

Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

# FEB 0 7 2001

U.S. Nuclear Regulatory Commission 10 CFR 50, App E. ATTN: Document Control Desk Washington, D.C. 20555

Gentlemen:

In the Matter of ) Docket No. 50-390 Tennessee Valley Authority )

WATTS BAR NUCLEAR PLANT (WBN) - EMERGENCY PLAN IMPLEMENTING PROCEDURE (EPIP) REVISION

In accordance with the requirements of 10 CFR Part 50, Appendix E, Section V, the enclosure provides revised EPIPs as follows:

EPIP	Rev	Title	Effective Date
EPIP-6	17	Activation and Operation of the Technical Support Center	1-24-2001
EPIP-7	12	Activation and Operation of the Operations Support Center	1-24-2001
EPIP-9	9	Loss of Meteorological Data	1-24-2001
EPIP-12	15	Emergency Equipment and Supplies	1-24-2001
EPIP-14	14	Radiological Control Response	1-24-2001
Filing ins	tructions	are included with this document.	

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U.S. Nuclear Regulatory Commission Page 2 FEB 0 7 2001

There are no regulatory commitments in this letter. If you should have any questions, please contact me at (423) 365-1824.

Sincerely,

P. L. Pace Manager, Licensing and Industry Affairs

Enclosure cc (Enclosure) NRC Resident Inspector (w/o Enclosure) Watts Bar Nuclear Plant 1260 Nuclear Plant Road Spring City, Tennessee 37381

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U.S. Nuclear Regulatory Commission (2 copies) Region II Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, Georgia 30303

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FILING INSTRUCTIONS

DOCUME	ENT NUM	BER		EPI	p.6			
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Comments				<u></u>		. <u>.</u>		
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# **TENNESSEE VALLEY AUTHORITY**

# WATTS BAR NUCLEAR PLANT

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

### EPIP-6

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

**Revision 17** 

Unit 0

### QUALITY RELATED

PREPARED BY: <u>Benjamin McNew</u> (Type Name)

SPONSORING ORGANIZATION: <u>Emergency Planning</u>

APPROVED BY: Frank L. Pavlechko

EFFECTIVE DATE: 01/24/2001

LEVEL OF USE: REFERENCE

WBN

# ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### **REVISION LOG**

Revision Number	Implementation Date	Pages Affected	Description of Revision	
8	6/23/95	. 67	Revised Appendix Z to include requirements for Auxiliary Building lighting guidance after a LOCA/MSLB inside primary containment.	
CN-1	9/28/95	12, 13, 39, 60, 62, 63	(Non-intent) grammatical and numerical corrections made. Information was enhanced in Appendix X to provide additional contingency options for ERCW concerns.	
CN-2	7/12/96	3, 67, 67(a), 71	Add page to Appendix Z (a), to cover the concerns of SOER- 93.0001 for cleanup of the secondary side water and installing temporary hotwell indication if needed.	
9	10/10/96	3, 4, 5, 6, 7, 8, 12, 13, 16, 17, 19, 22, 24, 25, 26, 28, 29, 30, 32, 34, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 49, 50, 54, 59, 61, 72	The following non-intent revisions were made: removed RC Mgr. from 3.3.4, per WBPER960582, changed all references of SOS to SM, enhanced TSC activation instructions, added organizational title and work phone number to call list reference, replaced TI-30 with EPIP-16, enhanced headset instruction in App. G, added responsibility to App. I, added AUO announcement to App. M, App. N deleted due to repetitive instructions in APP. Q, editorial non-intent changes concerning when to card into TSC accountability card readers made, RE/RM reference note added to App. R, App. T revised to reflect utilization of ERFDS, Westinghouse Rep. added to note 2, repaginated to include page 2 of App. Z, and other minor grammatical changes to enhance human factoring.	
CN-1	2/15/97	48	Operational responsibility added to Appendix P.	
CN-2	2/10/98	3,5,8,11,21,24, 43, 51	Satellite phone added to communications loss statement, SSP- 1.06 changed to SPP-1.2, App. M add resp. to call clerks. App.Q Fire Pro. changed to HVAC Sys. Eng	
10	6/30/98	All	Non-Intent Changes. Made text alignment, typo corrected. Incorporated Change Notices 1 and 2.	
11	12/28/98	All	Added the following non-intent changes: GL 96-06 to Sect. 4.1 & Source Notes, editorial changes, SAMG responsibilities to Apps. C, E & Q, Ops staffing considerations to App. D, PORC/50.54x evaluation to Apps. E & Q, considerations to security/ environmental hazards to App. H, provide rad data to OSC to App. I, confirm completion of EPIPs 2-5 to App. M. Added ERCW caution to App. X.	
12	3/2/99	All	Non-intent change. Revised ERFDS to ICS. Duty added to TSC clerical staff in Appendix P.	
13	10/21/99	All	Non-intent change. Enhancement to Appendix R on instrument IDs. Removed 1-XR-1-5 reference in Appendix R due to DCN-39911. Duty added to TSC clerical staff in Appendix P. Changed AUO requirement due to tech spec changes in Appendix D.	
14	02/07/00	All	Non-intent change. Revised APP. C SED Turnover Data Sheet per corrective action for PER-00-000177-000. Enhanced operational responsibilities in APP. C and F.	

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#### **REVISION LOG**

Revision Number	Implementation Date	Pages Affected	Description of Revision
15	06/14/00	All	Non-intent changes. SED, OPS Communicator, Radcon Mgr., and Site VP duties were enhanced to be consistent with REP Appendix C. REX replaced with HIS-20, TSC removed from Maint. Mgr. Position title, and SED duties revised to reflect Radcon Mgr. Responsibility for authorizing/issuing KI. This revision corrects problems from WBN PER006394.
16	08/15/00	Ali (Pg. 3, 60)	Intent change. Revised CNTMT Rad Monitors (1-RE-90-271, 272, 273, & 274) readings to correspond with the new TI-RPS-162, "Response of the Primary Containment High Range Monitors" readings (Reference EDC-50600). This analysis resulted in a revision to Appendix U on the PAR Chart. This revision resolves action items from CORP PER-99-000038-000. This revision was also determined not to reduce the level of effectiveness of the procedure or REP.
17	01/24/01	All (Pg.7,29,51,54,56)	Plan effectiveness determinations revisions indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Added additional positions to TSC minimum staffing to support REP actions and standardize staffing across TVAN (App. C). Eliminated TAM/TAT responsibility associated with procedural development and 50.54.X. This information is located in other TVAN Standards and Departmental Procedures. This revision standardizes EP response within TVAN (App. E & Q). Clarified RADCON Managers authority to issue KI (App. C). Deleted RE-90-106 (iodine channel) and RE 90-290-293 per direction of DCN 50482-A and SA WBP LEE-00-052 (App. R). Non-intent change.

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### **1.0 PURPOSE**<sup>8,11</sup>

The purpose of this Procedure is to describe activation of Technical Support Center (TSC), describe the TSC organization, and provide for TSC operation once it has been staffed.

### 2.0 **RESPONSIBILITY**<sup>2,11</sup>

The Shift Manager (SM), upon detection of an emergency condition, becomes the Site Emergency Director (SED), classifies the emergency, and declares the event. Upon arrival of the Plant Manager, or alternate defined in the Emergency Response Organization Call List, the SM will be relieved of the SED duties. The SED activates and operates the TSC (Appendix A) and oversees the operations of the Operations Support Center (OSC).

### 3.0 INSTRUCTION

3.1 General<sup>4,9</sup>

The TSC will provide the following functions:

- A. Provide plant management and technical support to plant Operations personnel during emergency conditions.
- B. Perform CECC functions for the Alert Emergency class, the Site Area Emergency class, and General Emergency class until the CECC is functional.
- C. Help the reactor operators determine the plant safety status.
- D. Relieve the reactor operators of peripheral duties and communications not directly related to reactor system manipulations.
- E. Prevent congestion in the control room.
- F. Provide assistance to the operators by technical personnel who have comprehensive plant data at their disposal.
- G. Provide a coordinated emergency response by both technical and management personnel.

#### 3.0 INSTRUCTION (continued)

- H. Provide reliable communications between onsite and offsite emergency response personnel.
- I. Provide a focal point for development of recommendations for offsite actions.
- J. Provide relevant plant data to the NRC for its analysis of abnormal plant operating conditions.

#### 3.2 Initiating Conditions

This procedure shall be activated if an emergency has been declared and classified as ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.

This procedure may be activated at any other time at the discretion of the SED.

### 3.3 Activation of the TSC

- 3.3.1 The SED will activate the TSC and announce the emergency condition by one or more of the following methods depending on time of day, etc:
  - A. Plant public address announcement.
- **NOTE:** The Radiological Emergency Response Organization Call List is handled in accordance with the Fitness for Duty, (SPP-1.2).
  - B. Shift personnel will normally activate the Emergency Paging System (EPS) **or** contact the persons designated on the Emergency Response Organization Call List.
  - C. TSC personnel can also contact additional responders/replacements by phone using the Emergency Response Organization Call List available in the TSC and Appendix AA.
  - D. Target activation time for Minimum TSC staffing is approximately 60 minutes.

#### 3.0 **INSTRUCTIONS** (continued)

3.3.2 Emergency Response Organization Call List <sup>6</sup>

The Site Emergency Preparedness (EP) Manager shall:

- 1. MAINTAIN an Emergency Response Call List listing all TSC (and other emergency) personnel by organizational title, name, home and work telephone numbers, and pager numbers.
- 2. UPDATE the Emergency Response Organization Call List quarterly with input by the appropriate organizations. Current copies of the list will be maintained in the TSC, OSC, Main Control Room, SM Office, and Nuclear Security. Each page will be dated for revision control.

All TSC responders **shall** have unescorted protected area access and **shall** comply with fitness-for-duty policies while on-call.

- 3.3.3 Depending on the emergency conditions, personnel required for the TSC may vary. Listed below is the minimum staff required:
  - Site Emergency Director
  - Operations Manager or Operations Communicator
  - Technical Assessment Manager (TAM) or Technical Assessment Team Leader or TAT Team (Thermal Hydraulics, Mechanical, and Electrical) Members
  - RADCON Manager

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### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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### 3.0 **INSTRUCTIONS** (continued)

- 3.3.4 In addition, the following personnel should report to the TSC, or assigned TSC support location, upon announcement of an ALERT or higher emergency or at the direction of the SED:<sup>16</sup>
  - Site Vice President (optional)
  - Operations Manager
  - Operations Communicator
  - TSC Maintenance Manager
  - Control Room Communicator (report to Control Room)
  - Nuclear Security Manager (can initially be the Nuclear Security Shift Supervisor)
  - Technical Assessment Team
  - Chemistry Manager
  - NRC Coordinator
  - Emergency Preparedness Manager
  - Media Relations Specialist (optional)
  - Westinghouse Representative
  - TSC Boardwriters
  - Emergency Response Team Boardwriter

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#### 3.0 **INSTRUCTIONS** (continued)

#### 3.4 Required Actions For Activation and Operation of the TSC

- 3.4.1 TSC staff actions and responsibilities are described in their checklists (Appendices B-Q).
- 3.4.2 TSC responders will complete all of the applicable steps contained in the appropriate Appendix/Checklist for their position.
- 3.4.3 The Site Emergency Director or designee shall declare the TSC activated and inform the SM of the final transfer of responsibilities. A formal activation announcement shall be made plant wide to indicate the transfer of responsibility from the SM to the TSC SED.

### 3.5 Contingencies

- 3.5.1 If there is a loss of onsite to offsite telephone communications, cellular phone, radios or the satellite phone described in SOI-100.01 will be used.<sup>17</sup>
- 3.5.2 If the TSC becomes uninhabitable, the SED will relocate the TSC to an alternate location based on RADCON/OPERATIONS advice.
- 3.5.3 Plant procedures should be followed whenever possible. Should a situation arise where normal procedures would be inappropriate, action will be performed as determined by the SED.

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### 3.0 **INSTRUCTIONS** (continued)

### 3.6 Long-Term Operation<sup>10</sup>

- 3.6.1 Long-term operation will be put into effect during emergencies which are projected to exist for more than 12 hours.
- 3.6.2 The SED will notify the Central Emergency Control Center (CECC) of the decision to begin long-term operation.
- 3.6.3 Meals and arrangements for sleeping facilities will be made at the request of the SED. These arrangements may be made by the CECC.
- 3.6.4 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. The SED will coordinate these call-ins with Nuclear Security to facilitate site access.
- 3.6.5 The SED, through the OSC Manager, will establish 12-hour (or shorter) shifts for craft personnel onsite and call in additional personnel as necessary.

### 3.7 Termination and Deactivation

- 3.7.1 **REFER TO** WBN-EPIP-13, "Termination of the Emergency and Recovery," for activities associated with terminating emergencies, TSC deactivation, and post-accident recovery.
- 3.7.2 All equipment, supplies, and procedures will be replenished in the TSC following a drill, exercise or emergency by applicable groups as assigned in WBN, EPIP-12.

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#### 3.0 **INSTRUCTIONS** (continued)

#### 3.8 Records

3.8.1 QA Records

NONE

### 3.8.2 Non-QA Records

The Appendices and Checklists in this Procedure are necessary to demonstrate key actions during an emergency or annual NRC evaluated exercise and are considered Non-Quality Assurance (QA) records.

3.8.3 All original records generated during the course of a declared emergency or drill **shall** remain at each TSC responder's position after the emergency or drill is terminated. The EP Manager **shall** assemble all TSC records and ensure that they are stored appropriately.

#### 4.0 **REFERENCES**

### 4.1 Source Documents:

Tennessee Valley Authority Nuclear Power Radiological Emergency Plan (REP)

SPP-1.2, *Fitness For Duty* 

Memo from J. B. Hosmer to R. J. Johnson dated 1/15/88 RIMS No. B25 88011 5028

NUREG 0654, FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants

NUREG 0696, Functional Criteria for Emergency Response Facilities, Final Report

ANSI Standard N 18.7-1976

10 CFR 20, Standards for Protection From Radiation

EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents

NRC Generic Letter 96-06, Assurance of Equipment Operability and Containment Integrity During Design Basis Accident Condition

#### 4.2 Interface Documents

WBN-EPIP-1 Emergency Plan Classification Flowchart

WBN-EPIP-2 Notification of Unusual Event

WBN-EPIP-3 Alert

WBN-EPIP-4 Site Area Emergency

WBN-EPIP-5 General Emergency

WBN-EPIP-7 Activation and Operation of the Operations Support Center

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### 4.0 **REFERENCES** (continued)

4.2 Interface Documents (continued)

WBN-EPIP-8 Personnel Accountability and Evacuation

WBN-EPIP-11 Security and Access Control

WBN-EPIP-13 Termination of the Emergency and Recovery

WBN-EPIP-15 Emergency Exposure Guidelines

WBN-EPIP-16 Initial Dose Assessment for Radiological Emergencies

CECC-EPIP-9 Emergency Environmental Radiological Monitoring Procedures

WBN, FSAR

SOI-30.06 Auxiliary Building Gas Treatment System (ABGTS)

SOI-67.01 Essential Raw Cooling Water System

Chemistry Manual, Chapter 13 (PASS)

ICS User's Manual

Watts Bar Nuclear Plant, Plant Lighting, N3-228-4003

### 5.0 APPENDICES

Appendix A	Technical Support Center Facility Diagram and Organization Cha	rt.

- Appendix B Site Vice President Checklist
- Appendix C Site Emergency Director Checklist and SED Turnover Datasheet
- Appendix D Operations Manager Checklist
- Appendix E Technical Assessment Manager Checklist

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# 5.0 APPENDICES (continued)

Appendix F	TSC Maintenance Manager Checklist
Appendix G	Operations Communicator Checklist
Appendix H	Nuclear Security Manager Checklist
Appendix I	RADCON Manager Checklist
Appendix J	Chemistry Manager Checklist
Appendix K	NRC Coordinator Checklist
Appendix L	Control Room Communicator Checklist
Appendix M	EP Manager Checklist
Appendix N	Nuclear Engineering Checklist (Intentionally Deleted)
Appendix O	TSC Logkeeper Checklist
Appendix P	TSC Clerical Staff Checklist
Appendix Q	Technical Assessment Team Checklist
Appendix R	Plant Parameter Data Sheets
Appendix S	Predictive Release Data Sheet
Appendix T	TSC Accident Assessment Summary Sheet
Appendix U	Protective Action Recommendation Guidance
Appendix V	Reference Materials and Equipment List
Appendix W	Containment Sump Operation and Level Guidance
Appendix X	ERCW Concerns for Technical Assessment Team

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# 5.0 APPENDICES (continued)

Appendix Y	Small Break LOCA Concerns
Appendix Z	Additional TAT Duties (Post Accident)
Appendix AA	Emergency Responder Notification Form
Appendix BB	WBN TSC Sign-in Roster



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### **APPENDIX A** Page 2 of 2

### **Technical Support Center (TSC)**

WBN EMERGENCY RESPONSE ORGANIZATION



(\*) Denotes minimum staffing position(s) per NUREG 0654.

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### APPENDIX B Page 1 of 2

# SITE VICE PRESIDENT

Initial TSC Activation Checklist

Date: Inits/Time	
/	ENTER badge into the TSC Accountability Card Reader.
!	SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
/	NOTIFY SED of arrival.
/	ESTABLISH a log of communications/events.
/	ESTABLISH contact with the Media Relations Specialist.
/	ESTABLISH contact with the CECC Director.
/	<b>CHECK</b> the status of emergency actions already in progress. (Such as accountability, site evacuation or press inquiries.)

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### APPENDIX B Page 2 of 2

# SITE VICE PRESIDENT

# **Operational Responsibilities List**

- Provides TVA policy direction to the SED.
- Provides support to other emergency centers as necessary.
- Serves as the primary site representative to function as a TVA Spokesperson in the Local News Center (LNC) at the WBN Training Center (if activated).
- Directs the site resources to support the SED in the accident mitigation activities.
- Provides direct interface on overall site response activities with NRC, FEMA, other Federal organizations, the CECC Director, and onsite media.
- Provides interfaces/briefings (as needed) at offsite locations on the overall site response activities with Federal, State and Local agencies.

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### APPENDIX C Page 1 of 7

# SITE EMERGENCY DIRECTOR

Initial Activation of the Technical Support Center Checklist

Date: Inits/Time			
/	<b>OBTAIN</b> turnover briefing from SM/SED. Pages 5, 6 and 7 of Appendix C, SED Turnover Data Sheet may be used as a guide.		
/	<b>REPORT</b> to the TSC and ENTER badge into the TSC Accountability Card Reader.		
/	SIGN IN on the staffing chart and PUT ON position badge.		
/	ESTABLISH log of communications/events.		
/	ESTABLISH initial contact with the CECC Director.		
/	<b>CHECK</b> the status of emergency actions already in effect such as emergency notifications (NRC, State, etc.) and accountability or site evacuation.		
/	<ul> <li>REQUEST checklist completion status for required positions:</li> <li>Site Emergency Director</li> <li>Operations Manager or Operations Communicator</li> <li>TAM or TAT Leader or TAT Team (Thermal Hydraulics, Mechanical, and Electrical) members</li> <li>RADCON Manager</li> </ul>		
/	CONFIRM TSC staffed and Operational.		
1	ASSUME role of SED from SM (confirmatory phone call to the SM).		

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#### APPENDIX C Page 2 of 7

# SITE EMERGENCY DIRECTOR

Initial TSC Activation Checklist (continued)

\_\_\_/\_\_ INFORM the CECC Director and OSC Manager that TSC is operational and that you have assumed responsibility of the SED and provide initial briefing.

- \_\_/\_\_ MAKE a general plant-wide announcement regarding plant condition similar to the following:
  - 1. ACCESS the Public Address System by dialing 487.
  - 2. COVER the following points as a minimum:
    - a. "ATTENTION ALL SITE PERSONNEL. ATTENTION ALL SITE PERSONNEL.
    - b. D "This is a drill, this is a drill." **OR**

    - d. This is \_\_\_\_\_\_ (name)\_ Site Emergency Director.The TSC was activated at \_\_\_\_\_\_ hours. Due to \_\_\_\_\_\_ we have classified a \_\_\_\_\_\_ (NOUE, Alert, Site Area Emergency, General Emergency). Plant protective actions which we are implementing include: (Evacuations, assembly and accountability, etc.) \_\_\_\_\_\_

e. Radiological release points:

f. Our plan of action at this time is to \_\_\_\_\_

- g. The OSC (is, is not) activated. All emergency response teams will be dispatched from the OSC.
- h. I "This is a drill, this is a drill." OR
  I "This is a real emergency. This is a real emergency."

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# Site Emergency Director

**Operational Responsibilities**<sup>3,5</sup>

- Determines the emergency classification and periodically reevaluates the classification. Changes to the classification will be reported to the CECC Director and the NRC. THE CLASSIFICATION OF THE EVENT CANNOT BE DELEGATED. (See WBN EPIP-1)
- Approves or authorizes emergency doses that may exceed applicable NRC dose limits. THIS RESPONSIBILITY CANNOT BE DELEGATED. (See WBN EPIP-15)
- Prior to the CECC being staffed, makes recommendations for protective actions to State and Local agencies through the Operations Duty Specialist. THIS RESPONSIBILITY CANNOT BE DELEGATED EXCEPT TO THE CECC DIRECTOR. Use Appendix U, Protective Action Recommendation Guidance Flowchart as a guide. (See WBN EPIP-5)
- Directs onsite emergency accident mitigation activities and periodically briefs the TSC/OSC staff on the current plant situation.
- Ensures that general plant population is periodically briefed on the emergency conditions.
- Periodically reviews priority of work operations of the OSC with the OSC Manager. (See WBN EPIP-7)
- Directs activities of onsite emergency organizations.
- Consults with the CECC Director and Site VP on important decisions. Use the CECC Ringdown Line to the CECC Director.

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### APPENDIX C Page 4 of 7

# Site Emergency Director

**Operational Responsibilities (continued)** 

- Coordinates emergency actions with onsite NRC.
- Initiates onsite protective actions. (See WBN EPIP-8)
- Verifies the administration of Potassium Iodine (KI) to TVA personnel based on RADCON Manager's advice/direction. (See WBN EPIP-14)
- Establishes a RADCON checkpoint for site evacuation if conditions warrant. (See WBN EPIP-8 and WBN EPIP-14)
- Initiates long-term 24 Hour/day operation.
- Assumes responsibilities for the Severe Accident Management, when directed by the Main Control Room and the TSC is functional and the SAMG Evaluators are monitoring "TSC Diagnostic Flow Chart" (DFC). The TSC must have three SAMG Evaluators monitoring SAMGs to assume the accident responsibility.
- Evaluates conditions and determines if emergency procedures should be implemented.

a.	Emergency Environmental Radiological Monitoring Procedures	CECC-EPIP-9
b.	Medical Emergency Response	WBN-EPIP-10
С.	Security Threat	Physical Security Plan
d.	Personnel Accountability	WBN-EPIP-8
	and Evacuation	

e. Initial Dose Assessment for WBN-EPIP-16 Radiological Emergencies

### **DEACTIVATION RESPONSIBILITIES**

Refer to WBN EPIP-13.

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### APPENDIX C Page 5 of 7

### SED Turnover Datasheet

1.	Current Emergency Classification:				
	Time/Date Declared/				
2.	Event Description:				

3.	Equipment Problems:	
Ο.	Equipritorit i tobiorito.	

<ol><li>Site Radiological Pro</li></ol>	blems
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Rad Release: No 5. Yes Filtered Unfiltered Monitored Unmonitored Uncontrolled Controlled Projected Duration \_\_\_/ (hrs./min.)

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### APPENDIX C Page 6 of 7

# SED TURNOVER DATASHEET (continued)

	Wind Speed mph Wind Direction FROM			
	Projected Whole Body Dosemrem $\cong$ miles			
	Projected Thyroid Dosemrem $\cong$ miles			
6.	Protective Action Recommendations to Offsite Officials (use PAR Flowchart in App. U):			
	None 🗆 1 🗆 2 🗆 3 🗆 4 🗆			
7.	Onsite Protective Actions Taken:			
	SITE EVACUATION ACCOUNTABILITY SPECIFIC AREA EVACUATIONS			
8.	Field Monitoring Vans Activated: Yes 🛛 No 🛛			
9.	SM/SED Notifications Made:			
	Time ODS notified: (State and other notifications)			
	Time NRC Notified			
10.	Injured or contaminated persons status:			
	Rhea County Medical Center			

Athens Regional Medical Center

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# SED TURNOVER DATASHEET (continued)

11. Status of personnel in the field:

	<u>NAMI</u>	E LOCATION
12.	SED	Responsibility Transferred:
		Physically in the TSC
		TSC has minimum staffing
		Call SM to see if conditions have changed.
		Declares over the telephone, 'The TSC is staffed and activated. This is and I am now assuming the role of Site
		Emergency Director."

