

April 15, 1985



Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
Attn: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Serial No. 85-075  
NO/ESH: dao  
Docket Nos. 50-280  
50-281  
License Nos. DPR-32  
DPR-37

Gentlemen:

VIRGINIA POWER  
SURRY POWER STATION UNIT NOS. 1 AND 2  
PROPOSED TECHNICAL SPECIFICATION CHANGES

Pursuant to 10 CFR 50.90, Virginia Power requests an amendment in the form of changes to the Technical Specifications to Operating Licenses DPR-32 and DPR-37, for Surry Power Station Unit Nos. 1 and 2.

The proposed Technical Specification changes will reduce the minimum number of thimbles from 38 to 26 thimbles, to obtain a flux map for routine monthly surveillance of hot channel factors. A reduced number of thimbles flux map will only be allowed when 38 thimbles cannot be obtained due to thimble blockage, or inoperable movable incore detector equipment. A reduced number of thimbles flux map can only be used to verify hot channel factors for monthly surveillance, and additional uncertainties will be applied to the measured hot channel factors to ensure compliance with their Technical Specification limits. The proposed changes will not adversely affect the safe operation of the plant since all hot channel factors will be within their Technical Specification limits. The proposed Technical Specification changes are provided in Attachment 1. A Safety Analysis for the proposed changes is included in Attachment 2. VEP-NOS-8, "A Study of the Effects of a Reduced Number of Thimbles on the Results of INCORE Flux Map Analysis," is provided as Attachment 3.

Virginia Power satisfactorily maintains the movable incore detector system at the Surry Power Station. During each refueling outage the incore detector tubes are cleaned, as necessary, to ensure the maximum possible number of accessible thimbles. Incore detectors which are

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*Approval*  
*1/20*  
*w/ check*  
*\$150.00*  
*# 76624*

Letter to: Mr. Harold R. Denton

Date:

Page: 2



**VIRGINIA POWER**

determined to be inoperable are replaced during scheduled maintenance outages. If multiple failures occur and the supply of new detectors is not adequate, detectors will be replaced to permit access to the maximum number of thimbles for flux map analysis. Limit switch corrections are made whenever large mesh corrections are noted in the final INCORE computer code results.

This maintenance should ensure that the maximum number of thimbles are available for obtaining flux map data, however extraordinary circumstances may prevail which do not allow the proper monthly surveillance of hot channel factors, and the unit would have to shut down due to a surveillance requirement rather than actual hot channel factor violations. In order to avoid a forced reactor outage due to a reduced number of accessible flux map thimbles, the monthly surveillance requirements could be met with the proposed Technical Specification changes. VEP-NOS-8 (Attachment 3) clearly demonstrates that all hot channel factors can be accurately monitored with a reduced number of thimbles flux map if the proposed additional uncertainties are added to the measured hot channel factor values. Finally, the reduced number of thimbles flux map will reduce the station man-rem exposure by reducing the number of at-power containment entries to repair the movable incore detector system.

This request has been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Safety Evaluation and Control Staff. It has been determined that this request does not involve an unreviewed safety question as defined in 10 CFR 50.59.

This change does not pose a significant hazards consideration as defined in the Federal Register, 48FR14870. The basis for this determination is provided in example (vi) which partially states, "A change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptance criteria with respect to the system or component specified in the Standard Review Plan". The proposed changes reduce the minimum number of thimbles required for monthly surveillance of hot channel factors (only if 38 thimbles may not be physically monitored), but additional conservatism will be applied to the measured hot channel factors obtained with a reduced number of thimbles flux map to ensure that all hot channel factors are within their Technical Specification limits. The proposed changes have been reviewed with respect to the accident analyses in the Surry UFSAR and none are affected, therefore these changes do not pose a significant hazards consideration.

Letter to: Mr. Harold R. Denton  
Date:  
Page: 3



**VIRGINIA POWER**

We have reviewed this request in accordance with the criteria in 10 CFR 170.12. A voucher check in the amount of \$150 is enclosed as an application fee.

Very truly yours,

W. L. Stewart

**Attachments**

1. Proposed Technical Specification Changes
2. Safety Evaluation
3. VEP-NOS-8, "A Study of the Effects Reduced Number of Thimbles on the Results of INCORE Flux Map Analysis", October, 1983.
4. Voucher Check for \$150

cc: Dr. J. Nelson Grace  
Regional Administrator  
Region II

Mr. D. J. Burke  
NRC Resident Inspector  
Surry Power Station

Mr. J. Don Neighbors  
NRC Project Manager - Surry  
Operating Reactors Branch No. 1  
Division of Licensing

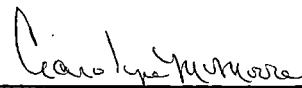
Mr. Charles Price  
Department of Health  
109 Governor Street  
Richmond, Virginia 23219

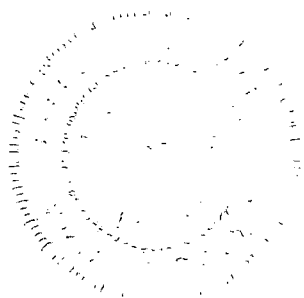
COMMONWEALTH OF VIRGINIA )  
   )  
CITY OF RICHMOND  )

The foregoing document was acknowledged before me, in and for the City and Commonwealth aforesaid, today by W. R. Cartwright who is Manager-Nuclear Operations Support, of Virginia Power. He is duly authorized to execute and file the foregoing document in behalf of that Company, and the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 15 day of April, 19 85.

My Commission expires: February 10, 19 89.

  
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Notary Public



(SEAL)

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