

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

November 13, 1987

W. L. STEWART  
VICE PRESIDENT  
NUCLEAR OPERATIONS

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

Serial No. 87-341A  
E&C/MWH: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 REGARDING  
ASME SECTION XI RELIEF REQUEST  
HEAT EXCHANGER REPLACEMENTS

By letter Serial No. 87-341, dated July 23, 1987, Virginia Electric and Power Company requested relief from certain ASME Section XI requirements for the replacement of the component cooling water and recirculation spray heat exchangers. In a telephone conversation on October 8, 1987, Mr. Chandu Patel and Mr. W. P. Kleinsorge of your staff requested additional information in support of our request. Attachment A provides the requested additional information.

Should you require any further assistance, please contact us.

Very truly yours,

*W. L. Stewart for*  
W. L. Stewart

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

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

*A047*  
*11*

8711190131 871113  
PDR ADDCK 05000280  
P PDR

**ATTACHMENT A**  
**ADDITIONAL INFORMATION REGARDING THE RELIEF REQUEST**  
**SURRY HEAT EXCHANGER REPLACEMENT**

**REQUEST FOR ADDITIONAL INFORMATION**

Please specify the reason(s) for the submittal of the relief request per 10 CFR 50.55a(g)(5)(iii).

**RESPONSE**

Pursuant to 10 CFR 50.55a(g)(5)(iii), Virginia Electric and Power Company seeks relief from the requirements of IWA-7210, Construction Codes, of Section XI of the ASME Code, 1980 Edition, Winter 1980 Addenda to the extent that this Code requirement is impractical for Surry Power Station for the construction of the replacement component cooling water and recirculation spray heat exchangers. We provide the following reasons as the basis for this relief:

- 1) The original heat exchangers were manufactured to the requirements of the 1968 Edition of the ASME Code, Section III, Class C. This Construction Code refers the manufacturer immediately to Section VIII of the Code. It is presumed that the referral was to the 1968 Edition of ASME Section VIII. Manufacture of the heat exchangers to the original construction code is impractical because the 1968 ASME Code Section VIII requirements have been superseded by later editions and addenda. Therefore, we have requested permission to use the latest effective edition and addenda of ASME Section VIII which would be the 1986 Edition with addenda through the Winter 1986 Addenda.
- 2) The heat exchanger manufacturing industry has maintained Section VIII of the ASME Code as the industry standard and many equipment manufacturers have not maintained their ASME Code Section III "N-Stamp" due to the present low business demand. Thus, the number of heat exchanger venders that are even qualified to manufacture these replacement heat exchangers to a later edition of the ASME Code, Section III, is severely restricted.
- 3) It is impractical to impose the requirements of the ASME Section III construction code because the ASME Class C designation no longer exists and the heat exchangers would have to be manufactured to either ASME Class 2 or Class 3. In addition, the use of ASME Section III as the construction code would impose unjustified higher costs and longer procurement schedules.

Our evaluation of the Construction Codes have concluded that a vessel built to the 1986 ASME Code Section VIII, Division 1 will meet or exceed the original requirements of the 1968 ASME Code Section III, Class C. In addition, Virginia Electric and Power Company proposes to purchase the replacement heat exchangers from a vender who has a quality assurance program in accordance with 10 CFR 50, Appendix B. By imposing this additional requirement, we contend that the quality of the replacement component cooling water and recirculation spray heat exchangers meets or exceeds the requirements of the original construction code.

## REQUEST FOR ADDITIONAL INFORMATION

Please provide drawings which identify the construction code of the existing heat exchangers.

## RESPONSE

The following drawings, which identify the construction code of the existing recirculation spray and component heat exchangers, were previously forwarded as requested:

### Recirculation Spray Heat Exchanger:

- |    |                |                        |
|----|----------------|------------------------|
| 1. | 11448-4.24-2A  | General Name Plate     |
| 2. | 11448-4.24-21A | Setting Plan - RS-E-1A |
| 3. | 11448-4.24-20A | Setting Plan - RS-E-1B |
| 4. | 11448-4.24-23A | Setting Plan - RS-E-1C |
| 5. | 11448-4.24-22A | Setting Plan - RS-E-1D |

### Component Cooling Water Heat Exchanger:

- |    |                  |                               |
|----|------------------|-------------------------------|
| 1. | 11448-4.24-1B/1C | Setting Plan - 1-CC-E-1A & 1B |
| 2. | 11448-4.24-2B/2C | Setting Plan - 1-CC-E-1C & 1D |

## REQUEST FOR ADDITIONAL INFORMATION

Please provide a description of the system configuration for the Recirculation Spray and Component Cooling Water Heat Exchangers.

## RESPONSE

For a description of the requested system configurations, refer to the following sections of the Surry Power Station Updated Final Safety Analysis Report: Section 6.3.1, Spray System, and; Section 9.4, Component Cooling System.