,835	231,835	
\$ 33	Normal	Aggressive	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_N	\$ 400	\$ 40,000	\$ 40,800	\$ 41,600	\$ 42,000	\$ 42,200	\$ -	\$ -	\$ 177,034	\$ 1,318,900	\$ 132,187	132,187	
\$ 33	Normal	Normal	C&I Lighting	High Bay Fluorescent 8LF32T8 - Double fixture replace 1000W HID_N	\$ 400	\$ 24,000	\$ 24,480	\$ 24,960	\$ 25,200	\$ 25,320	\$ -	\$ -	\$ 106,221	\$ 1,318,900	\$ 132,187	132,187	
\$ 34	Aggressive	Aggressive	C&I Lighting	42W 8 Lamp Hi Bay CFL_AG	\$ 395	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ -	\$ -	\$ 23,543	\$ 32,488	\$ 3,080	3,080	
\$ 34	Aggressive	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_AG	\$ 395	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 32,488	\$ 3,080	3,080	
\$ 34	Normal	Aggressive	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	\$ 395	\$ 4,000	\$ 4,080	\$ 4,160	\$ 4,200	\$ 4,220	\$ -	\$ -	\$ 17,703	\$ 24,387	\$ 2,316	2,316	
\$ 34	Normal	Normal	C&I Lighting	42W 8 Lamp Hi Bay CFL_N	\$ 395	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 24,387	\$ 2,316	2,316	
\$ 35	Aggressive	Aggressive	C&I Lighting	Pulse Start Metal Halide -retrofit only_AG	\$ 150	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ 39,984	\$ -	\$ -	\$ 154,503	\$ 445,789	\$ 45,465	45,465	
\$ 35	Aggressive	Normal	C&I Lighting	Pulse Start Metal Halide -retrofit only_AG	\$ 150	\$ 10,938	\$ 11,484	\$ 12,059	\$ 12,662	\$ 13,295	\$ -	\$ -	\$ 51,501	\$ 445,789	\$ 45,465	45,465	
\$ 35	Normal	Aggressive	C&I Lighting	Pulse Start Metal Halide -retrofit only_N	\$ 150	\$ 26,250	\$ 26,775	\$ 27,300	\$ 27,563	\$ 27,694	\$ -	\$ -	\$ 116,179	\$ 334,636	\$ 34,188	34,188	
\$ 35	Normal	Normal	C&I Lighting	Pulse Start Metal Halide -retrofit only_N	\$ 150	\$ 8,750	\$ 8,925	\$ 9,100	\$ 9,188	\$ 9,231	\$ -	\$ -	\$ 38,726	\$ 334,636	\$ 34,188	34,188	
\$ 36	Aggressive	Aggressive	C&I Lighting	CFL Fixture_AG	\$ 45	\$ 6,875	\$ 8,250	\$ 9,900	\$ 11,880	\$ 14,256	\$ -	\$ -	\$ 42,692	\$ 667,820	\$ 67,122	67,122	
\$ 36	Aggressive	Normal	C&I Lighting	CFL Fixture_AG	\$ 45	\$ 6,875	\$ 8,250	\$ 9,900	\$ 11,880	\$ 14,256	\$ -	\$ -	\$ 42,692	\$ 667,820	\$ 67,122	67,122	
\$ 36	Normal	Aggressive	C&I Lighting	CFL Fixture_N	\$ 45	\$ 5,500	\$ 5,610	\$ 5,720	\$ 5,775	\$ 5,803	\$ -	\$ -	\$ 24,342	\$ 377,634	\$ 35,193	35,193	
\$ 36	Normal	Normal	C&I Lighting	CFL Fixture_N	\$ 45	\$ 5,500	\$ 5,610	\$ 5,720	\$ 5,775	\$ 5,803	\$ -	\$ -	\$ 24,342	\$ 377,634	\$ 35,193	35,193	
\$ 37	Aggressive	Aggressive	C&I Lighting	CFL Screw in_AG	\$ 3	\$ 37,500	\$ 45,000	\$ 54,000	\$ 64,800	\$ 77,760	\$ -	\$ -	\$ 232,868	\$ 4,311,520	\$ 442,335	442,335	
\$ 37	Aggressive	Normal	C&I Lighting	CFL Screw in_AG	\$ 3	\$ 37,500	\$ 45,000	\$ 54,000	\$ 64,800	\$ 77,760	\$ -	\$ -	\$ 232,868	\$ 4,311,520	\$ 442,335	442,335	
\$ 37	Normal	Aggressive	C&I Lighting	CFL Screw in_N	\$ 3	\$ 30,000	\$ 30,600	\$ 31,200	\$ 31,500	\$ 31,650	\$ -	\$ -	\$ 132,776	\$ 2,438,047	\$ 252,209	252,209	
\$ 37	Normal	Normal	C&I Lighting	CFL Screw in_N	\$ 3	\$ 30,000	\$ 30,600	\$ 31,200	\$ 31,500	\$ 31,650	\$ -	\$ -	\$ 132,776	\$ 2,438,047	\$ 252,209	252,209	
\$ 38	Aggressive	Aggressive	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AG	\$ 25	\$ 31,250	\$ 37,500	\$ 45,000	\$ 54,000	\$ 64,800	\$ -	\$ -	\$ 194,056	\$ 2,582,078	\$ 224,545	224,545	
\$ 38	Aggressive	Normal	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_AG	\$ 25	\$ 31,250	\$ 37,500	\$ 45,000	\$ 54,000	\$ 64,800	\$ -	\$ -	\$ 194,056	\$ 2,582,078	\$ 224,545	224,545	
\$ 38	Normal	Aggressive	C&I Lighting	LED Exit Signs Electronic Fixtures (Retrofit Only)_N	\$ 25												

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's)					NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits
						YR 1 Program Incentive Costs	YR 2 Program Incentive Costs	YR 3 Program Incentive Costs	YR 4 Program Incentive Costs	YR 5 Program Incentive Costs	NPV (Today's) Administration Cost	NPV (Today's) Program Implementation Cost	NPV (Today's) NPV Incentives	NPV (Today's) NPV Incentives	NPV (Today's) NPV Incentives		
\$ 43	Aggressive	Aggressive	C&I Lighting	Light Tube_AG	\$ 500	6,250	\$ 6,653	\$ 6,891	\$ 7,235	\$ 7,597	\$ -	\$ -	\$ -	\$ 29,429	\$ 49,716	\$ 4,544	
\$ 43	Aggressive	Normal	C&I Lighting	Light Tube_AG	\$ 500	1,875	\$ 1,869	\$ 2,067	\$ 2,171	\$ 2,279	\$ -	\$ -	\$ -	9,839	\$ 49,716	\$ 4,544	
\$ 43	Normal	Aggressive	C&I Lighting	Light Tube_N	\$ 500	5,000	\$ 5,100	\$ 5,200	\$ 5,250	\$ 5,275	\$ -	\$ -	\$ -	22,129	\$ 37,320	\$ 3,417	
\$ 43	Normal	Normal	C&I Lighting	Light Tube_N	\$ 500	1,500	\$ 1,530	\$ 1,560	\$ 1,575	\$ 1,583	\$ -	\$ -	\$ -	6,639	\$ 37,320	\$ 3,417	
\$ 44	Aggressive	Aggressive	C&I Lighting	Central Lighting Control_AG	\$ 2,700	31,250	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ -	\$ -	\$ -	147,145	\$ 1,743,842	\$ 162,245	
\$ 44	Aggressive	Normal	C&I Lighting	Central Lighting Control_AG	\$ 2,700	12,500	\$ 13,125	\$ 13,781	\$ 14,470	\$ 15,194	\$ -	\$ -	\$ -	58,588	\$ 1,743,842	\$ 162,245	
\$ 44	Normal	Aggressive	C&I Lighting	Central Lighting Control_N	\$ 2,700	25,000	\$ 25,500	\$ 26,000	\$ 26,250	\$ 26,375	\$ -	\$ -	\$ -	110,647	\$ 1,309,032	\$ 122,001	
\$ 44	Normal	Normal	C&I Lighting	Central Lighting Control_N	\$ 2,700	10,000	\$ 10,200	\$ 10,400	\$ 10,500	\$ 10,550	\$ -	\$ -	\$ -	44,259	\$ 1,309,032	\$ 122,001	
\$ 45	Aggressive	Aggressive	C&I Lighting	Switching Controls for Multilevel Lighting_AG	\$ 3,000	46,875	\$ 49,219	\$ 51,680	\$ 54,264	\$ 56,977	\$ -	\$ -	\$ -	220,718	\$ 1,363,863	\$ 126,884	
\$ 45	Aggressive	Normal	C&I Lighting	Switching Controls for Multilevel Lighting_AG	\$ 3,000	12,500	\$ 13,125	\$ 13,781	\$ 14,470	\$ 15,194	\$ -	\$ -	\$ -	58,588	\$ 1,363,863	\$ 126,884	
\$ 45	Normal	Aggressive	C&I Lighting	Switching Controls for Multilevel Lighting_N	\$ 3,000	37,500	\$ 38,250	\$ 39,000	\$ 39,375	\$ 39,663	\$ -	\$ -	\$ -	165,970	\$ 1,023,796	\$ 95,411	
\$ 45	Normal	Normal	C&I Lighting	Switching Controls for Multilevel Lighting_N	\$ 3,000	10,000	\$ 10,200	\$ 10,400	\$ 10,500	\$ 10,550	\$ -	\$ -	\$ -	44,259	\$ 1,023,796	\$ 95,411	
\$ 46	Aggressive	Aggressive	C&I Lighting	Daylight Sensor controls_AG	\$ 3,000	15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	\$ -	\$ -	\$ -	70,630	\$ 1,077,158	\$ 100,342	
\$ 46	Aggressive	Normal	C&I Lighting	Daylight Sensor controls_AG	\$ 3,000	9,000	\$ 9,450	\$ 9,923	\$ 10,419	\$ 10,940	\$ -	\$ -	\$ -	42,378	\$ 1,077,158	\$ 100,342	
\$ 46	Normal	Aggressive	C&I Lighting	Daylight Sensor controls_N	\$ 3,000	10,000	\$ 10,200	\$ 10,400	\$ 10,500	\$ 10,550	\$ -	\$ -	\$ -	44,259	\$ 673,816	\$ 62,877	
\$ 46	Normal	Normal	C&I Lighting	Daylight Sensor controls_N	\$ 3,000	6,000	\$ 6,120	\$ 6,240	\$ 6,300	\$ 6,330	\$ -	\$ -	\$ -	26,555	\$ 673,816	\$ 62,877	
\$ 47	Aggressive	Aggressive	C&I HVAC	Sleeve AC under 14,000 Btu hr_AG	\$ 30	469	\$ 492	\$ 517	\$ 543	\$ 570	\$ -	\$ -	\$ -	2,207	\$ 14,756	\$ 947	
\$ 47	Aggressive	Normal	C&I HVAC	Sleeve AC under 14,000 Btu hr_AG	\$ 30	469	\$ 492	\$ 517	\$ 543	\$ 570	\$ -	\$ -	\$ -	2,207	\$ 14,756	\$ 947	
\$ 47	Normal	Aggressive	C&I HVAC	Sleeve AC under 14,000 Btu hr_N	\$ 30	375	\$ 383	\$ 390	\$ 394	\$ 396	\$ -	\$ -	\$ -	1,660	\$ 11,077	\$ 712	
\$ 47	Normal	Normal	C&I HVAC	Sleeve AC under 14,000 Btu hr_N	\$ 30	375	\$ 383	\$ 390	\$ 394	\$ 396	\$ -	\$ -	\$ -	1,660	\$ 11,077	\$ 712	
\$ 48	Aggressive	Aggressive	C&I HVAC	Sleeve AC over 14,000 Btu hr_AG	\$ 30	469	\$ 492	\$ 517	\$ 543	\$ 570	\$ -	\$ -	\$ -	2,207	\$ 35,684	\$ 2,299	
\$ 48	Aggressive	Normal	C&I HVAC	Sleeve AC over 14,000 Btu hr_AG	\$ 30	469	\$ 492	\$ 517	\$ 543	\$ 570	\$ -	\$ -	\$ -	2,207	\$ 35,684	\$ 2,299	
\$ 48	Normal	Aggressive	C&I HVAC	Sleeve AC over 14,000 Btu hr_N	\$ 30	375	\$ 383	\$ 390	\$ 394	\$ 396	\$ -	\$ -	\$ -	1,660	\$ 26,786	\$ 1,729	
\$ 48	Normal	Normal	C&I HVAC	Sleeve AC over 14,000 Btu hr_N	\$ 30	375	\$ 383	\$ 390	\$ 394	\$ 396	\$ -	\$ -	\$ -	1,660	\$ 26,786	\$ 1,729	
\$ 49	Aggressive	Aggressive	C&I HVAC	HP Water Heater 500 gal_day_AG	\$ 7,000	43,750	\$ 45,938	\$ 48,234	\$ 50,646	\$ 53,178	\$ -	\$ -	\$ -	206,003	\$ 592,951	\$ 40,906	
\$ 49	Aggressive	Normal	C&I HVAC	HP Water Heater 500 gal_day_AG	\$ 7,000	43,750	\$ 45,938	\$ 48,234	\$ 50,646	\$ 53,178	\$ -	\$ -	\$ -	206,003	\$ 592,951	\$ 40,906	
\$ 49	Normal	Aggressive	C&I HVAC	HP Water Heater 500 gal_day_N	\$ 7,000	35,000	\$ 35,700	\$ 36,400	\$ 36,750	\$ 36,925	\$ -	\$ -	\$ -	154,905	\$ 445,104	\$ 30,759	
\$ 49	Normal	Normal	C&I HVAC	HP Water Heater 500 gal_day_N	\$ 7,000	35,000	\$ 35,700	\$ 36,400	\$ 36,750	\$ 36,925	\$ -	\$ -	\$ -	154,905	\$ 445,104	\$ 30,759	
\$ 50	Aggressive	Aggressive	C&I HVAC	HP Water Heater 1000 gal_day_AG	\$ 10,000	31,250	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ -	\$ -	\$ -	147,145	\$ 1,358,305	\$ 95,258	
\$ 50	Aggressive	Normal	C&I HVAC	HP Water Heater 1000 gal_day_AG	\$ 10,000	31,250	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ -	\$ -	\$ -	147,145	\$ 1,358,305	\$ 95,258	
\$ 50	Normal	Aggressive	C&I HVAC	HP Water Heater 1000 gal_day_N	\$ 10,000	25,000	\$ 25,500	\$ 26,000	\$ 26,250	\$ 26,375	\$ -	\$ -	\$ -	110,647	\$ 1,019,625	\$ 71,629	
\$ 50	Normal	Normal	C&I HVAC	HP Water Heater 1000 gal_day_N	\$ 10,000	25,000	\$ 25,500	\$ 26,000	\$ 26,250	\$ 26,375	\$ -	\$ -	\$ -	110,647	\$ 1,019,625	\$ 71,629	
\$ 51	Aggressive	Aggressive	C&I HVAC	HP Water Heater 1500 gal_day_AG	\$ 14,000	26,250	\$ 27,563	\$ 28,941	\$ 30,388	\$ 31,907	\$ -	\$ -	\$ -	123,602	\$ 1,225,902	\$ 85,972	
\$ 51	Aggressive	Normal	C&I HVAC	HP Water Heater 1500 gal_day_AG	\$ 14,000	26,250	\$ 27,563	\$ 28,941	\$ 30,388	\$ 31,907	\$ -	\$ -	\$ -	123,602	\$ 1,225,902	\$ 85,972	
\$ 51	Normal	Aggressive	C&I HVAC	HP Water Heater 1500 gal_day_N	\$ 14,000	21,000	\$ 21,420	\$ 21,840	\$ 22,050	\$ 22,155	\$ -	\$ -	\$ -	92,943	\$ 920,235	\$ 64,647	
\$ 51	Normal	Normal	C&I HVAC	HP Water Heater 1500 gal_day_N	\$ 14,000	21,000	\$ 21,420	\$ 21,840	\$ 22,050	\$ 22,155	\$ -	\$ -	\$ -	92,943	\$ 920,235	\$ 64,647	
\$ 52	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 1.5 HP - Incentives per HP_AG	\$ 93	291	\$ 305	\$ 320	\$ 336	\$ 353	\$ -	\$ -	\$ -	1,368	\$ 3,372	\$ 309	
