

NRC MONTHLY OPERATING REPORT

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

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: May 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	744.00	3,623.00	94,560.00
12. Number Of Hours Reactor Was Critical	744.00	3,623.00	71,637.59
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	3,623.00	70,494.34
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,440,983.00	11,960,816.70	230,535,073.14
17. Gross Electrical Energy Generated (MWH)	833,037.00	4,090,995.50	78,178,783.50
18. Net Electrical Energy Generated (MWH)	793,275.00	3,898,326.00	74,153,024.88
19. Unit Service Factor	100.00%	100.00%	74.55%
20. Unit Availability Factor	100.00%	100.00%	74.55%
21. Unit Capacity Factor (Using MDC Net)	99.65%	100.56%	73.29%
22. Unit Capacity Factor (Using DER Net)	99.65%	100.56%	73.29%
23. Unit Forced Outage Rate	0.00%	0.00%	5.88%
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	NA		NA
INITIAL ELECTRICITY	NA		NA
COMMERCIAL OPERATION	NA		NA

AVERAGE DAILY UNIT POWER LEVEL

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MONTH: May 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1079.04</u>
2	<u>1079.25</u>
3	<u>1078.58</u>
4	<u>1077.08</u>
5	<u>1075.29</u>
6	<u>1072.08</u>
7	<u>913.38</u>
8	<u>1054.96</u>
9	<u>1078.00</u>
10	<u>1077.17</u>
11	<u>1078.83</u>
12	<u>1078.50</u>
13	<u>1078.21</u>
14	<u>1077.04</u>
15	<u>1077.88</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	<u>1077.63</u>
17	<u>1076.67</u>
18	<u>1075.83</u>
19	<u>1075.29</u>
20	<u>1062.75</u>
21	<u>1070.58</u>
22	<u>1078.79</u>
23	<u>1077.54</u>
24	<u>1077.29</u>
25	<u>1076.92</u>
26	<u>1076.75</u>
27	<u>951.75</u>
28	<u>1075.88</u>
29	<u>1075.33</u>
30	<u>1073.25</u>
31	<u>1075.58</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: May 1994

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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: 50-361
 UNIT NAME: SONGS - 2
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<u>Date</u>	<u>Time</u>	<u>Event</u>
May	01 0001	Unit is in Mode 1, 98% reactor power, 1130 MWe.
May	07 0750	Commenced lowering reactor power to 80% for circulating water system heat treatment.
	1020	Unit 2 reduced Reactor Power to 80%, 910 MWe for circulating water system heat treatment.
	2040	Commenced Unit 2 circulating water system heat treatment.
May	08 0120	Commenced raising reactor power to full power after completion of circulating water system heat treatment.
	0455	Unit at 98% reactor power, 1130 MWe.
May	20 2218	Commenced reactor power reduction to allow Steam Bypass Cooling System valves to shut during repair of Main Turbine valve 2UV2200D.
	2315	Reactor power reduced to 94%, 1050 MWe.
May 21	21 0432	Reactor power raised to 98%, 1132 MWe after Main Turbine Valve 2UV2200D Return to service.
May	27 0933	Control Element Assembly number 79 dropped during post maintenance testing. Breaker had tripped.
	0943	Commenced boration to RCS to reduce power to 68% by 1033 hours.
	0954	Performed COLSS Out Of Service surveillance. Departure from Nucleate Boiling Ration failed, Local Power Density passed. Reducing power to restore DNBR margin.
	1015	DNBR sat, reactor power at 78.5%
	1030	Reactor power at 68%
	1150	Reactor power stabilized at 55%. Holding for one hour than power will be raised at 5% per hour.
	2130	Unit at 98% reactor power, 1130 MWe.
May	31 2400	Unit is in Mode 1, 98% reactor power, 1126 MWe.

