October 1, 1984

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMPREIONI-3 AN :06

SAFETY AND LICENSING BOARDE OF SECRETAR

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VIRGINIA ELECTRIC AND POWER	) Docket Nos.	50-338/339-OLA-1
COMPANY	)	-OLA-2
CONTAINT		

(North Anna Power Station, Units 1 and 2)

### APPLICANT'S REPLY TO CONCERNED CITIZENS OF LOUISA COUNTY'S BRIEF ON TABLE S-4 ISSUES

The Applicant, Virginia Electric and Power Company (Vepco), has set out its argument-in-chief in the Response it filed on September 20, 1984. All that is necessary here is to set out what appear to be the main points of the argument put forth by Concerned Citizens of Louisa County (CCLC) and make a brief comment on each.

1. CCLC argues that Table S-4 may not be used by the Staff in an environmental assessment because Part 51 does not explicitly say that it may. Put another way, CCLC says that the Staff is forbidden to use Table S-4 even when all of the § 51.52 parameters are met. There are three answers. First, the critical consideration is not that § 51.30, which prescribes the content of environmental assessments, does not explicitly mandate the use of Table S-4; it is that neither § 51.30, nor any other provision of 8410030545 841001 PDR ADDCK 05000338 Part 51, explicitly forbids the use of Table S-4. In the absence of an explicit prohibition, the Board should be guided by the Commission's Statement of Considerations, 40 Fed. Reg. 1005 (January 6, 1975), which contains no indication that the Staff is to make the arbitrary distinction between environmental impact statements and environmental assessments that CCLC advocates. Second, CCLC now concedes that the Staff may be permitted to use Table S-4 in certain operating license proceedings, Concerned Citizens of Louisa County's Brief on Table S-4 Issues (CCLC Brief), at 11. Thus, the argument it makes here produces an absurd result: The Staff may use the generic "short cut" provided by Table S-4 in a proceeding where significant environmental effects are presumed to be involved and the preparation of an environmental impact statement is therefore required. But the Staff must do an entirely original, site-specific environmental review in a proceeding where no significant environmental effects appear to exist and an environmental assessment is done. The Commission could not have intended such a wasteful result. Third, contrary to CCLC's position, a literal reading of Part 51 does authorize the use of Table S-4 in this case. Section 51.30, which briefly sets out the requirements for environmental assessments, requires a brief discussion of "the environmental impacts of the

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proposed action . . . " (emphasis added). Section 51.52(a)(6) says that Table S-4 sets forth "the <u>environmental impacts</u> of transportation of fuel and waste to and from the reactor . . . " (emphasis added). In short, what is explicitly required to be "discussed" in the environmental assessment is explicitly set forth in Table S-4. Thus, the Commission's obvious wishes, common sense and the language of Part 51 all refute CCLC's position.

CCLC argues that Table S-4 may never be used by 2. the Staff in its evaluation of a proposed operating license amendment. Again, the argument produces an absurd result. CCLC would now concede that if Vepco were seeking an operating license for North Anna and wished to include in that license the right to receive and store Surry fuel, the use of Table S-4 by the Staff would be appropriate. CCLC's position would mean, however, that if Vepco waited until the issuance of its operating license and promptly thereafter sought an amendment authorizing the receipt of Surry fuel at North Anna, the Staff could under no circumstances use Table S-4 to evaluate the environmental impacts of the shipments from Surry to North Anna. It is not surprising that CCLC has not identified one rational objective that would be served by its approach, which is so plainly at odds with the Commission's objective in adopting Table S-4.

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3. CCLC argues that Table S-4 is merely a component to be plugged into a cost-benefit analysis and not a substitute for a narrative analysis of the underlying environmental effects of transportation. Again, to use the literal approach to Part 51 that CCLC embraces, nothing on the face of Part 51 indicates that Table S-4 is merely an element of a pst-benefit analysis. On the contrary, as has been indicated, § 51.52(a)(6) says that Table S-4 sets forth the "environmental impacts" of transportation. And, after all, it is "environmental impacts" that an environmental assessment is supposed to discuss. Second, contrary to CCLC's bald assertion, Table S-4 is not merely a substitute for narrative analysis. The narrative analysis - a comprehensive one - is included in WASH-1238, the Environmental Survey of Transportation of Radioactive Materials To And From Nuclear Power Plants, which is the document identifying the impacts set out in Table S-4.