From: \_ \_ to \_ TSC/SED SM

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

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#### APPENDIX D Page 1 of 2

# **OPERATIONS MANAGER**

Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- \_\_\_\_\_ ENTER badge into the TSC Accountability Card Reader.
- \_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- **ESTABLISH** log of communications/events.
- \_\_/\_\_ ESTABLISH contact with the OSC Operations Advisor and the CR Communicator in the MCR.
- \_\_/\_\_ CHECK the status of onsite emergency actions already in effect such as Accountability or Evacuations.
- \_\_/\_\_ **REPORT** the status of inplant field activities (operations, repair, radiological, etc.) received from the OSC Operations Advisor, Maintenance Manager or SM.
- \_/\_\_\_ VERIFY that notification of the NRC has been accomplished and inform SED and NRC Coordinator.
- \_/\_\_ DESIGNATES a person knowledgeable of the event to establish and maintain communications with the NRC via the phone as needed. This will be the NRC Coordinator when present. NOTIFY the SM that responsibility for NRC contact has been transferred to the TSC.
- \_\_\_\_\_ **PROVIDE** this completed checklist to the SED or EP Manager.

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### APPENDIX D Page 2 of 2

# **OPERATIONS MANAGER**

# **Operational Responsibilities**

- Directs operational activities.
- Informs the SED of plant status and operational problems.
- Recommends solutions and mitigating action for operational problems.
- Designates a SRO for the Technical Assessment Team, as needed.
- Provides advice regarding Technical Specifications, system response, safety limits, etc.
- Periodically reviews the emergency status with the control room. Reviews trended parameters, time history information, and status boards with the Control Room staff.
- Ensures that the Control Room is aware of TSC accident assessments and OSC repair and response activities and priorities.
- Ensures that adequate Operations staffing is currently in the Main Control Room and that oncoming control room staffing requirements are being met for the following positions (Appendix AA, Emergency Responder Notification Form, may be used to document):
  - □ Shift Manager
  - □ Unit Supervisor
  - Station Technical Advisor
  - □ 2 Reactor Operators
  - 5 AUOs (minimum tech specs staffing)

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### APPENDIX E Page 1 of 2

# TECHNICAL ASSESSMENT MANAGER

# Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

- \_\_\_\_/ ENTER badge into the TSC Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- **\_\_\_\_ ESTABLISH** log of communications/events.
- \_\_\_\_\_ CHECK the status of emergency actions already in effect such as Accountability or Site Evacuation or Response Teams in the Plant.
- \_\_\_\_/ **PROVIDE** this completed checklist to the SED or EP Manager.

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# APPENDIX E Page 2 of 2 **TECHNICAL ASSESSMENT MANAGER** <u>Operational Responsibilities</u>

- Designates Technical Assessment Team Leader (if necessary).
- Directs activities of the Technical Assessment Team.
- Directs onsite effluent assessment.
- Projects future plant status based on present plant conditions.
- Keeps assessment team informed of plant status.
- Provides information, evaluations, and projections to the SED.
- Coordinates assessment activities with the CECC Plant Assessment team.
- Establishes and maintains a status of significant plant problems.
- If ICS is <u>not</u> operable, ensures information on Appendices R, S and T is sent to the CECC to be used in the predictive release rate model.
- Coordinate with the Chemistry Manager to initiate a Post-Accident Sample (PASS) as needed for assessment of the containment atmosphere and/or fuel damage.
- Provides for trending of significant parameters.
- Assumes SAMG responsibilities, when directed by the SED. The TSC must be functional and 3 SAMG Evaluators must be monitoring the "TSC Diagnostic Flow Chart" (DFC) to assume SAMG responsibilities.

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### APPENDIX F Page 1 of 2

# MAINTENANCE MANAGER

# Initial Activation of The Technical Support Center Checklist

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

Inits/Time

- \_\_\_/\_\_ ENTER badge into the TSC Accountability Badge Reader.
- \_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- **ESTABLISH** log of communications/events.
- \_\_\_/\_\_\_ ESTABLISH contact with the OSC Manager and Asst. OSC Manager.
- \_\_\_/\_\_ CHECK the status of emergency actions already in effect such as Accountability or Site Evacuation.
- \_\_\_/\_\_ CHECK status of deployed emergency response teams (Operations, Maintenance, Medical Emergency Response Teams, etc.)
- / **PROVIDE** this completed checklist to the SED or EP Manager.

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### APPENDIX F Page 2 of 2

# MAINTENANCE MANAGER

# **Operational Responsibilities**

- Coordinates emergency response team assignment activities with the SED and the OSC.
- Maintains cognizance of deployed OSC teams purpose and status.
- Assists the SED and the OSC Manager in determining the relative priorities of maintenance/repair activities.
- Ensures that damage assessment and repair priorities are coordinated with the OSC.
- Maintains the Emergency Response Teams tracking board in the TSC.

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### APPENDIX G Page 1 of 2

# **OPERATIONS COMMUNICATOR**

Initial Activation of The Technical Support Center Checklist

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

Inits/Time

- \_\_\_/\_\_ ENTER badge into the TSC Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_\_/ OBTAIN headset and dial 4101.
- \_\_\_/\_\_ CHECK operability of the Integrated Computer System (ICS) system.
- \_\_\_\_/\_\_\_ PROVIDE this completed checklist to the SED or EP Manager.

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<u> - - - -</u>

### APPENDIX G Page 2 of 2

# **OPERATIONS COMMUNICATOR**

**Operational Responsibilities** 

- Provides operational knowledge as needed to status evaluations of plant systems.
- Provides advise to the Operations Manager regarding Technical Specifications, Systems Response, and safety limits.
- Assist Operations Manager in development of operations recommendations to problems.
- Monitors the Control Room Communicator Party line.
- Operates TSC ICS to obtain plant status and parameters.
- Provides information from the Control Room to the Technical Support Center personnel.
- Completes portions of plant parameter data sheets (Appendices R and S) as needed.
- Monitors plant status boards.
- Obtains supplemental data as needed by the TSC, OSC, or CECC.
- Makes inquiries to the Control Room Communicator to obtain specific information as necessary.
- Maintains the "Sequence of Events" board and "Main Problems" board.
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#### APPENDIX H Page 1 of 2

# NUCLEAR SECURITY MANAGER

# Initial Activation of The Technical Support Center Checklist

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

Inits/Time

- \_\_\_\_\_ ENTER badge into the TSC Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- /\_\_\_\_ NOTIFY SED of arrival.
- **ESTABLISH** log of communications/events.
- \_\_\_\_/ ESTABLISH contact with the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS).
- \_\_\_/\_\_ CHECK the status of emergency actions already in effect such as Accountability, Site Evacuation or site being closed to visitors.
- **PROVIDE** this completed checklist to the SED or EP Manager.

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#### APPENDIX H Page 2 of 2

# NUCLEAR SECURITY MANAGER

# **Operational Responsibilities**

- Directs activities of Nuclear Security personnel and mobilizes additional personnel as needed.
- Reports on site accountability/evacuation as defined in WBN EPIP-8.
- Assists in establishing search teams, as required. (WBN EPIP-8)
- Provides status updates to Nuclear Security personnel.
- Reports status of Security related events to the SED.
- Controls access to the site and the Main Control Room.
- Advises incoming emergency response personnel at the gate house of any radiological, security, or environmental hazards enroute to the TSC/OSC.

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#### APPENDIX I Page 1 of 2

# **RADCON MANAGER**

# Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- \_\_\_\_\_ ENTER badge into the TSC Accountability Card Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_/\_\_ NOTIFY SED of arrival.
- \_\_\_\_/ ESTABLISH contact with the OSC RADCON Supervisor, the plant monitoring van (if dispatched), and the CECC Radiological Assessment Coordinator (RAC).
- \_\_\_\_/\_\_ CONTROL eating and drinking in the TSC until habitability has been established.
- \_\_\_\_\_ CHECK the status of offsite/onsite radiological conditions and emergency actions already in effect such as Accountability or Site Evacuation.
- \_\_\_\_/ PROVIDE this completed checklist to the SED or EP Manager.

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#### APPENDIX I Page 2 of 2

# RADCON MANAGER

**Operational Responsibilities** 

- Directs onsite Radcon activities.
- IF the CECC is not staffed, utilize WBN, EPIP-16 to perform dose assessment. REPORT results to the SED.
- Makes recommendations for protective actions for onsite personnel to the SED and for personnel entry into radiological hazardous environments.
- Obtains MET data as needed by using ICS or CECC computer.
- Directs the issue of KI by following WBN EPIP-14 guidelines to onsite personnel after notifying the SED.
- Remains cognizant of assessments of inplant and onsite radiological conditions from the OSC RADCON Supervisor.
- Directs the radiological monitoring vans until the CECC assumes control (CECC EPIP-9).
- Provides periodic status reports to the SED on radiological conditions.
- Keeps the CECC RAC informed on site radiological conditions and Coordinates supplemental RADCON support.
- Coordinates assessment of radiological conditions offsite with CECC RAM.
- Maintains status maps of offsite radiological conditions and inplant Radiological Conditions status board (ensuring times are posted next to radiological data).
- Provides RADCON surveillance through the OSC to MET station personnel, if required by environmental releases.
- Designates a qualified/knowledgeable person to provide inplant radiological data to the NRC via the Health Physics Network (HPN) upon request.<sup>13</sup>
- Ensures outlying emergency responders (i.e. line crews, warehouse) have dosimetry and are being protected during the emergency.
- Provide radiological data to the OSC that must be obtained from the Main Control Room.

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#### APPENDIX J Page 1 of 2

# CHEMISTRY MANAGER

# Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- \_\_\_/\_\_ ENTER badge into the TSC Accountability Card Reader.
- / SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_\_/\_\_\_ NOTIFY SED of arrival.
- \_\_\_/\_\_ ESTABLISH log of communications/events.
- \_\_\_/\_\_ ESTABLISH contact with the OSC Chemistry Advisor and the CECC Radiological Assessment Coordinator (RAC).
- \_\_\_\_/ CHECK the status of emergency actions already in effect such as chemistry sampling.
- / **PROVIDE** this completed checklist to the SED or EP Manager.

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#### APPENDIX J Page 2 of 2

# CHEMISTRY MANAGER

# **Operational Responsibilities**

- Coordinates information and the assessment of radioactive effluents with the CECC.
- Directs and remains cognizant of OSC Chemistry Advisor's Post-Accident Sampling Activities.
  - **NOTE:** From the time a decision is made to take a PASS sample, the results must be obtained in three (3) hours. A PASS should not (normally) be requested until post-accident conditions are stable enough to provide for useful evaluation results.
- Determines the impact of the incident on radwaste and various effluent treatment systems.
- Assist the RADCON Manager in Dose Assessment Calculations using WBN EPIP-16.
- Maintains the release rate portion on the Chemistry Status Board.
- Completes portions of plant parameter data sheets (Appendices R and S) as needed.
- Provides assistance to the SED and Technical Assessment Manager as needed.

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#### APPENDIX K Page 1 of 2

# NRC COORDINATOR

# Initial Activation of The Technical Support Center Checklist

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

- Inits/Time
- / ENTER badge into the TSC Accountability Card Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_\_/ NOTIFY SED and OPS Manager of arrival.
- / **ESTABLISH** log of communications/events.
- \_\_\_\_/ CHECK the status of plant conditions and emergency actions already in effect such as Accountability or Site Evacuation.
- \_\_\_/\_\_ RELIEVE the Control Room of responsibility for maintaining contact with the NRC, (ENS).<sup>13</sup>
- \_\_\_\_\_ CALL NRC to inform them that you have assumed responsibility for contact from the Control Room.
- \_\_\_\_ PROVIDE this completed checklist to the SED or EP Manager.

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#### APPENDIX K Page 2 of 2

# NRC COORDINATOR

**Operational Responsibilities** 

- Acts as primary liaison with onsite NRC personnel.
- Remains fully cognizant of emergency and plant conditions.
- Updates NRC personnel on plant status (use Appendix T as a guide when ICS is unavailable).
- Provides information requests from NRC to TSC personnel.

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#### APPENDIX L Page 1 of 1

# CONTROL ROOM COMMUNICATOR

Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- \_\_\_/\_\_ ENTER badge into the Accountability Card Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- / NOTIFY SED of arrival.
- \_\_\_\_/ **REPORT** to the TSC to obtain headset.
- \_\_\_\_/ REPORT to Control Room and establish the Main Control Room "party line". Obtain headset/transmitter and activate amplifier at SM console Dial 4101 for contact.
- \_\_\_\_/ ESTABLISH contact with the Operations Manager and the other party line receivers (Status Board Writer, OSC OPS Advisor, TSC OPS Communicator).
- \_\_\_\_\_ PROVIDE this completed checklist to the SED or EP Manager.

# **Operational Responsibilities**

- Serves as the control room operations communications interface.
- Provides key plant parameters and critical safety function conditions and other information as requested over the operations "party line" to various positions in the TSC, OSC, and CECC.
- Provides operational knowledge for status evaluation of plant systems.

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#### APPENDIX M Page 1 of 2

# **EP MANAGER**

# Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- **ENTER** badge into the TSC Accountability Card Reader.
- /\_\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_/\_\_\_ NOTIFY SED of arrival.
- **ESTABLISH** log of communications/events.
- \_\_\_\_/\_\_ CHECK the status of emergency actions already in effect such as Accountability or Site Evacuation.
- \_\_\_\_\_ ENSURE checklists are distributed and are being completed. INFORM SED when key staff are present.
- \_\_\_\_\_ ENSURE all essential positions are filled by qualified responders and checklists are returned.
- / CALL TSC Clerks to come to the TSC as necessary.
- \_\_\_\_\_\_ ENSURE all activation activities are proceeding normally.
- \_\_\_\_\_ ENSURE operability of backup communications.
- \_\_\_\_\_\_ ENSURE that initial conditions data are transmitted to the CECC. Data may include equipment status, core status, and a copy of the latest RCS coolant chemical analysis.
- \_\_\_\_\_\_ ANNOUNCE activation of the TSC and provide SED (name) on the Plant PA and instruct AUOs in the plant to report to the OSC staging area once they have completed previous missions assigned by the Main Control Room.

#### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX M Page 2 of 2

# **EP MANAGER**

### **Operational Responsibilities**

- Advises the SED regarding the REP, use of EPIPs, emergency equipment use and availability, and coordination with the CECC.
- Confirm completion of action steps in EPIPS 2 5.
- Confirms TSC and OSC are operating properly.
- Provides assistance to the SED as requested.
- Coordinates food and lodging requirements for the ERO with the CECC.
- Assist the SED by making PA announcements to update plant personnel of emergency status.
- The EP Manager is authorized to activate the TSC if the incoming SED has been delayed. The SM/SED will be notified that Emergency classifications, Protective Action Recommendations and Emergency Dose Authorizations will remain with the SM/SED.

#### **DEACTIVATION RESPONSIBILITIES**

Refer to EPIP-13.

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#### APPENDIX N Page 1 of 1

# Intentionally Deleted

Nuclear Engineering personnel are available on the TAT Teams and do not require a separate and repetitive Activation Checklist.

This appendix will remain in its current state/position for future use.

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#### APPENDIX O Page 1 of 1

# TSC LOGKEEPER

# Initial Activation of The Technical Support Center Checklist

Date: \_\_\_\_

Inits/Time

- \_\_\_/\_\_ ENTER badge into the TSC Accountability Card Reader.
- \_\_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_/\_\_ **REPORT** to the SED and begin a log of his/her activities.
- \_\_\_/\_\_ RECORD significant information on the TSC Sequence of Events board.
- \_\_\_\_/ **PROVIDE** this completed checklist to the SED or EP Manager.

#### **Operational Responsibilities**

- Maintains official logs of the events and SED activities.
- Initiates the shift turnover list as directed by the SED.

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#### APPENDIX P Page 1 of 2

# TSC CLERICAL STAFF

Initial Activation of The Technical Support Center Checklist

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

Inits/Time

- / ENTER badge into the TSC Accountability Card Reader.
- \_\_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- \_\_\_/\_\_ **DISTRIBUTE** manuals and TSC supplies and operate equipment as requested.
- **ENSURE** that EPIPs are at the appropriate revision level.
- \_\_\_\_/ ASSIST TSC personnel in obtaining their TLDs.

#### Deactivation of the TSC

- \_\_\_\_/\_\_ COLLECT all logs, notes, and other materials from each TSC position and **PROVIDE** them to the EP Manager for documentation and storage.
- \_\_\_\_/ ASSIST in the deactivation of the TSC by returning all equipment, supplies and manuals to the proper storage cabinets.
- \_\_\_\_/\_\_\_ PROVIDE this completed checklist to the SED or EP Manager.

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#### APPENDIX P Page 2 of 2

# TSC CLERICAL STAFF

# **Operational Responsibilities**

- Assist in the set up of the TSC.
- Maintains accountability of TSC personnel and staff organization board.
- In the event of a Site Wide Evacuation, notify the TSC RADCON Manager that this is a non-radiation worker position.
- Answers telephones.
- Distributes plant parameter data sheets (Appendices R, S, & T), if ICS in unavailable.
- Uses Emergency Response Call List to obtain staff for unfilled positions or replacement staff for shift turnover using Appendix AA, "Emergency Responder Notification Form". Ensure that the following directions relative to call-in for unscheduled work per the "Fitness For Duty" (SPP-1.2) are followed: ASK responder the following questions:
  - 1. "Have you consumed alcohol in the past five hours?"
  - 2. "Are you fit for duty?"

If the first question is answered in the affirmative, call the next person on the call list unless the individual indicates that he <u>is</u> fit for duty in which case you should refer the determination to a supervisor.

- Operates facsimile machines.
- Operates CECC computer.

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#### APPENDIX Q Page 1 of 3

# TECHNICAL ASSESSMENT TEAM

Initial Activation of The Technical Support Center Checklist

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

Inits/Time

- \_\_\_/\_\_\_ ENTER badge into the TSC Accountability Card Reader.
- \_\_\_/\_\_\_ SIGN IN on the Organizational/Staffing Chart and PUT ON position badge.
- **\_\_\_/\_\_ ESTABLISH** log of communications/events.
- **ESTABLISH** contact with the Technical Assessment Manager.
- \_\_\_/\_\_ CHECK the status of emergency actions already in effect such as Accountability or Site Evacuation.
- \_\_\_/\_\_ PROVIDE this completed checklist to the SED or EP Manager.

# ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX Q Page 2 of 3

# TECHNICAL ASSESSMENT TEAM

Operational Responsibilities<sup>7</sup>

- Team Leader may designate TSC Logkeeper and Board Writer as directed by the TAM.
- Prepares and provides current assessment on plant conditions and provides this information to the CECC Plant Assessment Team.
- Project future status based on present plant conditions.
- Provide technical support and recommendations to plant operations on mitigating the accident.
- Monitor containment sump level and consult Appendix W for guidance.
- Provides direction for environmental qualification operating concerns for containment cooling following a non-LOCA event inside containment (i.e., loss of secondary side coolant) per Appendix X.
- Determines the condition of the reactor and nuclear fuel.
- If ICS is unavailable, prepares accident assessment form (Appendix T) for the TAM and NRC Communicator as warranted.
- Provides Predictive Release Data Sheet (Appendix S) to the CECC as requested.
- Ensures actions in Additional TAT Duties (Post Accident), Appendix Z, are initiated as needed.
- Performs trending of key plant parameters using ICS.
- Assumes SAMG responsibilities, when directed by the TAM. The TSC must be functional and 3 SAMG Evaluators must be monitoring the "TSC Diagnostic Flow Chart" (DFC) to assume SAMG responsibilities.

## ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX Q Page 3 of 3

# TECHNICAL ASSESSMENT TEAM

**Operational Responsibilities (continued)** 

- Verifies that all Aux. Bldg. Secondary Containment Enclosures (ABSCE) doors are closed. (Contact MCR for SOI-30.06, Checklist 3 status file or Fire Protection)
- Identifies and tracks the status of current ABSCE breaches. (Contact HVAC System Engineer for Breaching Log status)
- Verifies that all Emergency Control Room Pressurization Boundary (ECRPB) doors are closed.
- Identifies and tracks the status of current ECRPB breaches.

# ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX R Page 1 of 6

#### Plant Parameter Data Sheets<sup>7</sup>

DATE: \_\_\_\_\_TIME: \_\_\_\_\_ UNIT: \_\_\_\_\_

NOTE: Unit status updates can be gained from the ICS computer utilizing the TSC Mimics and the following subgroups: REP1, REP2, 2PS1, 3MS1, 4SI1, or SPDS.

**Refer** to the ICS System User's Guide for additional information. If the ICS is inoperable, utilize the sheets of this appendix to trend/track needed data.

1.	CST LEVEL: (LI-2-230A) (LI-2-233A) GAL
2.	SG HEAT SINK: CONDENSER ATMOSPHERE
3.	AFW PUMPS RUNNING:
4.	SG LEVELS: NR: (1) (2) (3) (4)% (LI-3-39) (LI-3-52) (LI-3-94) (LI-3-107)
	WR: (1) (2) (3) (4)% (LI-3-43A) (LI-3-56A) (LI-3-98A) (LI-3-111A)
5.	SG PRESSURES: (1) (2) (3) (4) PSIG (PI-1-2A) (PI-1-9A) (PI-1-20A) (PI-1-27A)
6.	RVLIS: DYNAMIC RANGE% STATIC%
7.	PZR LEVEL: (LI-68-335A) (LI-68-320) % (COLD CAL) (HOT CAL)
8.	PZR PRESSURE: (PI-68-342A) (PI-68-340A) PSIG
9.	RCS PRESSURE: (LOOP 3 HOT LEG) (PI-68-64) PSIG
10.	HL TEMP: WR (1) (2) (3) (4) °F (TI-68-1) (TI-68-24A) (TI-68-43) (TI-68-65)
11.	CL TEMP: WR (1)(2)(3)(4)°F (TI-68-18) (TI-68-41) (TI-68-60) (TI-68-83)

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#### APPENDIX R Page 2 of 6

# Plant Parameter Data Sheets

DATE	E: TIME:	UNIT:
12.	RCS FLOW: RCP's RUNN	
13.	ECCS STATUS: 🗆 STAND	DBY INJECT I RECIRC I SPRAY
14.	RWST LEVEL: (LI-63-50)	)GAL (LI-63-51)GAL
15.	CNTMT SUMP LEVEL:	(LI-63-176) %
16.	FLOWRATE: (FI-62- CHAR	-93) GPM (FI-63-170) GPM GING BIT
17.	CNTMT PRESSURE: NR	(PI-30-44) (PI-30-45) PSID
18.	INCORE THERMOCOUPL QUAD 1 - (1	ES: of #41,28,24,56,55,29,6) °F
	QUAD 2 - (1	of #44,22,58,21,16,63,64) °F
	QUAD 3 - (1	of #54,12,8,40,4,3,7) °F
	QUAD 4 - (1	of #60,9,45,6,46,42,36) °F
19.	NIS SOURCE RANGE:	(N-131) CPS (N-132) CPS
20.	SUB COOLING MARGIN	°F°F °F°F
21.	STATUS TREE INDICATI	NG:
	RED 🗆	REASON:
	ORANGE	REASON:
		DATA BY:

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#### APPENDIX R Page 3 of 6

#### Plant Parameter Data Sheets

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ UNIT: \_\_\_\_\_

#### **RADIATION MONITORS**

- NOTE: UNIT STATUS UPDATE SHEETS (FOR USE WHEN TSC/ICS COMPUTER IS INOPERABLE)
- 1. LOWER CNTMT (1-RE-90-106) □ ISOLATED □ TO LOWER □ TO UPPER
- (A) PARTICULATE \_\_\_\_\_ CPM
  - (B) TOTAL GAS \_\_\_\_\_ CPM
- 2. UPPER CNTMT (1-RE-90-112) □ ISOLATED □ TO UPPER □ TO LOWER
- (A) PARTICULATE \_\_\_\_\_ CPM
  - (B) TOTAL GAS \_\_\_\_\_ CPM
  - (C) IODINE \_\_\_\_ CPM
- 3. SHIELD BLDG VENT (1&2-RE-90-400) TOTAL GAS U1 \_\_\_\_ U2 \_\_\_\_ μCi/cc FLOW \_\_\_\_CFM
- 4.
   AUXILIARY BLDG VENT (0-RE-90-101)
   (A) PARTICULATE \_\_\_\_\_ CPM

   □ ISOLATED
   (B) TOTAL GAS \_\_\_\_\_ CPM

   FLOW \_\_\_\_\_ CFM
   (C) IODINE \_\_\_\_\_ CPM
- 5. CONDENSER EXHAUST (LR)\_\_\_\_\_CPM FLOW\_\_\_\_CFM (1-RE-90-119) (FT-2-256)
- NOTE: ICS radiation monitor(s) RE identifications may be referenced as RM in the MCR.

