

50-257/260/296

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TO: Mr. V. Steillo

FROM: TVA
Chattanooga, Tenn. 37401
J.E. GillelandDATE OF DOCUMENT
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3-13-78☒ LETTER
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PROP

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1516NEO

DESCRIPTION Ltr trans the following: 1P

ENCLOSURE Vol. 1 entitled "Summary of the Eval.
of Browns Ferry Plant Intake Structure"....Vol. 2 entitled "Analysis of Flow Patterns in the
Vicinity of Browns Ferry Plant Intake".....Vol. 3 entitled "Eval of Plankton Entrainment by
the Intake of Browns Ferry Plant".....Vol. 4 entitled "Effects of the Browns Ferry Plant
Cooling Water Intake on the Fish Populations of
Wheeler Reservoir".....

2½ inches thick

PLANT NAME : Browns Ferry Plant Units 1-2-3
JCM 3-31-78

Dist PER S. SHEPPARD 3/31/78

14 ENCL/REPR LTRS

SAFETY

FOR ACTION/INFORMATION

ENVIRONMENTAL

ASSIGNED AD:

ASSIGNED AD: V. MOORE (LTR)

BRANCH CHIEF:

BRANCH CHIEF:

PROJECT MANAGER:

DICK CLARK

PROJECT MANAGER:

LIC. ASST: (2)

S. SHEPPARD

LIC. ASST:

B. HARLESS

INTERNAL DISTRIBUTION

REG FILES

SYSTEMS SAFETY

PLANT SYSTEMS

SITE SAFETY &

NRC PDR

R. MATSON

TEDESCO

ENVIRON ANALYSIS

I & E (2)

SCHROEDER

BENAROYA

DENTON & MULLER

OELD

LATNAS

CRUTCHFIELD

GOSSICK & STAFF

ENGINEERING

IPPOLITO

HANAUER

KNIGHT

F. ROSA

ENVIRON TECH

MTPC

BOSNAK

ERNST

CASE

SIHWEIL

OPERATING REACTORS

BALLARD (2)

ROYD

PAWLICKI

STELLO

YOUNGBLOOD

EISENHUT

PROJECT MANAGEMENT

REACTOR SAFETY

SHAO

SITE TECH

SKOVHOLT

ROSS

BAER

GAMMILL (2)

P. COLLINS

NOVAK

BUTLER

HOUSTON

ROSZTOCZY

GRIMES (2)

SITE ANALYSIS

WELTZ

CHECK

VOLLMER

HELMES

BUNCH

SK

AT & I

J. COLLINS

SALTZMAN

KREGER

RUTBERG

EXTERNAL DISTRIBUTION

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REG V (J. HANCHETT)

16 CYS SENT CATEGORY

TO ACRS

780900077

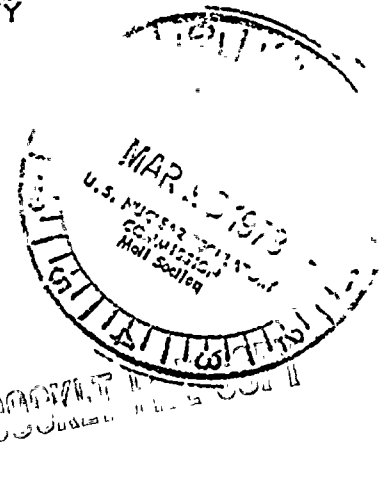
TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

830 Power Building

March 9, 1978

Director of Nuclear Reactor Regulation
Attention: Mr. Victor Stello, Jr., Director
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Dear Mr. Stello:

Enclosed for your information are TVA's report concerning environmental effects of the plant intake at Browns Ferry Nuclear Plant and a copy of H. G. Moore's February 13, 1978, letter to John C. White transmitting the report to EPA. The report consists of the four volumes listed below:

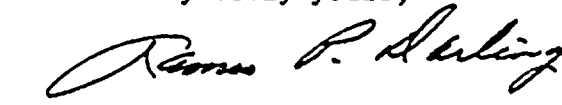
- Volume 1 - Summary of the Evaluation of the Browns Ferry Nuclear Plant Intake Structure
- Volume 2 - Analysis of Flow Patterns in the Vicinity of Browns Ferry Nuclear Plant Intake
- Volume 3 - Evaluation of Plankton Entrainment by the Intake of Browns Ferry Nuclear Plant
- Volume 4 - Effects of the Browns Ferry Nuclear Plant Cooling Water Intake on the Fish Populations of Wheeler Reservoir

As indicated by evaluations presented in Volumes 3 and 4, no significant impingement and entrainment are occurring. These evaluations demonstrate no significant environmental impact on Wheeler Reservoir because of the Browns Ferry Nuclear Plant intake structure.

Fish entrainment estimates were not as definitive as other biological parameters measured. For this reason, we are continuing a further year of study to better define the fish entrainment and effect of the Browns Ferry Nuclear Plant intake on the fisheries resource of Wheeler Reservoir.

From the evaluations presented in this report, we believe that no modifications to the intake at Browns Ferry are required.

Very truly yours,


for J. E. Gilleland
Assistant Manager of Power

Enclosures (14)

780900077

FEB 13 1978

Mr. John C. White
Administrator, Region IV
Environmental Protection Agency
345 Courtland Street, NE.
Atlanta, Georgia 30308

Dear Mr. White:

Re: Browns Ferry Nuclear Plant
NPDES Permit No. AL0022080

In accordance with Part III. E. and Part I.B.1.b. of the above-referenced permit, enclosed are documents which constitute TVA's report related to environmental effects of the plant intake. The report consists of four volumes as follows:

Volume 1, Summary of the Evaluation of the Browns Ferry Nuclear Plant Intake Structure

Volume 2, Analysis of Flow Patterns in the Vicinity of Browns Ferry Nuclear Plant Intake

Volume 3, Evaluation of Plankton Entrainment by the Intake of Browns Ferry Nuclear Plant

Volume 4, Effects of the Browns Ferry Nuclear Plant Cooling Water Intake on the Fish Populations of Wheeler Reservoir

The evaluations contained in Volumes 3 and 4 and summarized in Volume 1 of the report indicates that no significant impingement and entrainment are occurring and thus no modifications are required as specified in Part III. E. of the permit. We believe that these evaluations demonstrate that the plant intake is not resulting in a significant adverse environmental impact to Wheeler Reservoir.

For reasons indicated in the report, quantification and final assessment of fish entrainment cannot be as definitive as the other biological assessments. Therefore, we will continue for one year the studies necessary to define fish entrainment estimates and to assess potential impacts of plant entrainment on the fisheries resource of Wheeler Reservoir. Evaluation of existing fisheries entrainment data indicate that continued operation of the facility during the additional year of study will not pose a threat to the aquatic communities.

Mr. John C. White

FEB 13 1978

We believe that this report shows that no modifications of the Browns Ferry intake are required.

Sincerely yours,



Harry G. Moore, Jr., Ph.D.
Acting Director of Environmental
Planning

JSM:RS

Enclosures

cc (Enclosures):

Mr. James W. Warr (2)

Technical Staff

Alabama Water Improvement Commission

749 State Office Building

Montgomery, Alabama 36104

