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

FEB 2 0 2003

10 CFR 50, App E.

U.S. Nuclear Regulatory Commission
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 the following EPIP.

EPIP	Rev	Title	Effective Date
EPIP-6	23	Activation and Operation of the Technical Support Center	1-21-2003

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, Site Licensing and Industry Affairs

Enclosure
cc: See Page 2

A045

FEB 2 0 2003

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

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

TENNESSEE VALLEY AUTHORITY

WATTS BAR NUCLEAR PLANT

EMERGENGY PLAN IMPLEMENTING PROCEDURE

EPIP-6

ACTIVATION AND OPERATION OF THE TECHNICAL SUPPORT CENTER (TSC)

Revision 23

Unit 0

PREPARED BY: James F. Hagy

SPONSORING ORGANIZATION: Emergency Planning

APPROVED BY: Frank L. Pavlechko

Effective Date: 01/21/2003

LEVEL OF USE: REFERENCE

NON-QUALITY RELATED

REVISION LOG

Revision Number	Implementation Date	Pages Affected	Description of Revision
18	3/30/01	All Page 11, 60	Plan effectiveness determinations revisions indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Intent change. Revised PAR chart to meet requirements of RTM 96 Vol. 1 Rev. 4.
19	9/25/01	All Page 10, 20, 35, 43 & 44	Plan effectiveness determinations revisions indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Intent change. Procedure revised to Non-Quality related per requirements of NQAP & pending revision to SPP-2.2. The coversheet and records section of the procedure was revised to reflect this change. Non-Intent change. Addressed fatigue issues for the ERO on App C and App M. Resolved Security personnel evacuation problem identified in PER 01-013997-000.
20	01/24/02	All pg. 3, 64, 70	Plan effectiveness determinations revisions indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Non-intent change. Revised Appendix X to include upstream dam for PER 01-016578-000. Revised Appendix BB to include listing position or role. This is to enhance tracking of data for NEI, PI on participation.
21	06/05/02	All 3, 18, 24, 29 &61	Plan effectiveness determinations on these changes indicate the following revisions do not reduce the level of effectiveness of the procedure or REP. Non-intent change(s): Clarified in App.B that the Site VP can assume the duties of the SED as necessary. Corrected typo in App. C and removed the reference to the 3 and 4 PARs. Added an operational responsibility to the TAM in App.E. to coordinate WOG-99-064 (ERG) activities with the TAT Team. Added WOG-99-064 to the App.V reference list.
22	12/16/2002	All	Plan effectiveness determination reviews indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Non-intent change to revise instruction references. Updated format for intersite consistency. Deleted source notes. Added table of contents. Revised section numbering.
23	01/21/2003	2, 60	Plan effectiveness determination reviews indicate the following revisions do not reduce the level of effectiveness of the procedure or REP: Non-intent change to add loss of offsite power to App. X, for WBPER 03-00695-000.

Table of Contents

1.0 PURPOSE

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 REFERENCES

2.1 Source Documents:

1. Tennessee Valley Authority Nuclear Power Radiological Emergency Plan (REP)
2. SPP-1.2, Fitness For Duty
3. Memo from J. B. Hosmer to R. J. Johnson dated 1/15/88, RIMS No. B25 88011 5028
4. 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
5. NUREG 0696, Functional Criteria for Emergency Response Facilities, Final Report
6. ANSI Standard N 18.7-1976
7. CFR 20, Standards for Protection From Radiation
8. EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
9. NRC Generic Letter 96-06, Assurance of Equipment Operability and Containment Integrity During Design Basis Accident Condition
10. Response Technical Manual (RTM) 96 Vol. 1 Rev. 4.

2.2 Interface Documents

1. WBN-EPIP-1 Emergency Plan Classification Flowchart
2. WBN-EPIP-2 Notification of Unusual Event
3. WBN-EPIP-3 Alert
4. WBN-EPIP-4 Site Area Emergency
5. WBN-EPIP-5 General Emergency
6. WBN-EPIP-7 Activation and Operation of the Operations Support Center
7. WBN-EPIP-8 Personnel Accountability and Evacuation
8. WBN-EPIP-11 Security and Access Control
9. WBN-EPIP-16 Termination of the Emergency and Recovery
10. WBN-EPIP-15 Emergency Exposure Guidelines
11. WBN-EPIP-13 Initial Dose Assessment for Radiological Emergencies
12. CECC-EPIP-9 Emergency Environmental Radiological Monitoring Procedures
13. WBN, FSAR
14. SOI-30.06 Auxiliary Building Gas Treatment System (ABGTS)
15. SOI-67.01 Essential Raw Cooling Water System
16. Chemistry Manual, Chapter 13 (PASS)
17. ICS User's Manual
18. Watts Bar Nuclear Plant, Plant Lighting, N3-228-4003
19. SOI-14.03, Condensate Demineralizer Waste Disposal

3.0 INSTRUCTIONS

3.1 General

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).

