819 N. HARBOR DRIVE BUILDING ~ CO-GENERATOR PROJECT OPERATIONAL PRO FORMA

				1ST YEAR		2ND YEAR		3RD YEAR		TOTAL
	SAVINGS	**UNITS**	**TOTAL**	**RATE**	**TOTAL**	**RATE**	**TOTAL**	**RATE**	**TOTAL**	**3 YEARS**
1	Microturbine electric output - peak hours	kwh	152,852	$ 0.09187	$ 14,043	$ 0.09513	$ 14,541	$ 0.09513	$ 14,541	$ 43,124
2	Microturbine electric output - off-peak hours	kwh	45,990	$ 0.10659	$ 4,902	$ 0.09513	$ 4,375	$ 0.09513	$ 4,375	$ 13,652
3	Electric demand reduction credit	kw/mo	25	$ 7.35	$ 2,205	$ 6.21	$ 1,863	$ 6.21	$ 1,863	$ 5,931
4	Electric summer demand reduction credit	kw/4mo	25	$ 20.67	$ 2,067	$ 8.91	$ 891	$ 8.91	$ 891	$ 3,849
5	Swimming pool gas water heating cost	therms	11,075	$ 0.87892	$ 9,734	$ 0.78034	$ 8,642	$ 0.78034	$ 8,642	$ 27,019
	Plus City Utility Users Tax 4.75% (1-4)				$ 1,565		$ 1,440		$ 1,440	$ 4,445
	TOTAL SAVINGS				**$ 34,516**		**$ 31,752**		**$ 31,752**	**$ 98,020**
	EXPENSES									
6	Microturbine natural gas fuel	therms	24,000	$ 0.87892	$ 21,094	$ 0.78034	$ 18,728	$ 0.78034	$ 18,728	$ 58,550
	Plus City Utility Users Tax 4.75% (5)				$ 1,002		$ 890		$ 890	$ 2,781
7	Microturbine routine maintenance	hrs	8,688	$ 0.138	$ 1,199	$ 0.138	$ 1,199	$ 0.138	$ 1,199	$ 3,597
8	Microturbine five year overhaul reserve	hrs	8,688	$ 0.276	$ 2,398	$ 0.276	$ 2,398	$ 0.276	$ 2,398	$ 7,194
	Sub-total of Mircoturbine Expenses	kWh	198,842	$ 0.129	**$ 25,693**	$ 0.117	**$ 23,215**	$ 0.117	**$ 23,215**	**$ 72,122**
9	Electric standby power charge	kw/mo	29	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Electric generation reservation charge	kw/mo	29	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Electric departing load charge	kwh	198,842	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Plus City Utility Users Tax 4.75% (8-10)				$ -		$ -		$ -	$ -
	Sub-total of Electric Expenses				**$ -**		**$ -**		**$ -**	**$ -**
	TOTAL EXPENSES	kwh	198,842	$ 0.12921	**$ 25,693**		**$ 23,215**		**$ 23,215**	**$ 72,122**
	NET ANNUAL SAVINGS				**$ 8,823**		**$ 8,537**		**$ 8,537**	**$ 25,898**

1	Capstone microturbine peak electric output = (28 kw/hr x 15 hrs/day) x 365 days less routine maintenance downtime (28 kw/hr x 16 hrs). Current average Block 2 Energy Charge $.13481/kWh less proposed 20% reduction.
2	Capstone microturbine off-peak electric output = (14 kw/hr x 9 hrs/day) x 365 days. Current average Block 1 Energy Charge $0.11942/kWh less 20%
3	SCE currently charges $5.40 per the maximum kw of demand every monthly billing period.
4	SCE currently charges an additional $7.75 per the maximum kw of demand during the summer months (Jun-Sep).
5	Capstone microturbine exhaust heat output = 80% of estimated annual gas used to heat the pool & spa (22,150 x 80% = 17,720 therms/year).
6	Capstone microturbine gas input = (Peak 4.1 therms/hr x 15 hrs/day) + (Off-Peak 2.5 therms/hr x 9 hrs/day) x 365 days/year less routine maintenance downtime (4.1 therms/hr x 16 hrs/year). Average Commodity Tier 2 gas rates- 2002 = $0.5228/therm & Jan-Apr 2003 = $0.72421/therm.
7	Routine maintenance covers labor & materials for replacing the inlet air filter & external fuel filter annually and thermocouples & igniter bi-annually.
8	Five year overhaul reserve covers replacing the rotor (only moving part) after 40,000 hrs of operation.
9	SCE currently charges $6.40/kw & credits $5.40/kw back for a net cost of $1.00/kw per the self-generator output for standby power.
10	SCE currently charges an additional $0.37/kw per the self-generator output as a generation reservation charge for standby power.
11	PUC currently requires all self-generators to contribute towards the nuclear decommissioning and public purpose programs.

