

NRC MONTHLY OPERATING REPORT

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

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: April 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	<u>719.00</u>	<u>2,879.00</u>	<u>93,816.00</u>
12. Number Of Hours Reactor Was Critical	<u>719.00</u>	<u>2,879.00</u>	<u>70,893.59</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>719.00</u>	<u>2,879.00</u>	<u>69,750.34</u>
15. Unit Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,440,983.00</u>	<u>9,519,833.70</u>	<u>228,094,090.14</u>
17. Gross Electrical Energy Generated (MWH)	<u>816,833.00</u>	<u>3,257,958.50</u>	<u>77,345,746.50</u>
18. Net Electrical Energy Generated (MWH)	<u>777,113.00</u>	<u>3,104,867.00</u>	<u>73,359,565.88</u>
19. Unit Service Factor	<u>100.00%</u>	<u>100.00%</u>	<u>74.35%</u>
20. Unit Availability Factor	<u>100.00%</u>	<u>100.00%</u>	<u>74.35%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>101.01%</u>	<u>100.79%</u>	<u>73.08%</u>
22. Unit Capacity Factor (Using DER Net)	<u>101.01%</u>	<u>100.79%</u>	<u>73.08%</u>
23. Unit Forced Outage Rate	<u>0.00%</u>	<u>0.00%</u>	<u>5.94%</u>
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		<u>NA</u>	<u>NA</u>
INITIAL ELECTRICITY		<u>NA</u>	<u>NA</u>
COMMERCIAL OPERATION		<u>NA</u>	<u>NA</u>

AVERAGE DAILY UNIT POWER LEVEL

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

MONTH: April 1994

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>1084.38</u>
2	<u>1084.42</u>
3	<u>1130.96</u>
4	<u>1085.63</u>
5	<u>1084.58</u>
6	<u>1083.58</u>
7	<u>1083.71</u>
8	<u>1081.96</u>
9	<u>1079.42</u>
10	<u>1077.17</u>
11	<u>1082.46</u>
12	<u>1084.08</u>
13	<u>1080.96</u>
14	<u>1078.17</u>
15	<u>1080.75</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

16	<u>1080.79</u>
17	<u>1082.54</u>
18	<u>1082.92</u>
19	<u>1080.38</u>
20	<u>1082.21</u>
21	<u>1080.50</u>
22	<u>1072.04</u>
23	<u>1060.25</u>
24	<u>1081.58</u>
25	<u>1084.71</u>
26	<u>1083.83</u>
27	<u>1080.67</u>
28	<u>1079.88</u>
29	<u>1079.08</u>
30	<u>1033.25</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

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

REPORT MONTH: April 1994

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 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
DATE: _____
COMPLETED BY: M. A. Robinson
TELEPHONE: (714) 368-9418

<u>Date</u>	<u>Time</u>	<u>Event</u>
April	01 0001	Unit is in Mode 1, 98% reactor power, 1134 MWe.
April	03 0100	All clocks adjusted ahead one hour to conform to Pacific Daylight Saving Time.
April	23 1259	Control Element Assembly number 20 dropped during monthly Control Element Assembly testing.
	1310	Commenced lowering reactor power to 78%.
	1312	Commenced withdrawing Control Element Assembly number 20.
	1540	Commenced raising reactor power to full load after completing monthly Control Element Assembly testing.
	1923	Unit at 98% reactor power, 1128 MWe.
April	30 2400	Unit is in Mode 1, 98% reactor power, 1130 MWe.

REFUELING INFORMATION

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

MONTH: April 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 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
UNIT NAME: SONGS - 2
DATE: _____
COMPLETED BY: M. A. Robinson
TELEPHONE: (714) 368-9418

MONTH: April 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: M. A. Robinson
 TELEPHONE: (714) 368-9418

