



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, NJ 08038 609 339-4800

Corbin A. McNeill Jr. Vice President — Nuclear

May 2, 1985

Dr. Thomas E. Murley, Regional Administrator
Region 1
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Dr. Murley:

NOTICE OF VIOLATION - NON-FUNCTIONAL FIRE BARRIERS
COMBINED INSPECTION REPORT NOS. 50-272/84-46 AND
50-311/84-46
SALEM GENERATING STATION
DOCKET NOS. 50-272 AND 50-311

Public Service Electric and Gas Company is in receipt of
your letter dated April 2, 1985 which transmitted a Notice
of Violation on non-functional fire barriers.

Pursuant to the requirements of 10 CFR 2.201, our response
to the items of violation is included in attachment 1.

Sincerely,

A handwritten signature in dark ink, appearing to be "C. McNeill", with a long, sweeping horizontal line extending to the right.

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PDR ADOCK 05000272
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Attachment

The Energy People

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ATTACHMENT 1

10 CFR PART 2.201 INFORMATION
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
SALEM GENERATING STATION
RESPONSE TO NOTICE OF VIOLATION

Your letter of April 2, 1985, identified a violation of Technical Specification 3.7.11 involving non-functional fire barriers. This involved degraded fire doors, fire dampers and unsealed penetrations. A special report as required by the technical specification was not submitted. The following is a response to the Notice of Violation and constitutes the special report required by Technical Specification 3.7.11.

1. PSE&G DOES NOT DISPUTE THIS VIOLATION
2. THE ROOT CAUSE OF THIS VIOLATION WAS INADEQUATE MANAGEMENT ATTENTION TO FIRE PROTECTION REQUIREMENTS WHICH ALLOWED THE FOLLOWING CONDITIONS TO BE LEFT UNATTENDED FOR AN EXCESSIVE PERIOD OF TIME:
 - a. Inoperable fire doors due to broken or non-functional hardware.
 - b. Missing UL labels on fire doors.
 - c. Missing fire protection wrap (FS-195) from dampers at electrical cable tray penetrations.
 - d. Unsealed ventilation duct penetrations through stairwell walls.
 - e. Fire doors remaining open due to excessive pressure differential.

3. IMMEDIATE CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

A comprehensive review of the degraded fire barrier penetrations was performed. After an extensive UL fire door audit in August 1984, a detailed program was initiated in January 1985 for the repair of inoperable fire doors. The actions completed to date are:

- a. For those fire doors having UL labels and with broken hardware, new hardware has been purchased and installed.

- b. Fire doors either missing a UL label or having hardware inconsistent with UL label requirements, per UL audit, are being replaced in total. There are 77 doors in this category. All doors have been ordered with approved UL hardware and are on site. As of this date, 58 new doors have been installed.
- c. Missing fire protection wrapping (FS-195) on the fire dampers has been replaced.
- d. Design changes concerning the unsealed ventilation duct penetrations through stairwell walls have been initiated. These design changes call for the addition of one and one-half hour fire rated dampers on all discharge ducts into stairwells. These design changes are described in our January 31, 1985 Appendix R exemption request.
- e. A review of the pressure differential problem has been initiated. Some improvement has occurred. Certain improper operations of the ventilation systems have been identified and corrected. Controllers have been found misoperating and have been corrected.

4. LONG TERM CORRECTIVE ACTIONS TO AVOID FURTHER VIOLATIONS

- A. The following additional specific actions are being taken to correct specific deficiencies:
 - 1. An on-going maintenance program has been established. A folio system for maintaining a sufficient inventory of spare UL fire door hardware has been instituted in conjunction with a computer program designating specific hardware required for each door with a folio reference.
 - 2. Concerning the 77 inadequate fire doors, the remaining 19 doors are being installed.
 - 3. Fire Damper Functional Test Procedures are being revised to require immediate reinstallation of the removed fire wrap after completion of testing. Also the Station Fire Department is now responsible for performing this functional test and will be tracking the impairments.
 - 4. Concerning the unsealed ventilation duct penetrations, design changes will be implemented upon NRC approval of our January 31, 1985 Appendix R exemption request.

5. In order to resolve the excessive pressure differential problem, a review is being conducted of related operating and maintenance procedures. In an effort to identify any system incompatibilities, air flow tests are being performed on individual systems. A review of the system's design is being conducted to improve system characteristics. This should limit the pressure differentials which will result in less impact upon fire door operation.
- B. An indepth review of the entire Fire Protection issue was performed. As a result of discussions between the Vice President - Nuclear, General Manager - Salem Operations and his staff, increased attention and awareness of requirements for maintaining the Fire Protection Systems operability has been reinforced. An aggressive program is in place to identify and rectify design and operational concerns associated with the Auxiliary Building Ventilation System, which in the past has impacted proper Fire Door operation. A contributing factor related to this problem was the large number of outages that have occurred on both Units since October 1982, which directly affected Fire Protection priority status. The increased number of contractor support personnel also aggravated the amount of maintenance needed to keep the Fire Doors in an operable condition. In addition, there are no effective mechanisms in place to determine the length of time that Fire Barriers are in a degraded condition, or to indicate to management that the number of degraded Fire Barriers is becoming excessive. Such mechanisms will be instituted.
5. FULL COMPLIANCE FOR ITEMS 4.A.1, 4.A.2 AND 4.A.3 WILL BE ACHIEVED BY MAY 31, 1985. COMPLIANCE WITH ITEM 4.A.4 WILL BE COMPLETE WITHIN 7 MONTHS OF NRC APPROVAL. RESULTS FROM ITEM 4.A.5 SHOULD BE AVAILABLE BY AUGUST 1, 1985. COMPLIANCE WITH 4.B WILL BE ACHIEVED BY MAY 31, 1985.