

NRC PUBLIC DOCUMENT ROOM



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Appeal Board

In the Matter of	)	
	)	
TENNESSEE VALLEY AUTHORITY	)	Docket Nos. STN 50-518
	)	STN 50-519
(Hartsville Nuclear Plants	)	STN 50-520
Units 1A, 2A, 1B, and 2B)	)	STN 50-521

BRIEF IN SUPPORT OF  
EXCEPTIONS OF INTERVENORS, WILLIAM N. YOUNG,  
ET AL, TO THE DECISION ON MOTION  
FOR SUMMARY DISPOSITION OF THE  
ATOMIC SAFETY AND LICENSING BOARD  
DATED OCTOBER 31, 1978

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I

INTRODUCTORY STATEMENT

This Appeal comes to the Atomic Safety and Licensing Appeal Board on exceptions filed by the Intervenor, William N. Young, et al (Intervenor) to a decision of the Atomic Safety and Licensing Board (Licensing Board), dated October 31, 1978 and docketed November 1, 1978, which decision granted a Motion for Summary Disposition previously filed by the applicant, Tennessee Valley Authority (TVA) concerning the location of the discharge diffuser for the Hartsville

Nuclear Plants.

In order to place the issues in context, we review briefly the proceedings leading to this appeal.

On March 17, 1978 this Appeal Board issued its decision (ALAB-463) affirming in part and reversing in part the initial decision of the Licensing Board, dated April 28, 1977, authorizing the issuance of construction permits for the four units of the Hartsville Nuclear Plant. One issue involved the location of the discharge diffuser into the Cumberland River. Near Dixon Island, in that river, a mussel bed had been located, which contained specimens of lampsilis orbiculata, a mussel on the endangered species list pursuant to the Endangered Species Act of 1973.

In its initial decision, the Licensing Board had approved locating the discharge diffuser downstream from the mussel bed and had given a conditional approval to TVA's preferred location, upstream from the mussel bed, the condition being that the upstream location be approved by the Department of the Interior. This Appeal Board, in ALAB-463, reserved decision on the downstream location (that location is not presently in issue) and reversed the Licensing Board on its conditional approval of the upstream location. At the risk of oversimplification, the key element in that reversal was the absence of the required consultation with the Department of the Interior as to that location, pursuant to Section 7 of the Endangered Species Act, as well as all parties' comments to

that consultation.

Under date of March 15, 1978, the Department of the Interior rendered an opinion concerning the upstream location (Biological Opinion Letter). Under date of March 29, 1978, TVA filed its motion, headed "Applicant's Motion for Summary Disposition on the Acceptability of Construction of the Discharge Diffuser at a Point Between Dixon Island and the Upstream End of the Mussel Bed" (Motion for Summary Disposition). After various filings by the parties, the Licensing Board issued its decision and order dated October 31, 1978, granting that motion and issuing certain directions to the NRC Staff.

## II

### ISSUES PRESENTED

The statements of material facts as to which TVA asserted there is not a genuine issue to be heard (Numbered 1 through 7) and the position of the Intervenor (agreeing as to numbers 1 and 2 and disputing numbers 3 through 7) are stated by the Licensing Board, with its findings, in its decision of October 31, 1978. The exceptions filed by the Intervenor present two issues:

1. Under the present record, are there any genuine issues of fact material to the protection of the endangered species from impacts of construction of the discharge diffuser at the proposed upstream location?

2. Under the present record, are there any genuine issues of fact material to the protection of the endangered species from impacts of operation of the discharge diffuser at the proposed upstream location?



### III

#### IMPACTS OF CONSTRUCTION

Exception 1 asserts errors in the Licensing Board's finding that:

"the construction and operation of the diffuser discharge at the upstream location will not jeopardize the continued existence of the endangered pink mucket pearly mussel, Lampsilis orbiculata. Therefore, there is not a genuine issue of material fact to be heard as to TVA's statement of fact No. 3."

The Board's finding was regarding Applicant's proposed statement of fact Number 3 which says:

The Biological Opinion of the Department of the Interior is that construction of the discharge diffuser in the area between Dixon Island and the upstream edge of the mussel bed will not jeopardize the continued existence of the pink mucket pearly mussel, Lampsilis orbiculata.

Proposed statement of fact 3 by its terms deals only with construction of the diffuser. Intervenor take exception to the words "and operation" in the Board's findings. As discussed below, Intervenor feel that there are no adequate safeguards regarding the operational phase of the project and hence our exception. Intervenor assert that hearings must be held as to proper safeguards necessary for the Applicant to operate diffuser at the upstream location.

Exception 2 asserts error in the Licensing Board's finding that "there is no longer any genuine issue of fact

to be heard as to TVA's statement of fact No. 4." That proposed statement of fact is:

"The record in this proceeding confirms the opinion of the Department of the Interior that the small amount of sediment which would be added by construction of the discharge diffuser will not adversely affect the mussels."

