



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 82-116/03L

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 82-116/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura  
General Manager -  
Salem Operations

RF:ks *JSJ*

CC: Distribution

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PDR ADOCK 05000311  
S PDR

Report Number: 82-116/03L  
Report Date: 10-20-82  
Occurrence Date: 09-27-82  
Facility: Salem Generating Station, Unit 2  
Public Service Electric & Gas Company  
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Reactor Coolant System Subcooling Margin Monitor - Inoperable.  
This report was initiated by Incident Reports 82-310 and 82-313.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 82% - Unit Load 900 MWe.

DESCRIPTION OF OCCURRENCE:

At 1900 hours, September 27, 1982, during routine operation, the Control Room Operator observed a malfunction of the P-250 process computer. The computer was declared inoperable, and because it supplies the inputs to the Reactor Coolant System (RCS) subcooling margin monitor, the monitor was also declared inoperable. Technical Specification Action Statement 3.3.3.7.a was entered retroactive to the time of discovery of the problem.

The computer was repaired and the subcooling monitor satisfactorily tested. At 0815 hours, September 28, 1982, the monitor was declared operable, and Action Statement 3.3.3.7.a was terminated. Later that day, at 1700 hours, the Control Room Operator observed that the subcooling monitor had failed for a second time. The instrument was declared inoperable and Action Statement 3.3.3.7.a was re-entered.

RCS wide range temperature and pressure indication were available throughout both occurrences, allowing calculation of the subcooling margin through the use of steam tables.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

On the first occasion, the malfunction of the P-250 computer resulted from failure of a computer logic board. No recent failures of the type of board involved had been observed, and the incident was assumed to be an isolated one.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE: (continued)

In the second instance, Thermocouple T0045A (Tsat) was found to be indicating 1300<sup>o</sup>F. A new value was entered, the channel was reset, and the thermocouple indication returned to normal. No further problems with the Tsat indication were noted. The computer had not been flushed during maintenance following the first occurrence; the failure apparently involved an isolated malfunction of the point associated with the repair.

ANALYSIS OF OCCURRENCE:

Operability of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. Since, as noted, wide range RCS temperature and pressure instrumentation was operable, allowing for determination of the subcooling margin, no risk to the health or safety of the public was involved. The occurrence constituted operation in a degraded mode permitted by a limiting condition for operation, and is reportable in accordance with Technical Specification 6.9.1.9.b.

Action Statement 3.3.3.7.a requires:

With the number of operable accident monitoring channels less than the required number of channels, restore the inoperable channel(s) to operable status within 7 days, or be in at least hot shutdown within the next 12 hours.

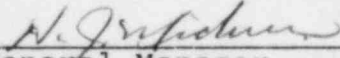
CORRECTIVE ACTION:

In the first case, the failed logic board was replaced and the computer was satisfactorily tested. As noted, the subcooling margin monitor was declared operable on September 28, 1982 and Action Statement 3.3.3.7.a was terminated. In the second instance, as discussed, a value was entered into the point and the point cleared to restore the Tsat input. At 1929 hours, September 28, 1982, the subcooling monitor was declared operable and Action Statement 3.3.3.7.a was terminated. No further action was deemed necessary in view of the nature of the occurrence.

FAILURE DATA:

Westinghouse Electric Corp.  
PRODAC 250 Computer  
Logic Board

Prepared By R. Frahm

  
General Manager -  
Salem Operations

SORC Meeting No. 82-94B