



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Nuclear Department

December 12, 1989

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

Dear Sir:

MONTHLY OPERATING REPORT  
SALEM NO. 2  
DOCKET NO. 50-311

In compliance with Section 6.9.1.6, Reporting Requirements for the Salem Technical Specification, the original copy of the monthly operating reports for the month of November 1989 are being sent to you.

Average Daily Unit Power Level  
Operating Data Report  
Unit Shutdowns and Power Reductions  
Safety Related Maintenance  
Major Plant Modification  
Operating Summary  
Refueling Information

Sincerely yours,

L. K. Miller  
General Manager -  
Salem Operations

RH:sl

cc: Mr. William T. Russell  
Regional Administrator USNRC  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Enclosures  
8-1-7.R4  
The Energy People

8912210017 891130  
PDR AD0CK 05000311  
FDC

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-311  
 Unit Name Salem # 2  
 Date 12-10-89  
 Telephone 609-935-6000  
 Extension 4722

Completed by Art Orticelle

Month NOVEMBER 1989

Day Average Daily Power Level  
(MWe-NET)

Day Average Daily Power Level  
(MWe-NET)

1 0  
 2 0  
 3 0  
 4 0  
 5 78  
 6 975  
 7 1067  
 8 1104  
 9 1104  
 10 1059  
 11 1062  
 12 1097  
 13 1098  
 14 1102  
 15 1115  
 16 1092

17 1008  
 18 664  
 19 888  
 20 1109  
 21 1107  
 22 1102  
 23 1094  
 24 1086  
 25 1109  
 26 1117  
 27 1103  
 28 1095  
 29 988  
 30 1070  
 31

OPERATING DATA REPORT

Docket No. 50-311  
 Date 12-10-89  
 Telephone 935-6000  
 Extension 4722

Completed by Art Orticelle

Operating Status

1. Unit Name	<u>Salem No. 2</u>	<u>Notes</u>
2. Reporting Period	<u>November 1989</u>	
3. Licensed Thermal Power (MWt)	<u>3411</u>	
4. Nameplate Rating (Gross MWe)	<u>1170</u>	
5. Design Electrical Rating (Net MWe)	<u>1115</u>	
6. Maximum Dependable Capacity (Gross MWe)	<u>1149</u>	
7. Maximum Dependable Capacity (Net MWe)	<u>1106</u>	
8. If Changes Occur in Capacity Ratings (items 3 through 7) since Last Report, Give Reason	<u>N/A</u>	

9. Power Level to Which Restricted, if any (Net MWe) N/A

10. Reasons for Restrictions, if any N/A

	<u>This Month</u>	<u>Year to Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	<u>720</u>	<u>8016</u>	<u>71305</u>
12. No. of Hrs. Reactor was Critical	<u>660.2</u>	<u>6906</u>	<u>45261.8</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>610.5</u>	<u>6678.6</u>	<u>43801.2</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1997556</u>	<u>21862046.4</u>	<u>86527143.4</u>
17. Gross Elec. Energy Generated (MWH)	<u>679152</u>	<u>7287672</u>	<u>45171972</u>
18. Net Elec. Energy Generated (MWH)	<u>648540</u>	<u>6982374</u>	<u>42957679</u>
19. Unit Service Factor	<u>84.8</u>	<u>83.3</u>	<u>61.4</u>
20. Unit Availability Factor	<u>84.8</u>	<u>83.3</u>	<u>61.4</u>
21. Unit Capacity Factor (using MDC Net)	<u>81.4</u>	<u>78.8</u>	<u>54.5</u>
22. Unit Capacity Factor (using DER Net)	<u>80.8</u>	<u>78.1</u>	<u>54</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>10.7</u>	<u>26.3</u>
24. Shutdowns scheduled over next 6 months (type, date and duration of each)	<u>REFUELING OUTAGE 3-31-90</u>		

25. If shutdown at end of Report Period, Estimated Date of Startup:

N/A

UNIT SHUTDOWN AND POWER REDUCTIONS  
 REPORT MONTH NOVEMBER 1989

Docket No. 50-311  
 Unit Name Salem No.2  
 Date 12-10-89  
 Telephone 609-935-6000  
 Extension 4722

Completed by Art Orticelle

No.	Date	Type 1	Duration Hours	Reason 2	Method of Shutting Down Reactor	License Event Report	System Code 4	Component Code 5	Cause and Corrective Action to Prevent Recurrence
0217	11-1-89	S	104.03	B	1	---	EB	TRANSF	PHASE B MAIN TRANSFORMER
0218	11-5-89	F	5.47	A	4	---	HA	VALVEX	EHC. PROBLEM TURBINE STOP VALVE
0222	11-17-89	F	38.08	H	5	---	EA	TRANSF	SOLAR ACTIVITY LINE DISTURBANCES
0230	11-29-89	F	3.0	A	5	---	HF	PUMPXX	23A CIRC PUMP