The major concern in the compromise construction phase monitoring plan, approved by the parties and approved by the Licensing Board (Slip Opin. at 17) is the detection of sedimentation. With the adoption of this monitoring plan there are no longer any genuine issues of fact relating to the protection of Lampsilis orbiculata during construction of the discharge diffuser at the proposed upstream location. Intervenor's point out that the statement in the Board's opinion regarding the amount of siltation that "It does not appear from any evidence offered in this matter, that there is available any precise answer to 'how much is too much' ... (Slip Opin. at 6) is in error. In "Applicant's Response to Interrogatories" filed May 11, 1978, the answer to interrogatory 1, part (d) indicates that an aggregate of 1/4 inch of additional siltation would cause most of the common fresh-water mussels to be unable to maintain themselves. The Applicant goes on to say that its dredging "will not result in deposition of sediment on the Dixon Island mussel bed to a thickness even approaching 1/4 inch". Neither

Intervenors or the Staff offered any evidence to contradict this evidence in any way. Intervenors assert that this 1/4 inch aggregate deposition standard is the proper standard to be used with the compromise monitoring plan. As long as all parties continue to agree on this standard there are no longer any genuine issues of material fact regarding construction effects of the upstream diffuser location upon Lampsilis orbiculata.

We emphasize our view that the Licensing Board's adoption of the construction phase monitoring plan is not a determination that diffuser construction will not jeopardize Lampsilis orbiculata or its habitat, rather, it provides a procedure which, if followed, should provide sufficient safeguards so that TVA can detect a dangerous condition and take corrective action before harm results. Therefore we support the Licensing Board's direction to the NRC Staff to incorporate the monitoring plan in any authorization to construct the diffuser, and to observe the dredging to verify that the plan is being adhered to and that accumulation of sediment is acceptably small. (Slip Opin. at 17).

The Interior Department's commitment to have a representative on the site during early dredging, to verify adherence to the monitoring plan, is further assurance that



the endangered mussel will be protected during construction. (See letter dated October 27, 1978, from William C. Hickling, Area Manager, Fish and Wildlife Service, and trammittal letter dated November 1, 1978 from Alvin H. Guttermann, Staff Attorney, TVA, copies attached to this brief as Attachment 1.)

Subject to this Board's acceptance of the compromise monitoring plan as stated above, Intervenor withdraw Exception 2 and pursue Exception 1 only as to effects of operation of the discharge diffuser.

#### IV

##### IMPACTS OF OPERATION

Intervenor's Exceptions 3, 4 and 6 assert error in the Licensing Board's findings on TVA's proposed statement of facts 5, 6 and 7, respectively, all of which deal with impacts from plant operation. These proposed statements of fact are as follows:

##### Proposed Statement of Fact Number 5

The record in this proceeding confirms the opinion of the Department of the Interior that the heated water discharged from the Hartsville Nuclear Plants during plant operation will not impact the mussel bed or fish in the area.

##### Proposed Statement of Fact Number 6

The record in this proceeding confirms the opinion of the Department of the Interior that the release of

radiation from the Hartsville Nuclear Plants during routine operation will have no effect on the pink mucket pearly mussel.

Proposed Statement of Fact Number 7

The record in this proceeding confirms the opinion of the Department of the Interior that construction and operation of the discharge diffuser in the area between Dixon Island and the upstream end of the mussel bed is environmentally acceptable and will not jeopardize the continued existence of the pink mucket pearly mussel, Lampsilis orbiculata.

The Licensing Board found there was no genuine issue of fact to be heard as to each of these statements of fact. (Slip Opin. at 10, 12, 16).

Intervenors urged the Licensing Board to impose, as a condition to construction of the discharge diffuser at the upstream location, a requirement of some minimum standards for monitoring the impacts of plant operation on the endangered mussel species. Rejecting this, the Board wrote:

"As indicated previously, the record and findings in this construction permit proceeding clearly show that operation of the plant will not cause any significant adverse effects upon the endangered species of mussels. Therefore, this Board will not require as a condition for the construction of the discharge diffuser, a monitoring program of any format for the period of plant operation. However, the Board orders the NRC Staff to consider the protection of the endangered mussel species, Lampsilis orbiculata, in developing the environmental technical specifications for the plant at the operating license stage." Slip Opin. at 15, 16.

Intervenors' Exception 5 asserted error in failing to impose a requirement of minimum standards for monitoring

operational impacts.

