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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: August 1993
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	88,008.00
12.	Number Of Hours Reactor Was Critical	631.50	4,351.23	65,085.59
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	565.45	4,285.07	63,942.34
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1,708,688.10	13,990,476.11	208,810,324.43
17.	Gross Electrical Energy Generated (MWH)	591,574.00	4,741,122.00	70,786,682.00
18.	Net Electrical Energy Generated (MWH)	556,949.00	4,495,671.05	67,103,186.88
19.	Unit Service Factor	76.00%	73.49%	72.66%
20.	Unit Availability Factor	76.00%	73.49%	72.66%
21.	Unit Capacity Factor (Using MDC Net)	69.96%	72.06%	71.26%
22.	Unit Capacity Factor (Using DER Net)	69.96%	72.06%	71.26%
23.	Unit Forced Outage Rate	0.00%	0.00%	6.44%

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

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: J. L. Darling
TELEPHONE: (714) 368-6223

MONTH: August 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0.00	16	1099.75
2	0.00	17	1101.88
3	0.00	18	1101.08
4	0.00	19	1101.46
5	0.00	20	1102.04
6	0.00	21	1091.29
7	0.00	22	1102.46
8	14.25	23	1102.79
9	439.13	24	1104.08
10	695.88	25	1104.33
11	813.67	26	1097.63
12	790.67	27	1090.17
13	1068.67	28	1081.79
14	1086.08	29	1086.50
15	1098.50	30	1073.08
		31	1036.33

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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
REPORT MONTH: August 1993
COMPLETED BY: J. L. Darling
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
83	930602	S	178.55	C	2	NA	NA	NA	NA

Note. Refueling shutdown continued from previous month.

[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: J. L. Darling
TELEPHONE: (714) 368-6223

Date		Time	Event
August	1	0001	Unit is in Mode 1.
August	3	1810	Unit entered Mode 3.
August	5	1535	Unit entered Mode 2.
		1630	Reactor critical.
		1711	Reactor power increased to 5 x 10-2 for Physics Testing.
August	7	1125	Commenced reactor power increase to 3% to roll main feedwater pump.
August	8	0043	Commenced increasing reactor power to perform overspeed trip test on main turbine.
		0123	Entered Mode 1.
		0913	Reactor power stabilized at 18%
		1033	Unit synchronized to the grid, following completion of main turbine overspeed trip testing.
		2240	Commenced power increase to 68% after completing 20% power Physics Testing
August	10	0448	Reactor Power at 68% to conduct Physics Testing.
		2135	Commenced reactor power increase following completion of 68% power Physics Testing.
August	11	0040	Reactor power increase stopped at 75% due to high vibration pretrip alarms on main feedwater pump turbine 2K006.
		1050	Reactor power increase to 80% commenced. Main Feedwater pump turbine vibration monitored to ensure it does not exceed 4 mils.

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

Date	Time	Event
August 11	1227	Unit at 80% reactor power to perform circulating water system heat treat. Main feedwater pump turbine (MFWPT) vibration 3.2 mils.
August 12	0245	Commenced reactor power decrease to 75% to reduce MFWPT vibration following completion of heat treat.
	0430	Unit at 75% reactor power.
	0900	Commenced power decrease to 60% to support placing MFWPT K005 inservice.
	1510	Commenced reactor power increase to 100% after placing MFWPT K005 in service.
August 13	0514	Unit at 100% reactor power.
August 30	0505	Commenced unit load reduction to allow repairs to turbine steam supply valve 2200H.
	0530	Unit load at 1005 MWe.
	0742	Unit returned to full load, 1132 MWe, following repairs to turbine steam supply valve 2200H.
August 31	2400	Unit at 98% reactor power, 1125 MWe.

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REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

MONTH: August 1993

1. Scheduled date for next refueling shutdown.

   Cycle 8 refueling outage is forecast for January 15, 1995.

