

# AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-311  
 Unit Name Salem # 2  
 Date July 10, 1985  
 Telephone 609-935-6000  
 Extension 4455

Completed by J. P. Ronafalvy

Month June 1985

Day Average Daily Power Level  
 (MWe-NET)

Day Average Daily Power Level  
 (MWe-NET)

1	<u>1093</u>
2	<u>1104</u>
3	<u>1092</u>
4	<u>1093</u>
5	<u>1099</u>
6	<u>1095</u>
7	<u>1096</u>
8	<u>1083</u>
9	<u>1101</u>
10	<u>1103</u>
11	<u>1098</u>
12	<u>1107</u>
13	<u>606</u>
14	<u>908</u>
15	<u>1090</u>
16	<u>1100</u>

17	<u>1091</u>
18	<u>1105</u>
19	<u>1098</u>
20	<u>1107</u>
21	<u>1105</u>
22	<u>1110</u>
23	<u>1111</u>
24	<u>1101</u>
25	<u>1092</u>
26	<u>1108</u>
27	<u>1095</u>
28	<u>584</u>
29	<u>0</u>
30	<u>0</u>
31	<u>          </u>

Pg. 8.1-7 R1

8507240089 850630  
 PDR ADOCK 05000311  
 R PDR

IE24  
 1/1

# OPERATING DATA REPORT

Docket No. 50-311  
 Date July 10, 1985  
 Telephone 935-6000  
 Extension 4455

Completed by J. P. Ronafalvy

## Operating Status

1. Unit Name	<u>Salem No. 2</u>	<u>Notes</u>
2. Reporting Period	<u>June 1985</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)	<u>N/A</u>	
10. Reasons for Restrictions, if any	<u>N/A</u>	

	<u>This Month</u>	<u>Year to Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	<u>720</u>	<u>4343</u>	<u>32568</u>
12. No. of Hrs. Reactor was Critical	<u>665.1</u>	<u>1719.7</u>	<u>16814.3</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>3533.6</u>
14. Hours Generator On-Line	<u>664.0</u>	<u>1491.2</u>	<u>16103.3</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2210338</u>	<u>4486057</u>	<u>48213093</u>
17. Gross Elec. Energy Generated (MWH)	<u>740060</u>	<u>1470200</u>	<u>15747850</u>
18. Net Elec. Energy Generated (MWH)	<u>708944</u>	<u>1364471</u>	<u>14882307</u>
19. Unit Service Factor	<u>92.2</u>	<u>34.3</u>	<u>49.4</u>
20. Unit Availability Factor	<u>92.2</u>	<u>34.3</u>	<u>49.4</u>
21. Unit Capacity Factor (using MDC Net)	<u>89.0</u>	<u>28.4</u>	<u>41.3</u>
22. Unit Capacity Factor (using DER Net)	<u>88.3</u>	<u>28.2</u>	<u>41.0</u>
23. Unit Forced Outage Rate	<u>7.8</u>	<u>62.7</u>	<u>40.9</u>
24. Shutdowns scheduled over next 6 months (type, date and duration of each)	<u>N/A</u>		

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

7-7-85

26. Units in Test Status (Prior to Commercial Operation):

	<u>Forecast</u>	<u>Achieved</u>
Initial Criticality	<u>6/30/80</u>	<u>8/2/80</u>
Initial Electricity	<u>9/1/80</u>	<u>6/3/81</u>
Commercial Operation	<u>9/24/80</u>	<u>10/13/81</u>

UNIT SHUTDOWN AND POWER REDUCTIONS  
REPORT MONTH June 1985

Completed by J.P. Ronafalvy

Docket No. 50-311  
Unit Name Salem No.2  
Date July 10, 1985  
Telephone 609-935-6000  
Extension 4455

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
85-110	6-13	F	5.9	B	5	-	HC	HTEXCH	Condenser Tube Inspection
85-130	6-28	F	56.0	A	1	-	CJ	VALVEX	Nuclear Nonpower operated safety valves Reactor Coolant

1  
F: Forced  
S: Scheduled

2 Reason  
A-Equipment Failure-explain  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training & Licensing Exam  
F-Administrative  
G-Operational Error-explain  
H-Other-explain

3 Method  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Continuation of  
Previous Outage  
5-Load Reduction  
9-Other

