



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. 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 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.: 50-311  
UNIT: Salem 2  
DATE: 06/13/97  
COMPLETED BY: R. Ritzman  
TELEPHONE: (609) 339-1445

SUMMARY OF CHANGES, TESTS, AND EXPERIMENTS  
FOR THE HOPE CREEK 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

**S96-031, Masoneilan Air Operator Retainer Clip.** This design change enhances the reliability of the Containment Fan Coil Units Service Water Inlet and Outlet Valves and the Turbine Lube Oil and Auxiliary Cooling Heat Exchangers Service Water Bypass Valve by installing a declutching pin retainer clip. The clip provides a positive method to hold in pin in its engaged 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.

**S97-018, Service Water Flow Element, Instrument Tubing/Root Valve Addition.** This design change provides a reliable and effective method to measure and monitor Service Water flow to Charging Pump Lube Oil Coolers, Charging Pump Room Coolers, Safety Injection Pump Lube Oil Coolers, and a Safety Injection Pump Room Cooler.

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.

**S97-076, Add Welded Pipe Cap to Main Steam Valves.** This design change provides a passive containment boundary to the pressure test valves on the Steam Generators and the vent valves on the Main Steam lines near the Steam Generators. The passive containment boundary consists of a safety related pipe nipple and a welded cap at the outlet of the 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.

**S97-098, Install Flow Points and Vent Opening in the Component Cooling Heat Exchanger Rooms Duct Work.** This design change installs air flow test points and modifies an access door in the duct from the 21 Component Cooling Water Pump Room Cooler that supplies air to the 21 and 22 Component Cooling Heat Exchanger Rooms. This redistribution will allow for an improved air flow.

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-3264, Pkg. 2, Reactor Protection System Signal Low-Low Tavg Nomenclature Change.** This design change clarifies conflicting documentation regarding the Reactor Protection System Low Tavg and Low-Low Tavg signals. The name of the Tavg reactor protection signal is being changed from Low Tavg to Low-Low Tavg for standardization. The associated pushbuttons in the control room are being changed from

yellow to white to achieve consistency in recognizing and responding to alarm and control functions.

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 Fully Integral Design.** This design change removes and replaces the Low Pressure Turbine Rotors with new mono-block rotors. Each rotor replacement consists of the new rotor, inner cylinder, seals, and associated bearing cover modifications. The installation of the new rotors is expected to result in increased turbine efficiency.

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-3590, Pkg. 16, Integrated Testing of NRC GL 96-06 Modifications.** This design change package performs the integrated acceptance testing of the modifications made to the Service Water system by other packages of 2EC-3590.

This design change package 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-3612, Pkg. 1, NRC GL 96-06 Overpressurization Related Modifications.** This design change adds six relief valves to limit the post-accident peak operating pressures of certain piping segments inside containment. This design change will ensure that the post-accident operating conditions for the associated containment isolation valves do not exceed their design limits.

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-3617, Pkg. 1, Pressure Operated Relief Valve Control Modifications.** This design change modifies the control actuation circuitry for the Pressure Operated Relief Valves. The modification provides separation/isolation of safety related and non-safety related functions to prevent a single failure from affecting both Pressure Operated Relief 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.

**2EC-3623, Pkg. 1, Flux Mapping Cabinet Power Change.** This design change replaces the power feed to a demultiplexor and two modems in the Flux Mapping Cabinet. This will allow the use of the Safety Parameters Display System as a primary Core Exit Thermocouple display for use during the performance of Emergency Operating Procedures.

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-3625, 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

**S2.OP-SO.ABV-0001(Q), Rev. 4, Auxiliary Building Ventilation System Operation.** This procedure revision disables the automatic start feature of one of the two 100% supply air fans under normal operating conditions and imposes additional operability requirements on both supply and exhaust air fans to assure building temperatures can be maintained within design limits under certain postulated single failures. These procedural controls were imposed until the fan logic is modified via a design change.

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

**TS2.SE-SU.ABV-0002(Q), Rev. 0, Auxiliary Building Ventilation Test.** This new temporary procedure was written to measure the actual airflow developed by either one or two of the Auxiliary Building Ventilation exhaust fans with the supply fan shut down. The procedure includes temperature monitoring and test termination instructions. The ventilation system retains its ability to perform its safety function during this test.

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

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

Completed by: Robert Phillips *leaf*

Docket No: 50-311  
 Date: 07/10/97  
 Telephone: 339-2735

Operating Status

1.	Unit Name	Salem No. 2	Notes
2.	Reporting Period	June 1997	
3.	Licensed Thermal Power (Mwt)	3411	
4.	Nameplate Rating (Gross MWe)	1170	
5.	Design Electrical Rating (Net MWe)	1115	
6.	Maximum Dependable Capacity (Gross MWe)	1149	
7.	Maximum Dependable Capacity (Net MWe)	1106	
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

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	720	4343	144949
12. No. of Hrs. Rx. was Critical	0	0	78083.6
13. Reactor Reserve Shutdown Hrs.	0	0	0
14. Hours Generator On-Line	0	0	75229.5
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	0	187781005.0
17. Gross Elec. Energy Generated (MWH)	0	0	78648598
18. Net Elec. Energy Gen. (MWH)	-13045	-50940	74629659
19. Unit Service Factor	0	0	51.9
20. Unit Availability Factor	0	0	51.9
21. Unit Capacity Factor (using MDC Net)	0	0	46.5
22. Unit Capacity Factor (using DER Net)	0	0	46.2
23. Unit Forced Outage Rate	100	100	33.3

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

Forced outage extension.

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

3rd quarter, 1997.

ERAGE DAILY UNIT POWER LEV

Docket No.: 50-311  
 Unit Name: Salem #2  
 Date: 07/10/97  
 Telephone: 339-2735

Completed by: Robert Phillips *RP*

Month June 1997

Day Average Daily Power Level  
(MWe-NET)

Day Average Daily Power Level  
(MWe-NET)

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

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



UNIT SHUTDOWN AND POWER REDUCTIONS  
REPORT MONTH June 1997

DOCKET NO.: 50-311  
UNIT NAME: Salem #2  
DATE: 07-10-97  
COMPLETED BY: Robert Phillips  
TELEPHONE: 609-339-2735

NO.	DATE	TYPE <sup>1</sup>	DURATION (HOURS)	REASON <sup>2</sup>	METHOD OF SHUTTING DOWN REACTOR	LICENSE EVENT REPORT #	SYSTEM CODE <sup>4</sup>	COMPONENT CODE <sup>5</sup>	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
4092	6-1-97	F	744	F,C	4	-----	2422		Refueling Outage Extension

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. 50-311  
Unit Name: Salem 2  
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: Currently in outage.  
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  
JUNE 1997

SALEM UNIT 2

The unit 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.