4. CCLC appears to take comfort in the fact that the Staff did not apply Table S-4 in the <u>Oconee-to-McGuire</u> case. <u>Duke Power Co</u>. (Amendment to Materials License SNM-1773-Transportation of Spent Fuel from Oconee Nuclear Station for Storage at McGuire Nuclear Station), ALAB-651, 14 NRC 307 (1981). Vepco does not know why the Staff did not apply Table S-4 in that proceeding, but we have two observations. First, the <u>Oconee-to-McGuire</u> proposal did

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not fall within the assumptions that underlay Table S-4. The proposal contemplated 300 spent fuel shipments. The shipments were to be made in a single year. <u>Duke Power Co</u>. (Oconee/McGuire), LBP-80-28, 12 NRC 459, 489 (1980). The underlying environmental analysis for Table S-4, however, anticipates 60 shipments per year per unit. WASH-1238 at 20. Since Oconee is a three-unit station, <u>id</u>. at 463, the proposal involved 100 shipments per reactor per year, exceeding the assumption underlying Table S-4 by 67%. Second, it is not Vepco's position that the Staff is required to use Table S-4 in a proceeding such as this one; Vepco's position is that the Staff is permitted to use Table S-4 in the environmental assessment where the parameters are met, and common sense dictates that it do so here.

5. CCLC raises once more an argument that we had thought was adequately answered at the prehearing conference, namely that the fuel to be shipped by Vepco may exceed an average irradiation level of 33,000 MWD/MTU. CCLC again cites page 23 of the Staff's <u>Environmental</u> <u>Assessment</u> and argues that "a factual dispute over this issue may arise in the future." As we took pains to point out at the prehearing conference, the burn-up rate of 36,000 MWD/MTU set out at page 23 of the <u>Environmental</u> Assessment is the assumed burn-up for North Anna fuel, none

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of which is going to be shipped from Surry. Moreover, no factual dispute over the Surry burn-up level is likely to arise. We say this because Vepco will not ship fuel exceeding an average irradiation level of 33,000 MWD/MTU. Vepco has represented that fact to NRC in response to a question submitted to it by the Staff, and copies of the question and Vepco's commitment, dated September 13, 1983, are attached to this Reply as Attachment A.

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Finally, CCLC resurrects a concern about the 6. "risk of sabotage or diversion" at the end of its Brief. CCLC Brief at 18. Vepco, of course, has acknowledged from the outset that the risk of sabotage of spent fuel shipments was not considered in the formulation of Table S-4. Our arguments about Table S-4 do not involve sabotage. They are directed at CCLC's Contention 1, to the extent it involves the risks of accidents and human error, and to CCLC's Contention 5, to the extent it alleges that the environmental assessment does not evaluate either the risks or the consequences of accidents. In short, CCLC's odd reference to sabotage has nothing to do with Table S-4 and thus nothing to do with the issues being briefed. Since CCLC has raised the matter, however, we should reemphasize what we said in our Response to the Contentions of Concerned Citizens of Louisa County, namely that CCLC

has set out nothing approaching an adequate basis for a contention involving sabotage. We also remind the Board of CCLC's representation at the prehearing conference that:

We're not saying that the risk of sabotage is so great that this stuff should not be shipped, and we don't intend to litigate sabotage tully.

We have not come up with a scenario in which the Red Brigade or someone captures a truck and opens it and what not, because we don't think that this is necessary. (Tr. 106).

7. We leave the Board with this thought: The environmental effects of spent fuel shipments from the Surry Power Station have now been dealt with twice, in each case on a basis independent of the other. They were revaluated first on a site-specific basis in connection with the issuance of the Surry operating licenses. They have now been dealt with by the Staff through the use of Table S-4. To require that they be evaluated yet a third time - an evaluation that would surely result in another finding that the environmental effects of such shipments will be negligible - would produce precisely the result the Commission sought to avoid when it promulgated Table S-4.

