

NORTH ANNA ENVIRONMENTAL COALITION

Mr. Frederic J. Coufal, Chairman
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

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May 20, 1977

In the Matter of Virginia Electric and Power Company
North Anna 1 & 2
Operating License

Dear Mr. Coufal:

The North Anna Environmental Coalition (NAEC) has serious concerns about the imminent licensing of the improperly sited and defectively constructed North Anna nuclear power station.

NAEC study has led to the writing of the enclosed letter to Mr. Ernst Volgenau, NRC Director of Inspection and Enforcement. The letter is being sent to you and the Atomic Safety and Licensing Board with the formal request that the issues listed be explored formally on the record of the upcoming Operating License Hearing:

- a. Remedial drainage required for excessive groundwater
- b. Abnormal and differential settling of key structures into water-filled clays (saprolite/halloysite)
- c. Micro-earthquake indications along the North Anna fault and Neuschel's Lineament
- d. Earthquake design deficiencies
- e. Severe leakage problems in Westinghouse steam generators

Although these site-related issues are significant and of construction importance, they were not considered at either North Anna Construction License Hearing. They appear to have come to light after the 1974 hearing on the North Anna fault zone (with its site-approving decision) and after the installation of micro-seismic monitoring equipment (with its registering of faulting near the dam and activity along the extrapolation of the North Anna reactor faults). Thus the necessity for consideration by your Board of these matters which bear heavily on "VEPCO's performance in the construction...of North Anna Units" and their safe operation as questioned in Contention #1.

Another consideration also appears to have grown in significance and dubiety:

- f. VEPCO's financial ability

Although VEPCO's financial situation was explored during the first session of the current hearing, several matters have changed since that time. Construction was stopped on Surry Units 3 & 4 on March 18, 1977, a change from VEPCO's answer to Interrogatory 4.9 on November 12, 1976 that "There are no plans to abandon the construction of either North Anna 3 and 4 or Surry 3 and 4."

VEPCO's Prospectus of March 2, 1977 states that "Cancellation of certain construction projects would result in substantial costs not being recoverable except, to the extent permitted, through rate-making procedures" whereas in 1975 and 1976 the Prospectus statement had been

"The Company's experience to date in connection with construction deferments indicates that these commitments can be deferred or cancelled without material penalty."

It appears that the question of who will bear the Surry cancellation costs will ultimately be decided by the Virginia State Corporation Commission whose deliberations would be of interest to this Board.

The Coalition also believes that this Board should consider certain contradictions or irregularities in the NRC record of assessment of VEPCO's financial fitness to construct nuclear facilities.

On April 24, 1975, Mr. A. Schwencer of the NRC wrote the Coalition that it was then the position of the NRC, as it had been in August and December of 1974, that VEPCO had "reasonable assurance of obtaining the funds necessary to design and construct Units 3 and 4 at North Anna and Surry as well as to complete Units 1 and 2 at North Anna."

It now appears that on November 19, 1974, Edwin Triner, NRC's Director of the Office of Program Analysis-Regulation, sent FEA a "response concerning the availability of nuclear generation by 1980." On page 2 of Attachment 2 of that response, under the heading FACTORS LIMITING NUCLEAR GROWTH, both North Anna 3 and Surry 3 are listed in a column marked "Financial Difficulties."

Which NRC information is to be believed—that giving "reasonable assurance" of funds, or that noting "financial difficulties"?

Was the NRC Staff, along with Mr. Triner, privy to unfavorable financial information regarding VEPCO which had not been made known to the Atomic Safety and Licensing Board that made the favorable finding?

Are there today internal NRC documents, comparable to those described above, that suggest conclusions at variance with those in prepared testimony? that suggest "financial difficulties" attendant upon the operation of North Anna Units 1 and 2?

How will the NRC assess VEPCO's financial capability to operate North Anna safely if the Virginia State Corporation Commission should fail to grant the rate increases for North Anna start-up costs and Surry 3 & 4 cancellation costs?

NAEC respectfully requests that this Board make a thorough examination of the foregoing financial implications.

g. Abnormal Settling at Surry

NAEC recognizes that the Board has decided against exploring the history of Surry construction, but the parallels between the handling of abnormal and differential settling at Surry during operation and the attention to abnormal and differential settling at North Anna during construction are worthy of Board attention -- particularly as they reflect upon VEPCO's "commitment and technical qualifications" under question in Contention #1.

