Exhibit Number	:	DRA-3
Commissioner	:	Geoffrey F. Brown
Admin. Law Judge	:	Jeffrey P. O'Donnell

Division of Ratepayer Advocates

California Public Utilities Commission
State of California

COST-EFFECTIVENESS ANALYSIS OF SDG&E'S PARTICIPATION IN SCE'S STEAM GENERATOR REPLACEMENT PROJECT AT SAN ONOFRE NUCLEAR GENERATION STATION

Quantitative Effect of Updating Price Of Hedging Natural Gas Prices

Application No. 06-04-018

San Francisco, California
August 2006

SUMMARY

DRA updated SDG&E's cost-effectiveness analysis by replacing SDG&E's price of 40¢ for hedging natural gas prices with 8.2¢ per 2005 Market Price Referent Decision No. 05-12-042 and Advice Letter E-3980.

Comparison Table
Most Likely Scenario
Total NPV (2005 $s)

Dollars in Millions

Alternatives:	SDG&E Participates in SGRP	SDG&E 90% Owner of CCGT	CCGT-SONGS
SDG&E	1,390	1,411	21
DRA Update	1,389	1,380	(9)
Difference	(23)	No Effect	

Table 2 Hedging Price Update
Total Cost of SDG&E Alternatives During 2009-22
Summary of Results ($ millions)

Description	SDG&E Participates in SGRP			~ 90% Owner of CCCT		
	Low	Most Likely	High	Low	Most Likely	High
Standard Items						
Fuel Costs includes hedging price	142	142	142	447	671	1,020
Operating & Maintenance	749	749	843	106	105	103
NDT Contributions	71	71	71	0	0	0
Capital - Routine (non-SGRP)	155	155	179	0	0	0
Capital - SGRP	173	173	205	0	0	0
Capital - CTCC Power Plant	0	0	0	294	294	294
Capital - Transmission	0	0	0	2	2	2
PPA Costs	0	0	0	239	324	461
Sub-Total Standard Items NPV (200:	1,290	1,290	1,439	1,088	1,396	1,881
Additional Items						
SONGS Ownership Credits				(105)	(105)	(105)
Supplemental Costs	0	33	95	0	29	81
Environmental Cost Adder				61	61	61
Nuclear Cost Adder	61	61	61			
Increase Due to Parity ROE on Existing Plant	4	4	4			
Sub-Total Additional Items NPV (20	66	99	161	(44)	(15)	37
Total NPV (2005$)	**1,356**	**1,389**	**1,600**	**1,044**	**1,380**	**1,918**

Table 1
NPV of Costs to Customers in 2005 $

($ millions)	**Most Likely Scenario**	**Lowest Scenario**	**Highest Scenario**	**Low to High Range**	**Most Likely to High Range**
SONGS	1,389	1,356	1,600	244	211
CCCT	1,380	1,044	1,918	874	537

Case	Most Likely (000)	High (000)
CCCT CASE	1,380,488,559	
BASE CASE - SONGS	1,388,966,097	1,537,825,072
Difference from CCCT Case	**(8,477,539)**	**(157,336,513)**

DRA Hedging Price
Replaced SDGE's price of $.4/mWhr with $.082 per 2005 MRP D0512042