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#### APPENDIX R Page 4 of 6 Plant Parameter Data Sheets

6.	STEAM LINE RAD MONIT	ORS: 1-RE- 1-RE- 1-RE- 1-RE- 1-RE-	90-421 _ 90-422 _ 90-423 _ 90-424 _	m m m	ıR/hr ıR/hr ıR/hr ıR/hr	
	STEAMFLOW (MCR)					
	1-FI-1-3A(3B)		SG1	<u> </u>	1bm/hr.	
	1-FI-1-10A(10B)		SG2	<u> </u>	1bm/hr.	
	1-FI-1-21A(21B)		SG3		1bm/hr.	
	1-FI-1-28A(28B)		SG4		1bm/hr.	
7.	SERVICE BLDG VENT		0-RE-90-	CPM 132	FLOW	_CFM
8.	SG BLOWDOWN:		1-RE-90-	CPM 120	1-RE-90-121	_СРМ
9.	ERCW DISCHARGE:	HEADER A:	0-RE-90-	CPM 133	0-RE-90-140	_CPM
		HEADER B:	0-RE-90-	CPM 134	0-RE-90-141	_СРМ

10. Additional monitors in alarm (trend as needed).

DATA BY:\_\_\_\_\_

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#### APPENDIX R Page 5 of 6

#### Plant Parameter Data Sheets

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ UNIT: \_\_\_\_\_

#### POST-ACCIDENT RADIATION MONITORS

- NOTE UNIT STATUS UPDATE (FOR USE WHEN TSC/ICS COMPUTER IS INOPERABLE)
- 1.
   UPPER CNTMT:
   (TOP OF #2 & #3 SG)
   1-RE-90-271:
   R/hr

   (TOP OF #1 & #4 SG)
   1-RE-90-272:
   R/hr
- 2. LOWER CNTMT: (BETWEEN #2 & #3 SG) 1-RE-90-273: \_\_\_\_\_ R/hr (BETWEEN #1 & #4 SG) 1-RE-90-274: \_\_\_\_\_ R/hr
- 3. COND VAC EXHAUST: (mid.R/1-RE-90-404A) (HR/1-RE-90-404B) CPM
- 4. Additional monitors in alarm (trend as needed):

DATA BY: \_\_\_\_\_

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#### APPENDIX R Page 6 of 6

# Plant Parameter Data Sheets

**NOTE:** Unit status update sheets (for use when TSC/ICS computer is inoperable).

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ UNIT: \_\_\_\_\_

#### RADIOLOGICAL RELEASE DATA

1. RELEASE POINT:

з.

4.

5.

2. RELEASE RATES: CIRCLE ONE: DECREASING STABLE INCREASING UNKNOWN

-----AIRBORNE-----LIQUID RELEASE -----

			ISO-	CONCEN	TRATION	FLOWF	RATE	TOTAL-	RELEASE
RELEASES $\mu$	Ci/SEC		TOPE	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS
NOBLE GAS					<u></u> ,				
IODINES									
PARTICULA	re								
COM	BINED RELEAS	E							
ISOTOPE	RELEASE RA	r <mark>e</mark>							
	•		<u> </u>					w	
RELEASE BI	EGAN	EXP	ECTED T	O END	TH HOTIN	EST/EDT.	DURAT	ION	HR
RELEASE PO	OTENTIAL: _			_ 01,	IN VOLUM	E OF	(	CU FI C	R GAL)
METEOROLO	GICAL CONDIT	IONS:	(IF REQ	UESTED	DUE TO M	ET DATAI	JINK IN	IOPERABI	E)
DATE	TIME	WIND :	SPEED	DIRE	CTION	ELEVAT	ION	TEMPE	RATURE
		(MPH o	r METER	S) (DEG	REES)	(METERS	5)	DIFFEF	RENTIAL
	/								
	/								
	/			<u></u>					
DEMARKS / CO	MMENTS .								
Itel Harting / C									

DATA BY:

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#### APPENDIX S Page 1 of 1 <u>Predictive Release Data Sheet</u><sup>7</sup>

ATE:	TIME:	UNIT	·. ·		
DATA NEED	ED FOR CEC	C TO PERFOR	M PREDICTI	VE RELEAS	SE METHODOLC
				<u></u>	
. PRIMARY COOI	LANT CONCENTI	RATION			
	IN GAS	IN LIQ			
ISOTOPE	$\mu$ Ci/cc	$\mu$ Ci/ml	53 <b>0</b> 5.	SAMPLE	DATA
I-131 T 122		_	DATE:		11ME:
I-132 T-133		-	LOCAT	ION:	
I-134	<u></u>				
I-135			TEMPE	RATURE:	°F
CS-137					
CS-138			PRESS	URE	PSIA
KR-85m			CD C I	OT UME -	CC
KR-85			GAS V		(C
KR-88			WATER	MASS:	GRAM
XE-133	······································				
XE-135			WATER	LEVEL:	
3. OPERATING	POWER HISTO	RY (IF CECC/IC:	5 DATALINK I	NOPERABLE)	
START I	E OF SHOIDOWN	VG POWER	START	END	AVG POWER
PERIOD I	PERIOD	IN MWt	PERIOD	PERIOD	IN MWt
	<u> </u>				<del></del>
4. CORE EXIT	THERMOCOUPLI	E READINGS (IF	CECC/ICS DA	TALINK INO	PERABLE)
NUMBER			(F)	Noi LD.	
10112210			, <i>,</i> ,		
					· · · · · · · · · · · · · · · ·
	א המיום ד ביו לביד עי	TRUCOV ITE CEC	-/TCS DATALT	NK INOPERA	BLE)
DATE TIL	ME REA	DING RCS VO	L NOTES:	III IIIOI DIVI	,
	(UN)	ITS) (CU FT	)		
Send to: CECC	Core Damage	& CECC RAC.	DATA	вх	

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#### APPENDIX T Page 1 of 1

# TSC Accident Assessment Summary Sheet<sup>7</sup>

- **NOTE:** This Status Update Sheet is for use when the TSC ICS/ERDS data systems are inoperable.
- TO: Tech. Assmt. Mgr. & NRC Coordinator and CECC Plant Assessment Team FROM: WBN Tech. Assmt. Team
- I. HEAT REMOVAL CAPABILITY (Core Cooling, Heat Sink, RSC Inventory): Status Tree: \_\_\_\_\_
- II. FUEL INTEGRITY (Subcriticality, RCS Radionuclide):
- III. RADIOACTIVITY IN CONTAINMENT;
- IV. CONTAINMENT INTEGRITY: Status Tree:
- V. OVERALL ASSESSMENT & RECOMMENDATIONS:

Prepared by \_\_\_\_\_ WBN /EXT\_\_\_\_

Time \_\_\_\_\_

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# APPENDIX U

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#### APPENDIX V Page 1 of 1

Reference Materials and Equipment List

The following reference materials are provided in the TSC:

- 1. Watts Bar Nuclear Plant FSAR.
- 2. Watts Bar Nuclear Plant Technical Specifications (Unit 1).
- 3. Surveillance Instructions (Selected). (Note <sup>1</sup> Below)
- 4. Technical Instructions (Selected). (Note <sup>1</sup> Below)
- 5. Radiological Control Instructions.
- 6. System Operating Instructions.
- 7. General Operating Instructions.
- 8. REP and WBN and CECC Emergency Plan Implementing Procedures
- 9. Plant Functional Drawings.
- 10. Abnormal Operating Instructions.
- 11. Emergency Operating Procedures.
- 12. Westinghouse Emergency Response Guidelines. (Note <sup>2</sup> Below)
- 13. Hand-held calculators.
- 14. Office supplies for use in the TSC.
- **NOTE**: <sup>1</sup>Selection to be made by Technical Assessment Team Leader(s) or Technical Assessment Manager(s) and approved by the Emergency Preparedness Manager.

<sup>2</sup>Obtain copy from Site Westinghouse Representative or Master Files.

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#### APPENDIX W Page 1 of 1

Containment Sump Operation and Level Guidance<sup>1</sup>

**NOTE:** Revised Engineering Analysis on the WBN Containment Sump Operation and Level Guidance has made the information previously provided in this Appendix no longer applicable.

Information on the Containment Sump Operation and Level Guidance can be gained through the following sources:

- FSAR 6.3 Emergency Core Cooling System
- System Description N3-63-4001 Safety Injection Systems
- ES-1.3 Transfer to RHR Containment Sump

#### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX X

#### Page 1 of 3

# ERCW Concerns for Technical Assessment 1, 18

#### MSLB and LOCA Events:

The LCC fans will be operated throughout all events except LOCA and MSLB. Following a MSLB, the LCC fans (four total - 2 Train A and 2 Train B) are started between 1.5 and 4 hours after event initiation. Within 2 hours of event initiation, contingent upon no ERCW available to operating LCC units, operators will initiate plant cooldown at a minimum rate of 19°F per hour in the RCS and 25°F per hour in the Pressurizer, to at least 350°F in the RCS and 450°F in the Pressurizer.

CAUTION: Prior to reinitiating ERCW flow to the LCC coils, the potential for waterhammer and two phase flow must be considered. Parameters to be considered are containment temperature which can cause boiling within the coils, available system pressure to prevent boiling, and maintenance of system integrity after reinitiating ERCW flow.

If ERCW is supplied to operating units, the cooldown specified here is not required, if containment temperature is maintained below 120°F.

#### Non-LOCA Events:

- Provide direction for environmental qualification operating concerns for containment cooling following a non-LOCA event (e.g. loss of secondary coolant) inside containment. Items which should be addressed are listed below:
  - a. Cooldown the RCS to less than 350 degrees F within 12 hours and continue as conditions allow.
  - b. In case of failure of the normal RHR suction valves to open, continue cooldown using the steam generators.
  - c. Within one to four hours after event initiation, place at least two lower containment coolers in service. Ensure ERCW is aligned before placing coolers in service. This action will require entry into the annulus to manually open the ERCW valve if one train of power is lost. Preferable, all lower containment coolers should be placed in service.
    - (1) If A-train power is lost, A-train valves FCV-67-104 and FCV-67-112, located in the annulus (approx. el 713) will have to be manually operated in order to place the B-train ERCW header to the B-train lower compartment coolers in service. See Appendix X, page 3 of 3 for the specific location of these valves.
    - (2) If B-train power is lost, B-train valves FCV-67-88 and FCV-67-96, located in the annulus (approx. el 713) will have to be manually operated in order to place the A-train ERCW header to the A-train lower compartment coolers in service. See Appendix X, page 3 of 3 for the specific location of these valves.
  - d. Evaluate containment heat loads. If a reactor coolant pump is running, then at least three lower containment coolers should be in service.
  - e. Evaluate ERCW flow to the lower containment coolers and, if required, consider reducing flow to other equipment such as the containment spray heat exchangers.
  - f. In case of failure of both the CVCS letdown and excess letdown flow paths, then evaluate use of the reactor vessel head vent system or pressurizer PORV.

#### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX X Page 2 of 3

ERCW Concerns for Technical Assessment Team (continued)

- Monitor ERCW screens and strainers. Within 3 hours after operating basis earthquake (≥ 1/2 SSE), a loss
  of downstream dam, a stage I flood, a tornado warning or within 12 hours following a LOCA, then perform
  the following actions:
  - a. Isolate chlorination to ERCW.
  - b. Inspect ERCW traveling screens and place screens into continuous backwash.
  - c. Inspect ERCW strainers differential pressure and place into continuous backwash.
- 3. For events other than those listed in previous step, then maintain the normal monitoring and cleaning frequency of the ERCW screens and strainers per SOI-67.01.



# ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX Y Page 1 of 1

# SMALL BREAK LOCA CONCERNS<sup>2</sup>

As a result of a review of Sequoyah II-91-094, Nuclear Experience Review, it has been noted that the potential exists to have a loss of containment sump inventory as a result of lifting the relief (SRV-62-649) on the CCP miniflow recirculation line which would divert sump water inventory to the VCT/HUT. This scenario is potentially valid whenever the RHR pumps are providing makeup to the charging pumps in the recirculation mode.

Evaluate the conditions to determine if:

- A RCS Loss of Coolant accident is in progress.
- The unit is to the point of going on RHR Recirculation and RWST inventory is depleted and inventory for suction of the CCPs is from the containment sump.

If these conditions exist, then consider:

- Monitoring VCT level (this is the relief point of SRV-62-649)
- Determine if miniflow valve FCV-62-98 or FCV-62-99 should be closed to preclude loss of inventory to the VCT.
- If entry into Auxiliary Building is required to manually close the miniflow valve, have RADCON evaluate potential dose for performing this function.
- If loss of containment sump inventory to the HUT is occurring, actions must be taken to add water to RWST.

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#### APPENDIX Z Page 1 of 2

#### ADDITIONAL TAT DUTIES (POST ACCIDENT)

#### Auxiliary Building Lighting Guidance<sup>14</sup>

In order to support the results of the Auxiliary Building temperature heat-up calculation (reference 7.2.21), normal lighting in the following rooms should be turned off within 12 hours of an Auxiliary Building isolation (ABI) resulting from a LOCA/MSLB inside primary containment, if temperatures in these rooms cannot be maintained below 128°F:

#### Elevation 757.0

A10 (Old Reverse Osmosis Rm) A11 (U1 Reactor Bldg. Equip Hatch) A12 (U1 Reactor Bldg. Access Rm) Elevation 782.0 A1 (U1 MG Set Rm) A2 (PZR Header Xfmr Rm-Train A)

Lights must be turned off via the wall switch in the rooms and not at the circuit breaker in the lighting cabinet. Room 757.0-A11 has one 1500 watt light located at A5-A6 and W-X that is not switched and should not be turned off at LC156 (breaker 13) as this breaker also controls an emergency battery pack.

**NOTE:** Should emergency repair work be conducted in any of these rooms, repair teams should be instructed to turn the lights off upon departure.

#### **Control Room Chiller Guidance**

Operator Action will be required following a LOCA/HELB (inside containment) to assure that temperatures in the Main Control Room and in the Shut Down Board Rooms remain below the Maximum Limits.

The Technical Assessment Team will assure the following actions are taken.

Within 24 hours of the start of the LOCA/HELB, switch from the operating Train to the Standby train on the following systems:

- Main Control Room AHU
- Shut Down Board Room A & B Chiller

Continue to alternate trains every 24 hours.

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#### APPENDIX Z Page 2 of 2

#### Steam Generator Tube Rupture (SGTR) Recovery<sup>15</sup>

Operator action will be required to dispose of contaminated water on the plant's secondary side after a SGTR.

To assist Plant Operations the Technical Assessment Team will assure the following actions are taken.

• Ensure the station sump is aligned to the unlined pond (in accordance with AOI-33, E-3 or ECA-3 series) and unlined pond releases are performed in accordance with the Offsite Dose Calculation Manual (ODCM).

**NOTE:** Hotwell level indication may be inadequate if the hotwell level is high.

- Evaluate having temporary level indication installed to provide accurate indication of hotwell level.
- The hotwell may be processed (cleaned up) in accordance with SOI-14.03, Condensate Demineralizer Waste Disposal.
- The A Condensate Storage Tank (CST) may be processed (cleaned up) in accordance with SOI-2&3.01, Condensate and Feedwater System.
- Any contaminated Steam Generator may be processed in accordance with SOI-15.01, Steam Generator Blowdown System.

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Appendix AA Page 1 of 1

# EMERGENCY RESPONDER NOTIFICATION FORM

Fitness for Duty

Person Calling\_\_\_\_\_

Date \_\_\_\_\_ Department \_\_\_\_\_

Name	Time Called	Time Needed to Report	Alcohol 5 Hrs. Prior to Report (Y/N)	Fit for Duty (Y/N)	Duty Official Comments
### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### APPENDIX BB

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## WBN TSC Sign-In Roster

NAME (Print)	Social Security Number	Signature	Replacement within 12 hours Yes/No	Replacement notified Yes/No

Date of TSC Activation

WBN EP Records Coordinator

### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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#### SOURCE NOTES Page 1 of 2

**Operation of ERCW** 1 NRC IE Notice 87-52-02, screens/strainers to be consistent with NE Weakness No. 1, NCO-870324038 USQD (Appendix W) Small Break LOCA Concerns (Appendix Y) NER Item 910949 2 SEDs Responsibilities. Section 2.0 3 DV-847100 F00021, NIR-0560. Responsibility, 3.3 Activation of the TSC, Appendix C (Pages 1 through 7). Physical TSC Layout and Communications. MC-840827005041A, MSC-02407. 4 Section 3.0 Instruction, 3.1 General. Appendix A (pages 1 and 2). SED duties that cannot be delegated Appendix MC-840827055035A, MSC-2400. 5 C (page 3 of 7) Also see EPIPs 5 and 15. Quarterly Update of WBN Emergency 6 MC-840827005055, MSC-02419, Organization. Section 3.0 Instructions, NCO-920042076. Section 3.3.2 Emergency Response Call List. Plant Parameters Essential to EOF (CECC) 7 GR-82330000006, GLT-0015, Function. Appendix Q, R, S, T. NCO-920033014. Activation and Operation of the TSC. All GLT-0011, NCO-920053011. 8 Sections and Appendices. TSC will be operational by Fuel Load MC-810914022080, MSC-04144. 9 (NUREG 0737 Upgrade). Entire procedure NCO-920042275 supports the upgrade requirements. Also see **FREDS Users Manual** 

FRS-06-293.

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### ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER

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The MCRHS area is designed for long term

#### SOURCE NOTES Page 2 of 2

occupation by personnel required during emergency operation. Section 3.6 Long Term Operation, 3.6.3. Also see EPIP-12. EPIPs will contain the following elements. 11. ANSI Standard N.18.7-1976 Subsection 5.3.9.3: 01 POI 12. 390/93-64A 10 CFR 20 Revisions 13. MSC-02859, NCO 920042546 Radiological Emergency Plan Site Procedures shall designate site personnel who shall staff the ENS and HPN communication systems. Turn off lights in key Auxiliary Building rooms 14. WBPER 950118 after a LOCA/MSLB inside containment. 15. SOER-93.0001 Cleanup secondary side following a SGTR. Add temporary Hotwell Level Indication due to high level in Hotwell. 16. WB PER960582 Remove statement concerning reportability requirements of RC Mgr. NRC Information Notice 97-05 Offsite Notification Capabilities when site 17. communication capabilities are lost MSLB/LOCA: Prior to reinitiating ERCW NRC Generic Letter (GL) 96-06 18. flow to LCC Coils, potential for waterhammer and two phase flow must be considered.

FILING INSTRUCTIONS

DOCUMENT NUMBER <u>EPIP-7</u> REMOVE REVISION 11 INSERT REVISION 12 Comments •

### **TENNESSEE VALLEY AUTHORITY**

### WATTS BAR NUCLEAR PLANT

### EMERGENCY PLAN IMPLEMENTING PROCEDURES

#### EPIP-7

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

Revision 12 Unit 0

#### **QUALITY RELATED**

PREPARED BY: <u>Benjamin McNew</u> (Type Name)

SPONSORING ORGANIZATION: <u>Emergency Planning</u>

APPROVED BY: \_\_\_\_\_ Frank L. Pavlechko

EFFECTIVE DATE: 01/24/2001

LEVEL OF USE: REFERENCE

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

EPIP-7 Revision 12 Page 2 of 57

#### **REVISION LOG**

(Page 1 of 2)

Revision Number	Effective Date	Pages Affected	Description of Revision
0	N/A	New WBN EPIP	Supersedes IP-7.
1	02/10/93	4 4 5 6 8 11 18,19 17,22,28,31,3 3,35,37,39,40 47	Added OSC Teams Coordinator, OSC Power Stores Coordinator, DCRM Representative, TSC Coordinator to response organization. Removed note about RADCON staffing issues. Added 3.5 section on call out list. Added OSC Teams Coordinator Personnel Pool Log. Added NUREG 0654 and NUREG 0696 and 10 CFR 50, App. E references. Added page 2 to Appendix A, Alt. OSC Layout. Changed all Attachments to Appendices. Added OSC Mgr Briefing items to Appendix D. Added deactivation responsibilities to checklists. Added Appendix Q, OSC Personnel Coordinator Checklists. Added OSC Power Stores Coordinator Checklists. Added Work Control Boardwriter Checklists. Added RADCON Boardwriters Checklists.
2	08/16/93	All	Editorial (non-intent) and format changes. Repetitive non-used information removed. New OSC Team Briefing/Debriefing Form added. Source notes added to the procedure. Revised RADCON Briefers' responsibilities. Non-pager contacts for Asst. OSC Manager reduced. TSC Coordinator position discontinued due to lack of need for the position. OSC Logkeeper Appendix was repeated twice, one of the Appendix was removed. Contact information for Maintenance personnel added to the OSC Teams Coordinator position. Nuclear Stores duties enhanced.
3	10/04/93	6 21,22,23	OSC equip., supplies, and procedures will be replenished following a drill, exercise or emergency. Change Briefing Form to dispatch teams out of OSC.
4	09/02/94	All	Added Fitness For Duty note in Section 3.2.3, A. Added WBN EPIPs 12, 15, and 16 to the references section. Changed briefing form, Appendix F, to move OSC Manager's signature to front of the form. Added responsibilities to Appendices G, K, N, and O. Other editorial changes were made. Added optional OSC RADCON Briefer's Emergency Response Teams Staging Area orientation to Appendix H. Added responsibility of faxing Emergency Response Teams board status to Main Control Room to Appendix L.
CN-1	1/17/95	7,55	Source note referencing the capabilities of the OSC was added to the text.

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

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# REVISION LOG

Revision Number	Effective Date	Pages Affected	Description of Revision
5	4/21/96	3,11,19,20,22, 24,46, 52,54	Minor editorial changes concerning eating and drinking in the OSC, notification of non-pager wearing responders, changes to OSC roster and additions to OSC Teams Coordinator's responsibilities. Phone number revisions.
6	10/10/96	3, 4, 5, 6, 7, 9, 13, 14, 19, 24, 26, 27, 31, 33, 35, 37, 38, 39, 40, 41, 42, 44, 45, 48, 49, 51, 53, 55	The following non-intent and editorial revisions were made: Shift Clerk revised to Shift Personnel to reflect additional trained responders on shift, enhanced OSC activation instructions, added pager number to ERO call list, revised organizational title as needed, when to card in on the assembly card readers revised, and staffing of the OSC, redundant material/information removed, typographical errors corrected, fitness for duty instructions enhanced, activation time for minimum staffing of the OSC included, SM replaced SOS, non-QA records instructions enhanced, additional duty added to App. G, App. V added to the procedure, mainframe computer reference replaced with Curator, and editorial and grammatical enhancements made to assist human factoring.
CN-1	2/15/97	9, 38, 53	Operational responsibility added to Appendix L and T. Typographic error corrected on appendix list.
CN-2	2/10/98	3,5, 8,15, 22, 34	Satellite phone, NP-STD-1.6 changed to SPP-1.2 for FFD, key check-off for briefers, App. J removed "initiate" fire response.
7	6/30/98	All	Non-intent Changes. Incorporated Change Notices 1 & 2. SM FAX # changed. Alternate OSC number revised.
8	2/28/99	All	Non-intent change. Revised ERFDS to ICS and referenced OSC alternate locations in Appendix C.
9	10/21/99	All	Non-intent change. Developed new landscape tables for App L and P to replace scanned tables. Added step to OSC clerk's responsibilities (App L) to ensure all sign roster.
10	02/07/00	All	Non-intent changes. Revised APP. F OSC Team Briefing/Debriefing Form per corrective actions for PER-00-000177-000. Added steps to Appendix I, Initial Activation Checklist and Operational Responsibilities. Corrected typo on Appendix L. Added step to Appendix M, Operational Responsibilities. Revised Appendix P pg. 3 of 3 to enhance OSC Teams Dispatch.
11	06/14/00	All	Non-intent changes. Removed REX references and replaced it with HIS-20. Added wording to OSC Mgr., Assistant OSC Mgr., OPS Advisor and Nuclear Stores Coordinator responsibilities/titles to reflect wording in the REP. Corrected one typo and text alignments. Identified removal of QA records from MDB to EQB to resolve problems identified in PER980610. This revision also corrects problems from WBN PER006394.

