

Public Service Electric and Gas Company 80 Park Place Newark, N.J. 07101 Phone 201 430-7000

December 11, 1980

Mr. Boyce H. Grier
Director of USNRC
Office of Inspection and Enforcement
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 80-07/03x-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station Unit No. 1 Technical Specifications, Section 6.9.1, we are submitting supplemental Licensee Event Report for Reportable Occurrence 80-07/03x-1.

Sincerely yours,

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R. A. Uderitz
General Manager Nuclear Production

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MARSOL SURVICE Report Number:

80-07/03X-1

Report Date:

12/11/80

Occurrence Date:

1/28/80

Facility:

Salem Generating Station, Unit 1

Public Service Electric & Gas Company Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Check Valve 1DR7 Failure to Meet Intended Design

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 Reactor Power 98%

DESCRIPTION OF OCCURRENCE:

On January 28, 1980, Public Service Engineering Department identified 1DR7, Demineralized Water Supply Check Valve to the Auxiliary Feedwater Storage Tank (AFST) as not being seismically qualified. The AFST was declared inoperable at 1600 hours (TS 3.7.1.3) and the Demineralized Water Storage Tank was verified as a backup water supply. A Seismic Test of 2DR7, an identical valve, was performed by the Franklin Institute Research Laboratory in Philadelphia, Pennsylvania, to IEEE Standard 344-1975. No physical failure was observed to have occurred to the valve due to the seismic test. In order to duplicate test conditions, a pipe brace was added to the system and the Action Statement was terminated at 1100 hours on February 1, 1980.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

During an Engineering review of the system diagrams, it was discovered 1DR7 was not seismically qualified. This valve had been designated in 1970 from an Auxiliary Feedwater valve to a demineralized water supply valve placing it outside the boundary of seismic piping. It was determined this was an error and resulted in a design deficiency.

ANALYSIS OF OCCURRENCE:

The design deficiency could have resulted in draining the AFST in the event of a seismic occurrence if the non-safety related valve boundary is postulated to break.

CORRECTIVE ACTION:

A valve of the same design was seismically tested and was able to withstand seismic levels which enveloped the Required Response Spectrum as required for biaxial testing by IEEE Standard 344-1975. A pipe brace was installed because test conditions could not duplicate actual plant conditions. The added brace, therefore, allowed in plant and test conditions to be equivalent. Further review by the Engineering Department determined that the shake test of the valve type and the additional support that was seismically analyzed provide the necessary assurance that the situation is acceptably resolved. No additional action is required on this item.

FAILURE DATA:

Not Applicable

Prepared By	J. C. Osuch	M. Trefilia
		Manager - Salem Generating Station
SORC Meeting	No. 100-80	· ·