NOTE: In the event of plant inaccessibility, all references to the TSC (or OSC) are intended to refer to the alternate location selected for staffing, such as the staging area in Classroom 19 of the Watts Bar Training Center.

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 INSTRUCTIONS

3.1 General (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

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.

NOTE: 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

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:

- 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

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.

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.

3.0 INSTRUCTIONS (continued)

3.6 Long-Term Operation

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-16, "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.

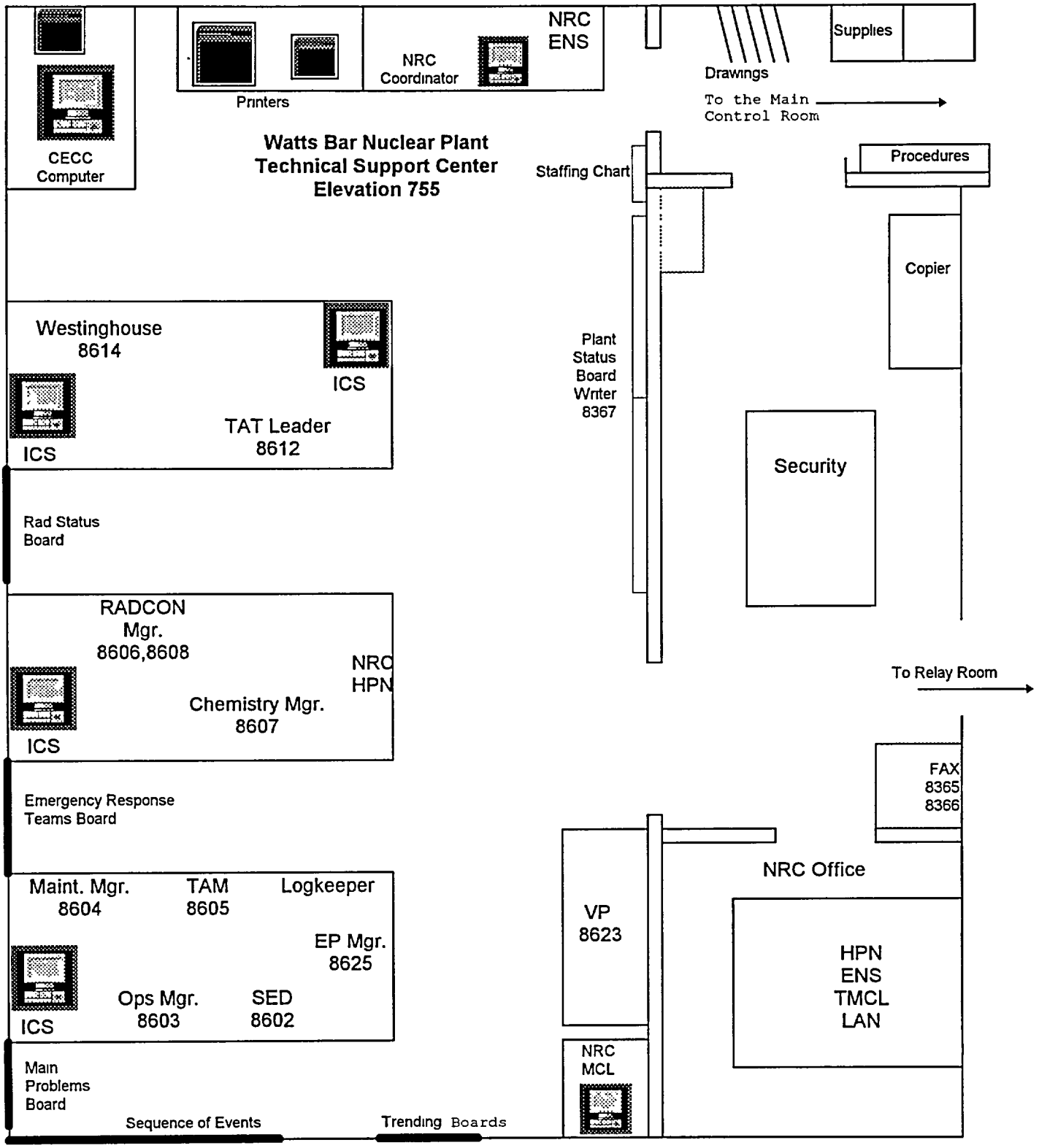
4.0 RECORDS

4.1 Non-QA Records

The appendices in this Procedure necessary to demonstrate key actions during an actual REP Event are Life of Plant Non-QA records, and will be forwarded to the WBN Emergency Preparedness Manager, who shall submit the records to the Corporate EP Manager for storage.

The materials deemed necessary to demonstrate performance of key actions during drills are considered Non-QA records. These records shall be forwarded to the EP Manager who shall retain records deemed necessary to demonstrate six-year plan performance for six years. The EP Manager shall retain other records in this category for three years.

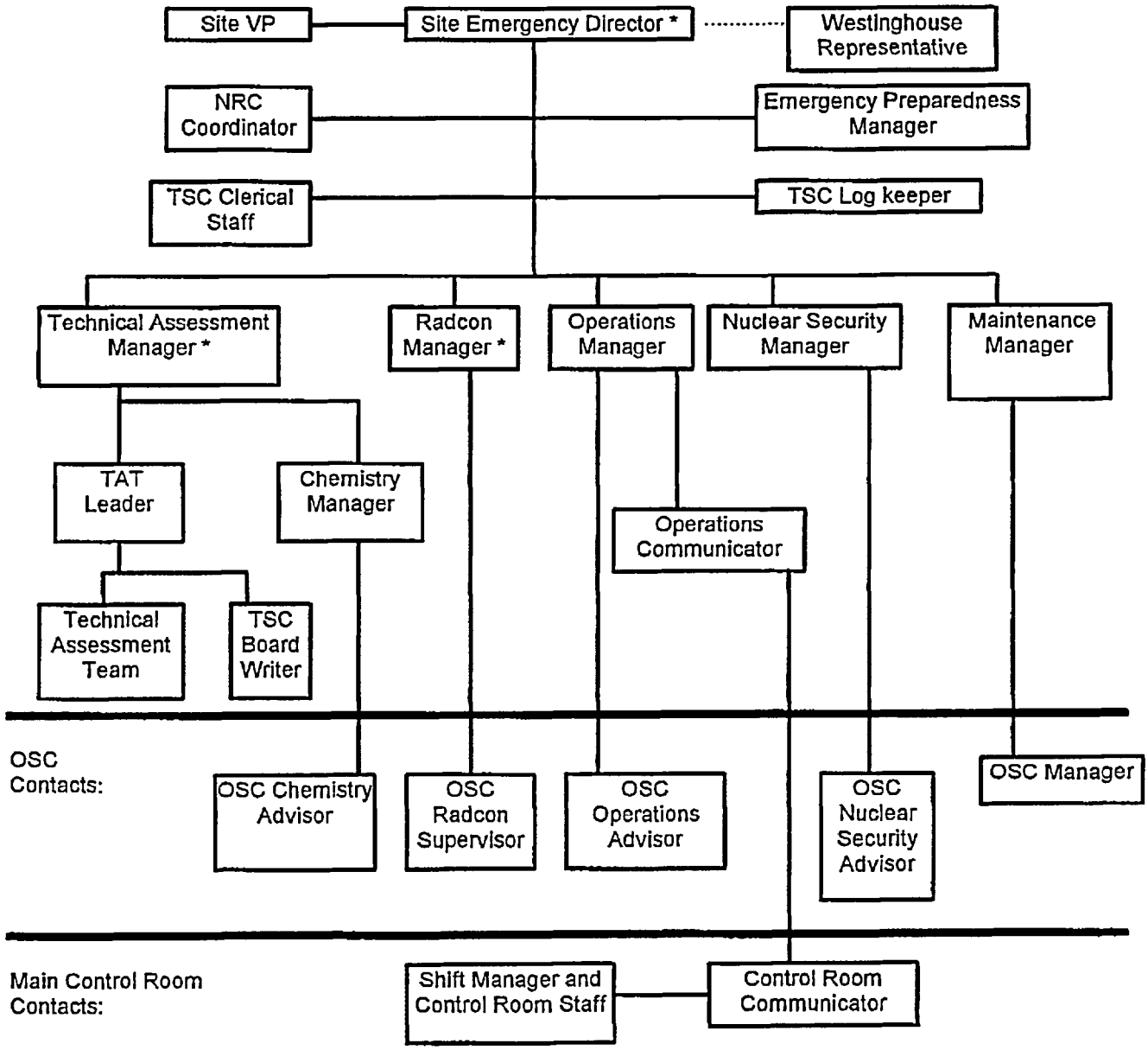
APPENDIX A
TSC Facility Layout Diagram
Page 1 of 2



