NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: May 1989
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	744.00	3,623.00	50,736.00
12. Number Of Hours Reactor Was Critical	294.60	2,462.77	36,302.76
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	294.55	2,445.76	35,630.78
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	993,642.81	8,081,281.05	115,732,268.68
17. Gross Electrical Energy Generated (MWH)	336,730.50	2,745,741.50	39,179,914.50
18. Net Electrical Energy Generated (MWH)	315,669.00	2,596,881.00	37,118,368.35
19. Unit Service Factor	39.59%	67.51%	70.23%
20. Unit Availability Factor	39.59%	67.51%	70.23%
21. Unit Capacity Factor (Using MDC Net)	39.65%	66.99%	68.37%
22. Unit Capacity Factor (Using DER Net)	39.65%	66.99%	68.37%
23. Unit Forced Outage Rate	60.41%	32.49%	6.42%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
    Cycle 5 refueling outage scheduled to commence on September 15, 1989.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: June 6, 1989
26. Units In Test Status (Prior To Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	NA	NA
INITIAL ELECTRICITY	NA	NA
COMMERCIAL OPERATION	NA	NA

mor.may/2

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

MONTH: May 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1106.63	17	0.00
2	1108.75	18	0.00
3	1106.50	19	0.00
4	1104.50	20	0.00
5	1093.04	21	0.00
6	1100.04	22	0.00
7	1101.75	23	0.00
8	1102.42	24	0.00
9	1100.54	25	0.00
10	1063.08	26	0.00
11	1079.63	27	0.00
12	1106.17	28	0.00
13	179.88	29	0.00
14	0.00	30	0.00
15	0.00	31	0.00
16	0.00		

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: MAY 1989

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

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
49	890513	F	449.45	A	1	NA	AB	SG	Reactor normally shutdown fr 100% power to investigate and repair cause of increased primary to secondary leakage in SG E088. Cause was due to cracks in the welds of 3 welded tube plugs. The leaking plugs were replaced with new plugs.

[1]F-Forced
S-Scheduled

[2]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)

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

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

Date	Time	Event
May 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1152 MWe gross.
May 13	0120	Commenced reactor power reduction from 100% to approximately 80% to perform heat treating operations for the circulating water tunnels.
	0245	Reactor at 80% power. Planned heat treat cancelled. Initiate plant shutdown to investigate and repair increased primary to secondary leakage in Steam Generator (SG) E088.
	0633	Tripped the turbine manually.
	0636	Tripped the reactor manually.
	0730	Entered Mode 3.
	1842	Entered Mode 4.
May 14	1530	Entered Mode 5 for SG E088 tube leak repair outage.
May 31	2400	Unit is Mode 5. SG E088 tube leak repairs in progress.

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REFUELING INFORMATION

DOCKET NO: 50-361
UNIT NAME: SONGS - 2
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

MONTH: May 1989

1. Scheduled date for next refueling shutdown.

   September 15, 1989.

2. Scheduled date for restart following refueling.

   November 18, 1989.

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 determined

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

   Not yet determined.

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.

   a) As a result of the extended fuel cycle, a change to Technical Specification (TS) 3.2.1, "Linear Heat Rate", may be needed in order to compensate for a higher end-of-life fuel pin fission gas pressure. However, this change is not required for return to service. This change will only be necessary if the "Fuel Rod Maximum Allowable Gas Pressure" Topical Report (CEN-372-P), which was submitted to the NRC by the Combustion Engineering Owner's Group, is not approved on the SONGS 2 docket at the time that the pre-determined burnup is achieved.

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REFUELING INFORMATION

DOCKET NO: 50-361
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MONTH: May 1989

b) An amendment to TS 3.1.3.4 is being prepared to revise CEA drop time. This change, which incorporates the use of an arithmetic average and maximum individual CEA drop times, will provide additional margin between the measured values and the TS limits. This change is desired for startup testing during return to service, but is not required for return to service.

6. The number of fuel assemblies.

a) In the core. 217

b) In the spent fuel storage pool. 446 (268 Unit 2 Spent Fuel Assemblies, 70 Unit 1 Spent Fuel Assemblies, and 108 Unit 2 New Fuel Assemblies)

7. Licensed spent fuel storage capacity. 800

Intended change in spent fuel storage capacity. 1542, forecasted to occur during Cycle 5 (1990)

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

Approximately 1995 (refueling only)

Approximately 1993 (full off load capability)

mor.may/7

NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: May 1989
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	744.00	3,623.00	45,287.00
12. Number Of Hours Reactor Was Critical	744.00	3,326.29	33,005.03
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	744.00	3,309.07	31,899.26
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	2,516,439.88	11,018,934.21	99,547,714.56
17. Gross Electrical Energy Generated (MWH)	861,156.50	3,779,574.50	33,747,662.00
18. Net Electrical Energy Generated (MWH)	819,090.00	3,585,715.00	31,787,187.20
19. Unit Service Factor	100.00%	91.34%	70.44%
20. Unit Availability Factor	100.00%	91.34%	70.44%
21. Unit Capacity Factor (Using MDC Net)	101.94%	91.64%	64.99%
22. Unit Capacity Factor (Using DER Net)	101.94%	91.64%	64.99%
23. Unit Forced Outage Rate	0.00%	8.66%	8.20%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
    NA

25. If Shut Down 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

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

MONTH: May 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1110.92	17	1099.96
2	1111.04	18	1099.50
3	1109.58	19	1100.42
4	1110.29	20	1097.46
5	1103.63	21	1099.38
6	1105.04	22	1099.00
7	1107.92	23	1102.21
8	1110.63	24	1088.29
9	1105.33	25	1101.33
10	1104.63	26	1092.83
11	1105.13	27	1099.25
12	1096.79	28	1096.21
13	1098.38	29	1093.00
14	1097.25	30	1091.54
15	1099.29	31	1093.04
16	1099.50		

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: MAY 1989

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

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

[1]F-Forced
S-Scheduled

[2]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)

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

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SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: E. R. Siacor
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Date	Time	Event
May 1	0001	Unit is in Mode 1 at 100% reactor power. Turbine load at 1155 MWe gross.
May 24	0930	High pressure turbine stop valve 3UV-2200D failed shut. Reactor power reduced to 85% to investigate and repair cause of stop valve failure.
	1630	Replaced faulty trip solenoid and 3UV-2200D was returned to service. Reactor power increase to 100%.
May 31	2400	Unit is in Mode 1 at 100% reactor power. Turbine load at 1155 MWe gross.

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REFUELING INFORMATION

DOCKET NO: 50-362
UNIT NAME: SONGS - 3
DATE:
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

MONTH: May 1989

1. Scheduled date for next refueling shutdown.

   Forecasted for April 1, 1990.

2. Scheduled date for restart following refueling.

   Forecasted for June 10, 1990.

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 determined.

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

   Not yet determined.

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.

6. The number of fuel assemblies.

   a) In the core. 217

   b) In the spent fuel storage pool. 337 (268 Unit 3, 69 Unit 1)

7. Licensed spent fuel storage capacity. 800

   Intended change in spent fuel storage capacity. 1542, forecasted to occur during Cycle 5 (1991)

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

   Approximately 1996 (refueling only)
   Approximately 1994 (full off load capability)

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