



*Southern California Edison Company*

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October 13, 1995

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U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Gentlemen:

Subject: Docket Nos. 50-361 and 50-362  
Monthly Operating Reports for September 1995  
San Onofre Nuclear Generating Station, Units 2 and 3

Technical Specification 6.9.1.10 of Facility Operating Licenses NPF-10 and NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively, requires Edison to provide a Monthly Operating Report for each Unit, which includes: routine operating statistics and shutdown experience; all challenges to safety valves; any changes to the Offsite Dose Calculation Manual (ODCM); and any major changes to the radioactive waste treatment system. All covered activities are reported monthly, except for ODCM changes, which are reported within 90 days from the time the changes are effective.

This letter transmits the September 1995 Monthly Operating Reports for Units 2 and 3, respectively. There were no challenges to safety valves, no major changes to the Units 2 and 3 radioactive waste treatment systems, and no changes to the ODCM during the reporting period.

If you require any additional information, please let me know.

Sincerely,

Enclosures

cc: L. J. Callan, Regional Administrator, NRC Region IV  
J. E. Dyer, Director, Division of Reactor Projects, NRC Region IV  
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV  
M. B. Fields, NRC Project Manager, Units 2 and 3  
J. A. Sloan, Senior NRC Resident Inspector, San Onofre Units 2 & 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: October 13, 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: September 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	6,551.00	106,248.00
12. Number Of Hours Reactor Was Critical	720.00	4,585.40	81,359.99
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	720.00	4,023.32	79,654.66
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,432,846.39	13,018,576.00	260,396,431.85
17. Gross Electrical Energy Generated (MWH)	811,878.50	4,385,330.00	88,236,829.50
18. Net Electrical Energy Generated (MWH)	773,582.00	4,130,648.04	83,694,742.91
19. Unit Service Factor	100.00%	61.42%	74.97%
20. Unit Availability Factor	100.00%	61.42%	74.97%
21. Unit Capacity Factor (Using MDC Net)	100.41%	58.93%	73.62%
22. Unit Capacity Factor (Using DER Net)	100.41%	58.93%	73.62%
23. Unit Forced Outage Rate	0.00%	2.15%	5.34%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. If Shutdown At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_
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: October 13, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

MONTH: September 1995

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1140.38</u>
2	<u>1091.83</u>
3	<u>939.33</u>
4	<u>1085.58</u>
5	<u>1097.33</u>
6	<u>1096.71</u>
7	<u>1095.25</u>
8	<u>1098.29</u>
9	<u>1100.58</u>
10	<u>1100.75</u>
11	<u>1103.13</u>
12	<u>1102.38</u>
13	<u>1103.88</u>
14	<u>1102.08</u>
15	<u>1098.17</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	<u>1096.42</u>
17	<u>1093.54</u>
18	<u>1090.88</u>
19	<u>1090.88</u>
20	<u>1077.92</u>
21	<u>1012.96</u>
22	<u>1013.96</u>
23	<u>1014.67</u>
24	<u>1012.63</u>
25	<u>989.13</u>
26	<u>1078.92</u>
27	<u>1092.75</u>
28	<u>1091.17</u>
29	<u>1085.17</u>
30	<u>1035.96</u>

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361

UNIT NAME: SONGS - 2

REPORT MONTH: September 1995DATE: October 13, 1995COMPLETED BY: C. E. WilliamsTELEPHONE: (714) 360-6707

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: 50-361  
UNIT NAME: SONGS - 2  
DATE: October 13, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

<u>Date</u>	<u>Time</u>	<u>Event</u>
September 01	0001	Unit is in Mode 1, 99.1% reactor power, 1146 MWe.
September 03	0845	Commenced reducing reactor power to 80%, to perform circulating water system heat treatment.
	1220	Reactor power at 80%.
September 04	0115	Commenced raising reactor power to 100% after completion of circulating water system heat treatment.
	0352	Reactor at 99.4% power, 1152 MWe.
September 20	2045	Commenced reducing reactor power to approximately 90% for repairs on second and third point feedwater heaters.
	2145	Reactor at 93% power, 1055 MWe.
September 21	0630	Reactor raised to 97% power, maximum power level limit due to condensate flow limitation with second and third point heaters out of service.
September 25	0815	Commenced reactor power reduction to 93% for return of second and third point feedwater heaters.
	1015	Completed reactor power reduction to 93%
September 26	0455	Commenced raising reactor power to 100% with the second and third point heaters returned to service.
	0905	Reactor power at 100%, 1150 MWe.
September 30	2400	Unit is in Mode 1, reactor power 99.9%, 1140 MWe.

