Dry cooling versus applicant-propo								NPV discount ra		NPV of revenues				
Description	D	U (050	N 4 1 4\		0	. (40F N			0	s % of Beac		and escalation	rate calculator	with wet cooling
Parameter	Parameter Beacon dry cooling (250 Mw plant)				Genesis dry coolin	ig (125 ivi	w unit)			s % of Beac er-Mw basis	on	1	1.00799	\$55,874,000 \$55,874,000
	Calas Field	D # i-	Calas Field	D#:-	Calabrial Da		Salas Field	Solar Field	Solar Field S		alas Ciald	1	1.00799	
		•	Solar Field	Page # in	57.5 P. C.							1	1.01605	\$55,874,000 \$55,874,000
	Unchanged	VVP Study	Expanded	WP study	Unchanged WF			Expanded	UnchangedE			1		\$55,874,000
					manus manus de la companya de la co		2.00%	6.87%		12.00%	6.87%	1	1.03235 1.04060	\$55,874,000 \$55,874,000
A	000507	- 40	COOFO	7	000000 4	use DV	000 000	200 000	00.00/			1		\$55,874,000
Annual output with wet cooling	602527		60252	, )	280000 (N	- 1	280,000	280,000				1	1.04892 1.05730	\$55,874,000 \$55,874,000
Net generation impact (Mwh)	-45,162			•	-18,000 (N	vote B)	13,440	0.000				1		\$55,874,000
% reduction in net gen	-7.50%			Note A	-6.43%		4.80%	0.00%				1	1.06575	\$55,874,000
Revenue impact of net gen	-\$6,774,300		\$1		-\$5,039,450	~	\$2,184,000	\$(		70.00/	40.00/	1	1.07427	\$55,874,000
Capital cost	-\$20,497,000		-\$73,497,000			p. 8		-\$15,429,756		72.8%	42.0%		1.08286	\$55,874,000
Annual O&M cost impact	\$1,288,000	•	\$1,288,000			p. 20	\$746,000	\$746,000		115.8%	115.8%		1.09151	\$55,874,000
NPV of O&M cost impact	\$12,980,000	•	\$12,980,000	•	\$7,517,919		\$7,517,919	\$7,517,919		115.8%	115.8%	1	1.10023	\$55,874,000
NPV of generation impact	-\$63,860,000		\$6	)	-\$47,505,909		\$20,588,140	\$0				1	1.10903	\$55,874,000
Annual extra revenue with dry cooling due to higher price per kwh				\$0		\$0	\$0				1	1.11789	\$55,874,000	
NPV of extra revenue with dry cooling due to higher price per kwh			\$0		\$0	\$0	)			1	1.12682	\$55,874,000		
					11 42							1	1.13583	\$55,874,000
Total impact on NPV	-\$71,377,000		-\$60,517,000		-\$40,245,989		\$1,348,060	-\$7,911,836	5 112.8%	-4.5%	26.1%	. 1	1.14491	\$55,874,000
Reported total impact on NPV	-\$71,100,000	p. 17	-\$60,100,000	) p. 17								1	1.15406	\$55,874,000
												1	1.16328	\$55,874,000
Price at which output is sold (\$/Mw	h) \$150	p. 17	\$150	)	\$199.55		\$162.50	\$162.50	)			1	1.17258	\$55,874,000
												1	1.18195	\$55,874,000
NPV of 30-year output, wet cooling	\$1,133,424,875		\$1,133,424,87	5	\$526,713,268		\$526,713,268	\$526,713,268	3			1	1.19140	\$55,874,000
						4						1	1.20092	\$55,874,000
Total impact on NPV	-6.30%		-5.34%	,	-7.64%		0.26%	-1.50%	5			1	1.21051	\$55,874,000
												1	1.22019	\$55,874,000
		TOD												
	Wet price	mulitplier	Effective price	•								1	1.22994	\$55,874,000
Genesis revenue/Mwh - wet cooling	g: \$162.50	1.22	8 \$199.5	5								1	1.23977	\$55,874,000
Genesis revenue/Mwh - dry cooling	g: \$162.50	1,19	4 \$194.0	3								1	1.24968	\$55,874,000
												1	1.25967	\$55,874,000
						l	mplicit O&M in	flation rate		0.7992%				
					Per WP pp. 15, 17 for BS	SP: N	NPV/annual co	st for O&M		10.07764				
					Per WP p. 17 for BSP:	N	NPV/annual co	st for generation	on	9.42680				
						I	mplicit discour	t rate		10.000%		9.42680	10.0776	\$526,713,268

Note A:Should have been 4.1%, not zero, per Beacon FSA, pp. 6-9, 6-40, 6-44

Note B:Output based on actual contract quantitites, per AL3546-E-A, confidential appendices, pdf p. 13 of 67

Note C:Price based on the public estimate for Beacon, not the actual Genesis price

