

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

December 8, 1982

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attention: Mr. Robert A. Clark, Chief
Operating Reactors Branch No. 3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Serial No. 670
NOCHP/WAT:ba
Docket No. 50-338
License No. NPF-4

Gentlemen:

Hydrogen Monitoring Program
North Anna Power Station - Unit 1

In our December 10, 1979 letter, Serial No. 1003, we indicated that we would purchase and install hydrogen monitors on Unit 1 at North Anna. This was done in an effort to qualify and quantify the effectiveness of the Boric Acid Treatment Program in arresting steam generator support plate corrosion. In our September 16, 1980 letter, Serial No. 794, we indicated that the lack of hydrogen baseline data had hampered the analysis of the effectiveness of the Hydrogen Monitoring Program.

This lack of baseline data has reduced the effectiveness of the monitoring program based on hydrogen evolution data obtained so far. The hydrogen analyzers will only give indications of gross, generalized corrosion that may occur. The data being recorded can be affected by a large number of plant conditions such as chemical feed rates and concentrations, cooling water temperature variations and flow rates through the monitors themselves, and primary hydrogen concentrations and permeability rates. It has been Vepco's experience over the past two years that these parameters are virtually impossible to control in a power plant environment to the degree necessary to perform an accurate and meaningful interpretation of the collected data.

Based on this experience and in conjunction with the positive results and observations concerning corrosion abatement as indicated through the steam generator inspection programs, Vepco intends to terminate the Hydrogen Monitoring Program on North Anna Unit 1.

If further information is required, please feel free to contact us.

Very truly yours,

W. L. Stewart
W. L. Stewart

cc: Mr. James P. O'Reilly
Region II

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