

P 1&2 LCC w/ Normal Fuel Escalation													
		Existing Design LCC					Alternate Design LCC w/ Scenario 1						
Capital Cost		\$	759,814					\$	2,826,847				
Ann. Elec. Cost		\$	2,631,787					\$	1,805,810				
Ann. NG Cost		\$	1,712,745					\$	2,289,093				
Real Discount rate			3%						3%				
		O&M	Natural Gas		Electricity				O&M	Natural Gas		Electricity	
Date	Year	Boiler	UPV	Cost	UPV	Cost	Boiler & CHP	UPV	Cost	UPV	Cost		
2008	1	\$3,559	0.96	\$1,644,235	0.97	\$2,552,834	\$97,603	0.96	\$2,197,529	0.97	\$1,751,635		
2009	2	\$3,559	0.92	\$1,575,725	0.94	\$2,473,880	\$97,603	0.92	\$2,105,965	0.94	\$1,697,461		
2010	3	\$3,559	0.89	\$1,524,343	0.90	\$2,368,608	\$97,603	0.89	\$2,037,293	0.90	\$1,625,229		
2011	4	\$3,559	0.85	\$1,455,833	0.87	\$2,289,655	\$97,603	0.85	\$1,945,729	0.87	\$1,571,054		
2012	5	\$3,559	0.83	\$1,421,578	0.86	\$2,263,337	\$97,603	0.83	\$1,899,947	0.86	\$1,552,996		
2013	6	\$3,559	0.81	\$1,387,323	0.87	\$2,289,655	\$97,603	0.81	\$1,854,165	0.87	\$1,571,054		
2014	7	\$3,559	0.80	\$1,370,196	0.86	\$2,263,337	\$97,603	0.80	\$1,831,274	0.86	\$1,552,996		
2015	8	\$3,559	0.80	\$1,370,196	0.87	\$2,289,655	\$97,603	0.80	\$1,831,274	0.87	\$1,571,054		
2016	9	\$3,559	0.80	\$1,370,196	0.87	\$2,289,655	\$97,603	0.80	\$1,831,274	0.87	\$1,571,054		
2017	10	\$3,559	0.82	\$1,404,451	0.87	\$2,289,655	\$97,603	0.82	\$1,877,056	0.87	\$1,571,054		
2018	11	\$3,559	0.82	\$1,404,451	0.89	\$2,342,291	\$97,603	0.82	\$1,877,056	0.89	\$1,607,170		
2019	12	\$3,559	0.81	\$1,387,323	0.89	\$2,342,291	\$97,603	0.81	\$1,854,165	0.89	\$1,607,170		
2020	13	\$3,559	0.82	\$1,404,451	0.89	\$2,342,291	\$97,603	0.82	\$1,877,056	0.89	\$1,607,170		
2021	14	\$3,559	0.81	\$1,387,323	0.89	\$2,342,291	\$97,603	0.81	\$1,854,165	0.89	\$1,607,170		
2022	15	\$3,559	0.82	\$1,404,451	0.89	\$2,342,291	\$97,603	0.82	\$1,877,056	0.89	\$1,607,170		
2023	16	\$3,559	0.83	\$1,421,578	0.89	\$2,342,291	\$97,603	0.83	\$1,899,947	0.89	\$1,607,170		
2024	17	\$3,559	0.84	\$1,438,705	0.89	\$2,342,291	\$97,603	0.84	\$1,922,838	0.89	\$1,607,170		
2025	18	\$3,559	0.84	\$1,438,705	0.90	\$2,368,608	\$97,603	0.84	\$1,922,838	0.90	\$1,625,229		
2026	19	\$3,559	0.84	\$1,438,705	0.89	\$2,342,291	\$97,603	0.84	\$1,922,838	0.89	\$1,607,170		
2027	20	\$3,559	0.84	\$1,438,705	0.89	\$2,342,291	\$97,603	0.84	\$1,922,838	0.89	\$1,607,170		
Column NPV		\$52,950		\$21,430,259		\$34,871,151	\$1,452,082		\$28,641,663		\$23,926,956		
Total NPV						\$57,114,175					\$56,847,547		
Total Saving (20 yr)							\$	266,627					
Saving / yr							\$	13,331					
Payback Period (yr)							yr.	mo.					
