NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER: 50-259/260/296

FILE NUMBER:

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO: Mr. V. Stello	FROM: TVA Chattanooga, Tenn. 37401 J.E. Gilleland	DATE OF DOCUMENT: 3-9-78 DATE RECEIVED: 3-13-78
☑ LETTER ☐ ORIGINAL ☐ COPY ☐ NOTORIZED ☑ UNCLASSIFIED	PRCP	INPUT FORM
NUMBER OF COPIES RECEIVED: 1 SIGNED		

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 AER 5-SHEPPARD 3/31/78

14 ENCL/REPRO LTRS

FOR ACTION/INFORMATION

SAFETY		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. MATTSON	TEDESCO	ENVIRON ANALYSIS
I & E (2)	SCHROEDER	BENAROYA	DENTON & MULLER
OELD		LAINAS	CRUTCHFIELD
GOSSICK & STAFF	ENGINEERING	IPPOLITO	
HANAUER	KNIGHT	E. ROSA	ENVIRON TECH
MIPC	BOSNAK		ERNST
CASE	SIHWEIL	OPERATING REACTORS	BALLARD (2)
BOYD	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
MELTZ	CHECK		VOLLMER
HELTEMES			BUNCH
SK	AT & I		J. COLLINS
	SALTZMAN		KREGER
	RUTBERG		

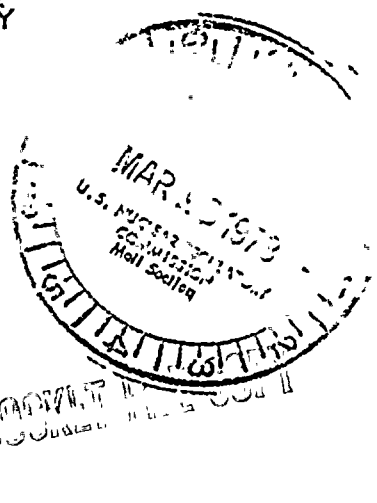
EXTERNAL DISTRIBUTION

LPDR: Athens AL	NAT LAB:	CONTROL NUMBER
TIC		780900077
NSIC		
REG V (J. HANCHETT)		
16 CYS SENT CATEGORY	TO ACRS	

NRC FORM 195 (2-76)

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