

## NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: JAN 14 1994  
 COMPLETED BY: M. A. Robinson  
 TELEPHONE: (714) 368-9418

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: December 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	8,760.00	90,937.00
12. Number Of Hours Reactor Was Critical	744.00	7,280.23	68,014.59
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	7,214.07	66,871.34
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,522,349.10	23,754,408.11	218,574,256.43
17. Gross Electrical Energy Generated (MWH)	844,901.00	8,042,228.00	74,087,788.00
18. Net Electrical Energy Generated (MWH)	806,126.00	7,647,183.05	70,254,698.88
19. Unit Service Factor	100.00%	82.35%	73.54%
20. Unit Availability Factor	100.00%	82.35%	73.54%
21. Unit Capacity Factor (Using MDC Net)	101.26%	81.59%	72.20%
22. Unit Capacity Factor (Using DER Net)	101.26%	81.59%	72.20%
23. Unit Forced Outage Rate	0.00%	0.00%	6.18%
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  
 INITIAL ELECTRICITY  
 COMMERCIAL OPERATION

NA	NA
NA	NA
NA	NA

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: JAN 14 1994  
 COMPLETED BY: M. A. Robinson  
 TELEPHONE: (714) 368-9418

MONTH: December 1993

DAY AVERAGE DAILY POWER LEVEL  
 (MWe-Net)

1	1085.88
2	1086.17
3	1084.38
4	1078.04
5	1081.71
6	1082.54
7	1083.46
8	1083.38
9	1086.33
10	1079.50
11	1081.33
12	1085.33
13	1083.21
14	1084.17
15	1086.88

DAY AVERAGE DAILY POWER LEVEL  
 (MWe-Net)

16	1087.83
17	1083.04
18	1085.00
19	1085.04
20	1085.00
21	1079.63
22	1084.08
23	1084.17
24	1079.33
25	1085.92
26	1085.54
27	1082.88
28	1080.92
29	1081.00
30	1084.92
31	1082.00

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: December 1993DOCKET NO: 50-361UNIT NAME: SONGS - 2DATE: JAN 14 1994COMPLETED BY: M. A. RobinsonTELEPHONE: (714) 368-9418

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	LER No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
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There were no unit shutdowns or reductions in the Average Daily Power Level of more than 20% this reporting period.

<sup>1</sup>F-Forced  
S-Scheduled

<sup>2</sup>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)

<sup>3</sup>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)

<sup>4</sup>IEEE Std 805-1984

<sup>5</sup>IEEE Std 803A-1983

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: JAN 14 1994  
COMPLETED BY: M. A. Robinson  
TELEPHONE: (714) 368-9418

<u>Date</u>	<u>Time</u>	<u>Event</u>
December 1	0001	Unit is in Mode 1, 98% reactor power, 1135 MWe.
December 31	2400	Unit is in Mode 1, 98% reactor power, 1133 MWe.

REFUELING INFORMATION

DOCKET NO:	50-361
UNIT NAME:	SONGS - 2
DATE:	JAN 14 1994
COMPLETED BY:	M. A. Robinson
TELEPHONE:	(714) 368-9418

MONTH: December 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.

REFUELING INFORMATION

DOCKET NO: 50-361  
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MONTH: December 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 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)

## NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362  
 UNIT NAME: SONGS - 3  
 DATE: IAN 14 1994  
 COMPLETED BY: M. A. Robinson  
 TELEPHONE: (714) 368-9418

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: December 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	8,760.00	85,488.00
12. Number Of Hours Reactor Was Critical	38.12	6,726.69	65,926.45
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	33.77	6,690.83	64,296.89
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	81,360.73	22,037,715.49	206,671,789.72
17. Gross Electrical Energy Generated (MWH)	11,824.50	7,516,547.00	70,143,407.00
18. Net Electrical Energy Generated (MWH)	(7,240.00)	7,117,368.58	66,263,038.94
19. Unit Service Factor	4.54%	76.38%	75.21%
20. Unit Availability Factor	4.54%	76.38%	75.21%
21. Unit Capacity Factor (Using MDC Net)	0.00%	75.23%	71.77%
22. Unit Capacity Factor (Using DER Net)	0.00%	75.23%	71.77%
23. Unit Forced Outage Rate	0.00%	1.62%	6.88%
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  
 INITIAL ELECTRICITY  
 COMMERCIAL OPERATION

<u>NA</u>	<u>NA</u>
<u>NA</u>	<u>NA</u>
<u>NA</u>	<u>NA</u>

## AVERAGE DAILY UNIT POWER LEVEL

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UNIT NAME: SONGS - 3  
DATE: JAN 14 1994  
COMPLETED BY: M. A. Robinson  
TELEPHONE: (714) 368-9418

MONTH: December 1993DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	0.00
10	0.00
11	0.00
12	0.00
13	0.00
14	0.00
15	0.00

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

16	0.00
17	0.00
18	0.00
19	0.00
20	0.00
21	0.00
22	0.00
23	0.00
24	0.00
25	0.00
26	0.00
27	0.00
28	0.00
29	0.00
30	0.00
31	400.00

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: December 1993DOCKET NO: 50-362UNIT NAME: SONGS - 3DATE: JAN 14 1994COMPLETED BY: M. A. RobinsonTELEPHONE: (714) 368-9418

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	LER No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
80	931010	S	705.88	C	1	NA	NA	NA	NA

<sup>1</sup>F-Forced  
S-Scheduled

<sup>2</sup>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)

<sup>3</sup>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)

<sup>4</sup>IEEE Std 805-1984

<sup>5</sup>IEEE Std 803A-1983

## SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

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Date	Time	Event
December 1	0001	Unit is in Mode 5, 129 degrees F, 345 psig with a bubble in pressurizer.
December 3	2133	Entered Mode 4.
December 6	1651	Entered Mode 3.
December 7	1620	Commence cooldown to Mode 5 for seal replacement on RCP 3P-002.
	2035	Entered Mode 4.
December 8	1945	Entered Mode 5.
December 12	1009	Entered Mode 4.
December 13	1200	Entered Mode 3.
	2106	Stopped RCP 3P-002 due to abnormal pump operation. An RPS actuation on RCS flow-low occurred. The CEA's were withdrawn 1 1/2 inches per procedure for plant heatup.
December 14	0531	Entered Mode 4.
	2056	Entered Mode 5.
December 26	0437	Entered Mode 4.
December 27	0402	Entered Mode 3.
December 28	1422	Entered Mode 2.
	1500	Reactor critical.
December 30	0953	Entered Mode 1, Reactor power at 5%.
	1414	Synchronized main generator and applied 55 MWe block load, ending Unit 3 Cycle 7 Refueling Outage.
December 31	2400	Unit is in Mode 1, 68% power, 700 MWe.

REFUELING INFORMATION

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MONTH: December 1993

1. Scheduled date for next refueling shutdown.

Cycle 8 refueling outage is forecast for June 1995.

2. Scheduled date for restart following refueling.

Restart from Cycle 8 refueling outage is forecast for August 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

REFUELING INFORMATION

DOCKET NO: 50-362  
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MONTH: December 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.

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).