VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRCINIA 23261

October 11, 1994

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555 Serial No. 94-576 NL&P/JBL: R0 Docket Nos. 50-339 License Nos. NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION UNIT 2 REQUEST TO USE ASME SECTION IX CODE CASES 2142 AND 2143

In accordance with the provisions of 10 CFR 50.55a(a)(3)(i), Virginia Electric and Power Company requests approval to use American Society of Mechanical Engineers (ASME) Section IX Code Cases 2142 and 2143 in the fabrication and installation of the North Anna Unit 2 replacement steam generators. These Code Cases were adopted by the ASME on December 7, 1992, and were published in the ASME Boiler and Pressure Vessel Code, 1992 Edition, Code Case Supplement 3 - 1993. However, since the 1992 Edition of the ASME Code has not yet been incorporated by reference into the NRC's regulations, these Code Cases cannot be used without prior NRC approval.

These Code Cases introduce and classify new nickel based weld materials that closely match and are intended for welding Alloy 690. Code Case 2142 establishes welding classifications and other requirements for a bare wire weld filler metal (UNS N06052). Code Case 2143 establishes welding classification and other requirements for a coated weld electrode (UNS 06152). These Code Cases establish the general welding characteristics of these welding materials as F-No. 43. The F-No. 43 designation categorizes the welding characteristics of these welding materials to be similar to many other Code-acceptable nickel based weld metals. This F-No. 43 welding characteristics designation would permit the employment of previously qualified welding procedures for welding with these metals.

The current base metal of choice for use in replacement steam generator components as primary-side wetted surfaces is Alloy 690. These new weld materials are the preferred choice for welding applications involving Alloy 690 in a corrosive environment. The use of these weld materials for non-structural welds will increase the service life of the replacement steam generators and will provide an acceptable level of quality and safety because of their superior corrosion resistant properties.

Planned replacement of the North Anna Unit 2 steam generators is scheduled for the spring of 1995, and the replacement steam generator components are in the final stages of fabrication. Therefore, Virginia Electric and Power Company requests approval for use of Code Cases 2142 and 2143 by October 31, 1994.

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Should you have any questions, please contact us.

Very truly yours,

James P. O'Hanion Senior Vice President - Nuclear

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