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

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#### REVISION LOG (Page 2 of 2)

Revision	Effective	Pages	Description of Revision
Number	Date	Affected	
12	01/24/01	All Pg. 11,13,42	Plan effectiveness determination reviews indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Revised locations of alternate OSC to Team Room (App. A). Added additional position to OSC minimum staffing to support REP activities and standardize staffing across TVAN (App. C). Added ARW column to OSC team coordinator's checklist (App. P). Non-intent change.

#### **1.0 PURPOSE**<sup>1,2,3</sup>

This procedure provides instructions for the Operations Support Center (OSC) activation, organization, operation, termination, and deactivation.

### 2.0 **RESPONSIBILITY**<sup>1,2</sup>

The OSC Manager and OSC staff are responsible for activation, operation and deactivation of the OSC.

- 3.0 INSTRUCTION<sup>1,2.</sup>
- 3.1 General

At ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY classifications, the OSC Manager **will report** directly to the OSC and **shall** be responsible for implementing this Procedure.

- 3.2 Initiating Conditions
- 3.2.1 The OSC is to be activated and operated when an emergency is declared and classified as an ALERT, a SITE AREA EMERGENCY, or a GENERAL EMERGENCY.
- 3.2.2 This Procedure may be activated at any other time as deemed necessary by the Site Emergency Director.
- 3.2.3 The Shift Manager (SM) will activate the OSC by announcing the emergency condition by one or more of the following methods.
  - A. Plant Public Address (PA) announcement.
- **NOTE:** The Radiological Emergency Response Organization Call List is handled in accordance with the TVA Fitness For Duty Program.
  - B. Shift personnel will normally activate the Emergency Paging System (EPS) <u>or</u> contact the persons designated on the Radiological Emergency Response Organization Call List.

#### 3.0 INSTRUCTION (CONTINUED)

- C. OSC personnel can also contact additional responders/replacements by phone utilizing the Emergency Response Organization Call List available in the OSC and Appendix V.
- D. Target activation time for minimum OSC staffing is approximately 60 minutes.
- E. IF the normal phone system and radio systems are not functioning, the satellite phone system will be used as described in SOI-100.01.
- 3.3 Activation of the OSC
  - 3.3.1 The OSC Manager **shall** assume responsibility for implementing this Procedure and directing OSC personnel and activities.
- 3.3.2 Personnel with OSC Emergency Preparedness assignments **REPORT** to their response positions, (**SEE** Appendix A, OSC Layout, and Appendix B, Alternate OSC Layout). Activation of the facility is required at the ALERT **OR** higher emergency classification or at the discretion of the Site Emergency Director.
- 3.3.3 Other plant staff the OSC Manager determines to be necessary to support OSC functions will be called:
  - (1) OSC Clerk
  - (2) Maintenance/Craft personnel as needed
  - (3) Operations personnel as needed
  - (4) RADCON personnel as needed
  - (5) Transmission/Power Supply Group personnel as needed
  - (6) Others, as needed.
- 3.4 Required OSC Actions
- 3.4.1 OSC organization (Appendix B), staff actions and responsibilities are provided in Appendices C-T.
- 3.4.2 OSC responders will complete all of the applicable steps contained in the appropriate Appendices.

#### 3.0 **INSTRUCTION** (CONTINUED)

- 3.4.3 Plant procedures should be followed whenever possible. Should a situation arise where normal procedures would be inappropriate, action will be performed as determined by the OSC Manager. Nonconformance with plant procedures should be documented and action/steps taken. Also, deviations may warrant initiation of a Problem Evaluation Report (PER) or other Corrective Action Plan (CAP).
- 3.5 Emergency Response Organization Call List

The WBN Emergency Preparedness Manager shall maintain the Emergency Response organization call list listing key OSC personnel by Emergency Response Organization Title, name, home and work telephone numbers and pager numbers. The call list will be updated at least quarterly with input by the appropriate section/group supervisors. The list will be available to shift personnel to use in case of the failure of the Emergency Paging System.

3.6 Long-Term Operation

Additional personnel will be called in at the request of the OSC Manager to provide coverage or to ensure 12-hour or shorter shifts in the OSC. The OSC Manager will coordinate these call-ins with Nuclear Security to facilitate site access.

- 3.7 Termination and Deactivation
- 3.7.1 Deactivation will be implemented using WBN EPIP-13, "Termination of the Emergency and Recovery," when plant conditions are such that: (1) the emergency has been terminated; (2) the OSC has been deactivated; and (3) OSC personnel have been relieved of emergency response duties.
- 3.7.2 All records generated during the operation of the OSC will be reviewed by the OSC Manager and forwarded to the Emergency Preparedness Manager.
- 3.7.3 All equipment and usable supplies will be returned to their storage locations.
- 3.7.4 All equipment, supplies and procedures will be replenished in the OSC following a drill, exercise or emergency by applicable groups as assigned in WBN EPIP-12, "Emergency Equipment and Supplies."

#### 3.0 INSTRUCTION (CONTINUED)

- 3.8 Records
- 3.8.1 QA Records

NONE

#### 3.8.2 Non-QA Records

- The appendices and checklist in this procedure are necessary to demonstrate key actions during an emergency or NRC evaluated exercise(s) and are considered Non-Quality Assurance (QA) records.
- All original records generated during the course of an emergency drill/exercise will be assembled by the Emergency Preparedness Manager and stored appropriately.

#### 4.0 **REFERENCES**

- 4.1 TVA Nuclear Power Radiological Emergency Plan (NP REP)
- 4.2 WBN-EPIP-6 Activation and Operation of the Technical Support Center
- 4.3 WBN-EPIP-8 Personnel Accountability and Evacuation
- 4.4 WBN-EPIP-10 Medical Emergency Response
- 4.5 WBN-EPIP-12 Emergency Equipment and Supplies
- 4.6 WBN-EPIP-13 Termination of the Emergency and Recovery
- 4.7 WBN-EPIP-14 Radiological Control Response
- 4.8 WBN-EPIP-15 Emergency Exposure Guidelines
- 4.9 WBN-EPIP-16 Initial Dose Assessment for Radiological Emergencies

#### 4.0 **REFERENCES**

- 4.7 Tennessee Valley Authority Nuclear Power Radiological Emergency Plan (REP)
- 4.8 SPP-1.2, *Fitness For Duty*
- 4.9 NUREG 0654, FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants
- 4.10 NUREG 0696, Functional Criteria for Emergency Response Facilities, Final Report
- 4.11 Title 10 Code of Federal Regulations, Part 50, Appendix E
- 4.12 ANSI Standard N 18.7-1976
- 4.13 SOI-100.01 Communications Systems

#### 5.0 APPENDICES

Appendix A **OSC Layout** Appendix B **OSC Organization Chart** Appendix C **OSC Manager Checklist** Appendix D **OSC Manager Briefing Outline** Appendix E Assistant OSC Manager Checklist Appendix F OSC Team Tracking/Debriefing Form **OSC RADCON Supervisor Checklist** Appendix G Appendix H **OSC RADCON Briefer Checklist** Appendix I **OSC Operations Advisor Checklist** Appendix J **OSC Fire Protection Advisor Checklist** 

### 5.0 APPENDICES (continued)

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#### APPENDIX A (Page 1 of 2) OPERATIONS SUPPORT CENTER LAYOUT Elevation 713 Radcon Lab Area



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#### APPENDIX B (Page 1 of 1)

#### **OPERATIONS SUPPORT CENTER ORGANIZATION**

OPERATIONS SUPPORT CENTER ORGANIZATION



(\*) Denotes minimum staffing position(s) per NUREG 0654.

#### APPENDIX C (Page 1 of 4)

# OSC MANAGER

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time

- \_\_\_\_/ ENTER keycard into the Accountability Badge Reader.
- \_\_\_\_/ SIGN in OSC on the staffing chart and put on position badge.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- \_\_\_\_/ ESTABLISH a log of activities and communications.
- \_\_\_\_\_ CALL the SED in the TSC and OBTAIN an update of emergency conditions.
- \_\_\_\_\_ **RELOCATE** to OSC Alternate location (Main Office Building Team Conference room) if OSC is not habitable.
  - **NOTE:** The location of the Alternate OSC/RADCON Lab will depend on inplant radiological conditions. The TSC RADCON Manager, after consultation with the SED, will make the decision on location transfer. Possible locations that will be considered are the Alternate OSC in the Main Office Building and the **Relay Room** 755' level next to the Control Room and the TSC or the WBN Training Center.<sup>4</sup>
  - \_/\_\_\_\_ ENSURE minimum staffing requirements for the OSC are met.
    - \_\_\_\_ OSC Manager
    - RADCON Supervisor (onshift)
    - Mechanical Maintenance Supervisor or Briefer
    - Electrical Maintenance Supervisor or Briefer
    - I&C Maintenance Supervisor or Briefer
- \_\_\_\_\_\_ ENSURE OSC support personnel are notified as needed. This includes anyone who is needed to mitigate the incident. SED can authorize personnel onsite who have not been REP trained.
- \_\_\_/\_\_\_ BRIEF OSC on personnel, radiological and plant conditions and expected actions. Use Appendix D as a guide.

#### APPENDIX C (Page 2 of 4)

# OSC MANAGER

#### INITIAL OSC ACTIVATION CHECKLIST

- \_\_\_\_/ BRIEF the OSC regarding the OSC and initial information.
- \_\_\_/\_\_\_ INFORM the TSC of encountered plant conditions and the status of any emergency actions already in progress.
- \_\_\_\_/ CONFIRM that the OSC is staffed with qualified personnel and operational. (Will be up to discretion of OSC Manager. Minimum staffing positions must be met.)
- \_\_\_\_/ INFORM the SED that the OSC is operational.
  - \_/\_\_\_\_ **REQUIRE** OSC personnel to use WBN EPIP-7 checklists to perform their assigned duties.
  - \_/\_\_\_\_ DETERMINE the location and function of persons/teams currently and previously tasked by the TSC/Main Control Room and ensure assignment of Team Tracking Letters.
- \_\_\_\_\_ ESTABLISH shift rotations to fill the OSC positions IF duration is expected to exceed 12 hours.

#### APPENDIX C (Page 3 of 4)

# OSC MANAGER

### **OPERATIONAL RESPONSIBILITIES**

- Demonstrate command and control of the OSC throughout the emergency.
- Brief the OSC staff on current conditions, as needed.
- Update the SED and TSC Maintenance Manager as needed.
- Authorize OSC personnel to form emergency response teams.
- Direct the dispatching of emergency response teams (Medical Emergency Response Teams, emergency repair teams, search and rescue teams, fire protection teams, Post Accident Sampling Teams, radiological monitoring teams, damage assessment teams, and others as necessary.)
- Brief, track and coordinate Emergency Response teams which are being dispatched by the Control Room.
- Ensure that team activities are continually prioritized and synchronized with the TSC.
- Coordinate with the SED, TSC RADCON Manager, and OSC RADCON Supervisor authorizing exposures in excess of occupational limits. (Use WBN EPIP-15).
- Coordinates maintenance teams and ensures they have received proper briefings and are all accompanied by a Radcon Technician (as necessary).

#### APPENDIX C (Page 4 of 4)

# OSC MANAGER

### OPERATIONAL RESPONSIBILITIES

- Coordinate with the SED, TSC RADCON Manager, and OSC RADCON Supervisor in the issuance of KI. (Use WBN EPIP-14).
- Provide supplemental staffing for the OSC as needed.
- Initiate long-term 24 hour/day operation.
- Relocate the OSC as habitability conditions dictate.
- Deactivate the OSC when directed by the SED. (Ensure that all assigned tasks have been completed or terminated as needed, and all emergency response teams have been properly debriefed.)
- Review OSC records to ensure completeness and accuracy prior to collection by the WBN Emergency Preparedness Manager.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

#### DEACTIVATION RESPONSIBILITIES

- Terminate in accordance with WBN EPIP-13, "Termination of the Emergency and Recovery."
- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Assists in forming re-entry and recovery plans.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

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

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#### APPENDIX D (Page 1 of 2) OSC MANAGER BRIEFING OUTLINE

The following may be used as a guide for OSC Manager briefings:

- "This is a real emergency. This is a real emergency." OR
  "This is a drill. This is a drill. We need to treat this exercise as if it were a real emergency."
- "This is \_\_\_\_\_\_. I am the OSC Manager."
  "The OSC was activated at \_\_\_\_\_\_ hours."
  "The TSC (is/is not) activated. \_\_\_\_\_\_is the Site Emergency Director."

#### 3. "The following is a summary of conditions at this time:

Emergency Classification:			
Date	Time Updated	PZR Level	
_Notification of Unusual Event	RCS Pres	ESF STATUS	
Alert	RCS Temp		
Site Area Emergency	•		
General Emergency			
Event Description:			
StatusUnit 1			
StatusUnit 2			
Time Event Started:			
Primary Plant Condition:			
Mode: 1 2 3 4 5 6			
(circle one)			
Electrical Lineup:			
•			
Description of	of any abnormal lineup		
YES NO YES NO	YES NO	YES NO	YES NO
DG1A Operating? DG2A Operating	g? DG1B Operating?	DG2B Operating?	<b>Offsite Pwr Avail.?</b>
Maior Mechanical Problems:			
Major Electrical Problems:			

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#### APPENDIX D (Page 2 of 2)

# OSC MANAGER BRIEFING OUTLINE

- 4. "We are analyzing the work that was in progress at the time of the incident to determine if work should be continued, escalated, postponed or discontinued."
- 5. "Our plan of action at this time is to \_\_\_\_\_."
- 6. "Please maintain an orderly atmosphere in the OSC. Listen to briefings and make information flow to the appropriate organizations."
- "The status of Emergency Response teams in the field is \_\_\_\_\_: (Examples: Fire, Medical, damages, repairs....) More information will be provided as it becomes available."
- 8. "This is a real emergency. This is a real emergency." **OR** "This is a drill. This is a drill."

Recorded by:
Time:
Date:
Major Instrument and Control Problems:
Environmental Problems High Rad Areas:
Toxic Gas:
High Press. Steam:
Other:

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#### APPENDIX E (Page 1 of 3)

# ASSISTANT OSC MANAGER

#### INITIAL OSC ACTIVATION CHECKLIST

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

Inits/Time:

- \_\_\_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN OSC Staffing Chart and PUT ON position badge.
- \_\_\_\_/ SIGN the OSC Roster (Appendix U).
- \_\_\_/ ENSURE Plant Status Board is initially completed.
- \_\_\_\_/ ESTABLISH logbook and communications.
- \_\_\_/ ENSURE that qualified (properly trained) OSC personnel are "signed-in" on the OSC Staffing Chart and the OSC Roster.
- \_\_\_\_/ **REQUEST** checklist completion status from OSC personnel. (Checklists <u>are not</u> optional.)
- **CONTACT** the following non-pager carrying OSC Support personnel:
  - 1. OSC Clerk/Logkeeper
  - 2. Communications Support (as needed)
  - 3. Computer Support (as needed)

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#### APPENDIX E (Page 2 of 3)

# ASSISTANT OSC MANAGER

### **OPERATIONAL RESPONSIBILITIES**

- Assist the OSC Manager in providing direction and control in the OSC.
- Maintain communications with the TSC.
- Oversee the operations of the OSC Teams and coordinate supporting activities.
- Assign TSC developed task(s) to the team briefer(s) and ensure emergency teams are properly briefed using Appendix F, OSC Team Briefing/Debriefing Form.
- Authorize the dispatching of emergency response teams (includes signing briefing form, Appendix F).
- Ensure emergency teams are properly debriefed, in a timely manner, using Appendix F, OSC Team Briefing/Debriefing Form.
- Ensure the Plant Status Board, Emergency Response Team Tracking Boards, and OSC Staffing Chart are kept current.
- Coordinate with OSC RADCON Supervisor and Operations Advisor as needed regarding OSC Team activities (determine if teams need RADCON or Operations support).
- Authorize issuance of equipment and document issuance as necessary.
- Assist in authorizing emergency exposures and the issuance of KI for emergency response teams.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.
- Assist the OSC Manager in coordinating shift changes and 24 hour/day OSC operations as needed.

#### APPENDIX E (Page 3 of 3)

# ASSISTANT OSC MANAGER

### DEACTIVATION RESPONSIBILITIES

- Ensures all teams are accounted for.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

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

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#### APPENDIX F (Page 1 of 2)

	WATTS BAR NUCLEAR PLANT OSC TEAM BRIEFING/DEBRIEFING FORM
TEAM: Assistant OSC Mgr / init/time	Task Description: Describe problem or task, drawings, known facts, precautions, etc.
Lead Briefer / init/time	Task Team    Discipline (IM, MM, etc.)      Team Leader
RADCON / init/time	RADCON Requirements:      RWP Required:YesNo If yes, RWP #      SCBA Respirator Dressout Other      Emerg Exposure Apprl. (EPIP-15 by SED) Yes (REM) No N/A      KI Approval (By TSC RADCON Manager or designee) Yes No N/A
OSC Mgr / init/time	FINAL APPROVAL to release team Team Necessary Radiological Conditions have not changed since briefing Announce to OSC areas: "Is there any reason that we should not dispatch this team at this time?"

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

#### APPENDIX F (Page 2 of 2)

#### WATTS BAR NUCLEAR PLANT OSC TEAM BRIEFING/DEBRIEFING FORM

Briefer / init/time	Task Complete: Inform OSC Manager of results (Including any damage assessments) Inform TSC TAT of results (x8611)
Team Ldr / init/time Briefer / init/time	Debriefing Was Assignment Completed? YesNo Observations/Damage Assessment from the field (list below) Equipment status Hazards (actual or potential) Radiological Conditions Unusual Sounds, etc. Other information Personnel Directed to OSC Teams Coordinator Recommendations from field team Debriefing Conducted By: Summary Provided to Briefer Update OSC Team Tracking Board Send personnel back to OSC Teams Coordinator Summary Provided to OSC Teams Coordinator Summary Provided to OSC Teams Coordinator Summary Provided to OSC Teams Coordinator
OSC Mgr / init/time	TSC Notified: Team results provided to TSC Maintenance Manager

#### NOTES: (OBSERVATIONS/DAMAGE ASSESSMENTS/RECOMMENDATIONS)

### APPENDIX G (Page 1 of 3) OSC RADCON SUPERVISOR

#### **INITIAL OSC ACTIVATION CHECKLIST**

#### Date:\_\_\_\_ Inits/Time

- \_\_\_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_/ SIGN in on the OSC Staffing Chart and PUT ON position badge.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- **ESTABLISH** a log of communications and activities.
- \_\_\_/\_\_\_ ESTABLISH communications with the TSC RADCON Manager.
- \_\_\_/\_\_\_ ESTABLISH communications with the RADCON Lab Supervisor.
- \_\_\_\_\_ ENSURE adequate RADCON staffing available for emergency response (dosimetry support, RWP support, boardwriter, clerical).
- \_\_\_/\_\_\_ CONTROL eating and drinking in the OSC until habitability has been established.
- \_\_\_\_/ ENSURE habitability surveys are current for the OSC areas, TSC, and Control Room and assembly areas as listed in WBN EPIP-8.
- \_\_\_\_/ ASSIGN HIS-20 computer operator.
- \_\_\_\_/ ENSURE that RADCON Techs are called in from home to provide staffing as required by WBN EPIP-14.
- \_\_\_\_/ LOCATE all RADCON persons/teams currently and previously tasked and ensure they are tracked on the Emergency Response Teams Board.

#### APPENDIX G (Page 2 of 3)

# OSC RADCON SUPERVISOR

**OPERATIONAL RESPONSIBILITIES** 

- Provide and coordinate RADCON resources as necessary.
- Provide direction to the RADCON Lab.
- Ensure RADCON Teams are dispatched through the OSC. (Tracked on Emergency Response Teams Board.)
- Ensure emergency response teams have adequate RADCON/dosimetry coverage.
- Brief the OSC Manager and OSC Staff of radiological conditions as needed.
- Provide immediate radiological information to OSC staff as conditions change.
- Brief the TSC RADCON Manager of the RADCON resources and radiological conditions as needed.
- Ensure "Environmental Problems" segment of Plant Status Board is correct.
- Ensure that all predressed OSC staging area teams are issued proper dosimetry and have been evaluated for radiological access.
- Provide assistance to the OSC Manager as needed.
- Periodically check habitability of TSC, OSC, and Control Room, if radiological conditions warrant.
- Administer KI to emergency response teams according to WBN EPIP-14. (Forward Potassium Iodine Issue Report, to the TSC RADCON Manager.)
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.
- Log-on to Integrated Computer System (ICS).

APPENDIX G (Page 3 of 3)

# OSC RADCON SUPERVISOR

DEACTIVATION RESPONSIBILITIES

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.
- Ensures outlining emergency response groups (i.e., line crews, warehouse) have dosimetry and are being protected throughout the emergency.

#### APPENDIX H (Page 1 of 4)

# OSC RADCON BRIEFER

INITIAL OSC ACTIVATION CHECKLIST

Date:
Inits/Time

- \_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_\_/\_\_\_ SIGN in OSC on the Staffing Chart.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- \_\_\_\_/ ESTABLISH a log of communications and activities.
- \_\_\_/\_\_\_ NOTIFY the OSC RADCON Supervisor of arrival.
- \_\_\_/ ACCESS RADCON Party Line (4103) as necessary.
  - **ENSURE** that personnel reporting to the OSC teams staging area are briefed as time allows using page 3 of 4 of Appendix H as an orientation for responders.

#### APPENDIX H (Page 2 of 4)

# **OSC RADCON BRIEFER**

### **OPERATIONAL RESPONSIBILITIES**

- Provide radiological technical assistance to the Briefing Teams.
- Provide radiological conditions analysis of the job assigned to the emergency response teams.
- Assist with portions of the OSC Team Briefings.
- Complete applicable portions of Appendix F, the OSC Team Tracking/Briefing/Debriefing Form.
- Ensure radiological data is collected and reported back to the OSC in an expeditious manner for planning and prioritizing further emergency response activities.
- Ensure TLDs are collected and processed from returning team members.
- Assist in the administration of KI according to WBN-EPIP 14.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.
- Ensures that the radiological information on the OSC status board is accurate.
- Ensures that personnel reporting to the OSC Teams Staging Area are briefed as time allows using page 3 of 4 of Appendix H as an orientation for responders.

# APPENDIX H

(Page 3 of 4)

# OSC RADCON BRIEFER

### EMERGENCY RESPONSE TEAMS STAGING AREA ORIENTATION

(RADCON will brief responders as conditions allow on the contents of this list.)

- Stay continuously aware of REP status and in plant conditions.
- Plan contingencies when assigned a team (anticipate needs and hazards) prior to entering accident area.
- Communicate with briefers on a regular basis. Be aware of radio dead spots in the Plant (e.g., El. 676, RHR pump rooms). Perform functional check of radio and equipment prior to entering Auxiliary Building or accident area. Use repeat-backs for effective transfer of information. BP-364 lists radio sensitive areas of the plant.
- Perform applicable pathway surveys to and from work location.
- Relay data promptly and frequently to the OSC! This information is critical in assessing plant conditions and protection of personnel. Consideration should be given to designating a runner to telephone data if necessary.
- If on pathway the team encounters a field of >1000 mrem/HR advise the OSC.
- If when arriving to destination team encounters a field of >1000 mrem/HR, return to lower dose area and advise OSC.
- Stay together as a team for accountability.
- In-plant conditions are dynamic, OSC will continually advise the team of any changes while in the field.
- If for some reason the scope of the job changes while in the field, notify the OSC.
- Note any unusual plant conditions (frisker increases, liquid leaks, poor visibility, etc.), advise OSC.
- Use appropriate techniques to reduce exposure and maximize safety.
- When in the field, use available supplies in RADCON cabinets if needed.
- Contact RADCON briefer upon completion of task.
- Primary accident condition RWPS are available; please familiarize yourself with them, <u>RADCON will brief the team on the RWP</u>.
- If possible, keep a written log of team activities while in the field.
- Contact RADCON or OSC for return route in the event of change of event conditions, etc.

