

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 7, 1988

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

Serial No. 88-515
PES/ISI/DJF:vlh
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NRC BULLETIN NO. 88-09: THIMBLE TUBE THINNING
REQUEST FOR ALTERNATE INSPECTION SCHEDULE

In NRC Bulletin No. 88-09, Thimble Tube Thinning In Westinghouse Reactors, paragraph 2 of the reporting requirements requested an alternative schedule for addressees who cannot meet the schedule described in Item 2 of Actions Requested. This letter addresses the schedule for meeting the actions requested in Item 2 for Surry Power Station and specifically proposes an alternate schedule for completion of inspections.

The thimble tube design installed at Surry is a double walled asymmetric configuration. (Refer to Attachment 1). The double wall design is relatively unique and the asymmetric design application will require additional work to establish acceptance criteria for UT inspections of the thimble tube wall. We are presently working with Westinghouse to develop the inspection and acceptance criteria for this thimble tube design. Westinghouse has indicated that their effort to develop inspection methodology for our design will not be completed in time to be utilized during the presently ongoing Surry 1 and 2 outages.

We propose to inspect the Unit 1 and Unit 2 thimble tubes during the next refueling outages (Spring 1990) consistent with the Bulletin. We believe that this is reasonable based on the schedule for development of inspection methodology for the double wall design and based on the following technical reasons. Surry has not experienced thimble tube leakage. We deduce from this that potential tube wear due to flow vibration is not a phenomenon of immediate consequence for the Surry design. Secondly, the thimble tubes at Surry were replaced two fuel cycles ago with the double wall design. This recent replacement concurrent with the previous long term wear experience provides assurance of no imminent wear-through concern. Finally, the double wall thimble tube design itself provides an added level of protection in that both walls must be breached prior to leakage.

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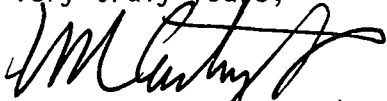
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In summary, we intend to inspect the thimble tubes on Surry Unit 1 and 2 in the Spring 1990 refueling outages. The information required by Item 3a of the reporting requirements will be provided to you within 30 days of the completion of the thimble tube inspections.

On August 30, 1988, members of my staff discussed this alternate schedule with Mr. J. Ramsey, the NRR technical contact for the Bulletin. Based on that discussion, we understand the proposed schedule to be an acceptable approach to addressing the Bulletin.

If you have any questions regarding this proposed schedule or require further information, please advise us directly.

