

Profit And Loss Statement
 损益计算表 Case 3 - Outside

No. Year	Sales Revenue			Operating Cost			Steam Cost			Description			Cost			Profit			Interest Payment			Total	INCOME	
	Generated Energy	Stable Energy	Revenue	Supply Well	O&M Steam	O&M P. Plant	MM\$	MM\$	MM\$	Steam	Supply	Power Plant	Total	Tax	After Tax	Japan Bank	Int'l Bank	MM\$	MM\$	MM\$	MM\$			MM\$
	GWH	GWH	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$	MM\$			MM\$
0	2001																							
1	2002																							
2	2003																							
3	2004	231.26	217.51	17.40		1.02	0.45	2.54		2.00	3.43	9.44		2.47	5.49	3.19	4.18	1.95	1.48	3.43	3.43	(3.43)		
4	2005	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	7.96	3.85	8.58	3.73	4.85	4.85	3.73	8.58	8.58	(3.09)		
5	2006	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	4.06	5.24	5.24	4.06	8.58	9.30	(0.72)		
6	2007	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	3.87	5.11	5.11	3.87	8.58	8.98	(0.40)		
7	2008	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	3.65	5.00	5.00	3.65	8.58	8.65	(0.07)		
8	2009	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	3.41	4.86	4.86	3.41	8.58	8.27	0.31		
9	2010	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	3.15	4.72	4.72	3.15	8.58	7.87	0.71		
10	2011	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	2.86	4.56	4.56	2.86	8.58	6.94	1.64		
11	2012	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	2.21	4.21	4.21	2.21	8.58	6.42	2.16		
12	2013	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	10.77	12.43	3.85	8.58	1.85	4.01	4.01	1.85	8.58	5.86	(0.22)		
13	2014	308.35	290.01	23.20	4.26	1.35	0.60	3.39		2.00	3.43	15.03	8.17	2.53	5.64	1.44	3.81	3.81	1.44	8.58	5.25	4.41		
14	2015	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66	1.00	3.57	3.57	1.00	8.58	4.57	5.09		
15	2016	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66	0.52	3.32	3.32	0.52	8.58	3.84	5.82		
16	2017	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		3.05	3.05		8.58	3.05	6.61		
17	2018	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		2.76	2.76		8.58	2.76	6.90		
18	2019	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		2.46	2.46		8.58	2.46	7.20		
19	2020	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		2.12	2.12		8.58	2.12	7.54		
20	2021	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		1.75	1.75		8.58	1.75	7.91		
21	2022	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.00	4.34	9.66		1.35	1.35		8.58	1.35	8.31		
22	2023	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	9.20	14.43	4.47	9.96		0.93	0.93		8.58	0.93	9.03		
23	2024	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	5.34	17.86	5.54	12.32		0.47	0.47		8.58	0.47	11.85		
24	2025	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	5.34	17.86	5.54	12.32		-	-		8.58	-	12.32		
25	2026	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	5.34	17.86	5.54	12.32		-	-		8.58	-	12.32		
26	2027	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	5.34	17.86	5.54	12.32		-	-		8.58	-	12.32		
27	2028	308.35	290.01	23.20		1.35	0.60	3.39		2.00	3.43	5.34	17.86	5.54	12.32		-	-		8.58	-	12.32		
28	2029	77.09	72.50	5.60		0.34	0.15	0.85		-	-	1.34	4.46	1.38	3.08		-	-		8.58	-	3.08		
29	2030																							
30	2031																							
Total				960.00		33.85	14.91	84.75		23.84	68.64	230.25	349.75	108.41	241.34		38.97	78.67		117.64	117.64	123.70		

