

Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

June 14, 2000

10 CFR Part 50, APP.E

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Gentleman:

In the Matter of)	Docket Nos.	50-259
Tennessee Valley Authority)		50-260
			50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, and 3 EMERGENCY PLAN IMPLEMENTING PROCEDURE (EPIP) REVISIONS

TVA is submitting this notification in accordance with the requirements of 10 CFR Part 50, Appendix E, Section V, to provide NRC with the following EPIP revisions: (1) EPIP Index; and (2) EPIP-1, Revision 29A (Section 1.0). The revision date for the index and EPIP 1 changes is May 23, 2000.

The enclosed information is being sent by certified mail. The signed mail receipt signifies that you have received this information. If you have any questions, please telephone me at (256) 729-2636.

Siffcerely T. E. Abnev Manager of Licensing and Industry Affairs





U.S. Nuclear Regulatory Commission Page 2 June 14, 2000

Enclosures

1

٦.

î

ì

cc (Enclosures):

NRC Resident Inspector Browns Ferry Nuclear Plant 10833 Shaw Road Athens, Alabama 35611 (Enclosures provided by BFN Document Control Unit)

Mr. Paul E. Fredrickson, Branch Chief (2 Enclosures)
U.S. Nuclear Regulatory Commission
Region II
61 Forsyth Street S.W.
Suite 23T85
Atlanta, Georgia 30303

Mr. William O. Long, Senior Project Manager (w/o Enclosures) U.S. Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852 ENCLOSURES TENNESSEE VALLEY AUTHORITY BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3

î

З,

EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP) EPIP -1

SEE ATTACHED

GENERAL REVISIONS

GENERIC FILING INSTRUCTIONS

FILE DOCUMENTS AS FOLLOWS:

PAGES TO BE REMOVEDPAGES TO BE INSERTEDEPIP INDEX (ALL)EPIP INDEX (ALL)

1 - 3

l

EPIP-1 REVISION 29EPIP-1 REVISION 29A(Pages 1 and 13-20)(Pages 1 and 13-20)

				Brow Curator	ns rerry i Procedure	DOCIMENT	SCREEN		• • • • • • •			raye	L
	Proc	(Doct	ype= PROCE	DURE Statu Sorted h		ProcType=F	PIP			4	05/1	
Unit	Туре 	Proc Number	Title	Doc Type	FoldSta	Group Sect	Remarks	Reason Chg	Effect Dt	Rev	, OL	Lvl	Vault
0.	EPIP	EPIP-1/Secti on I	EMERGENCY CLASSIFICATION PROCEDURE (INTRODUCTION)	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	029	Y	100	IN VAULT
U	EPIP	EPIP-1/Secti on II-1.0	EVENT CLASSIFICATION MATRIX - REACTOR 1.0	PROCEDURE	ACTIVE ACTIVE	OTHER REP	PAGE 18 WILL NOT PRINT ALL CHARACTERS	Performers Change Request	05/23/2000	029A	Y	100	
			• • • • •	алан Алан Алан			(WILL NEED TO PRINT SEPARATELY						•
0	EPIP	EPIP-1/Secti on II-2.0	EVENT CLASSIFICATION MATRIX - PRIMARY CONTAINMENT 2.0	PROCEDURE	ACTIVE	other Rep	,	Procedure Simplificati on	11/04/1999	028	Y	100	IN VAULT
	ËPIP	EPIP-1/Secti on II-3.0	EVENT CLASSIFICATION MATRIX - SECONRDARY CONTAINMENT 3.0	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	029	Y	100	IN VAULT
0 1	EPIP	EPIP-1/Secti on II-4.0	EVENT CLASSIFICATION MATRIX - RADIOACTIVITY RELEASE 4 0	PROCEDURE	ACTIVE ACTIVE	other Rep	•	Procedure Simplificati on	03/09/2000	028B	Y	100	IN VAULT
) 1	BPIP	EPIP-1/Secti on II-5.0	EVENT CLASSIFICATION MATRIX - LOSS OF POWER 5.0	PROCEDURE	ACTIVE ACTIVE	OTHER REP		Performers Change Request	04/27/2000	029	Y	100	IN VAULT
Ē	SPIP	EPIP-1/Secti on II-6.0	EVENT CLASSIFICATION MATRIX - HAZARDS 6.0	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	029	Y	100	IN VAULT
E	PIP	EPIP-1/Secti on II-7.0	EVENT CLASSIFICATION MATRIX - NATURAL EVENT 7.0	PROCEDURE	ACTIVE	OTHER REP		Procedure Simplificati on	11/04/1999	028	Y	100	IN VAULT
		ta Manakati kunta	na an an Anna an Anna an Anna an Anna Anna an Anna Anna		19 2 1 1 •				a a Nacional Constantes de Caracteria de Caracteria de Caracteria de Caracteria de Caracteria de Caracteria de	41.1			
	• •			n na y sa sa Sa sa						·	rg per att i	e i	
							n de la composition de La composition de la c						