The REGULATORY INVESTIGATION REPORT of Surry Settlement (Nos. 50-280/75-1 and 50-281/75-1) is one of the most broadly revealing documents in regard to VEPCO management and integrity. As you probably recall, the problem of abnormal settling at Surry was finally made known to the NRC not by VEPCO but by a "confidential informant" on May 7, 1975 although the problem had been known to VEPCO since 1972. The efforts of a determined insurance inspector to prod an intransigent utility are detailed in the correspondence in the REPORT which should certainly be a part of any record which deals with VEPCO's nuclear management and probity. We enclose it for your most thoughtful examination as you consider North Anna monitoring.

h. The Need for Rock Anchors

The NRC LER OUTPUT of May 20, 1976 contains the following entry on North Anna 3: DESIGN/FABRICATION ERROR explained as

"DESIGN DEFICIENCY. Lack of adequate safety margin for earthquake forces and uplift forces due to water under structure. Rock anchors added to integrate foundation with rock."

NAEC questioned and questions why North Anna Units 1 and 2, constructed on the same wet fault, would not also require rock anchors. It would appear to take a very credulous board to be satisfied with the explanations offered by VEPCO on April 25, echoed by the NRC Staff on May 12 (pages 26 and 27 of enclosure with Counsel Swanson's letter of that date).

Surely the Board must question why VEPCO chose foundation elevations and structure dimensions and foundation subgrade materials for North Anna 3 and 4 which were more vulnerable in an earthquake than those of Units 1 and 2. Does it demonstrate proper "commitment and technical qualifications" to have increased the seismic susceptibility by "design deficiency" in Units 3 and 4?

Perhaps the answer is to be found in an exhibit from the Show Cause Hearing of 1974. NX-13, notes from a Stone and Webster meeting of June 2, 1973 on the Chlorite Seam Problem, contains the following entry:

"3. Effects of fault

-plane of weakness

-For 1 & 2 bad

-Could design for 3 & 4, but
don't want to.

Admit it prob. then."

Although it was "bad" for 1 and 2 in 1973, it was probably already too late for the installation of rock anchors at that time. To have installed them in 1970 would have "admitted a problem," recorded in photographs in 1970, but not formally recognized or admitted until three years later.

NAEC respectfully requests this Board to explore on the record the implications of the lack of rock anchors for Units 1 and 2, and the presence of rock anchors for Units 3 and 4.

(A Note regarding Show Cause Exhibits: Many exhibits have grown in geological significance since 1974. NX-9, Notes of an AEC meeting of November 13, 1973 call for a "review of every possible authority on the subject" of "saprolite" but not until 1976 did the NRC request a study on saprolite by the Army Corps of Engineers.)

1. Justice Department Report

Since 1975, the Justice Department has been studying the VEPCO situation in regard to both faulting and settling. The original report was finished on October 28, 1975, and work has continued since that time.

NAEC believes the Board, before it makes any decision on VEPCO's commitment to operational integrity, should request and study all Justice Department reports.

Limited Appearances

NAEC was gratified to read in the Board's Order of March 30, 1977 that at the reconvened hearing the Applicant and Staff would "respond to questions raised by those who made limited appearances." Local citizens who made limited appearances on November 30, 1976 have just recently begun to receive written replies. Since several of them have found these replies unsatisfactory, they are particularly interested in having the Board explore these significant issues on the record, raising questions to elicit complete answers.

It is possible that citizens who were unable to attend the 1976 hearing may ask to speak briefly at the 1977 segment. It is also possible that there may be requests to speak to the new contentions under consideration. Given the holiday weekend, the number expected is small.

NAEC has continued its study of the North Anna situation since the 1976 hearing, and may ask for a few moments to make an updated limited appearance.

We are appreciative of the Board's scheduling and other pressures upon its time. We know that your position is a difficult and even an historic one.

Thank you for your professional consideration.

Sincerely,

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

Enc.

CC: ASLB

Counsel for VEPCO, NRC, Intervenor Arnold, State of Virginia
ACRS
NRC I & E