PSE&G

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

Salem Generating Station

March 11, 1983

Mr. R. C. Haynes
Regional Administrator
USNRC
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Haynes:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 83-015/03L

Pursuant to the requirements of Salem Generating Station Unit No. 1, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 83-015/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

H. J. Midura
General Manager -
Salem Operations

RF:ks

CC: Distribution

IE22

Report Number: 83-015/03L

Report Date: 03-10-83

Occurrence Date: 02-10-83

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

IDENTIFICATION OF OCCURRENCE:

Electrical Power Systems - No. 1A Emergency Diesel Generator - Inoperable.

This report was initiated by Incident Report 83-039.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 4 - RX Power 0 % - Unit Load 0 MWe.

DESCRIPTION OF OCCURRENCE:

At 0300 hours, February 10, 1983, during routine surveillance testing of No. 1A Emergency Diesel Generator, an equipment operator observed a Jacket Water High Temperature alarm. The operator immediately tripped the diesel; he noticed that Service Water Flow Control Valve 11SW42 was apparently not opening sufficiently to adequately cool the jacket water system. The generator was declared inoperable and at 0302 hours, February 10, 1983, Technical Specification Action Statement 3.8.1.1a was entered. Surveillance of the redundant A.C. power sources was immediately performed and operability satisfactorily demonstrated.

APPARENT CAUSE OF OCCURRENCE:

At 0400 hours, the equipment operator shifted the controller for Valve 11SW42 to the manual mode, opened the valve, and restarted the diesel. The jacket water temperature remained in specification, the controller was shifted to the automatic mode, and the valve operated satisfactorily during subsequent testing of the emergency generator.

A calibration check of the service water flow control transmitter was satisfactory, and lacking any further evidence of problems, the controller setpoint was readjusted and the generator was retested. The surveillance was satisfactory, the generator was declared operable, and at 0539 hours, February 10, 1983, Action Statement 3.8.1.1a was terminated.

Further investigation of the problem was prompted by review of the corrective action. It revealed that a missing handwheel on Instrument Root Valve 11SW41 may have resulted in pressure fluctuations in the flow transmitter high side sensing line. The valve is of the

APPARENT CAUSE OF OCCURRENCE: (cont'd)

diaphragm type; with the handwheel missing, the valve was in an intermediate, unrestrained position. Although the sensing line was not isolated, movement of the valve diaphragm during system operation could result in pressure variations, which in turn may have caused erratic operation of Valve 11SW42. As noted, subsequent operation of the generator was satisfactory, and the problem was apparently isolated in nature.

ANALYSIS OF OCCURRENCE:

The operability of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment for safe shutdown of the facility and mitigation of accidents. The requirements are consistent with the initial condition assumptions of the accident analyses, and are based on maintaining a single supply with an assumed loss of offsite power and single failure of the other A.C. source.

As noted, the redundant A.C. sources were operable, and therefore no risk to the health and safety of the public was involved. The occurrence constituted operation in a degraded mode permitted by a limiting condition for operation. The event is reportable in accordance with Technical Specification 6.9.1.9b.

Action Statement 3.8.1.1a requires:

> With either an offsite circuit or diesel generator of the required A.C. electrical power sources inoperable, demonstrate the operability of the remaining A.C. sources by performing surveillance requirements 4.8.1.1.1a and 4.8.1.1.2a2 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits and three diesel generators to operable status within 72 hours from the time of initial loss or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

CORRECTIVE ACTION:

As noted, the operability of redundant A.C. power sources was immediately demonstrated. Following satisfactory performance of surveillance testing, the generator was declared operable. Upon discovery of the missing valve handwheel, the handwheel was replaced and the valve was opened.

The possible indeterminate position of diaphragm type valves resulting from the loss of a handwheel will be addressed in weekly operations information directives. The incident will also be discussed in the station training program, as part of a continuing effort to upgrade operating and maintenance practices.

FAILURE DATA:

Grinnell Corp.
1 inch Saunders Valve
Type 1876-MC-OL

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 83-031B