FIRR Case 3-O

Cash Flow Statement
キャッシュフロー - Case 3 - Outside

No. / Year	Loan		Cash Flow Out			Cash Flow In			Balance			
	MMS		Net Income	Dep. Steam Facilities	Dep. P. Plant Facilities	Total	Project Cost	Japan Bank Principal Payment	Int'l Bank Principal Payment	Total	Annual Balance	Balance
	MMS		MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS
0 / 2001						37.22	40.65			40.65	(3.43)	(3.43)
1 / 2002	40.65		(3.43)			35.81	43.18			43.18	(7.37)	(10.80)
2 / 2003	43.18		(7.37)			9.25	6.90			6.90	2.35	(8.45)
3 / 2004	6.90		(3.09)			4.71		2.22	1.43	3.65	1.06	(7.39)
4 / 2005			(6.72)	2.00	3.43	5.03		2.41	1.56	3.97	1.06	(6.33)
5 / 2006			(0.40)	2.00	3.43	5.36		2.63	1.67	4.30	1.06	(5.26)
6 / 2007			(0.07)	2.00	3.43	5.74		2.87	1.81	4.68	1.06	(4.20)
7 / 2008			0.31	2.00	3.43	6.14		3.13	1.95	5.08	1.06	(3.14)
8 / 2009			0.71	2.00	3.43	6.59		3.42	2.11	5.53	1.06	(2.08)
9 / 2010			1.16	2.00	3.43	7.07		3.73	2.28	6.01	1.06	(1.01)
10 / 2011			1.64	2.00	3.43	7.59		4.07	2.46	6.53	1.06	0.05
11 / 2012			2.16	2.00	3.43	8.11		4.43	2.66	7.09	0.57	(1.83)
12 / 2013			(0.22)	2.00	3.43	8.27		4.84	2.86	7.70	0.57	(1.25)
13 / 2014			4.41	0.43	3.43	8.95		5.28	3.10	8.38	0.57	(0.68)
14 / 2015			5.09	0.43	3.43	9.68		5.69	3.35	9.04	0.64	(0.04)
15 / 2016			5.82	0.43	3.43	10.47			3.62	9.68	0.85	6.81
16 / 2017			6.61	0.43	3.43	11.30			3.91	10.37	1.12	8.83
17 / 2018			7.20	0.43	3.43	12.17			4.21	11.16	1.48	10.35
18 / 2019			7.54	0.43	3.43	13.10			4.55	12.06	1.93	12.41
19 / 2020			7.91	0.43	3.43	14.10			4.92	13.10	2.47	14.97
20 / 2021			8.31	0.43	3.43	15.17			5.32	14.30	3.11	18.01
21 / 2022			9.03		3.43	16.46			5.74	15.66	3.85	21.86
22 / 2023			11.85			18.95			5.90	17.16	4.75	26.61
23 / 2024			12.32			21.46				18.81	5.81	32.42
24 / 2025			12.32			24.00				20.62	7.00	39.42
25 / 2026			12.32			26.66				22.56	8.36	47.78
26 / 2027			12.32			29.44				24.64	9.90	57.68
27 / 2028			12.32			32.34				26.86	11.64	69.32
28 / 2029			3.08			35.46				29.24	13.58	82.90
29 / 2030						38.81				31.78	15.72	98.62
30 / 2031						42.49				34.56	18.16	116.78
Total	90.72		123.70	23.84	68.64	306.91	90.72	44.69	65.41	200.92	105.09	32.05