That there is a genuine issue of material fact as to both the effects of the temperature of the effluent from the diffuser pipe and the impacts of routine releases of radionuclides upon the endangered mussel species, Lampsilis orbiculata, can be seen from even a cursory reading of the three affidavits of Robert J. Neff, PhD, which were submitted as part of Intervenor's responses to Applicant's motion for Summary Disposition dated June 7, 1978. Nothing is known about the tolerances of this particular organism for various environmental variables such as temperature, oxygen concentration, pH, turbidity, sensitivity to pollutants, etc. It is because of this that Intervenor has insisted upon monitoring the effects within the mussel bed by monitoring the health of individual members of the bed. It is possible that the species may survive or even thrive once the HNP becomes operational, but the affidavits supplied by Intervenor cast substantial doubt. The only way to safely proceed is by establishing adequate safeguards to tell us what is happening within the bed and if Intervenor's expert is correct, to identify and mitigate the problems, hopefully before irreparable harm comes to those members of Lampsilis orbiculata within the bed.

We believe the Licensing Board has examined the conflicting evidence in the record and determined the preponderance is

against Intervenor's position, instead of examining the evidence to determine if there is a genuine issue of material fact.

Summary disposition procedure under Section 2.749 has its judicial counterpart in Rule 56 of the Federal Rules of Civil Procedure. On the basis of the record, the Board is to determine "whether there is warrant for an evidentiary trial; i.e., whether there is 'a genuine issue as to any material fact' bearing upon the claim or claims as to which summary resolution is sought." Alabama Power Company (Joseph M. Farley Nuclear Plant, Units 1 and 2) ALAB-182, RAI-74-3210 at 217.

A Licensing Board has stated the principles:

"The parties agree that 'the considerations governing summary judgment are analogous to those used in deciding a motion for a directed verdict' and that 'the opposing party need not show that he would prevail on the factual issues, but only that there are such issues to be tried.' Public Service Co. of N. Hampshire (Seabrook Sta.), LBP-74-36, RAI-74-5, 877, 877-878 (May 17, 1974), citing Amer. Mfg. Mutual Assur. Co. v. ABC & Paramount Theaters, 387 F.2d 280 (2 Cir. 1967); cf. 10 CFR Section 2.749 and Rule 56, FRCP. Furthermore, as the Staff points out, the purpose of the summary disposition rule 'is not to cut litigants off from their right of trial if they really have evidence which they will offer on a trial, it is to carefully test this out, in advance of trial, by inquiring and determining whether such evidence exists.' Whittaker v. Coleman, 115 F.2d 305, 307 (5 Cir. 1940). Thus, in deciding a motion for summary disposition, the record is to be viewed in the light most favorable to the party opposing the motion. This the Board has done in evaluating the two motions and Intervenor's response. But,



in order to defeat such motions, the Intervenor still must establish (or the Board must perceive from the record) that there does exist a genuine issue of material fact with respect to each contention so attacked. At this stage, mere allegations in the pleadings are not sufficient to establish the existence of an issue of material fact. 10 CFR Section 2.749(b); see Orvis v. Brickman, 95 F. Supp. 605 (USDC, D.C. 1951), aff'd, 196 F.2d 762 (D.C.Cir. 1952); see also 6 Moore Section 56.15[3]. Gulf States Utilities Company (River Bend Station, Units 1 and 2) LPB-75-10, NRCI 75-3, 246 at 247, 248.

It is unquestioned that the Licensing Board was correct in considering the issue of operational impacts as well as construction impacts on the endangered species. It was directed to do so by the Appeal Board (ALAB-463, Slip Opin. at 39) and operational impacts were discussed in the Biological Opinion Letter. This seems proper under both the Endangered Species Act of 1973 and the National Environmental Protection Act. (NEPA issues were decided before the endangered species of mussel was found to exist in the mussel beds near the Hartsville Nuclear Plant location. It seems likely that an environmental impact statement should be issued, or there should be a determination that one is not required under NEPA, on the impacts of the discharge diffuser upon the endangered species.)

The standards proposed by Dr. Neff in his three affidavits, filed with Intervenor's responses dated June 7, 1978, August 14,



1978 and October 10, 1978 are reasonable in scope and technically feasible. In summary, these standards provide for the following:

1. Monitoring should be conducted upstream from the plant, in the area of the discharge diffuser and downstream from the plant, so long as an analysis of the data obtained reveals the presence of conditions traceable to the plant operation, which are known to be or are reasonably suspected of being harmful to the endangered species.

2. The following conditions should be monitored:

- a. Survival of the Endangered Species.
- b. Sediment, including size, chemical and organic content.
- c. Turbidity.
- d. Water Pollutants, including biocides.
- e. Pathological Survey of samples of mussels other than the endangered species by histopathological examination to determine if there is any increase in the number of tumors in those members found below the Diffuser Outfall pipe versus those found above.
- f. Determine levels of radionuclides in the shell, gills, and gonads.

