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 FACIL: 50-361 San Onofre Nuclear Station, Unit 2, Southern California 05000361  
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 RECIP. NAME RECIPIENT AFFILIATION  
 MIRAGLIA, F. Licensing Branch 3

SUBJECT: Forwards revised Tables 8.1, 8.3, 8.4 & 8.5 from "Need for Station" chapter of DES re facility operation. Tables have been updated to include current recorded data for 1980 & revised projections for 1981-1985.

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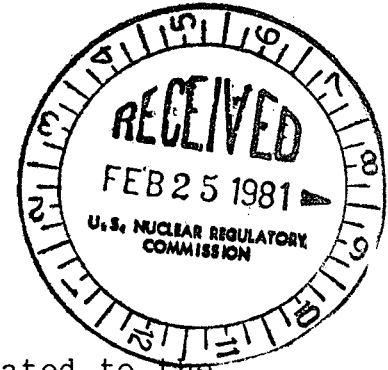
**SCE**

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MANAGER OF NUCLEAR ENGINEERING,  
SAFETY, AND LICENSING

TELEPHONE  
(213) 572-1401

Office of Nuclear Reactor Regulation  
Attention: Mr. Frank Miraglia, Branch Chief  
Licensing Branch 3  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555



Gentlemen:

Subject: Docket No. 50-361 and 50-362  
Draft Environmental Statement Related to the  
Operation of San Onofre Nuclear  
Generating Station Units 2 and 3

Enclosed are four tables from the "Need for the Station" chapter of the Draft Environmental Statement related to the operation of San Onofre Nuclear Generating Station, Units 2 and 3. These tables have been updated to include the latest recorded data (1980) and revised projections for 1981 through 1985. Table 8.1 shows the generating stations and production costs for the Southern California Edison Company. Tables 8.3 and 8.4 show recorded and forecasted peak demand, energy requirements, installed generating capacity, and reserve margins through 1985 for the Southern California Edison and San Diego Gas & Electric Companies. Table 8.5 presents the electrical energy sales forecast for San Diego Gas & Electric through 1997.

Please find enclosed six copies of revised Tables 8.1, 8.3, 8.4, and 8.5, dated January 1981. Table 8.2, generating stations and production costs for San Diego Gas and Electric Company is not included because 1980 data will not be available until March 1981. This information supersedes the information previously submitted. Should you have any questions regarding this information, please contact me.

Sincerely,

*KP Baskin*

Enclosure

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3/1*

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Revised Table 8.1. Southern California Edison Co. thermal-electric  
generating stations and production costs

Station Name	On-line dates for first and last unit	Function	Fuel Type	Total Station Capacity (MW)	1980 Production Cost (dollars/MWhr)*
Long Beach	1928-1977	P	Oil/gas	156 530	77.9 38.1
Redondo Beach	1948-1967	B, I	Oil/gas	642	41.5 31.8
Huntington Beach	1958-1969	I, P	Oil/gas	870 114	39.3 49.2
Mandalay	1959-1970	I, P	Oil/gas	430 117	44.0 94.7
Ormond Beach	1971-1973	I	Oil/gas	1,500	50.6
Alamitos	1956-1969	B, I, P	Oil/gas	990 960 114	41.6 45.5 80.7
El Segundo	1955-1965	I	Oil/gas	1,020	41.8
Etiwanda	1953-1969	I, P	Oil/gas	904 108	42.2 71.8
Mohave	1971	B	Coal	885	11.8
Four Corners	1969-1970	B	Coal	768	4.6
San Onofre Unit 1	1967	B	Nuclear	349	9.0
Coolwater	1961-1978	I	Oil/gas	146 482	29.2 56.7
Highgrove	1952-1955	P	Oil/gas	154	50.5
San Bernardino	1957-1958	P	Oil/gas	126	35.0
Garden State	1967	P	Oil/gas	12	67.0
Ellwood	1974	P	Oil/gas	48	61.6

Note: B = base, I = intermediate, and P = peaking.

\*Fuel Only

Revised Table 8.3. Southern California Edison Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1985 <sup>a</sup>

Year	Area Peak Demand (MW)	Growth <sup>b</sup> (%)	Total Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW)		Reserve Margin (%)	
					With SONGS 2 & 3	Without SONGS 2 & 3	With SONGS 2 & 3	Without SONGS 2 & 3
1976	11292		59428		14071	14071	24.6	24.6
1977	11564	2.4	63345	6.6	14278	14278	23.5	23.5
1978	12159	2.9	63877	0.8	14966	14966	23.1	23.1
1979	12662	4.1	66217	3.7	15071	15071	19.0	19.0
1980	12841	1.4	65459	-1.1	15504	15504	20.7	20.7
1981	11274	3.4	67120	2.5	15471	15471	16.6	16.6
1982	13647	2.1	67910	1.2	16184	15304	18.6	12.1
1983	13895	1.8	70220	3.4	17446	15686	25.6	12.9
1984	14305	3.0	72590	3.4	17837	16077	24.7	12.4
1985	14735	3.0	75130	3.5	17535	15775	19.0	7.1

a) Per November 18, 1980 Resource Plan.

b) Percentage increase over previous year.  
1976 through 1980 is recorded.