REFUELING INFORMATION

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MONTH: May 1994

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 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 will be 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 will be requested to permit deferring the Integrated Leakrate Testing.
- C. A proposed change to the Technical Specifications will be 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 will be requested to remove the diversity requirement of the pressurizer pressure transmitters providing input to the shutdown cooling open permissive interlock.
- E. A proposed change to the Technical Specifications (PCN 431), revising the automatic reset of the low pressurizer pressure bypass, will be revised to simplify the request. requested which will revise the minimum water level in the refueling cavity with only one train of shutdown cooling operable.
4. Scheduled date for submitting proposed licensing action and supporting information.
- | | |
|------------------------------------|----------------------------------|
| 1. Refueling Cavity Water Level | Submittal Forecast July 31, 1994 |
| 2. Integrated Leakrate Testing | Submittal Forecast July 31, 1994 |
| 3. Linear Heat Rate | Submittal Forecast Aug. 31, 1994 |
| 4. Pressure Instrument Diversity | Submittal Forecast July 31, 1994 |
| 5. Low Pressurizer Pressure Bypass | Revision Forecast Aug. 31, 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.

REFUELING INFORMATION

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MONTH: May 1994

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:
 COMPLETED BY: R. L. Kaplan
 TELEPHONE: (714) 368-6834

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: May 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	744.00	3,623.00	89,111.00
12. Number Of Hours Reactor Was Critical	744.00	3,623.00	69,549.45
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	3,605.09	67,901.98
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,440,821.97	11,634,584.71	218,306,374.43
17. Gross Electrical Energy Generated (MWH)	831,374.00	3,983,245.00	74,126,652.00
18. Net Electrical Energy Generated (MWH)	786,897.00	3,772,340.00	70,035,378.94
19. Unit Service Factor	100.00%	99.51%	76.20%
20. Unit Availability Factor	100.00%	99.51%	76.20%
21. Unit Capacity Factor (Using MDC Net)	97.93%	96.41%	72.77%
22. Unit Capacity Factor (Using DER Net)	97.93%	96.41%	72.77%
23. Unit Forced Outage Rate	0.00%	0.00%	6.54%
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	NA	NA
INITIAL ELECTRICITY	NA	NA
COMMERCIAL OPERATION	NA	NA

Document Control Desk

AVERAGE DAILY UNIT POWER LEVEL

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MONTH: May 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1052.17</u>
2	<u>1051.46</u>
3	<u>1050.96</u>
4	<u>1057.38</u>
5	<u>1066.17</u>
6	<u>1067.46</u>
7	<u>1065.46</u>
8	<u>1065.75</u>
9	<u>1065.21</u>
10	<u>1064.33</u>
11	<u>1065.17</u>
12	<u>1066.88</u>
13	<u>1065.04</u>
14	<u>1053.96</u>
15	<u>1065.46</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	<u>1065.83</u>
17	<u>1064.58</u>
18	<u>1063.63</u>
19	<u>1063.00</u>
20	<u>1063.25</u>
21	<u>1065.21</u>
22	<u>1062.04</u>
23	<u>1061.83</u>
24	<u>1062.67</u>
25	<u>1063.21</u>
26	<u>1063.50</u>
27	<u>1066.54</u>
28	<u>980.58</u>
29	<u>984.54</u>
30	<u>1066.54</u>
31	<u>1067.58</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: May 1994

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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
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<u>Date</u>	<u>Time</u>	<u>Event</u>
May	01 0001	Unit is in Mode 1, 95.5% reactor power, 1102 MWe.
May	02 1535	Spent Fuel Pool heatup rate test completed. Heat up rate 0.25 F/HR.
May	04 1920	Completed respan of SBCS and installation of coefficients.
	2109	Reactor power raised to 97.4%, 1120 MWe. SBCS pressure at 850 psi.
May	28 1500	Commenced lowering reactor power to 80% for circulating water system heat treatment.
May	29 0001	Unit 3 reduced Reactor Power to 80%, 907 MWe for circulating water system heat treatment.
	0800	Commenced raising reactor power to full power after completion of circulating water system heat treatment.
	1103	Unit at 97% reactor power, 1115 MWe.
May	31 2400	Unit is in Mode 1, 97% reactor power, 1116 MWe.

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MONTH: May 1994

1. Scheduled date for next refueling shutdown.

Cycle 8 refueling outage is forecast for June 9, 1995.

2. Scheduled date for restart following refueling.

Restart from Cycle 8 refueling outage is forecast for August 18, 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

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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).

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Revised Pages being submitted
for the
February, March and April
Monthly Operating Reports