CAPSTONE vs EDISON ELECTRIC GENERATING COST PER KWH

EDISON COST	UNITS	QTY	RATE	TOTAL
Facilities Related Demand Charge	kW	28	$ 9.62	$ 269
Summer Time Related Demand Charge	kW	28	$ 16.86	$ 472
Block 1 Energy Charge	kWh	-	$ -	$ -
Block 2 Energy Charge	kWh	12,600	$ 0.10660	$ 1,343
Redondo Beach UUT	TL Chrgs	$ 2,085	4.75%	$ 99
State Tax	kWh	12,600	$ 0.00030	$ 4
EDISON PER MONTH COST				**$ 2,187**
EDISON PER KWH COST				**$ 0.17360**

CAPSTONE COST	UNITS	QTY	RATE	TOTAL
Gas Co. Commodity Charge Tier 1	Therms	250	$ 1.06914	$ 267
Gas Co. Commodity Charge Tier 2	Therms	1,750	$ 0.85970	$ 1,504
State Regulatory Fee	Therms	2,000	$ 0.00068	$ 1
Public Purpose Surcharge	Therms	1,845	$ 0.04961	$ 92
Redondo Beach City Users Tax	TL Chrgs	$ 1,865	4.75%	$ 89
Microturbine routine maintenance expense	Hours	667	$ 0.208	$ 139
Microturbine five (5) year overhaul reserve	Hours	667	$ 0.276	$ 184
Sub-total of Capstone Costs				**$ 2,276**
Edison Standby Power Charge	kW	28	$ 4.20	$ 1,411
Edison Generation Reservation Charge	kW	28	$ -	$ -
Edison Departing Load Charge	kWh	12,600	$ -	$ -
Redondo Beach UUT	TL Chrgs	$ 1,411	4.75%	$ 67
Sub-total of Edison Costs				**$ 1,478**
Edison Facilities Related Demand Charge	kW	28	$ 9.62	$ (269)
Edison Summer Time Related Demand Charge	kW	28	$ 16.86	$ (472)
Redondo Beach UUT	TL Chrgs	$ (741)	4.75%	$ (35)
Sub-total of Edison Savings				**$ (777)**
CAPSTONE COST PER MONTH				**$ 2,978**
CAPSTONE COST PER KWH				**$ 0.23632**

COST DIFFERENTIAL PER MONTH	**$ (790.29)**
COST DIFFERENTIAL PER KWH	**$ (0.06272)**

ELECTRICITY PER GS-2 RATE	**-01/12**	**01/12-**	**-02/11**	**02/11-03/11**	**03/11-04/12**	**04/12-05/11**	**05/11-06/10**	**06/10-07/12**
Demand Charges (per kW)								
Delivery Related	4.47	4.47	4.47	4.47	4.47	4.47	4.47	4.47
Summer Time Related							5.48	5.48
Generation Related	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Summer Time Related							2.27	2.27
Total Demand Charges	**5.4**	**5.4**	**5.4**	**5.4**	**5.4**	**5.4**	**13.15**	**13.15**
Block 1 Energy Charges (per kWh):								
Delivery Related	0.01306	0.0128	0.01272	0.01286	0.01286	0.01286	0.01286	0.01286
Generation Related - DWR	0.10287	0.08918	0.10287	0.08918	0.08918	0.08918	0.08918	0.08918
Generation Related - SCE	0.07934	0.07934	0.07934	0.07934	0.07934	0.07934	0.07934	0.07934
Block 2 Energy Charges (per kWh):								
Delivery Related	0.01306	0.01286	0.01272	0.01286	0.01286	0.01286	0.01286	0.01286
Generation Related - DWR	0.10287	0.08918	0.10287	0.08918	0.08918	0.08918	0.08918	0.08918
Generation Related - SCE	0.09597	0.09597	0.09597	0.09597	0.09597	0.09597	0.09597	0.09597
DWR Bond Charge (per kWh)	0.00444	0.00493	0.00444	0.00493	0.00493	0.00493	0.00493	0.00493

NATURAL GAS PER GN-10 RATE	**12/29-01/28**	**01/28-03/01**	**03/01-03/30**	**03/30-04/28**	**04/28-05/26**	**05/26-06/28**	**06/28-07/27**	**07/27-08/25**
Customer Charge (per day)	0.49315	0.49315	0.49315	0.49315	0.49315	0.49315	0.49315	0.49315
Commodity Tier 1 (per therm)	0.97188	0.94788	0.91756	0.91162	0.98780	1.05670	1.02930	1.00070
Commodity Tier 2 (per therm)	0.77966	0.75508	0.72475	0.71874	0.79498	0.86389	0.83641	0.80788

ELECTRICITY PER GS-2 RATE	07/12-08/10	08/10-09/09	09/09-10/	10/ -11/	11/ -12/	12/ -01/	AVERAGE
Demand Charges (per kW)							
Delivery Related		5.44					
Summer Time Related		7.04					
Generation Related		0.77					
Summer Time Related		1.87					
Total Demand Charges		**15.12**					
Block 1 Energy Charges (per kWh):							
Delivery Related		0.01404					**0.01299**
Generation Related - DWR		0.09056					**0.09238**
Generation Related - SCE		0.06539					**0.07779**
Block 2 Energy Charges (per kWh):							
Delivery Related		0.01404					**0.01300**
Generation Related - DWR		0.09056					**0.09238**
Generation Related - SCE		0.07910					**0.09410**
DWR Bond Charge (per kWh)		0.00493					**0.00482**

NATURAL GAS PER GN-10 RATE	08/25-09/24	09/24-10/25	AVERAGE
Customer Charge (per day)	0.49315	0.49315	
Commodity Tier 1 (per therm)	0.93450	0.92900	**0.96869**
Commodity Tier 2 (per therm)	0.74164	0.73615	**0.77592**