NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: November 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	720.00	8,016.00	72,649.00
12.	Number Of Hours Reactor Was Critical	306.83	4,988.69	51,748.25
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	240.10	4,895.13	50,697.55
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	698,121.14	15,570,216.90	165,054,201.62
17.	Gross Electrical Energy Generated (MWH)	232,787.00	5,248,316.50	55,955,810.50
18.	Net Electrical Energy Generated (MWH)	208,946.01	4,952,354.59	53,004,876.83
19.	Unit Service Factor	33.35%	61.07%	69.78%
20.	Unit Availability Factor	33.35%	61.07%	69.78%
21.	Unit Capacity Factor (Using MDC Net)	27.12%	57.74%	68.19%
22.	Unit Capacity Factor (Using DER Net)	27.12%	57.74%	68.19%
23.	Unit Forced Outage Rate	0.00%	14.31%	7.03%

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

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: November 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0.00	17	0.00
2	0.00	18	0.00
3	0.00	19	0.00
4	0.00	20	0.00
5	0.00	21	136.75
6	0.00	22	667.42
7	0.00	23	828.21
8	0.00	24	955.13
9	0.00	25	1076.17
10	0.00	26	1100.79
11	0.00	27	1108.83
12	0.00	28	1110.79
13	0.00	29	1106.13
14	0.00	30	1112.38
15	0.00		
16	0.00		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1991

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 12/16/91
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	479.90	C	4	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

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

Date	Time	Event
November 1	0001	Unit is in Mode 5, day 76 of the Cycle 6 refueling outage.
November 8	1607	Entered Mode 4.
November 10	1210	High pressure safety injection (HPSI) check valve S21204MU020 failed leak rate test. Commenced approach to Mode 5.
	1948	Entered Mode 5.
November 13	2005	Entered Mode 4 following completion of HPSI check valve S21204MU020 repair.
November 15	2329	Entered Mode 3.
November 18	0437	Entered Mode 2.
	0510	Reactor made critical.
November 20	1510	Entered Mode 1.
	2354	Unit synchronized to the grid. Continued reactor power increase.
November 23	0250	Reactor at 80% power. Commenced circulating water system heat treatment.
November 24	0555	Commenced reactor power increase to 100% following completion of heat treating operations.
	1630	Reactor at 100% power.
November 26	1245	Reduced turbine load to 1070 MWe gross to support efforts to reseat leaking MSR relief valves.
November 26	1435	Turbine load increased to 1150 MWe gross following unsuccessful attempt to reseat MSR relief valves.
November 30	2359	Unit is in Mode 1 at 100% reactor power. Turbine load at 1155 MWe gross.

REFUELING INFORMATION

DOCKET NO:	50-361
UNIT NAME:	SONGS - 2
DATE:	12/16/91
COMPLETED BY:	M. M. Farr
TELEPHONE:	(714) 368-9787

MONTH: November 1991

1. Scheduled date for next refueling shutdown.

   Cycle 7 refueling outage is forecast for May 1993.

2. Scheduled date for restart following refueling.

   Restart from Cycle 7 refueling outage is forecast for July 1993.

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

   Not yet determined for Cycle 7.

   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.

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REFUELING INFORMATION

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MONTH: November 1991

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 554 (484 Unit 2 Spent 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 2001 (full off load capability)

mor.nov/7

NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: November 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	720.00	8,016.00	67,200.00
12.	Number Of Hours Reactor Was Critical	720.00	7,526.28	51,754.25
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	720.00	7,350.52	50,327.01
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	2,417,391.81	24,570,599.10	160,868,240.66
17.	Gross Electrical Energy Generated (MWH)	815,301.50	8,335,267.00	54,586,949.50
18.	Net Electrical Energy Generated (MWH)	775,535.00	7,920,677.97	51,545,587.30
19.	Unit Service Factor	100.00%	91.70%	74.89%
20.	Unit Availability Factor	100.00%	91.70%	74.89%
21.	Unit Capacity Factor (Using MDC Net)	99.73%	91.49%	71.02%
22.	Unit Capacity Factor (Using DER Net)	99.73%	91.49%	71.02%
23.	Unit Forced Outage Rate	0.00%	8.30%	7.85%

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: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: November 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1088.50	17	1064.46
2	1075.88	18	1075.50
3	1089.75	19	1082.46
4	1086.96	20	1074.79
5	1084.04	21	1068.33
6	1084.88	22	1077.13
7	1084.38	23	1032.63
8	1081.79	24	1069.83
9	1060.54	25	1080.46
10	1080.38	26	1084.71
11	1080.38	27	1084.50
12	1082.63	28	1085.83
13	1082.25	29	1087.13
14	1083.33	30	1082.17
15	1081.29		
16	1037.08		

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1991

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
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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
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 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: 12/16/91
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Date	Time	Event
November 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1130 MWe gross.
November 23	2020	Commenced reactor power decrease to 85% to bump circulating water pumps.
	2200	Reactor at 85%.
November 24	0045	Commenced reactor power increase to 100% following bumping of circulating water pumps.
	0245	Reactor at 100% power.
October 31	2400	Unit is in Mode 1 at 100% reactor power. Turbine load at 1140 MWe gross.

REFUELING INFORMATION

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MONTH: November 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.

   None.

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REFUELING INFORMATION

DOCKET NO: 50-362
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DATE: 12/16/91
COMPLETED BY: M. M. Farr
TELEPHONE: (714) 368-9787

MONTH: November 1991

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 505 (376 Unit 3 Spent Fuel Assemblies, 69 Unit 1 Spent Fuel Assemblies, and 60 Unit 3 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 2003 (full off load capability)

mor.nov/13