



Southern California Edison Company

23 PARKER STREET

IRVINE, CALIFORNIA 92718

F. R. NANDY
MANAGER, NUCLEAR LICENSING

September 17, 1990

TELEPHONE
(714) 587-5400

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

Subject: Docket Nos. 50-361 and 50-362
Monthly Operating Reports for August 1990
San Onofre Nuclear Generating Station, Units 2 and 3

Technical Specification 6.9.1.10 to Facility Operating Licenses NPF-10 and NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively, requires SCE 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 requires reporting within 90 days from the time the changes were made effective.

This letter transmits the August 1990 Monthly Operating Reports for Units 2 and 3, respectively. There were no challenges to safety valves, no changes to the ODCM, and no major changes to the Units 2 and 3 radioactive waste treatment systems, during the reporting period.

If you require additional information, please let me know.

Very truly yours,

Enclosures

cc: J. B. Martin (Regional Administrator, USNRC Region V)
C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)
J. E. Tatum (NRR, SONGS Project Manager)
Institute of Nuclear Power Operations (INPO)

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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
 UNIT NAME: SONGS - 2
 DATE: September 17, 1990
 COMPLETED BY: T. M. Sarette
 TELEPHONE: (714) 368-9335

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: August 1990
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>744.00</u>	<u>5,831.00</u>	<u>61,704.00</u>
12. Number Of Hours Reactor Was Critical	<u>76.83</u>	<u>4,968.85</u>	<u>44,035.69</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>61.42</u>	<u>4,946.89</u>	<u>43,089.92</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>73,229.49</u>	<u>16,549,051.08</u>	<u>140,484,080.40</u>
17. Gross Electrical Energy Generated (MWH)	<u>53,287.00</u>	<u>5,662,070.50</u>	<u>47,636,777.50</u>
18. Net Electrical Energy Generated (MWH)	<u>38,192.00</u>	<u>5,385,742.00</u>	<u>45,128,586.24</u>
19. Unit Service Factor	<u>8.26%</u>	<u>84.84%</u>	<u>69.83%</u>
20. Unit Availability Factor	<u>8.26%</u>	<u>84.84%</u>	<u>69.83%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>4.80%</u>	<u>86.32%</u>	<u>68.35%</u>
22. Unit Capacity Factor (Using DER Net)	<u>4.80%</u>	<u>86.32%</u>	<u>68.35%</u>
23. Unit Forced Outage Rate	<u>0.00%</u>	<u>1.29%</u>	<u>6.10%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	<u>NA</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

<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: 50-361
UNIT NAME: SONGS - 2
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

1	<u>0.00</u>
2	<u>0.00</u>
3	<u>0.00</u>
4	<u>0.00</u>
5	<u>0.00</u>
6	<u>0.00</u>
7	<u>0.00</u>
8	<u>0.00</u>
9	<u>0.00</u>
10	<u>0.00</u>
11	<u>0.00</u>
12	<u>0.00</u>
13	<u>0.00</u>
14	<u>0.00</u>
15	<u>0.00</u>
16	<u>0.00</u>

DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

17	<u>0.00</u>
18	<u>0.00</u>
19	<u>0.00</u>
20	<u>0.00</u>
21	<u>0.00</u>
22	<u>0.00</u>
23	<u>0.00</u>
24	<u>0.00</u>
25	<u>0.00</u>
26	<u>0.00</u>
27	<u>0.00</u>
28	<u>0.00</u>
29	<u>177.98</u>
30	<u>773.06</u>
31	<u>1003.02</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361

UNIT NAME: SONGS - 2

REPORT MONTH: AUGUST 1990

DATE: September 17, 1990

COMPLETED BY: T. M. Sarette

TELEPHONE: (714) 368-9335

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
58	900728	S	682.58	B	4	NA	NA	NA	Continuation of the scheduled steam generator inspection outage.

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 of 20%
or greater in the
past 24 hours
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: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

<u>Date</u>	<u>Time</u>	<u>Event</u>
August 1	0001	Unit is in Mode 5, day 5 of the scheduled 34 day steam generator inspection outage.
August 24	1518	Entered Mode 4 following completion of steam generator inspection outage.
August 26	2225	Entered Mode 3.
August 28	1848	Entered Mode 2.
	1910	Reactor made critical.
August 29	0120	Entered Mode 1.
	1055	Unit synchronized to the grid. Continued reactor power increase.
	2110	Reactor held at 75% power due to one circulating water pump being removed from service for condenser tube leak investigation.
August 30	1655	Commenced reactor power increase to 100%.
August 31	2400	Unit is in Mode 1 at 100% power. Turbine load held at 1128 MWe gross to permit repair of the fourth point heater tube leak.

REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

1. Scheduled date for next refueling shutdown.

Cycle 6 refueling outage is forecast for July 1991.

2. Scheduled date for restart following refueling.

Restart from Cycle 6 refueling outage is forecast for October 1991.