Respectfully submitted,

VIRGINIA ELECTRIC AND POWER COMPANY

By <u>/s/ Michael W. Maupin</u> Michael W. Maupin, Counsel

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#### Of Counsel

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Michael W. Maupin Marcia R. Gelman

HUNTON & WILLIAMS P. O. Box 1535 Richmond, Virginia 23212

Dated: October 1, 1984

### CERTIFICATE OF SERVICE

I hereby certify that I have this day served Applicant's Reply to Concerned Citizens of Louisa County's Brief on Table S-4 Issues upon each of the persons named below by depositing a copy in the United States mail, properly stamped and addressed to him at the address set out with his name: Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Chief Docketing and Service Section

Sheldon J. Wolfe, Chairman Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. Jerry Kline Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. George A. Ferguson School of Engineering Howard University 2300 5th Street Washington, D.C. 20059 Henry J. McGurren, Esq. U.S. Nuclear Regulatory Commission Washington, D.C. 20555

James B. Dougherty, Esq. 3045 Porter Street, NW Washington, D.C. 20008

Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Atomic Safety and Licensing Appeal Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

> By <u>/s/ Michael W. Maupin</u> Michael W. Maupin, Counsel for Virginia Electric and Power Company

Dated: October 1, 1984

Meterology and Effluent Treatment Bromehs (4)

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ADDITIONAL INFORMATION NEEDED Meteorology and Effluent Treatment Branch

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- Please provide the calculated burnup (equilibrium core) of North Anna and Surry fuel, in megawatt-days per metric ton of uranium.
- 2. Please provide the following:
  - a. Weight of uranium per fuel assembly, in kg.
  - b. Number of fuel assemblies in core.
  - c. Number of fuel assemblies removed per reload at equilibrium cycle.
- Please provide an estimate of the weight, compacted volume, and radioactivity (curie content) of the racks to be removed, cut-up, and disposed of as solid radioactive waste.







# VIRGINIA ELECTRIC AND POWER COMPANY Richmond, Viboinia 23261

W. L. STEWART VICE PRESIDENT NUCLEAR OPERATIONS

September 13, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attn: Mr. James R. Miller, Chief
Operating Reactors Branch No. 3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Serial No. 456 PSE/HSM:jdm:0004N Docket Nos. 50-338 50-339 License Nos. NPF-4 NPF-7

Gentlemen:

## ADDITIONAL INFORMATION PROPOSED OPERATING LICENSE AMENDMENT NPF-4 AND NPF-7 NORTH ANNA POWER STATION UNIT NOS. 1 AND 2

We have reviewed your letter of July 25, 1983 in which you requested additional information on the Spent Fuel Pool Storage Capacity Expansion. (8 questions) In addition to these questions, we have recently received on an informal basis additional questions from the Auxiliary Systems Branch (13), the Materials & Qualifications Branch (2), the Core Performance Branch (1), the Meteorology and Effluent Treatment Branch (1), and the Radiological Assessment Branch (3).

The eight questions in your letter of July 25, 1983 will be labeled A.1 through A.8. The thirteen questions from the Auxiliary Systems Branch will be labeled B.1 through B.13. The two questions from the Materials & Qualifications Branch will be labeled C.1 and C.2. The question from the Radiological Assessment Branch will be labeled D.1. The three questions from the Meteorology and Effluent Treatment Branch have been previously answered and forwarded to you by our letter dated June 16, 1983, Serial No. 450B.

The answers to the above questions are enclosed herein with the exception of the following: A.4, A.6, B.2, B.4, B.7, C.1, and E.3. These remaining questions will be answered by October 1, 1983.

If you require further information on this matter, we would be pleased to meet with your staff at their earliest convenience.

Very truly yours.

n. L. Strwalt

cc: Mr. James P. O'Reilly Regional Administrator Region II U.S. Nuclear Regulatory Commission Atlanta, Georgia 30303 Mr. M. B. Shymlock NRC Resident Inspector North Anna Power Station

bc: R. H. Leasburg Mr 9/2 W. C. Spencer Gr H. S. McKay J. W. Waddill Gg J. C. Harris, Jr. Mr W. R. Cartwright E. R. Smith MLO H. L. Bowling, Jr. 96-83 E. W. Harrell J. H. Leberstien THL 94/83 NP-51.2 NRC Letter Etc. New of thes -JHLGIEWH 9/1/83 Central Files 1 GOV 02-54-03-02-01

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## Question E.1:

Please provide the calculated burnup (equilibrium core) of North Anna and Surry fuel, in megawatt - days per metric ton of uranium.

## Answer:

The Surry and North Anna equilibrium reload cores are being designed now for an average discharge burnup of approximately 36,000 MWD/MTU. However, it should be noted that the average burnup of the 500 Surry fuel assemblies which are to be stored at North Anna will be less than 33,000 MWD/MTU.

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