

## NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-206  
 UNIT NAME: SONGS - 1  
 DATE: July 16, 1990  
 COMPLETED BY: T. M. Sarette  
 TELEPHONE: (714) 368-9335

### OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 1
2. Reporting Period: June 1990
3. Licensed Thermal Power (Mwt): 1347
4. Nameplate Rating (Gross MWe): 456
5. Design Electrical Rating (Net MWe): 436
6. Maximum Dependable Capacity (Gross MWe): 456
7. Maximum Dependable Capacity (Net MWe): 436
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): 390
10. Reasons For Restrictions, If Any: Self-imposed power level limit to control Steam Generator tube corrosion

		This Month	Yr.-to-Date	Cumulative
11.	Hours In Reporting Period	720.00	4,343.00	201,991.00
12.	Number Of Hours Reactor Was Critical	718.00	4,162.86	118,024.70
13.	Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14.	Hours Generator On-Line	717.75	4,145.90	113,825.38
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	873,110.70	5,040,285.33	142,610,132.45
17.	Gross Electrical Energy Generated (MWH)	282,600.00	1,649,602.86	48,069,931.28
18.	Net Electrical Energy Generated (MWH)	274,992.00	1,562,070.00	45,324,490.00
19.	Unit Service Factor	99.69%	95.46%	56.35%
20.	Unit Availability Factor	99.69%	95.46%	56.35%
21.	Unit Capacity Factor (Using MDC Net)	87.60%	82.49%	51.47%
22.	Unit Capacity Factor (Using DER Net)	87.60%	82.49%	51.47%
23.	Unit Forced Outage Rate	0.00%	4.49%	19.35%
24.	Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Reactor thermal shield support replacement and cycle 11 refueling outage commenced on June 30, 1990. Outage duration scheduled for 140 days.</u>			
25.	If Shutdown At End Of Report Period, Estimated Date of Startup: <u>November 17, 1990</u>			
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

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DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	<u>380.36</u>
2	<u>380.58</u>
3	<u>380.08</u>
4	<u>379.89</u>
5	<u>359.06</u>
6	<u>376.38</u>
7	<u>374.86</u>
8	<u>375.33</u>
9	<u>376.34</u>
10	<u>377.11</u>
11	<u>378.25</u>
12	<u>377.32</u>
13	<u>376.33</u>
14	<u>376.76</u>
15	<u>376.35</u>
16	<u>376.86</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>377.02</u>
18	<u>376.39</u>
19	<u>378.17</u>
20	<u>378.01</u>
21	<u>377.66</u>
22	<u>378.07</u>
23	<u>379.41</u>
24	<u>379.05</u>
25	<u>380.11</u>
26	<u>380.90</u>
27	<u>380.99</u>
28	<u>372.20</u>
29	<u>376.00</u>
30	<u>228.34</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: June 1990

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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
139	900630	S	2.0	C,D	1	NA	NA	NA	Reactor thermal shield support replacement and cycle 11 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**

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<u>Date</u>	<u>Time</u>	<u>Event</u>
June 1	0001	Unit is in Mode 1 at 92% reactor power. Turbine load at 399 MWe gross.
June 5	1510	Commenced reactor power decrease to allow removal from service of the south circulating water pump for cleaning large amounts of kelp on south screens and rakes.
	1530	Reactor at 65% power. Commenced screens and rakes cleaning.
	1833	Commenced reactor power increase.
	1944	Reactor at 92% power.
June 28	1800	Reactor power reduced to 75% for main steam relief valve testing.
	2255	Reactor power increased to 85%.
June 30	0047	Commenced reactor power decrease for main steam relief valve testing.
	0113	Reactor at 70% power.
	1150	Reactor at 67% power in preparation for circulating water system heat treatment.
	1407	Commenced heat treatment.
	1608	Completed heat treatment

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<u>Date</u>	<u>Time</u>	<u>Event</u>
June 30	1800	Commenced reactor shutdown for reactor thermal shield support replacement and Cycle 11 refueling outage.
	2144	Entered Mode 2.
	2145	Unit taken off line.
	2200	Entered Mode 3.
	2400	Unit is in Mode 3, day 1 of scheduled 140 day reactor thermal shield support replacement and Cycle 11 refueling outage.

## REFUELING INFORMATION

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MONTH: June 1990

1. Scheduled date for next refueling shutdown.

The Cycle 11 refueling outage commenced on June 30, 1990, and is currently in progress.

The Cycle 12 refueling outage is forecast to commence in June 1992.

2. Scheduled date for restart following refueling.

Restart from the Cycle 11 refueling outage is forecast for November 17, 1990.

Restart from the Cycle 12 refueling outage is forecast for September 1992.

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

Yes, for Cycle 11 refueling.

Not yet specifically determined for Cycle 12 refueling.

What will these be?

For Cycle 11 refueling:

- a) License Amendment Application No. 180, associated with the resolution of the 480V breaker overload issue.
- b) License Amendment Application No. 181, associated with the thermal shield support replacement and monitoring program.
- c) License Amendment Application No. 182, associated with increased spent fuel pool cooling heat loads.
- d) License Amendment Application No. 183, associated with removal of the license condition related to the TDI diesel generators.
- e) License Amendment Application No. 185, associated with reduced minimum Auxiliary Feedwater Flow resulting from the cavitating venturi resizing.

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3. ( Continued )

For Cycle 12 refueling:

Not yet specifically determined. Under evaluation.

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

For Cycle 11 refueling outage:

- a) License Amendment Application No. 180, auxiliary electrical supply, was submitted on April 19, 1990.
- b) License Amendment Application No. 181, thermal shield support replacement and monitoring program, was submitted on April 20, 1990.
- c) License Amendment Application No. 182, spent fuel pool cooling system, was submitted on May 16, 1990.
- d) License Amendment Application No. 183, TDI diesel generator license condition, was submitted on June 5, 1990.
- e) License Amendment Application No. 185, auxiliary feedwater system minimum flow requirements, was submitted on July 3, 1990.

For Cycle 12 refueling outage:

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.

For Cycle 11 refueling, none have been identified at this time.

For Cycle 12 refueling, not yet specifically determined. Under evaluation.

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6. The number of fuel assemblies.

a) In the core. 157

b) In the spent fuel storage pool. 59

7. Licensed spent fuel storage capacity. 216

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 1995 (refueling only)

Approximately 1991 (full off load capability)