-

annon a sanan (a a sa sanan s	N 8 - P - P		Doct	Brown Curator P ype= PROCED	rocedure VRE Statu	DOCUMENT	' SCREEN ProcType=E	PIP	<u></u>			raye pg102 05/23	2 2a 8/00
	_				Sorted b	y Num							
	Proc	B . 1			Doc Sta	Group							
Unit	туре	Proc Number	Title	Doc Type	FoldSta	Sect	Remarks	Reason Chg	Effect Dt	Rev	QR	Lvl	Vault
							~~~~~~~~~			*			
0	EPIP	EPIP-1/Secti on II-8.0	EVENT CLASSIFICATION MATRIX - EMERGENCY DIRECTOR JUDGEMENT 8.0	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	029	Y	100	IN VAULT
0	EPIP	EPIP-1/Secti	TECHNICAL BASIS -	PROCEDURE	ACTIVE	OTHER		Performers	04/27/2000	029	Y	100	IN
		on III-1.0	REACTOR 1.0		ACTIVE	REP		Change Request			-		VAULT
0	EPIP	EPIP-1/Secti	TECHNICAL BASIS -	PROCEDURE	ACTIVE	OTHER		Procedure	11/04/1999	028	Y	100	TN
- 	••••	on III-2.0	PRIMARY CONTAINMENT 2.0	:	ACTIVE	REP		Simplificati on			•	100	VAULT
.0	EPIP	EPIP-1/Secti	TECHNICAL BASIS -	PROCEDURE	ACTIVE	OTHER		Performers	04/27/2000	029	v	100	TN
	s.	on III-3.0	SECONDARY CONTAINMENT 3.0	· · · · · · · · · · · · · · · · · · ·	ACTIVE	REP		Change Request	01/2//2000	023	•	100	VAULT
•													
U	Brir	on III-4.0	TECHNICAL BASIS - RADIOACTIVITY RELEASE 4.0	PROCEDURE	ACTIVE ACTIVE	other Rep		Procedure Simplificati on	03/09/2000	028B	Y	100	IN VAULT
0	RDID	FRID-1/Costi	MPCINICAL DAGIO	DRAGHENER									2000 - A.
Ŭ,		on III-5.0	LOSS OF POWER 5.0	PROCEDURE	ACTIVE	other REP		Procedure Simplificati on	04/27/2000	029	¥.	100	IN VAULT
0	EPIP	EPIP-1/Secti	TECHNICAL BASTS -	DDOCEDIIDE	ACTIV	OTURD		D					
		on III-6.0	HAZARDS 6.0	PROCEDURE	ACTIVE	REP		Simplificati on	0472772000	029	Ŷ	100	in Vault
0	EPIP	EPIP-1/Secti	TECHNICAL BASIS -	PROCEDURE	ACTIVE	OTHER		Procedure	11/04/1000	028	v	100	1 ⁻
		on III-7.0	NATURAL EVENTS 7.0	÷	ACTIVE	REP		Simplificati on	11/04/1999	020 -	1	÷.	IN VAULT
0	EPIP	<b>EPIP-1/Secti</b>	TECHNICAL BASIS -	PROCEDURE	ACTIVE	OTHER		Procedure	04/27/2000	029	Y	100	TN
	•	on III-8.0	EMERGENCY DIRECTOR JUDGEMENT 8.0		ACTIVE	REP		Simplificati	- 1, 2, , 2000	ज्यु <b>क्</b> म ^र । ।	•	100	VAULT
			ana ang ang ang ang ang ang ang ang ang						. • • •			· •	•

· · ·

-

.

.

i · .