\$ 52	Aggressive	Normal	C&I Motors	DRIVES_Motors 1.5 HP - Incentives per HP_AG	\$ 93	181	\$ 190	\$ 200	\$ 210	\$ 220	\$ -	\$ -	\$ -	853	\$ 3,372	\$ 309	
\$ 52	Normal	Aggressive	C&I Motors	DRIVES_Motors 1.5 HP - Incentives per HP_N	\$ 93	233	\$ 237	\$ 242	\$ 244	\$ 245	\$ -	\$ -	\$ -	1,029	\$ 2,531	\$ 233	
\$ 52	Normal	Normal	C&I Motors	DRIVES_Motors 1.5 HP - Incentives per HP_N	\$ 93	145	\$ 148	\$ 151	\$ 152	\$ 153	\$ -	\$ -	\$ -	642	\$ 2,531	\$ 233	
\$ 53	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_AG	\$ 267	655	\$ 688	\$ 722	\$ 758	\$ 796	\$ -	\$ -	\$ -	3,084	\$ 9,103	\$ 825	
\$ 53	Aggressive	Normal	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_AG	\$ 267	655	\$ 688	\$ 722	\$ 758	\$ 796	\$ -	\$ -	\$ -	3,084	\$ 9,103	\$ 825	
\$ 53	Normal	Aggressive	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_N	\$ 267	524	\$ 534	\$ 545	\$ 550	\$ 553	\$ -	\$ -	\$ -	2,319	\$ 6,833	\$ 620	
\$ 53	Normal	Normal	C&I Motors	DRIVES_Motors 7.5-20 HP - Incentives per HP_N	\$ 267	524	\$ 534	\$ 545	\$ 545	\$ 550	\$ -	\$ -	\$ -	2,319	\$ 6,833	\$ 620	
\$ 54	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_AG	\$ 707	1,016	\$ 1,067	\$ 1,120	\$ 1,176	\$ 1,235	\$ -	\$ -	\$ -	4,785	\$ 18,965	\$ 1,794	
\$ 54	Aggressive	Normal	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_AG	\$ 707	1,016	\$ 1,067	\$ 1,120	\$ 1,176	\$ 1,235	\$ -	\$ -	\$ -	4,785	\$ 18,965	\$ 1,794	
\$ 54	Normal	Aggressive	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_N	\$ 707	813	\$ 829	\$ 846	\$ 854	\$ 858	\$ -	\$ -	\$ -	3,598	\$ 14,236	\$ 1,349	
\$ 54	Normal	Normal	C&I Motors	DRIVES_Motors 25-100 HP - Incentives per HP_N	\$ 707	813	\$ 829	\$ 846	\$ 854	\$ 858	\$ -	\$ -	\$ -	3,598	\$ 14,236	\$ 1,349	
\$ 55	Aggressive	Aggressive	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_AG	\$ 1,607	2,050	\$ 2,153	\$ 2,260	\$ 2,373	\$ 2,492	\$ -	\$ -	\$ -	9,653	\$ 28,774	\$ 2,722	
\$ 55	Aggressive	Normal	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_AG	\$ 1,607	2,050	\$ 2,153	\$ 2,260	\$ 2,373	\$ 2,492	\$ -	\$ -	\$ -	9,653	\$ 28,774	\$ 2,722	
\$ 55	Normal	Aggressive	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_N	\$ 1,607	1,640	\$ 1,673	\$ 1,706	\$ 1,722	\$ 1,730	\$ -	\$ -	\$ -	7,258	\$ 21,600	\$ 2,047	
\$ 55	Normal	Normal	C&I Motors	DRIVES_Motors 125-250 HP - Incentives per HP_N	\$ 1,607	1,640	\$ 1,673	\$ 1,706	\$ 1,722	\$ 1,730	\$ -	\$ -	\$ -	7,258	\$ 21,600	\$ 2,047	
\$ 56	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 1.5_AG	\$ 3,861	4,826	\$ 5,067	\$ 5,320	\$ 5,586	\$ 5,866	\$ -	\$ -	\$ -	22,722	\$ 17,522	\$ 1,609	
\$ 56	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 1.5_AG	\$ 3,861	200	\$ 210	\$ 221	\$ 232	\$ 243	\$ -	\$ -	\$ -	942	\$ 17,522	\$ 1,609	
\$ 56	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 1.5_N	\$ 3,861	3,861	\$ 3,938	\$ 4,015	\$ 4,054	\$ 4,073	\$ -	\$ -	\$ -	17,086	\$ 13,153	\$ 1,210	
\$ 56	Normal	Normal	C&I Motors	DRIVES_VFD HP 1.5_N	\$ 3,861	150	\$ 153	\$ 156	\$ 158	\$ 158	\$ -	\$ -	\$ -	664	\$ 13,153	\$ 1,210	
\$ 57	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 2_AG	\$ 3,971	4,963	\$ 5,211	\$ 5,472	\$ 5,745	\$ 6,033	\$ -	\$ -	\$ -	23,370	\$ 23,339	\$ 2,145	
\$ 57	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 2_AG	\$ 3,971	250	\$ 263	\$ 276	\$ 289	\$ 304	\$ -	\$ -	\$ -	1,177	\$ 23,339	\$ 2,145	
\$ 57	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 2_N	\$ 3,971	3,971	\$ 4,050	\$ 4,129	\$ 4,169	\$ 4,189	\$ -	\$ -	\$ -	17,573	\$ 17,520	\$ 1,613	
\$ 57	Normal	Normal	C&I Motors	DRIVES_VFD HP 2_N	\$ 3,971	200	\$ 204	\$ 208	\$ 210	\$ 211	\$ -	\$ -	\$ -	885	\$ 17,520	\$ 1,613	
\$ 58	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 3_AG	\$ 4,095	5,119	\$ 5,375	\$ 5,644	\$ 5,926	\$ 6,222	\$ -	\$ -	\$ -	24,104	\$ 34,825	\$ 3,217	
\$ 58	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 3_AG	\$ 4,095	300	\$ 315	\$ 331	\$ 347	\$ 365	\$ -	\$ -	\$ -	1,413	\$ 34,825	\$ 3,217	
\$ 58	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 3_N	\$ 4,095	4,095	\$ 4,177	\$ 4,259	\$ 4,300	\$ 4,321	\$ -	\$ -	\$ -	18,125	\$ 26,142	\$ 2,419	
\$ 58	Normal	Normal	C&I Motors	DRIVES_VFD HP 3_N	\$ 4,095	300	\$ 306	\$ 312	\$ 315	\$ 317	\$ -	\$ -	\$ -	1,328	\$ 26,142	\$ 2,419	
\$ 59	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 5_AG	\$ 4,353	13,003	\$ 14,283	\$ 14,997	\$ 15,747	\$ 16,535	\$ -	\$ -	\$ -	64,052	\$ 143,433	\$ 13,406	
\$ 59	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 5_AG	\$ 4,353	1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ -	5,886	\$ 143,433	\$ 13,406	
\$ 59	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 5_N	\$ 4,353	10,883	\$ 11,100	\$ 11,318	\$ 11,427	\$ 11,481	\$ -	\$ -	\$ -	48,164	\$ 107,669	\$ 10,081	
\$ 59	Normal	Normal	C&I Motors	DRIVES_VFD HP 5_N	\$ 4,353	1,250	\$ 1,275	\$ 1,300	\$ 1,313	\$ 1,319	\$ -	\$ -	\$ -	5,375	\$ 107,669	\$ 10,081	
\$ 60	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 7.5_AG	\$ 5,503	17,197	\$ 18,057	\$ 18,960	\$ 19,908	\$ 20,903	\$ -	\$ -	\$ -	80,974	\$ 221,891	\$ 20,109	
\$ 60	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 7.5_AG	\$ 5,503	1,875	\$ 1,969	\$ 2,067	\$ 2,171	\$ 2,279	\$ -	\$ -	\$ -	8,829	\$ 221,891	\$ 20,109	
\$ 60	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 7.5_N	\$ 5,503	13,758	\$ 14,033	\$ 14,308	\$ 14,445	\$ 14,514	\$ -	\$ -	\$ -	60,889	\$ 166,565	\$ 15,121	
\$ 60	Normal	Normal	C&I Motors	DRIVES_VFD HP 7.5_N	\$ 5,503	1,875	\$										

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's) Administration Cost	Program NPV (Today's)			NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits
						YR 1 Program Incremental Costs	YR 2 Program Incremental Costs	YR 3 Program Incremental Costs	YR 4 Program Incremental Costs	YR 5 Program Incremental Costs		Implementation Cost	NPV (Today's) Incentives			
\$ 64	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 25_AG	\$ 9,411	\$ 5,882	\$ 6,176	\$ 6,485	\$ 6,809	\$ 7,149	\$ -	\$ -	\$ -	\$ 27,696	\$ 146,859	\$ 13,406
\$ 64	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 25_AG	\$ 9,411	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,510	\$ -	\$ -	\$ -	\$ 5,886	\$ 146,859	\$ 13,406
\$ 64	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 25_N	\$ 9,411	\$ 4,706	\$ 4,800	\$ 4,894	\$ 4,941	\$ 4,964	\$ -	\$ -	\$ -	\$ 20,826	\$ 110,241	\$ 10,081
\$ 64	Normal	Normal	C&I Motors	DRIVES_VFD HP 25_N	\$ 9,411	\$ 1,250	\$ 1,275	\$ 1,300	\$ 1,313	\$ 1,319	\$ -	\$ -	\$ -	\$ 5,532	\$ 110,241	\$ 10,081
\$ 65	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 30_AG	\$ 10,828	\$ 6,768	\$ 7,106	\$ 7,461	\$ 7,834	\$ 8,226	\$ -	\$ -	\$ -	\$ 31,866	\$ 175,614	\$ 16,087
\$ 65	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 30_AG	\$ 10,828	\$ 1,500	\$ 1,575	\$ 1,654	\$ 1,736	\$ 1,823	\$ -	\$ -	\$ -	\$ 7,063	\$ 175,614	\$ 16,087
\$ 65	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 30_N	\$ 10,828	\$ 5,414	\$ 5,522	\$ 5,631	\$ 5,685	\$ 5,712	\$ -	\$ -	\$ -	\$ 23,962	\$ 131,826	\$ 12,097
\$ 65	Normal	Normal	C&I Motors	DRIVES_VFD HP 30_N	\$ 10,828	\$ 1,500	\$ 1,530	\$ 1,560	\$ 1,575	\$ 1,583	\$ -	\$ -	\$ -	\$ 6,639	\$ 131,826	\$ 12,097
\$ 66	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 40_AG	\$ 11,370	\$ 7,106	\$ 7,462	\$ 7,835	\$ 8,226	\$ 8,638	\$ -	\$ -	\$ -	\$ 33,461	\$ 226,582	\$ 21,450
\$ 66	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 40_AG	\$ 11,370	\$ 2,000	\$ 2,100	\$ 2,205	\$ 2,315	\$ 2,431	\$ -	\$ -	\$ -	\$ 9,417	\$ 226,582	\$ 21,450
\$ 66	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 40_N	\$ 11,370	\$ 5,685	\$ 5,799	\$ 5,912	\$ 5,969	\$ 5,998	\$ -	\$ -	\$ -	\$ 25,161	\$ 170,086	\$ 16,129
\$ 66	Normal	Normal	C&I Motors	DRIVES_VFD HP 40_N	\$ 11,370	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ -	\$ 8,852	\$ 170,086	\$ 16,129
\$ 67	Aggressive	Aggressive	C&I Motors	DRIVES_VFD HP 50-AG	\$ 14,256	\$ 8,910	\$ 9,356	\$ 9,823	\$ 10,314	\$ 10,830	\$ -	\$ -	\$ -	\$ 41,954	\$ 283,087	\$ 26,812
\$ 67	Aggressive	Normal	C&I Motors	DRIVES_VFD HP 50-AG	\$ 14,256	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ -	\$ 11,772	\$ 283,087	\$ 26,812
\$ 67	Normal	Aggressive	C&I Motors	DRIVES_VFD HP 50-N	\$ 14,256	\$ 7,128	\$ 7,271	\$ 7,413	\$ 7,484	\$ 7,520	\$ -	\$ -	\$ -	\$ 31,548	\$ 212,502	\$ 20,162
\$ 67	Normal	Normal	C&I Motors	DRIVES_VFD HP 50-N	\$ 14,256	\$ 2,500	\$ 2,550	\$ 2,600	\$ 2,625	\$ 2,638	\$ -	\$ -	\$ -	\$ 11,065	\$ 212,502	\$ 20,162
\$ 68	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 1.5_AG	\$ 350	\$ 788	\$ 827	\$ 868	\$ 912	\$ 957	\$ -	\$ -	\$ -	\$ 3,708	\$ 6,474	\$ 594
\$ 68	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 1.5_AG	\$ 350	\$ 788	\$ 827	\$ 868	\$ 912	\$ 957	\$ -	\$ -	\$ -	\$ 3,708	\$ 6,474	\$ 594
\$ 68	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 1.5_N	\$ 350	\$ 630	\$ 643	\$ 655	\$ 662	\$ 665	\$ -	\$ -	\$ -	\$ 2,788	\$ 4,860	\$ 447
\$ 68	Normal	Normal	C&I Motors	DRIVES_Pumps HP 1.5_N	\$ 350	\$ 630	\$ 643	\$ 655	\$ 662	\$ 665	\$ -	\$ -	\$ -	\$ 2,788	\$ 4,860	\$ 447
\$ 69	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 2_AG	\$ 350	\$ 825	\$ 825	\$ 866	\$ 910	\$ 955	\$ 1,003	\$ -	\$ -	\$ 3,885	\$ 8,632	\$ 792
\$ 69	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 2_AG	\$ 350	\$ 825	\$ 866	\$ 910	\$ 955	\$ 1,003	\$ -	\$ -	\$ -	\$ 3,885	\$ 8,632	\$ 792
\$ 69	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 2_N	\$ 350	\$ 660	\$ 673	\$ 686	\$ 693	\$ 696	\$ -	\$ -	\$ -	\$ 2,921	\$ 6,479	\$ 596
\$ 69	Normal	Normal	C&I Motors	DRIVES_Pumps HP 2_N	\$ 350	\$ 660	\$ 673	\$ 686	\$ 693	\$ 696	\$ -	\$ -	\$ -	\$ 2,921	\$ 6,479	\$ 596
\$ 70	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 3_AG	\$ 350	\$ 863	\$ 906	\$ 951	\$ 998	\$ 1,048	\$ -	\$ -	\$ -	\$ 4,061	\$ 12,946	\$ 1,188
\$ 70	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 3_AG	\$ 350	\$ 863	\$ 906	\$ 951	\$ 998	\$ 1,048	\$ -	\$ -	\$ -	\$ 4,061	\$ 12,946	\$ 1,188
\$ 70	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 3_N	\$ 350	\$ 690	\$ 704	\$ 718	\$ 725	\$ 728	\$ -	\$ -	\$ -	\$ 3,054	\$ 9,718	\$ 893
