RADIOLOGICAL EMERGENCY PLAN

Revision Date: IP-6 (PORC 5/25/84)
(Issued JUN 12 1984)

This log sheet must be retained as the last page of the Browns Ferry Nuclear Plant Implementing Procedures Document.

Reason for revision: see coversheet

Inserted by: _____ Date Inserted: _____

Pages to be Removed			New Pages to be Inserted		
Part	Page Number	Revision	Part	Page Number	Revision
List of Effective Pages	1 of 9	05/24/84	List of Effective Pages	1 of 9	06/06/84
	2 of 9	05/24/84		2 of 9	06/06/84
IP-6	Coversheet	05/15/84	IP-6	Coversheet	05/25/84
Attachment 2	1 of 2	04/17/84	Attachment 2	1 of 2	05/25/84
Attachment 3	1 of 2	03/08/84	Attachment 3	1 of 2	05/25/84
	2 of 2	04/17/84		2 of 2	05/25/84

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT IMPLEMENTING PROCEDURES DOCUMENT

LIST OF EFFECTIVE PAGES

This List of Effective Pages must be retained with the Browns Ferry Nuclear Plant Implementing Procedures Documents.

Part	Procedure Number	Subdivision	Page Number	Date/Rev. No.
BFN		List of Effective Pages	1 of 9	06/06/84
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			8 of 9	05/14/84
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	IP-1		Coversheet	04/06/84
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			5 of 11	10/19/82
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	IP-2		Coversheet	04/17/84
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			2 of 3	04/17/84
			3 of 3	02/04/83
	IP-3		Coversheet	04/17/84
			1 of 3	04/17/84
			2 of 3	04/17/84
			3 of 3	04/17/84

LIST OF EFFECTIVE PAGES (Con't)

Part	Procedure Number	Subdivision	Page Number	Date/Rev. No.
BFN (Cont'd)	IP-3	Table 1	1 of 1	10/12/83
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	IP-4		Coversheet	04/17/84
			1 of 3	01/19/84
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			3 of 3	03/20/84
		Table 1	1 of 1	10/12/83
		Table 2	1 of 1	10/12/83
	IP-5		Coversheet	04/17/84
			1 of 3	03/12/84
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		Table 1	1 of 1	10/12/83
		Table 2	1 of 1	10/12/83
		Figure 1	1 of 1	03/12/84
	IP-6		Coversheet	05/25/84
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		Attachment 1	1 of 2	04/17/84
			2 of 2	04/17/84
		Attachment 2	1 of 2	05/25/84
			2 of 2	05/15/84
		Attachment 3	1 of 2	05/25/84
			2 of 2	"
	IP-7		Coversheet	04/17/84
			1 of 1	12/21/81
		Attachment 1	1 of 2	02/15/84
			2 of 2	04/17/84
	IP-8		Coversheet	04/17/84
			1 of 4	04/17/84
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		Attachment 1 (deleted)	1 of 1	03/14/84
	IP-9 (deleted)		Coversheet	03/14/84

PERMANENT INSTRUCTION CHANGE INFORMATION

Instruction Number IP-6
Unit No. 1, 2 & 3
Title ACTIVATION OF THE TECHNICAL SUPPORT CENTER

Reason For Revision PERSONNEL CHANGES; phone number changes

Pages Affected ATTACHMENT 2, PAGE 1
ATTACHMENT 3, PAGES 1 & 2

History of Revisions (For DCU Use Only)

Approval Date	Affected Pages
5/25/84	1 (Att. 2)
5/25/84	1,2 (Att. 3)
5/15/84	2 (Att. 2)
4/17/84	1,2 (Att. 1)
4/17/84	1,2 (Att. 2)
4/17/84	2 (Att. 3)

Is this change in response to an LER, IE Bulletin, NRC Inspection Report, *Management/Supervisor Inspection, OQAB audit, etc.? Yes ____ No ✓
(If yes, specify document under reason for revision.)

Change in procedural detail of FSAR or other licensing document? Yes ____ No ____; New instruction? Yes ____ No ✓
(If yes to either question, a USQD is required.)

Is this a work plan initiated change? ____ Yes (Work Plan No. ____) ✓ No

Fire Protection System involved? Yes ____ No ✓ (If yes, review and signature of fire protection engineer is required.)

NA
Fire Protection Engineer

Was this change made to meet a NRC commitment? Yes ____ No ✓
(If yes, refer to BF 2.3 for proper identification of the change.)

Security System involved? Yes ____ No ✓ (If yes, review and signature of Public Safety Services Supervisor is required.)

