

November 1995 Monthly Operating Report  
Units 2 and 3

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

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: December 14, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: November 1995
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	107,713.00
12. Number Of Hours Reactor Was Critical	693.60	5,869.60	82,644.19
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	686.65	5,454.97	81,086.31
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,359,616.90	17,819,175.90	265,197,031.75
17. Gross Electrical Energy Generated (MWH)	780,780.00	6,018,098.00	89,869,597.50
18. Net Electrical Energy Generated (MWH)	742,266.00	5,684,734.04	85,248,828.91
19. Unit Service Factor	95.37%	68.05%	75.28%
20. Unit Availability Factor	95.37%	68.05%	75.28%
21. Unit Capacity Factor (Using MDC Net)	96.35%	66.28%	73.97%
22. Unit Capacity Factor (Using DER Net)	96.35%	66.28%	73.97%
23. Unit Forced Outage Rate	4.63%	2.18%	5.28%
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: N/A			
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 - 2  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6707

MONTH: November 1995

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1104.75
2	1103.04
3	1102.79
4	1103.38
5	1102.50
6	1099.71
7	1099.38
8	1099.50
9	1099.04
10	1098.25
11	1097.88
12	1098.17
13	1096.63
14	1097.88
15	1096.04

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	1095.54
17	1091.42
18	1082.21
19	1093.54
20	1093.13
21	1094.96
22	1095.08
23	1096.75
24	1091.33
25	1095.92
26	1097.75
27	1097.25
28	1097.29
29	88.79
30	117.88

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6707

REPORT MONTH: November 1995

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
91	11/29/95	F	33.35	A	1	NA	IJ	MI	Corroded leads and grounded conduit in reactor coolant pump motor cooler leak detection system repaired.

<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

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6707

<u>Date</u>	<u>Time</u>	<u>Event</u>
November	01 0001	Unit is in Mode 1, 100% power, 1153 MWe.
November	28 2342	Commenced reducing reactor power at 15% per hour to investigate indication of high humidity on reactor coolant pump air cooler.
November	29 0451	Manually tripped main turbine at 19% reactor power.
	0454	Reactor manually tripped at 18% reactor power. Unit in Mode 3.
November	30 0545	Commenced reactor startup.
	0718	Reactor Critical.
	1109	Unit enters Mode 1, reactor power 5%.
	1414	Synchronized main generator and applied block load of 55MWe.
	1501	Commenced reactor power increase at 10% per hour.
	2400	Unit is in Mode 1, 56.6% power, 596 MWe.

REFUELING INFORMATION

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: December 14, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

MONTH: November 1995

1. Scheduled date for next refueling shutdown.  
Cycle 9 refueling outage is forecast for November 1996.
2. Scheduled date for restart following refueling.  
Restart from Cycle 9 refueling outage is forecast for January 1997.
3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?  
Unknown at this time.  
What will these be?  
Unknown at this time.
4. Scheduled date for submitting proposed licensing action and supporting information.  
Unknown at this time.
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.  
Unknown at this time.

REFUELING INFORMATION

DOCKET NO: 50-361  
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6. The number of fuel assemblies.

A. In the core. 217

B. In the spent fuel storage pool. 770 Total Fuel Assemblies  
700 Unit 2 Spent Fuel Assemblies  
0 Unit 2 New Fuel Assemblies  
70 Unit 1 Spent Fuel Assemblies

C. In the New Fuel Storage Racks Zero Unit 2 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.

March 2005, assuming current fuel loading for all future cycles, and unit 1 fuel remains at current location.

NRC MONTHLY OPERATING REPORT  
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: December 14, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: November 1995
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	102,264.00
12. Number Of Hours Reactor Was Critical	720.00	6,506.25	81,192.70
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	720.00	6,432.15	79,475.64
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,359,616.90	20,829,104.31	255,977,150.30
17. Gross Electrical Energy Generated (MWH)	819,797.00	7,069,690.00	86,902,366.50
18. Net Electrical Energy Generated (MWH)	778,685.00	6,685,032.63	82,125,943.56
19. Unit Service Factor	100.00%	80.24%	77.72%
20. Unit Availability Factor	100.00%	80.24%	77.72%
21. Unit Capacity Factor (Using MDC Net)	100.14%	77.22%	74.36%
22. Unit Capacity Factor (Using DER Net)	100.14%	77.22%	74.36%
23. Unit Forced Outage Rate	0.00%	0.00%	5.64%
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

