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Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

Nuclear Business Unit

JUL 15 1997

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

Attn: Document Control Desk

**MONTHLY OPERATING REPORT
SALEM UNIT NO. 1
DOCKET NO. 50-272**

In compliance with Section 6.9.1.6, Reporting Requirements for the Salem Technical Specifications, the original monthly operating report for June, 1997, is attached.

Sincerely yours,

David F. Garchow
General Manager -
Salem Operations

RAR:tcp
Enclosures

C Mr. H. J. Miller
Regional Administrator USNRC, Region 1
475 Allendale Road
King of Prussia, PA 19046

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The power is in your hands.

DOCKET NO.: 50-272
UNIT: Salem 1
DATE: 06/13/97
COMPLETED BY: R. Ritzman
TELEPHONE: (609) 339-1445

SUMMARY OF CHANGES, TESTS, AND EXPERIMENTS
FOR THE SALEM UNIT 1 GENERATING STATION

MONTH JUNE 1997

The following items completed during **June 1997** have been evaluated to determine:

1. If the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
2. If a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
3. If the margin of safety as defined in the basis for any technical specification is reduced.

The 10CFR50.59 Safety Evaluations showed that these items did not create a new safety hazard to the plant nor did they affect the safe shutdown of the reactor. These items did not change the plant effluent releases and did not alter the existing environmental impact. The 10CFR50.59 Safety Evaluations determined that no unreviewed safety or environmental questions are involved.

Design Changes Summary of Safety Evaluations

S97-009, Control Room Normal Air Conditioning System Plenum Drain Modification. This design change adds two 1 inch drain openings in the Control Room Normal Air Conditioning Plenum to reduce standing water in the plenum.

The Control Area Air Conditioning System (CAACS) is designed to maintain room temperatures within the specified limits required for operation, maintenance, and testing of plant controls. The emergency (filtration) portion of the CAACS provides uninterrupted safe occupancy during post-accident conditions. This design change represents an operational improvement to the CAACS.

This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3385, Pkg. 1, Replacement of 125VDC Battery Chargers. This design change modifies the 125VDC system by replacing six battery chargers. The battery chargers were exhibiting an increasing number of age-related failures and are no longer being manufactured. Battery chargers from another manufacturer were installed. Expected benefits include less frequent maintenance, spare part availability, and increased reliability.

These battery chargers are not accident initiators or contributors to any accident analyzed in the UFSAR and are not required to be directly involved in the mitigation of an accident analyzed in the UFSAR. This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3401, Pkg. 1, "B" Emergency Diesel Generator Starting Air and Turbo Boost System Upgrade. This design change enhances the "B" Emergency Diesel Generator Starting Air and Turbo Boost System. It replaces existing components with components made of stainless steel or other corrosion resistant material, removes the starting air dryer, and raises the relief valve setpoint to minimize unnecessary compressor cycling.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3429, Pkg. 4, "B" Emergency Diesel Generator Jacket Water Piping Modifications. This design change adds flexhose downstream of isolation valves to isolate the tubing between the pressure switch and the isolation valve from diesel vibrations. To accommodate the flexhose installation, tubing downstream of the flexhose was rerouted and supported. This design change provides a higher safety factor against fatigue failure.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3438, Pkg. 2, "B" Emergency Diesel Generator Circuit Breaker Voltage Permissive Relay Installation and Indication Modifications. This design change installs two voltage sensing relays and an auxiliary relay to monitor the output voltage of the "B" Emergency Diesel Generator (EDG). Contacts from the auxiliary relay replace the voltage permissive contact in the closing circuit of the main circuit breaker for the EDG. The setpoints of the voltage sensing relays are at a higher voltage than the previous relays and will prohibit the EDG main circuit breaker from closing when the EDG output is less than the required voltage. This design change also installs indicating lights on the generator control panel to identify when the voltage and speed permissives are satisfied.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3453, Pkg. 2, "B" Emergency Diesel Generator Fuel Oil Day Tank Setpoint Change. This design change adjusted the level switch setpoints associated with the fuel oil day tank. This design change allows the Emergency Diesel Generator to run longer after the receipt of the low level alarm and before it runs out of fuel. This change also mitigates the consequences of a loss of the fuel oil transfer pump.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3455, Pkg. 2, "B" Emergency Diesel Generator Prelube Oil Pipe Modifications. This design change modifies piping to accommodate diesel engine to diesel skid differential motion imposed on the piping system. Flexible mechanical joints and flexhose were installed on the suction and discharge sides of the prelube oil pump and the prelube drain valve was removed.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3529, Pkg. 2, Modify "B" Emergency Diesel Generator to Increase Vibration Tolerance. This design change modifies the "B" Emergency Diesel Generator starting air, fuel oil, lube oil, and jacket water auxiliary systems to increase vibration tolerance. The changes include replacing piping and tubing with flexhose; adding bracing, supports, and brackets; and relocating valves.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3533, Pkg. 2, "B" Emergency Diesel Generator Starting and Turbo-Boost Air Compressor Start/Stop Pressure Switches. This design change replaces pressure control switches for the Emergency Diesel Generator starting and turbo-boost air compressors. This design change also revises the auto stop setpoint for the air compressors to increase the margin prior to safety relief valve operation.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

1EC-3701, Pkg. 1, Switchgear and Penetration Area Ventilation System Reliability Enhancement Modification. This design change enhances the Switchgear and Penetration Area Ventilation System reliability and ability to maintain temperatures within its design limits. This is accomplished by modifying the supply fans start logic, the switchgear exhaust/return fans control circuits, the modulating damper controls, the penetration area exhaust fan control circuits, and the isolation damper controls.

