

October 2, 1986

Docket Nos. 50-338
and 50-339

Mr. W. L. Stewart
Vice President - Nuclear Operations
Virginia Electric and Power Company
Post Office Box 26666
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Dear Mr. Stewart:

SUBJECT: NOTICE OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT
IMPACT RELATING TO EXEMPTION FROM THE REQUIREMENTS OF SECTIONS
III.G AND III.J OF APPENDIX R, 10 CFR 50 - NORTH ANNA POWER STATION,
UNITS NO. 1 AND NO. 2 (NA-1&2)

Enclosed is a copy of a "Notice of Environmental Assessment and Finding of No
Significant Impact" for your information. This notice relates to your
application dated May 1, 1984, as revised October 31, 1984, August 21,
1985, and March 21, 1986, regarding your request for an exemption from the
requirements of Sections III.G and III.J of Appendix R to 10 CFR 50 for NA-1&2.

The notice is being forwarded to the Office of the Federal Register for
publication.

Sincerely,

/s/

Leon B. Engle, Project Manager
PWR Project Directorate #2
Division of PWR Licensing-A

Enclosure:
As stated

cc w/enclosure:
See next page

LA:PD#2
DM Miller
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Mr. W. L. Stewart
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North Anna Power Station
Units 1 and 2

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UNITED STATES NUCLEAR REGULATORY COMMISSION

VIRGINIA ELECTRIC AND POWER COMPANY AND

OLD DOMINION ELECTRIC COOPERATIVE

NORTH ANNA POWER STATION, UNITS NO. 1 AND 2

DOCKET NOS. 50-338 AND 50-339

NOTICE OF ENVIRONMENTAL ASSESSMENT AND

FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of Appendix R to 10 CFR 50 to Virginia Electric and Power Company and Old Dominion Electric Cooperative (the licensee), for the North Anna Power Station, Units 1 and 2, located in Louisa County, Virginia.

ENVIRONMENTAL ASSESSMENT:

Identification of Proposed Action:

The exemption would grant the following exemptions from the requirements of Sections III.G and III.J of Appendix R to 10 CFR 50:

1. Auxiliary, Fuel, and Decontamination Buildings (Fire Area 11).

An exemption was requested from the specific requirement of Section III.G.3 to the extent that full area fire detection and fixed suppression systems are not installed throughout the area.

2. Containment Incore Instrument Tunnel (Fire Areas 1-1 and 1-2).

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.

3. Quench Spray Pump House (Fire Areas 15-1 and 15-2).

An exemption was requested from the specific requirement of Section III.G.3 to the extent that automatic fire suppression systems are not installed throughout the fire areas.

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4. Main Steam Valve House (Fire Areas 17-1 and 17-2).

An exemption was requested from the specific requirement of Section III.G.3 to the extent that automatic fire suppression systems are not installed throughout each fire area.

5. Auxiliary Feedwater Pump House (Fire Areas 14B-1 and 14B-2).

An exemption was requested from the specific requirement of Section III.G.3 to the extent that automatic fire suppression systems are not installed throughout the fire areas.

6. Charging Pump Cubicles (Elevation 244 Feet, 6 Inches).

An exemption was requested from the specific requirement of Section III.G.2.a to the extent that nonrated removable concrete walls do not provide a 3-hour fire resistance rating.

7. Separation of Instrumentation Inside the Containment (Fire Areas 1-1 and 1-2).

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.

8. Emergency Lighting in the Seal Water Filter Area, Main Control Room, and Exterior Access Routes.

An exemption was requested from the specific requirement of Section III.1 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.

9. Chiller Rooms (Elevation 254 Feet, 0 Inch of the Service Building).

An exemption was requested from the specific requirements of Section III.G.2.a to the extent that ventilation penetrations through fire barriers are not provided with fire dampers.

In summary, the exemptions were requested from separating cables and associated nonsafety circuits of redundant trains by 3-hour rated fire barriers as required in Section III.G.2.a of Appendix R, and from providing automatic fire suppression and detection systems as part of the protection requirements of Sections III.G.2.b and III.G.3 of Appendix R. Additionally, exemptions from the intervening combustible requirements of Section III.G.2.b and the emergency lighting requirements of Section III.J were requested.

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

The Need for the Proposed Action:

The proposed exemption is 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 Section III.G and Section III.J of Appendix R.

Environmental Impact of the Proposed Action:

The proposed Exemption 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 does the proposed exemption otherwise affect radiological plant effluents. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed exemption.

With regard to potential non-radiological impacts, the proposed exemption involves features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impact associated with the proposed exemption.

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 exemption. 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:

This action does not involve the use of resources not previously considered in the Final Environmental Statement (as amended) for the North Anna 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 exemption.

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 exemption from 10 CFR 50, Appendix R, Sections III.G and III.J of Appendix R dated May 1, 1984, as revised by letters dated October 31, 1984, August 21, 1985, and March 21, 1986, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Board of Supervisors Office, Louisa County Courthouse, Louisa, Virginia 23093, and the Alderman Library, Manuscripts Department, University of Virginia, Charlottesville, Virginia 22901.

Dated at Bethesda, Maryland, this 2nd day of October, 1986.

FOR THE NUCLEAR REGULATORY COMMISSION



Daniel G. McDonald, Acting Director
PWR Project Directorate #2
Division of PWR Licensing-A
Office of Nuclear Reactor Regulation