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: April 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	<u>719.00</u>	<u>2,879.00</u>	<u>88,367.00</u>
12. Number Of Hours Reactor Was Critical	<u>719.00</u>	<u>2,879.00</u>	<u>68,805.45</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>701.09</u>	<u>2,879.09</u>	<u>67,157.98</u>
15. Unit Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,278,100.50</u>	<u>9,193,762.75</u>	<u>215,865,552.46</u>
17. Gross Electrical Energy Generated (MWH)	<u>776,273.50</u>	<u>3,151,658.00</u>	<u>73,295,065.00</u>
18. Net Electrical Energy Generated (MWH)	<u>733,833.00</u>	<u>2,985,259.00</u>	<u>69,248,297.94</u>
19. Unit Service Factor	<u>97.51%</u>	<u>99.38%</u>	<u>76.00%</u>
20. Unit Availability Factor	<u>97.51%</u>	<u>99.38%</u>	<u>76.00%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>94.50%</u>	<u>96.01%</u>	<u>72.56%</u>
22. Unit Capacity Factor (Using DER Net)	<u>94.50%</u>	<u>96.01%</u>	<u>72.56%</u>
23. Unit Forced Outage Rate	<u>2.49%</u>	<u>0.62%</u>	<u>6.63%</u>
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: NA
26. Units In Test Status (Prior To Commercial Operation): Forecast Achieved

INITIAL CRITICALITY	<u>NA</u>	<u>NA</u>
INITIAL ELECTRICITY	<u>NA</u>	<u>NA</u>
COMMERCIAL OPERATION	<u>NA</u>	<u>NA</u>

AVERAGE DAILY UNIT POWER LEVEL

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

MONTH: April 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1054.00</u>
2	<u>159.71</u>
3	<u>993.46</u>
4	<u>1055.42</u>
5	<u>1059.71</u>
6	<u>1052.50</u>
7	<u>1056.50</u>
8	<u>1054.92</u>
9	<u>1055.21</u>
10	<u>1053.63</u>
11	<u>1054.63</u>
12	<u>1056.92</u>
13	<u>1058.42</u>
14	<u>1055.50</u>
15	<u>1054.54</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	<u>964.46</u>
17	<u>999.42</u>
18	<u>1063.00</u>
19	<u>1062.13</u>
20	<u>1066.42</u>
21	<u>1061.79</u>
22	<u>1062.25</u>
23	<u>1061.33</u>
24	<u>1064.46</u>
25	<u>1067.75</u>
26	<u>1068.00</u>
27	<u>1065.38</u>
28	<u>1058.29</u>
29	<u>1031.79</u>
30	<u>1004.88</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: April 1994

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

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
81	4/02/94	S (see note)	17.91	B	5	N/A	IT	RTV	Power reduction for root valve S31301MR040 maintenance.

Note: Regulatory Guide 1.16 states "The term 'forced outage' as used in this guide and as normally defined in the electric power industry means the occurrence of a component failure or other condition which requires that the unit be removed from service for corrective action immediately or up to and including the next weekend." Although the Unit was removed from service the next weekend, three days after root valve S31301MR040 failed, the Unit could have remained operating and was removed from service to repair the root valve to ensure optimal plant performance. Therefore, since the Unit was not required to be removed from service, the outage was classified as Scheduled.

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: _____
COMPLETED BY: M. A. Robinson
TELEPHONE: (714) 368-9418

<u>Date</u>		<u>Time</u>	<u>Event</u>
April	01	0001	Unit is in Mode 1, 97.6% reactor power, 1122 MWe.
		2100	Commenced lowering reactor power to remove main turbine from the grid to repair main turbine instrument root valve S31301MR040.
April	02	0435	Main turbine manually tripped at 110 MWe.
		1702	Commenced roll-up of main turbine after completion of instrument root valve repair.
		1759	Synchronized the main turbine to the grid and applied block load. Commenced raising reactor power to full load.
April	03	0100	All clocks adjusted ahead one hour to conform to Pacific Daylight Saving Time.
		1333	Unit at 95.2% reactor power, 1095 MWe.
April	16	1400	Commenced lowering reactor power to 80% for circulating water system heat treatment.
April	17	0001	Unit at 80% reactor power, 880 MWe.
		0545	Commenced raising reactor power to full power after completion of circulating water system heat treatment.
April	18	0001	Unit at 95% reactor power, 1100 MWe.
April	29	2135	Lowering main turbine power for High Pressure Turbine stop and governor valve testing.
April	30	0150	Returned main turbine to full power after completion of High Pressure Turbine stop and governor valve testing.
April	30	2400	Unit is in Mode 1, 95% reactor power, 1102 MWe.

REFUELING INFORMATION

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

MONTH: April 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

REFUELING INFORMATION

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

MONTH: April 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. 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).