4 Exhibit G  
Instructions  
for Prepara-  
tion of Data  
Entry Sheets  
for Licensee  
Event Report  
(LER) File  
(NUREG 0161)

5 Exhibit 1  
Salem as  
Source

MAJOR PLANT MODIFICATIONS  
REPORT MONTH JUNE 1985

DOCKET NO.: 50-311  
UNIT NAME: Salem 2  
DATE: July 10, 1985  
COMPLETED BY: J. Ronafalvy  
TELEPHONE: 609/339-4455

*DCR NO.	PRINCIPLE SYSTEM	SUBJECT
2EC-1014	Component Cooling	Provide motor operators for component cooling water pumps discharge header valves 21CC3 and 22CC3.
2EC-1225	Turbine Generator	Install reflash annunciator interface locally for the isolated phase bus alarms so that multiple alarms for the above system can be acknowledged at the Control Room with a local self test feature.
2EC-1406	28V D.C.	Replace existing undervoltage relay with new type.
2EC-1532	Waste Gas	Install redundant waste gas oxygen analysis capability.
2EC-1559	Nuclear Instrumentation	Addition of a complete source range indication in order to provide source range flux indication at the remote shutdown panel. The new channel is to be electrically isolated from the Control Room.
2ET-1685	Circulating Water	Replace 23B circulating water traveling screen with a screen whose effective height is changed from 40' to 20' - will be done by raising entire rotating assembly 20'. Remaining traveling screen frame will be enclosed down to El. 50'.

\* Design Change Request

*DCR NO.	PRINCIPLE SYSTEM	SUBJECT
2EC-1699A	Circulating Water - Traveling Screen	Install a 316 S.S. traveling screen in place of 21A screen. Install one set of 316 S.S. baskets in 23A traveling screen. Install 316 S.S. flexible hose on screen wash connections.
2EC-1767	Post Accident Sampling System	Design and install sample lines from the discharge of the FHR pumps to the PASS Liquid Sampling Panel #813. The modification shall be capable of sampling the #11, 12, 21 and 22 RHR trains. Samples shall be conditioned/cooled prior to entering Panel 813.
2EC-1776	Circulating Water	Replace the remaining inlet expansion joints of Unit No. 2 Main Condenser.
2EC-1916	Reactor Coolant	Replace RTD bypass loop valves 22RC16, 17, 24, 25 & 28 Mark No. FA-17 with Mark No. FA-131.
2EC-1918	Reactor Coolant	Replace RTD bypass loop valves 24RC16, 17, 24, 25 & 28 mark No. FA-17 with Mark No. FA-131.
2EC-1919	Reactor Coolant	Replace RTD bypass loop valves 21RC16, 17, 24, 25 & 28 mark No. FA-17 with Mark No. FA-131.
2EC-2056	Steam Generator Feed and Condensate	Replace 2BF75 socket welded relief valve Mark No. M206, with a flanged relief valve Mark No. F77.
2EC-2101	Auxiliary Feedwater	Replace #21 Aux Feedwater Pump motor (Allis-Chalmers) with spare (Westinghouse) motor.
2SC-1245	Pressurizer Overpressurization Protection	Change design of pressurizer system to one similar to Unit 1, utilizing 2PR1 and 2PR2 as the "POPS" valves.

\* Design Change Request



MAJOR PLANT MODIFICATIONS  
REPORT MONTH JUNE 1985

DOCKET NO.: 50-311  
UNIT NAME: Salem 2  
DATE: July 10, 1985  
COMPLETED BY: J. Ronafalvy  
TELEPHONE: 609/339-4455

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*DCR NO.	10CFR 50.59	SAFETY EVALUATION
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2EC-1014	The new motor operators will enable more rapid and remote operation of the valves. The handwheels will be retained. The valves and their function do not change. The new operators will be seismically (Class I) and environmentally qualified. The description as addressed in the FSAR will be appropriately modified. No unreviewed safety or environmental questions are involved.
2EC-1225	The isolated phase bus and its alarms are not safety related nor do they affect any safety related systems through this DCR. No unreviewed safety or environmental questions are involved.
2EC-1406	This DCR installs an undervoltage relay with a higher setpoint than the currently installed relay. The relay is not safety related. No unreviewed safety or environmental questions are involved.
2EC-1532	This DCR enhances the oxygen analysis of the Waste Gas System by providing redundancy. It does not affect the function of any safety related system nor will it affect the safe shutdown of the plant. No unreviewed safety or environmental questions are involved.
2EC-1559	This DCR will meet the 10CFR 50, Appendix R and Regulatory Guide 1.97 requirements for post accident monitoring. Fire wrapping, cable routing and power sources have been considered for this installation. No unreviewed safety or environmental questions are involved.
2ET-1685	This modification will not reduce the present open area of the screen. A velocity survey will be performed in order to evaluate this proposed configuration prior to implementation of any further changes. This change does not affect the presently performed safety analysis nor does it create any new hazards. No unreviewed safety or environmental questions are involved.