\$ 70	Normal	Normal	C&I Motors	DRIVES_Pumps HP 3_N	\$ 350	\$ 690	\$ 704	\$ 718	\$ 725	\$ 728	\$ -	\$ -	\$ -	\$ 3,054	\$ 9,718	\$ 893
\$ 71	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 5_AG	\$ 341	\$ 600	\$ 630	\$ 662	\$ 695	\$ 729	\$ -	\$ -	\$ -	\$ 2,825	\$ 14,380	\$ 1,320
\$ 71	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 5_AG	\$ 341	\$ 600	\$ 630	\$ 662	\$ 695	\$ 729	\$ -	\$ -	\$ -	\$ 2,825	\$ 14,380	\$ 1,320
\$ 71	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 5_N	\$ 341	\$ 480	\$ 490	\$ 499	\$ 504	\$ 506	\$ -	\$ -	\$ -	\$ 2,124	\$ 10,795	\$ 993
\$ 71	Normal	Normal	C&I Motors	DRIVES_Pumps HP 5_N	\$ 341	\$ 480	\$ 490	\$ 499	\$ 504	\$ 506	\$ -	\$ -	\$ -	\$ 2,124	\$ 10,795	\$ 993
\$ 72	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 7.5_AG	\$ 498	\$ 625	\$ 656	\$ 689	\$ 724	\$ 760	\$ -	\$ -	\$ -	\$ 2,943	\$ 21,848	\$ 1,980
\$ 72	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 7.5_AG	\$ 498	\$ 625	\$ 656	\$ 689	\$ 724	\$ 760	\$ -	\$ -	\$ -	\$ 2,943	\$ 21,848	\$ 1,980
\$ 72	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 7.5_N	\$ 498	\$ 500	\$ 510	\$ 520	\$ 525	\$ 528	\$ -	\$ -	\$ -	\$ 2,213	\$ 16,400	\$ 1,489
\$ 72	Normal	Normal	C&I Motors	DRIVES_Pumps HP 7.5_N	\$ 498	\$ 500	\$ 510	\$ 520	\$ 525	\$ 528	\$ -	\$ -	\$ -	\$ 2,213	\$ 16,400	\$ 1,489
\$ 73	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 10_AG	\$ 332	\$ 650	\$ 683	\$ 717	\$ 752	\$ 790	\$ -	\$ -	\$ -	\$ 3,061	\$ 29,130	\$ 2,640
\$ 73	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 10_AG	\$ 332	\$ 650	\$ 683	\$ 717	\$ 752	\$ 790	\$ -	\$ -	\$ -	\$ 3,061	\$ 29,130	\$ 2,640
\$ 73	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 10_N	\$ 332	\$ 520	\$ 530	\$ 541	\$ 546	\$ 549	\$ -	\$ -	\$ -	\$ 2,301	\$ 21,867	\$ 1,985
\$ 73	Normal	Normal	C&I Motors	DRIVES_Pumps HP 10_N	\$ 332	\$ 520	\$ 530	\$ 541	\$ 546	\$ 549	\$ -	\$ -	\$ -	\$ 2,301	\$ 21,867	\$ 1,985
\$ 74	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 15_AG	\$ 585	\$ 375	\$ 394	\$ 413	\$ 434	\$ 456	\$ -	\$ -	\$ -	\$ 1,766	\$ 21,848	\$ 1,980
\$ 74	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 15_AG	\$ 585	\$ 375	\$ 394	\$ 413	\$ 434	\$ 456	\$ -	\$ -	\$ -	\$ 1,766	\$ 21,848	\$ 1,980
\$ 74	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 15_N	\$ 585	\$ 300	\$ 306	\$ 312	\$ 315	\$ 317	\$ -	\$ -	\$ -	\$ 1,328	\$ 16,400	\$ 1,489
\$ 74	Normal	Normal	C&I Motors	DRIVES_Pumps HP 15_N	\$ 585	\$ 300	\$ 306	\$ 312	\$ 315	\$ 317	\$ -	\$ -	\$ -	\$ 1,328	\$ 16,400	\$ 1,489
\$ 75	Aggressive	Aggressive	C&I Motors	DRIVES_Pumps HP 20_AG	\$ 850	\$ 500	\$ 525	\$ 551	\$ 579	\$ 608	\$ -	\$ -	\$ -	\$ 2,354	\$ 29,130	\$ 2,640
\$ 75	Aggressive	Normal	C&I Motors	DRIVES_Pumps HP 20_AG	\$ 850	\$ 500	\$ 525	\$ 551	\$ 579	\$ 608	\$ -	\$ -	\$ -	\$ 2,354	\$ 29,130	\$ 2,640
\$ 75	Normal	Aggressive	C&I Motors	DRIVES_Pumps HP 20_N	\$ 850	\$ 400	\$ 408	\$ 416	\$ 420	\$ 422	\$ -	\$ -	\$ -	\$ 1,770	\$ 21,867	\$ 1,985
\$ 75	Normal	Normal	C&I Motors	DRIVES_Pumps HP 20_N	\$ 850	\$ 400	\$ 408	\$ 416	\$ 420	\$ 422	\$ -	\$ -	\$ -	\$ 1,770	\$ 21,867	\$ 1,985
\$ 76	Aggressive	Aggressive	C&I Appliance	Commercial Clothes Washers - Washer Only_AG	\$ 260	\$ 8,125	\$ 8,531	\$ 8,958	\$ 9,406	\$ 9,876	\$ -	\$ -	\$ -	\$ 38,258	\$ 42,013	\$ 3,877
\$ 76	Aggressive	Normal	C&I Appliance	Commercial Clothes Washers - Washer Only_AG	\$ 260	\$ 3,125	\$ 3,281	\$ 3,445	\$ 3,618	\$ 3,798	\$ -	\$ -	\$ -	\$ 14,715	\$ 42,013	\$ 3,877
\$ 76	Normal	Aggressive	C&I Appliance	Commercial Clothes Washers - Washer Only_N	\$ 260	\$ 6,500	\$ 6,630	\$ 6,760	\$ 6,825	\$ 6,858	\$ -	\$ -	\$ -	\$ 28,768	\$ 31,537	\$ 2,915
\$ 76	Normal	Normal	C&I Appliance	Commercial Clothes Washers - Washer Only_N	\$ 260	\$ 2,500	\$ 2,550	\$ 2,600	\$ 2,625	\$ 2,638	\$ -	\$ -	\$ -	\$ 11,065	\$ 31,537	\$ 2,915
\$ 77	Aggressive	Aggressive	C&I Office & Computer equipment	Plug Load Occupancy Sensors Document Stations_AG	\$ 150	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ -	\$ 11,772	\$ 124,296	\$ 12,214
\$ 77	Aggressive	Normal	C&I Office & Computer equipment	Plug Load Occupancy Sensors Document Stations_AG	\$ 150	\$ 1,563	\$ 1,641	\$ 1,723	\$ 1,809	\$ 1,899	\$ -	\$ -	\$ -	\$ 7,357	\$ 124,296	\$ 12,214
\$ 77	Normal	Aggressive	C&I Office & Computer equipment	Plug Load Occupancy Sensors Document Stations_N	\$ 150	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ -	\$ 8,852	\$ 93,304	\$ 9,185
\$ 77	Normal	Normal	C&I Office & Computer equipment	Plug Load Occupancy Sensors Document Stations_N	\$ 150	\$ 1,250	\$ 1,275	\$ 1,300	\$ 1,313	\$ 1,319	\$ -	\$ -	\$ -	\$ 5,532	\$ 93,304	\$ 9,185
\$ 78	Aggressive	Aggressive	C&I Refrigeration	Vending Equipment Controller_AG	\$ 160	\$ 6,250	\$ 6,563	\$ 6,891	\$ 7,235	\$ 7,597	\$ -	\$ -	\$ -	\$ 29,429	\$ 200,449	\$ 18,929
\$ 78	Aggressive	Normal	C&I Refrigeration	Vending Equipment Controller_AG	\$ 160	\$ 6,250	\$ 6,563	\$ 6,891	\$ 7,235	\$ 7,597	\$ -	\$ -	\$ -	\$ 29,429	\$ 200,449	\$ 18,929
\$ 78	Normal	Aggressive	C&I Refrigeration	Vending Equipment Controller_N	\$ 160	\$ 5,000	\$ 5,100	\$ 5,200	\$ 5,250	\$ 5,275	\$ -	\$ -	\$ -	\$ 22,129	\$ 150,469	\$ 14,234
\$ 78	Normal	Normal	C&I Refrigeration	Vending Equipment Controller_N	\$ 160	\$ 5,000	\$ 5,100	\$ 5,200	\$ 5,250	\$ 5,275	\$ -	\$ -	\$ -	\$ 22,129	\$ 150,469	\$ 14,234
\$ 79	Aggressive	Aggressive	C&I HVAC	Window Film_AG	\$ 6	\$ 9,375	\$ 9,844	\$ 10,336	\$ 10,853	\$ 11,395	\$ -	\$ -	\$ -	\$ 44,144	\$ 150,219	\$ 13,570
\$ 79	Aggressive	Normal	C&I HVAC	Window Film_AG	\$ 6	\$ 781	\$ 820	\$ 861	\$ 904	\$ 950	\$ -	\$ -	\$ -	\$ 3,679	\$ 150,219	\$ 13,570
\$ 79	Normal	Aggressive	C&I HVAC	Window Film_N	\$ 6	\$ 7,500	\$ 7,650	\$ 7,800	\$ 7,875	\$ 7,913	\$ -	\$ -	\$ -	\$ 33,194	\$ 112,763	\$ 10,204
\$ 79	Normal	Normal	C&I HVAC	Window Film_N	\$ 6	\$ 2,500	\$ 2,550	\$ 2,600	\$ 2,625	\$ 2,638	\$ -	\$ -	\$ -	\$ 11,065	\$ 112,763	\$ 10,204
\$ 80	Aggressive	Aggressive	C&I Office & Computer equipment	80Plus NC_Desktop Unit_AG	\$ 7	\$ 31,250	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ -	\$ -	\$ -	\$ 147,145	\$ 1,242,328	\$ 119,292
\$ 80	Aggressive	Normal	C&I Office & Computer equipment	80Plus NC_Desktop Unit_AG	\$ 7	\$ 31,250	\$ 32,813	\$ 34,453	\$ 36,176	\$ 37,985	\$ -	\$ -	\$ -	\$ 147,145	\$ 1,242,328	\$ 119,292
\$ 80	Normal	Aggressive	C&I Office & Computer equipment	80Plus NC_Desktop Unit_N	\$ 7	\$ 25,000	\$ 25,500	\$ 26,000	\$ 26,250	\$ 26,375	\$ -	\$ -	\$ -	\$ 110,647	\$ 932,565	\$ 89,702
\$ 80	Normal	Normal	C&I Office & Computer equipment	80Plus NC_Desktop Unit_N	\$ 7	\$ 25,000	\$ 25,500	\$ 26,000	\$ 26,250	\$ 26,375	\$ -	\$ -	\$ -	\$ 110,647	\$ 932,565	\$ 89,702
\$ 81	Aggressive	Aggressive	C&I Office & Computer equipment	80Plus NC_Server Unit_AG	\$ 26	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ -	\$ 5,886	\$ 86,659	\$ 8,449
\$ 81	Aggressive	Normal	C&I Office & Computer equipment	80Plus NC_Server Unit_AG	\$ 26	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ -	\$ 5,886	\$ 86,659	\$ 8,449
\$ 81	Normal	Aggressive	C&I Office & Computer equipment	80Plus NC_Server Unit_N	\$ 26	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ -	\$ 4,426	\$ 65,051	\$ 6,353
\$ 81	Normal	Normal	C&I Office & Computer equipment	80Plus NC_Server Unit_N	\$ 26	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ -	\$ 4,426	\$ 65,051	\$ 6,353
\$ 82	Aggressive	Aggressive	C&I Office & Computer equipment	CompPowerMgr_AG	\$ 30	\$ 150,000	\$ 157,500	\$ 165,375	\$ 173,644	\$ 182,326	\$ -	\$ -	\$ -	\$ 706,297	\$ 14,184,222	\$ 1,364,139
\$ 82	Aggressive	Normal	C&I Office & Computer equipment	CompPowerMgr_AG	\$ 30	\$ 150,000	\$ 157,500	\$ 16								

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's)					NPV (Today's) Environmental Benefits
						YR 1 Program Incentive Costs	YR 2 Program Incentive Costs	YR 3 Program Incentive Costs	YR 4 Program Incentive Costs	YR 5 Program Incentive Costs	Administration Cost	Program Implementation Cost	NPV (Today's) Incentives	NPV (Today's) Avoid Cost		
\$ 85	Aggressive	Aggressive	C&I Refrigeration	Night covers for displays_AG	\$ 35	\$ 656	\$ 689	\$ 724	\$ 760	\$ 798	\$ -	\$ -	\$ 3,090	\$ 10,035	\$ 1,178	
\$ 85	Aggressive	Normal	C&I Refrigeration	Night covers for displays_AG	\$ 35	\$ 375	\$ 384	\$ 413	\$ 434	\$ 456	\$ -	\$ -	\$ 1,766	\$ 10,035	\$ 1,178	
\$ 85	Normal	Aggressive	C&I Refrigeration	Night covers for displays_N	\$ 35	\$ 525	\$ 536	\$ 546	\$ 551	\$ 554	\$ -	\$ -	\$ 2,324	\$ 7,533	\$ 886	
\$ 85	Normal	Normal	C&I Refrigeration	Night covers for displays_N	\$ 35	\$ 300	\$ 306	\$ 312	\$ 315	\$ 317	\$ -	\$ -	\$ 1,328	\$ 7,533	\$ 886	
\$ 86	Aggressive	Aggressive	C&I Refrigeration	Head Pressure Control_AG	\$ 80	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	\$ -	\$ -	\$ 70,630	\$ 1,197,154	\$ 127,130	
\$ 86	Aggressive	Normal	C&I Refrigeration	Head Pressure Control_AG	\$ 80	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	\$ -	\$ -	\$ 70,630	\$ 1,197,154	\$ 127,130	
\$ 86	Normal	Aggressive	C&I Refrigeration	Head Pressure Control_N	\$ 80	\$ 12,000	\$ 12,240	\$ 12,480	\$ 12,600	\$ 12,660	\$ -	\$ -	\$ 53,110	\$ 898,655	\$ 95,596	
\$ 86	Normal	Normal	C&I Refrigeration	Head Pressure Control_N	\$ 80	\$ 12,000	\$ 12,240	\$ 12,480	\$ 12,600	\$ 12,660	\$ -	\$ -	\$ 53,110	\$ 898,655	\$ 95,596	
\$ 87	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators less than 20ft3_AG	\$ 250	\$ 2,344	\$ 2,461	\$ 2,584	\$ 2,713	\$ 2,849	\$ -	\$ -	\$ 11,036	\$ 30,016	\$ 3,198	
\$ 87	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3_AG	\$ 250	\$ 938	\$ 984	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 30,016	\$ 3,198	
\$ 87	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators less than 20ft3_N	\$ 250	\$ 1,875	\$ 1,913	\$ 1,950	\$ 1,969	\$ 1,978	\$ -	\$ -	\$ 8,298	\$ 22,532	\$ 2,405	
\$ 87	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators 20-48 ft3_N	\$ 250	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 22,532	\$ 2,405	
\$ 88	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators 20-48 ft3_AG	\$ 500	\$ 4,688	\$ 4,922	\$ 5,168	\$ 5,426	\$ 5,698	\$ -	\$ -	\$ 22,072	\$ 44,021	\$ 4,690	