Debt Service Ratio, Case 3 - Outside

No	Year	Cash Generation		Total		Interest Payment		Principal Payment		Loan Payment		Accumu. Total		Debt Service Ratio
		Operating Revenue	Depreciation	Operating Revenue	Depreciation	Interest Payment	Principal Payment	Loan Payment	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Interest Payment	
		MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	MMS	
0	2001	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2002	-	-	-	-	3.43	-	-	-	3.43	-	3.43	-	-
2	2003	-	-	-	-	7.37	-	-	-	7.37	-	7.37	-	-
3	2004	5.49	5.43	10.93	10.93	8.58	3.65	3.65	3.65	8.58	3.65	10.80	3.43	0.56
4	2005	8.58	5.43	24.94	14.01	9.30	3.97	3.97	3.97	12.95	3.97	19.38	10.80	0.77
5	2006	8.58	5.43	38.95	14.01	8.98	4.30	4.30	4.30	12.95	4.30	32.33	19.38	0.86
6	2007	8.58	5.43	52.96	14.01	8.65	4.68	4.68	4.68	12.95	4.68	45.27	32.33	0.91
7	2008	8.58	5.43	66.97	14.01	8.27	5.08	5.08	5.08	12.95	5.08	58.22	45.27	0.94
8	2009	8.58	5.43	80.98	14.01	7.87	5.53	5.53	5.53	12.95	5.53	71.17	58.22	0.96
9	2010	8.58	5.43	94.99	14.01	7.42	6.01	6.01	6.01	12.95	6.01	84.12	71.17	0.98
10	2011	8.58	5.43	109.00	14.01	6.94	6.42	6.42	6.42	12.95	6.42	97.08	84.12	0.99
11	2012	8.58	5.43	123.01	14.01	6.42	6.86	6.86	6.86	12.95	6.86	110.01	97.08	1.00
12	2013	5.64	5.43	134.08	11.07	5.86	7.09	7.09	7.09	12.95	7.09	122.96	110.01	0.99
13	2014	9.66	3.86	147.60	13.52	5.25	7.70	7.70	7.70	12.95	7.70	135.90	122.96	0.99
14	2015	9.66	3.86	161.12	13.52	4.57	8.38	8.38	8.38	12.95	8.38	148.85	135.90	0.99
15	2016	9.66	3.86	174.64	13.52	3.84	9.04	9.04	9.04	12.88	9.04	161.80	148.85	1.00
16	2017	9.66	3.86	188.15	13.52	3.05	9.62	9.62	9.62	6.87	9.62	174.68	161.80	1.00
17	2018	9.66	3.86	201.67	13.52	2.76	3.81	3.81	3.81	6.87	3.81	187.55	174.68	1.07
18	2019	9.66	3.86	215.19	13.52	2.46	4.21	4.21	4.21	6.87	4.21	194.69	187.55	1.11
19	2020	9.66	3.86	228.71	13.52	2.12	4.55	4.55	4.55	6.87	4.55	201.36	194.69	1.14
20	2021	9.66	3.86	242.23	13.52	1.75	4.82	4.82	4.82	6.87	4.82	208.03	201.36	1.16
21	2022	9.66	3.86	255.75	13.52	1.35	5.32	5.32	5.32	6.87	5.32	214.70	208.03	1.19
22	2023	9.66	3.43	269.14	13.39	0.93	5.74	5.74	5.74	6.87	5.74	221.37	214.70	1.22
23	2024	12.32	-	281.46	12.32	0.47	5.90	5.90	5.90	6.37	5.90	227.74	221.37	1.24
24	2025	12.32	-	293.78	12.32	-	-	-	-	-	-	227.74	227.74	1.29
25	2026	12.32	-	306.10	12.32	-	-	-	-	-	-	227.74	227.74	1.34
26	2027	12.32	-	318.42	12.32	-	-	-	-	-	-	227.74	227.74	1.40
27	2028	12.32	-	330.74	12.32	-	-	-	-	-	-	227.74	227.74	1.45
28	2029	3.08	-	333.83	3.08	-	-	-	-	-	-	227.74	227.74	1.47
29	2030	-	-	-	-	-	-	-	-	-	-	-	-	-
30	2031	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		241.34	92.46	333.83	4.68533	117.64	110.10	110.10	110.10	227.74	110.10	227.74	227.74	-