# REFUELING INFORMATION

DOCKET NO:	50-361
UNIT NAME:	SONGS - 2
DATE:	October 13, 1995
COMPLETED BY:	C. E. Williams
TELEPHONE:	(714) 368-6707

MONTH: September 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  
UNIT NAME: SONGS - 2  
DATE: October 13, 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. 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.

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 13, 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: September 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	6,551.00	100,799.00
12. Number Of Hours Reactor Was Critical	193.68	5,041.25	79,727.70
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	119.70	4,967.15	78,010.64
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	244,098.30	15,947,138.31	251,095,184.30
17. Gross Electrical Energy Generated (MWH)	77,926.50	5,401,844.50	85,234,521.00
18. Net Electrical Energy Generated (MWH)	59,407.00	5,101,824.63	80,542,735.56
19. Unit Service Factor	16.63%	75.82%	77.39%
20. Unit Availability Factor	16.63%	75.82%	77.39%
21. Unit Capacity Factor (Using MDC Net)	7.64%	72.11%	73.99%
22. Unit Capacity Factor (Using DER Net)	7.64%	72.11%	73.99%
23. Unit Forced Outage Rate	0.00%	0.00%	5.74%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling Shutdown, July 22, 1995, Duration (76 days)</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):	Forecast	Achieved	

INITIAL CRITICALITY  
INITIAL ELECTRICITY  
COMMERCIAL OPERATION

NA	NA
NA	NA
NA	NA



# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: October 13, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

MONTH: September 1995

DAY LEVEL	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 (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	51.50
27	441.88
28	689.75
29	810.92
30	988.08

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1995DOCKET NO: 50-362UNIT NAME: SONGS - 3DATE: October 13, 1995COMPLETED BY: C. E. WilliamsTELEPHONE: (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
88	950721	S	600.3	C	1	N/A	N/A	N/A	N/A

<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: October 13, 1995  
COMPLETED BY: C. E. Williams  
TELEPHONE: (714) 368-6707

<u>Date</u>	<u>Time</u>	<u>Event</u>
September 01	0001	Unit is in Mode 6, Cycle 8 refueling outage in progress.
September 02	1313	Unit in Mode 5.
September 14	1535	Unit in Mode 4.
September 21	0405	Unit in Mode 3.
September 22	2044	Commenced reactor startup.
	2129	Unit in Mode 2.
	2219	Reactor Critical.
	2342	Commenced reactor low power physics testing.
September 24	0930	Reactor Power at 2%.
	0945	Completion of low power physics testing.
	1520	Commenced reactor power increase to 10%.
	1532	Unit in Mode 1.
	1715	Reactor Power at 12%.
September 26	0018	Synchronized main generator to grid and applied block load of 55MWe. End of Cycle 8 refueling outage. Commenced raising power to approximately 20% for 20% power physics testing.
September 27	0145	Completed 20% power physics testing and commenced raising power to 68% test plateau at a rate of 3% per hour.
	1900	Reactor power at 68%, 744 MWe.
September 29	0320	Commenced reactor power increase to 80% for heat treatment of circulating water system, following completion of 68% physics testing.
	1625	Commenced circulating water system heat treatment.

September 29	2256	Commenced reactor power increase to 100% with a hold at 95% reactor power to perform excore calibration.
September 30	0630	Reactor power at 95%, 1093 Mwe.
	2120	Reduced turbine load to raise steam generator pressure
	2400	Unit is in Mode 1, reactor power at 91.3%, 1045 MWe, 3.31 EFPD

# REFUELING INFORMATION

DOCKET NO:	50-362
UNIT NAME:	SONGS - 3
DATE:	October 13, 1995
COMPLETED BY:	C. E. Williams
TELEPHONE:	(714) 368-6834

MONTH: September 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: October 13, 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.

Approximately 2003 (full off-load capability).