



KCP&L- GMO
IRP Stakeholder
Meeting
May 24, 2010



GMO 20 Year DSM

kWh Cumulative Electric

Impacts/Savings, Gross



	Change-A- Light_73_77	HPwES_78_8 2	LIWx_83_87	AFNH_88_92	ESNH_93_97	BOC_98_102	Optimizer_ 103_107	MPower_108 _112	Turn-In 113- 117	Blue Line_118_122	Cool Homes_123_ 127	EStarProd_128 _132	OLA_Kit_133 _137	Cnl Custom RFP_138_142	Cnl Prescriptive _143_147	All Programs kWh	All Programs Incremental	GMO Load Forecast, mWh	
Year	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh			
1	3,327,305	151,076	412,696	40,934	-	263,750	-	-	9,686,206	9,231,250	6,586,819	6,112,877	3,133,350	2,532,000	14,592,487	56,070,749	56,070,749	8,797,010	0.64%
2	6,654,609	302,152	825,392	122,802	1,375,720	791,250	-	-	19,372,412	18,462,500	13,173,639	15,281,852	6,266,700	7,089,600	30,327,434	120,046,062	63,975,313	8,977,918	0.71%
3	9,981,914	453,228	1,238,088	204,670	4,127,160	1,582,500	-	-	29,058,618	27,693,750	19,760,458	27,572,158	9,400,050	15,192,000	45,955,035	192,219,628	72,173,566	9,167,301	0.79%
4	9,981,914	604,304	1,650,784	286,538	6,878,600	2,110,000	-	-	38,697,785	27,693,750	26,347,277	28,863,509	12,533,400	27,345,600	62,978,231	245,971,692	53,752,064	9,311,161	0.58%
5	9,981,914	755,380	2,063,480	368,406	9,630,040	1,846,250	-	-	47,058,115	27,693,750	32,934,097	30,154,860	15,666,750	43,550,400	78,658,988	300,362,428	54,390,737	9,461,415	0.57%
6	9,981,914	906,456	2,476,176	450,274	12,381,480	1,055,000	-	-	37,371,909	18,462,500	39,391,784	31,446,211	15,666,750	59,755,200	93,363,737	322,709,390	22,346,962	9,612,561	0.23%
7	9,981,914	1,057,532	2,888,872	532,142	15,132,920	263,750	-	-	27,685,703	9,231,250	45,720,324	32,737,562	15,666,750	75,960,000	107,603,923	344,462,641	21,753,251	9,807,808	0.22%
8	6,654,609	1,208,608	3,301,568	614,010	17,884,360	-	-	-	17,999,497	-	50,476,845	28,562,052	12,533,400	92,164,800	121,609,729	353,009,478	8,546,837	9,939,440	0.09%
9	3,327,305	1,359,684	3,714,264	695,878	20,635,800	-	-	-	8,360,330	-	55,107,321	21,653,110	9,400,050	108,369,600	134,943,525	367,566,866	14,557,388	10,087,594	0.14%
10	-	1,510,760	4,126,960	777,746	23,387,240	-	-	-	-	-	59,615,926	11,945,506	6,266,700	124,574,400	147,929,094	380,134,332	12,567,466	10,241,944	0.12%
11	-	1,661,836	4,539,656	859,614	26,138,680	-	-	-	-	-	62,310,620	13,236,857	3,133,350	139,260,000	152,997,868	404,138,480	24,004,148	10,438,727	0.23%
12	-	1,812,912	4,952,351	941,482	28,890,120	-	-	-	-	-	64,886,481	14,528,208	-	152,426,400	155,678,404	424,116,359	19,977,879	10,576,189	0.19%
13	-	1,963,988	5,365,047	1,023,350	31,641,560	-	-	-	-	-	67,380,007	15,819,559	-	164,326,800	155,604,560	443,124,871	19,008,512	10,737,073	0.18%
14	-	2,115,064	5,777,743	1,105,218	34,393,000	-	-	-	-	-	69,791,994	16,786,979	-	174,961,200	153,379,116	458,310,314	15,185,442	10,898,277	0.14%
15	-	2,266,140	6,190,439	1,187,086	37,144,440	-	-	-	-	-	72,122,380	17,270,482	-	184,582,800	149,245,135	470,008,902	11,698,588	11,112,334	0.11%
16	-	2,266,140	6,190,439	1,228,020	39,895,880	-	-	-	-	-	74,412,739	17,431,317	-	190,659,600	143,200,249	475,284,384	5,275,482	11,286,698	0.05%
17	-	2,266,140	6,190,439	1,228,020	41,271,600	-	-	-	-	-	76,663,004	17,431,317	-	193,698,000	136,591,555	475,340,075	55,690	11,498,893	0.00%
18	-	2,266,140	6,190,439	1,228,020	41,271,600	-	-	-	-	-	78,873,112	17,431,317	-	192,432,000	129,489,457	469,182,085	(6,157,989)	11,708,268	-0.05%
19	-	2,266,140	6,190,439	1,228,020	41,271,600	-	-	-	-	-	77,594,196	17,431,317	-	186,608,400	121,944,608	454,534,720	(14,647,365)	11,940,064	-0.12%
20	-	2,266,140	6,190,439	1,228,020	41,271,600	-	-	-	-	-	76,275,925	17,431,317	-	176,227,200	114,031,667	434,922,309	(19,612,412)	12,105,976	-0.16%

