

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 23, 1996

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U. S. Nuclear Regulatory Commission
Washington, D. C. 20005

Serial No. 96-444
NLOS/ETS: R0
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Dear Sir:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
PROTECTION AGAINST DYNAMIC EFFECTS
ASSOCIATED WITH THE POSTULATED RUPTURE
OF HIGH ENERGY PIPING OUTSIDE CONTAINMENT

As part of the initial licensing process for North Anna Units 1 and 2, Virginia Electric and Power Company analyzed the high energy piping systems outside containment. The analysis was performed in accordance with the criteria specified in Mr. A. Giambusso's letter of December 12, 1972 to Virginia Electric and Power Company, entitled, "General Information Required for Consideration of the Effects of a Piping System Break Outside Containment." As a result of this analysis, modifications were identified and completed as a means to protect safety-related equipment in the Main Steam Valve House against pipe whip and jet impingement. However, in place of modifications in the Mechanical Equipment Room, an augmented inservice inspection program was implemented at postulated break locations to provide additional assurance of the integrity of the Main Steam and Feedwater Systems. In addition, a leak detection system was provided to monitor these high energy lines.

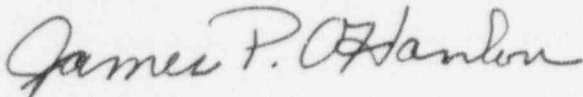
The augmented inservice weld inspections performed since initial licensing and plant operations on the Main Steam and Feedwater Systems have not identified any unacceptable inservice weld indications. Based on at least 15 years of inspection experience on each unit, we conclude that weld failure due to operational stress or material defects not initially detected in the manufacture of these high energy lines is unlikely. Since the most likely failure mechanism associated with carbon steel piping is flow-accelerated corrosion, we are modifying our commitment by replacing the augmented inservice weld inspection program for the Main Steam and Feedwater Systems with our Secondary Piping and Component Inspection Program. The

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Secondary Piping and Component Inspection Program is specifically designed to detect flow-accelerated corrosion.

This letter does not establish any new or additional commitments. The secondary piping and component inspection program is a previously committed program. Should you have any questions or require additional information, please contact us.

Very truly yours,

A handwritten signature in cursive script that reads "James P. O'Hanlon".

James P. O'Hanlon
Senior Vice President - Nuclear

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

Mr. R. D. McWhorter
NRC Senior Resident Inspector
North Anna Power Station