UMED District CHP
Anchorage, Alaska
Turbine Pro Forma Output

Preliminary Analysis
November 4, 8008

Project Cash Flow - Version Solar Mercury 50-6000R

YEAR:	-1	0	1	2	3	4	5	6	7	8	9	10	11
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
REVENUES													
Electricity PPA Price			**$52.00**	$53.56	$55.17	$56.82	$58.53	$60.28	$62.09	$63.95	$68.61	$73.60	$78.95
Electricity Sold, MWH			72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892
Electric Energy Payment			3,790,386	3,904,098	4,021,221	4,141,858	4,266,114	4,394,097	4,525,921	4,661,699	5,000,809	5,364,588	5,754,830
CFI Price			$1.75	$1.80	$1.86	$1.91	$1.97	$2.03	$2.09	$2.15	$2.22	$2.28	$2.35
CFI's Generated			15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017
CFI Payment			26,279	27,068	27,880	28,716	29,577	30,465	31,379	32,320	33,290	34,288	35,317
Thermal Price			35.0000	36.0500	37.1315	38.2454	39.3928	40.5746	41.7918	43.0456	47.0969	51.5294	56.3792
Thermal Energy Sold, MWH			85,278	85,278	85,278	85,278	85,278	85,278	85,278	85,278	85,278	85,278	85,278
Thermal Energy Payment			2,984,730	3,074,273	3,166,502	3,261,498	3,359,345	3,460,126	3,563,932	3,670,851	4,016,338	4,394,341	4,807,920
Backup Service Payment			750,000	712,500	676,875	643,031	610,880	580,336	551,319	523,753	497,565	472,687	449,053
Float Earnings			-	-	-	-	-	-	-	-	-	-	-
Interest Income		-	10,000	10,000	10,361	10,715	11,074	11,438	11,813	12,060	12,302	12,539	12,936
TOTAL REVENUE	-	-	**7,561,395**	**7,727,938**	**7,902,839**	**8,085,818**	**8,276,990**	**8,476,463**	**8,684,363**	**8,900,683**	**9,560,304**	**10,278,443**	**11,060,055**
EXPENSES													
Project		Solar Mercury 50-6000R											
O&M			80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382	107,513
Insurance			32,000	32,000	32,000	34,967	34,967	34,967	38,210	38,210	38,210	41,753	41,753
Conventional Boiler Fuel			-	-	-	-	-	-	-	-	-	-	-
Duct Burner Fuel			35,461	35,461	35,461	35,461	35,461	35,461	35,462	35,462	35,462	35,462	35,462
GTG Fuel			193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429
Fuel			3,677,366	3,787,688	3,901,319	4,018,360	4,138,912	4,263,080	4,390,974	4,522,704	4,956,762	5,438,301	5,972,724
Service Agreement			546,690	546,690	546,690	546,690	546,690	563,091	579,984	597,383	615,305	633,764	652,777
Reserve Fund			25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Leaseholder payments			200,000	216,600	234,578	254,048	275,134	297,970	322,701	349,486	378,493	409,908	443,930
Power Use			-	-	-	-	-	-	-	-	-	-	-
Reserve Fund			-	-	-	-	-	-	-	-	-	-	-
Project Personnel													
Management			100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	134,392
Staffing			1,000,000	1,030,000	1,060,900	1,092,727	1,125,509	1,159,274	1,194,052	1,229,874	1,266,770	1,304,773	1,343,916
			(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(200,000)	(200,000)	(200,000)	(200,000)		
Accounting/Planning Oversight			60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	80,635
TOTAL OPERATING EXPENSES	-	-	**5,649,946**	**5,814,068**	**5,983,993**	**6,162,937**	**6,345,224**	**6,650,498**	**6,866,384**	**7,086,716**	**7,613,455**	**8,395,535**	**9,031,531**
Cash flow available for debt service			**1,911,449**	**1,913,870**	**1,918,845**	**1,922,881**	**1,931,766**	**1,825,964**	**1,817,979**	**1,813,967**	**1,946,849**	**1,882,909**	**2,028,524**
RATE STABILIZATION FUND													
Addition (subtraction) to Operating Reserves		250,000	-	9,031	8,833	8,988	9,104	9,367	6,186	6,041	5,925	9,915	7,877
Operating Reserves		**250,000**	**250,000**	**259,031**	**267,864**	**276,852**	**285,956**	**295,324**	**301,509**	**307,551**	**313,476**	**323,391**	**331,269**
DEBT SERVICE													
CREB Bond			-	-	-	-	-	-	-	-	-	-	-
Muni Bond			1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413
TOTAL DEBT PAYMENTS	-		1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413
Coverage			**1.34**	**1.34**	**1.35**	**1.36**	**1.37**	**1.31**	**1.31**	**1.31**	**1.40**	**1.36**	**1.46**
Remaining CREB Bond			-	-	-	-	-	-	-	-	-	-	-
Remaining Municipal Bond			24,383,387	23,992,143	23,581,336	23,149,990	22,697,076	22,221,517	21,722,179	21,197,875	20,647,355	20,069,310	19,462,362
Warranty Expense					-	-	-	-	-	-	-	-	-
Capitalized Warranty Fund		-	25,000	50,000	75,000	100,000	125,000	150,000	175,000	200,000	225,000	250,000	275,000
Remaining Warranty Fund		-	25,000	50,000	75,000	100,000	125,000	150,000	175,000	200,000	225,000	250,000	275,000
Construction Interest Expense (Cap CREB)		-	-	-	-	-	-	-	-	-	-	-	-
Capitalized Interest		-	-	-	-	-	-	-	-	-	-	-	-
Remaining Capitalized Interest		-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense (Cap Muni)			-	-	-	-	-	-	-	-	-	-	-
Capitalized Interest			-	-	-	-	-	-	-	-	-	-	-
Remaining Capitalized Interest		-	-	-	-	-	-	-	-	-	-	-	-
Net cash flow after debt service	-	-	**301,035**	**294,425**	**299,599**	**303,480**	**312,248**	**206,184**	**201,381**	**197,512**	**330,511**	**262,580**	**410,234**
SECURITIZED CASH FLOW													
Net cash flow to investor									-	-	-	-	-
NPV of cash flows to investor at		-											
NET CASH FLOWS AVAILABLE TO PROJECT													
Net cash flow									**201,381**	**197,512**	**330,511**	**262,580**	**410,234**
Cumulative cash flow			-	-	-	-	-	-	201,381	398,892	729,403	991,984	1,402,217

