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July 3, 1979

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North Anna Spent Fuel Pool Docket Nos. 50-338 SP & 50-339 SP

Gentlemen:

This will confirm the phone calls I made Thursday afternoon, June 28, 1979, to notify the Board and parties of new information pertinent to Vepco's motion for summary disposition and prefiled written testimony.

Vepco filed its Motion for Summary Disposition on May 11, 1979, asking for summary disposition of all the issues in this proceeding. Attached to that motion was "Vepco's Statement Of Material Facts As To Which There Is No Genuine Issue To Be Heard." Two of these "material facts" were stated as follows:

Valentine B. Deale, Esq. Dr. Quentin J. Stober Mr. Ernest E. Hill July 3, 1979
Page Two

118. According to technical papers by D. R. Miller, W. A. Williams, and T. L. Doan, large missiles such as utility poles and automobiles (which are the design tornado missiles for North Anna 1 and 2) lack sufficient lift or velocity to clear a height of 25 feet (FSAR § 15.4.5.2).

119. These could not, therefore, strike the fuel elements (FSAR § 15.4.5.2).

As indicated, these statements relied on Section 15.4.5.2 of the Final Safety Analysis Report (FSAR) for the North Anna Power Station, Units 1 and 2. Section 15.4.5.2.4 references Section 9.1.2 of the FSAR, which contains the following statement:

> The fuel building is discussed in Section 3.8.1. Stored fuel in the spent fuel pit is protected from horizontal missiles by 6 ft thick reinforced concrete walls of the pit which extend 20 ft 10 in. above grade. The building geometry protects the fuel elements from direct impact of missiles with angles of approach up to approximately 45 deg above the horizontal. D. R. Miller and W. A. Williams, in a paper entitled "Tornado Protection of a Spent Fuel Storage Pool No. APED-5696," dated November 1968, and T. L. Doan in a paper entitled "Tornado Considerations for Nuclear Power Plant Structures," published in July, 1970, state that large missiles such as utility poles and automobiles (which are the design tornado missiles, Section 3.3.2) lack sufficient lift or velocity to clear a height of 25 ft. These could not, therefore, impinge on the fuel elements. These spent fuel elements would also be protected by the water which covers the storage racks in the pool from other lighter missiles resulting

Valentine B. Deale, Esq. Dr. Quentin J. Stober Mr. Ernest E. Hill July 3, 1979
Page Three

from damage to adjacent building superstructures As discussed in the paper by T. L. Doan, small, fast-moving missiles traveling down wards [sic] would impact only one fuel assembly. The radiological impact of this occurrence is evaluated in Section 15.4.5.

Two sentences in "Vepco's Testimony on High-Density Spent Fuel Storage Racks," served on the Board and parties on June 23, 1979, also rely on the above FSAR statement. At page 14, lines 11-15, the written testimony says the following:

Large missiles such as utility poles and automobiles (which are the design tornado missiles for North Anna 1 and 2) lack sufficient lift or velocity to clear a height of 25 feet. They could not, therefore, strike the fuel elements.

In preparation for the public hearing in this proceeding, Vepco asked Stone & Webster Engineering Corporation, which had originated the FSAR language quoted above in 1973, to verify that the FSAR statement was correct. Stone & Webster advised Vepco on June 28 that the statement is correct as written. However, Stone & Webster also advised that subsequent field studies have shown that large missiles can rise to elevations higher than the Miller-Williams and Doan papers indicate. I telephoned Mr. John H. Frye of the ASLB Staff and counsel for the NRC Staff and the intervenors the same afternoon to inform them of this new information.

Valentine B. Deale, Esq. Dr. Quentin J. Stober Mr. Ernest E. Hill July 3, 1979 Page Four

Vepco will ask to be allowed to supplement its motion for summary disposition in the near future in order to update the information on tornado missiles.

Very truly yours,

/s/ James N. Christman
James N. Christ 1, Counsel for
Virginia Elr \_c and Power
Company

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