#### APPENDIX H (Page 4 of 4)

# OSC RADCON BRIEFER

DEACTIVATION RESPONSIBILITIES

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

### Appendix I (Page 1 of 2)

# OSC OPERATIONS ADVISOR

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time

- \_\_\_\_/ ENTER into the Accountability Badge Reader.
- \_\_\_\_/ SIGN in on the OSC Staffing Chart.
- \_\_\_/\_\_\_ SIGN the OSC Roster. (Appendix U)
- / **ESTABLISH** a log of activities and communications.
- \_\_\_\_/ ESTABLISH communications with the TSC Operations Manager for updates and to obtain Operations support.
- \_\_\_\_/ CALL-IN AUOs\Operations personnel from offshift to support OSC activities (Minimum of 3 AUOs is usually needed in the OSC).
- \_\_\_\_/ ESTABLISH communications with the Control Room Communicator via the Control Room party-line.
- / LOG ON to Integrated Computer System (ICS) terminal.
- / **ANNOUNCE** on the portable radio: "AUO's report to the OSC." (repeat)
## Appendix I (Page 2 of 2)

## **OSC OPERATIONS ADVISOR CHECKLIST**

## **OPERATIONAL RESPONSIBILITIES**

- Direct AUO's to maintain a log, and listen to the Operations Party Line to remain current on Plant Status.
- Provide plant operations advice to support the OSC Manager.
- Provide Operational advice to support the entire OSC, including Briefing Teams as needed. (Additional AUOs can be used to assist in briefing teams.)
- Provide personnel for any operations actions that may be required while in the field.
- Keep the TSC Operations Manager, and Operations Communicator appraised of the OSC Team activities while in the field.
- Operate ICS terminal in the OSC as needed.
- Ensure the OSC Plant Status Board is correct.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

## APPENDIX J (Page 1 of 2)

## OSC FIRE PROTECTION ADVISOR

INITIAL OSC ACTIVATION CHECKLIST

Date:

Inits/Time

- \_\_\_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/ SIGN OSC Roster. (Appendix U)
- \_\_\_\_/\_\_\_ ESTABLISH a log of activities and communications.
- \_\_\_/\_\_\_ ESTABLISH communications with the Fire Operations Unit or the Fire Station to provide plant status updates.

## APPENDIX J (Page 2 of 2)

## OSC FIRE PROTECTION ADVISOR

## **OPERATIONAL RESPONSIBILITIES**

- Monitor plant status and fire response.
- Support WBN-EPIP-10, Medical Emergency Response, as needed.
- Initiate and provide first response for hazardous material containment.
- Initiate personnel search and rescue in hazardous areas.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

## APPENDIX K (Page 1 of 2)

## OSC CHEMISTRY ADVISOR

INITIAL OSC ACTIVATION CHECKLIST

Date:

Inits/Time

- \_\_\_\_/ ENTER keycard into the Accountability Badge Reader.
- \_\_\_\_/ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/ SIGN OSC Roster. (Appendix U)
- \_\_\_\_\_ ESTABLISH a log of activities and communications.
- \_\_\_\_\_ ESTABLISH communications with the TSC Chemistry Manager.
- **ESTABLISH** communications with Chemistry Lab staff.
  - \_/\_\_\_ CALL the assigned Chemistry Engineer to support OSC operations.

## APPENDIX K (Page 2 of 2)

## OSC CHEMISTRY ADVISOR

## OPERATIONAL RESPONSIBILITIES

- Provide and coordinate Chemistry personnel needed to support the OSC.
- Provide Chemistry technical content in emergency team briefings as necessary.
- Dispatch the Post-Accident Sampling (PAS) team as directed by the TSC.
- Maintain a communications link with the TSC Chemistry Manager.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.
- Provide/assist in obtaining Release/Pathway information as needed.
- Provide Chemistry data (primary and secondary) of initiating conditions and provide ongoing Chemistry information.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

## APPENDIX L (Page 1 of 3)

## **OSC CLERK**

## INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time

- \_\_\_\_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_\_/ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/\_\_\_ SIGN the OSC Roster. (Appendix U)
- **ESTABLISH** a log of activities and communications.
- \_\_\_\_/ NOTIFY other staff to report to the OSC as determined by the OSC Manager.

## APPENDIX L

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## OSC CLERK

## OPERATIONAL RESPONSIBILITIES

- Ensure the OSC Status Boards are continuously updated to reflect current plant conditions.
- Ensure OSC responders have signed the OSC roster.
- Ensure a log is maintained of all important OSC activities.
- In the event of a Site Wide Evacuation, notify the OSC RADCON Supervisor that this is a non-radiation worker position.
- Collect and maintain all original copies of OSC generated records.
- Provide records to the WBN Emergency Preparedness (EP) Manager when the OSC is deactivated.
- Maintain log of communications and activities.
- Provide OSC team status reports to the control room on a periodic basis.
- Provide adequate turnover when a shift change occurs, and utilizes Appendix V to activate additional OSC responders.
- Assist OSC responders in obtaining their TLDs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.
- Assists in forming re-entry and recovery plans.

WBN
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## APPENDIX L (Page 3 of 3) EMERGENCY RESPONSE TEAMS

TO: SM in MCR (Simulator for Drills) FROM: \_\_\_\_\_/ FAX to the SM (8463) and TSC (8365) (For drills FAX to the SM/simulator at x8363).

Priority	Team	Task Location	Lead Briefer/Team Leader/RC Tech	Comments/Status	Time Briefed	Time Out	Time In	Time Debriefed
			L. Briefer:					Depriered
			T. Leader:					
			RC Tech:					
			L. Briefer:					
			T. Leader:					
			RC Tech:					
			L. Briefer:	-				
			T. Leader:					
			RC Tech:					
			L. Briefer:					
			T. Leader:					
			RC Tech:					
			L. Briefer:					
			T. Leader:					
			RC Tech:					
			L. Briefer:					
			T. Leader:					
			RC Tech:					
			L. Briefer:					
			T. Leader:					
			RC Tech:					
			L. Briefer;					
			T. Leader:					
			RC Tech:					

#### APPENDIX M (Page 1 of 2)

## OSC BRIEFING TEAM

## INITIAL OSC ACTIVATION CHECKLIST

Date:

Inits/Time

- \_\_\_\_/ ENTER keycard into the Accountability Badge Reader.
- \_\_\_\_/ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- \_\_\_\_/ ESTABLISH a log of communications and activities.
- \_\_\_\_/ **REPORT** any conditions in the plant which may be related to the emergency condition.

### APPENDIX M (Page 2 of 2)

## OSC BRIEFING TEAM

## OPERATIONAL RESPONSIBILITIES

- Provide Mechanical, Electrical, and Instrument technical expertise.
- Notify Mechanical, Electrical, Instrument Foremen to report with crews to the OSC Staging Area.
- Evaluate job conditions (including RADCON, Fire Operations, and Operational aspects of the task) and analyze the necessary precautions and methods best suited to safe performance of the task.
- Brief the OSC Teams based on the analysis of the job.
- Track, communicate and monitor safety of the OSC Teams while in the field.
- Debrief the OSC Teams after completion of the task.
- Complete applicable portions of Appendix F, OSC Team Briefing/Debriefing Form.
- Operates Curator computer as needed to provide OSC team briefing information.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

#### APPENDIX N (Page 1 of 2)

## OSC INDUSTRIAL SAFETY ADVISOR

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time

- \_\_\_\_/ ENTER keycard into the accountability card reader.
- \_\_\_/\_\_\_ SIGN the OSC Staffing Chart.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- / **ESTABLISH** a log of communications and activities.

## APPENDIX N (page 2 of 2)

## OSC INDUSTRIAL SAFETY ADVISOR

## OPERATIONAL RESPONSIBILITIES

- Ensure the OSC Manager/OSC Staff are aware of safety hazards that could affect emergency response activities.
- Assist Briefing Teams in preparing applicable portions of Appendix F, OSC Team Tracking/Debriefing Form.
- Assist Briefing Teams in briefing process. Ensure teams have adequate safety apparel and equipment to complete emergency team assignments.
- Assist in obtaining/procuring adequate safety equipment.
- Assist in the team debriefing process as needed.
- Ensure safety hazard information obtained from returning teams flows back into the OSC in a timely expeditious manner. Incorporate significant information into the prioritizing and emergency team briefing process.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

#### APPENDIX O (Page 1 of 1)

## OSC NUCLEAR SECURITY ADVISOR

INITIAL OSC ACTIVATION CHECKLIST

Date:	_
Inits/Time	
/	ENTER keycard into the Accountability Badge Reader. 差
1	SIGN in on the OSC Staffing Chart.

- \_\_\_\_\_ SIGN the OSC Roster. (Appendix U)
- \_\_\_/ ESTABLISH a log of communications and activities.

## **OPERATIONAL RESPONSIBILITIES**

- Ensure the OSC Manager/OSC Staff are aware of security hazards that could affect emergency response activities.
- Provide assistance to briefing teams as needed.
- Ensure security provides expeditious emergency entries and exits for teams dispatched from the OSC.
- Ensure adequate staffing is available to support WBN EPIP-8, "Personnel Accountability and Evacuation," when implementing assembly and accountability or evacuations.
- Provide Security support for search and rescue operations and other necessary emergency response actions.
- Maintain log of communications and activities.
- Provide adequate turnover when a shift change occurs.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

## APPENDIX P (Page 1 of 3)

## OSC TEAMS COORDINATOR

INITIAL OSC ACTIVATION CHECKLIST

Date:

Inits/Time

- \_\_\_\_/ ENTER keycard into the Accountability Badge Reader.
- \_\_\_/ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/ SIGN the OSC Roster. (Appendix U)
- \_\_\_\_/ ESTABLISH a log of communications and activities.
- \_\_\_\_/\_\_\_ USE Page 3 of 3 of this Appendix to organize an OSC Teams Staging Area.
- \_\_\_\_/ ENSURE OSC tool kits have been moved from the Toolroom in the Maintenance Shop to the OSC Teams Staging Area.
- \_\_\_\_/ ENSURE the following minimum number of personnel come to the prestaging area (these numbers are approximate depending on plant conditions):
  - 4 Electrical Maintenance
  - 6 Mechanical Maintenance
  - 2 I&C Maintenance
  - 3 AUOs from Main Control Room Kitchen (or from home)
  - **NOTE:** This is not a comprehensive list. The emergency may or may not require all of these positions to be prestaged. This is only a suggested list.

## APPENDIX P (Page 2 of 3)

## OSC TEAMS COORDINATOR

## **OPERATIONAL RESPONSIBILITIES**

- Maintain contact with Assistant OSC Manager.
- Manage the Emergency Response Team staging area by:
  - 1. Directing responders (potential OSC teams) to check-in with the HIS-20 Operator.
  - 2. Requiring all potential OSC team members to dress out.
  - 3. Prepare emergency responders to be dispatched.
- Ensure that OSC briefers know who is available in the OSC Teams Staging Area by periodically distributing lists of personnel awaiting assignments.
- Ensure that every team is debriefed upon returning.

- Ensures all teams are accounted for and properly debriefed.
- Ensures all logs and team briefing forms are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

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

EPIP-7 Revision 12 Page 48 of 57

(Circle One for This Sheet) FIN MMG MEG MIG **APPENDIX P RLAs** FOPs **AUOs RCTs** (Page 3 of 3) **OSC TEAMS COORDINATOR** EPT309 SCBA Correct. TLD# Margin OSC Respirator HPT Name SSN Team Briefer Eyewear ARW Comments (RAĎ) Teams RRT010 363.002 Available .

## APPENDIX Q (Page 1 of 1)

## OSC NUCLEAR STORES COORDINATOR

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time

/ ENTER keycard into the Accountability Badge Reader.

\_\_\_/\_\_\_ SIGN in on the OSC Staffing Chart.

- \_\_\_\_/ SIGN OSC Roster. (Appendix U)
- \_\_\_/ ESTABLISH a log of communications and activities.

## **OPERATIONAL RESPONSIBILITIES**

- Provides coordination between Power Stores and the OSC.
- Provides materials as expeditiously as possible for emergency response activities.
- Operates mainframe computer to determine materials availability.

- Ensures all records (anything written down during the OSC activation) are completed and signed.
- Leave all papers at your station which will be collected and properly stored by WBN Emergency Preparedness.

### APPENDIX R (Page 1 of 2)

## WORK CONTROL BOARDWRITER

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time	ENTER keycard into the Accountability Badge Reader.
/	SIGN in on the OSC Staffing Chart.
/	SIGN the OSC Roster. (Appendix U)
/	ESTABLISH a log of communications and activities.
/	<b>PROVIDE</b> a status of current work control plant activities to the OSC for immediate analysis to:

- Determine if any ongoing work is related to the emergency.
- Determine if current jobs should be continued, expedited or stopped.

## APPENDIX R (Page 2 of 2)

## WORK CONTROL BOARDWRITER

## **OPERATIONAL RESPONSIBILITIES**

- Maintain contact on control room party line on x4102.
- Maintain OSC status boards.

- Ensures all records (anything written down during the OSC activation) are complete and signed.
- Leave all papers at work station which will be collected and properly stored by WBN Emergency Preparedness.

## APPENDIX S (Page 1 of 2)

## RADCON BOARDWRITER

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_

Inits/Time /	ENTER keycard into the Accountability Badge Reader.
/	SIGN in on the OSC Staffing Chart.
	SIGN the OSC Roster. (Appendix U)
/	ESTABLISH a log of communications and activities.
/	ESTABLISH contact on the RADCON Party-line by dialing 4103.

## APPENDIX S (Page 2 of 2)

## RADCON BOARDWRITER

## OPERATIONAL RESPONSIBILITIES

- Maintains the radiological status boards by providing a radiological sequence of events.
- Maintains copies of radiological status board as conditions change.
- Notifies the OSC RADCON Supervisor of changes in radiological conditions.
- Maintains contact on RADCON Party Line (4103).
- Maintains radiological status elevation maps to provide a clear status of radiological conditions at all times.
- Maintains a clear status of eating and drinking in the OSC areas on the Radiological Status Board.

- Ensures all records (anything written down during the OSC activation) are complete and signed.
- Leaves all papers at work station which will be collected and properly stored by WBN Emergency Preparedness.

## APPENDIX T (Page 1 of 1) DCRM COORDINATOR

INITIAL OSC ACTIVATION CHECKLIST

Date:\_\_\_\_\_ Inits/Time

1

- \_\_\_/\_\_\_ ENTER keycard into the Accountability Badge Reader.
- \_\_\_/\_\_\_ SIGN in on the OSC Staffing Chart.
- \_\_\_\_/ SIGN the OSC Roster (Appendix U).
  - \_\_/\_\_\_ ENSURES that current WBN EPIP-7 copies are available for all OSC responders.
- \_\_\_\_/ ESTABLISH a log of communications and activities.

**ENSURE** OSC Manager has a controlled copy of the WBN-EPIPs on his desk.

### **OPERATIONAL RESPONSIBILITIES**

- Provides DCRM expertise as needed.
- Provides drawings, documents, vendors manuals as requested by OSC.
- In the event of a station flood, ensure that designated QA records located in the MDB vault are removed to the second floor of EQB.
- In the event of a Site Wide Evacuation, notify the OSC RADCON Supervisor that this is a non-radiation worker position.
- Assists in OSC logistics as requested.

- Ensures all records (anything written down during the OSC activation) are complete and signed.
- Leaves all papers at work station which will be collected and properly stored by WBN Emergency Preparedness.

### APPENDIX U (Page 1 of 1)

## OSC ROSTER

NAME (Print)	Social Security Number	Signature	Replacement within 12 hours Yes/No	Replacement notified Yes/No
		:		

Date of OSC Activation

WBN EP Records Coordinator

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

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## Appendix V Page 1 of 1

#### **EMERGENCY RESPONDER NOTIFICATION FORM** ÷

Fitness for Duty

Person Calling\_\_\_\_\_

Date \_\_\_\_\_ Department \_\_\_\_\_

Name	Time Called	Time Needed to Report	Alcohol 5 Hrs. Prior to Report (Y/N)	Fit for Duty (Y/N)	Duty Official Comments

	WBN ACTIVATION AND OF THE OPE SUPPORT CEN		ATION IS SC)	EPIP-7 Revision 12 Page 57 of 57		
	SOURCE NOTES Page 1 of 1					
1	1 MC-840827005001, MSC-02371.			Revise OSC procedure duties and responsibilities. See entire procedure with all appendices.		
2.	2. ANSI N18.7-1976 Subsection 5.3.9.3: 01 POI			enting procedures will the following elements.		
3.	. MSC-02853, NCO-920042521			ite will have an OSC. Unications will be available to the The OSC will establish and in appropriate communications by team that may enter the plant essment or repair.	е	

4. WBPER 98016506

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Alternate OSC locations.

## FILING INSTRUCTIONS

DOCUMENT NUMBER _	EPIP-9	
REMOVE REVISION	8 INSERT REVISION	9
Comments		

## TENNESSEE VALLEY AUTHORITY

## WATTS BAR NUCLEAR PLANT

## EMERGENCY PLAN IMPLEMENTING PROCEDURES

### EPIP-9

## LOSS OF METEOROLOGICAL DATA

**Revision** 9

Unit 0

#### QUALITY RELATED

PREPARED BY: <u>Benjamin McNew</u> (Type Name)

SPONSORING ORGANIZATION: <u>Emergency Planning</u>

APPROVED BY: <u>Frank L. Pavlechko</u>

EFFECTIVE DATE: 01/24/2001

LEVEL OF USE: REFERENCE

	LOSS OF	EPIP-9
WBN	METEOROLOGICAL	Revision 9
	DATA	Page 2 of 9

## **REVISION DESCRIPTION:**

Revision	Implementation			Description of Revision
Number	Date			
0	02/10/93		New F	Procedure
1	08/16/93		Forma notes	at (non-intent) and Editorial changes. Source added to the procedure.
2	05/27/94	4	Chan	ged User name and password on Appendix A.
3	4/21/95		Editor numb enhar proce	ial (non-intent) changes made. Phone ers revised. Instructions revised (FRED) to nce clarity. Source Note added to the dure.
Revision Number	Implementation Date	Pages Affected		Description of Revision
CN-1	9/28/95	4, 7		(Non-intent) , phone numbers revised (new area code).
4	7/5/96	3,4,7		Revised computer network method for acquiring MET data identified in Appendix B. New shift titles identified. This revision was evaluated to be non-intent
5	2/15/97	4,5,	6,7,8	Non-intent editorial changes made. Typographical errors corrected. Added Records Section to the procedure. Revised location of MET Tower keys. Revised Knoxville computer access information to correspond to new screen instructions. Dose Assessment computer name revised to CECC computer
CN-1	2/2/98	2,4	1,5,8	Changed "Knoxville" to "Chattanooga"

	LOSS OF	EPIP-9	
WBN	METEOROLOGICAL	Revision 9	
	DATA	Page 3 of 9	

## **REVISION DESCRIPTION (continued)**

Revision Number	Implementation Date	Pages Affected	Description of Revision
6	4/28/98	2,3,4,5	Revised Field Support team name. Deleted Knoxville MET computer contact and replaced it with SQN MCR source of information. Deleted use of Tower Strip Charts for ALARA/time constraint purposes.
7	2/28/99	All	Non-intent changes. Revised ERFDS to ICS.
8	10/21/99	Ali	Non-intent change. New alternate MET data screen replaced old screen in Appendix A. The new screen enhancement is for Operations and TSC personnel. Combined steps A & B for MET tower in-operability.
9	01/24/01	All Pg. 4 & 6	Plan effectiveness determinations reviews indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Revised ANSI/ANS reference. Non- intent change.

	LOSS OF	EPIP-9
WBN	METEOROLOGICAL	Revision 9
	DATA	Page 4 of 9

#### 1.0 PURPOSE<sup>2</sup>

This Procedure provides instructions to ensure appropriate actions are taken by the Shift Manager (SM) for Main Control Room outages of onsite meteorological data.

#### 2.0 RESPONSIBILITY<sup>1</sup>

Daily meteorological channel checks are performed by the SM to verify operability. IF an outage is detected, the SM shall take necessary actions to check backup displays, track the outage, and to initiate repair request.

Emergency Planning (EP) Field Support is responsible for operating the meteorological data system and for making the data signal available to the plant.

### 3.0 INSTRUCTIONS<sup>1</sup>

#### 3.1 Background

Requirements for onsite meteorological data are:

- A. The Offsite Dose Calculation Manual (ODCM) requires that two of three wind speed channels, two of three wind direction channels, and one of three air temperature differences be operable at all times to support estimation of routine and accident doses. A special report to the NRC is to be prepared for outages of more than seven (7) days.
- B. Emergency action level event (5.2 tornado) and protective action decision making of the Radiological Emergency Plan (REP) require use of meteorological data.
- C. R.G. 1.23 "Onsite Meteorological Programs" and ANSI/ANS Standard 3.11-2000 "Determining Meteorological Information at Nuclear Facilities" require a 90 percent annual joint data recovery rate of valid wind speed, wind direction and temperature difference.

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	DATA	Page 5 of 9	

#### 3.0 **INSTRUCTIONS** (continued)

#### 3.2 Met Tower Inoperability

- 3.2.1 **IF** Met data is unavailable in the Main Control Room or from the ICS Terminals in the TSC & OSC (METDATA), use the CECC computer terminal in the TSC to get Met Data from the MET Tower using Appendix A of this Procedure.
- **NOTE 1:** I&C should be contacted to fix the problem with the ICS display.
  - 3.2.2 **IF** the minimum required data (See background 3.1) is not available from these methods, declare the system inoperable and begin appropriate tracking. **NOTIFY** EP Field Support (normal business hours or next working day, whichever is applicable) at x8450.
  - 3.2.3 **IF** specific Met data is still needed (i.e., WBN EPIP-1, emergency action levels), the remaining steps for obtaining data should be used in the following order:
    - STEP A: 1) Call the SQN Control Room (843-6211) and request the needed meteorological information.
      - 2) THEN REQUEST the Operations Duty Specialist (ODS) page the duty CECC Meteorologist. The CECC Meteorologist has backup procedures to estimate missing data using established relationships between onsite data and other sources of data.
    - **STEP B: CALL** the Morristown National Weather Service at <u>9-1-(423)-586-8400</u> and request the wind speed and wind direction.
- **NOTE 2:** This information will be from the 10 meter elevation but is still usable.

#### 3.3 Met Tower Repair

A. **AFTER** notification that the Met Tower outage is completed, **DOCUMENT** the closure of any tracking initiated.

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#### 4.0 **REFERENCES**

2

- A. Watts Bar Nuclear Plant Offsite Dose Calculation Manual.
- B. Watts Bar Nuclear Plant Environmental Data Station Manual.
- C. Watts Bar Nuclear Plant Emergency Plan Implementing Procedure 1, "Emergency Planning Classification Flowchart."
- D. U.S.N.R.C. Regulatory Guide 1.23, "Onsite Meteorological Programs."
- E. American Nuclear Society Standard ANSI/ANS-3.11-2000, "Determining Meteorological Information at Nuclear Facilities."
- F. Meteorological Data Print Program Users Manual.
- G. Radiological Emergency Notification Directory (REND).
- H. Watts Bar Nuclear Plant Nowcast Manual, October 1991.
- I. ANSI N18.7-1976

#### 5.0 APPENDICES

Appendix A - CECC Computer and Printer Use

#### 6.0 RECORDS

A. QA Records

None.

B. Non-QA Records

All original records/printouts generated during the course of a declared emergency or drill, will be sent to the EP Manager for retention.

