



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

Salem Generating Station

August 26, 1981

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:

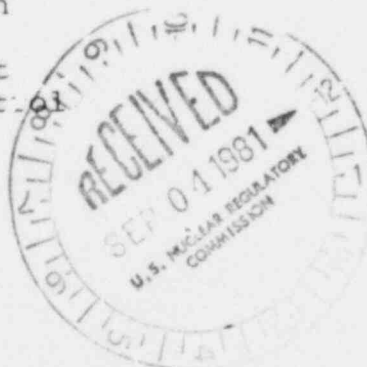
LICENSE NO. DPR-75
DOCKET NO. 50-311
REPORTABLE OCCURRENCE 81-82/99X

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 81-82/99X. This report is required within ninety (90) days of the occurrence.

Sincerely yours,

H. J. Midura
Manager -
Salem Generating Station

CC: R. A. Uderitz
General Manager - Nuclear Production
Director, Office of Inspection
and Enforcement (30 copies)
Director, Office of Management
Information and Program Control
(3 copies)



IE22
5
1/1

8109080181 810826
PDR ADOCK 05000311
S PDR

Report Number: 81-82/99X
Report Date: 8-26-81
Occurrence Date: 6-3-81 and 6-27-81
Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Inadvertent Safety Injections Following Reactor Trips.
This report was initiated by Incident Reports 81-171 and 81-220.

CONDITIONS PRIOR TO OCCURRENCE:

6-03-81 Mode 1 - Rx Power 20% - Unit Load 111 MWe
6-27-81 Mode 1 - Rx Power 30% - Unit Load 260 MWe

DESCRIPTION OF OCCURRENCE:

At 0440 hours, June 3, 1981, and again at 0403 hours, June 27, 1981, an inadvertent safety injection (SI) occurred following a turbine/reactor trip. On both occurrence dates the inadvertent SIs were initiated by high steam line flow coincidence with low reactor coolant average temperature. In both cases the emergency procedure for SI initiation was implemented and followed. The SIs were determined to be inadvertent and the SI signal was reset and the injection transients were terminated in accordance with procedures and the unit was placed in a stable condition. The duration of the injections were approximately 5 minutes on June 3, 1981, and 10 minutes on June 27, 1981.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

Procedure inadequacy. The inadvertent-SIs were the result of higher than normal steam flow demand oscillations caused by No. 23 auxiliary feedwater pump (AFP). Testing on June 27, 1981, revealed that the No. 23 AFP when started ran erratic with wide variation in pump speed. The hunting of the pump was discovered to be severe enough to cause steam flow spiking on No. 21 and No. 23 steam generators. The high steam line flow conditions were set up by the combined effects of the steam demand by the Steam Dump System and the oscillations in the speed and hence steam demand of the No. 23 AFP.

ANALYSIS OF OCCURRENCE:

All safeguards equipment functioned as designed when the safety injections were initiated. The unit was designed for 50 safety injections. So far to date we have had 3 safety injections transients which were of less severity than the design basis transient, therefore, the transients had no detrimental effect on the unit and operation may continue safely.

CORRECTIVE ACTION:

During the testing on June 27, 1981, it was discovered that by venting the auxiliary feedwater pump governor each time the pump is removed from service, by cycling the governor from minimum to maximum speed 3 times, the pump will operate properly and function without speed oscillations and steam demand spiking. The procedures for Unit 1 and 2 have been revised to incorporate this method auxiliary feedwater pump operation.

FAILURE DATA:

Not Applicable

Prepared By R. MacWatters

SORC Meeting No. 81-82

H. J. McFadden
Manager - Salem Generating Station