

Existing Design							West Tower LCC w/ Normal Fuel Escalation					Alternate Design LCC w/ Scenario 1					Alternate Design LCC w/ Scenario 2				
Capital Cost		\$ 1,519,629					\$ 2,446,940					\$ 4,625,834									
Ann. Elec. Cost		\$ 7,611,606					\$ 4,712,509					\$ 3,338,887									
Ann. NG Cost		\$ 4,652,730					\$ 5,519,092					\$ 6,003,529									
Real Discount rate		3%					3%					3%									
		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity		Boiler & CHP	UPV	Cost	UPV	Cost
Date	Year	Boiler	UPV	Cost	UPV	Cost	Boiler & CHP	UPV	Cost	UPV	Cost	Boiler & CHP	UPV	Cost	UPV	Cost	Boiler & CHP	UPV	Cost	UPV	Cost
2008	1	\$10,677	0.96	\$4,466,621	0.97	\$7,383,258	\$195,205	0.96	\$5,298,329	0.97	\$4,571,134	\$216,550	0.96	\$5,763,388	0.97	\$3,238,720					
2009	2	\$10,677	0.92	\$4,280,512	0.94	\$7,154,909	\$195,205	0.92	\$5,077,565	0.94	\$4,429,759	\$216,550	0.92	\$5,523,247	0.94	\$3,138,554					
2010	3	\$10,677	0.89	\$4,140,930	0.90	\$6,850,445	\$195,205	0.89	\$4,911,992	0.90	\$4,241,258	\$216,550	0.89	\$5,343,141	0.90	\$3,004,998					
2011	4	\$10,677	0.85	\$3,954,821	0.87	\$6,622,097	\$195,205	0.85	\$4,691,229	0.87	\$4,099,883	\$216,550	0.85	\$5,103,000	0.87	\$2,904,832					
2012	5	\$10,677	0.83	\$3,861,766	0.86	\$6,545,981	\$195,205	0.83	\$4,580,847	0.86	\$4,052,758	\$216,550	0.83	\$4,982,929	0.86	\$2,871,443					
2013	6	\$10,677	0.81	\$3,768,711	0.87	\$6,622,097	\$195,205	0.81	\$4,470,465	0.87	\$4,099,883	\$216,550	0.81	\$4,862,859	0.87	\$2,904,832					
2014	7	\$10,677	0.80	\$3,722,184	0.86	\$6,545,981	\$195,205	0.80	\$4,415,274	0.86	\$4,052,758	\$216,550	0.80	\$4,802,824	0.86	\$2,871,443					
2015	8	\$10,677	0.80	\$3,722,184	0.87	\$6,622,097	\$195,205	0.80	\$4,415,274	0.87	\$4,099,883	\$216,550	0.80	\$4,802,824	0.87	\$2,904,832					
2016	9	\$10,677	0.80	\$3,722,184	0.87	\$6,622,097	\$195,205	0.80	\$4,415,274	0.87	\$4,099,883	\$216,550	0.80	\$4,802,824	0.87	\$2,904,832					
2017	10	\$10,677	0.82	\$3,815,239	0.87	\$6,622,097	\$195,205	0.82	\$4,525,656	0.87	\$4,099,883	\$216,550	0.82	\$4,922,894	0.87	\$2,904,832					
2018	11	\$10,677	0.82	\$3,815,239	0.89	\$6,774,329	\$195,205	0.82	\$4,525,656	0.89	\$4,194,133	\$216,550	0.82	\$4,922,894	0.89	\$2,971,610					
2019	12	\$10,677	0.81	\$3,768,711	0.89	\$6,774,329	\$195,205	0.81	\$4,470,465	0.89	\$4,194,133	\$216,550	0.81	\$4,862,859	0.89	\$2,971,610					
2020	13	\$10,677	0.82	\$3,815,239	0.89	\$6,774,329	\$195,205	0.82	\$4,525,656	0.89	\$4,194,133	\$216,550	0.82	\$4,922,894	0.89	\$2,971,610					
2021	14	\$10,677	0.81	\$3,768,711	0.89	\$6,774,329	\$195,205	0.81	\$4,470,465	0.89	\$4,194,133	\$216,550	0.81	\$4,862,859	0.89	\$2,971,610					
2022	15	\$10,677	0.82	\$3,815,239	0.89	\$6,774,329	\$195,205	0.82	\$4,525,656	0.89	\$4,194,133	\$216,550	0.82	\$4,922,894	0.89	\$2,971,610					
2023	16	\$10,677	0.83	\$3,861,766	0.89	\$6,774,329	\$195,205	0.83	\$4,580,847	0.89	\$4,194,133	\$216,550	0.83	\$4,982,929	0.89	\$2,971,610					
2024	17	\$10,677	0.84	\$3,908,293	0.89	\$6,774,329	\$195,205	0.84	\$4,636,038	0.89	\$4,194,133	\$216,550	0.84	\$5,042,965	0.89	\$2,971,610					
2025	18	\$10,677	0.84	\$3,908,293	0.90	\$6,850,445	\$195,205	0.84	\$4,636,038	0.90	\$4,241,258	\$216,550	0.84	\$5,042,965	0.90	\$3,004,998					
2026	19	\$10,677	0.84	\$3,908,293	0.89	\$6,774,329	\$195,205	0.84	\$4,636,038	0.89	\$4,194,133	\$216,550	0.84	\$5,042,965	0.89	\$2,971,610					
2027	20	\$10,677	0.84	\$3,908,293	0.89	\$6,774,329	\$195,205	0.84	\$4,636,038	0.89	\$4,194,133	\$216,550	0.84	\$5,042,965	0.89	\$2,971,610					
Column NPV		\$158,851		\$58,216,043		\$100,853,691	\$2,904,164		\$69,056,169		\$62,440,695	\$3,221,711		\$75,117,558		\$44,240,217					
Total NPV						\$160,748,213					\$136,847,967					\$127,205,321					
Total Saving (20 yr)							\$ 23,900,245														
Saving / yr							\$ 1,195,012														
Payback Period (yr)							yr.	mo.													
