WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT

MIDDLE SOU... UTILITIES SYSTE...

POM VOLUME 18
POM SECTION 2

EP-1-001
REVISION 5

Emergency Plan Implementing Instruction

Recognition and Classification of Emergency Condition

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: L. F. Stolz for RPB 10/1/84
Plant Manager-Nuclear Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-1-001 - Recognition and Classification of Emergency Condition (Rev. 5)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	R M Gahl	✓		9/27/84
	Operations Superintendent	[signature]	✓		9/27/84
	Radiation Protection Superintendent	R W Fenning	✓		9/27/84
	Plant Quality Manager	C. L. Skinner	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman	[signature]	✓		9/27/84

PORC Meeting No. 84-98 Item No. 33 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Cog #2 9-13-84 MHS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-1-001 Title Recognition & Classification of Emerg. Cond.

Effective Date Full Load (if different from approval date)

Complete A, B, and C

A. Change No. N/A |_| Permanent |_| Deviation Expiration Date N/A

B. Revision No. 5

C. Deletion |_| YES |X| NO

DESCRIPTION OF CHANGE OR REVISION

Added note for upgrade of annunciator system to clarify.

REASON FOR CHANGE, REVISION, OR DELETION

To incorporate NRC Commitments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE August 29 1984

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE Aug 29 1984

TECHNICAL REVIEW [signature] DATE 9-17-84

GROUP HEAD REVIEW [signature] DATE 9-18-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 5
1-6,	Revision 5
7-20	Revision 4
21	Revision 2

1.0 PURPOSE

1.1 This procedure describes the immediate actions to be taken to recognize and classify the four emergency classifications: Unusual Event, Alert, Site Area Emergency, and General Emergency.

1.2 This procedure provides an Emergency Coordinator's Close-Out Checklist (Attachment 7.2) to verify that all criteria exist to terminate the emergency condition.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 Title 10, Code of Federal Regulations Part 50, Appendix E

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

2.4 Waterford 3 SES Final Safety Analysis Report

2.5 EP-1-010, Unusual Event

2.6 EP-1-020, Alert

2.7 EP-1-030, Site Area Emergency

2.8 EP-1-040, General Emergency

2.9 EP-2-052, Protective Action Guidelines

2.10 OP-903-024, Reactor Coolant System Water Inventory Balance

2.11 EP-2-150, Emergency Plan Implementing Records

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator (EC) shall be responsible for implementation of this procedure and declaration of the appropriate emergency classification whenever, in his judgment, the station status warrants such a declaration.

3.2 The Shift Supervisor shall assume the responsibility and authority of the Emergency Coordinator (EC) until such time that he is properly relieved of this duty by the Duty Plant Manager.

3.3 If, for whatever reason, the Shift Supervisor cannot immediately assume the duty of Emergency Coordinator, the Control Room Supervisor (CRS) shall assume the duty of Emergency Coordinator until properly relieved as described in step 3.2.

4.0 INITIATING CONDITIONS

4.1 An off-normal event has occurred or is in progress.

4.2 An action step in a plant operating or emergency operating procedure refers to this instruction for classification of the indicated plant conditions.

CAUTION

This instruction does not replace any plant operating procedure. Ensure that any immediate actions (e.g., use of Emergency Procedures) are taken for the proper operation of the plant. During an emergency condition, continue to use the appropriate plant procedures in parallel with this instruction.

5.0 PROCEDURE

5.1 Verify the off-normal event to ensure that the event is real.

5.2 Match the off-normal event with one of the following eight emergency categories:

5.2.1	Uncontrolled Release of Radioactivity	TAB A
5.2.2	Loss of RCS Inventory	TAB B
5.2.3	DNB/Degraded Core Sequence	TAB C
5.2.4	Loss of Safety Functions	TAB D
5.2.5	Hazards to Station Operations	TAB E
5.2.6	Natural Phenomena	TAB F
5.2.7	Security Compromise	TAB G
5.2.8	Miscellaneous	TAB H

NOTE

The effects of combinations of initiating events that individually constitute a lower classification condition should be considered as a possibly higher emergency classification.

NOTE

If the indicated off-normal condition does not appear to match any of the listed predetermined emergencies, refer to TAB H, Miscellaneous. The Emergency Coordinator must use his judgement in determining if the indicated conditions meet the intent of the emergency classification scheme.

5.3 Refer to Attachment 7.1, Classification System, and under the category TAB selected in step 5.2 above, match the off-normal condition with the appropriate Emergency Action Level (EAL) to determine the emergency classification.

5.4 Declare the highest emergency classification for which an EAL has been exceeded.

5.5 Perform the emergency actions as outlined in the appropriate Emergency Plan Implementing Instruction, one of which is provided for each classification, as follows:

5.5.1 Unusual Event - EP-1-010

5.5.2 Alert - EP-1-020

5.5.3 Site Area Emergency - EP-1-030

5.5.4 General Emergency - EP-1-040

5.6 Assessment actions shall be continued, and if necessary, the emergency classification escalated (or downgraded) as more definitive information becomes available or if the plant conditions change significantly.

NOTE

When the emergency situation is reclassified ensure that the emergency communicator updates the answering machine message with the appropriate classification message.

5.7 When the Emergency Coordinator has made the decision to terminate the emergency condition, Attachment 7.2, Emergency Coordinator's Close-Out Checklist, shall be completed to verify that all necessary criteria exist to terminate the emergency condition.

6.0 FINAL CONDITIONS

All criteria for close-out of this instruction have been met in accordance with Attachment 7.2, and the initiating conditions which activated this instruction have been declassified to non-emergency status.

7.0 ATTACHMENTS

7.1 Classification System
7.1 TAB A Uncontrolled Release of Radioactivity
7.1 TAB B Loss of RCS Inventory
7.1 TAB C DNB/Degraded Core Sequence
7.1 TAB D Loss of Safety Functions
7.1 TAB E Hazards to Station Operation
7.1 TAB F Natural Phenomena
7.1 TAB G Security Compromise
7.1 TAB H Miscellaneous
7.2 Emergency Coordinator's Close-Out Checklist

UNCONTROLLED RELEASE OF RADIOACTIVITY

UNUSUAL EVENT

A. Radiological effluent Technical Specification exceeded as indicated by the following conditions:

EITHER

In valid HIGH alarm

OR

By sampling

AND

Release path NOT ISOLATED

AND

In the opinion of the SS/EC that exceeding of the conservative estimate of the Technical Specification provided in the parentheses "()" warrant the declaration without calculation.

1.) Airborne effluent Monitors.

Gaseous Waste Management Monitor, PRM-IRE-0648;

(50 SCFM, 2.0 uCi/ml)
(40 SCFM, 2.5 uCi/ml)
(30 SCFM, 3.3 uCi/ml)
(20 SCFM, 5.0 uCi/ml)
(10 SCFM, 20.0 uCi/ml)

OR

Condenser Vacuum Pump Noble Gas Monitor, PRM-IRE-002
(5.0 E4 uCi/sec.)

ALERT

NOTE

Off-Site Protective Action may be required - See EP-2-052 TAB "A"

A. Radiological effluents greater than 10 times Technical Specifications Limits. As indicated by the following conditions:

EITHER

In valid HIGH alarm

OR

By sampling

AND

Release path NOT ISOLATED

AND

In the opinion of the SS/EC that exceeding conservative estimate of the Technical Specification provided in the parentheses "()" warrant the declaration without calculation.

1.) Airborne effluent Monitors

Gaseous waste Management Monitor PRM-IRE-0648;

(50 SCFM, 20.0 uCi/ml)
(40 SCFM, 25.0 uCi/ml)
(30 SCFM, 33.0 uCi/ml)
(20 SCFM, 50.0 uCi/ml)
(10 SCFM, 200.0 uCi/ml)

OR

Condenser Vacuum Pump Noble Gas Monitor, PRM-IRE-002
(5.0 E5 uci/ml)

SITE AREA EMERGENCY

NOTE

Off-Site Protective Action may be required - see EP-2-052, TAB "A".

Any one of the following conditions:

1. Plant Stack Noble Gas Monitor, PRM-IRE-0110 indicates noble release rate greater than 4.0E5 uCi/sec for 0.5 hr; or greater than 4.0E6 uCi/sec for 2 minutes, on CP-52.

2. Offsite Dose Assessment (CEPADAS/Manual) projects whole body dose rates at the EAB greater than 50 mrem/hr for 0.5 hr; or greater than 500 mrem/hr for 2 minutes.

3. Offsite Dose Assessment (CEPADAS/Manual) projects thyroid dose rates at the EAB greater than 250 mrem/hr for 0.5 hr; or greater than 2500 mrem/hr for 2 minutes.

4. Radiological monitoring team measures whole body dose rates at the EAB greater than 50 mrem/hr for 0.5 hr; or greater than 500 mrem/hr for 2 minutes.

5. Radiological monitoring team measures thyroid dose rates (equivalent I-131 concentrations) at the EAB greater than 250 mrem/hr for 0.5 hr; or greater than 2500 mrem/hr for 2 minutes.

GENERAL EMERGENCY

NOTE

Off-Site Protective Actions ARE REQUIRED - see EP-2-052 TAB "A".

Any one of the following conditions:

1. Offsite Dose Assessment (CEPADAS /Manual) projects whole body dose rate at the EAB greater than or equal to 1.0 rem/hr.

2. Offsite Dose Assessment (CEPADAS /Manual) projects thyroid dose rate at the EAB greater than or equal to 5.0 rem/hr.

3. Radiological monitoring team measures whole body dose rate at the EAB greater than or equal to 1.0 rem/hr.

4. Radiological monitoring team measures thyroid dose rate (equivalent I-131 concentrations) at the EAB greater than or equal to 5.0 rem/hr.

UNCONTROLLED RELEASE OF RADIOACTIVITY

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
OR	OR		
Fuel Handling Bldg. Exhaust A Monitor, ARM-IRE-5107A (28,625 SCFM, 3.7 E-3 uCi/cc)	Fuel Handling Bldg. Exhaust A Monitor, ARM-IRE-5107A (28,625 SCFM, 3.7 E-2 uCi/ml)		
OR	OR		
Fuel Handling Bldg. Exhaust B Monitor, ARM-IRE-5107B, (28,625 SCFM, 3.7 E-3 uCi/cc)	Fuel Handling Bldg. Exhaust B Monitor, ARM-IRE-5107B (28,625 SCFM, 3.7 E-2 uCi/ml)		
OR	OR		
Fuel Handling Bldg. Wide Range, ARM-IRE-3032,	Fuel Handling Bldg. Wide Range, ARM-IRE-3032		
OR	OR		
Plant Stack Noble Gas Monitor PRM-IRE-0110 (Channel 4 reading 5.0 E4 uCi/Sec)	Plant Stack Noble Gas Monitor, PRM-IRE-0110 (Channel 4 reading 5.0 E5 uCi/Sec).		
2.) Liquid effluent monitors.	2.) Liquid effluent monitors.		
Liqu'd Waste Management Monitor, PRM-IRE-0647 (1.0 E-1 uCi/ml).	Liquid Waste Management Monitor, PRM-IRE-0647 (1.0 uCi/ml).		
OR	OR		
Boron Management Condensate Monitor PRM-IRE-0627 (1.0 E-1 uCi/ml).	Boron Management Conden ate Monitor PRM-IRE-0627 (1.0 uCi/ml).		
OR	OR		
Circulating Water Discharge Monitor PRM-IRE-6775 (2.0 E-5 uCi/ml).	Circulating Water Discharge Monitor PRM-IRE-1900 (2.0 E-4 uCi/ml).		
OR	OR		
Dry Cooling Tower Sump #1 Monitor PRM-IRE-6775 (2.0 E-5 uCi/ml).	Dry Cooling Tower Sump #1 Monitor PRM-IRE-6775 (2.0 E-4 uCi/ml).		
OR	OR		
Dry Cooling Tower Sump #2 Monitor PRM-IRE-6776 (2.0 E-5 uCi/ml).	Dry Cooling Tower Sump #2 Monitor PRM-IRE-6776 (2.0 E-4 uCi/ml).		
OR	OR		
Industrial waste Sump Monitor PRM-IRE-6778 (2.0 E-5 uCi/ml).	Industrial waste Sump Monitor PRM-IRE-6778 (2.0 E-4 uCi/ml).		

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
	B. Radiation levels or airborne contamination which indicate a severe degradation in the control of radioactive materials as indicated by: 1.) Any Area Radiation Monitor (AAA, AAS) or Process Airborne Monitor (PPP, PII, PGG, PPS, PIS, PGS) "trend" indication on RM-11 console shows a valid unexplained increase by a factor of 1000. 2.) Any radiological survey results indicating an unexplained increase by a factor of 1000 in direct radiation or airborne contamination levels within the facility.		
	3.) SS/EC opinion that a fuel damage accident with release of radioactivity to Containment or Fuel Handling Building has occurred based on reported fuel handling incident verified by alarms on any of the following radiation monitors:	6.) SS/EC opinion that a major fuel damage accident with release of radioactivity to Containment or Fuel Handling Building has occurred based on reported fuel handling incident verified by greater than 10 times HIGH alarm set point indication on any of the following radiation monitors:	
	Containment HI Range Area Monitors, ARM-IRE-5400AS(BS); or	Containment HI Range Area Monitor, ARM-IRE-5400AS(BS); or	
	FHB Exhaust A Monitor, ARM-Ire-5107A; or	FHB Exhaust A Monitor, ARM-IRE-5107A; or	
	FHB Exhaust B Monitor, ARM-IRE-5107B; or	FHB Exhaust B Monitor, ARM-IRE-5107B; or	
	FHB Area Radiation Monitor, ARM-IRE-0300.2S; or	FHB Area Radiation Monitor, ARM-IRE-0300.2S; or	
	FHB Area Radiation Monitor, ARM-IRE-0300.4S; or	FHB Area Radiation Monitor, ARM-IRE-0300.4S; or	
		FHB Exhaust Monitor, Wide Range, ARM-IRE-3032; or	
	FHB Area Radiation Monitor, ARM-IRE-0300.1S; or	FHB Area Radiation Monitor, ARM-IRE-0300.1S; or	
	FHB Area Radiation Monitor, ARM-IRE-0300.3S; or	FHB Area Radiation Monitor, ARM-IRE-0300.3S; or	
	Containment Particulate Airborne Monitor, ARM-IRE-0100S; or	Containment Particulate Airborne Monitor, ARM-IRE-0100S; or	

UNCONTROLLED RELEASE OF RADIOACTIVITY

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
	Containment Area Radiation Monitor, ARM-IRE-3024S; or Containment Area Radiation Monitor, ARM-IRE-3025S; or Containment Area Radiation Monitor, ARM-IRE-3026S; or Containment Area Radiation Monitor, ARM-IRE-3027S.	Containment Area Radiation Monitor, ARM-IRE-3024S; or Containment Area Radiation Monitor, ARM-IRE-3025S; or Containment Area Radiation Monitor, ARM-IRE-3026S; or Containment Area Radiation Monitor, ARM-IRE-3027S. 7.) Uncontrolled decrease in spent fuel pool water level to below level of irradiated fuel as determined by visual observation of pool level; or L2 on CP-2, FUEL POOL LEVEL LO-alarm, concurrent with full scale indication on any two of the-following radiation monitors: FHB Area Radiation Monitor, ARM-IRE-0300.2S FHB Area Radiation Monitor, ARM-IRE-0300.4S FHB Area Radiation Monitor, ARM-IRE-0300.1S FHB Area Radiation Monitor, ARM-IRE-0300.3S	
	4.) Steam Line fault concurrent with significant (greater than 10 gpm) primary to secondary leakage as indicated by: Uncontrolled decrease in Steam Generator pressure(s) to MSIS as indicated on SMA, SMB, SMC, SMD (on CP-8) [MS-IPT-0301AS, (0301BS), (0303AS), (0303BS)]. AND Main Steam Line Monitor, PRM-IRE-5500A, (B) exceeds "Alert" alarm set point, on CP-52.	8. Steam line fault concurrent with SS/EC determination that there is gross RCS activity release from the secondary boundary as determined by: Uncontrolled decrease in Steam Generator pressure(s) to MSIS as indicated on SMA, SMB, SMC, SMD on CP-8 [MS-IPT-0301AS, (0301BS), (0303AS), (0303BS)]. AND Main Steam Line Monitor PRM-IRE-5500A, (B) exceeds "Hi" alarm set point, on CP-52. OR Equilibrium Charging Flow minus letdown flow is greater than 44 gpm with RCSDE I-131 greater than 1.0 uCi/gm (as determined by the most recent isotopic analysis results).	

UNUSUAL EVENT

1.) Exceeding either primary to secondary leak rate technical specifications or primary system leak rate technical specifications as indicated by RCS leakage greater than any ONE of the following Technical Specification limits:

a.) Zero pressure boundary leakage.

b.) 1 gpm unidentified leakage.

c.) 1 gpm RCS pressure isolation valve leakage.

d.) 1 gpm total primary to secondary leakage or 720 gallons per day through any one Steam Generator.

e.) 10 gpm identified leakage.

ALERT

NOTE

Off-Site Protective Action may be required - see EP-2-052 TAB "B".

Any one of the following conditions:

RCS Leakage greater than 44 gpm as indicated by:

1.) Equilibrium charging flow minus total letdown flow greater than 44 gpm.

2.) Rapid gross failure of one steam generator tube with loss of offsite power as indicated by:

Equilibrium charging flow minus total letdown flow greater than 88 gpm

Main Steam Line Monitor, PRM-IRE-5500A, (B) exceeds "Alert" alarm set point, on CP-52

AND

"4 kV Bus SA Bkr Trip/Trouble" alarm, P1 on CP-1

AND

"4 kV Bus SB Bkr Trip/Trouble" alarm, P3 on CP-1.

3.) Steam line break with significant (greater than 10 gpm) primary to secondary leak rate as indicated by:

Equilibrium charging flow minus total letdown flow greater than 10 gpm greater than known total RCS leakage.

AND

Uncontrolled decrease in S/G pressure(s) to MSIS as shown on SMA, SMB, SMC, SMD (CP-8) [MS-IPT-0304AS, (0301BS), (0303AS), (0303BS)]

SITE AREA EMERGENCY

NOTE

Off-Site Protective Action may be required - see EP-2-052 TAB "B".

Any one of the following conditions:

1.) RCS to Containment leakage greater than available charging pump capacity (LOCA) as determined by:

Uncontrolled decrease in Pressurizer pressure and subcooling margin with SIAS and HPSI flow indicated on CP-8.

AND

Increasing Containment radiation/ pressure/temperature/sump levels.

AND

No abnormal difference between Steam Generator pressures and levels.

GENERAL EMERGENCY

NOTE

Off-Site Protective Action ARE REQUIRED - see EP-2-052 TAB "B".

Any one of the following conditions:

1.) Any loss of coolant accident and subsequent failures of Emergency Core Cooling Systems such that, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, and the ultimate failure of Containment is likely.

2.) Any loss of coolant accident and subsequent failures of Containment Heat Removal Systems such that, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, and the ultimate failure of Containment is likely.

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
		2.) RCS to secondary leakage greater than available charging pump capacity (SGTR) as determined by: Uncontrolled decrease in Pressurizer pressure and subcooling margin with SIAS and HPSI flow indicated on CP-8. AND Main Steam Line Monitor, PRM-IRE-5500A, (B) exceeds HI-HI alarm set point on CP-52. 3.) RCS to secondary leakage greater than 88 gpm concurrent with loss of offsite power as indicated by: Equilibrium charging flow minus total letdown flow greater than 88 gpm AND Main Steam Line Monitor, PRM-IRE-5500A, (B) exceeds HI alarm set point, on CP-52. AND "4 kV Bus SA Bkr Trip/Trouble" alarms P1 on CP-1. AND "4 kV Bus SB Bkr Trip/Trouble" alarm, P3 on CP-1.	

DNB/DEGRADED CORE SEQUENCE

UNUSUAL EVENT

1.) Emergency Core Cooling System (ECCS) initiated and discharge to vessel as indicated by:

Valid SIAS actuation and safety injection flow indicated on SI-1FI-0311, (0321), (0331), (0341).

2.) Rapid secondary depressurization of the secondary side as indicated by:

Uncontrolled decrease in Steam Generator pressure(s) to MSIS as indicated on SMA, SMB, SMC, SMD on CP-8 [MS-1PT-(0301AS), (0301BS), (0303AS), (0303BS)].

3.) Abnormal coolant temperature and/or pressure or abnormal fuel temperatures outside of technical specification limits as indicated by:

a.) Reactor trip with RPS Channels Trip DNBR "Lo" (A-12) on CP-2, DNBR less than 1.20 as indicated; or

b.) Reactor trip with RPS Channels Trip Local PWR Density "HI" (A-11) peak linear heat rate greater than 21.0 kW/ft as indicated on CP-7 by margin meter less than or equal to 0 for DNBR or LPD.

c.) RCS pressure greater than 2750 psia.

4.) Fuel Damage as indicated by:

LETDOWN ACTIVITY HI alarm, D1 on CP-4, and verified by isotopic analysis indicating an increase in failed fuel greater than 0.1 percent in 30 minutes, or failed fuel greater than 1.0%.

ALERT

Any one of the following conditions:

1.) Severe loss of fuel cladding verified by isotopic analysis indicating an increase in failed fuel greater than 1.0 percent in 30 minutes or total failed fuel greater than 5.0 percent.

2.) RCS chemistry sample results indicate dose equivalent I-131 greater than 300 uCi/ml and SS/EC opinion that sample results are not due to iodine spiking phenomenon.

3. Reactor Coolant Pump shaft seizure leading to fuel failure as determined by:

Reactor Trip on Low Flow and DNBR Low

AND

Increasing selected isotope activity on RPM-1RE-0202, Letdown Process Radiation Monitor on CP-4.

AND

DNBR less than 1.20 as indicated by Core Protection Calculators.

AND

(A1), (A3), (A5), (A7), ON CP-2, REACTOR CLG PUMP TRIP/TROUBLE alarm(s).

AND

Computer alarm, PT. I.D. D13202, (13402), (13602), (13807), RCP MTR OVERCURR/OVERLD TRIP

SITE AREA EMERGENCY

NOTE

Off-Site Protective Action may be required - see EP-2-052 TAB "C".

1.) SS/EC opinion that a "degraded core with possible loss of coolable geometry" condition exists based on consideration of the following:

(a) Adequacy of core cooling.

(b) Reactor coolant activity sample results.

(c) Containment radioactivity levels.

GENERAL EMERGENCY

NOTE

Off-Site Protective Action ARE REQUIRED - see EP-2-052 TAB "C".

1.) Loss of core heat sink such that, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, and the ultimate failure of Containment is likely based on determination of either of the following:

(a) Transient initiated by loss of all normal feedwater capability followed by failure of all emergency feedwater capability for extended period:

OR

(b) Loss of all offsite power and failure of both Emergency Diesel Generators and failure of steam driven Emergency Feedwater Pump for extended period.

LOSS OF SAFETY FUNCTION

UNUSUAL EVENT

Any one of the following conditions:

1.) Loss of offsite power or loss of onsite AC power capability as indicated by:

a.) P1 on CP-1, "4 kV Bus SA Bkr Trip/Trouble" alarm.

AND

P3 on CP-1, "4 kV Bus SB Bkr Trip/Trouble" alarm.

OR

b.) Loss of operability of both Emergency Diesel Generators.

2.) Significant loss of assessment capability as indicated by:

In Modes 1,2,3,4

Loss of both trains of plant computer for greater than 15 minutes.

OR

Loss of SPDS for greater than 15 minutes.

OR

Loss all meteorological instruments for greater than 15 minutes.

OR

Technical Specification required shutdown due to loss of RMS.

ALERT

Any one of the following conditions:

1.) Loss of all offsite ac power concurrent with failure of both Emergency Diesel Generators as determined by:

P1 on CP-1 4 kV BUS SA VOLTAGE LOST;" AND

P3 on CP-1, 4 kV BUS SB VOLTAGE LOST;"

2.) Loss of all onsite vital dc power as determined by:

N8 on CP-35, BATTERY SA TROUBLE; AND

N9 on CP-35, BATTERY SAB TROUBLE; AND

N10 on CP-35, BATTERY SB TROUBLE;

SITE AREA EMERGENCY

NOTE

Conditions 3, 4 and 5 may require Off-Site Protective Action - See EP-2-052, TAB "D".

Any one of the following conditions:

1. Loss of all offsite ac power concurrent with failure of both Emergency Diesel Generators for greater than 15 minutes as determined by:

P1 on CP-1, 4 kV BUS SA VOLTAGE LOST; AND

P3 on CP-1, 4 kV BUS SB VOLTAGE LOST;

2.) Loss of all onsite vital dc power for greater than 15 minutes as determined by:

N8 on CP-35, BATTERY SA TROUBLE; AND

N9 on CP-35, BATTERY SAB TROUBLE; AND

N10 on CP-35, BATTERY SB TROUBLE;

GENERAL EMERGENCY

NOTE

Off-Site Protective Actions ARE REQUIRED - See EP-2-052, TAB "D".

Any one of the following conditions:

1.) EC/SS opinion that a gross loss of any two of the three fission product barriers has occurred and plant conditions are such that a potential for the loss of the third barrier exists based on consideration of the following:

FOR THE 1st BARRIER - FUEL CLADDING

A.) Conditions indicating a potential loss of fuel cladding can be determined by:

1.) Violation of DNBR due to loss of RCS flow or loss of RCS subcooling margin or abnormally high fuel temperatures.

2.) Inadequate core cooling due to loss of core heatsink or core flow blockage or LOCA concurrent with failure of ECCS.

B.) Conditions indicating a loss of fuel cladding can be determined by:

1.) Fission product activity in the reactor coolant.

LOSS OF SAFETY FUNCTION

UNUSUAL EVENT

3.) Loss of engineered safety feature or fire protection system function requiring shutdown by technical specifications.

