

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

October 20, 1988

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Serial No. 88-699  
NAPS/JHL  
Docket No. 50-338  
License No. NPF-4

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY  
NORTH ANNA POWER STATION UNIT NO. 1  
CONTAINMENT MAT TRIAXIAL RESPONSE SPECTRUM RECORDER

At 0600 on September 10, 1988, with Unit 1 at 100 percent power (Mode 1) and the containment mat triaxial response spectrum recorder inoperable, the Action Statement of Technical Specification 3.3.3.3 was entered. The Action Statement requires that the seismic monitoring instrument be returned to operable status within 30 days or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and plans for restoring the instrument to operable status. Since the containment mat triaxial response spectrum recorder was still inoperable on October 10, 1988, this Special Report is being submitted pursuant to Technical Specification 6.9.2.

On September 10, 1988, control room personnel observed various annunciators on the control room seismic instrument panel to be in alarm. The Instrument Department was notified to troubleshoot the alarms. Troubleshooting determined that there may be either a bad capacitor or a leakage to ground connection in the alarm circuit for the vertical portion of the containment mat triaxial response spectrum recorder. The leads have since been lifted to defeat the continuous alarms in the control room. The vertical recorder is still operable, but without control room indication. The north-south and east-west recorders and annunciators for the containment mat triaxial response spectrum recorder are still operable. In addition, there are other seismic monitoring instruments that provide control room indication in the event of a seismic event (i.e., the containment mat and containment operating level triaxial time history accelerographs and the containment mat triaxial seismic switches).

Repairs to the alarm circuit of the vertical portion of the containment mat triaxial response spectrum recorder will be performed by the recorder manufacturer (Engdahl Enterprises) during the Unit 1 1989 refueling outage

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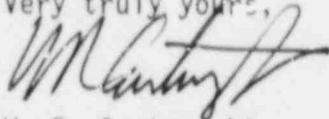
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which is scheduled to commence in April 1989. The recorder is a very sensitive instrument. Past experiences with repairs on this recorder at power, which requires commensurate protective clothing, self contained breathing apparatus and limited access time because of ALARA concerns, have resulted in damage to the equipment. Performing the repairs during the refueling outage will reduce the potential for further damage of the recorder.

No significant safety implications are posed by this event because other Technical Specification seismic monitoring instrumentation with control room indication is operable.

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

Very truly yours,



W. R. Cartwright  
Vice President - Nuclear

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