GMO 20 Year DSM

kWh Cumulative Electric

Impacts/Savings, Net



	Change-A- Light_73_77	HPwES_78_82	LIWx_83_87	AFNH_88_92	ESNH_93_97	BOC_98_102	Optimizer_103_107	MPower_108_112	Turn-In 113-117	Blue Line_118_122	Cool Homes_123_127	EStarProd_128_132	OLA_Kit_133_137	Cnl Custom RFP_138_142	Cnl Prescriptive_143_147	All Programs kWh (net free)	All Programs Incremental , kWh (net free)	GMO Load Forecast, mWh	
Year	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)	kWh (net free)				
1	2,062,929	120,861	412,696	40,934	-	211,000	-	-	6,056,503	8,308,125	5,009,459	4,761,098	3,133,350	1,772,400	11,260,619	43,149,974	43,149,974	8,797,010	0.49%
2	4,125,858	241,722	825,392	122,802	1,100,576	633,000	-	-	12,113,006	16,616,250	10,018,919	11,902,542	6,266,700	4,962,720	23,366,429	92,295,915	49,145,941	8,977,918	0.55%
3	6,188,786	362,582	1,238,088	204,670	3,301,728	1,266,000	-	-	18,169,509	24,924,375	15,028,378	21,476,517	9,400,050	10,634,400	35,157,290	147,352,374	55,056,459	9,167,301	0.60%
4	6,188,786	483,443	1,650,784	286,538	5,502,880	1,688,000	-	-	24,197,130	24,924,375	20,037,837	22,251,327	12,533,400	19,141,920	47,947,280	186,833,702	39,481,328	9,311,161	0.42%
5	6,188,786	604,304	2,063,480	368,406	7,704,032	1,477,000	-	-	29,330,373	24,924,375	25,047,297	23,026,138	15,666,750	30,485,280	59,203,079	226,089,300	39,255,598	9,461,415	0.41%
6	6,188,786	725,165	2,476,176	450,274	9,905,184	844,000	-	-	23,273,870	16,616,250	29,958,653	23,800,948	15,666,750	41,828,640	69,701,770	241,436,466	15,347,167	9,612,561	0.16%
7	6,188,786	846,026	2,888,872	532,142	12,106,336	211,000	-	-	17,217,367	8,308,125	34,771,783	24,575,759	15,666,750	53,172,000	79,788,897	256,273,842	14,837,376	9,807,808	0.15%
8	4,125,858	966,886	3,301,568	614,010	14,307,488	-	-	-	11,160,864	-	38,592,282	20,977,080	12,533,400	64,515,360	89,698,202	260,792,998	4,519,155	9,939,440	0.05%
9	2,062,929	1,087,747	3,714,264	695,878	16,508,640	-	-	-	5,133,242	-	42,316,832	15,191,657	9,400,050	75,858,720	99,007,442	270,977,401	10,184,403	10,087,594	0.10%
10	-	1,208,608	4,126,960	777,746	18,709,792	-	-	-	-	-	45,948,683	7,167,304	6,266,700	87,202,080	108,012,999	279,420,871	8,443,471	10,241,944	0.08%
11	-	1,329,469	4,539,656	859,614	20,910,944	-	-	-	-	-	48,134,102	7,942,114	3,133,350	97,482,000	111,444,326	295,775,575	16,354,704	10,438,727	0.16%
12	-	1,450,330	4,952,351	941,482	23,112,096	-	-	-	-	-	50,229,063	8,716,925	-	106,698,480	113,113,009	309,213,736	13,438,161	10,576,189	0.13%
13	-	1,571,190	5,365,047	1,023,350	25,313,248	-	-	-	-	-	52,257,457	9,491,736	-	115,028,760	112,745,577	322,796,366	13,582,630	10,737,073	0.13%
14	-	1,692,051	5,777,743	1,105,218	27,514,400	-	-	-	-	-	54,219,958	10,072,187	-	122,472,840	110,848,363	333,702,761	10,906,395	10,898,277	0.10%
15	-	1,812,912	6,190,439	1,187,086	29,715,552	-	-	-	-	-	56,116,526	10,362,289	-	129,207,960	107,668,428	342,261,193	8,558,432	11,112,334	0.08%
16	-	1,812,912	6,190,439	1,228,020	31,916,704	-	-	-	-	-	57,980,432	10,458,790	-	133,461,720	103,193,777	346,242,794	3,981,601	11,286,698	0.04%
17	-	1,812,912	6,190,439	1,228,020	33,017,280	-	-	-	-	-	59,811,633	10,458,790	-	135,588,600	98,356,158	346,463,833	221,039	11,498,893	0.00%
18	-	1,812,912	6,190,439	1,228,020	33,017,280	-	-	-	-	-	61,610,092	10,458,790	-	134,702,400	93,203,536	342,223,469	(4,240,364)	11,708,268	-0.04%
19	-	1,812,912	6,190,439	1,228,020	33,017,280	-	-	-	-	-	60,616,724	10,458,790	-	130,625,880	87,771,561	331,721,606	(10,501,863)	11,940,064	-0.09%
20	-	1,812,912	6,190,439	1,228,020	33,017,280	-	-	-	-	-	59,591,287	10,458,790	-	123,359,040	82,117,872	317,775,641	(13,945,965)	12,105,976	-0.12%