Dry cooling versus applicant-proposed technology

NPV discount rate calculator and escalation rate calculator

											aı	nu escalation i	ale calculator
Parameter	Beacon dry o	ooling (250	) Mw plant)		Genesis dry co	ooling (125	5 Mw unit)		Genesis	as % of Bea	acon	1	1
											s	1	1.00799
	Solar Field	Page # in	Solar Field	Page # in	Solar Field	Page # in	Solar Field	Solar Field	Solar FieldS	Solar FieldS	olar Field	1	1.01605
	Unchanged	WP study	Expanded	WP study	Unchanged	WP study	Expanded	Expanded	Unchange <sub>(</sub> E	Expanded E	xpanded	1	1.02417
							12.00%	6.87%		12.00%	6.87%	1	1.03235
												1	1.04060
Annual output with wet cooling	602527	7 p. 16	602527	•	280000	(Note B)	280,000	280,000	92.9%			1	1.04892
Net generation impact (Mwh)	-45,162	2 p. 17	0	١	-18,000	(Note B)	13,440	) (	79.7%			1	1.05730
% reduction in net gen	-7.50%	6 p. 16	0.00%	Note A	-6.43%		4.80%	0.00%	85.8%			1	1.06575
Revenue impact of net gen	-\$6,774,300	D p. 17	\$0	1	-\$5,039,450	)	\$2,184,000	) \$(	148.8%			1	1.07427
Capital cost	-\$20,497,000	D p. 17	-\$73,497,000	p. 17	-\$258,000	p. 8	-\$26,758,000	-\$15,429,756	5 2.5%	72.8%	42.0%	1	1.08286
Annual O&M cost impact	\$1,288,000	0 p. 15	\$1,288,000	ı	\$746,000	p. 20	\$746,000	\$746,000	115.8%	115.8%	115.8%	1	1.09151
NPV of O&M cost impact	\$12,980,000	0 p. 17	\$12,980,000	p. 17	\$7,517,919	}	\$7,517,919	\$7,517,919	115.8%	115.8%	115.8%	1	1.10023
NPV of generation impact	-\$63,860,000	D p. 17	\$0	ı	-\$47,505,909	)	\$20,588,140	) \$(	148.8%			1	1.10903
Annual extra revenue with dry cooling due to higher price per kwh					\$2,181,255	5	\$3,403,904	\$3,248,000	)			1	1.11789
NPV of extra revenue with dry cooling due to higher price per kwh					\$20,562,262	2	\$32,087,937	7 \$30,618,260	)			1	1.12682
												1	1.13583
Total impact on NPV	-\$71,377,000	0	-\$60,517,000	1	-\$19,683,727	7	\$33,435,996	\$22,706,424	4 55.2%	-110.5%	-75.0%	1	1.14491
Reported total impact on NPV	-\$71,100,000	0 p. 17	-\$60,100,000	p. 17								1	1.15406
												1	1.16328
Price at which wet-cooled output is s	old (\$/Mwh) \$150	0 p. 17	\$150	1	\$199.55	j	\$162.50	\$162.50	כ			1	1.17258
												1	1.18195
NPV of 30-year output, wet cooling	\$1,133,424,875	5	\$1,133,424,875	j	\$526,713,268	3	\$526,713,268	\$526,713,268	3			1	1.19140
												1	1.20092
Total impact on NPV	-6.30%	6	-5.34%		-3.74%	· )	6.35%	4.31%	, D			1	1.21051
												1	1.22019
		TOD											
		mulitplier	Effective price									1	1.22994
Genesis revenue/Mwh - wet cooling:	\$162.50	1.22	8 \$199.55									1	1.23977
Genesis revenue/Mwh - dry cooling:	\$174.10	1.19	4 \$207.88									1	1.24968
- · · · · · · · · · · · · · · · · · · ·												1	1.25967
Price increase for dry cooling:	7.14%	6	4.17%				Implicit O&M ir	nflation rate		0.7992%			
					Per WP pp. 15, 17 for BS	P:	NPV/annual co	st for O&M		10.07764			
					Per WP p. 17 for BSP:		NPV/annual co	st for generatio	n	9.42680			
					,		Implicit discou	-		10.000%		9.42680	10.0776
4							•						

Note A: Should have been 4.1%, not zero, per Beacon FSA, pp. 6-9, 6-40, 6-44

Note B: Output based on actual contract quantitites, per AL3546-E-A, confidential appendices, pdf p. 13 of 67

Note C:Price based on the actual Genesis contract assuming no Federal loan guarantee per AL3546-E-A, confidential appendices, pdf p. 13 of 67