	LOSS OF	EPIP-9
WBN	METEOROLOGICAL	Revision 9
	DATA	Page 7 of 9

## APPENDIX A (Page 1 of 2)

## TSC CECC COMPUTER AND PRINTER USE

Note:	If computer is already on, go to step (6)	
1.	TURN ON computer terminal (switch is located in front).	
2.	PRESS "Data" button on telephone linked to terminal (8628).	
3.	When the prompt "Destination" appears, <b>PRESS</b> the "Vax" button on telephone linked to terminal (8628).	
4.	PRESS "Data" button on telephone linked to printer (8615).	
5.	When the prompt "Destination" appears, <b>PRESS</b> the "Vax" button on telephone linked to printer. (8615)	
6.	DOUBLE PRESS "Return" on terminal key board (repeat step if necessary).	
7.	When the prompt "Username" is received, <b>TYPE</b> "WBMET" <u>and</u> <b>PRESS</b> "Return".	
8.	When the prompt "Password" is received, <b>TYPE</b> "TSC" <u>and</u> <b>PRESS</b> "Return". (NOTE: The password will NOT be seen on the screen.) The printer will print the MET data and log off the computer.	
9.	Return to step 6 for additional MET data when needed.	
10.	USE met data printout for documentation.	

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#### APPENDIX A (Page 2 of 2)

#### EXAMPLE REPORT WATTS BAR NUCLEAR PLANT METEORLOGICAL DATA

DATE: 4-OCT-99 TIME: 11:30:48 (Central) REF: 49 LOCATION: CECC COMPUTER

DESCRIPTION	INSTRMENT	TS LIMIT	DATE (Last 15 min)	
WIND SPEED	10m Elevation 46m Elevation 91m Elevation	Operable and Channel Check	3.5 mph 5.4 mph 6.3 mph	
WIND DIRECTION	10m Elevation 46m Elevation 91m Elevation		233.7 deg 222.4 deg 219.3 deg	
AIR Delta T(1)	10 to 46m 10 to 91m 46 to 91m		-1.1 F(1) -1.9 F(1) -0.9 F(1)	

(1) To calculate Delta T, subtract the Lower elevation temperature value from the higher elevation temperature value (ex: (91m value) - (10m value)).

Performers Initials \_\_\_\_\_

SROs Initials \_\_\_\_\_

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WBN	METEOROLOGICAL Revision S		
	DATA	Page 9 of 9	

#### SOURCE NOTES Page 1 of 1

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- 1 ANSI N18.7-1976 Subsection 5.3.9.3: 01 POI
- 2 NCO 920042341, MSC 04181

EPIPs will include the following elements.

TVA will have backup procedures to provide MET DATA needed for dose calculations.

# FILING INSTRUCTIONS

DOCUMENT NUMBER		EPTP	-12	
REMOVE REVISION _	14	INSERT R	EVISION _	15
-				
Comments				
		<u></u>		
				· ·
# TENNESSEE VALLEY AUTHORITY

# WATTS BAR NUCLEAR PLANT

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

### EPIP-12

# EMERGENCY EQUIPMENT AND SUPPLIES

Revision 15

Unit 0

### QUALITY RELATED

PREPARED BY: <u>Benjamin F. McNew, Jr.</u> (Type Name)

SPONSORING ORGANIZATION: <u>Emergency Planning</u>

APPROVED BY: \_\_\_\_\_\_ Frank L. Pavlechko

EFFECTIVE DATE: 01/24/2001

LEVEL OF USE: REFERENCE

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# EMERGENCY

EPIP-12

EQUIPMENT

### AND SUPPLIES

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**Revision 15** 

### **REVISION DESCRIPTION:**

Revision Number	Effective Date	Pages Affected	Description of Revision
0	12/04/90		New WBN EPIP, Supersedes IP-17.
1	02/10/93		General Revision.
2	8/16/93		Editorial (non-intent) and format changes. Additional equipment/documents added to key inventory check offs. Non needed equipment/documents removed from inventory check offs. New location of SCBA equipment identified OSC Inventory revised to reflect the new facility. Source notes added to the procedure.
3	01/01/94		Added EOIs, AOIs, SOIs, Es, ECAs to Appendix G. Changed "Appendix" to "Attachment" on Appendix D to concur with CECC EPIP-9, and made some editorial changes.
4	04/11/94		Added specific numbers for required kits and spare bottles, deleted number of SCBAs required in RADCON Lab, corrected referenced procedure to O-FPS-510-SCBA, and change from Signature and Review Sheet to Required Emergency SCBA Inventory Sheet. These changes made to Appendix C and Section 4.2. Added OSC medical supplies cabinet to Appendix G. Added RCI-109 references to Appendix E. Added Section 2.2.4 to use PMI to check facility communications and equipment.
5	10/14/94		Inventory supplies revised to reflect current equipment and references maintained in the TSC, OSC, and RADCON Lab area. Decon supplies added to Appendix A.
CN-1	1/17/95		Source note referencing the PM communication test was added to the text.
6	2/23/95		Reference added. Non-intent format changes made. Additions to inventories in TSC and OSC added. OSC staging area equipment identified.
CN-1	4/1/95		Source note referencing Operator protective clothing.
7	7/21/95	6,10,12,13, 14,17	Minor editorial changes (all non-intent) made to the procedure. Athens Hospital name revised. Locations of MCR SCBAs enhanced. Electric dosimeters at support hospitals referenced to replace pocket chambers. Ten TLDs (emergency use only) added to TSC inventory.
CN-1	8/15/95	11	Revised Appendix D to reflect CECC EPIP-9 revision.
8	2/29/96	3, 10, 18, 21	Minor (non-intent) changes made to the procedure. Fire Services (FPS) numbers revised to reflect current PMs. Additions to OSC inventory made. NRC plan removed from the TSC at their direction.

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# EMERGENCY

EPIP-12

EQUIPMENT

# AND SUPPLIES

Revision 15 Page 3 of 22

### **REVISION DESCRIPTION:**

Revisio n Number	Effective Date	Pages Affected	Description of Revision	
9	10/10/96	3, 5, 7, 10, 12, 16, 17, 18, 19, 20, 21, 23	The following non-intent revisions were made: App. H deleted and included in section 2.2 of this procedure, section 3.0 Records, added to the procedure, cellular phone(s) were added to TSC and OSC inventories, FPS-510 SCBA title was revised, sign offs were added to App. F, EP Manager address revised .	
CN-1	2/10/98	3, 10, 16, 18, 19, 20, 21	App. F- added satellite phone to TSC inventory, added ref. PAI-4.01, App.G-removed Spectralink phones in OSC and added Unidens, other editorials as needed.	
10	6/30/98	All	Non-intent Changes. Incorporated Change Notice 1. Added references to the TSC and OSC.	
11	09/16/98	All	The following non-intent changes were made: combined EPIP-12 and 14 RADCON inventory list's items to Appendix A of this procedure; revised RCI-109 to RCDP-8; clarified the use of EP equipment identified in Appendix A; identified DCRM/EP responsibilities to maintain latest revision's of procedures in the emergency facilities. Removed MSPL due to procedure cancellation.	
12	2/28/99	All	Non-intent change. Revised ERFDS to ICS.	
13	10/22/99	All	The following intent change was made: The medical supplies stored at the two support hospitals were reduced for the following reasons 1) patient handling processes were improved to reduce unneeded materials; 2) the hospitals requested the unnecessary supplies be removed to enhance storage space in the emergency cabinets; 3) the hospitals have sufficient supplies available due to blood born pathogen prevention programs to provide additional supplies as needed.	
			The following non-intent changes were made: Enhanced titles on two OSC toolboxes and cell phones in the TSC/OSC can be utilized by EP personnel while on duty. ESIs and PAI-13.01 PCP were removed from the TSC inventory as no longer needed for REP response. Added SAMGs to TSC/OSC inventory.	
14	6/14/00	All	Non Intent changes. Revised reference to REX to HIS-20. Revised monthly to calendar monthly to match wording in the REP. Fire Operations inspection monthly/quarterly cycle added for clarification. App. A, five (5) calculators moved to OSC from lab for security purposes. App. E, numbers added to hospital set for clarification. App. F, three (3) titles revised on referenced documents and added referenced to the inventory. App. G, titles of two references revised. New KI packets identified. This resolves problems identified in WBN PER, 006394.	

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EMERGENCY

WBN

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### EQUIPMENT

### AND SUPPLIES

**Revision 15** 

EPIP-12

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### **REVISION DESCRIPTION:**

Revisio n Number	Effective Date	Pages Affected	Description of Revision
15	01/24/01	All Pg. 5,17,18,20	Plan effectiveness determination revisions indicate the following revisions do not reduce the level of effectiveness of the procedures or REP: Revised communications/equipment inspection(s) into calendar monthly and quarterly requirements to support REP activities and standardize these tests across TVAN. This revision also brings these tests in line with requirements in NUREG 0654 (Section 2.2). Removed INPO Resource Manual from TSC. It is online and no longer issued in hard copy (App. F). Revised office and dry board supplies descriptions to standardize across TVAN (App. F & G). Revised fire protection PM retention information to provide the WID number for easier tracking on EMPAC (App. B). Non-intent change.

#### 1.0 PURPOSE

This Emergency Plan Implementing Procedure (EPIP) provides instructions for required periodic inspections/inventories and maintenance of emergency equipment and supplies.

### 2.0 **RESPONSIBILITIES**<sup>3</sup>

- 2.1.1 Responsible organizations shall establish programs/procedures to ensure the inventories for which they are responsible are scheduled and conducted at specified frequencies.
- 2.1.2 Organizations performing inventory and/or inspection shall ensure the following upon completion:
  - A. Seals or break-away locking devices are in place on cabinets which are not routinely used to provide a means of determining if a cabinet has been opened.
  - B. Signatures of persons performing inventory and/or inspection are obtained.
  - C. Deficiencies noted in the inventory are corrected.
  - D. Completed inventory lists are submitted to the Emergency Preparedness (EP) Manager.
- 2.1.3 Radiological Control (RADCON) shall be responsible for inventory or inspection of equipment listed in Appendices A and D.
- **NOTE:** Radiological equipment identified in Appendix A is considered available for use and not dedicated equipment. This equipment can also be utilized for routine plant operations.
- 2.1.4 Medical Services is responsible for providing supplies and shall assist Fire Protection (FP) in the inventory or inspection of equipment listed in Appendix B.
- 2.1.5 Fire Protection shall be responsible for the inventory or inspection of equipment and supplies listed in Appendices B and C.
- 2.1.6 EP shall be responsible for inventory or inspection of equipment and supplies listed in Appendices E, F and G.

WBN	EMERGENCY	EPIP-12
	EQUIPMENT	<b>Revision 15</b>
	AND SUPPLIES	Page 6 of 22

### 2.0 **RESPONSIBILITIES** (continued)

2.1.7 The WBN EP Manager shall review completed inventory lists (Appendices), investigate deficiencies, provide signature (if required) and maintain file copies.

### 2.2 Inventory/Inspection Frequency

- 2.2.1 Emergency Preparedness shall ensure that the contents of emergency equipment and supply cabinets are inventoried, inspected, and checked for operability and/or material condition each calendar quarter unless otherwise specified. After drills, exercises, or real emergencies, equipment and supplies will be replenished as soon as possible by WBN Emergency Preparedness.<sup>2</sup>
- 2.2.2 Portable radiation monitoring instruments shall be inventoried and calibrated routinely in accordance with RCDP-8. Instruments should be replaced if they require service/calibration prior to the date of the next inventory.<sup>2</sup> These instruments are inventoried on a calendar monthly basis.
- 2.2.3 Self-Contained Breathing Apparatus (SCBA) units shall be inventoried monthly in accordance with applicable plant procedures and more often as needed.<sup>2</sup>
- 2.2.4 Medical/Emergency supplies shall be inventoried monthly/quarterly with applicable plant procedures or more if needed.
- **NOTE:** Fire Operations monthly inventories follow a 28 day cycle and Fire Operations quarterly inventories follow a 12 week cycle.
- 2.2.5 Emergency facilities communications and equipment inspections will be conducted on a calendar monthly and calendar quarterly basis by WBN Emergency Preparedness using Preventive Maintenance Instruction, WBN 0-TEL-250-0001, File # 01 and WBN 0-TEL-250-0002, File #02.<sup>4</sup>

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#### RESPONSIBILITIES FOR EMERGENCY EQUIPMENT AND SUPPLIES INVENTORY AND MAINTENANCE SUMMARY

APPENDICES A, B, C, D, E, F, & G		FREQUENCY	RESPONSIBLE
<b>A.</b> .	Radiological Control Lab	Monthly	Radiological Control
В.	Medical/Emergency Supplies	Monthly/Quarterly F	ire Protection/Medical
C.	Self-Contained Respiratory Equipment	Monthly	Fire Protection
D.	Emergency Van	Quarterly	Radiological Control
E.	Hospital Emergency Room Cabinet	Quarterly	EP Program Manager
F.	Technical Support Center Cabinets References & Supplies	Quarterly	EP Program Manager
G.	Operations Support Center Cabinets References & Supplies	Quarterly	EP Program Manager

### 2.3 Inventory/Inspection Instructions<sup>3</sup>

- 2.3.1 Emergency response facility cabinets shall be inventoried against the list of required items (see Appendices).
- 2.3.2 Special checks of certain material(s) in the cabinets shall be performed as follows:
  - A. Copies of procedures maintained at the emergency response facilities (see Appendices) shall be checked/maintained by DCRM to verify latest revisions.
  - B. TSC and OSC position activity books are maintained/verified by EP.
  - C. SCBA units and spare bottles shall be verified ready for use.
  - D. Protective clothing and heat or moisture-sensitive items shall be checked for deterioration.
  - E. Flashlights shall be checked for power/operability.
  - F. Potassium lodide (KI) in the OSC medical supply cabinet shall be checked for expiration date as indicated on Appendix G. Stock should be replaced if it expires prior to next projected inventory.

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- 2.3.2 Continued
  - G. As necessary, replace batteries with fresh batteries from Power Stores. (Do not discard batteries. Return them to the Toolroom.)
- 2.3.3 Emergency response facility cabinet inventory lists (Appendices) shall be completed as follows:
  - A. If items are present, in sufficient quantities, and in good working condition, check YES column.
  - B. If a deficiency is noted, check the NO column. Make appropriate corrections and describe the corrective action in the REMARKS column.
  - C. Deficiencies should be corrected immediately. If circumstances do not allow immediate correction, the EP Manager shall be notified. When deficiencies are corrected, the list (Appendix) is initialed and dated.
  - D. Forward completed signature and review list (Appendix) to the EP Manager for confirmation and records management. Original documentation of inventories of medical supplies in the fire emergency equipment cage and ambulance and SCBA equipment will be retained by Fire Protection or Document Control.
  - E. Sealed cabinets or kits do not have to be inventoried unless they contain items which require periodic replacement or pressure checks (for example, batteries and SCBA bottle pressure) or calibration.

### 3.0 Records

- 3.1 QA Records None
- 3.2 Non-QA-records

The inventory(s)/inspection(s) in this instruction are Non-QA documents and will be retained by the WBN Emergency Planning Manager for at least two years.

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#### 4.0 REFERENCES

4.1 Interfacing Documents

RCDP-8, Radiological Control Departmental Procedure: "Radiological Instrumentation and Equipment Controls"

NP Radiological Emergency Plan (REP)

ANSI Standard N18.7-1976

WBN FSAR Chapter Six

4.2 Other Documents

NUREG 0654, Revision 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

Preventive Maintenance Instruction (PMI) 0-FPS-510-SCBA, Cleaning/Sanitizing, Maintenance, Inspection, Storage and Inventory of Positive Pressure MSA, SCBAs.<sup>2</sup>

FPS-510-AMB, FPS-777 - Fire Equip, FPS-510-005 Stretcher, FPS-510-0010 Fire Truck

#### 5.0 APPENDICES

Appendix A, RADCON Emergency Equipment

Appendix B, Medical Emergency Supplies

Appendix C, Emergency Use Pressure Demand Self-Contained Respiratory Equipment

Appendix D, Radiological Monitoring Van Emergency Equipment

Appendix E, Rhea County Medical Center and Athens Regional Medical Center Emergency Cabinet Inventory

Appendix F, Technical Support Center Emergency Supplies

Appendix G, Operations Support Center Emergency Supplies

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# Appendix A (Page 1 of 2)

### RESPONSIBILITY - RADCON RADCON EMERGENCY EQUIPMENT

Dale:				ao Building, El 712
Location:	Radiological Control Laboratory and supp	oort are	eas - Servi	
QUANTIT	YDESCRIPTION YES NO Alpha Survey Meter	<u>REN</u>	<u>IARKS</u>	
	(500,000 cpm)			
1	Neutron dose rate survey meter (0.025 eV - 10 MeV)			
2	(5,000 mrem)		_	
2	(1,000 rem/hr. with 13-foot extendable probe)			
e	ION Chamber Survey Meter			
0	(50 rem/hr.)			
1	ION Chamber Survey Meter (20,000 rem/hr.)		_	
5	High Volume Air Sampler (and support equipment)			
10	Frisker Type Survey Meters (0-50,000 cpm)		_	
5	Low-Volume Air Sampler (and support equipment)	_		
1	Portable Mini Scaler			
5	Calculators (hand-held) (in OSC cabine	et)		
5	Marinelli beakers	_		<u> </u>
1	Shielded detector pig		—	
10	Silver zeolite cartridges			

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### Appendix A (Page 2 of 2)

# RESPONSIBILITY - RADCON RADCON EMERGENCY EQUIPMENT (continued)

Date \_\_\_\_

### **Decontamination Supplies:**

Location: Radiological Control Laboratory - Service Building, El 713'

QUANTITY	DESCRIPTION	<u>YES</u>	<u>NO</u>	REMARKS
2 boxes	Surgeon Gloves			
1.60 cc	Syringe			
2 boxes	Gauze Pads			
1 box	Cotton Q-Tips			
2 bottles	Saline Solution			
5	Surgical Brushes			
1 bottle	Shampoo			
5 bars	Soap			
1 bottle	Soap (liquid abrasive)			
1 can	Mechanic's Hand Cleaner			•
1 can	Shaving Cream			
5	Razors			
3 bags	Commeal			
1 box	Paper Bath Towels			
25	Towels			
1 nair	Scissors			
1 pail	Catch Containment w/drain tubing			
	Poly Bottle			
5 gallon	Petri Dishes			
1	Radcon Spill Kit			
1	Frisker w/wound probe			
1 2 rolls	Duct Tape			
2 TONS	Eacial Tissue			
10	Paper Coveralis			
10				
	al Inc			
Inspection performe	a by.		<b>&gt;</b> -+-	
RADCO	ON Representative	L	Jate	
Reviewed by:				
FP Mar	nager	Ľ	Date _	
	lage:			·····

Send completed Appendix A to WBN EP Manager, WTC 1P, WBN.

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### Appendix B (Page 1 of 1)

### **RESPONSIBILITY - MEDICAL SERVICES/FIRE PROTECTION**

### MEDICAL EMERGENCY SUPPLIES<sup>1</sup>

A sealed trauma kit and other medical supplies for exclusive use by Π 1. the Medical Emergency Response Team (MERT) shall be located in both the fire emergency equipment cage and ambulance maintained by Fire Protection (FP). Medical Services (MS) identifies and provides the minimum necessary materials to be kept in the kits. FP performs a inventory/inspection of the kits quarterly or after each use of the kit with assistance from MS. FP provides documentation of those inspections. FP will restock kits as necessary. (See PM-0-FPS-510-AMB and FPS-777 Fire Equip., Fire Truck FPS-510-0010.) Stretchers are placed at strategic locations throughout the plant for 2. use by MERT for transportation of seriously ill or injured persons. FP will perform and document quarterly inspections of stretcher locations and their associated equipment. (See PM-0-FPS-510-005, Stretcher). Equipment located in the fire emergency cage and ambulance shall 3. be available for use by MERT. Work Implementing Document (WID) number for the following 4. completed packages shall be sent to WBN EP Manager, WTC 1P-WBN: PM-O-FPS-510-AMB, PM-O-FPS-510-005-Stretcher Cabinets and FPS-777-Fire Equipment.. WID numbers for completed PM's received and filed. 5.

Signature

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### Appendix C (Page 1 of 1)

# **RESPONSIBILITY - FIRE PROTECTION**

# EMERGENCY USE PRESSURE DEMAND SELF-CONTAINED RESPIRATORY EQUIPMENT

Self-contained Breathing Apparatus (SCBA) equipment used for radiological emergency conditions are stored at the following locations:<sup>2</sup>

	LOCATION	REQUIRED <u>SCBA KITS</u>	SPARE BOTTLES
1.	Main Control Room (located in El. 755 Relay Room)	10	0
2.	Auxiliary Building, El 757', Fire Cage	6	6
3.	Service Building, El 729', Fire Cage	6	6
4.	Service Building, El 713', Racks	20	20
5.	Fire Truck and other Response Vehicles (fire protection)	5	4

- 6. SCBA equipment is inspected and inventoried in accordance with 0-FPS-510-SCBA, Cleaning/Sanitizing, Maintenance, Inspection, Storage and Inventory of Positive Pressure MSA, SCBAs.
- 7. Send completed copy of Required Emergency SCBA Inventory Sheet to WBN EP Manager. One copy will be maintained in WBN EP files.
- 8. Required Emergency SCBA Inventory Sheet received and filed.

Signature

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### **RESPONSIBILITY - RADCON**

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### RAD MONITORING VAN EMERGENCY EQUIPMENT

- 1. See CECC-EPIP-9, Attachment J.
- 2. A copy of Attachment J (completed) will be forwarded to the WBN EP Manager, WTC 1P-WBN, for review and retention in the WBN EP files.
- 3. CECC Attachment J reviewed and filed.

Signature

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#### Appendix E RESPONSIBILITY - EP RHEA MEDICAL CENTER AND ATHENS REGIONAL MEDICAL CENTER EMERGENCY CABINET INVENTORY<sup>7</sup>

SAT	Quantity	Description	Kemarks
Prote	ctive Clothing		
<b></b>	10 pair	Shoe covers	
l	10	Dress out packages (coveralls, booties, gloves)	
<u> </u>	3	Surgical gowns	
	2 boxes	Surgical gloves	
L	4 rolls	Surgical tape for dressout	
Facili	ty Preparation		
	1 set	Floor coverings (see hospital specific booklet)	
<b></b>	20 ft	3 ft approx. wide paper	
	2 rolls	2 inch approx. duct tape	
<b></b>	2 roll	Radiation Warning symbol tape (2")	
	2	Step off pads	
	1 set	Radiological barrier posting signs (5 in set)	
	1 set	Radiological barrier rope or ribbon	
<u> </u>	1 set	Traffic cones (5 in set)	
<b></b>	10	Large rad waste plastic bags (trash can size)	
	10	Medium rad waste plastic bags	
	2 copies	Hospital specific booklet	
	1	Radioactive material label tape	
Deco	ntamination Su	Ipplies	<u> </u>
	1	Decontamination table, backboard and bottles (min. total	
	<u> </u>	capacity of 10 gallons)	
	1	Flexible funnel with drain hose	
	1	Decontamination media /soap product	
	1	NCRP # 65 Reference Handbook	
	12	Cotton swabs	
	20	Zip lock bags for sample collection	
	10	Labels for sample bags	
	2	Scissors	
	1	Wall poster with decontamination steps	
Healt	th Physics Sup	plies	(Serial # and cal due)
	1	Bicron ISM (RSO-5 or 50)	
	2	Bicron Surveyor 50	
	1	Wound probe with cable	
	10	TLDs	
	10	Electronic dosimeters and tray	
	200	Smears	
	12	Radioactive Material tags	
	1	Masslin mop and 20 cloths	l
	· · · · ·	Date:	

Inspected by:

\* A copy of completed Appendix E will be retained in the WBN EP files.