4.) Loss of containment integrity requiring shutdown by Technical Specifications.

ALERT

3.) Loss of the ability to achieve or maintain Cold Shutdown due to any of the following:

(a) Inability to borate to Mode 5 Shutdown Margin of 2.0% k/k; or

(b) Loss of both Shutdown Cooling trains; or

(c) Loss of both essential CCW/ACCW trains.

4. Reactor remains critical after receipt of RPS or manual trip signal as indicated by:

(a) Two or more like RPS trip channels have reached or exceeded the trip set point

AND

(b) Reed Switch Position Transmitters indicate 10 or more CEA's not full inserted

AND

(c) No indication of core damage

5.) Most or all Control Room annunciators lost as determined by visual observation, while in Modes 1,2,3,4.

6.) Evacuation of Control Room anticipated or required with control of shutdown systems established from local stations.

SITE AREA EMERGENCY

3.) Loss of the ability to achieve or maintain Hot Shutdown due to any of the following:

(a) Inability to borate to Mode 4 Shutdown Margin of 5.15% k/k (for (for greater than 15 minutes); or

(b) Loss of both Steam Generators as an effective heatsink; or

(c) Inability to maintain natural circulation when forced flow is not available; or

(d) Inability to make up RCS volume (for greater than or equal to 15 minutes).

4. Transient requiring operation of shutdown systems with failure to trip (automaticly and manually) with no core damage immediately evident as determined by:

(a) Two or more like RPS trip channels have reached or exceeded the trip set point.

AND

(b) Reed Switch Position Transmitters indicate 10 or more CEA's not fully inserted.

AND

(c) No indication of core damage.

5.) Most or all Control Room annunciators lost and SS/EC opinion that transient which jeopardizes reactor safety is in progress.

6.) Evacuation of Control Room required with control of shutdown systems NOT established from local stations within 15 minutes.

GENERAL EMERGENCY

FOR THE 2nd BARRIER - RCS PRESSURE BOUNDARY

A.) Conditions indicating a potential loss of the RCS pressure boundary can be determined by:

1.) RCS overpressure transient due to loss of core heatsink or reactor power excursion or transient requiring operation of shutdown systems with failure to trip.

B.) Conditions indicating a loss of the RCS pressure boundary can be determined by:

1.) Decreasing RCS pressure and increasing Containment radiation/ pressure/temperature/sump levels and no abnormal difference between Steam Generator pressures (LOCA).

2.) Decreasing RCS pressure and increasing radiation on Main Steam Line Monitors increasing level on affected Steam Generator (SGTR).

FOR THE 3rd BARRIER - CONTAINMENT

A.) Conditions indicating a potential loss of containment can be determined by:

1.) Steam line break inside Containment concurrent with failure of Containment Heat Removal Systems.

2.) LOCA concurrent with failure of Containment Heat Removal Systems.

3.) Post-LOCA hydrogen generation concurrent with failure of Hydrogen Removal Systems.

LOSS OF SAFETY FUNCTION

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
			B.) Conditions indicating a loss of containment can be determined by: 1.) LOCA or steam line break followed by rapidly increasing pressure in the Shield Building annulus (primary Containment to Shield Building fault). 2.) Pressure in one Steam Generator continues to decrease following actuation of MSIS with Containment pressure not increasing (SLB between Containment and MSIV). 3.) MSIV position indication shows MSIV not fully closed following actuation of MSIS, and primary to secondary leakage indicated. 4.) Multiple Containment Isolation Valve failures creating a release path from Containment to outside atmosphere. II.) Transient requiring operation of shutdown systems with failure to trip (automatically and manually) and, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, as determined by: Two or more like RPS trip channels have reached or exceeded the trip set point. AND Reed Switch Position Transmitters indicate 10 or more CEA's not fully inserted. Opinion of the SS/EC that a Core Melt Sequence is in progress, or imminent.

HAZARD TO STATION OPERATION

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
Any one of the following conditions:	Any one of the following conditions:	Any one of the following conditions:	NOTE Off-site Protective Actions ARE REQUIRED - See EP-2-052, TAB "E".
1.) Observation of fire within the plant which lasts longer than 10 minutes or any fire within the owner controlled area which requires offsite fire fighting assistance.	1.) Observation of fire within the plant which potentially affects safety systems.	1.) Observation of fire within the plant which compromises both trains of a safety system or its functions.	1.) Any major hazard which causes massive common damage to plant systems such that, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, and the ultimate failure of Containment is likely.
2.) Aircraft crash onsite but outside protected area.	2.) Aircraft crash or missile impact inside the protected area.	2.) Aircraft crash or missile impact or explosion causes major damage to safety systems.	
3.) Train derailment onsite.			
4.) Near or onsite explosion.	3.) Known explosion damage to the facility which degrades the level or safety of the plant.		
5.) Near or onsite uncontrolled release of toxic or flammable gas. (GO TO EP-4-010).	4.) Near or onsite uncontrolled release of toxic or flammable gas. (GO TO EP-4-010).	3.) Near or onsite uncontrolled release of toxic or flammable gas. (GO TO EP-4-010).	

NATURAL PHENOMENA

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
			NOTE Off-Site Protective Actions ARE REQUIRED - See EP-2-052, TAB "F".
Any one of the following conditions:	Any one of the following conditions:	Any one of the following conditions:	
1.) Any earthquake felt in-plant or valid receipt of L10 (on CP-36), SEISMIC RECORDERS IN OPERATION alarm.	1.) Earthquake recording greater than 0.05 g ground acceleration or valid receipt of Ms10 (on CP-36), SEISMIC EVENT alarm.	1.) Earthquake recording greater than 0.1 g ground acceleration.	
2.) Any in-plant flooding condition which, in the opinion of the SS/EC, potentially degrades the level of safety of the plant; or river water level at intake structure greater than +24 ft. MSL.	2.) Hurricane surge or other in-plant flooding condition which, in the opinion of the SS/EC, actually degrades the level of safety of the plant; or river water level at intake structure greater than +27 ft. MSL.	2.) Hurricane surge or other in-plant flooding condition which causes actual failure of vital-equipment; or river water breaching the levee (EL. +30 ft. MSL).	1.) Any major natural phenomenon which causes massive common damage to plant systems such that, in the opinion of the SS/EC, a Core Melt Sequence is in progress, or imminent, and the ultimate failure of Containment is likely.
3.) Any tornado onsite.	3.) Any tornado striking the protected area.	3.) Tornado causes major damage to vital equipment.	
4.) Site comes under a hurricane warning.	4.) Site experiencing sustained hurricane force winds (74 mph).	4.) Hurricane with wind gusts exceeding 200 mph.	

SECURITY COMPROMISE

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
		NOTE Off-Site Protective Actions ARE REQUIRED - See EP-2-052, TAB "G".	NOTE Off-site Protective Actions ARE REQUIRED _ See EP-2-052, TAB "G".
1.) Any security threat, attempted entry or attempted sabotage such that Security notifies the SS/EC of initiation of the Security Contingency Plan.	1.) SS/EC notified by Security of an ongoing security compromise in the plant, but not to vital areas as defined in the Security Contingency Plan.	1.) Imminent loss of physical security control of the plant.	1.) Loss of physical security control of the plant.

MISCELLANEOUS

UNUSUAL EVENT

Any one of the following conditions:

1.) Transportation of contaminated injured individual from site to offsite hospital.

2.) Other plant conditions exist that, in the opinion of the SS/EC, warrant increased awareness on the part of the plant operating staff or state or local authorities; or require plant shutdown under technical specification requirements; or involve other than normal controlled shutdown.

ALERT

1.) Other plant conditions exist that, in the opinion of the SS/EC, warrant precautionary activation of Technical Support Center and placing Emergency Operations Facility and other key emergency personnel on standby.

SITE AREA EMERGENCY

1.) Other plant conditions exist that, in the opinion of the SS/EC warrant activation of emergency centers and monitoring teams or a precautionary notification to the public near the site.

GENERAL EMERGENCY

NOTE

Off-Site Protective Actions ARE REQUIRED - See EP-2-052, TAB "H".

1.) Other plant conditions exist that, in the opinion of the SS/EC could result in a Core Melt Sequence or a release of radioactivity to the environment such that resultant dose at the site boundary could reach or exceed the EPA Protective Action Guidelines of 1.0 rem whole body or 5 rems to the thyroid.

EMERGENCY COORDINATOR'S CLOSE-OUT CHECKLIST

INSTRUCTION

1. This checklist shall be used by the Emergency Coordinator to evaluate a decision to terminate an existing emergency condition. All criteria shall be met.

2. This checklist, completed and signed by the Emergency Coordinator, is a prerequisite for initiation of the Recovery Organization in accordance with EP-2-170.

CRITERIA	CRITERIA MET (Initials)
1. The plant is in a stable configuration with adequate core cooling.	_____
2. In-plant radiation levels are stable or decreasing with time.	_____
3. The release of radioactive material to the environment is controlled and there is no significant potential for additional uncontrolled releases.	_____
4. All safety systems necessary to maintain the plant in a stable configuration are operable.	_____
5. Fires are extinguished; flooding conditions and any other site damage are under control.	_____
6. All vital areas requiring occupancy are habitable.	_____
7. Site security control is established.	_____
8. Contaminated injured personnel have been transported to a hospital.	_____
9. All implementing procedures, have been closed out or are determined to remain active with responsibility for their completion and closure assigned to an individual.	_____

Approval to terminate emergency condition granted by:

_____ Date:_____ Time:_____
Emergency Coordinator

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-1-010
REVISION 6

Emergency Plan Implementing Instruction

Unusual Event

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: _____ 10/1/84
Plant Manager-Nuclear — Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-1-010 - Unusual Event (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent		✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent		✓		9/27/84
	Plant Quality Manager		✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman		✓		9/27/84

PORC Meeting No. 84-96 Item No. 22 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Comg #2
9-13-84
WNS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-1-010 Title Unusual Event

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. N/A |_|Permanent |_|Deviation Expiration Date N/A

B. Revision No. 6

C. Deletion |_|YES |X|NO

DESCRIPTION OF CHANGE OR REVISION

Add Tech Spec 3.3 to reflect 1984 annual discrepancy with the emergency medicine

REASON FOR CHANGE, REVISION, OR DELETION

Incorporation of NRC Comments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE Aug 29 1984

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES____ NO ~
2. Change the procedures as described in the FSAR? YES____ NO ~
3. Conduct tests/experiments not described in the FSAR? YES____ NO ~
4. Require a change to the Technical Specifications? YES____ NO ~

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 8/29/84

TECHNICAL REVIEW [signature] DATE 8-30-84

GROUP HEAD REVIEW [signature] DATE 9-7-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1 - 6	Revision 6
7	Revision 4

1.0 PURPOSE

To outline the actions to be taken for an emergency condition at the Unusual Event Level.

NOTE

The normal on-shift complement of personnel is considered sufficient to respond to an Unusual Event. Activation of other LP&L emergency organizations is optional.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 EP-1-001, Recognition and Classification of Emergency Conditions

2.3 Emergency Management Resources Book

2.4 EP-1-020, Alert

2.5 EP-1-030, Site Area Emergency

2.6 EP-1-040, General Emergency

2.7 EP-2-010, Notifications and Communications

2.8 EP-2-031, In-Plant Radiological Controls and Surveys During Emergencies

2.9 EP-2-100, Technical Support Center (TSC) Activation, Operation, and Deactivation

2.10 EP-2-101, Operational Support Center (OSC) Activation, Operation, and Deactivation

2.11 EP-2-150, Emergency Plan Implementing Records

2.12 FP-1-003, Fire Emergency/Reports

2.13 EP-2-190, Personnel Accountability

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator is Responsible for the implementation of this procedure.

3.2 The Emergency Coordinator is responsible for ensuring that the actions as outlined in this procedure are carried out.

3.3 The Shift Supervisor is the Emergency Coordinator until properly relieved by the Duty Plant Manager.

4.0 INITIATING CONDITIONS

This procedure is to be initiated upon reaching the following conditions:

4.1 Whenever an Unusual Event is recognized and classified per EP-1-001.

4.2 At the direction of the Emergency Coordinator.

5.0 PROCEDURE

5.1 Sound the station alarm.

5.2 Make the following announcement(s):

5.2.1 "ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL: AN UNUSUAL EVENT HAS BEEN DECLARED DUE TO (announce reason for declaration of Unusual Event). ALL MEMBERS OF THE ON-SHIFT EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS. ALL OTHER PERSONNEL SHOULD CONTINUE WITH THEIR NORMAL DUTIES UNLESS FURTHER INSTRUCTION IS GIVEN. THE MAINTENANCE RADIO FREQUENCE IS NOW DEDICATED FOR EMERGENCY USE ONLY."

5.2.2 If there is a localized emergency announce its type and location and instruct personnel to stand clear of this area (Refer to FP-1-003).

5.2.3 Repeat the announcement(s).

NOTE

If an Unusual Event has been declared, and in the opinion of the SS/EC contacting the Duty Plant Manager will prevent completing the off-site notifications within the 15 minutes required by regulation, the SS/EC shall direct the Emergency Communicator to begin off-site notifications.(5.5).

5.3 Make initial contact with the Duty Plant Manager (Refer to the Emergency Management Resources Book).

5.3.1 If the Duty Plant Manager cannot be reached, contact any of the alternate Duty Plant Mangers (Refer to the Emergency Management Resources Book).

5.3.2 Upon contact with the Duty Plant Manager, discuss the following:

5.3.2.1 Nature of situation

5.3.2.2 Classification

5.3.2.3 Action taken or to be taken

5.3.2.4 Need to call in additional support personnel

5.3.2.5 Advise that the Duty EOF Director be contacted by the Duty Plant Manager.

5.3.2.6 Advise that Emergency News Director be contacted by the Duty Plant Manager. (Refer to the Emergency Management Resources Book).

5.4 If necessary, activate the on-site Emergency Response Organization by directing the Emergency Communicator to activate the Emergency Pager System in accordance with EP-2-010, Attachment 7.2.

NOTE

If conditions exist that could be hazardous to those personnel reporting to the site, provide instructions for appropriate protective actions including use of alternate routes, activation of backup facilities, etc., as necessary.

5.5 Complete Attachment 7.5 of EP-2-010, Initial Notification Form, and provide the form and the agencies to be notified to the Emergency Communicator. Direct the Emergency Communicator to commence initial off-site notifications of the appropriate organizations listed below in accordance with EP-2-010:

5.5.1 St. Charles Parish Emergency Operations Center (EOC) - Notify with 15 minutes of declaration.

5.5.2 St. John the Baptist Parish EOC - Notify within 15 minutes of declaration.

5.5.3 Louisiana Nuclear Energy Division (LNED) - Notify within 15 minutes of declaration.

5.5.4 Louisiana Office of Emergency Preparedness (LOEP) - Notify within 15 minutes of declaration.

5.5.5 Waterford 1 and 2 - Notify with 15 minutes of declaration, but after above notifications.

5.5.6 Nuclear Regulatory Commission (NRC) - As soon as possible, but within one hour of declaration.

5.5.7 U. S. Coast Guard - As necessary.

5.5.8 Missouri Pacific Railroad - As necessary.

5.5.9 American Nuclear Insurers (ANI) - As necessary.

5.6 Perform facility accountability activities as necessary in accordance with EP-2-190.

5.7 As additional information becomes available, update the Emergency Communicator by completing Attachment 7.7 of EP-2-010, Follow-up Notification. Direct the Emergency Communicator to conduct additional updates to off-site agencies in accordance with EP-2-010.

5.8 Direct a Health Physics Technician to initiate in-plant radiological controls in accordance with EP-2-031 if a real or potential radiological hazard exists.

5.9 Initiate any additional response measures in accordance with applicable emergency procedures listed on Attachment 7.1.

5.10 As conditions change, periodically check EP-1-001 to determine whether reclassification is necessary.

5.10.1 If reclassification is necessary, then reclassify the emergency in accordance with EP-1-001 and implement appropriate Implementing Instruction EP-1-020, EP-1-030, or EP-1-040.

NOTE

Ensure the station alarm is sounded before making the announcement that the emergency has been reclassified (see EP-1-020, EP-1-030, or EP-1-040).

5.10.2 If closeout is appropriate, then close out the emergency with a verbal summary to all agencies/personnel as indicated on Attachment 7.13 of EP-2-010 and refer to EP-2-170 to initiate any appropriate recovery activities.

5.10.3 When reclassifying ensure that the answering machine message tape reflects the most current emergency classification.

6.0 FINAL CONDITIONS

6.1 The Unusual Event has been closed out with normal station administration resumed and appropriate recovery activities underway or the emergency is reclassified.

7.0 ATTACHMENT

7.1 Procedure Reference for Additional Response Guidelines

PROCEDURE REFERENCE FOR ADDITIONAL RESPONSE GUIDELINES

Topic	Reference
Personnel	EP-2-020, Contaminated Injured/Ill Personnel
	EP-2-030, Emergency Radiation Exposure Guidelines and Controls
	EP-2-032, Monitoring and Decontamination
	EP-2-081, Search and Rescue
	FP-1-003, First Emergency/Reports
	UNT-7-018, First Aid and Medical Care
Radiation Releases	EP-2-060, Radiological Field Monitoring
Administration	EP-2-130, Emergency Team Assignments
	EP-2-140, Reentry
	EP-2-170, Recovery
	Emergency Management Resources Book
Security	PS-16-102, Security Response During Operating Emergencies
	PS-18-101, Standard Responses to Safeguards Contingencies

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-1-020
REVISION 6

Emergency Plan Implementing Instruction

Alert

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: K. F. Stoltz for RPB
Plant Manager-Nuclear

10/1/84
Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-1-020 - Alert (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent		✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent		✓		9/27/84
	Plant Quality Manager		—		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman		✓		9/27/84

PORC Meeting No. 84-96 Item No. 23 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

Chg #2
9-13-84
MHS

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-1-020 Title Alert

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. _____ |_| Permanent |_| Deviation Expiration Date _____

B. Revision No. 6

C. Deletion |_| YES |X| NO

DESCRIPTION OF CHANGE OR REVISION

Incorporate responses to NRC exercise comments dealing with answering machine message updates and clarification of observability and EC responsibilities

REASON FOR CHANGE, REVISION, OR DELETION

To meet NRC Commitments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE 8/22/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 8/22/84

TECHNICAL REVIEW [signature] DATE 8-30-84

GROUP HEAD REVIEW [signature] DATE 9-7-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1-7	Revision 6
8	Revision 5

1.0 PURPOSE

To outline the actions to be taken for an emergency condition at the Alert Level.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan
2.2 EP-1-001, Recognition and Classification of Emergency Conditions
2.3 EP-1-010, Unusual Event
2.4 EP-1-030, Site Area Emergency
2.5 EP-1-040, General Emergency
2.6 EP-2-010, Notifications and Communications
2.7 EP-2-031, In-Plant Radiological Controls and Surveys During Emergencies
2.8 EP-2-050, Offsite Dose Assessment (Manual)
2.9 EP-2-051, Offsite Dose Assessment (Computerized)
2.10 EP-2-052, Protective Action Guidelines
2.11 EP-2-060, Radiological Field Monitoring
2.12 EP-2-100, Technical Support Center (TSC) Activation, Operation, and Deactivation
2.13 EP-2-101, Operational Support Center (OSC) Activation, Operation, and Deactivation
2.14 EP-2-150, Emergency Plan Implementing Records
2.15 Emergency Management Resources Book
2.16 EP-2-034, Onsite Surveys During Emergencies
2.17 FP-1-003, Fire Emergency/Reports
2.18 EP-2-190, Personnel Accountability

2.19 UNT-7-018, First Aid and Medical Care

2.20 EP-2-071, Site Protective Measures

2.21 EP-2-130, Emergency Team Assignments

2.22 PS-16-103, Accountability of Personnel During Emergencies

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator is responsible for the implementation of this procedure.

3.2 The Emergency Coordinator is responsible for ensuring that the actions as outlined in this procedure are carried out.

3.3 The Shift Supervisor is the Emergency Coordinator until properly relieved by the Duty Plant Manager.

4.0 INITIATING CONDITIONS

This procedure is to be initiated upon reaching the following conditions:

4.1 Whenever an Alert is recognized and classified in accordance with EP-1-001.

4.2 At the direction of the Emergency Coordinator.

5.0 PROCEDURE

5.1 Sound the station alarm.

5.2 Make the following announcement (s):

5.2.1 "ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL: AN ALERT HAS BEEN DECLARED DUE TO (announce reason for declaration of alert). ALL MEMBERS OF THE ON-SITE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR STATIONS. ALL OTHER PERSONNEL REPORT TO YOUR WORK STATIONS (If the emergency is radiation oriented, add: "There will be no smoking, eating or drinking until further notice.") "THE MAINTENANCE RADIO FREQUENCY IS NOW DEDICATED FOR EMERGENCY USE ONLY."

5.2.2 If there is a localized emergency announce its type and instruct personnel to stand clear of this area (refer to FP-1-003).

5.2.3 Repeat the announcement (s).

5.2.4 Consider site protective measures in accordance with EP-2-071.

NOTE

If an Alert has been declared, and in the opinion of the SS/EC contacting the Duty Plant Manager will prevent completing the off-site notifications within the 15 minutes required by regulation, the SS/EC shall direct the Emergency Communicator to begin off-site notifications (5.5).

5.3 Make initial contact with the Duty Plant Manager (Refer to the Emergency Management Resources Book).

5.3.1 If the Duty Plant Manager cannot be reached, contact any of the alternate Duty Plant Managers (Refer to the Emergency Management Resources Book).

5.3.2 Upon contact with the Duty Plant Manager, discuss the following:

5.3.2.1 Nature of the situation

5.3.2.2 Classification

5.3.2.3 Action taken or to be taken

5.3.2.4 Need to activate emergency response facilities

5.3.2.5 Advise that the Duty Emergency Operations Facility Director be contacted by the Duty Plant Manager.

5.3.2.6 Advise that the Emergency News Director be contacted by the Duty Plant Manager.

5.4 Direct the Emergency Communicator to activate the Emergency Pager System in accordance with Attachment 7.2 of EP-2-010.

NOTE

If conditions exist that could be hazardous to those personnel reporting to the site, provide instructions for appropriate protective actions including use of alternate routes, activation of backup facilities, etc., as necessary.

5.5 Complete Attachment 7.5, Initial Notification Form, or Attachment 7.7, Followup Notification Form as appropriate of EP-2-010 and provide the form and agencies to be notified to the Emergency Communicator. Direct the Emergency Communicator to commence initial off-site notifications of the appropriate organizations listed below in accordance with EP-2-010.

5.5.1 St. Charles Parish Emergency Operations Center (EOC) - Notify within 15 minutes of declaration.

5.5.2 St. John the Baptist Parish EOC - Notify within 15 minutes of declaration.

5.5.3 Louisiana Nuclear Energy Division (LNED) - Notify within 15 minutes of declaration.

5.5.4 Louisiana Office of Emergency Preparedness (LOEP) - Notify within 15 minutes of declaration.

5.5.5 Waterford 1 and 2 - Notify within 15 minutes of declaration, but after above notifications.

5.5.6 Nuclear Regulatory Commission (NRC) - Notify as soon as possible, but within one hour of declaration.

5.5.7 Middle South Utilities - As soon as possible.

5.5.8 Institute of Nuclear Power Operations (INPO) - As soon as possible.

5.5.9 U.S. Coast Guard - As necessary.

5.5.10 Missouri Pacific Railroad - As necessary.

5.5.11 American Nuclear Insurers (ANI) - As necessary.

5.6 Ensure that the following accountability activities are performed:

5.6.1 The Security, Central Alarm Station/Secondary Alarm Station (CAS/SAS) Operator activates the Accountability Keycard Readers as per PS-16-103.

5.6.2 Personnel accountability activities are peformed as per EP-2-190.

5.7 As additional information becomes available, update the Emergency Communicator by completing Attachment 7.7, Follow-up Notification, of EP-2-010. Direct the Emergency Communicator to conduct additional updates to offsite agencies in accordance with EP-2-010.

5.8 Initiate off-site dose assessment in accordance with EP-2-050 for manual assessment or EP-2-051 for computerized assessment. Determine the need for protective action recommendations in accordance with EP-2-052, Protective Action Guidelines.

5.9 If radiological releases are occurring, instruct the Health Physics Coordinator to activate Radiological Field Monitoring Teams in accordance with EP-2-130 and EP-2-060.

5.10 Initiate activation of the Technical Support Center in accordance with EP-2-100.

5.11 Initiate activation of the Operational Support Center in accordance with EP-2-101.

5.12 Direct the Health Physics Coordinator and/or the Radiological Controls Coordinators to initate in-plant radiological controls in accordance with EP-2-031 if a potential radiological hazard exists and to perform on-site surveys as necessary in accordance with EP-2-034.

5.13 Ensure that emergency logs/records are kept in accordance with EP-2-150.

5.14 Initiate any additional response measures in accordance with the applicable emergency procedures listed on Attachment 7.1.

5.15 As conditions change, periodically check EP-1-001 to determine whether reclassification is necessary.

5.15.1 If reclassification is necessary, then reclassify emergency in accordance with EP-1-001 and implement the appropriate Emergency Plan Implementing Instruction: EP-1-010, EP-1-030 or EP-1-040.

5.15.2 If closeout is appropriate, then close out the emergency with a verbal summary to all agencies/personnel as indicated on Attachment 7.13 of EP-2-010 and implement EP-2-170 to initiate recovery activities.

5.15.3 When reclassifying ensure that the answering machine message tape reflects the most current emergency classification.

NOTE

Ensure the station alarm is sounded prior to making the announcement that the emergency has been reclassified - whether it is an increase or decrease in classification. (See EP-1-010, EP-1-030 or EP-1-040).

6.0 FINAL CONDITIONS

6.1 The Alert has been closed out with normal station administration resumed and recovery activities initiated in accordance with EP-2-170 or the emergency is reclassified.

