

# NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: July 16, 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: June 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>720.00</u>	<u>4,343.00</u>	<u>60,216.00</u>
12. Number Of Hours Reactor Was Critical	<u>720.00</u>	<u>4,308.17</u>	<u>43,375.01</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>720.00</u>	<u>4,301.90</u>	<u>42,444.93</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>2,397,614.87</u>	<u>14,445,737.39</u>	<u>138,380,766.71</u>
17. Gross Electrical Energy Generated (MWH)	<u>815,935.00</u>	<u>4,966,640.00</u>	<u>46,941,347.00</u>
18. Net Electrical Energy Generated (MWH)	<u>780,222.00</u>	<u>4,742,434.00</u>	<u>44,485,278.24</u>
19. Unit Service Factor	<u>100.00%</u>	<u>99.05%</u>	<u>70.49%</u>
20. Unit Availability Factor	<u>100.00%</u>	<u>99.05%</u>	<u>70.49%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>101.27%</u>	<u>102.05%</u>	<u>69.04%</u>
22. Unit Capacity Factor (Using DER Net)	<u>101.27%</u>	<u>102.05%</u>	<u>69.04%</u>
23. Unit Forced Outage Rate	<u>0.00%</u>	<u>0.00%</u>	<u>6.06%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>A Steam Generator Inspection outage is scheduled to commence on or before</u> <u>July 31, 1990. Outage duration is forecast for 34 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

<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: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 1990

## DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

1	<u>1057.08</u>
2	<u>976.77</u>
3	<u>762.90</u>
4	<u>989.94</u>
5	<u>1021.88</u>
6	<u>1064.17</u>
7	<u>1060.21</u>
8	<u>1064.38</u>
9	<u>1056.15</u>
10	<u>1055.77</u>
11	<u>1063.23</u>
12	<u>1057.77</u>
13	<u>1058.77</u>
14	<u>1058.02</u>
15	<u>1049.13</u>
16	<u>1059.42</u>

## DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

17	<u>1053.71</u>
18	<u>1055.00</u>
19	<u>1049.75</u>
20	<u>1068.71</u>
21	<u>1035.42</u>
22	<u>1078.33</u>
23	<u>1042.08</u>
24	<u>1067.08</u>
25	<u>1059.52</u>
26	<u>1063.29</u>
27	<u>1065.58</u>
28	<u>1065.98</u>
29	<u>1036.67</u>
30	<u>1055.79</u>

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361

UNIT NAME: SONGS - 2

REPORT MONTH: JUNE 1990

DATE: July 16, 1990

COMPLETED BY: T. M. Sarette

TELEPHONE: (714) 368-9335

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
55	900603	S	0.00	B	5	NA	KE	COND	Power reduction of 20% or greater to perform heat treating operations for the circulating water tunnels.

<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 of 20%  
or greater in the  
past 24 hours  
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: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

<u>Date</u>	<u>Time</u>	<u>Event</u>
June 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1147 MWe gross.
June 2	1435	Commence reactor power decrease to 80% in preparation for circulating water system heat treatment.
	1810	Reactor at 80% power.
June 3	0810	Commenced reactor power decrease to 75% for circulating water pump P-118 water box cleaning.
	0910	Reactor at 75% power.
June 4	0334	Commenced reactor power increase following completion of P-118 water box cleaning.
	0745	Reactor at 100% power.
June 8	2200	Commence reactor power decrease to 95% in preparation for reactor coolant system water volume correction factor testing.
	2230	Reactor at 95% power.
	2300	Reactor returned to 100% power.
June 30	2400	Unit is in Mode 1 at 100% reactor power. Turbine load at 1140 MWe gross.

## REFUELING INFORMATION

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 1990

1. Scheduled date for next refueling shutdown.

Forecast for July 1991.

2. Scheduled date for restart following refueling.

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: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 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: July 16, 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: June 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	720.00	4,343.00	54,767.00
12. Number Of Hours Reactor Was Critical	0.00	2,294.11	40,224.39
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	0.00	2,278.18	39,094.26
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	0.00	7,496,618.89	123,364,375.44
17. Gross Electrical Energy Generated (MWH)	0.00	2,553,085.50	41,837,797.00
18. Net Electrical Energy Generated (MWH)	(6,391.25)	2,398,327.13	39,440,438.33
19. Unit Service Factor	0.00%	52.46%	71.38%
20. Unit Availability Factor	0.00%	52.46%	71.38%
21. Unit Capacity Factor (Using MDC Net)	0.00%	51.13%	66.68%
22. Unit Capacity Factor (Using DER Net)	0.00%	51.13%	66.68%
23. Unit Forced Outage Rate	0.00%	7.96%	7.71%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Cycle 5 refueling outage commenced on April 14, 1990 is in progress. Outage duration has been extended to 98 days.			
25. If Shutdown At End Of Report Period, Estimated Date of Startup:	<u>July 21, 1990</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: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 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>0.00</u>
30	<u>0.00</u>



## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: JUNE 1990DOCKET NO: 50-362UNIT NAME: SONGS - 3DATE: July 16, 1990COMPLETED BY: T. M. SaretteTELEPHONE: (714) 368-9335

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
54	900414	S	720	C	4	NA	NA	NA	Cycle 5 refueling outage.

<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 of 20%  
or greater in the  
past 24 hours  
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: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

<u>Date</u>	<u>Time</u>	<u>Event</u>
June 1	0001	Unit is in Mode 5, day 49 of the Cycle 5 Refueling outage.
June 30	2400	Unit is in Mode 5, day 78 of the Cycle 5 Refueling outage.

## REFUELING INFORMATION

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 1990

1. Scheduled date for next refueling shutdown.

Cycle 5 refueling outage commenced on April 14, 1990, and is currently in progress.

Cycle 6 refueling outage is forecast for January 1992.

2. Scheduled date for restart following refueling.

Restart from Cycle 5 refueling outage is scheduled for July 21, 1990.

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?

None have been identified for Cycle 5.

Not yet specifically determined for Cycle 6. Under evaluation.

What will these be?

None have been identified for Cycle 5.

Not yet specifically determined for Cycle 6. Under evaluation.

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

None for Cycle 5.

Not yet specifically determined for Cycle 6. Under evaluation.

## REFUELING INFORMATION

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: July 16, 1990  
COMPLETED BY: T. M. Sarette  
TELEPHONE: (714) 368-9335

MONTH: June 1990

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 for Cycle 5.

Not yet specifically determined for Cycle 6. Under evaluation.

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)