



PSEG

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

Salem Generating Station

December 10, 1992

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

Dear Sir:

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

In compliance with Section 6.9.1.6, Reporting Requirements for the Salem Technical Specifications, the original copy of the monthly operating reports for the month of November 1992 are being sent to you.

Average Daily Unit Power Level
Operating Data Report
Unit Shutdowns and Power Reductions
Safety Related Maintenance
10CFR50.59 Evaluations
Operating Summary
Refueling Information

Sincerely yours,

General Manager
Salem Operations

RH:pc

cc: Mr. Thomas T. Martin
Regional Administrator USNRC
Region I
631 Park Avenue
King of Prussia, PA 19046

Enclosures

8-1-7.R4

The Energy People
9212160065 921130
PDR ADDCK 05000272
R PDR

AVERAGE DAILY UNIT POWER LEVEL

Completed by: Mark Shedlock

Docket No.: 50-272
 Unit Name: Salem #1
 Date: 12/10/92
 Telephone: 339-2122

Month NOVEMBER 1992

Day Average Daily Power Level
 (MWe-NET)

1	<u>0</u>
2	<u>124</u>
3	<u>179</u>
4	<u>843</u>
5	<u>1078</u>
6	<u>1121</u>
7	<u>1119</u>
8	<u>1116</u>
9	<u>1124</u>
10	<u>1109</u>
11	<u>1109</u>
12	<u>1108</u>
13	<u>1108</u>
14	<u>1091</u>
15	<u>1107</u>
16	<u>1115</u>

Day Average Daily Power Level
 (MWe-NET)

17	<u>1114</u>
18	<u>1114</u>
19	<u>1106</u>
20	<u>1125</u>
21	<u>1114</u>
22	<u>1113</u>
23	<u>1113</u>
24	<u>1125</u>
25	<u>1094</u>
26	<u>1099</u>
27	<u>1118</u>
28	<u>1123</u>
29	<u>1113</u>
30	<u>1115</u>
31	<u></u>

OPERATING DATA REPORT

Completed by: Mark Shedlock

Docket No: 50-272
 Date: 12/10/92
 Telephone: 339-2122

Operating Status

	<u>Salem No. 1</u>	<u>Notes</u>
1. Unit Name	<u>November 1992</u>	
2. Reporting Period		
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>8040</u>	<u>135193</u>
12. No. of Hrs. Rx. was Critical	<u>720</u>	<u>4864.7</u>	<u>88465.0</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>693.5</u>	<u>4459.7</u>	<u>85507.7</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2231620.8</u>	<u>14609736.0</u>	<u>270106881.2</u>
17. Gross Elec. Energy Generated (MWH)	<u>751810</u>	<u>4867050</u>	<u>89671680</u>
18. Net Elec. Energy Gen. (MWH)	<u>719986</u>	<u>4625513</u>	<u>85402086</u>
19. Unit Service Factor	<u>96.3</u>	<u>55.5</u>	<u>63.2</u>
20. Unit Availability Factor	<u>96.3</u>	<u>55.5</u>	<u>63.2</u>
21. Unit Capacity Factor (using MDC Net)	<u>90.4</u>	<u>52.0</u>	<u>57.1</u>
22. Unit Capacity Factor (using DER Net)	<u>89.7</u>	<u>51.6</u>	<u>56.7</u>
23. Unit Forced Outage Rate	<u>3.7</u>	<u>25.4</u>	<u>21.5</u>

24. Shutdowns scheduled over next 6 months (type, date and duration of each)
None

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

UNIT SHUTDOWN AND POWER REDUCTIONS
REPORT MONTH NOVEMBER 1992

DOCKET NO.: 50-272
UNIT NAME: Salem #1
DATE: 12/10/92
COMPLETED BY: Mark Shedlock
TELEPHONE: 339-2122

[illegible]

- | 1 | 2 | 3 | 4 | 5 |
|--------------|---|-------------------|---------------------------|------------------|
| F: Forced | Reason | Method: | Exhibit G - Instructions | Exhibit 1 - Same |
| S: Scheduled | A-Equipment Failure (explain) | 1-Manual | for Preparation of Data | Source |
| | B-Maintenance or Test | 2-Manual Scram | Entry Sheets for Licensee | |
| | C-Refueling | 3-Automatic Scram | Event Report (LER) File | |
| | D-Regulatory Restriction | 4-Continuation of | (NUREG-0161) | |
| | E-Operator Training & License Examination | Previous Outage | | |
| | F-Administrative | 5-Load Reduction | | |
| | G-Operational Error (Explain) | 9-Other | | |
| | H-Other (Explain) | | | |