7.0 ATTACHMENTS

7.1 Procedure Reference for Additional Response Guidelines

PROCEDURE REFERENCE FOR ADDITIONAL RESPONSE GUIDELINES

Topic	Reference
Personnel	EP-2-020, Contaminated Injured/Ill Personnel
	EP-2-030, Emergency Radiation Exposure Guidelines and Controls
	EP-2-032, Monitoring and Decontamination
	EP-2-081, Search and Rescue
	FP-1-003, Fire Emergency/Reports
	UNT-7-018, First Aid and Medical Care
Adminstration	EP-2-130, Emergency Team Assignments
	EP-2-140, Reentry
	EP-2-170, Recovery
	Emergency Management Resources Book
Security	PS-16-102, Security Response During Operating Emergencies
	PS-18-101, Standard Responses to Safeguards Contingencies

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-1-030
REVISION 6

Emergency Plan Implementing Instruction

Site Area Emergency

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: _____ 10/1/84
Plant Manager-Nuclear Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-1-030 - Site Area Emergency (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	[signature]	✓		9/27/84
	Operations Superintendent	[signature]	✓		9/27/84
	Radiation Protection Superintendent	[signature]	✓		9/27/84
	Plant Quality Manager	C. L. Skinner	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman	[signature]	✓		9/27/84

PORC Meeting No. 84-96 Item No. 24 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☑ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

chg #2
9-13-84
MHS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-1-030 Title Site Area Emergency

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. _____ |_| Permanent |_| Deviation Expiration Date _____

B. Revision No. 6

C. Deletion |_| YES |_| NO

DESCRIPTION OF CHANGE OR REVISION

Clarified answering machine message upgrading, accountability activities and EC Role

REASON FOR CHANGE, REVISION, OR DELETION

To fulfill NRC Commitments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE 8/22/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 8/22/84

TECHNICAL REVIEW [signature] DATE 8-29-84

GROUP HEAD REVIEW [signature] DATE 9-7-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1-8	Revision 6
9	Revision 4

1.0 PURPOSE

To outline the actions to be taken for an emergency condition at the Site Area Emergency level.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 EP-1-001, Recognition and Classification of Emergency Conditions

2.3 Emergency Management Resources Book

2.4 EP-1-010, Unusual Event

2.5 EP-1-020, Alert

2.6 EP-1-040, General Emergency

2.7 EP-2-010, Notifications and Communications

2.8 EP-2-031, In-Plant Radiological Controls and Surveys During Emergencies

2.9 EP-2-050, Offsite Dose Assessment (Manual)

2.10 EP-2-051, Offsite Dose Assessment (Computerized)

2.11 EP-2-060, Radiological Field Monitoring

2.12 EP-2-071, Site Protective Measures

2.13 EP-2-100, Technical Support Center (TSC) Activation, Operation, and Deactivation

2.14 EP-2-101, Operational Support Center (OSC) Activation, Operation and Deactivation

2.15 EP-2-150, Emergency Plan Implementing Records

2.16 EP-2-052, Protective Action Guidelines

2.17 EP-2-130, Emergency Team Assignments

2.18 EP-2-034, Onsite Surveys During Emergencies

2.19 FP-1-003, Fire Emergency/Reports

2.20 UNT-7-018, First Aid and Medical Care

2.21 EP-2-190, Personnel Accountability

2.22 PS-16-103, Accountability of Personnel During Emergencies

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator is responsible for the implementation of this procedure.

3.2 The Emergency Coordinator is responsible for ensuring that the actions as outlined in this procedure are carried out.

3.3 The Shift Supervisor is the Emergency Coordinator until properly relieved by the Duty Plant Manager.

4.0 INITIATING CONDITIONS

This procedure is to be initated upon reaching the following conditions:

4.1 Whenever a Site Area Emergency is recognized and classified in accordance with EP-1-001.

4.2 At the direction of the Emergency Coordinator.

5.0 PROCEDURE

5.1 SITE EVACUATION

5.1.1 Select the off-site assembly area to be used: Monsanto Park, Luling or St. John the Baptist Catholic Church, Edgard.

5.1.2 Notify the Security Shift Supervisor to prepare for evacuation of the site.

5.1.3 Dispatch the Off-site Assembly Area Supervisor.

5.1.4 Ensure that a Health Pyhsics technician is dispatched to the off-site assembly area.

5.1.5 Sound the station alarm.

5.1.6 Make the following announcement:

"ATTENTION ALL PERSONNEL! ATTENTION ALL PERSONNEL: A SITE AREA EMERGENY HAS BEEN DECLARED DUE TO (announce reason for declaration of Site Area Emergency). ALL MEMBERS OF THE EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS. DUE TO PLANT CONDITIONS, ALL NONESSENTIAL PERSONNEL MUST PROCEED IMMEDIATELY TO THE (state one of the locations: ST. JOHN THE BAPTIST CATHOLIC

OR MONSANTO PARK AREA). UPON ARRIVAL, ALL PERSONNEL LOG IN WITH THE ASSEMBLY AREA SUPERVISOR. PERSONNEL IN RADIATION-CONTROLLED AREAS PROCEED TO THE HEALTH PHYSICS CONTROL POINT. THERE WILL BE NO SMOKING, EATING, OR DRINKING UNTIL FURTHER NOTICE. THE MAINTENANCE RADIO FREQUENCY IS NOW DEDICATED FOR EMERGENCY USE ONLY."

5.1.6.1 Repeat the announcement.

5.1.7 Make the following notifications in accordance with the notification procedures in EP-2-010.

5.1.7.1 Notify Waterford 1 & 2 to evacuate non-essential personnel.

NOTE

Waterford 1 & 2 personnel are not required to assemble at Waterford 3 assembly areas, but the Emergency Coordinator shall provide direction to Waterford 1 & 2 as to what evacuation routes to take.

5.1.7.2 Notify St. John the Baptist and St. Charles parishes for vehicular traffic control.

5.1.7.3 Notify the United States Coast Guard to control Exclusion Area river traffic.

5.1.7.4 Notify the Missiouri Pacific Railroad to Control Exclusion Area rail traffic.

5.1.8 Ensure accountability and evacuation verification activities are performed in accordance with EP-2-190 and PS-16-103.

NOTE

If a Site Area Emergency has been declared, and in the opinion of the SS/EC contacting the Duty Plant Manager will prevent completing the off-site notifications within the 15 minutes required by regulation, the SS/EC shall direct the Emergency Communicator to begin off-site notifications (5.4).

5.2 Make initial contact with the Duty Plant Manager.

NOTE

See Emergency Management Resources Book for names and phone numbers.

5.2.1 If the Duty Plant Manager cannot be reached, contact any of the alternate Duty Plant Managers.

5.2.2 Upon contact with the Duty Plant Manager, discuss the following:

5.2.2.1 Nature of situation

5.2.2.2 Classification

5.2.2.3 Action taken or to be taken

5.2.2.4 Need to activate emergency response facilities

5.2.2.5 Advise that the Duty EOF Director be contacted.

5.3 Direct the Emergency Communicator to activate the Emergency Pager System in accordance with EP-2-010.

NOTE

If conditions exist that could be hazardous to those personnel reporting to the site, provide instructions for appropriate protective actions including use of alternative routes, activation of backup facilities, etc., as necessary.

5.4 Complete Attachment 7.5, Initial Notification Form, or Attachment 7.7, Followup notification form as appropriate of EP-2-010, and provide the form and the agencies to be notified to the Emergency Communicator. Direct that the Emergency Communicator commence initial off-site notification of the appropriate organizations listed below in accordance with EP-2-010:

5.4.1 St. Charles Parish Emergency Operations Center (EOC)-notify within 15 minutes of declaration.

5.4.2 St. John the Baptist Parish EOC-notify within 15 minutes of declaration.

5.4.3 Louisiana Nuclear Energy Division (LNED)-notify within 15 minutes of declaration.

5.4.4 Louisiana Office of Emergency Preparedness (LOEP)-notify within 15 minutes of declaration.

5.4.5 Waterford 1 and 2-notify within 15 minutes of declaration, but after above notifications.

5.4.6 Nuclear Regulatory Commission (NRC)-notify as soon as possible, but within one hour of declaration.

5.4.7 Middle South Utilities - as soon as possible.

5.4.8 Institute of Nuclear Power Operations (INPO) - as soon as possible.

5.4.9 U.S. Coast Guard - as necessary.

5.4.10 Missouri Pacific Railroad - as necessary.

5.4.11 American Nuclear Insurers (ANI) - as necessary.

5.5 Ensure that the following accountability activities are performed:

5.5.1 The Security, Central Alarm Station/Secondary Alarm Station (CAS/SAS) Operator activates the Accountability Keycard Readers as per PS-16-103.

5.5.2 Personnel accountability activities are performed as per EP-2-190.

5.6 As additional information becomes available, update the Emergency Communicator by completing Attachment 7.7, Follow-up Notification, of EP-2-010. Direct the Emergency Communicator to conduct additional updates to off-site agencies per EP-2-010.

5.7 Initiate off-site dose assessment in accordance with EP-2-050 for manual assessment or EP-2-051 for computerized assessment. Determine the need for protective action recommendations per EP-2-052, Protective Action Guidelines.

5.8 If radioactive releases are occurring or anticipated, instruct the Health Physics Coordinator to activate Radiological Field Monitoring Teams in accordance with EP-2-130 and EP-2-060.

5.9 Initiate activation of the Technical Support Center in accordance with EP-2-100, if not previously activated.

5.10 Ensure that emergency logs/records are kept in accordance with EP-2-150.

5.11 Direct the Health Physics Coordinator and/or the Radiological Controls Coordinator to initiate in-plant radiological controls in accordance with EP-2-031 if a real or potential radiological hazard exists and to perform on-site surveys as necessary in accordance with EP-2-034.

5.12 Initiate any additional response measures in accordance with the applicable emergency procedures listed in Attachment 7.1.

5.13 As conditions change, periodically check EP-1-001 to determine whether reclassification is necessary.

5.13.1 If reclassification is necessary, then reclassify emergency according to EP-1-001 and implement appropriate Implementing Instruction EP-1-010, EP-1-020 or EP-1-040.

NOTE

Ensure the station alarm is sounded prior to making the announcement that the emergency has been reclassified - whether it is an increase or decrease in classification. (See EP-1-010, EP-1-020 or EP-1-040).

5.13.2 If closeout is appropriate, then close out emergency with a verbal summary to all agencies/personnel as indicated on Attachment 7.13 of EP-2-010 and implement EP-2-170 to initiate recovery activities.

5.13.3 When reclassifying ensure that the answering machine message tape reflects the most current emergency classification.

6.0 FINAL CONDITIONS

6.1 The Site Area Emergency has been closed out with normal station administration resumed and recovery activities initiated in accordance with EP-2-170 or the emergency reclassified.

7.0 ATTACHMENTS

7.1 Procedure References for Additional Response Guidelines

PROCEDURE REFERENCES FOR ADDITIONAL RESPONSE GUIDELINES

Topic	References
Personnel	EP-2-020, Contaminated Injured/Ill Personnel
	EP-2-030, Emergency Radiation Exposure Guidelines and Controls
	EP-2-032, Monitoring and Decontamination
	EP-2-033, Administration of Iodine Blocking Agents
	EP-2-052, Protective Action Guidelines
	EP-2-071, Site Protective Measures
	EP-2-081, Search and Rescue
Administration	EP-2-130, Emergency Team Assignments
	EP-2-140, Reentry
	EP-2-170, Recovery
	Emergency Management Resources Book
Security	PS-16-102, Security Response During Operating Emergencies
	PS-18-101, Standard Responses to Safeguards Contingencies

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-1-040
REVISION 6

Emergency Plan Implementing Instruction

General Emergency

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: L. F. Stolz for RPB 10/1/84
Plant Manager-Nuclear Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-1-040 - General Emergency (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	R M Dahe	✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent	R W Keaning	✓		9/27/84
	Plant Quality Manager	C. L. Skinner	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman W.J. 9-27-84		✓		9/27/84

PORC Meeting No. 84-86 Item No. 25 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Chg #2 9-13-84 MHS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-1-040 Title General Emergency

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. _____ |_| Permanent |_| Deviation Expiration Date _____

B. Revision No. 6

C. Deletion |_| YES |X| NO

DESCRIPTION OF CHANGE OR REVISION

Incorporated steps to update answering machine with change in emergency classification and dose assessment responsibility and EC activities

REASON FOR CHANGE, REVISION, OR DELETION

To fulfill NRC commitments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE Aug 22, 1984

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE Aug 22 1984

TECHNICAL REVIEW [signature] DATE 8-30-84

GROUP HEAD REVIEW [signature] DATE 9-7-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1 - 8	Revision 6
9	Revision 4

NS30310EPG

1.0 PURPOSE

To outline the actions to be taken for an emergency condition at the General Emergency level.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 EP-1-001, Recognition and Classification of Emergency Conditions

2.3 Emergency Management Resources Book

2.4 EP-1-010, Unusual Event

2.5 EP-1-020, Alert

2.6 EP-1-030, Site Area Emergency

2.7 EP-2-010, Notifications and Communications

2.8 EP-2-031, In-Plant Radiological Controls and Surveys During Emergencies

2.9 EP-2-050, Offsite Dose Assessment (Manual)

2.10 EP-2-051, Offsite Dose Assessment (Computerized)

2.11 EP-2-052, Protective Action Guidelines

2.12 EP-2-060, Radiological Field Monitoring

2.13 EP-2-071, Site Protective Measures

2.14 EP-2-100, Technical Support Center (TSC) Activation, Operation, and Deactivation

2.15 EP-2-101, Operational Support Center (OSC) Activation, Operation, and Deactivation

2.16 EP-2-150, Emergency Plan Implementing Records

2.17 EP-2-034, Onsite Surveys During Emergencies

2.18 FP-1-003, Fire Emergency/Reports

2.19 UNT-7-018, First Aid and Medical Care

2.20 EP-2-190, Personnel Accountability

2.21 PS-16-103, Accountability of Personnel During Emergency

2.22 EP-2-130, Emergency Team Assignments

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator is Responsible for the implementation of this procedure.

3.2 The Emergency Coordinator is responsible for ensuring that the actions as outlined are carried out.

3.3 The SHift Supervisor is the Emergency Coordinator until properly relieved by the Duty Plant Manager.

4.0 INITIATING CONDITIONS

This procedure is to be initiated upon reaching the following conditions:

4.1 Whenever a General Emergency is recognized and classified per EP-1-001.

4.2 At the direction of the Emergency Coordinator.

5.0 PROCEDURE

5.1 Initiate a Site Evacuation, if not previously initiated:

5.1.1 Select the Off-site Assembly Area to be used: Monsanto Park, Luling or St. John the Baptist Catholic Church, Edgard.

5.1.2 Notify the Security Shift Supervisor to prepare for the evacuation of the site.

5.1.3 Dispatch the Off-site Assembly Area Supervisor.

5.1.4 Ensure that a Health Physics technician is dispatched to the Off-site Assembly Area.

5.1.5 Sound the station alarm.

5.2 Make the following announcement(s):

5.2.1 "ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL: A GENERAL EMERGENCY HAS BEEN DECLARED DUE TO (announce reason for declaration of General Emergency). ALL MEMBERS OF THE EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS. DUE TO PLANT CONDITIONS ALL NONESSENTIAL PERSONNEL MUST PROCEED IMMEDIATELY TO THE (state one of the locations: St. John the Baptist Catholic Church or Monsanto Park area.) UPON ARRIVAL, ALL PERSONNEL LOG IN WITH THE ASSEMBLY AREA SUPERVISOR. PERSONNEL IN RADIATION CONTROLLED AREAS PROCEED TO THE HEALTH PHYSICS CONTROL POINT. THERE WILL BE NO SMOKING, EATING, OR DRINKING UNTIL FURTHER NOTICE. THE MAINTENANCE RADIO FREQUENCY IS NOW DEDICATED FOR EMERGENCY USE ONLY."

5.2.2 If there is a localized emergency (e.g., fire), announce its type and location and instruct personnel to stand clear of this area (refer to FP-1-003).

5.2.3 Repeat the announcement(s).

5.2.4 Make the following notifications in accordance with the notification procedures in EP-2-010.

5.2.4.1 Notify Waterford 1 & 2 to evacuate non-essential personnel.

NOTE

Waterford 1 & 2 personnel are not required to assemble at Waterford 3 assembly areas, but the Emergency Coordinator shall provide direction to Waterford 1 & 2 as to what evacuation routes to take.

5.2.4.2 Notify St. John the Baptist and St. Charles parishes for vehicular traffic control.

5.2.4.3 Notify the United States Coast Guard to control Exclusion Area river traffic.

5.2.4.4 Notify the Missouri Pacific Railroad to Control Exclusion Area rail traffic.

5.2.5 Ensure accountability and evacuation verification activities are performed in accordance with EP-2-190 and PS-16-103.

NOTE

If a General Emergency has been declared, and in the opinion of the SS/EC contacting the Duty Plant Manager will prevent completing the off-site notifications within the 15 minutes required by regulation, the SS/EC shall direct the Emergency Communicator to begin off-site notifications (5.5).

5.3 Make initial contact with the Duty Plant Manager.

NOTE

See Emergency Management Resources Book for names and phone numbers.

5.3.1 If the Duty Plant Manager cannot be reached, contact any of the alternate Duty Plant Managers.

5.3.2 Upon contact with the Duty Plant Manager, discuss the following:

5.3.2.1 Nature of the situation

5.3.2.2 Classification

5.3.2.3 Action taken or to be taken

5.3.2.4 Need to activate emergency response facilities

5.3.2.5 Advise the Emergency Operations Facility Director be contacted by the Duty Plant Manager.

5.4 Direct the Emergency Communicator to activate the Emergency Pager System in accordance with EP-2-010.

NOTE

If conditions exist that could be hazardous to those personnel reporting to the site, provide instructions for appropriate protective actions including use of alternative routes, activation of backup facilities, etc., as necessary

---

5.5 Complete Attachment 7.5, Initial Notification Form, or Attachment 7.7, Followup Notification Form as appropriate of EP-2-010, and provide the form and the agencies to be notified to the Emergency Communicator. Direct that the Emergency Communicator commence initial off-site notifications of the appropriate organizations listed below in accordance with EP-2-010:

5.5.1 St. Charles Parish Emergency Operations Center (EOC) - Notify within 15 minutes of declaration.

5.5.2 St. John the Baptist Parish EOC - Notify within 15 minutes of declaration.

5.5.3 Louisiana Nuclear Energy Division (LNED) - Notify within 15 minutes of declaration.

5.5.4 Louisiana Office of Emergency Preparedness (LOEP) - Notify within 15 minutes of declaration.

5.5.5 Waterford 1 & 2 - Notify within 15 minutes of declaration, but after above notifications.

5.5.6 Nuclear Regulatory Commission (NRC) - As soon as possible, but within one hour of declaration.

5.5.7 Middle South Utilities - as soon as possible.

5.5.8 Institute of Nuclear Power Operations (INPO) - as soon as possible.

5.5.9 U. S. Coast Guard - as necessary

5.5.10 Missouri Pacific Railroad - as necessary

5.5.11 American Nuclear Insurers (ANI) - as necessary

5.6 Ensure that the following accountability activities are performed:

5.6.1 The Security Central Alarm Station/Secondary Alarm Station (CAS/SAS) Operator activates the Accountability Keycard Readers as per PS-16-103.

5.6.2 Personnel accountability activities are performed as per EP-2-190.

5.7 As additional information becomes available, update the Emergency Communicator by completing Attachment 7.7, Follow-Up Notification, of EP-2-010. Direct the Emergency Communicator to conduct additional updates to off-site agencies in accordance with EP-2-010.

5.8 Initiate off-site dose assessment in accordance with EP-2-050 for manual assessment or EP-2-051 for computerized assessment. Determine protective action recom endations in accordance with EP-2-052, Protective Action Guidelines.

5.9 If radiological releases are occurring or anticipated, instruct the Health Physics Coordinator to activate Radiological Field Monitoring Teams in accordance with EP-2-130 and EP-2-060.

5.10 Initiate activation of the Technical Support Center in accordance with EP-2-100, if not previously activated.

5.11 Initiate activation of the Operational Support Center in accordance with EP-2-101, if not previously activated.

5.12 Ensure that emergency logs/records are kept in accordance with EP-2-150.

5.13 Direct the Health Physics Coordinator and/or the Radiological Controls Coordinator to initiate in-plant radiological controls in accordance with EP-2-031 if a real or potential radiological hazard exists and to perform on-site surveys as necessary in accordance with EP-2-034.

5.14 Initiate any additional response measures in accordance with emergency procedures listed in Attachment 7.1.

5.15 As conditions change, periodically check EP-1-001 to determine whether reclassification is necessary.

5.15.1 If reclassification is necessary, then reclassify the emergency in accordance with EP-1-001 and implement appropriate Implementing Instruction EP-1-010, EP-1-020, or EP-1-030.

NOTE

Ensure the station alarm is sounded prior to making the announcement that the emergency has been reclassified - whether it is an increase or decrease in classification (see EP-1-010, EP-1-020, or EP-1-030).

5.15.2 If closeout is appropriate, then close out the emergency with a verbal summary to all agencies/personnel as indicated on Attachment 7.13 of EP-2-010 and implement EP-2-170 to initiate recovery activities.

5.15.3 When reclassifying ensure that the answering machine message tape reflects the most current emergency classification.

6.0 FINAL CONDITIONS

6.1 The General Emergency has been closed out with normal station administration resumed and recovery activities initiated in accordance with EP-2-170 or the emergency reclassified.

7.0 ATTACHMENTS

7.1 Procedure References for Additional Response Guidelines.

PROCEDURE REFERENCES FOR ADDITIONAL RESPONSE GUIDELINES

Topic	References
Personnel	EP-2-020, Contaminated Injured/Ill Personnel
	EP-2-030, Emergency Radiation Exposure Guidelines and Controls
	EP-2-032, Monitoring and Decontamination
	EP-2-033, Administration of Iodine Blocking Agents
	EP-2-071, Site Protective Measures
	EP-2-081, Search and Rescue
Administration	EP-2-130, Emergency Team Assignments
	EP-2-140, Reentry
	EP-2-170, Recovery
	Emergency Management Resources Book
Security	PS-16-102, Security Response During Operating Emergencies
	PS-18-101, Standard Responses to Safeguards Contingencies

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-2-030
REVISION 4

Emergency Plan Implementing Procedure

Emergency Radiation Exposure Guidelines
And Controls

PORC Meeting No. 84-96

Reviewed: _____
PORC Chairman

Approved: _____ for RPB 10/1/84
Plant Manager-Nuclear Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-2-030- Emergency Radiation Exposure Guidelines & Controls (Rev. 4)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent		✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent		✓		9/27/84
	Plant Quality Manager		✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman		✓		9/27/84

PORC Meeting No. 84-96 Item No. 26 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Chg #2
9-13-84
MHS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-2-030 Title Emerg. Radiation Exposure Guidelines & Controls

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. NA |_|Permanent |_|Deviation Expiration Date _____

B. Revision No. 4

C. Deletion |_|YES |X|NO

DESCRIPTION OF CHANGE OR REVISION

Incorporated the guidelines in IE Notice 84-40 into procedure.

REASON FOR CHANGE, REVISION, OR DELETION

To comply with the IE Notice 84-40

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE 9/21/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES____ NO ✓
2. Change the procedures as described in the FSAR? YES____ NO ✓
3. Conduct tests/experiments not described in the FSAR? YES____ NO ✓
4. Require a change to the Technical Specifications? YES____ NO ✓

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 9/22/84

TECHNICAL REVIEW [signature] DATE 9/12/84

GROUP HEAD REVIEW [signature] DATE 9/13/84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 4
1-5	Revision 4
6-8	Revision 2

1.0 PURPOSE

To provide guidelines and administrative controls for radiation exposures in excess of 10CFR20 limits during life saving or accident-mitigating activities.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 Title 10, Code of Federal Regulations, Part 20, Standards for Protection Against Radiation

2.3 National Council on Radiation Protection Report No.39, Basic Radiation Protection Criteria

2.4 IE Information Notice No. 84-40: Emergency Worker Doses

3.0 RESPONSIBILITIES

The Emergency Coordinator is responsible for ensuring that the actions outlined in this procedure are carried out.

4.0 INITIATING CONDITIONS

This procedure is to be initiated upon reaching the following condition:

4.1 Defined emergency response actions to perform life saving or accident-mitigating functions are expected to result in radiation exposures in excess of the 10CFR20 limits. 10CFR20 limits are provided for reference in Attachment 7.2.

5.0 PROCEDURE

NOTE

The Emergency Coordinator is the only individual who can authorize emergency exposures in excess of 10CFR20 limits.

5.1 The Emergency Coordinator will determine the need to perform specific tasks which are anticipated to result in exposure in excess of 10CFR20 limits by evaluating the risk of not performing the tasks against the anticipated exposure.

NOTE

To the extent practicable, the Emergency Coordinator will confer with NRC personnel prior to authorizing exposures in excess of 10CFR20 limits. This contact may be made on the ENS line with the NRC Headquarters Duty Officer or with Senior NRC Region IV response personnel. It is recognized that coordination with the NRC may not be possible in all cases due to the nature of the situation.

5.2 The guidelines for emergency exposure are:

ORGAN	CORRECTIVE ACTION	LIFE SAVING
Whole Body	25 rems	75 rems
Extremities	100 rems	300 rems
Thyroid	125 rems	No limit

5.3 Personnel selected to perform the task should be chosen in accordance with the following guidelines:

5.3.1 Individual is a volunteer.

5.3.2 Individual is generally familiar with the radiological consequences of the exposure.

5.3.3 Fertile females shall not be used.

5.3.4 Individual has not previously received emergency exposure.

5.3.5 All other things being equal, and capabilities being the same, the oldest individuals should be selected for these activities.