\$ 88	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators 20-48 ft3_AG	\$ 500	\$ 938	\$ 984	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 44,021	\$ 4,690	
\$ 88	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators 20-48 ft3_N	\$ 500	\$ 3,750	\$ 3,825	\$ 3,900	\$ 3,938	\$ 3,956	\$ -	\$ -	\$ 16,597	\$ 33,045	\$ 3,527	
\$ 88	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators 20-48 ft3_N	\$ 500	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 33,045	\$ 3,527	
\$ 89	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators more than 48ft3_AG	\$ 900	\$ 5,625	\$ 5,906	\$ 6,202	\$ 6,512	\$ 6,837	\$ -	\$ -	\$ 26,486	\$ 44,887	\$ 4,782	
\$ 89	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators more than 48ft3_AG	\$ 900	\$ 1,125	\$ 1,181	\$ 1,240	\$ 1,302	\$ 1,367	\$ -	\$ -	\$ 5,287	\$ 44,887	\$ 4,782	
\$ 89	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Refrigerators more than 48ft3_N	\$ 900	\$ 4,500	\$ 4,590	\$ 4,680	\$ 4,725	\$ 4,748	\$ -	\$ -	\$ 19,916	\$ 33,695	\$ 3,596	
\$ 89	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Refrigerators more than 48ft3_N	\$ 900	\$ 900	\$ 918	\$ 936	\$ 945	\$ 950	\$ -	\$ -	\$ 3,983	\$ 33,695	\$ 3,596	
\$ 90	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers less than 20ft3_AG	\$ 150	\$ 1,406	\$ 1,477	\$ 1,550	\$ 1,628	\$ 1,709	\$ -	\$ -	\$ 6,622	\$ 25,905	\$ 2,759	
\$ 90	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers less than 20ft3_AG	\$ 150	\$ 938	\$ 984	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 25,905	\$ 2,759	
\$ 90	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers less than 20ft3_N	\$ 150	\$ 1,125	\$ 1,148	\$ 1,170	\$ 1,181	\$ 1,187	\$ -	\$ -	\$ 4,979	\$ 19,446	\$ 2,074	
\$ 90	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers less than 20ft3_N	\$ 150	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 19,446	\$ 2,074	
\$ 91	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers 20-48 ft3_AG	\$ 400	\$ 3,750	\$ 3,938	\$ 4,134	\$ 4,341	\$ 4,558	\$ -	\$ -	\$ 17,657	\$ 24,843	\$ 2,647	
\$ 91	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers 20-48 ft3_AG	\$ 400	\$ 538	\$ 584	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 24,843	\$ 2,647	
\$ 91	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers 20-48 ft3_N	\$ 400	\$ 3,000	\$ 3,120	\$ 3,150	\$ 3,155	\$ 3,165	\$ -	\$ -	\$ 13,278	\$ 18,649	\$ 1,990	
\$ 91	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers 20-48 ft3_N	\$ 400	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 18,649	\$ 1,990	
\$ 92	Aggressive	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers more than 48ft3_AG	\$ 700	\$ 4,375	\$ 4,594	\$ 4,823	\$ 5,065	\$ 5,318	\$ -	\$ -	\$ 20,600	\$ 15,211	\$ 1,621	
\$ 92	Aggressive	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers more than 48ft3_AG	\$ 700	\$ 1,125	\$ 1,181	\$ 1,240	\$ 1,302	\$ 1,367	\$ -	\$ -	\$ 5,297	\$ 15,211	\$ 1,621	
\$ 92	Normal	Aggressive	C&I Refrigeration	ENERGY STAR Solid Door Freezers more than 48ft3_N	\$ 700	\$ 3,500	\$ 3,570	\$ 3,640	\$ 3,675	\$ 3,693	\$ -	\$ -	\$ 15,491	\$ 11,419	\$ 1,219	
\$ 92	Normal	Normal	C&I Refrigeration	ENERGY STAR Commercial Solid Door Freezers more than 48ft3_N	\$ 700	\$ 900	\$ 918	\$ 936	\$ 945	\$ 950	\$ -	\$ -	\$ 3,983	\$ 11,419	\$ 1,219	
\$ 93	Aggressive	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines less than 500 lbs_AG	\$ 600	\$ 3,750	\$ 3,938	\$ 4,134	\$ 4,341	\$ 4,558	\$ -	\$ -	\$ 17,657	\$ 80,294	\$ 8,697	
\$ 93	Aggressive	Normal	C&I Refrigeration	Energy Efficient Ice Machines less than 500 lbs_AG	\$ 600	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 80,294	\$ 8,697	
\$ 93	Normal	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines less than 500 lbs_N	\$ 600	\$ 3,000	\$ 3,060	\$ 3,120	\$ 3,150	\$ 3,165	\$ -	\$ -	\$ 13,278	\$ 60,273	\$ 5,186	
\$ 93	Normal	Normal	C&I Refrigeration	Energy Efficient Ice Machines less than 500 lbs_N	\$ 600	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 60,273	\$ 5,186	
\$ 94	Aggressive	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines 500-1000 lbs_AG	\$ 1,500	\$ 4,688	\$ 4,922	\$ 5,168	\$ 5,426	\$ 5,698	\$ -	\$ -	\$ 22,072	\$ 59,324	\$ 5,029	
\$ 94	Aggressive	Normal	C&I Refrigeration	Energy Efficient Ice Machines 500-1000 lbs_AG	\$ 1,500	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 59,324	\$ 5,029	
\$ 94	Normal	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines 500-1000 lbs_N	\$ 1,500	\$ 3,750	\$ 3,825	\$ 3,900	\$ 3,938	\$ 3,956	\$ -	\$ -	\$ 16,597	\$ 44,532	\$ 3,781	
\$ 94	Normal	Normal	C&I Refrigeration	Energy Efficient Ice Machines 500-1000 lbs_N	\$ 1,500	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 44,532	\$ 3,781	
\$ 95	Aggressive	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs_AG	\$ 2,000	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 65,887	\$ 5,598	
\$ 95	Aggressive	Normal	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs_AG	\$ 2,000	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 65,887	\$ 5,598	
\$ 95	Normal	Aggressive	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs_N	\$ 2,000	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 49,459	\$ 4,209	
\$ 95	Normal	Normal	C&I Refrigeration	Energy Efficient Ice Machines more than 1000 lbs_N	\$ 2,000	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 49,459	\$ 4,209	
\$ 96	Aggressive	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR_AG	\$ 80	\$ 500	\$ 525	\$ 551	\$ 579	\$ 608	\$ -	\$ -	\$ 2,354	\$ 850,685	\$ 73,854	
\$ 96	Aggressive	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR_AG	\$ 80	\$ 500	\$ 525	\$ 551	\$ 579	\$ 608	\$ -	\$ -	\$ 2,354	\$ 850,685	\$ 73,854	
\$ 96	Normal	Aggressive	C&I Process	Engineered Nozzles - COMPRESS AIR_N	\$ 80	\$ 400	\$ 408	\$ 416	\$ 420	\$ 422	\$ -	\$ -	\$ 1,770	\$ 638,575	\$ 55,535	
\$ 96	Normal	Normal	C&I Process	Engineered Nozzles - COMPRESS AIR_N	\$ 80	\$ 400	\$ 408	\$ 416	\$ 420	\$ 422	\$ -	\$ -	\$ 1,770	\$ 638,575	\$ 55,535	
\$ 97	Aggressive	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders_AG	\$ 2	\$ 625	\$ 656	\$ 689	\$ 724	\$ 760	\$ -	\$ -	\$ 2,943	\$ 66,413	\$ 6,760	
\$ 97	Aggressive	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders_AG	\$ 2	\$ 625	\$ 656	\$ 689	\$ 724	\$ 760	\$ -	\$ -	\$ 2,943	\$ 66,413	\$ 6,760	
\$ 97	Normal	Aggressive	C&I Process	Barrel Wraps - Inj Mold & Extruders_N	\$ 2	\$ 500	\$ 510	\$ 520	\$ 525	\$ 528	\$ -	\$ -	\$ 2,213	\$ 49,854	\$ 5,083	
\$ 97	Normal	Normal	C&I Process	Barrel Wraps - Inj Mold & Extruders_N	\$ 2	\$ 500	\$ 510	\$ 520	\$ 525	\$ 528	\$ -	\$ -	\$ 2,213	\$ 49,854	\$ 5,083	
\$ 98	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia_AG	\$ 33	\$ 94	\$ 98	\$ 103	\$ 109	\$ 114	\$ -	\$ -	\$ 441	\$ 1,140	\$ 116	
\$ 98	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia_AG	\$ 33	\$ 94	\$ 98	\$ 103	\$ 109	\$ 114	\$ -	\$ -	\$ 441	\$ 1,140	\$ 116	
\$ 98	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 3 dia_N	\$ 33	\$ 75	\$ 77	\$ 78	\$ 79	\$ 79	\$ -	\$ -	\$ 332	\$ 856	\$ 87	
\$ 98	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 3 dia_N	\$ 33	\$ 75	\$ 77	\$ 78	\$ 79	\$ 79	\$ -	\$ -	\$ 332	\$ 856	\$ 87	
\$ 99	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia_AG	\$ 43	\$ 125	\$ 131	\$ 138	\$ 145	\$ 152	\$ -	\$ -	\$ 589	\$ 1,565	\$ 159	
\$ 99	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia_AG	\$ 43	\$ 125	\$ 131	\$ 138	\$ 145	\$ 152	\$ -	\$ -	\$ 589	\$ 1,565	\$ 159	
\$ 99	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 4 dia_N	\$ 43	\$ 100	\$ 102	\$ 104	\$ 105	\$ 106	\$ -	\$ -	\$ 443	\$ 1,175	\$ 119	
\$ 99	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 4 dia_N	\$ 43	\$ 100	\$ 102	\$ 104	\$ 105	\$ 106	\$ -	\$ -	\$ 443	\$ 1,175	\$ 119	
\$ 100	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia_AG	\$ 54	\$ 156	\$ 164	\$ 172	\$ 181	\$ 190	\$ -	\$ -	\$ 736	\$ 2,046	\$ 207	
\$ 100	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia_AG	\$ 54	\$ 156	\$ 164	\$ 172	\$ 181	\$ 190	\$ -	\$ -	\$ 736	\$ 2,046	\$ 207	
\$ 100	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 5 dia_N	\$ 54	\$ 125	\$ 128	\$ 130	\$ 131	\$ 132	\$ -	\$ -	\$ 553	\$ 1,536	\$ 156	
\$ 100	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 5 dia_N	\$ 54	\$ 125	\$ 128	\$ 130	\$ 131	\$ 132	\$ -	\$ -	\$ 553	\$ 1,536	\$ 156	
\$ 101	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia_AG	\$ 65	\$ 188	\$ 197	\$ 207	\$ 217	\$ 228	\$ -	\$ -	\$ 883	\$ 2,527	\$ 256	
\$ 101	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia_AG	\$ 65	\$ 188	\$ 197	\$ 207	\$ 217	\$ 228	\$ -	\$ -	\$ 883	\$ 2,527	\$ 256	
\$ 101	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 6 dia_N	\$ 65	\$ 150	\$ 153	\$ 156	\$ 158	\$ 158	\$ -	\$ -	\$ 664	\$ 1,897	\$ 192	
\$ 101	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 6 dia_N	\$ 65	\$ 150	\$ 153	\$ 156	\$ 158	\$ 158	\$ -	\$ -	\$ 664	\$ 1,897	\$ 192	
\$ 102	Aggressive	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia_AG	\$ 86	\$ 250	\$ 263	\$ 276	\$ 289	\$ 304	\$ -	\$ -	\$ 1,177	\$ 3,581	\$ 360	
\$ 102	Aggressive	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia_AG	\$ 86	\$ 250	\$ 263	\$ 276	\$ 289	\$ 304	\$ -	\$ -	\$ 1,177	\$ 3,581	\$ 360	
\$ 102	Normal	Aggressive	C&I Process	Pellet Dryer Tanks & Ducts 8 dia_N	\$ 86	\$ 200	\$ 204	\$ 208	\$ 210	\$ 211	\$ -	\$ -	\$ 885	\$ 2,688	\$ 270	
\$ 102	Normal	Normal	C&I Process	Pellet Dryer Tanks & Ducts 8 dia_N	\$ 86	\$ 200	\$ 204	\$ 208	\$ 210	\$ 211	\$ -	\$ -	\$ 885	\$ 2,688	\$ 270	
\$ 103	Aggressive	Aggressive	C&I HVAC	WLHP 17,000_AG	\$ 33	\$ 20	\$ 21	\$ 22	\$ 23	\$ 24	\$ -	\$ -	\$ 94	\$ 195	\$ 12	
\$ 103	Aggressive	Normal	C&I HVAC	WLHP 17,000_AG	\$ 33	\$ 20	\$ 21	\$ 22	\$ 23	\$ 24	\$ -	\$ -	\$ 94	\$ 195	\$ 12	
\$ 103	Normal	Aggressive	C&I HVAC	WLHP 17,000_N	\$ 33	\$ 16	\$ 16	\$ 17	\$ 17	\$ 17	\$ -	\$ -	\$ 71	\$ 146	\$ 9	
\$ 103	Normal	Normal	C&I HVAC	WLHP 17,000_N	\$ 33	\$ 16	\$ 16	\$ 17	\$ 17	\$ 17	\$ -	\$ -	\$ 71	\$ 146	\$ 9	
\$ 104	Aggressive															