APPENDIX A
Page 2 of 2

Technical Support Center (TSC)

WBN EMERGENCY RESPONSE ORGANIZATION



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

APPENDIX B
SITE VICE PRESIDENT

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** a log of communications/events.

___/___ **ESTABLISH** contact with the Media Relations Specialist.

___/___ **ESTABLISH** contact with the CECC Director.

___/___ **CHECK** the status of emergency actions already in progress.
(Such as accountability, site evacuation or press inquiries.)

APPENDIX B

SITE VICE PRESIDENT

Operational Responsibilities List

- Provides TVA policy direction to the Site Emergency director (SED) and can assume the duties of the SED as necessary.
- 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.

APPENDIX C

SITE EMERGENCY DIRECTOR

Initial Activation of the Technical Support Center Checklist

Date:_____
Inits/Time

___/___ **OBTAIN** turnover briefing from SM/SED. Pages 5, 6 and 7 of Appendix C, SED Turnover Data Sheet may be used as a guide.

___/___ **REPORT** 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.

___/___ **CHECK** the status of emergency actions already in effect such as emergency notifications (NRC, State, etc.) and accountability or site evacuation.

___/___ **REQUEST** checklist completion status for required positions:

- ☐ Site Emergency Director
- ☐ Operations Manager or Operations Communicator
- ☐ TAM or TAT Leader or TAT Team (Thermal Hydraulics, Mechanical, and Electrical) members
- ☐ RADCON Manager

___/___ **CONFIRM** TSC staffed and Operational.

___/___ **ASSUME** role of SED from SM (confirmatory phone call to the SM).

APPENDIX C
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. ☐ "This is a drill, this is a drill." **OR**
   c. ☐ "This is a real emergency. This is a real emergency."

   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. Any emergency response personnel who are fatigue and feel they can not perform their assigned duties, should notify the EP Manager in the TSC and the OCS Manager in the OSC.

   i. ☐ "This is a drill, this is a drill." **OR**
   ☐ "This is a real emergency. This is a real emergency."

APPENDIX C
SITE EMERGENCY DIRECTOR

Operational Responsibilities

- 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 Ring-down Line to the CECC Director.

APPENDIX C

SITE EMERGENCY DIRECTOR

Page 4 of 7

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
c.	Security Threat	Physical Security Plan
d.	Personnel Accountability and Evacuation	WBN-EPIP-8
e.	Initial Dose Assessment for Radiological Emergencies	WBN-EPIP-13

DEACTIVATION RESPONSIBILITIES

Refer to WBN EPIP-16.

APPENDIX C

SITE EMERGENCY DIRECTOR

SED Turnover Datasheet

1. Current Emergency Classification:

   UE ☐ ALERT ☐ SAE ☐ GE ☐

   Time/Date Declared ___/___

2. Event Description: _____

   _____

   _____

   _____

3. Equipment Problems: _____

   _____

   _____

4. Site Radiological Problems _____

   _____

5. Rad Release:

Yes	☐	No	☐
Filtered	☐	Unfiltered	☐
Monitored	☐	Unmonitored	☐
Controlled	☐	Uncontrolled	☐
Projected Duration		____/____ (hrs./min.)	

APPENDIX C

SITE EMERGENCY DIRECTOR

SED TURNOVER DATASHEET (continued)

Wind Speed _____ mph Wind Direction FROM ____

Projected Whole Body Dose _____mrem ≅ ____ miles

Projected Thyroid Dose _____mrem ≅ ____ miles

6. Protective Action Recommendations to Offsite Officials (use PAR Flowchart in App. U):

   None ☐ 1 ☐ 2 ☐

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

APPENDIX C

SITE EMERGENCY DIRECTOR

SED TURNOVER DATASHEET (continued)

11. Status of personnel in the field:

NAME	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 _____
SM TSC/SED

Time: _____ Date: _____

APPENDIX D
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.