							155	-					

P 1&2 LCC w/ 75% increase in elec. cost by 2011											
		Existing Design					Alternate Design LCC w/ Scenario 1				
Capital Cost		\$	759,814				\$	2,826,847			
Ann. Elec. Cost		\$	2,631,787				\$	1,805,810			
Ann. NG Cost		\$	1,712,745				\$	2,289,093			
Real Discount rate			3%					3%			
		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity	
Date	Year	Boiler	Esc.	Cost	Esc.	Cost	Boiler & CHP	Esc.	Cost	Esc.	Cost
2008	1	\$3,559	0.96	\$1,644,235	0.97	\$2,552,834	\$97,603	0.96	\$2,197,529	0.97	\$1,751,635
2009	2	\$3,559	0.92	\$1,575,725	0.94	\$2,473,880	\$97,603	0.92	\$2,105,965	0.94	\$1,697,461
2010	3	\$3,559	0.89	\$1,524,343	0.90	\$2,368,608	\$97,603	0.89	\$2,037,293	0.90	\$1,625,229
2011	4	\$3,559	0.85	\$1,455,833	1.52	\$4,006,896	\$97,603	0.85	\$1,945,729	1.52	\$2,749,345
2012	5	\$3,559	0.83	\$1,421,578	1.51	\$3,960,840	\$97,603	0.83	\$1,899,947	1.51	\$2,717,743
2013	6	\$3,559	0.81	\$1,387,323	1.52	\$4,006,896	\$97,603	0.81	\$1,854,165	1.52	\$2,749,345
2014	7	\$3,559	0.80	\$1,370,196	1.51	\$3,960,840	\$97,603	0.80	\$1,831,274	1.51	\$2,717,743
2015	8	\$3,559	0.80	\$1,370,196	1.52	\$4,006,896	\$97,603	0.80	\$1,831,274	1.52	\$2,749,345
2016	9	\$3,559	0.80	\$1,370,196	1.52	\$4,006,896	\$97,603	0.80	\$1,831,274	1.52	\$2,749,345
2017	10	\$3,559	0.82	\$1,404,451	1.52	\$4,006,896	\$97,603	0.82	\$1,877,056	1.52	\$2,749,345
2018	11	\$3,559	0.82	\$1,404,451	1.56	\$4,099,009	\$97,603	0.82	\$1,877,056	1.56	\$2,812,548
2019	12	\$3,559	0.81	\$1,387,323	1.56	\$4,099,009	\$97,603	0.81	\$1,854,165	1.56	\$2,812,548
2020	13	\$3,559	0.82	\$1,404,451	1.56	\$4,099,009	\$97,603	0.82	\$1,877,056	1.56	\$2,812,548
2021	14	\$3,559	0.81	\$1,387,323	1.56	\$4,099,009	\$97,603	0.81	\$1,854,165	1.56	\$2,812,548
2022	15	\$3,559	0.82	\$1,404,451	1.56	\$4,099,009	\$97,603	0.82	\$1,877,056	1.56	\$2,812,548
2023	16	\$3,559	0.83	\$1,421,578	1.56	\$4,099,009	\$97,603	0.83	\$1,899,947	1.56	\$2,812,548
2024	17	\$3,559	0.84	\$1,438,705	1.56	\$4,099,009	\$97,603	0.84	\$1,922,838	1.56	\$2,812,548
2025	18	\$3,559	0.84	\$1,438,705	1.58	\$4,145,065	\$97,603	0.84	\$1,922,838	1.58	\$2,844,150
2026	19	\$3,559	0.84	\$1,438,705	1.56	\$4,099,009	\$97,603	0.84	\$1,922,838	1.56	\$2,812,548
2027	20	\$3,559	0.84	\$1,438,705	1.56	\$4,099,009	\$97,603	0.84	\$1,922,838	1.56	\$2,812,548
Column NPV		\$52,950		\$21,430,259		\$55,791,043	\$1,452,082		\$28,641,663		\$38,281,210
Total NPV						\$78,034,067					\$71,201,801
Total Saving (30 yr)							\$	6,832,266			
Saving / yr							\$	341,613			
Payback Period (yr)							yr.	mo.			