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's)					NPV (Today's) Environmental Benefits
						YR 1 Program Incentive Costs	YR 2 Program Incentive Costs	YR 3 Program Incentive Costs	YR 4 Program Incentive Costs	YR 5 Program Incentive Costs	NPV (Today's) Administration Cost	Program Implementation Cost	NPV (Today's) Incentives	NPV (Today's) Avoid Cost		
\$ 106	Aggressive	Aggressive	C&I HVAC	Setback Programmable Thermostat_AG	\$ 100	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ 3,191	\$ -	\$ -	\$ 12,360	\$ 3,673,069	\$ 256,534	
\$ 106	Aggressive	Normal	C&I HVAC	Setback Programmable Thermostat_N	\$ 100	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ 3,191	\$ -	\$ -	\$ 12,360	\$ 3,673,069	\$ 256,534	
\$ 106	Normal	Aggressive	C&I HVAC	Setback Programmable Thermostat_N	\$ 100	\$ 1,750	\$ 1,785	\$ 1,820	\$ 1,838	\$ 1,846	\$ -	\$ -	\$ 7,745	\$ 2,297,687	\$ 160,752	
\$ 106	Normal	Normal	C&I HVAC	Setback Programmable Thermostat_N	\$ 100	\$ 1,750	\$ 1,785	\$ 1,820	\$ 1,838	\$ 1,846	\$ -	\$ -	\$ 7,745	\$ 2,297,687	\$ 160,752	
\$ 107	Aggressive	Aggressive	C&I HVAC	Ground Source HP Closed Loop_AG	\$ 600	\$ 375	\$ 394	\$ 413	\$ 434	\$ 456	\$ -	\$ -	\$ 1,766	\$ 2,591	\$ 171	
\$ 107	Aggressive	Normal	C&I HVAC	Ground Source HP Closed Loop_AG	\$ 600	\$ 188	\$ 197	\$ 207	\$ 217	\$ 228	\$ -	\$ -	\$ 883	\$ 2,591	\$ 171	
\$ 107	Normal	Aggressive	C&I HVAC	Ground Source HP Closed Loop_N	\$ 600	\$ 300	\$ 306	\$ 312	\$ 315	\$ 317	\$ -	\$ -	\$ 1,328	\$ 1,945	\$ 128	
\$ 107	Normal	Normal	C&I HVAC	Ground Source HP Closed Loop_N	\$ 600	\$ 15	\$ 15	\$ 16	\$ 16	\$ 16	\$ -	\$ -	\$ 66	\$ 1,945	\$ 128	
\$ 108	Aggressive	Aggressive	C&I HVAC	AC 65,000 1 Ph_AG	\$ 336	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ -	\$ -	\$ 23,543	\$ 53,892	\$ 3,307	
\$ 108	Aggressive	Normal	C&I HVAC	AC 65,000 1 Ph_AG	\$ 336	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ -	\$ -	\$ 23,543	\$ 53,892	\$ 3,307	
\$ 108	Normal	Aggressive	C&I HVAC	AC 65,000 1 Ph_N	\$ 336	\$ 4,000	\$ 4,080	\$ 4,160	\$ 4,200	\$ 4,220	\$ -	\$ -	\$ 17,703	\$ 40,454	\$ 2,487	
\$ 108	Normal	Normal	C&I HVAC	AC 65,000 1 Ph_N	\$ 336	\$ 4,000	\$ 4,080	\$ 4,160	\$ 4,200	\$ 4,220	\$ -	\$ -	\$ 17,703	\$ 40,454	\$ 2,487	
\$ 109	Aggressive	Aggressive	C&I HVAC	AC 65,000 3 Ph_AG	\$ 446	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 20,172	\$ 1,238	
\$ 109	Aggressive	Normal	C&I HVAC	AC 65,000 3 Ph_AG	\$ 446	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 20,172	\$ 1,238	
\$ 109	Normal	Aggressive	C&I HVAC	AC 65,000 3 Ph_N	\$ 446	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 15,143	\$ 931	
\$ 109	Normal	Normal	C&I HVAC	AC 65,000 3 Ph_N	\$ 446	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 15,143	\$ 931	
\$ 110	Aggressive	Aggressive	C&I HVAC	AC 65,000 - 135,000_AG	\$ 836	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ -	\$ -	\$ 23,543	\$ 62,466	\$ 3,860	
\$ 110	Aggressive	Normal	C&I HVAC	AC 65,000 - 135,000_AG	\$ 836	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ -	\$ -	\$ 23,543	\$ 62,466	\$ 3,860	
\$ 110	Normal	Aggressive	C&I HVAC	AC 65,000 - 135,000_N	\$ 836	\$ 4,000	\$ 4,080	\$ 4,160	\$ 4,200	\$ 4,220	\$ -	\$ -	\$ 17,703	\$ 46,890	\$ 2,903	
\$ 110	Normal	Normal	C&I HVAC	AC 65,000 - 135,000_N	\$ 836	\$ 4,000	\$ 4,080	\$ 4,160	\$ 4,200	\$ 4,220	\$ -	\$ -	\$ 17,703	\$ 46,890	\$ 2,903	
\$ 111	Aggressive	Aggressive	C&I HVAC	AC 135,000 - 240,000_AG	\$ 1,738	\$ 10,000	\$ 10,500	\$ 11,025	\$ 11,576	\$ 12,155	\$ -	\$ -	\$ 47,086	\$ 195,585	\$ 12,067	
\$ 111	Aggressive	Normal	C&I HVAC	AC 135,000 - 240,000_AG	\$ 1,738	\$ 10,000	\$ 10,500	\$ 11,025	\$ 11,576	\$ 12,155	\$ -	\$ -	\$ 47,086	\$ 195,585	\$ 12,067	
\$ 111	Normal	Aggressive	C&I HVAC	AC 135,000 - 240,000_N	\$ 1,738	\$ 8,000	\$ 8,160	\$ 8,320	\$ 8,400	\$ 8,440	\$ -	\$ -	\$ 35,407	\$ 146,818	\$ 9,074	
\$ 111	Normal	Normal	C&I HVAC	AC 135,000 - 240,000_N	\$ 1,738	\$ 8,000	\$ 8,160	\$ 8,320	\$ 8,400	\$ 8,440	\$ -	\$ -	\$ 35,407	\$ 146,818	\$ 9,074	
\$ 112	Aggressive	Aggressive	C&I HVAC	AC 240,000 - 760,000_AG	\$ 2,145	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 23,965	\$ 1,582	
\$ 112	Aggressive	Normal	C&I HVAC	AC 240,000 - 760,000_AG	\$ 2,145	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 23,965	\$ 1,582	
\$ 112	Normal	Aggressive	C&I HVAC	AC 240,000 - 760,000_N	\$ 2,145	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 17,990	\$ 1,190	
\$ 112	Normal	Normal	C&I HVAC	AC 240,000 - 760,000_N	\$ 2,145	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 17,990	\$ 1,190	
\$ 113	Aggressive	Aggressive	C&I HVAC	AC 760,000_AG	\$ 4,862	\$ 3,250	\$ 3,413	\$ 3,583	\$ 3,762	\$ 3,950	\$ -	\$ -	\$ 15,303	\$ 45,979	\$ 3,035	
\$ 113	Aggressive	Normal	C&I HVAC	AC 760,000_AG	\$ 4,862	\$ 3,250	\$ 3,413	\$ 3,583	\$ 3,762	\$ 3,950	\$ -	\$ -	\$ 15,303	\$ 45,979	\$ 3,035	
\$ 113	Normal	Aggressive	C&I HVAC	AC 760,000_N	\$ 4,862	\$ 2,600	\$ 2,652	\$ 2,704	\$ 2,730	\$ 2,743	\$ -	\$ -	\$ 11,507	\$ 34,515	\$ 2,282	
\$ 113	Normal	Normal	C&I HVAC	AC 760,000_N	\$ 4,862	\$ 2,600	\$ 2,652	\$ 2,704	\$ 2,730	\$ 2,743	\$ -	\$ -	\$ 11,507	\$ 34,515	\$ 2,282	
\$ 114	Aggressive	Aggressive	C&I HVAC	HP 65,000 1 Ph_AG	\$ 270	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 19,215	\$ 1,205	
\$ 114	Aggressive	Normal	C&I HVAC	HP 65,000 1 Ph_AG	\$ 270	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 19,215	\$ 1,205	
\$ 114	Normal	Aggressive	C&I HVAC	HP 65,000 1 Ph_N	\$ 270	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 14,424	\$ 906	
\$ 114	Normal	Normal	C&I HVAC	HP 65,000 1 Ph_N	\$ 270	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 14,424	\$ 906	
\$ 115	Aggressive	Aggressive	C&I HVAC	HP 65,000 3 Ph_AG	\$ 270	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 11,829	\$ 735	
\$ 115	Aggressive	Normal	C&I HVAC	HP 65,000 3 Ph_AG	\$ 270	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 11,829	\$ 735	
\$ 115	Normal	Aggressive	C&I HVAC	HP 65,000 3 Ph_N	\$ 270	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 8,879	\$ 553	
\$ 115	Normal	Normal	C&I HVAC	HP 65,000 3 Ph_N	\$ 270	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 8,879	\$ 553	
\$ 116	Aggressive	Aggressive	C&I HVAC	HP 65,000 - 135,000_AG	\$ 803	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 43,257	\$ 2,716	
\$ 116	Aggressive	Normal	C&I HVAC	HP 65,000 - 135,000_AG	\$ 803	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 43,257	\$ 2,716	
\$ 116	Normal	Aggressive	C&I HVAC	HP 65,000 - 135,000_N	\$ 803	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 32,471	\$ 2,042	
\$ 116	Normal	Normal	C&I HVAC	HP 65,000 - 135,000_N	\$ 803	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 32,471	\$ 2,042	
\$ 117	Aggressive	Aggressive	C&I HVAC	HP 135,000 - 240,000_AG	\$ 1,496	\$ 2,000	\$ 2,100	\$ 2,205	\$ 2,315	\$ 2,431	\$ -	\$ -	\$ 9,417	\$ 37,818	\$ 2,391	
\$ 117	Aggressive	Normal	C&I HVAC	HP 135,000 - 240,000_AG	\$ 1,496	\$ 2,000	\$ 2,100	\$ 2,205	\$ 2,315	\$ 2,431	\$ -	\$ -	\$ 9,417	\$ 37,818	\$ 2,391	
\$ 117	Normal	Aggressive	C&I HVAC	HP 135,000 - 240,000_N	\$ 1,496	\$ 1,600	\$ 1,632	\$ 1,664	\$ 1,680	\$ 1,688	\$ -	\$ -	\$ 7,081	\$ 28,388	\$ 1,798	
\$ 117	Normal	Normal	C&I HVAC	HP 135,000 - 240,000_N	\$ 1,496	\$ 1,600	\$ 1,632	\$ 1,664	\$ 1,680	\$ 1,688	\$ -	\$ -	\$ 7,081	\$ 28,388	\$ 1,798	
\$ 118	Aggressive	Aggressive	C&I HVAC	HP 240,000_AG	\$ 1,804	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 56,105	\$ 3,781	
\$ 118	Aggressive	Normal	C&I HVAC	HP 240,000_AG	\$ 1,804	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ -	\$ -	\$ 11,772	\$ 56,105	\$ 3,781	
\$ 118	Normal	Aggressive	C&I HVAC	HP 240,000_N	\$ 1,804	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 42,116	\$ 2,843	
\$ 118	Normal	Normal	C&I HVAC	HP 240,000_N	\$ 1,804	\$ 2,000	\$ 2,040	\$ 2,080	\$ 2,100	\$ 2,110	\$ -	\$ -	\$ 8,852	\$ 42,116	\$ 2,843	
\$ 119	Aggressive	Aggressive	C&I HVAC	PTAC_AG	\$ 121	\$ 3,750	\$ 3,938	\$ 4,134	\$ 4,341	\$ 4,558	\$ -	\$ -	\$ 17,657	\$ 10,747	\$ 706	
\$ 119	Aggressive	Normal	C&I HVAC	PTAC_AG	\$ 121	\$ 1,250	\$ 1,313	\$ 1,378	\$ 1,447	\$ 1,519	\$ -	\$ -	\$ 5,886	\$ 10,747	\$ 706	
\$ 119	Normal	Aggressive	C&I HVAC	PTAC_N	\$ 121	\$ 3,000	\$ 3,060	\$ 3,120	\$ 3,150	\$ 3,165	\$ -	\$ -	\$ 13,278	\$ 8,068	\$ 531	
\$ 119	Normal	Normal	C&I HVAC	PTAC_N	\$ 121	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,050	\$ 1,055	\$ -	\$ -	\$ 4,426	\$ 8,068	\$ 531	
\$ 120	Aggressive	Aggressive	C&I HVAC	PTAC-HP_AG	\$ 121	\$ 1,875	\$ 1,969	\$ 2,067	\$ 2,171	\$ 2,279	\$ -	\$ -	\$ 8,829	\$ 8,566	\$ 566	
\$ 120	Aggressive	Normal	C&I HVAC	PTAC-HP_AG	\$ 121	\$ 625	\$ 656	\$ 689	\$ 724	\$ 760	\$ -	\$ -	\$ 2,943	\$ 8,566	\$ 566	
\$ 120	Normal	Aggressive	C&I HVAC	PTAC-HP_N	\$ 121	\$ 1,500	\$ 1,530	\$ 1,560	\$ 1,575	\$ 1,583	\$ -	\$ -	\$ 6,639	\$ 6,430	\$ 425	
\$ 120	Normal	Normal	C&I HVAC	PTAC-HP_N	\$ 121	\$ 500	\$ 510	\$ 520	\$ 525	\$ 528	\$ -	\$ -	\$ 2,213	\$ 6,430	\$ 425	
\$ 121	Aggressive	Aggressive	C&I HVAC	Economizer_AG	\$ 170	\$ 21,250	\$ 22,313	\$ 23,428	\$ 24,600	\$ 25,830	\$ -	\$ -	\$ 100,059	\$ 1,234,289	\$ 79,859	
\$ 121	Aggressive	Normal	C&I HVAC	Economizer_AG	\$ 170	\$ 6,250	\$ 6,563	\$ 6,891	\$ 7,235	\$ 7,597	\$ -	\$ -	\$ 29,429	\$ 1,234,289	\$ 79,859	
\$ 121	Normal	Aggressive	C&I HVAC	Economizer_N	\$ 170	\$ 17,000	\$ 21,250	\$ 25,500	\$ 34,000	\$ 34,000	\$ -	\$ -	\$ 109,956	\$ 1,365,323	\$ 87,758	
\$ 121	Normal	Normal	C&I HVAC	Economizer_N	\$ 170	\$ 17,000	\$ 21,250	\$ 25,500	\$ 34,000	\$ 34,000	\$ -	\$ -	\$ 109,956	\$ 1,365,323	\$ 87,758	
\$ 122	Aggressive	Aggressive	C&I HVAC	Tuneup - Refrigerant Charge_AG	\$ 38	\$ 1,188	\$ 1,247	\$ 1,309	\$ 1,375	\$ 1,443	\$ -	\$ -	\$ 5,592	\$ 222,934	\$ 14,387	
\$ 122	Aggressive	Normal	C&I HVAC	Tuneup - Refrigerant Charge_AG	\$ 38	\$ 469	\$ 492	\$ 517	\$ 543	\$ 570	\$ -	\$ -	\$ 2,207	\$ 222,934	\$ 14,387	
\$ 122	Normal	Aggressive	C&I HVAC	Tuneup - Refrigerant Charge_N	\$ 38	\$ 950	\$ 969	\$ 1,900	\$ 2,850	\$ 3,800	\$ -	\$ -	\$ 8,481	\$ 343,565	\$ 21,821	
\$ 122	Normal	Normal	C&I HVAC	Tuneup - Refrigerant Charge_N	\$ 38	\$ 950	\$ 969	\$ 1,900	\$ 2,850	\$ 3,800	\$ -	\$ -	\$ 8,481	\$ 343,565	\$ 21,821	