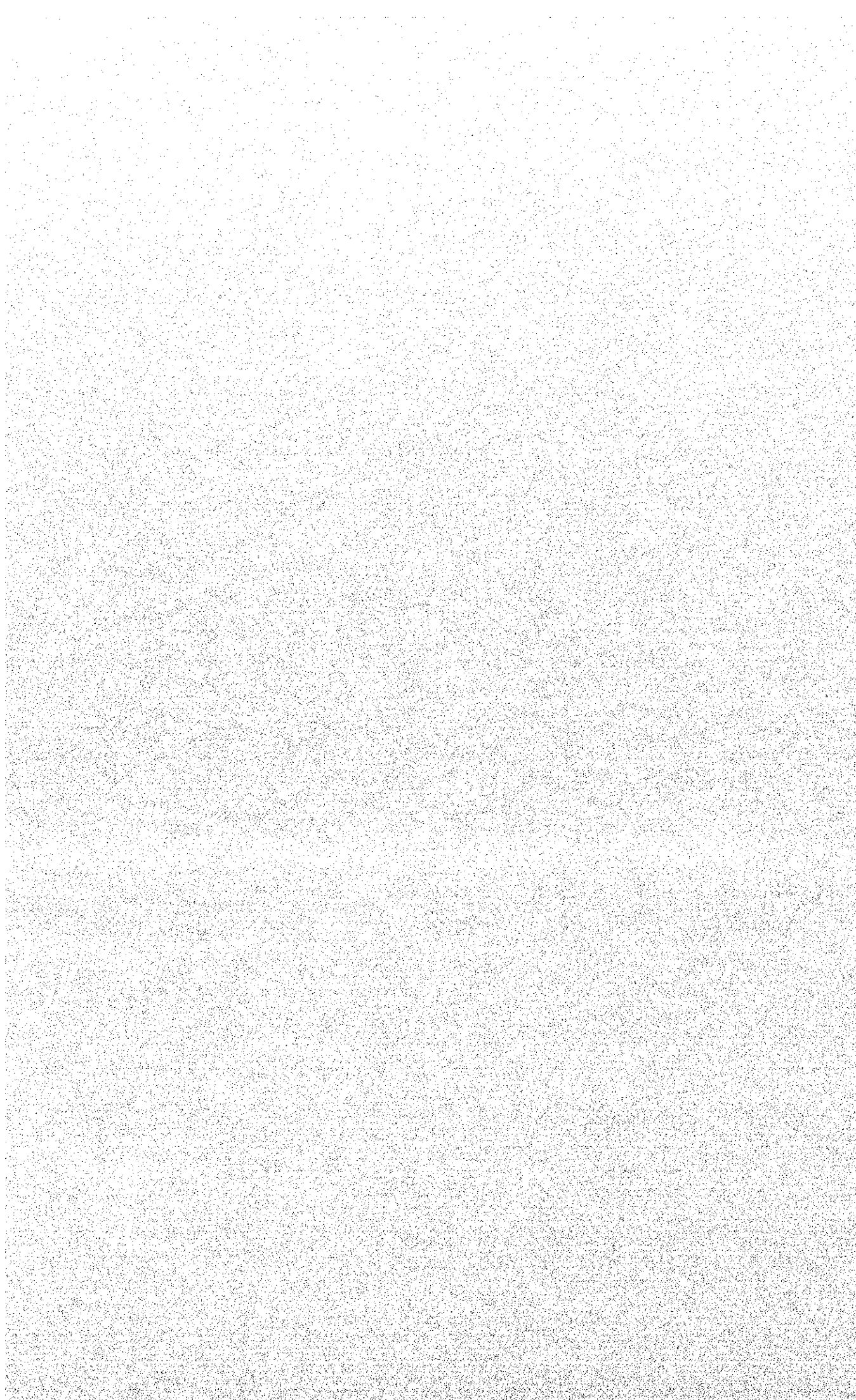
UNIT: Million US\$

International Bank Loan Repayment Schedule (Million US\$) Case 3 - Outside

No	Year	2002		2003		2004		2005		2006		TOTAL				
		Loan	Outstand- ing Balance	Principal	Repay- ment	Outstand- ing Balance	Principal	Repay- ment	Outstand- ing Balance	Principal	Repay- ment	Outstand- ing Balance	Principal	Repay- ment		
1.00	2,001.00	24.39	26.34	-	2.07	-	27.69	-	-	-	-	-	1.95	-	26.34	-
2.00	2,002.00	25.91	28.45	-	2.11	-	30.22	-	-	-	-	-	4.18	-	55.41	-
3.00	2,003.00	-	30.73	-	2.24	-	33.08	-	-	-	-	-	4.65	-	63.98	-
4.00	2,004.00	-	30.08	-	2.42	0.66	3.08	0.10	0.33	0.36	0.46	1.43	5.24	5.11	67.67	5.24
5.00	2,005.00	-	28.33	0.73	2.36	0.72	3.08	0.11	0.35	0.46	4.26	1.55	5.00	5.11	67.67	5.11
6.00	2,006.00	-	28.55	0.77	2.31	0.77	3.08	0.12	0.34	0.46	4.14	1.67	5.00	5.11	67.67	5.11
7.00	2,007.00	-	27.70	0.83	2.25	0.83	3.08	0.14	0.33	0.46	4.01	1.81	4.86	4.86	67.67	4.86
8.00	2,008.00	-	26.79	0.90	2.18	0.90	3.08	0.16	0.32	0.46	3.97	1.95	4.72	4.72	67.67	4.72
9.00	2,009.00	-	25.80	0.97	2.11	0.97	3.08	0.15	0.31	0.46	3.72	2.11	4.56	4.56	67.67	4.56
10.00	2,010.00	-	24.73	1.05	2.03	1.05	3.08	0.16	0.30	0.46	3.56	2.28	4.39	4.39	67.67	4.39
11.00	2,011.00	-	23.58	1.13	1.95	1.13	3.08	0.18	0.28	0.46	3.38	2.46	4.21	4.21	67.67	4.21
12.00	2,012.00	-	22.34	1.23	1.85	1.23	3.08	0.19	0.27	0.46	3.19	2.66	4.01	4.01	67.67	4.01
13.00	2,013.00	-	21.00	1.33	1.78	1.33	3.08	0.20	0.26	0.46	2.99	2.86	3.81	3.81	67.67	3.81
14.00	2,014.00	-	19.55	1.43	1.65	1.43	3.08	0.22	0.24	0.46	2.77	3.10	3.57	3.57	67.67	3.57
15.00	2,015.00	-	17.98	1.54	1.54	1.54	3.08	0.24	0.22	0.46	2.53	3.35	3.32	3.32	67.67	3.32
