PSEG

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

Salem Generating Station

July 21, 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 82-056/03L

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 82-056/03L. 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: 82-056/03L

Report Date: 07-21-82

Occurrence Date: 07-01-82

Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

100' Elevation Containment Air Lock - Inoperable.

This report was initiated by Incident Reports 82-166 and 82-168.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 91% - Unit Load 1020 MWe.

DESCRIPTION OF OCCURRENCE:

At 1330 hours, July 1, 1982, technicians exiting the 100' Elevation Containment Air Lock found that the inner door seal leakage was greater than the maximum allowed by Surveillance Procedure SP(O)4.6.1.3A. The air lock was declared inoperable, and at 1340 hours, Technical Specification Action Statement 3.6.1.3.a was entered. The door seal was repaired and the 100' Elevation Air Lock was declared operable on July 2, 1982. Later that day, however, the inner door again failed to meet surveillance leakage requirements. At 1400 hours, the air lock was declared inoperable and Action Statement 3.6.1.3.a was entered for a second time. In both instances, the outer door was operable and was maintained closed to provide containment integrity.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

Personnel slamming the door had caused the seal to be forced out of its proper position, which had resulted in improper seating of the knife edges against the seal surfaces.

The second occurrence involved the same problem, in addition to a broken roller on the latch roller assembly. Personnel while closing the door, increase the speed of the handwheel during the free rotation part of operation, to gain momentum for the portion which is more difficult due to latch engagement. This results in excessive stress on the latch rollers, each time the latch bar engages the roller assembly.

ANALYSIS OF OCCURRENCE:

The containment air lock doors allow for personnel access to the Containment Building while providing a redundant boundary as part of overall containment integrity. This barrier prevents the release of radioactive contamination to the environment in the event of a design basis accident. Since the outer door was maintained closed, providing containment integrity, no risk to the health or safety of the public was involved. The event consequently 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 3.6.1.3 requires:

> With one containment air lock door inoperable, maintain at least the operable air lock door closed and restore the inoperable door to operable status within 24hours, or be in hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

CORRECTIVE ACTION:

As noted, in both instances the outer door was operable and maintained closed, in compliance with the action statement. In the first case, the inner door seal was pulled out and properly repositioned, and surveillance testing was satisfactorily completed. The 100' Elevation Containment Air Lock was declared operable, and at 1010 hours, July 2, 1982 Action Statement 3.6.1.3.9 was terminated.

On the second occasion, the seal was repositioned as before. The cracked roller was replaced and the latch mechanism properly adjusted; leak rate surveillance was completed satisfactorily. At 2100 hours, July 2, 1982, the air lock was declared operable, and Action Statement 3.6.1.3.a was terminated for a second time.

Proper operation of the air lock doors is presently addressed in radiation worker training. Special emphasis will be placed on the importance of not slamming the doors, in view of the recurrent problems with air lock seals. In addition, slow operation of the latch mechanism to prevent damage to linkage and rollers will be mentioned. Caution signs reminding personnel not to slam the doors and to operate the latch mechanism slowly, will be placed at each operating station. Finally, a change to the Technical Specification will be requested, reducing the pressure used to test air lock seals. The present range of 47 to 50 PSIG at the seal interspace does not accurately simulate required seal performance.

FAILURE DATA:

Since January 1, 1982, there have been a total of 8 occasions on which containment air locks have failed; of these 7 involved the 100' Elevation Air Lock. The concentration of problems is likely due to the more frequent use of the lower elevation air lock for containment access.

Chicago Bridge and Iron Co.
Personnel Air Lock
Latch Roller

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 82-69