Very truly yours,

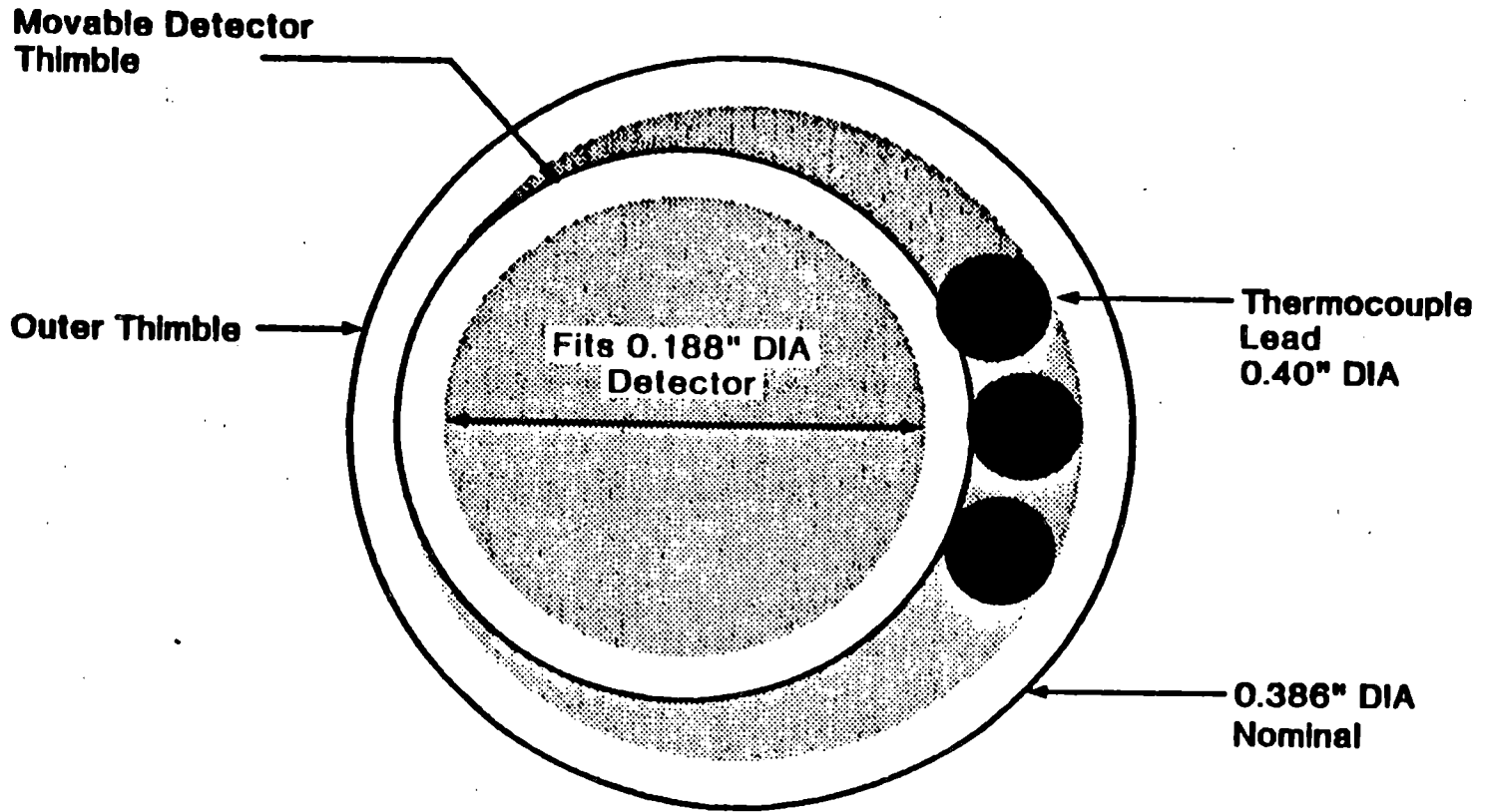


W. R. Cartwright
Vice President - Nuclear

Attachment

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. W. E. Holland
NRC Senior Resident Inspector
Surry Power Station



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THIMBLE-THERMOCOUPLES

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 7, 1988

United States Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900.
Atlanta, Georgia 30323

Serial No. 88-660
NL/HWB:hwb R2
Docket Nos. 50-280
50-281
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DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
SAFETY SYSTEM FUNCTIONAL INSPECTION: RESTART PREREQUISITES

INTRODUCTION

On Friday September 30, 1988 a meeting was held at Surry Power Station to discuss the preliminary results of the Safety System Functional Inspection (SSFI) conducted by the NRC on the Service Water (SW) and Recirculation Spray (RS) Systems. During the review of the results, two critical areas of concern were identified:

- A. Maintenance of intake canal level inventory including the capability of systems for emergency makeup to the canal
- B. Performance of service water heat exchangers

At the conclusion of this meeting, Virginia Power committed to the implementation of a program prior to restart of Unit 1 and Unit 2 to demonstrate the capability of these systems, and in particular certain specific components, to meet their design performance requirements. The purpose of this letter is to document in writing these commitments.

MAINTENANCE OF INTAKE CANAL INVENTORY

It will be demonstrated that the systems required for the maintenance of the necessary intake canal inventory are capable of performing their functions under a range of design conditions including single failure without taking credit for operation of associated non-safety grade equipment. This effort will address the following:

- 1. Establishing the minimum canal inventory requirements to support operation of required components under accident conditions.

2. Determination of the makeup requirements to the intake canal under loss of offsite power conditions, and the capability of the Emergency Service Water (ESW) system to perform this function under design seismic and temperature conditions.
3. Ability to maintain canal inventory by isolating non-essential uses of canal water under loss of offsite power and accident conditions.

PERFORMANCE OF SERVICE WATER SYSTEM HEAT EXCHANGERS

It will be demonstrated that the Service Water system heat exchangers are capable of performing their design heat transfer functions. In particular, the specific issue of potential fouling due to corrosion, debris and marine growth will be addressed by a combination of inspections, cleaning and, when necessary, performance testing. This effort will address the following:

1. Recirculation Spray Heat Exchangers
2. Control Room & Emergency Switchgear Room Air Conditioning Chiller Condensers
3. Charging Pump Lube Oil Coolers

SUMMARY

The resolution of these issues is expected to include revision of calculations, performance of special tests, system inspections, expansion of maintenance and surveillance procedures, and in some cases, plant modifications. It is our intention to pursue those activities necessary to ensure the capability and reliability of these systems and components prior to restart. The additional items of concern identified by the Safety System Functional Inspection process are under evaluation and will be addressed at the formal exit meeting. We will continue to keep you informed of our status and progress in these efforts.

If additional information is required, please let us know.

Very truly yours,



W. R. Cartwright
Vice President - Nuclear

cc: U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Mr. W. E. Holland
NRC Senior Resident Inspector
Surry Power Station

Mr. Chandu P. Patel
NRC Surry Project Manager
Project Director II-2
Division of Reactor Projects - I/II