							6	-			

P 1&2 LCC w/ 15% increase in elec. cost by 2011											
		Existing Design LCC					Alternate Design LCC w/ Scenario 1				
Capital Cost		\$	759,814				\$	2,826,847			
Ann. Elec. Cost		\$	2,631,787				\$	1,805,810			
Ann. NG Cost		\$	1,712,745				\$	2,289,093			
Real Discount rate			3%					3%			
		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity	
Date	Year	Boiler	Esc.	Cost	Esc.	Cost	Boiler & CHP	Esc.	Cost	Esc.	Cost
2008	1	\$3,559	0.96	\$1,644,235	0.97	\$2,552,834	\$97,603	0.96	\$2,197,529	0.97	\$1,751,635
2009	2	\$3,559	0.92	\$1,575,725	1.08	\$2,844,962	\$97,603	0.92	\$2,105,965	1.08	\$1,952,080
2010	3	\$3,559	0.89	\$1,524,343	1.04	\$2,723,900	\$97,603	0.89	\$2,037,293	1.04	\$1,869,013
2011	4	\$3,559	0.85	\$1,455,833	1.00	\$2,633,103	\$97,603	0.85	\$1,945,729	1.00	\$1,806,712
2012	5	\$3,559	0.83	\$1,421,578	0.99	\$2,602,838	\$97,603	0.83	\$1,899,947	0.99	\$1,785,946
2013	6	\$3,559	0.81	\$1,387,323	1.00	\$2,633,103	\$97,603	0.81	\$1,854,165	1.00	\$1,806,712
2014	7	\$3,559	0.80	\$1,370,196	0.99	\$2,602,838	\$97,603	0.80	\$1,831,274	0.99	\$1,785,946
2015	8	\$3,559	0.80	\$1,370,196	1.00	\$2,633,103	\$97,603	0.80	\$1,831,274	1.00	\$1,806,712
2016	9	\$3,559	0.80	\$1,370,196	1.00	\$2,633,103	\$97,603	0.80	\$1,831,274	1.00	\$1,806,712
2017	10	\$3,559	0.82	\$1,404,451	1.00	\$2,633,103	\$97,603	0.82	\$1,877,056	1.00	\$1,806,712
2018	11	\$3,559	0.82	\$1,404,451	1.02	\$2,693,634	\$97,603	0.82	\$1,877,056	1.02	\$1,848,246
2019	12	\$3,559	0.81	\$1,387,323	1.02	\$2,693,634	\$97,603	0.81	\$1,854,165	1.02	\$1,848,246
2020	13	\$3,559	0.82	\$1,404,451	1.02	\$2,693,634	\$97,603	0.82	\$1,877,056	1.02	\$1,848,246
2021	14	\$3,559	0.81	\$1,387,323	1.02	\$2,693,634	\$97,603	0.81	\$1,854,165	1.02	\$1,848,246
2022	15	\$3,559	0.82	\$1,404,451	1.02	\$2,693,634	\$97,603	0.82	\$1,877,056	1.02	\$1,848,246
2023	16	\$3,559	0.83	\$1,421,578	1.02	\$2,693,634	\$97,603	0.83	\$1,899,947	1.02	\$1,848,246
2024	17	\$3,559	0.84	\$1,438,705	1.02	\$2,693,634	\$97,603	0.84	\$1,922,838	1.02	\$1,848,246
2025	18	\$3,559	0.84	\$1,438,705	1.04	\$2,723,900	\$97,603	0.84	\$1,922,838	1.04	\$1,869,013
2026	19	\$3,559	0.84	\$1,438,705	1.02	\$2,693,634	\$97,603	0.84	\$1,922,838	1.02	\$1,848,246
2027	20	\$3,559	0.84	\$1,438,705	1.02	\$2,693,634	\$97,603	0.84	\$1,922,838	1.02	\$1,848,246
Column NPV		\$52,950		\$21,430,259		\$39,730,052	\$1,452,082		\$28,641,663		\$27,260,907
Total NPV						\$61,973,075					\$60,181,498
Total Saving (30 yr)							\$	1,791,577			
Saving / yr							\$	89,579			
							yr.	mo.			
