Southern California Edison Company

23 PARKER STREET

IRVINE, CALIFORNIA 92718

September 14, 1994

WALTER C. MARSH
MANAGER OF NUCLEAR REGULATORY AFFAIRS

TELEPHONE
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U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: Docket Nos. 50-361 and 50-362
Monthly Operating Reports for August 1994
San Onofre Nuclear Generating Station, Units 2 and 3

Technical Specification 6.9.1.10 of Facility Operating Licenses NPF-10 and NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively, requires Edison to provide a Monthly Operating Report for each Unit, which includes: routine operating statistics and shutdown experience; all challenges to safety valves; any changes to the Offsite Dose Calculation Manual (ODCM); and any major changes to the radioactive waste treatment system. All covered activities are reported monthly, except for ODCM changes, which are reported within 90 days from the time the changes were made effective.

This letter transmits the August 1994 Monthly Operating Reports for Units 2 and 3, respectively. There were no challenges to safety valves, and no major changes to the Units 2 and 3 radioactive waste treatment systems during the reporting period.

If you require any additional information, please let me know.

Sincerely,

Walter C. Marsh

Enclosures

cc: L. J. Callan, Regional Administrator, NRC Region IV
A. B. Beach, Director, Division of Reactor Projects, NRC Region IV
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV
M. B. Fields, NRC Project Manager, Units 2 and 3
J. A. Sloan, Senior NRC Resident Inspector, San Onofre Units 1, 2 & 3

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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: August 1994
3. Licensed Thermal Power (MWt): 3390
4. Nameplate Rating (Gross MWe): 1127
5. Design Electrical Rating (Net MWe): 1070
6. Maximum Dependable Capacity (Gross MWe): 1127
7. Maximum Dependable Capacity (Net MWe): 1070
8. If Changes Occur In Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: NA
9. Power Level To Which Restricted, If Any (Net MWe): NA
10. Reasons For Restrictions, If Any: NA

		This Month	Yr.-to-Date	Cumulative
11.	Hours In Reporting Period	744.00	5,831.00	96,768.00
12.	Number Of Hours Reactor Was Critical	744.00	5,831.00	73,845.59
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	744.00	5,831.00	72,702.34
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	2,440,983.00	19,202,399.60	237,776,656.04
17.	Gross Electrical Energy Generated (MWH)	812,894.50	6,525,395.00	80,613,183.00
18.	Net Electrical Energy Generated (MWH)	774,791.00	6,217,669.00	76,472,367.88
19.	Unit Service Factor	100.00%	100.00%	75.13%
20.	Unit Availability Factor	100.00%	100.00%	75.13%
21.	Unit Capacity Factor (Using MDC Net)	97.33%	99.66%	73.86%
22.	Unit Capacity Factor (Using DER Net)	97.33%	99.66%	73.86%
23.	Unit Forced Outage Rate	0.00%	0.00%	5.71%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling Shutdown, February 11, 1994, Duration (65 days)
25. If Shutdown At End Of Report Period, Estimated Date of Startup: NA
26. Units In Test Status (Prior To Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	NA	NA
INITIAL ELECTRICITY	NA	NA
COMMERCIAL OPERATION	NA	NA

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: August 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1055.29	16	1038.58
2	1065.71	17	1054.13
3	1065.17	18	1056.46
4	1065.08	19	1060.33
5	1066.79	20	1061.04
6	1059.38	21	1056.92
7	1054.54	22	1056.33
8	1055.54	23	1056.50
9	1058.08	24	1056.25
10	1062.29	25	1030.67
11	1064.63	26	1017.79
12	1063.71	27	1059.17
13	790.25	28	1058.42
14	926.13	29	1057.75
15	1005.83	30	1053.54
		31	1050.67

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: August 1994

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	LER No.	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
85	940813	S	0.0	B	5	NA	KE	COND	Reduce reactor power to perform circulating water system heat treatment and water box cleaning.