\* Design Change Request

- 2EC-1699A This change does not affect the presently performed safety analysis nor does it create any new hazards. No unreviewed safety or environmental questions are involved.
- 2EC-1767 The installation is being performed in accordance with the design specifications for the presently installed sampling system sample lines. It does not affect the ability to safety shutdown the Unit and will enhance the available information for maintaining the plant at safe shutdown after an accident. No unreviewed safety or environmental questions are involved.
- 2EC-1776 The replacement of the Main Condenser Inlet Expansion Joints does not affect any presently performed safety analysis nor does it create any new hazards. No unreviewed safety or environmental questions are involved.
- 2EC-1916 The replacement of the valves does not alter the ability of the piping system to perform as designed. The new valve has been evaluated as an acceptable substitute. The valve meets or exceeds seismic, nuclear, and pressure class of the existing valves. The flowmeter in the loop will ensure that the required flow is not affected. No unreviewed safety or environmental questions are involved.
- 2EC-1918 The replacement of the valves does not alter the ability of the piping system to perform as designed. The new valve has been evaluated as an acceptable substitute. The valve meets or exceeds seismic, nuclear, and pressure class of the existing valves. The flowmeter in the loop will ensure that the required flow is not affected. No unreviewed safety or environmental questions are involved.
- 2EC-1919 The replacement of the valves does not alter the ability of the piping system to perform as designed. The new valve has been evaluated as an acceptable substitute. The valve meets or exceeds seismic, nuclear, and pressure class of the existing valves. The flowmeter in the loop will ensure that the required flow is not affected. No unreviewed safety or environmental questions are involved.

\* Design Change Request

- 2EC-2056     The replacement of relief valve 2BF75 (welded in place) with a relief valve with break flanges will not change the function of the system and will ensure its integrity. The modification does not affect any safety related system and will not affect plant shutdown. The valve is not safety related and will not affect any safety related installation. No unreviewed safety or environmental questions are involved.
- 2EC-2101     The replacement motor is a Westinghouse safety related motor of equivalent size, horse power, RPM, and mounting configuration. The replacement will not alter the operation or reliability of the system and will not adversely affect the safe shutdown of the plant. No unreviewed safety or environmental questions are involved.
- 2SC-1245     The original design function of the system remains unchanged. The design change addressed itself to new plant protection criteria. No unreviewed safety or environmental questions are involved.

\* Design Change Request



PSE&G SALEM GENERATING STATION  
SAFETY RELATED WORK ORDER LOG

SALEM UNIT 2

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WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION
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850623019<sup>c</sup>

SIC

2

2CV179 AUTO CONTROLLER

FAILURE DESCRIPTION: 2CV179, PRIMARY WATER MAKEUP AUTO CONTROLLER, INTERMITTENTLY GOES FROM AUTO TO MANUAL CONTROL WHILE ADJUSTING THE INCREASE/DECREASE SETPOINT PUSHBUTTONS. ALSO THE SETPOINT FAILS TO ZERO WHEN THIS OCCURS. PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: REPLACED CAPACITOR ACROSS AUTO/MAN. RELAYS IN SERVO SETPOINT STATION 1HC-111C. OPERATOR VERIFIED SETPOINT.

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8506181364

SMD

2

21 SW PUMP STRAINER

FAILURE DESCRIPTION: #21 SW PUMP HAS A PACKING LEAK. (STILL LEAKING). THIS W.O. WAS WRITTEN TO COVER THE FAILED RETEST OF W.O. #8506143004.

CORRECTIVE ACTION: ADD ONE RING OF PACKING.