GMO 20 Year DSM

kW Cumulative Electric

Impacts/Savings, Gross



	Change-A- Light_73_77	HPwES_78_82	LIWx_83_87	AFNH_88_92	ESNH_93_97	BOC_98_102	Optimizer_ 103_107	MPower_108_ 112	Turn-In 113-117	Blue Line_118_122	Cool Homes_123_ 127	EStarProd_128_ 132	OLA_Kit_133_ 137	Cnl Custom RFP_138_142	Cnl Prescriptive_ 143_147	All Programs	All Programs Incremental
Year	kW	kW	kW	kW		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	
1	828	59	91	27	-	106	3,850	12,185	977	2,936	3,085	1,250	997	633	3,898	30,922	30,922
2	1,656	118	182	81	702	317	11,299	26,903	1,954	5,872	6,170	3,126	1,993	1,772	8,062	70,207	39,285
3	2,485	177	273	135	2,105	633	19,187	37,822	2,932	8,808	9,256	5,632	2,990	3,798	12,188	108,419	38,212
4	2,485	236	363	189	3,508	844	22,298	45,101	3,903.5	8,808	12,341	5,746	3,986	6,836	16,642	133,288	24,869
5	2,485	295	454	243	4,911	739	24,696	47,633	4,858	8,808	15,426	5,860	4,983	10,888	20,830	153,109	19,821
6	2,485	354	545	297	6,314	422	26,360	48,266	3,881	5,872	18,451	5,975	4,983	14,939	24,824	163,968	10,859
7	2,485	414	636	351	7,717	106	28,082	49,058	2,903	2,936	21,416	6,089	4,983	18,990	28,705	174,869	10,901
8	1,656	473	727	405	9,120		29,864	49,849	1,926		23,961	5,010	3,986	23,041	32,532	182,550	7,681
9	828	532	818	459	10,524		31,706	50,640	954		26,447	3,334	2,990	27,092	36,183	192,507	9,956
10		591	908	513	11,927		33,611	51,431			28,876	1,055	1,993	31,144	39,766	201,814	9,308
11		650	999	567	13,330		35,578	52,223			30,750	1,169	997	34,815	41,546	212,624	10,809
12		709	1,090	621	14,733		37,609	53,014			32,568	1,284		38,107	42,769	222,503	9,879
13		768	1,181	675	16,136		39,704	53,963			34,341	1,398		41,082	43,341	232,589	10,086
14		827	1,272	729	17,539		41,868	54,755			36,071	1,488		43,740	43,406	241,695	9,106
15		886	1,363	783	18,943		44,099	55,862			37,757	1,533		46,146	43,019	250,390	8,695
16		886	1,363	810	20,346		42,550	56,970			39,413	1,550		47,665	41,922	253,474	3,084
17		886	1,363	810	21,047		37,473	58,078			41,040	1,550		48,424	40,680	251,350	(2,124)
18		886	1,363	810	21,047		32,029	59,344			42,637	1,550		48,108	39,312	247,087	(4,264)
19		886	1,363	810	21,047		31,435	60,452			41,978	1,550		46,652	37,834	244,006	(3,080)
20		886	1,363	810	21,047		31,629	61,718			41,289	1,550		44,057	36,259	240,608	(3,399)