				BLOW Curston	ия тетта т	NUCLEAL	Prant.					raye	s
	(	$\mathcal{C}$	Doct	curator ype= PROCE	DURE Statu		r screen E ProcType=	EPIP				pg10 05/(	<b>.</b>
nit 	Proc Type	Proc Number	Title	<b>Doc Type</b>	Doc Sta FoldSta	Group Sect	Remarks	Reason Chg	Effect Dt	Rev	QR	Lvl	~ Vault
	EPIP	EPIP-1/TOC	EMERGENCY CLASSIFICATION PROCEDURE (COVER/TOC)	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	05/23/2000		Y	100	
	EPIP	EPIP-10	MEDICAL EMERGENCY PROCEDURE	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/23/2000	020	Y	. 100	IN VAULT
	EPIP	EPIP-11	SECURITY AND ACCESS CONTROL	PROCEDURE	ACTIVE	other Rep		Performers Change Request	03/09/2000	008A	Y	100	IN VAULT
	EPIP	EPIP-13	RADIOCHEMICAL LABORATORY PROCEDURE	PROCEDURE	ACTIVE ACTIVE	other Rep	• • •	Performers Change Request	11/04/1999	007	Y	100	IN VAULT
	EPIP	EPIP-14	RADIOLOGICAL CONTROL PROCEDURES	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	015	Y	100	IN VAULT
	EPIP	EPIP-15	EMERGENCY EXPOSURE	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	03/09/2000	006A '	Y	100	IN VAULT
1	EPIP	EPIP-16	TERMINATION AND RECOVERY PROCEDURE	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	004	Y	100	IN VAULT
1	SPIP	EPIP-17	EMERGENCY EQUIPMENT AND SUPPLIES (INVENTORY AND OPERABILITY PROCEDURE)	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/23/2000	024	Ľ	100	IN VAULT
F	PIP	EPIP-2	NOTIFICATION OF UNUSUAL EVENT	PROCEDURE	ACTIVE	other Rep	TONY FELTMAN EXT. 3666	Performers Change Request	03/09/2000	021A 1		100	IN VAULT
									. * •				
		•			ан 1919 - Салан 1919 - Салан				• • • • •				
		•							•				

1994) 1994 - 1995

<b> </b>	an an an an an an Anna an Anna ann an		ی در این می از میشوند این بر این	DLOMI	IS LETTA W	UCLEAL 1	Lanr					raye	*
			Doct	Curator E	Procedure	DOCUMENT	C SCREEN					pg102	2a
				cype- FROCE	Sorted b	IS≢ACTIVE Num	r proctAbe=1	25T5				05/23	3/00
	Proc				Doc Sta	Group							
Unit	Туре	Proc Number	Title	<b>Doc Type</b>	FoldSta	Sect	Remarks	Reason Chg	Effect Dt	Rev	QR	Lvl	Vault
					********								
0	EPIP	EPIP-20	PLANT DATA	PROCEDURE	ACTIVE ACTIVE	other Rep			06/14/1996	009	Y	100	
0	EPIP	EPIP-21	FIRE EMERGENCY PROCEDURE	PROCEDURE	ACTIVE	other Rep	а. С. С. С	Performers Change Request	05/15/2000	003	Y	100	IN VAULT
0	EPIP	EPIP-3	ALERT	PROCEDURE	ACTIVE ACTIVE	other Rep	TONY FELTMAN, 3666	Performers Change Request	03/09/2000	024A	Y	100	IN VAULT
0	EPIP	EPIP-4	SITE AREA_EMERGENCY	PROCEDURE	ACTIVE ACTIVE	other Rep	TONY FELTMAN, X3666,	Performers Change Request	03/09/2000	023A	Y	100	IN VAULT
0	EPIP	EPIP-5	GENERAL EMERGENCY	PROCEDURE	ACTIVE ACTIVE	other Rep	TONY FELTMAN, X3666	Performers Change Request	03/09/2000	028A	Y	100	IN VAULT
0	EPIP	EPIP-6	ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER (TSC)	PROCEDURE	ACTIVE ACTIVE	other Rep	TONY FELTMAN, X3666	Performers Change Request	03/09/2000	020A	Y	100	in Vault
0	EPIP	EPIP-7	ACTIVATION AND OPERATION OF THE OPERATIONS SUPPORT CENTER (OSC)	PROCEDURE	ACTIVE ACTIVE	other Rep	TONY Feltman @ Ext. 3666	Performers Change Request	03/09/2000	018A	Y	100	IN VAULT
0	EPIP	EPIP-8	PERSONNEL ACCOUNTABILITY AND EVACUATION	PROCEDURE	ACTIVE ACTIVE	other Rep		Performers Change Request	04/27/2000	012	Y	100	IN VAULT
		• • •		• •	··· ·			1999 - Barris Barris (* 1997) 1997 - Barris Barris (* 1997) 1997 - Barris (* 1997)		1. T		•	

· ·

ł.

