

**NRC MONTHLY OPERATING REPORT
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2**

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
 2. Reporting Period: September 1994
 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 | 6,551.00 | 97,488.00 |
| 12. Number Of Hours Reactor Was Critical | 720.00 | 6,551.00 | 74,565.59 |
| 13. Reactor Reserve Shutdown Hours | 0.00 | 0.00 | 0.00 |
| 14. Hours Generator On-Line | 720.00 | 6,551.00 | 73,422.34 |
| 15. Unit Reserve Shutdown Hours | 0.00 | 0.00 | 0.00 |
| 16. Gross Thermal Energy Generated (MWH) | 2,278,250.80 | 21,480,650.40 | 240,054,906.84 |
| 17. Gross Electrical Energy Generated (MWH) | 762,285.50 | 7,287,680.50 | 81,375,468.50 |
| 18. Net Electrical Energy Generated (MWH) | 726,189.00 | 6,943,858.00 | 77,198,556.88 |
| 19. Unit Service Factor | 100.00% | 100.00% | 75.31% |
| 20. Unit Availability Factor | 100.00% | 100.00% | 75.31% |
| 21. Unit Capacity Factor (Using MDC Net) | 94.26% | 99.06% | 74.01% |
| 22. Unit Capacity Factor (Using DER Net) | 94.26% | 99.06% | 74.01% |
| 23. Unit Forced Outage Rate | 0.00% | 0.00% | 5.66% |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling Shutdown, February 11, 1994, Duration (64 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
INITIAL ELECTRICITY
COMMERCIAL OPERATION

NA	NA
NA	NA
NA	NA

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
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DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: September 1994

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	1048.46
2	1012.08
3	732.71
4	735.33
5	772.17
6	932.67
7	1063.08
8	1067.17
9	1069.13
10	1064.67
11	1067.54
12	1066.29
13	1067.04
14	1069.63
15	1030.25

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

16	777.75
17	798.50
18	1062.46
19	1068.92
20	1071.08
21	1071.38
22	1072.96
23	1060.21
24	1052.96
25	1061.83
26	1061.54
27	1071.00
28	1080.38
29	1075.42
30	1073.29

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1994DOCKET NO: 50-361UNIT NAME: SONGS - 2DATE: October 14, 1994COMPLETED BY: R. L. KaplanTELEPHONE: (714) 368-6834

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
86	940902	S	0.0	B	5	NA	KE	COND	Reduce reactor power to perform circulating water pump repair and water box cleaning.
87	940915	S	0.0	B	5	NA	KE	COND	Reduce reactor power to perform circulating water pump repair.

¹F-Forced
S-Scheduled

²Reason:
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)

³Method:
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)

⁴IEEE Std 805-1984

⁵IEEE Std 803A-1983

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

<u>Date</u>	<u>Time</u>	<u>Event</u>
September 01	0001	Unit is in Mode 1, 98% reactor power, 1103 MWe.
	2055	Reduced turbine load by 30 Mwe due to circulating water Delta T limits.
September 02	0001	Unit at 94.7 reactor power, 1071 Mwe.
	0446	Returned Unit to full load, 1096 Mwe.
	2103	Commenced lowering reactor power to 75% for water box cleaning, and circulating pump maintenance.
September 03	0001	Unit at 74% reactor power, 770 MWe
September 06	0935	Commenced raising reactor power to 98%
	1645	Unit at 98% reactor power, 1106 MWe.
September 15	2045	Commenced lowering reactor power to 75% for circulating pump maintenance.
	2300	Unit at 75% reactor power, 837 MWe.
September 17	1420	Commenced raising reactor power to 80% for circulating water system heat treatment
	2300	Commenced raising reactor power to 98% after completion of circulating water system heat treatment.
September 18	0240	Unit at 98% power, 1112 MWe.
September 30	2400	Unit is in Mode 1, 98% reactor power, 1121 MWe.

REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: September 1994

1. Scheduled date for next refueling shutdown.

Cycle 8 refueling outage is forecast for February 11, 1995.

2. Scheduled date for restart following refueling.

Restart from Cycle 8 refueling outage is forecast for April 15, 1995.

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

Yes

What will these be?

- A. A proposed change to the Technical Specifications has been requested which will revise the minimum water level in the refueling cavity with only one train of shutdown cooling operable.
- B. A proposed change to the Technical Specifications and an exemption from 10 CFR 50 Appendix J has been requested to permit deferring the Integrated Leakrate Testing.
- C. A proposed change to the Technical Specifications has been requested to revise the allowed Linear Heat Rate from 13.9 to 13.0 kw/ft.
- D. A proposed change to the Final Safety Analysis has been requested to remove the diversity requirement of the pressurizer pressure transmitters providing input to the shutdown cooling open permissive interlock.
- E. Proposed change to the Technical Specifications (PCN 431), revising the automatic reset of the low pressurizer pressure bypass, has been revised to simplify the request.
- F. A proposed change to the Technical Specifications has been requested to allow a 3.0.4 exception for entering Modes 5 and 6 with the Control Room Emergency Air Cleanup System inoperable.