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

Not yet specifically determined. Under evaluation.

What will these be?

Not yet specifically determined. Under evaluation.

4. Scheduled date for submitting proposed licensing action and supporting information.

Not yet specifically determined. Under evaluation.

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.

Not yet specifically determined. Under evaluation.

REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

6. The number of fuel assemblies.

a) In the core. 217

b) In the spent fuel storage pool. 446 (376 Unit 2 Spent
Fuel Assemblies and 70
Unit 1 Spent Fuel
Assemblies.

7. Licensed spent fuel storage capacity. 1542 *

Intended change in spent fuel storage capacity. None

* Expanded from 800 to 1542 by License Amendment No. 87 - Facility modification is scheduled to be completed by December 1990.

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

Approximately 2001 (full off load capability)

NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362
 UNIT NAME: SONGS - 3
 DATE: September 17, 1990
 COMPLETED BY: T. M. Sarette
 TELEPHONE: (714) 368-9335

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: August 1990
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>744.00</u>	<u>5,831.00</u>	<u>56,255.00</u>
12. Number Of Hours Reactor Was Critical	<u>744.00</u>	<u>3,368.69</u>	<u>41,298.97</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>744.00</u>	<u>3,231.41</u>	<u>40,047.49</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>2,590,237.20</u>	<u>10,575,580.09</u>	<u>126,443,336.64</u>
17. Gross Electrical Energy Generated (MWH)	<u>846,118.00</u>	<u>3,590,923.00</u>	<u>42,875,634.50</u>
18. Net Electrical Energy Generated (MWH)	<u>804,823.00</u>	<u>3,368,402.13</u>	<u>40,410,513.33</u>
19. Unit Service Factor	<u>100.00%</u>	<u>55.42%</u>	<u>71.19%</u>
20. Unit Availability Factor	<u>100.00%</u>	<u>55.42%</u>	<u>71.19%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>100.16%</u>	<u>53.49%</u>	<u>66.51%</u>
22. Unit Capacity Factor (Using DER Net)	<u>100.16%</u>	<u>53.49%</u>	<u>66.51%</u>
23. Unit Forced Outage Rate	<u>0.00%</u>	<u>14.65%</u>	<u>8.30%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	<u>NA</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

<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: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

1	<u>1104.54</u>
2	<u>1052.92</u>
3	<u>1033.40</u>
4	<u>806.40</u>
5	<u>1073.23</u>
6	<u>1107.60</u>
7	<u>1114.17</u>
8	<u>1119.58</u>
9	<u>1107.71</u>
10	<u>1118.33</u>
11	<u>1095.83</u>
12	<u>1095.83</u>
13	<u>1125.00</u>
14	<u>1098.96</u>
15	<u>1098.44</u>
16	<u>1095.85</u>

DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

17	<u>1091.38</u>
18	<u>1093.44</u>
19	<u>1094.65</u>
20	<u>1089.21</u>
21	<u>1102.52</u>
22	<u>1088.77</u>
23	<u>1104.58</u>
24	<u>1080.46</u>
25	<u>1105.50</u>
26	<u>1097.15</u>
27	<u>1124.02</u>
28	<u>1136.81</u>
29	<u>1057.85</u>
30	<u>1118.94</u>
31	<u>1089.02</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: AUGUST 1990

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

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
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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 of 20%
or greater in the
past 24 hours
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: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

<u>Date</u>	<u>Time</u>	<u>Event</u>
August 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1156 MWe gross.
August 4	0010	Commenced reactor power decrease to 80% for circulating water system heat treatment.
	0630	Reactor at 80% power.
August 5	0210	Commenced reactor power increase to 100% following completion of heat treating operations.
	0630	Reactor at 100% power.
August 31	2400	Unit is in Mode 1 at 100% reactor power. Turbine load at 1150 MWe gross.

REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

1. Scheduled date for next refueling shutdown.

Cycle 6 refueling outage is forecast for January 1992.

2. Scheduled date for restart following refueling.

Restart from Cycle 6 refueling outage is forecast for April 1992.

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

Not yet specifically determined. Under evaluation.

What will these be?

Not yet specifically determined. Under evaluation.

4. Scheduled date for submitting proposed licensing action and supporting information.

Not yet specifically determined. Under evaluation.

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.

Not yet specifically determined. Under evaluation.

REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE: September 17, 1990
COMPLETED BY: T. M. Sarette
TELEPHONE: (714) 368-9335

MONTH: August 1990

6. The number of fuel assemblies.

a) In the core. 217

b) In the spent fuel storage pool. 445 (376 Unit 3 Spent
Fuel Assemblies and 69
Unit 1 Spent Fuel
Assemblies

7. Licensed spent fuel storage capacity. 1542 *

Intended change in spent fuel storage capacity. None

* Expanded from 800 to 1542 by License Amendment No. 77 - Facility modification is scheduled to be completed by September 1991.

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

Approximately 2003 (full off load capability)