APPENDIX D

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)

APPENDIX E

TECHNICAL ASSESSMENT 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.

___/___ **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.

APPENDIX E

TECHNICAL ASSESSMENT MANAGER

Operational Responsibilities

- 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 not 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.
- Coordinate support activities performed by the TAT Team in association with WOG-99-064 Emergency Response Guidelines (ERGs) Background Information.
- 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.

APPENDIX F

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.

APPENDIX F
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.

APPENDIX G

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.

APPENDIX G
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.

APPENDIX H

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.

APPENDIX H

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.
- Remain cognizant of Plant Radiological Conditions and report location(s) of Security Personnel\Patrols (as needed) to the RADCON Manager and 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.

APPENDIX I
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** log of communications/events.

___/___ **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.

APPENDIX I

RADCON MANAGER

Operational Responsibilities

- Directs onsite Radcon activities.
- **IF** the CECC is not staffed, utilize WBN, EPIP-13 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.
- 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.

APPENDIX J

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.

APPENDIX J
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-13.
- 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.

APPENDIX K

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).

___/___ **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.

APPENDIX K
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.

APPENDIX L
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.

APPENDIX M

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 who are fit for duty 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.

APPENDIX M
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.
- Monitor fitness for duty (ie... fatigue) for the response team and make recommendations to the SED as needed.
- 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-16.

APPENDIX N
Intentionally Deleted
Page 1 of 1

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.

APPENDIX O

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.

APPENDIX P
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.

APPENDIX P
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 is fit for duty in which case you should refer the determination to a supervisor.

- Operates facsimile machines.
- Operates CECC computer.

APPENDIX Q

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.

APPENDIX Q
TECHNICAL ASSESSMENT TEAM

Operational Responsibilities

- 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.

APPENDIX Q

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.

APPENDIX R
Plant Parameter Data Sheets

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: ☐ A-A ☐ B-B ☐ TD

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)

APPENDIX R

Plant Parameter Data Sheets

DATE: _____ TIME: _____ UNIT: _____

12. RCS FLOW: RCP's RUNNING: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ NATURAL CIRC

13. ECCS STATUS: ☐ STANDBY ☐ INJECT ☐ RECIRC ☐ SPRAY

14. RWST LEVEL: (LI-63-50) _____GAL (LI-63-51) _____GAL

15. CNTMT SUMP LEVEL: (LI-63-176) _____ %

16. FLOWRATE: (FI-62-93) _____ GPM CHARGING (FI-63-170) _____ GPM BIT

17. CNTMT PRESSURE: NR (PI-30-44) _____ (PI-30-45) _____ PSID

18. INCORE THERMOCOUPLES:

QUAD 1 - (1 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 (TI-68-105) _____°F (TI-68-115)

21. STATUS TREE INDICATING:

RED ☐ REASON: _____

ORANGE ☐ REASON: _____

DATA BY: _____

APPENDIX R

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)
   FLOW ____CFM
   TOTAL GAS U1 _____ U2 _____ µCi/cc

4. AUXILIARY BLDG VENT (0-RE-90-101)
   ☐ ISOLATED
   FLOW ____CFM
   (A) PARTICULATE _____ CPM
   (B) TOTAL GAS _____ CPM
   (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.

APPENDIX R
Plant Parameter Data Sheets

6. STEAM LINE RAD MONITORS: 1-RE-90-421 _____ mR/hr
   1-RE-90-422 _____ mR/hr
   1-RE-90-423 _____ mR/hr
   1-RE-90-424 _____ mR/hr

   STEAMFLOW (MCR)

   1-FI-1-3A(3B) SG1 _____ 1bm/hr.

   1-FI-1-10A(10B) SG2 _____ 1bm/hr.

   1-FI-1-21A(21B) SG3 _____ 1bm/hr.

   1-FI-1-28A(28B) SG4 _____ 1bm/hr.

