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

April 14, 1994

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

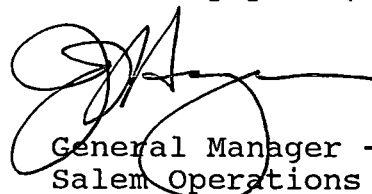
Dear Sir:

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 March 1994 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

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ERAGE DAILY UNIT POWER LEVEL

Completed by: Mike Morroni

Docket No.: 50-272
 Unit Name: Salem #1
 Date: 04/10/94
 Telephone: 339-2122

Month march 1994

Day Average Daily Power Level
 (MWe-NET)

1	<u>1108</u>
2	<u>1072</u>
3	<u>1090</u>
4	<u>1134</u>
5	<u>1019</u>
6	<u>949</u>
7	<u>1065</u>
8	<u>1037</u>
9	<u>751</u>
10	<u>755</u>
11	<u>752</u>
12	<u>849</u>
13	<u>1101</u>
14	<u>978</u>
15	<u>979</u>
16	<u>978</u>

Day Average Daily Power Level
 (MWe-NET)

17	<u>881</u>
18	<u>1092</u>
19	<u>849</u>
20	<u>797</u>
21	<u>1068</u>
22	<u>1073</u>
23	<u>1032</u>
24	<u>1077</u>
25	<u>1079</u>
26	<u>1078</u>
27	<u>1062</u>
28	<u>1088</u>
29	<u>1066</u>
30	<u>1037</u>
31	<u>776</u>

OPERATING DATA REPORT

Completed by: Mike Morroni

Docket No: 50-272
 Date: 04/10/94
 Telephone: 339-2122

Operating Status

1. Unit Name	<u>Salem No. 1</u>	<u>Notes</u>
2. Reporting Period	<u>March 1994</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>None.</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>
12. Hours in Reporting Period	<u>744</u>	<u>2160</u>	<u>146857</u>
12. No. of Hrs. Rx. was Critical	<u>744</u>	<u>1474.23</u>	<u>96606.2</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>744</u>	<u>1099.85</u>	<u>92987.69</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2294148</u>	<u>4197597.6</u>	<u>294976806.8</u>
17. Gross Elec. Energy Generated (MWH)	<u>768560</u>	<u>1061210</u>	<u>97597180</u>
18. Net Elec. Energy Gen. (MWH)	<u>736120</u>	<u>984975</u>	<u>92922528</u>
19. Unit Service Factor	<u>100</u>	<u>50.9</u>	<u>63.3</u>
20. Unit Availability Factor	<u>100</u>	<u>50.9</u>	<u>63.3</u>
21. Unit Capacity Factor (using MDC Net)	<u>89.5</u>	<u>41.2</u>	<u>57.2</u>
22. Unit Capacity Factor (using DER Net)	<u>88.7</u>	<u>40.9</u>	<u>56.7</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>19.9</u>	<u>20.9</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 MARCH 1994

DOCKET NO.: 50-272
UNIT NAME: Salem #1
DATE: 04-10-94
COMPLETED BY: Mike Morroni
TELEPHONE: 339-2122

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
0360	3-1-94	F	2.28	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0523	3-5-94	F	3.55	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0358	3-6-94	F	2.25	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0375	3-8-94	F	19.31	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0381	3-11-94	F	9.58	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0417	3-19-94	F	40.02	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0433	3-23-94	F	7.83	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0437	3-24-94	F	5.95	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0444	3-29-94	F	3.29	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0532	3-30-94	F	4.83	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS
0533	3-30-94	F	32.67	A	5	-----	HF	FILTER	CIRCULATING WATER PUMPS/SCREENS

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

SAFETY RELATED MAINTENANCE
MONTH: - MARCH 1994

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: APRIL 10, 1994
COMPLETED BY: R. HELLER
TELEPHONE: (609) 339-5162

WO NO UNIT

EQUIPMENT IDENTIFICATION

This section is being deleted from the report as it is not required by either the Technical Specifications or the Updated Final Safety Analysis Report. Deletion of this section from this and future reports was discussed with the NRC Region Salem Project Manager.

