

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

December 18, 1997

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Serial No. 97-697  
NL&OS/GDM R4  
Docket Nos. 50-280, 281  
50-338, 339  
License Nos. DPR-32, 37  
NPF-4, 7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY  
SURRY POWER STATION UNITS 1 AND 2  
NORTH ANNA POWER STATION UNITS 1 AND 2  
THERMO-LAG RADIANT ENERGY SHIELDS

In a letter dated December 15, 1995 (Serial No. 95-007B), Virginia Electric and Power Company submitted Appendix R Exemption Requests Nos. 27 and 37 for Surry and North Anna Power Stations, respectively. These submittals provided the technical basis for the continued use of Thermo-Lag 330-1 radiant energy shields in containment relative to the requirements of 10 CFR 50 Appendix R, Section III.G.2.f. A request for additional information was received from the NRC on October 15, 1996, and we responded to the request in our letter dated April 22, 1997 (Serial No. 96-539). The NRC denied the exemption requests in a letter dated November 24, 1997. This letter is provided to document our subsequent corrective action plan to ensure compliance with Appendix R requirements.

Virginia Electric and Power Company will implement design change packages to install non-combustible radiant energy shields in containment. We are currently evaluating various alternatives to satisfy the requirement for non-combustible radiant energy shields, and will implement the chosen alternative(s) during the next unit refueling outages for Surry and North Anna. The refueling outages are presently scheduled as follows:

Surry Unit 1 -	October 1998
Surry Unit 2 -	April 1999
North Anna Unit 1 -	September 1998
North Anna Unit 2 -	April 1998

Prior to the implementation of the design changes, the containment air temperatures in each of the four containments will be monitored at least once per hour using the permanently installed RTDs or the containments will be inspected once per 8 hours to allow early detection of a fire in containment. This compensatory measure, in

9801020041 971218  
PDR ADOCK 05000280  
P PDR



1/5  
2029

conjunction with the technical basis provided in support of our exemption requests, provides justification that adequate protection exists against a fire in containment prior to implementation of the design changes and ensures the units can be maintained in a safe shutdown condition in the event of a fire.

Please contact us should you have any questions or require further information related to this matter.

Very truly yours,



James P. O'Hanlon  
Senior Vice President – Nuclear

Commitments made in this letter:

1. Virginia Electric and Power Company will implement design change packages to install non-combustible radiant energy shields in Surry and North Anna Units 1 and 2 containments during their next scheduled refueling outages.
2. Prior to the implementation of the design changes, the containment air temperatures in each of the four containments will be monitored at least once per hour using the permanently installed RTDs or the containments will be inspected once per 8 hours to allow early detection of a fire in containment.

cc: US Nuclear Regulatory Commission  
Region II  
Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, Georgia 30303

Mr. R. A. Musser  
NRC Senior Resident Inspector  
Surry Power Station

Mr. M. J. Morgan  
NRC Senior Resident Inspector  
North Anna Power Station