5.4 Personnel shall not enter any area where dose rates are unknown or unmeasurable with dose rate instruments.

5.5 All reasonable precautions for minimizing the radiological consequences of the emergency action shall be taken (i.e., protective clothing, respiratory protection, thyroid prophylaxis, etc.).

5.6 The Emergency Coordinator (or designee) will complete Section A of Attachment 7.1.

NOTE

1. The Emergency Coordinator is the only individual who can sign Section A authorizing the emergency exposure.
2. Although it is preferable to perform and document these steps prior to the exposure, the Emergency Coordinator may verbally authorize the exposure and complete the documentation at a later time.

5.7 The individual who will receive the emergency exposure will complete Section B.

5.8 The Radiological Controls Coordinator will complete Sections C and D. Follow-up medical evaluation will be in accordance with the following guidelines:

5.8.1 If an individual's dose equivalent exceeds 10 rems for the whole body, 30 rems for the thyroid, 60 rems for the skin and/or 150 rems to an extremity, the details of the exposure incident shall be brought to the attention of a physician. The physician shall determine the need, extent and nature of any clinical, biological or biochemical examinations.

5.8.2 If an individual's dose equivalent exceeds 25 rems for the whole body, 75 rems to the thyroid, 150 rems for the skin and/or 375 rems for an extremity, the individual shall be examined by a physician. The physician shall determine the need, extent and nature of any clinical, biological or biochemical examinations or necessary medical surveillance.

5.9 The Radiological Controls Coordinator shall designate an individual responsibile to complete the exposure evaluation and complete a full report on the emergency exposure, including necessary reports in accordance with 10CFR20.403.

6.0 FINAL CONDITIONS

All sections of Attachment 7.1 are complete and assignments have been made for completing necessary exposure reports.

7.0 ATTACHMENTS

7.1 Emergency Exposure Authorization Form

7.2 10CFR20 Limits

EMERGENCY EXPOSURE AUTHORIZATION FORM

SECTION A

1. Name (to receive exposure): _____

   Soc. Sec. No.: _____

2. Individual TLD Number: _____ Employer/LP&L Department: _____

3. Task(s) to be Performed: _____

   _____

4. Date of Authorization: _____ Authorized Limit: _____

5. Conditions:

   Individual is a volunteer or professional rescue person.

   Individual is broadly familiar with radiological consequences of exposure.

   Fertile females shall not take part (Reg. Guide 8.13).

   Individual has not received an emergency exposure before.

   Dose rates in area are known/measurable.

   Life saving action?

   Corrective action?

6. Emergency Coordinator: _____(signature)

   _____

Section B

I have been briefed in the radiological consequences of the proposed emergency exposure, and I have volunteered to perform the emergency measures during which I will receive the emergency exposure.

7. Signature: _____ Date: _____

   _____

EMERGENCY EXPOSURE AUTHORIZATION FORM

SECTION C (Attach exposure evaluation)

1. Dose equivalent assigned for entry: _____

2. TLD/Dosimeter Results: _____

3. Bioassay Results: _____

4. Medical Evaluation/Action: _____

Doctor: _____

5. Radiological Controls Coordinator: _____ Date: _____

SECTION D

1. Disposition (Allow additional exposure, restricted access, etc.):

2. Individual assigned to follow up report(s):

3. Radiological Controls Coordinator: _____ Date: _____

10CFR20 LIMITS

ORGAN	Limit per Calendar Quarter
Whole Body	1.25 rems (3 rems with completed NRC Form 4*)
Extremities	18.75 rems
Skin	7.5 rems
Thyroid and other organs due to inhalation exposure	520 mpc-hours

*Total accumulated ocucpational dose not to exceed 5 (N-18) rems where "N" equals the individual's age in years in his last birthday.

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-2-052
REVISION 4

Emergency Plan Implementing Procedure

Protective Action Guidelines

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: L. A. Stiz for RB
Plant Manager-Nuclear

10/1/84
Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-2-052 - Protective Action Procedure (Rev. 4)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent		✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent		✓		9/27/84
	Plant Quality Manager		✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman		✓		9/27/84

PORC Meeting No. 84-98 / Item No. 27 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A (Corporate QA Manager) DATE N/A

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Comments:

Approved by N/A (Plant Manger-Nuclear) DATE N/A

chg #2 9-13-84 MHS

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-2-052 Title Protective Action Procedures

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. N/A |_|Permanent |_|Deviation Expiration Date N/A

B. Revision No. 4

C. Deletion |_|YES |X|NO

DESCRIPTION OF CHANGE OR REVISION

Change "may" to "shall" in Step 3.2.1 to reflect Emergency Plan Commitment. Note following 5.) "CR(ED)" changed to "State" Control clarifying words added and typo corrected.

REASON FOR CHANGE, REVISION, OR DELETION

To incorporate annual ~~change~~ update.

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE 9/13/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 9/13/84

TECHNICAL REVIEW [signature] DATE 9-13-84

GROUP HEAD REVIEW [signature] DATE 9-13-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 4
1-17	Revision 4
18	Revision 2
19-22	Revision 3

NS40519

1.0 PURPOSE

To provide guidance for protective action decision-making with respect to the EPA Protective Action Guidelines (PAG's) and those severe conditions where potential hazards exist but dose projections are not required.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan
2.2 Waterford 3 SES Evacuation Time Study
2.3 EPA-520, Manual of Protective Action Guides
2.4 EP-1-001, Recognition and Classification of Emergency Conditions
2.5 EP-2-010, Notifications and Communications
2.6 EP-2-050, Offsite Dose Assessment (Manual)
2.7 EP-2-051, Offsite Dose Assessment (Computerized)
2.8 NUREG-0654 Appendix 1 - Example Initiating Conditions - General Emergency

3.0 RESPONSIBILITIES

3.1 The Emergency Coordinator or EOF Director (upon activation of the EOF) is responsible for making protective action recommendations to off-site agencies. This responsibility shall not be delegated.
3.2 The Emergency Coordinator or designee is responsible for the implementation of this procedure.
3.2.1 Upon activation of the Emergency Operations Facility (EOF), this responsibility shall be transferred to the EOF Director or his designee.

4.0 INITIATING CONDITIONS

This procedure shall be initiated upon reaching any of the following conditions:

4.1 An emergency condition requiring dose asessment/projections has been declared at Waterford 3 SES.

4.2 An emergency condition which has the potential of breaching any one of the three fission product barriers and challenging the two remaining barriers has been declared at Waterford 3 SES.

4.3 As instructed by other implementing procedures, especially EP-1-001, Recognition and Classification of Emergency Conditions.

4.4 At the direction of the Emergency Coordinator (or EOF Director).

5.0 PROCEDURE

This procedure relates directly to TABS A through H of EP-1-001, Recognition and Classification of Emergency Conditions. The appropriate protective action guidelines for each class of emergency are referenced in the corresponding Tabs of this procedure.

TAB A deals with releases of radioactivity known to be occurring.

TABS B through H deal with situations wherein releases of radioactivity are not occurring, but where there is a potential for such a release due to the nature of the emergency.

NOTE

For any situation where there is a potential for the uncontrolled release of radioactive material, calculations should be done in accordance with EP-2-051 or EP-2-050 based on the radioactive material available for release. These calculations provide early consideration for protective actions based on a presumed radiological release using TAB A.

5.1 TAB A - UNCONTROLLED RELEASE OF RADIOACTIVITY

NOTE

This portion of the procedure provides the instructions for using the Protective Action Guidelines Worksheet, Attachment 7.1, to determine the need for off-site protective actions with respect to dose projections.

5.1.1 Ensure that off-site dose calculations are performed in accordance with EP-2-051 or EP-2-050. Obtain the whole body and child thyroid dose rates for the locations of interest from the Health Physics Coordinator (for the Emergency Coordinator), the Radiological Assessment Coordinator (for the Emergency Operations Facility Director), or on-shift personnel performing calculations if the TSC and EOF are not satisfied.

5.1.2 If the duration of the release is known, perform section 5.1.2. If the duration is unknown, proceed to section 5.1.3 and do not perform section 5.1.2.

5.1.2.1 Calculate the projected whole body and child thyroid doses by multiplying the dose rates by the release duration.

5.1.2.2 If the calculated dose is less than 1 rem whole body or less than 5 rems child thyroid, no protective actions are necessary at this time. Continue updating dose projections for protective actions determination.

5.1.2.3 If the calculated dose is greater than 1 rem whole body or greater than 5 rem child thyroid, but less than 5 rem whole body and less 25 rem child thyroid, recommend sheltering and access control to the affected areas as protective sections.

NOTE

Affected sectors are first identified as the plume centerline sector and the two adjacent sectors. Then, the affected area will be identified by relating the sectors to areas using Attachments 7.2 and 7.4. If a major portion of the plume lies in any given protective response area, protective action recommendations are given for that entire area.

5.1.2.4 If the projected dose is greater than 5 rems whole body or 25 rems child thyroid, determine the protective actions based on the duration of the release.

A. If the release duration is greater than two (2) hours, recommend evacuation and access control of the affected areas as protective actions.

B. If the release duration is less than two (2) hours, determine Plume Travel Time (PTT) and Estimated Evacuation Time (EET).

NOTE

Determine the Estimated Evacuation Time by comparing the affected sectors with the protective response areas as shown in Attachment 7.2 and correlating these protective response areas with Attachment 7.3, Estimated Evacuation Time Table. In estimating evacuation times, local constraints such as severe weather, road conditions, etc. should be taken into consideration. Determine the Plume Travel Time by dividing the distance from the plant to the affected area(s) (or approximate distance to population of interest) by the wind speed.

C. If the Plume Travel Time is less than Estimated Evacuation Time, recommend sheltering and access control to the affected areas as protective actions.

D. If the Plume Travel Time is greater than the Estimated Evacuation Time, recommend evacuation and access control to the affected areas as protective actions.

5.1.3 Duration of Release is Unknown

NOTE

Affected sectors are first identified as the plume centerline sector and the two adjacent sectors. Then, the affected area will be identified by relating the sectors to areas using Attachments 7.2 and 7.4. If a major portion of the plume lies in any given protective response area, protective action recommendations are to be given for the entire area.

5.1.3.1 If the whole body dose rate is less than 250 mrem/hr and the child thyroid dose rate is less than 1250 mrem/hr, no immediate protective actions are needed.

5.1.3.2 If the whole body dose rate is greater than 250 mrem/hr but less than 1250 mrem/hr, or if the child thyroid dose rate is greater than 1250 mrem/hr but less than 6250 mrem/hr, recommend sheltering and access control to the affected protective response areas.

5.1.3.3 If the whole body dose rate is greater than 1250 mrem/hr or if the child thyroid dose rate is greater than 6250 mrem/hr, recommend evacuation and access control to the affected protective response areas.

5.2 TAB B - LOSS OF RCS INVENTORY

5.2.1 Under the ALERT classification, there is a potential for uncontrolled release of radioactive materials. Calculations of potential off-site doses should be made using the procedure referenced in TAB A.

5.2.2 Under the SITE AREA EMERGENCY classification, Condition 1, refer to decision-making flow chart, Attachment 7.5. Note that the flow chart pertains to general emergencies. However, this situation is serious enough so that consideration should be given to the protective actions specified in the flow chart.

5.2.2.1 Under the SITE AREA EMERGENCY classification, Conditions 2 or 3, use the procedure referenced in 5.2.1 above.

5.2.3 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.2.3.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequency but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90- sector).

5.2.3.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and

containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.3 TAB C - DNB/DEGRADED CORE SEQUENCE

5.3.1 Under the ALERT classification there is a potential for uncontrolled release of radioactive materials. Calculations of potential off-site doses should be made using the procedure referenced in TAB A.

5.3.2 Under the SITE AREA EMERGENCY classification, refer to decision-making flow chart, Attachment 7.5. Note that the flow chart pertains to General Emergencies. However, this situation is serious enough so that consideration should be given to the protective actions specified in the flow chart.

5.3.3 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.3.3.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.3.3.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.4 TAB D - LOSS OF SAFETY FUNCTIONS

5.4.1 Under Conditions 3, 4, and 5 of the SITE AREA EMERGENCY classification, there is a potential for core degradation. Refer to the decision-making flow chart, Attachment 7.5.

5.4.2 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.4.2.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.4.2.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.5 TAB E - HAZARDS TO STATION OPERATION

5.5.1 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.5.1.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.5.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.6 TAB F - NATURAL PHENOMENA

5.6.1 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.6.1.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.6.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.7 TAB G - SECURITY COMPROMISE

NOTE

Imminent or actual loss of physical security control of the plant requires that a precautionary evacuation out to 2 miles be recommended to state and parish officials.

5.7.1 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.7.1.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.7.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.8 TAB H - MISCELLANEOUS

5.8.1 GENERAL EMERGENCY. Refer to Attachment 7.5. Note 2-mile and 5-mile sheltering requirements. For core melt sequences where significant releases from containment are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2-mile precautionary evacuation. Consider 5-mile downwind evacuation (45- to 90-degree sector) if large amounts of fission products (greater than gap activity) are in the containment atmosphere. Recommend sheltering in other parts of the plume exposure Emergency Planning Zone under this circumstance.

5.8.1.1 For core melt sequences where significant releases from containment are not yet taking place, where containment failure leading to a direct atmosphere release is likely in the sequence but not imminent, and where large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to the 5-mile radius and 10-mile downwind evacuation (45- to 90-degree sector).

5.8.1.2 For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.

5.8.2 To determine if the EPA thyroid or whole body dose guidelines could be exceeded, refer to TAB A of this procedure.

6.0 FINAL CONDITIONS

6.1 The radiological release has stopped or diminished and dose projections are below Protective Action Guidelines.

6.2 The emergency condition has been closed out and recovery actions are under way.

7.0 ATTACHMENTS

7.1 Protective Action Guidelines Worksheet

7.2 Affected Sectors/Protective Response Areas Chart

7.3 Evacuation Time Estimate Table

7.4 Protective Response Areas

7.5 Flow Chart for Protective Action Decision-Making Based on Core Conditions

PROTECTIVE ACTION GUIDELINES WORKSHEET

DATE _____

TIME _____

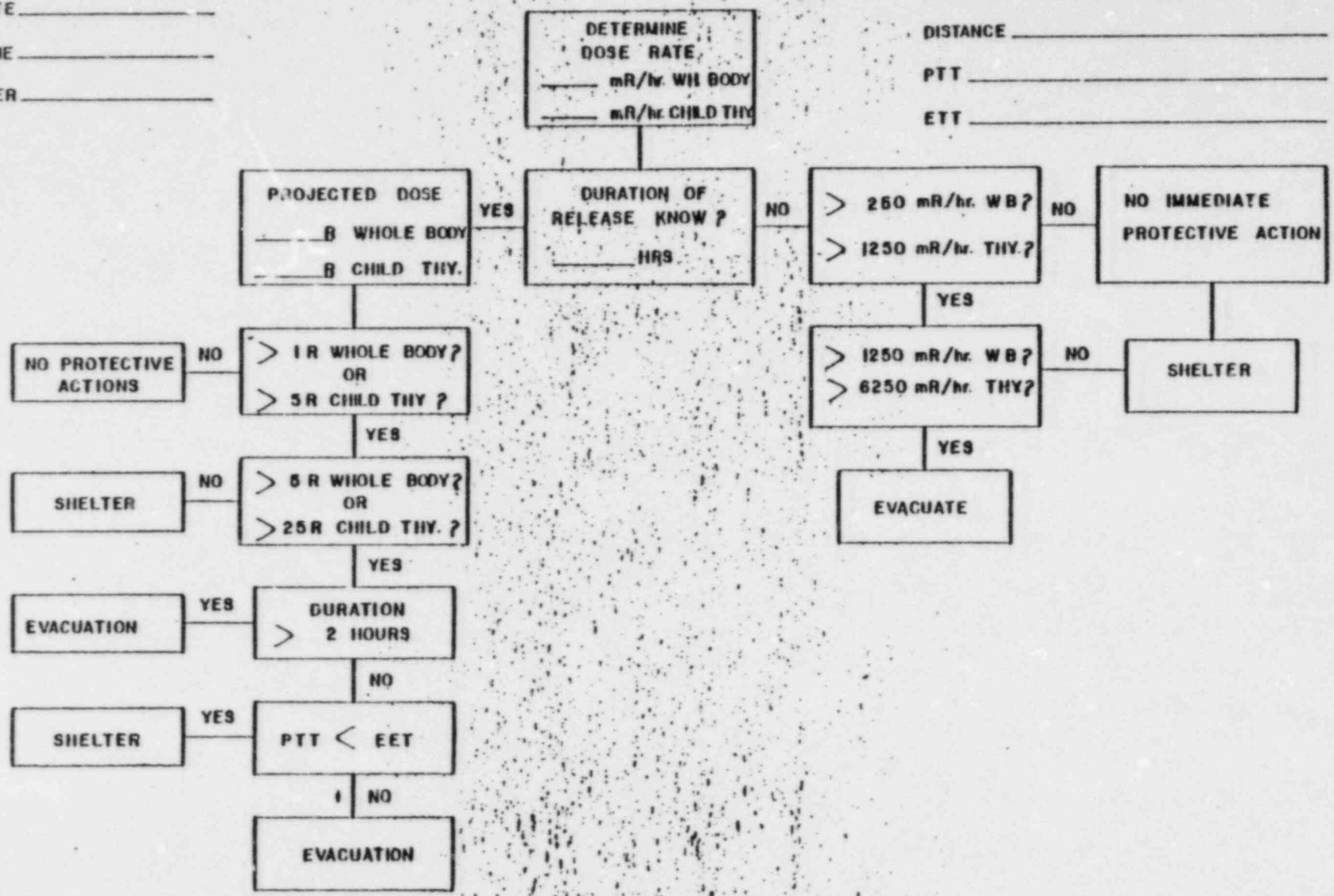
USER _____

PROT. RESP AREA _____

DISTANCE _____

PTT _____

ETT _____



AFFECTED SECTORS/PROTECTIVE RESPONSE AREAS CHART

AFFECTED SECTORS	0-2 miles	2-5 miles	5-10 miles
A,B,C	A1	A2, B2	A3, B4
B,C,D	A1, B1	A2, B2	A3, B4
C,D,E	B1, D1	B2, D2	B3, B4
D,E,F	B1, D1	B2, D2	B3, B4, D3
E,F,G	D1	B2, D2	B3, B4, D3
F,G,H	D1	D2	B3, D3, D4
G,H,J	D1	D2	D3, D4
H,J,K	D1	D2	D4
J,K,L	C1, D1	C2, D2	C4, D4
K,L,M	C1, D1	C2, D2	C4, D4
L,M,N	C1	C2	C4
M,N,P	C1	C2	A4, C3, C4
N,P,Q	C1	C2	A4, C3, C4
P,Q,R	C1	A2, C2	A4, C3
Q,R,A	A1, C1	A2, C2	A3, A4
R,A,B	A1, C1	A2, C2	A3, A4

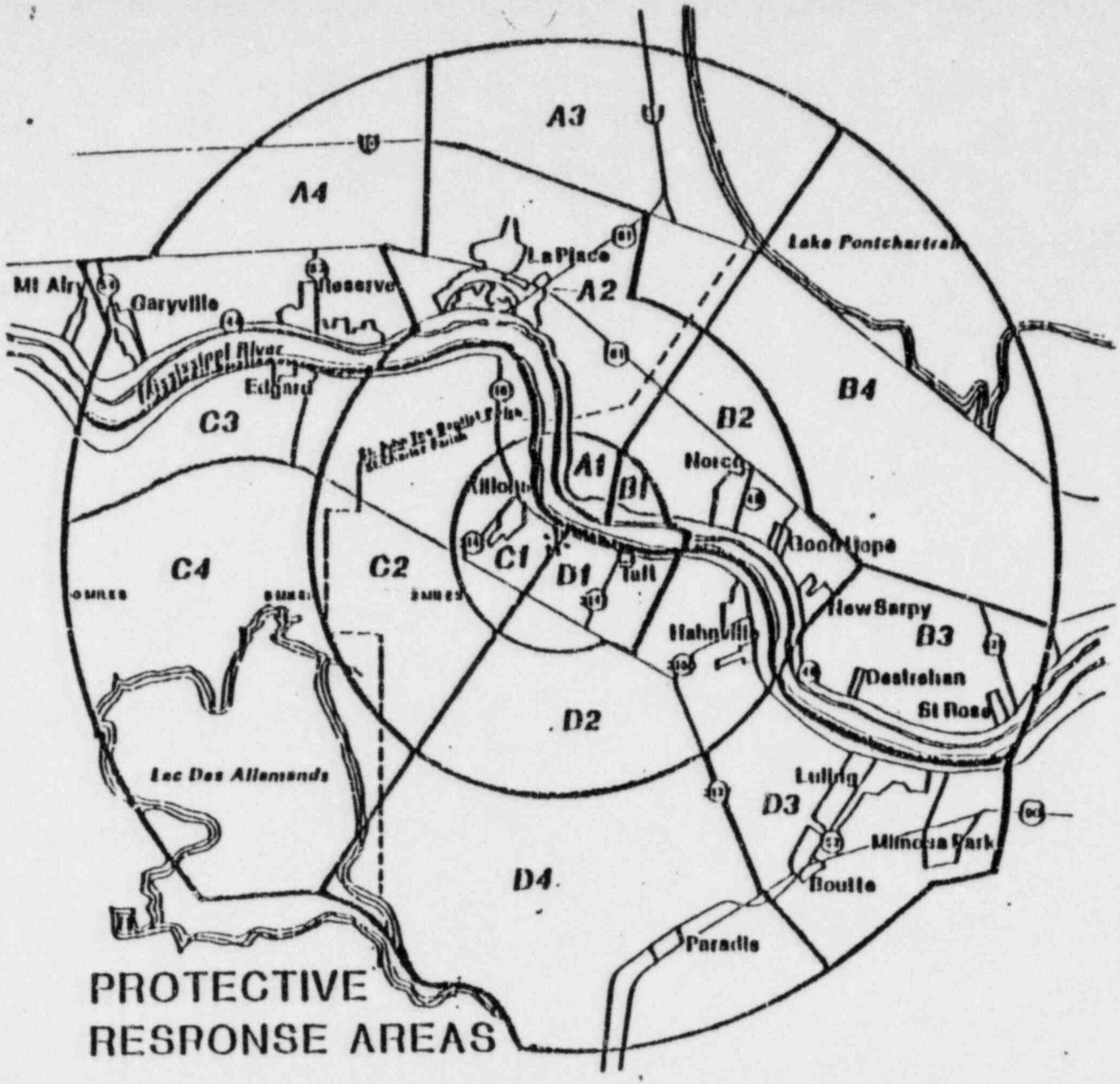
Directions For Use:

Find the plume centerline sector and two adjacent sectors in the "Affected Sectors" column. The corresponding Protective Response Areas in which protective actions are to be implemented can then be found for downwind distances of interest by reading across the page.

EVACUATION TIME ESTIMATE TABLE (*)

Evacuation Time Estimate & Mass Quadrant		Protective Response Area	Clear Weather Hours	Clear Weather Minutes	Adverse Weather Hours	Adverse Weather Minutes
0-2 Miles	SW	C1	1	45	1	45
	SE	D1	2	15	2	30
	NE	B1	No Population		No Population	
	NW	A1	1	45	1	45
Entire 2-Mile Area			2	15	2	30
0-5 Miles	SW	C1, C2	2	15	2	30
	SE	D1, D2	3	30	4	30
	NE	B1, B2	3	30	4	15
	NW	A1, A2	5	15	7	30
Entire 5-Mile Area			5	15	7	30
0-10 Miles	SW	C1, C2, C3, C4	2	15	2	30
	SE	D1, D2, D3, D4	4	15	6	00
	NE	B1, B2, B3, B4	3	45	4	30
	NW	A1, A2, A3, A4	5	15	7	30
Entire 10-Mile Area			5	15	7	30

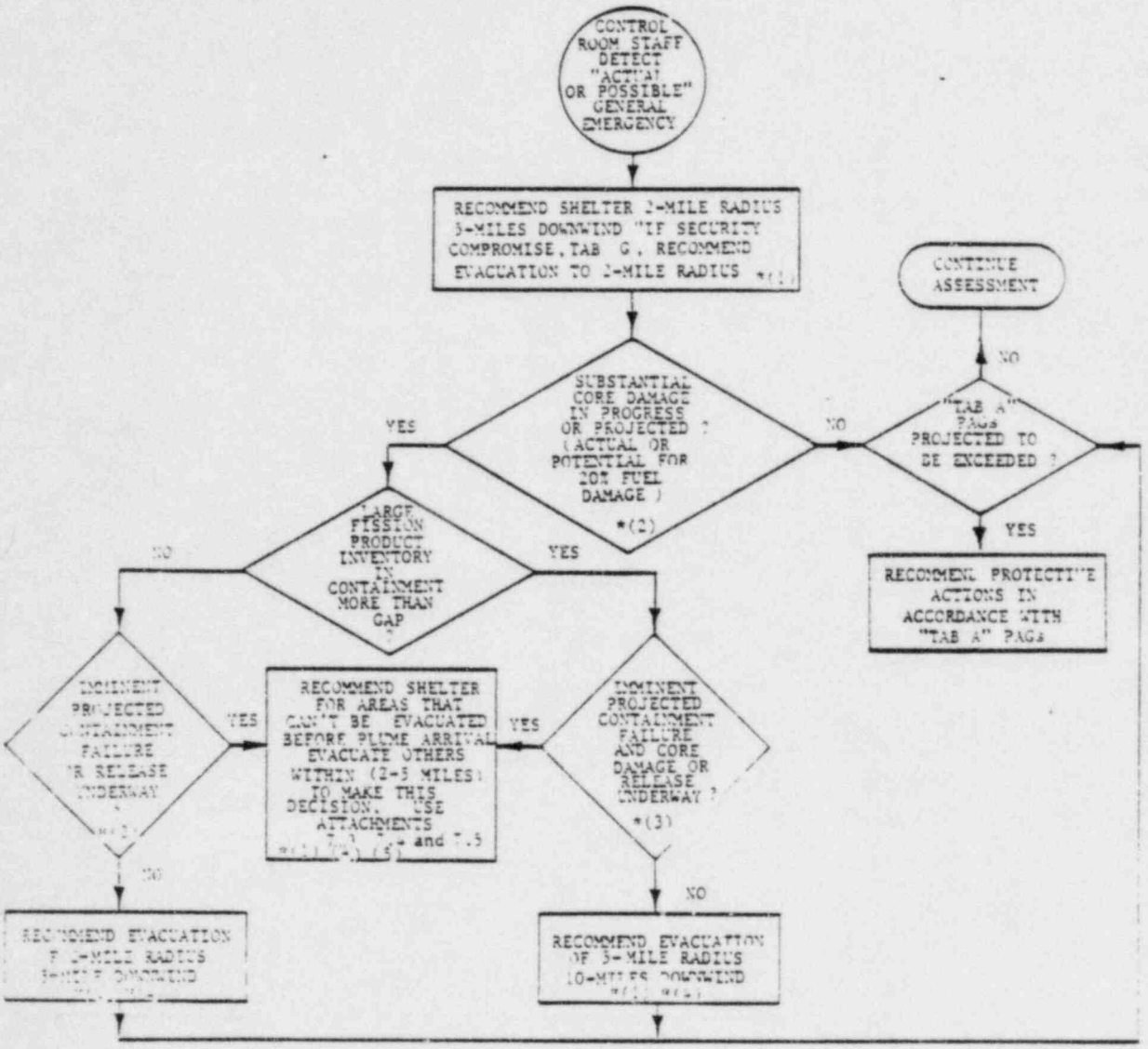
*Time to completely evacuate an evacuation area measured from the time of mobilization.