REFUELING INFORMATION

DOCKET NO: 50-361
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4. Scheduled date for submitting proposed licensing action and supporting information.

A. Refueling Cavity Water Level	Submitted July 28, 1994
B. Integrated Leakrate Testing	Submitted August 17, 1994
C. Linear Heat Rate	Submitted September 16, 1994
D. Pressure Instrument Diversity	Submitted July 6, 1994
E. Low Pressurizer Pressure Bypass	Revision submitted September 6, 1994
F. Control Room Air Cleanup System	Submitted August 26, 1994

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.	<u>217</u>
B. In the spent fuel storage pool.	<u>662 Total Fuel Assemblies</u> <u>592 Unit 2 Spent Fuel Assemblies</u> <u>0 Unit 2 New Fuel Assemblies</u> <u>70 Unit 1 Spent Fuel Assemblies</u>

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
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3**

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: September 1994
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	6,551.00	92,039.00
12. Number Of Hours Reactor Was Critical	720.00	6,551.00	72,477.45
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	720.00	6,537.60	70,834.49
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,359,461.23	21,235,151.12	227,906,940.83
17. Gross Electrical Energy Generated (MWH)	801,305.00	7,234,325.50	77,377,732.50
18. Net Electrical Energy Generated (MWH)	758,440.00	6,849,370.00	73,112,408.94
19. Unit Service Factor	100.00%	99.80%	76.96%
20. Unit Availability Factor	100.00%	99.80%	76.96%
21. Unit Capacity Factor (Using MDC Net)	97.54%	96.81%	73.55%
22. Unit Capacity Factor (Using DER Net)	97.54%	96.81%	73.55%
23. Unit Forced Outage Rate	0.00%	0.00%	6.29%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>None</u>			
25. If Shutdown At End Of Report Period, Estimated Date of Startup:		<u>NA</u>	
26. Units In Test Status (Prior To Commercial Operation):	<u>Forecast</u>		<u>Achieved</u>

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

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: September 1994

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>1050.92</u>
2	<u>1047.21</u>
3	<u>1034.63</u>
4	<u>1051.33</u>
5	<u>1051.50</u>
6	<u>1053.25</u>
7	<u>1053.96</u>
8	<u>1056.25</u>
9	<u>1057.17</u>
10	<u>1055.79</u>
11	<u>1054.75</u>
12	<u>1054.08</u>
13	<u>1053.58</u>
14	<u>1055.46</u>
15	<u>1056.92</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

16	<u>1051.92</u>
17	<u>1043.08</u>
18	<u>1050.71</u>
19	<u>1051.08</u>
20	<u>1053.38</u>
21	<u>1053.63</u>
22	<u>1055.29</u>
23	<u>1057.04</u>
24	<u>1057.96</u>
25	<u>1058.04</u>
26	<u>1059.21</u>
27	<u>1060.58</u>
28	<u>1061.54</u>
29	<u>1061.67</u>
30	<u>1039.75</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1994DOCKET NO: 50-362UNIT NAME: SONGS - 3DATE: October 14, 1994COMPLETED BY: R. L. KaplanTELEPHONE: (714) 368-6834

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
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There were no unit shutdowns or reductions in the Average Daily Power Level of more than 20% this reporting period.

¹F-Forced
S-Scheduled

²Reason:
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)

³Method:
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)

⁴IEEE Std 805-1984

⁵IEEE Std 803A-1983

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

<u>Date</u>	<u>Time</u>	<u>Event</u>
September 01	0001	Unit is in Mode 1, 97% reactor power, 1103MWe.
September 30	2100	Commenced lowering reactor power to 75% for circulating water system heat treatment and waterbox cleaning.
	2340	Unit at 75% reactor power, 830 MWe.
September 30	2400	Unit is in Mode 1, 75% reactor power, 830 MWe.

REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: October 14, 1994
COMPLETED BY: R. L. Kaplan
TELEPHONE: (714) 368-6834

MONTH: September 1994

1. Scheduled date for next refueling shutdown.

Cycle 8 refueling outage is forecast for July 8, 1995.

2. Scheduled date for restart following refueling.

Restart from Cycle 8 refueling outage is forecast for September 11, 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

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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).