Aver Diff 3.945

Hedging Adder by Case				Fuel Costs by Month Combine Cycle Plant			Fuel Costs by Month Combine Cycle Plant			Fuel Costs by Month Combine Cycle Plant	
0.082	0.082	0.082									
Gas Costs by Month			CCCT 88%	CCCT 88%	CCCT 88%	CCCT 85.5%	CCCT 85.5%	CCCT 85.5%	CCCT 83%	CCCT 83%	CCCT 83%
Low Case	Expected Case	High Case	Low Case	Expected Case	High Case	Low Case	Expected Case	High Case	Low Case	Expected Case	High Case
4.559	7.056	11.075	9,888,507	15,305,119	24,020,981	9,888,507	15,305,119	24,020,981	9,720,906	15,045,710	23,613,846
4.898	7.601	11.952	10,803,214	16,766,693	26,362,518	10,803,214	16,766,693	26,362,518	10,803,214	16,766,693	26,362,518
5.229	8.134	12.809	11,918,397	18,540,575	29,196,311	11,918,397	18,540,575	29,196,311	11,341,701	17,643,450	27,783,586
5.991	9.353	14.764	6,606,988	10,315,539	16,282,962	6,606,988	10,315,539	16,282,962	5,946,290	9,283,985	14,654,666
5.992	9.356	14.768	9,252,039	14,445,384	22,801,987	9,252,039	14,445,384	22,801,987	9,252,039	14,445,384	22,801,987
5.881	9.176	14.479	6,702,034	10,457,951	16,501,593	6,702,034	10,457,951	16,501,593	6,702,034	10,457,951	16,501,593
4.722	7.312	11.479	9,981,785	15,456,476	24,265,794	9,981,785	15,456,476	24,265,794	9,981,785	15,456,476	24,265,794
4.612	7.135	11.194	10,512,001	16,262,282	25,515,051	10,512,001	16,262,282	25,515,051	10,512,001	16,262,282	25,515,051
4.647	7.192	11.286	10,251,026	15,863,398	24,894,258	10,251,026	15,863,398	24,894,258	10,251,026	15,863,398	24,894,258
4.685	7.252	11.384	10,162,060	15,730,768	24,691,368	10,162,060	15,730,768	24,691,368	9,817,583	15,197,521	23,854,372
4.720	7.309	11.474	10,758,504	16,658,930	26,153,296	10,758,504	16,658,930	26,153,296	10,758,504	16,658,930	26,153,296
4.731	7.326	11.502	10,435,560	16,160,331	25,372,052	10,435,560	16,160,331	25,372,052	10,435,560	16,160,331	25,372,052
4.771	7.391	11.606	5,437,239	8,422,772	13,226,789	5,437,239	8,422,772	13,226,789	5,437,239	8,422,772	13,226,789
5.125	7.960	12.522	10,173,482	15,801,774	24,858,250	6,876,520	10,680,829	16,802,335	4,238,951	6,584,072	10,357,604
5.471	8.516	13.417	11,865,823	18,472,290	29,102,748	11,865,823	18,472,290	29,102,748	10,860,244	16,906,842	26,636,413
6.246	9.757	15.408	7,577,269	11,837,371	18,692,297	7,577,269	11,837,371	18,692,297	7,118,041	11,119,955	17,559,430
6.247	9.760	15.412	9,186,805	14,351,927	22,663,119	9,186,805	14,351,927	22,663,119	9,186,805	14,351,927	22,663,119
6.131	9.573	15.112	13,975,435	21,820,504	34,443,994	13,975,435	21,820,504	34,443,994	13,975,435	21,820,504	34,443,994
4.925	7.632	11.988	10,320,661	15,993,432	25,121,479	10,320,661	15,993,432	25,121,479	8,510,019	13,187,566	20,714,202
4.811	7.448	11.692	5,482,359	8,487,983	13,324,327	5,482,359	8,487,983	13,324,327	5,482,359	8,487,983	13,324,327
4.847	7.507	11.787	10,692,345	16,559,216	25,999,591	10,692,345	16,559,216	25,999,591	10,692,345	16,559,216	25,999,591
4.887	7.570	11.889	10,599,383	16,420,395	25,786,977	10,599,383	16,420,395	25,786,977	10,599,383	16,420,395	25,786,977
4.923	7.629	11.983	10,497,378	16,267,022	25,550,949	10,497,378	16,267,022	25,550,949	10,316,388	15,986,556	25,110,416
4.934	7.647	12.012	10,884,449	16,868,331	26,496,987	10,884,449	16,868,331	26,496,987	9,886,708	15,322,067	24,068,097
4.976	7.714	12.120	10,335,916	16,023,360	25,175,019	7,043,058	10,918,573	17,154,659	5,213,692	8,082,580	12,698,903
5.344	8.307	13.074	5,894,191	9,161,424	14,418,724	5,894,191	9,161,424	14,418,724	5,894,191	9,161,424	14,418,724
5.704	8.886	14.006	12,163,331	18,947,705	29,864,433	12,163,331	18,947,705	29,864,433	12,163,331	18,947,705	29,864,433
6.521	10.200	16.119	14,144,051	22,123,249	34,962,566	14,144,051	22,123,249	34,962,566	14,144,051	22,123,249	34,962,566
6.523	10.202	16.123	10,550,674	16,502,827	26,080,429	10,550,674	16,502,827	26,080,429	10,550,674	16,502,827	26,080,429
6.402	10.007	15.810	-	-	-	-	-	-	-	-	-
5.142	7.981	12.548	5,670,958	8,801,780	13,839,581	5,670,958	8,801,780	13,839,581	5,670,958	8,801,780	13,839,581
5.022	7.788	12.239	5,723,580	8,875,675	13,947,706	5,723,580	8,875,675	13,947,706	5,723,580	8,875,675	13,947,706
5.061	7.850	12.338	5,581,410	8,657,688	13,607,723	5,581,410	8,657,688	13,607,723	5,581,410	8,657,688	13,607,723
5.102	7.916	12.444	5,251,560	8,148,484	12,809,921	3,938,670	6,111,363	9,607,440	3,938,670	6,111,363	9,607,440
5.140	7.977	12.543	5,857,564	9,091,268	14,294,618	5,857,564	9,091,268	14,294,618	5,857,564	9,091,268	14,294,618
5.152	7.996	12.574	5,681,712	8,819,083	13,867,424	4,166,588	6,467,328	10,169,444	4,166,588	6,467,328	10,169,444
5.195	8.066	12.686	2,864,807	4,448,081	6,995,725	2,864,807	4,448,081	6,995,725	2,864,807	4,448,081	6,995,725
			-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-
			104,846,639	162,286,289	254,712,353	99,038,307	153,291,330	240,589,796	93,761,166	145,105,952	227,724,777
			103,090,656	159,622,585	250,588,035	102,942,679	159,394,213	250,230,298	102,273,036	158,355,636	248,598,071
			98,633,983	152,348,054	238,779,292	93,160,840	143,899,188	225,542,195	88,439,799	136,600,869	214,096,780
			98,063,050	151,242,441	236,813,325	97,922,754	151,026,846	236,476,568	96,929,214	149,489,079	234,063,086
			96,731,946	149,222,871	233,685,948	91,452,090	141,082,803	220,943,515	86,836,009	133,955,698	209,775,925
			101,325,542	156,564,014	245,448,164	101,180,593	156,340,822	245,099,070	100,153,892	154,749,026	242,597,981
			106,028,075	164,042,633	257,393,780	100,144,389	154,944,596	243,123,535	95,069,759	147,086,844	230,787,464
			115,029,565	178,463,918	280,536,048	114,864,986	178,209,373	280,136,739	113,699,610	176,395,841	277,280,262
			112,138,543	174,047,894	273,666,147	108,841,581	168,926,949	265,610,233	104,193,258	161,699,944	254,233,875
			117,609,521	182,738,670	287,537,895	114,316,663	177,633,883	279,517,535	109,038,696	169,447,878	266,652,212
			61,326,316	95,468,136	150,405,694	58,498,303	91,079,260	143,505,234	58,498,303	91,079,260	143,505,234

