



Southern California Edison Company

23 PARKER STREET
IRVINE, CALIFORNIA 92718

January 15, 1990

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

Subject: Docket No. 50-206
Monthly Operating Report for December 1989
San Onofre Nuclear Generating Station, Unit 1

The purpose of this letter is to provide the Monthly Operating Report required by Section 6.9.1.10 of Appendix A, Technical Specifications to Provisional Operating License DPR-13 for San Onofre Nuclear Generating Station, Unit 1.

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)
Institute of Nuclear Power Operations (INPO)

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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-206
UNIT NAME: SONGS - 1
DATE: January 15, 1990
COMPLETED BY: E. R. Siacor
TELEPHONE: (714) 368-6223

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 1
2. Reporting Period: December 1989
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	<u>744.00</u>	<u>8,760.00</u>	<u>197,648.00</u>
12. Number Of Hours Reactor Was Critical	<u>702.58</u>	<u>3,582.65</u>	<u>113,861.84</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>696.42</u>	<u>3,458.99</u>	<u>109,679.48</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>844,387.32</u>	<u>3,916,109.37</u>	<u>137,569,847.12</u>
17. Gross Electrical Energy Generated (MWH)	<u>278,400.00</u>	<u>1,268,400.00</u>	<u>46,420,328.42</u>
18. Net Electrical Energy Generated (MWH)	<u>262,258.00</u>	<u>1,166,402.00</u>	<u>43,762,420.00</u>
19. Unit Service Factor	<u>93.60%</u>	<u>39.37%</u>	<u>55.49%</u>
20. Unit Availability Factor	<u>93.60%</u>	<u>39.37%</u>	<u>55.49%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>80.85%</u>	<u>30.54%</u>	<u>50.78%</u>
22. Unit Capacity Factor (Using DER Net)	<u>80.85%</u>	<u>30.54%</u>	<u>50.78%</u>
23. Unit Forced Outage Rate	<u>6.40%</u>	<u>28.41%</u>	<u>19.82%</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: NA
26. Units In Test Status (Prior To Commercial Operation):

INITIAL CRITICALITY	<u>NA</u>	<u>NA</u>
INITIAL ELECTRICITY	<u>NA</u>	<u>NA</u>
COMMERCIAL OPERATION	<u>NA</u>	<u>NA</u>

AVERAGE DAILY UNIT POWER LEVEL

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DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>380.71</u>
2	<u>382.50</u>
3	<u>383.00</u>
4	<u>383.11</u>
5	<u>382.83</u>
6	<u>345.83</u>
7	<u>0.00</u>
8	<u>0.00</u>
9	<u>296.04</u>
10	<u>378.17</u>
11	<u>380.83</u>
12	<u>381.88</u>
13	<u>382.08</u>
14	<u>382.00</u>
15	<u>382.63</u>
16	<u>381.92</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>381.67</u>
18	<u>381.54</u>
19	<u>382.00</u>
20	<u>381.54</u>
21	<u>381.29</u>
22	<u>382.04</u>
23	<u>382.13</u>
24	<u>382.92</u>
25	<u>382.79</u>
26	<u>383.42</u>
27	<u>383.50</u>
28	<u>383.00</u>
29	<u>382.71</u>
30	<u>382.75</u>
31	<u>381.58</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: DECEMBER 1989

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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
135	891206	F	47.58	A	1	89-028	LE	RG	A TS required shutdown from 91% power was completed due to HV-851A containment isolation function being inoperable for greater than 4 hours due to inadequate backup nitrogen system (BNS) supply. Cyclic lifting & reseating of BNS relief valve, due to leakage past the valve seats of 3 out of 5 pressure regulators, was determined to have resulted in the loss of nitrogen exceeding the loss assumed in the accident analysis. The 3 regulators were repaired and returned to service. During the next refueling outage new regulators, designed to reduce BNS susceptibility to failure due to leakage past the valve seats, will replace the existing regulators.

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

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<u>Date</u>	<u>Time</u>	<u>Event</u>
December 1	0001	Unit is in Mode 1 at 91% reactor power. Turbine load at 401 MWe gross.
December 6	2018	Commenced a Technical Specification required shutdown from 91% reactor power to perform repairs on the backup nitrogen system regulators (BNS) for HV-851A.
	2043	Unusual Event declared.
	2130	Unusual Event terminated.
	2343	Turbine manually tripped. Unit off line.
	2349	Entered Mode 3.
December 8	1655	Commenced reactor startup following completion of repairs to the BNS regulators for HV-851A.
	1735	Entered Mode 2.
	1747	Reactor made critical.
	2130	Entered Mode 1.
	2318	Unit synchronized to the grid. Continuing reactor power increase to 70%.

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<u>Date</u>	<u>Time</u>	<u>Event</u>
December 9	0405	Reactor at 70% power. Commenced heat treating operations for the circulating water tunnels.
	0934	Completed heat treating operations. Commenced reactor power increase.
	1110	Reactor at 92% power.
December 31	2400	Unit is in Mode 1 at 91% power. Turbine load at 402 MWe gross.

REFUELING INFORMATION

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MONTH: December 1989

1. Scheduled date for next refueling shutdown.

June 30, 1990

2. Scheduled date for restart following refueling.

November 1990

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

Yes.

What will these be?

- a) License Amendment associated with the resolution of the 480V breaker overload issue.
- b) License Amendment associated with removal of the license condition related to the TDI diesel generators.
- c) License Amendment associated with revision of the basis to Technical Specification 3.3.1, "Safety Injection and Containment Spray", and resolution of other issues related to TS 3.3.1 which were identified during Cycle 10 refueling.

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REFUELING INFORMATION

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MONTH: December 1989

4. Scheduled date for submitting proposed licensing action and supporting information.
 - a) SCE expects to submit the license amendment associated with the 480V breaker overload issue in February 1990.
 - b) SCE expects to submit the request to remove the TDI diesel generator license condition in February 1990.
 - c) SCE expects to submit the request to revise the basis and resolve other issues related to TS 3.3.1 in April 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 have been identified at this time.
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)