

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

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TO: Mr. B.C. Ruschie

FROM: TVA  
Chanttanogga, Tenn. 37401  
J. E. Gilleland

DATE OF DOCUMENT

6-15-76

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6-18-76

☒ LETTER☐ NOTORIZED

PROP

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1 signed

DESCRIPTION Ltr trans the following:

ENCLOSURE 44th Revision to "Plan for Evaluation, Repair, &amp; Return to Service of Browns Ferry 1 &amp; 2 (March 22, 1975) Fire"....

(45 cys encl rec'd)

PLANT NAME: Browns Ferry 1 &amp; 2

Do Not Remove  
ACKNOWLEDGED

## SAFETY

## FOR ACTION/INFORMATION

## ENVIRO

DHL 6-21-76

ASSIGNED AD:

ASSIGNED AD:

☒ BRANCH CHIEF:

Schwenker

BRANCH CHIEF:

☒ PROJECT MANAGER:

Wambach

PROJECT MANAGER:

☒ LIC. ASST.:

Sheppard

LIC. ASST.:

## INTERNAL DISTRIBUTION

☒ REG FILE (2)

SYSTEMS SAFETY

PLANT SYSTEMS

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☒ NRC PDR (2)

HEINEMAN

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☒ I & E (2)

SCHROEDER

☒ BENAROYA

DENTON &amp; MULLER

OELD

LATNAS

GOSSICK &amp; STAFF

ENGINEERING

☒ IPPOLITO (4)

ENVIRO TECH.

MIPC

MACCARRY

KIRKWOOD

ERNST

CASE

KNIGHT

BALLARD

☒ HANAUER

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OPERATING REACTORS

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PROJECT MANAGEMENT

REACTOR SAFETY

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P. COLLINS

NOVAK

SHAO

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ROSZTOCZY

BAER

PETERSON

CHECK

BUTLER

SITE ANALYSIS

MELTZ

GRIMES

VOLLNER

HELTEMES

AT &amp; I

☒ C. LARA

BUNCH

SKOVHOLT

SALTZMAN

☒ ORNSTEIN

J. COLLINS

RUTBERG

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KREGER

## EXTERNAL DISTRIBUTION

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☒ LPDR: Athens, ALA.

NAT LAB:

BROOKHAVEN NAT LAB

☒ TIC:

REG. VIE

ULRIKSON (ORNL)

☒ NSIC:

LA PDR

ASLB

CONSULTANTS

☒ ACRS 16 CYS

TO L.A.

6197



100

1.  $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$



830 Power Building  
TENNESSEE VALLEY AUTHORITY  
CHATTANOOGA, TENNESSEE 37401

JUN 15 1976

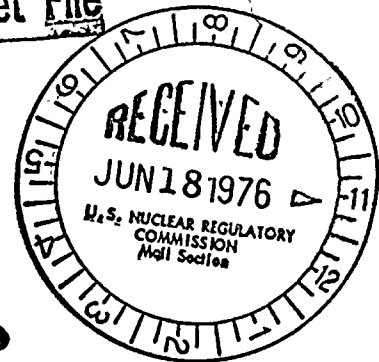
Regulatory Docket File

Mr. Benard C. Rusche, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Rusche:

In the Matter of the )  
Tennessee Valley Authority )

Docket Nos. 50-259  
50-260



Enclosed are 45 copies of the 44th revision to a document previously submitted on April 15, 1975, entitled "Plan for Evaluation, Repair, and Return to Service of Browns Ferry Units 1 and 2 (March 22, 1975, Fire)." The revision consists of the following:

Material Revised

Evaluation Plan  
Part

Program for Sampling, Analysis, and  
Cleanup of Residue on Affected  
Structures, Systems, and Components

V

This revision includes additional information regarding the surveillance program for electrical cables that have been coated with flame retardant material (Flamemastic 71A).

Instructions for entering the 44th revision are also included.

Very truly yours,

*J. E. Gilleland*

J. E. Gilleland  
Assistant Manager of Power

Enclosures  
CC: See page 2



6197

JUN 15 1976

Mr. Benard C. Rusche

CC, (Enclosures):

Mr. Frank Long  
Regional Office  
U.S. Nuclear Regulatory Commission  
230 Peachtree Street, NW., Suite 818  
Atlanta, Georgia 30303

Mr. Norman C. Moseley, Director (3)  
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Mr. C. E. Murphy  
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Atlanta, Georgia 30303

Regulatory Docket File

PLAN FOR EVALUATION, REPAIR, AND RETURN  
TO SERVICE OF BROWNS FERRY UNITS 1  
AND 2 (MARCH 22, 1975, FIRE)

Filing instructions for June 14, 1976, Revision.

Received V/Ltr. Dated **6-15-76**

Insert

Part V, section B, page 37,  
attachment 5A, dated 6/9/76



H. J. Green, Power Plant Superintendent, Browns Ferry Nuclear Plant

J. R. Calhoun, Chief, Nuclear Generation Branch, 702 EB-C

BROWNS FERRY NUCLEAR PLANT UNITS 1 AND 2 - ELECTRICAL CABLE SURVEILLANCE PROGRAM

This memorandum supplements my memorandum to you dated April 27, 1976, and modifies the test intervals specified in that memorandum.

Because of concern of the NRC that cocooning of the electrical cables with Flamemastic may cause heating and degradation of the cable, TVA has committed to inspect and test certain selected cable jackets periodically. An inspection and test should be made at the first unit 1 refueling outage, at the second unit 1 refueling outage, and thereafter at approximately 3-year intervals at the nearest unit 1 refueling outage.

A low-voltage power cable was selected for sampling since it would continuously carry current of sufficient magnitude to produce low-level heating, if any. Control and signal cables carry only small intermittent currents which would produce no, or little, heat.

The cable jacketing was selected as the primary indicator of cable degradation. Cables PH11 are single conductor, 400-KCM copper, with cross-linked polyethylene insulation and a polyvinyl chloride jacket. The temperature rating of the insulation is 90° C and the temperature rating of the jacket is 75° C. Calculations based on the thermal resistance of the insulation, jacket, and approximately 180 percent of normal current flow show that the temperature differential between the conductor and the outside of the insulation is 3.47° C, and between the conductor and the outside of the jacket is 4.73° C. Since the temperature rating of the insulation is 15° C greater than the jacket, it is evident that any thermal degradation, if any, of the cable will be detected first in the jacket.

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J. R. Calhoun

CCF:FVH:CJC

*JRC*  
6/10/76

