PSE&G

Public Service Electric and Gas Company P.O. Box #168 Hancocks Bridge, New Jersey 08038

February 2, 1982

Mr. R. C. Haynes
Director of USNRC
Office of Inspection and Enforcement
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Haynes:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 82-02/01T

Pursuant to the requirements of Salem Generating Station Unit No. 1 Technical Specifications, Section 6.9.1, we are submitting Licensee Event Report for Reportable Occurrence 82-02/01T. This report is required within fourteen (14) days of the occurrence.

Sincerely yours,

H.J. Midura
General Manager -
Salem Operations

FD:al

CC: Distribution

IE22
1/1

Report Number: 82-02/01T

Report Date: 02-02-82

Occurrence Date: 01-19-82

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

IDENTIFICATION OF OCCURRENCE:

No. 14 Steam Generator - Defective Tubes.

This report was initiated by Incident Report 82-023.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 6 - Rx Power 0% - Unit Load 0 MWe

DESCRIPTION OF OCCURRENCE:

On January 19, 1982, during the third refueling outage of Salem Unit No. 1, while performing surveillance requirements 4.4.5.0, 4.4.5.1, and 4.4.5.2 to demonstrate steam generator operability, indications of wastage (thinning) on the tube outside diameter was detected by multi-frequency eddy current examination. These indications are concentrated on the peripheral tubes at the first, second and third support plates in the cold leg side of the generator. The inward most indication is located not more than 5 rows in from the edge of the tube sheet.

No. 12 Steam Generator first sample inspection of 539 tubes included 12% of 3388 (408) tubes required by Technical Specification, and an additional 131 tubes to cover areas recommended by Westinghouse. The results were 3 tubes defective and 2 tubes degraded. A second sample 12% of 3388 (408) tubes, as required by C-2 result in Technical Specification Table 4.4-2, was taken. This sample concentrated on the periphery and was conducted from the cold leg side. No additional defective or degraded tubes were found.

No. 14 Steam Generator first sample inspection was originally 80 tubes by eddy current techniques and 52 tubes for a profilometry field trial. As a result of No. 12 Steam Generator inspection, this first sample was expanded to include tubes in the periphery and the examinations were conducted from the cold leg side. With profilometry field trials being cancelled, the first sample size was 229 tubes. The results of this inspection was 2 tubes defective and 11 tubes degraded. A second sample 12% of 3388 (408) tubes, as required by C-2 result in Technical Specification Table 4.4-2, was taken. An additional 6 defective and 13 degraded tubes were found, placing No. 14 Steam Generator in a C-3 result in Technical Specification Table 4.4-2.

Additional samples were taken in No. 14 Steam Generator of 916 tubes to throughly cover the periphery tubes and insure that an area well beyond the inner most indication was free from defective or degraded tubes. No additional defective or degraded tubes were found in these areas.

ANALYSIS OF OCCURRENCE:

Table 4.4-2 requires:

Result	Action Required
C-1	None
C-2	Plug defective tubes and inspect additional 2S tubes in this S.G.
C-3	Inspect all tubes in this S.G., plug defective tubes and inspect 2S tubes in each other S.G.
$S=\frac{3N\%}{n}$	Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection.

CORRECTIVE ACTION:

All defective tubes and those degraded above 30% were plugged. As required by Technical Specification Table 4.4-2 12% of 3388 (408) tubes will be examined in each of No. 11 and No. 13 Steam Generators. These exams are scheduled after the refueling activities are completed during this outage. The exams will be conducted using multifrequency eddy current techniques from the cold leg side.

Present plans also call for a peripheral tube (Row 44 Column 62) to be pulled from Steam Generator No. 14 during this outage for further evaluation. As an added precaution the plugging limit has been lowered to 30% in Steam Generator No. 14 and, depending on the results of No. 11 and No. 13 Steam Generator inspection, the 30% plugging limit will also apply. A supplemental report will be issued upon completion.

FAILURE DATA:

Westinghouse Electric Corporation
Steam Generators

Prepared By F. Dickey

General Manager -
Salem Operations

SORC Meeting No. 82-12