16.00	2,016.00	-	16.29	1.67	1.41	1.67	3.08	0.26	0.20	0.46	2.27	3.62	3.05	3.05	67.67	3.05
17.00	2,017.00	-	14.46	1.80	1.28	1.80	3.08	0.28	0.18	0.46	1.99	3.91	2.76	2.76	67.67	2.76
18.00	2,018.00	-	12.48	1.94	1.14	1.94	3.08	0.30	0.16	0.46	1.69	4.21	2.46	2.46	67.67	2.46
19.00	2,019.00	-	10.36	2.10	0.98	2.10	3.08	0.32	0.14	0.46	1.37	4.55	2.12	2.12	67.67	2.12
20.00	2,020.00	-	8.05	2.27	0.81	2.27	3.08	0.35	0.11	0.46	1.02	4.82	1.75	1.75	67.67	1.75
21.00	2,021.00	-	5.57	2.45	0.64	2.45	3.08	0.38	0.08	0.46	0.84	5.14	1.35	1.35	67.67	1.35
22.00	2,022.00	-	2.89	2.65	0.43	2.65	3.08	0.41	0.05	0.46	0.23	5.74	0.93	0.93	67.67	0.93
23.00	2,023.00	-	-	2.79	0.22	2.79	3.01	0.23	0.02	0.25	-	5.93	0.47	0.47	67.67	0.47
24.00	2,024.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.00	2,025.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.00	2,026.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.00	2,027.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.00	2,028.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.00	2,029.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.00	2,030.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		54.43	30.73	38.20	30.22	35.62	61.53	4.47	4.85	8.99	65.41	10.98	67.69	133.10		

Appendix 3:

Sensitivity Analysis



Sensitivity

Project Amatitlan Geothermal Case 3-Inside
 Subject Sensitivity Analysis

File Name 1999/5/21
 Date 2001/10/12
 Rev.

Capacity Factor	FIRR
74%	11.34%
76%	11.69%
78%	12.04%
80%	12.39%
82%	12.74%
84%	13.08%
86%	13.41%
88%	13.75%
90%	14.08%
92%	14.41%
94%	14.73%

Figure 3.4.2 Sensitivity to Capacity Factor

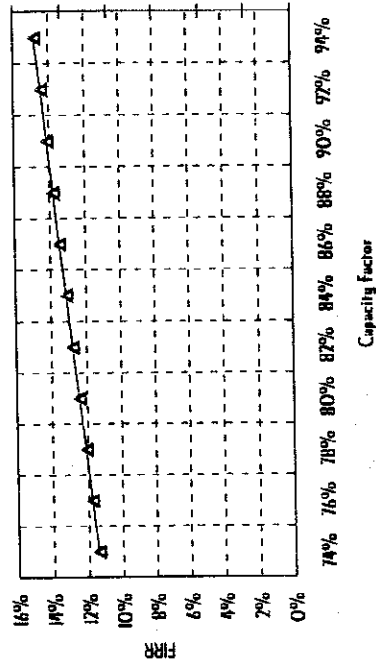
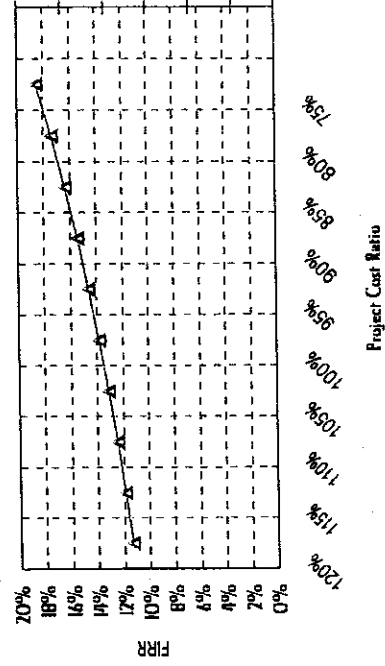


