



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

Salem Generating Station

February 9, 1983

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 83-003/03L

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 83-003/03L. This report is required within
thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura
General Manager -
Salem Operations

RF:ks

CC: Distribution

8303080329 830209
PDR ADOCK 05000311
S PDR

The Energy People

Report Number: 83-003/03L
Report Date: 02-04-83
Occurrence Date: 01-11-83
Facility: Salem Generating Station Unit 2
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Reactivity Control Systems - Rod Position Indication System - Inoperable.

This report was initiated by Incident Report 83-012.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - RX Power 55 % - Unit Load 550 MWe.

DESCRIPTION OF OCCURRENCE:

At 1300 hours, January 11, 1983, during routine operation, the Control Room Operator noticed that No. 1SA2 Rod Position Indication (RPI) indicated approximately half scale. No accompanying reactivity perturbation was observed, however, and the group demand position indicated no change in bank position. It was assumed that the affected control rod had not dropped. The RPI channel was declared inoperable, and Technical Specification Action Statement 3.1.3.2.1a was entered. A flux map utilizing incore detectors confirmed that no change in rod position had occurred.

APPARENT CAUSE OF OCCURRENCE:

Investigation of the problem revealed that the channel signal conditioner module had failed. No other problems were evident, and no previous failures of this type had been noted. The problem was therefore assumed to be of an isolated nature.

ANALYSIS OF OCCURRENCE:

Control rod position indication is required to be operable in order to verify the Technical Specification limiting conditions for operation involving rod position are met. Specifications on control rod position ensure that acceptable power distribution limits are maintained, the minimum shutdown margin is provided, and severity of a rod ejection accident is limited. Action statements impose additional restrictions which ensure the bases are met in the event of limited variations from the basic requirements.

As noted, actual rod position was determined to be within specification. The event therefore involved no risk to the health and safety of the public. The occurrence constituted operation in a degraded mode permitted by a limiting condition for operation and is reportable in accordance with Technical Specification 6.9.1.9b.

ANALYSIS OF OCCURRENCE: (cont'd)

Action Statement 3.1.3.2.1a requires:

With a maximum of one rod position indicator per bank inoperable, either:

- 1) Determine the position of the non-indicating rod indirectly by the moveable incore detectors at least once per 8 hours and immediately after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or
- 2) Reduce thermal power to less than 50% of rated thermal power within 8 hours.

CORRECTIVE ACTION:

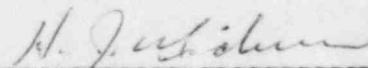
The failed signal conditioner module was replaced, the new module was calibrated, and the channel was satisfactorily tested. No. 1SA2 RPI was declared operable at 1633 hours, January 11, 1983, and Action Statement 3.1.3.2.1a was terminated. No further action was deemed necessary in view of the nature of the occurrence.

FAILURE DATA:

Magnetics, Inc.
Signal Conditioner Module
Type E2786

A number of previous problems have been noted with calibration drift of this type of module in other RPI channels. Due to the difference in the failure symptoms, however, the occurrence was assumed to be unrelated to the previous events.

Prepared By R. Frahm


General Manager -
Salem Operations

SORC Meeting No. 83-13A