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8506141354

SIC

2

DRIVE MOTOR

FAILURE DESCRIPTION: THE DRIVE FOR THE PSAT-TSAT RECORDER IS NOT WORKING. PLEASE REPAIR.

CORRECTIVE ACTION: FOUND CHART NOT ADVANCING. CHECKED FUSE FOR CHART MOTOR. REPLACED CHART DRIVE MOTOR.

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WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION
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8506111790

SMD

2

21 B.A.T. P.

FAILURE DESCRIPTION: LEAK AT SHAFT SEAL. PLEASE REPAIR, BORON CRYSTALIZATION.

CORRECTIVE ACTION: CLEANED UP BORON, REMOVED PLUGS IN MECH. SEAL. REINSTALLED PLUGS WITH TEFLON TAPE.

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8506031362

SMD

2

2SJ67, SI PUMP RECIRC

FAILURE DESCRIPTION: 2SJ67 (SI PUMP MTR. OP. RECIRC VALVE) HAS A PACKING LEAK. PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: TIGHTENED DOWN PACKING. LEAK STOPPED.

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8506020093

SMD

2

22SW144

FAILURE DESCRIPTION: VALVE LEAKING FROM UNDER INSULATION. PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: FLANGE LEAKING. CUT OLD BOLTS OUT. ADDED NEW STUDS AND TIGHTENED SAME.

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8505300149

SMD

2

21 CHARGING PUMP

FAILURE DESCRIPTION: THE SUCTION AND DISCHARGE FLANGES ON 21 CHARGING PUMP HAVE DAMP BORON BUILD-UP.

CORRECTIVE ACTION: REPLACED SUCTION GASKETS. CLEANED SUCTION SPOOL FLANGES. CLEANED DISCHARGE FLANGES.

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WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION
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8505300211

SMD

2

22 CONT. SPRAY PUMP

FAILURE DESCRIPTION: #22 CONTAINMENT SPRAY PUMP HAS DAMP BORON BUILD-UP ON THE SUCTION FLANGE.

CORRECTIVE ACTION: TIGHTENED FLANGE STUDS.

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8505311221

SMD

2

22 SI PUMP

FAILURE DESCRIPTION: THERE IS A SEAL LINE LEAKING WHERE IT ATTACHES TO THE HEAT EXCHANGER ON THE MOTOR END OF THE PUMP.

CORRECTIVE ACTION: FOUND LINE LOOSE, TIGHTENED.

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8505312970

SIC

2

SSPS INTERFACE

FAILURE DESCRIPTION: WHEN THIS VALVE WAS STROKED OPEN AND THE OPEN LIMIT WAS MADE UP, THE STATUS LIGHTS ON 2RP4 ILLUMINATED FOR CONT. VENT & PHASE B ISOLATION. PLEASE INVESTIGATE.

CORRECTIVE ACTION: CHECKED OUT CIRCUIT AND FOUND BAD LIGHT ASSEMBLY ON LIGHT #338. DIODE SHORTED. REPLACED BLOCK ASSEMBLY AND HAD CONTROL OPERATOR OPEN 24AF21 AND VERIFIED THAT ONLY THE STATUS LIGHT FOR 24AF21 WAS LIT.

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8505260023

SIC

2

PZR. LEVEL CH. 1

FAILURE DESCRIPTION: PZR. LEVEL CH. 1 FAILED HIGH. PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: FOUND S/G ISOLATOR 2LM-459A HAD DRIFTED 1 VOLT HIGH. REPLACED S/N QO-518 WITH 409.

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WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION
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8505171314

SMD

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23MD6, STEAM TRAP ISOLATION

FAILURE DESCRIPTION: 23MS6, STEAM TRAP ISOLATION (MS167 DRAIN) IS BLOWING STEAM. PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: TEMP. REPAIRS MADE BY FURMANITING PACKING GLAND.

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8503260336

SMD

2

AUX FEEDWATER SYSTEM

FAILURE DESCRIPTION: PRESENT B-J AUX FEED PUMP NO. 22 IS DAMAGED. REPLACEMENT WITH AN EQUIVALENT PUMP FROM INGERSOLL RAND IS REQUIRED.

CORRECTIVE ACTION: COMPLETED WORK ORDER AS PER 2EC2081. REPLACED AT PUMP WITH IR PUMP.