This design change does not negatively impact any accident response. This design change does not increase the probability or consequences of either an accident or a malfunction of equipment important to safety. Therefore, this design change does not involve an Unreviewed Safety Question.

Temporary Modifications Summary of Safety Evaluations

There were no changes in this category implemented during June, 1997.

Procedures Summary of Safety Evaluations

There were no changes in this category implemented during June, 1997.

UFSAR Change Notices Summary of Safety Evaluations

There were no changes in this category implemented during June, 1997.

Deficiency Reports Summary of Safety Evaluations

There were no changes in this category implemented during June, 1997.

Other Summary of Safety Evaluation

There were no changes in this category implemented during June, 1997.

OPERATING DATA REPORT

Docket No: 50-272
 Date: 07/10/97
 Telephone: 339-2735

Completed by: Robert Phillips

Operating Status

1. Unit Name	<u>Salem No. 1</u>	<u>Notes</u>
2. Reporting Period	<u>June 1997</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>4343</u>	<u>181799</u>
12. No. of Hrs. Rx. was Critical	<u>0</u>	<u>0</u>	<u>104380.45</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>0</u>	<u>0</u>	<u>100338.27</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>31806229.2</u>
17. Gross Elec. Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>105301000</u>
18. Net Elec. Energy Gen. (MWH)	<u>-2088</u>	<u>-15945</u>	<u>100158791</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>55.2</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>55.2</u>
21. Unit Capacity Factor			
(using MDC Net)	<u>0</u>	<u>0</u>	<u>49.8</u>
22. Unit Capacity Factor (using DER Net)	<u>0</u>	<u>0</u>	<u>49.4</u>
23. Unit Forced Outage Rate	<u>100</u>	<u>100</u>	<u>33.3</u>

24. Shutdowns scheduled over next 6 months (type, date and duration of each)
Steam Generator replacement.

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

AVERA ~~GE~~ DAILY UNIT POWER LEVEL

Docket No.: 50-272
 Unit Name: Salem #1
 Date: 07/10/97
 Telephone: 339-2735

Completed by: Robert Phillips *RIP*

Month June 1997

Day Average Daily Power Level
(MWe-NET)

Day Average Daily Power Level
(MWe-NET)

1	<u>0</u>
2	<u>0</u>
3	<u>0</u>
4	<u>0</u>
5	<u>0</u>
6	<u>0</u>
7	<u>0</u>
8	<u>0</u>
9	<u>0</u>
10	<u>0</u>
11	<u>0</u>
12	<u>0</u>
13	<u>0</u>
14	<u>0</u>
15	<u>0</u>
16	<u>0</u>

17	<u>0</u>
18	<u>0</u>
19	<u>0</u>
20	<u>0</u>
21	<u>0</u>
22	<u>0</u>
23	<u>0</u>
24	<u>0</u>
25	<u>0</u>
26	<u>0</u>
27	<u>0</u>
28	<u>0</u>
29	<u>0</u>
30	<u>0</u>
31	<u>0</u>

UNIT SHUTDOWN AND POWER REDUCTIONS
 REPORT MONTH June 1997

DOCKET NO.: 50-272
 UNIT NAME: Salem #1
 DATE: 07/10/97
 COMPLETED BY: Robert Phillips
 TELEPHONE: 609-339-2735

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
3859	6-1-97	F	744	F,C	4	-----	ZZ	ZZZZ	Steam Generator Replacement

¹
 F: Forced
 S: Scheduled

²
 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)

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 Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

⁵
 Exhibit 1 - Same Source

Refueling Information
Month: June, 1997

Docket No. 50-272
Unit Name: Salem 1
Contact: D.Tisdell
Telephone: 609-339-1538

Month: June, 1997

1. Refueling information has changed from last month: Yes: No: X
2. Scheduled date for next refueling: To Be Determined
Scheduled date for restart following refueling: To Be Determined
3. a. Will Technical Specification changes or other license amendments be required?
Yes: X 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? To be Determined
4. Scheduled date (s) for submitting proposed licensing action: To be Determined
5. Important licensing considerations associated with refueling:

6. Number of Fuel Assemblies:
 - a. Incore: 0
 - b. In Spent Fuel Storage: 953
7. Present Licensed spent fuel storage capacity: 1632
Future spent fuel storage capacity: 1632
8. Date of last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: April 2012

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY - UNIT 1
JUNE 1997

SALEM UNIT 1

The unit is in a refueling and steam generator replacement outage and remained shutdown for the entire period. According to commitments from PSE&G and a subsequent confirmatory action letter from the NRC, the unit will remain shutdown pending completion of the following actions:

- Appropriately address long standing equipment reliability and operability issues.
- After the work is completed, conduct a restart readiness review to determine for ourselves the ability of the unit to operate in a safe, event free manner.
- After the restart review, meet with the NRC and communicate the results of that review.