

UNITED STATES NUCLEAR REGULATORY COMMISSIONPUBLIC SERVICE ELECTRIC & GAS COMPANYDOCKET NOS. 50-272 AND 50-311CORRECTION

54 FR 31270 published on July 27, 1989 contained exemptions to 10 CFR Part 50, Appendix R related to the Salem Generating Station, Units 1 and 2. The word "smoke" on page 31275, Section 9.3, column 2 on line 2 should be corrected to read "fire."

Dated at Rockville, Maryland, this 15th day of August 1989.

FOR THE NUCLEAR REGULATORY COMMISSION



Walter Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

10 PIPE TUNNEL - ELEVATION 84 FEET (AREA 12 FA-PT-84)

10.1 Exemption Requested

The licensee requested approval of an exemption from the technical requirements of Section III.G.2 of Appendix R to 10 CFR 50 to the extent that it requires that redundant shutdown systems be separated by at least 20 feet free of intervening combustibles and be protected by automatic fire detection and suppression systems. Specifically, redundant systems are separated by less than 20 feet and the tunnel is not protected by an automatic fire suppression system.

10.2 Discussion

The physical description of this area, including perimeter construction, fire hazards, existing fire protection and configuration of safe shutdown systems is as described in Enclosure 1 to the licensee's July 15, 1988 letter.

To enhance fire safety the licensee committed to install a fire detection system throughout the pipe tunnel which will transmit an alarm automatically to the control room.

The licensee justified the exemption on the bases of the limited fire loading, the unaccessibility of the tunnel and the proposed modification.

10.3 Evaluation

The technical requirements of Section III.G.2 are not met in this area because redundant shutdown divisions are separated by less than 20 feet horizontal distance and the tunnel is not protected by an automatic fire suppression system.

The fire loading in the tunnel is minimal. If all of the combustibles ignited and were consumed the resulting fire would be about 7 minutes in duration as determined from the ASTM E-119 Time Temperature Curve. Because access to the area is limited to three hatchways the potential for accumulation of significant quantities of transient combustibles or ignition sources is considered remote. Nevertheless, the staff was concerned that if a fire did occur, it would not be detected in sufficient time for the fire brigade to intervene to limit damage. The licensee's commitment to install a fire detection system in the area has eliminated that concern. The staff concludes that with the addition of the detection system, the limited fire hazard in the area and the restricted access, there is reasonable assurance that at least one shutdown division can be maintained free of fire damage.

10.4 Conclusion

Based on its evaluation, the staff concludes that the licensee's alternate fire protection configuration provides an equivalent level of safety to that achieved by compliance with Appendix R. Therefore the licensee's request for exemption from the requirement of Section III.G.2 for 20 feet of separation between redundant shutdown systems and an automatic fire suppression system in the pipe tunnel is granted.