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

Nuclear Business Unit

SEP 15 1997

LR-N970621

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

Attn: Document Control Desk

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

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

Sincerely

David F. Garchow
General Manager -
Salem Operations

RBK/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.

Refueling Information

Docket No. 50-311

Month: August, 1997

Unit Name: Salem 2
Contact: R. B. Knieriem
Telephone: 609-339-1782

Month: August, 1997

1. Refueling information has changed from last month: Yes: No: X
2. Scheduled date for next refueling: January 6, 1999
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: X (for upcoming cycle) No: If no, when is it scheduled?
4. Scheduled date (s) for submitting proposed licensing action: N/A - previously submitted
5. Important licensing considerations associated with refueling:

| |
|--|
| |
| |

6. Number of Fuel Assemblies:
 - a. Incore: 193
 - b. In Spent Fuel Storage: 584
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: October, 2016

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY - UNIT 2
August 1997

SALEM UNIT 2

Salem Unit 2 was synchronized to the electric power grid at 0330 on August 30. The unit was operating at approximately 19% reactor power at the time of synchronization. Operators successfully conducted integrated testing and continued to increase power. At the end of the month, reactor power was at approximately 33%.

Additional testing will be conducted, with a final hold at 90% power for NRC review. Following NRC concurrence, the reactor power will be increased to 100%.

DOCKET NO. : 50-311
UNIT: Salem 2
DATE: 09/15/97
COMPLETED BY: R. B. Knieriem
TELEPHONE: (609) 339-1782

SUMMARY OF CHANGES, TESTS, AND EXPERIMENTS
FOR THE SALEM UNIT 2 GENERATING STATION

MONTH AUGUST 1997

The following items completed during **August 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

2EC-3407, Pkg. 1, Steam Traps Replacement Project. This design change will replace steam traps associated with the Main Steam system with a more reliable design to reduce the dumping of excessive quantities of steam directly to the condenser when steam traps fail and are bypassed. It will also reduce the potential for water hammer.

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.

2EC-3334, Pkg. 1, Salem Rod Cluster Control Assembly (RCCA) Replacement. This design change replaces RCCA with a design which incorporates the following features: (1) Single piece

absorber rod with reduced tip diameter to allow for increased swelling of the absorber rod within the clad. (2) Different composition of stainless steel for cladding and end plugs to improve wear resistant treatment and weldability. (3) Ion-nitriding surface treatment to improve wear resistance.

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.

2EC-3353, Pkg. 1, Replacement Of Low Pressure Turbine Rotors With A Fully Integral Design This design change modifies the Circulating Water system controls. It involves the removal and replacement of the existing Low Pressure Turbine Rotors with new Mono-block design rotors. The design incorporates the latest turbine design technology that provides improved efficiency with improved exhaust flow guides to allow operation at condenser back pressures up to 8 in. HG absolute.

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.

2EC-3395, Pkg. 1, Moisture Separator Reheater (MSR) Drain and Vent System Modifications. This design change involves piping replacement and rerouting changes for the MSR drain and vent system to reduce excessive vibration.

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.

2EC-3402, Pkg. 1, Main Turbine Lube Oil Separator Replacement. This modification replaces the existing centrifugal type separator with a coalescing filter type separator to simplify drive train maintenance and to reduce oil leaks caused by drive train vibration.

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.

2EC-3449, Pkg. 1, Steam Generator Tube Leak Detection Main Steam Line N-16 Monitors. This design change installs a Main Steam Line N-16 monitoring system. The system will utilize detectors mounted adjacent to the main steam lines to monitor for the presence of N-16 in the steam that would indicate a primary to secondary leak.

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.

2EC-3471, Pkg. 1 Reconfiguration of Main Generator Water Cooling System Runback Logic. This modification will upgrade the Main Generator non-safety related water cooling system runback logic from one (1) out of one (1) to a two (2) out of three (3) logic to minimize unnecessary generator trips.

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.

2EE-0119, Pkg. 1 Steam Generator Feed Pump Vibration Monitoring Update. This modification replaces the obsolete vibration monitoring equipment associated with the Steam Generator Feed pump with new equipment that has additional monitoring and analytical capabilities. It also replaces the existing L&N two pen chart recorders with new Yokogawa twelve point recorders.

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.

2EE-0276, Pkg. 1 Steam Generator Blowdown Sample Line Pressure Regulator Replacement. This modification replaces the existing pressure regulators for the steam generator

blowdown sample lines to the 2R19A-D radiation monitors. It will incorporate design improvements which improve the overall maintainability of the regulators.

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.