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0099158418

SMD

2

21 SW PUMP STRAINER

FAILURE DESCRIPTION: 21 SW PUMP STRAINER HAS A PACKING LEAK.

CORRECTIVE ACTION: REPLACED SHAFT THAT HAS BEEN REWORKED WITH BELZONI A, 4 NEW SHOES AND REPACKED STRAINER.

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0099158515

SMD

2

22 SW PUMP

FAILURE DESCRIPTION: PUMP HAS A SEVERE PACKING LEAK. PLEASE REPAIR.

CORRECTIVE ACTION: REPACKED STRAINER, REPLACED SEALS PLATES IN STRAINER. REPLACED HEADSHAFT, SLEEVE FROM 25 SW PUMP INTO 22. REPACKED PUMP.

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WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION
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0099160277

SMD

2

22 AUX FEED PUMP

FAILURE DESCRIPTION: THE MOTOR INBOARD BEARING WENT INTO ALARM. THE OIL WAS CHANGED BUT THE TEMPS DID NOT STABILIZE PRIOR TO REACHING 185 DEGREES.

CORRECTIVE ACTION: MOTOR SENT TO KEYSTONE FOR ARG. REPLACEMENT AND FAN REVERSAL FOR NEW INGERSOLL RAND PUMP.

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0099164213

SMD

2

AFD RECORDER

FAILURE DESCRIPTION: THE RECORDER SPIKED HIGH. I&C PLEASE INVESTIGATE AND REPAIR.

CORRECTIVE ACTION: FOUND 2QM-202B FAILED HIGH. REMOVED SN-693 AND INSTALLED SN-691. CALIBRATED TO SPEC.

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0099164337

SIC

2

ROD POSITION IND

FAILURE DESCRIPTION: ROD 1D2 IS READING 240 STEPS WHICH IS 12 STEPS ABOVE BANK DEMAND. PLEASE CHECK CAL.

CORRECTIVE ACTION: RECALIBRATED SIGNAL CONDITIONERS MODULE. OUT OF SPEC. GRID BIO FINAL INDICATION 235 STEPS.

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SALEM GENERATING STATION  
MONTHLY OPERATING SUMMARY - UNIT NO. 2  
JUNE 1985

SALEM UNIT NO. 2

The period began with the Unit operating at full power. On 6/13/85 at 1410 hours, power was reduced to 25% due to a condenser tube leak in 23B Condenser Waterbox. Investigations revealed that a tube plug had dislodged. Full power was restored on 6/14/85 at 1232 hours. On 6/28/85 at 1600 hours, the Unit was taken off the line and brought to Mode 5 (Cold Shutdown) to support repair of Pressurizer Safety Valve 2PR4 which was leaking. Additional work to be done during this "forced outage" includes repacking various secondary valves, replacement of valve 22MS14 (Main Steam Safety Valve), and investigation of hydrogen leakage from the Generator.

## REFUELING INFORMATION

COMPLETED BY: J. Ronafalvy DOCKET NO.: 50-311  
UNIT NAME: Salem 2  
DATE: July 10, 1985  
TELEPHONE: 609/935-6000  
EXTENSION: 4455

Month June 1985

1. Refueling information has changed from last month:  
YES        NO X
2. Scheduled date for next refueling: September 6, 1986
3. Scheduled date for restart following refueling: November 16, 1986
4. A) Will Technical Specification changes or other license  
amendments be required?  
YES        NO         
Not determined to date
- B) Has the reload fuel design been reviewed by the Station  
Operating Review Committee?  
YES        NO X  
If no, when is it scheduled? August 1986
5. Scheduled date(s) for submitting proposed licensing action:  
August 1986 if required
6. Important licensing considerations associated with refueling:  
NONE
7. Number of Fuel Assemblies:  
A) Incore 193  
B) In Spent Fuel Storage 140
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

8-1-7.R4



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

Salem Generating Station

July 10, 1985

Director, Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

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

In Compliance with Section 6.9, Reporting Requirements for the Salem Technical Specifications, 10 copies of the following monthly operating reports for the month of June 1985 are being sent to you.

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

Sincerely yours,

J. M. Zupko, Jr.  
General Manager -  
Salem Operations

JR:sbh

cc: Dr. Thomas E. Murley  
Regional Administrator USNRC  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Director, Office of Management  
Information and Program Control  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Enclosure  
8-1-7.R4

The Energy People

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