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FEB 13 1981

Docket Nos. 50-280
and 50-281

Mr. J. H. Ferguson
Executive Vice President - Power
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

Dear Mr. Ferguson:

We have reviewed the information you provided to date regarding the Surry Fire Protection Program. This includes your last submittal dated January 30, 1981.

Enclosure 1 presents Supplement 2 of our evaluation of several open items indicated in our Fire Protection Safety Evaluation Report issued September 19, 1979. Items 3.1.16(2), 3.1.18(1), 3.1.18(3), 3.1.18(7), 3.1.18(8), 3.1.26(1) and 3.1.26(2) have been reviewed and are acceptable.

Enclosure 2 lists the remaining unresolved issues of the Surry Fire Protection Program.

Sincerely,

Original signed by:
S. A. Varga
Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosures:
As Stated

cc: w/enclosures
See next page

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OFFICE	ORB#1:DL	ORB#1:DL					
SURNAME	DNeighbors:ds	SVarga					
DATE	2/12/81	2/12/81					

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Docket

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 13, 1981

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and 50-281

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Surry, Virginia 23883

ENCLOSURE 1

SUPPLEMENT 2 TO FIRE PROTECTION SAFETY EVALUATION REPORT
DATED SEPTEMBER 19, 1979
SURRY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-280/281

GAS SUPPRESSION SYSTEM, SECTION 3.1.16(2)

In the SER, it was our concern that the high pressure carbon dioxide systems failure could be undetected because alarms are not provided in the control room to alert the operators to a low pressure condition in the pilot bottle for the system.

By letter dated October 29, 1980, the licensee provided additional information regarding modifications for the high pressure carbon dioxide systems.

The licensee has proposed to replace the pneumatic controls with appropriate electric controls. The system no longer utilizes a pilot bottle and, therefore, the supervision of the pilot bottle no longer is a concern.

Based on the licensee's modification, we conclude that the gas suppression system is now acceptable.

HOSE STATIONS, SECTION 3.1.18(1) and 3.1.18(8)

In the SER, it was our concern that the number and location of the manual hose stations may not be adequate to provide an effective hose stream to all safety-related areas of the plant.

By letter dated January 30, 1981, the licensee verified that all areas of the plant containing safety-related equipment can be reached by hose stations. The licensee also verified that the existing hose stations in the turbine building have sufficient hose reach to cover all areas of the switchgear rooms and are equipped with nozzles suitable for extinguishing electrical fires.

Based on the licensee's verification, we conclude that there are sufficient hose stations so that at least one effective hose stream will be able to reach any safety-related area which meets Section III(D) of Appendix R to 10 CFR Part 50 and, therefore, the number of hose stations are acceptable.

HOSE STATIONS, SECTION 3.1.18(3)

In the SER, it was our concern that the manual fire suppression capability for the cable tray rooms and mechanical equipment rooms may not be adequate. We recommended that a 1½-inch hose station be provided at the entrance of the Unit 2 cable tray room with sufficient hose to reach all areas of both cable tray rooms and mechanical equipment rooms 1 and 2.

By letters dated June 30, 1980 and January 30, 1981, the licensee provided the design details for the hose station at the entrance of the cable tray rooms. In addition, the licensee verified that the hose station has sufficient

hose to reach all areas of both cable tray rooms and mechanical equipment rooms 1 and 2.

The hose rack outside the cable tray room is equipped with a fog-type spray nozzle. This type nozzle is suitable for electrical fires and therefore adequate for this area.

Based on the licensee's verification that the hose rack outside the cable tray room has sufficient hose to reach all areas of both cable tray rooms and mechanical equipment rooms 1 and 2, we conclude that the manual fire suppression capability for these areas is adequate. Further the licensee's proposed modification meets Section C.5(c)(4) of BTP ASB 9.5-1 and, therefore, is acceptable.

HOSE STATIONS, SECTION 3.1.18(7)

In the SER, it was our concern that all locations on the 29-feet, 6-inch elevation of the turbine building may not be reached by a maximum of 100 feet of 1½-inch hose attached to an interior hose station or attached to 2½-inch hose from a yard hose cabinet. Therefore, the manual fire suppression would not be adequate.

By letter dated January 30, 1981, the licensee verified that all locations on the 29-feet, 6-inch, elevation of the turbine building can be reached by a maximum of 100-feet of 1½-inch hose attached to an interior hose station or attached to 2½-inch hose from a yard hose cabinet.

Based on the licensee's verification, we conclude the manual fire suppression capability for the 29-feet, 6-inch elevation of the turbine building meets Section C.5.c(4) of BTP ASB 9.5-1 and, therefore, is acceptable.

WATER SUPPRESSION SYSTEMS, SECTION 3.1.26(1)

In the SER, it was our concern that the fire protection for each new filter unit added to the auxiliary building ventilation system may not be adequate.

By letter dated January 30, 1980, the licensee verified that the new filter bank is provided with sprinkler system protection.

This is one of the acceptable methods listed in Reg. Guide 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Ligh-Water-Cooled Nuclear Power Plants". Therefore, we conclude that the use of the sprinkler system to mitigate the radioactive material releases from fires of charcoal filters is acceptable.

WATER SUPPRESSION SYSTEMS, SECTION 3.1.26(2)

In the SER, it was our concern that the sprinkler heads in the turbine building installed under grating walkways may not be actuated in the event of a fire. We recommended that these sprinkler heads be equipped with heat collectors.

By letter dated January 30, 1981, the licensee verified that heat collector plates have been installed over the sprinkler heads per NFPA requirements.

Based on the licensee's verification, we conclude that the heat collector plates meet the recommendations of Section A-3-15-8 of NFPA 13 and, therefore, the sprinkler system in the turbine building is acceptable.

ENCLOSURE 2

UNRESOLVED FIRE PROTECTION ISSUES
SURRY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-280/281

3.1.4	Cable Tray Covers
3.1.10	Fire Barriers
3.1.30	Technical Specification
3.2.5	In-Situ Testing
3.1.5	Safe Shutdown Circuitry
3.1.23	Monitoring Panels
3.1.25	Safe Shutdown
3.2.3	Safe Shutdown Analysis