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### Appendix F (Page 1 of 4) RESPONSIBILITY - EP

### EMERGENCY SUPPLIES TECHNICAL SUPPORT CENTER (TSC)<sup>2</sup>

(TSC Reference Areas) (Checkoft)					
DOCUMENTS	<u>YES</u>	<u>NO</u>	REMARKS		
Plant Drawings (verify existence only) DCRM Controls Listing					
1 ASME Steam tables					
1 FRED Users Manual					
2 Meteorological Data Display Programs User's Manual					
1 Meteorological Data Print Program User's Manual					
1 WBN Environmental Data Station Manual					
3 Emergency Paging System User's Manual (1 in MCR)		<u> </u>			
3 NP REP (Radiological Emergency Plan)					
2 REND (Radiological Emergency Notification Directory)	<u> </u>		<u> </u>		
2 CECC EPIPs					
4 WBN EPIPs					
1 set Position Activity Books (latest Procedure Rev.)					
1 set SOIs (System Operating Instructions)					
3 copies Unit 1 Technical Specifications			<u></u>		
1 copy Function Restoration Instructions	<u> </u>				
2 copy Emergency Instructions					
1 copy Emergency Contingency Actions 1 Safety and Health Manual					

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**RESPONSIBILITY - EP** 

#### EMERGENCY SUPPLIES TECHNICAL SUPPORT CENTER (TSC)

	(TSC Reference Ar	eas)	
DOCUMENTS	YES	<u>NO</u>	REMARKS
10 WBN Phone Directories (latest edition)	- <u></u>		
10 TVA Phone Directories (latest edition)		<u> </u>	
1 WBN FSAR (Updated)			
1 State of Tennessee Multijurisdictional RE Response Plan	P		
1 WBN ODCM			
2 set AOIs (Abnormal Operating Instruction	s)		
1 set TIs (Technical Instructions) (Index/EPP Selected)			
1 set GOIs (General Operating Instructions)	)		<u></u>
1 Master Fuse List, Vol. 1 & 2			
1 (set) System Description Manual			
3 ICS System User's Guide	·		
1 (set) Annunciator Response Instructions			
	<u>, Anno 1997 - Anno 1997 - Anno 1997 - A</u> nno 1997 - Anno 1997 - An		

Retain completed Appendix F in WBN EP file.

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### **WBN**

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#### Appendix F (Page 3 of 4)

#### **RESPONSIBILITY - EP**

### EMERGENCY SUPPLIES TECHNICAL SUPPORT CENTER (TSC)

DOCUMENTS (continued)	YES	<u>NO</u>	REMARKS
RCIs (Radiological Control Instructions) 2 books			
1 ECIs Environmental Control Instructions (EPP Selected)			
1 Chemistry Manual (EPP Selected)			
1 Periodic Instructions (EPP Selected)			
7 SAMGs			
3 SAMG Set Point and Comp Aid Basis			
1 copy Chattanooga Phone Directory (current edition)			
1 copy Knoxville Phone Directory (current edition)			
Communications Equipment & Calculators			
3 Communications Head Sets			
1 Telephone (Cordless) (ac power)		. <u> </u>	
6 TI-55 Calculators (or equivalent)	, <u> </u>		
1 Spectralink Phone System		. <u></u>	
1 Video Recorder			
10 Emergency TLDs			Expiration Date:
1Satellite Phone and Accessories	<u></u>		

Retain completed Appendix F in WBN EP file.

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RESPONSIBILITY - EP -

#### EMERGENCY SUPPLIES TECHNICAL SUPPORT CENTER (TSC)

(TSC Reference Areas)						
	(Che	ckoff)				
SUPPLIES	<u>YES</u>	<u>NO</u>	REMARKS			
Assorted Dryboard Supplies						
2 rolls Thermal Paper		<u> </u>				
Assorted Desk Top Supplies		<u> </u>				
Assorted Office Supplies						
Keys to TSC in Main Control Room						
Cellular Telephone <sup>6</sup> (available for facility/EP use)		<u></u>				
Inspection Performed By:		_ D	)ate			
Reviewed by: WBN EP Manager		_ D	)ate			

Retain completed Appendix F in WBN EP file.

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#### Appendix G (Page 1 of 2) RESPONSIBILITY - EP EMERGENCY SUPPLIES OPERATIONS SUPPORT CENTER

OSC Areas (CHECKOFF)						
DOCUMENTS	YES NO	REMARKS				
1 set Position Activity Books (latest revision)						
Plant Drawings (verify existence only DCRM controls listing)						
1 WBN EPIPs		·····				
5 TVA Telephone Book (latest edition)						
1 Nuclear Power Safety and Health Manual (NPSHM)		·				
1 set Maintenance Instructions (MIs) (selected, see EPP)						
1 set Emergency Contingency Actions (ECAs) 1 set Abnormal Operating Instructions (AOIs)						
1 set System Operating Instructions (SOIs)		· · · · · · · · · · · · · · · · · · ·				
2 ICS System User's Guide						
1 Functional Restorations Instructions Master Fuse List Vol. 1 & 2	<u> </u>					
BP-364, Control of Portable Two-way Radios		· · · · · · · · · · · · · · · · · · ·				
CHEM 13.0 & 13.15 1 SAMG						
Communications Equipment						
3 Auto dial telephones						
2 ICS Terminals		······				
3 Computer Terminals						
4 Portable Phones						
1 HIS-20 Terminal 1 Cellular Telephone <sup>6</sup>						
(available for facility/EP use)						

Retain completed Appendix G in WBN EP file.

Inspection Performed By

# EMERGENCY

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**RESPONSIBILITY - EP** 

#### EMERGENCY SUPPLIES OPERATIONS SUPPORT CENTER

Supplies       YES       NO       REMARKS         Keys to OSC in Main Control Room		OSC Areas			
Subplies       Ist it       Ist it         Keys to OSC in Main Control Room	Supplier	(Uneckom)	YES	NO	REMARKS
Keys to OSC in Main Control Room	Supplies		120	<u>ne</u>	<u></u>
2 Éasels	Keys to OSC in Main Control Room				
Assorted desktop supplies for all positions 6 Status Boards Assorted Dryboard Supplies Assorted Office Supplies 1 Book of Current OSC Briefing/Debriefing Forms 5 Calculators	2 Easels				
6 Status Boards Assorted Dryboard Supplies Assorted Dryboard Supplies 1 Book of Current OSC Briefing/Debriefing Forms 5 Calculators Tool Room  EQUIPMENT OSC (Tool Kits) Boilermakers Limitorque Mechanical/Machinist Instrument Electrical Steam Fitters Safety equipment Medical Supply Cabinet First Aid Kit 2,000 tablets of KI KI Issuance Instructions Inserts OSC Staging Area(s) Tables and chairs Rex Terminal Anti C clothing/supplies <sup>5</sup> Speaker System Overnight Cots & Sleeping Bags Inspection Performed By: Date: Reviewed By: Date:	Assorted desktop supplies for all positions			—	
Assorted Dryboard Supplies Assorted Office Supplies Assorted Office Supplies I Book of Current OSC Briefing/Debriefing Forms 5 Calculators	6 Status Boards				
Assored Office Supplies	Assorted Dryboard Supplies			<del></del>	
T Book of Current OSC Briefing/Debrening Points	Assorted Office Supplies				
Social culators	5 Coloulators	15			
Iool Room         EQUIPMENT         OSC (Tool Kits)         Boilermakers	5 Calculators	Tool Dears			
EQUIPMENT         OSC (Tool Kits)         Boilermakers		<u>1001 Room</u>			
CSC (Tool Kits)         Boilermakers	FOLURMENT				
Boilemakers	OSC (Tool Kits)				
Limitorque Mechanical/Machinist Instrument Electrical Steam Fitters Safety equipment Medical Supply Cabinet First Aid Kit 2,000 tablets of KI KI Issuance Instructions Inserts OSC Staging Area(s) Tables and chairs Rex Terminal Anti C clothing/supplies <sup>5</sup> Speaker System Overnight Cots & Sleeping Bags Inspection Performed By: Date: Reviewed By: Date:	Boilermakers				······································
Mechanical/Machinist	Limitorque				
Instrument	Mechanical/Machinist		<u> </u>		
Electrical	Instrument				
Steam Fitters	Electrical				
Safety equipment	Steam Fitters				
Medical Supply Cabinet         First Aid Kit	Safety equipment				
First Ald Kit	Medical Supply Cabinet				
Z,000 tablets of Ki	FIRST AID KIT				
OSC Staging Area(s) Tables and chairs Rex Terminal Anti C clothing/supplies <sup>5</sup> Speaker System Overnight Cots & Sleeping Bags Inspection Performed By: Date: Reviewed By: Date:	Z,000 lablets of Ki Ki issuance instructions inserts				
Tables and chairs	OSC Staging Area(s)				
Rex Terminal	Tables and chairs				
Anti C clothing/supplies <sup>5</sup>	Rex Terminal				
Speaker System	Anti C clothing/supplies <sup>5</sup>				
Overnight Cots & Sleeping Bags            Inspection Performed By:            Reviewed By:    Date:	Speaker System				
Inspection Performed By:         Date:           Reviewed By:	Overnight Cots & Sleeping Bags				······
Inspection Performed By:      Reviewed By:    Date:		-	ato.		
Reviewed By: Date:	Inspection Performed By:	L	ale		
	Paviewed By:	D	ate:		
I EP Manager	EP Manager		· · · · ·		

Retain completed Appendix G in WBN EP file.

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		AND SUPP	LIES	Page 22 of 22			
	SOURCE NOTES Page 1 of 1						
1	MC-8404270050 NCO-920042683	15, <b>MSC-02387</b> ,	Onsite Ambula Section Apper EPIP-10.	ance complete and in ser ndix B (page 1 of 1). Also	vice. o see		
2	FSR-06-293 FSF NCO-920110809 FSR-06-294 NCO-920057401	R-06-294.	The MCRHS a occupation by emergency or equipment are Inventory/Insp Section 4.2. ( Emergency U and Appendix Emergency S 3.6 Long Terr	area is designed for long-term personnel required during perations. Supplies and provided Section 2.2 pection Frequency, 2.2.3, also see Other documents Appendix C se Pressure Demand S.C.B.A.s F, Technical Support Center upplies. Also see EPIP-6 Section n Operations 3.6.3.			
3	ANSI Standard N Subsection 5.3.9	118.7-1976 .3: 01 POI	Contents of E contain the fo	PIPs that support the RE llowing elements.	P will		
4	MSC-00590, LIC NCO 920030105	COND 21 Resp	In reference to communicatio Emergency P an emergency	o Licensing Condition 21 on system required by the lan are tested once per y y drill.	, Facility ear during		
5	HEO 219		Operator prot OSC.	ective clothing maintaine	d in the		
6	PERWB960582		Added cellula inventories.	ar phone to OSC and TS(	2		
7	NCRP #9		"Managemen Contaminated	t of Persons Accidentally d with Radionuclides"	,		

.

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FILING INSTRUCTIONS

DOCUMENT NUMBER <u>EPIP-14</u> REMOVE REVISION 13 INSERT REVISION 14 Comments :

# TENNESSEE VALLEY AUTHORITY

# WATTS BAR NUCLEAR PLANT

# EMERGENCY PLAN IMPLEMENTING PROCEDURES

### EPIP-14

# RADIOLOGICAL CONTROL RESPONSE

Revision 14

Unit 0

### QUALITY RELATED

PREPARED BY: <u>Benjamin F. McNew, Jr.</u> (Type Name)

SPONSORING ORGANIZATION: <u>Emergency Planning</u>

APPROVED BY: Frank L. Pavlechko

EFFECTIVE DATE: 01/24/2001

LEVEL OF USE: REFERENCE

# RADIOLOGICAL

# CONTROL

### RESPONSE

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### **REVISION DESCRIPTION:**

Revision Number	Implementation Date	Description of Revision		
0	05/02/90	New WBN EPIP. Supersedes IP-14.		
1	08/27/90	Include note to address Kr-85 Hazards from Decayed Fuel Per NRC IE 90- 08. Correct spelling in header. Update reference titles.		
2	05/20/91	Add additional respiratory protection equipment to Section 2.2. Clarify responsibilities and duties of RADCON Lab personnel. Add new Attachment 6. Add Source Note Page.		
3	02/10/93	Added Responsibilities section. Changed response time for <u>7</u> RADCON Techs to 60 minutes. Removed responsibilities of RADCON Manager. Refer to WBN EPIP-6. Removed section on responsibilities and duties of RADCON Personnel Assigned to the OSC. Refer to WBN EPIP-7. Removed reference to the Lead HP Tech in 2.6.1.		
4	8/16/93	Editorial (non-intent) and format changes. Additional information provided on the alternate lab (RADCON) location. Source notes added to the procedure. In-plant Rad monitors revised. Appendices realigned for easy use.		
5	1/1/94	Changes made to the procedure to incorporate new 10 CFR 20 and EPA 400 Guidance.		
6	4/11/94	Added ARW statement in Section 3.2.11.		
7	2/23/95	Editorial (non-intent) and format changes.		
8	4/21/95	Rad monitor list enhanced in Appendix C. Form revised in Appendix F to allow for signatures. Editorial non-intent changes made.		
Revision Number	Implementation Date	Pages     Description of Revision       Affected	Description of Revision	
9	2/15/97	<ul> <li>4,5,6,7,9,</li> <li>11,12,13,</li> <li>15, 18, 22</li> <li>Editorial and non-intent changes made (i.e. grammatical /typographical).</li> <li>Instruction information in the procedure reformatted in some sections to ma more user friendly. Hospital name revised. Location of site KI locker identi Revised Occupational Dose From Inhalation of Iodine 131 chart to emphase the more limiting thyroid vs. whole body. New location of KI inventory paperwork in EPIP-12 identified. Respiratory protection guidelines revised that they correspond with guidance provided in RCI-120. Duplicate/redund instructions were combined. Reference to pocket chamber dosimetry replace with the enhanced electronic dosimeters. TRN 30 reference removed from the procedure due to it no longer being applicable. RADCON callout information enhanced and printout location (TSC) of the ERO pager activation list addee the procedure.</li> </ul>	<ul> <li>Editorial and non-intent changes made (i.e. grammatical /typographical).</li> <li>Instruction information in the procedure reformatted in some sections to make it more user friendly. Hospital name revised. Location of site KI locker identified. Revised Occupational Dose From Inhalation of Iodine 131 chart to emphasize the more limiting thyroid vs. whole body. New location of KI inventory paperwork in EPIP-12 identified. Respiratory protection guidelines revised so that they correspond with guidance provided in RCI-120. Duplicate/redundant instructions were combined. Reference to pocket chamber dosimetry replaced with the enhanced electronic dosimeters. TRN 30 reference removed from the procedure due to it no longer being applicable. RADCON callout information enhanced and printout location (TSC) of the ERO pager activation list added to the procedure.</li> </ul>	

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### **REVISION LOG**

Revision Number	Implementation Date	Pages Affected	Description of Revision
CN-1	2/18/98	3, 6, 7, 14, 15, 19	Made instructions in 3.7.5 more descript with current Radcon procedures and instruments, renumbered steps 3.7.5 through <u>3.</u> 7.9, referenced EPIP-10 in 3.8.4, other editorials
10	6/30/98	All	Non-intent Changes. Incorporated Change Notice 1. Typographical corrections made. Added concerning radiation injuries to 3.8.3. Added ANSI Qualified per source note 7 in Appendix A. Added RCI-120 reference.
11	9/16/98	All	The following non-intent changes were made: revised KI instructions on Appendix E; consolidated inventory list for RADCON equipment in EPIP-12, "Emergency Equipment and Supplies" to eliminate repetitive instructions; typographical corrections made.
12	2/28/99	All	Non-intent change. Revised ERFDS to ICS and referenced alternate OSC location.
13	6/14/00	All	Non Intent change. Clarified number of Radcon personnel to be called in, in addition to onshift staff. Included use of RWP 911 and 912 to cover entry teams in drills and emergencies. Added a step in the Alert actions to notify SQN, Radcon to dispatch their monitoring van (as needed) to support WBN. Added the OSC to the emergency paging printout locations for easier access by the Radcon SS. Replaced KI bottle information to reflect new packaging. Revised medical center title for Rhea Hospital. Revised reference of ANSI qualified "Techs" to "personnel" to clarify acceptable staffing. This revision resolves problems identified in WBN PER006394.
14	01/24/01	All Pg. 5,8,12,15, 19,21	Plan effectiveness determination reviews indicated the following revisions do not reduce level of effectiveness of the procedure or REP: Clarified use of RWP 911 & 912 to match wording in RCDP-3 Section 3.6.7 Typographical addition (') made to elevation 713'. Deleted reference to RE-90-280 & RE-290-293 per direction of DCN 50482-A & SA WBP LEE-00-052. Non-intent change.

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#### 1.0 PURPOSE

This Procedure describes the actions and responsibilities of the Watts Bar Radiological Control (RADCON) Section in the event of a radiological emergency.

### 2.0 **RESPONSIBILITIES**<sup>4</sup>

Emergencies classified by the Site Emergency Director will require that the WBN Radiological Control Section perform functions and actions defined in this procedure.

#### 3.0 INSTRUCTIONS

- 3.1 General Instructions<sup>1,4,6</sup>
  - 3.1.1 The response to radiological emergencies by RADCON personnel will depend upon the type and magnitude of the existing emergency condition. This can range from a minimal response requiring one or two people to a total manpower mobilization. In addition, it should be noted radiological problems may not be associated with a given emergency [as defined in the Radiological Emergency Plan (REP)]. Natural phenomena, security threats, or other events not involving radiological problems could be the cause for the emergency status.
  - 3.1.2 **IF** an ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY is classified, RADCON is required to assemble a specific number of personnel as described below.
    - A. During normal and off-shifts, an ALERT will be announced over the public address system and the emergency pagers will be activated. (In the event of a SITE AREA EMERGENCY or GENERAL EMERGENCY, the offsite sirens will be activated by the state.)
    - B. The RADCON Lab will be contacted by the SM. The Radiological Control Shift Supervisor (RCSS) will determine the number of RADCON personnel currently onsite and will ensure at least a total of seven (7) additional are available onsite within approximately 60 minutes.

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3.2 Precautions and Limitations <sup>2,4</sup>

During a radiological emergency established radiological control procedures will normally be utilized to cover most situations. Since the magnitude of the problem(s) may be more severe, it is imperative that all requirements for entry into affected plant areas be met. This section summarizes items that will need to be addressed prior to entry into the affected areas and during recovery operations.

- 3.2.1 Plant accidents involving core damage may produce excessive dose rates and airborne activity concentrations within plant areas. Radiological precautions must be followed under these conditions until available data indicates otherwise.
- 3.2.2 These precautions could include the following:
  - The use of respiratory equipment,
  - Issuance of KI,
  - Multiple layers of protective clothing,
  - The use of electronic dosimeters, multiple TLDs and extremity TLDs as appropriate.
  - The use of RWP (911) for drills and (912) for actual emergencies should be utilized to cover the entry team(s).
  - Personnel will be instructed to monitor their dosimetry frequently to prevent overexposure.
- 3.2.3 IF core damage is suspected or if for any other reason elevated airborne activity concentrations are present, then appropriate respiratory protection will be required. Initial entry will probably require the use of respiratory equipment, since iodines may be present in significant quantities.
- **CAUTION** IF spent fuel damage is involved, be aware of the potential for significant skin doses from Kr-85. After spent fuel has decayed greater than 190 days, Kr-85 is the predominant gaseous nuclide. Consequently, the dose to the skin could be approximately 150 times the whole body dose. [Reference 4.0]
  - 3.2.4 The following respiratory guidelines will be considered during emergency incidents:

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3.0 INSTRUCTIONS (continued)

# WBN EMERGENCY RESPIRATOR ISSUE GUIDELINES

NOTE: THESE GUIDELINES ARE RECOMMENDATIONS ONLY, SUBJECT TO THE JUDGEMENT OF RADCON AND EMERGENCY MANAGEMENT PERSONNEL. THESE GUIDELINES ARE APPLICABLE ONLY TO PROTECTION FROM AIRBORNE RADIOACTIVE MATERIAL AND DO NOT APPLY TO RESPIRATORS/SCBAs ISSUED FOR PROTECTION FROM INDUSTRIAL OR CHEMICAL HAZARDS OR ATMOSPHERES IMMEDIATELY HAZARDOUS TO LIFE OR HEALTH.

TASKS TO SAVE A LIFE: OR PREVENT SIGNIFICANT DAMAGE TO PLANT

<u>HIGH PRIORITY TASKS</u>: (priority 1 or 2)

**NOTE: IF INDIVIDUAL'S** 

200 DAC-HRS., DOSE

**<u>RESULTING FROM ALL</u>** INTAKES FOR THE YEAR

TO DATE MUST BE ASSESSED

IN DETERMINING THE TEDE.

TOTAL INTAKE FOR THE YEAR TO DATE EXCEEDS -Respirator/SCBA not required to enter airborne areas if the the following are true:

-Respirator/SCBA not required to enter airborne radioactivity

dose will not result in TEDE exceeding NRC dose limits or, if

approved by the SED, doses up to the TVA emergency dose limits (i.e., up to 25 rem/10 rem) (this can include uptakes > 1 ALI)

areas provided resulting internal dose plus external

-Individual's internal dose plus external dose will not result in TEDE exceeding NRC annual dose limit;

and

-Delays or hindrances caused by issuing or wearing respirators/SCBAs will jeopardize the success or timeliness of the task;

or

-Use of a respirator/SCBA will result in a higher TEDE to the responding individuals.

LOW or MID PRIORITY: TASKS

-Use WBN RCI-120, attachments 1 and 2, for respirator issue guidance.

**NOTE** Protective requirements may be revised at the discretion of the TSC RADCON Manager as sample data becomes available.

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- 3.2.5 Special precautions must be taken when obtaining samples. Smears may have significant dose rates (in the REM/hr range). High airborne activity could result in significant activity concentrations being collected onto the filter media. FOLLOW standard RADCON procedures, should samples be considered radiological hazards.
- 3.2.6 **ENSURE** all electronic dosimeters are properly processed for each worker. **MAKE** arrangements to have TLDs read, as soon as possible. **IF** possible, **RESTRICT** repetitive entries of workers. **SUBSTITUTE** other qualified personnel for team members, on reentry's, to distribute exposures. Employee's remaining allowable dose shall be verified by RADCON prior to entry into plant areas.
- 3.2.7 IF plant conditions are such that radiological conditions are changing rapidly, it may not be possible to use previous data in order to determine protective requirements. This factor must be considered prior to allowing survey teams into affected plant areas.
- 3.2.8 The **"Buddy System"** shall be utilized for initial entries into any area where radiological conditions are not known or any area where radiological conditions could be changing due to plant conditions. At least one person of the buddy system must be qualified in radiological controls procedures. Monitoring teams should maintain communication capabilities with the RADCON Lab.
- 3.2.9 Habitability surveys of OSC, TSC, and assembly areas shall be performed as necessary.
- 3.2.10 Advanced Radiation Worker (ARW) trained personnel will respond (upon request) to the Radiological Control Shift Supervisor during a radiological emergency and provide support and surveillance as needed during the initial phase.

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### **3.0 INSTRUCTIONS** (continued)

### 3.3 **Response Classification Guidelines**<sup>4</sup>

### 3.3.1 NOTIFICATION OF UNUSUAL EVENT

- A. No offsite radiological problems are postulated during a NOTIFICATION OF UNUSUAL EVENT.
- B. These events require a certain notification to be made to offsite agencies. These events will not have any major impact on RADCON.
- C. RADCON will follow standard practices and procedures during response work.