7. SERVICE BLDG VENT _____CPM FLOW _____CFM
   0-RE-90-132

8. SG BLOWDOWN: _____CPM _____CPM
   1-RE-90-120 1-RE-90-121

9. ERCW DISCHARGE: HEADER A: _____CPM _____CPM
   0-RE-90-133 0-RE-90-140

   HEADER B: _____CPM _____CPM
   0-RE-90-134 0-RE-90-141

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

DATA BY:_____

APPENDIX R

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: _____

APPENDIX R
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: _____

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

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

RELEASES µCi/SEC	ISO-TOPE	CONCENTRATION VALUE	CONCENTRATION UNITS	FLOWRATE VALUE	FLOWRATE UNITS	TOTAL-RELEASE VALUE	TOTAL-RELEASE UNITS
NOBLE GAS _____							
IODINES _____							
PARTICULATE _____							
_____ COMBINED RELEASE____							
ISOTOPE RELEASE RATE							
_____ _____							
_____ _____							
_____ _____							

3. RELEASE BEGAN _____ EXPECTED TO END _____ EST/EDT. DURATION ____ HR
RELEASE POTENTIAL: _____ Ci, IN VOLUME OF _____ (CU FT OR GAL)

4. METEOROLOGICAL CONDITIONS: (IF REQUESTED DUE TO MET DATALINK INOPERABLE)

DATE	TIME	WIND SPEED (MPH or METERS)	DIRECTION (DEGREES)	ELEVATION (METERS)	TEMPERATURE DIFFERENTIAL
_____/_____					
_____/_____					
_____/_____					
_____/_____					

5. REMARKS/COMMENTS:
_____
_____

DATA BY: _____

APPENDIX S
Predictive Release Data Sheet

Page 1 of 1

DATE: _____ TIME: _____ UNIT: _____

DATA NEEDED FOR CECC TO PERFORM PREDICTIVE RELEASE METHODOLOGY

1. PRIMARY COOLANT CONCENTRATION

ISOTOPE	IN GAS µCi/cc	IN LIQ µCi/ml
I-131		
I-132		
I-133		
I-134		
I-135		
CS-137		
CS-138		
KR-85m		
KR-85		
KR-87		
KR-88		
XE-133		
XE-135		

SAMPLE DATA
DATE: _____ TIME: _____
LOCATION: _____
TEMPERATURE: _____°F
PRESSURE _____ PSIA
GAS VOLUME: _____ CC
WATER MASS: _____ GRAM
WATER LEVEL: _____

2. CONCENTRATION OF HYDROGEN IN CONTAINMENT ATMOSPHERE
H_2 CONC (MOLE %): _____ DATE: _____
CNTMT TEMP: _____ °F TIME: _____
CNTMT PRESS _____ PSI LOCATION: _____

3. OPERATING POWER HISTORY (IF CECC/ICS DATALINK INOPERABLE)
DATE/TIME OF SHUTDOWN: _____

START PERIOD	END PERIOD	AVG POWER IN MWt	START PERIOD	END PERIOD	AVG POWER IN MWt

4. CORE EXIT THERMOCOUPLE READINGS (IF CECC/ICS DATALINK INOPERABLE)

THERMOCOUPLE NUMBER	DATE	TIME	READING (F)	NOTES:

5. REACTOR WATER LEVEL HISTORY (IF CECC/ICS DATALINK INOPERABLE)

DATE	TIME	READING (UNITS)	RCS VOL (CU FT)	NOTES:

Send to: CECC Core Damage & CECC RAC. DATA BY _____

APPENDIX T

TSC Accident Assessment Summary Sheet

Page 1 of 1

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 ____

APPENDIX U

Protective Action Recommendation

Page 1 of 1

Note 1: If conditions are unknown utilizing the flowchart, then answer NO.