Payback Period (yr)							23	-			

P 1&2 LCC w/ 15% increase in NG cost by 2009											
		Existing Design LCC					Alternate Design LCC w/ Scenario 1				
Capital Cost		\$	759,814				\$	2,826,847			
Ann. Elec. Cost		\$	2,631,787				\$	1,805,810			
Ann. NG Cost		\$	1,712,745				\$	2,289,093			
Real Discount rate			3%					3%			
		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity	
Date	Year	Boiler	Esc.	Cost	Esc.	Cost	Boiler & CHP	Esc.	Cost	Esc.	Cost
2008	1	\$3,559	0.96	\$1,644,235	0.97	\$2,552,834	\$97,603	0.96	\$2,197,529	0.97	\$1,751,635
2009	2	\$3,559	1.06	\$1,812,084	0.94	\$2,473,880	\$97,603	1.06	\$2,421,860	0.94	\$1,697,461
2010	3	\$3,559	1.02	\$1,752,994	0.90	\$2,368,608	\$97,603	1.02	\$2,342,887	0.90	\$1,625,229
2011	4	\$3,559	0.98	\$1,674,208	0.87	\$2,289,655	\$97,603	0.98	\$2,237,588	0.87	\$1,571,054
2012	5	\$3,559	0.95	\$1,634,815	0.86	\$2,263,337	\$97,603	0.95	\$2,184,939	0.86	\$1,552,996
2013	6	\$3,559	0.93	\$1,595,422	0.87	\$2,289,655	\$97,603	0.93	\$2,132,290	0.87	\$1,571,054
2014	7	\$3,559	0.92	\$1,575,725	0.86	\$2,263,337	\$97,603	0.92	\$2,105,965	0.86	\$1,552,996
2015	8	\$3,559	0.92	\$1,575,725	0.87	\$2,289,655	\$97,603	0.92	\$2,105,965	0.87	\$1,571,054
2016	9	\$3,559	0.92	\$1,575,725	0.87	\$2,289,655	\$97,603	0.92	\$2,105,965	0.87	\$1,571,054
2017	10	\$3,559	0.94	\$1,615,118	0.87	\$2,289,655	\$97,603	0.94	\$2,158,615	0.87	\$1,571,054
2018	11	\$3,559	0.94	\$1,615,118	0.89	\$2,342,291	\$97,603	0.94	\$2,158,615	0.89	\$1,607,170
2019	12	\$3,559	0.93	\$1,595,422	0.89	\$2,342,291	\$97,603	0.93	\$2,132,290	0.89	\$1,607,170
2020	13	\$3,559	0.94	\$1,615,118	0.89	\$2,342,291	\$97,603	0.94	\$2,158,615	0.89	\$1,607,170
2021	14	\$3,559	0.93	\$1,595,422	0.89	\$2,342,291	\$97,603	0.93	\$2,132,290	0.89	\$1,607,170
2022	15	\$3,559	0.94	\$1,615,118	0.89	\$2,342,291	\$97,603	0.94	\$2,158,615	0.89	\$1,607,170
2023	16	\$3,559	0.95	\$1,634,815	0.89	\$2,342,291	\$97,603	0.95	\$2,184,939	0.89	\$1,607,170
2024	17	\$3,559	0.97	\$1,654,511	0.89	\$2,342,291	\$97,603	0.97	\$2,211,264	0.89	\$1,607,170
2025	18	\$3,559	0.97	\$1,654,511	0.90	\$2,368,608	\$97,603	0.97	\$2,211,264	0.90	\$1,625,229
2026	19	\$3,559	0.97	\$1,654,511	0.89	\$2,342,291	\$97,603	0.97	\$2,211,264	0.89	\$1,607,170
2027	20	\$3,559	0.97	\$1,654,511	0.89	\$2,342,291	\$97,603	0.97	\$2,211,264	0.89	\$1,607,170
Column NPV		\$52,950		\$24,405,346		\$34,871,151	\$1,452,082		\$32,617,884		\$23,926,956
Total NPV						\$60,089,262					\$60,823,768
Total Saving (30 yr)							\$ (734,507)				
Saving / yr							\$ (36,725)				
Payback Period (yr)							yr. (56)	mo. (3)			