- |              |                                      |                    |              |             |
|--------------|--------------------------------------|--------------------|--------------|-------------|
| 1            | 2 Reason                             | 3 Method           | 4 Exhibit G  | 5 Exhibit 1 |
| F: Forced    | A-Equipment Failure-explain          | 1-Manual           | Instructions | Salem as    |
| S: Scheduled | B-Maintenance or Test                | 2-Manual Scram.    | for Prepara- | Source      |
|              | C-Refueling                          | 3-Automatic Scram. | tion of Data |             |
|              | D-Regulatory Restriction             | 4-Continuation of  | Entry Sheets |             |
|              | E-Operator Training & Licensing Exam | Previous Outage    | for Licensee |             |
|              | F-Administrative                     | 5-Load Reduction   | Event Report |             |
|              | G-Operational Error-explain          | 9-Other            | (LER) File   |             |
|              | H-Other-explain                      |                    | (NUREG 0161) |             |

PSE&G SALEM GENERATING STATION  
SAFETY RELATED WORK ORDER LOG

SALEM UNIT 2

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WO NO	UNIT	EQUIPMENT IDENTIFICATION
890829161	2	2CVE22 SUCTION STABILIZER FAILURE DESCRIPTION: 2CVE22 REPLACE SUCTION STABILIZER BLADDER.
891108084	2	2TC107A/B:21 FAILURE DESCRIPTION: 21 BAST HI/LO TEMP ALARM UP/INVESTIGATE.
891113088	2	FAILURE DESCRIPTION: RX TRIP BKR./SN 02YN219-6/WOULD NOT CLOSE.
891117093	2	2R12A FAILURE DESCRIPTION: 2R12A CONT. GAS MONT/FAILED/INVESTIGATE. OUT/TROUBLESHOOT.
891023122	2	2SJ12 FAILURE DESCRIPTION: 2SJ12 WILL NOT OPEN TROUBLESHOOT & REWORK.

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MAJOR PLANT MODIFICATIONS  
MONTH: - NOVEMBER 1989

DOCKET NO: 50-311  
UNIT NAME: SALEM 2  
DATE: DECEMBER 10, 1989  
COMPLETED BY: P. WHITE  
TELEPHONE: (609) 339-4455

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\*DCR                      PRINCIPAL SYSTEM                      DESCRIPTION  
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2EC-02210              Diesel Generators              This design change replaced existing diesel generator differential relays type 12CFE22 with IJD type relays or SA-1 type relays.

\* DCR - Design Change Request

MAJOR PLANT MODIFICATIONS  
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\*DCR

SAFETY EVALUATION 10 CFR 50.59  
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2EC-02210

This design change replaced existing diesel generator differential relays type 12CFE22 with IJD type relays or SA-1 type relays. The previous relays were not seismically qualified in the de-energized condition. Inadvertant actuation of those relays in the de-energized condition could have hindered the automatic start feature of the D/G. The new relays are not subject to this problem. Therefore, their installation has enhanced the reliability of the D/G. There was no change to any plant process or discharge or to the environmental impact of the plant. No unreviewed safety or environmental questions are involved.

\* DCR - Design Change Request

SALEM GENERATING STATION  
MONTHLY OPERATING SUMMARY - UNIT 2  
NOVEMBER 1989

SALEM UNIT NO. 2

The Unit began the period shutdown while troubleshooting and corrective maintenance was performed on Valves 23 and 24 SJ139. On November 3, 1989, the valve maintenance activities were completed and a heatup of the Reactor Coolant System commenced. During the heatup, problems were identified with the main steam isolation valve control circuitry which delayed the Unit's return to service until November 4, 1989. The Unit was synchronized early on November 5, 1989, however, it had to be removed from service due to the discovery of an unisolable Electro Hydraulic Control System leak. The leak was repaired and the Unit returned to full power on November 6, 1989. The Unit continued to operate at full power until November 17, 1989, when power was reduced as a precautionary measure. This was in response to the Load Dispatcher's Solar Magnetic Disturbance (SMD) alert. The alert remained in effect until November 19, 1989, when the Unit was restored to full power. With the exception of load reductions on November 24, and 29, 1989, for circulating water problems, the Unit continued to operate at essentially full power throughout the remainder of the period.



REFUELING INFORMATION

COMPLETED BY: P. White

DOCKET NO.: 50-311  
 UNIT NAME: Salem 2  
 DATE: December 10, 1989  
 TELEPHONE: 609/935-6000  
 EXTENSION: 4455

Month NOVEMBER 1989

1. Refueling information has changed from last month:  
 YES \_\_\_\_\_ NO X
2. Scheduled date for next refueling: March 31, 1990
3. Scheduled date for restart following refueling: May 14, 1990
4. A) Will Technical Specification changes or other license amendments be required?  
 YES \_\_\_\_\_ NO \_\_\_\_\_  
 NOT DETERMINED TO DATE X
- B) Has the reload fuel design been reviewed by the Station Operating Review Committee?  
 YES \_\_\_\_\_ NO X

If no, when is it scheduled? February 1990

5. Scheduled date(s) for submitting proposed licensing action:  
January 1990
6. Important licensing considerations associated with refueling:  
NONE
7. Number of Fuel Assemblies:
 

A)	Incore	<u>193</u>
B)	In Spent Fuel Storage	<u>224</u>
8. Present licensed spent fuel storage capacity: 1170  
 Future spent fuel storage capacity: 1170
9. Date of last refueling that can be discharged to spent fuel pool assuming the present licensed capacity: March 2003