[1]F-Forced
S-Scheduled

[2]Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

[3]Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Continuation from Previous Month
5-Reduction in the Average Daily Power Level of more than 20% from the previous day
6-Other (Explain)

[4]IEEE Std 805-1984

[5]IEEE Std 803A-1983

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

Date		Time	Event
August	01	0001	Unit is in Mode 1, 92.5% reactor power, 1040 MWe, to repair heater drain pump 2P059.
		0201	Commenced raising reactor power to 98% after completion of heater drain pump 2P059 outage.
		0436	Unit at 98%, 1113 MWe.
August	13	0100	Commenced lowering reactor power to 80% for circulating water system heat treatment, water box cleaning, and condensate pump maintenance.
		0317	Unit at 80% reactor power, 908 MWe
		1207	Circulating water heat treatment complete.
August	14	0001	Unit at 75% reactor power, 773 MWe for water box cleaning.
		0355	Commenced raising reactor power to 90% after completion of circulating water system heat treatment and water box cleaning.
		0600	Unit at 90% reactor power, 1003 MWe.
August	15	1145	Commenced raising reactor power to 98% after completion of condensate pump maintenance.
		1505	Unit at 98% reactor power, 1100 MWe.
August	25	2140	Commenced lowering reactor power to 80% for circulating water pump bumping and water box cleaning.
		2330	Unit at 80% reactor power, 908 MWe for circulating pump bumping.

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

Date		Time	Event
August	26	0330	Commenced raising power to 98% after completion of circulating water pump bumping and water box cleaning.
		0715	Unit at 98% power, 1115 MWe.
August	31	2400	Unit is in Mode 1, 98% reactor power, 1103 MWe.

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REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: August 1994

1. Scheduled date for next refueling shutdown.

   Cycle 8 refueling outage is forecast for February 11, 1995.

2. Scheduled date for restart following refueling.

   Restart from Cycle 8 refueling outage is forecast for April 15, 1995.

3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

   Yes

   What will these be?

   A. A proposed change to the Technical Specifications has been requested which will revise the minimum water level in the refueling cavity with only one train of shutdown cooling operable.

   B. A proposed change to the Technical Specifications and an exemption from 10 CFR 50 Appendix J has been requested to permit deferring the Integrated Leakrate Testing.

   C. A proposed change to the Technical Specifications has been requested to revise the allowed Linear Heat Rate from 13.9 to 13.0 kw/ft.

   D. A proposed change to the Final Safety Analysis has been requested to remove the diversity requirement of the pressurizer pressure transmitters providing input to the shutdown cooling open permissive interlock.

   E. Proposed change to the Technical Specifications (PCN 431), revising the automatic reset of the low pressurizer pressure bypass, has been revised to simplify the request.

   F. A proposed change to the Technical Specifications has been requested to allow a 3.0.4 exception for entering Modes 5 and 6 with the Control Room Emergency Air Cleanup System inoperable.

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REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

4. Scheduled date for submitting proposed licensing action and supporting information.

A.	Refueling Cavity Water Level	Submitted July 28, 1994
B.	Integrated Leakrate Testing	Submitted August 17, 1994
C.	Linear Heat Rate	Submittal Forecast Sept. 15, 1994
D.	Pressure Instrument Diversity	Submitted July 6, 1994
E.	Low Pressurizer Pressure Bypass	Revision submitted Sept. 6, 1994
F.	Control Room Air Cleanup System	Submitted Aug. 26, 1994

5. Important licensing considerations associated with refueling, e.g. new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

None.

6. The number of fuel assemblies.

A. In the core. 217

B. In the spent fuel storage pool. 662 Total Fuel Assemblies
592 Unit 2 Spent Fuel Assemblies
0 Unit 2 New Fuel Assemblies
70 Unit 1 Spent Fuel Assemblies

7. Licensed spent fuel storage capacity. 1542

Intended change in spent fuel storage capacity. None

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

Approximately 2005 (full off-load capability)

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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: August 1994
3. Licensed Thermal Power (MWt): 3390
4. Nameplate Rating (Gross MWe): 1127
5. Design Electrical Rating (Net MWe): 1080
6. Maximum Dependable Capacity (Gross MWe): 1127
7. Maximum Dependable Capacity (Net MWe): 1080
8. If Changes Occur In Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: NA
9. Power Level To Which Restricted, If Any (Net MWe): NA
10. Reasons For Restrictions, If Any: NA