### 3.3.2 **ALERT**

- A. A limited radiological release is possible during an ALERT situation. Onsite emergency teams will be activated and offsite agencies contacted.
- B. IF the assembly alarm is activated, RADCON personnel shall secure work in a safe manner and report to the 713' RADCON Lab for assembly and accountability.
- C. RADCON Techs. will be dispatched to survey assembly and accountability areas as necessary.
- D. It should be noted that an ALERT situation may require the evacuation of a certain plant area and/or building. RADCON shall ensure these areas are properly posted and arrangements are made with Nuclear Site Security to restrict all unauthorized access to the affected area(s).
- E. RADCON personnel will assist in the development of all recovery plans as necessary. Recommendations will be made to keep exposures As Low As Reasonably Achievable (ALARA) and to approve recovery activities.
- F. An offsite survey team may be dispatched from SQN, if coverage is necessary. Site RCSS will contact SQN Radcon Lab as soon as possible for assistance. (Refer to CECC EPIP-9)

#### 3.3.3 SITE AREA EMERGENCY

- A. During a SITE AREA EMERGENCY, there may be releases to the environment requiring RADCON response.
- B. A SITE AREA EMERGENCY may require the evacuation of a plant building or buildings.
- C. Personnel will be notified to assemble for accountability. RADCON shall secure work in a safe manner and proceed to the 713' RADCON Lab.
- D. An accountability will be made in accordance with WBN EPIP-8. Information shall be gathered describing the emergency situation; RADCON representatives shall be sent to the assembly areas to determine if any workers were in the affected plant areas at the time of the event. These people shall be separated from other plant workers and personnel contamination surveys initiated for all personnel.
- E. As reports become available regarding the details of the emergency, RADCON personnel shall prepare all necessary equipment needed and ready a survey team(s) for entry into the affected area(s).
- F. Upon notification from the Technical Support Center (TSC), survey team(s) may be dispatched from the OSC to various areas of the plant. It should be noted that depending on the type of accident, initial survey(s) may not be performed until hours or days after an event. In this case, procedures may be developed describing the reentry steps to be followed.
- G. A site boundary survey may be required. The details of the survey shall be coordinated with the TSC. The emergency van should be utilized while performing these surveys.
- H. An offsite survey team may be dispatched from SQN, if coverage is necessary. Site RCSS will contact the SQN RADCON Lab as soon as possible for assistance. (REFER TO CECC EPIP-9.)

- I. Precautions may be required to prevent personnel overexposures. These exposures could result directly from radiation emitted from the plume and/or due to submersion in the plume. (**REFER TO** Section 3.6, Issuance of KI, of this Procedure.)
- J. **RECORD** all survey results. All findings shall be reported to the TSC or Central Emergency Control Center (CECC) (if activated). If results indicate offsite contamination, the survey areas may need to be extended. **OBTAIN** further instructions **and PERFORM** required surveillance(s).
- K. Additional manpower support and equipment may be obtained from other TVA nuclear facilities.

### 3.3.4 **GENERAL EMERGENCY**

- A. During a GENERAL EMERGENCY, there may be radiation releases to the environment requiring RADCON response. These releases may require the implementation of evacuation procedures.
- B. An extensive RADCON response will be required during a GENERAL EMERGENCY.
- C. The actions described under SITE AREA EMERGENCY will be applicable to a GENERAL EMERGENCY condition as well.
- D. During a GENERAL EMERGENCY, conditions in the RADCON Lab may be such that evacuation is warranted. If this situation develops, a RADCON Lab would need to be established within an area of low background radiation. Alternate locations (such as the various equipment rooms in the Control Building or portions of the WBN Training Center) will be considered (the RADCON Manager in the TSC is responsible for making this determination). The Site Emergency Director shall be informed when it becomes necessary to evacuate the RADCON Lab. The alternate lab would be equipped with necessary supplies and instrumentation needed to perform minimum radiological surveys and analyses required during an emergency (SEE Appendix B).<sup>5</sup>

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- E. If it is necessary to evacuate the RADCON lab, the personnel stationed in the lab will secure the equipment listed in Appendix A of EPIP-12. This equipment will be brought to the alternate lab by RADCON. This list is a minimum, and if time permits and manpower allows, efforts should be made to transport additional equipment and supplies to the alternate lab.
- F. All subsequent offsite activities will be coordinated with offsite support agency survey teams to make the best use of available manpower. **REPORT** all survey results as soon as possible to the TSC or CECC (if activated) so recommendations to the proper agencies can be made to initiate any required protective actions.

# 3.4 Duties of RADCON Personnel Assigned to the TSC<sup>4</sup>

- 3.4.1 The TSC is activated during an ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.
- 3.4.2 The RADCON Manager is the designated RADCON TSC Manager. Approved alternates rotate this Emergency Respond Organization (ERO) duty. Additional, suitably trained and qualified personnel are listed on the ERO call list. It should be noted that the duty RCSS may serve as the TSC representative during the initial stages of an emergency until relieved by a duly qualified individual
- 3.4.3 The responsibilities and duties of the TSC RADCON Manager are summarized in WBN EPIP-6.

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### 3.5 Duties of RADCON Personnel Assigned to the RADCON Lab.

- 3.5.1 The RADCON Shift Supervisor (RCSS) or qualified designee is responsible for managing the activities of the 713' Lab. Appendix A of this procedure can be used as a guide by the RCSS during REP activities.
- 3.5.2 Survey teams are dispatched from the OSC staging areas. The RCSS is responsible for ensuring survey teams are properly equipped and protected and are aware of any special precautions, plant conditions, or requirements, (e.g., RWP).
- 3.5.3 The RCSS will ensure all entries are properly coordinated and approved by the OSC.
- 3.5.4 The RCSS is responsible for ensuring adequate numbers of RADCON personnel are available to support emergency activities. When an Alert or higher emergency has been classified, ensure seven (7) additional RADCON personnel have responded to the emergency page (printout in OSC/TSC). For a summary of minimal assignments during emergency see Appendix G of this Procedure.
- 3.5.5 The RCSS is responsible for preparing and designating an onsite RADCON monitoring team. Team members will prepare the monitoring van in accordance with CECC-EPIP-9. For immediate offsite monitoring, the RCSS should request assistance from SQN.
- 3.5.6 The RCSS will dispatch survey teams to assembly areas, the OSC, and TSC to evaluate radiological conditions and monitor radiation levels as conditions dictate. These survey teams will be responsible for monitoring contamination levels (both on personnel and floor/equipment areas) and implementing corrective actions (e.g., decontamination or zoning) as necessary.
- 3.5.7 The RCSS will monitor the 713' Lab for habitability and will coordinate evacuation activities to the alternate lab location (Appendix B) if warranted.
- 3.5.8 The RCSS may use ICS or Appendix C to track radiological conditions in the plant.

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# 3.6 Issuance of Potassium Iodide (KI)<sup>3,6</sup>

- 3.6.1 IF the TSC RADCON Manager or designee has reason to believe a person's projected cumulative dose to the thyroid from inhalation of radioactive iodine might exceed 10 rem, the exposed person should be started immediately on a dose regimen of potassium iodide (KI). Anyone authorized to administer KI shall be familiar with the Food and Drug Administration's approved package insert and be sure each proposed recipient is similarly informed. KI recipients will acknowledge their understanding of the consequences of taking or refusing KI by signing-in on the "Potassium Iodide Issue Report" (Appendix F). The initial dose of KI should not be delayed and those who begin therapy should continue the 10-day course of KI unless their thyroid dose is determined not to have exceeded 10 rem. An adequate supply of KI for the site is stored at the OSC staging area. FOLLOW dosage schedules as outlined on the package insert.
- 3.6.2 Projected cumulative doses to the thyroid from inhalation of radioactive iodine can be determined using Appendix D, "Occupational Dose from Inhalation of Iodine-131."
- 3.6.3 KI is stored in the Emergency Medical Supply cabinet (OSC staging area). KI has an approved shelf-life with the expiration date listed on each tablet package. To ensure the KI supply is valid, these dates will be inspected during the quarterly OSC emergency supply inventory identified in WBN EPIP-12 and the KI will be replaced as necessary.
- 3.6.4 A copy of the Food and Drug Administration approved package insert shall accompany the issuance of KI. Dosage schedules and other pertinent information are outlined on the package insert and should be followed closely (Appendix E).
- 3.6.5 The issuing agent shall complete the "Potassium Iodide (KI) Issue Report," (Appendix F) for KI when issued. A copy of this report will be routed to the TSC RADCON Manager in a timely manner.
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# 3.0 INSTRUCTIONS (continued)

## 3.7 Radioiodine Sample Acquisition

3.7.1 During accident conditions, noble gas concentrations may be present in significant quantities. The collection of these noble gases on charcoal cartridges during iodine sampling will interfere with subsequent iodine analysis. Silver zeolite (AgZ) cartridges are provided for use during periods of high noble gas concentrations.

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- CAUTION 1 RCI-101 should be referenced for hazards associated with Silver Zeolite cartridge use.
- **CAUTION 2** Sample cartridges may exhibit high dose rates after sampling during accident conditions. Exercise good ALARA practices when handling, storing, and disposing of these cartridges.
  - 3.7.2 Radioiodine samples should be collected at 30 liters per minute (LPM) for daily or weekly samples. Grab samples may be collected at 30 or 60 LPM based upon the type of air sampler used and the conditions in the sample location.
  - 3.7.3 Radioiodine sample volumes of less than 900 liters may be performed if it is known or suspected that dose rates on the AgZ cartridges will exceed 10 mrem/hr. During these instances, sample duration's may be reduced to 5 minutes. Sample duration's less than 5 minutes may be used for ALARA purposes but shall be pre-approved by the RCSS.
  - 3.7.4 Upon completion of sampling activities, the air sample should be returned to the RADCON Lab for analysis as soon as possible. Prior to departing the RCA, a radiation survey of the sample head shall be performed to determine the contact dose rate. The results of this survey shall determine any special handling or packaging requirements during analysis.
  - 3.7.5 IF the iodine sample activity is  $\geq 1$  mrem/hr., a contact dose rate should be taken by using a Ludlum 14-C or equivalent GM survey instrument with the beta window closed. The radioiodine air activity can be approximated by using the following formula:

[Average of the Front and Back Contact Dose Rate (mrem/hr) X 5.1 E-3]

 $\mu Ci/ml =$ \_\_\_\_

Volume (liters)

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### 3.0 **INSTRUCTIONS** (continued)

- 3.7.6 Radioiodine cartridges with contact gamma dose rates greater than or equal to 100 mrem/hr shall not be delivered to the Chemistry Lab without prior approval of the Chemistry Count Room Supervisor and the RCSS.
- 3.7.7 RADCON personnel shall inform Chemistry personnel of the contact dose rates of the samples. RADCON personnel should provide radiological coverage during handling, analysis and disposal if samples read greater than 100 mrem/hr. The RCSS will approve disposal methods and location for all samples reading greater than 100 mrem/hr.
- 3.7.8 Gamma analysis results shall be reported to the RCSS as soon as possible.
- 3.7.9 Accident related radioiodine samples should be documented and analyzed in accordance with RCI-101 or CECC-EPIP-9 as appropriate.

## 3.8 Personnel Decontamination and Facilities

- 3.8.1 RCI-102 describes the procedures to be used for personnel decontamination.
- 3.8.2 Contaminated personnel are normally decontaminated at the 713' elevation decon facility. This facility is equipped with a wash sink, shower, and all necessary supplies. These supplies normally include various decontamination agents and soaps, towels, clean clothing, and other miscellaneous supplies.
- 3.8.3 Concerning radiation injuries, grossly contaminated personnel with injuries are normally treated at the 713' elevation prior to transfer to an offsite medical facility <u>unless</u> the injury requires immediate transportation.
- 3.8.4 Contaminated personnel requiring offsite medical attention are treated at either of the agreement hospitals (Rhea County Medical Center [Dayton] or Athens Regional Medical Center [Athens]). The hospital(s) have a complete staff and have been trained in the handling and care of contaminated patients. Refer to WBN EPIP-10 for guidance on transporting contaminated and radiation injuries to REACTs in Oak Ridge. Watts Bar maintains a supply cabinet at each hospitals' Emergency Room which contains posting materials and various other supplies.

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#### 4.0 **REFERENCES**

4.1 Interfacing Documents

CECC-EPIP-9, "Emergency Radiological Monitoring Procedures"

WBN EPIP-6, "Activation and Operation of the Technical Support Center (TSC)"

WBN EPIP-7, "Activation and Operation of the Operations Support Center (OSC)"

WBN EPIP-8, " Personnel Accountability and Evacuation"

WBN EPIP-10, "Medical Emergency Response"

WBN EPIP-11 "Security and Access Control"

WBN EPIP-12, "Emergency Equipment and Supplies"

WBN EPIP-13, "Termination of the Emergency and Recovery"

WBN EPIP-15, "Emergency Exposure Guidelines"

WBN EPIP-16, "Initial Dose Assessment for Radiological Emergencies"

NRC Information Notice 90-08, Kr-85 Hazards from Decayed Fuel

4.2 Other Documents

10 CFR 50.72 Immediate Notification Requirements for Operating Nuclear Power Reactors

NUREG 0654, FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

RCI-101, Radiation Contamination, and Airborne Surveys

RCI-102, Contamination and Hot Particle Control

**RCI-120**, Respirator Minimization Process

ANSI N18.7-1976

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#### 4.2 Other Documents (continued)

10 CFR 20 Standards for Protection Against Radiation

EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents

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ICS System User's Guide

### 5.0 APPENDICES

Appendix A, "RADCON Shift Supervisor"

Appendix B, "Alternate RADCON Lab Location"

Appendix C, "Selected Key In-plant Radiation Monitors"

Appendix D, "Occupational Dose From Inhalation of Iodine-131"

Appendix E, "Potassium Iodide Administration Instructions"

Appendix F, "Potassium Iodide Issue Report"

Appendix G, "RADCON Emergency Staffing Function/Times"

### 6.0 RECORDS

6.1 QA Records

NONE

6.2 Non-QA Records

Appendixes A, C, and F will be retained for real emergencies and the NRC Graded Exercise by the WBN EP Manager.

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# APPENDIX A

# Page 1 of 1 RADCON SHIFT SUPERVISOR CHECKLIST

IF The	e RCSS has been contacted of a REP activation, the following checklist may be used as a g	uide to
1.	<b>INITIATE</b> immediate requested actions by the Main Control Room (MCR).	
2.	IF activation is ALERT or higher, ensure seven (7) additional ANSI Qualified	
	Follow FFD directions for call-in of unscheduled work per EPIP-7. <sup>7</sup>	
3.	CONTACT SQN to dispatch Offsite survey team per CECC-EPIP-9.	
4.	IF time allows, prepare the Radiological Sampling Van to be dispatched per CECC-EPIP-9.	
5.	INITIATE CECC-EPIP-9, as requested by the SM, TSC or CECC.	
6.	IF following 2 conditions are met, go to the TSC and perform TSC RADCON Manager's functions until relieved. (Ref. WBN EPIP-6)	
	□ RCSS functions can be performed from the TSC.	
	TSC RADCON Manager is not in the TSC.	
7.	IF Assembly Alarm has been activated, dispatch RADCON personnel to assembly areas (as needed) per WBN EPIP-8 to survey assembly areas.	
8.	<b>DISPATCH</b> RADCON personnel for search and rescue teams into the plant (as needed) per WBN EPIP-8.	
9.	<b>ENSURE</b> radiological habitability in the MCR, TSC and OSC throughout the REP activation.	
10.	<b>DIRECT</b> radiological field monitoring teams until relieved by TSC RADCON Manager.	
11.	IF evacuation of the RADCON Lab is required, relocate emergency equipment in Appendix B of this procedure.	

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# ALTERNATE RADCON LAB/OSC LOCATION

The location of the Alternate RADCON Lab/OSC will depend on inplant radiological conditions. The TSC RADCON Manager, after consultation with the SED, will make the decision on location transfer. Possible locations that will be considered are the Alternate OSC in the Main Office Building Team Room and the Relay Room 755' level next to the Control Room and the TSC or the WBN Training Center.<sup>5,8</sup>

Equipment identified in EPIP-12 Appendix A, will be moved to the alternate RADCON Lab if conditions warrant the evacuation of the 713' Lab.

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**RADCON** personnel should first utilize the Integrated Computer System (ICS) to assist them in tracking in-plant radiological conditions. Key radiation monitoring information can be found in the following TSC Mimics or ICS system group.

- 4RM1 In-plant radiation monitors
- 4RM2 In-plant radiation monitors
- EFF1 Radiation monitors associated with the plant's release paths
- Group System Group Menu SYS-90-RAD MON

Questions on the ICS can be referenced in the ICS User's Manual which are located in the TSC/OSC.

Should the ICS not be available, then the worksheets of this appendix can be utilized (as needed) to track in-plant radiological conditions.

			UPDA	ATED RE. mR/Hr.,	ADINGS, or R/Hr.	СРМ,
DESCRIPTION	IDENTIFIER	BACKGROUND	Date	Date	Date	Date
		READING	Time	Time	Time	Time
O-M-12 Spent Fuel Pit Area (El. 757)	1&2-RE-90-1					
Upper Containment RB (El. 757)	1-RE-90-2					
Spent Fuel Pool Skimmer (El. 737) Filter Area Monitor	0-RE-90-5					
CCW Heat Exchangers (El. 737)	1&2-RE-90-6					
Hot Sample Room (El. 713)	1&2-RE-90-7					
AFW Pump Area (El. 713)	1&2-RE-90-8					
Waste Condensate Tanks (El. 692)	0-RE-90-9					
CVCS Board Area (El. 692)	1&2-RE-90-10					
CS & RHR Pump Area (El. 676)	0-RE-90-11					
RB Low Compt Inst Rm (El. 736)	1-RE-90-61					

#### SELECTED KEY IN-PLANT RADIATION MONITORS

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# SELECTED KEY IN-PLANT RADIATION MONITORS

			UPDA	TED REA mR/Hr.,	DINGS, or R/Hr.	СРМ,
DESCRIPTION	IDENTIFIER	BACKGROUND	Date	Date	Date	Date
		READING	Time	Time	Time	Time
Inside RB-Upper Containment (El. 737)	1-RE-90-112					
Inside RB-Lower Containment (El. 737)	1-RE-90-106					
Condensate Demin (El. 685)	0-RE-90-230 0-RE-90-231	1				
(Space for additional monitors)						

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TAZOÍ IDSAT DSA1 01 2000 Exp 3-2005 20001 3,2005 ÌOSAT DSAT IÓSAT 100 mg. Table Laf 20101 N.Y. N.Y. 1002 5. I ni 20001 -2005 Lot 20001 Exp 3-2006

# **IOSAT** " Tablets

#### **IOSAT™** Tablets

(Potassium lodide Tablets, U.S.P.) (Pronounced poe-TASS-e-um- EYE-oh-dyed) (Abbreviated KI)

TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU, IN A RADIATION EMERGENCY RADIOACTIVE IDDINE COULD BE RELEASED INTO THE AIR, POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS, DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLENGIC TO IODIDE (SEE SIDE EFFECTS BELOW).

#### INDICATIONS THYROID BLOCKING IN A RADIATION EMERGENCY ONLY

DIRECTIONS FOR USE

Use only as directed by State or local public itealth authorities in the event of a radiation emergency.

#### DOSE

ADULTS AND CHILDREN ONE YEAR OF AGE OR OLDER: One (1) tablet once a day. Crush for small children.

BABIES UNDER ONE YEAR OF AGE: One-half (1/2 tablet once a day. Crush first.

DOSAGE: Take for 10 days unless directed otherwise by State or local public health authorities. Store at controlled room temperalure between 15" and 30"C (59' to 86"F). Keep package dry and foli packets intact.

#### WARNING POTASSIUM IDDIDE SHOULD NOT BE USED BY PEOPLE

Each IOSAT" Tablet contains 130 mg. of polassium lodide.

Certain forms of iodine help your thyroid gland work right. Most people get the lodine they need from foods like iodized self or

lish. The thyroid can "store" or hold only a certain amount of

In a radiation emergency, radioactive looine may be released in

the air. This material may be breathed or swallowed. It may enter

the thytoid gland and damage it. The damage would probably not

show itself for years. Children are most likely to have thyrold

If you take potassium lodide, it will fill up your thyroid gland. This

reduces the chance that hermful radioactive todine will enter the

The only people who should not take potassium iodide are peo-

ple who know they are allergic to indide. You may take polossium

ladide even if you are taking medicinos for a thyroid problem (for

exemple, a thyroid hormone or antithyroid drug). Pregnant and

nursing women and bables and children may also take this drug.

Potassium iodide should be taken as soon as possible offer pub-

lic health officials tell you. You should take one dose every 24

hours. More will not help you because the thyrold can "hold" only

limited amounts of icoine. Larger doses will increase the risk of

WHO SHOULD NOT TAKE POTASSIUM IODIDE

HOW AND WHEN TO TAKE POTASSIUM IODIDE

ic health authority.

NOW POTASSIUM (OD)DE WORKS

DESCRIPTION

demage.

thyroid gland.

SIDE EFFECTS Usually, side effects of potassium todide happen when people take higher doses for a long time. You should be careful not to ALLERGIC TO IODIDE. Keep out of the reach of children. In take more than the recommended dose or take it for longer than case of overdose or allergic reaction, contact a physician or pubyou are lold. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "lodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarmea).

side effects. You will probably be tokin of to take the drug for

A few people have an allergic reaction with more serious symptoms. These could be lever and joint pains, or swelling of parts of the lace or body and at times severe shortness of breath regulting immediate medical attention.

Taking lodide may rarely cause overactivity of the Myroid gland, underactivity of the thyrold gland, or enlargement of the thyrold gland (goiler).

WHAT TO DO IF SIDE EFFECTS OCCUR If the side effects are severe or II you have an allergic reaction, stop taking potassium lodide. Then, if possible, call a doctor or public health authority for instructions.

#### HOW SUPPLIED

more than 10 days.

IOSAT Tablets (Potassium Iodide Tablets, U.S.P.): packages of 14 tablets (NDC51803-001-01): Eacle white, round, scored tablet contains 150 mg. potassium todicle

> Distributed by ANBEX, INC. 15 W. 75th St., New York, N.Y. 10023

# INDICATIONS: THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

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POTASSIUM IODIDE (KI) ADMINISTRATION INSTRUCTIONS

APPENDIX Page

E

**----**

of

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# APPENDIX F Page 1 of 1 <u>POTASSIUM IODINE (KI) ISSUE REPORT</u>

ISSUED TO SIGNATURE	SOCIAL SECURITY NUMBER	KNOWN ALLERGY TO IODINE? (If yes do not issue)	PACKAGE INSERT PROVIDED	TIME OF INITIAL KI DOSE	DATE OF INITIAL KI DOSE	ISSUED BY
1						
						1
AUTHORIZED BY:		TITLE:				
Route to Emergency Preparedness	Manager.					

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# **RADCON EMERGENCY STAFFING FUNCTIONS/TIMES**

<u>Majo</u>	or Task	<u>On Shift</u>	<u>30 minutes</u>	60 minutes
A.	In-Plant Surveys	1	1	1
B.	Radiation Protection:*	2**	2**	2
	<ol> <li>Access Control</li> <li>HP Coverage for Repair Corrective Action, Search and Rescue, First Aid and Fire fighting</li> <li>Personnel Monitoring</li> <li>Dosimetry</li> </ol>			
C.	Onsite (Out-of-Plant)	-	1**	1
D.	Offsite Surveys	-	2***	2†
E.	Senior Health Physics Expertise		1****	

†Coverage can be provided by the SQN RADCON Monitoring Van.

\*May be provided by Shift personnel assigned other functions.

\*\*May be provided by task specific trained personnel.

\*\*\*Driver may not be a RADCON Tech if enough RADCON Techs. are not available.

\*\*\*\*RCSS will report to TSC if able to manage the RADCON Lab from there.

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			SOURCE NOTES Page 1 of 1		
l	MC-840827005009, MSC-02381 NCO-920030990		Include priority for Radiological Surveillance Support. General Instruction Section 3.1, 3.1.2, 3.2.10, Alert 3.3.2 Site Area Emergency 3.3.3, General Emergency 3.3.4, Section 3.4 Duties of Radcon Personnel assigned to the TSC, 3.5.4 Duties of Radcon personnel assigned to the Radcon Lab.		
2	MC-84082700501 NCO-920030991	0, MSC-02382	Issuance of Dosimetry remaining inside the fe Section 3.2, 3.2.2, and	devices to those personnel nce. Precautions and limit 3.2.7.	l ations
3	MC-84082700502 NCO-920030995	8, MSC-02394	SED is responsible for for projected doses exe Issuance of Potassium (pp. 1 and 2). Also se	recommended issuance of ceeding 24 REM. Section Iodine 3.6.1, Appendix E e EPIP-6 App. I (pg. 2 of 2	KI 3.6 2).
4	ANSI N18.7-1976 Subsection 5.3.9.3	: 01 <b>POI</b>	EPIPs will contain the	following elements.	
5	MC-84082700502 NCO-840115012	9, MSC-02395	Alternate lab (potentia	l) locations.	
6	390/93-64A		10 CFR 20 revisions.		
7	SQ970202PER		Reference ANSI Quali	ified.	
8	WBPER 9801650	5	OSC Alternate Location	ons.	

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