Revised Table 8.4. San Diego Gas & Electric Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1987

Year	Area Peak Demand <sup>a</sup> (MW)	Growth <sup>b</sup> (%)	Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW) <sup>c</sup>		Reserve Margin (%) <sup>c</sup>	
					With SONGS 2 & 3	Without SONGS 2 & 3	With SONGS 2 & 3	Without SONGS 2 & 3
1978 <sup>e</sup>	1981	13.5	10053	7.8	2030	2030	2.5	2.5
1979 <sup>e</sup>	2019	1.9	10548	4.9	2363	2363	17.0	17.0
1980 <sup>e</sup>	2050	3.7	10403	-1.4	2401 <sup>d</sup>	2401 <sup>d</sup>	17.1	17.1
1981	1975	-3.7	10738	3.2	2366	2366	19.8	19.8
1982	2004	1.5	10824	0.8	2586	2366	29.0	18.1
1983	2033	1.4	11108	2.6	2806	2366	38.0	16.4
1984	2077	2.2	11407	2.7	2806	2366	35.1	13.9
1985	2184	5.2	11762	3.1	2806	2366	28.5	8.3
1986	2272	4.0	12244	4.1	2806	2366	23.5	4.1
1987	2361	3.9	12763	4.2	2806	2366	18.8	0.0

<sup>a</sup> 1981-1987 SDG&E CFM III Forecast adopted by California Energy Commission in December 1980.

<sup>b</sup> Percentage increase over previous year.

<sup>c</sup> Excludes purchased capacity.

<sup>d</sup> July net rating.

<sup>e</sup> 1978 through 1980 are recorded.

REVISED  
TABLE 8.5. SAN DIEGO GAS & ELECTRIC CO.  
ELECTRIC ENERGY SALES FORECAST

Year	Total Area Sales (kWhr x 10 <sup>6</sup> ) **
*	1978
9,278	
*	1979
9,852	
*	1980
9,729	
**	1981
9,975	
	1982
10,054	
	1983
10,318	
	1984
10,596	
	1985
10,925	
	1986
11,373	
	1987
11,855	
	1988
12,209	
	1989
12,185	
	1990
12,521	
	1991
13,026	
	1992
13,351	
	1993
13,822	
	1994
13,980	
	1995
14,191	
	1996
14,495	
	1997
14,998	

\* Recorded.

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Mandalay	1959-1970	I, P	Oil/gas	430 117	44.0 94.7
Ormond Beach	1971-1973	I	Oil/gas	1,500	50.6
Alamitos	1956-1969	B, I, P	Oil/gas	990 960 114	41.6 45.5 80.7
El Segundo	1955-1965	I	Oil/gas	1,020	41.8
Etiwanda	1953-1969	I, P	Oil/gas	904 108	42.2 71.8
Mohave	1971	B	Coal	885	11.8
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Highgrove	1952-1955	P	Oil/gas	154	50.5
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Ellwood	1974	P	Oil/gas	48	61.6

Note: B = base, I = intermediate, and P = peaking.

1/81

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Revised Table 8.3. Southern California Edison Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1985 <sup>a</sup>

Year	Area Peak Demand (MW)	Growth <sup>b</sup> (%)	Total Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW)		Reserve Margin (%)	
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a) Per November 18, 1980 Resource Plan.

b) Percentage increase over previous year.  
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Revised Table 8.4. San Diego Gas & Electric Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1987

Year	Area Peak Demand <sup>a</sup> (MW)	Growth <sup>b</sup> (%)	Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW) <sup>c</sup>		Reserve Margin (%) <sup>c</sup>	
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1987	2361	3.9	12763	4.2	2806	2366	18.8	0.0

<sup>a</sup> 1981-1987 SDG&E CFM III Forecast adopted by California Energy Commission in December 1980.

<sup>b</sup> Percentage increase over previous year.

<sup>c</sup> Excludes purchased capacity.

<sup>d</sup> July net rating.

<sup>e</sup> 1978 through 1980 are recorded.

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TABLE 8.5. SAN DIEGO GAS & ELECTRIC CO.  
ELECTRIC ENERGY SALES FORECAST

Year	Total Area Sales (kWhr x 10 <sup>6</sup> ) **
* 1978	9,278
* 1979	9,852
* 1980	9,729
** 1981	9,975
1982	10,054
1983	10,318
1984	10,596
1985	10,925
1986	11,373
1987	11,855
1988	12,209
1989	12,185
1990	12,521
1991	13,026
1992	13,351
1993	13,822
1994	13,980
1995	14,191
1996	14,495
1997	14,998

\* Recorded.

