NRC MONTHLY OPERATING REPORT

DOCKET NO. 50-361
UNIT SONGS - 2
DATE September 15, 1987
COMPLETED BY E. R. Siacor
TELEPHONE (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: August 1987
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	35,400.00
12.	Number Of Hours Reactor Was Critical	674.67	5,670.60	25,031.75
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	672.42	5,638.17	24,515.68
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1,808,278.80	18,282,350.30	79,103,772.80
17.	Gross Electrical Energy Generated (MWH)	681,568.50	6,227,213.50	26,643,008.00
18.	Net Electrical Energy Generated (MWH)	646,569.00	5,938,769.00	25,224,174.55
19.	Unit Service Factor	90.38%	96.69%	69.25%
20.	Unit Availability Factor	90.38%	96.69%	69.25%
21.	Unit Capacity Factor (Using MDC Net)	81.22%	95.19%	66.59%
22.	Unit Capacity Factor (Using DER Net)	81.22%	95.19%	66.59%
23.	Unit Forced Outage Rate	0.00%	1.47%	4.57%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Cycle 4 Refueling Outage, August 29, 1987 now in progress, 80-day duration

25. If Shut Down At End Of Report Period, Estimated Date of Startup: Nov. 17, 1987
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 SONGS - 2

DATE September 15, 1987

COMPLETED BY E. R. Siacor

TELEPHONE (714) 368-6223

MONTH August 1987

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1100.42	17	954.38
2	1099.67	18	936.58
3	1098.17	19	909.46
4	1094.29	20	895.00
5	1080.29	21	886.54
6	1063.58	22	882.08
7	1024.50	23	868.50
8	1000.63	24	876.88
9	1035.13	25	873.96
10	1027.71	26	870.58
11	1006.17	27	867.83
12	1004.58	28	687.13
13	988.29	29	0.00
14	976.96	30	0.00
15	955.29	31	0.00
16	953.33		

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH AUGUST 1987

DOCKET NO. 50-361
UNIT NAME SONGS - 2
DATE September 15, 1987
COMPLETED BY E. R. Siacor
TELEPHONE (714) 368-6223

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
37	082887	S	0.00	C	5	NA	NA	NA	Power reduction greater than 20% per day in preparation for scheduled Cycle 4 Refueling Outage.
-	082987	S	71.58	C	1	NA	NA	NA	Cycle 4 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 of 20% or greater in the past 24 hours
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	SONGS - 2
DATE	September 15, 1987
COMPLETED BY	E. R. Siacor
TELEPHONE	(714) 368-6223

Date	Time	Event
August 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1140 MWe gross.
August 4	0401	Commenced power reduction at 1% per day for scheduled Cycle 4 refueling outage.
August 28	0930	Reactor power reduction increased to greater than 20% per day in preparation for Cycle 4 refueling outage.
August 29	0025	Main turbine tripped.
	0145	Entered Mode 2.
	0240	Reactor tripped. Entered Mode 3.
	2100	Entered Mode 4.
August 30	1940	Entered Mode 5.
August 31	2400	Unit is in Mode 5, day 3 of Cycle 4 refueling outage.

REFUELING INFORMATION

DOCKET NO. 50-361

UNIT SONGS - 2

DATE September 15, 1987

MONTH: August 1987

COMPLETED BY E. R. Siacor

TELEPHONE (714) 368-6223

1. Scheduled date for next refueling shutdown.

   August 1989

2. Scheduled date for restart following refueling.

   October 1989

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

   Not yet determined

   What will these be?