PROTECTIVE
RESPONSE AREAS

FLOW CHART FOR PROTECTIVE ACTION DECISION-MAKING BASED ON CORE CONDITIONS

THE FOLLOWING ACTIONS WILL BE BASED ON PREDETERMINED OBSERVABLE INSTRUMENTATION & PLANT STATUS INDICATORS EALs CONTAINED IN THE EMERGENCY PLAN & THAT HAVE BEEN REVIEWED BY OFFSITE OFFICIALS HOWEVER RESPONSIBLE OFFSITE OFFICIALS MUST DECIDE ON THE FEASIBILITY OF IMPLEMENTING THE PROTECTIVE ACTIONS AT THE TIME OF THE ACCIDENT.



*(1) SITUATIONS REQUIRING URGENT ACTION BY OFFSITE OFFICIALS (BASED ON CONTROL ROOM INDICATORS. NO DOSE PROJECTIONS REQUIRED) 15-MINUTE DECISION MAKING. ACTIVATION OF ALERTING SYSTEM & EBS MESSAGE.

*(2) ACTUAL OR PROJECTED RELEASE OF 20% GAP FROM CORE OR LOSS OF PHYSICAL CONTROL OF THE PLANT TO INTRUDERS.

*(3) "PUFF" RELEASE RATE MUCH GREATER THAN DESIGNED LEAK RATE.

*(4) FOR ALL EVACUATIONS SHELTER THE REMINDER OF THE PLUME EPZ & PROMPTLY RELOCATE THE POPULATION AFFECTED BY ANY GROUND CONTAMINATION FOLLOWING PLUME PASSAGE.

*(5) CONCENTRATE ON EVACUATION OF AREAS NEAR THE PLANT, MAY BE TIME TO EVACUATE 2-MILE RADIUS & NOT THE 5-MILE RADIUS.

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-2-071
REVISION 6

EMERGENCY PLAN IMPLEMENTING PROCEDURES

SITE PROTECTIVE MEASURES

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: _____ for RP13 10/1/84
Plant Manager-Nuclear Approval Date

FUEL LOAD 10-25
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-2-071 - Site Protective Measures (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent		✓		9/27/84
	Operations Superintendent		✓		9/27/84
	Radiation Protection Superintendent		✓		9/27/84
	Plant Quality Manager		✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman		✓		9/27/84

PORC Meeting No. 84-98 Item No. 28 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Comments:

Clg #2
9-13-84
MHS

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-2-071 Title Site Protective Measures

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. N/A |_| Permanent |_| Deviation Expiration Date N/A

B. Revision No. 6

C. Deletion |_| YES |X| NO

DESCRIPTION OF CHANGE OR REVISION

Increased dosages to clarify various actions during a Site Evacuation. Deleted plant variables from the procedure text.

REASON FOR CHANGE, REVISION, OR DELETION

Drill Comments and annual review.

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE 8/22/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES____ NO X
2. Change the procedures as described in the FSAR? YES____ NO X
3. Conduct tests/experiments not described in the FSAR? YES____ NO X
4. Require a change to the Technical Specifications? YES____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 8/22/84

TECHNICAL REVIEW [signature] DATE 9-12-84

GROUP HEAD REVIEW [signature] DATE 9-13-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1-4	Revision 6
7	Revision 5
5	Revision 4
6,8	Revision 3

LIST OF PAGES CONTAINING
PROPRIETARY INFORMATION

8

1.0 PURPOSE

This procedure provides guidance to the Emergency Coordinator for a site evacuation.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 EP-2-010, Notification and Communications

2.3 EP-1-020, Alert

2.4 EP-1-030, Site Area Emergency

2.5 EP-1-040, General Emergency

2.6 PS-16-103, Accountability of Personnel During Emergencies

2.7 EP-2-190, Personnel Accountability

2.8 EP-2-032, Monitoring and Decontamination

3.0 RESPONSIBILITIES

The Emergency Coordinator is responsible for implementing this procedure.

4.0 INITIATING CONDITIONS

4.1 Declaration of an Alert

4.2 Declaration of a Site Area Emergency

4.3 Declaration of a General Emergency

4.4 As directed by the Emergency Coordinator

5.0 PROCEDURE

5.1 SITE EVACUATION

5.1.1 Direct the Health Physic Coordinator to select the appropriate off-site assembly area for the evacuation. (Monsanto Park, Luling or St. John the Baptist Catholic Church, Edgard), and to provide information on any special consideration which may exist.

5.1.2 Direct the Security Shift Supervisor to prepare for the evacuation of the site and to restrict access to the site, to authorized personnel only.

NOTE

When possible the Health Physics Technician should accompany the Assembly Area Supervisor to the assembly area in the same vehicle.

5.1.3 Direct the TSC Supervisor to dispatch the Assembly Area Supervisor from the OSC to the designated assembly area.

5.1.4 Direct the Health Physics Coordinator to dispatch a Health Physic Technician (or trained personnel selected by the Health Physics Coordinator) from the -4 central point to the designated assembly area.

NOTE

The following announcement may have been made previously when the Site Area or General Emergencies were declared.

5.1.5 Sound the Station Alarm and make the following announcement: "ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL: A SITE EVACUATION HAS BEEN IMPLEMENTED. ALL PERSONNEL NOT ASSIGNED TO THE EMERGENCY RESPONSE ORGANIZATION PROCEED IMMEDIATELY TO (state assemble area)). UPON ARRIVAL, LOG IN WITH THE ASSEMBLY AREA SUPERVISOR. PERSONNEL IN RADIATION CONTROLLED AREAS PROCEED TO THE HEALTH PHYSICS CONTROL POINT. THERE WILL BE NO SMOKING, EATING OR DRINKING UNTIL FURTHER NOTICE. THE MAINTENANCE RADIO FREQUENCY IS NOW DEDICATED FOR EMERGENCY USE ONLY."

5.1.5.1 Repeat the announcement.

5.1.6 Make the following notifications in accordance with the notification procedures in EP-2-010.

5.1.6.1 Notify Waterford 1 & 2 to evacuate non-essential personnel.

NOTE

The Emergency Coordinator shall provide direction to Waterford 1 & 2 as to what evacuation routes to take.

5.1.6.2 Notify St. John the Baptist and St. Charles parishes for vehicular traffic control.

5.1.6.3 Notify the United States Coast Guard to control Exclusion Area river traffic.

5.1.6.4 Notify the Missiouri Pacific Railroad to Control Exclusion Area rail traffic.

5.1.7 Ensure accountability and evacuation verification activities are performed in accordance with EP-2-190 and PS-16-103.

6.0 FINAL CONDITIONS

This procedure shall be considered complete when:

6.1 Assembly Area muster has been completed and results forwarded to the Emergency Coordinator.

6.2 Evacuation has been verified in accordance with PS-16-103.

6.3 Plant activities and emergency status has been evaluated and emergency manpower requirements identified.

6.4 Assembled personnel are briefed, placed on standby or disbanded as directed by the Emergency Coordinator.

7.0 ATTACHMENTS

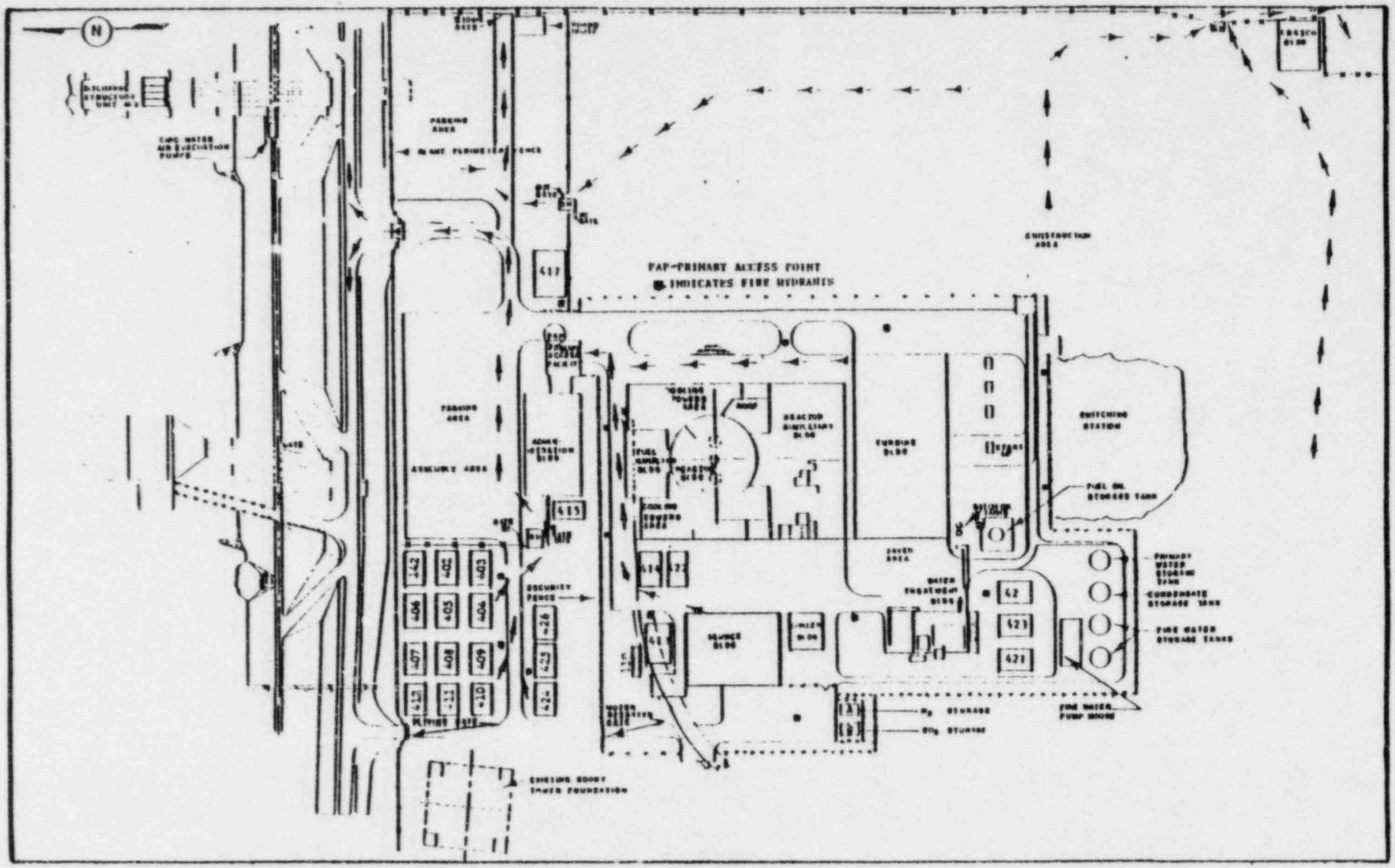
7.1 Onsite Evacuation Routes

7.2 Assembly Area Muster Sheet

7.3 Site Evacuation Route

7.4 Assembly Area Supervisor Actions and Checklist

ON-SITE EVACUATION ROUTES



ASSEMBLY AREA MUSTER SHEET

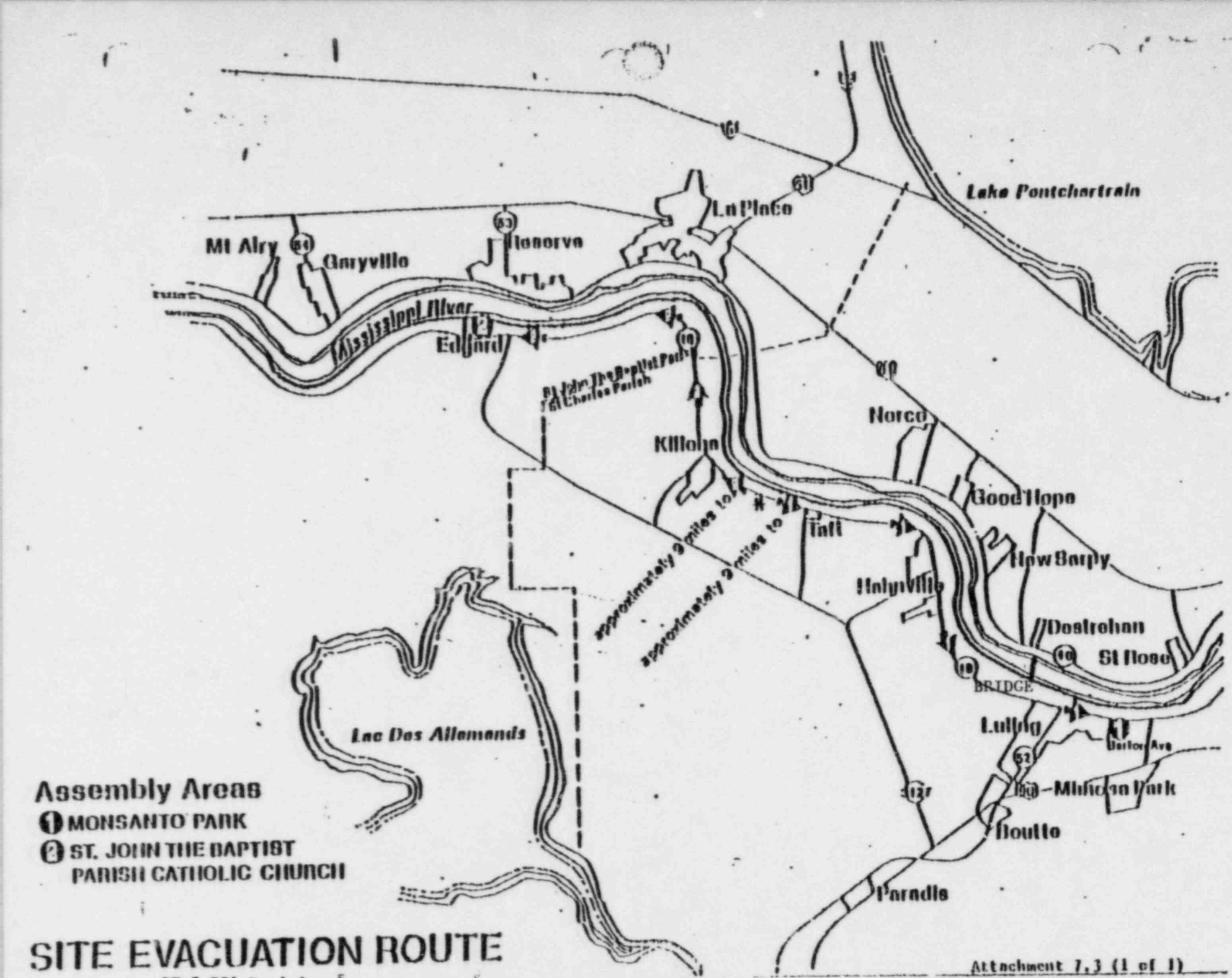
Assembly Area Supervisor's Name: _____

Date: _____ Time: _____

Name of Individual Completing Muster Sheet: _____

Location: _____

Print the names of personnel that have assembled. Present completed form(s) immediately to LP&L Assembly Area Supervisor.



SITE EVACUATION ROUTE

EP-2-071 Revision 5

Attachment 7.3 (1 of 1)

ASSEMBLY AREA SUPERVISOR ACTIONS AND CHECKLIST

1. Procure Assembly Area Kit and verify operation of communications equipment.
2. Proceed to the proper assembly area.
3. Upon arrival at the assembly area:
   a. Establish communcations with the OSC.

NOTE

If communications cannot be established with the portable radio, relay messages by dispatching an individual to the nearest coin-operated telephone. The PABX number for the OSC Supervisor is [ ].

---

   b. Ensure that all personnel are logged in on the Assembly Area Muster Sheet (Attachment 7.2). Assign individuals to assist with this task, as necessary.
   c. Ensure that Health Physics technicians (or trained personnel selected by the Health Physics Coordinator) are assigned to survey all personnel, vehicles and equipment for contamination. Report any requirements for decontamination to the OSC Supervisor.
   d. Coordinate the operations of personnel and vehicles at the assembly area.

THE MATERIAL CONTAINED WITHIN THE SYMBOLS [ ] IS PROPRIETARY OR PRIVATE INFORMATION.

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-2-101
REVISION 6

Emergency Plan Implementing Procedure

Operational Support Center Activation,
Operation and Deactivation

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: L. F. Storz for RPB 10/1/84
Plant Manager-Nuclear Approval Date

Fuel Load
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-2-101 - Operational Support Center (OSC) Activation, Operation, and Deactiviation (Rev. 6)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	[signature]	✓		9/27/84
	Operations Superintendent	[signature]	✓		9/27/84
	Radiation Protection Superintendent	[signature]	✓		9/27/84
	Plant Quality Manager	[signature]	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman	[signature]	✓		9/27/84

PORC Meeting No. 84-98 Item No. 32 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Comments: Chg #2 9-27-84 MHS

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-2-101 Title CSC Activation, Operation & Deactivation

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. 2 [ ]Permanent [ ]Deviation Expiration Date N/A

B. Revision No. 6

C. Deletion [ ]YES [X]NO

DESCRIPTION OF CHANGE OR REVISION

Revised to reflect when the CSC is actually operating. Added clarification to the operation of the Fire and First Aid Team. Changed Backup CSC activation.

REASON FOR CHANGE, REVISION, OR DELETION

To upgrade procedure and to incorporate LER Commitments

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE Aug 29, 1984

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE Aug 29 1984

TECHNICAL REVIEW [signature] DATE 9-17-84

GROUP HEAD REVIEW [signature] DATE 9-17-84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 6
1-16	Revision 6
17-19	Revision 5

1.0 PURPOSE

This procedure provides guidance for the Operational Support Center (OSC) staff in the activation, operation and deactivation of the Operational Support Center.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan
2.2 EP-2-130, Emergency Team Assignments
2.3 EP-2-150, Emergency Plan Implementing Records
2.4 EP-2-190, Personnel Accountability
2.5 EP-2-060, Radiological Field Monitoring
2.6 EP-2-031, In-Plant Radiological Controls and Surveys During Emergencies
2.7 EP-2-030, Emergency Radiation Exposure Guidelines and Controls
2.8 EP-2-034, On-Site Surveys During Emergencies
2.9 EP-3-040, Emergency Equipment Inventory
2.10 Emergency Management Resources Book
2.11 EP-2-071, Site Protective Measures
2.12 EP-2-170, Recovery
2.13 EP-2-032, Monitoring and Decontamination

3.0 RESPONSIBILITIES

The Operational Support Center Supervisor has overall responsibility for ensuring that actions outlined in this procedure are carried out. The Radiological Controls Coordinator, Assembly Area Supervisor and emergency response team personnel are responsible for ensuring that activities in their areas are conducted in accordance with this procedure. The first OSC responders shall begin implementation of this procedure.

4.0 INITIATING CONDITIONS

This procedure is to be initiated upon any of the following conditions:

4.1 At the direction of the Emergency Coordinator; or
4.2 Declaration of any of the following emergency conditions.
4.2.1 Alert
4.2.2 Site Area Emergency
4.2.3 General Emergency

5.0 PROCEDURE

NOTE

If the Backup OSC is to be activated, GO TO Attachment 7.2.

5.1 General Instructions for all personnel.

5.1.1 Perform a whole body frisk as required.

5.1.2 Card into the "Accountability Keycard Reader",(if accountability is not being performed by the backup manual method).

5.1.3 Sign in on the appropriate status board indicating activities qualified to perform.

5.1.4 Check in with the OSC Supervisor or appropriate team leader for further instructions and go to the appropriate page of this procedure for assigned responsibilities.

5.1.5 If you are one of the first arrivals and the OSC is not set up, GO TO 5.2, OSC First Responders.

5.2 OSC First Responder

5.2.1 Unlock OSC Supervisor's Cabinet with key from key box (Refer to Attachment 7.1). All other keys are inside the OSC Supervisor's Cabinet.

NOTE

A key for the OSC Supervisor's Office is also located in the key locker (Refer to Attachment 7.1.)

5.2.2 Ensure all status boards are removed from their storage location in the Ventilation Room and placed in the OSC operations area.

5.2.3 Plug in telephones in appropriate jacks (refer to Attachment 7.1) and test them.

5.2.4 Plug the remote base stations (telephone sets for Maintenance and Field Team radios) in the appropriate jacks (refer to Attachment 7.1).

NOTE

Forms, pens, log sheets and other supplies are maintained in the desk in the OSC Supervisor's Cabinet.

5.2.5 Check in with the OSC Supervisor and go to the appropriate section of this procedure for assigned responsibilities.

NOTE

Prior to the activation of the TSC or the OSC the Emergency Coordinator may request support from the personnel assembled in the OSC.

5.3 OSC Supervisor

5.3.1 Activation

5.3.1.1 Evaluate the OSC current staffing and then make initial contact with the TSC Supervisor to ascertain plant conditions and support needed.

5.3.1.2 Call out additional personnel to staff the OSC as needed. Refer to the Emergency Management Resources Book for names and telephone numbers of personnel.

5.3.1.2.1 The call out of Operations personnel should be coordinated with the Operations Coordinator in the TSC.

5.3.1.3 Verify the Radiological Controls Coordinator reports to the -4 Control Point and activates with Health Physics support personnel and establishes communications with the OSC and TSC.

5.3.1.4 Verify the Radiological Controls Coordinator dispatches a Health Physics technician to the OSC as Health Physics liaison and to coordinate OSC radiological controls.

5.3.1.5 Begin activation of Emergency Teams as necessary in accordance with EP-2-130.

5.3.1.6 Ensure the OSC Communicator checks out communications links and establishes communications with the TSC and Control Room on the Sound Powered Phone.

5.3.1.7 Ensure that all personnel arriving at the OSC "Card" into the Accountability Keycard Readers, (Refer to EP-2-190 Initial accountability) and are then continuously accounted for as per EP-2-190 (Continuous Accountability).

NOTE

The OSC will be considered activated when,
1. The OSC Supervisor is present and briefed on the current situation.
2. The TSC has been activated.

5.3.1.8 Inform the TSC Supervisor of OSC capabilities as they are made available (i.e., First Aid Team personnel assembled and prepared to operate in accordance with EP-2-130.).

NOTE

Not all Emergency Teams must be staffed, nor personnel be available to staff all emergency teams, prior to the activation of the OSC.

5.3.2 Operation

5.3.2.1 Ensure continuous personnel accountability is maintained in accordance with EP-2-190.

5.3.2.2 Assemble and dispatch Emergency Teams in accordance with EP-2-130.

5.3.2.2.1 When a qualified Fire Brigade is staffed as per EP-2-130:

A. Notify Health Physics (for coverage as necessary) and stage the Fire Brigade at the +7 MSL RAB.

B. Relieve the on-shift Fire Brigade of the primary fire brigade activities.

5.3.2.2.2 When the Emergency First Aid Team is staffed as per EP-2-130:

A. Notify Health Physics (for coverage as necessary) and stage the First Aid Team at the +7 MSL RAB.

B. Relieve the on-shift First Aid Team.

5.3.2.3 When the Radiological Field Monitoring Teams are dispatched ensure they have transportation by:

5.3.2.3.1 Providing keys and drivers for vehicles designated for field monitoring from the OSC Supervisor Locker.

5.3.2.3.2 If the vehicles are not parked in the designated area; attempt to recall them by using the field monitoring radio.

5.3.2.3.3 If the designated vehicles are unavailable, provide other company vehicles as necessary.

5.3.2.4 Ensure a log of OSC activities is kept by the OSC Logkeeper as per EP-2-150.

5.3.2.5 Ensure radiological control is maintained in the OSC and habitability is assessed by the OSC Health Physics Technician:

5.3.2.5.1 OSC habitability surveys shall be conducted in accordance with EP-2-034.

5.3.2.5.2 Consideration should be given to evacuating the OSC when radiation levels are 100 mrem/hr or greater, and/or total weighted MPC airborne concentration levels are 10 MPC or greater, and there is no indication that these levels will significantly decrease during the next 4 hours.

