

# NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-361  
 UNIT NAME: SONGS - 2  
 DATE: 3-13-92  
 COMPLETED BY: M. M. Farr  
 TELEPHONE: (714) 368-9787

## OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 2
2. Reporting Period: February 1992
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  | 696.00       | 1,440.00     | 74,833.00      |
| 12. Number Of Hours Reactor Was Critical   | 696.00       | 1,440.00     | 53,932.25      |
| 13. Reactor Reserve Shutdown Hours   | 0.00         | 0.00         | 0.00           |
| 14. Hours Generator On-Line  | 696.00       | 1,440.00     | 52,881.55      |
| 15. Unit Reserve Shutdown Hours  | 0.00         | 0.00         | 0.00           |
| 16. Gross Thermal Energy Generated (MWH)   | 2,347,411.99 | 4,805,481.87 | 172,327,517.30 |
| 17. Gross Electrical Energy Generated (MWH)  | 806,731.00   | 1,648,191.00 | 58,449,493.50  |
| 18. Net Electrical Energy Generated (MWH)  | 768,963.00   | 1,571,032.00 | 55,383,366.83  |
| 19. Unit Service Factor  | 100.00%      | 100.00%      | 70.67%         |
| 20. Unit Availability Factor   | 100.00%      | 100.00%      | 70.67%         |
| 21. Unit Capacity Factor (Using MDC Net)   | 103.26%      | 101.96%      | 69.17%         |
| 22. Unit Capacity Factor (Using DER Net)   | 103.26%      | 101.96%      | 69.17%         |
| 23. Unit Forced Outage Rate  | 0.00%        | 0.00%        | 6.76%          |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):<br>None |              |              | NA             |
| 25. If Shutdown 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: 50-361  
UNIT NAME: SONGS - 2  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

MONTH: February 1992

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

|    |         |
|----|---------|
| 1  | 1100.67 |
| 2  | 1078.71 |
| 3  | 1109.21 |
| 4  | 1094.83 |
| 5  | 1110.46 |
| 6  | 1111.96 |
| 7  | 1112.21 |
| 8  | 1101.33 |
| 9  | 1110.42 |
| 10 | 1109.83 |
| 11 | 1109.00 |
| 12 | 1107.50 |
| 13 | 1107.38 |
| 14 | 1101.46 |
| 15 | 1107.92 |
| 16 | 1105.71 |

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

|    |         |
|----|---------|
| 17 | 1106.00 |
| 18 | 1107.25 |
| 19 | 1108.04 |
| 20 | 1107.63 |
| 21 | 1102.04 |
| 22 | 1107.00 |
| 23 | 1106.17 |
| 24 | 1106.50 |
| 25 | 1105.13 |
| 26 | 1104.67 |
| 27 | 1100.75 |
| 28 | 1095.75 |
| 29 | 1102.04 |

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-361

UNIT NAME: SONGS - 2

REPORT MONTH: February 1992

DATE: 3-13-92

COMPLETED BY: M. M. Farr

TELEPHONE: (714) 368-9787

| No. | Date | Type <sup>1</sup> | Duration<br>(Hours) | Reason <sup>2</sup> | Method of<br>Shutting<br>Down<br>Reactor <sup>3</sup> | LER<br>No. | System<br>Code <sup>4</sup> | Component<br>Code <sup>5</sup> | Cause & Corrective<br>Action to<br>Prevent Recurrence |
|-----|------|-------------------|---------------------|---------------------|---|------------|-----------------------------|--------------------------------|---|
| NA  | NA   | NA                | NA                  | NA                  | NA  | NA         | NA                          | NA                             | NA  |

<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: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

| <u>Date</u> | <u>Time</u> | <u>Event</u>  |
|-------------|-------------|---|
| February 1  | 0001        | Unit is in Mode 1 at 100% reactor power. Turbine load at 1040 MWe gross.      |
|             | 0015        | Turbine returned to full load, 1155 MWe.                                      |
|             | 2215        | HP governor valve UV2200B tripped closed. Unit stabilized with SBCS.          |
|             | 2250        | Commenced reactor power decrease to 93% to close SBCS valves.                 |
|             | 2400        | Reactor at 95% power, SBCS valves closed.                                     |
| February 2  | 0808        | Commenced reactor power increase to 100% following UV2200B return to service. |
|             | 1025        | Reactor at 100% power.  |
| February 4  | 0120        | HP governor valve UV2200B tripped closed. Unit stabilized with SBCS.          |
|             | 0135        | Commenced reactor power decrease to 95% to close SBCS valves.                 |
|             | 0220        | Reactor at 95% power, SBCS valves closed.                                     |
|             | 0545        | Commenced reactor power increase to 100% following UV2200B return to service. |
|             | 0645        | Reactor at 100% power.  |
| February 29 | 2400        | Unit is in Mode 1 at 100% reactor power. Turbine load at 1150 MWe gross.      |

# REFUELING INFORMATION

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

MONTH: February 1992

1. Scheduled date for next refueling shutdown.

Cycle 7 refueling outage is forecast for May 1993.

2. Scheduled date for restart following refueling.

Restart from Cycle 7 refueling outage is forecast for July 1993.

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

Not yet determined for Cycle 7.

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 determined.