NA
Public Safety Services Supervisor

C. J. Rogers 1-23-84
Prepared By Date

A. E. Swindell 1-25-84
PORC Chairman Date

[signature] 1-23-84
Submitted By Date

J. R. Bynum 1/25/84
Plant Superintendent Date

Retention: Period - Lifetime; Responsibility - Document Control Supervisor
(Note: If this is a new instruction or instruction deletion, document control will update the source document matrix.)

*Revision

ATTACHMENT 2 - TEAM 2

INSTRUCTIONS

Contact members from this list if unable to reach TEAM 1 members. If unable to reach TEAM 2 member to to ALTERNATE li Attachment 3.

Message: "This is Browns Ferry. We have activated the REP. Please report to the Technical Support Center immediately as the (POSITION)."

Time Contacted	Position		Name	PAX	DIM	HOME	PAGE
_____	Site Emergency Director		Jim Swindell	221/212	701	355-7277	103
_____	Operations Manager		Tommy Jordan	205/214	793	383-5868	129
_____	Technical Assessment Manager		Dwight Mims	208/215	785	355-9659	272
* _____	Maintenance Manager		John Nebrig	762	734	350-0790	268
_____	REP Communicator		Bill Roberts	100/106	623	232-7027	142
_____	Secretary	NOTE: Call all three	Glenda Harrison	178	810	729-6573	___
_____	Secretary		Jacque Garner	221/212	701	233-0576	___
_____	Secretary		Peggy Gilbert	414	895	729-6273	___
_____	TSC Communicator		M. W. (Tink) Haney	206/241	790	233-0834	241
_____	NRC Communicator		E. G. Thornton	446	875	232-5952	___
_____	Operations Specialist		Roy Smallwood	429/430	861	757-3992	___
_____	Health Physicist	NOTE: Call both	Herman Crowson	335/334	876	764-1381	334
_____	Health Physicist		Wayne Simpkins	457/458	759	232-7973	___

*Revision

ATTACHMENT 3 - ALTERNATES

INSTRUCTIONS

Use this list only if unable to reach TEAM 1 or TEAM 2 member.

Message: "This is Browns Ferry. We have activated the REP. Please report to the Technical Support Center immediately as the (POSITION)."

Time Contacted	Position	Name	PAX	DIM	HOME	PAGE
_____	Site Emergency Director	John Pittman	221/212	701	355-0230	221
_____	Site Emergency Director	Ray Hunkapiller	205/214	794	355-5667	204
_____	Operations Manager	A. L. (Smiley) Burnette	429/430	861	766-1929	130
_____	Technical Assessment Manager	Jim Swindell	221/212	701	355-7277	103
_____	Maintenance Manager	Tom Cosby	207/235	797	232-8779	235
_____	REP Communicator	Jimmy Walker	405/406	865	232-9216	146
_____	TSC Communicator	John Nebrig	701	712	350-0790	268
* _____	NRC Communicator	Vacant				
_____	Operations Specialist	R. G. Jones	446	874	232-3596	___
_____	Operations Specialist	E. G. Thornton	446	875	232-5952	___
_____	Health Physicist	John Corey	209	___	744-7239	___
_____	Radiochemical Engineer	Jim Shaw	436	621	381-6314	___
_____	Reactor Engineer	Harold Stiles	454/455	893	232-6389	___

**

*Revision
**Deletion

ATTACHMENT 3 - ALTERNATES (Continued)

Time Contacted	Position	Name	PAX	DIM	HOME	PAGE
_____	Electrical Engineer	Walt Christopher	207	889	355-1810	___
_____	Instrument Engineer	No alternate				
_____	PSO Engineer	Elmer Todd	394/395	820	232-7978	258
* _____	Systems and Test Engineer	No alternate				
_____	Mechanical Engineer	Pat Ebersole	206/241	791	543-6189	205
_____	Quality Engineer	Larry Parvin	309/409	801	2343-9570	107
_____	Quality Engineer	Russell Perry	100/106	623	729-8823	109/112
_____	PSS Supervisor	Glen Lard	266/246	822	766-8557	___
_____	Computer Engineer	Wayne Lynch	264	856	233-0998	___
_____	Secretary	Darlene Rains	701	714	233-3715	___
* _____	Secretary	Arnette Johnson	212/221	701	729-8389	___

*Revision

TVA 64 (05-9-65)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : Holders of Browns Ferry Nuclear Plant Implementing Procedures Document

FROM : E. K. Sliger, Supervisor, Radiological Emergency Preparedness Section, 1640 CST2-C

DATE : JUN 15 1984

SUBJECT: BROWNS FERRY NUCLEAR PLANT IMPLEMENTING PROCEDURES DOCUMENT

The attached revision is for inclusion in your copy of the subject manual.

Section 10.1.5.3 of the Radiological Emergency Plan requires manual holders to acknowledge receipt of revisions. Please sign the receipt on the back of the distribution list and return to the Records/Manual Control Unit, 1570 CST2-C, within 2 weeks of transmittal date. If you have any questions, call Linda Condra, 6796-C.

If responsibility for this manual is transferred to another individual, please note this on your acknowledgment receipt.

E. K. Sliger

BJS:LEC
Attachments

RADIOLOGICAL EMERGENCY PLAN

Revision Date: IP-1, IP-14, IP-26 (PORC 5/30/84)

(Issued JUN 15 1984)

This log sheet must be retained as the last page of the Browns Ferry Implementing Procedures Document.

Reason for revision: see coversheets

Inserted by: _____ Date Inserted: _____

Pages to be Removed			New Pages to be Inserted		
Part	Page Number	Revision	Part	Page Number	Revision
List of Effective Pages	1 of 9	06/06/84	List of Effective Pages	1 of 9	06/13/84
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IP-14	Coversheet	01/19/84	IP-14	Coversheet	05/30/84
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IP-26	Coversheet	04/17/84	IP-26	Coversheet	05/30/84
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	3 of 4	04/17/84		3 of 4	05/30/84
	4 of 4	07/06/83		4 of 4	05/30/84

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT IMPLEMENTING PROCEDURES DOCUMENT

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LIST OF EFFECTIVE PAGES (Con't)

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	IP-15		Coversheet	06/15/82
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	IP-16		Coversheet	06/15/82
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	IP-17		Coversheet	05/08/84
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BFN (Cont'd)	IP-24	Attachment A (Cont'd)	18 of 31	11/04/83
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Tennessee Valley Authority
Browns Ferry Nuclear Plant

BF 2.3
BF 11.1
FEB 15 1984

PERMANENT INSTRUCTION CHANGE INFORMATION

Instruction Number EP-1
Unit No. 1,2,3
Title Emergency Plan Classification Logic

Reason For Revision Add reference to EP-10 and EP-27 for medical emergency and for unusual watch

Pages Affected 9,10

History of Revisions (For DCU Use Only)

Approval Date	Affected Pages
5/30/84	9,10
4/06/84	4,6
3/14/84	1,2,9,11
1/12/84	2
10/12/83	1,6,10
7/06/83	10

Is this change in response to an LER, IE Bulletin, NRC Inspection Report, *Management/Supervisor Inspection, OQAB audit, etc.? Yes _____ No X
(If yes, specify document under reason for revision.)

Change in procedural detail of FSAR or other licensing document?
Yes _____ No X ; New instruction? Yes _____ No X
(If yes to either question, a USQD is required.)

Is this a work plan initiated change? _____ Yes (Work Plan No. ____) X No

Fire Protection System involved? Yes _____ No X (If yes, review and signature of fire protection engineer is required.)

NA
Fire Protection Engineer

Was this change made to meet a NRC commitment? Yes _____ No X
(If yes, refer to BF 2.3 for proper identification of the change.)

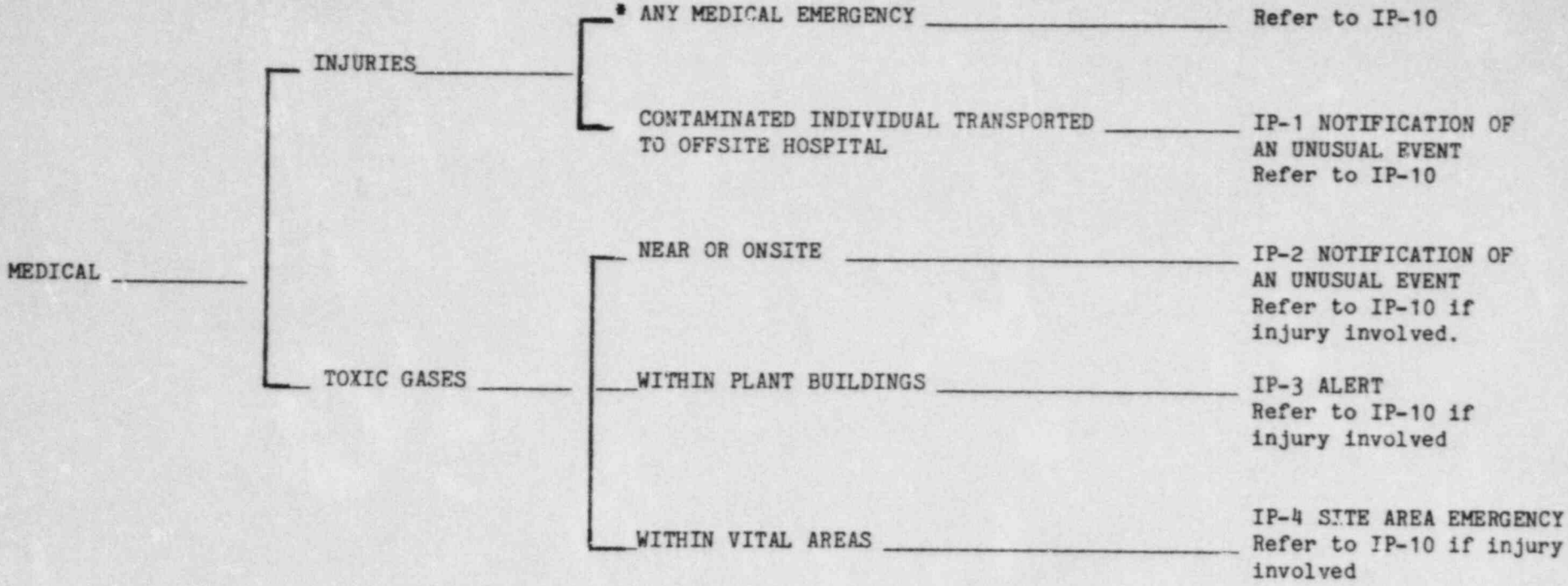
Security System involved? Yes _____ No X (If yes, review and signature of Public Safety Services Supervisor is required.)

NA
Public Safety Services Supervisor

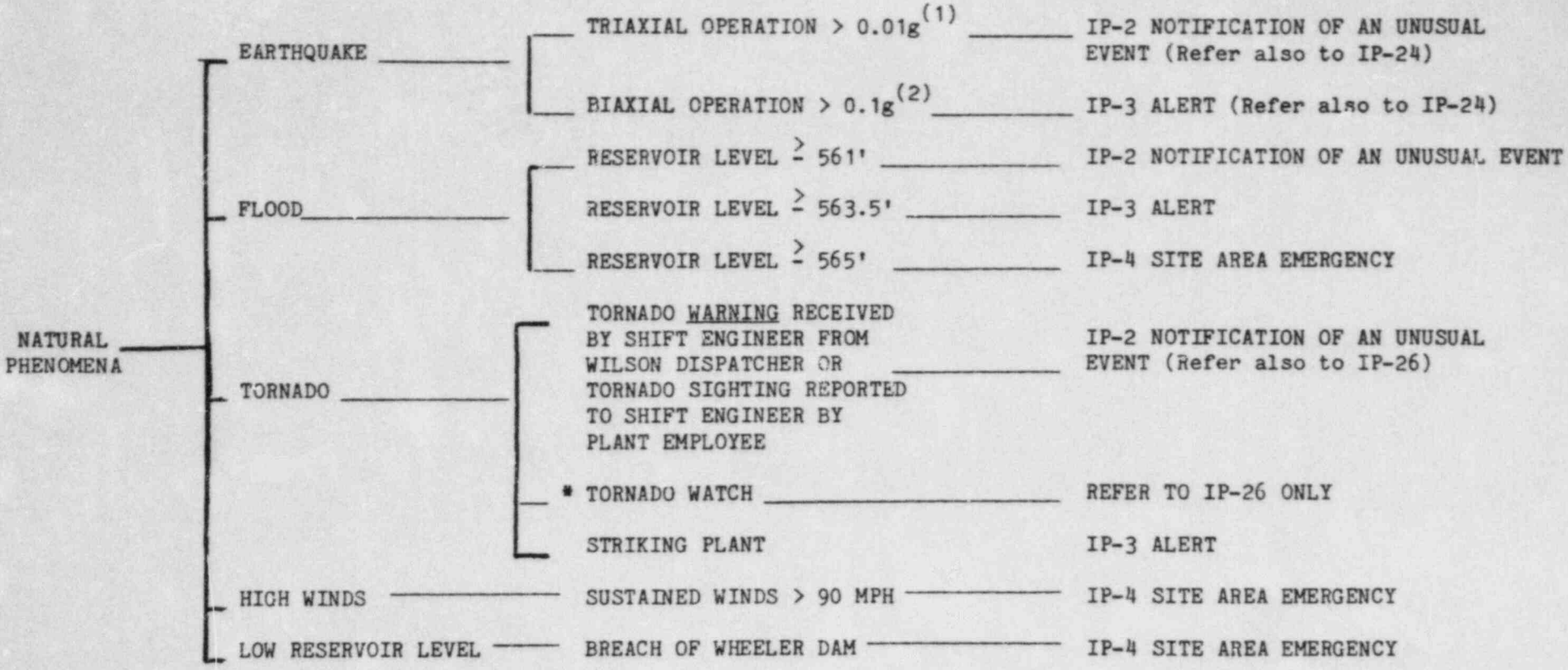
[signature]	5/12/84	J. R. Calhoun	5/30/84
Prepared By	Date	PORC Chairman	Date
[signature]	5/12/84	J. R. Calhoun	5/30/84
Submitted By	Date	Plant Superintendent	Date

Retention: Period - Lifetime; Responsibility - Document Control Supervisor
(Note: If this is a new instruction or instruction deletion, document control will update the source document matrix.)

*Revision


MEDICAL
INJURIES
TOXIC GASES
* ANY MEDICAL EMERGENCY
Refer to IP-10
CONTAMINATED INDIVIDUAL TRANSPORTED TO OFFSITE HOSPITAL
IP-1 NOTIFICATION OF AN UNUSUAL EVENT
Refer to IP-10
NEAR OR ONSITE
IP-2 NOTIFICATION OF AN UNUSUAL EVENT
Refer to IP-10 if injury involved.
WITHIN PLANT BUILDINGS
IP-3 ALERT
Refer to IP-10 if injury involved
WITHIN VITAL AREAS
IP-4 SITE AREA EMERGENCY
Refer to IP-10 if injury involved

*Revision



(1) Before initiating IP-2, confirm by noticeable building movement and/or call National Earthquake Information Center at (303) 234-3994. See FSAR Figure 2.5-7. Modified Mercalli Intensity IV.

(2) Before initiating IP-3, confirm by building movement, some damage to nonseismic structures. Call National Earthquake Information Center at (303) 234-3994. See FSAR Figure 2.5-7, Modified Mercalli Intensity VII.

*Revision

Tennessee Valley Authority
Browns Ferry Nuclear Plant

Form BF
BF 2.3
BF 11.1
FEB 15 1984

PERMANENT INSTRUCTION CHANGE INFORMATION

Instruction Number IP-14
Unit No. 1,2,3
Title HEALTH PHYSICS PROCEDURES

Reason For Revision Change reference for field monitoring from HPTSIL 20 to IP-27. Clarify the use of NRC Health Physics Network (orange phone)

Pages Affected 2,3,5

History of Revisions (For DCU Use Only)

Approval Date	Affected Pages
5/30/84	2,3,5
/19/84	4, 1 of Att. 1,
1/19/84	1 of Att. 2
10/12/83	1,2,3,4

Is this change in response to an LER, IE Bulletin, NRC Inspection Report, Management/Supervisor Inspection, OQAB audit, etc.? Yes ____ No X
(If yes, specify document under reason for revision.)

Change in procedural detail of FSAR or other licensing document?
Yes ____ No X ; New instruction? Yes ____ No X
(If yes to either question, a USQD is required.)

Is this a work plan initiated change? ____ Yes (Work Plan No. ____) X No

Fire Protection System involved? Yes ____ No X (If yes, review and signature of fire protection engineer is required.)

NA
Fire Protection Engineer

Was this change made to meet a NRC commitment? Yes ____ No X
(If yes, refer to BF 2.3 for proper identification of the change.)

Security System involved? Yes ____ No X (If yes, review and signature of Public Safety Services Supervisor is required.)

NA
Public Safety Services Supervisor

Prepared By — Date 5/12/84
PORC Chairman — Date 5/30/84

Submitted By — Date 5/12/84
Plant Superintendent — Date 5/30/84

Retention: Period - Lifetime; Responsibility - Document Control Supervisor
(Note: If this is a new instruction or instruction deletion, document control will update the source document matrix.)

* Revision

OCT 12 1983

HEALTH PHYSICS PROCEDURES

1.0 PURPOSE

This procedure outlines the actions to be followed by Health Physics personnel during a radiological emergency. Natural phenomena, security threats, or other events not involving radiation could be the cause for the emergency. This procedure describes those HP actions required during an emergency involving radiological problems.

NOTE: Shift Engineer's clerk will initiate IP-14 by calling the Health Physics Shift Supervisor.

2.0 NOTIFICATION OF UNUSUAL EVENT

2.1 No offsite radiological problems are postulated during a NOTIFICATION OF UNUSUAL EVENT. This situation should not have any major impact on the health physics unit.

2.2 Although Health Physics will not automatically be called, should assistance be needed Health Physics will follow standard practices and procedures during any response work.

3.0 ALERT

A limited release is possible during an ALERT situation. Significant loss of fuel cladding, small line breaks, fuel handling accidents, or high radiation levels are examples.

INITIALS

*NRC/C

_____ 3.1 All HP technicians report to the HP lab.

_____ 3.2 HP will take 1 ion chamber survey instrument to the TSC and to OSC.

_____ 3.3 HP personnel will periodically survey the TSC and OSC.

_____ 3.4 A HP technician will accompany any personnel dispatched into areas of potential hazard.

_____ 3.5 An ALERT may require the evacuation of a certain plant area and/or building. HP will post these areas and have public safety restrict all unauthorized access.

3.6 Health Physics personnel will assist in the development of all recovery plans as necessary. Recommendations will be made to keep exposure as low as reasonably achievable and to recommend and approve any cleanup activities.

*Revision

4.0 SITE AREA EMERGENCY

A SITE AREA EMERGENCY may require extensive HP response. A LOCA major fuel handling accident are examples.

INITIALS

_____ 4.1 HP technicals report to the lab.

NRC/C

_____ 4.2 HP will take 1 ion chamber survey instrument to the TSC and to the OSC.

_____ 4.3 Health Physics personnel will periodically survey the TSC and OSC.

_____ 4.4 A health physics technician will accompany any personnel dispatched into areas of potential hazard.

NRC/C

_____ 4.5 * Initial offsite environmental assessment will be conducted per IP-27. Report findings to the Site Emergency Director.

NRC/C

_____ 4.6 Dispatch HP technician to the site access control point established by PSS personnel. Survey vehicles and personnel leaving the site using RM-14 frishers and smear techniques.

_____ 4.7 If requested by Site Emergency Director, perform site boundary survey, using the emergency van. Equipment listed in Attachment 1 should be transported to the van.

a. When instructed to do so, travel to the site boundary in the downwind direction and measure the dose rate with an ionization chamber or similar survey instrument. If possible, air sampling should also be performed at the same time.

b. Precautions must be taken to prevent overexposure if there are high concentrations of radioactive particulate or radioiodine being released.

c. Record all survey results. All findings shall be reported to the TSC. If results indicate offsite contamination, the survey may need to be extended. Obtain further instructions and perform required surveillance.

d. Arrangements can be made for manpower support and offsite surveys from Muscle Shoals.

_____ 4.8 If a site evacuation is ordered, see Section 6.0.

_____ 4.9 If HP lab must be evacuated, see Section 7.0.

*Revision

5.0 GENERAL EMERGENCY

During a GENERAL EMERGENCY, there will probably be radiation releases to the environment requiring health physics response.

INITIALS

NRC/C

_____ 5.1 HP technicians report to lab.

_____ 5.2 HP will take 1 ion chamber survey instrument to the TSC and OSC.

_____ 5.3 Health Physics personnel will periodically survey the TSC and OSC.

_____ 5.4 A health physics technician will accompany any personnel dispatched into areas of potential hazard.

NRC/C _____ 5.5 Initial offsite environmental assessment will be conducted * per IP-27. Report findings to the Site Emergency Director.

NRC/C _____ 5.6 Dispatch a HP Technician to the site access control point established by PSS personnel. Survey vehicles and personnel leaving the site using RM-14 frishers and smear techniques.

_____ 5.7 If requested by Site Emergency Director, perform site boundary survey, using the emergency van. Equipment listed in Attachment 1 should be transported to the van.

a. When instructed to do so, travel to the site boundary in the downwind direction and measure the dose rate with an ionization chamber or similar survey instrument. If possible, air sampling should also be performed at the same.

b. Precautions must be taken to prevent overexposure if there are high concentrations of radioactive particulates or radiodine being released.

c. Record all survey results. All findings shall be reported to the TSC. If results indicate offsite contamination, the survey may need to be extended. Obtain further instructions and perform required surveillance.

d. Arrangements can be made for manpower support and equipment for offsite surveys from Muscle Shoals.

_____ 5.8 If a site evacuation is ordered, see Section 6.0.

_____ 5.9 If HP lab must be evacuated, see Section 7.0.

6.0 SITE EVACUATION

_____ 6.1 HP technicians proceed to lab, if habitable. If uninhabitable, see Section 7.0.

*Revision

INITIALS

_____ 6.2 Report accountability by name and badge number to Health Physicist in TSC.

_____ 6.3 If any plant personnel are missing, PSS will form search parties, each having at least one HP technician.

NRC/C _____ 6.4 HP will survey personnel and vehicles leaving the site at the PSS access control point. Contaminated individuals will be evacuated to the Power Service Shops utility building at Wilson Hydro Plant. Notify Health Physicist in TSC of any such individuals.

7.0 HP LAB UNINHABITABLE

_____ 7.1 HP technicians will secure equipment listed in Attachment 2, and proceed with equipment to mechanical equipment NRC/C room, control bay, unit 3, elevation 617.

_____ 7.2 Report to Health Physicist in TSC.

8.0 ISSUANCE OF POTASSIUM IODINE (KI)

8.1 If a responsible health physicist has reason to believe that a person's projected cumulative dose to the thyroid from inhalation of radioactive iodine might exceed 10 rems (See Attachment 3) the exposed person should be started immediately on a dose regimen of potassium iodine (KI). Anyone authorized to initiate KI shall be familiar with the Food and Drug Administration approved package insert and be sure that each proposed recipient is similarly informed. The initial dose of KI should not be delayed and those who begin therapy dose is determined not to have exceeded 10 rem. An adequate supply of KI is stored in the medical station to supply any personnel exposed to radioactive iodine. It is supplied in bottles which contain a full 10-day dose regime. Follow dosage scheduled as outlined on the package insert accompanying each bottle of KI.

8.2 The potassium iodine is stored in the plant medical station. KI has an approved shelf-life with the expiration date listed on each bottle. To ensure that the KI supply is valid, these dates will be inspected during the emergency medical supply inventory and the bottles replaced as necessary.

8.3 A copy of the Food and Drug Administration approved package insert shall accompany each bottle of KI issued. Dosage scheduled and other pertinent information are outlined on the package and should be followed closely (Attachment 4).

8.4 The issuing agent shall complete the Potassium Iodine Issue Report (Attachment 5) for each bottle of KI issued. A copy of this report will be routed to the Plant health physicist in a timely manner.

*9.0 USE OF NRC HEALTH PHYSICS NETWORK

* 9.1 This line is located in the health physics plant laboratory (on dimension) and the NRC Resident Inspector's office (orange phone).

* 9.2 The line is to be used by TVA personnel only under the following circumstances:

a. Incoming call from NRC.

b. Incoming call from another reactor site, if call is made at request of NRC at that site. Individual answering phone should verify the incoming call is made at NRC request.

c. Outgoing call to another reactor site at request of NRC at
* Browns Ferry. [Dial 21 + two digit number required
* (22 - Bethesda, 23 - Atlanta.)]

d. Outgoing call to the two numbers (NRC) listed on the phone.
* This is to be used in the event of an emergency, or can be used as a backup to the ENS (red phone) and Bell system during an emergency.

*Revision

Tennessee Valley Authority
Browns Ferry Nuclear Plant

BF 2.3
BF 11.1
FEB 15 1984

PERMANENT INSTRUCTION CHANGE INFORMATION

Instruction Number IP-26
Unit No. 1,2,3
Title TORNADO EMERGENCY PROCEDURE

Reason For Revision EXPERIENCE BASED ON DRILLS AND ACTUAL EVENTS
General Revision

Pages Affected ALL

History of Revisions (For DCU Use Only)

Approval Date	Affected Pages
5/30/84	All
4/17/84	3
10/12/83	2
8/03/83	3
7/06/83	All

Is this change in response to an LER, IE Bulletin, NRC Inspection Report, *Management/Supervisor Inspection, OQAB audit, etc.? Yes ____ No X
(If yes, specify document under reason for revision.)

Change in procedural detail of FSAR or other licensing document?
Yes ____ No X ; New instruction? Yes ____ No X
(If yes to either question, a USQD is required.)

Is this a work plan initiated change? ____ Yes (Work Plan No. ____) X No

Fire Protection System involved? Yes ____ No X (If yes, review and signature of fire protection engineer is required.)

NA
Fire Protection Engineer

Was this change made to meet a NRC commitment? Yes ____ No X
(If yes, refer to BF 2.3 for proper identification of the change.)

Security System involved? Yes ____ No X (If yes, review and signature of Public Safety Services Supervisor is required.)

NA
Public Safety Services Supervisor

Prepared By	14/12/84 Date	PORC Chairman	15/30/84 Date
Submitted By	14/12/84 Date	Plant Superintendent	15/30/84 Date

Retention: Period - Lifetime; Responsibility - Document Control Supervisor
(Note: If this is a new instruction or instruction deletion, document control will update the source document matrix.)

*Revision

MAY 30 1984

TORNADO EMERGENCY PROCEDURE

1.0 PURPOSE

1.1 To prescribe the actions to be taken during a tornado watch and tornado warning.

2.0 PROCEDURE

2.1 Notification

Notification may be by any of the following:

(a) Wilson Dispatcher.

(b) Plant personnel (verify by TV/weather radio).

(c) National Weather Service (weather radio).

(d) Other sources (verify by TV/weather radio)

DATE: _____ NOTE: Possible "Wind Speed High" at 45 mph (panel 9-20).

2.2 Tornado Watch

INITIATED		CANCELLED		
Init.	Time	Init.	Time	
				NOTE: A tornado watch is a precautionary condition indicating a tornado is a possibility.
____	____	____	____	2.2.1 Shift engineer notifies public safety service shift lieutenant (PAX 273) of tornado watch (refer him to IP-26) and makes every effort to have an additional shift engineer on site whose duties will be to help coordinate electrical switching and other plant activities.
____	____	____	____	2.2.2 Shift engineer reviews appropriate abnormal operating instructions (OI-57) for implementation in case of building or electrical distribution system damage. Particular attention is to be given to possible loss of off-site power.
____	____	____	____	2.2.3 Shift engineer will have reactor building crane, bridge, and trolley secured against bumpers using tie-downs.
____	____	____	____	2.2.4 Shift engineer to notify refuel floor personnel to suspend fuel handling operations.
____	____	____	____	2.2.5 Public safety service to be alert for conditions to become worse and be prepared to implement tornado warning actions.

2.3 Tornado Warning

NOTE: A tornado warning condition indicates that a tornado has been sighted in the area (within approximately 35 mile radius of BFNP), through notification as specified in 2.1 above.

2.3.1 Shift engineer immediate actions:

NOTE: The duty shift engineer has primary responsibility for implementation and coordination of this procedure and may exercise the authority to request needed assistance from other sections, as deemed necessary, in the initiation and implementation of this procedure.

INITIATED Init.	Time	CANCELLED Init.	Time	
____	____	____	____	Initiate IP-2.
____	____	____	____	NOTE: Hardhat provisions are suspended during a tornado warning, as the primary concern is safety from the tornado.
____	____	____	____	Notify public safety service shift lieutenant (PAX 273) of tornado warning. Request they activate their portion of this procedure.
____	____	____	____	Notify plant superintendent's office to clear office and service building personnel into elevation 565 turbine building. Request senior management personnel keep buildings clear.
____	____	____	____	Evacuate all personnel from refuel floor operations except personnel required to perform tie-down of reactor building crane, bridge, and trolley. Tie-down crew to evacuate refuel floor when crane is secured.
____	____	____	____	Dispatch AUO to evacuate elevation 621 turbine building.
____	____	____	____	Notify water treatment plant personnel of tornado warning. Request they stay inside until further notice.
____	____	____	____	Notify Hypochlorite (Operations Training) Building personnel of tornado warning. Request they seek shelter in turbine or diesel generator building until further notice.
____	____	____	____	Notify personnel in plant by public address of tornado warning. Request they go to reactor building, turbine building elevation 565 or 586, diesel generator building, or radwaste building.

2.3 Tornado Warning (continued):

INITIATED Init.	Time	CANCELLED Init.	Time			
				2.3.1 (Continued):		
				Close outside doors on radwaste building and reactor building, if open.		
				Notify all control room operating personnel of the tornado warning.		
				Position personnel for emergency switching on electrical distribution system.		
				2.3.2 Public safety service immediate actions.		
				Notify motor patrol of tornado warning. They should direct all workers in the yard, cooling tower area, and outside the protected area back inside the fence and then to elevation 565 turbine building.		
				Notify PSS field personnel of specific actions to be taken per PSSSIL 17.33		
				Evacuate all personnel from the following list of external buildings by dispatching officers, and direct them to one of the following: Reactor building, turbine building elevation 565 or 586, radwaste area, diesel generator building, intake pumping building, or biothermal building.		
				. Trailers on west side of powerhouse.		
				. Plant shop building 3 (north side of office building)		
				. Firing range (contact by radio if available).		
				Notify the following by telephone to evacuate to tornado shelter areas:		
				Public safety chief in administrative office bulding outside security fence (when building is occupied).	266	822
				OMMTM Supervisor or assistants.	701/715	714
				Biotherm research facility supervisor or personnel (direct them to remain in facility).	341	729-8574

2.3 Tornado warning (continued):

INITIATED Init.	Time	CANCELLED Init.	Time			
____	____	____	____	Personnel in Warehouse 12 (east side of powerhouse).	793/794/ 789	748
____	____	____	____	Personnel in greenhouse (direct them to Biotherm)	___	729-6102
____	____	____	____	Low level radwaste facility	449	___

2.4 ALL CLEAR - Following Tornado Watch

____ ____ ____ ____ Shift engineer notify public safety and all other personnel notified in step 2.2 when, in his judgment, it is safe to issue ALL CLEAR.

2.5 ALL CLEAR - Following Tornado Warning

____ ____ ____ ____ 2.5.1 Shift engineer to announce "ALL CLEAR" on public address system. Cancel IP-2 when, in his judgment, it is safe to issue an "ALL CLEAR."

____ ____ ____ ____ 2.5.2 Shift engineer to notify public safety by phone.

____ ____ ____ ____ 2.5.3 Public safety service shall notify all personnel notified in step 2.3.2 and those gathered in tornado shelter areas of the "ALL CLEAR" condition.

2.6 Operator Action Following Tornado or High Wind

2.6.1 Inspections by shift engineer/site emergency director.

Make inspection of switchyard and transformer yard for damage.

Make inspection of site area for any damage.

2.6.2 Based on results of damage inspections, the shift engineer/site emergency director will initiate maintenance and restoration actions. When conditions permit, resume normal activities. Log events and actions in daily journal.