10CFR50.59 EVALUATIONS
MONTH: - MARCH 1994

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: APRIL 10, 1994
COMPLETED BY: R. HELLER
TELEPHONE: (609)339-5162

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

1EC-3277 Pkg 1

"Salem Pressure Resistant Barrier Review Project"
- This DCP will verify, document and/or upgrade and install penetration seals, internal conduit seals and other barrier features required to provide compartmental isolation in HELB barriers, Internal Flood barriers, and External Flood barriers at various elevations in the Auxiliary Building, Outer Penetration Buildings, Fuel Handling Buildings, and Service Water Intake Structure. This DCP will establish compliance with existing regulatory commitments contained in the UFSAR and the corrective action statement contained in LER 272/91-009-02. Specifically, the design and installation of barrier features installed in HELB, Internal Flood, and External Flood containment barriers will be verified and upgraded as necessary. There is no reduction in the margin of safety as defined in the basis for any Technical Specification. (SORC 94-020)

1EC-3249 Pkg 1

"Replacement of Spray Valve 1PS1 and 1PS3 Internals" - Rev. 3 - Pressurizer Spray Valves 1PS1 and 1PS3 are being retrofitted with new trim, upgraded valve bonnet bolts, nuts and gaskets, valve packing and actuator spring. The actuator spring will be adjusted due to revised calculations for required actuator thrust obtained from OEM. Also, the bonnet extension for spray valve 1PS1 will be replaced in kind. A temporary modification associated with the 1PS1 bonnet will be removed. Also, an isolation valve, 1CA-1963 will be added on the control air tubing to provide isolation between the control air supply line to the 1PS3 valve positioner and 1PS1 & 1PS3 I/P converters. The valve trim and other material upgrades will eliminate problems of seat leakage, body to bonnet leakage and valve body to bonnet bolt corrosion. This will reduce considerably the corrective maintenance work in the pressurizer

10CFR50.59 EVALUATIONS
MONTH: - MARCH 1994

DOCKET NO: 50-272
UNIT NAME: SALEM 1
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TELEPHONE: (609)339-5162

(cont'd)

ITEM	SUMMARY
	enclosure, which is a high radiation and heat stress area. The basic design and function of the spray valve has not changed. The OEM has recertified the valve to its original design criteria. The modifications will grade the specific valve components to restore the valve reliability to its desired value. The testing will verify that the upper end of the valve flow still meets the minimum plant design criteria of 400 gpm. The proposed testing is bounded by the analysis for a stuck open safety valve. There is no reduction in the margin of safety as defined in the basis for any Technical Specification. (SORC 94-022)
B. Procedures and Revisions	
NC.NA-AP.ZZ-0023(Q)	"Scaffolding & Transient Load Control" - Rev. 1 - The purpose of this procedure is to provide instruction and assign responsibilities for controlling the erection of scaffolding at both the Salem and Hope Creek Stations. In addition, this procedure provides guidelines for the control and storage of transient loads at each plant. Revision 1 to this procedure incorporates several programmatic changes to the existing guidelines for the erection and control of scaffolding. The first of these changes involves the requirement to enter all scaffolding into the scaffold control log located in the work control center. Another change will allow the seismic restraint requirements to be waived on scaffolding erected in a safety-related area, provided that a Limited Condition of Operation (LCO) has been entered for the associated equipment. This revision also incorporates the requirements of the Pre-startup Walkdown previously included in NC.NA-AP.ZZ-0031(Q), Artificial Island Inspection/Housekeeping Program. Also incorporated into this revision are supplementary guidelines for the control and restraint of transient loads on the Refueling Floor (Reactor Building EL 201') at Hope Creek. The issuance of

10CFR50.59 EVALUATIONS
MONTH: - MARCH 1994

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(cont'd)