DOCKET NO: 50-362  
 UNIT NAME: SONGS - 3  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6707

MONTH: November 1995

DAY LEVEL	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1093.79</u>
2	<u>1092.25</u>
3	<u>1091.96</u>
4	<u>1092.75</u>
5	<u>1096.21</u>
6	<u>1094.46</u>
7	<u>1049.33</u>
8	<u>1091.29</u>
9	<u>1092.83</u>
10	<u>1092.29</u>
11	<u>1091.21</u>
12	<u>1089.33</u>
13	<u>1089.00</u>
14	<u>1089.38</u>
15	<u>1088.92</u>

DAY	AVERAGE DAILY POWER (MWe-Net)
16	<u>1089.08</u>
17	<u>1089.88</u>
18	<u>1084.04</u>
19	<u>904.08</u>
20	<u>1006.88</u>
21	<u>1092.63</u>
22	<u>1093.75</u>
23	<u>1094.75</u>
24	<u>1095.71</u>
25	<u>1087.92</u>
26	<u>1094.54</u>
27	<u>1095.17</u>
28	<u>1096.58</u>
29	<u>1093.50</u>
30	<u>1091.71</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1995

DOCKET NO: 50-362  
 UNIT NAME: SONGS - 3  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6834

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

**SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH**

DOCKET NO: 50-362  
 UNIT NAME: SONGS - 3  
 DATE: December 14, 1995  
 COMPLETED BY: C. E. Williams  
 TELEPHONE: (714) 368-6707

<u>Date</u>	<u>Time</u>	<u>Event</u>
November	01 0000	Unit is in Mode 1, 99.6% reactor power, 1045 MWe.
November	07 1020	Commenced reducing reactor power to 95% for repair of third point heater level switch.
	1100	Reactor power at 95%, 1062 Mwe.
	2335	Commenced reactor power increase to 100%.
November	08 0314	Unit at 100% reactor power, 1145 Mwe.
November	18 2225	Commenced power reduction to 80% for circulating water system heat treatment and testing of high pressure turbine stop and governor valves.
November	19 0028	Reactor power at 80% power, 890 MWe.
	0925	Commenced raising reactor power to 100%.
	1639	Stopped reactor power increase at 93.8%, 1050 Mwe due to broken electrical connection on high pressure turbine stop valve.
November	20 2055	Commenced raising reactor power to 100% after returning high pressure stop valve to service.
	2345	Reactor power at 99%, 1140 MWe.
November	30 2400	Unit is in Mode 1, 99.7% reactor power, 1145 Mwe.

REFUELING INFORMATION

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UNIT NAME:	<u>SONGS - 3</u>
DATE:	<u>December 14, 1995</u>
COMPLETED BY:	<u>C. E. Williams</u>
TELEPHONE:	<u>(714) 368-6834</u>

MONTH: November 1995

1. Scheduled date for next refueling shutdown.  
Cycle 9 refueling outage is forecast for March 1997.
2. Scheduled date for restart following refueling.  
Restart from Cycle 9 refueling outage is forecast for May 1997.
3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?  
Unknown at this time.  
What will these be?  
Unknown at this time.
4. Scheduled date for submitting proposed licensing action and supporting information.  
Unknown at this time.
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.  
Unknown at this time.

**REFUELING INFORMATION**

DOCKET NO:	50-362
UNIT NAME:	SONGS - 3
DATE:	December 14, 1995
COMPLETED BY:	C. E. Williams
TELEPHONE:	(714) 368-6707

6. The number of fuel assemblies.

A. In the core. 217

B. In the spent fuel storage pool. 818 Total Fuel Assemblies  
700 Unit 3 Spent Fuel Assemblies  
0 Unit 3 New Fuel Assemblies  
118 Unit 1 Spent Fuel Assemblies

C. In the New Fuel Storage Racks Zero 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.

November 2003 (full off-load capability assuming current fuel loading for all future cycles, and unit 1 fuel remains where it is currently located).

Amended pages: May through October, 1995