5.3.2.5.3 The OSC shall be evacuated when radiation levels are 500 mrem/hr or greater and/or total weighted MPC airborne concentrations are 100 MPC or greater.

NOTE

Accumulated doses to personnel must also be taken into account. Consideration should be given to evacuation when 10CFR20 limits (see EP-2-030) are approached and there is no indication that conditions will improve before limits are exceeded.

NOTE

The Health Physics technician and Assembly Area Supervisor should travel in the same vehicle to the assembly area if possible to facilitate coordination of activities.

5.3.2.6 If a Site Evacuation has taken, or takes, place; ensure the Assembly Area Supervisor is dispatched (or has already been dispatched by the Emergency Coordinator) and activities at offsite assembly areas conducted in accordance with EP-2-071.

5.3.2.6.1 Ensure a Health Physics technician (or trained personnel selected by the Health Physics Coordinator) is dispatched to the selected offsite assembly area.

5.3.2.6.2 Coordinate activities with the Radiological Controls Coordinator/ OSC Supervisor to ensure personnel and vehicles at the selected assembly area are monitored and decontaminated as necessary and to ascertain the need for additional site responders - called in from the assembly area - in accordance with EP-2-071.

5.3.2.7 Maintain communications with the TSC, -4 Control Point, emergency response teams, Control Room (plant conditions through sound powered phone only) and Assembly Area Supervisor as necessary.

5.3.2.8 If extended operation of the OSC is required, provide continuous manning capability - watch bill - using Attachment 7.3 as a guide. Coordinate continuous manning activities and schedules with the TSC Supervisor.

5.3.2.9 Keep the TSC Supervisor informed of OSC activities and support overall plant activities as directed.

5.3.2.10 Ensure all documentation is maintained in accordance with EP-2-150.

5.3.2.11 If the OSC is to be evacuated and the Backup OSC activated, GO TO Attachment 7.2.

5.3.3 Deactivation

5.3.3.1 Assist in follow-up activities and evaluation of the event.

5.3.3.2 Assist in, and provide teams for, recovery operations as necessary as directed by the Recovery Manager in accordance with EP-2-170.

5.3.3.3 If the emergency condition has terminated, ensure all emergency teams are recalled to the OSC and debriefed, all logs, all data sheets, Team Briefing/Debriefing sheets, correspondence, etc. are collected, reviewed and compiled for further review by the Emergency Planning Coordinator (EPC).

5.3.3.4 Restore equipment and facility to initial conditions. Inventory emergency equipment as per EP-3-040, Emergency Equipment Inventories.

5.4 Radiological Controls Coordinator

5.4.1 Activation

5.4.1.1 Report to the -4 Control Point and staff it with Health Physics technicians.

5.4.1.2 Establish communications with the OSC and Health Physics Coordinator in the TSC.

5.4.1.3 Begin monitoring the Radiation Monitoring System readings from the terminal at the -4 Control Point Office.

5.4.1.4 Dispatch a Health Physics technician to the OSC for radiological control, habitability surveys and Health Physics liaison (team briefings, etc.).

5.4.1.5 Ensure all essential personnel at the -4 Control Point log into the accountability keycard reader as per EP-2-190, (if accountability is not being performed dby the backup manual method).

5.4.2 Operation

5.4.2.1 Provide Health Physics coverage for emergency response teams as necessary. Assist in briefing and debriefing of teams for radiological purposes.

NOTE

The Fire Brigade and the Emergency First Aid Team are dispatched from the +7 ft. MSL RAB.

5.4.2.1.1 Provide a portable radiation instrument as necessary to the +7 ft. MSL RAB for the Fire Brigade and Emergency First Aid Teams use.

5.4.2.1.2 Provide initial Health Physics coverage for the Fire Brigade and/or Emergency First Aid Team when dispatched and as appropriate.

5.4.2.2 Conduct in-plant and onsite surveys and maintain radiological controls in accordance with EP-2-031 and EP-2-034.

5.4.2.3 Provide Health Physics personnel for offsite field monitoring teams in accordance with EP-2-060.

5.4.2.4 Provide Health Physics support for offsite assembly area activities as directed.

5.4.2.5 Provide Health Physics support for decontamination operations in accordance with EP-2-032.

5.4.2.6 Maintain a log of Radiological Controls Coordinator/-4 Control Point activities as per EP-2-150.

5.4.2.7 Advise the OSC Supervisor as to OSC habitability.

5.4.2.7.1 OSC habitability surveys shall be conducted in accordance with EP-2-034.

A. Consideration should be given to evacuating the OSC when radiation levels are 100 mrem/hr or greater, and/or total weighted MPC airborne concentration levels are 10 MPC or greater, and there is no indication that these levels will significantly decrease during the next 4 hours.

B. The OSC shall be evacuated when radiation levels are 500 mrem/hr or greater and/or total weighted MPC airborne concentrations are 100 MPC or greater.

NOTE

Accumulated doses to personnel must also be taken into account. Consideration should be given to evacuation when 10CFR20 limits (see EP-2-030) are approached and there is no indication that conditions will improve before limits are exceeded.

5.4.2.8 If the OSC is to be evacuated and the Backup OSC activated, refer to Attachment 7.2.

5.4.3 Deactivation

5.4.3.1 Complete the log for the -4 Control Point and review and forward to the OSC Supervisor.

5.4.3.2 Assist in follow-up activities and evaluation of the event as directed.

5.4.3.3 Ensure affected plant and onsite areas are surveyed for radioactive contamination and cleared or appropriate controls established, corrective actions taken.

5.4.3.4 Assist in recovery operations as necessary as directed in accordance with EP-2-170.

5.4.3.5 If the emergency condition has terminated, ensure all survey forms, data sheets, etc. are collected, reviewed and compiled and given to the OSC Supervisor.

5.4.3.6 Restore equipment and facility to initial conditions. Inventory emergency equipment as per EP-3-040, Emergency Equipment Inventories.

5.5 Emergency Response Team Leader

5.5.1 Activation

5.5.1.1 When directed by the OSC Supervisor, assemble the appropriate equipment in accordance with EP-2-130.

5.5.1.2 When the Emergency Team has been formed and briefed as per EP-2-130, inform the OSC Supervisor of your team's availability.

5.5.1.3 Respond as directed by the OSC Supervisor.

5.5.2 Operation

5.5.2.1 Conduct emergency response team operations as per the appropriate procedure(s) and the OSC Supervisor direction.

5.5.2.2 Maintain communication with the OSC while in the field and provide periodic reports which should include as a minimum, team location, status and any off-normal conditions observed within the plant.

5.5.3 Deactivation

5.5.3.1 On completion of assigned task or function and at the direction of the OSC Supervisor debriefing and deactivate the team as per appropriate procedure and EP-2-130.

5.5.3.2 Restore emergency equipment to proper storage location and report and equipment deficiencies to the OSC Supervisor.

5.5.3.3 Ensure all appropriate documentation (Briefing/Debriefing sheets, etc.) is complete and forwarded to the OSC Supervisor.

5.5.3.4 Assist as directed by the OSC Supervisor.

6.0 FINAL CONDITIONS
Assess the status of the OSC and ensure that the following actions have been completed.

6.1 EP-2-170, Recovery has been implemented for OSC activities as appropriate.

6.2 All records generated during the operation of the OSC have been handled in accordance with EP-2-150.

6.3 All functional equipment/supplies have been restored to preactivation conditions, as appropriate.

6.4 The entire OSC staff has been relieved of all duties associated with the operation of the OSC.

6.5 Returning field monitoring team vehicles and personnel are surveyed in accordance with EP-2-060.

7.0 ATTACHMENTS

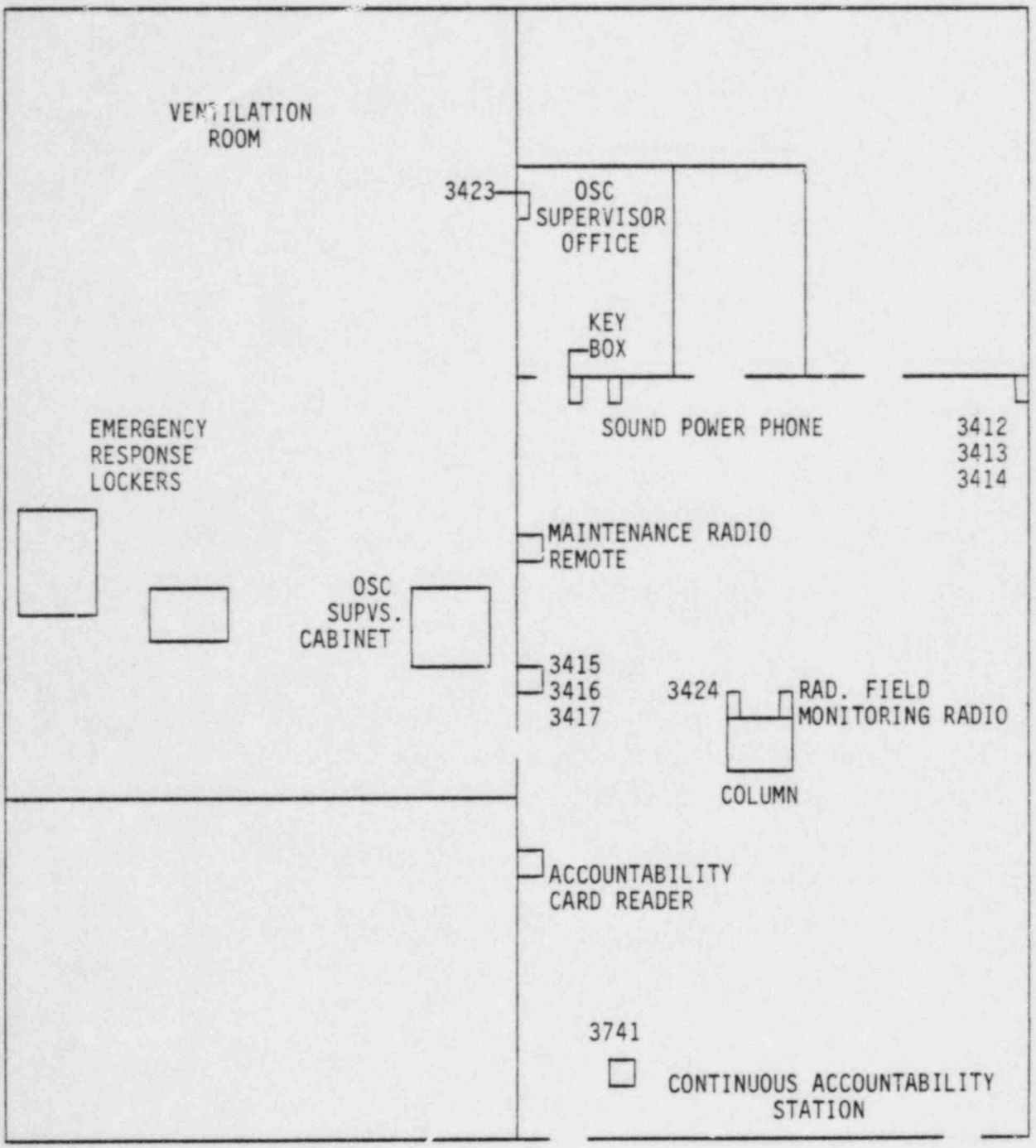
7.1 OSC Floor Plan and Equipment Locations

7.2 Backup OSC Activation

7.3 OSC Watch Bill Form

OSC FLOOR PLAN AND EQUIPMENT LOCATIONS

SERVICE BUILDING 2ND FLOOR



BACKUP OSC ACTIVATION

The Backup OSC is located in the Administration Building Meeting Room.

This Attachment should be implemented under the following conditions:

1.) The OSC is inaccessible.

2.) The habitability of the OSC deteriorates, requiring evacuation.

3.) The Emergency Coordinator directs use of Backup OSC.

Since use of the Backup OSC will be caused by abnormal conditions, this procedure should be considered guidance and followed as common sense and good judgement dictates.

A. ACTIVATION OF THE BACKUP OSC FROM THE OSC DUE TO DETERIORATING CONDITIONS.

1. Contact the TSC Supervisor and advise him that you are activating the Backup OSC. Request that Security be notified.

NOTE

The following equipment is to be considered at a minimum for movement to the OSC.

a.) Completed documentation
b.) Procedures
c.) Forms
d.) Field Monitoring Kits
e.) Assembly Area Supervision Kit
f.) Onsite Monitoring Kit
g.) Vehicles
h.) Radiological Instrumentation
i.) Radios
j.) Radiological Emergency Records

Some items may be already in the field or in use.

2. Brief the OSC personnel and assign individuals to ensure key pieces of equipment are transported to the Backup OSC.

NOTE

The keys for the Backup OSC are located in the OSC Supervisor Locker.

3. Select and dispatch a team of OSC personnel to the Backup OSC to:

a.) Unlock the Backup OSC
b.) Setup communication systems
c.) Establish communications with the OSC
d.) Verify communications with any Emergency Teams in the field.

Ensure that the keys for the Backup OSC and adequate forms and documentation are sent with the team.

4. Transfer control of those Emergency Team(s) performing functions in the field to the Backup OSC. Inform the TSC Supervisor of the transfer and provide a new contact phone number in the Backup OSC.

5. Coordinate the transfer of personnel and equipment to the Backup OSC. Ensure that continuous accountability as per EP-2-190 is performed.

6. When all OSC personnel, command and control, and communication are established in the Backup OSC update the TSC Supervisor as to the current OSC status.

7. Follow applicable procedurs, ensuring that adjustments are made for use of the Backup OSC.

B. ACTIVATION OF THE BACKUP OSC WITHOUT INITIAL PRIMARY OSC ACTIVATION.

1. Gain access to the Meeting Room and the Projection Room within the Meeting Room. Keys are maintained within the OSC Supervisor locker or security should be able to provide access.

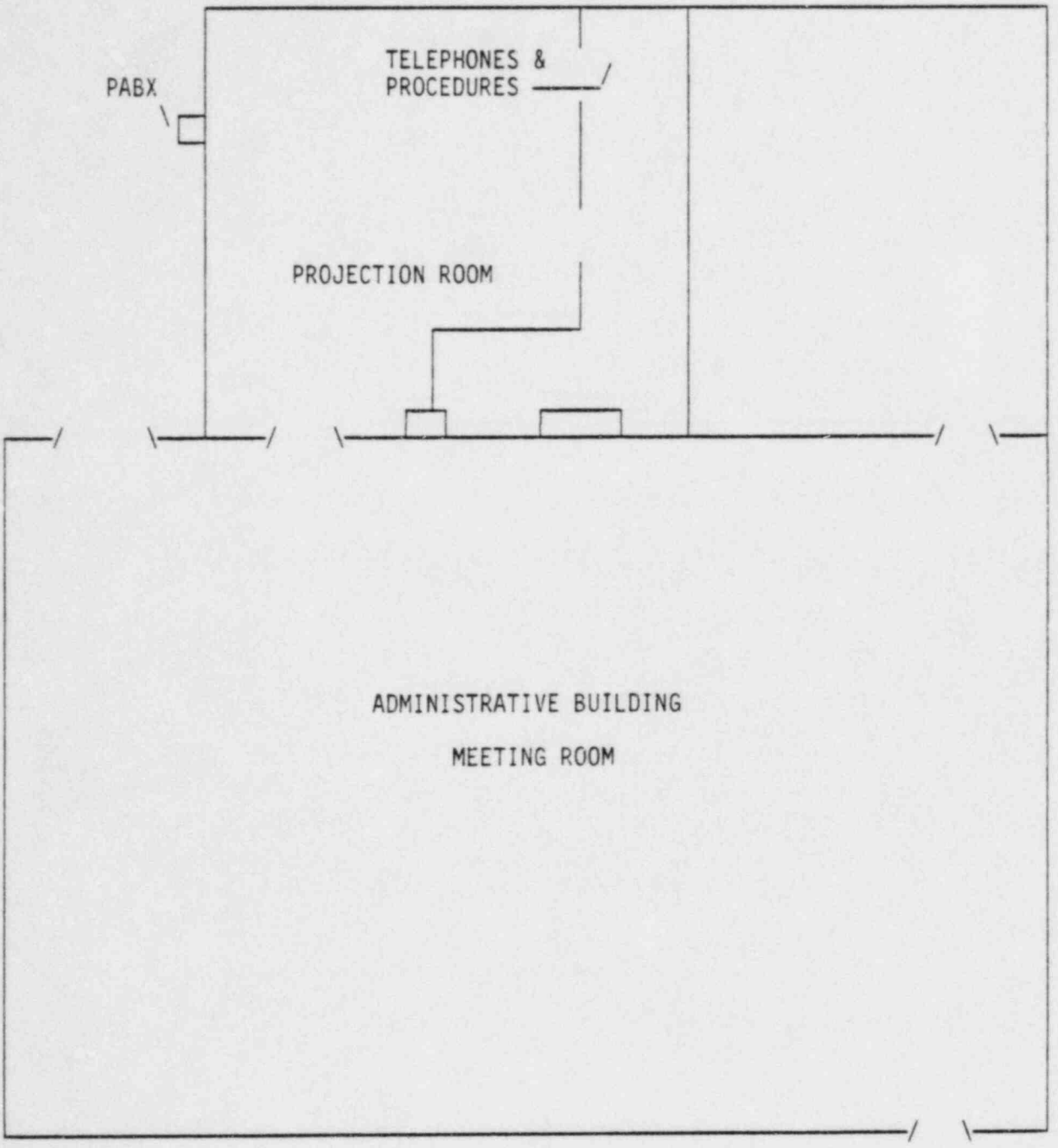
2. Setup available equipment.

3. Evaluate and if possible dispatch personnel to the OSC to retrieve at a minimum the following equipment.

   a.) Field Monitoring Kits
   b.) Field Monitoring Radios
   c.) Keys from the OSC Supervisor Locker
   d.) Radiological instrumentation
   e.) Onsite Monitoring Kit
   f.) Assembly Area Supervision Kit
   g.) Emergency Kits

4. Establish communication and advise the TSC Supervisor as to the OSC availability.

BACKUP OSC


PABX
TELEPHONES &
PROCEDURES
PROJECTION ROOM
ADMINISTRATIVE BUILDING
MEETING ROOM

OSC WATCH BILL FORM

Continuous manning capability of the OSC may be provided through providing qualified personnel for each of three shifts. The Emergency Management Resources Book may be used as a reference. The OSC Supervisor will normally have responsibility for setting up this schedule (names of personnel assigned to each shift should be put in the blanks and the period for the schedule indicated on the attached sheets) and contacting assignees.

As directed by the Emergency Coordinator, schedules and personnel assignments may be adjusted (i.e., 2-shift personnel assignments as opposed to 3 shifts.).

All schedules shall be approved by the Emergency Coordinator or his designee, posted in the appropriate area and copies distributed to affected personnel.

NOTE

The attached sheets only provide a guide on setting up continuous operations. The Emergency Coordinator or his designee decides which positions for each shift shall be filled and hours.

Period of This Schedule: From _____ To _____

_____
Emergency Coordinator

OSC SUPERVISOR
0800-1630 _____
1600-0030 _____
0000-0830 _____

OSC LOGKEEPER
0800-1630 _____
1600-0030 _____
0000-0830 _____

RADIOLOGICAL CONTROLS COORDINATOR
0800-1630 _____
1600-0030 _____
0000-0830 _____

FIRE TEAM
0800-1630 _____(Leader)
_____
_____
_____
_____
1600-0030 _____(Leader)
_____
_____
_____
_____
0000-0830 _____(Leader)
_____
_____
_____
_____

FIRST AID TEAM
0800-1630 _____
1600-0030 _____
0000-0830 _____

REPAIR TEAM
0800-1630 _____
_____
1600-0030 _____
_____
0000-0830 _____
_____

Period of This Schedule: From _____ To _____

_____
Emergency Coordinator

SEARCH & RESCUE TEAM

0800-1630 _____
1600-0030 _____
0000-0830 _____

OSC COMMUNICATOR

0800-1630 _____
1600-0030 _____
0000-0830 _____

HEALTH PHYSICS TECHNICIANS

0800-1630 _____
_____
_____
_____
_____
_____

1600-0030 _____
_____
_____
_____
_____
_____

0000-0830 _____
_____
_____
_____
_____
_____

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-3-020
REVISION 3

Emergency Plan Implementing Procedure

Emergency Preparedness Drill and Exercises

PORC Meeting No 84-22

Reviewed: _____
PORC Chairman

Approved: RP Barkhurst
Plant Manager-Nuclear

4/5/84
Approval Date

~~Fuel Load~~
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-3-020 - (Change 1) Emergency Preparedness Drills and Exercises (Rev. 3)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	[signature]	✓		9/27/84
	Operations Superintendent	[signature]	✓		9/27/84
	Radiation Protection Superintendent	[signature]	✓		9/27/84
	Plant Quality Manager	[signature]	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman	[signature]	✓		9/27/84

PORC Meeting No. 84-98 Item No. 49 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

cag*2 9-13-84 MHS

Comments:

Approved by [signature] DATE 9/28/84
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-3-020 Title Emergency Preparedness Drill & Exercise

Effective Date _____ (if different from approval date)

Complete A, B, and C

A. Change No. 1 |X| Permanent |_| Deviation Expiration Date N/A

B. Revision No. 3

C. Deletion |_| YES |_| NO

DESCRIPTION OF CHANGE OR REVISION

Step 5.1.4 change "semiannually" to "annually" and delete "One of these drills".

REASON FOR CHANGE, REVISION, OR DELETION

To reflect requirement in NUREG 0654 FEMA-REP-1 Rev 1 H.2.d as Exercised Per Section 8.1.2.4-5.

REQUIRED SIGNATURES

ORIGINATOR [signature] DATE Sept 21, 1984

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES ____ NO X
2. Change the procedures as described in the FSAR? YES ____ NO X
3. Conduct tests/experiments not described in the FSAR? YES ____ NO X
4. Require a change to the Technical Specifications? YES ____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE Sept 21, 1984

TECHNICAL REVIEW N/A per 9/24/84 DATE _____

GROUP HEAD REVIEW [signature] DATE Sept 24, 1984

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

WATERFORD 3 SES

PLANT OPERATING MANUAL

CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-3-020 Title Emergency Preparedness Drill and Exercises

Effective Date ~~Fuel Load~~ (if different from approval date)

Complete A, B, or C

A. Change No. N/A

B. Revision No. 3

C. Deletion N/A

REASON FOR CHANGE, REVISION, OR DELETION

To incorporate NRC Follow-up Appraisal Comments, clarify procedure and incorporate comments from annual exercise.

REQUIRED SIGNATURES

Originator _____ Date 3-22-84

Technical Review N/A SE Date _____

SAFETY EVALUATION

Does this change, revision, or deletion:	YES	NO
1. Change the facility as described in the FSAR?	___	✓
2. Change the procedures as described in the FSAR?	___	✓
3. Conduct tests/experiments not described in the FSAR?	___	✓
4. Create a condition or conduct an operation which exceeds, or could result in exceeding, the limits in Technical Specifications?	___	✓

If the answer to any of the above is yes, complete and attach a 10 CFR 50.59 Safety Evaluation checklist.

Safety Evaluation _____ Date 3-22-84

Group/Dep't. Head Review _____ Date 3-22-84

Temporary Approval* _____ Date _____ (NOS)

Temporary Approval* _____ Date _____

QC Review _____ Date 3-29-84

PORC Review _____ Date 3-30-84 Meeting No. 84-22

Plant Manager-Nuclear Approval N/A RAT Date N/A RAT

*Temporary approval must be followed by Plant Manager-Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

TITLE	Revision 3
1-81	Revision 3

1,4

1 Chg 1
9/21/04
Beck

NS30176

1.0 PURPOSE

The purpose of this procedure is to provide guidance for the preparation, scheduling, performance, observation and critique of emergency preparedness drills and exercises.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 NUREG 0654/FEMA-REP-1

2.3 Waterford 3 SES Final Safety Analysis Report, Section 13.2.2.1.4

2.4 Waterford 3 SES Emergency Medical Assistance Program (EMAP)

2.5 UNT-3-002, Training Records and Forms

2.6 EP-3-040, Emergency Equipment Inventory

2.7 EP-3-070, Emergency Communications Systems Routine Testing

2.8 NSP-451, Emergency Planning Action Item Tracking System

3.0 RESPONSIBILITIES

3.1 The Emergency Planning Coordinator (EPC) shall be responsible for the development, planning, scheduling and coordination of all drills/exercises, critiques, documentation and evolutions involving the Waterford 3 Emergency Plan.

3.2 The Plant Manager or his designee shall review and approve all plant drill scenarios.

3.3 The Senior Vice President-Nuclear Operations or his designee shall review and approve all joint exercise scenarios.

3.4 Individuals involved in drills/exercises shall be responsible for the following precautions:

3.4.1 Understanding Attachment 7.1, Definitions.

3.4.2 During a drill/exercise all communications and announcements that are part of the drill/exercise shall be prefaced and followed with the words "THIS IS A DRILL."

3.4.3 During preparation of the Drill Package, the planners and those individuals that review the scenario shall ensure that plant safety is not compromised. When operation of facility equipment or performance of an evolution could compromise equipment or personnel safety, an observer or monitor shall be assigned to witness the evolution.

3.5 The Manager Plant Training shall review all drill/exercise critiques.

4.0 INITIATING CONDITIONS

This procedure shall be used to develop, conduct and document emergency preparedness drills/exercises.

5.0 PROCEDURE

5.1 EXERCISE SCHEDULING REQUIREMENTS

5.1.1 A major exercise simulating a Site Area and General Emergency shall be conducted annually. The scenario should be varied to ensure that over a 5-year period all major elements and components of the Waterford 3 Emergency Plan are exercised. At least once every six (6) years there should be one drill initiated between 6 pm and midnight and another between midnight and 6 am. This exercise shall be critiqued by the Federal, State and LP&L drill observers/evaluators.

