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ROSENBLUM,R.M. Southern California Edison Co.
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SUBJECT: Monthly operating repts for Aug 1991 for San Onofre Nuclear Generating Station,Units 2 & 3.W/910913 ltr.

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R. M. ROSENBLUM
MANAGER OF
NUCLEAR REGULATORY AFFAIRS

TELEPHONE
(714) 454-4505

September 13, 1991

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

Subject: Docket Nos. 50-361 and 50-362
Monthly Operating Reports for August 1991
San Onofre Nuclear Generating Station, Units 2 and 3

Technical Specification 6.9.1.10 to Facility Operating Licenses NPF-10 and NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively, requires SCE 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 requires reporting within 90 days from the time the changes were made effective.

This letter transmits the August 1991 Monthly Operating Reports for Units 2 and 3, respectively. There were no challenges to safety valves, no changes to the ODCM, 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.

Very truly yours,

RM Rosenblum

Enclosures

cc: J. B. Martin (Regional Administrator, USNRC Region V)
C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)

IE24

NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: August 1991
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	70,464.00
12.	Number Of Hours Reactor Was Critical	385.98	4,681.86	51,441.42
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	385.70	4,655.03	50,457.45
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1,275,576.35	14,872,095.76	164,356,080.48
17.	Gross Electrical Energy Generated (MWH)	428,785.00	5,015,529.50	55,723,023.50
18.	Net Electrical Energy Generated (MWH)	403,738.00	4,752,993.00	52,805,515.24
19.	Unit Service Factor	51.84%	79.83%	71.61%
20.	Unit Availability Factor	51.84%	79.83%	71.61%
21.	Unit Capacity Factor (Using MDC Net)	50.72%	76.18%	70.04%
22.	Unit Capacity Factor (Using DER Net)	50.72%	76.18%	70.04%
23.	Unit Forced Outage Rate	0.00%	14.94%	7.06%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Cycle 6 refueling outage commenced on August 17, 1991, in progress. Outage duration scheduled for 90 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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: August 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1088.33	17	0.00
2	1075.75	18	0.00
3	1078.46	19	0.00
4	1079.17	20	0.00
5	1079.46	21	0.00
6	1083.50	22	0.00
7	1086.96	23	0.00
8	1093.08	24	0.00
9	1086.21	25	0.00
10	1085.46	26	0.00
11	1081.29	27	0.00
12	1083.29	28	0.00
13	1082.21	29	0.00
14	1081.08	30	0.00
15	1010.13	31	0.00
16	806.54		

mor.aug/3

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: August 1991

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

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
68	910817	S	358.30	C	1	NA	NA	NA	Cycle 6 refueling outage.

[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

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

Date	Time	Event
August 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1132 MWe gross.
August 15	0800	Commenced reactor power decrease to 80% for circulating water system heat treatment.
August 16	0400	Reactor at 80% power.
	1350	Completed heat treating operations.
	2240	Commenced reactor power decrease for the Cycle 6 refueling outage.
August 17	0142	Manually tripped main turbine.
August 17	0159	Manually tripped reactor.
August 18	2315	Entered Mode 4.
August 20	0540	Entered Mode 5.
August 29	1318	Detensioned reactor head bolts. Entered Mode 6.
August 31	2359	Unit is in Mode 6, day 14 of the Cycle 6 refueling outage.

REFUELING INFORMATION

DOCKET NO:	50-361
UNIT NAME:	SONGS - 2
DATE:	9-13-91
COMPLETED BY:	M. M. Farr
TELEPHONE:	(714) 368-9787

MONTH: July 1991

1. Scheduled date for next refueling shutdown.

   Cycle 6 refueling outage began August 17, 1991.

2. Scheduled date for restart following refueling.

   Restart from Cycle 6 refueling outage is forecast for November 1991.

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

   Yes.

   What will these be?

   All license amendments associated with the Cycle 6 refueling outage have been approved.

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

   Not applicable.