\$ 123	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 200-300 tons_AG	\$ 1,100	\$ 2,063	\$ 2,166	\$ 2,274	\$ 2,389	\$ 2,507	\$ -	\$ -	\$ 9,712	\$ 25,152	\$ 1,625	
\$ 123	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_AG	\$ 1,100	\$ 1,875	\$ 1,969	\$ 2,067	\$ 2,171	\$ 2,279	\$ -	\$ -	\$ 8,829	\$ 25,152	\$ 1,625	
\$ 123	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 0-100 tons_N	\$ 1,100	\$ 1,650	\$ 1,683	\$ 1,716	\$ 1,733	\$ 1,741	\$ -	\$ -	\$ 7,303	\$		

MMP - C and I End-use measures - Cost Information

MMP ID#	Penetration	Incentive	Characteristic	Program	Incremental Cost of measure YR1	NPV (Today's)					NPV (Today's) Administration Cost	Program NPV (Today's)		NPV (Today's) Avoid Cost	NPV (Today's) Environmental Benefits
						YR 1 Program Incentive Costs	YR 2 Program Incentive Costs	YR 3 Program Incentive Costs	YR 4 Program Incentive Costs	YR 5 Program Incentive Costs		Implementation Cost	NPV (Today's) Incentives		
\$ 127	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AG	\$ 1,100	\$ 2,250	\$ 2,363	\$ 2,481	\$ 2,605	\$ 2,735	\$ -	\$ -	\$ 10,594	\$ 139,550	\$ 10,952
\$ 127	Aggressive	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_AG	\$ 1,100	\$ 2,250	\$ 2,363	\$ 2,481	\$ 2,605	\$ 2,735	\$ -	\$ -	\$ 10,594	\$ 139,550	\$ 10,952
\$ 127	Normal	Aggressive	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_N	\$ 1,100	\$ 1,800	\$ 1,836	\$ 1,872	\$ 1,890	\$ 1,899	\$ -	\$ -	\$ 7,967	\$ 104,754	\$ 8,235
\$ 127	Normal	Normal	C&I HVAC	Chilled Water Reset Air Cooled 400-500 tons_N	\$ 1,100	\$ 1,800	\$ 1,836	\$ 1,872	\$ 1,890	\$ 1,899	\$ -	\$ -	\$ 7,967	\$ 104,754	\$ 8,235
\$ 128	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AG	\$ 1,100	\$ 3,125	\$ 3,281	\$ 3,445	\$ 3,618	\$ 3,798	\$ -	\$ -	\$ 14,715	\$ 165,816	\$ 12,100
\$ 128	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_AG	\$ 1,100	\$ 3,125	\$ 3,281	\$ 3,445	\$ 3,618	\$ 3,798	\$ -	\$ -	\$ 14,715	\$ 165,816	\$ 12,100
\$ 128	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_N	\$ 1,100	\$ 2,500	\$ 2,550	\$ 2,600	\$ 2,625	\$ 2,638	\$ -	\$ -	\$ 11,065	\$ 124,471	\$ 9,099
\$ 128	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 0-1000 tons_N	\$ 1,100	\$ 2,500	\$ 2,550	\$ 2,600	\$ 2,625	\$ 2,638	\$ -	\$ -	\$ 11,065	\$ 124,471	\$ 9,099
\$ 129	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AG	\$ 1,100	\$ 938	\$ 984	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 92,500	\$ 7,260
\$ 129	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_AG	\$ 1,100	\$ 938	\$ 984	\$ 1,034	\$ 1,085	\$ 1,140	\$ -	\$ -	\$ 4,414	\$ 92,500	\$ 7,260
\$ 129	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_N	\$ 1,100	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 69,436	\$ 5,459
\$ 129	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 1000-2000 tons_N	\$ 1,100	\$ 750	\$ 765	\$ 780	\$ 788	\$ 791	\$ -	\$ -	\$ 3,319	\$ 69,436	\$ 5,459
\$ 130	Aggressive	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AG	\$ 1,100	\$ 1,094	\$ 1,148	\$ 1,206	\$ 1,266	\$ 1,329	\$ -	\$ -	\$ 5,150	\$ 154,165	\$ 12,099
\$ 130	Aggressive	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_AG	\$ 1,100	\$ 1,094	\$ 1,148	\$ 1,206	\$ 1,266	\$ 1,329	\$ -	\$ -	\$ 5,150	\$ 154,165	\$ 12,099
\$ 130	Normal	Aggressive	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_N	\$ 1,100	\$ 875	\$ 893	\$ 910	\$ 919	\$ 923	\$ -	\$ -	\$ 3,873	\$ 115,725	\$ 9,098
\$ 130	Normal	Normal	C&I HVAC	Chilled Water Reset Water Cooled 2000-3000 tons_N	\$ 1,100	\$ 875	\$ 893	\$ 910	\$ 919	\$ 923	\$ -	\$ -	\$ 3,873	\$ 115,725	\$ 9,098
\$ 131	Aggressive	Aggressive	C&I HVAC	Air Cooled Chillers_AG	\$ 10,000	\$ 6,250	\$ 6,563	\$ 6,891	\$ 7,235	\$ 7,597	\$ -	\$ -	\$ 29,429	\$ 29,536	\$ 1,773
\$ 131	Aggressive	Normal	C&I HVAC	Air Cooled Chillers_AG	\$ 10,000	\$ 1,000	\$ 1,050	\$ 1,103	\$ 1,158	\$ 1,216	\$ -	\$ -	\$ 4,709	\$ 29,536	\$ 1,773
\$ 131	Normal	Aggressive	C&I HVAC	Air Cooled Chillers_N	\$ 10,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ 21,469	\$ 21,495	\$ 1,294
\$ 131	Normal	Normal	C&I HVAC	Air Cooled Chillers_N	\$ 10,000	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ -	\$ -	\$ 3,435	\$ 21,495	\$ 1,294
\$ 132	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_AG	\$ 4,000	\$ 25,000	\$ 26,250	\$ 27,563	\$ 28,941	\$ 30,388	\$ -	\$ -	\$ 117,716	\$ 427,016	\$ 25,800
\$ 132	Aggressive	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_AG	\$ 4,000	\$ 20,000	\$ 21,000	\$ 22,050	\$ 23,153	\$ 24,310	\$ -	\$ -	\$ 94,173	\$ 427,016	\$ 25,800
\$ 132	Normal	Aggressive	C&I HVAC	Water Cooled Chillers less than 150 ton_N	\$ 4,000	\$ 20,000	\$ 20,400	\$ 20,800	\$ 21,000	\$ 21,100	\$ -	\$ -	\$ 88,517	\$ 320,544	\$ 19,400
\$ 132	Normal	Normal	C&I HVAC	Water Cooled Chillers less than 150 ton_N	\$ 4,000	\$ 16,000	\$ 16,320	\$ 16,640	\$ 16,800	\$ 16,880	\$ -	\$ -	\$ 70,814	\$ 320,544	\$ 19,400
\$ 133	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AG	\$ 11,500	\$ 57,500	\$ 60,375	\$ 63,394	\$ 66,563	\$ 69,892	\$ -	\$ -	\$ 270,747	\$ 2,042,557	\$ 123,738
\$ 133	Aggressive	Normal	C&I HVAC	Water Cooled Chillers 150 - 300 ton_AG	\$ 11,500	\$ 57,500	\$ 60,375	\$ 63,394	\$ 66,563	\$ 69,892	\$ -	\$ -	\$ 270,747	\$ 2,042,557	\$ 123,738
\$ 133	Normal	Aggressive	C&I HVAC	Water Cooled Chillers 150 - 300 ton_N	\$ 11,500	\$ 46,000	\$ 46,920	\$ 47,840	\$ 48,300	\$ 48,530	\$ -	\$ -	\$ 203,590	\$ 1,533,264	\$ 93,046
\$ 133	Normal	Normal	C&I HVAC	Water Cooled Chillers 150 - 300 ton_N	\$ 11,500	\$ 46,000	\$ 46,920	\$ 47,840	\$ 48,300	\$ 48,530	\$ -	\$ -	\$ 203,590	\$ 1,533,264	\$ 93,046
\$ 134	Aggressive	Aggressive	C&I HVAC	Water Cooled Chillers more than 300 ton_AG	\$ 50,000	\$ 50,000	\$ 52,500	\$ 55,125	\$ 57,881	\$ 60,775	\$ -	\$ -	\$ 235,432	\$ 1,380,507	\$ 89,641
\$ 134	Aggressive	Normal	C&I HVAC	Water Cooled Chillers more than 300 ton_AG	\$ 50,000	\$ 50,000	\$ 52,500	\$ 55,125	\$ 57,881	\$ 60,775	\$ -	\$ -	\$ 235,432	\$ 1,380,507	\$ 89,641
\$ 134	Normal	Aggressive	C&I HVAC	Water Cooled Chillers more than 300 ton_N	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ -	\$ -	\$ 171,751	\$ 1,004,681	\$ 65,394
\$ 134	Normal	Normal	C&I HVAC	Water Cooled Chillers more than 300 ton_N	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ -	\$ -	\$ 171,751	\$ 1,004,681	\$ 65,394
C1	Aggressive	Aggressive	C&I Custom	Custom_RFP_New Construction Level 1_AG	\$ 19,000	\$ 114,000	\$ 228,000	\$ 456,000	\$ 684,000	\$ 855,000	\$ -	\$ -	\$ 1,875,659	\$ 26,914,472	\$ 2,249,234
C1	Aggressive	Normal	C&I Custom	Custom_RFP_New Construction Level 1_AG	\$ 19,000	\$ 114,000	\$ 228,000	\$ 456,000	\$ 684,000	\$ 855,000	\$ -	\$ -	\$ 1,875,659	\$ 26,914,472	\$ 2,249,234
C1	Normal	Aggressive	C&I Custom	Custom_RFP_New Construction Level 1_N	\$ 19,000	\$ 114,000	\$ 171,000	\$ 256,500	\$ 384,750	\$ 577,125	\$ -	\$ -	\$ 1,214,475	\$ 17,388,282	\$ 1,456,362
C1	Normal	Normal	C&I Custom	Custom_RFP_New Construction Level 1_N	\$ 19,000	\$ 114,000	\$ 171,000	\$ 256,500	\$ 384,750	\$ 577,125	\$ -	\$ -	\$ 1,214,475	\$ 17,388,282	\$ 1,456,362
C2	Aggressive	Aggressive	C&I Custom	Custom_RFP_New Construction Level 2_AG	\$ 19,000	\$ 176,000	\$ 352,000	\$ 704,000	\$ 1,056,000	\$ 1,320,000	\$ -	\$ -	\$ 2,895,755	\$ 26,914,472	\$ 2,249,234
C2	Aggressive	Normal	C&I Custom	Custom_RFP_New Construction Level 2_AG	\$ 19,000	\$ 176,000	\$ 352,000	\$ 704,000	\$ 1,056,000	\$ 1,320,000	\$ -	\$ -	\$ 2,895,755	\$ 26,914,472	\$ 2,249,234
C2	Normal	Aggressive	C&I Custom	Custom_RFP_New Construction Level 2_N	\$ 19,000	\$ 176,000	\$ 264,000	\$ 396,000	\$ 594,000	\$ 891,000	\$ -	\$ -	\$ 1,874,979	\$ 17,388,282	\$ 1,456,362
C2	Normal	Normal	C&I Custom	Custom_RFP_New Construction Level 2_N	\$ 19,000	\$ 176,000	\$ 264,000	\$ 396,000	\$ 594,000	\$ 891,000	\$ -	\$ -	\$ 1,874,979	\$ 17,388,282	\$ 1,456,362
C3	Aggressive	Aggressive	C&I Custom	Custom_RFP_New Construction Mid Level_AG	\$ 19,000	\$ 146,000	\$ 292,000	\$ 584,000	\$ 876,000	\$ 1,095,000	\$ -	\$ -	\$ 2,402,160	\$ 26,914,472	\$ 2,249,234
C3	Aggressive	Normal	C&I Custom	Custom_RFP_New Construction Mid Level_AG	\$ 19,000	\$ 146,000	\$ 292,000	\$ 584,000	\$ 876,000	\$ 1,095,000	\$ -	\$ -	\$ 2,402,160	\$ 26,914,472	\$ 2,249,234
C3	Normal	Aggressive	C&I Custom	Custom_RFP_New Construction Mid Level_N	\$ 19,000	\$ 146,000	\$ 219,000	\$ 328,500	\$ 492,750	\$ 739,125	\$ -	\$ -	\$ 1,555,380	\$ 17,388,282	\$ 1,456,362
C3	Normal	Normal	C&I Custom	Custom_RFP_New Construction Mid Level_N	\$ 19,000	\$ 146,000	\$ 219,000	\$ 328,500	\$ 492,750	\$ 739,125	\$ -	\$ -	\$ 1,555,380	\$ 17,388,282	\$ 1,456,362

Variable:	Program	Participants YR1	Participants YR2	Participants YR3	Participants YR4	Participants YR5	Target kWh percust	Target kW percust	Measure life	kWh (Net Free), Yr1	kWh (Net Free), Yr2	kWh (Net Free), Yr3	kWh (Net Free), Yr4	kWh (Net Free), Yr5	Annual kW (net Free), Yr1	Annual kW (net Free), Yr2	Annual kW (net Free), Yr3	Annual kW (net Free), Yr4	Annual kW (net Free), Yr5
RLW 1, Avg Home	Under charged-Add refrigerant	1,849	2,773	3,698	3,698	3,698	688.84	0.18	5	1,226,417	3,066,043	5,518,878	7,971,712	10,424,546	327	816	1,469	2,122	2,775
RLW 2, Avg Home	Over charged-Remove refrigerant	2,186	3,280	4,373	4,373	4,373	176.32	0.12	5	371,237	928,092	1,670,565	2,413,038	3,155,511	245	613	1,103	1,593	2,083
RLW 3, Avg Home	Increase duct sizes or add new ducts	1,020	1,529	2,039	2,039	2,039	980.83	0.82	20	963,111	2,407,779	4,334,002	6,260,225	8,186,448	803	2,008	3,615	5,222	6,824
RLW 4, Avg Home	Increase blower speed	1,693	2,540	3,387	3,387	3,387	807.02	0.67	5	1,316,055	3,290,138	5,922,248	8,554,358	11,186,468	1,089	2,722	4,899	7,077	9,254
RLW 5, Avg Home	Reduce duct leakage to 5%	1,271	1,907	2,543	2,543	2,543	606.43	0.45	20	742,422	1,856,055	3,340,899	4,825,743	6,310,587	556	1,389	2,501	3,612	4,723
RLW 6, Avg Home	Size AC units (A) to 100% of Manual J	96	144	192	192	192	333.12	0.27	15	27,372	68,429	123,172	177,916	232,659	22	55	99	144	188
RLW 7, Avg Home	Size AC units (B) to 100% of Manual J	191	286	382	382	382	1,046.24	0.83	15	170,976	427,439	769,391	1,111,343	1,453,294	136	340	612	884	1,156
