



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

Salem Generating Station

February 24, 1984

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 79-068/03X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station
Unit No. 1 Technical Specifications, Section 6.9.1.9.d,
we are submitting supplemental Licensee Event Report for
Reportable Occurrence 79-068/03X-1.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. M. Zupko, Jr.".

J. M. Zupko, Jr.
General Manager -
Salem Operations

JR:k11967

CC: Distribution

IE22
1/1

Report Number: 79-068/03X-1
Report Date: 02/24/84
Occurrence Date: 10/18/79
Facility: Salem Generating Station Unit 1
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

ECCS Subsystem Inoperable - (No. 12 Safety Injection Pump Inoperable)

This report was initiated by Incident Report 79-386

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - Rx Power 000 % - Unit Load 0000 MWe

DESCRIPTION OF OCCURRENCE:

On October 18, 1979, during a refueling shutdown, while performing routine surveillance testing, No. 12 Safety Injection Pump motor tripped on overcurrent. The motor was meggered, with satisfactory results. The pump was uncoupled from the motor; the motor rotated freely, but the pump could not be rotated by hand. The pump was disassembled for internal inspection. The radial and thrust impeller locknuts were found to be hand tight, the impeller spacer sleeves were worn and the impeller shaft was slightly bent. No. 11 Safety Injection Pump was also disassembled and inspected; its impeller locknuts were also loose, although the pump was not damaged. In addition, Unit 2 Safety Injection Pumps were also disassembled. Inspection revealed that No. 22 Safety Injection Pump impeller locknuts were loose; the locknuts on No. 21 were found to be secured with set screws.

APPARENT CAUSE OF OCCURRENCE:

The impeller locknuts were never properly secured at the manufacturing facility.

ANALYSIS OF OCCURRENCE:

Unit 2 was not yet operational, and No. 12 Safety Injection Pump (Unit 1) was found to be inoperable while the reactor plant was in Mode 5. The pumps are not required for safe plant operation, while in Mode 5. The Charging/Safety Injection Pumps were operational throughout the occurrence. Because of the abnormal system degradation, and the possible generic implications, the event was reported in accordance with Technical Specification 6.9.1.9.d.

CORRECTIVE ACTION:

The pump manufacturer was contacted, and advised PSE&G against any method of mechanically securing the locknuts. The setscrews in No. 21 pump impeller locknuts were installed by mistake at the manufacturing facility, and the rotating element was sent back to the manufacturer for rework. The rotating element from No. 22 Safety Injection Pump was installed in No. 12 Safety Injection Pump. No. 12 Safety Injection Pump was reassembled, tested and returned to service on November 2, 1979. The locknuts of all safety injection pumps were secured with the use of Locktite compound, per PSE&G Engineering Department recommendation, with concurrence from the pump manufacturer.

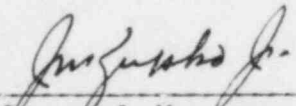
Subsequently, PSE&G received Burl Letter 40-39, dated November 12, 1981, with a new Safety Injection Pump Operating and Maintenance Manual. One of the items added to the new manual was instructions for reassembling the pump impeller locknuts using Locktite Compound Number 242. Maintenance Procedure Number M6M (Safety Injection Pump Disassembly, General Maintenance and Reassembly) was changed to reflect this action.

Since the initial occurrence, and the reassembly of all Safety Injection Pump impeller locknuts using the Locktite compound, there have been no similar problems encountered. Subsequent inspections of the pumps have also revealed no reoccurrence of the problem.

FAILURE DATA:

Safety Injection Pump
Horizontal, Centrifugal, 10 Stage
Pacific Pumps, Inc.

Prepared By J. L. Rupp



General Manager -
Salem Operations

SORC Meeting No. 84-024