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.

mor.aug/6

REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: July 1991

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 554 (376 Unit 2 Spent Fuel Assemblies, 70 Unit 1 Spent Fuel Assemblies, and 108 Unit 2 New 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 2001 (full off load capability)

mor.aug/7

NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: August 1991
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	65,015.00
12. Number Of Hours Reactor Was Critical	744.00	5,341.28	49,569.25
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	5,165.52	48,142.01
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,455,919.55	17,240,553.64	153,538,195.20
17. Gross Electrical Energy Generated (MWH)	839,538.50	5,861,695.00	52,113,377.50
18. Net Electrical Energy Generated (MWH)	799,308.00	5,565,824.97	49,190,734.30
19. Unit Service Factor	100.00%	88.59%	74.05%
20. Unit Availability Factor	100.00%	88.59%	74.05%
21. Unit Capacity Factor (Using MDC Net)	99.48%	88.38%	70.06%
22. Unit Capacity Factor (Using DER Net)	99.48%	88.38%	70.06%
23. Unit Forced Outage Rate	0.00%	11.41%	8.18%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): NA
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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
UNIT NAME: SONGS - 3
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: August 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1083.13	17	1097.67
2	1074.67	18	1097.17
3	1067.42	19	1096.50
4	1071.88	20	1096.88
5	1072.88	21	1098.67
6	1086.83	22	1098.08
7	1100.33	23	1092.92
8	1104.33	24	1101.54
9	1045.71	25	1101.83
10	788.46	26	1095.67
11	888.38	27	1090.63
12	1092.25	28	1093.33
13	1102.67	29	1093.50
14	1101.17	30	1094.42
15	1099.88	31	1043.21
16	1096.00		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: August 1991

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

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
60	910809	S	0.00	B	5	NA	KE	COND	Reduced reactor power to 75% to support circulating water system heat treatment and circulating water pump P-115 waterbox 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

mor.aug/10

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

Date	Time	Event
August 1	0001	Unit is in Mode 1 at 98% reactor power. Turbine load at 1130 MWe gross. Isothermal Temperature Coefficient test in progress.
August 6	1350	Reactor at 100% power.
August 9	1700	Commenced reactor power decrease to 80% for circulating water system heat treatment and valve testing.
	2115	Reactor at 80% power.
August 10	1210	Commenced reactor power decrease to 75% to perform circulating water pump P-115 water box cleaning.
August 11	1150	Commenced reactor power increase to 100% power following completion of heat treating operations and maintenance on circulating water pump P-115.
	1610	Maintained 94% reactor power for excore calibration.
	2120	Completed excore calibration.
	2300	Commenced reactor power increase to 100%.
August 12	0030	Reactor at 100% power.
August 31	2359	Unit is in Mode 1 at 100% reactor power. Turbine load at 1140 MWe gross.

mor.aug/11

REFUELING INFORMATION

DOCKET NO:	50-362
UNIT NAME:	SONGS - 3
DATE:	9-13-91
COMPLETED BY:	M. M. Farr
TELEPHONE:	(714) 368-9787

MONTH: August 1991

1. Scheduled date for next refueling shutdown.

   Cycle 6 refueling outage is forecast for January 1992.

2. Scheduled date for restart following refueling.

   Restart from Cycle 6 refueling outage is forecast for April 1992.

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

   Yes.

   What will these be?

   All license amendments associated with the Cycle 6 refueling outage have been approved.

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

   Not applicable.

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.

   Not yet specifically determined for Cycle 6. Under evaluation.

mor.aug/12

REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: 9-13-91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: July 1991

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 445 (376 Unit 3 Spent Fuel Assemblies and 69 Unit 1 Spent Fuel Assemblies

7. Licensed spent fuel storage capacity. 1542 *

   Intended change in spent fuel storage capacity. None

   * Expanded from 800 to 1542 by License Amendment No. 77 - Facility modification is scheduled to be completed by September 1991.

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

   Approximately 2003 (full off load capability)

mor.aug/13