5.1.2 Communication drills/exercises shall be conducted:

5.1.2.1 Monthly, a communication drill which involves the state and local governments within the Plume Exposure Pathway. Emergency Planning Zone (10-mile EPZ).

5.1.2.2 Quarterly, a communication drill which involves the Federal and State Emergency Response Organization within the Ingestion Exposure Pathway Emergency Planning Zone (50-mile EPZ).

5.1.2.3 Annually, a communication drill between Waterford 3 and the State and local Emergency Operations Centers (EOC's) and the Field Assessment Teams. This drill may be held in conjunction with the annual exercise.

5.1.3 Fire drills shall be conducted as described in the Waterford 3 SES Training Manual.

5.1.4 Plant environmental and radiological monitoring drills (on-site and off-site) shall be conducted ~~semi~~annually/ ~~One of these drills~~ may be held in conjunction with the annual exercise.

5.1.5 Health Physics drills which involve response to, and analysis of, simulated elevated airborne and liquid samples, and direct radiation measurments in the environment, shall be conducted semiannually. One of these drills may be held in conjunction with the annual exercise.

5.1.6 Analysis of inplant liquid samples and use of the post-accident sampling system shall be included in health physics drills annually. This drill may be held in conjunction with the annual exercise.

5.1.7 Medical emergency drills shall be performed annually in accordance with section 7.0 of the EMAP and may be held in conjunction with the annual exercise.

5.1.8 A drill shall be performed semi-annually to assess the capability of Control Room personnel to don air-supplied respiratory equipment within two minutes. This drill may be held in conjunction with other drills or the annual exercise.

5.2 DRILL/EXERCISE DEVELOPMENT

NOTE

The Drill/Exercise Package and information related to the package is considered priority in nature. Individuals privy to the information contained within the package, or related to the package, are the package preparer(s) and authorized reviewers.

5.2.1 The EPC provides as a guide to the drill preparer, using Attachment 7.2, Dill/Exercise Objective Check Sheet, the following:

A. Scope - The magnitude of the drill/exercise, which shall include involvement of on-site and off-site organizations and departments.

B. Time Frame - The shift on which the drill/exercise should begin; the duration of the drill/exercise, real time and compressed drill time; the projected date of the drill/exercise.

C. Administrative Requirements - The requirements involved that must be met by the drill/exercise.

D. Test Objectives - Identity of areas where weakness has been demonstrated in past drills/exercises.

5.2.2 The drill preparer will write the drill scenario based on the Drill/Exercise Scenario Objective Letter in conformance with Attachment 7.3, Drill/Exercise Scenario Format. He will ensure that not only are the objectives met, but also that the drill/exercise is realistic, challenging, and can be performed without jeopardizing plant safety. The drill preparer shall forward the drill/exercise scenario to the EPC for his review.

5.2.3 The EPC shall review the drill/exercise scenario for completeness. The EPC shall then forward the complete scenario to the Plant Manager/Senior Vice President-Nuclear Operations or their designee for review and authorization.

5.2.4 The EPC, upon receiving the approved drill/exercise scenario, will ensure that those organizations requiring copies receive them. If the exercise is the annual exercise, the submittals for the NRC and FEMA shall be in accordance with Attachment 7.10, Milestones for Exercise Observation and Critiques, or, other schedule mutually agreed upon by NRC, FEMA and LP&L.

5.2.5 The EPC will, prior to the drill/exercise date, select and ensure adequate training of drill team members.

5.2.6 Prior to any scheduled drill or exercise which involves events and/or evolutions which could be witnessed by the general public, the EPC shall inform the LP&L Director of Public Relations of the event.

5.2.7 The EPC shall notify affected off-site agencies at least 30 days prior to any drill or exercise.

5.2.8 Prior to each major drill/exercise the EPC shall walkdown all Plant Emergency Facilities.

5.3 DRILL/EXERCISE

5.3.1 The Drill Team Controller shall conduct a predrill/exercise briefing with the drill team. The Drill Team Controller shall ensure that all drill team members understand their function and purpose in the scenario.

5.3.2 Those Drill Monitors required to provide information for participant's use shall be issued Cue Cards containing the information. See Attachment 7.3, Drill/Exercise Scenario Format.

5.3.3 The EPC shall ensure that those Drill Monitors and observers who are assigned to ensure plant safety fully understand their responsibilities during the drill/exercise.

5.3.4 Prior to commencing the drill/exercise, the Drill Team Controller shall ensure that drill observers are stationed properly.

5.3.5 The Drill Team Controller shall commence the drill/exercise and is responsible for control of the progress of the scenario.

5.3.6 During the drill/exercise, the Drill Monitors and observers shall record their observations and comments in chronological order.

5.3.7 Upon termination of the drill/exercise each controller will pick up all logs, records and forms generated by the participants of the drill/exercise.

5.4 POST DRILL/EXERCISE ACTIVITIES

5.4.1 The EPC shall ensure that the Emergency Facilities are restored to pre-drill conditions.

NOTE

Refer to Attachment 7.10, Milestones for Exercise observation and Critique for guidance in scheduling post-annual exercise activities.

5.4.2 Post Drill/Exercise Critique

5.4.2.1 Following the termination of the drill/exercise the EPC shall meet collectively with all drill team members and Senior drill participants and critique the drill/exercise.

5.4.2.2 During the critique the EPC shall note the highlights for inclusion in the initial summary report.

5.4.2.3 The EPC shall enter any deficiencies noted on the Emergency Planning Action Item Tracking System.

5.4.3 Initial Summary Report

5.4.3.1 Controllers, Monitors and observers forward completed Attachments 7.7, 7.8, and 7.9, Drill/Exercise Critique Sheet, Observation Evaluation Checklist and Drill/Exercise Report, respectively, to the EPC.

5.4.3.2 The EPC using the documents of 5.4.3.1 above, and critique comments develops the initial drill/exercise summary.

5.4.3.3 The EPC enters and discrepancies and deficiencies noted on the Emergency Planning Action Item Tracking System.

5.4.3.4 The EPC forwards the initial summary to the Plant Manager-Nuclear and Nuclear Service Manager. If the event is an exercise the summary is also forwarded to the Senior Vice President-Nuclear Operations.

5.4.4 Final Report

5.4.4.1 The Lead Controllers forward the results of the evaluation of all logs, forms and records generated by the drill participants comparing what happened with what should have happened.

5.4.4.2 The EPC compiles the reports generated in 5.4.4.1 above and prepares the final drill exercise report and forwards it to the Plant Manager-Nuclear, Manager Nuclear Services and in the case of an exercise, to the Senior Vice President-Nuclear Operations.

5.4.4.3 The EPC enters any discrepancies or deficiencies on the Emergency Planning Action Item Tracking System.

5.4.5 Records Retention

5.4.5.1 The EPC forwards all copies of Attachment 7.6, Drill/Exercise Attendance Report to the Training Manager.

5.4.5.2 The EPC prepares a copy of the Drill/Exercise Package, the initial summary report and supporting documents for retention in Central Records and forwards these to Central Records.

5.4.5.3 The EPC may also retain a copy of the records identified in 5.4.5.2 above, in the Emergency Planning Working files.

5.4.5.4 The records identified in 5.4.5.2 above, will be retained in Central Records for a period of 6 years.

6.0 FINAL CONDITIONS

6.1 The initial Summary Report is forwarded to the designated management personnel.

6.2 All documents and records are completed and filed for retention in Central Records and Emergency Planning Working files.

6.3 The final report is forwarded to designated management personnel.

6.4 All emergency equipment and documents used during the drill/exercise is inventoried and restocked in accordance with EP-3-040, Emergency Equipment Inventory.

6.5 All Action Items identified during the drill/exercise are documented and tracked in accordance with the Emergency Planning Action Item Tracking System.

7.0 ATTACHMENTS

7.1 Definitions

7.2 Drill/Exercise Scenario Objective Check Sheet

7.3 Drill/Exercise Scenario Format

7.4 W3SES Cue Card

7.5 Drill Monitor/Observer Assignment Sheet

7.6 Drill Exercise Participant Attendance Report

7.7 Drill/Exercise Critique Sheet

7.8 Observer Evaluation Checklist

7.9 Drill/Exercise Evaluation Report Sheet

7.10 Milestones for Exercise Observation and Critique

DEFINITIONS

1. Drill - A supervised training instruction period conducted or simulated in a work environment for the purpose of developing and maintaining skills required to cope with abnormal or emergency plant conditions, including an evaluation of performance.
2. Exercise - An event that tests a major portion of the basic elements existing within an Emergency Preparedness Plan/Organization. This event should demonstrate the capability of the emergnecy preparedness organization to cope with a radiological emergency which could result in off-site consequences.
3. Drill Team Controller - The senior drill team member stationed in the Control Room. He/she shall be responsible for controlling the drill events in a timely and safe manner.
4. Drill Monitor - An individual who a) is knowledgeable of the appropriate procedures, b) is knowledgeable of the drill/exercise scenario prior to performance, c) has been given instruction on the expected actions of participants and has no involvement as a participant in the exercise, d) shall provide direction to participants via cue card or through free play, and e) is responsible to the Drill Team Controller. A Drill Monitor will observe, evaluate, and record the performance of participants.
5. Drill Observer - An individual who a) is knowledgeable of the drill/exercise scenario prior to performance, b) has been given instruction on the expected actions of participants and has no involvement as a participant in the exercise, and c) is responsible to the Drill Team Controller. A Drill Observer will observe, evaluate and record the performance of participants.
6. Drill Exercise Package - The document used to control the administrative aspects of a) initiation of the drill/exercise scenario, b) performance of the drill/exercise, and c) critique and documentation of the drill/exercise.
7. Drill Preparer - An individual assigned by the EPC to develop a drill/exercise scenario. He/she shall be knowledgeable of nuclear plant operation, procedures, plant safety, and the W3SES Emergency Plan and Emergency Plan Implementing Procedures.

DRILL/EXERCISE SCENARIO OBJECTIVE CHECK SHEET

1. Time Frame
   a. Season (Circle one)
      winter spring summer fall
   b. Period of the week (Circle one)
      weekday weekend holiday
   c. What shift shall the drill begin on-
      8 am - 5 pm 6 pm - midnight midnight - 6 am
   d. Projected Drill/Exercise date __/__/__
   e. Date of last similar drill/exercise __/__/__
   f. Real time span of drill _____ hours, ____days
   g. Drill/Exercise time frame _____ hours, ___days
2. Maximum Level of Classification Emergency
   a. Classification during the drill/exercise (check one)
      _____ Notification of Unusual Event
      _____ Alert
      _____ Site Area Emergency
      _____ General Emergency
3. Organization/Facility Involvement
   a. On-Site

Control Room Staff	yes/no
TSC	yes/no
EOF	yes/no
Site Security	yes/no
Fire Brigade	yes/no
OSC	yes/no
B/U OSC	yes/no

B/U EOF	yes/no
PR Staff	yes/no
Off-Site Assembly Areas	yes/no

b. Off-Site

EOC St. Charles Parish	yes/no
EOC St. John	yes/no
Sheriff's Department	yes/no
Fire Department	yes/no
EOC State Baton Rouge	yes/no
Regional NRC Office	yes/no
LOEP Office of Emerg Preparedness	yes/no
LNED Nuclear Emerg Division	yes/no
CCC	yes/no
GOIC	yes/no
Emergency Medical	yes/no
Ambulance	yes/no

4. Communication

a. Do you desire to exercise the emergency backup phone system? yes/no

b. Do you desire to use the emergency paging system? yes/no

c. Should a news bulletin be prepared? yes/no

d. Do you desire to activate the LP&L Public Information Center? yes/no

e. Do you desire to exercise the Public Notification System? yes/no

f. Is a medical problem to be involved? yes/no

If yes, 1) On-site response? yes/no

2) Off-site response? yes/no

3) Victim(s) injury(ies) _____

_____

_____

_____

4) Is the victim contaminated? yes/no

g. If yes is answered for f.2 above, describe involvement of off-site organization. _____

_____

_____

h. Will the exercise involve a fire? yes/no

a) On-site response? yes/no

b) Off-site response? yes/no

c) Describe involvement of responder. _____

_____

_____

_____

_____

i. Will the Security Force response be tested? yes/no

a) Sabotage/Bomb? yes/no

b) Intruder? yes/no

c) Other _____

_____

5. Radiological Release

a. Meteorological capabilities

1. Should real-time meteorology be used? yes/no

2. Should simulated meteorology be used? yes/no

3. Should weather forecasting capability be required? yes/no

DRILL/EXERCISE SCENARIO OBJECTIVE CHECK SHEET

b. Dose Assessment

1. Will dose projection be backed up by field monitoring?
   yes/no
2. Will long-term dose projections be calculated?
   yes/no
3. Source of radioactive release _____
   _____

c. Postaccident Sampling

1. Should postaccident sampling capabilities be exercised?
   yes/no
2. If yes, to what extent? _____
   _____
   _____
   _____
   _____

DRILL/EXERCISE SCENARIO FORMAT

1. The following format shall be used by the Drill Preparer to ensure a standardization of the drill and exercise packages.
2. The first page of the drill/exercise package shall be a Title Page with the following information centered on it.

W3SES
Emergency Preparedness
Drill/Exercise
(Title)
(Date)

3. Page number two (2) of the package shall be a "Table of Contents" similar in design to the following outline.

Sections:

- I Introduction
- II Objectives
- III Guidelines
  - A. General
  - B. Safety Precautions
  - C. Drill Monitor and Observer Instruction
  - D. Performance Evaluation Standards
- IV Narrative Summary
- V Exercise Scenario
  - A. Initial Conditions
    1. Plant Status
    2. Meteorological Conditions
- VI Cue Cards
  - Part I Participant Message
  - Part II Monitor Guide
  - A. Anticipated Response

B. Comments

C. Instructions

VII Charts, Graphs and Tables

VIII References

IX Drill Monitor and Drill Observer Assignment Sheet

4. Introduction - This section should contain a brief narrative description of goals that the drill or exercise is designed to accomplish.

5. Objectives - This section shall clearly state, in detail, the objectives that the drill/exercise package was designed to evaluate.

6. Guidelines - Includes those items that provide guidance to the participants, Drill Monitors and observers throughout the performance of the drill. This section is broken down into several subsections.

   a. General Guidelines - Those general guidelines that are to be followed by all participants throughout the drill or exercise period.

   b. Safety Precautions - General and detailed precautions necessary to prevent jeopardizing plant and personnel safety.

   c. Monitor/Observer Instruction - Those information items that the Drill Monitors and Drill Observers need to be aware of to perform their function.

   d. Performance Evaluation Standards - To ensure validity of the evaluation, all drill monitors must utilize the same grading criteria. The following standards should be utilized:

      1) Recording Times of Actions

         a. For calculating elapsed times, evaluators will be given the actual time the drill is initiated. This will be T=0 on all reports. All elapsed time calculations will be based on this [illegible] regardless of when the separate evaluation activities are initiated.

         b. An emergency center will be deemed to be in service when its personnel accountability check is completed

and reported or when the center has sufficient manpower present to carry out its mission. (Note: A formal announcement should be made.)

c. Monitors shall use the forms provided during the course of the drill to take notes on the time and events. It is intended to be used to complement the evaluation forms used to grade the exercise.

2) Evaluation Standards

a. Excellent (5) - Personnel and equipment always functioned without error the first time, every time. There were no problems encountered and all personnel and equipment functioned at a level much greater than could reasonably be anticipated.

b. Good (4) - Personnel and equipment generally performed better than expected. Any errors or problems were minor and easily correctable.

c. Satisfactory (3) - Personnel and equipment performed according to expectations with few minor exceptions. Any errors noted were not severe and could be corrected without undue labor or expense.

d. Poor (2) - Personnel and equipment generally performed below expectations and there were several significant deficiencies noted. The area's ability to carry out its functions was diminished.

e. Failure (1) - Personnel and equipment consistently failed to perform as required and there were serious deficiencies noted which severely impaired the ability of the Emergency Response Facility (ERF) to carry out its functions.

f. Not Applicable/Not Observed (0) - Through no fault of the exercise.

3) Categories for Evaluation

a. Activation and Response

b. Communications/Dissemination of Information

c. Procedures

d. Direction and Control

e. Material and Equipment

f. Protective Measures

g. Access Control

4) Drill monitors/observers shall use three (3) documents to generate their evaluation of the participants and equipment performance observed:

a. Drill/Exercise Critique Sheet (Attachment 7.7)

b. Observer Checklist (Attachment 7.8)

c. Drill/Exercise Evaluation Sheet (Attachment 7.9)

The Drill/Exercise Critique Sheet is a narrative summary of significant observed events. The Observer Checklist is an outline of expected key events that should be performed by each segment of the emergency organization. The key events are coupled with an evaluation scale. The Drill Monitor/Observer, on completion of the evaluation, shall complete the Drill/Exercise Evaluation Sheet based on his/her comments made in the Drill/Exercise Critique Sheet and evaluation made in the Observer Checklist.

NOTE

The Observer Checklist is not weighted, nor are items equal in value; therefore, a quantitative evaluation of this document is not considered reasonable. A "failure" or "poor" in one area can significantly impact the overall rating of that section.

---

7. Narrative Summary - A brief narrative description of the drill/exercise sequence of events.

8. Exercise Scenario - An outline of the sequence of drill events.

a. Initial Conditions - Those parameters and plant conditions necessary to be established to set the stage to commence the drill or exercise.

b. Meterological Condition - Those meteorological parameters necessary to establish the initial conditions for the drill or exercise; radiation release.

c. Detailed Scenario Timetable - A three-column format that provides a sequence of events that includes a drill time, event summary and the cue card number used to initiate the drill or exercise event.

9. Cue Cards (pages 21 and 22) - A two-page document used to transmit parameters and plant conditions to the participants of the drill/exercise.

a. The information on page 1 shall be given to the participant. (See page 21 of this attachment.) The time block shall be the drill time or condition under which the cue card should be issued. The message shall contain in chronological sequence the events, changes in parameters, indications or actions that the participant shall observe, hear, smell, feel or experience and then respond to.

b. Page 2 (see page 22 of this attachment) shall be retained by the Drill Monitor to provide him/her with guidance control or to evaluate the participant's response to page 1 of cue cards. Page 2 of the cue card has three subsections:

1) Anticipated Response - Shall be an outline of the order of actions that is expected to be observed as the participant responds to the cue card message. This section shall include reference to procedures that are to be used and the expected interpretation of the message parameters.

2) Comments - This section is a blank section to allow the Drill Monitor to make comments while referring to the Anticipated Response section. These comments should be transferred to the Drill Critique Sheet at a later time.

3) Instruction - Special instruction that the monitor should be aware of during the response to the cue card message.

10. Charts, Graphs and Tables - This section shall include all supportive charts, graphs and tables referenced by the cue cards or by the Drill/Exercise Package.
11. Reference - All referenced documents and procedures used to prepare and/or support the design and uses of the Drill/Exercise Package.
12. Drill Monitor/Observer Assignment Sheet - Shall list the positions which require Drill Monitors and/or Drill Observers. The Drill Team Controller shall ensure that each position is filled with an individual that is qualified to evaluate and safely monitor the assigned responsibility.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. CUE CARD NO. _____

TO: TIME:

****

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

****

INFORMATION:

****

THIS IS A DRILL

****

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO.

CUE CARD NO. _____

TO:

TIME:

ANTICIPATED RESPONSE

COMMENTS:

INSTRUCTIONS:

DRILL/EXERCISE SCENARIO FORMAT

DRILL MONITOR/OBSERVER TASK ASSIGNMENT SHEET

Drill/Exercise Title _____ Page ____of____

Date __/__/___ Time __:___

	Observer Name	Area of Responsibility
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		
26.		
26.		
27.		
28.		
29.		
30.		

DRILL/EXERCISE PARTICIPANT ATTENDANCE LIST

Drill/Exercise Title _____ Date __/__/__ Page ___of___

	Name	SSN#	Department	Emergency Planning Position
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
18.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				

DRILL/EXERCISE CRITIQUE SHEET

Drill Observer Name: _____ Date __/__/__

Drill/Exercise Title: _____

Assigned area to monitor _____

1. Drill monitors and observers shall use this sheet to record important events and comments during the drill.
2. The notes on this sheet should be used when completing the Observer Evaluation Checklist (Attachment 7.8).

Time	Event	Comment	Page ___ of ___

DRILL/EXERCISE CRITIQUE SHEET

Time Event Comment Page ___ of ___

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: CONTROL ROOM DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

*If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
Control Room (CR) personnel rapidly and correctly interpreted the problem.	0 1 2 3 4 5	
CR personnel knew when to refer to the Emergency Operating procedures, Emergency Plan and which Emergency Implementing procedures to use.	0 1 2 3 4 5	
Plant process information was available when required.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
CR personnel obtained timely meteorological data.	0 1 2 3 4 5	
CR personnel got timely release information from radiological and effluent monitor systems.	0 1 2 3 4 5	
CR personnel responded quickly to personal injury incident.	0 1 2 3 4 5	
CR personnel responded properly to simulated operational events.	0 1 2 3 4 5	
HP assistance was requested as needed.	0 1 2 3 4 5	
Event classifications were timely accurate and clear.	0 1 2 3 4 5	
The SS took action to determine what other conditions might exist which would verify the accuracy of the initial indication.	0 1 2 3 4 5	
CR personnel took appropriate actions to mitigate the effects of the accident.	0 1 2 3 4 5	
Technical advice was requested and/or received from the proper people.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
The emergency was upgraded or downgraded when appropriate.	0 1 2 3 4 5	
The SS made the correct response to implement on-site and off-site assessment and protective measures.	0 1 2 3 4 5	
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Notifications were timely and properly completed.	0 1 2 3 4 5	
Communications flow was adequate to ensure that information was timely, effective, and efficient.	0 1 2 3 4 5	
Phone listings were available, complete and up-to-date.	0 1 2 3 4 5	
General status announcements were made and updated periodically throughout the drill.	0 1 2 3 4 5	
Proper data flow was maintained between TSC and CR.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Logs were maintained.	0 1 2 3 4 5	
The ambient noise level in the CR was not a problem	0 1 2 3 4 5	
Transfer of information within the CR was clearly and completely understood.	0 1 2 3 4 5	
III. PROCEDURES		
Emergency Operating Procedures and Emergency Plan Implementing Procedures were clearly marked and readily available in the CR.	0 1 2 3 4 5	
Procedures used were current and controlled.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
The SS promptly assumed control and authority.	0 1 2 3 4 5	
Action was taken to initiate activation of the Emergency Response Centers when plant conditions and procedures indicated they should be activated.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
The proper management chain of command in the CR was followed when making decisions	0 1 2 3 4 5	
Emergency control and authority was properly transferred to the designated Emergency Coordinator.	0 1 2 3 4 5	
The transfer of control and authority was announced and logged.	0 1 2 3 4 5	
V. MATERIAL AND EQUIPMENT		
Plant Monitoring system functioned correctly.	0 1 2 3 4 5	
Radiation Monitoring System functioned correctly.	0 1 2 3 4 5	
CEPADAS functioned correctly	0 1 2 3 4 5	
Met. Data available independent of CEPADAS.	0 1 2 3 4 5	
Public Address System functioned correctly.	0 1 2 3 4 5	
Paging/Callout System functioned correctly.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Message recorders functioned correctly.	0 1 2 3 4 5	
PABX and dedicated hotlines functioned correctly.	0 1 2 3 4 5	
Station Alarm/Fire Alarm Systems functioned correctly.	0 1 2 3 4 5	
Radios functioned correctly	0 1 2 3 4 5	
VI. PROTECTIVE MEASURES		
Personnel in the CR were adequately protected from radiological and chemical hazards.	0 1 2 3 4 5	
Supplies such as respirators, protective clothing and KI for CR personnel were available.	0 1 2 3 4 5	
HP personnel were available as needed.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Access to CR was limited to personnel operating the plant, or participating in the drill/exercise.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER _____

LOCATION/GROUP OBSERVED: DOSE ASSESSMENT - CR DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
The need to perform dose measurements was promptly identified.	0 1 2 3 4 5	
The correct procedures were used for making dose calculations	0 1 2 3 4 5	
The individual(s) assigned to perform dose calculations were familiar with the procedures.	0 1 2 3 4 5	
Dose calculations were performed efficiently and accurately.	0 1 2 3 4 5	
Some means were available to verify that the dose calculations were correct.	0 1 2 3 4 5	

OBSERVER CHECKLIST

WATERFORD 3 SES OBSERVER _____

LOCATION/GROUP OBSERVED: TECHNICAL SUPPORT CENTER DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
The TSC was manned in a timely manner at the Alert Action Level.	0 1 2 3 4 5	
Command and control authority was transferred from the Control Room (CR) according to procedure.	0 1 2 3 4 5	
The transfer of command and control was formal, was announced, and was logged.	0 1 2 3 4 5	
Follow-up activities to manage injured persons.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Follow-up activities to manage fire.	0 1 2 3 4 5	
Field monitoring teams dispatched if appropriate.	0 1 2 3 4 5	
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Plant status and/or radiation parameters needed to determine the existing conditions were available in the TSC including portable radiological monitoring, chemistry and meteorological data.	0 1 2 3 4 5	
Communications with State, parish, and NRC officials were quickly established.	0 1 2 3 4 5	
Initial (if appropriate) and Follow-up Notifications were made in timely (usually 15 min) fashion.	0 1 2 3 4 5	
Major changes in plant or radiation release status was made known to all parties quickly.	0 1 2 3 4	
Off-site protective action recommendations were made quickly and clearly.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
All responsible persons in the the TSC kept abreast of current conditions.	0 1 2 3 4 5	
Communications between TSC and CR, EOF, OSC and CCC were established and used.	0 1 2 3 4 5	
Communications with field monitoring teams were adequate.	0 1 2 3 4 5	
Discussions were held concerning trends, prognosis, courses of action.	0 1 2 3 4 5	
III. PROCEDURES		
Current and controlled copies of the Emergency Plan and Implementing Procedures were available.	0 1 2 3 4 5	
Personnel using procedures were trained and familiar with them.	0 1 2 3 4 5	
Communications with off-site groups were made in accordance with procedures.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
IV. DIRECTION AND CONTROL		
Transfer of command from the CR was clear and understand by all persons in TSC.	0 1 2 3 4 5	
Transfer of command from TSC to EOF was clear and understood by all persons in TSC.	0 1 2 3 4 5	
Appropriate TSC personnel made prompt recommendations.	0 1 2 3 4 5	
Logs were kept.	0 1 2 3 4 5	
Recommendations were passed on to Emergency Coordinator for decisions.	0 1 2 3 4 5	
Proper classification upgrading and downgrading was done.	0 1 2 3 4 5	
V. MATERIAL AND EQUIPMENT		
SPDS was operational.	0 1 2 3 4 5	
CEPADAS was operational.	0 1 2 3 4 5	
Blueprints as-built drawings maps, etc. were available.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
PABX, sound-powered phones and dedicated hotlines functioned correctly.	0 1 2 3 4 5	
Public Address System functioned correctly.	0 1 2 3 4 5	
Radios functioned correctly.	0 1 2 3 4 5	
Fascimile machine functioned correctly.	0 1 2 3 4 5	
Status boards in place and used.	0 1 2 3 4 5	
VI. PROTECTIVE MEASURES		
HP coverage available in TSC (air sampling, dose rate instruments).	0 1 2 3 4 5	
Protective equipment and supplies for TSC personnel.	0 1 2 3 4 5	
Plant evacuation decisions logical and clear.	0 1 2 3 4 5	
Plant evacuation directives included travel routes, special precautions, etc.	0 1 2 3 4 5	
Continuing accountability information given to Security.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
In-plant radiological monitoring reported to TSC.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Only those people with assigned responsibilities were in TSC.	0 1 2 3 4 5	
Sign-in system was employed	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: DOSE ASSESSMENT - TSC DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Initial and subsequent dose dose calculations were performed in a timely manner.	0 1 2 3 4 5	
Computerized equipment was properly utilized. (CEPADAS)	0 1 2 3 4 5	
Plume was defined and tracked	0 1 2 3 4 5	
Teams were contacted, briefed, and dispatched expeditiously (through OSC).	0 1 2 3 4 5	
Communications were maintained with all teams.	0 1 2 3 4 5	
Personnel were efficiently utilized.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Health Physics Coordinator initiated and provided periodic updates to the Emergency Coordinator.	0 1 2 3 4 5	
Status was maintained on team exposure levels.	0 1 2 3 4 5	
Comparisons were made between projected and actual field measurements.	0 1 2 3 4 5	
Off-site monitoring teams were provided with adequate information to perform their duties.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: EMERG OPERATING FACILITY DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows.