SAFETY RELATED MAINTENANCE
MONTH: - NOVEMBER 1992

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: DECEMBER 10, 1992
COMPLETED BY: J. FEST
TELEPHONE: (609) 339-2904

WO NO	UNIT	EQUIPMENT IDENTIFICATION
920825164	1	HAGAN SUMMATOR FAILURE DESCRIPTION: HAGAN SUMMATOR S/N # MO-124 DEFECTIVE - REWORK
900828109	1	14 REACTOR COOLANT PUMP FAILURE DESCRIPTION: 14 RCP NO. 3 SEAL LEAKING - DISASSEMBLE AND INSPECT AND/OR REPLACE
911004121	1	1R46 RADIATION MONITOR FAILURE DESCRIPTION: 1R46 CABINET FANS BAD - REPLACE
920916227	1	VALVE 12SW387 FAILURE DESCRIPTION: REPAIR DOWNSTREAM SPOOL 1-SW-P-1108
921007171	1	1R41 RADIATION MONITOR FAILURE DESCRIPTION: APD VENT FAN NOT WORKING - REPLACE
921013096	1	VALVE 11SW127 FAILURE DESCRIPTION: 11SW127 EXCEEDED STROKE TIME - INVESTIGATE AND CORRECT
921019112	1	VALVE 1SW185 FAILURE DESCRIPTION: 1SW185 FAILED STROKE TIME - INVESTIGATE AND CORRECT
921019116	1	VALVE 11SW122 FAILURE DESCRIPTION: 11SW122 FAILED STROKE TIME - INVESTIGATE AND CORRECT
921031115	1	MAIN STEAMLINE RADIATION MONITOR FAILURE DESCRIPTION: MONITOR RECORDER READS HIGH - INVESTIGATE
921104105	1	VALVE 12SW129 FAILURE DESCRIPTION: 12SW129 EXCEEDED STROKE TIME - INVESTIGATE AND CORRECT

SAFETY RELATED MAINTENANCE
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(cont'd)

WO NO	UNIT	EQUIPMENT IDENTIFICATION
921104175	1	12CV160 - 12 CVC BAT INLET
		FAILURE DESCRIPTION: REPLACE FAILED LOCAL PRESSURE GAGES
921122096	1	12 STEAM GENERATOR LEVEL
		FAILURE DESCRIPTION: 12 S/G LEVEL CHANNEL 3 INDICATING LOW - INVESTIGATE AND CORRECT
921124055	1	12 STEAM GENERATOR LEVEL
		FAILURE DESCRIPTION: 12 S/G LEVEL CHANNEL 1 IS 3% OUT - INVESTIGATE AND CORRECT
921124079	1	11 STEAM GENERATOR LEVEL
		FAILURE DESCRIPTION: 11 S/G LEVEL APPROACHING OOS - INVESTIGATE AND CORRECT

10CFR50.59 EVALUATIONS
MONTH: - NOVEMBER 1992

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: DECEMBER 10, 1992
COMPLETED BY: J. FEST
TELEPHONE: (609) 339-2904

The following items were evaluated in accordance with the provisions of the Code of Federal Regulations 10CFR50.59. The Station Operations Review Committee has reviewed and concurs with these evaluations.

ITEM

SUMMARY

A. Design Change Packages (DCPs)

1EC-3157 Pkg 2

"Chemical Waste Discharge Line" - This change adds a new Chemical Waste Discharge line from the Turbine Building to the Non-Rad Basin. This line will run above ground over the walkway between the Turbine Building southwest corner and the B Building north wall. It then runs along the north and west B Building walls to a point opposite the Non-Rad Basin. The line then drops underground to transverse the roadway between the B Building and the basin. At the basin this new line will dump into the basin separately from the existing line and will also connect to the existing bypass to the clarifiers. In the Turbine Building, on elevation 88', this line connects to the existing Chemical Waste line from the Salem Units 1 and 2 Condensate Polishing High Conductivity sumps and also the Hope Creek Demineralized Water Makeup System. This allows the existing underground Chemical Waste line to provide dedicated service for the Salem Demineralized Water Makeup System Chemical Waste Tank. Isolation valves are provided at elevation 88' so that either line can be used for all services if required. This DCP will also remove the existing acid and caustic storage tank level bubblers from the storage tanks and from the area on elevation 100 where the new discharge line will penetrate the building wall at an existing wall opening. The operation of the Demineralized Water Make Up and Condensate Polishing Systems are not addressed in the Technical Specifications. Therefore, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.
(SORC 92-114)

1SC-2267 Pkg 4

"SEC Circuit - Service Water Pump Start Test Switch Installation" Rev. 1 - The purpose of this change is to provide a permanently mounted key lock test switch in the 14 service water pump

10CFR50.59 EVALUATIONS
MONTH: - NOVEMBER 1992

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(cont'd)

ITEM

SUMMARY

circuit breaker cubicle. The switch will be installed in the service water pump SEC circuitry, and when placed in the "Test" position, will ensure that two service water pumps are available to provide flow to the plant (Minimum Safeguards Requirement) powered from different vital busses during performance of SP(0)4.0.5-P-SW (14-16), Full Flow Test Surveillance, with an SEC Mode Operation. This modification will also eliminate the current practice of lifting a lead in the SEC cabinet during performance of SP(0)4.0.5-P-SW (14-16), and provide an added degree of personnel safety. Since the installation of a key lock test switch does not affect the subject Technical Specification Requirement, the margin of safety as defined in the Basis of the Technical Specifications is not reduced. (SORC 92-115)

1EC-3105 Pkg 1

"Rad Waste Panel 104 Modifications" Rev.1 - The purpose of this change is to modify Rad Waste Panel 104 and associated instruments and equipment. Work will include upgrading of instrument loops with new components, physical repair of Panel 104, removal of equipment no longer needed, and a functional verification of each instrument loop. The instruments being replaced include indicating switches which are used to monitor administratively controlled evolutions within the Liquid Radwaste, Gaseous Waste, and CVCS Systems. The replacement components are similar in fit and function to the existing instruments except that the Helicoid indicating switches do not permit indication beyond the setpoint values. The switches have "control tabs" on the setpoint indicators which lock in the alarm value but prevent the indicating needle from passing the setpoint indicator. Process values beyond the setpoint will not be shown to the operator. The purpose of this revision of the DCP is to authorize revision of OD-36 to ensure that daily checks of instrument setpoint locations will occur. The new method of indication has been analyzed and no unresolved safety question is involved. (SORC 92-116)

10CFR50.59 EVALUATIONS
MONTH: - NOVEMBER 1992

DOCKET NO: 50-272
UNIT NAME: SALEM 1
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(cont'd)

ITEM	SUMMARY
1EA-01034 Pkg 1	"Reclassification of Liquid Radwaste Piping Between 1WL91 and 1WL385" - The purpose of the design change is to reclassify the piping classified SP53B (Nuclear Class III, Seismic Class III) between valve numbers 1WL91 and 1WL385 to SP53P (non-Nuclear, Seismic Class III). The working and design pressure and temperature of both specs are the same, as are the material requirements. This piping was originally conservatively classified as safety-related because the criteria for classification at the time of construction had not been finalized. The relevant guidelines are those of Reg. Guide 1.143. The Technical Specifications refer to the treatment of the effluent prior to release to an unrestricted area. If the system is not operating or leaks into the Auxiliary Building, no radioactive effluent will be released without being treated. Therefore, the margin of safety for any of the Technical Specifications will not be reduced. (SORC 92-117)
1EE-0011 Pkg 1	"Traveling Screen Blowdown" - This engineering change installs three 2" stainless steel blowdown lines, associated shutoff valves and supports from the three fish spray wash headers located in No. 13B traveling screen in the Circulating Water Intake Structure. The nozzles of the traveling screen fish spray wash headers frequently clog with silt and grass which restricts or totally blocks water spray. Currently, the nozzles must be unplugged manually by unscrewing and clearing each nozzle individually. This process requires a traveling screen outage and maintenance personnel to climb onto and into the traveling screens which requires approximately 8 hours to complete. Opening the shutoff valve will flush out the debris and silt from the spray headers, thus clearing the spray nozzles. The water will be discharged back into the bay. There is no reduction in the margin of safety as defined in the basis for any Technical Specification. (SORC 92-118)