Natural Gas Forecast for MPR Baseload Proxy

Year	NYMEX Futures Contract Average	2011 - 2013 Linear Interpolation	Average HHub Fundamental Forecast	MPR Hhub Forecast	Combined CA Basis Forecast	PG&E/SoCal Average Distribution Rate w/ Escalation	Average Franchise Fee Surcharge	Hedging Transaction Cost	MPR CA Gas Forecast (nominal$)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
2006	$11.04		$8.22	$11.04	-$0.83	$0.316	$0.137	$0.082	$10.75
2007	$9.53		$7.01	$9.53	-$0.54	$0.323	$0.121	$0.082	$9.52
2008	$8.36		$6.56	$8.36	-$0.54	$0.331	$0.105	$0.082	$8.35
2009	$7.58		$6.10	$7.58	-$0.54	$0.339	$0.095	$0.082	$7.56
2010	$7.04		$5.93	$7.04	-$0.54	$0.348	$0.087	$0.082	$7.02
2011		$6.87	$5.88	$6.87	-$0.54	$0.356	$0.085	$0.082	$6.86
2012		$6.71	$6.03	$6.71	-$0.54	$0.365	$0.083	$0.082	$6.70
2013		$6.55	$6.28	$6.55	-$0.54	$0.374	$0.081	$0.082	$6.55
2014			$6.39	$6.39	-$0.54	$0.383	$0.078	$0.082	$6.39
2015			$6.45	$6.45	-$0.54	$0.392	$0.079	$0.082	$6.46
2016			$6.64	$6.64	-$0.54	$0.402	$0.082	$0.082	$6.66
2017			$6.94	$6.94	-$0.54	$0.412	$0.086	$0.082	$6.99
2018			$7.16	$7.16	-$0.54	$0.422	$0.089	$0.082	$7.22
2019			$7.51	$7.51	-$0.54	$0.432	$0.094	$0.082	$7.58
2020			$7.80	$7.80	-$0.54	$0.443	$0.097	$0.082	$7.89
2021			$8.08	$8.08	-$0.54	$0.454	$0.101	$0.082	$8.18
2022			$8.41	$8.41	-$0.54	$0.465	$0.106	$0.082	$8.53
2023			$8.74	$8.74	-$0.54	$0.476	$0.110	$0.082	$8.88
2024			$9.10	$9.10	-$0.54	$0.488	$0.115	$0.082	$9.25
2025			$9.46	$9.46	-$0.54	$0.500	$0.120	$0.082	$9.62
2026			$9.78	$9.78	-$0.54	$0.512	$0.124	$0.082	$9.96
2027			$10.13	$10.13	-$0.54	$0.525	$0.129	$0.082	$10.33
2028			$10.47	$10.47	-$0.54	$0.537	$0.133	$0.082	$10.68
2029			$10.83	$10.83	-$0.54	$0.550	$0.138	$0.082	$11.06
2030			$11.25	$11.25	-$0.54	$0.550	$0.144	$0.082	$11.49
2031			$11.57	$11.57	-$0.54	$0.564	$0.148	$0.082	$11.83

linear interpolation	-0.162565

20-yr Levelized Natural Gas Forecast

2006	$7.91
2007	$7.64
2008	$7.50
2009	$7.47
2010	$7.53
2011	$7.89
2012	$7.84