

Public Service  
Electric and Gas  
Company

**Steven E. Miltenberger**  
Vice President -  
Nuclear Operations

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609 339-4199

**MAR 18 1988**

NLR-N88046

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

INSPECTION REPORT NO. 50-311/87-29  
APPENDIX R COMPLIANCE  
SALEM GENERATING STATION  
UNIT NO. 2  
DOCKET NO. 50-311

Unresolved Item 50-311/87-29-08, contained in the subject Inspection Report required the submission of the conclusions of a study verifying the implications of the breaker relay configuration during the September 1987 inspection. The results of the PSE&G study (copy attached) documents the condition of Salem Unit 2 at the time of the NRC Appendix R Inspection 311/87-29 relative to breaker coordination as required by Appendix R.

This study is not representative of the current configuration of the plant. A number of modifications have been made as detailed in our submittals of October 16, 1987 and December 10, 1987.

PSE&G's evaluation was performed by identifying all safe shutdown and associated circuit power cables in a given fire area throughout the plant. Once the circuits for a fire area were identified, they were reviewed to determine the level of protection available as defined by Appendix R (coordination, wrap, separation, etc.). Where associated circuits were not protected, the shutdown model was reviewed to determine impact on the ability to shutdown the station in the event of a fire in the fire area. PSE&G Design Memo S-C-M200-NDM-0610-0 (Attachment 1) describes in further detail the methodology used in this study.

8803300210 880318  
PDR ADOCK 05000311  
Q DCD

*Acob*  
|||

MAR 18 1988

The tables in Attachment 2 summarize the results of this review by fire area and include affected cables and shutdown equipment as well as alternate shutdown options. The evaluation does identify areas where proper protection of circuits was not provided prior to September 1987. In those areas, the report defines the compensatory actions that the operators would take to mitigate the consequences of a fire and safely bring the plant to safe shutdown. As a result of breaker coordination, there was no instance where the plant could not be safely shutdown by restoring electrical equipment, or by using alternate equipment located outside the fire area.

In addition to the breaker coordination review and as a result of this study, fire area 1(2)FA-AB-84A is identified as an area where there is an impact on safe shutdown of the plant. This is due to a misrouted alternate shutdown cable discovered during this review. The alternate shutdown cable provides a source of control and field flashing power for the diesel generators when employing alternate shutdown. An hourly firewatch has been in this area since March 1987 for other reasons. The misrouted cable will be the subject of a future LER. This is a separation concern and is not related to breaker coordination.

As discussed at the Enforcement Conference on February 12, 1988, the enclosed report completes the information required to support your final actions, with respect to the Appendix R inspection.

Sincerely,

A handwritten signature in black ink, appearing to read "S E Mittenberger" followed by a stylized flourish.

Attachments

MAR 18 1988

Document Control Desk

3

C Mr. D. C. Fischer  
USNRC Licensing Project Manager

Mr. T. J. Kenny  
USNRC Senior Resident Inspector

Mr. W. T. Russell, Administrator  
USNRC Region I

Mr. D. M. Scott, Chief  
Bureau of Nuclear Engineering  
Department of Environmental Protection  
380 Scotch Road  
Trenton, NJ 08628