VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-280 AND 50-281

NOTICE OF ENVIRONMENTAL ASSESSMENT AND

FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of exemptions from the requirements of Appendix R to 10 CFR 50 to Virginia Electric and Power Company (the licensee), for the Surry Power Station, Units 1 and 2, located in Surry County, Virginia.

ENVIRONMENTAL ASSESSMENT:

Identification of Proposed Action:

The following exemptions would be granted from the requirements of Sections III.G, III.J and III.L of Appendix R to 10 CFR 50:

- 1. Containment Incore Instrument Tunnels (Fire Areas 15 and 16).
 An exemption was requested from the specific requirement of Section III.G.2.d to the extent that less than 20 feet of separation exists between redundant excore neutron flux detector cables in these areas.
- Separation of Instrumentation Inside the Containments (Fire Areas 15 and 16).

An exemption was requested from the specific requirement of Section III.G.2.d to the extent that intervening combustibles exist between redundant cables and equipment separated by 20 feet or by radiant energy shields.

 Emergency Lighting in the Containments, Main Control Room, and in Exterior Access Routes.

Exemptions were requested from the specific requirement of Section III.J to the extent that it requires 8 hour emergency lighting in all areas needed for operation of safe shutdown equipment and in access and egress routes thereto.

- Refueling Water Storage Tank.
 - An exemption was requested from the specific requirement of Section III.L.2.d to the extent that process monitoring is not capable of providing direct readings of process variables necessary to perform and control required safe shutdown functions.
- 5. Redundant Circuits in a Manhole Adjacent to Fuel Cil Pumphouse Room 2 (Fire Area 188).

An exemption was requested from the specific requirement of Section III.G.2.a to the extent that cables of redundant trains are not separated by a fire barrier having a 3 hour fire resistant rating.

In summary, exemptions were requested from the requirement of separating cables and associated nonsafety circuits of redundant trains by 3 hour rated fire barriers as discussed in Section III.G.2.a of Appendix R, and from providing horizontal separation of more than 20 feet with ro intervening combustibles as required by Sections III.G.2.b and III.G.2.d. In addition, exemptions were requested from the emergency lighting requirements of Section III.2. Also, an exemption was requested from the requirement of providing direct reading of process variables as discussed in Section III.2.d.

Equivalent levels of protection for the items specified above would be provided by the licensee.

The Need for the Proposed Action:

The proposed exemptions are needed in order to permit the licensee to use alternate fire protection configurations that achieve an equivalent level of safety compared to that attained by compliance with Sections III.G, III.J and III.L of Appendix R.

Environmental Impact of the Proposed Action:

The proposed exemptions would not degrade the level of safety attained by compliance with the rule and there would be no change in accident doses to the environment. Consequently, the probability of fires has not been increased and the post-fire radiological releases would not be greater than previously determined; nor do the proposed exemptions otherwise affect radiological plant effluents. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed exemptions.

With regard to potential nonradiological impacts, the proposed exemptions involve features located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed exemptions.

Alternatives to the Proposed Action:

Since we have concluded that the environmental effects of the proposed action are not significant, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested exemptions. This would not reduce the environmental impacts associated with fire protection

modifications and compliance with the rule would accrue unreasonable costs to the licensee without an increase in safety.

Alternative Use of Resources:

The action does not involve the use of resources not previously considered in the Final Environmental Statements for the Surry Power Station, Units No. 1 and No. 2.

Agencies and Persons Contacted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemptions.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for exemptions from 10 CFR 50, Appendix R, Sections III.6, III.J and III.L, dated July 6, 1984, as revised by letters dated November 30, 1984, April 10, 1986, September 30, 1986 and October 16, 1987, which are available for public inspection at the Commission's Public Document Room 1717 H Street, N.W., Washington, D.C., and at the Swem Library, College of William and Mary, Williamsburg, Virginia 23185

Dated at Rockville, Maryland, this 18th day day of February 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Werbert N. Berkow, Director Project Directorate 11-2

Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation