



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

March 15, 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; (2) EPIP-1, Revision 28B; (3) EPIP-2, Revision 21A; (4) EPIP-3, Revision 24A; (5) EPIP-4, Revision 23A; (5) EPIP-5, Revision 28A; (7) EPIP-6, Revision 20A; (8) EPIP-7, Revision 18A; (9) EPIP-8, Revision 11A; (10) EPIP-11, Revision 8A; (11) EPIP-15, Revision 6A; and (12) EPIP-17, Revision 23A. The revision date for these EPIP changes is March 9, 2000.

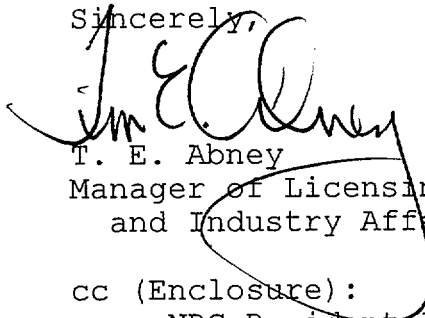
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U.S. Nuclear Regulatory Commission  
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At the time of issuing (1) EPIP Index; (2) EPIP-1, Revision 28A; (3) EPIP-2, Revision 21; EPIP-3, Revision 24; (5) EPIP-4, Revision 23; (6) EPIP-5, Revision 28; (7) EPIP-6, Revision 20; (8) EPIP-7, Revision 18; (9) EPIP-8, Revision 11; (10) EPIP-11, Revision 8; (11) EPIP-15, Revision 6; and (12) EPIP-17, Revision 23, typographical errors were corrected, resulting in an additional revision level for each document. Since the latter revisions include all changes (typographical and substantive), TVA is only submitting the latter EPIP revisions.

The enclosed information is being sent by certified mail. Please sign and return the receipt signifying that you have received this information. If you have any questions, please telephone me at (256) 729-2636.

Sincerely,



T. E. Abney  
Manager of Licensing  
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ENCLOSURE  
TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT  
UNITS 1, 2, AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)  
EPIPs -1, 2, 3, 4, 5, 6, 7, 8, 11, 15, and 17

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SEE ATTACHED

GENERAL REVISIONS

GENERIC FILING INSTRUCTIONS

FILE DOCUMENTS AS FOLLOWS:

PAGES TO BE REMOVED

EPIP INDEX (ALL)  
EPIP-1 REVISION 27 (AFFECTED SECTIONS)  
EPIP-2 REVISION 20 (ALL)  
EPIP-3 REVISION 23 (ALL)  
EPIP-4 REVISION 22 (ALL)  
EPIP-5 REVISION 27 (ALL)  
EPIP-6 REVISION 19 (ALL)  
EPIP-7 REVISION 17 (ALL)  
EPIP-8 REVISION 10 (ALL)  
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EPIP-15 REVISION 5 (ALL)  
EPIP-17 REVISION 22 (ALL)

PAGES TO BE INSERTED

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EPIP-2 REVISION 21A (ALL)  
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EPIP-5 REVISION 28A (ALL)  
EPIP-6 REVISION 20A (ALL)  
EPIP-7 REVISION 18A (ALL)  
EPIP-8 REVISION 11A (ALL)  
EPIP-11 REVISION 8A (ALL)  
EPIP-15 REVISION 6A (ALL)  
EPIP-17 REVISION 23A (ALL)

Unit	Proc Type	Proc Number	Doc Type	Title	Eff Dt Doc Stat	Group Section	REV
0	EPIP	EPIP-1/Section I	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-1.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-2.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-3.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-4.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	03/09/2000 ACTIVE	OTHER REP	028B
0	EPIP	EPIP-1/Section II-5.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-6.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-7.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section II-8.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-1.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-2.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-3.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-4.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	03/09/2000 ACTIVE	OTHER REP	028B

Unit	Proc Type	Proc Number	Doc Type	Title	Eff Dt	Group	REV
					Doc Stat	Section	
0	EPIP	EPIP-1/Section III-5.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-6.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-7.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/Section III-8.0	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	11/04/1999 ACTIVE	OTHER REP	028
0	EPIP	EPIP-1/TOC	PROCEDURE	EMERGENCY PLAN CLASSIFICATION LOGIC	03/09/2000 ACTIVE	OTHER REP	028B
0	EPIP	EPIP-10	PROCEDURE	MEDICAL EMERGENCY PROCEDURE	07/09/1998 ACTIVE	OTHER REP	019
0	EPIP	EPIP-11	PROCEDURE	SECURITY AND ACCESS CONTROL	03/09/2000 ACTIVE	OTHER REP	008A
0	EPIP	EPIP-13	PROCEDURE	RADIOCHEMICAL LABORATORY PROCEDURE	11/04/1999 ACTIVE	OTHER REP	007
0	EPIP	EPIP-14	PROCEDURE	RADIOLOGICAL CONTROL PROCEDURES	11/04/1999 ACTIVE	OTHER REP	014
0	EPIP	EPIP-15	PROCEDURE	EMERGENCY EXPOSURE	03/09/2000 ACTIVE	OTHER REP	006A
0	EPIP	EPIP-16	PROCEDURE	TERMINATION AND RECOVERY PROCEDURE	11/01/1995 ACTIVE	OTHER REP	003
0	EPIP	EPIP-17	PROCEDURE	EMERGENCY EQUIPMENT AND SUPPLIES (INVENTORY AND OPERABILITY PROCEDURE)	03/09/2000 ACTIVE	OTHER REP	023A
0	EPIP	EPIP-2	PROCEDURE	NOTIFICATION OF UNUSUAL EVENT	03/09/2000 ACTIVE	OTHER REP	021A

Unit	Proc Type	Proc Number	Doc Type	Title	Eff Dt	Group	REV
					Doc Stat	Section	
0	EPIP	EPIP-20	PROCEDURE	PLANT DATA	06/14/1996 ACTIVE ACTIVE	OTHER REP	009
0	EPIP	EPIP-21	PROCEDURE	FIRE EMERGENCY PROCEDURE	06/25/1997 ACTIVE ACTIVE	OTHER REP	002
0	EPIP	EPIP-3	PROCEDURE	ALERT	03/09/2000 ACTIVE ACTIVE	OTHER REP	024A
0	EPIP	EPIP-4	PROCEDURE	SITE AREA EMERGENCY	03/09/2000 ACTIVE ACTIVE	OTHER REP	023A
0	EPIP	EPIP-5	PROCEDURE	GENERAL EMERGENCY	03/09/2000 ACTIVE ACTIVE	OTHER REP	028A
0	EPIP	EPIP-6	PROCEDURE	ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER (TSC)	03/09/2000 ACTIVE ACTIVE	OTHER REP	020A
0	EPIP	EPIP-7	PROCEDURE	ACTIVATION AND OPERATION OF THE OPERATIONS SUPPORT CENTER (OSC)	03/09/2000 ACTIVE ACTIVE	OTHER REP	018A
0	EPIP	EPIP-8	PROCEDURE	PERSONNEL ACCOUNTABILITY AND EVACUATION	03/09/2000 ACTIVE ACTIVE	OTHER REP	011A

Browns Ferry Nuclear Plant  
Curator Procedures F Screen  
status=ACTIVE ProcType=EPIP Doc Type=PROCEDURE  
Sorted by Num

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Unit	Proc Type	Proc Number	Doc Type	Title	Eff Dt	Group	REV
					Doc	Stat	Section

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Curator Procedures Issued

	Count
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	34
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Total	34

Total records selected: 34

\* \* \* E N D O F R E P O R T \* \* \*



**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-1**

**EMERGENCY CLASSIFICATION PROCEDURE**

**REVISION 28B**

PREPARED BY: T. W. CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: T. W. CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

## REVISION LOG

Procedure Number: EPIP-1

Revision Number 28B

Pages Affected: 34,132

Description of Change:

- EC-38 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 28A.  
EPIP 1 (rev. log) was changed to reflect current revision level.  
Page 34, EPIP 1, Event Classification Matrix, Section 4, Table 4.1-S was reviewed and found to contain a editorial error. The concentration for the Iodine Site Boundary Radiation Reading was corrected ( $3.0 \times 10^{-9}$  changed to  $3.0 \times 10^{-7}$ ).  
Page 132, EPIP 1, Basis, Section 4, Table 4.1-S was reviewed and found to contain a editorial error. The concentration for the Iodine Site Boundary Radiation Reading was corrected ( $3.0 \times 10^{-9}$  changed to  $3.0 \times 10^{-7}$ ).  
Revision 28A corrected this error.

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

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

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# **RADIOACTIVITY RELEASES 4.0**

**NOTES:**

- NOTE 4.1-U** Prior to making this emergency classification based upon the WRGERMS indication, assess the release by either of the following:  
 1. Actual field measurements exceed the limits in Table 4.1-U  
 2. SI 4.8.B.1.a.1 Release Fraction exceeds 2.0  
 If neither assessment can be conducted within 60 minutes then the declaration must be made on the valid WRGERMS reading.
- NOTE 4.1-A** Prior to making this emergency classification based upon the WRGERMS indication, assess the release by either of the following:  
 1. Actual field measurements exceed the limits in Table 4.1-A  
 2. SI 4.8.B.1.a.1 Release Fraction exceeds 200  
 If neither assessment can be conducted within 15 minutes then the declaration must be made on the valid WRGERMS reading.
- NOTE 4.1-S** Prior to making this emergency classification based upon the Gaseous Release Rate indication, assess the release by either of the following methods:  
 1. Actual field measurements exceed the limits in Table 4.1-S.  
 2. Projected or Actual Dose Assessments exceed 100 mrem TEDE or 500 mrem CDE.  
 If neither assessment can be conducted within 15 minutes then the declaration must be made based on the valid WRGERMS reading.
- NOTE 4.1-G** Prior to making this emergency classification based upon the Gaseous Release Rate indication, assess the release by either of the following methods:  
 1. Actual field measurements exceed the limits in Table 4.1-G.  
 2. Projected or Actual Dose Assessments exceed 1000 mrem TEDE or 5000 mrem CDE.  
 If neither assessment can be conducted within 15 minutes then the declaration must be made based on the valid WRGERMS reading.

**CURVES/TABLES:**

**Table 4.1-U  
RELEASE LIMITS FOR UNUSUAL EVENT**

TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$2.88 \times 10^{-7} \mu\text{Ci/sec}$	1 HOUR
GASEOUS RELEASE RATE	SI 4.8.B.1.a.1	RELEASE FRACTION 2.0	1 HOUR
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	0.10 MREM/HR $\gamma - \beta$	1 HOUR

**Table 4.1-A  
RELEASE LIMITS FOR ALERT**









TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$2.88 \times 10^{-9} \mu\text{Ci/sec}$	15 MINUTES
GASEOUS RELEASE RATE	SI 4.8.B.1.a.1	RELEASE FRACTION 200	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	10 MREM/HR $\gamma - \beta$	15 MINUTES

**Table 4.1-S  
RELEASE LIMITS FOR SITE AREA EMERGENCY**

TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$1.3 \times 10^{-10} \mu\text{Ci/sec}$	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	100 MREM/HR $\gamma - \beta$	1 HOUR
SITE BOUNDARY IODINE-131	FIELD ASSESSMENT TEAM	$3.9 \times 10^{-7} \mu\text{Ci} \cdot \text{cm}^3$	1 HOUR

**Table 4.1-G  
RELEASE LIMITS FOR GENERAL EMERGENCY**

TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$1.3 \times 10^{-11} \mu\text{Ci/sec}$	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	1000 MREM/HR $\gamma - \beta$	1 HOUR
SITE BOUNDARY IODINE-131	FIELD ASSESSMENT TEAM	$3.9 \times 10^{-6} \mu\text{Ci} \cdot \text{cm}^3$	1 HOUR

<b>GASEOUS EFFLUENT</b>		<b>MAIN STEAM LINE BREAK</b>	
<b>DESCRIPTION</b>		<b>DESCRIPTION</b>	
<p><b>4.1-U</b>  </p> <p>Gaseous release exceeds ANY limit and duration in Table 4.1-U.</p> <p>OPERATING CONDITION: - All</p>	<p><b>4.2-U</b></p> <p>Main Steam Line break outside Primary Containment with isolation.</p> <p>OPERATING CONDITION: - Mode 1 - Mode 2</p>	<b>UNUSUAL EVENT</b>	
<p><b>4.1-A</b>  </p> <p>Gaseous release exceeds ANY limit and duration in Table 4.1-A.</p> <p>OPERATING CONDITION: - All</p>			
<p><b>4.1-S</b>  </p> <p>EITHER of the following conditions exists:</p> <ul style="list-style-type: none"> <li>• Gaseous release exceeds or is expected to exceed ANY limit and duration in Table 4.1-S.</li> <li>• Dose assessment indicates actual or projected dose consequences above 100 mrem TEDE or 500 mrem thyroid CDE.</li> </ul> <p>OPERATING CONDITION: - All</p>	<p><b>4.2-S</b></p> <p>Unisolable Main Steam Line break outside Primary Containment.</p> <p>OPERATING CONDITION: - Mode 1 - Mode 2</p>	<b>SITE EMERGENCY</b>	
<p><b>4.1-G</b>  </p> <p>EITHER of the following conditions exists:</p> <ul style="list-style-type: none"> <li>• Gaseous release exceeds or is expected to exceed ANY limit and duration in Table 4.1-G.</li> <li>• Dose assessment indicates actual or projected dose consequences above 1000 mrem TEDE or 5000 mrem thyroid CDE.</li> </ul> <p>OPERATING CONDITION: - All</p>		<b>GENERAL EMERGENCY</b>	

**NOTES:**

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**CURVES/TABLES:**



<b>LIQUID EFFLUENT</b>		
<b>DESCRIPTION</b>	<b>DESCRIPTION</b>	
<p><b>4.3-U</b></p> <p>Liquid release rate exceeds 20 times ECL as determined by chemistry sample  <b>AND</b>                      Release duration exceeds or will exceed 60 minutes.</p> <p>OPERATING CONDITION:                      - All</p>		<b>UNUSUAL EVENT</b>
<p><b>4.3-A</b></p> <p>Liquid release rate exceeds 2000 times ECL as determined by chemistry sample  <b>AND</b>                      Release duration exceeds or will exceed 15 minutes.</p> <p>OPERATING CONDITION:                      - All</p>		<b>ALERT</b>
		<b>SITE EMERGENCY</b>
		<b>GENERAL EMERGENCY</b>

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# **RADIOACTIVITY RELEASE 4.0**

**GASEOUS EFFLUENT**

**4.1-U**

**UNUSUAL EVENT**

**Gaseous release exceeds ANY limit and duration in Table 4.1-U.**

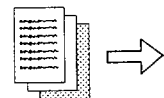
**OPERATING** - All  
**CONDITION**

**BASIS**      Unplanned radioactivity releases that exceed Table 4.1-U limits and continue for 1 hour or longer represent an uncontrolled situation and potential degradation in the level of safety of the plant. The Offsite Dose Calculation Manual (ODCM) contains the site specific release limits and appropriate surveillance requirements which normally monitor these limits. Table 4.1-U is based on 2 times the ODCM limit. The release should not be averaged over 60 minutes. For example, a release of 4 times ODCM limits for 30 minutes does not meet the requirements for this event classification. The 1 hour time period allows sufficient time to isolate any release after exceeding ODCM limits. Release continuing for more than 1 hour represents inability to isolate or control the release. The Site Emergency Director should declare the event as soon as it is determined that the release duration has or will likely exceed 1 hour. The value of 0.10 mrem/hr at the site boundary is based on a proration of twice the 500 mrem/yr ODCM instantaneous release rate limit.

Utilize Radiological Control for obtaining site boundary assessments.

Escalation to Alert is based on radiation release rate which exceeds 200 times the ODCM limit.

**REFERENCES** - Reg Guide 1.101 Rev. 3, (NUMARC-AU1 example-1)  
- RIMS L63 950502 800  
- 10CFR20



## GASEOUS EFFLUENT

4.1-U

### UNUSUAL EVENT (CONTINUED)

#### CURVES/TABLES

Table 4.1-U RELEASE LIMITS FOR UNUSUAL EVENT			
TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$2.88 \times 10^{-7}$ $\mu$ Ci/sec	1 HOUR
GASEOUS RELEASE RATE	SI 4.8.B.1.a.1	RELEASE FRACTION 2.0	1 HOUR
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	0.10 MREM/HR $\gamma - \beta$	1 HOUR

#### NOTES

NOTE 4.1-U

Prior to making this emergency classification based upon the WRGERMS indication, assess the release by either of the following:

1. Actual field measurements exceed the limits in Table 4.1-A
2. SI 4.8.B.1.a.1 Release Fraction 2.0

If neither assessment can be conducted within 60 minutes then the declaration must be made on the valid WRGERMS reading.

## GASEOUS EFFLUENT

4.1-A

### ALERT

Gaseous release exceeds ANY limit and duration in Table 4.1-A.

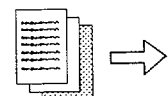
**OPERATING**            -    All  
**CONDITION**

**BASIS**            This event escalates from Unusual Event by increasing the magnitude of the release by a factor of 100. The release limit is equivalent to 200 times the Offsite Dose Calculation Manual (ODCM) limit. The value of 10 mrem/hr at the site boundary is based on a proration of the 500 mrem/yr criteria for both time (8766 hr/yr) and the 200 multiplier. The required release duration is reduced to 15 minutes in recognition of the increased severity. Table 4.1-A contains the Alert limits and appropriate monitoring points for the releases.

Utilize Radiological Control for obtaining site boundary assessments.

Escalation to Site Area Emergency is based on radiation release which will yield a dose to a member of the public which exceeds 10CFR20 limits.

**REFERENCES**    -    Reg Guide 1.101 Rev. 3, (NUMARC-AA1 example-1)  
                      -    RIMS L63 950502 800  
                      -    10CFR20  
                      -    EPA 400



**GASEOUS EFFLUENT**

**4.1-A**

**ALERT**  
(CONTINUED)

**CURVES/TABLES**

<b>Table 4.1-A RELEASE LIMITS FOR ALERT</b>			
<b>TYPE</b>	<b>MONITORING METHOD</b>	<b>LIMIT</b>	<b>DURATION</b>
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$2.88 \times 10^9$ $\mu$ Ci/sec	15 MINUTES
GASEOUS RELEASE RATE	SI 4.8.B.1.a.1	RELEASE FRACTION 200	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	10 MREM/HR $\gamma - \beta$	15 MINUTES

**NOTES**

- NOTE 4.1-A Prior to making this emergency classification based upon the WRGERMS indication, assess the release by either of the following:
1. Actual field measurements exceed the limits in Table 4.1-A
  2. SI 4.8.B.1.a.1 Release Fraction 200

If neither assessment can be conducted within 15 minutes then the declaration must be made on the valid WRGERMS reading.

**GASEOUS EFFLUENT**

**4.1-S**

**SITE AREA EMERGENCY**

**EITHER of the following conditions exists:**

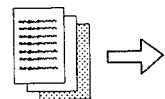
- **Gaseous release exceeds or is expected to exceed ANY limit and duration in Table 4.1-S.**
- **Dose assessment indicates actual or projected dose consequences above 100 mrem TEDE or 500 mrem thyroid CDE**

**OPERATING** - All  
**CONDITION**

**BASIS** The limits in this event classification are based on 10 percent of the EPA Protective Action Guidelines or the 10CFR20 dose limit for a member of the public. These limits also provide a desirable gradient between Alert, Site Area Emergency, and General Emergency.

Table 4.1-S limits for stack and field surveys measurements are consistent with 10 percent of the EPA Protective Action Guidelines or the 10CFR20 dose limit for a member of the public. Stack Noble Gas Release Rates of  $1.3 \times 10^{10}$   $\mu\text{Ci}/\text{sec}$  for 60 minutes, site boundary radiation readings of 100 mrem/hr for 1 hour, and Iodine-131 concentration of  $3.9 \times 10^{-7}$   $\mu\text{Ci}/\text{cm}^3$  for 1 hour are indicative of dose consequences consistent with the limits described previously. The durations in Table 4.1-S are consistent with NUMARC recommendations and industry standards. If analyses indicated a longer or shorter duration for this period in which the substantial portion of the activity is released these dose rates should be adjusted.

Utilize Radiological Control for obtaining site boundary. Dose projection assessments should be requested through the CECC by the implementation of CECC EPIP-8, if the CECC is not staffed utilize site Radiological Control for dose projection assessments through the implementation of BFN EPIP-14.





**GASEOUS EFFLUENT**

**4.1-S**

SITE AREA EMERGENCY  
(CONTINUED)

The 500 mrem thyroid CDE limit was established in consideration of the 1 to 5 ratio of the EPA Protective Action Guidelines for TEDE and thyroid CDE.

Escalation to General Emergency is based on actual or projected dose exceeding 1000 mrem TEDE or 5000 mrem thyroid CDE.

- REFERENCES**
- Reg Guide 1.101 Rev. 3, (NUMARC-AS1 example-1)
  - RIMS L63 950502 800
  - 10CFR20
  - EPA 400

**CURVES/TABLES**

Table 4.1-S RELEASE LIMITS FOR SITE AREA EMERGENCY			
TYPE	MONITORING METHOD	LIMIT	DURATION
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$1.3 \times 10^{10}$ $\mu$ Ci/sec	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	100 MREM/HR $\gamma - \beta$	1 HOUR
SITE BOUNDARY IODINE-131	FIELD ASSESSMENT TEAM	$3.9 \times 10^{-7}$ $\mu$ CI/cm <sup>3</sup>	1 HOUR

**NOTES**

NOTE 4.1-S Prior to making this emergency classification based upon the Gaseous Release Rate indication, assess the release by either of the following methods:

1. Actual field measurements exceed the limits in Table 4.1-S.
2. Projected or Actual Dose Assessments exceed 100 mrem TEDE or 500 mrem CDE.

If neither assessment can be conducted within 15 minutes then the declaration must be made based on the valid WRGERMS reading.

## GASEOUS EFFLUENT

4.1-G

### GENERAL EMERGENCY

**EITHER of the following conditions exists:**

- Gaseous release exceeds or is expected to exceed ANY limit and duration in Table 4.1-G.
- Dose assessment indicates actual or projected dose consequences above 1000 mrem TEDE or 5000 mrem thyroid CDE

**OPERATING** - All  
**CONDITION**

**BASIS** The limits in this event classification are based on the EPA Protective Action Guidelines which require public protective actions if dose consequences of 1000 mrem TEDE or 5000 mrem thyroid CDE are indicated. These limits also provide a desirable gradient between Alert, Site Area Emergency, and General Emergency and represent the upper level of the gradient.

Table 4.1-G limits for stack and field surveys measurements are consistent with the EPA Protective Action Guidelines for dose limits requiring public protective actions. Stack Noble Gas Release Rates of  $1.3 \times 10^{11}$   $\mu\text{Ci}/\text{sec}$  for 60 minutes, site boundary radiation readings of 1000 mrem/hr for 1 hour, and Iodine-131 concentration of  $3.9 \times 10^{-6}$   $\mu\text{Ci}/\text{cm}^3$  for 1 hour are indicative of dose consequences consistent with the limits described previously. The durations in Table 4.1-G are consistent with NUMARC recommendations and industry standards. If analyses indicated a longer or shorter duration for this period in which the substantial portion of the activity is released these dose rates should be adjusted.

Utilize Radiological Control for obtaining site boundary assessments. Dose projection assessments should be requested through the CECC by the implementation of CECC EPIP-8, if the CECC is not staffed utilize site Radiological Control for dose projection assessments through the implementation of BFN EPIP-14.

The 5000 mrem thyroid CDE limit was established in consideration of the 1 to 5 ratio of the EPA Protective Action Guidelines for TEDE and thyroid CDE. Actual meteorology is used in dose assessment calculations to achieve the most accurate dose assessment possible.



**GASEOUS EFFLUENT**

**4.1-G**

**GENERAL EMERGENCY**  
(CONTINUED)

- REFERENCES**
- Reg Guide 1.101 Rev. 3, (NUMARC-as1 example-1)
  - RIMS L63 950502 800
  - 10CFR20

**CURVES/TABLES**

<b>Table 4.1-G RELEASE LIMITS FOR GENERAL EMERGENCY</b>			
<b>TYPE</b>	<b>MONITORING METHOD</b>	<b>LIMIT</b>	<b>DURATION</b>
GASEOUS RELEASE RATE	STACK NOBLE GAS (WRGERMS)	$1.3 \times 10^{11}$ $\mu\text{Ci}/\text{sec}$	15 MINUTES
SITE BOUNDARY RADIATION READING	FIELD ASSESSMENT TEAM	1000 MREM/HR $\gamma - \beta$	1 HOUR
SITE BOUNDARY IODINE-131	FIELD ASSESSMENT TEAM	$3.9 \times 10^{-6}$ $\mu\text{Ci} / \text{cm}^3$	1 HOUR

**NOTES**

**NOTE 4.1-G**

Prior to making this emergency classification based upon the Gaseous Release Rate indication, assess the release by either of the following methods:

1. Actual field measurements exceed the limits in Table 4.1-G.
2. Projected or Actual Dose Assessmnets exceed 1000 mrem TEDE or 5000 mrem CDE.

If neither assessment can be conducted within 15 minutes then the declaration must be made based on the valid WRGERMS reading.

**MAIN STEAM LINE BREAK**

**4.2-U**

**UNUSUAL EVENT**

**Main Steam Line break outside Primary Containment with isolation.**

**OPERATING** - Mode 1  
**CONDITION** - Mode 2  
- Mode 3

**BASIS**

This event classification is intended to address the puff release associated with a Main Steam Line break outside Primary that isolates by PCIS Logic as required or can be isolated from the Main Control Room. Regardless of whether the break is in the Turbine Building or the Reactor Building a ground level release should be anticipated due to the blowout panels between the two buildings. Design basis analysis shows that even if MSIV closure occurs within design limits, dose consequences from a "puff" release should be expected. Thus this event classification is included due to the possibility of offsite exposures from the "puff" release.

This event is detected by instrumentation which inputs to the PCIS Logic circuitry. Main Steam Line high flow, Reactor low pressure with the mode switch in "Run", And Turbine Building Main Steam Space high temperature are all symptoms of the event and should be evaluated to determine if an actual break has occurred.

Escalation to Area is based on radiation release rate event classifications.

**REFERENCES** - Reg Guide 1.101 Rev. 3, (NUMARC-FU)

**MAIN STEAM LINE BREAK**

**4.2-S**

**SITE AREA EMERGENCY**

**Unisolable Main Steam Line break outside Primary Containment.**

**OPERATING** - Mode 1  
**CONDITION** - Mode 2  
- Mode 3

**BASIS**

This event classification applies to Main Steam Line Break that cannot be isolated by PCIS Logic or from the Main Control Room. Regardless of whether the break is in the Turbine Building or the Reactor Building a ground level release is expected due to the blowout panels between the two buildings. This event classification represents a loss of two of the three fission product barriers.

Main Steam Line high flow, Reactor low pressure with the mode switch in "Run", and Turbine Building Main Steam Space high temperature are all symptoms of the event. This event is anticipatory to 4.1-S and the threshold for leakage outside Primary and Secondary Containment should be considered to be any continuous discharge of steam through the break that, in the opinion of the Site Emergency Director, could result in exceeding the limits outlined in 4.1-S.

Escalation to General Emergency is based on loss of the Fuel Clad barrier or radioactivity release event classifications.

**REFERENCES** - Reg Guide 1.101 Rev. 3, (NUMARC-FS)

## LIQUID EFFLUENT

4.3-U

### UNUSUAL EVENT

Liquid release rate exceeding 20 times ECL as determined by  
chemistry sample

AND

Release duration exceeds or will exceed 60 minutes.

**OPERATING** - All  
**CONDITION**

**BASIS** Liquid release rates are determined using Surveillance Instructions which utilize liquid samples rather than instrument readings for activity determination. Effluent Concentration Limits (ECL) are those annual concentrations given in 10CFR20 Appendix B, Table 2, Column 2. 10 times ECL is equivalent to the instantaneous ODCM limit. Unplanned radioactivity releases that exceed 20 times ECL (2 times ODCM limit) and continue for 60 minutes or longer represent an uncontrolled situation and potential degradation in the level of safety of the plant. The release should not be averaged over 60 minutes. For example, a release of 40 times ECL for 30 minutes does not meet the requirements of this event classification. The 60 minute time period allows sufficient time to isolate any release after exceeding ECL. Greater than 60 minutes represents inability to isolate or control the release. The Site Emergency Director should declare the event as soon as it is determined that the release duration has or will likely exceed 60 minutes. The Chemistry Department determines the magnitude of the release by sample procedure for any release as required by initiating procedures (i.e., SI, ARP, AOI, EOI). The sample results are reported to the Site Emergency Director as a fraction or multiple of ECL.

Escalation to Alert is based on release in excess of 2000 times ECL for greater than 15 minutes.

**REFERENCES** - Reg Guide 1.101 Rev. 3, (NUMARC-AU1 example-2)  
- RIMS L63 950502 800  
- 10CFR20

**LIQUID EFFLUENT**

**4.3-A**

**ALERT**

**Liquid release rate exceeding 2000 times ECL as determined by chemistry sample**

**AND**

**Release duration exceeds or will exceed 15 minutes.**

**OPERATING** - All  
**CONDITION**

**BASIS** This event escalates from Unusual Event by increasing the magnitude of the release by a factor of 100. The required release duration is reduced to 15 minutes in recognition of the increased severity. The Chemistry Department determines the magnitude of the release by sample procedure for any release as required by initiating procedures (e.g., SI, ARP, AOI, EOI). The sample results are reported to the Site Emergency Director as a fraction or multiple of ECL. 10 times ECL is equal to the ODCM limit; therefore, 200 times the ODCM limit is equivalent to 2000 times ECL.

Escalation to Site Area Emergency is based on event classifications indicative of failure of the Reactor Coolant System pressure boundary and Primary Containment barrier.

**REFERENCES** - Reg Guide 1.101 Rev. 3, (NUMARC-AA1 example-2)  
- RIMS L63 950502 800

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP- 2**

**NOTIFICATION OF UNUSUAL EVENT**

**REVISION 21A**

PREPARED BY: T.W. CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03-08-2000

EFFECTIVE DATE: 03-09-2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**



REVISION LOG

Procedure Number: EPIP-2

Revision Number: 21A

Pages Affected: 5, 7, 9, 10

Description of Change:

EC-25      This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 21. EPIP 2 was revised primarily as a part of the site standardization process.  
EPIP 2 (rev. log) was changed to reflect the current revision level.  
Page 5, was revised to add the follow up notification form into the body of the instruction.  
Page 7, adds the follow-up notification attachment to the procedure attachment listing.  
Page 9, was revised to update Nuclear Security telephone extension number.  
Page 10, was revised to add the follow up notification form.

**1.0 PURPOSE**

- 1.1** Provide for timely notification of appropriate individuals or organizations when the Shift Manager has determined by EPIP-1 that an incident has occurred which is classified as a NOTIFICATION OF UNUSUAL EVENT.
  
- 1.2** Provide for periodic analysis of the current situation by the Shift Manger/Site Emergency Director (SED) to determine whether the NOTIFICATION OF UNUSUAL EVENT should be terminated, continued, or upgraded to a more serious classification.

**2.0 SCOPE**

This procedure applies to emergency events that are classified as a Notification of Unusual Event by EPIP-1, Emergency Classification Procedure.

3.0 INSTRUCTIONS

3.1 Notification of the Operations Duty Specialist (ODS)

**Note:** The ODS should be notified within 5 minutes after the emergency event is declared.

**Date:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_

3.1.1 Complete Attachment A (Notification Information).

\_\_\_\_\_  
INITIALS                      TIME

3.1.2 Notify the ODS and Provide the information from Attachment A.

\_\_\_\_\_  
INITIALS                      TIME

**Note:** Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS Telephone Numbers  
5-751-1700  
5-751-2495

**If** the ODS cannot be reached within 10 minutes, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m.  
9-1-334-206-5391

Holidays-Weekends-Offshifts  
9-1-334-242-4378

3.1.3 Fax a copy of Attachment A to the ODS for confirmation of information or state if contacted directly).

\_\_\_\_\_  
INITIALS                      TIME

ODS Fax                      AL Rad Health  
5-751-8620                      9-1-334-206-5387

3.1.4 Receive confirmation call from the ODS (to verify notification of the State of Alabama) (NA this step if the State was contacted directly).

\_\_\_\_\_  
INITIALS                      TIME

3.0 INSTRUCTIONS (CONTINUED)

3.2 NOTIFICATION OF SITE PERSONNEL

3.2.1 **Provide** the Unit 1, Unit Operator with a completed copy of Attachment A.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.2.2 **Direct** the Unit 1, Unit Operator to make notifications from Attachment B ( Unit 1, Unit Operator Notification), utilizing information from Attachment A.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.2.3 **Make** the following plant P.A. announcement:

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

THIS IS (NAME), SHIFT MANAGER. A NOTIFICATION OF UNUSUAL EVENT HAS BEEN DECLARED ON UNIT \_\_\_\_ . I HAVE ASSUMED THE DUTIES OF SITE EMERGENCY DIRECTOR.

3.2.4 **Notify** the Plant Manager or alternate.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.3 OFFSITE DOSE ASSESSMENT

3.3.1 Evaluate the need for offsite dose assessment.  
(N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.3.1.1 When offsite dose assessment is required obtain the information from the CECC when operational.

3.3.1.2 If the CECC is not operational, contact the TSC, when staffed or the RADCON Shift Supervisor and request the implementation of EPIP 14, for dose assessment.

3.0 INSTRUCTIONS (CONTINUED)

3.4 NOTIFICATION OF THE NRC

3.4.1 **Notify** the NRC immediately or within 1 hour and if requested by the NRC maintain an open and continuous communications channel.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**Note:** **Utilize** the Emergency Notification System (ENS) when making this notification. Dial the first number listed on the sticker affixed to the ENS telephone, using all 10 digits. **If** the number is busy, **Then** select in order, the alternate numbers until a connection is achieved.

**Note:** **If** the ENS phones are out-of-service, **Then** dial direct utilizing the TVA phone system by dialing 9-1-the number listed on the ENS telephones. No access codes are required.

**3.0 INSTRUCTIONS (CONTINUED)**

**3.5 PERIODIC EVALUATION OF THE EVENT**

**3.5.1** Continue to **Evaluate** the event by using EPIP-1 as conditions warrant.

**3.5.2** **If** other EAL conditions exist indicating the current emergency classification or significant changes in plant conditions have occurred since the last update to the ODS, and the CECC is not staffed, **Then, Complete** the "Follow-Up" Notification Form (Attachment C), notify the ODS and provide the new information. Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS - 5-751-2495, 1700

**Note** **If** the ODS cannot be reached, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m.  
9-1-334-206-5391

Holidays-Weekends-Offshifts  
9-1-334-242-4378

**3.5.3** **If** the conditions warrants upgrading to a higher classifications, **Then** initiate the appropriate EPIP.

**3.5.4** **If** the conditions warrant termination of the classification, **Then** enter the Termination section of this procedure at step 3.6.

**3.5.5** **Re-enter** this procedural section as conditions warrant at step 3.5.1 or until directed to exit this procedure by steps 3.5.3 or 3.5.4.

3.0 INSTRUCTIONS (CONTINUED)

3.6 TERMINATION OF THE EVENT

If the situation no longer exists terminate the event and notify the following:

Date: \_\_\_/\_\_\_/\_\_\_

3.6.1 Notify the ODS of the termination of the emergency or the state directly if the ODS cannot be contacted.

\_\_\_\_\_  
INITIALS                      TIME

3.6.2 Notify the NRC of the termination of the emergency.

\_\_\_\_\_  
INITIALS                      TIME

3.6.3 Notify the Plant Manager or Alternate of the termination of the emergency.

\_\_\_\_\_  
INITIALS                      TIME

3.6.4 Complete Attachment A by providing the time and date of termination.

\_\_\_\_\_  
INITIALS                      TIME

3.6.4 Notify the Unit 1, Unit Operator. Provide the Unit 1, Unit Operator with the termination time and date and direct the Unit 1, Unit Operator to notify the individuals contacted on Attachment B of the termination of the emergency.

\_\_\_\_\_  
INITIALS                      TIME

**3.0 INSTRUCTIONS (CONTINUED)**

**3.7 CLOSURE OF THE NOTIFICATION OF UNUSUAL EVENT**

3.7.1 Upon termination of the Notification of Unusual Event, the Shift Manager shall send the completed EPIP-2 and all attachments to Emergency Preparedness (EP).

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.7.2 EP shall forward to the PORC Secretary the completed EPIP and all attachments for review by PORC.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.7.3 PORC Review Completed.

\_\_\_\_\_  
PORC Chairman / DATE  
[NRC/C85/28].

3.7.4 After PORC review is completed the PORC secretary shall forward the signed EPIP-2 with all attachments to EP for documentation storage.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**4.0 ATTACHMENTS**

Attachment A - Notification Information

Attachment B - Unit 1, Unit Operator Notification

Attachment C - Follow Up Information Form



ATTACHMENT A (Page 1 of 1)  
NOTIFICATION INFORMATION

THIS IS A REAL EVENT

THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.  
Name

There has been a NOTIFICATION OF UNUSUAL EVENT declared at Browns Ferry affecting:

Unit 1

Unit 2

Unit 3

Common

EAL Designator: \_\_\_\_\_

Brief Description of the Event:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Plant Conditions:

Stable

Deteriorating

Radiological Conditions:

No Abnormal Releases Offsite

Airborne Release Offsite

Liquid Release Offsite

Release Information Not Known

Event Declared: Time: \_\_\_\_\_ Date: \_\_\_\_\_

Event Terminated: Time: \_\_\_\_\_ Date: \_\_\_\_\_

There is no Protective Action Recommendation at this time.

Please repeat the information you have received to ensure accuracy.

ATTACHMENT B (Page 1 of 1)  
UNIT 1, UNIT OPERATOR NOTIFICATIONS

Date: \_\_\_/\_\_\_/\_\_\_

**Note:** All notifications should be made utilizing the information located on EPIP 2, Attachment A

**Received** a completed copy of EPIP 2, Attachment A from the  
Site Emergency Director.

\_\_\_\_\_  
INITIALS                      TIME

Personnel Notifications	Initial Notifications		Termination Notifications	
<b>Notify</b> the Operations Manager (from the weekly duty list)	_____ Initials	_____ Time	_____ Initials	_____ Time
<b>Notify</b> the Vice President (from the weekly duty list)	_____ Initials	_____ Time	_____ Initials	_____ Time
<b>Notify</b> the REP manager (from the weekly duty list)	_____ Initials	_____ Time	_____ Initials	_____ Time
[NRC/C] <b>Notify</b> the Emergency Public Information Officer (from the weekly duty list)	_____ Initials	_____ Time	_____ Initials	_____ Time
<b>Notify</b> the Nuclear Security Shift Supervisor. Ext. 3150 or 2219	_____ Initials	_____ Time	_____ Initials	_____ Time
<b>Notify</b> the NRC Resident Ext. 2573, or 2572 or from the weekly duty list.	_____ Initials	_____ Time	_____ Initials	_____ Time

This is a Quality Assurance record with a retention of five years.

ATTACHMENT C (Page 1 of 1)  
FOLLOW-UP INFORMATION FORM  
**Notification of Unusual Event**

THIS IS A REAL EVENT       THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a NOTIFICATION OF UNUSUAL EVENT declared at Browns Ferry affecting:

Unit 1       Unit 2       Unit 3       Common

The Reactor is  Shutdown       At Power

Plant Conditions are  Stable       Deteriorating

“Follow-Up” Information (e.g., Key Events, Status Changes)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Current Radiological Conditions are:

- No Abnormal Releases Offsite
- Airborne Release Offsite
- Liquid Release Offsite
- Release Information Not Known

Additional Rad information: (e.g., release duration)

\_\_\_\_\_  
\_\_\_\_\_

There is no Protective Action Recommendation at this time.

Please repeat the information you have received to ensure accuracy.

The time for this follow up is:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

LAST PAGE

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-3**

**ALERT**

**REVISION 24A**

PREPARED BY: TIM CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

REVISION LOG

Procedure Number: EPIP-3

Revision Number: 24A

Pages Affected: 2,4,5,6,8,10

Description of Change:

- EC-28      This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 24. EPIP 3 was revised primarily as a part of the site standardization process and to improve general procedure progression. EPIP 3 (rev. log) was changed to reflect the current revision level.
- Page 2 and 4, was revised to modify and move the logic step regarding center notifications (due to this change procedure step numbers were revised without revision indications).
- Page 5, was revised to add the follow up form information into the body of the instruction.
- Page 6, adds the follow up notification form attachment to the procedure attachment listing.
- Page 8, was revised to update Nuclear Security telephone extension number.
- Page 10, was revised to add the follow up notification form.

**1.0 PURPOSE**

- 1.1** Provide for timely notification of appropriate individuals or organizations when the Shift Manager/Site Emergency Director (SED) has determined by EPIP-1 that an incident has occurred which is classified as an ALERT.
  
- 1.2** Provide for periodic evaluation of the current situation by the Shift Manager/SED to determine whether the ALERT should be terminated, continued, or upgraded to a more serious classification.

**2.0 SCOPE**

This procedure applies to emergency events that are classified as Alert by EPIP-1, Emergency Classification Procedure.

# EPIP-3

### 3.0 INSTRUCTIONS

Date: \_\_\_/\_\_\_/\_\_\_

3.1 If all Emergency Centers **ARE STAFFED**, Then notify the following that an **ALERT** Emergency Classification has been issued and EPIP 3 is being implemented, and continue in this procedure at Step 3.4. If all Emergency Centers **ARE NOT STAFFED**, Then N/A this step and continue in this procedure.

CECC   
TSC   
OSC

Control Rooms   
Plant PA Announcement

\_\_\_\_\_  
INITIALS                      TIME

This is NAME, Site Emergency Director, an Alert has been declared at BFN, we are currently implementing EPIP-3. Standby for further updates.

### 3.2 Notification of the Operations Duty Specialist (ODS) & Emergency Responders

**Note:** The ODS **should** be notified within 5 minutes after the emergency event is declared.

3.2.1 **Complete** Attachment A (Notification Information).

\_\_\_\_\_  
INITIALS                      TIME

3.2.2 **Direct** the Unit 1, Unit Operator to make notifications from Attachment B (Unit 1, Unit Operator Notification)

\_\_\_\_\_  
INITIALS                      TIME

3.2.3 **Notify** the ODS and **Provide** the information from Attachment A.

\_\_\_\_\_  
INITIALS                      TIME

**Note:** Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS Telephone Numbers - 5-751-1700, or 2495

**If** the ODS cannot be reached within 10 minutes, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m. - Holidays-Weekends-Offshifts  
9-1-334-206-5391                      9-1-334-242-4378

3.2.4 **Fax** a copy of Attachment A to the ODS for confirmation of information or state if the state was contacted directly.

\_\_\_\_\_  
INITIALS                      TIME

ODS Fax                                      AL Rad Health Fax  
5-751-8620                                      9-1-334-206-5387

3.2.5 **Receive** confirmation call from the ODS (to verify notification of the State of Alabama)(NA this step, if the state was contacted directly).

\_\_\_\_\_  
INITIALS                      TIME

**3.0 INSTRUCTIONS (CONTINUED)****3.3 NOTIFICATION OF SITE PERSONNEL**

**3.3.1 Make** the following plant P.A. announcement:

\_\_\_\_\_  
INITIALS\_\_\_\_\_  
TIME

THIS IS (*NAME*), SHIFT MANAGER. An ALERT HAS BEEN DECLARED ON UNIT \_\_\_\_ . I HAVE ASSUMED THE DUTIES OF SITE EMERGENCY DIRECTOR. REPORT TO YOUR ASSIGNED EMERGENCY RESPONSE FACILITY AT THIS TIME!

**3.4 ACCOUNTABILITY**

**CAUTION:** Do not initiate an Accountability if the Alert is due to a Tornado or other severe weather condition.

**3.4.1** If the emergency situation warrants an Accountability, **activate** the Accountability Alarm. (Reference EPIP-8) (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS\_\_\_\_\_  
TIME

**Note:** If the emergency situation does not warrant an Accountability at this time, continue to assess the situation and activate the Accountability Alarm when necessary.

**3.5 OFFSITE DOSE ASSESSMENT**

**3.5.1** Evaluate the need for offsite dose assessment. (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS\_\_\_\_\_  
TIME

**3.5.1.1** When offsite dose assessment is required obtain the information from the CECC when operational.

**3.5.1.2** If the CECC is not operational, contact the TSC, when staffed or the RADCON Shift Supervisor and request the implementation of EPIP 14, for dose assessment.



---

**3.0 INSTRUCTIONS (CONTINUED)****3.6 NOTIFICATION OF THE NRC**

**3.6.1** **Notify** the NRC immediately or within 1 hour and if requested by the NRC maintain an open and continuous communications channel.

---

INITIALS

---

TIME

**Note:** **Utilize** the Emergency Notification System (ENS) when making this notification. Dial the first number listed on the sticker affixed to the ENS telephone, using all 10 digits. **If** the number is busy, **Then** select in order, the alternate numbers until a connection is achieved.

**Note:** **If** the ENS phones are out-of-service, **Then** dial direct utilizing the TVA phone system by dialing 9-1-the number listed on the ENS telephones. No access codes are required.

---

**3.0 INSTRUCTIONS (CONTINUED)****3.7 PERIODIC EVALUATION OF THE EVENT**

3.7.1 Continue to **Evaluate** the event using EPIP-1 as conditions warrant.

3.7.2 **If** plant conditions warrant the need for follow up information, **Complete** the Follow Up Notification Form, Attachment C.

**Note:** Conditions that warrant this evaluation are as a minimum when other EAL conditions exist indicating the current emergency classification or significant changes in plant conditions have occurred.

3.7.3 **If** the CECC is not staffed, **Then** notify the ODS and provide follow up information from the completed Attachment C form. Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS - 5-751-2495, 1700

**Note:** **If** the ODS cannot be reached, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m.  
9-1-334-206-5391

Holidays-Weekends-Offshifts  
9-1-334-242-4378

3.7.4 **If** the conditions warrant upgrading to a higher classification, **Then** initiate the appropriate EPIP.

3.7.5 **If** the conditions warrants termination of the classifications, **Then** enter EPIP-16, Termination and Recovery Procedure.

3.7.6 **After** the evaluation has been completed, **if staffed**, **Notify** the following of the status:

- CECC
- NRC (ENS)
- TSC
- OSC
- CONTROL ROOMS
- PLANT PA ANNOUNCEMENT

3.7.7 **Re-enter** this procedural section as conditions warrant at step 3.7.1 or until directed to exit this procedure by steps 3.7.4 or 3.7.5.

### 3.0 INSTRUCTIONS (CONTINUED)

#### 3.8 CLOSURE OF THE ALERT

3.8.1 Upon termination of the Alert, send the completed EPIP-3 and all attachments to Emergency Preparedness (EP). \_\_\_\_\_  
INITIALS                  TIME

3.8.2 EP shall forward to the PORC Secretary the completed EPIP and all attachments for review by PORC. \_\_\_\_\_  
INITIALS                  TIME

3.8.3 PORC Review Completed.

\_\_\_\_\_/\_\_\_\_\_  
PORC Chairman                  DATE  
[NRC/C85/28].

3.8.4 After PORC review is completed the PORC secretary shall forward the signed EPIP-3 with all attachments to EP for documentation storage. \_\_\_\_\_  
INITIALS                  TIME

#### 4.0 ATTACHMENTS

Attachment A - Notification Information

Attachment B - Unit 1, Unit Operator Notification

Attachment C - Follow Up Information Form

ATTACHMENT A (Page 1 of 1)  
NOTIFICATION INFORMATION

THIS IS A REAL EVENT

THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a ALERT declared at Browns Ferry affecting:

Unit 1

Unit 2

Unit 3

Common

EAL Designator: \_\_\_\_\_

Brief Description of the Event:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Plant Conditions:

Stable

Deteriorating

Radiological Conditions:

No Abnormal Releases Offsite

Airborne Release Offsite

Liquid Release Offsite

Release Information Not Known

Event Declared:

Time: \_\_\_\_\_

Date: \_\_\_\_\_

Event Terminated:

Time: \_\_\_\_\_

Date: \_\_\_\_\_

There is no Protective Action Recommendation at this time.

Please repeat the information you have received to ensure accuracy.

# EPIP-3

ATTACHMENT B (Page 1 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_/\_\_\_/\_\_\_

1. **Activate** the Automatic Paging System (APS).

\_\_\_\_\_  
INITIALS                  TIME

**Note:** See Instructions in EPIP-6 Callout List (List will be maintained by the EP Manager)

**Important:** If the APS does NOT activate, Call the ODS (5-751-1700 or 5-751-2495) to activate and notify the SED immediately.

2. **Notify** the Unit Supervisors on shift.

\_\_\_\_\_  
INITIALS                  TIME

3. **Notify** Nuclear Security Shift Supervisor and state "AN ALERT HAS BEEN DECLARED" and direct to activate EPIP-11, Security and Access Control.

\_\_\_\_\_  
INITIALS                  TIME

- Plant Extension 3150 or 2219

4. **Notify** the Chemistry Lab Supervisor and state "AN ALERT HAS BEEN DECLARED" and direct to activate EPIP-13, Radiochemical Laboratory Procedure.

\_\_\_\_\_  
INITIALS                  TIME

- Plant Extension 2367 or 2368

5. **Notify** the RADCON Shift Supervisor and state "AN ALERT HAS BEEN DECLARED" and direct to activate EPIP-14, Radiological Control Procedure.

\_\_\_\_\_  
INITIALS                  TIME

- Plant Extension 2300 or 3104

ATTACHMENT B (Page 2 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_/\_\_\_/\_\_\_

6. **Notify** the "On-Call" NRC Resident and state "AN ALERT HAS BEEN DECLARED," per BFN-EPIP-03.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2572 [Secretary] or from weekly duty list

7. **IF** the APS did not operate properly, **Make** notifications from the current duty list. **If** the individuals on the duty list cannot be contacted, **Make** notifications from the EPIP-6 Call Out List. **Notify** the SED of the condition.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

ATTACHMENT C (Page 1 of 1)  
FOLLOW-UP INFORMATION FORM  
**ALERT**

THIS IS A REAL EVENT       THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a Alert declared at Browns Ferry affecting:

Unit 1       Unit 2       Unit 3       Common

The Reactor is  Shutdown       At Power

Plant Conditions are  Stable       Deteriorating

“Follow-Up” Information (e.g., Key Events, Status Changes)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Current Radiological Conditions are:

- No Abnormal Releases Offsite
- Airborne Release Offsite
- Liquid Release Offsite
- Release Information Not Known

Additional Rad information: (e.g., release duration)

\_\_\_\_\_  
\_\_\_\_\_

There is no Protective Action Recommendation at this time.

Please repeat the information you have received to ensure accuracy.

The time for this follow up is:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

LAST PAGE

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-4**

**SITE AREA EMERGENCY**

**REVISION 23A**

PREPARED BY: TIM CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**



REVISION LOG

Procedure Number: EPIP-4

Revision Number: 23A

Pages Affected: 2,4,3,5,7,9,11

Description of Change:

EC-29 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 23. EPIP 4 was revised primarily as a part of the site standardization process and to improve general procedure progression .  
EPIP 4 (rev. log) was changed to reflect the current revision level.  
Page 2 and 4, was revised to move and modify the logic step regarding center notifications.  
(due to this change, step numbers were revised without revision indications)  
Page 3, a note was formalized to ensure Nuclear Security is notified prior to sounding the evacuation alarms.  
Page 5, was revised to add the follow up form information into the body of the instruction.  
Page 7, adds the follow up notification form attachment to the procedure attachment listing.  
Page 9, was revised to update Nuclear Security telephone extension number.  
Page 11, was revised to add the follow up notification form.

**1.0 PURPOSE**

- 1.1** Provide for timely notification of appropriate individuals or organizations when the Shift Manager/Site Emergency Director (SED) has determined by EPIP-1 that an incident has occurred which is classified as a SITE AREA EMERGENCY (SAE).
- 1.2** Provide for periodic evaluation of the current situation by the Shift Manager/SED to determine whether the SAE should be terminated, continued, or upgraded to a more serious classification.

**2.0 SCOPE**

This procedure applies to emergency events that are classified as Site Area Emergency by EPIP-1, Emergency Classification Procedure.

### 3.0 INSTRUCTIONS

Date: \_\_\_/\_\_\_/\_\_\_

3.1 If all Emergency Centers **ARE STAFFED**, Then notify the following that a **SITE AREA EMERGENCY** Emergency Classification has been issued and EPIP 4 is being implemented, and continue in this procedure at Step 3.4. If all Emergency Centers **ARE NOT STAFFED**, Then N/A this step and continue in this procedure.

CECC   
TSC   
OSC

Control Rooms   
Plant PA Announcement

\_\_\_\_\_  
INITIALS      TIME

This is NAME, Site Emergency Director, an SAE has been declared at BFN, we are currently implementing EPIP-4. Standby for further updates.

### 3.2 Notification of the Operations Duty Specialist (ODS) & Emergency Responders

**Note:** The ODS **should** be notified within 5 minutes after the emergency event is declared.

3.2.1 **Complete** Attachment A (Notification Information).

\_\_\_\_\_  
INITIALS      TIME

3.2.2 **Direct** the Unit 1, Unit Operator to make notifications from Attachment B (Unit 1, Unit Operator Notification)

\_\_\_\_\_  
INITIALS      TIME

3.2.3 **Notify** the ODS and **Provide** the information from Attachment A.

\_\_\_\_\_  
INITIALS      TIME

**Note:** Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS Telephone Numbers  
5-751-1700, 2495

**If** the ODS cannot be reached within 10 minutes, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m. - Holidays-Weekends-Offshifts  
9-1-334-206-5391      9-1-334-242-4378

3.2.4 **Fax** a copy of Attachment A to the ODS for confirmation of information or if the state is contacted directly.

\_\_\_\_\_  
INITIALS      TIME

ODS Fax      AL Rad Health Fax  
5-751-8620      9-1-334-206-5387

3.2.5 **Receive** confirmation call from the ODS (to verify notification of the State of Alabama)(NA this step, if the state was contacted directly).

\_\_\_\_\_  
INITIALS      TIME

3.0 INSTRUCTIONS (CONTINUED)

3.3 NOTIFICATION OF SITE PERSONNEL

3.3.1 **Make** the following plant P.A. announcement:

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

THIS IS (*NAME*), SHIFT MANAGER. A SITE AREA EMERGENCY HAS BEEN DECLARED ON UNIT \_\_\_\_\_. I HAVE ASSUMED THE DUTIES OF SITE EMERGENCY DIRECTOR. REPORT TO YOUR ASSIGNED EMERGENCY RESPONSE FACILITY AT THIS TIME!

3.4 ACCOUNTABILITY AND EVACUATION OF NON-EMERGENCY RESPONDERS

3.4.1 **Prior** to sounding the Evacuation Alarm, **Notify** Nuclear Security. **If** the TSC is staffed notify the TSC Security Manager. **If** the TSC is not staffed or the TSC Security Manager position has not been filled then call 3150 or 2219.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.4.2 **Activate** the Accountability Alarm, if not previously sounded. (Reference EPIP-8) (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.4.3 **When** accountability is complete, **Conduct** evacuation of non-emergency responders by activating the Evacuation Alarm.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

### 3.0 INSTRUCTIONS (CONTINUED)

#### 3.5 DOSE ASSESSMENT

3.5.1 Evaluate the need for offsite dose assessment.  
(N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.5.1.1 **When** offsite dose assessment is required obtain the information from the CECC when operational.

3.5.1.2 **If** the CECC is not operational, contact the TSC, when staffed or the RADCON Shift Supervisor and request the implementation of EPIP 14, for dose assessment.

#### 3.6 NOTIFICATION OF THE NRC

3.6.1 **Notify** the NRC immediately or within 1 hour and if requested by the NRC maintain an open and continuous communications channel.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**Note:** **Utilize** the Emergency Notification System (ENS) when making this notification. Dial the first number listed on the sticker affixed to the ENS telephone, using all 10 digits. **If** the number is busy, **Then** select in order, the alternate numbers until a connection is achieved.

**Note:** **If** the ENS phones are out-of-service, **Then** dial direct utilizing the TVA phone system by dialing 9-1-the number listed on the ENS telephones. No access codes are required.

**3.0 INSTRUCTIONS (CONTINUED)**

**3.7 PERIODIC EVALUATION OF THE EVENT**

**3.7.1** Continue to **Evaluate** the event using EPIP-1 as conditions warrant.

**3.7.2** **If** plant conditions warrant the need for follow up information, **Complete** the Follow Up Notification Form, Attachment C.

**Note:** Conditions that warrant this evaluation are as a minimum when other EAL conditions exist indicating the current emergency classification or significant changes in plant conditions have occurred.

**3.7.3** **If** the CECC is not staffed, **Then** notify the ODS and provide follow up information from the completed Attachment C form. Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS - 5-751-2495, 1700

**Note:** **If** the ODS cannot be reached, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m.  
9-1-334-206-5391

Holidays-Weekends-Offshifts  
9-1-334-242-4378

**3.7.4** **If** the conditions warrants upgrading to a higher classifications, **Then** initiate EPIP-5, General Emergency.

**3.7.5** **If** the conditions warrant termination of the classification, **Then** enter EPIP-16, Termination and Recovery Procedure.

### 3.0 INSTRUCTIONS (CONTINUED)

#### 3.7 PERIODIC EVALUATION OF THE EVENT (CONTINUED)

3.7.6 **After** the evaluation has been completed, **if staffed**, **Notify** the following of the status:

- CECC
- NRC (ENS)
- TSC
- OSC
- CONTROL ROOMS
- PLANT PA ANNOUNCEMENT

3.7.7 **Re-enter** this procedural section as conditions warrant at step 3.7.1 or until directed to exit this procedure by steps 3.7.4 or 3.7.5.

#### 3.8 CLOSURE OF THE SITE AREA EMERGENCY

3.8.1 **Upon** termination of the Site Area Emergency, **Send** the completed EPIP-4 and all attachments to Emergency Preparedness (EP).

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.8.2 EP shall **Forward** to the PORC Secretary the completed EPIP and all attachments for review by PORC.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.8.3 PORC Review Completed.

\_\_\_\_\_  
PORC Chairman / \_\_\_\_\_  
[NRC/C85/28]. DATE

3.8.4 After PORC review is completed the PORC secretary shall forward the signed EPIP-4 with all attachments to EP for documentation storage.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**4.0 ATTACHMENTS**

Attachment A - Notification Information

Attachment B - Unit 1, Unit Operator Notification

Attachment C - Follow Up Information Form



ATTACHMENT A (Page 1 of 1)  
NOTIFICATION INFORMATION

THIS IS A REAL EVENT

THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a SITE AREA EMERGENCY declared at Browns Ferry affecting:

Unit 1

Unit 2

Unit 3

Common

EAL Designator: \_\_\_\_\_

Brief Description of the Event:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Plant Conditions:

Stable

Deteriorating

Radiological Conditions:

No Abnormal Releases Offsite

Airborne Release Offsite

Liquid Release Offsite

Release Information Not Known

Event Declared:

Time: \_\_\_\_\_

Date: \_\_\_\_\_

Event Terminated:

Time: \_\_\_\_\_

Date: \_\_\_\_\_

There is no Protective Action Recommendation at this time.

The Meteorological conditions are:

Wind Speed: \_\_\_\_\_ Wind Direction From: \_\_\_\_\_

Please repeat the information you have received to ensure accuracy.

---

ATTACHMENT B (Page 1 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_/\_\_\_/\_\_\_

1. **Activate** the Automatic Paging System (APS).

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**Note:** See Instructions in EPIP-6 Callout List (List will be maintained by the EP Manager)

**Important:** If the APS does NOT activate, Call the ODS (5-751-1700 or 5-751-2495) to activate and notify the SED immediately.

2. **Notify** the Unit Supervisors on shift.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3. **Notify** Nuclear Security Shift Supervisor and state "A SITE AREA EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-11, Security and Access Control.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 3150 or 2219

4. **Notify** the Chemistry Lab Supervisor and state "A SITE AREA EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-13, Radiochemical Laboratory Procedure.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2367 or 2368

5. **Notify** the RADCON Shift Supervisor and state "A SITE AREA EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-14, Radiological Control Procedure.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2300 or 3104

---

ATTACHMENT B (Page 2 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

6. **Notify** the “On-Call” NRC Resident and state “A SITE AREA EMERGENCY HAS BEEN DECLARED,” per BFN-EPIP-04.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2572 [Secretary] or from weekly duty list

7. **IF** the APS did not operate properly, **Make** notifications from the current duty list. **IF** the individuals on the duty list cannot be contacted, **Make** notifications from the EPIP-6 Call Out List. **Notify** the SED of the condition.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

ATTACHMENT C (Page 1 of 1)  
FOLLOW-UP INFORMATION FORM  
**Site Area Emergency**

THIS IS A REAL EVENT       THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a Site Area Emergency declared at Browns Ferry affecting:

Unit 1       Unit 2       Unit 3       Common

The Reactor is  Shutdown       At Power

Plant Conditions are  Stable       Deteriorating

“Follow-Up” Information (e.g., Key Events, Status Changes)

---

---

---

---

Current Radiological Conditions are:

- No Abnormal Releases Offsite
- Airborne Release Offsite
- Liquid Release Offsite
- Release Information Not Known

Additional Rad information: (e.g., release duration)

---

---

---

There is no Protective Action Recommendation at this time.

Please repeat the information you have received to ensure accuracy.

The time for this follow up is:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**LAST PAGE**

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-5**

**GENERAL EMERGENCY**

**REVISION 28A**

PREPARED BY: TIM CORNELIUS

PHONE: 3336

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

REVISION LOG

Procedure Number: EPIP-5

Revision Number: 28A

Pages Affected: 2,3,5,6,7,9,12

Description of Change:

- EC-35 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 28. EPIP 5 was revised primarily as a part of the site standardization process and to improve general procedure progression .  
EPIP 5, (rev. log) was changed to reflect the current revision level.  
Page 2, was revised to modify the logic step regarding center notifications (due to this change, step numbers were revised without revision indications).  
Page 3, a note was formalized to ensure Nuclear Security is notified prior to sounding the evacuation alarms.  
Page 5, was revised to add the follow up form information into the body of the instruction.  
Page 7, adds the notification form attachment to the procedure attachment listing.  
Page 9, was revised to update Nuclear Security telephone extension number.  
Page 12, was revised to add the follow up notification form.

**1.0 PURPOSE**

- 1.1** Provide for timely notification of appropriate individuals or organizations when the Shift Manager/Site Emergency Director (SED) has determined by EPIP-1 that an incident has occurred which is classified as a GENERAL EMERGENCY (GE).
- 1.2** Provide for periodic evaluation of the current situation by the Shift Manager/SED to determine whether the GE should be terminated, or continued.

**2.0 SCOPE**

This procedure applies to emergency events that are classified as General Emergency by EPIP-1, Emergency Classification Procedure.

### 3.0 INSTRUCTIONS

Date: \_\_\_/\_\_\_/\_\_\_

**3.1** If all Emergency Centers **ARE STAFFED**, Then notify the following that a **GENERAL EMERGENCY** Emergency Classification has been issued and EPIP 5 is being implemented, and continue in this procedure at Step 3.4. **If all Emergency Centers ARE NOT STAFFED**, Then N/A this step and continue in this procedure.

CECC   
TSC   
OSC

Control Rooms   
Plant PA Announcement

INITIALS

TIME

This is NAME, Site Emergency Director. an GE has been declared at BFN, we are currently implementing EPIP-5. Standby for further updates.

### 3.2 Notification of the Operations Duty Specialist (ODS) & Emergency Responders

**Note:** The ODS **should** be notified within 5 minutes after the emergency event is declared.

**3.2.1 Complete** Attachment A (Notification Information).

INITIALS

TIME

**3.2.2 Direct** the Unit 1, Unit Operator to make notifications from Attachment B (Unit 1, Unit Operator Notification)

INITIALS

TIME

**3.2.3 Notify** the ODS and **Provide** the information from Attachment A.

INITIALS

TIME

**Note:** Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS Telephone Numbers  
5-751-1700, 2495

**If** the ODS cannot be reached within 10 minutes, **Then** contact the following and Provide the information from Attachment A:

**1. Limestone County: 9-232-0111**

INITIALS

TIME

**2. Morgan County: 9-1-256-353-2515**

INITIALS

TIME

**3. Lawrence County: 9-1-256-974-7641**

INITIALS

TIME

**4. Lauderdale County: 9-1-256-760-9117**

INITIALS

TIME

**5. State of Alabama Rad Health Duty Officer:**

Day Shift 8 a.m. - 5 p.m.

**9-1-334-206-5391**

Holidays-Weekends-Offshifts

**9-1-334-242-4378**

INITIALS

TIME



**3.0 INSTRUCTIONS (CONTINUED)**

**3.2.4** Fax a copy of Attachment A to the ODS for confirmation of information or the state if contacted directly.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

ODS Fax  
5-751-8620

AL Rad Health  
9-1-334-206-5387

**3.2.5** Receive confirmation call from the ODS (to verify notification of the State of Alabama), (N/A this step if the State was contacted directly).

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**3.3 NOTIFICATION OF SITE PERSONNEL**

**3.3.1** Make the following plant P.A. announcement:

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

THIS IS (NAME), SHIFT MANAGER. A GENERAL EMERGENCY HAS BEEN DECLARED ON UNIT \_\_\_\_\_. I HAVE ASSUMED THE DUTIES OF SITE EMERGENCY DIRECTOR. REPORT TO YOUR ASSIGNED EMERGENCY RESPONSE FACILITY AT THIS TIME!

**3.4 ACCOUNTABILITY AND EVACUATION OF NON-EMERGENCY RESPONDERS**

**3.4.1** Prior to sounding the Evacuation Alarm, Notify Nuclear Security. If the TSC is staffed notify the TSC Security Manager. If the TSC is not staffed or the TSC Security Manager position has not been filled then call 3150 or 2219.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**3.4.1** Activate the Accountability Alarm, if not previously sounded. (Reference EPIP-8) (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**3.4.2** When accountability is complete, Conduct evacuation of non-emergency responders by activating the Evacuation Alarm, if not previously sounded. (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

### 3.0 INSTRUCTIONS (CONTINUED)

#### 3.5 DOSE ASSESSMENT

3.5.1 Evaluate the need for offsite dose assessment.  
(N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3.5.1.1 **When** offsite dose assessment is required **Obtain** the information from the CECC when operational.

3.5.1.2 If the CECC is not operational, **Contact** the TSC, when staffed or the RADCON Shift Supervisor and **Request** the implementation of EPIP 14, for dose assessment.

#### 3.6 NOTIFICATION OF THE NRC

3.6.1 **Notify** the NRC immediately or within 1 hour and if requested by the NRC maintain an open and continuous communications channel.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**Note:** **Utilize** the Emergency Notification System (ENS) when making this notification. Dial the first number listed on the sticker affixed to the ENS telephone, using all 10 digits. **If** the number is busy, **Then** select in order, the alternate numbers until a connection is achieved.

**Note:** **If** the ENS phones are out-of-service, **Then** dial direct utilizing the TVA phone system by dialing 9-1-the number listed on the ENS telephones. No access codes are required.

### 3.0 INSTRUCTIONS (CONTINUED)

#### 3.7 PROTECTIVE ACTION RECOMMENDATION

3.7.1 **If** the CECC is **not staffed**, **Then** make a Protective Action Recommendation (PAR) using Attachment C. (This PAR shall be made only by the SED.) (N/A STEP IF NOT APPLICABLE)

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

#### 3.8 PERIODIC EVALUATION OF THE EVENT

3.8.1 Continue to **Evaluate** the event using EPIP-1 as conditions warrant.

3.8.2 **If** plant conditions warrant the need for follow up information, **Complete** the Follow Up Notification Form, Attachment D.

**Note:** Conditions that warrant this evaluation are as a minimum when other EAL conditions exist indicating the current emergency classification or significant changes in plant conditions have occurred.

3.8.3 **If** the CECC is not staffed, **Then** notify the ODS and provide follow up information from the completed Attachment D form. Utilize the direct ring-down ODS phone when making this notification or as applicable dial direct.

ODS - 5-751-2495, 1700

**Note:** **If** the ODS cannot be reached, **Then** contact the State of Alabama directly by requesting the Rad Health Duty Officer at:

Day Shift 8 a.m. - 5 p.m.  
9-1-334-206-5391

Holidays-Weekends-Offshifts  
9-1-334-242-4378

**3.0 INSTRUCTIONS (CONTINUED)**

**3.8 PERIODIC EVALUATION OF THE EVENT(CONTINUED)**

**3.8.4** If the conditions warrant termination of the classification, Then enter EPIP-16, Termination and Recovery Procedure.

**3.8.5** After the evaluation has been completed, if staffed, Notify the following of the status:

- CECC
- NRC (ENS)
- TSC
- OSC
- CONTROL ROOMS
- PLANT PA ANNOUNCEMENT

**3.8.6** Re-enter this procedural section as conditions warrant at step 3.8.1 or until directed to exit this procedure by steps 3.8.4.

**3.9 CLOSURE OF THE GENERAL EMERGENCY**

**3.9.1** Upon termination of the General Emergency Send the completed EPIP-5 and all attachments to Emergency Preparedness (EP). \_\_\_\_\_  
INITIALS                  \_\_\_\_\_  
TIME

**3.9.2** EP shall Forward to the PORC Secretary the completed EPIP and all attachments for review by PORC. \_\_\_\_\_  
INITIALS                  \_\_\_\_\_  
TIME

**3.9.3** PORC Review Completed.

\_\_\_\_\_  
PORC Chairman                  /                  \_\_\_\_\_  
[NRC/C85/28].                  DATE

**3.9.4** After PORC review is completed the PORC secretary shall Forward the signed EPIP-5 with all attachments to EP for documentation storage. \_\_\_\_\_  
INITIALS                  \_\_\_\_\_  
TIME

**4.0 ATTACHMENTS**

Attachment A - Notification Information

Attachment B - Unit 1, Unit Operator Notification

Attachment C - Protective Action Recommendations

Attachment D - Follow Up Information Form

ATTACHMENT A (Page 1 of 1)  
NOTIFICATION INFORMATION

THIS IS A REAL EVENT                       THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a GENERAL EMERGENCY declared at Browns Ferry affecting:

Unit 1                       Unit 2                       Unit 3                       Common

EAL Designator: \_\_\_\_\_

Brief Description of the Event:

Plant Conditions:

Stable                       Deteriorating

Radiological Conditions:

- No Abnormal Releases Offsite
- Airborne Release Offsite
- Liquid Release Offsite
- Release Information Not Known

Event Declared:                      Time: \_\_\_\_\_                      Date: \_\_\_\_\_

Event Terminated:                      Time: \_\_\_\_\_                      Date: \_\_\_\_\_

The following Protective Action Recommendation (PAR) is provided (PAR Required for General Emergency).

- Recommendation 1 - Evacuate 2 mile radius and 10 miles downwind and shelter remainder of 10 mile EPZ.
- Recommendation 2 - Evacuate 2 mile radius and 5 miles downwind and shelter remainder of 10 mile EPZ.
- Recommendation 3 - Evacuate 2 mile radius and shelter remainder of                      10 mile EPZ.
- Recommendation 4 - Shelter 2 mile radius and shelter 5 miles downwind.

The Meteorological Conditions are:

Wind Speed: \_\_\_\_\_ Wind Direction From: \_\_\_\_\_

Please repeat the information you have received to ensure accuracy.

---

ATTACHMENT B (Page 1 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_ / \_\_\_ / \_\_\_

1. **Activate** the Automatic Paging System (APS).

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

**Note:** See Instructions in EPIP-6 Callout List (List will be maintained by the EP Manager)

**Important:** If the APS does NOT activate, Call the ODS (5-751-1700 or 5-751-2495) to activate and notify the SED immediately.

2. **Notify** the Unit Supervisor's on shift.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

3. **Notify** Nuclear Security Shift Supervisor and state "A GENERAL EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-11, Security and Access Control.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 3150 or 2219

4. **Notify** the Chemistry Lab Supervisor and state "A GENERAL EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-13, Radiochemical Laboratory Procedure.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2367 or 2368

5. **Notify** the RADCON Shift Supervisor and state "A GENERAL EMERGENCY HAS BEEN DECLARED," and direct to activate EPIP-14, Radiological Control Procedure.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2300 or 3104

---

ATTACHMENT B (Page 2 of 2)  
Unit 1, Unit Operator NOTIFICATION

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

6. **Notify** the "On-Call" NRC Resident and state "A GENERAL EMERGENCY HAS BEEN DECLARED," per BFN-EPIP-05.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

- Plant Extension 2572 [Secretary] or from weekly duty list

7. **IF** the APS did not operate properly, **Make** notifications from the current duty list. **If** the individuals on the duty list cannot be contacted, **Make** notifications from the EPIP-6 Call Out List. **Notify** the SED of the condition.

\_\_\_\_\_  
INITIALS

\_\_\_\_\_  
TIME

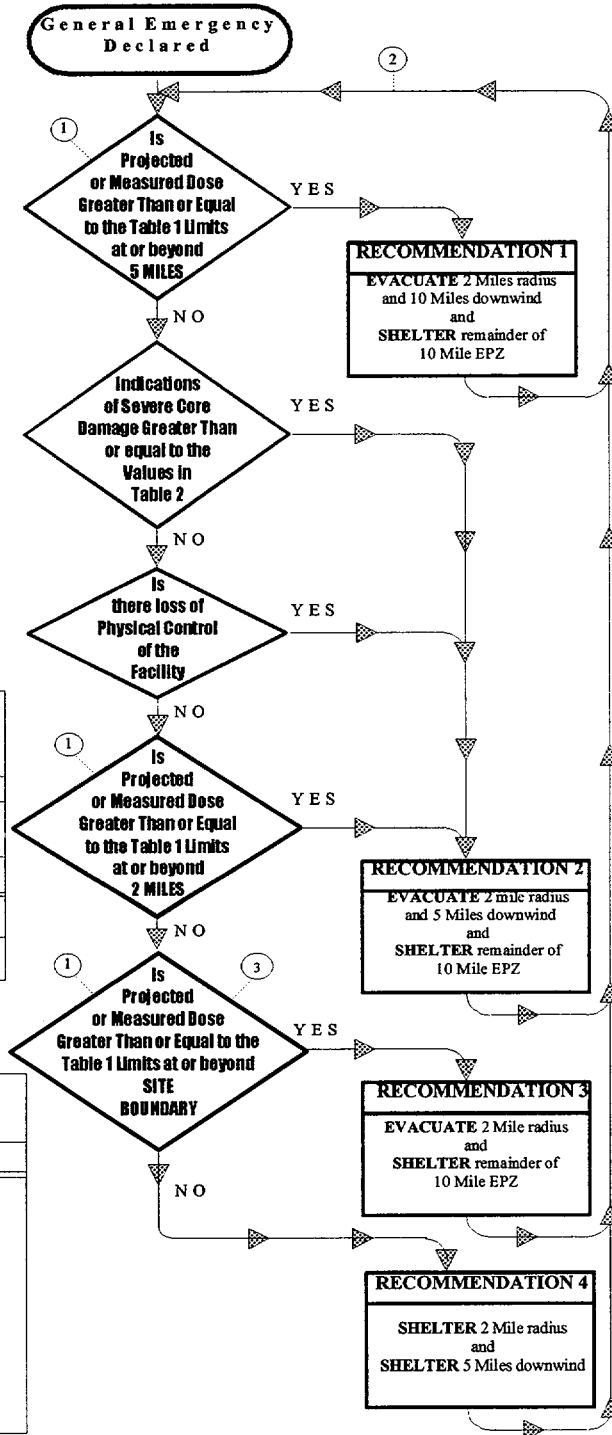


ATTACHMENT C (Page 1 of 1)  
PROTECTIVE ACTION RECOMMENDATIONS

NOTES	
①	IF Conditions Are not known, Then Answer No.
②	CONTINUE ASSESSMENT. Modify protective actions based on available plant and field monitoring information. Locate and evacuate additional localized hot spots.
③	When Dose Assessment Projections OR Actual Measured Exposures are not known, a stack release rate of $> 1.3 \text{ E}11 \text{ uCi/sec}$ noble gas can be utilized to meet the condition of 1 Rem/hr External Dose at the site boundary.

TABLE 1 RADIOACTIVITY RELEASE DOSE	
TYPE	LIMIT
Measured	$3.9 \text{ E-}6 \text{ uCi/cc}$ of Iodine 131
	1 REM/hr External Dose
Projected	1 REM TEDE
	5 REM Thyroid CDE

TABLE 2 Severe Core Damage	
INDICATIONS	
1.	Entry conditions for Severe Accident Management Guidelines have been met.
2.	Unit 2 -Drywell Radiation Exceeds 2-RM-90-272A-345 R/HR 2-RM-90-273A-164 R/HR.
	Unit 3 Drywell Radiation Exceeds 3-RM-90-272A-106 R/HR 3-RM-90-273A-164 R/HR.
3.	Equilibrium Reactor Coolant Activity of $\geq 300 \text{ uCi/gm}$ Dose Equivalent Iodine.



ATTACHMENT D (Page 1 of 1)  
FOLLOW-UP INFORMATION FORM  
**General Emergency**

THIS IS A REAL EVENT       THIS IS A DRILL

This is \_\_\_\_\_ at Browns Ferry.

Name

There has been a General Emergency declared at Browns Ferry affecting:

Unit 1       Unit 2       Unit 3       Common

The Reactor is  Shutdown       At Power

Plant Conditions are  Stable       Deteriorating

“Follow-Up” Information (e.g., Key Events, Status Changes, Status of any Plant Evacuations)

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Current Radiological Conditions are:

No Abnormal Releases Offsite       Airborne Release Offsite  
 Liquid Release Offsite       Release Information Not Known

Additional Rad information: (e.g., release duration)

---

---

The current meteorological conditions from the site are:

Wind Speed \_\_\_\_\_, Wind Direction from \_\_\_\_\_

The following Protective Action Recommendation is provided:

Recommendation 1       Recommendation 3  
 Recommendation 2       Recommendation 4

Please repeat the information you have received to ensure accuracy.

The time for this follow up is:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-6**

**ACTIVATION AND OPERATION OF THE  
TECHNICAL SUPPORT CENTER (TSC)**

**REVISION 20A**

PREPARED BY: TIM CORNELIUS

PHONE: 3666

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03-08-2000

EFFECTIVE DATE: 03-09-2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

REVISION LOG

Procedure Number: EPIP-6

Revision Number: 20A

Pages Affected: 10,14

Pagination Pages: NONE

Description of Change:

EC-24 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 20. EPIP 6 revised the TSC RADCON Manager and Nuclear Security Checklists.

EPIP 6, (rev. log) was changed to reflect the current revision level.

Page 10, was revised to clarify the responsibility of the TSC Radcon Manager regarding the collection and distribution of radiological information.

Page 14, added checklist items from EPIP 11 regarding actions taken routinely by TSC Nuclear Security Manager.

## ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER (TSC)

### 1.0 PURPOSE

The purpose of this procedure is to describe the activation of the Technical Support Center (TSC), and provide for TSC operation once it has been staffed. The TSC is staffed during an ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.

### 2.0 SCOPE

This procedure covers the emergency response from the TSC to support the shift operations staff during a radiological emergency, and direct the onsite response to the emergency.

### 3.0 INSTRUCTIONS

3.1 The TSC will be staffed by qualified members reporting to the TSC upon hearing the Site Accountability Alarm, Plant Public Address System, activation of the Automated Paging System (APS) or upon being called for duty by the Unit 1, Unit Operator.

3.2 The Emergency Preparedness (EP) Manager will maintain the EPIP-6 Callout List. It will be issued on white paper with each page dated for revision control. The list will be provided to the SHIFT MANAGER. Revisions to the callout list will not require PORC approval.

3.3 Required Actions for activation and operation of the TSC.

- All members of the TSC staff complete the appropriate attachment for your position.

3.4 Other Information

- A list of emergency organizational telephone numbers are contained in the Radiological Emergency Notification Directory (REND).

### 3.5 CONTINGENCIES

- 3.5.1** NRC order - The NRC role onsite is to observe, advise, and concur with licensee decisions and actions. If a situation arises where the NRC wants an action taken regarding plant operation that TVA does not agree with, the SED shall require the NRC to sign a written order directing TVA to take the action before the SED will comply.
- 3.5.2** Evacuation - Relocate TSC to second level of office building. (Plant Manager's Office Area)
- 3.5.3** Reasonable action which departs from any NRC or TVA requirement (e.g., Technical Specifications, License conditions, rules, regulations, or written plant procedures) may be taken in an emergency situation when this action is immediately needed to protect the public health and safety and no action consistent with license condition or Technical Specifications that can provide adequate or equivalent protection is immediately apparent. Plant emergency procedures may depart from Technical Specifications under these conditions.
- 3.5.4** During Site Emergency conditions when a Site Emergency Director is in charge, he may make the decision to allow departure from any NRC or TVA requirement (as stated above). In such an event, if the SED does not hold an SRO license, concurrence shall be obtained by a Senior Reactor Operator, preferably the on-duty SHIFT MANAGER, or other SRO Licensed Operations Management, prior to the action. Additional requirements are contained in SSP-12.1, Section 3.16.1.

#### 4.0 LONG TERM OPERATION

- 4.1 Long-term operation will be put into effect during an Alert, Site Area Emergency, or General Emergency which exists or is projected to exist for more than 12 hours.
- 4.2 The SED will notify the CECC of the decision to begin long-term operation.
- 4.3 Meal periods will be scheduled at the request of the SED.
- 4.4 Sleeping facilities will be established as necessary in the second floor of the Plant Administrative Building (outside the gatehouse). Nuclear Security (NS) Supervisor will provide access control. (If radiological or other conditions do not permit this area to be used, provisions will be made through the CECC for near-site lodging, or for other sleeping area onsite.)
- 4.5 The Operations Lunch Room in the control bay at Elevation 3C will serve as an assembly room for meetings, etc. The plant assembly room can also be used if additional space is needed and radiological conditions exist.
- 4.6 Additional personnel will be called in at the request of the SED to provide coverage or to ensure 12-hour or shorter shifts in the TSC.
- 4.7 The SED, through the OSC Director, will establish 12-hour (or shorter) shifts for their craft personnel onsite and call in additional personnel as necessary.
- 4.8 Following the immediate actions required for mitigating the accident, the need for additional actions for long-term operation should be appraised. Actions required for long-term operation shall include evaluation of the following:
  - Diesel Generator fuel oil levels and usage rates
  - Containment Atmosphere Dilution nitrogen tank level
  - Reactor Building basement (and other Class I structures) for water accumulation
  - Standby Gas Treatment filter/charcoal replacement needs

## 5.0 ATTACHMENTS

- Attachment A - Operations Initial Activation of TSC Checklist
- Attachment B - Site Emergency Director Checklist
- Attachment C - Operations Manager Checklist
- Attachment D - RADCON Manager Checklist
- Attachment E - Technical Assessment Manager Checklist
- Attachment F - Maintenance Manager Checklist
- Attachment G - Chemistry Manager Checklist
- Attachment H - Nuclear Security Manager Checklist
- Attachment I - Emergency Preparedness Manager Checklist
- Attachment J - NRC Coordinator Checklist
- Attachment K - TSC Communicator Checklist
- Attachment L - Technical Assessor # 1 (Reactor Engineer) Checklist
- Attachment M - Technical Assessor # 2 (I&C Engineer) Checklist
- Attachment N - Technical Assessor # 3 Checklist
- Attachment O - Operations Specialist Checklist
- Attachment P - Assistant RADCON Manager Checklist
- Attachment Q - Site Vice President Checklist
- Attachment R - Status Board Writer Checklist
- Attachment S - Technical Assessment Team Leader Checklist
- Attachment T - Site Engineering Manager Checklist
- Attachment U - Control Room Communicator Checklist
- Attachment V - Technical Support Center Clerk Checklist



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**ATTACHMENT A**  
**(Page 1 of 1)**  
**OPERATIONS INITIAL ACTIVATION OF TSC**

**Initials/Time**

**Initial TSC Activation**

- /           Swipe into Accountability Card Reader.
- /           Sign the Operations Accountability Log Sheet.
- /           Unlock TSC.
- /           Unlock TSC Supply Cabinet. (Key in SHIFT MANAGER Key Box.)
- /           Post and Maintain Plant conditions on affected Unit Status Board. (Obtain updates  
from control room personnel.)
- \_\_\_ Emergency Classification
- \_\_\_ Initiating Conditions
- \_\_\_ Current unit status.

**NOTE:** Remain in TSC, until initial personnel arrive to man the TSC, report to SHIFT MANAGER for assigned duties.

---

**ATTACHMENT B**  
**(Page 1 of 3)**  
**SITE EMERGENCY DIRECTOR CHECKLIST**

**NOTE:** (l) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- /      Swipe into Accountability Card Reader.
- /      Sign TSC Accountability Log Sheet.
- /      Sign in on the Staffing Board.
- /      Obtain complete turnover from the SHIFT MANAGER / SED (in the Control Room).
- Obtain copy of the SHIFT MANAGER / SED Log.
- /      Verify the TSC and OSC are ready for operation (when the following positions are staffed):

**TSC**

- Site Emergency Director
- Maintenance Manager
- Radcon Manager
- Operations Manager
- Technical Assessment Manager
- Control Room Communicator
- Chemistry Manager

**OSC**

- OSC Director
- Electrical Supervisor
- Mechanical Supervisor
- Instrument and Control Supervisor
- Radcon Manager
- OSC Operations Manager

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**ATTACHMENT B**  
**(Page 2 of 3)**  
**SITE EMERGENCY DIRECTOR CHECKLIST (Continued)**

**Initials/Time**

**Initial TSC Activation**

\_\_\_\_ / \_\_\_\_

Assume responsibility as SED from SHIFT MANAGER/SED.

\_\_\_\_ / \_\_\_\_

Make the following announcement over the Emergency Center P.A. System.

This is NAME, I have assumed the responsibility of the Site Emergency Director. I am declaring the TSC and OSC activated at TIME.

- This is an actual emergency (or exercise - if an exercise, we need to treat this exercise seriously as if it were a real emergency and take complete advantage of this exercise as a learning experience).
- Give plant status update.

\_\_\_\_ / \_\_\_\_

Have a plant wide P.A. announcement made that you have assumed responsibility.

\_\_\_\_ / \_\_\_\_

Establish communications with the CECC utilizing the direct ring-down phone or by dialing the director at 5-751-1614.

**NOTE:** (1) Maintain a log of activities and communications.

**ATTACHMENT B**

**(Page 3 of 3)**

**SITE EMERGENCY DIRECTOR CHECKLIST (Continued)**

**Initial TSC Activation**

**Operational Responsibilities**

Follow appropriate EPIP steps for current Emergency Classification:

1. **EPIP-2**, "Notification of Unusual Event"
2. **EPIP-3**, "Alert"
3. **EPIP-4**, "Site Area Emergency"
4. **EPIP-5**, "General Emergency"

Directs onsite emergency accident mitigation activities.

Consult with CECC Director and Site Vice President on significant events and their related impacts.

Establish and maintain site priorities for accident mitigation.

Initiates onsite protective actions.

Turn over SED Log to TSC Clerk.

Coordinates accident mitigation actions with the NRC

Initiates long term 24-hour accident mitigation operations.

Responsible for the declaration of emergency classifications

Authorize Emergency Radiation Exposures (**EPIP-15**)

Makes final approval on entries into radiologically hazardous areas when Radcon recommends against entry.

**Periodic Requirements:**

1. Reevaluate the event by using **EPIP-1** at least every **TWO HOURS** or more frequently if conditions warrant.
2. Ensure update announcements to TSC and Control Room staffs (periodically and as conditions warrant).
3. Ensure update announcements to plant workers over P.A. System (periodically and as conditions warrant)
4. Ensure update status to OSC Director (periodically and as conditions warrant).
5. If CECC is not activated, make Protective Action Recommendations as needed.

When Severe Accident Management Guidelines are entered, assume decision maker duties (If Qualified).

---

**ATTACHMENT C**  
**(Page 1 of 1)**  
**OPERATIONS MANAGER CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Establish communications with the Shift Manager in the Control Room.
- \_\_\_\_ / \_\_\_\_\_ Establish communications with Operations OSC Manager in the OSC.
- \_\_\_\_ / \_\_\_\_\_ Provide someone (SRO preferred) to establish and maintain communications with the NRC via the Emergency Notification System (ENS) - as required.

**Operational Responsibilities**

Directs operational activities.

Performs damage assessment and recommends solutions and mitigating action for operational problems

Provide current update status from the Control Room to the SED and the TSC Staff.

Provide direction and control interface from the TSC to the Control Room.

Provide assistance to the SED as needed.

Provide status updates to the OSC Operations Manager.

Ensure the Unit Status Boards and Equipment Status Board are maintained.

Routinely update the SHIFT MANAGER and discuss priorities and status of OSC repair teams.

When Severe Accident Management Guidelines are entered assume evaluator duties (If Qualified).

---

**ATTACHMENT D**  
**(Page 1 of 1)**  
**RADCON MANAGER CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Establish communications with RADCON OSC Manager.
- \_\_\_\_ / \_\_\_\_\_ Establish communications with plant monitoring van (if dispatched and CEOC or CECC is not staffed).
- \_\_\_\_ / \_\_\_\_\_ Provide someone to communicate with NRC on the Health Physics Network (HPN) phone, as required.
- \_\_\_\_ / \_\_\_\_\_ Assign a RADCON Status Board writer.

**Operational Responsibilities**

Directs and/or performs assessment of inplant and onsite radiological conditions

Directs onsite RadCon activities.

Coordinates additional RadCon support with the CECC Radiological Communicator.

Make recommendations for protective actions for onsite personnel.

Coordinates assessment of radiological conditions offsite with CECC Radiological Communicator.

Makes final recommendation to SED for entries into radiological hazardous areas.

Collects and Provides plant radiological data to Emergency Facilities as applicable.

Provide assistance to the SED, as needed.

Provide status update to the SED.

Provide updates to the RADCON OSC Manager.

Ensure maintenance of the RADCON Status Maps/Boards in the TSC.

---

**ATTACHMENT E**  
**(Page 1 of 1)**  
**TECHNICAL ASSESSMENT MANAGER CHECKLIST**

**NOTE:** (I) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- |   |  |
|---|--|
| / | Swipe into Accountability Card Reader.   |
| / | Sign TSC Accountability Log Sheet.   |
| / | Sign in on the Staffing Board.   |
| / | Establish communication with the Technical Assessment Team Leader.   |
| / | Assign a Technical Assessment Team member as a TSC Board Writer.   |
| / | Direct the TSC communicator to begin Monitoring SPDS and support status board collection or begin completing applicable portions of <u>EPIP-20</u> , Plant Data if SPDS is inoperable. |

**Operation Responsibilities**

Provide information, evaluations, and projects to the SED.

Directs onsite effluent assessment.

Keeps assessment team informed of plant status.

Directs activities of the Technical Assessment Team.

Communicate with the CECC Plant Assessment Manager.

Coordinates assessment activities with the CECC plant assessment team.

Ensures that Plant Status and Trend Boards are maintained..

Projects future plant status based on present plant conditions.

Provide assistance to the SED, as needed

When Severe Accident Management Guidelines are entered assume evaluator duties (If Qualified).

---

**ATTACHMENT F**  
**(Page 1 of 1)**  
**MAINTENANCE MANAGER CHECKLIST**

**NOTE:** (1) Maintain a log of all activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Establish Communication with OSC Team Manager, OSC Director and Assistant Director.
- \_\_\_\_ / \_\_\_\_\_ Obtain a turnover of damage assessment and repair activities.

**Operational Responsibilities**

- Directs repairs and corrective actions.
- Performs damage assessment
- Directs activities of the Operation Support Center.
- Make team assignments to OSC Team Manager.
- Provide update OSC status to the SED.
- Provide assistance to the SED as needed.
- Provide status to the OSC Director
- Ensure OSC and TSC status boards are consistent.
- Provide TSC personnel with a debriefing summary for each returning OSC team.
- Communicate with the Assistant OSC director on matters concerning equipment and/or plant assessments.



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**ATTACHMENT G**  
**(Page 1 of 1)**  
**CHEMISTRY MANAGER CHECKLIST**

**NOTE:** (I) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Establish communication with the Chemistry Manager in the OSC.
- \_\_\_\_ / \_\_\_\_\_ Establish communication with the CECC Rad Assessment Coordinator.
- \_\_\_\_ / \_\_\_\_\_ Confirm the Emergency Data Information System is in operation.

**Operational Responsibilities**

Coordinates assessment of radioactive effluents with CECC Plant Assessment Team. .

Collect Meteorological Data.

Maintain Release Status Board (jointly with RADCON).

Provide direction of Post Accident Sampling Activities.

**NOTE:** Ensure that plant configurations that are prerequisite to performing sampling have been completed prior to requesting a sample. The three hour time requirement begins upon a sample request, however, a request to prepare a team for sampling does not initiate the clock. Sampling teams should not be assigned a tracking number until the team is officially requested.

Provide assistance to the SED as needed.

Provide status updates to the SED.

Directs activities of the radiochemical laboratory and provides status update to the Chemistry Manager in the OSC.

Determines impact of incident on environment, radwaste, various effluent treatment systems.

---

**ATTACHMENT H**  
**(Page 1 of 1)**  
**NUCLEAR SECURITY MANAGER CHECKLIST**

**NOTE:** (I) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Obtain status of site accountability.
- \_\_\_\_ / \_\_\_\_\_ Ensure accountability status is reported to the SED within 30 minutes of initiating accountability.
- \_\_\_\_ / \_\_\_\_\_ Assist in organizing search teams if needed.
- \_\_\_\_ / \_\_\_\_\_ Restrict access to the protected area except for personnel whose name appears on the Emergency Access List or as authorized by the SED.
- \_\_\_\_ / \_\_\_\_\_ Close all site access control points, which control personnel entering or leaving the site. Only personnel authorized by the Emergency Access List or the SED will be allowed to enter.
- \_\_\_\_ / \_\_\_\_\_ When SAE or GE level emergencies have been declared no personnel except those who have; (1) been authorized by the SED, (2) accounted for by Nuclear Security and, (3) monitored by RADCON will be allowed to leave the site.

**Operational Responsibilities**

- Directs activities of Nuclear Security personnel.  
Controls Access to Site and Control Rooms.  
Reports on site accountability / evacuation as defined in BFN-EPIP's.  
Provide update status to Security Shift Supervisors.  
Provide update status to SED.  
Provide assistance to SED as needed.

---

ATTACHMENT I  
(Page 1 of 1)  
EMERGENCY PREPAREDNESS MANAGER CHECKLIST

**NOTE:** (I) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- /          Swipe into Accountability Card Reader.
- /          Sign TSC Accountability Log Sheet.
- /          Sign in on the Staffing Board.
- /          Call Clerical Support personnel.
- /          Confirm all TSC and OSC positions are filled and SED informed. (Notify the Unit 1, Unit Operator when TSC and OSC are staffed).
- /          Correct any activation problems.
- /          Confirm all "Initial TSC Activation" items are completed for all TSC positions.

**Operational Responsibilities**

Advises SED regarding overall radiological emergency plan, use of implementing procedures, emergency equipment availability, and coordination with CECC.

Confirms site emergency centers are operating properly.

Provide assistance to the SED as needed.

Deactivation of the TSC

- Collect all logs and information forms from all staff members in the TSC.
- Place the TSC in a ready state.

**ATTACHMENT J**  
**(Page 1 of 1)**  
**NRC COORDINATOR CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

\_\_\_ / \_\_\_      Swipe into Accountability Card Reader.

\_\_\_ / \_\_\_      Sign TSC Accountability Log Sheet.

\_\_\_ / \_\_\_      Sign in on the Staffing Board.

**Operational Responsibilities**

Acts as primary liaison with onsite NRC personnel.

Update NRC Personnel on plant status.

Provide information requests from NRC to TSC personnel.

**ATTACHMENT K**  
**(Page 1 of 1)**  
**TSC COMMUNICATOR CHECKLIST**

**Initials/Time**

**Initial TSC Activation**

- \_\_\_ / \_\_\_      Swipe into Accountability Card Reader.
- \_\_\_ / \_\_\_      Sign TSC Accountability Log Sheet.
- \_\_\_ / \_\_\_      Sign in on Staffing Board.
- \_\_\_ / \_\_\_      Ensure operability of SPDS in the TSC.

**Operational Responsibilities**

Maintain the Main SPDS terminal in the TSC in support of staff needs.

Support the status board writers in maintaining parameter and parameter trend board information.

Provides information from the control room to the Technical Assessment team as needed.

If SPDS is inoperable or becomes inoperable then, completes plant data sheets, Attachment 1, 2, or 3 of EPIP-20 every one-half hour or more frequently if required.

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**ATTACHMENT L**  
**(Page 1 of 1)**  
**TECHNICAL ASSESSOR # 1 CHECKLIST**  
**(REACTOR ENGINEER)**

**NOTE:** (1) Maintain a log of activities and communications.

Initials/Time

Initial TSC Activation

\_\_\_ / \_\_\_      Swipe into Accountability Card Reader.

\_\_\_ / \_\_\_      Sign TSC Accountability Log Sheet.

\_\_\_ / \_\_\_      Sign in on Staffing Board.

\_\_\_ / \_\_\_      Obtain needed documents and set up in the Technical Assessment Team Area.

**Operational Responsibilities**

Completes trend graphs as needed.

Provides the TSC staff and CECC Plant Assessment Team with current assessments on plant conditions.

Project future plant status based on current conditions.

Provide Technical Support as needed.

When Severe Accident Management Guidelines are entered report to the TSC and assume evaluator duties (If Qualified).

**ATTACHMENT M**  
**(Page 1 of 1)**  
**TECHNICAL ASSESSOR # 2 CHECKLIST**  
**(INSTRUMENTATION AND CONTROL ENGINEER )**

**NOTE:** (I) Maintain a log of activities and communications.

Initials/Time	<u>Initial TSC Activation</u>
___ / ___	Swipe into Accountability Card Reader.
___ / ___	Sign TSC Accountability Log Sheet.
___ / ___	Sign in on Staffing Board.
___ / ___	Obtain needed documents and set up in the Technical Assessment Team Area.

**Operational Responsibilities**

Completes trend graphs as needed.

Provides the TSC staff and CECC Plant Assessment Team with current assessments on plant conditions.

Project future plant status based on current conditions.

Provide Technical Support as needed.

When Severe Accident Management Guidelines are entered report to the TSC and assume evaluator duties (If Qualified).

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**ATTACHMENT N**  
**(Page 1 of 1)**  
**TECHNICAL ASSESSORS #3 CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

Initials/Time

Initial TSC Activation

- \_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_\_ Sign in on Staffing Board.
- \_\_\_\_ / \_\_\_\_\_ Obtain needed documents and set up in the Technical Assessment Team Area.

**Operational Responsibilities**

Completes trend graphs as needed.

Provides the TSC staff and CECC Plant Assessment Team with current assessments on plant conditions.

Project future plant status based on current conditions.

Provide Technical Support as needed.

Provide information to the Plant Assessment Team member (Board Writer) for TSC Status Boards.

**NOTE:** To obtain current plant parameters, monitor the operations communications bridge as assigned by the team leader.

**NOTE:** If assigned as the TSC status Technical Status Board writer follow these instructions.

Report to TSC

- Monitor communications via the operations party line.
- Maintain the following status boards

Affected Unit

Trend Boards Technical

Assessment Parameter



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**ATTACHMENT O**  
**(Page 1 of 1)**  
**OPERATIONS SPECIALIST CHECKLIST**

**NOTE:** (I) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- |              |  |
|--------------|--|
| <u>  /  </u> | Swipe into Accountability Card Reader.   |
| <u>  /  </u> | Sign TSC Accountability Log Sheet.   |
| <u>  /  </u> | Sign in on Staffing Board.   |
| <u>  /  </u> | Establish communications with Control Room Communicator in the Control Room and OSC Operations Manager via party line. |

**Operational Responsibilities**

Provides operational knowledge for status evaluation of plant systems.

Provides advice regarding technical specifications, system response, safety limits, etc..

Assists in development of recommended solutions to developing problems.

Provide plant data to the TSC Staff and to the Shift Manager. (Use party line)

Provide Assistance to the SED as needed.

When Severe Accident Management Guidelines are entered assume evaluator duties (If Qualified).

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**ATTACHMENT P**  
**(Page 1 of 1)**  
**ASSISTANT RADCON MANAGER CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_ / \_\_\_      Swipe into Accountability Card Reader.
- \_\_\_ / \_\_\_      Sign TSC Accountability Log Sheet.
- \_\_\_ / \_\_\_      Sign in on Staffing Board.
- \_\_\_ / \_\_\_      Begin providing information for the TSC RADCON Status Board writer.

**Operational Responsibilities**

Provide Radiological Data to the RADCON Manager.

Assist the Chemistry Manager in maintaining the Release Status Board.

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**ATTACHMENT Q**  
**(Page 1 of 1)**  
**SITE VICE PRESIDENT CHECKLIST**

**NOTE:** (l) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

\_\_\_\_ / \_\_\_\_\_ Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_\_ Sign TSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_\_ Sign in on Staffing Board.

**Operational Responsibilities**

Provides TVA policy direction to the Site Emergency Director (SED).

Directs the site resources to support the SED in the accident mitigation activities.

Interface with News Media through the Information Officer. (7698 or from Weekly Duty List)

Assist the SED as needed.

At his discretion, may provide interface at the appropriate offsite location on the overall site response activities with; State and local agencies, NRC region/corporate, and Joint Information Center.

Provide direct interface on overall site response activities with NRC, FEMA, or other Federal organizations responding to the site.

Provides direct interface on overall site response activities with the CECC Director and onsite media.

Provides support to the other emergency operation centers as necessary.

**ATTACHMENT R**  
**(Page 1 of 1)**  
**STATUS BOARD WRITER CHECKLIST**  
**(Unit/Equipment Boards)**

**Initials/Time**

**Initial TSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign TSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on Staffing Board.

\_\_\_\_ / \_\_\_\_

Establish communications with OSC status Board writers.

**Operational Responsibilities**

Maintain the following Status Boards:

- Equipment Problems
- Unaffected Unit
- Team Tracking

---

**ATTACHMENT S**  
**(Page 1 of 1)**  
**TECHNICAL ASSESSMENT TEAM LEADER CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- \_\_\_\_ / \_\_\_\_      Swipe into Accountability Card Reader.
- \_\_\_\_ / \_\_\_\_      Sign the TSC Accountability Log Sheet.
- \_\_\_\_ / \_\_\_\_      Sign in on the Staffing Board.
- \_\_\_\_ / \_\_\_\_      Report to Technical Assessment Team Area.
- \_\_\_\_ / \_\_\_\_      Establish communications with the Plant Assessment Team in the CECC.
- \_\_\_\_ / \_\_\_\_      Assign a technical assessor position to monitor the operation communication bridge.

**Operational Responsibilities**

Performs systems assessment as directed by Technical Assessment Manager.

Determines condition of Reactor and Nuclear Fuel

Acts as Plant Assessment Team Leader

Provide updated information to the Plant Assessment Team.

Provide detailed technical assessments and recommendations to the TSC.

When Severe Accident Management Guidelines are entered remain in technical assessment team area and assume evaluator duties (If Qualified).

**ATTACHMENT T**  
**(Page 1 of 1)**  
**SITE ENGINEERING MANAGER CHECKLIST**

**NOTE:** (1) Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- /         Swipe into Accountability Card Reader.
- /         Sign the TSC Accountability Log Sheet.
- /         Sign in on the Staffing Board.
- /         Report to the Technical Assessment Team Area.

**Operational Responsibilities**

Serves as the primary interface with Engineering.

Serve as a member of the Technical Assessment Team.

Provide Engineering Support to TSC.

**ATTACHMENT U**  
**(Page 1 of 1)**  
**CONTROL ROOM COMMUNICATOR CHECKLIST**

**Initials/Time**

**Initial TSC Activation**

- /         Swipe into Accountability Card Reader.
- /         Sign the TSC Accountability Log Sheet.
- /         Sign in on the Staffing Board.
- /         Report to the affected Unit Control Room.
- /         Establish Communications with the Operations Specialist (use party line).

**Operational Responsibilities**

Provide updated plant parameters and status over the telephone to the Operations Specialist, Technical Assessment team areas and OSC operations personnel

When Severe Accident Management Guidelines are entered remain in the control room and assume evaluator duties (If Qualified).

**ATTACHMENT V**  
**(Page 1 of 1)**  
**TECHNICAL SUPPORT CENTER CLERK CHECKLIST**

NOTE: Maintain a log of activities and communications.

**Initials/Time**

**Initial TSC Activation**

- /          Swipe into Accountability Card Reader.
- /          Sign the TSC Accountability Log Sheet.
- /          Sign in on the Staffing Board.
- /          Check the operability of the copy machine.

**Operational Responsibilities**

- Maintain log of events.
- Answer telephones.
- Operate facsimile machine.
- Other duties as assigned by the Site Emergency Director.
- Provide clerical support to the TSC Staff.
- Maintain official SED Log.

**LAST PAGE**



**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-7**

**ACTIVATION AND OPERATION OF THE  
OPERATIONS SUPPORT CENTER (OSC)**

**REVISION 18A**

PREPARED BY: TIM CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

## REVISION LOG

Procedure Number: EPIP-7

Revision Number: 18A

Pages Affected: 1,4,5,6,7,9,11,14,20,21,27,28

Pagination Pages: All

Description of Change:

- EC-21 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 18. EPIP 7 revised and combined the Team Briefing/Debriefing Form and the Team Tracking Form, added checklist for planners and document control, removed the customer group checklist, revised existing checklists and removed the management of the call-out list which is contained in EPIP-17.  
EPIP 7 (rev. log) was changed to reflect the current revision level.
- Page 1, was revised to remove information concerning maintenance of the "Call-Out" List.  
Information regarding the "Call-Out" list is contained in EPIP-17 (removal of this step resulted in a change to procedural steps which are not marked as revisions.
- Page 4/5, revised Attachment A (Team Tracking Form) incorporating Attachment B, Delete Attachment B (Briefing/De-Briefing Form). (Combining Attachment A and Attachment B resulted in changing the alpha designator for the remaining Attachments, which were not designated with revision indications)
- Page 6, revised maintenance superintendent title to maintenance manager.
- Page 7, removed checklist item to contact Document Control personnel, now a paged position.  
Revised maintenance superintendent title to maintenance manager.
- Page 9, revised Radcon superintendent title to Radcon manager, clarified responsibility ensuring radcon coverage for all teams to as applicable.
- Page 11, revised responsibility to allow Staging Area Fire Protection Personnel to assist on donning SCBA's.
- Page 14, deleted customer group attachment.
- Page 20, re-titled checklist header.
- Page 21, revised to remove OSC Staging Area Manager responsibility from reporting to the OSC, the revision allows the OSC Staging Area Manager to report directly to staging area.
- Page 27, added OSC Planner Checklist.
- Page 28, added OSC Document Control Checklist.
- Page 29, removed customer group for OSC Diagram.

## 1.0 PURPOSE

- 1.1 The purpose of this procedure is to describe the activities of the Operations Support Center (OSC) and the assessment and repair activities during a radiological emergency.

## 2.0 Scope

- 2.1 The procedure covers the emergency response from the OSC during an ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.

## 3.0 INSTRUCTIONS

- 3.1 The OSC will be staffed by qualified members reporting to the OSC and staging area upon hearing the Site Accountability Alarm, Plant Public Address System, upon activation of the Automated Paging System (APS), or upon being called for duty by the Unit 1, Unit Operator.

**NOTE:** Refer to EPIP-8, Personnel Accountability and Evacuation.

- 3.2 The OSC is located in two locations.

- The OSC is located on elevation 580' Service Building.
- The OSC staging area located on elevation 565' of the Service Building Maintenance Lunch Room area.

**NOTE:** If necessary to evacuate the OSC, relocate to the second level of the Plant Office Building (Plant Manager's Office area).

## 3.0 INSTRUCTIONS (CONTINUED)

### 3.3 Operation of The OSC

3.3.1 Normal plant maintenance procedures will be followed whenever possible. Should a situation arise where normal procedures would be inappropriate, maintenance will be performed as determined by the SED. If a situation is encountered in the field that threatens the safety of any team member, the Team Leader shall take appropriate action to prevent injury.

### 3.4 Required Actions for Activation and Operation of the OSC

3.4.1 All members of the OSC staff complete the appropriate attachment for your position.

## 4.0 LONG -TERM OPERATION

4.1 Upon receiving information from the TSC that emergency operation is expected to extend past 12 hours, the OSC Director will arrange to set up shift rotations.

**NOTE:** Calling in additional personnel may be necessary.

## 5.0 Attachments

Attachment A -	Team Tracking Form
Attachment B -	OSC Director Checklist
Attachment C -	RADCON OSC Manager Checklist
Attachment D -	Fire Protection OSC Manager Checklist
Attachment E -	Chemistry OSC Manager Checklist
Attachment F -	Operations OSC Manager Checklist
Attachment G -	Instrumentation and Controls OSC Supervisor Checklist
Attachment H -	Mechanical OSC Supervisor Checklist
Attachment I -	Electrical OSC Supervisor Checklist
Attachment J -	RADCON Lab Supervisor Checklist
Attachment K -	Fire Protection Shift Captain Checklist
Attachment L -	Chemistry Lab Supervisor Checklist
Attachment M -	OSC Engineer's Check List
Attachment N -	OSC Staging Area Manager
Attachment O -	Assistant OSC Director
Attachment P -	OSC Clerk Checklist
Attachment Q -	Status Board Writer
Attachment R -	OSC Team Manager
Attachment S -	Materials Coordinator
Attachment T -	OSC Planners Checklist
Attachment U -	OSC Document Control Checklist
Attachment V -	OSC Configuration

ATTACHMENT A (Page 1 of 2)  
**TEAM TRACKING FORM**

TEAM DESIGNATOR (A, B, C, etc.) \_\_\_\_\_ TEAM PRIORITY (NA, 1, 2, 3, etc.) \_\_\_\_\_

<p><b>Team Manager</b></p> <p>_____/_____ <i>Initials Time</i></p>	<p><b>Team Task:</b> _____ _____</p> <p><b>Associated TSC Priority:</b> _____</p> <p><b>Task Location:</b> UNIT <input type="checkbox"/>1    <input type="checkbox"/>2    <input type="checkbox"/>3    <input type="checkbox"/>Common</p> <p><input type="checkbox"/> Reactor Bldg., Elev. _____    <input type="checkbox"/> Control Bay, Elev. _____    <input type="checkbox"/> Diesel Bldg., Elev. _____</p> <p><input type="checkbox"/> Turbine Bldg., Elev. _____    <input type="checkbox"/> OTHER (Be Specific) _____ Elev. _____</p>														
<p><b>Assist. Director</b></p> <p>_____/_____ <i>Initials Time</i></p>	<p><b>Responsible Section:</b>    <input type="checkbox"/> Electrical    <input type="checkbox"/> I&amp;C    <input type="checkbox"/> RADCON</p> <p>                                  <input type="checkbox"/> Mechanical    <input type="checkbox"/> Operations    <input type="checkbox"/> Fire/Medical</p> <p>                                  <input type="checkbox"/> OTHER (Be Specific) _____</p> <p><input type="checkbox"/> <b>OSC Center Announcement:</b> Let me have your attention, Team (<i>Use Designator</i>) has been requested from the TSC to (<i>Describe Task</i>). (<i>Section Rep</i>) has been assigned to plan this task.</p>														
<p><b>Section Rep</b></p> <p>_____/_____ <i>Initials Time</i></p>	<p><b>Team Members</b></p> <p><b>Team Leader</b> _____ <b>Section:</b> _____</p> <p>_____ <b>Section:</b> _____</p> <p>_____ <b>Section:</b> _____</p> <p>_____ <b>Section:</b> _____</p> <p>_____ <b>Section:</b> _____</p> <p><b>Briefing Checklist</b></p> <table style="width:100%; border:none;"> <tr> <td><input type="checkbox"/> Description of Problem</td> <td><input type="checkbox"/> Key(s) Needed for Task</td> </tr> <tr> <td><input type="checkbox"/> Effected System Status</td> <td><input type="checkbox"/> Hazards to/from Work Site</td> </tr> <tr> <td><input type="checkbox"/> Procedures to be Used</td> <td><input type="checkbox"/> Safety Evaluation</td> </tr> <tr> <td><input type="checkbox"/> Drawings to be Used</td> <td><input type="checkbox"/> Operations Support</td> </tr> <tr> <td><input type="checkbox"/> Tools/Equipment Needed</td> <td><input type="checkbox"/> RADCON Support</td> </tr> <tr> <td><input type="checkbox"/> Clearances Needed</td> <td><input type="checkbox"/> RWP Required/Brief</td> </tr> <tr> <td><input type="checkbox"/> Route to/from Work Site</td> <td><input type="checkbox"/> Return as a team for De-Briefing</td> </tr> </table> <p><b>Communications:</b>    <input type="checkbox"/> Hand-Held Radio,    Channel- _____</p> <p>                                  <input type="checkbox"/> Telephone, provide OSC Number- _____</p> <p>                                  <input type="checkbox"/> Other- _____</p>	<input type="checkbox"/> Description of Problem	<input type="checkbox"/> Key(s) Needed for Task	<input type="checkbox"/> Effected System Status	<input type="checkbox"/> Hazards to/from Work Site	<input type="checkbox"/> Procedures to be Used	<input type="checkbox"/> Safety Evaluation	<input type="checkbox"/> Drawings to be Used	<input type="checkbox"/> Operations Support	<input type="checkbox"/> Tools/Equipment Needed	<input type="checkbox"/> RADCON Support	<input type="checkbox"/> Clearances Needed	<input type="checkbox"/> RWP Required/Brief	<input type="checkbox"/> Route to/from Work Site	<input type="checkbox"/> Return as a team for De-Briefing
<input type="checkbox"/> Description of Problem	<input type="checkbox"/> Key(s) Needed for Task														
<input type="checkbox"/> Effected System Status	<input type="checkbox"/> Hazards to/from Work Site														
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<input type="checkbox"/> Drawings to be Used	<input type="checkbox"/> Operations Support														
<input type="checkbox"/> Tools/Equipment Needed	<input type="checkbox"/> RADCON Support														
<input type="checkbox"/> Clearances Needed	<input type="checkbox"/> RWP Required/Brief														
<input type="checkbox"/> Route to/from Work Site	<input type="checkbox"/> Return as a team for De-Briefing														
<p><b>RADCON</b></p> <p>_____/_____ <i>Initials Time</i></p>	<p><b>RWP Utilized</b>    <input type="checkbox"/>Yes    <input type="checkbox"/>No    If yes, RWP# _____</p> <p><b>Emergency Exposures Utilized</b>    <input type="checkbox"/>Yes    <input type="checkbox"/>No    (If Yes Approval Required, EPIP 15)</p> <p><b>Potassium Iodine Utilized</b>    <input type="checkbox"/>Yes    <input type="checkbox"/>No    (If Yes Approval Required, EPIP 14)</p>														
<p><b>OSC Director</b></p> <p>_____/_____ <i>Initials Time</i></p>	<p><b>Final Approval By OSC Director</b></p> <p><input type="checkbox"/> <b>OSC Center Announcement:</b> "Is there any reason that Team (<i>Use Designator</i>) should not be released at this time".</p>														

ATTACHMENT A (Page 1 of 2)  
**TEAM TRACKING FORM**

TEAM DESIGNATOR (A, B, C, etc.) \_\_\_\_\_ TEAM PRIORITY (NA, 1, 2, 3, etc.) \_\_\_\_\_

<b>Section Rep</b>	<b>De-Briefing Summary Information</b>
_____/_____ <i>Initials      Time</i>	<input type="checkbox"/> Assignment Completed <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> CANCELLED
	<hr/> <hr/> <hr/>
	<input type="checkbox"/> Equipment Status "As Left":
	<hr/> <hr/> <hr/>
	<input type="checkbox"/> Hazards Encountered (Actual or Potential)
	<hr/> <hr/> <hr/>
	<input type="checkbox"/> Equipment Clearance Status
	<hr/> <hr/> <hr/>
	<input type="checkbox"/> Unusual Sounds, Additional Radiological Information, Other Task Applicable Information
	<hr/> <hr/> <hr/>
	<b>DE-BRIEFING CLOSURE</b>
	<input type="checkbox"/> Inform OSC Director of Team De-Briefing Summary <input type="checkbox"/> Direct Personnel to OSC STAGING AREA or Other <input type="checkbox"/> Update OSC Team Tracking Board
<b>OSC Director</b> _____/_____ <i>Initials      Time</i>	<input type="checkbox"/> TSC Notified. Team results provided to the TSC Maintenance Manager

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ATTACHMENT B (Page 1 of 3)  
**OSC DIRECTOR CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**NOTE:** Operations Personnel initially activating the OSC, when relieved by the on-call OSC Director will assume the duties of the Operations OSC Manager (See Attachment 7).

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Set up the OSC (assign any available personnel to assist)

- Configure OSC area an arrangement similar to EPIP-7, Attachment V
- Clear tables
- Ensure telephones are in proper location and operating.
- Open OSC supply cabinet
- Place notebooks in the proper position in the OSC.
- Obtain needed documents

\_\_\_\_ / \_\_\_\_

Inform the SHIFT MANAGER/SED of your location and status

\_\_\_\_ Unit 1 2191/2192

\_\_\_\_ Unit 2 2291/2292

\_\_\_\_ Unit 3 2391/2392

\_\_\_\_ / \_\_\_\_

Establish communication with the Maintenance Manager (TSC) (phone # 3766).

\_\_\_\_ / \_\_\_\_

Establish communication with the OSC Staging Area Manager (phone # 2244).

\_\_\_\_ / \_\_\_\_

Confirm the OSC is staffed (Notify the Maintenance Manager) (phone # 3766).



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ATTACHMENT B (Page 2 of 3)  
OSC DIRECTOR CHECKLIST (Continued)

Initials/Time

Initial OSC Activation (Continued)

\_\_\_\_ / \_\_\_\_

Make the following remarks prior to activating the OSC.

**This is an actual emergency (or exercise - if an exercise, we need to treat this exercise seriously as if it were a real emergency and take complete advantage of this exercise as a learning experience).**

**Be Professional**

- **Keep legible logs of all your activities.**
- **Be clear and precise in transfer of information.**
- **Make sure you are accurate with units as data are transferred.**
- **Keep noise level down as low as possible.**

\_\_\_\_ / \_\_\_\_

Ensure that the Team Manager:

- Tracks any team(s) dispatched prior to OSC activation.
- Form initial response teams (see note below).

**Operational Responsibilities**

Provide Maintenance Manager with a debriefing summary for each returning repair/damage team.

Direct OSC activities through the Assistant OSC Director.

Communication with the SED as needed to ensure effective performance of the OSC.

Approve the dispatching of all teams.

Provide updates to the OSC personnel.

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ATTACHMENT B (Page 3 of 3)  
OSC DIRECTOR CHECKLIST (Continued)

**Operational Responsibilities (Continued)**

Provide updates to the OSC staging area personnel (approximately every one-half hour or as conditions warrant).

Ensure that all teams returning from assigned tasks are debriefed utilizing Attachment A of this procedure.

**NOTE:** Initial response teams are as a minimum:

1. One Medical Emergency/Fire Response Team.
2. Two RADCON Survey Teams.
3. One Post Accident Sampling Team.
4. Two repair teams (each consists of at least one Mechanical, one Electrical, one Operations, and one RADCON).
5. Turbine Building el. 565' Tool Room.

**NOTE:** If AREA is determined to be not habitable by Radcon discontinue this team #5.

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ATTACHMENT C (Page 1 of 2)  
**RADCON OSC MANAGER CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial Activation of the OSC**

<u>    /    </u>	Swipe into Accountability Card Reader.
<u>    /    </u>	Sign the OSC Accountability Log Sheet.
<u>    /    </u>	Sign in on the staffing board.
<u>    /    </u>	Establish communication with the RADCON Manager in the TSC.
<u>    /    </u>	Establish communication with the RADCON Lab Supervisor.
<u>    /    </u>	Ensure adequate RADCON staff available for OSC support.
<u>    /    </u>	Assign a RADCON Technician to the MERT.
<u>    /    </u>	Assign a RADCON status board writer.
<u>    /    </u>	Complete "Team Tracking Forms" (Attachment A) for all RADCON personnel dispatched prior to the OSC activation and give to the Assistant OSC Director.

**Operational Responsibilities**

Direct RADCON personnel in the RADCON lab.

Ensure all RADCON teams are dispatched through the OSC.

Provide assistance to the OSC Director, as needed.

Ensure as applicable that teams have RADCON coverage.

Brief the OSC Director of RADCON status.

Brief the RADCON Superintendent in the TSC on status.

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ATTACHMENT C (Page 2 of 2)  
**RADCON OSC MANAGER CHECKLIST (Continued)**

**Operational Responsibilities (Continued)**

Complete and update "Team Tracking Forms" (Attachment A) for RADCON teams you are assigned.

Ensure that all predressed OSC staging area teams are issued proper dosimetry and have been evaluated for radiological access (i.e. watch list)

Ensure technical briefing to OSC teams of radiological conditions prior to dispatch.

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ATTACHMENT D (Page 1 of 1)  
**FIRE PROTECTION OSC MANAGER CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Establish communications with the Site Fire Protection Shift Captain and staff.

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all Fire Protection Personnel dispatched prior to OSC activation and give to the Assistant OSC Director.

**Operational Responsibilities**

When possible allow Staging Area Fire Protection personnel to assist team in donning SCBAs.

Provide and coordinate site Fire Protection resources as necessary to support the OSC Director.

Assist in technical briefings of OSC teams as necessary.

Provide evaluations and projections on emergency air supplies.

Complete and update "Team Tracking Forms" (Attachment A) for MERT and fire fighting teams you are assigned.

Provide industrial safety support to the OSC Director as needed.

Brief teams on industrial hazards as needed.

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ATTACHMENT E (Page 1 of 1)  
**CHEMISTRY OSC MANAGER CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial Activation of the OSC**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Establish communication with the Chemistry Lab Personnel. If no Chemistry Shift Supervisor is available in the lab, appoint a lead technician and call in the next shift Chemistry Supervisor.

\_\_\_\_ / \_\_\_\_

Ensure adequate Chemistry staff is available to support the OSC.

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all Chemistry Personnel dispatched prior to OSC activation, and give to the Assistant OSC Director.

**Operational Responsibilities**

Direct Chemistry assignments in the Chemistry lab.

Ensure all Chemistry teams are dispatched through the OSC.

Provide assistance to the OSC Director as needed.

Brief the OSC Director of Chemistry status.

Complete and update "Team Tracking Forms" (Attachment A) for Chemistry teams you are assigned.

Obtain necessary post accident samples (as directed by the OSC Director). The three hour time requirement begins upon a sample requested by the SED, however, a request to prepare a team for sampling does not start the time period. Sampling teams should not be assigned a tracking number until the sample is officially requested.

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ATTACHMENT F (Page 1 of 1)  
**OPERATIONS OSC MANAGER CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Notify the OSC Director and Shift Manager (affected unit Control Room) upon arrival to the OSC.

\_\_\_\_ / \_\_\_\_

Establish communications with the Operations Communicator utilizing the operations communications bridge.

\_\_\_\_ / \_\_\_\_

Establish communications with supporting OSC Operations personnel (staging area).

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all Operations Personnel dispatched prior to OSC activation, and give to the Assistant OSC Director. (EOI Activities)

**Operational Responsibilities**

Provide and coordinate operations personnel to support the OSC Director.

Provide operations support to OSC teams that are dispatched into the field.

Perform any operations actions that may be required while in the field.

Keeps the SHIFT MANAGER apprised of OSC team activities while in the field.

Complete and update "Team Tracking Forms" (Attachment A) for Operations teams you are assigned.

Ensure the responsiveness of EOI field teams.

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ATTACHMENT G (Page 1 of 1)  
**INSTRUMENT AND CONTROL (I&C) SUPERVISOR CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Notify the OSC Director upon arrival.

\_\_\_\_ / \_\_\_\_

Establish communications with the supporting OSC I&C staff (staging area).

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all I&C Personnel dispatched prior to OSC activation and give to the Assistant OSC Director.

**Operational Responsibilities**

Provide and coordinate I&C resources necessary to support the OSC Director and teams.

Provide technical assistance with I&C problems.

Perform damage and repair assessments.

Assist in technical briefings of OSC teams as necessary.

Complete and update "Team Tracking Forms" (Attachment A) for I&C teams you are assigned.



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ATTACHMENT H (Page 1 of 1)  
**MECHANICAL OSC SUPERVISOR CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Notify OSC Director upon arrival.

\_\_\_\_ / \_\_\_\_

Establish communications with appropriate supporting OSC Mechanical staff (Staging Area).

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all Mechanical Personnel dispatched prior to OSC activation and give to the Assistant OSC Director.

**Operational Responsibilities**

Provide and coordinate Mechanical Maintenance resources necessary to support OSC Director and teams.

Provide technical assistance with mechanical system problems.

Perform damage and repair assessments.

Assist in technical briefings of OSC teams as necessary.

Complete and update "Team Tracking Forms" (Attachment A) for mechanical maintenance teams you are assigned.

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ATTACHMENT I (Page 1 of 1)  
**ELECTRICAL OSC SUPERVISOR CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Notify OSC Director upon arrival.

\_\_\_\_ / \_\_\_\_

Establish communications with appropriate supporting OSC Electrical staff (staging area).

\_\_\_\_ / \_\_\_\_

Complete "Team Tracking Forms" (Attachment A) for all Electrical Personnel dispatched prior to OSC activation.

**Operational Responsibilities**

Provide and coordinate Electrical Maintenance resources necessary to support OSC Director and teams.

Provide technical assistance with electrical system problems.

Perform damage and repair assessments.

Assist in technical briefings of OSC teams as necessary.

Complete and update "Team Tracking Forms" (Attachment A) for Electrical Maintenance teams you are assigned.

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ATTACHMENT J (Page 1 of 1)  
**RADCON LAB SUPERVISOR (RADCON LAB) CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign RADCON lab Accountability Log Sheet

\_\_\_\_ / \_\_\_\_

Establish communications with appropriate supporting RADCON Lab staff.

**Operational Responsibilities**

Provide and coordinate RADCON personnel necessary to support the OSC teams.

Maintains an interface with the OSC RADCON Manager related to the radiological conditions in the plant.

Ensure that adequate dosimetry is maintained for OSC teams.

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ATTACHMENT K (Page 1 of 1)  
**FIRE PROTECTION SHIFT CAPTAIN (STAGING AREA) CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC staging area Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Ensure all ESTS sign the OSC Staging area Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Notify Fire Protection Manager (OSC) upon arrival.

\_\_\_\_ / \_\_\_\_

Establish communications with the site Fire Protection staff.

**Operational Responsibilities**

Monitor status of site Fire Protection/Life Safety systems and keep OSC Fire Protection Manager apprised.

Acts as Medical Emergency Response Team (MERT) Leader if EPIP-10 is implemented.

Keeps Fire Protection OSC Manager apprised as to status of emergency air supplies.

Directs the Fire Protection staff's activities when required to dispatch into the field for fire, medical, or other necessary support.

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ATTACHMENT L (Page 1 of 1)  
**CHEMISTRY LAB SUPERVISOR (CHEMISTRY LAB) CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the Chemistry Lab Accountability Log Sheets

\_\_\_\_ / \_\_\_\_

Ensure the condensate oxygen injection system has been isolated if installed on the affected unit.

\_\_\_\_ / \_\_\_\_

Establish communications with appropriate supporting Chemistry staff.

\_\_\_\_ / \_\_\_\_

Ensure dose-rate monitoring instruments are functioning properly.

\_\_\_\_ / \_\_\_\_

Have on-duty technicians review emergency sampling/analysis procedures and prepare for implementation.

**Operational Responsibilities**

Provide and coordinate Chemistry Lab necessary to support the OSC teams.

Assist in technical briefings of OSC teams as necessary.

Obtain necessary post accident samples and performs analysis of samples (as directed by the OSC Director). The three hour time requirement begins upon a sample request by the SED, however, a request to prepare a team for sampling does not start the time period. Sampling teams should not be assigned a tracking number until the sample is officially requested.

Maintains an interface with the Chemistry OSC Manager and provides results of sample analysis in a timely manner.

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ATTACHMENT M (Page 1 of 1)  
**OSC ENGINEER'S CHECKLIST**  
**(ELECTRICAL - MECHANICAL - INSTRUMENTATION AND CONTROLS)**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

**Operational Responsibilities**

Provide engineering support to the OSC staff.

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ATTACHMENT N (Page 1 of 1)  
**OSC STAGING AREA MANAGER**

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Staging Area Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Assign a foreman to set up the OSC staging area, include the following:

- Ensure all personnel in the OSC staging area card into the Accountability Card Reader.
- Ensure all personnel in the OSC staging area sign the Accountability Log Sheet.
- Unlock Supply Cabinet
- Install the OSC Staging Area Telephones.

**Operational Responsibilities**

Maintain control in the OSC staging area

Assemble personnel and direct them to the OSC when requested.

Ensure adequate man-power exist in the OSC staging area. (i.e. Radcon, AUO's, Electrical, etc. personnel)

Inform OSC manager of all time delays in team assembly.

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ATTACHMENT O (Page 1 of 1)  
**ASSISTANT OSC DIRECTOR CHECKLIST**

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

\_\_\_\_ / \_\_\_\_

Call Maintenance Planner.

\_\_\_\_ / \_\_\_\_

Collect any completed Team Tracking Forms from OSC managers and route to OSC Team Manager.

**Operational Responsibilities**

Ensure status boards are kept current.

Assign tasks to appropriate OSC managers when directed by OSC Team Manager.

Keep the OSC Director informed of task status.

Ensure the responsiveness of all personnel assigned to assemble and dispatch field teams.



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ATTACHMENT P (Page 1 of 1)  
**OSC CLERK CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

**Operational Responsibilities**

Maintain a log for the OSC Director.

Provide clerical support for the OSC and OSC Staging Area.

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ATTACHMENT Q (Page 1 of 1)  
**STATUS BOARD WRITER CHECKLIST**

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign OSC Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on Staffing Board.

**Operational Responsibilities**

Maintain the following Status Boards (As assigned)

- Affected Unit
- Equipment Problems
- Team Tracking

Obtain up-to-date plant data from the OSC Operations Communicator.

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ATTACHMENT R (Page 1 of 1)  
**OSC TEAM MANAGER**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

<u>    </u> / <u>    </u>	Swipe into Accountability Card Reader.
<u>    </u> / <u>    </u>	Sign the Accountability Log Sheet.
<u>    </u> / <u>    </u>	Sign in on Staffing Board.
<u>    </u> / <u>    </u>	Track any team(s) dispatched prior to the OSC activation.
<u>    </u> / <u>    </u>	Establish communications with the TSC maintenance manager (#3766).

**Operational Responsibilities**

Initiate team Tracking Forms as requested by TSC Maintenance manager and forward to Assistant OSC Director upon acknowledgment by the OSC director.

Ensure that the team tracking board is consistent and accurate and that the information is being transferred in a timely manner to the TSC team tracking board writer.

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ATTACHMENT S (Page 1 of 1)  
**MATERIALS COORDINATOR**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on Staffing Board.

\_\_\_\_ / \_\_\_\_

Track activities conducted prior to the OSC activation and report to director.

\_\_\_\_ / \_\_\_\_

Establish communications with Power Stores representative at Extension #2608.

**Operational Responsibilities**

Provide and coordinate material support resources necessary to support the Operation Support Center.

Provide technical assistance as applicable in regards to material acquisition, substitution, and availability.

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ATTACHMENT T (Page 1 of 1)  
**OSC PLANNERS CHECKLIST**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

**Operational Responsibilities**

Provide support to the OSC Staff as applicable.

Support in the Planning and briefing preparation for OSC Team

Complete and update "Team Tracking Forms" for teams you are assigned

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ATTACHMENT U (Page 1 of 1)  
**OSC DOCUMENT CONTROL**

**NOTE:** Maintain a log of activities and communications.

**Initials/Time**

**Initial OSC Activation**

\_\_\_\_ / \_\_\_\_

Swipe into Accountability Card Reader.

\_\_\_\_ / \_\_\_\_

Sign the Accountability Log Sheet.

\_\_\_\_ / \_\_\_\_

Sign in on the staffing board.

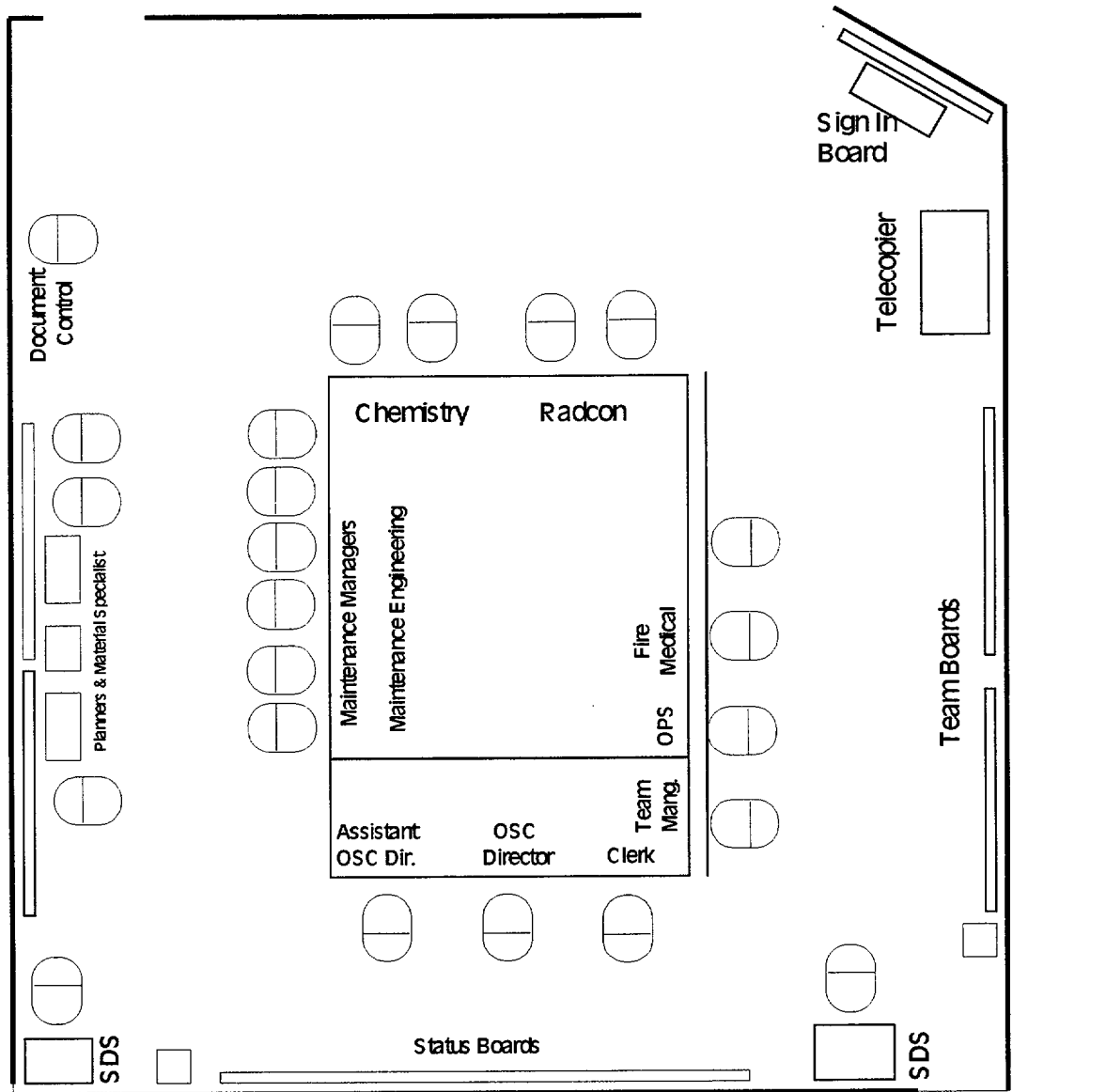
**Operational Responsibilities**

Provide document control support for the OSC and OSC Staging Area.

Ensure that documents/drawings are maintained as utilized by OSC members.

Ensure timely availability of procedures and drawings as requested by OSC members.

ATTACHMENT V (Page 1 of 1)  
OSC CONFIGURATION



**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-8**

**PERSONAL ACCOUNTABILITY AND EVACUATION**

**REVISION 11A**

PREPARED BY: TIM CORNELIUS

PHONE: 3666

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**



REVISION LOG

Procedure Number: EPIP-8

Revision Number: 11A

Pages Affected: All

Pagination Pages: None

Description of Change:

EC-14 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 11. EPIP 8 was revised to incorporate the information contained in SSP-1.52 for personnel accountability and evacuation. SSP 1.52 was canceled.

EPIP 8 (rev. log) was changed to reflect the current revision level.

Pages 1-8, was revised to include information concerning site accountability and evacuation that was contained in SSP 1.52. This is a general revision.

## 1.0 PURPOSE

To describe the actions and responsibilities necessary to account for plant personnel inside the protected area during an emergency situation.

## 2.0 SCOPE

This procedure outlines the responsibilities of emergency responders during an accountability and/or evacuation situation of Browns Ferry.

## 3.0 INSTRUCTIONS

### 3.1 General

3.1.1 All individuals entering the protected area shall:

- Swipe their badge into the Entry Card Reader.
- Enter the protected area in accordance with security procedures.

3.1.2 All individuals leaving the protected area shall:

- Swipe their badge into the Exit Card Reader in the appropriate exit portals.
- Exit the protected area in accordance with security procedures.

**NOTE:** These “Entry and Exit” Card Readers function as accountability card readers.

### 3.2 Particular Area Evacuation

3.2.1 The Public Address (PA) System will be used to announce the evacuation of a particular area of the plant.

3.2.2 Personnel in the affected areas upon hearing the PA announcement shall do the following:

- If working in a contaminated zone, exit the zone in accordance with Radiological Control (RADCON) procedures, unless instructed otherwise by RADCON.
- Exit the affected area in an orderly manner.
- Personnel not in the affected area should continue assigned task if not instructed otherwise.

**NOTE:** Personnel should not enter the affected area until the “All Clear” has been announced or directed through emergency response processes.

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**3.0 INSTRUCTIONS (CONTINUED)**

**3.2 Particular Area Evacuation (continued)**

**3.2.3** Shift Manager/Site Emergency Director (SED) shall:

*Make a Public Address (PA) announcement similar to - "Attention All Personnel, conditions in the (area to be evacuated) warrant an evacuation of the area. Leave the (area to be evacuated) immediately.*

**3.3 Site Assembly and Accountability**

**3.3.1 General**

- 3.3.1.1** A 3 minute undulating siren (Assembly and Accountability Siren) will sound when an emergency condition exists requiring assembly and accountability of site personnel.
- 3.3.1.2** Non-Emergency Responders, upon hearing the Assembly and Accountability Siren, shall proceed immediately to their designated assembly areas as listed on Attachment A. Upon arriving at the assembly area, swipe your badge into the Accountability Card Reader and remain in the designated assembly area until released by the Site Emergency Director (SED) or the Plant Evacuation Alarm is sounded. See step 3.4.1 for instructions regarding Plant Evacuation.
- 3.3.1.3** Emergency Responders, upon hearing the Assembly and Accountability Siren, shall proceed immediately to their assigned Emergency Response Facility as listed on Attachment B. Upon arriving at the Emergency Facility swipe your badge into the Accountability Card Reader and Sign the Accountability Roster Form, Attachment C.
- 3.3.1.4** Visitors remain with escorts and swipe your badge into the appropriate Accountability Card Reader.
- 3.3.1.5** If you cannot reach your designated assembly area within 20 minutes, go to the nearest Accountability Card Reader and swipe your badge. See Attachment A and B.
- 3.3.1.6** If the Accountability Card Reader will not accept your badge, or if your cannot access a reader, call Nuclear Security at extension 3238 or 2219.

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**3.0 INSTRUCTIONS (CONTINUED)**

**3.3 Site Assembly and Accountability (continued)**

**3.3.2 When required the Shift Manager/SED shall:**

**3.3.2.1** Activate the Assembly and Accountability Alarm (3-minute undulating siren). Reactivate as necessary.

**3.3.2.2** Use guidelines listed below to evacuate personnel from designated assembly areas to alternate areas.

- radiation dose rate > 2 mrem/hr
- airborne radioactivity > 10CFR 20.1201 DAC Limits

**3.3.2.3** Make PA announcement, use Emergency Dispatches and or instruct Nuclear Security to inform the affected personnel.

**3.2.3 Upon the activation of Site Assembly and Accountability Nuclear Security (NS) shall:**

**3.3.3.1** Restrict access to the Protected Area to personnel listed on the Emergency Response Access List or as authorized by the SED.

**3.3.3.2** Dispatch officers to search areas on TVA properly outside the protected area.

**NOTE:** For any person found on the owner controlled area and are not TVA personnel or contractors, NS will obtain name, address, phone number. RADCON will survey the individuals if conditions warrant.

**3.3.3.3** Report results of accountability within 30-minutes after the assembly and accountability alarm has sounded.

**3.3.3.4** If necessary, form a search team to locate missing individual(s) 15-minutes after accountability deadline has passed.

**3.3.3.5** Each team will be accompanied by a RADCON technician.

**3.3.3.6** Provide assistance to the SED/Shift Manager in movement and informing personnel.

**3.0 INSTRUCTIONS (CONTINUED)**

**3.3 Site Assembly and Accountability (continued)**

**3.3.4 Upon the activation of Site Assembly and Accountability RADCON shall:**

- 3.3.4.1** Survey all assembly areas (including the Emergency Centers), if radiological conditions warrant.
- 3.3.4.2** Support any search teams.

**3.4 Site Evacuation**

**3.4.1 General**

- 3.4.1.1** A 3-minute steady siren (Site Evacuation Siren) will sound when an emergency condition exists requiring a plant evacuation.
- 3.4.1.2** Non-Emergency Responders, proceed to the appropriate protected area exit portal. Swipe you badge into the Exit Card Reader or as instructed by Nuclear Security. Exit the protected area in accordance with security procedures. Proceed to your vehicle and evacuate from the site to your place of residence. Follow all guidance at this time of state and local authorities, where applicable.
- 3.4.1.3** Emergency Responders, proceed to your assigned emergency response facility. Sign the Accountability Roster, Attachment C, if not already completed. Swipe your badge into the Accountability Card reader if not already completed.
- 3.4.1.4** Visitors remain with escorts and swipe your badge into the appropriate Exit Card Reader or as instructed by Nuclear Security.
- 3.4.1.5** If the Exit Card Reader will not accept your badge, call Nuclear Security at extension 3238 or 2219.

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**3.0 INSTRUCTIONS (CONTINUED)**

**3.4 Site Evacuation (continued)**

**3.4.2 When required the Shift Manager/SED shall:**

**3.4.2.1** Activate the Site Evacuation Alarm (3-Minute steady siren).

**3.4.2.2** Reactivate as necessary.

**3.4.2.3** Notify the Central Emergency Control Center - (If not staffed Notify the Operation Duty Specialist).

**3.4.3 Upon the activation of Site Evacuation Nuclear Security shall:**

**3.4.3.1** Close site access points.

**3.4.3.2** Assist in movement of traffic and personnel.

**3.4.4 Upon the activation of Site Evacuation RADCON shall:**

**3.4.4.1** If radiological condition warrants, set up control check points which coincide with NS access control points.

**3.4.4.2** Ensure personnel and vehicles are decontaminated before being released from the owner controlled area.

**3.4.4.3** If necessary, provide decontamination support to the Muscle Shoals Service Shop #4. (Offsite decontamination facility)

**4.0 ATTACHMENTS**

- Attachment A - Non-Emergency Responder Assembly Locations
- Attachment B - Emergency Responder Emergency Facility/Assembly Locations
- Attachment C - Accountability Roster Form

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ATTACHMENT A

Page 1 of 1

**NON EMERGENCY RESPONDERS ASSEMBLY LOCATIONS**

<b>Location</b>	<b>Reporting Organizations</b>
Maintenance Shop	Maintenance Production personnel (except for IM) Maintenance Program Support personnel Work Control Center personnel
Plant Assembly Room	Plant Manager's office staff Operations office staff Maintenance office staff RADCON office staff Work Control/Outage personnel
Maintenance Building	Instrument Mechanic (IM) Shop personnel Maintenance Support personnel
Plant Engineering Building	Site Engineering - System Engineering personnel Radwaste personnel
West Access Portal Exit	All other organizations not listed and the west portal is your regular entry point.
East Access Portal Exit	All other organizations not listed and the west portal is your regular entry point.

**NOTE:** If your organization is not listed on this attachment and you are exiting, utilizing the east or west portal then swipe your badge into the Exit Card Reader at the portal and go inside one of the following Buildings

- Administration Building
- Contractor Facility Complex
- BFN Training and Visitor Center
- Materials Procurement Complex
- Modifications Fabrication Shop
- Modifications Administration Building

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**APPENDIX B**

Page 1 of 1

**EMERGENCY RESPONDERS EMERGENCY FACILITY/ASSEMBLY LOCATIONS**

<b>Location</b>	<b>Reporting Organizations</b>
Unit 1 and 2 Control Rooms	All operations personnel in Control Bays, Unit 1/2
Unit 3 Control Room	All operations personnel in Control Bays, Unit 3
Technical Support Center	TSC staff
Operations Support Center	OSC staff Document Control and Records Management, personnel from plant office building information center.
OSC Staging Area	Maintenance personnel assigned to staging area Fire Protection ESTs Tool Room personnel
Radiological Control (RADCON)	RADCON Field Operations personnel
Radiochemistry Laboratory	Chemistry Control personnel



**APPENDIX C**

Page 1 of 1

**ACCOUNTABILITY ROSTER**

Emergency Response Facility \_\_\_\_\_

Supervisor In Charge \_\_\_\_\_ Ext. \_\_\_\_\_

SSN	Name (Last, First MI)	ERO Position Filled (Staging Area Personnel, OSC Board Writer, etc.)

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-11**

**SECURITY AND ACCESS CONTROL**

**REVISION 8A**

PREPARED BY: TIM CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03-08-2000

EFFECTIVE DATE: 03-09-2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

REVISION LOG

Procedure Number: EPIP-11

Revision Number: 8A

Pages Affected: All

Pagination Pages: NONE

Description of Change:

EC-11 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 8. EPIP 11 was revised re-format procedure and remove Security Checklist items, placing them into EPIP-6.

EPIP 11 (rev. log) was changed to reflect the current revision level.

Pages 1-2, revised Shift Operations Supervisor title to Shift Manager and Shift Operations Supervisor Clerk to Unit 1 Unit Operator. Additionally incorporated checklist items from procedure to EPIP-6, Activation and Operation of the Technical Support Center. This is a general revision to EPIP-11.

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SECURITY AND ACCESS CONTROL

**1.0 PURPOSE**

To provide access control for the Browns Ferry Site during a Radiological Emergency.

**2.0 SCOPE**

Provide for implementation of a predetermined security and access control plan for an ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.

**3.0 INSTRUCTIONS**

**3.1 General**

**3.1.1** NS Shift Supervisor, when notified by the Shift Manager or Unit 1 Unit Operator that an emergency has been declared will report immediately to the Technical Support Center (TSC) and fill the position of Nuclear Security Manager until relieved by the on-call manager.

**3.1.2** During an Alert, Site Area Emergency, General Emergency or as directed by the Site Emergency Director, Nuclear Security will:

- Restrict access to the protected area except for personnel whose name appears on the Emergency Response List or as authorized by the SED.
- Close all site access control points which control personnel entering or leaving the site. No personnel except those pre-authorized by the Emergency Response List or as authorized by the SED will be allowed to enter.
- Close all site access control points which control personnel entering or leaving the site.
- Conduct periodic radio or telephone checks with Nuclear Security Shift Supervisor or his designee, by all officers assigned to a post.

**3.1.3** All emergency vehicles and personnel including the RADCON monitoring van will be permitted immediate access.

**3.1.4** Following the termination of the emergency, Nuclear Security will be relieved from emergency duties by the Site Emergency Director or the Shift Supervisor at which time, officers will resume their normal duties.

**3.0 INSTRUCTIONS (CONTINUED)**

**3.2 Site Area Emergency/General Emergency**

**3.2.1** When a Site Area Emergency or General Emergency has been declared no personnel except those who have (1) been authorized by Site Emergency Director, (2) accounted for by NS, and (3) monitored by RADCON if radiological conditions exist will be allowed to leave the site.

**3.2.2** After Site Area Emergency or General Emergency has been declared site egress will be restricted and authorized only after RADCON completes a survey or as granted by the Site Emergency Director through the NS representative in the TSC.

**3.3 Accountability and Evacuation**

**3.2.1** If Accountability or Evacuation is conducted, security shall monitor the processes and report information in accordance with EPIP-8, "Personnel Accountability and Evacuation Procedure."

**4.0 ATTACHMENTS**  
None

**TENNESSEE VALLEY AUTHORITY**

**BROWNS FERRY NUCLEAR PLANT**

**EMERGENCY PLAN IMPLEMENTING PROCEDURE**

**EPIP-15**

**EMERGENCY EXPOSURE**

**REVISION 6A**

PREPARED BY: T. W. CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03-08-2000

EFFECTIVE DATE: 03-09-2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

**QUALITY-RELATED**

REVISION LOG

Procedure Number: EPIP-15

Revision Number: 6A

Pages Affected: 2

Pagination Pages: NONE

Description of Change:

EC-08 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 6. EPIP 15 was revised to change a procedural reference. The revision was considered as a non-intent change.  
EPIP 15 (rev. log) was changed to reflect the current revision level.  
Pages 2, revised Radiological Control Instruction 3.1 procedure title to Standard Programs and Processes (SPP) 5.10.

## 1.0 PURPOSE

This procedure provides guidance for authorizations of personnel dose limits under emergency conditions, consistent with EPA-400, "Manual of Protection Action Guides and Protective Actions for Nuclear Incidents".

## 2.0 SCOPE

These limits apply only to emergency exposure authorizations and not to spontaneous reactions by individuals attempting to mitigate an emergency situation. This procedure provides guidance for the approval and administration of radiation exposures received during emergencies in excess of 10 CFR 20.1201 entitled "Occupational Dose Limits for Adults." This procedure does not provide direction for the approval and administration for exposures received during other activities involving radiation dose to individuals.

Note: For the purposes of this implementing procedure, radiation exposure as expressed in units of R/hr and submits, thereof, are equivalent to dose (rad) and dose equivalent (rem) based on ANSI N 13.11 development and terminology. Any acute dose greater than 10 rem is generally denoted in units of rad, since that level is considered as the accident range of personnel exposure. Any dose less than that level is considered as the protective range of personnel exposure. For purposes of this procedure the assumptions of 1 rad = 1 rem is assumed for all levels of exposure.

## 3.0 INSTRUCTIONS

### 3.1 RADCON Group

The Radiological Control group is responsible for performing radiological surveys or other assessments to estimate the radiation doses.

### 3.2 SITE EMERGENCY DIRECTOR

3.2.1 The Site Emergency Director (SED), shall provide authorization for all emergency radiation doses that may exceed 10 CFR 20.1201 entitled "Occupational Dose Limits for Adults."

3.2.2 The documentation of authorization may be accomplished by log entry. The entry should include the task for which the approval was authorized.



**3.3 GUIDANCE FOR ALL EMERGENCY DOSE LIMITS**

- 3.3.1 The exposure of personnel during emergency operations shall be maintained As Low As Reasonably Achievable (ALARA).
- 3.3.2 Internal exposure should be minimized by the use of respiratory protection equipment. Respiratory Protection Factors are provided Standard Programs and Processes (SPP) 5.10. If a projected dose to the thyroid is expected to exceed 10 rem during emergency conditions, Potassium Iodine (KI) should be issued. EPIP-14 contains information regarding issuance and precautions for the use of KI.
- 3.3.3 Protective clothing should be used to minimize personnel contamination.
- 3.3.4 Personnel undertaking an emergency operation in which the dose will exceed 10 CFR 20.1201 entitled "Occupational Dose Limits for Adults" limits shall do so on a voluntary basis and with full awareness of the risks involved, including the numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects as depicted on Attachment A. Acknowledgment of this decision shall be documented on Attachment B of this procedure by the individual involved in this activity.
- 3.3.6 Other factors being equal, older volunteers should be selected first.
- 3.3.7 Other factors being equal, selection of female volunteers capable of reproduction should be avoided.
- 3.3.8 Exposures under these conditions shall be limited to a once in a lifetime. Personnel who have received previous accident or emergency exposures in excess of 25 rem TEDE shall not participate in further emergency exposure assignments.
- 3.3.9 Personnel shall not enter any area where dose rates are unknown or not measurable with instruments and dosimetry immediately available.

### 3.0 INSTRUCTIONS (CONTINUED)

3.3.9 Until isotopic assessments of airborne radioactivity are available, and administrative correction factor of 2 should be used to estimate TEDE exposures in airborne activity areas:

$$\text{Estimated TEDE} = \text{Dosimeter Reading} \times 2$$

Note: The above value corresponds to the ratio of external (measured) dose rate to estimate TEDE dose, in accordance with default values in TVA's Dose Assessment model. When accident specific nuclide assessment are available, more definitive dose assessments should be performed to adjust the correction factors.

### 3.4 DOSE LIMITS FOR WORKERS DURING EMERGENCIES

3.4.1 Doses to all workers during emergencies should, to the extent practicable be limited to 10 CFR 20.1201 limits. There are however, some emergency situations for which higher emergency exposures may be justified. Whenever these situations are justified and ALARA considerations have been evaluated the following limits can be administered.

3.4.2 Dose Limits for the Protection of Valuable Property

<b>DOSE LIMIT (REM)</b>	<b>RECEPTOR</b>
<b>10</b>	<b>WHOLE BODY (TEDE)</b>
<b>30</b>	<b>LENS OF THE EYE</b>
<b>100</b>	<b>ALL OTHER ORGANS</b>

**3.0 INSTRUCTIONS (CONTINUED)**

**3.4 DOSE LIMITS FOR WORKERS DURING EMERGENCIES (CONTINUED)**

3.4.3 Dose Limits for Lifesaving Activities and the Protection of Large Populations.

<b>DOSE LIMIT (REM)</b>	<b>RECEPTOR</b>
<b>25</b>	<b>WHOLE BODY (TEDE)</b>
<b>75</b>	<b>LENS OF THE EYE</b>
<b>250</b>	<b>ALL OTHER ORGANS</b>

3.4.4 Dose Limits Greater Than 25 Rem for Lifesaving Activities or to Avoid Extensive Exposures to Large Populations.

- 3.4.4.1 Situations may occur in which a dose in excess of 25 rem would be required in order to carry out lifesaving operations or to avoid extensive exposures to large populations. It is not possible to prejudge the risk that one person should be allowed to take to save the life of others.
- 3.4.4.2 Personnel made knowledgeable of the risks involved with radiation exposures through training or briefings utilizing the information contained within Attachment A and selected on a voluntary basis may be allowed to exceed the 25 rem emergency dose exposure limit for the purpose of lifesaving activities or to avoid extensive exposures to large populations.
- 3.4.4.3 Acknowledgment of this decision shall be documented on Attachment B of this procedure by the individual involved in this activity.

**3.0 INSTRUCTIONS (CONTINUED)**

**3.5 POST-EXPOSURE ACTIVITIES**

- 3.5.1 Personnel receiving emergency doses should be restricted from further occupational exposures pending the outcome of exposure evaluations, and if necessary, medical surveillance.
- 3.5.2 Radcon shall conduct post exposure dose assessments for exposed individuals, with particular attention to determining the adequacy of administrative dosimeter correction factors for TEDE doses resulting from internal and external exposures.
- 3.5.3 Any exposures above 5 rem TEDE shall be reported to a TVA physician. It is the responsibility of the physician to determine appropriate medical evaluations and required care. Cross reference guidance in EPIP-10.
- 3.5.4 Any emergency exposures shall be reported to the Radcon Superintendent as soon as possible.

ATTACHMENT A (Page 1 of 1)  
EPA EMERGENCY EXPOSURE RISK INFORMATION

I. Health Effects Associated with Whole Body Adsorbed Doses Received Within A Few Hours<sup>1</sup>.

Whole Body Absorbed Dose (rad)	Early Fatalities <sup>2</sup> (Percent)	Whole Body Adsorbed Dose (rad)	Prodromal Effects <sup>3</sup> (Percent)
140	5	50	2
200	15	100	15
300	50	150	50
400	85	200	85
460	95	250	98

<sup>1</sup> Risks will be lower for protracted exposure periods.

<sup>2</sup> Supportive medical treatment may increase the dose at which these frequencies occur by approximately 50 percent.

<sup>3</sup> Forewarning symptoms of more serious health effects associated with large doses of radiation.

II. Approximate Cancer Risk to Average Individuals from 25 rem Effective Dose Equivalent Delivered Promptly.

Age at Exposure (years)	Risk of Premature Death (deaths per 1,000 persons exposed)	Average years of life lost if premature death occurs (Years)
20 to 30	9.1	24
30 to 40	7.2	19
40 to 50	5.3	15
50 to 60	3.5	11

Note: Tables referenced from the Environmental Protection Agency's "manual of Protective Action Guides and Protective Actions for Nuclear Incidents", (EPA-400), October 15, 1991, page 2-18.

ATTACHMENT B (Page 1 of 1)  
GREATER THAN 10 CFR 20.1201 EXPOSURE LIMIT ACKNOWLEDGMENT

**READ THE FOLLOWING STATEMENT BEFORE SIGNING THIS FORM:**

I acknowledge by signature on this form that I am volunteering for exposures in excess 10 CFR 20.1201 limits and that I have been made aware through training or a briefing of the risks involved through a review of the material presented on Attachment A of the procedure.

The persons listed below have acknowledged and volunteered to receive Dose Limits in excess of 10 CFR 20.1201 limits. Authorization is required by the Site Emergency Director to administer any emergency exposure limit. This form **does not** represent the authorization of the Site Emergency Director.

Name (Please print Last, First, MI)	SSN	Signature	Time/Date
1. _____	- -	_____	/ . .
2. _____	- -	_____	/ . .
3. _____	- -	_____	/ . .
4. _____	- -	_____	/ . .
5. _____	- -	_____	/ . .
6. _____	- -	_____	/ . .
7. _____	- -	_____	/ . .
8. _____	- -	_____	/ . .
9. _____	- -	_____	/ . .
10. _____	- -	_____	/ . .
11. _____	- -	_____	/ . .
12. _____	- -	_____	/ . .
13. _____	- -	_____	/ . .
14. _____	- -	_____	/ . .
15. _____	- -	_____	/ . .
16. _____	- -	_____	/ . .
17. _____	- -	_____	/ . .
18. _____	- -	_____	/ . .
19. _____	- -	_____	/ . .
20. _____	- -	_____	/ . .

LAST PAGE

TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT

## EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-17

### **Emergency Equipment and Supplies (Inventory and Operability Procedure)**

REVISION 23A

PREPARED BY: TIM CORNELIUS

PHONE: 2038

RESPONSIBLE ORGANIZATION: EMERGENCY PREPAREDNESS

APPROVED BY: TIM CORNELIUS

DATE: 03/08/2000

EFFECTIVE DATE: 03/09/2000

**LEVEL OF USE: REFERENCE USE**

VALIDATION DATE: NOT REQUIRED

QUALITY-RELATED

## REVISION LOG

PROCEDURE NUMBER: EPIP-17 REVISION NUMBER: 23A

PAGES AFFECTED: 3,7,8,20-23,27-28,35

### DESCRIPTION OF CHANGES:

- EC-26 This change is being conducted to human factor the Revision Log, Description of Change and added clarification to revision log effecting rev. 23. EPIP 17 was revised in support of the site standardization process, to revise the agreement hospital and off site decontamination facility inventories, and revise procedure references. EPIP 17 (rev. log) was changed to reflect the current revision level. Page 3, was revised to change procedure title SSP 3.14 to SPP 3.1. Page 3, revised section 3.3.1-3.3.3, to remove reference to the Inventory Deficiency/Resolution Form. Page 7, removed reference SSP 1.52, requirements incorporated in EPIP-17. Page 8, added drawing and/or procedure inventory information in support of the TSC inventory list. Pages 20-23, revised Technical Support Center inventories, incorporating procedures and drawing listing. Pages 27-28, revised hospital inventories. Page 35, revised off-site decontamination facility inventory. Page 36, deleted Inventory Deficiency/Resolution Form.



## 1.0 PURPOSE

The purpose of this procedure is to provide a listing of equipment and supplies, along with storage locations, available for emergency response during the activation of the Radiological Emergency Plan and Emergency Plan Implementing Procedures. This procedure will ensure the availability and readiness of emergency equipment at BFN through the performance of periodic inventories and operability checks.

## 2.0 SCOPE

This procedure provides information pertaining to equipment and supplies available for use during emergencies at the Browns Ferry Nuclear Plant. This procedure additionally provides instructions to personnel performing checks of equipment and supplies in regards to frequencies, responsibilities, acceptance and record management.

## 3.0 INSTRUCTIONS

### 3.1 Responsibilities and Frequency

**3.1.1** Inventories and operability checks shall be conducted in accordance with frequencies provided in *Attachment 1*. In addition with this frequency schedule, special inventories shall be required when items or equipment maintained by this procedure have been affected by a drill, exercise or training. This special inventory shall be performed at a reasonable time following the activity. This special inventory may also be used as the routine inventory.

**3.1.2** Conduct of inventories and operability checks shall be the responsibility of the organization provided in *Attachment 1*.

**3.1.3** The Manager, Emergency Preparedness (EP), is responsible for ensuring the overall state of readiness of supplies and equipment identified in the procedure.

### **3.1 Responsibilities and Frequency (Continued)**

- 3.1.4** Individuals performing work within this procedure shall be familiar with all procedural guidance and testing requirements applicable to their assigned task. By initialing the item listing on the task form, the individual performing tasks within this procedure is responsible for ensuring the item is present, in the specified quantity and functional for its intended purpose.
- 3.1.5** Equipment inventories and operability of the site environmental monitoring vans shall be conducted in accordance with *CECC-EPIP-9*. Routine and special inventory/operability checks involving the site environmental monitoring vans are the responsibility of RADCON. Training personnel will be responsible for inventory and operability checks following training activities.
- 3.1.6** Personnel performing inventories and operability checks shall ensure that upon completion of task, seals or locking devices are in place to ensure the integrity of the equipment or supplies. Areas requiring these measures are listed on *Attachment 2*.
- 3.1.7** Personnel conducting inventories and operability checks in accordance with this instruction will ensure that the latest revision of this procedure is utilized.
- 3.1.8** Definition for annual and quarterly shall be as noted in the Radiological Emergency Plan. Terms such as once every calendar quarter or month invokes that the task should be conducted within the timeframe of a physical quarter or month.

### **3.2 Records Management**

- 3.2.1** Personnel conducting tasks within this procedure will provide legible documentation of results on applicable forms.
- 3.2.2** Upon completion of applicable task(s), originals with signatures, shall be forwarded to the Manager, EP for review and concurrence. Originals should be forwarded as soon as possible, but no later than the end of the current quarter.

**3.1 Records Management(Continued)**

**3.2.3** The Manager, EP shall review all task forms and concur with results by signature.

**3.2.4** EP shall maintain all procedure records for a minimum retention period of 1 year. These records are considered NON-QA.

**3.3 Task Deficiencies**

Deficient items as discussed within this procedure do not relate to those described in SPP 3.1, "Corrective Action Program". Any deficient item identified within this procedure which does meet the requirements of SPP 3.1 shall be documented in accordance with SPP 3.1.

**3.3.1** All task deficiencies shall be noted on the applicable task form.

**3.3.2** All task deficiencies shall be corrected as soon as possible. If circumstances do not allow prompt correction the Manager, EP, shall be notified. When deficiencies have been corrected, the applicable task form shall be signed.

**3.3.3** For failures of the NRC FTS-2000, Emergency Telecommunications System (ETS) deficiencies will be reported immediately in accordance with the instructions provided on the applicable task form.

### **3.4 Specific Instructions for Inventories, Operability Checks, Administrative Checks and Reviews**

#### **3.4.1 SCBA's**

Self Contained Breathing Apparatus (SCBA) units are inventoried per this procedure for inventory purposes only. Inspections/equipment maintenance and operability checks are conducted in accordance with applicable Fire Protection Instructions.

#### **3.4.2 Radiological Control Instrumentation**

**3.4.2.1 On-Site** - Survey instrumentation, counting equipment, air samplers, dosimeters and other radiological control equipment listed on applicable forms are for inventory purposes only. Instrument readiness is a process of the on-site radiological control organization. As a function of this inventory calibration due dates and instrumentation physical appearance will be observed to help ensure operability.

**3.4.2.2 Off-Site** - Survey instrumentation and dosimeters referenced as offsite by this procedure are considered those maintained by EP at the BFN - Agreement Hospitals. Survey instrumentation operability shall be maintained by the Western Area Radiological Laboratory, Instrumentation Section. Electronic dosimeters shall be exchanged according to response dates not to exceed calibration due dates. Electronic dosimetry should be observed for physical damage to help ensure operability.

#### **3.4.3 Telecommunications**

**3.4.3.1 Nuclear Regulatory Commission - Emergency Notification System** telephones. Lift the receiver and listen for a dial tone; after receiving a dial tone, dial the first number listed on the sticker located on the telephone instrument, using all 10 digits. If the first number is busy, proceed on with the second, etc. Confirm acceptable voice quality between parties conducting the test with all extensions off hook. Request a call-back be made to single phone and confirm acceptable voice quality.

**3.4 Specific Instructions for Inventories, Operability Checks, Administrative Checks and Reviews (Continued)**

**3.4.3 Telecommunications (Continued)**

**3.4.3.2** All other telecommunications tested by this procedure. Conduct the test by lifting receiver and listen for a dial tone; after receiving a dial tone, place a local call and request a call-back be made. Confirm acceptable voice quality between telephones being tested.

**3.4.4 TSC & OSC Intercom System**

Activate the intercom system in the TSC or OSC. Assign someone to monitor the test in the applicable locations. The TSC PA services the TSC, OSC and the Technical Assessment Team Area while the OSC PA services the OSC and OSC Staging Area.

**3.4.5 EP Clocks**

Verify the correct operation of the TSC and the OSC clock by logging onto the clock program and making classification changes using the program. Return the system to the "No Classification" display.

**3.4.6 Telecopiers (TSC & OSC)**

Verify operability by faxing a test message to another telecopier. Fax a test message back to the telecopier being tested. Check telecopier paper and physical condition. Ensure legibility of test messages.

**3.4.7 Telephone Headsets**

Configure headset as applicable. Make call and confirm acceptable voice quality using the microphone and ear piece.

**3.4.8 Ring down Phones (CECC/TSC, TAT/Plt Assessment, ODS/Control Rooms 1/2 & 3)**

Contact Corporate EP, have someone man the telephone in the CECC/ODS areas. Place a call to the CECC/ODS by lifting the receiver and receive a call from the CECC/ODS.

**3.4 Specific Instructions for Inventories, Operability Checks, Administrative Checks and Reviews (Continued)**

**3.4.9 Meteorological (MET) Data Terminal and Printer**

Log onto the MET terminal. Request information in printed format. Verify that the printer has a supply of paper and that the print is legible. Log off system.

**3.4.10 OSC Computer & Printer (OSC)**

Ensure the operability of the OSC computer by performing a task such as the activation of the word processing program. Check the response of the printer by requesting a print task via the computer, observe the action of the printer and print quality.

**3.4.11 Copiers (TSC/OSC)**

Verify operability by copying a test message through the copier. Make copies using the sorter and verify legibility of copies, check copy paper supply and physical condition of copier.

**3.4.12 Batteries**

All batteries shall be observed for physical damage such as indentations, leaking or rust. Batteries shall be tested to determine effectiveness by battery tester. Batteries sealed by the manufacture with an affixed label indicating a "shelf life" can be exempted from the individual battery test and accepted as is, as long as the current date does not exceed the "shelf life" date. Sealed batteries which have a "shelf life" date that is exceeded by the current date can be utilized, but must pass a battery test utilizing the battery testor.

**3.4.13 Zetron Radio Control Units (RCU)**

Observe the unit to ensure that the time is displayed on the face plate. Verify that a green indicator light appears by one of the radio frequency selector buttons. The RCU should be tested by contacting a normally manned station.

## **3.4 Specific Instructions for Inventories, Operability Checks, Administrative Checks and Reviews (Continued)**

### **3.4.14 Hand Held 2-Way Radios**

Observe the unit for physical damage, then assemble one of the battery packs to the radio. Make radio contact with another hand held unit and verify acceptable voice quality.

### **3.4.15 Control Room Conference Bridge (101/102)**

Activate the "2-Way" bridge by dialing 101 on two plant telephones. Verify acceptable voice quality. Then test the "Listen Only" bridge by having someone activate the "2-Way" bridge by dialing 101 and someone activate the "Listen Only" bridge by dialing 102. Verify that the 102 is a "listen Only" system.

### **3.4.16 ERO Logbooks**

Utilize EPIP-6 or 7, position attachments to identify what ERO logbooks are intended for use in the applicable centers. Review the logbooks to ensure that each contains:

- (1) The latest revision of the applicable EPIP Attachment
- (2) An adequate supply of log sheets

### **3.4.17 Calculators, Flashlights, etc.**

Verify functional by observing anticipated response.

### **3.4.18 Emergency Procedure Telephone Number Review and Update**

Certain EPIP's and site procedures contain telephone numbers utilized by response personnel. Once per calendar quarter these numbers will be reviewed to ensure accuracy and updates are made as applicable. Changes will be conducted in accordance with site instructions.

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**3.4 Specific Instructions for Inventories, Operability Checks, Administrative Checks and Reviews (Continued)**

**3.4.19 Review of Emergency Procedures**

In accordance with the Radiological Emergency Plan (REP) the REP, REP Appendices and the EIPs shall be reviewed annually. Changes concerning the REP will be forwarded to the corporate EP staff for consideration and implementation as applicable. Changes noted concerning the EIPs shall be considered and if applicable revisions conducted in accordance with site instructions.

**3.4.20 Emergency Response List**

The Emergency Response List contains individuals which are allowed access to the protected area during an emergency at BFNP for the purposes of serving within the emergency response organization. This listing is updated quarterly and copies distributed to Nuclear Security. The list will be issued on white paper and will not require PORC review.

**3.4.21 Call-Out List**

This list contains active Emergency Responders by emergency positions. This list is utilized as a tool for the call-out of emergency responders. The list is updated quarterly and will be issued on white paper. The call-out list will not be PORC reviewed.

**3.4.22 Procedures and/or Drawings**

Controlled Procedures and/or drawings listed on applicable forms are for inventory purpose only. Procedure and Drawing inspection/maintenance process is conducted through applicable site instructions.



## 4.0 ATTACHMENTS

- 4.1 Attachment 1 Inventory Matrix Table
- 4.2 Attachment 2 Locked/Sealed Cabinet Listing
- 4.3 Attachment 3 Radcon Emergency Equipment - Service Building 565'
- 4.4 Attachment 4 Radcon Emergency Equipment - Control Building 617"
- 4.5 Attachment 5 Staging Area C-Zone Dress-Out Clothing - Service Building 565'
- 4.6 Attachment 6 Emergency Use SCBA Inventory
- 4.7 Attachment 7 Maintenance Emergency Tool Box Inventory, Clean Tool Room - Service Building 565'
- 4.8 Attachment 8 Technical Support Center Inventory/Operability Check
- 4.9 Attachment 9 Operations Support Center Inventory/Operability Check
- 4.10 Attachment 10 OSC Staging Area Inventory/Operability Check
- 4.11 Attachment 11 Huntsville/Decatur General Hospital Inventory/Operability Checks
- 4.12 Attachment 12 ETS Communications Operability Checks
- 4.13 Attachment 13 Local Recovery Center Inventory/Operability Checks
- 4.14 Attachment 14 EP Quarterly Administrative Checks and Reviews
- 4.15 Attachment 15 EP Once per Calendar Quarter Administrative Checks and Reviews
- 4.16 Attachment 16 EP Annual Administrative Checks and Reviews
- 4.17 Attachment 17 Alternate Decontamination Facility
- 4.18 Attachment 18 Inventory-Operability Deficiency/Resolution Form

**Attachment 1  
Inventory Matrix Table**

<u>EPIP Attachment Number</u>	<u>Description</u>	<u>Responsible Section</u>	<u>Frequency</u>	<u>Specific Instructions Provided</u>
3	<i>Radcon Emergency Equipment - Service Building 565'</i>	Radcon	Once every calendar quarter	Yes
4	<i>Radcon Emergency Equipment - Control Building 617'</i>	Radcon	Once every calendar quarter	Yes
5	<i>Staging Area C-Zone Dress-Out Clothing Service Building 565'</i>	Radcon	Once every calendar quarter	Yes
6	<i>Emergency Use SCBA Inventory</i>	Operations	Once every calendar quarter	Yes
7	<i>Maintenance Emergency Tool Box Inventory, Clean Tool Room - Service Building</i>	Maintenance	Once every calendar quarter	
8	<i>Technical Support Center Inventory/Operability Check</i>	EP	Once every calendar quarter	Yes
9	<i>Operations Support Center Inventory/Operability Check</i>	EP	Once every calendar quarter	Yes
10	<i>OSC Staging Area Inventory/Operability Check</i>	EP	Once every calendar quarter	Yes
11	<i>Huntsville/Decatur General Hospital Inventory/Operability Checks</i>	EP	Once every calendar quarter	Yes
12	<i>ENS Monthly Communications Operability Check</i>	EP	Once monthly	Yes
13	<i>Local Recovery Center Inventory/Operability Check</i>	EP	Once every calendar quarter	Yes
14	<i>EP Quarterly Administrative Checks and Reviews</i>	EP	Once quarterly	Yes
15	<i>EP Once per Calendar Quarter Administrative Checks and Reviews</i>	EP	Once every calendar quarter	Yes
16	<i>EP Annual Administrative Checks and Reviews</i>	EP	Once annually	Yes
17	<i>Alternate Decontamination Facility</i>	EP	Once every calendar quarter	

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**Attachment 2  
Locked/Sealed Cabinet Listing**

<u>Cabinet</u>	<u>Location</u>
Equipment and Supplies Cabinet	Technical Support Center
Equipment and Supplies Cabinet	Operations Support Center
Equipment and Supplies Cabinet	OSC Staging Area
Equipment and Supplies Cabinet	Local Recovery Center
Equipment and Supplies Cabinet (Radcon)	Service Building 565'
Equipment and Supplies Cabinet (Radcon)	Control Building 617'
Equipment and Supplies Cabinet (Hospital)	Decatur General "Emergency Room"
Equipment and Supplies Cabinet (Hospital)	Huntsville Hospital "Emergency Room"
Equipment and Supplies Cabinet (Alternate Decontamination Facility)	Power Service Shop # 4 TVA Muscle Shoals Reservation

### Attachment 3

#### Radcon Emergency Equipment - Service Building 565'

*Location: Service Building 565' Behind Radiological Control Lab*

Equipment	QTY	INV	OPER	INIT
<b><u>Radiological Survey Instrumentation</u></b>				
High Range Survey Meters	2	_____		_____
Ion Chambers	4	_____		_____
GM Survey Meters ( <i>Friskers</i> )	2	_____		_____
Neutron Survey Meter	1	_____		_____
Silver Zeolite Cartridges	10	_____		_____
Alpha Survey Meter	1	_____		_____
Mini-Scaler	1	_____		_____
Hi-Volume Air Sampler	2	_____		_____
Low-Volume Air Sampler	1	_____		_____
Shielded Detector "Pig" ( <i>Located in Radcon Area, Service Building, 565'</i> )	1	_____		_____
<b><u>Dosimetry</u></b>				
Dosimetry Chargers	2	_____		_____
Whole Body TLD's	10	_____		_____
Multi-Badge Sets	10	_____		_____
Extremity TLD Badge Sets	30	_____		_____
0-200 mr Pocket Chambers	10	_____		_____
0-500 mr Pocket Chambers	10	_____		_____
0-1500 mr Pocket Chambers	10	_____		_____
0-5 R Pocket Chambers	10	_____		_____
0-20 R Pocket Chambers	10	_____		_____
0-100 R Pocket Chambers	10	_____		_____
<b><u>Miscellaneous</u></b>				
Calculator (Hand Held)	1	_____	Y N	_____
Batteries (D-Cell)	16	_____	Y N	_____
Log Book	1	_____		_____
Flashlights	8	_____	Y N	_____
Box of Pens	1	_____		_____
Particulate Air Filters (Box)	2	_____		_____
Disc Smears (Box)	1	_____		_____
KI Tablets Expiration Date _____ ( <i>Radcon Supply Cage</i> )( <i>Tablets</i> )	2000	_____		_____

**Signatures:**

**Supervisor, Radcon:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Retention Period is 12 months - - Non-QA Record

**Attachment 4**

**Radcon Emergency Equipment - Control Building 617'**

*Location: Control Building 617' Mechanical Equipment Room*

<b>Equipment</b>	<b>QTY</b>	<b>INV</b>	<b>OPER</b>	<b>INIT</b>
<b><u>Radiological Survey Instrumentation</u></b>				
High Range Survey Meters	2	_____		_____
Ion Chambers	4	_____		_____
GM Survey Meters ( <i>Friskers</i> )	2	_____		_____
Neutron Survey Meter	1	_____		_____
Silver Zeolite Cartridges	10	_____		_____
Alpha Survey Meter	1	_____		_____
Mini-Scaler	1	_____		_____
Hi-Volume Air Sampler	2	_____		_____
Low-Volume Air Sampler	1	_____		_____
Shielded Detector "Pig"	1	_____		_____
<b><u>Dosimetry</u></b>				
Dosimetry Chargers	2	_____		_____
Whole Body TLD's	10	_____		_____
Multi-Badge Sets	10	_____		_____
Extremity TLD Badge Sets	30	_____		_____
0-200 mr Pocket Chambers	10	_____		_____
0-500 mr Pocket Chambers	10	_____		_____
0-1500 mr Pocket Chambers	10	_____		_____
0-5 R Pocket Chambers	10	_____		_____
0-20 R Pocket Chambers	10	_____		_____
0-100 R Pocket Chambers	10	_____		_____
<b><u>Miscellaneous</u></b>				
Calculator (Hand Held)	1	_____	Y N	_____
Batteries (D-Cell)	16	_____	Y N	_____
Log Book	1	_____		_____
Flashlights	8	_____	Y N	_____
Box of Pens	1	_____		_____
Particulate Air Filters (Box)	2	_____		_____
Disc Smears (Box)	1	_____		_____

**Signatures:**

**Supervisor, Radcon:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Retention Period is 12 months - - Non-QA Record

### Attachment 5

#### Staging Area C-Zone Dress-Out Clothing - Service Building 565'

*Location: Service Building Column 6, G-line Hallway  
behind Mechanical Maintenance Offices*

Equipment	QTY	INV	INIT
<b><u>Coveralls (Pairs)</u></b>	<b>40</b>	_____	_____
Based upon size availability an alternate distribution may be acceptable at the discretion of the Radcon Supervisor and the EP Manager, noted by signature of completed form.			
Size 46			
Size 48	10	_____	
Size 50	10	_____	
Size 52	5	_____	
Size 54	5	_____	
Size 58	5	_____	
<b><u>Hood covers</u></b>	<b>25</b>	_____	_____
<b><u>Shoe Covers (Pairs)</u></b>	<b>25</b>	_____	_____
<b><u>Surgeon Caps</u></b>	<b>25</b>	_____	_____
<b><u>Rubber Gloves (Pairs)</u></b>	<b>25</b>	_____	_____
<b><u>Booties (Pairs)</u></b>	<b>25</b>	_____	_____
<b><u>Cotton Glove Inserts (Pairs)</u></b>	<b>25</b>	_____	_____
<b><u>Masking Tape (Rolls)</u></b>	<b>8</b>	_____	_____

**Signatures:**

**Supervisor, Radcon:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Retention Period is 12 months - - Non-QA Record

**Attachment 6  
Emergency Use SCBA Inventory**

Description	Location	QTY	INV	INIT
Self Contained Breathing Apparatus	Unit 1 Control Room	5	_____	_____
Self Contained Breathing Apparatus	Unit 2 Control Room	5	_____	_____
Self Contained Breathing Apparatus	Unit 3 Control Room	5	_____	_____
45 cu. ft. Air Cylinder	Service Building Elevation 565, Service Shop Hallway	15	_____	_____
Self Contained Breathing Apparatus and 10 additional cylinders	Fire Equipment Cabinet Turbine Building - 557'	10	_____	_____
Self Contained Breathing Apparatus	4kV Shutdown Bd Rm "C"	*5	_____	_____
Self Contained Breathing Apparatus	3A Electrical Board Room	5	_____	_____
Self Contained Breathing Apparatus	Fire Equipment Cabinet Stairwell - RB 1&2 El. 565'	4	_____	_____
Self Contained Breathing Apparatus	Fire Equipment Cabinet Stairwell - RB 2&3 El. 565'	4	_____	_____
Self Contained Breathing Apparatus	Radcon Emergency Cart	2	_____	_____
Self Contained Breathing Apparatus	Fire Truck	4	_____	_____

(\* Required for by 10 CFR 50 Appendix R Support

**Signatures:**

**Supervisor, FIREPROTECTION:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Retention Period is 12 months - - Non-QA Record

**Attachment 7 (Page 1 of 4)**  
**Maintenance Emergency Tool Box Inventory**

**Electrical Tool Box**

**Number of Boxes 2 -- Number of Boxes Inventoried \_\_\_\_**

Tool Description	QTY	INV	INIT
Pliers, Needle Nose, 6"	2	_____	_____
Pliers Diagonal, 6"	2	_____	_____
Tester, Circuit, 24.0"	2	_____	_____
Rule, Folding, Carpenters, Outside Reading, 6'	2	_____	_____
Pliers, Tongue & Groove, 10", #430 Channel Locks	2	_____	_____
Screwdriver, STD Tip, .25" Tip, X 8.0" Long	2	_____	_____
Screwdriver, STD Tip, .313" Tip, X 4.0" Long	2	_____	_____
Screwdriver, STD Tip, .125" Tip, X 6.0" Long	2	_____	_____
Pliers, Lineman's, 9.0"	2	_____	_____
Screwdriver, STD Tip, .25" Tip, X 6.0" Long	2	_____	_____
Screwdriver, Phillips Tip, #2 Tip, 4" Blade	2	_____	_____
Screwdriver, Holding, .25" X 6" (Klein)	2	_____	_____
Wrench, Adjustable, 10.0"	2	_____	_____