NPV of revenues with wet cooling \$55,874,000

\$526,713,268

Dry cooling versus applicant-propose	ntee							NPV discount ra		NPV of revenues				
					,							and escalation ra	with wet cooling	
Parameter	Beacon dry co	oling (250	) Mw plant)			Genesis dry cooling (	25 Mw unit)		Genesis :	as % of Be	acon	1	1	\$55,874,000
							17.0			er-Mw bas		1	1.00799	\$55,874,000
	Solar Field			Page # in			in Solar Field	Solar Field	Solar FieldS			1	1.01605	\$55,874,000
	Unchanged	WP study	/ Expanded	WP study		Unchanged WP stu	dy Expanded	Expanded	Unchange <sub>1</sub> E	Expanded I	Expanded	1	1.02417	\$55,874,000
							12.00%	6.87%		12.00%	6.87%	. 1	1.03235	\$55,874,000
												1	1.04060	\$55,874,000
Annual output with wet cooling	602527		602527			280000 (Note	B) 280,000	280,000				1	1.04892	\$55,874,000
Net generation impact (Mwh)	-45,162	2 p. 17	0			-18,000 (Note	B) 13,44	) (	0 79.7%			1	1.05730	\$55,874,000
% reduction in net gen	-7.50%	p. 16	0.00%	Note A		-6.43%	4.80%	6 0.00%	6 85.8%			1	1.06575	\$55,874,000
Revenue impact of net gen	-\$6,774,300	p. 17	\$0			-\$5,039,450	\$2,184,00	) \$1	0 148.8%			1	1.07427	\$55,874,000
Capital cost	-\$20,497,000	p. 17	-\$73,497,000	p. 17		-\$258,000 p.8	-\$26,758,00	-\$15,429,75	6 2.5%	72.8%	42.0%	. 1	1.08286	\$55,874,000
Annual O&M cost impact	\$1,288,000	p. 15	\$1,288,000			\$746,000 p. 2	\$746,00	\$746,00	0 115.8%	115.8%	115.8%	. 1	1.09151	\$55,874,000
NPV of O&M cost impact	\$12,980,000	p. 17	\$12,980,000	p. 17		\$7,517,919	\$7,517,91	9 \$7,517,91	9 115.8%	115.8%	115.8%	. 1	1.10023	\$55,874,000
NPV of generation impact	-\$63,860,000	p. 17	\$0			-\$47,505,909	\$20,588,14	) \$1	0 148.8%			1	1.10903	\$55,874,000
Annual extra revenue with dry coolin	g due to higher	price per	kwh			\$3,870,526	\$4,988,48	\$4,760,000	0			1	1.11789	\$55,874,000
NPV of extra revenue with dry cooling due to higher price per kwh					\$36,486,691	\$47,025,42	4 \$44,871,58	8			1	1.12682	\$55,874,000	
												1	1.13583	\$55,874,000
Total impact on NPV	-\$71,377,000	)	-\$60,517,000			-\$3,759,298	\$48,373,48	4 \$36,959,75	2 10.5%	-159.9%	-122.1%	. 1	1.14491	\$55,874,000
Reported total impact on NPV	-\$71,100,000	p. 17	-\$60,100,000	p. 17								1	1.15406	\$55,874,000
												1	1.16328	\$55,874,000
Price at which output is sold (\$/Mwh)	) \$150	p. 17	\$150			\$199.55	\$162.5	\$162.50	0			1	1.17258	\$55,874,000
												1	1.18195	\$55,874,000
NPV of 30-year output, wet cooling	\$1,133,424,875	5	\$1,133,424,875			\$526,713,268	\$526,713,26	\$526,713,26	8			1	1.19140	\$55,874,000
												1	1.20092	\$55,874,000
Total impact on NPV	-6.30%	, )	-5.34%			-0.71%	9.189	6 7.029	6			1	1.21051	\$55,874,000
												1	1.22019	\$55,874,000
		TOD												
		mulitplier	Effective price									1	1.22994	\$55,874,000
Genesis revenue/Mwh - wet cooling:	\$162.50	1.22	8 \$199.55									1	1.23977	\$55,874,000
Genesis revenue/Mwh - dry cooling:	\$179.50	1.19	4 \$214.32									1	1.24968	\$55,874,000
												1	1.25967	\$55,874,000
Price increase for dry cooling:	10.46%	<b>)</b>	7.40%				Implicit O&M	inflation rate		0.7992%				
				Per W	er WP pp	. 15, 17 for BSP:	NPV/annual c	ost for O&M	10.07764					
				Pe	er WP p.	17 for BSP:	NPV/annual c	ost for generation	on	9.42680				
					•		Implicit discou	ınt rate		10.000%		9.42680	10.0776	\$526,713,268
							•							

Note A: Should have been 4.1%, not zero, per Beacon FSA, pp. 6-9, 6-40, 6-44

Note B: Output based on actual contract quantitites, per AL3546-E-A, confidential appendices, pdf p. 13 of 67

Note C: Price based on the actual Genesis contract assuming a Federal loan guarantee,
per AL3546-E-A, confidential appendices, pdf p. 13 of 67