PSE&G

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

Salem Generating Station

August 25, 1982

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

Dear Mr. Haynes:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 82-057/03L

Pursuant to the requirements of Salem Generating Station Unit No. 1, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 82-057/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura

H. J. Midura
General Manager -
Salem Operations

RF:ks

CC: Distribution

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PDR ADOCK 05000272
S PDR

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95-2189 (20M) 11-81

Report Number: 82-057/03L

Report Date: 08-25-82

Occurrence Date: 08-03-82

Facility: Salem Generating Station, Unit 1
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Axial Flux Distribution - Out of Specification.

This report was initiated by Incident Report 82-209.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 80% - Unit Load 890 MWe.

DESCRIPTION OF OCCURRENCE:

At 1427 hours, August 3, 1982, during routine operation, the Control Operator observed a No. 13A Travelling Screen High Differential Pressure Trip alarm. At the time of the occurrence, Nos. 12B and 13B Circulators were already out of service for maintenance; with 3 out of 6 of the circulators inoperable, vacuum started to decrease rapidly. The operator commenced reduction of turbine load in order to maintain vacuum, and due to the temperature error, automatic insertion of the control rods occurred. Axial Flux Difference (AFD) went out of the +6, -9% target band as a result of the rod insertion and Technical Specification Action Statement 3.2.1.a.2.a was entered. Rx power was stabilized at 65%, and the operator commenced boration of the Reactor Coolant System to restore the rods to a normal position. AFD returned to within the target band at 1505 hours, and Action Statement 3.2.1.a.2.a was terminated. A total of 35 minutes penalty deviation was accumulated. AFD was maintained within the limits of Technical Specification Figure 3.2-1 throughout the occurrence.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

No. 13A Circulator tripped due to a high differential pressure caused by grass and debris clogging the travelling screen. Floating materials are routinely drawn into the screens by the large volumes of water moved by the circulators. No. 13B Circulator was out of service due to its pump being removed for inspection and repair. No. 12B Circulator had been removed from service earlier that day for routine travelling screen inspection.

ANALYSIS OF OCCURRENCE:

Limits on AFD insure core thermal limits are not exceeded during normal operation, including periods of xenon redistribution. The AFD band also insures that the initial core thermal conditions assumed for events analyzed in the FSAR are met. Deviation of AFD from the target band will not affect xenon distribution sufficiently to change the peaking factor envelope upon return to power, provided thermal power, total deviation and duration are controlled.

Action Statement 3.2.1.a.2 requires:

> Between 50% and 90% of rated thermal power, power operation may continue, provided the indicated AFD has not been outside of the +6, -9% target band for more than 1 hour penalty deviation cumulative during the previous 24 hours, and the indicated AFD is within the limits of Figure 3.2-1 of the Technical Specification; otherwise, reduce thermal power to less than 50% of rated 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.

As noted, the plant was maintained within the limits specified in the action statement, and consequently no risk to the health or safety of the public was involved. The event constituted operation in a degraded mode permitted by a limiting condition for operation and is reportable in accordance with Technical Specification 6.9.1.9.b.

CORRECTIVE ACTION:

The clogged screen was cleaned, and No. 13A Circulator was returned to service. With AFD back in the target band, load escalation was commenced. No. 12B Circulator was returned to service; No. 13B Circulator is still out of service pending completion of repairs.

FAILURE DATA:

Rex Chainbelt
Travelling Screen
Chain Link

Prepared By R. Frahm

W. J. Vaficura
General Manager -
Salem Operations

SORC Meeting No. 82-78