							-	9													

West Tower LCC w/ 75% increase in elec. cost by 2011							
		Existing Design LCC		Alternate Design LCC w/ Scenario 1		Alternate Design LCC w/ Scenario 2	
Capital Cost		\$ 1,519,629		\$ 2,446,940		\$ 4,625,834	
Ann. Elec. Cost		\$ 7,611,606		\$ 4,712,509		\$ 3,338,887	
Ann. NG Cost		\$ 4,652,730		\$ 5,519,092		\$ 6,003,529	
Real Discount rate		3%		3%		3%	
		O&M	Natural Gas	Electricity			
Date	Year	Boiler	Esc.	Cost	Esc.	Cost	
2008	1	\$10,677	0.96	\$4,466,621	0.97	\$7,383,258	
2009	2	\$10,677	0.92	\$4,280,512	0.94	\$7,154,909	
2010	3	\$10,677	0.89	\$4,140,930	0.90	\$6,850,445	
2011	4	\$10,677	0.85	\$3,954,821	1.52	\$11,588,670	
2012	5	\$10,677	0.83	\$3,861,766	1.51	\$11,455,467	
2013	6	\$10,677	0.81	\$3,768,711	1.52	\$11,588,670	
2014	7	\$10,677	0.80	\$3,722,184	1.51	\$11,455,467	
2015	8	\$10,677	0.80	\$3,722,184	1.52	\$11,588,670	
2016	9	\$10,677	0.80	\$3,722,184	1.52	\$11,588,670	
2017	10	\$10,677	0.82	\$3,815,239	1.52	\$11,588,670	
2018	11	\$10,677	0.82	\$3,815,239	1.56	\$11,855,076	
2019	12	\$10,677	0.81	\$3,768,711	1.56	\$11,855,076	
2020	13	\$10,677	0.82	\$3,815,239	1.56	\$11,855,076	
2021	14	\$10,677	0.81	\$3,768,711	1.56	\$11,855,076	
2022	15	\$10,677	0.82	\$3,815,239	1.56	\$11,855,076	
2023	16	\$10,677	0.83	\$3,861,766	1.56	\$11,855,076	
2024	17	\$10,677	0.84	\$3,908,293	1.56	\$11,855,076	
2025	18	\$10,677	0.84	\$3,908,293	1.58	\$11,988,279	
2026	19	\$10,677	0.84	\$3,908,293	1.56	\$11,855,076	
2027	20	\$10,677	0.84	\$3,908,293	1.56	\$11,855,076	
Column NPV		\$158,851		\$58,216,043		\$161,357,813	
Total NPV						\$221,252,335	
Total Saving (30 yr)						\$ 46,944,961	
Saving / yr						\$ 2,347,248	
Payback Period (yr)					yr.	mo.	