RLW 8, Avg Home	Add two more inches of insulation to ducts in attic	335	502	670	670	670	241.92	0.24	20	69,366	173,414	312,145	450,876	589,608	69	174	313	452	591
RLW 9, Avg Home	Install Heat Pump SEER = 13 to 16	12	18	23	23	23	1,258.50	(0.52)	15	9,429	23,572	42,430	61,288	80,146	(4)	(10)	(17)	(25)	(33)
RLW 10, Avg Home	Install AC SEER = 16 vs 13 SEER	94	142	189	189	189	921.00	(0.11)	15	74,469	186,171	335,108	484,045	632,982	-	-	-	-	-
RLW 11, Avg Home	Elec strip-Install Heat Pump SEER = 16	5	7	9	9	9	4,061.10	(0.48)	13	16,266	40,664	73,195	105,726	138,258	(2)	(5)	(9)	(12)	(16)
RLW 12, Avg Home	Add another R-23 attic insulation	239	359	479	479	479	879.45	0.54	20	157,617	394,042	709,276	1,024,509	1,339,743	97	243	438	632	827
RLW 13, Avg Home	Add another R-19 attic insulation	242	364	485	485	485	541.30	0.35	20	84,241	210,601	379,083	547,564	716,045	54	135	243	350	458
RLW 14, Avg Home	Add R-11 wall insulation	65	98	130	130	130	2,633.51	0.69	20	110,228	275,570	496,027	716,483	936,939	29	73	131	189	247
RLW 15, Avg Home	Add R-19 Insulation to floor	1,158	1,737	2,316	2,316	2,316	(223.06)	(0.12)	20	(193,426)	(483,565)	(870,416)	(1,257,268)	(1,644,120)	(102)	(254)	(458)	(662)	(865)
RLW 16, Avg Home	Reduce infiltration to 0.35 ACH	1,784	2,675	3,567	3,567	3,567	1,046.11	0.43	20	1,597,145	3,992,862	7,187,151	10,381,440	13,575,730	651	1,627	2,929	4,231	5,532
RLW 17, Avg Home	Add storm windows	56	84	112	112	112	908.06	0.28	20	32,654	81,635	146,944	212,252	277,560	10	25	46	66	86
RLW 18, Avg Home	Single pane to Low E double pane window 2904	63	94	125	125	125	1,428.02	0.54	20	66,953	167,383	301,290	435,196	569,103	25	63	113	164	214
RLW 19, Avg Home	Standard double pane to Low E double pane window 2904	901	1,351	1,801	1,801	1,801	520.01	0.26	20	400,935	1,002,337	1,804,207	2,606,076	3,407,946	201	503	906	1,309	1,712
RLW 20, Avg Home	Add solar screens to E & W glass	2,181	3,272	4,362	4,362	4,362	171.52	0.22	10	280,225	700,563	1,261,013	1,821,463	2,381,913	353	882	1,588	2,294	3,000
RLW 21, Avg Home	Plant deciduous trees on E & W sides	1,181	1,772	2,363	2,363	2,363	627.44	0.18	10	555,187	1,387,968	2,498,343	3,608,717	4,719,092	158	395	712	1,028	1,344
RLW 22, Avg Home	Use 10 more CFLs throughout house	9,474	14,211	18,948	18,948	18,948	543.32	0.05	7	4,443,049	11,107,624	19,993,723	28,879,822	37,765,920	1,843	4,608	8,294	11,980	15,667
RLW 23, Avg Home	Purchase Energy Star refrigerator	883	1,325	1,767	1,767	1,767	151.65	0.02	19	62,962	157,404	283,327	409,250	535,173	7	18	32	47	61
RLW 24, Avg Home	Removed refrigerator unit uses no energy	2,663	3,994	5,326	5,326	5,326	953.93	0.12	3	1,498,587	3,746,467	6,743,641	8,242,228	9,991,521	171	428	770	941	1,027
RLW 25, Avg Home	Purchase Energy Star dishwasher	2,437	3,656	4,874	4,874	4,874	107.47	0.01	13	168,142	420,355	756,640	1,092,924	1,429,209	18	45	82	118	154
RLW 26, Avg Home	Purchase Energy Star clothes washer	1,557	2,336	3,115	3,115	3,115	110.44	0.02	14	110,416	276,040	496,872	717,704	938,536	17	42	76	109	143
RLW 27, Avg Home	Install programmable thermostat	8,561	12,841	17,121	17,121	17,121	665.97	(0.22)	7	3,660,080	9,150,201	16,470,362	23,790,523	31,110,684	(1,202)	(3,006)	(5,410)	(7,815)	(10,219)
RLW 28, Avg Home	Install faucet aerators	10,496	15,744	20,992	20,992	20,992	31.31	9,999.00	10	281,318	703,294	1,265,929	1,828,564	2,391,199	88	221	397	574	750
RLW 29, Avg Home	Install low flow shower heads	9,996	14,994	19,992	19,992	19,992	173.94	9,999.00	5	1,488,380	3,720,950	6,697,711	9,674,471	12,651,231	467	1,168	2,102	3,036	3,970
RLW 30, Avg Home	Insulate hot water pipes	11,342	17,013	22,684	22,684	22,684	80.07	9,999.00	10	680,193	1,700,483	3,060,870	4,421,256	5,781,643	213	534	960	1,387	1,814
RLW 31, Avg Home	Wrap electric water heater	2,849	4,273	5,698	5,698	5,698	58.02	9,999.00	10	106,122	265,304	477,548	689,791	902,035	33	83	150	216	283
KCP&L 1	Install AC SEER = 14 vs 13 SEER (Cool Homes replacement at failure)	281	730	730	730	730	232.03	0.22	6	13,953	50,201	86,448	122,696	158,944	14	49	84	119	154
KCP&L 2	Install AC SEER = 15 vs 13 SEER (Cool Homes replacement at failure)	281	730	730	730	730	433.12	0.42	6	26,045	93,708	161,370	229,033	296,695	25	91	156	222	287
KCP&L 3	Install AC SEER = 16 vs 13 SEER (Cool Homes replacement at failure)	31	81	81	81	81	609.08	0.59	6	4,041	14,598	25,156	35,714	46,272	4	14	24	35	45
KCP&L 4	Install AC SEER = 9 to 14 SEER (Cool Homes early replacement using CSG estimates) no bulbs	141	365	365	365	365	3,331.00	2.29	9.14	400,969	1,441,885	2,482,801	3,523,717	4,564,633	276	993	1,709	2,426	3,142
KCP&L 5	Install AC SEER = 9 to 15 SEER (Cool Homes early replacement using CSG estimates) no bulbs	141	365	365	365	365	3,331.00	2.29	9.14	400,969	1,441,885	2,482,801	3,523,717	4,564,633	276	993	1,709	2,426	3,142
KCP&L 6	Install AC SEER = 9 to 16 SEER (Cool Homes early replacement using CSG estimates) no bulbs	31	81	81	81	81	3,484.00	2.41	9.14	93,197	335,136	577,076	819,015	1,060,955	64	232	399	566	733
KCP&L 7	Recommissioning (9 SEER based on CSG Cool Homes assumptions) no bulbs	688	1,785	1,785	1,785	1,785	937.13	0.28	10	551,899	1,983,789	3,415,678	4,847,568	6,279,457	162	583	1,005	1,426	1,847
KCP&L 8	Refrig Turn In	10,000	11,000	12,100	13,310	14,641	954.00	9,999.00	3	5,103,900	10,718,190	16,893,909	18,583,300	20,441,630	1,601	3,363	5,301	5,831	6,414
KCP&L 9	Freezer Turn In	5,000	5,500	6,050	6,655	7,321	954.00	9,999.00	3	2,551,950	5,359,095	8,446,955	9,291,650	10,220,815	801	1,682	2,650	2,915	3,207
KCP&L 10	Dehumidifier Turn In	1,000	1,100	1,210	1,331	1,464	275.00	0.05	3	147,125	308,963	486,984	535,682	589,250	27	56	89	97	107
KCP&L 11	Room AC Turn In	2,500	2,750	3,025	3,328	3,660	153.00	0.15	3	204,638	429,739	677,350	745,085	819,594	198	416	655	721	793
KCP&L 12	Blue Line - in home monitor KCP&L pays full cost.	20,000	20,000	20,000	-	-	987.00	9,999.00	5	19,009,620	38,019,240	57,028,860	57,028,860	57,028,860	5,965	11,929	17,894	17,894	17,894
KCP&L 12	Blue Line - in home monitor KCP&L pays half incremental cost.	20,000	20,000	20,000	-	-	987.00	9,999.00	5	19,009,620	38,019,240	57,028,860	57,028,860	57,028,860	5,965	11,929	17,894	17,894	17,894
KCP&L 13 /19	On Line Audit with Kits	5,000	5,500	6,050	6,655	7,321	186.40	0.03	7	997,240	2,094,204	3,300,864	4,628,191	6,088,250	144	303	478	670	882
KCP&L 14	New Home Energy Star - Above standard	200	220	242	266	293	2,133.00	0.13	20	456,462	958,570	1,510,889	2,118,440	2,786,746	28	58	92	129	170
KCP&L 16	Energy Star New Homes	-	500	1,000	1,000	1,000	2,607.00	0.93	20	-	976,322	2,928,965	4,881,608	6,834,251	-	348	1,045	1,741	2,438
KCP&L 20	Optimizer	28,182	10,909	12,654	14,455	12,000	1.00	9,999.00	15	33,170	46,010	60,904	77,917	92,041	-	-	-	-	-

Variable:	Program	NPV (Today's) Admin	NPV (Today's) Implem	NPV (Today's) Incent	NPV (Today's) Avoid Cst	NPV (Today's) Benefits	Incremental Costs YR1	YR 1 Program Costs	YR 2 Program Costs	YR 3 Program Costs	YR 4 Program Costs	YR 5 Program Costs
RLW 1, Avg Home	Under charged-Add refrigerant	\$ -	\$ -	\$ 1,646,748.22	\$ 7,692,464.72	\$ 469,043.71	\$ 250.00	231,101	346,652	462,202	462,202	462,202
RLW 2, Avg Home	Over charged-Remove refrigerant	\$ -	\$ -	\$ 778,985.35	\$ 2,368,051.46	\$ 141,979.58	\$ 100.00	109,321	163,982	218,642	218,642	218,642
RLW 3, Avg Home	Increase duct sizes or add new ducts	\$ -	\$ -	\$ 3,451,225.92	\$ 12,152,789.11	\$ 895,021.42	\$ 950.00	484,337	726,506	968,675	968,675	968,675
RLW 4, Avg Home	Increase blower speed	\$ -	\$ -	\$ 603,337.52	\$ 5,962,902.78	\$ 503,325.74	\$ 100.00	84,671	127,007	169,342	169,342	169,342
RLW 5, Avg Home	Reduce duct leakage to 5%	\$ -	\$ -	\$ 2,717,649.10	\$ 9,224,636.60	\$ 689,934.20	\$ 600.00	381,389	572,083	762,778	762,778	762,778
RLW 6, Avg Home	Size AC units (A) to 100% of Manual J	\$ -	\$ -	\$ 107,522.82	\$ 411,202.59	\$ 22,248.95	\$ 314.40	15,090	22,634	30,179	30,179	30,179
RLW 7, Avg Home	Size AC units (B) to 100% of Manual J	\$ -	\$ -	\$ 142,566.35	\$ 2,567,286.94	\$ 138,977.23	\$ 209.60	20,007	30,011	40,015	40,015	40,015
RLW 8, Avg Home	Add two more inches of insulation to ducts in attic	\$ -	\$ -	\$ 716,054.42	\$ 901,508.28	\$ 64,461.60	\$ 600.00	100,490	150,734	200,979	200,979	200,979
RLW 9, Avg Home	Install Heat Pump SEER = 13 to 16	\$ -	\$ -	\$ 31,183.90	\$ 77,828.71	\$ 7,664.27	\$ 750.00	4,376	6,564	8,753	8,753	8,753
RLW 10, Avg Home	Install AC SEER = 16 vs 13 SEER	\$ -	\$ -	\$ 282,692.29	\$ 1,075,060.81	\$ 60,531.54	\$ 840.00	39,672	59,509	79,345	79,345	79,345
RLW 11, Avg Home	Elec strip-Install Heat Pump SEER = 16	\$ -	\$ -	\$ 80,018.32	\$ 130,259.15	\$ 12,226.96	\$ 4,800.00	11,230	16,844	22,459	22,459	22,459
RLW 12, Avg Home	Add another R-23 attic insulation	\$ -	\$ -	\$ 902,184.01	\$ 1,911,629.36	\$ 146,473.64	\$ 1,058.25	126,611	189,916	253,221	253,221	253,221
RLW 13, Avg Home	Add another R-19 attic insulation	\$ -	\$ -	\$ 698,922.00	\$ 1,026,057.86	\$ 78,284.94	\$ 809.25	98,085	147,128	196,170	196,170	196,170
RLW 14, Avg Home	Add R-11 wall insulation	\$ -	\$ -	\$ 812,990.50	\$ 1,248,916.97	\$ 102,435.22	\$ 3,500.00	114,093	171,140	228,187	228,187	228,187
RLW 15, Avg Home	Add R-19 insulation to floor	\$ -	\$ -	\$ 1,622,121.12	\$ (2,269,287.77)	\$ (179,751.06)	\$ 393.25	227,645	341,467	455,290	455,290	455,290
RLW 16, Avg Home	Reduce infiltration to 0.35 ACH	\$ -	\$ -	\$ 2,541,831.81	\$ 18,615,607.85	\$ 1,484,229.73	\$ 400.00	356,715	535,073	713,430	713,430	713,430
RLW 17, Avg Home	Add storm windows	\$ -	\$ -	\$ 203,555.86	\$ 373,482.54	\$ 30,345.54	\$ 1,020.00	29,567	42,850	57,133	57,133	57,133
RLW 18, Avg Home	Single pane to Low E double pane window 2904	\$ -	\$ -	\$ 78,058.52	\$ 775,608.41	\$ 62,219.81	\$ 350.00	10,955	16,432	21,909	21,909	21,909
RLW 19, Avg Home	Standard double pane to Low E double pane window 2904	\$ -	\$ -	\$ 1,145,641.95	\$ 4,758,818.29	\$ 372,589.52	\$ 357.00	160,777	241,165	321,554	321,554	321,554
RLW 20, Avg Home	Add solar screens to E & W glass	\$ -	\$ -	\$ 2,005,003.78	\$ 3,228,097.41	\$ 179,273.36	\$ 258.00	281,378	422,067	562,756	562,756	562,756
