



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

**Nuclear Business Unit**

**AUG 21 2008**

LRN-00-0326

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

Gentlemen:

**SALEM GENERATING STATION UNIT NO. 1  
LICENSE NO. DPR-70  
DOCKET NO. 50-272  
SPECIAL REPORT 00-001**

The attached special report addresses the inoperability of Unit 1 Radiation Monitoring System Channel 1R46 A through E for greater than seven days. This report is submitted pursuant to Technical Specification 6.9.2 and is in accordance with Technical Specification Table 3.3-6 ACTION 23.

Sincerely,

A handwritten signature in black ink, appearing to read "M. B. Bezilla", is written over the typed name.

M. B. Bezilla  
Vice President -  
Operations

Attachment (1)

C United States Nuclear Regulatory Commission – Region I  
475 Allendale Road  
King of Prussia, PA 19406

/EHV  
Distribution  
LER File 3.7

IE22

The power is in your hands.

ATTACHMENT TO LRN-00-0326  
SPECIAL REPORT 00-001

At 0309 hours on August 8, 2000, Radiation Monitoring System (RMS) channel 1R46 A through E, Main Steamline Discharge (Safety Valve and Atmospheric Relief Dumps), was declared inoperable in accordance with Technical Specification (TS) 3.3.3.1. The channel was declared inoperable as a result of multiple alarms on the control room 1RP1 alarm panel.

TS 3.3.3.1 Action 23 states in part that: ".....1) either restore the inoperable Channel(s) to OPERABLE status within 7 days of the event, or 2) prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status."

The 1R46 A through D detectors monitor the 11 through 14 steam lines with E being a common channel. These detectors input into a common control room alarm.

Troubleshooting of the 1R46 alarms was started following the identification of the original problem on August 8, 2000. The alarms were believed to be caused by low chilled-water cooling flow to the detectors due to flow switch problems. Investigation revealed that the alarms were not caused by true low flow, but by the D channel flow switch magnet being dirty. The flow switch magnet had collected some of the chilled water impurities (mostly iron) causing it to malfunction. The flow switch magnet was cleaned and returned to service. Following the return of chilled water flow, the A channel spiked into alarm. The alarm was reset and the A channel appeared to operate erratically. Although channels B, C, D and E were all operating properly, the TS actions statement was not exited and the A channel was observed. On August 11, 2000, the A channel spiked again. Investigation by an instrument and control technician determined that the A channel detector spiking was not the result of high activity, but the result of a failed detector. A new detector was ordered.

At approximately 2200 hours on August 15, 2000, the A channel detector was replaced, and upon satisfactory completion of the required TS surveillance test, the 1R46 A through E detectors were declared operable on August 16, 2000 at 1125 hours.