NPV Cash Flow	**$**	**4,117,534**
NPV Rate Stabilization Fund		$3,078,446.59
Project Discount Rate		**8.30%**

UMED District CHP
Anchorage, Alaska
Turbine Pro Forma Output

Project Cash Flow - Version Solar Mercury 50-6000R

YEAR:	12	13	14	15	16	17	18	19	20	Totals
	2021	2022	2023	2024	2025	2026	2027	2028	2029	
REVENUES										
Electricity PPA Price	$84.69	$90.85	$97.46	$100.39	$103.40	$106.50	$109.70	$112.99	$116.38	
Electricity Sold, MWH	72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892	72,892	
Electric Energy Payment	6,173,459	6,622,541	7,104,291	7,317,420	7,536,943	7,763,052	7,995,944	8,235,823	8,482,898	$ 117,057,990
CFI Price	$2.42	$2.50	$2.57	$2.65	$2.73	$2.81	$2.89	$2.98	$3.07	
CFI's Generated	15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017	15,017	
CFI Payment	36,377	37,468	38,592	39,750	40,942	42,170	43,436	44,739	46,081	$ 706,133
Thermal Price	61.6853	67.4909	73.8429	76.0582	78.3399	80.6901	83.1108	85.6041	88.1722	
Thermal Energy Sold, MWH	85,278	85,278	85,278	85,278	85,278	85,279	85,279	85,279	85,279	
Thermal Energy Payment	5,260,424	5,755,516	6,297,203	6,486,122	6,680,708	6,881,132	7,087,569	7,300,199	7,519,208	$ 99,027,938
Backup Service Payment	426,600	405,270	385,007	365,756	347,468	330,095	313,590	297,911	283,015	$ 9,622,711
Float Earnings	-	-	-	-	-	-	-	-	-	$ -
Interest Income	13,251	13,743	14,410	15,252	16,276	17,323	18,151	19,013	19,900	$ 272,558
TOTAL REVENUE	**11,910,110**	**12,834,537**	**13,839,503**	**14,224,301**	**14,622,339**	**15,033,773**	**15,458,690**	**15,897,685**	**16,351,102**	**$ 226,687,330**
EXPENSES										
Project										
O&M	110,739	114,061	117,483	121,007	124,637	128,377	132,228	136,195	140,280	$ 2,149,630
Insurance	41,753	45,624	45,624	45,624	49,855	49,855	49,855	54,478	54,478	$ 836,183
Conventional Boiler Fuel	-	-	-	-	-	-	-	-	-	
Duct Burner Fuel	35,462	35,462	35,462	35,462	35,462	35,462	35,462	35,462	35,462	
GTG Fuel	193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429	193,429	
Fuel	6,566,058	7,225,021	7,957,106	8,195,821	8,441,697	8,694,950	8,955,800	9,224,476	9,501,212	$ 123,830,330
Service Agreement	672,360	692,531	713,307	734,706	756,747	779,450	802,833	826,918	851,726	$ 13,206,331
Reserve Fund	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	$ 500,000
Leaseholder payments	480,776	520,681	563,897	610,701	661,389	716,284	775,736	840,122	909,852	$ 9,462,283
Power Use	-	-	-	-	-	-	-	-	-	$ -
Reserve Fund	-	-	-	-	-	-	-	-	-	$ -
Project Personnel										
Management	138,423	142,576	146,853	151,259	155,797	160,471	165,285	170,243	175,351	$ 2,687,037
