

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

September 20, 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. 85-574
NO/ETS:acm
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT NOS. 1 AND 2
ASME SECTION XI RELIEF REQUEST

Virginia Electric and Power Company (VEPCO) letter, Serial No. 85-208, dated April 15, 1985 was the submittal of a relief request for Surry Power Station. Relief was requested from the requirements of ASME-Section XI pertaining to the replacement of certain components in the boric acid transfer system. VEPCO's June 10, 1985 letter, Serial No. 85-208A, submitted additional information requested by Mr. Edward Girard by telephone from Mr. R. H. Coupe, Surry Power Station Engineering. The NRC, in a letter dated July 24, 1985 requested additional information in order to complete the review. The following information is provided in response to the NRC request.

NRC Request for Information No. 1:

In the first enclosure to your April 15, 1985 letter, under the heading "Reason for Request," you state that the filter vessels for the boric acid transfer system were originally contracted to the requirements of ASME Section III, 1968 edition. Please state whether any code addenda to the 1968 edition were applicable.

Response:

VEPCO is still attempting to locate the original Purchase Specification for the AMF Cuno filters which were originally installed in the plant. Accordingly, we have not been able to verify if any addenda were applicable to the ASME Section III, 1968 edition.

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Stone & Webster evaluated the original and current code requirements for the Boric Acid filters. Their evaluation, included any potentially applicable addenda. The conclusion was that any of the potentially applicable addenda did not impact the evaluation results.

NRC Request for Information No. 2:

In the enclosures to your April 15, 1985 letter, you indicated that an evaluation was made comparing the code for the original filter vessels with the code you proposed for the new vessels. Provide a copy of the comparison, item by item, not just your conclusions.

Response:

Table I, attached, lists the additional requirements above ASME VIII, 1968, which ASME III, 1968 imposes on Class G vessels. This Table indicates how the new ASME VIII filters fulfill these requirements. The evaluation has used both the 1968 summer and winter addenda.

NRC Request for Information No. 3:

The Stone and Webster Engineering Corporation "evaluation" letter enclosed with your April 15, 1985 letter, noted a difference in allowable stresses for Type 304 stainless steel between the original filter vessel code and the code requested for the new vessels. The Stone and Webster letter proposed that your purchase requisition should include a specific requirement to account for this change. Indicate whether you have included the proposed requirement in your requisition.

Response:

The recommendation by Stone and Webster that the purchase order include specific wording to account for differences in the allowable stress for Type 304 SS was followed. P.O. #IP-69503 was reviewed and the proposed wording has been verified.

VIRGINIA ELECTRIC AND POWER COMPANY TO Mr. Harold R. Denton

If you have any questions or require additional information, please contact us.

Very truly yours,


f W. L. Stewart

Enclosure:

Table I

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

Mr. Donald Burke
Senior Resident Inspector
Surry Power Station

TABLE I

REQUIREMENTS FOR CLASS C VESSELS
ASME III, SUBSECTION C, ARTICLE 21

	<u>ASME III</u> <u>1968</u>	<u>*ASME III, 1968</u> <u>Winter Addenda</u>	<u>Resolution of Additional Requirements</u>
N-2111	The requirements of Section VIII of the Code shall apply to the materials, design, fabrication, inspection, and testing, and certification of Class C vessels except that the following additional requirements shall apply.	N/A	The new Cuno filters are considered replacements and shall meet the requirements of ASME XI, Article IWA-7200 (C) which allows use of latter edition of the Construction Code. Based on Table 1 and the purchase order requirements, the requirements of ASME XI subarticle 7200(C) is met with the exception that ASME VIII is used in lieu of ASME III (the original Construction Code).
N-2112	Par. U-1(g) of Section VIII shall not apply to Class C vessels. This paragraph addresses exemption from Code stamping.	Par. U-1(h) of Section VIII, Div. 1 of the Code shall not apply. This paragraph addresses exemption from inspection.	Par. U-1(g) has not been applied. The new Cuno filter is stamped. Par. U-1(h) has not been applied. All final welds were liquid penetrant inspected.
N-2113	Par. UW-2(a) of Section VIII shall apply to any Class C vessels containing radioactivity.	a) All welded joints of Cat. A shall be Type 1 of Table UW-12. b) All welded joints of Cat. B&C shall be Type 1 or 2 of Table UW-12.	ASME VIII, 1983, requires all Cat. D joints to be full penetration welds extending through the entire thickness of the vessel or nozzle walls. This is a more stringent requirement.

ASME III
1968

*ASME III, 1968
Winter Addenda

Resolution of Additional Requirements

N-2114

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Radiographic Examination
All welded joints of categories A, B, C, and D joints which are butt welds where either of the joined members at the weld exceeds 3/16 in. in thickness shall be radiographically examined in accordance with the requirements of UW-51 except that categories C and D joints of two inches or less nominal pipe size need not be radiographed.

In compliance. All circumferential and longitudinal welded joints were specified to be radiographed.

N-2115

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Liquid Penetrant or Magnetic Particle Examination

All final welds were specified to be liquid penetrant inspected.

- a) All welded joints of Category D over two inch nominal pipe size which are not butt welds shall be examined by magnetic particle or liquid penetrant methods at the root of the weld after back chipping or after removal of backing rings and on

N-2115

Class C vessels shall be stamped with the letter "N" below the Code U-symbol in the stamping shown in Fig. UG-118 of Section VIII.

Added Division 1.

Since the vessel was fabricated to ASME VIII in lieu of ASME III, no "N" Stamp is required.

*Summer Addenda 1968 did not effect Article 21.

ASME III
1968

*ASME III, 1968
Winter Addenda

Resolution of Additional Requirements

- c) All joints of Cat. D shall be full penetration welds extending through the entire thickness of the vessel wall or the nozzle wall except that those joints of 2 inches or less nominal pipe size may be of the acceptable types of Fig. UW-16.1.

Review of manufacturer's drawing indicates all Cat. D joints on the new vessel are full penetration welds.

N-2114

Par. UG-125 through UG-134 of Section VIII shall not apply and the requirements of Article 9 of this section shall be substituted.

Article 9 - Protection
Against Overpressure.

No pressure relief device was included as part of the replacement.