2EE-0317, Pkg. 1 Modify Controls to 2CH168 Valve. This modification eliminates a single failure vulnerability concern related to the 2CH168 valve (Temperature Control Isolation Valve in the Emergency Air Conditioning System). Failure of this valve to open could lead parts of the combined control room envelope to exceed temperature limits imposed by section 3.11 of the UFSAR. This modification will be accomplished by permanently removing the pneumatic control to the valve, permanently placing the valve in the full open position.

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 August, 1997.

Procedures Summary of Safety Evaluations

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

UFSAR Change Notices Summary of Safety Evaluations

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

Deficiency Reports Summary of Safety Evaluations

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

Other Summary of Safety Evaluation

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

DOCKET NO.: 50-311
 UNIT: Salem 2
 DATE: 9/11/97
 COMPLETED BY: R. Phillips
 TELEPHONE: (609) 339-2735

OPERATING DATA REPORT
OPERATING STATUS

| | | | | |
|----|---|---------------------------|-----------------|----------|
| 1 | Reporting Period August 1997 | Hours in Report Period | <u>744</u> | |
| 2 | Currently Authorized Power Level (MWt) | | <u>3411</u> | |
| | Max Dependable Capacity (MWe-Net) | | <u>1106</u> | |
| | Design Electrical Rating (MWe-Net) | | <u>1115</u> | |
| 3 | Power level to which restricted (if any) (MWe Net) | | <u>None</u> | |
| 4 | Reason For Restriction (if any) | | | |
| | | <u>This Month</u> | <u>Yr To</u> | |
| | | | <u>Date</u> | |
| | | | <u>Cumulati</u> | |
| 5 | No. of hours reactor was critical | 283 | 283 | 78366.6 |
| 6 | Reactor reserve shutdown hours | 0.0 | 0.0 | 0.0 |
| 7 | Hours generator on line | 45 | 45 | 75274.5 |
| 8 | Unit reserve shutdown hours | 0.0 | 0.0 | 0.0 |
| 9 | Gross thermal energy generated (MWH) | 75146 | 75146 | 18785615 |
| 10 | Gross electrical energy generated (MWH) | 8230 | 8230 | 78656828 |
| 11 | Net electrical energy generated (MWH) | -17592 | -91119 | 74611515 |
| 12 | Unit Service Factor | 6.0% | 0.8% | 49.9% |
| 13 | Unit Availability Factor | 6.0% | 0.8% | 49.9% |
| 14 | Unit Capacity Factor (MDC) | 0.0% | 0.0% | 44.7% |
| 15 | Unit Capacity Factor (DER) | 0.0% | 0.0% | 44.3% |
| 16 | Unit Forced Outage Rate | 93.9% | 99.2% | 34.1% |
| 17 | Shutdowns scheduled over next 6 months (type, date, duration): None | | | |
| 18 | If shutdown at end of report period, estimated date of Startup: | | | |

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OPERATING DATA REPORT
UNIT SHUTDOWNS AND POWER REDUCTIONS

MONTH AUGUST 1997

| NO. | DATE | TYPE F=FORCED S=SCHEDULED | DURATION (HOURS) | REASON (1) | METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER (2) | CORRECTIVE ACTION/COMMENT |
|------|------------------|---------------------------------|---------------------|---------------|---|----------------------------------|
| 4092 | 8/1 - 8/31 | F | 744 | F, C | 4 | Refueling Outage Extension |

(1) 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

(2) Method

- 1 - Manual
- 2 - Manual Trip
- 3 - Automatic Trip/Scram
- 4 - Continuation
- 5 - Other (Explain)

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AVERAGE DAILY UNIT POWER LEVEL

MONTH AUGUST 1997

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|-----|--|-----|--|
| 1 | <u>0</u> | 17 | <u>0</u> |
| 2 | <u>0</u> | 18 | <u>0</u> |
| 3 | <u>0</u> | 19 | <u>0</u> |
| 4 | <u>0</u> | 20 | <u>0</u> |
| 5 | <u>0</u> | 21 | <u>0</u> |
| 6 | <u>0</u> | 22 | <u>0</u> |
| 7 | <u>0</u> | 23 | <u>0</u> |
| 8 | <u>0</u> | 24 | <u>0</u> |
| 9 | <u>0</u> | 25 | <u>0</u> |
| 10 | <u>0</u> | 26 | <u>0</u> |
| 11 | <u>0</u> | 27 | <u>0</u> |
| 12 | <u>0</u> | 28 | <u>0</u> |
| 13 | <u>0</u> | 29 | <u>0</u> |
| 14 | <u>0</u> | 30 | <u>73</u> |
| 15 | <u>0</u> | 31 | <u>191</u> |
| 16 | <u>0</u> | | |