Figure 3.4.3 Sensitivity to Project Cost

Project Cost	FIRR
120%	11.21%
115%	11.78%
110%	12.38%
105%	13.04%
100%	13.75%
95%	14.52%
90%	15.36%
85%	16.29%
80%	17.31%
75%	18.45%

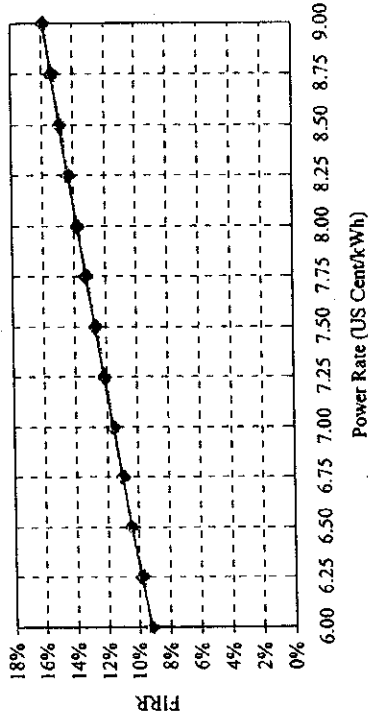
Figure 3.4.3 Sensitivity to Project Cost



Power Rate	FIRR
6.00	9.16%
6.25	9.77%
6.50	10.37%
6.75	10.96%
7.00	11.54%
7.25	12.10%
7.50	12.66%
7.75	13.21%
8.00	13.75%
8.25	14.28%
8.50	14.81%
8.75	15.33%
9.00	15.84%

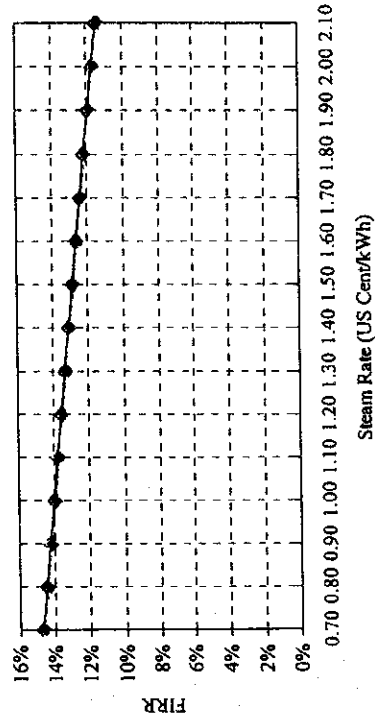
US Cent/kWh

Figure 3.4-4 Sensitivity to Power Rate



Steam Rate	FIRR
0.70	14.65%
0.80	14.42%
0.90	14.20%
1.00	13.97%
1.10	13.75%
1.20	13.52%
1.30	13.29%
1.40	13.06%
1.50	12.82%
1.60	12.59%
1.70	12.35%
1.80	12.11%
1.90	11.87%
2.00	11.63%

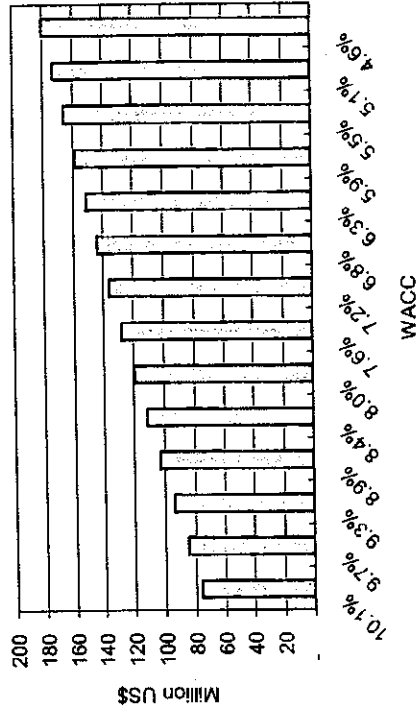
Figure 3.4-5 Sensitivity to Steam Rate



WACC and Accumulated Cash

WACC	Accumulated Cash
10.13%	76
9.71%	85
9.29%	94
8.87%	103
8.44%	111
8.02%	120
7.60%	128
7.18%	136
6.76%	144
6.33%	151
5.91%	159
5.49%	166
5.07%	173
4.64%	180

Figure 3.4-6 Sensitivity to Interest Rate



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