Staffing	1,384,234	1,425,761	1,468,534	1,512,590	1,557,967	1,604,706	1,652,848	1,702,433	1,753,506	$ 26,870,374
Accounting/Planning Oversight	83,054	85,546	88,112	90,755	93,478	96,282	99,171	102,146	105,210	$ 1,612,222
TOTAL OPERATING EXPENSES	**9,731,288**	**10,505,691**	**11,354,807**	**11,716,354**	**12,295,458**	**12,684,265**	**13,087,645**	**13,510,901**	**13,945,505**	**$ 184,432,202**
Cash flow available for debt service	**2,178,823**	**2,328,846**	**2,484,696**	**2,507,947**	**2,326,880**	**2,349,508**	**2,371,045**	**2,386,783**	**2,405,597**	**$ 42,255,129**
RATE STABILIZATION FUND										
Addition (subtraction) to Operating Reserves	12,307	16,683	21,053	25,597	26,158	20,709	21,552	22,172	22,626	$ 270,125
Operating Reserves	**343,576**	**360,259**	**381,311**	**406,908**	**433,066**	**453,775**	**475,327**	**497,499**	**520,125**	**$ 7,084,069**
DEBT SERVICE										
CREB Bond	-	-	-	-	-	-	-	-	-	$ -
Muni Bond	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	$ 32,208,267
TOTAL DEBT PAYMENTS	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	1,610,413	**$ 32,208,267**
Coverage	**1.56**	**1.66**	**1.77**	**1.79**	**1.70**	**1.73**	**1.75**	**1.78**	**1.80**	
Remaining CREB Bond	-	-	-	-	-	-	-	-	-	
Remaining Municipal Bond	18,825,067	18,155,907	17,453,289	16,715,540	15,940,903	15,127,535	14,273,499	13,376,760	12,435,185	
Warranty Expense	-	-	-	-	-	-	-	-	-	
Capitalized Warranty Fund	300,000	325,000	350,000	375,000	400,000	425,000	450,000	475,000	500,000	
Remaining Warranty Fund	300,000	325,000	350,000	375,000	400,000	425,000	450,000	475,000	500,000	
Construction Interest Expense (Cap CREB)	-	-	-	-	-	-	-	-	-	
Capitalized Interest	-	-	-	-	-	-	-	-	-	
Remaining Capitalized Interest	-	-	-	-	-	-	-	-	-	
Interest Expense (Cap Muni)	-	-	-	-	-	-	-	-	-	
Capitalized Interest	-	-	-	-	-	-	-	-	-	
Remaining Capitalized Interest	-	-	-	-	-	-	-	-	-	
Net cash flow after debt service	**556,102**	**701,750**	**853,231**	**871,937**	**690,309**	**718,385**	**739,080**	**754,198**	**772,558**	**$ 9,776,737**
SECURITIZED CASH FLOW										
Net cash flow to investor	-	-	-	-	-	-	-	-	-	
NPV of cash flows to investor at										
NET CASH FLOWS AVAILABLE TO PROJECT										
Net cash flow	**556,102**	**701,750**	**853,231**	**871,937**	**690,309**	**718,385**	**739,080**	**754,198**	**772,558**	
Cumulative cash flow	1,958,319	2,660,069	3,513,300	4,385,237	5,075,545	5,793,930	6,533,010	7,287,208	8,059,766	
NPV Cash Flow										
NPV Rate Stabilization Fund										
Project Discount Rate										