					-	4	

West Tower LCC w/15% increase in NG cost by 2009																
		Existing Design LCC				Alternate Design LCC w/ Scenario 1				Alternate Design LCC w/ Scenario 2						
Capital Cost		\$ 1,519,629								\$ 4,625,834						
Ann. Elec. Cost		\$ 7,611,606								\$ 3,338,887						
Ann. NG Cost		\$ 4,652,730								\$ 6,003,529						
Real Discount rate		3%								3%						
		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity		O&M	Natural Gas		Electricity	
Date	Year	Boiler	Esc.	Cost	Esc.	Cost	Boiler & CHP	Esc.	Cost	Esc.	Cost	Boiler & CHP	Esc.	Cost	Esc.	Cost
2008	1	\$10,677	0.96	\$4,466,621	0.97	\$7,383,258	\$195,205	0.96	\$5,298,329	0.97	\$4,571,134	\$216,550	0.96	\$5,763,388	0.97	\$3,238,720
2009	2	\$10,677	1.06	\$4,922,588	0.94	\$7,154,909	\$195,205	1.06	\$5,839,200	0.94	\$4,429,759	\$216,550	1.06	\$6,351,734	0.94	\$3,138,554
2010	3	\$10,677	1.02	\$4,762,069	0.90	\$6,850,445	\$195,205	1.02	\$5,648,791	0.90	\$4,241,258	\$216,550	1.02	\$6,144,612	0.90	\$3,004,998
2011	4	\$10,677	0.98	\$4,548,044	0.87	\$6,622,097	\$195,205	0.98	\$5,394,913	0.87	\$4,099,883	\$216,550	0.98	\$5,868,450	0.87	\$2,904,832
2012	5	\$10,677	0.95	\$4,441,031	0.86	\$6,545,981	\$195,205	0.95	\$5,267,974	0.86	\$4,052,758	\$216,550	0.95	\$5,730,369	0.86	\$2,871,443
2013	6	\$10,677	0.93	\$4,334,018	0.87	\$6,622,097	\$195,205	0.93	\$5,141,035	0.87	\$4,099,883	\$216,550	0.93	\$5,592,288	0.87	\$2,904,832
2014	7	\$10,677	0.92	\$4,280,512	0.86	\$6,545,981	\$195,205	0.92	\$5,077,565	0.86	\$4,052,758	\$216,550	0.92	\$5,523,247	0.86	\$2,871,443
2015	8	\$10,677	0.92	\$4,280,512	0.87	\$6,622,097	\$195,205	0.92	\$5,077,565	0.87	\$4,099,883	\$216,550	0.92	\$5,523,247	0.87	\$2,904,832
2016	9	\$10,677	0.92	\$4,280,512	0.87	\$6,622,097	\$195,205	0.92	\$5,077,565	0.87	\$4,099,883	\$216,550	0.92	\$5,523,247	0.87	\$2,904,832
2017	10	\$10,677	0.94	\$4,387,524	0.87	\$6,622,097	\$195,205	0.94	\$5,204,504	0.87	\$4,099,883	\$216,550	0.94	\$5,661,328	0.87	\$2,904,832
2018	11	\$10,677	0.94	\$4,387,524	0.89	\$6,774,329	\$195,205	0.94	\$5,204,504	0.89	\$4,194,133	\$216,550	0.94	\$5,661,328	0.89	\$2,971,610
2019	12	\$10,677	0.93	\$4,334,018	0.89	\$6,774,329	\$195,205	0.93	\$5,141,035	0.89	\$4,194,133	\$216,550	0.93	\$5,592,288	0.89	\$2,971,610
2020	13	\$10,677	0.94	\$4,387,524	0.89	\$6,774,329	\$195,205	0.94	\$5,204,504	0.89	\$4,194,133	\$216,550	0.94	\$5,661,328	0.89	\$2,971,610
2021	14	\$10,677	0.93	\$4,334,018	0.89	\$6,774,329	\$195,205	0.93	\$5,141,035	0.89	\$4,194,133	\$216,550	0.93	\$5,592,288	0.89	\$2,971,610
2022	15	\$10,677	0.94	\$4,387,524	0.89	\$6,774,329	\$195,205	0.94	\$5,204,504	0.89	\$4,194,133	\$216,550	0.94	\$5,661,328	0.89	\$2,971,610
2023	16	\$10,677	0.95	\$4,441,031	0.89	\$6,774,329	\$195,205	0.95	\$5,267,974	0.89	\$4,194,133	\$216,550	0.95	\$5,730,369	0.89	\$2,971,610
2024	17	\$10,677	0.97	\$4,494,537	0.89	\$6,774,329	\$195,205	0.97	\$5,331,443	0.89	\$4,194,133	\$216,550	0.97	\$5,799,409	0.89	\$2,971,610
2025	18	\$10,677	0.97	\$4,494,537	0.90	\$6,850,445	\$195,205	0.97	\$5,331,443	0.90	\$4,241,258	\$216,550	0.97	\$5,799,409	0.90	\$3,004,998
2026	19	\$10,677	0.97	\$4,494,537	0.89	\$6,774,329	\$195,205	0.97	\$5,331,443	0.89	\$4,194,133	\$216,550	0.97	\$5,799,409	0.89	\$2,971,610
2027	20	\$10,677	0.97	\$4,494,537	0.89	\$6,774,329	\$195,205	0.97	\$5,331,443	0.89	\$4,194,133	\$216,550	0.97	\$5,799,409	0.89	\$2,971,610
Column NPV		\$158,851		\$66,297,970		\$100,853,691	\$2,904,164		\$78,642,993		\$62,440,695	\$3,221,711		\$85,545,864		\$44,240,217
Total NPV						\$168,830,140				\$146,434,791						\$137,633,626
Total Saving (30 yr)							\$ 22,395,349					\$ 31,196,514				
Saving / yr							\$ 1,119,767					\$ 1,559,826				
Payback Period (yr)							yr.	mo.				yr.	mo.			
							-	9				1	11			