Attachment 7 (Page 2 of 4)  
Maintenance Emergency Tool Box Inventory

I&C Tool Box

Number of Boxes 2 -- Number of Boxes Inventoried \_\_\_\_\_

Tool Description	QTY	INV	INIT
Pliers, Tongue & Groove, 9, #42 Channel Locks	1	_____	_____
Screwdriver, STD Tip, .25" Tip, X 6.0" Long	1	_____	_____
Screwdriver, Jewelers, Set of Six, .25"-1.100" Mfg. Starrett	1	_____	_____
Screwdriver, Holding, .25" X 6" (Klein)	1	_____	_____
Cord, Extension, 110 V 100'	1	_____	_____
Wrench Set, Hex Key (Allen), Folding, 0.050"-0.187"	1	_____	_____
Wrench, Ignition, Set	1	_____	_____
Wrench, Valve Wheel, Number 0, 8.0"X.50"X.656"	1	_____	_____
Socket, Set, 1/4" DR., SL/DW, 3/16" to 9/16"	1	_____	_____
Driver, Nut, Set, Fractional 1/4" to 1/2"	1	_____	_____
Wrench, Set, Hexkey, .028" to 5/8"	1	_____	_____
Cutter, Tube, .125" to .625"	1	_____	_____
Cutter, Tube, .125" to 1.125"	1	_____	_____
Pliers, Diagonals, 6"	1	_____	_____
Pliers, Lineman, 7"	1	_____	_____
Pliers, Needle Nose, 7"	1	_____	_____
Pliers, Tounge & Groove, #430 CL.	1	_____	_____
File, Half Round, 4" Smooth	1	_____	_____
File, Round, 6" Smooth	1	_____	_____
Puller, Fuse, Midget	1	_____	_____
Puller, Fuse, 100A-250V	1	_____	_____
Screwdriver, Philips, #1x3"	1	_____	_____
Screwdriver, Phillips, #2x4"	1	_____	_____
Screwdriver, Flat, 1/8x2.25"	1	_____	_____
Screwdriver, Flat, 1/4x6"	1	_____	_____
Screwdriver, Flat, 1/4x4"	1	_____	_____
Screwdriver, Flat, 5/16x6"	1	_____	_____
Screwdriver, holding, SM/pocket Clip	1	_____	_____
Screwdriver, Holding, 3/16x6"	1	_____	_____
Screwdriver, holding, 1/4x8"	1	_____	_____
Wrench, Adjustable, 4"	1	_____	_____
Wrench, Adjustable, 6"	1	_____	_____
Wrench, Adjustable, 8"	1	_____	_____

**Attachment 7 (Page 3 of 4)**  
**Maintenance Emergency Tool Box Inventory**

**I&C Tool Box (CONTINUED)**

Tool Description	QTY	INV	INIT
Wrench, Combo, 3/8"	1	_____	_____
Wrench, Combo, 7/16"	1	_____	_____
Wrench, Combo 1/2"	1	_____	_____
Wrench, Combo, 9/16"	1	_____	_____
Wrench, Combo, 5/8"	1	_____	_____
Wrench, Combo, 11/16"	1	_____	_____
Wrench, Combo, 3/4"	1	_____	_____
Wrench, Flare Nut, 1/2"-9/16"	1	_____	_____
Wrench, Flare Nut, 5/8"-11/16"	1	_____	_____
Wrench, Flare Nut, 3/4"-1"	1	_____	_____
Wrench, Flare Nut, 7/8"-1 1/8"	1	_____	_____
Snoop, Bottle, 8 oz	1	_____	_____
Note: The following items are supplied by the I&C Shop			
Tube Fitting, 1/4"M NPT to 3/8" tube comp	2	_____	_____
Tube Fitting, 1/4"F NPT to 1/4" tube comp	2	_____	_____
Tube Fitting, 3/8" comp to 3/8" comp	2	_____	_____
Tube Fitting, 1/4" comp to 1/4" comp	2	_____	_____
Tube Fitting, Tee, 1/4" comp	2	_____	_____
Tape, Electrical, Scotch 33 Black	1	_____	_____
Leads, Test, 4'	1	_____	_____
Jumpers, Banana, 2' orange w/clips	2	_____	_____
Tywraps, 3/16"x8"	1PK	_____	_____
Tywraps, 1/8"x4"	1PK	_____	_____
Valve Wrench, Custom Made, I&C Specs.	1	_____	_____

**Attachment 7 (Page 4 of 4)  
Maintenance Emergency Tool Box Inventory**

**Mechanical Tool Box**

**Number of Boxes 2 -- Number of Boxes Inventoried \_\_\_**

Tool Description	QTY	INV	INIT
Flux, Soldering	1	_____	_____
Chisel, Cold, .4375" Cut	1	_____	_____
Wrench Set, Combo, 0.250"-1.250"	1	_____	_____
Wrench Set, Hex Key (Allen), 0.187"-0.375"	1	_____	_____
Wrench Set, Hex Key (Allen), Folding, 0.050"-0.187"	1	_____	_____
Socket Set, .375"	1	_____	_____
Hammer, Ball Pein, 12 oz	1	_____	_____
Punch, Pin, .188"	1	_____	_____
Punch, Pin, .125"	1	_____	_____
Pliers, Tongue & Groove, 9" #420 Channel Locks	1	_____	_____
Screwdriver, Phillips Tip, Round Shank, #2 Tip X 4.0" Blade	1	_____	_____
Screwdriver, Phillips Tip, Round Shank, #2 Tip X 1.50" Blade	1	_____	_____
Screwdriver, STD Tip, .25" Tip X 6.0" Long	1	_____	_____
Screwdriver, STD Tip, .25" Tip X 12.0" Long	1	_____	_____
Wrench, Pipe, 12"	1	_____	_____
Wrench, Adjustable, 12.0"	1	_____	_____
Pliers, Slip Joint, 10"	1	_____	_____
Pliers, Needle Nose, W/Side Cutter, 8"	1	_____	_____

**Signatures:**

**Supervisor, Tool Room:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Retention Period is 12 months - - Non-QA Record

Attachment 8 (Page 1 of 4)  
Technical Support Center Inventory/Operability Check

<b>Equipment In the Technical Support Center</b>	<b>QTY</b>	<b>INV</b>	<b>OPER</b>	<b>INIT</b>
Telecopier	2	_____	Y N	_____
Telecopier (TAT Area)	1	_____	Y N	_____
TSC Intercom System	1	_____	Y N	_____
TSC Zetron Radio System	1	_____	Y N	_____
Copier	1	_____	Y N	_____
EP Clock	1	_____	Y N	_____
Control Room Conference Bridge Headset	2	_____	Y N	_____
Met Data Terminal & Printer	1	_____	Y N	_____
ERO Logbooks	*	_____		_____
Accountability Roster	1	_____		_____
ICS Terminal (TSC Area)	4	_____	Y N	_____
ICS Terminal (TAT Area)	1	_____	Y N	_____
<b><u>In TSC Equipment &amp; Supply Cabinet</u></b>				
Calculators, ( <i>Scientific</i> )	6	_____	Y N	_____
Flashlights	12	_____	Y N	_____
Batteries ( <i>D-Cells</i> )	24	_____	Y N	_____
Batteries ( <i>AA</i> )	24	_____	Y N	_____
Telephone Headsets ( <i>Spares</i> )	3	_____	Y N	_____
Staplers	1	_____		_____
Pens ( <i>Black Ink</i> )	24	_____		_____
Pencils	12	_____		_____
Tape Dispensers w/tape	1	_____		_____
"Post-it-notes" Pads	12	_____		_____
Message Pads	12	_____		_____
Note Pads ( <i>8.5"x 11"</i> )	12	_____		_____
Board Cleaner ( <i>Bottles</i> )	1	_____		_____
Paper Towels ( <i>Rolls</i> )	1	_____		_____
Grease Pencils	12	_____		_____
Dry Erase Markers	12	_____		_____
Copier Paper ( <i>Packs</i> )	4	_____		_____
Spare Phones for NRC ETS	6	_____		_____

\* Utilize EPIP-6, position attachments to identify what ERO logbooks are intended for use in the TSC.

Attachment 8 (Page 2 of 4)  
Technical Support Center Inventory/Operability Check

Procedures/Drawings <u>In the Technical Support Center</u>	QTY	INV	OPER	INIT
*REP	4	_____		_____
*BFN EPIP's	11	_____		_____
*CECC EPIP's	2	_____		_____
*Severe Accident Management Guidelines Flowcharts	1 Set	_____		_____
*Technical Support Guidelines	1 Set	_____		_____
*Emergency Operating Instruction (EOI) Flowcharts	1 Set	_____		_____
*EOI Program Manual	1 Set	_____		_____
*Radiological Control Instructions	1 Set	_____		_____
*Abnormal Operating Instructions	1 Set	_____		_____
*REND	2	_____		_____
*AI Radiological Emergency Response Plan	1	_____		_____
*Multi-Jurisdictional Radiological Emergency Response Plan TEMA	1	_____		_____
*Alarm Response Procedures	1 Set	_____		_____
*Operating Instructions	1 Set	_____		_____
*Technical Specifications	1 Set	_____		_____
*Technical Requirements	1 Set	_____		_____
*Safe Shutdown Instructions	1 Set	_____		_____
*Fire Protection Report	1 Set	_____		_____
*Final Safety Analysis Report	1 Set	_____		_____
*User Manual Meteorological Data Display Program CECC	1	_____		_____
*User Manual Nuclear Power (NP) Sites - Emergency Paging System (EPC) CECC	1	_____		_____
*FRED Forecast Radiological Emergency Dose	1	_____		_____
*User Manual Meteorological Data Print Program	1	_____		_____
*Plant Drawings	1 Set	_____		_____
Radcon Survey Maps	1 Set	_____		_____
EP 10-Mile Sample Point Map	2	_____		_____
EP 2-Mile Sample Point Map	1	_____		_____
EP 50 Mile Sample Point Map	1	_____		_____
EP 10 Mile Evacuation Sector Map	1	_____		_____
Operators Manual Zetron Radio Console	1	_____		_____

\* Controlled Documents or Drawings

**Attachment 8 (Page 3 of 4)**  
**Technical Support Center Inventory/Operability Check**

<b>Procedures/Drawings <u>In the Technical Assessment Team Area</u></b>	<b>QTY</b>	<b>INV</b>	<b>OPER</b>	<b>INIT</b>
<b>*REP</b>	1	_____		_____
<b>*BFN EPIP's</b>	2	_____		_____
<b>*REND</b>	1	_____		_____
<b>*Operating Instructions</b>	1 Set	_____		_____
<b>*Technical Specifications</b>	1 Set	_____		_____
<b>*Technical Requirements</b>	1 Set	_____		_____
<b>*UMMI</b>	1 Set	_____		_____
<b>*UEMI</b>	1 Set	_____		_____
<b>*EMI</b>	1 Set	_____		_____
<b>*Unit 2 EOI Appendices</b>	1	_____		_____
<b>*Unit 3 EOI Appendices</b>	1	_____		_____
<b>*SAMG EOI Appendices</b>	1	_____		_____
<b>*SPCC Plan</b>	1	_____		_____
<b>*Plant Drawings</b>	1 Set	_____		_____

**Attachment 8 (Page 4 of 4)**  
**Technical Support Center Inventory/Operability Check**  
**Technical Support Center Telephones**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
3777	Y N	_____	2305	Y N	_____
3730	Y N	_____	3734	Y N	_____
3771	Y N	_____	3733	Y N	_____
3770	Y N	_____	3736	Y N	_____
3732	Y N	_____	3735	Y N	_____
3764	Y N	_____	3744	Y N	_____
3761	Y N	_____	3756	Y N	_____
3765	Y N	_____	3745	Y N	_____
3767	Y N	_____	3738	Y N	_____
3766	Y N	_____	3740	Y N	_____
3768	Y N	_____	3762 w/Headset	Y N	_____
3763	Y N	_____	3769 w/Headset	Y N	_____
3779	Y N	_____	3737 w/Headset	Y N	_____
3782 (Node 2 Jack Only)	Y N	_____	CECC Ringdown	Y N	_____
3784 (Node 2 Jack Only)	Y N	_____	101/102 Bridge	Y N	_____
			103 Radcon Bridge	Y N	_____

**Technical Assessment Team Area**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
3741	Y N	_____	3025	Y N	_____
2165	Y N	_____	2202	Y N	_____
2274	Y N	_____	Plt Assessment Ringdown	Y N	_____

**Control Rooms**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
ODS Unit 1/2 Ringdown	Y N	_____	ODS Unit 3 Ringdown	Y N	_____
Unit 1/2 Bridge Headset	Y N	_____	Unit 3 Bridge Headset	Y N	_____
Unit 1/2 Fixed Satellite Telephone	Y N	_____	Unit 3 Fixed Satellite Telephone	Y N	_____

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
Retention Period is 12 months - - Non-QA Record

Attachment 9 (Page 1 of 2)  
Operations Support Center Inventory/Operability Check

<u>Equipment</u> <u>In the Operational Support Center</u>	QTY	INV	OPER	INIT
Telecopier	1	_____	Y N	_____
OSC Intercom System	1	_____	Y N	_____
Copier	1	_____	Y N	_____
EP Clock	1	_____	Y N	_____
Computer Terminal	1	_____	Y N	_____
Printer for Computer	1	_____	Y N	_____
Accountability Roster	1	_____		_____
OSC Zetron Radio System	1	_____	Y N	_____
RADCON Zetron Radio System	1	_____	Y N	_____
ICS Terminals	2	_____	Y N	_____
<u>In OSC Equipment &amp; Supply Cabinet</u>				
Calculators, ( <i>Scientific</i> )	6	_____	Y N	_____
Flashlights	12	_____	Y N	_____
Batteries ( <i>D-Cells</i> )	24	_____	Y N	_____
Batteries ( <i>AA</i> )	24	_____	Y N	_____
Telephone Headsets ( <i>Spares</i> )	2	_____	Y N	_____
Staplers	3	_____		_____
Pens ( <i>Black Ink</i> )	24	_____		_____
Pencils	12	_____		_____
Tape Dispensers w/tape	1	_____		_____
"Post-it-notes" Pads	12	_____		_____
Message Pads	12	_____		_____
Note Pads ( <i>8.5"x 11"</i> )	12	_____		_____
Board Cleaner ( <i>Bottles</i> )	1	_____		_____
Paper Towels ( <i>Rolls</i> )	1	_____		_____
Grease Pencils	12	_____		_____
Dry Erase Markers	12	_____		_____
Copier Paper ( <i>Packs</i> )	4	_____		_____
Hand Held 2-Way Radios	10	_____		_____
ERO Logbooks	*	_____		_____

\* Utilize EPIP-7, position attachments to identify what ERO logbooks are intended for use in the OSC.



**Attachment 9 (Page 2 of 2)**  
**Operations Support Center Inventory/Operability Check**

**Operations Support Center Telephones**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
3276	Y N	_____	3639	Y N	_____
3233	Y N	_____	3274	Y N	_____
2964	Y N	_____	2942	Y N	_____
2599	Y N	_____	3225	Y N	_____
2558	Y N	_____	2598	Y N	_____
2026	Y N	_____	3660	Y N	_____
3184	Y N	_____	2904	Y N	_____
3780	Y N	_____	3093	Y N	_____
3172	Y N	_____	3001 w/Headset	Y N	_____
3750 (Node 1 Jack Only)	Y N	_____	2089 w/Headset	Y N	_____
3752 (Node 1 Jack Only)	Y N	_____			

<b>Manager, EP:</b> _____ <b>Date:</b> _____ Retention Period is 12 months - - Non-QA Record
---

**Attachment 10  
OSC Staging Area Inventory/Operability Check**

Equipment	QTY	INV	OPER	INIT
<b><u>In the OSC Staging Area Equipment &amp; Supply Cabinet</u></b>				
Calculators, ( <i>Scientific</i> )	1	_____	Y N	_____
Flashlights	12	_____	Y N	_____
Batteries ( <i>D-Cells</i> )	24	_____	Y N	_____
Staplers	1	_____		_____
Pens ( <i>Black Ink</i> )	24	_____		_____
Pencils	12	_____		_____
Tape Dispensers	1	_____		_____
"Post-it-notes" Pads	12	_____		_____
Message Pads	12	_____		_____
Note Pads ( <i>8.5"x 11"</i> )	12	_____		_____
Accountability Roster	1	_____		_____
ERO Logbooks	*	_____		_____
<b><u>In the OSC Staging Area</u></b>				
Ice Vests	12	_____		_____
Ice Packs for vests	72	_____		_____

**Operations Support Center Staging Area Telephones**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
2244	Y N	_____	2115	Y N	_____
2309	Y N	_____	2215	Y N	_____
			2303	Y N	_____

\* Utilize EPIP-7, position attachments to identify what ERO logbooks are intended for use in the OSC Staging Area.

<b>Manager, EP:</b> _____ <b>Date:</b> _____ Retention Period is 12 months - - Non-QA Record
---

**Attachment 11 (Page 1 of 2)**  
**Huntsville/Decatur General Hospital Inventory/Operability Check**  
**(Circle One)**

Hospital Equipment & Supply Cabinet	QTY	INV	OPER	INIT
<b><u>Personnel Dress-Out Clothing</u></b>				
"Booties" ( <i>Pairs</i> )	10	_____		_____
Dress Out Packages	10	_____		_____
Surgical Gloves ( <i>Pairs</i> )	50	_____		_____
Surgical Gowns	3	_____		_____
Surgical tape for dressout ( <i>Rolls</i> )	4	_____		_____
<b><u>Rad Monitoring Instruments &amp; Dosimetry</u></b>				
Bicron Surveyor 50 (GM) or equivalent	2	_____	Y N	_____
Bicron RSO 5 (Ion Chamber) or equivalent	1	_____	Y N	_____
TLD's	10	_____		_____
Electronic Dosimeters	10	_____		_____
Wound Probe w/Cable	1	_____		_____
<b><u>Zone, Survey &amp; Contamination Control Supplies</u></b>				
Floor Covering ( <i>Set</i> )	1	_____		_____
Duct Tape ( <i>Rolls</i> )	2	_____		_____
Rad Posting Signs	8	_____		_____
Contamination Smears	100	_____		_____
Step-Off-Pads	2	_____		_____
Rad Ribbon or rope ( <i>Rolls</i> )	1	_____		_____
Massilin Mop	1	_____		_____
Massilin Cloths	20	_____		_____
Rad Emblem Tape ( <i>Rolls</i> )	1	_____		_____
Flexible Funnel w/ drain hose	1	_____		_____
Fluid Collection Bottle ( <i>2 Gallon min.</i> )	1	_____		_____
3 ft. Wide Paper (Feet)	20	_____		_____
Cotton Swabs	12	_____		_____
Radioactive Material Tags	12	_____		_____
Traffic Cones (set)	1	_____		_____

**Attachment 11 (Page 2 of 2)**  
**Huntsville/Decatur General Hospital Inventory/Operability Check**

<u>Zone, Survey &amp; Contamination Control Supplies (Continued)</u>	<b>QTY</b>	<b>INV</b>	<b>OPER</b>	<b>INIT</b>
Scissors	1	_____		_____
Plastic Bags ( <i>Large</i> )	10	_____		_____
Plastic Bags ( <i>Medium</i> )	10	_____		_____
"Zip Lock" Plastic Bags	24	_____		_____
Skin Decon Media ( <i>Container</i> )	1	_____		_____
Sample Bag Labels	12	_____		_____
Hospital Response Booklet ( <i>Hospital Specific</i> )	1	_____		_____
Wall Poster (" <i>Care of Contamination Patients</i> ")	1	_____		_____
NCRP Report # 65 ( <i>Issued Date - April 15, 1980</i> )	1	_____		_____
Decontamination Table, bottle and Backboard	1	_____		_____

<b>Manager, EP:</b> _____ <b>Date:</b> _____ Retention Period is 12 months - - Non-QA Record
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**Attachment 12**  
**ETS Communications Operability Check**

<u>Description</u>	<u>Location</u>	<u>Telephone Number</u>	<u>OPER</u>	<u>INIT</u>
Reactor Safety Counterpart Link (RSCL)	TSC (NRC Area)	(700) 221-7996	Y N	—
Protective Measures Counterpart Link (PMCL)	TSC (NRC Area)	(700) 221-7997	Y N	—
Management Counterpart Link (MCL)	TSC (NRC Area)	(700) 221-7995	Y N	—
Local Area Network (LAN) Access (Check this line by use of a telephone instrument)	TSC (NRC Area)	(700) 221-7994	Y N	—
Health Physics Network (HPN)	TSC (NRC Area)	(700) 221-7992	Y N	—
Health Physics Network (HPN)	TSC (TVA Area)	(700) 221-7992	Y N	—
*Emergency Notification System (ENS)	TSC (NRC Area)	(700) 221-7991	Y N	—
*Emergency Notification System (ENS)	TSC (TVA Area)	(700) 221-7991	Y N	—
*Emergency Notification System (ENS)	Unit 1/2 Control Room	(700) 221-7991	Y N	—
*Emergency Notification System (ENS)	Unit 3 Control Room	(700) 221-7991	Y N	—

\* Notify the Shift Manager prior to beginning the ENS telephone checks

Note: IMMEDIATELY, Report Failures to (1) the Shift Manager , and (2) the NRCOC at 9-1-301-951-0550 from a TVA telephone. (The NRC may request that Browns Ferry conduct repairs.)

Note: Upon Completion of repairs, perform a test of the affected telephones. If test is satisfactory, inform the SOS and the NRCOC.

<b>Manager, EP:</b> _____ Retention Period is 12 months - - Non-QA Record	<b>Date:</b> _____
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**Attachment 13 (Page 1 of 2)**  
**Local Recovery Center Inventory/Operability Check**

Equipment	QTY	INV	OPER	INIT
<u><b>In the LRC Area</b></u>				
Met Data Terminal	1	_____	Y N	_____
Printer for Met Data Terminal	1	_____	Y N	_____
ICS Terminal	1	_____	Y N	_____
<u><b>In LRC Equipment &amp; Supply Cabinet</b></u>				
Calculators, ( <i>Scientific</i> )	4	_____	Y N	_____
Flashlights	12	_____	Y N	_____
Batteries ( <i>D-Cells</i> )	24	_____	Y N	_____
Staplers	1	_____		_____
Pens ( <i>Black Ink</i> )	24	_____		_____
Pencils	12	_____		_____
Tape Dispensers	1	_____		_____
"Post-it-notes" Pads	12	_____		_____
Message Pads	12	_____		_____
Note Pads ( <i>8.5"x 11"</i> )	12	_____		_____
Board Cleaner ( <i>Bottles</i> )	2	_____		_____
Paper Towels ( <i>Rolls</i> )	1	_____		_____
Dry Erase Markers	12	_____		_____

**Attachment 13 (Page 2 of 2)**  
**Local Recovery Center Inventory/Operability Check**

Telephone Number	Operable	Initials	Telephone Number	Operable	Initials
2038	Y N	_____	2692	Y N	_____
3666	Y N	_____	2460	Y N	_____
3636	Y N	_____	2064	Y N	_____
3656	Y N	_____	3647	Y N	_____
3645	Y N	_____			
Portable Satellite Telephone	Y N	_____			

<b>Manager, EP:</b> _____ <b>Date:</b> _____ Retention Period is 12 months - - Non-QA Record
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**Attachment 14  
 EP Quarterly Administrative Checks and Reviews**

	QTY	INV	DATE	INIT
<b>Emergency Response List Update</b> <ul style="list-style-type: none"> <li>• Nuclear Security            Shift Supervisor's Office (5-Copies)</li> </ul>	5	_____	_____	_____
<b>Call-Out List</b> <ul style="list-style-type: none"> <li>• Shift Manager</li> </ul>	1	_____	_____	_____

<b>Manager, EP:</b> _____ <b>Date:</b> _____ Retention Period is 12 months - - Non-QA Record
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**Attachment 15**  
**EP Once per Calendar Quarter Administrative Checks and Reviews**

	QTY	INV	DATE	INIT
<b>Emergency Procedure</b>				
<b>Telephone Number Review and Update</b>				
<ul style="list-style-type: none"> <li>• <b>BFNP Emergency Preparedness Implementing Procedures</b></li> <li>• <b>BFN Site Standard Practice</b></li> </ul>	<p align="center">ALL</p> <p align="center">SSP-1.52</p>	<p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p>

<b>Manager, EP:</b> _____	<b>Date:</b> _____
Retention Period is 12 months - - Non-QA Record	

**Attachment 16**  
**EP Annual Administrative Checks and Reviews**

	QTY	INV	DATE	INIT
<b>Review Emergency Procedures</b>				
• Radiological Emergency Plan	NA	_____	_____	_____
• Browns Ferry, Emergency Plan Implementing Procedures	NA	_____	_____	_____

**Manager, EP:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
Retention Period is 12 months - - Non-QA Record

**Attachment 17**  
**Alternate Decontamination Facility**  
**Power Service Shop # 4 - TVA, Muscle Shoals Reservation**

Equipment	QTY	INV	INIT
<u>Supply Cabinet</u>			
Cotton Tipped Swabs	2 PKG	_____	_____
Square Gauze	1 Box	_____	_____
Detergent	1 Box	_____	_____
Surgical Brush	12	_____	_____
Waterless Hand Cleaner	2 Cans	_____	_____
Shampoo	2 BTL	_____	_____
Paper Bath Towels	100	_____	_____
Small Coveralls	12	_____	_____
Medium Coveralls	12	_____	_____
Large Coveralls	12	_____	_____
Small Tennis Shoes	12	_____	_____
Large Tennis Shoes	12	_____	_____

**Signatures:**  
 Inventoried/Inspected by \_\_\_\_\_ Date: \_\_\_\_\_  
 Manager, EP: \_\_\_\_\_ Date: \_\_\_\_\_  
 Retention Period is 12 months - - Non-QA Record

LAST PAGE