# REFUELING INFORMATION

DOCKET NO: 50-361  
UNIT NAME: SONGS - 2  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

MONTH: February 1992

6. The number of fuel assemblies.

- a) In the core. 217
- b) In the spent fuel storage pool. 554 (484 Unit 2 Spent  
Fuel Assemblies, 70  
Unit 1 Spent 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 2001 (full off load capability)

# NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: 3-13-92  
COMPLETE BY: M. M. Farr  
TELEPHONE: (714) 368-9787

## OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 3
2. Reporting Period: February 1992
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  | 696.00     | 1,440.00     | 69,384.00      |
| 12. Number Of Hours Reactor Was Critical   | 0.00       | 569.43       | 53,067.68      |
| 13. Reactor Reserve Shutdown Hours   | 0.00       | 0.00         | 0.00           |
| 14. Hours Generator On-Line  | 0.00       | 569.42       | 51,640.43      |
| 15. Unit Reserve Shutdown Hours  | 0.00       | 0.00         | 0.00           |
| 16. Gross Thermal Energy Generated (MWH)   | 0.00       | 1,903,579.98 | 165,191,004.44 |
| 17. Gross Electrical Energy Generated (MWH)  | 0.00       | 640,736.00   | 56,040,761.00  |
| 18. Net Electrical Energy Generated (MWH)  | (2,796.61) | 604,038.40   | 52,922,145.69  |
| 19. Unit Service Factor  | 0.00%      | 39.54%       | 74.43%         |
| 20. Unit Availability Factor   | 0.00%      | 39.54%       | 74.43%         |
| 21. Unit Capacity Factor (Using MDC Net)   | 0.00%      | 38.84%       | 70.52%         |
| 22. Unit Capacity Factor (Using DER Net)   | 0.00%      | 38.84%       | 70.62%         |
| 23. Unit Forced Outage Rate  | 0.00%      | 0.00%        | 7.67%          |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):<br>Cycle 6 refueling outage commenced on January 24, 1992, in progress.<br>Outage duration scheduled for 85 days. |            |              |                |
| 25. If Shutdown At End Of Report Period, Estimated Date of Startup:  |            | April, 1992  |                |
| 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

DOCKET NO: 50-361  
UNIT NAME: SONGS - 3  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

MONTH: February 1992

| DAY | AVERAGE DAILY POWER LEVEL<br>(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                                   |
| 16  | 0.00                                   |

| DAY | AVERAGE DAILY POWER LEVEL<br>(Mwe-Net) |
|-----|--|
| 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  | 0.00                                   |
| 27  | 0.00                                   |
| 28  | 0.00                                   |
| 29  | 0.00                                   |



## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO: 50-362

UNIT NAME: SONGS - 3

REPORT MONTH: February 1992

DATE: 3-13-92

COMPLETED BY: M. M. Farr

TELEPHONE: (714) 368-9787

| No. | Date   | Type <sup>1</sup> | Duration<br>(Hours) | Reason <sup>2</sup> | Method of<br>Shutting<br>Down<br>Reactor <sup>3</sup> | LER<br>No. | System<br>Code <sup>4</sup> | Component<br>Code <sup>5</sup> | Cause & Corrective<br>Action to<br>Prevent Recurrence |
|-----|--------|-------------------|---------------------|---------------------|---|------------|-----------------------------|--------------------------------|---|
|     |        |                   |                     |                     |   |            |                             |                                |   |
| 63  | 920124 | S                 | 696.00              | C                   | 5   | NA         | NA                          | NA                             | Cycle 6 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 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

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# SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

| <u>Date</u> | <u>Time</u> | <u>Event</u>   |
|-------------|-------------|--|
| February 1  | 0001        | Unit is in Mode 6, day 15 of the Cycle 6 refueling outage.   |
| February 5  | 0912        | Commenced core alterations and off loading.  |
| February 9  | 0804        | Completed off loading the core. Alterations secured.   |
| February 19 | 0521        | Commenced reload of fuel assemblies into the reactor core. Entered Mode 6. Core alterations in progress. |
| February 23 | 0800        | Completed reloading the core. Alterations secured.   |
| February 26 | 0525        | Completed installation of reactor head.  |
| February 27 | 2225        | Entered Mode 5.  |
| February 29 | 2400        | Unit is in Mode 5, day 43 of the Cycle 6 refueling outage.   |

# REFUELING INFORMATION

|               |                       |
|---------------|-----------------------|
| DOCKET NO:    | <u>50-362</u>         |
| UNIT NAME:    | <u>CONGS - 3</u>      |
| DATE          | <u>3-13-92</u>        |
| COMPLETED BY: | <u>M. M. Farr</u>     |
| TELEPHONE:    | <u>(714) 368-9787</u> |

MONTH: February 1992

1. Scheduled date for next refueling shutdown.

Cycle 6 refueling outage began January 24, 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?

Yes.

What will these be?

All license amendments associated with the Cycle 6 refueling outage have been approved.

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

Not applicable.

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.

# REFUELING INFORMATION

DOCKET NO: 50-362  
UNIT NAME: SONGS - 3  
DATE: 3-13-92  
COMPLETED BY: M. M. Farr  
TELEPHONE: (714) 368-9787

MONTH: February 1992

6. The number of fuel assemblies.

a) In the core. 217

b) In the spent fuel storage pool. 553 (484 Unit 3 Spent  
Fuel Assemblies, 69  
Unit 1 Spent 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)