•

.

Total records selected: 34

* * * END OF REPORT * * *

. . .

### **TENNESSEE VALLEY AUTHORITY**

### BROWNS FERRY NUCLEAR PLANT

# **EMERGENCY PLAN IMPLEMENTING PROCEDURE**

### EPIP-1

# **EMERGENCY CLASSIFICATION PROCEDURE**

## **REVISION 29A**

PREPARED BY: T. W. CORNELIUS

PHONE: 2038

DATE: 05/23/2000

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: T. W. CORNELIUS

EFFECTIVE DATE: 05/23/2000

# **LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED** 

### **REVISION LOG**

### Procedure Number: EPIP-1

Revision Number 29A

### Pages Affected: 1, 17, 19

### Description of Change:

EC - 40

۱

This editorial change is being submitted to correct headers on page 17 and 19. Page 1 is being revised to update index revision numbers.

### EPIP-1 EMERGENCY CLASSIFICATION PROCEDURE

S. 1. 2

# **TABLE OF CONTENTS**

• . .-

<u> </u>	AGE NUMBER	<b>REVISION</b>
TABLE OF CONTENTS	1	204
SECTION I	*********	27 <b>A</b>
INTRODUCTION		
CLASSIFICATION INSTRUCTIONS	3	20
GLOSSARY	5	29
EVENT CLASSIFICATION INDEX	11	29
SECTION II		
EVENT CLASSIFICATION MATRIX		
1.0 REACTOR	13	204
2.0 PRIMARY CONTAINMENT		275
3.0 SECONDARY CONTAINMENT		20
4.0 RADIOACTIVITY RELEASES	33	22 28R
5.0 LOSS OF POWER	39	29
6.0 HAZARDS	45	29
7.0 NATURAL EVENTS	61	28
8.0 EMERGENCY DIRECTOR JUDGEMENT	67	29
SECTION III		
BASIS		
1.0 REACTOR	75	20
2.0 PRIMARY CONTAINMENT	97	27
3.0 SECONDARY CONTAINMENT		20
4.0 RADIOACTIVITY RELEASE	126	22 28R
5.0 LOSS OF POWER	139	200
6.0 HAZARDS	155	29
7.0 NATURAL EVENTS	183	28
8.0 EMERGENCY DIRECTOR JUDGEMENT	190	29

### EPIP-1 **EMERGENCY CLASSIFICATION PROCEDURE**

A start and the second sec second sec

n an the second seco an an an an an Arran (Caraba) 🖤

> ter a ser a se

• • ...•

# THIS PAGE INTENTIONALLY BLANK

.

14 ( 

and the second second second ١

PAGE 2 OF 207

**REVISION 29A** 

EMERGENCY CLASSIFICATION PROCEDURE

**1.0 REACTOR** 

# REACTOR 1.0

**1.0 REACTOR** 

**PAGE 13 OF 207** 

**REVISION 29A** 

1.0	REACTOR
-----	---------

### EMERGENCY CLASSIFICATION PROCEDURE

### **NOTES:**

1.1-U1/1.1-A1	Applicable when the Reactor Head is removed and the Reactor Cavity is flooded.
1.1 <b>-</b> S1	Applicable in Mode 5 when the Reactor Head is installed.
1.1-G2	<ul> <li>The reactor will remain subcritical under all conditions without boron when:</li> <li>All control rods are inserted to or beyond position 02</li> <li>All control rods except one are inserted to or beyond position 00</li> </ul>