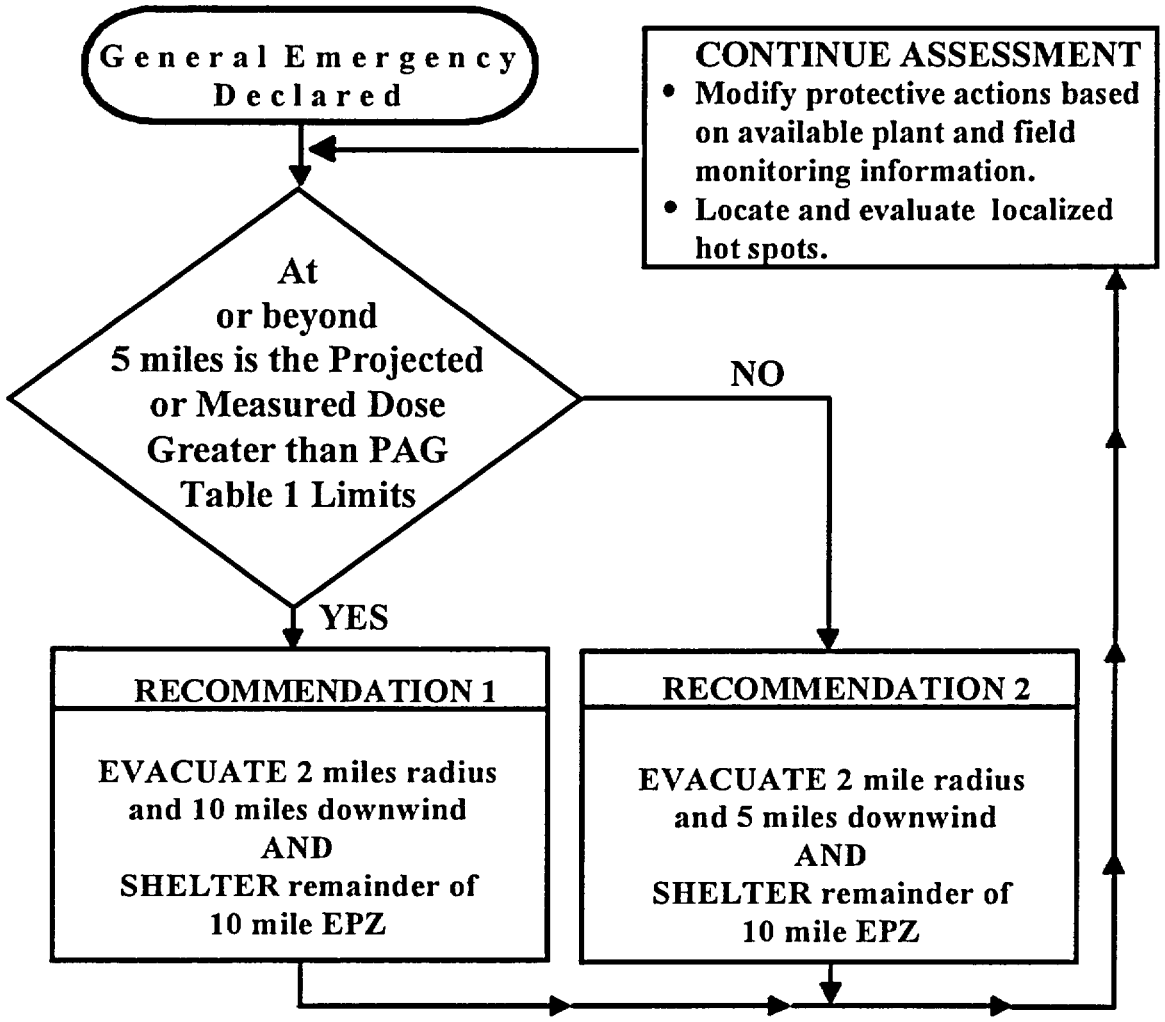


TABLE 1
Protective Action Guides

TYPE	LIMIT
Measured	3.9E-6 microCi/cc of Iodine 131 or 1 REM/hr External Dose
Projected	1 REM TEDE or 5 REM Thyroid CDE

APPENDIX V
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 [1] Below)
4. Technical Instructions (Selected). (Note [1] 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 [2] Below)
13. WOG, ERG Maintenance Direct Work Item DW-97-002 Response (Emergency Response Guidelines, Background Information).
14. Hand-held calculators.
15. Office supplies for use in the TSC.

NOTE: **1** Selection to be made by Technical Assessment Team Leader(s) or Technical Assessment Manager(s) and approved by the Emergency Preparedness Manager.

NOTE: **2** Obtain copy from Site Westinghouse Representative or Master Files.

APPENDIX W

Containment Sump Operation and Level Guidance

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

APPENDIX X
ERCW Concerns for Technical Assessment

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:

1. 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.

APPENDIX X
ERCW Concerns for Technical Assessment Team

2. Monitor ERCW screens and strainers. Within 3 hours after operating basis earthquake (≥ 1/2 SSE), a loss of upstream or downstream dam, a stage I flood, a tornado, a loss of offsite power, 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.