ITEM	SUMMARY
C. SAR Change Notices	
SCN 93-60	<p>this revision does not reduce the margin of safety as defined in the bases for any Technical Specification. (SORC 93-024)</p>
M29-94-300	<p>"Main Steam Isolation Valves" - Generic wording changes were made to change main steam "stop" valve to correctly read main steam "isolation" valve (MSIV) and to change MSIV "closure" to correctly read MSIV "isolation". These changes will more accurately reflect the function and operation of the MSIVs per engineering evaluation S-C-MDC-1302 and S-C-MEE-0846. Discussions of smaller line breaks clarify the description of the Postulated Break Analysis and an explanation of the relationship between the MSIV test closure times and the MSIV isolation time used in the main steam pipe rupture analysis were also added to the interpretation of the procedure. There is no reduction in the margin of safety as defined in the basis for any Technical Specification. (SORC 94-025)</p> <p>"Section 17.2.17" - This change is being made to allow electronic retention of computer generated records, where such a record keeping system would generate certain records by entry of information and "electronic approvals" utilizing a computer terminal. Such "character records" would not reflect the author's original "handwritten" signature or initials in the same way that reproduced facsimile copy of scanned copy would. Controlled access in the formulating and processing of such records and selected applications for electronic approvals will support programmatic authorization process. A review of the Hope Creek and Salem Generating Station's Technical Specifications, Section 6.0, did not reveal any associated bases. Therefore, the proposal cannot reduce the margin of safety as defined in the basis for any Technical Specification. (SORC 94-026)</p>

10CFR50.59 EVALUATIONS
MONTH: - MARCH 1994

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(cont'd)

ITEM	SUMMARY
S-C-RCS-SEE-0866	"Section 3.5.1.1" - The proposal revises SGS-UFSAR Section 3.5.1.1 to provide clarification that the Rod Control System MG set flywheels will not produce missiles under any anticipated accident condition. The addition of this clarification does not affect plant operations and does not reduce the margin of safety as defined in the bases for any Technical Specifications. (SORC 94-026)
DEF DES-90-01378	"Section 9.5.6" - This change to UFSAR Section 9.5.6 is to reflect as-built configuration of the diesel generator start motor air system. The Technical Specifications do not provide a specific discussion of safety function related to the air start motors for the emergency diesel generator. Therefore, there is no reduction in the margin of safety as defined in the basis for any Technical Specification. (SORC 94-026)

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY - UNIT 1
MARCH 1994

SALEM UNIT NO. 1

The Unit began the period operating at essentially full power. Reactor power varied during the period as a precautionary measure due to the continuous challenges of heavy grass at the circulator inlet area. On March 9, 1994, power was reduced to 75% as a precautionary measure due to the high potential that two circulators would have to be removed from service due to high grass conditions and a problem with a circulating water pump motor bearing. The motor was replaced and the Unit returned to 100% power on March 12, 1994. On March 16, 1994, power was reduced to 11% due to a high influx of grass and subsequent loss of circulators. The circulators were restarted approximately one hour later and the Unit was restored to 100% power on March 17, 1994. On March 19, 1994, power was reduced to 77% for condenser water box cleaning due to the heavy grass conditions. The Unit was restored to 100% power on March 21, 1994, and, with the exception of a brief load reduction on March 23, 1994, due to heavy grass conditions, continued to operate at 100% power until March 30, 1994. On March 30, 1994, heavy grass conditions caused an emergency trip of 13A & 13B circulators and load was reduced to 80%. The Unit continued to operate at reduced power throughout the remainder of the period.

REFUELING INFORMATION
MONTH: - MARCH 1994

DOCKET NO: 50-272
UNIT NAME: SALEM 1
DATE: APRIL 10, 1994
COMPLETED BY: R. HELLER
TELEPHONE: (609) 339-5162

MONTH MARCH 1994

1. Refueling information has changed from last month:
YES X NO
2. Scheduled date for next refueling: MARCH 25, 1995
3. Scheduled date for restart following refueling: MAY 23, 1995
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?: MARCH 1995
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 732
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