

# NORTH ANNA ENVIRONMENTAL COALITION

P.O. BOX 3951  
CHARLOTTESVILLE, VIRGINIA 2290  
(717)533-7694 or (804)293-603  
October 29, 1977

Mr. Edson G. Case  
Acting Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Case:

Since you have recently been reviewing the events relating to the North Anna case, would you kindly answer the following questions for the Coalition:

1. According to Mr. Walter Butler, AEC North Anna Project Manager in 1970, several technical discussions were held between AEC and VEPCO regarding site stability conditions. Who attended the meetings on the following dates, and what was the substance of the discussions?
  - a. February 18-19, 1970 Technical Meeting; and
  - b. September 10, 1970 Site Visit.
2. According to a VEPCO memorandum regarding the September 10, 1970 Site Visit (in the Justice Department papers, dated 9-14-70), "Mr. Waldron (USGS) wanted to visit the plant site and other areas. Mr. Cardone (AEC) wished to confine the visit to the damsite." Why did AEC geologist Cardone choose not to inspect the reactor excavations?  
(This is particularly baffling since an earlier Justice Department report of October 28, 1975 quotes an "AEC staff geologist" who must be Mr. Cardone as saying that "reports of offset in thrust faults at the site" raised questions in his mind." Surely such questions should lead to reactor excavation inspection.)
3. According to Mr. Butler, who recalls "a geological concern during the review" of North Anna, he made arrangements for Mr. Cardone to meet with Mr. Swiger (Stone & Webster engineer)"at the time of excavation." Was the date of the trip arranged for Mr. Cardone February 25, 1970 when Mr. Swiger flew down from Boston? If not, what was the date of the meeting between AEC geologist(s) and Mr. Swiger at the site?
4. At the 1970 meeting between the AEC and Mr. Swiger, what "geological concerns" were discussed? Is there a trip and meeting report in the Public Document Rooms in Washington and Virginia of said meeting, placed there in 1970?

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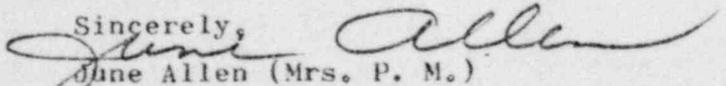
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5. Did Mr. Cardone inspect the chlorite seam in the excavation for Unit 1 with Mr. Swiger?
6. Was either Mr. Robert Henry, Mr. John Briedis, or Mr. David McKittrick present at the meeting arranged by Mr. Butler for Messrs. Cardone and Swiger?
7. Did Mr. Swiger tell Mr. Cardone that he and Messrs. Henry, Briedis, and McKittrick had all considered faulting in Unit 1? (See AEC Investigation Report of March 1974, page 14, plus Henry deposition page 19, and Briedis deposition page 42.)
8. Did Mr. Butler also arrange in 1970 for a North Anna site visit by a geologist by the name of Mr. Steppe? If so, what was the date of his visit and what did he report to the AEC?
9. Why were AEC Inspectors Crossman and Long at the North Anna excavation site on February 19, 1970? (VEPCO had no construction permit at that time, and did not apply for an "exemption to proceed" until August of 1970.)
10. Who received the report of Inspectors Crossman and Long regarding North Anna's collapsing excavation wall, and what follow-up measures were taken? What course was recommended by Messrs. Denton, Gammill, and Cardone regarding the North Anna foundation problem? To whom were their -- or any other AEC staff member's -- recommendations or observations made?
11. What AEC officials or staff members (names and titles) were aware in 1970 of what Mr. Butler calls a "geological concern" at the site?
12. On April 30, 1970, why did the AEC require VEPCO to install "at least one strong-motion seismograph in the basement of the containment building" and to "consider the installation of another seismograph in the upper part of the structure"? What other U.S. reactors have such seismographic installations?
13. Also on April 30, 1970, why did the AEC tell North Anna "that for your site, diagonal reinforcement of the containment will be required"?

14. Still pursuing the AEC's early assessment of the North Anna site, why on August 15, 1969 did the AEC/DRL recommend the more stringent seismic values for North Anna of .08 and .15g (as opposed to the applicant's .06 and .12g)?  
Were the more stringent AEC consultants' recommendations for North Anna supported by AEC geologist Cardone who signed the August 21, 1969 report of the August 15, 1969 meeting?
15. Did the AEC require or authorize the increase in thickness of the concrete mat in Unit 1 from 7 feet to 10 feet? If so, what was the rationale behind the need for the increase?
16. Do you agree with the geologists, Drs. Goodwin, Funkhouser, and Mueller that the chlorite seam in the North Anna excavations represents "a zone of weakness"?
16. In 1970, did the AEC read the March 1970 Stone and Webster reports on stability conditions at the North Anna site, one of which was written by site geologist Robert Henry? If so, what actions were taken thereon? or on the Dames & Moore Foundation Conditions report of May 8, 1969?
17. What was the exact level of AEC authority over the North Anna nuclear station in 1969 and 1970?  
(We know that no construction license was granted until 1971 and no exemption to proceed until September of 1970. Nevertheless, we also know that the first North Anna contract with Stone & Webster was signed in 1966 and the PSAR was filed 3-21-69.)
18. Returning to 1977, and VEPCO's April letters to your office serial numbers 134 and 138,  
--what is the current installation completion date for the horizontal drain system to combat settling?  
--what is the current installation date for the cooling towers to combat "fouling and corrosion problems" in the Lake Anna water?
19. Will the above described systems be required to be completed and tested before your office recommends the granting of an Operating License for North Anna?

Thank you for your professional attention and interest.

Sincerely,

  
June Allen (Mrs. P. M.)  
President, NAEC

cc: Senator Gary Hart  
Representative John Moss      Representative Jonathan Bingham  
Union of Concerned Scientists