PSE&G

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

Nuclear Business Unit

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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. 1
DOCKET NO. 50-272

Gentlemen:

In compliance with Section 6.9.1.6, Reporting Requirements for the Salem Technical Specifications, the original Monthly Operating report for May 1999 is attached.

Sincerely,

D. F. Garchow
General Manager -
Salem Operations

/rbk
Enclosures

C Mr. H. J. Miller
Regional Administrator USNRC, Region 1
475 Allendale Road
King of Prussia, PA 19046

DOCKET NO.: 50-272
UNIT: Salem 1
DATE: 6/15/99
COMPLETED BY: R. Knieriem
TELEPHONE: (609) 339-1782

Reporting Period: **May 1999**

OPERATING DATA REPORT

Design Electrical Rating (MWe-Net)	**1115**		
Maximum Dependable Capacity (MWe-Net)	**1106**		
	Month	**Year-to-date**	**Cumulative**
No. of hours reactor was critical	**681**	**3483**	**114303**
No. of hours generator was on line (service hours)	**667**	**3450**	**110038**
Unit reserve shutdown hours	**0**	**0**	**0**
Net Electrical Energy (MWH)	**698092**	**3684996**	**110297159**

UNIT SHUTDOWNS

NO.	DATE	TYPE F=FORCED S=SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTION/COMMENT
1	**5/20/99 - 5/24/99**	**F**	**76.7**	**A**	**3**	**Dropped Control Rod, Gripper fuse failure due to Containment Fan Coil Unit Leak**

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

Summary:

Salem Unit 1 began the month of May 1999, operating at full power. Full power operation continued until May 20, 1999 when the unit automatically shutdown in response to a dropped control rod. Salem Unit 1 returned to service on May 24,1999. Full power operation was restored on May 27, 1999 and continued through the end of the month.

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

MONTH: May 1999

The following items completed during **May 1999** 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

Design Change Package (DCP) 1EE-0366, Removal Of Spare Relays From The Solid State Protection System (SSPS)

This modification removed eight unused relays from the SSPS panels. The relays were removed to alleviate any SSPS concerns related to postulated relay contact closure due to inadvertent operation or a relay coil short. Operation and function of the SSPS remained as described in the UFSAR.

Review of this modification under 10CFR50.59 was not required because the removal of the spare relays did not constitute a change to the facility as described in the Safety Analysis Report (SAR), did not involve a change to procedures as described in the SAR, and did not involve a test or experiment not described in the SAR. The 10CFR50.59 evaluation was performed as a conservative measure because the change involved the SSPS. The evaluation concluded that the probability of any accident previously evaluated in the SAR would not be increased by the modification. The removal of the unused relays would remove potential failures that could inhibit a trip output from one channel

the removal of the relays. All of the identified failure modes are bounded by existing UFSAR Safety Analyses. Therefore, the possibility of an accident of a different type from any previously evaluated in the SAR did not change.

Minor Modification S97-009, Salem Unit 1 Control Room Normal Air Conditioning System Plenum Modification

This modification provided a resolution to ineffective condensate draining of the Salem Unit 1 Control Room Normal Air Conditioning system, Multi-zone Hot/Cold Deck Plenums by adding two 1" drain openings in the Control Room Normal Air Conditioning system plenum, 1VHE1000.

Review of this modification under 10CFR50.59 was required because the installation of the additional drain openings constituted a change to the facility as described in the SAR. . The modification did not constitute an Unreviewed Safety Question (USQ) because the portions of the Control Room Normal Air Conditioning system that were modified do not support any accident or recovery function. Therefore this modification did not increase the consequence or probability of an accident previously analyzed. The modification did not increase the probability or consequences of a malfunction of equipment important to safety. This modification would not create any new accidents or malfunctions since no new failure modes were introduced and failure modes considered applicable to this modification are within the existing design basis. In addition the Technical Specification Bases were not affected and no changes to the Technical Specifications were required.

Temporary Modifications - Summary of Safety Evaluations

Temporary Modification 99-010, Removal Of Service Water Valves 11SW65 and 11SW72 and Installation Of Blind Flanges

This Temporary Modification removed the 11SW65 and 11SW72 valves one at a time and replaced them with blind flanges. This action was taken to support inspection and maintenance of the 11SW72 valve and repair of Containment Fan Coil Unit leaks during power operation.

Review of this Temporary Modification under 10CFR50.59 was required because the removal of Service Water valves 11SW65 and 11SW72 and the installation of blind flanges constituted a change to the facility as described in the SAR. The installation of this modification did not constitute an Unreviewed Safety Question (USQ) because the modification was designed and installed to meet existing safety requirements and the safety analyses described in the UFSAR. Therefore this modification did not increase the consequence or probability of an accident previously analyzed. The modification did not increase the probability or consequences of a malfunction of equipment important to

the probability or consequences of a malfunction of equipment important to safety. This modification would not create any new accidents or malfunctions since no new failure modes were introduced and failure modes considered applicable to this modification are within the existing design basis. In addition the Technical Specification Bases were not affected and no changes to the Technical Specifications were required.

Procedures - Summary of Safety Evaluations

Procedures SC.RE-ST.ZZ-0001(Q) – 0004(Q) and; TS2.IC-PT.NIS-0001(Q), Dynamic Rod Worth Measurement Application

This procedural change involves implementation of the Dynamic Rod Worth Measurement (DRWM) methodology for determining control rod worth, versus the traditional rod exchange method which involves exchanging one bank with a previously measured bank to determine its worth. The DRWM methodology reduces the amount of time that the reactor core is in a low power, just critical condition during physics testing. The DRWM method uses signals from Power Range detectors during continuous control rod insertion, calculates an inverse kinetic equation, and then applies a spatial factor to this calculated value to account for static and dynamic spatial effects.

This proposed change does not affect the design or operation of plant equipment. It does not result in the increase of consequences of any credible accident or introduce any unknown accident. No unreviewed safety question exists. This technique is much simpler for plant personnel to perform, as compared to previously used methods, thus reducing the possibility of any human error.

UFSAR Change Notices - Summary of Safety Evaluations

There were no changes in this category implemented during May 1999.

Deficiency Reports - Summary of Safety Evaluations

There were no changes in this category implemented during May 1999.

Other - Summary of Safety Evaluations

There were no changes in this category implemented during May 1999.