		This Month	Yr.-to-Date	Cumulative
11.	Hours In Reporting Period	744.00	5,831.00	91,319.00
12.	Number Of Hours Reactor Was Critical	744.00	5,831.00	71,757.45
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	744.00	5,817.60	70,114.49
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	2,440,821.97	18,875,689.88	225,547,479.60
17.	Gross Electrical Energy Generated (MWH)	818,628.00	6,433,020.50	76,576,427.50
18.	Net Electrical Energy Generated (MWH)	774,245.00	6,090,930.00	72,353,968.94
19.	Unit Service Factor	100.00%	99.77%	76.78%
20.	Unit Availability Factor	100.00%	99.77%	76.78%
21.	Unit Capacity Factor (Using MDC Net)	96.36%	96.72%	73.36%
22.	Unit Capacity Factor (Using DER Net)	96.36%	96.72%	73.36%
23.	Unit Forced Outage Rate	0.00%	0.00%	6.35%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): None
25. If Shutdown At End Of Report Period, Estimated Date of Startup: NA
26. Units In Test Status (Prior To Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	NA	NA
INITIAL ELECTRICITY	NA	NA
COMMERCIAL OPERATION	NA	NA

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: August 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1050.88	16	1038.96
2	1053.96	17	1038.96
3	1052.88	18	1041.38
4	1053.83	19	1040.58
5	1056.63	20	1047.38
6	1044.42	21	1044.79
7	1047.21	22	1044.54
8	1034.63	23	1045.13
9	1049.42	24	1047.33
10	1027.42	25	1049.08
11	1052.42	26	1049.79
12	1051.00	27	860.54
13	1047.33	28	1046.58
14	1045.33	29	1053.00
15	1042.46	30	1050.63
		31	1051.75

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: August 1994

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	LER No.	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence

There were no unit shutdowns or reductions in the Average Daily Power Level of more than 20% this reporting period.

[1]F-Forced
S-Scheduled

[2]Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

[3]Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Continuation from Previous Month
5-Reduction in the Average Daily Power Level of more than 20% from the previous day
6-Other (Explain)

[4]IEEE Std 805-1984

[5]IEEE Std 803A-1983

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

Date		Time	Event
August	01	0001	Unit is in Mode 1, 97% reactor power, 1110 MWe.
August	08	1055	Commenced load reduction from 1098 MWe to 1025 MWe using the steam bypass control valves to repair high pressure governor valve.
		1405	Returned to full load 1096 MWe.
August	10	1016	Commenced lowering reactor power to <90% to repair Core Protection Calculator (CPC) C and Control Element Assembly Calculator (CEAC) 1.
		1120	Unit at 87% reactor power, 987 MWe.
		1430	Commenced raising reactor power to 97% after repair of CPC C and CEAC 1.
		1630	Unit at 97% reactor power, 1096 MWe.
August	27	0300	Commenced lowering reactor power to 80% for circulating water system heat treatment.
		0500	Unit at 80% reactor power, 908 MWe.
		2330	Commenced raising reactor power after completion of circulating water system heat treatment.
	28	0250	Unit at 97% reactor power, turbine valves wide open, 1104 MWe.
August	31	2400	Unit is in Mode 1, 97% reactor power, 1101 MWe.

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REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: August 1994

1. Scheduled date for next refueling shutdown.

   Cycle 8 refueling outage is forecast for June 4, 1995.

2. Scheduled date for restart following refueling.

   Restart from Cycle 8 refueling outage is forecast for August 6, 1995.

3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

   Unknown at this time for Cycle 8 refueling.

   What will those be?

   NA

4. Scheduled date for submitting proposed licensing action and supporting information.

   NA

5. Important licensing considerations associated with refueling, e.g. new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

   None.

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REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

6. The number of fuel assemblies.

   A. In the core. 217

   B. In the spent fuel storage pool. 710 Total Fuel Assemblies
   592 Unit 3 Spent Fuel Assemblies
   0 Unit 3 New Fuel Assemblies
   118 Unit 1 Spent Fuel Assemblies

7. Licensed spent fuel storage capacity. 1542

   Intended change in spent fuel storage capacity. None

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

   Approximately 2003 (full off-load capability).