RLW 21, Avg Home	Plant deciduous trees on E & W sides	\$ -	\$ -	\$ 3,788,095.67	\$ 6,137,837.01	\$ 355,179.87	\$ 900.00	531,613	797,419	1,063,226	1,063,226	1,063,226
RLW 22, Avg Home	Use 10 more CFLs throughout house	\$ -	\$ -	\$ 2,700,351.29	\$ 19,453,999.27	\$ 2,211,439.43	\$ 80.00	378,961	568,442	757,923	757,923	757,923
RLW 23, Avg Home	Purchase Energy Star refrigerator	\$ -	\$ -	\$ 629,376.88	\$ 588,408.43	\$ 57,266.67	\$ 200.00	88,325	132,488	176,651	176,651	176,651
RLW 24, Avg Home	Removed refrigerator unit uses no energy	\$ -	\$ -	\$ 474,372.82	\$ 3,277,072.95	\$ 370,697.71	\$ 50.00	66,572	99,859	133,145	133,145	133,145
RLW 25, Avg Home	Purchase Energy Star dishwasher	\$ -	\$ -	\$ 1,302,433.93	\$ 1,412,017.36	\$ 126,393.64	\$ 150.00	182,781	274,171	365,561	365,561	365,561
RLW 26, Avg Home	Purchase Energy Star clothes washer	\$ -	\$ -	\$ 2,219,314.69	\$ 983,894.36	\$ 86,509.68	\$ 400.00	311,454	467,181	622,907	622,907	622,907
RLW 27, Avg Home	Install programmable thermostat	\$ -	\$ -	\$ 6,099,980.29	\$ 17,485,520.84	\$ 1,821,732.21	\$ 200.00	856,058	1,284,087	1,712,116	1,712,116	1,712,116
RLW 28, Avg Home	Install faucet aerators	\$ -	\$ -	\$ 299,164.47	\$ 1,996,493.90	\$ 179,972.31	\$ 8.00	41,984	62,976	83,968	83,968	83,968
RLW 29, Avg Home	Install low flow shower heads	\$ -	\$ -	\$ 712,296.38	\$ 5,997,697.19	\$ 569,231.53	\$ 20.00	99,962	149,943	199,924	199,924	199,924
RLW 30, Avg Home	Insulate hot water pipes	\$ -	\$ -	\$ 3,838,937.71	\$ 4,827,291.00	\$ 435,152.20	\$ 95.00	538,748	808,122	1,077,496	1,077,496	1,077,496
RLW 31, Avg Home	Wrap electric water heater	\$ -	\$ -	\$ 253,755.60	\$ 753,139.54	\$ 67,891.15	\$ 25.00	35,612	53,417	71,223	71,223	71,223
KCP&L 1	Install AC SEER = 14 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 1,745,548.18	\$ 141,382.14	\$ 8,278.28	\$ 200.00	182,650	474,500	474,500	474,500	474,500
KCP&L 2	Install AC SEER = 15 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 1,745,548.18	\$ 263,913.32	\$ 15,452.79	\$ 900.00	182,650	474,500	474,500	474,500	474,500
KCP&L 3	Install AC SEER = 16 vs 13 SEER (Cool Homes replacement at failure)	\$ -	\$ -	\$ 253,126.69	\$ 41,156.46	\$ 2,409.74	\$ 1,200.00	26,350	68,850	68,850	68,850	68,850
KCP&L 4	Install AC SEER = 9 to 14 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 946,857.46	\$ 5,576,785.02	\$ 320,363.77	\$ 200.00	99,141	257,369	257,369	257,369	257,369
KCP&L 5	Install AC SEER = 9 to 15 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 946,857.46	\$ 5,576,785.02	\$ 320,363.77	\$ 900.00	99,141	257,369	257,369	257,369	257,369
KCP&L 6	Install AC SEER = 9 to 16 SEER (Cool Homes early replacement using CSG estimates) no bulbs	\$ -	\$ -	\$ 270,104.35	\$ 1,296,361.09	\$ 74,461.95	\$ 1,200.00	28,281	73,418	73,418	73,418	73,418
KCP&L 7	Recommissioning (9 SEER based on CSG Cool Homes assumptions) no bulbs	\$ -	\$ -	\$ 886,598.42	\$ 8,175,523.77	\$ 472,985.63	\$ 135.00	92,880	240,975	240,975	240,975	240,975
KCP&L 8	Refrigerator Turn In	\$ -	\$ -	\$ 1,291,074.37	\$ 9,398,640.38	\$ 915,010.40	\$ -	250,000	275,000	302,500	332,750	366,025
KCP&L 9	Freezer Turn In	\$ -	\$ -	\$ 645,537.19	\$ 4,699,320.19	\$ 457,505.20	\$ -	125,000	137,500	151,250	166,375	183,013
KCP&L 10	Dehumidifier Turn In	\$ -	\$ -	\$ 129,107.44	\$ 420,167.19	\$ 26,376.09	\$ -	25,000	27,500	30,250	33,275	36,603
KCP&L 11	Room AC Turn In	\$ -	\$ -	\$ 322,768.59	\$ 604,281.64	\$ 36,686.74	\$ -	62,500	68,750	75,625	83,188	91,506
KCP&L 12	Blue Line - in home monitor KCPL pays full cost.	\$ -	\$ -	\$ 9,164,664.06	\$ 28,968,345.67	\$ 2,833,516.56	\$ 165.00	3,300,000	3,300,000	3,300,000	-	-
KCP&L 12	Blue Line - in home monitor KCPL pays half incremental cost.	\$ -	\$ -	\$ 4,582,332.03	\$ 28,968,345.67	\$ 2,833,516.56	\$ 82.50	1,650,000	1,650,000	1,650,000	-	-
KCP&L 13 /19	On Line Audit with Kits	\$ -	\$ -	\$ 516,429.75	\$ 3,810,565.96	\$ 359,732.33	\$ 20.00	100,000	110,000	121,000	133,100	146,410
KCP&L 14	New Home Energy Star - Above standard	\$ -	\$ -	\$ 774,644.62	\$ 3,586,463.24	\$ 307,430.81	\$ 1,500.00	150,000	165,000	181,500	199,650	219,615
KCP&L 16	Energy Star New Homes	\$ -	\$ -	\$ 2,265,508.26	\$ 9,059,650.51	\$ 721,157.32	\$ 350.00	400,000	400,000	800,000	800,000	800,000
KCP&L 20	Optimizer	\$ 917,499.13	\$ -	\$ 26,113,436.88	\$ 100,978,198.16	\$ -	\$ -	11,087,580	4,339,710	5,021,412	5,724,990	4,765,920

RENEWABLE PROJECT LOAD IMPACT

TESS Renewable End-Use Participants		YR1	Measure life	Incremental Costs YR1	kwH (Net Free), Yr1	kwH (Net Free), Yr2	kwH (Net Free), Yr3	kwH (Net Free), Yr4	kwH (Net Free), Yr5	Annual kW (net Free), Yr1	Annual kW (net Free), Yr2	Annual kW (net Free), Yr3	Annual kW (net Free), Yr4	Annual kW (net Free), Yr5
2.16kW PV North - BUY	1	20	\$	26,900	968	968	968	968	968	0.2	0.2	0.2	0.2	0.2
2.16kW PV North 10P	1	20	\$	26,900	2,249	2,249	2,249	2,249	2,249	0.4	0.4	0.4	0.4	0.4
2.16kW PV North	1	20	\$	26,900	2,249	2,249	2,249	2,249	2,249	0.4	0.4	0.4	0.4	0.4
2.16kW PV South - BUY	1	20	\$	22,900	674	674	674	674	674	0.1	0.1	0.1	0.1	0.1
2.16kW PV South 10P	1	20	\$	22,900	2,353	2,353	2,353	2,353	2,353	0.4	0.4	0.4	0.4	0.4
2.16kW PV South	1	20	\$	22,900	2,353	2,353	2,353	2,353	2,353	0.4	0.4	0.4	0.4	0.4
3.024kW PV North - BUY	1	20	\$	32,900	1,860	1,860	1,860	1,860	1,860	0.3	0.3	0.3	0.3	0.3
3.024kW PV North 10P	1	20	\$	32,900	2,644	2,644	2,644	2,644	2,644	0.5	0.5	0.5	0.5	0.5
3.024kW PV North	1	20	\$	32,900	2,644	2,644	2,644	2,644	2,644	0.5	0.5	0.5	0.5	0.5
3.024kW PV South - BUY	1	20	\$	32,900	1,927	1,927	1,927	1,927	1,927	0.3	0.3	0.3	0.3	0.3
3.024kW PV South 10P	1	20	\$	22,900	2,665	2,665	2,665	2,665	2,665	0.5	0.5	0.5	0.5	0.5
3.024kW PV South	1	20	\$	22,900	2,665	2,665	2,665	2,665	2,665	0.5	0.5	0.5	0.5	0.5
Wind Bergey NE - BUY	1	20	\$	63,000	3,874	3,874	3,874	3,874	3,874	0.6	0.6	0.6	0.6	0.6
Wind Bergey NE 10P	1	20	\$	63,000	5,065	5,065	5,065	5,065	5,065	0.9	0.9	0.9	0.9	0.9
Wind Bergey NE	1	20	\$	63,000	5,065	5,065	5,065	5,065	5,065	0.9	0.9	0.9	0.9	0.9
Wind Bergey NE - BUY	1	20	\$	63,000	2,479	2,479	2,479	2,479	2,479	0.4	0.4	0.4	0.4	0.4
Wind Bergey South West 10P	1	20	\$	63,000	4,780	4,780	4,780	4,780	4,780	0.8	0.8	0.8	0.8	0.8
Wind Bergey South West	1	20	\$	63,000	4,780	4,780	4,780	4,780	4,780	0.8	0.8	0.8	0.8	0.8
Skystream NE Buy	1	20	\$	22,900	467	467	467	467	467	0.0	0.0	0.0	0.0	0.0
Skystream NE 10P	1	20	\$	22,900	2,479	2,479	2,479	2,479	2,479	0.4	0.4	0.4	0.4	0.4
Skystream NE	1	20	\$	22,900	2,479	2,479	2,479	2,479	2,479	0.4	0.4	0.4	0.4	0.4
Skystream SW Buy	1	20	\$	22,900	362	362	362	362	362	0.0	0.0	0.0	0.0	0.0
Skystream SW 10P	1	20	\$	22,900	2,226	2,226	2,226	2,226	2,226	0.4	0.4	0.4	0.4	0.4
Skystream SW	1	20	\$	22,900	2,226	2,226	2,226	2,226	2,226	0.4	0.4	0.4	0.4	0.4
SDHW NE	1	20	\$	7,500	4,832	4,832	4,832	4,832	4,832	1.5	1.5	1.5	1.5	1.5
SDHW SW	1	20	\$	7,500	4,832	4,832	4,832	4,832	4,832	1.5	1.5	1.5	1.5	1.5
Solar Space Heat NE	1	20	\$	2,300	3,088	3,088	3,088	3,088	3,088	1.5	1.5	1.5	1.5	1.5
Solar Space Heat SW	1	20	\$	2,300	3,088	3,088	3,088	3,088	3,088	1.5	1.5	1.5	1.5	1.5

RENEWABLE PROJECT COST

TESS Renewable End-Use	YR 1 Program Costs	YR 2 Program Costs	YR 3 Program Costs	YR 4 Program Costs	YR 5 Program Costs	Today's Admin	Today's Implem	Today's Incent	Today's Avoid Cst	Today's Environmental Benefits
2.16kW PV North - BUY	\$ 13,450.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,450	\$ 595	137
2.16kW PV North 10P	\$ 2,717.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,388	\$ 1,521	319
2.16kW PV North	\$ 13,477.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,148	\$ 1,521	319
2.16kW PV South - BUY	\$ 11,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,500	\$ 406	95
2.16kW PV South 10P	\$ 2,294.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,776	\$ 1,577	333
2.16kW PV South	\$ 11,454.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,936	\$ 1,577	333
3.024kW PV North - BUY	\$ 16,450.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,450	\$ 1,155	264
3.024kW PV North 10P	\$ 3,321.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,632	\$ 1,806	375
3.024kW PV North	\$ 16,481.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,792	\$ 1,806	375
3.024kW PV South - BUY	\$ 16,450.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,450	\$ 1,198	273
3.024kW PV South 10P	\$ 2,321.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,681	\$ 1,822	378
3.024kW PV South	\$ 11,481.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,841	\$ 1,822	378
Wind Bergey NE - BUY	\$ 31,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,500	\$ 2,143	549
Wind Bergey NE 10P	\$ 7,093.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,095	\$ 3,406	718
Wind Bergey NE	\$ 32,293.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,295	\$ 3,406	718
Wind Bergey NE - BUY	\$ 31,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,500	\$ 1,316	351
Wind Bergey South West 10P	\$ 6,878.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,088	\$ 3,104	677
Wind Bergey South West	\$ 32,078.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,288	\$ 3,104	677
Skystream NE Buy	\$ 11,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,500	\$ 250	66
Skystream NE 10P	\$ 2,411.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,627	\$ 1,594	351
Skystream NE	\$ 11,571.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,787	\$ 1,594	351
Skystream SW Buy	\$ 11,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,500	\$ 188	51
Skystream SW 10P	\$ 2,388.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,551	\$ 1,402	315
Skystream SW	\$ 11,548.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,711	\$ 1,402	315
SDHW NE	\$ 3,750.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,750	\$ 3,665	685
SDHW SW	\$ 3,750.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,750	\$ 3,665	685
Solar Space Heat NE	\$ 1,150.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,150	\$ 2,041	438
Solar Space Heat SW	\$ 1,150.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,150	\$ 2,041	438