



**PSEG**

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

**Nuclear Business Unit**

**AUG 15 1997**

LR-N970517

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 July, 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

*IE241*

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PDR ADOCK 05000272  
R PDR



The power is in your hands.

DOCKET NO.: 50-272  
UNIT: Salem 1  
DATE: 08/15/97  
COMPLETED BY: R. Ritzman  
TELEPHONE: (609) 339-1445

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

MONTH JULY 1997

The following items completed during **July 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

**1EC-3310, Pkg. 1, Emergency Diesel Generator Low Lube Oil Temperature Setpoint Change.** This design change revises the Emergency Diesel Generator (EDG) lube oil low temperature setpoint to 100°F. Raising the low lube oil temperature from 80°F to 100°F is conservative and will more promptly alert the operators of a failed heater.

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. 1, "A" 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 "A" 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. 1, "A" 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-3533, Pkg. 1, "A" 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.

**5EC-0008, Pkg. 1, Hand Geometry Access Project.** This design change installs a hand geometry reader system in the Security Center, enables the elimination of the badge issue and retrieval from the Security Center, and relocates the accountability computer terminals.

This design change was reviewed with regard to the Design Basis Security Threat. Nothing in this design change was determined to contribute to an increased vulnerability to a design basis threat. The use of hand geometry is a program enhancement in that it reduces the possibility of human error in badge issuance and improves Security Center lobby management.

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

**TMR 97-020, 4KV "A" Vital Bus Undervoltage Relay Tie-Ins.** This temporary modification installs steel plates, terminal blocks, circuit breakers, fuse holders, and wiring to eliminate the need for additional bus outages. The additional bus outages would be required to support the installation of the Service Water Accumulator Tank Discharge Valve modification.

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

#### Procedures      Summary of Safety Evaluations

**S1.MD-CM.CAV-0004(Q), Rev. 0, Alternate Feed for 11 Control Room Emergency Air Conditioning System.** This new maintenance procedure was written to provide an alternate 230V AC power feed to the 11 Control Room Emergency Air Conditioning System. The normal supply is from the 1A vital ventilation MCC. This procedure allows the 11 Control Room Emergency Air Conditioning System to temporarily be powered from the 1B vital ventilation MCC during 1A vital bus outages with the unit in Mode 5, 6, or undefined.

The safety evaluation concluded that this new procedure does not present any new challenges to the involved systems. The procedure connects the "A" and "B" trains, and there is sufficient independence from the "C" train such that no single failure will result in less than the required power distribution system.

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 July, 1997.

Deficiency Reports      Summary of Safety Evaluations

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

Other      Summary of Safety Evaluation

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

# OPERATING DATA REPORT

Completed by: Robert Phillips

Docket No: 50-272 *Ant*  
 Date: 08/10/97  
 Telephone: 339-2735

## Operating Status

1. Unit Name	<u>Salem No. 1</u>	<u>Notes</u>
2. Reporting Period	<u>July</u>	<u>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>744</u>	<u>5087</u>	<u>186862</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>- 2868</u>	<u>-18813</u>	<u>100155923</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>53.7</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>53.7</u>
21. Unit Capacity Factor (using MDC Net)	<u>0</u>	<u>0</u>	<u>48.4</u>
22. Unit Capacity Factor (using DER Net)	<u>0</u>	<u>0</u>	<u>48.1</u>
23. Unit Forced Outage Rate	<u>100</u>	<u>100</u>	<u>35.5</u>

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

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

# AVERAGE DAILY UNIT POWER LEVEL

287

Completed by: Robert Phillips

Docket No.: 50-272  
 Unit Name: Salem #1  
 Date: 08/10/97  
 Telephone: 339-2735

Month July 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 July 1997

DOCKET NO.: 50-272  
UNIT NAME: Salem #1  
DATE: 08/10/97  
COMPLETED BY: Robert Phillips  
TELEPHONE: 609-339-2735

[illegible]

```
1
F:  Forced
S:  Scheduled
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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: July, 1997

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

Month: July, 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  
JULY 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.