PSE&G

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

Salem Generating Station

March 8, 1983

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 83-010/03L

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 83-010/03L. 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: 83-010/03L

Report Date: 03-07-83

Occurrence Date: 02-05-83

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

IDENTIFICATION OF OCCURRENCE:

Containment Systems - Containment Type B and C Leak Rate - Out-of-Specification.

This report was initiated by Incident Report 82-118.

CONDITIONS PRIOR TO OCCURRENCE:

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

DESCRIPTION OF OCCURRENCE:

From October 16, 1982 to February 5, 1983, during a scheduled refueling, routine surveillance of Containment Type B and C components revealed three containment isolation valves with leakage rates greater than the maximum range of the leak rate test equipment (20,000 sccm). The components involved were Containment Isolation Valves 1CC215, 14GB4 and 1VC8. Since actual leakage due to each valve could not be ascertained, it was not possible to demonstrate that the total Type B and C leakage was less than 0.60 La as required by Technical Specifications Limiting Condition for Operation 3.6.1.2b (applicable only in Modes 1 through 4).

The integrity of redundant containment boundaries had been maintained during previous operation; total leakage past redundant containment isolation valves did not constitute an abnormal portion of the total allowable leakage. The valves involved were repaired and satisfactorily tested; combined Type B and C leakage was determined to be within specification prior to returning to Mode 4 operation.

APPARENT CAUSE OF OCCURRENCE:

Investigation revealed that the stroke of Valves 1CC215 and 1VC8 was out of adjustment. Disassembly of Steam Generator Blowdown Valve 14GB4 revealed that the valve seating surfaces were damaged by wire cutting. Both Valves 1CC215 and 14GB4 had failed the previous leak rate testing in 1980-81, and had been reworked at that time. The range of the test equipment in use at the time, however, was insufficient to allow quantification of lesser leakage (maximum range 2,000sccm).

ANALYSIS OF OCCURRENCE:

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the accident analyses at the peak accident pressure of 47 psig.

ANALYSIS OF OCCURRENCE: (cont'd)

Action Statement 3.6.1.2 requires:

> With either the measured overall integrated containment leakage rate exceeding 0.75 La, or with the measured combined leakage rate for all penetrations and valves subject to Type B and C tests exceeding 0.60 La, restore the leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System (RCS) temperature above 200°F.

Leakage rate limits during performance of periodic tests incorporate conservatism to account for possible degradation of the leakage barriers between testing. The combined leakage rate had previously been demonstrated within specification during leak rate testing in 1980-81. As noted, the valves were repaired and total leakage was demonstrated to be within specification during the recent testing.

Finally, redundant barriers and therefore containment integrity were maintained. The occurrence thus did not involve any risk to the health and safety of the public. Due to the loss of redundancy in containment barriers, the event constituted operation in a degraded mode permitted by a limiting condition for operation. The occurence is reportable in accordance with Technical Specification 6.9.1.9b.

CORRECTIVE ACTION:

Valves 1CC215 and 1VC8 were restroked and satisfactorily tested. Valve 14GB4 internals were reworked, the gasket and packing were replaced, and the valve was also satisfactorily tested. With the valves repaired, and no further problems encountered, on February 5, 1983, the final results of Type B and C leak rate testing demonstrated combined leakage was within specification.

Due to the recurrence of excessive leakage by two of the valves, particularly Valve 14GB4, the Nuclear Engineering Department was notified of the occurrence. Appropriate corrective action will be implemented pending investigation of the problems.

FAILURE DATA:

Masoneilan International, Inc.
3 inch Control Valve
Model 38-20721

Prepared By R. Frahm

H. J. Midura
General Manager -
Salem Operations

SORC Meeting No. 83-028