2. Scheduled date for restart following refueling.

   Restart from Cycle 8 refueling outage is forecast for March 31, 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 these 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: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

MONTH: August 1993

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 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: J. L. Darling
TELEPHONE: (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: August 1993
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	82,559.00
12. Number Of Hours Reactor Was Critical	744.00	5,752.22	64,951.98
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	5,720.73	63,326.79
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,440,821.97	18,913,463.37	203,547,537.61
17. Gross Electrical Energy Generated (MWH)	845,883.00	6,474,088.50	69,100,948.50
18. Net Electrical Energy Generated (MWH)	804,677.00	6,150,943.00	65,296,613.36
19. Unit Service Factor	100.00%	98.11%	76.70%
20. Unit Availability Factor	100.00%	98.11%	76.70%
21. Unit Capacity Factor (Using MDC Net)	100.14%	97.67%	73.23%
22. Unit Capacity Factor (Using DER Net)	100.14%	97.67%	73.23%
23. Unit Forced Outage Rate	0.00%	1.89%	6.98%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling shutdown, October 10, 1993, forecast duration 85 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: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

MONTH: August 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1092.13	16	1086.21
2	1089.46	17	1087.67
3	1088.54	18	1086.67
4	1088.08	19	1086.29
5	1085.29	20	1082.88
6	1080.83	21	1088.46
7	1065.58	22	1087.00
8	1082.67	23	1088.46
9	1086.00	24	1085.71
10	1084.88	25	1083.92
11	1080.75	26	1078.13
12	1085.71	27	1066.38
13	1084.88	28	1064.50
14	1080.50	29	1069.88
15	1084.96	30	1068.46
		31	1057.38

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: August 1993

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: J. L. Darling
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

There were no unit shutdowns or power reductions 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: J. L. Darling
TELEPHONE: (714) 368-6223

Date		Time	Event
August	1	0001	Unit is in Mode 1, 100% reactor power, 1140 MWe.
August	11	1900	Reactor power decreased to 97% to maintain circulating water Delta T below alarm setpoint.
August	28	1711	Turbine load decreased to 995 MWe when high pressure stop valve 2200D closed. Steam Bypass Control system placed in local setpoint to limit RCS transient.
		1740	High pressure stop valve 2200D reopened. No apparent cause found for closure of stop valve 2200D.
		1800	Commenced unit load increase to 100% power.
August	31	2300	Commenced reactor power decrease to 80% to allow circulating water heat treat.
		2400	Unit at 93% reactor power, 1055 MWe.

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REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: J. L. Darling
TELEPHONE: (714) 368-6223

MONTH: August 1993

1. Scheduled date for next refueling shutdown.

   Cycle 7 refueling outage is forecast for October 10, 1993.

2. Scheduled date for restart following refueling.

   Restart from Cycle 7 refueling outage is forecast for January 3, 1993.

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

   Yes.

   What will these be?

   A. A change has been requested to Technical Specification 3.7.1.1 to allow an increased tolerance on the main steam safety valves for the purpose of determining valve operability. Although not required, NRC approval of this change is desired to support the surveillance testing scheduled to be performed during the Unit 3 Cycle 7 outage.

   B. A change will be requested to Technical Specification 3.3.2 to provide enhanced degraded voltage protection. NRC approval is required to permit installation of the required plant modifications during the Unit 3 Cycle 7 outage.

   C. A change will be requested to Technical Specifications 2.2.1, 3.3.1, 3.3.2, 3.5.2, and 3.5.3 to revise the pressure at which the Low Pressurizer Pressure Trip may be bypassed. NRC approval is required to permit changes to the trip setpoint at the beginning of the Unit 3 Cycle 7 outage.

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

A.	Proposed Change on MSSVs	Submitted March 5, 1993
B.	Proposed Change to 3.3.2	September 24, 1993
C.	Proposed Change on Trip Bypass	September 17, 1993

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REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: J. L. Darling
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MONTH: August 1993

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. 638 Total Fuel Assemblies
   484 Unit 3 Spent Fuel Assemblies
   36 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 2004 (full off-load capability)

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