3. The sampling frequency should be quarterly, that is four monitoring periods each year.

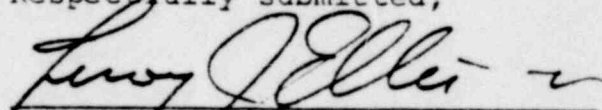
4. The raw data and results of each monitoring should be made available to the State of Tennessee, the U.S. Fish and Wildlife Service, and to Intervenor.

That the Licensing Board in a construction permit proceeding, can impose requirements applicable to the operating license stage, is established by Arkansas Power and Light Co. (Arkansas Nuclear One, Unit 2) ALAB-94, RAI-73-1 25 (1973), involving a NEPA requirement.

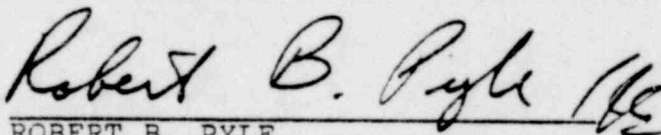
#### CONCLUSION

For the reasons stated, this case should be remanded for an evidentiary hearing, or this Board should impose plant operating phase standards for a monitoring plan, as a condition to approving the upstream discharge diffuser location.

Respectfully submitted,



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December 18, 1978.

TENNESSEE VALLEY AUTHORITY

KNOXVILLE, TENNESSEE 37902

November 1, 1978

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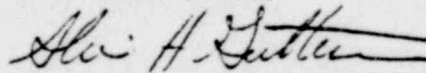
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Re: In the Matter of Tennessee Valley Authority  
(Hartsville Nuclear Plants, Units 1A, 2A, 1B and 2B)  
Docket Nos. STN 50-518, STN 50-519, STN 50-520 and  
STN 50-521

Gentlemen:

In accordance with the agreement in the telephone conference on October 30, 1978, I am enclosing a copy of the October 27, 1978, letter from William C. Hickling, Area Manager, Fish and Wildlife Service. That letter documents the agreement of the Fish and Wildlife Service that its representative will observe the first few days of dredging for the Hartsville Nuclear Plants diffuser and will distribute a report summarizing the monitoring data.

Very truly yours,



Alvin H. Gutterman  
Staff Attorney

Enclosure  
cc (Enclosure): See list on page 2

Attachment 1

John F. Wolf, Esq., Chairman  
Dr. J. V. Leeds, Jr.  
Dr. Forrest J. Remick  
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Leroy J. Ellis III, Esq.  
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November 1, 1978

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## United States Department of the Interior

## FISH AND WILDLIFE SERVICE

ROOM 279, FEDERAL BUILDING  
ASHEVILLE, NORTH CAROLINA 28801

October 27, 1978

Mr. Alvin H. Gutterman  
Division of Law  
Tennessee Valley Authority  
400 Commerce Avenue  
Knoxville, Tennessee

Dear Mr. Gutterman:

This letter has been prepared to reaffirm the position of the Fish and Wildlife Service relative to the monitoring program developed for discharge diffuser construction in the Cumberland River. The diffuser construction is an integral component of the Hartsville Nuclear Plant.

As discussed at the September 7, 1973, meeting in Nashville, a Service representative will be present on site during the initial 2-3 days of actual dredge removal to actually verify that TVA is adhering to the monitoring plan. Afterwards, a summary of sediment data collected during this initial phase will be furnished the Intervenor.

Please keep this office advised of your schedule for this particular phase of the project. If you have any questions regarding this matter, please let me know.

Sincerely,

William C. Hickling  
Area Manager

[illegible]



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CERTIFICATE OF SERVICE

I hereby certify that I have served the original and twenty conformed copies of the following documents on the Nuclear Regulatory Commission by depositing them in the United States mail, postage prepaid and addressed to Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555, Attention: Chief, Docketing and Service Section:

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ET AL, TO THE DECISION ON MOTION  
FOR SUMMARY DISPOSITION OF THE  
ATOMIC SAFETY AND LICENSING BOARD  
DATED OCTOBER 31, 1978.

and that I have served a copy of each of the above documents upon the persons listed below by depositing it in the United States mail, postage prepaid and addressed:

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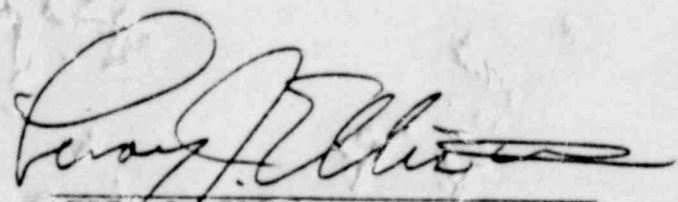
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This 18 day of  
December, 1978

  
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Attorney for Intervenor,  
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