GMO 20 Year DSM kW Cumulative Electric Impacts/Savings, Net



	Change-A- Light_73_77	HPwES_78_82	LIWx_83_87	AFNH_88_92	ESNH_93_97	BOC_98_102	Optimizer_103_107	MPower_108_112	Turn-In 113-117	Blue Line_118_122	Cool Homes_123_127	EStarProd_128_132	OLA_Kit_133_137	Cnl Custom RFP_138_142	Cnl Prescriptive_143_147	All Programs All Programs	All Programs Incremental
Year	kW	kW	kW	kW		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
1	513	47	91	27	-	84	3,850	12,185	601	2,642	2,403	989	997	443	2,970	27,844	27,844
2	1,027	95	182	81	561	253	11,299	26,903	1,202	5,285	4,807	2,472	1,993	1,241	6,137	63,538	35,694
3	1,540	142	273	135	1,684	506	19,187	37,822	1,803	7,927	7,210	4,454	2,990	2,659	9,220	97,552	34,014
4	1,540	189	363	189	2,806	675	22,298	45,101	2,401	7,927	9,614	4,523	3,986	4,785	12,537	118,937	21,385
5	1,540	236	454	243	3,929	591	24,696	47,633	2,987	7,927	12,017	4,591	4,983	7,621	15,539	134,990	16,053
6	1,540	284	545	297	5,051	338	26,360	48,266	2,386	5,285	14,374	4,660	4,983	10,457	18,391	143,217	8,227
7	1,540	331	636	351	6,174	84	28,082	49,058	1,785	2,642	16,684	4,728	4,983	13,293	21,142	151,513	8,296
8	1,027	378	727	405	7,296	-	29,864	49,849	1,184	-	18,724	3,842	3,986	16,129	23,852	157,263	5,750
9	513	425	818	459	8,419	-	31,706	50,640	586	-	20,717	2,479	2,990	18,965	26,406	165,123	7,860
10	-	473	908	513	9,541	-	33,611	51,431	-	-	22,666	633	1,993	21,801	28,900	172,471	7,348
11	-	520	999	567	10,664	-	35,578	52,223	-	-	24,173	702	997	24,370	30,127	180,919	8,448
12	-	567	1,090	621	11,786	-	37,609	53,014	-	-	25,636	770	-	26,675	30,943	188,711	7,791
13	-	614	1,181	675	12,909	-	39,704	53,963	-	-	27,063	839	-	28,757	31,277	196,983	8,272
14	-	662	1,272	729	14,032	-	41,868	54,755	-	-	28,455	893	-	30,618	31,253	204,536	7,552
15	-	709	1,363	783	15,154	-	44,099	55,862	-	-	29,812	920	-	32,302	30,924	211,927	7,392
16	-	709	1,363	810	16,277	-	42,550	56,970	-	-	31,145	930	-	33,365	30,103	214,222	2,294
17	-	709	1,363	810	16,838	-	37,473	58,078	-	-	32,454	930	-	33,897	29,188	211,739	(2,483)
18	-	709	1,363	810	16,838	-	32,029	59,344	-	-	33,739	930	-	33,676	28,191	207,629	(4,110)
19	-	709	1,363	810	16,838	-	31,435	60,452	-	-	33,219	930	-	32,656	27,123	205,534	(2,094)
20	-	709	1,363	810	16,838	-	31,629	61,718	-	-	32,675	930	-	30,840	25,993	203,505	(2,029)

Comparison



Comparison of these tables with IRP Volume 5

First five years of the energy impact, kWh & kW, is the same for all programs except:

- Appliance Turn-In Program is 0.1% lower.
- Prescriptive Rebates is 0.5% higher
- Energy Star Products program is 5% lower.
 - Deemed kWh savings estimate for Energy Star clothes washer was updated (lowered) as per RLW residential end-use measure analysis.