



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

Nuclear Department

April 5, 1984

U. S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Division of Licensing  
Washington, D. C. 20555

Attention: Mr. Steven A. Varga, Chief  
Operating Reactors Branch, No. 1

Dear Mr. Varga:

REQUEST FOR EXEMPTIONS FROM 10CFR 50, APPENDIX R  
SALEM GENERATING STATION  
UNITS NO. 1 AND 2  
DOCKET NOS. 50-272 AND 50-311

PSE&G letter, dated January 27, 1984, to NRC - Region 1, stated that an exemption from the explicit requirements of 10CFR 50 Appendix R, Section III.G.2.b for area wide suppression or detection would be requested for the Residual Heat Removal area. A detailed technical justification was to be submitted by January 31, 1984. However, this information was inadvertently deleted from our January 31, 1984 letter. The request for exemption and detailed technical justification is enclosed for your review (Attachment 1).

Following the guidelines of Generic Letter 83-33, we have included in Attachment 2 an exemption request for the Salem control room, as the separation between the Units No. 1 and 2 Control Rooms does not comply with the separation, i.e., the barrier or distance, requirements of Appendix R. This item has been identified by the NRC as an unresolved item during the recent fire protection audit of Salem Unit No. 1. The detailed technical basis for this exemption request is provided in Attachment 2.

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The Energy People


Mr. Steven A. Varga

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Should you have any questions, please call us.

Sincerely,

Handwritten signature of E. A. Liden, appearing to be "EA Liden / JTB".

E. A. Liden  
Manager - Nuclear  
Licensing and Regulation

Attachments

C Donald C. Fischer  
Licensing Project Manager

Mr. James Linville  
Senior Resident Inspector

ATTACHMENT 1  
EXEMPTIONS REQUEST  
SALEM GENERATING STATION - UNIT NO. 1

An exemption is requested from the explicit requirements of 10 CFR 50 Appendix R Section III.G.2b to the extent that no area wide detection or automatic suppression exists in Fire Area 1FA-AB-45A.

The exemption request is based on the following:

- A. Fire detection exists around the RHR pumps located on elevation 45'.
- B. Hose stations are located on elevation 55' within reach of the RHR pumps.
- C. Component Cooling valves which control component cooling water flow to the RHR heat exchangers can be manually aligned to the proper cold shutdown position.
- D. The combustible loading on elevation 55' is 2,785 BTU/sq. ft., which, if totally consumed, would correspond to a fire severity of about 2 minutes.
- E. The physical separation between RHR pumps is approximately twenty feet with a concrete wall separating the two pumps.
- F. The power cables for the RHR pumps are routed in conduit and are separated by approximately twenty feet at the point of closest interaction. The cables are also separated by the concrete wall which separates RHR pumps.

ATTACHMENT 2  
EXEMPTIONS REQUEST  
SALEM GENERATING STATION - UNIT NO. 1

An exemption is requested from the explicit requirements of 10CFR 50 Appendix R Section III.G.2.a to the extent that the Units No. 1 and 2 Control Rooms are not separated by 3-hour barriers

The technical justification for this exemption request is as follows:

- 1) An area wide detection system is presently installed in the main control room.
- 2) An area-wide detection system will be added in the peripheral rooms. Specifically, detection will be installed in the shift supervisors' office, corridor surrounding the control rooms, janitor's equipment room and the women's rest room.
- 3) Wire mesh glass will be installed in place of the existing plane glass located between the two control rooms and will be expanded to include the shift supervisors' office. This glass will prevent any potential shattering and will minimize the propagation of smoke and gases generated during a control room fire.

The lower portions of the wire mesh glass assembly consists of louvered metal panels which are required for equipment ventilation. However, should a fire occur in the Unit No. 1 Control Room, the probability of fire propagation through the twelve foot corridor and into the Unit No. 2 Control Room is minuscule. In order to enhance fire detection capabilities, an area wide detection system will be installed in the corridor.

- 4) Suppression in the control room consists of a portable suppression system and hose station.
- 5) The control room areas are constantly manned assuring quick response to any fire in that area.
- 6) The Salem Unit No. 1 has been designed to permit an orderly shutdown independent of the control room. Alternate shutdown procedures have been developed and are in place for plant operator personnel use.

Additional fire detectors and wire mesh glass on the control room wall will be installed within six months of NRC approval.

With the above modifications and existing fire protection features, PSE&G considers it extremely unlikely that a fire in one control room will affect the habitability of the other control room.