\*\* 1981-1997, SDG&E CFM III Forecast adopted by the California Energy Commission in December 1980.

Revised Table 8.1. Southern California Edison Co. thermal-electric  
generating stations and production costs

Station Name	On-line dates for first and last unit	Function	Fuel Type	Total Station Capacity (MW)	1980 Production Cost (dollars/MW-hr)*
Long Beach	1928-1977	P	Oil/gas	156 530	77.9 38.1
Redondo Beach	1948-1967	B, I	Oil/gas	642	41.5 31.8
Huntington Beach	1958-1969	I, P	Oil/gas	870 114	39.3 49.2
Mandalay	1959-1970	I, P	Oil/gas	430 117	44.0 94.7
Ormond Beach	1971-1973	I	Oil/gas	1,500	50.6
Alamitos	1956-1969	B, I, P	Oil/gas	990 960 114	41.6 45.5 80.7
El Segundo	1955-1965	I	Oil/gas	1,020	41.8
Etiwanda	1953-1969	I, P	Oil/gas	904 108	42.2 71.8
Mohave	1971	B	Coal	885	11.8
Four Corners	1969-1970	B	Coal	768	4.6
San Onofre Unit 1	1967	B	Nuclear	349	9.0
Coolwater	1961-1978	I	Oil/gas	146 482	29.2 56.7
Highgrove	1952-1955	P	Oil/gas	154	50.5
San Bernardino	1957-1958	P	Oil/gas	126	35.0
Garden State	1967	P	Oil/gas	12	67.0
Ellwood	1974	P	Oil/gas	48	61.6

Note: B = base, I = intermediate, and P = peaking.

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\*Fuel Only

Revised Table 8.3. Southern California Edison Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1985 <sup>a</sup>

Year	Area Peak Demand (MW)	Growth <sup>b</sup> (%)	Total Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW)		Reserve Margin (%)	
					With SONGS 2 & 3	Without SONGS 2 & 3	With SONGS 2 & 3	Without SONGS 2 & 3
1976	11292		59428		14071	14071	24.6	24.6
1977	11564	2.4	63345	6.6	14278	14278	23.5	23.5
1978	12159	2.9	63877	0.8	14966	14966	23.1	23.1
1979	12662	4.1	66217	3.7	15071	15071	19.0	19.0
1980	12841	1.4	65459	-1.1	15504	15504	20.7	20.7
1981	11274	3.4	67120	2.5	15471	15471	16.6	16.6
1982	13647	2.1	67910	1.2	16184	15304	18.6	12.1
1983	13895	1.8	70220	3.4	17446	15686	25.6	12.9
1984	14305	3.0	72590	3.4	17837	16077	24.7	12.4
1985	14735	3.0	75130	3.5	17535	15775	19.0	7.1

a) Per November 18, 1980 Resource Plan.

b) Percentage increase over previous year.  
1976 through 1980 is recorded.

Revised Table 8.4. San Diego Gas & Electric Co. forecasts of peak demand, energy requirements, installed generating capacity, and reserve margins through 1987

Year	Area Peak Demand <sup>a</sup> (MW)	Growth <sup>b</sup> (%)	Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW) <sup>c</sup>		Reserve Margin (%) <sup>c</sup>	
					With SONGS 2 & 3	Without SONGS 2 & 3	With SONGS 2 & 3	Without SONGS 2 & 3
1978 <sup>e</sup>	1981	13.5	10053	7.8	2030	2030	2.5	2.5
1979 <sup>e</sup>	2019	1.9	10548	4.9	2363	2363	17.0	17.0
1980 <sup>e</sup>	2050	3.7	10403	-1.4	2401 <sup>d</sup>	2401 <sup>d</sup>	17.1	17.1
1981	1975	-3.7	10738	3.2	2366	2366	19.8	19.8
1982	2004	1.5	10824	0.8	2586	2366	29.0	18.1
1983	2033	1.4	11108	2.6	2806	2366	38.0	16.4
1984	2077	2.2	11407	2.7	2806	2366	35.1	13.9
1985	2184	5.2	11762	3.1	2806	2366	28.5	8.3
1986	2272	4.0	12244	4.1	2806	2366	23.5	4.1
1987	2361	3.9	12763	4.2	2806	2366	18.8	0.0

<sup>a</sup> 1981-1987 SDG&E CFM III Forecast adopted by California Energy Commission in December 1980.

<sup>b</sup> Percentage increase over previous year.

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Year	Area Peak Demand (MW)	Growth <sup>b</sup> (%)	Total Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW)		Reserve Margin (%)	
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Year	Area Peak Demand <sup>a</sup> (MW)	Growth <sup>b</sup> (%)	Energy Requirements kWhr x 10 <sup>6</sup>	Growth <sup>b</sup> (%)	Installed Capacity (MW) <sup>c</sup>		Reserve Margin (%) <sup>c</sup>	
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