PSE&G

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Salem Generating Station

April 27, 1994

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

Dear Sir:

SALEM GENERATING STATION
LICENSE NO. DPR-70
DOCKET NO. 50-272
UNIT NO. 1
SPECIAL REPORT 94-2

This Special Report addresses a valid failure of 1A Diesel Generator on March 29 1994. This report is submitted pursuant to Technical Specification 6.9.2 and in accordance with Technical Specification Surveillance Requirement 4.8.1.1.4.

Sincerely yours,

J. J. Hagan
General Manager -
Salem Operations

MJPJ:pc

Distribution

UNIT 1 SPECIAL REPORT 94-2

PLANT IDENTIFICATION:

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

IDENTIFICATION OF OCCURRENCE:

1A Diesel Generator Valid Failure

Event Date: 3/29/94

Report Date: 4/27/94

This report was initiated by Incident Report No. 94-098 and is submitted in accordance with Technical Specification (TS) Surveillance Requirement 4.8.1.1.4.

INITIAL CONDITIONS:

Mode 1 (Power Operation) Reactor Power 100% - Unit Load 1140 MWe

At 0324 hours on March 29, 1994, 1A Diesel Generator (DG) was started in preparation for monthly surveillance testing (one hour loading), in accordance with TS Surveillance Requirement 4.8.1.1.2. This surveillance is accomplished using test procedure S1.OP-DG.ST-0001(Q).

DESCRIPTION OF OCCURRENCE:

At 0336 hours (same day), when an attempt was made to load 1A DG, the DG output breaker, 1ADD, failed to close . TS 3.8.1.1 Action "b" was entered due to the inoperability of 1A DG.

APPARENT CAUSE OF OCCURRENCE:

Buildup of undetermined composition and origin on the normally closed contacts of the breaker position switch, 52HL, had resulted in excessive electrical resistance across the contacts. This switch is the permissive for automatic and manual operation of the breaker and provides 125VDC control power for the breaker's control circuits (CLOSE, TRIP, & LOSS OF VOLTAGE ALARM). The high contact resistance (as-found reading of approximately 12 ohms) prevented the breaker CLOSE coil from receiving sufficient voltage for operation, which prevented the breaker from closing.

ANALYSIS OF OCCURRENCE:

This event is a valid failure as described in Regulatory Guide 1.108. It is the first failure of 1A DG in the last 20 valid tests. As such, the current surveillance test interval for 1A DG is once per 28 days, in accordance with TS Table 4.8-1. The subject surveillance had been satisfactorily completed during prior performance on March 1, 1994.

ANALYSIS OF OCCURRENCE: (cont'd)

At the time of event discovery, the other two (2) Unit 1 DGs (B and C) were operable. With one DG inoperable, the remaining DGs are capable of providing power to the minimum safeguards equipment required for analyzed accident and transient conditions.

CORRECTIVE ACTION:

The breaker position switch, General Electric Type SB1, was replaced and proper contacts resistance (approximately one ohm) verified. Following successful completion of the subject surveillance testing, which confirmed proper operation of the breaker, 1A DG was returned to standby, at 1605 hours on March 29, 1994.

Electrical resistances across the contacts of the 52HL position switches of the remaining five DG output breakers of both Salem Units were measured and found to be acceptable (less than one ohm).

Maintenance procedure revisions will be implemented to measure 52HL switch contact resistances during routine switchgear maintenance.

General Manager -
Salem Operations

MJPJ:pc
SORC Mtg. 94-036