PSE&G

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

Salem Generating Station

March 26, 1982

Mr. R. C. Haynes
Regional Administrator
USNRC
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Haynes:

LICENSE NO. DPR-75
DOCKET NO. 50-311
REPORTABLE OCCURRENCE 82-16/03L

Pursuant to the requirements of Salem Generating Station Unit No. 2, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 82-16/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura

H. J. Midura
General Manager -
Salem Operations

FD:al

CC: Distribution

IE22
S.1/1

Report Number: 82-16/03L

Report Date: 3-26-82

Occurrence Date: 02-26-82 and 02-27-82

Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Axial Power Distribution - Out of Target Band.

This report was initiated by Incident Reports 82-042, 82-043 and 82-044.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 91% - Unit Load 1050 MWe

DESCRIPTION OF OCCURRENCE:

On three occasions the Axial Power Distribution (ΔI) drifted out of the $\pm$5% target band due to a power reduction caused by clogged screens tripping the circulator.

At 0454 hours, February 26, 1982, with reactor power greater than 90%, No. 21B circulator tripped, and since No. 21A circulator was out of service for cleaning, a rapid load reduction was necessary due to partial loss of vacuum in No. 21 condenser. At 0457 hours, ΔI went out of the target band and Action Statement 3.2.1.a was entered.

At 0243 hours, February 27, 1982, No. 21B circulator again tripped. At 0245 hours No. 21A circulator was placed in service, while power was being reduced. At 0302 hours No. 21A circulator tripped, and power was again reduced to minimize a loss of condenser vacuum. At 0308 hours, with reactor power at 88%, ΔI went out of the target band and Action Statement 3.2.1.a was entered.

At 1516 hours, February 27, 1982, No. 21A circulator tripped, with No. 21B circulator out of service, and a load reduction was commenced. The ΔI went out of the target band at 80% reactor power at 1518 hours, and Action Statement 3.2.1.a was entered.

This occurrence constituted operation in a degraded mode in accordance with Technical Specification 6.1.9.1.b.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The ΔI exceeding the ±5% target band is inherent to rapid load reductions, which were necessary to minimize loss of condenser vacuum.

ANALYSIS OF OCCURRENCE:

Technical Specification 3.2.1.a requires:

a. With the indicated Axial Flux Difference outside of the ±5% target band about the target flux difference and with thermal power:

1. Above 90% of rated thermal power, within 15 minutes:

a. Either restore the indicated AFD to within the target band limits, or

b. Reduce thermal power to less than 90% of rated thermal power.

2. Between 50% and 90% rated thermal power:

a. Power operation may continue provided:

1. The indicated AFD has not been outside of the ±5% target band for more than 1 hour penalty deviation cumulative during the previous 24 hours, and

2. The indicated AFD is within the limits shown on Figure 3.2-1. Otherwise, reduce thermal power to less than 50% of rated thermal power within 30 minutes and reduce the Power Range Neutron Flux-High Trip Setpoints to less than or equal to 55% of rated thermal power within the next 4 hours.

CORRECTIVE ACTION:

The ΔI was restored to within the ±5% target band at 0509, 0313, and 1533 hours, respectively, and Action Statement 3.2.1.a was terminated. The time durations out of the target band were 12 minutes, 5 minutes, and 15 minutes, with a total time out of the band on February 26, 12 minutes, and February 27, 20 minutes. On February 27 both circulators were returned to service, and power was stabilized at 70%.

FAILURE DATA:

Circulator Screen Clogged

Prepared By F. Dickey

SORC Meeting No. 82-34

General Manager -
Salem Operations