PSEG

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

Salem Generating Station

January 19, 1983

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 83-001/03L

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 83-001/03L. 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

IE22

Report Number: 83-001/03L

Report Date: 01-19-83

Occurrence Date: 01-04-83

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

IDENTIFICATION OF OCCURRENCE:

Reactor Coolant System - No. 12 Residual Heat Removal Loop - Inoperable.

This report was initiated by Incident Report 83-003.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - RX Power 0 % - Unit Load 0 MWe.

DESCRIPTION OF OCCURRENCE:

At 1840 hours, January 4, 1982, the Control Room Operator observed that No. 1B Vital Bus had tripped. Since it is supplied from the bus, No. 12 Residual Heat Removal (RHR) Pump was de-energized. Loss of the pump rendered the associated RHR loop inoperable, and Technical Specification Action Statement 3.4.1.4a was entered. The operator immediately started No. 11 RHR Pump to restore cooling flow to the core. The second pump remained operable throughout the occurrence.

APPARENT CAUSE OF OCCURRENCE:

Investigation revealed that the 4KV supply breakers to the bus had opened due to differential relay protection. A visual inspection of the busswork and 7.5KV leakage check were satisfactory. Inspection of the differential current transformers and associated wiring revealed no abnormalities; the differential relay setpoints were checked and tested satisfactorily.

Since there were no apparent problems, No. 1B Vital Bus was re-energized. No further trips were noted, and the occurrence was assumed to be of an isolated nature.

ANALYSIS OF OCCURRENCE:

In Modes 4 and 5, a single RHR loop provides sufficient heat removal capability for removing decay heat; single failure considerations require that both loops are operable. Both RHR pumps may be de-energized for up to 2 hours provided no operations are permitted that would cause dilution of the Reactor Coolant System (RCS) boron concentration and core outlet temperature is maintained at least $10^{o}F$ less than saturation temperature.

Since at least one pump was in operation, the event involved no risk to the health and safety of the public. Due to the loss of redundancy, the occurrence constituted operation in a degraded mode

ANALYSIS OF OCCURRENCE: (cont'd)

permitted by a limiting condition for operation. The incident therefore was reportable in accordance with Technical Specification 6.9.1.9b.

Action Statement 3.4.1.4 requires:

> With less than the required number of RHR loops operable, immediately initiate corrective action to return the required loops to operable status as soon as possible; with no RHR loop in operation, suspend all operations involving a reduction in boron concentration of the RCS and immediately initiate corrective action to return the required RHR loop to operation.

CORRECTIVE ACTION:

As noted, the redundant RHR loop was immediately placed in operation, and investigation of the problem was commenced, in compliance with the action statement. Following restoration of the bus, no further problems were observed; Action Statement 3.4.1.4a was terminated at 1300 hours, January 7, 1983. No other corrective action was deemed necessary in view of the nature of the occurrence.

FAILURE DATA:

Not Applicable

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 83-05