PSE&G

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

Salem Generating Station

April 7, 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 82-15/03L

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 82-15/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura
General Manager -
Salem Operations

FD:ks

CC: Distribution

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The Energy People

95-2189 (20M) 11-81

Report Number: 82-15/03L

Report Date: 04-07-82

Occurrence Date: 03-16-82

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

IDENTIFICATION OF OCCURRENCE:

Loss of No. 1A Vital Bus - Wire to Undervoltage Relay Shorted.

This report was initiated by Incident Report 82-055.

CONDITIONS PRIOR TO OCCURRENCE:

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

DESCRIPTION OF OCCURRENCE:

On March 16, 1982 the 1A Vital Bus Undervoltage Annunciator alarmed and the Control Room Operator observed that No. 1A Vital Bus was de-energized. Power was lost to No. 11 Component Cooling Pump and Nos. 15 and 16 Service Water Pumps, resulting in a loss of Component Cooling Water (CCW) and Service Water (SW) flows; the redundant CCW and SW pumps were tagged out for maintenance. At 1055 hours all charging pumps and both Residual Heat Removal (RHR) loops were declared inoperable due to the loss of CCW, and Action Statements (A.S.) 3.1.2.3 and 3.4.1.4 were entered. None of the boron injection flow paths were operable due to the loss of the charging pumps, and A.S. 3.1.2.1 was entered. At the same time the loss of SW resulted in all diesel generators being declared inoperable, and A.S. 3.8.1.2 and 3.8.2.2 being entered.

These occurrences constituted operation in a degraded mode in accordance with Technical Specification 6.9.1.9.b.

All Technical Specification requirements for Mode 5 operation were met, however, and this event did not result in any risk to the health or safety of the public, or to the environment.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

A wire to the TD5 undervoltage relay had shorted to the feeder cubicle door, causing the 1A Vital Bus infeed breaker to trip without automatic transfer.

ANALYSIS OF OCCURRENCE:

The Technical Specifications require that all operations involving core alterations or positive reactivity changes be suspended if any of the following conditions exist:

1. Less than a minimum of one boron injection flow path is operable (A.S.3.1.2.1.),

2. No operable charging pump in the boron injection flow path above (A.S.3.1.2.3),

3. Less than a minimum of two operable diesel generators (A.S.3.8.1.2).

Technical Specification 3.4.1.4 requires:

> With less than two RHR loops operable, immediately initiate corrective action to return both 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 Reactor Coolant System (RCS), and immediately initiate action to return an RHR loop to operation.

Technical Specification 3.8.2.2. requires:

> With less than a minimum of two operable A.C. electrical bus trains each aligned to an operable diesel generator, establish containment integrity within 8 hours.

CORRECTIVE ACTION:

All core alterations and positive reactivity changes (including reduction of RCS boron concentration) were suspended. Action was immediately taken to restore 1A Vital Bus, and thereby return both RHR loops to an operable status and one RHR loop to operation in minimum time.

At 1128 hours, March 16, 1982, SW flow was restored, all diesels were declared operable, and A.S.3.8.1.2 and 3.8.2.2 were terminated. The faulty wire was replaced, and 1A Vital Bus and CCW flow were restored. All charging pumps, a boron injection flow path, and both RHR loops were declared operable. One RHR loop was placed in operation, and at 1140 hours A.S.3.1.2.1, 3.1.2.3 and 3.4.1.4 were terminated.

FAILURE DATA:

Crimped Wire

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 82-38