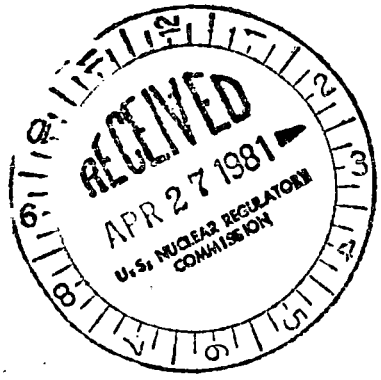
PSE&G

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

April 21, 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-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 81-35/03L

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 81-35/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

R. A. Uderitz
General Manager -
Nuclear Production

CC: Director, Office of Inspection
and Enforcement (30 copies)
Director, Office of Management
Information and Program Control
(3 copies)

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The Energy People

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Report Number: 81-35/03L

Report Date: April 21, 1981

Occurrence Date: 3/22/81

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

IDENTIFICATION OF OCCURRENCE:

ECCS Subsystem Inoperable

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 100% - Unit Load 1130 MW

DESCRIPTION OF OCCURRENCE:

During the performance of Surveillance Test SP(O) 4.0.5(V) on March 22, 1981, it was discovered that the No. 11 Safety Injection Pump Discharge Valve 11SJ40 would not open. Action Statement 3.5.2.a was entered at 1445 hours which requires that with one ECCS subsystem inoperable, restore the inoperable subsystem to operable status within 72 hours or be in hot shutdown within the next 12 hours.

Investigation revealed that the control circuitry of the valve was incorrectly wired. A jumper between the operate relay and the circuit common was missing. The wire was replaced and the Action Statement terminated at 1900 hours on March 22, 1981.

This occurrence constituted operation in a degraded mode in accordance with Technical Specification 6.9.1.9.b.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

Personnel Error - Tests to verify the lockout function of the valve were not performed in accordance with instructions contained in the Design Change Package for the modification of the valve's control circuit before the work order was signed off as completed.

ANALYSIS OF OCCURRENCE:

On October 10, 1980, Catalytic, Inc. was issued a work order to perform 1EC0770 DCP to provide for specific ECCS Valve Control Power Lockout. The design change included modification to eleven of these valves, providing the ability to lockout valve operation from the Control Room which would preclude the need for local tagout of these valves during normal operation. The DCP was a TMI commitment for the refueling outage.

The DCP called for the installation of a new panel switch and associated wiring to the individual valve motor control centers. Provisions were made in the DCP for wiring connection documentation for the new cable. However, this was not done for the internal panel wiring required for the modification. Catalytic, Inc. provided field instructions for the completion of the modification based on the DCP schematics.

During the Unit 1 Refueling Outage, the eleven valve modifications were completed and the Work Order signed off by the Catalytic supervisor and the Senior Shift Supervisor on duty on December 15, 1980. The DCP provided instructions for the retest of the valves which included restroking and verifying the lockout function. It is apparent that only the valve stroking was performed during the outage, although there is no written documentation of the valve retest performed other than the operator's valve surveillance performed for mode changes at the completion of the outage.

With Unit 1 returned to service, the DCP for the valve lockout proceeded on Unit 2. During the functional test of the modification, it became apparent there was a problem with the modification as installed, in as much as the valve lockout switch did not provide its intended function. Investigation revealed an error in field instructions for the internal panel wiring of the lockout switch. This cast doubt on the Unit 1 lockout switches capability.

During the March snubber inspection outage, Catalytic corrected the lockout switch wiring on Unit No. 1.

On March 22, 1981, after an attempt to stroke 11SJ40, an Incident Report was generated indicating that 11SJ40 would not operate from the console which rendered that portion of the ECCS inoperable. Subsequent investigation of this problem revealed the missing wire from the operate relay to the circuit common. This was corrected by installing the required jumper and the valve was returned to operable status.

All of the valves included in the DCP were retested on March 24, 1981 except the SJ44's which were tested during the March outage startup.

CORRECTIVE ACTION:

A review of the plant's administrative requirements concerning work order retesting and the control and documentation thereof has been initiated. Specific corrective action taken based on the review will be submitted in a supplementary report.

FAILURE DATA:

Not Applicable

Prepared By W. J. Steele

SORC Meeting No. 81-30

W. J. Fisher

Manager - Salem Generating Station