

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

W. R. CARTWRIGHT  
VICE PRESIDENT  
NUCLEAR

February 15, 1989

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

Serial No. 89-083  
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  
ADDITIONAL INFORMATION REQUESTED  
INSERVICE INSPECTION PROGRAM

On December 21, 1988, a telephone conversation was held between members of your staff, EG&G Idaho, and members of our staff to discuss our response to your questions generated from your review of our Inservice Inspection Program for Surry Units 1 and 2, (reference our letter 88-332A dated September 30, 1988). The following are additional questions that you raised about the program during the telephone conversation. Our responses to these additional questions are as follows:

- 1) NRC: Augmented examinations required by the enforcement authority are not included in the licensees program plan submittal. Give a brief statement of compliance with these augmented requirements.

VEPCO: Virginia Electric and Power Company is in compliance with those augmented requirements discussed. Our 10 Year Interval/Period Plan contains those requirements that we have committed to. This document is available at the site for your representative to review at any time.

- 2) NRC: Containment Spray and CVCS systems have been exempted from volumetric and surface examinations in your program per Section IWC-1220 of ASME Section XI 1980 Edition thru Winter 1980 Addenda. 10 CFR 50.55a(b)(2)(iv) requires Class 2 piping welds in Residual Heat Removal Systems, Emergency Core Cooling Systems, and Containment Heat Removal Systems be examined. The licensee should not be exempting those systems from volumetric examinations based on ASME Section XI. Later Editions and Addenda of Section XI require volumetric examination of Class 2 piping welds with a nominal wall thickness greater than 3/8" thick in components larger than 4" nominal pipe size.

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The staff stated that a minimum of a 7.5% sample size constitutes an acceptable program on these systems. Verify volumetric examinations will be performed on at least 7.5% of the welds in CS and CVCS systems.

VEPCO: A 7.5% sample size program will be initiated on the CS and CVCS systems and will be incorporated into the 10 Year Interval/Period Plan. Examinations will be performed on these systems such that 7.5% will be completed by the end of this Interval.

- 3) NRC: Relief Request RR-22 (Surry Unit 1) and RR-21 (Surry Unit 2) in Section 5 of the licensee's program plan submittal states that the licensee cannot perform a primary leakage test on the lower head of the reactor vessel because it would be hazardous to conduct and the techniques would be limited in usefulness. The staff questioned the conditions of the test area and whether the relief requests are necessary.

VEPCO: After further conversations with the personnel that perform this examination we have decided to withdraw relief request RR-22 for Surry Unit 1 and RR-21 for Surry Unit 2. The visual examination will be performed in accordance with ASME Section XI guidelines.

- 4) NRC: It was stated in VEPCO's 9-30-88 Inservice Inspection Program submittal that information regarding the percentage of coverage of pressurizer welds (relief request SR-005) would be forwarded at a later date. Is this information now available?

VEPCO: Upon reevaluation, it has been determined that the interference involving the pressurizer insulation support ring can be removed. However, removal of the insulation support ring would involve a great deal of manpower and exposure due to its multipurpose use (it is also used as a support for the pressurizer safety valves). Removal of the insulation support ring and alternate examination methods are discussed in the attached revised relief requests.

If you have any further questions or require additional information, please advise.

Very truly yours,



W. R. Cartwright

Attachments

1. Relief Request SR-005 Unit 1
2. Relief Request SR-005 Unit 2

cc: U. S. Nuclear Regulatory Commission  
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Mr. W. E. Holland  
NRC Senior Resident Inspector  
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NRC Surry Project Manager  
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Division of Reactor Projects - I/II

RELIEF REQUEST NO. SR-005

I. IDENTIFICATION OF COMPONENTS AND IMPRACTICAL CODE REQUIREMENTS

The shell to top head circumferential weld on the Surry 1 Pressurizer is not accessible for 100% volumetric examination. Additionally, the one foot intersecting longitudinal weld is also partially inaccessible.

Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition through the Winter 1980 Addendum, requires a full volumetric examination for both the circumferential and longitudinal welds (Category B-B).

Relief is requested from this requirement due to the physical inaccessibility of the welds.

II. BASIS FOR RELIEF

The shell to top head circumferential weld and intersecting longitudinal weld are inaccessible for either a full volumetric or surface examination due to interference from the insulation support ring. The insulation support ring covers an area 4 inches wide just below the weld. Only the four inches of weld 15 that intersect with weld 7 are inaccessible due to the support ring. The remaining 8 inches of the required 12 inches may be examined in accordance with ASME Section XI.

III. ALTERNATE PROVISIONS

A volumetric examination will be performed to the extent practicable on welds 7 and 15. Approximately 100% of the inner 1/3 of weld 15 can be examined in one direction and approximately 60% of the inner 1/3 in the opposite direction. 100% of Weld 7 will be examined from 4" through 12".

The insulation support ring will be removed before the end of the inspection interval at which time 100% of both welds will be examined.

RELIEF REQUEST NO. SR-005

I. IDENTIFICATION OF COMPONENTS AND IMPRACTICAL CODE REQUIREMENTS

The shell to top head circumferential weld on the Surry 2 Pressurizer is not accessible for 100% volumetric examination. Additionally, the one foot intersecting longitudinal weld is also partially inaccessible.

Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition through the Winter 1980 Addendum, requires a full volumetric examination for both the circumferential and longitudinal welds (Category B-B).

Relief is requested from this requirement due to the physical inaccessibility of the welds.

II. BASIS FOR RELIEF

The shell to top head circumferential weld and intersecting longitudinal weld are inaccessible for either a full volumetric or surface examination due to interference from the insulation support ring. The insulation support ring partially covers weld 7. Only the four inches of weld 2 that intersect with weld 7 are inaccessible due to the support ring. The remaining 8 inches of the required 12 inches may be examined in accordance with ASME Section XI.

III. ALTERNATE PROVISIONS

A volumetric examination will be performed to the extent practicable on welds 7 and 2. Approximately 100% of the inner 1/3 of weld 7 can be examined in one direction and approximately 60% of the inner 1/3 in the opposite direction. 100% of weld 2 will be examined from 4" through 12".

The insulation support ring will be removed before the end of the inspection interval at which time 100% of both welds will be examined.