10CFR50.59 EVALUATIONS
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(cont'd)

ITEM

SUMMARY

B. Procedures and Revisions

NC.NA-AP.ZZ-0048(Q)

"Station Performance Monitoring Program" Rev. 1 -
The purpose of this change is as follows: 1) Adds a requirement for the System Engineer to initiate a design change request for selected component problems, 2) Adds responsibilities relative to component monitoring (Section 3.7). Reference: 1991 INPO report, 3) Adds a requirement to consider adding circulate system components that have experienced failures (two or more times within an 18 month period) to the program in elimination of the failures would increase the reliability of the related system, 4) Adds a requirement for the responsible System Engineer to initiate appropriate corrective action(s) for excessive component failures and if none are required, so indicate, 5) Deletes former Section 5.7, ASME Section XI Component Testing Effectiveness, and Unplanned Capability Loss Factor to Definitions. The revision to the procedure does not change the intent of the administrative controls for performance monitoring. The overall program has been enhanced by adding responsibilities relative to component monitoring as committed to in response to the 1991 INPO assessment of Salem and providing industry operating experience feedback to the Technical Departments. This revision cannot reduce the margin of safety as defined in the basis of any Technical Specification. (SORC 92-115)

S1.OP-SO.BR-0001(Z)

"Boric Acid Evaporator Operations" Rev. 0 - The purpose of this procedure is to provide direction for the operation of the Boric Acid Evaporator. This new procedure allows for transfer of the Boric Acid Evaporator bottom to the CVCS Holdup Tank or the Boric Acid Tank. The intent of the UFSAR was to ensure that the evaporator bottoms were sampled prior to discharge to the CVCS HUT or the Boric Acid Tank. The UFSAR implies allowance for sampling without transfer to the concentrates holding tank because it mentions the existence of a sample connection at the discharge of the boric acid concentrates' pump. This procedure places procedural controls on boron concentration of the

10CFR50.59 EVALUATIONS
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(cont'd)

ITEM	SUMMARY
	<p>bottom concentrates that are discharged to the CVCS HUT and/or the Boric Acid Tanks. The boron recovery system is not used for accident mitigation, therefore, this procedure does not reduce the margin of safety as defined in the basis for any Technical Specification. (SORC 92-116)</p>
NC.NA-AP.ZZ-0036(Q)	<p>"Control of Information System and Computer Resources" Rev. 1 - The purpose of this revision is as follows: 1) This revision meets the biennial review requirements of NC.NA-AP.ZZ-0032(Q), 2) This revision clarifies when an Information Systems Request is required, 3) Changes have been made to address user responsibilities, 4) A software policy has been addressed, 5) Section on "System Usage" had been moved to NC.NA-AP.ZZ-0064(Q), Software Quality Assurance. The Technical Specifications do not address Information Systems or Computer Resources, therefore the margin of safety for the basis of any Technical Specification is not reduced. (SORC 92-118)</p>

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY - UNIT 1
NOVEMBER 1992

SALEM UNIT NO. 1

The Unit began the period shutdown for repairs to 12BF19 and various other leaks on the Service Water, Heater Drain and Main Steam systems. A startup was commenced on November 1, 1992, and the Unit was restored to full power on November 5, 1992. The Unit continued to operate at essentially full power throughout the remainder of the period.

REFUELING INFORMATION
MONTH: - NOVEMBER 1992

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: DECEMBER 10, 1992
COMPLETED BY: J. FEST
TELEPHONE: (609) 339-2904

MONTH NOVEMBER 1992

1. Refueling information has changed from last month:
YES _____ NO X
2. Scheduled date for next refueling: OCTOBER 2, 1993
3. Scheduled date for restart following refueling: DECEMBER 13, 1993
4. a) Will Technical Specification changes or other license amendments be required?:
YES _____ NO _____
NOT DETERMINED TO DATE X
- b) Has the reload fuel design been reviewed by the Station Operating Review Committee?:
YES _____ NO X
If no, when is it scheduled?: _____
5. Scheduled date(s) for submitting proposed licensing action:
N/A
6. Important licensing considerations associated with refueling:

7. Number of Fuel Assemblies:
 - a. Incore 193
 - b. In Spent Fuel Storage 656
8. Present licensed spent fuel storage capacity: 1170
Future spent fuel storage capacity: 1170
9. Date of last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: September 2001