   Not yet determined

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

   Not yet determined

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 determined

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 160 irradiated fuel, 59 new fuel

7. Licensed spent fuel storage capacity. 800

   Intended change in spent fuel storage capacity. Under Review

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

   Approximately 1997 (refueling only)

   Approximately 1993 (full offload capability)

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NRC MONTHLY OPERATING REPORT

DOCKET NO. 50-362
UNIT NAME SONGS - 3
DATE September 15, 1987
COMPLETED BY E. R. Siacor
TELEPHONE (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: August 1987
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	29,951.00
12.	Number Of Hours Reactor Was Critical	744.00	4,225.57	20,838.25
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	744.00	4,093.65	19,979.98
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	2,505,525.04	13,447,566.68	59,851,352.02
17.	Gross Electrical Energy Generated (MWH)	854,808.50	4,577,019.00	20,139,253.50
18.	Net Electrical Energy Generated (MWH)	813,559.00	4,329,743.05	18,897,679.47
19.	Unit Service Factor	100.00%	70.20%	66.71%
20.	Unit Availability Factor	100.00%	70.20%	66.71%
21.	Unit Capacity Factor (Using MDC Net)	101.25%	68.75%	58.42%
22.	Unit Capacity Factor (Using DER Net)	101.25%	68.75%	58.42%
23.	Unit Forced Outage Rate	0.00%	2.33%	10.62%

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

25. If Shut Down 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. 50-362

UNIT SONGS - 3

DATE September 15, 1987

COMPLETED BY E. R. Siacor

TELEPHONE (714) 368-6223

MONTH August 1987

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1104.42	17	1084.92
2	1104.92	18	1106.21
3	1104.50	19	1108.00
4	1104.50	20	1104.17
5	1103.38	21	1092.63
6	1100.21	22	1059.46
7	1092.25	23	1097.96
8	1097.92	24	1103.88
9	1097.17	25	1103.08
10	1098.13	26	1102.29
11	1096.96	27	1103.75
12	1099.42	28	1099.00
13	1102.88	29	1099.79
14	1097.25	30	1099.25
15	924.13	31	1104.50
16	1101.42		

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH AUGUST 1987

DOCKET NO. 50-362
UNIT NAME SONGS - 3
DATE September 15, 1987
COMPLETED BY E. R. Siacor
TELEPHONE (714) 368-6223

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
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] F-Forced
S-Scheduled

[2] Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Trsining & 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 of 20% or greater in the past 24 hours
6-Other (Explain)

[4] IEEE Std 805-1984

[5] IEEE Std 803A-1983

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO. 50-362

UNIT SONGS - 3

DATE September 15, 1987

COMPLETED BY E. R. Siacor

TELEPHONE (714) 368-6223

Date	Time	Event
August 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1151 MWe gross.
August 15	005	Commenced power reduction for heat treating of intake structure.
	0500	Reactor at 80% power.
	1825	Commenced power increase following completion of heat treating operation.
	2230	Reactor at 100% power. Turbine load at 1151 MWe gross.
August 31	2400	Unit is in Mode 1 at 100% reactor power. Turbine load at 1153 MWe gross.

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REFUELING INFORMATION

DOCKET NO. 50-362

UNIT SONGS - 3

DATE September 15, 1987

MONTH: August 1987

COMPLETED BY E. R. Siacor

TELEPHONE (714) 368-6223

1. Scheduled date for next refueling shutdown.

   June 1988

2. Scheduled date for restart following refueling.

   August 1988

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

   Not yet determined

   What will these be?

   Not yet determined

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

   Not yet determined

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 determined

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 160

7. Licensed spent fuel storage capacity. 800

   Intended change in spent fuel storage capacity. Under Review

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

   Approximately 1997 (refueling only)

   Approximately 1993 (Full offload capability)

7435u/12

Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P. O. BOX 128

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H. E. MORGAN
STATION MANAGER

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September 15, 1987

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

Subject: Docket Nos. 50-361/50-362
Monthly Operating Reports for August 1987
San Onofre Nuclear Generating Station, Units 2 and 3

Enclosed are the Monthly Operating Reports as required by Section 6.9.1.10 of Appendix A, Technical Specifications to Facility Operating Licenses NPF-10 and NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively.

Please contact us if we can be of further assistance.

Sincerely,

K W Rieger for H E Morgan

Enclosures

cc: J. B. Martin (Regional Administrator, USNRC Region V)

F. R. Huey (USNRC Senior Resident Inspector, Units 1, 2 and 3)

Institute of Nuclear Power Operations (INPO)

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