• Determined by reactor engineering

### **CURVES/TABLES:**

MINIMUM AL	TABLE TERNATE	1.1 - G2 RPV FLOODING PRESS
NUMBER OF OPEN MSRVs		MARFP (PSIG)
6 or More	\	180
5		220
4		280

### EMERGENCY CLASSIFICATION PROCEDURE

### EPIP-1 SECTION II EVENT CLASSIFICATION MATRIX

°,

**1.0 REACTOR** 

WATE	RLEVEL	
DESCRIPTION	DESCRIPTION	
1.1-U1       N         Uncontrolled water level decrease in Reactor Cavity with irradiated fuel assemblies expected to remain covered by water.         OPERATING CONDITION:         - Mode 5	1.1-U2 Uncontrolled water level decrease in Spent Fuel Pool with irradiated fuel assemblies expected to remain covered by water. OPERATING CONDITION: - All	UNUSUAL EVENT
1.1-A1 N Uncontrolled water level decrease in Reactor Cavity expected to result in irradiated Fuel assemblies being uncovered.	1.1-A2 Uncontrolled water level decrease in Spent Fuel Storage Pool expected to result in irradiated fuel assemblies being uncovered.	ALERT
OPERATING CONDITION: - Mode 5 1.1-S1	OPERATING CONDITION: - All 1.1-S2	SI
Reactor water level CANNOT be maintained above -162 IN. (TAF) OPERATING CONDITION: - All	Reactor water level CANNOT be determined. OPERATING CONDITION: - Mode 1 - Mode 3 - Mode 2	TE EMERGENCY
1.1-G1         Reactor water level CANNOT be restored and maintained above -190 IN.         OPERATING CONDITION:         - Mode 1       - Mode 3         - Mode 2	1.1-G2       To Rod         Reactor water level CANNOT be determined AND         EITHER of the following conditions exists:         • The reactor will remain subcritical w/o boron under all conditions and         Less than 4 MSRVs can be opened, or Reactor pressure CANNOT be restored and maintained at least 65 PSI above Suppression Chamber pressure.         • It has NOT been determined that the reactor will remain subcritical w/o boron under all conditions and unable to restore and maintain MARFP in Table 1.1-G2.         OPERATING CONDITION:         - Mode 1       - Mode 3         - Mode 3	GENERAL EMERGENCY

### EMERGENCY CLASSIFICATION PROCEDURE

#### **NOTES:**

1.2 Subcritical is defined as Reactor power below the heating range and not trending upward.

### **CURVES/TABLES:**



CLASSIFICATION SE PROCEDURE EVENT CLAS	CTION II SIFICATION	N MATRIX 1.0 RI	ЕАСТО
SCRAM FAILURE	RE	ACTOR COOLANT ACTIVITY	
DESCRIPTION		DESCRIPTION	
	1.3-U Reactor co equivalent determined	olant activity exceeds 26 µCi/gm dose I-131 (Technical Specification Limit) as I by chemistry sample.	UNUSUAL EVENT
1.2-A	124		
Failure of automatic scram functions to bring the Reactor subcritical AND Manual scram or ARI was successful. OPERATING CONDITION: - Mode 1 - Mode 2	Reactor cool equivalent I sample. OPERATING - Mode 1 - Mode 2	J ant activity exceeds 300 µCi/gm dose odine-131 as determined by chemistry CONDITION: - Mode 3	ALERT
1.2-S Failure of automatic scram, manual scram, and ARI to bring the Reactor subcritical. OPERATING CONDITION: - Mode 1			SITE EMERGENCY
1.2-G Failure of automatic scram, manual scram, and ARI. Reactor power >3% AND EITHER of the following conditions exists: • Suppression Pool temp exceeds HCTL. Refer to Curve 1.2-G. • Reactor water level CANNOT be restored and maintained at or above -190 IN. OPERATING CONDITION: • Mode 1 • Mode 2			GENERAL EMERGENCY

- 1. K. - 1



EMERGENCY CLASSIFICATION PROCEDURE



**REVISION 29A** 

PAGE 18 OF 207

**1.0 REACTOR** 

### EMERGENCY CLASSIFICATION PROCEDURE

## EPIP-1 SECTION II EVENT CLASSIFICATION MATRIX

1.0 REACTOR

MSL/O	<b>FFGAS RADIATION</b>	LOSS OF DECAY HEAT REMOVAL	
	DESCRIPTION	DESCRIPTION	
1.4-U Valid MAIN alarm, RA-90 Valid OG PR alarm, RA-90 OPERATING - Mode 1 - Mode 2	STEAM LINE RADIATION HIGH-HIGH )-135C OR ETREATMENT RADIATION HIGH )-157A. CONDITION: - Mode 3		UNUSUAL EVENT
		1.5A Reactor moderator temperature CANNOT be maintained below 212° F whenever Technical Specifications require Mode 4 conditions or during operations in Mode 5. OPERATING CONDITION: - Mode 4 - Mode 5	ALERT
		1.5-S         Suppression Pool temperature, level and RPV pressure CANNOT be maintained in the safe area of Curve 1.5-S.         OPERATING CONDITION:         -Mode 1       -Mode 3         -Mode 2	SITE EMERGENCY
	1		GENERAL EMERGENCY

### EMERGENCY CLASSIFICATION PROCEDURE

# THIS PAGE INTENTIONALLY BLANK

. .