APPENDIX X

ERCW Concerns for Technical Assessment Team

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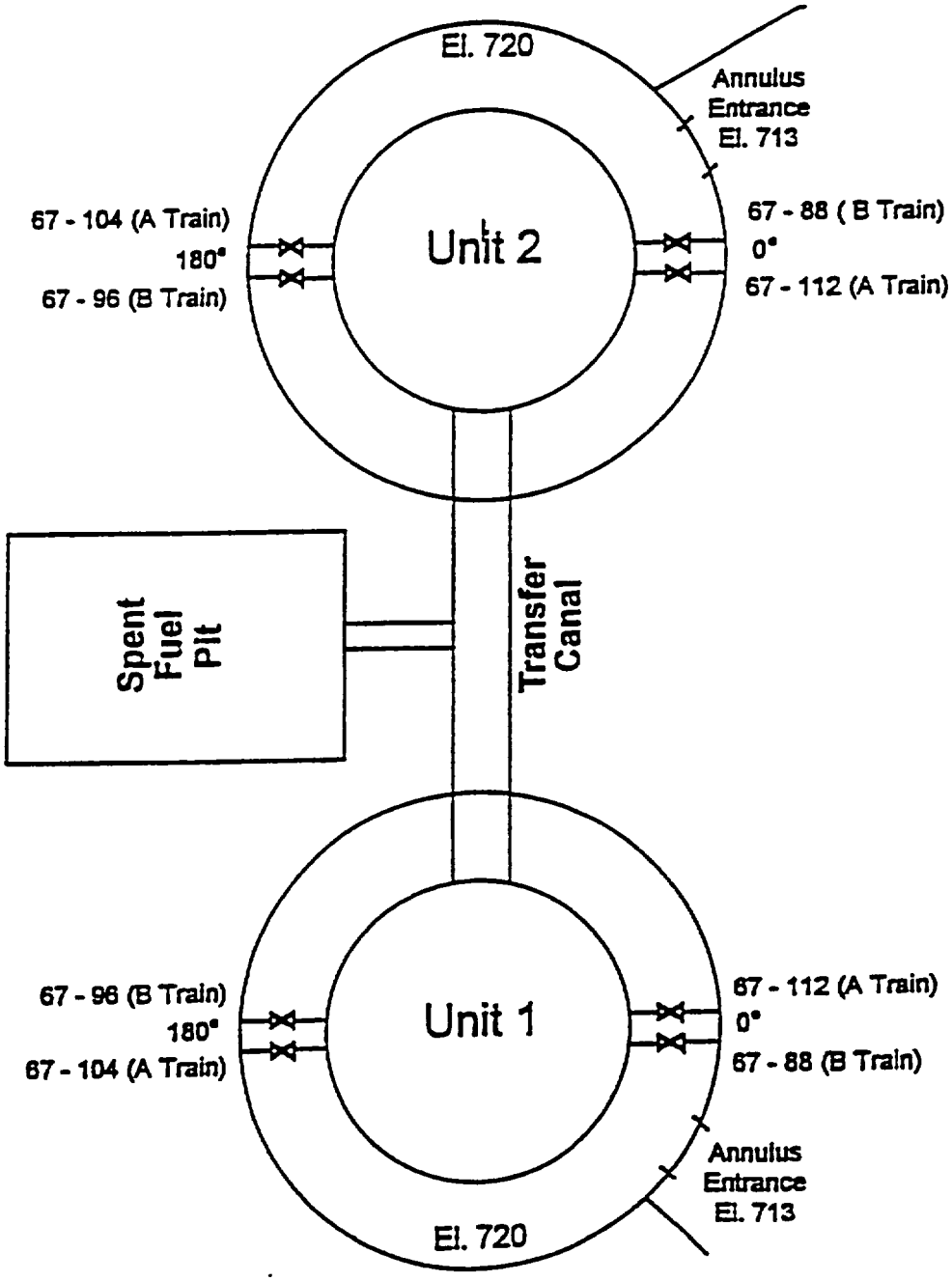

APPENDIX Y
SMALL BREAK LOCA CONCERNS

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.

APPENDIX Z

ADDITIONAL TAT DUTIES (POST ACCIDENT)

Auxiliary Building Lighting Guidance

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.

APPENDIX Z

ADDITIONAL TAT DUTIES (POST ACCIDENT)

Steam Generator Tube Rupture (SGTR) Recovery

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 SOI-14.03) 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.

APPENDIX AA
EMERGENCY RESPONDER NOTIFICATION FORM

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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

APPENDIX BB

WBN TSC Sign-In Roster

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

Date of TSC Activation

WBN EP Records Coordinator