



*Southern California Edison Company*

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April 15, 1991

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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 March 1991  
San Onofre Nuclear Generating Station, Unit 1

Technical Specification 6.9.1.10 to Provisional Operating License DPR-13 for the San Onofre Nuclear Generating Station, Unit 1, requires SCE provide a Monthly Operating Report which includes: routine operating statistics and shutdown experience; and, all challenges to pressurizer safety and relief valves.

This letter transmits the March 1991 Monthly Operating Report for Unit 1. There were no challenges to pressurizer safety or relief valves during the reporting period.

If you require any 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)  
G. Kalman (NRR, SONGS Project Manager)  
Institute of Nuclear Power Operations (INPO)

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NRC MONTHLY OPERATING REPORT

DOCKET NO: 50-206  
 UNIT NAME: SONGS - 1  
 DATE: 4-15-91  
 COMPLETED BY: S. L. Vittum  
 TELEPHONE: (714) 368-9230

OPERATING STATUS

1. Unit Name: San Onofre Nuclear Generating Station, Unit 1
2. Reporting Period: March 1991
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): See Item 10
10. Reasons For Restrictions, If Any: Power level reduction from full power as a result of a self-imposed reduced operating temperature to retard Steam Generator tube corosion rate.

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.00</u>	<u>2,106.00</u>	<u>203,781.00</u>
12. Number Of Hours Reactor Was Critical	<u>145.56</u>	<u>145.56</u>	<u>116,312.26</u>
13. Reactor Reserve Shutdown Hours	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
14. Hours Generator On-Line	<u>145.56</u>	<u>145.56</u>	<u>112,501.94</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>91,210.90</u>	<u>91,210.90</u>	<u>141,530,712.51</u>
17. Gross Electrical Energy Generated (MWH)	<u>28,800.00</u>	<u>28,800.00</u>	<u>47,704,144.00</u>
18. Net Electrical Energy Generated (MWH)	<u>19,898.00</u>	<u>16,631.00</u>	<u>45,010,277.00</u>
19. Unit Service Factor	<u>19.56%</u>	<u>6.74%</u>	<u>55.21%</u>
20. Unit Availability Factor	<u>19.56%</u>	<u>6.74%</u>	<u>55.21%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>6.13%</u>	<u>1.77%</u>	<u>50.66%</u>
22. Unit Capacity Factor (Using DER Net)	<u>6.13%</u>	<u>1.77%</u>	<u>50.66%</u>
23. Unit Forced Outage Rate	<u>0.00%</u>	<u>0.00%</u>	<u>19.53%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

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	<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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MONTH: March 1991

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>86.92</u>
25	<u>104.67</u>
26	<u>0.00</u>
27	<u>0.00</u>
28	<u>73.29</u>
29	<u>220.88</u>
30	<u>275.46</u>
31	<u>286.17</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: March 1991

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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	444.16	C,D	4	NA	NA	NA	Reactor thermal shield supp Replacement and Cycle 11 refueling outage.
140	910320	F	63.30	A,B	1	NA	JB	ISV	Reactor shutdown and entered Mode 3 for repairs to HV-854A and performance of a Hot SIS force test
141	910322	F	5.19	B	1	NA	JB	VTV	Unit reduction for entry to Mode 3 to isolate SV-2900.
142	910326	F	27.53	B	1	NA	BQ	VTV	Unit reduction for entry to Mode 3 to isolate SV-3900.
143	910327	F	6.50	A	2	NA	IG	TBG	Reactor shutdown to Mode 3 to cap cono-seal to teleflex path L-8.

<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>
March	1	0001 Unit is in Mode 5.
March	9	0827 Unit entered Mode 4.
March	12	1417 Unit entered Mode 3.
March	19	1135 Unit entered Mode 2.
		1216 Reactor is critical.
March	20	2320 Reactor shutdown and entered Mode 3 for repairs to HV-854A and performance of a Hot SIS force test.
March	22	1222 Unit entered Mode 2.
		1240 Reactor is critical.
		1816 Commenced shutdown to Mode 3 to isolate SV-2900.
		1821 Unit entered Mode 3.
March	23	0148 Unit entered Mode 2 following repairs to SV-2900.
		0206 Reactor is critical.
		1450 Unit entered Mode 1.
		1835 Unit on line at 35 MWe (13% power)
March	25	2308 Commenced Unit load reduction for entry to Mode 2 for turbine overspeed and generator no load generator testing.
March	26	0205 Unit off line and in Mode 2
		0424 Commenced shutdown to Mode 3 to isolate SV-3900.
		0428 Unit in Mode 3.
		0455 Reactor trip breakers open.

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March	27	0558	Unit in Mode 2.
		0618	Reactor is critical.
		1620	Commence reactor shutdown to Mode 3 to cap cono-seal to teleflex path L-8.
		1622	Unit in Mode 3.
		1645	Tripped reactor.
		2106	Reactor startup commenced.
		2153	Unit entered Mode 2.
		2210	Reactor is critical.
March	28	0557	Unit on line at 27 MWe (17% power)
		1115	Made a one-hour report to the NRC pursuant to 10 CFR 50.72(b).1.ii.B for a condition found during operation which is outside the design basis for the plant. Reactor power is to be limited to 75% Maximum until a review is made and the concern resolved.
		2200	Unit load at 203 MWe (50% power)
March	30	0620	Commenced Heat Treat of Circulating Water System.
March	31	2359	Unit is in Mode 1 at 70% power, 308 MWe.

REFUELING INFORMATION

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1. Scheduled date for next refueling shutdown.

September 1992

2. Scheduled date for restart following refueling.

Restart from the Cycle 12 refueling outage is forecast for February 1993.

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

Not yet determined for Cycle 12 refueling. Under evaluation.

What will these be?

Not yet determined.

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

Not yet 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 determined. Under evaluation.

6. The number of fuel assemblies.

a) In the core. 157

b) In the spent fuel storage pool. 99

7. Licensed spent fuel storage capacity. 216

Intended change in spent fuel storage capacity. None

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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)

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