

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

Salem Generating Station

October 20, 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 82-072/03X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station Unit No. 2 Technical Specifications, Section 6.9.1.9.b, we are submitting supplemental Licensee Event Report for Reportable Occurrence 82-072/03X-1.

Sincerely yours,

H. J. Midura

General Manager -Salem Operations

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RH: ks JC. 1.

CC: Distribution

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Report Number: 82-072/03X-1

Report Date: 10-20-82

Occurrence Date: 08-20-82

Facility: Salem Generating Station, Unit 2

Public Service Electric & Gas Company Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Reactor Trip System - Reactor Trip Breaker "B" - Inoperable.

This report was initiated by Incident Report 82-246.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 82% - Unit Load 890 MWe.

DESCRIPTION OF OCCURRENCE:

At 2000 hours, August 20, 1982, during surveillance testing of Solid State Protection System (SSPS), Train "B", it was discovered that Reactor Trip Breaker "B" would not trip as required. The channel was declared inoperable and Limiting Condition for Operation Action Statement 3.3.1 Action 1 was entered at 2000 hours. At 2040 hours, a power reduction was commenced in compliance with the limiting condition for operation. An unusual event was entered due to a shutdown required by a limiting condition for operation. Only the automatic trip function was inoperable. The manual trip function was unaffected.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The cause of the Reactor Trip Breaker malfunction was determined to be binding of the Undervoltage (UV) coil solenoid. When the UV coil was deenergized the solenoid would not drop fully. This prevented the coil from tripping the breaker on a signal from the Solid State Protection System.

ANALYSIS OF OCCURRENCE:

The operability of the protective and Engineered Safety Feature (ESF) Instrumentation Systems and interlocks ensure that; 1) the associated ESF action and or reactor trip will be initiated when the parameter monitored by each channel or combination thereof reaches its setpoint, 2) the specified coincidence logic is maintained, 3) sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance, and 4) sufficient system functional capability is available for protective and ESF purposes from diverse parameters.

ANALYSIS OF OCCURRENCE: (continued)

The operability of these systems is required to provide the overall reliability, redundancy and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems is consistent with the assumptions used in the accident analysis. Redundant reactor trip capability is provided by another independent channel. Therefore, this occurrence involved no risk to the health and safety of the general public.

Action Statement 3.3.1 Action 1 requires:

With the number of operable channels one less than required by the minimum channels operable requirement, be in hot standby within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1 provided the other channel is operable.

Inoperability of one reactor trip channel, therefore, constitutes 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 Reactor Trip Breaker was replaced with an "A" Train Bypass Breaker. The surveillance test was satisfactorily completed, and Limiting Condition for Operation Action Statement 3.3.1 Action 1 was terminated at 2206 hours, August 20, 1982. The undervoltage coil was replaced and the SSPS Train "B" Reactor Trip Breaker was reinstalled and tested satisfactorily.

FAILURE DATA:

Westinghouse Electric Corporation Type "A" Breaker Model DB-50

Prepared By R. Heller

General Manager -Salem Operations

SORC Meeting No. 82-94B