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

*If not observed, so note in Comment column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
EOF Director maintained open communication link with TSC while enroute.	0 1 2 3 4 5	
EOF was activated within one hour after request by Emergency Coordinator.	0 1 2 3 4 5	
EOF Director received complete briefing from Emergency Coordinator prior to assuming command and control.	0 1 2 3 4 5	
EOF personnel informed of assumption of specific responsibilities.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: EMERG OPERATIONS FACILITY DATE _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is as defined as follows:

0 - Not Applicalbe/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Sign-in system used to assume full staffing.	0 1 2 3 4 5	
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Communications were quickly established with TSC, EOF, CCC and off-site groups.	0 1 2 3 4 5	
All parties notified of assumption of command and control by EOF.	0 1 2 3 4 5	
Needed data was available from TSC and CR.	0 1 2 3 4 5	
EOF received prompt information on radiological status, both on- and off-site.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Pertinent information quickly (15 minutes) transmitted to off-site groups.	0 1 2 3 4 5	
Up-to-date meteorological data was available.	0 1 2 3 4 5	
Plant status information was promptly available.	0 1 2 3 4 5	
Communications with off-site monitoring teams were adequate.	0 1 2 3 4 5	
General status announcements and updates were made to EOF personnel throughout exercise.	0 1 2 3 4 5	
EOF coordinated the supply of information to news media, or to Corporate Command Center.	0 1 2 3 4 5	
Status boards used and kept current.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
III. PROCEDURES		
Emergency Plan and Implementing Procedures were available in current and controlled copies.	0 1 2 3 4 5	
EOF participants were familiar with procedures.	0 1 2 3 4 5	
Correct procedures were used	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
The organizational structure and chain of command in EOF was clear.	0 1 2 3 4 5	
Appropriate people made prompt decisions and recommendations.	0 1 2 3 4 5	
EOF Director took necessary follow-up actions to care for injured personnel, if any.	0 1 2 3 4 5	
Status boards kept current.	0 1 2 3 4 5	
Plume pathway tracked and visible	0 1 2 3 4 5	
Emergency classifications and action level notifications transmitted to proper authorities as required.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Protective action recommendations were made clearly and timely.	0 1 2 3 4 5	
Continuing accountability data forwarded to Security.	0 1 2 3 4 5	
V. MATERIAL AND EQUIPMENT		
SPDS was available.	0 1 2 3 4 5	
CEPADAS was available.	0 1 2 3 4 5	
PABX, sound-powered phones, and dedicated hotlines available and working.	0 1 2 3 4 5	
Facsimile machine functioned.	0 1 2 3 4 5	
Status boards available.	0 1 2 3 4 5	
Reference materials, procedures, prints, etc., available.	0 1 2 3 4 5	
VI. PROTECTIVE MEASURES		
Radiological monitoring performed at EOF.	0 1 2 3 4 5	
Protective supplies available.	0 1 2 3 4 5	
Personal dosimetry available and used.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Security control established.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Only assigned EOF people were present.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: DOSE ASSESSMENT - EOF DATE_____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Initial and subsequent dose calculations were performed in a timely manner.	0 1 2 3 4 5	
Computerized equipment was properly utilized.	0 1 2 3 4 5	
Plume was defined and tracked	0 1 2 3 4 5	
Teams were contacted, briefed, and dispatched expeditiously.	0 1 2 3 4 5	
Communications were maintained with all teams.	0 1 2 3 4 5	
Personnel were efficiently utilized.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Radiological Assessment Coordinator initiated and provided periodic updates to the EOF Director.	0 1 2 3 4 5	
Status was maintained on team exposure levels.	0 1 2 3 4 5	
Off-site monitoring data were coordinated with State.	0 1 2 3 4 5	
Comparisons were made between projected and actual field measurements.	0 1 2 3 4 5	
Dose assessment off-site teams were provided with adequate information to perform their duties.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: OPERATIONAL SUPPORT CENTER DATE _____

Directions: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
The OSC was activated in a timely manner.	0 1 2 3 4 5	
All support personnel listed in the Emergency Plan were available in the OSC.	0 1 2 3 4 5	
The personnel stationed in the OSC understood their emergency response functions.	0 1 2 3 4 5	
There were enough specialists available to fill all demands for HP, Fire Bridgades, Search and Rescue teams, Repair teams, and Field Monitoring teams.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Communications with the CR and TSC were adequate.	0 1 2 3 4 5	
Communications with -4 control point were adequate.	0 1 2 3 4 5	
Communications with +7 Health Physics area were adequate.	0 1 2 3 4 5	
Communications with speciality teams were adequate.	0 1 2 3 4 5	
There was adequate information flow from the TSC concerning plant conditions and hazardous areas.	0 1 2 3 4 5	
There was adequate information flow from the OSC to specialty teams.	0 1 2 3 4 5	
III. PROCEDURES		
The Emergency Plan and implementing Procedures were available and current and controlled copies.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Appropriate procedures were available, as needed, for the specialty teams.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
The OSC was supervised (coordinated) adequately.	0 1 2 3 4 5	
A chain of command was established.	0 1 2 3 4 5	
Team formation and briefing were done quickly and accurately.	0 1 2 3 4 5	
Information for continuing accountability was supplied to Security.	0 1 2 3 4 5	
V. MATERIALS AND EQUIPMENT		
The office and communications equipment necessary to activate the OSC were available.	0 1 2 3 4 5	
All necessary vehicles were immediately available.	0 1 2 3 4 5	
Specialized tools were obtainable	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
VI. PROTECTIVE MEASURES		
Protective equipment, clothing and decontamination facilities were available.	0 1 2 3 4 5	
The OSC was monitored for radiation.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Only OSC assigned personnel were in the prescribed areas.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: FIRST AID TEAM DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
First Aid Team assembly was timely following notification.	0 1 2 3 4 5	
First Aid Team assembled with the proper first aid equipment.	0 1 2 3 4 5	
Accident/Injury assessment made by the First Aid Team.	0 1 2 3 4 5	
First Aid assistance was rendered in a timely manner.	0 1 2 3 4 5	
Appropriate decontamination measures were taken.	0 1 2 3 4 5	
Maintained communications linkage with Control Room.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
The HP escort reacted properly to the simulated event.	0 1 2 3 4 5	
The request for and notifiction of ambulance was in accordance to procedures.	0 1 2 3 4 5	
Patient was made ready for transport by the First Aid Team	0 1 2 3 4 5	
Dosimeter was left with the patient.	0 1 2 3 4 5	
Adequate HP coverage was provided at the hospital.	0 1 2 3 4 5	
Patient's radition doses are monitored by HP personnel.	0 1 2 3 4 5	
HP performed radiation survey of ambulance at hospital before vehicle was released.	0 1 2 3 4 5	
Consideration/measures were taken to prevent spread of contamination.	0 1 2 3 4 5	
Periodic status reports are provided to the Shift Supervisor as to the injured undividual's status.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: FIRE TEAM DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Reaction time between fire alarm and fire team activation is timely	0 1 2 3 4 5	
Fire fighting personnel response time to the scene of the fire was timely.	0 1 2 3 4 5	
Fire team members report to scene of fire with appropriate fire fighting gear and equipment.	0 1 2 3 4 5	
Initial assessment of fire situation is adequately performed.	0 1 2 3 4 5	
Standard fire fighting procedures were followed.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
When it is apparent W3 team cannot control the fire, off-site support is requested and obtained in a timely manner.	0 1 2 3 4 5	
Communications were maintained between the fire team leader and the OSC.	0 1 2 3 4 5	
Adequate information is provided by the fire team to the OSC for their assessment.	0 1 2 3 4 5	
Smooth transition and coordination is made between plant fire team and local fire department.	0 1 2 3 4 5	
Arrival of local fire department to fire scene is timely.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: SEARCH AND RESCUE TEAM DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
OSC Supervisor selected three or more volunteers to serve as team.	0 1 2 3 4 5	
If radiological hazards are involved, one team member is a HP Technician.	0 1 2 3 4 5	
Team members briefed in accordance with procedure EP-2-130.	0 1 2 3 4 5	
At least one team member has required formal access permit to area being entered.	0 1 2 3 4 5	
Radio check performed.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Safety equipment and first aid assistance available as requested.	0 1 2 3 4 5	
Communications maintained with OSC during search and rescue.	0 1 2 3 4 5	
Log of activities kept.	0 1 2 3 4 5	
Debriefing conducted, records and logs collected.	0 1 2 3 4 5	
Personal dosimetry used, if needed.	0 1 2 3 4 5	
TSC informed of results of search and rescue.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: OFFSITE MONITORING TEAMS DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Initial team briefings were held	0 1 2 3 4 5	
Team assembled with field kits, vehicles and communication equipment in a timely manner.	0 1 2 3 4 5	
Field Monitoring Kits were checked for contents before leaving site.	0 1 2 3 4 5	
Instruments checked for proper operability and current calibration.	0 1 2 3 4 5	
Teams received explicit instructions of where to go and what to sample.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Procedures for conducting off-site monitoring were consulted and followed.	0 1 2 3 4 5	
Vehicles were readily available	0 1 2 3 4 5	
Vehicles checked for contamination after mission completed.	0 1 2 3 4 5	
Sampling locations were readily located.	0 1 2 3 4 5	
Samples were properly packaged, identified and labeled.	0 1 2 3 4 5	
Pocket dosimeters were periodically checked.	0 1 2 3 4 5	
Pocket dosimeter readings were logged in upon return to W3.	0 1 2 3 4 5	
Communications were maintained with the TSC and/or EOF throughought sampling activity.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: CORPORATE COMMAND CENTER DATE:_____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
The Corporate Command Center (CCC) was fully staffed in a timely fashion.	0 1 2 3 4 5	
The Emergency Director was clearly in command.	0 1 2 3 4 5	
Information was received quickly from EOF.	0 1 2 3 4 5	
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Statements prepared by EOF Off-Site Technical Advisor reviewed by Emergency News Director.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Emergency News Director coordinated news releases in a timely manner with Louisiana Nuclear Energy Division, Nuclear Regulatory Commission, and local officials.	0 1 2 3 4 5	
Spokespersons were clearly identified.	0 1 2 3 4 5	
Emergency News Director acted as moderator at all briefings.	0 1 2 3 4 5	
Rumor control methods were used.	0 1 2 3 4 5	
III. PROCEDURES		
Controlled and current copies of the Emergency Plan and Implementing Procedures were available.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
Emergency Director was clearly in control of the CCC.	0 1 2 3 4 5	
Major decisions were made by Emergency Director in consultation with his staff.	0 1 2 3 4 5	

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
News releases were reviewed and issued smoothly and quickly.	0 1 2 3 4 5	
Off-site power transmission and distribution restoration was handled smoothly and quickly.	0 1 2 3 4 5	
Security assistance was provided to the plant Security Superintendent as requested.	0 1 2 3 4 5	
Liason with off-site law enforcement was provided, as appropriate.	0 1 2 3 4 5	
Spokespersons were knowledgeable about technical aspects of plant problems.	0 1 2 3 4 5	
V. MATERIALS AND EQUIPMENT		
Space for staff was adequate.	0 1 2 3 4 5	
Space for news media representatives was adequate.	0 1 2 3 4 5	
Adequate telephones to handle traffic were available.	0 1 2 3 4 5	
Fascimile machine operable.	0 1 2 3 4 5	
Enough vehicles available	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
VI. PROTECTIVE MEASURES (Not Applicable)		
VII. ACCESS CONTROL Only persons with assigned emergency responsibilities were present. (News media representatives excepted.)	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: HEALTH PHYSICS DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Adequate trained personnel were available to furnish HP coverage to the -4 Control Point, First Aid Teams, Chemistry, Search and Rescue Teams, Fire Teams, Repair Teams, EOF, OSC and evacuees.	0 1 2 3 4 5	
On-site monitoring equipment was easily accessible and properly distributed.	0 1 2 3 4 5	
Equipment was checked for proper operability prior to its use.	0 1 2 3 4 5	
Standard HP practices were employed for entry into actual or potential radiation areas.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Proper survey records, dosimetry stay times, etc. were maintained during entry.	0 1 2 3 4 5	
Survey results were reported to the appropriate personnel.	0 1 2 3 4 5	
Follow-up actions were taken on survey reports.	0 1 2 3 4 5	
Pocket dosimeters were frequently checked and properly logged.	0 1 2 3 4 5	
The TSC and EOF's habitability was frequently monitored.	0 1 2 3 4 5	
Team members had adequate understanding of proper utilization of equipment (survey instruments, radios, SCBA's, etc.)	0 1 2 3 4 5	
The Radiological Controls Coordinator received adequate information from the OSC to perform his function	0 1 2 3 4 5	
Survey results were systematically collected by the Radiological Controls Coordinator.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
The correct procedure was used to establish emergency dose limits, if needed.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: EMERGENCY CHEMISTRY DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
The Chemistry Engineer reported promptly to the Technical Assessment area of the TSC.	0 1 2 3 4 5	
The Chemistry Supervisor reported promptly to the RAB Laboratory.	0 1 2 3 4 5	
An adequate number of technicians were available or were called in.	0 1 2 3 4 5	
Analytical results were available within the specified times.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
II. COMMUNICATIONS/DISSEMINATION OF INFORMATION		
Communications with the Control Room (CR) and/or TSC were adequate.	0 1 2 3 4 5	
Directions given to technicians were clear.	0 1 2 3 4 5	
Plant status information was available and followed: CE-3-900, CE-3-901, CE-3-902 CE-2-903, CE-3-904, EP-2-091 and EP-2-031.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
Samples were collected and analyzed as requested by CR or TSC.	0 1 2 3 4 5	
Chemistry Supervisor (or alternate) was clearly in command.	0 1 2 3 4 5	
Analytical results were verified	0 1 2 3 4 5	
Logs of actions were kept.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
V. MATERIALS AND EQUIPMENT		
Analytical equipment functioned properly.	0 1 2 3 4 5	
Sample points were accessible and open (valves correctly aligned by CR and/or technicians).	0 1 2 3 4 5	
VI. PROTECTIVE MEASURES		
Health Physics coverage was requested as needed.	0 1 2 3 4 5	
Protective equipment was available to lab personnel.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Only personnel with emergency responsibilities were present during exercise.	0 1 2 3 4 5	
Access to PASS, etc., was made according to procedure.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: EVACUATION/ASSEMBLY AREA DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
Announcement to evacuate is clearly understandable and is heard by all personnel.	0 1 2 3 4 5	
Announcement was preceded by station alarm.	0 1 2 3 4 5	
Evacuees quickly assembled in correct area.	0 1 2 3 4 5	
Person in charge was clearly identifiable.	0 1 2 3 4 5	
II. COMMUNICATION/DISSEMINATION OF INFORMATION		
Adequate instructions were given to evacuees by Emergency Coordinator.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Assembly Area Supervisor established and maintained communication with OSC.	0 1 2 3 4 5	
Assembly Area Supervisor notified OSC when all persons were accounted for at off-site assembly area.	0 1 2 3 4 5	
III. PROCEDURES		
Evacuees passed through proper control points.	0 1 2 3 4 5	
Personnel badges and TLD's were left at the primary access point.	0 1 2 3 4 5	
Muster sheets were completed as requested.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
The Assembly Area Supervisor was easily identified and clearly in charge.	0 1 2 3 4 5	
Evacuation was performed in smooth and controlled manner.	0 1 2 3 4 5	
Accountability (muster sheets) were used correctly at off-site assembly area.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Evacuees followed directions given over PA System and given by Assembly Area Supervisor.	0 1 2 3 4 5	
V. MATERIAL AND EQUIPMENT		
Assembly Area Supervisor was equipped with voice amplifier.	0 1 2 3 4 5	
Adequate vehicles were available	0 1 2 3 4 5	
Adequate radiation instrumentation and decontamination equipment was available.	0 1 2 3 4 5	
Radios functioned correctly.		
VI. PROTECTIVE MEASURES		
Portal monitors were effectively used to monitor evacuees.	0 1 2 3 4 5	
First aid equipment was available or obtainable.	0 1 2 3 4 5	
Decontamination equipment was available or obtainable.	0 1 2 3 4 5	
Health Physics coverage was available at on-site assembly area.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Health Physics coverage was available at off-site assembly area.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Off-site assembly area was fully accessible.	0 1 2 3 4 5	
There were no major problems in moving evacuees through control points or the Principal Access Point.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

WATERFORD 3 SES OBSERVER_____

LOCATION/GROUP OBSERVED: ACCOUNTABILITY/SECURITY DATE: _____

DIRECTIONS: Circle the number on the rating scale that corresponds to the evaluation made by the observer. The rating scale is defined as follows:

0 - Not Applicable/Not Observed*
5 - Excellent
4 - Good
3 - Satisfactory
2 - Poor
1 - Failure

* If not observed, so note in Comments column.

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
I. ACTIVATION AND RESPONSE		
Security personnel were in place quickly following evacuation announcement.	0 1 2 3 4 5	
Means were established for performing rapid initial accountability for persons leaving protected areas.	0 1 2 3 4 5	
Means were established for quickly establishing location of personnel remaining in protected area and performing evacuation verification outside the protected area.	0 1 2 3 4 5	
II. COMMUNICATION/DISSEMINATION OF INFORMATION		
Initial notifications to Security Supervisor was clear and complete.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Communications internal to the Security organization were adequate.	0 1 2 3 4 5	
Status reports from Security Supervisor to the Emergency Director were timely and complete.	0 1 2 3 4 5	
Continuing accountability reports were quickly furnished to Security by CR, TSC, OSC and EOF.	0 1 2 3 4 5	
III. PROCEDURES		
Appropriate Security procedures were readily available.	0 1 2 3 4 5	
Controlled and current copies of the Emregency Plan and Implementing Procedures were readily available.	0 1 2 3 4 5	
Appropriate procedures were used used during exercise.	0 1 2 3 4 5	
IV. DIRECTION AND CONTROL		
Accountability of all personnel was achieved within 30 minutes.	0 1 2 3 4 5	

OBSERVER EVALUATION CHECKLIST

EVENT/CRITERIA	RATING SCALE 0 1 2 3 4 5	COMMENTS
Accountability of people entering or leaving assembly areas was accomplished.	0 1 2 3 4 5	
Security personnel were trained and familiar with their responsibilities.	0 1 2 3 4 5	
Security personnel requested or required by procedure were promptly dispatched.	0 1 2 3 4 5	
V. MATERIALS AND EQUIPMENT		
Security computer in place and operable.	0 1 2 3 4 5	
Communications equipment properly functional.	0 1 2 3 4 5	
VI. PROTECTIVE MEASURES		
Health Physics coverage available as requested.	0 1 2 3 4 5	
Security personnel kept advised of plant status.	0 1 2 3 4 5	
VII. ACCESS CONTROL		
Facility access controlled during exercise.	0 1 2 3 4 5	
Special access controls, if any, put in place as requested.	0 1 2 3 4 5	

DRILL/EXERCISE SCENARIO FORMAT

DRILL/Exercise Evaluation Report Sheet

Drill Observer Name: _____ Date: / /

Drill/Exercise Title: _____

Assigned Area to Monitor: _____

Categories	Grade
1. Activation and Response	_____
2. Communications/Dissemination of Information	_____
3. Procedures	_____
4. Direction and Control	_____
5. Material and Equipment	_____
6. Protective Measures	_____
7. Access Control	_____

Comments/Suggestions

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

MILESTONES FOR EXERCISE OBSERVATION AND CRITIQUES

NR - DAYS	DESCRIPTION
- 75 days	State and licensee jointly submit exercise objectives to FEMA and NRC Regional Offices.
- 60 days	FEMA and NRC Regional Offices discuss and meet with licensee/state as necessary and prepare response.
- 45 days	State and license scenario developers submit exercise scenario to FEMA and NRC Regions for review.
- 35 days	FEMA and NRC Regions notify State and licensee of scenario acceptability.
- 30 days	FEMA and NRC Regions develop specific postexercise critique schedule with the State and advise FEMA and NRC Headquarters.
- 15 days	RAC Chairman and NRC Region will meet to develop observer action plan (where stationed, how many from each organization, what to look for).
- 1 day	Meeting, in the exercise area, of all Federal observers both on-site and off-site to finalize assignments, give instructions.
E day	Exercise
E day	RAC observers caucus to collate observations. NRC observers also caucus to collate observations.
E day	RAC Chairman and NRC Region meet as soon after their respective caucuses as practical to coordinate Federal participation in critique.
E to + 1 day	Joint RAC/NRC critique General Agenda A. State, locals and licensee present their views.

MILESTONES FOR EXERCISE OBSERVATION AND CRITIQUES

NR - DAYS	DESCRIPTION
	B. Critique of off-site actions, by RAC Chairman
	C. Critique of on-site action, by NRC
	D. Critique of Federal response (if applicable) by RAC Chairman
	E. Opportunity for clarification questions or comments by licensee, State and locals (press and public questions will not be entertained during the critique).
+ 15 days	Written critiques by FEMA Region to State with copies to FEMA Headquarters and NRC, and by NRC Region to licensee with copies to NRC Headquarters and FEMA.

WATERFORD 3 SES
PLANT OPERATING MANUAL

LOUISIANA POWER & LIGHT
MIDDLE SOUTH UTILITIES SYSTEM

POM VOLUME 18
POM SECTION 2

EP-3-040
REVISION 5

Emergency Plan Implementing Procedure

Emergency Equipment Inventory

PORC Meeting No. 84-98

Reviewed: _____
PORC Chairman

Approved: _____ _____
Plant Manager-Nuclear Approval Date

_____
Effective Date

REVIEW COVER SHEET

REVIEW OF: EP-3-040 - Emergency Equipment Inventory (Rev. 5)

PORC REVIEW

The PORC has reviewed this item and determined that a safety evaluation was performed (as applicable), that an unreviewed safety question does not exist (as applicable), that a change to the Technical Specifications is not required, and that nuclear safety is/was not adversely affected.

ORDER OF REVIEW	PORC MEMBER	PORC MEMBER SIGNATURE	RECOMMENDED FOR APPROVAL YES	RECOMMENDED FOR APPROVAL NO	DATE
	Maintenance Superintendent	[signature]	✓		9/27/84
	Operations Superintendent	[signature]	✓		9/27/84
	Radiation Protection Superintendent	[signature]	✓		9/27/84
	Plant Quality Manager	[signature]	✓		9-27-84
	Technical Support Superintendent				
	Assistant Plant Manager				
	PORC Chairman WSOM	[signature]	✓		9/27/84

PORC Meeting No. 84-96 98 Item No. 29 Date: 9-27-84

This item is recommended for approval? ☒ YES ☐ NO

This item requires SRC/NRC review prior to implementation? ☐ YES ☒ NO

If yes, ensure documentation supporting review is attached.

This item requires QA review prior to implementation? ☐ YES ☒ NO

QA REVIEW

Reviewed by N/A DATE N/A
Corporate QA Manager

PLANT MANAGER-NUCLEAR APPROVAL (REFER TO 5.4.12.1)

Cog #2 9-13-84 MHS

Comments:

Approved by N/A DATE N/A
Plant Manger-Nuclear

WATERFORD 3 SES
PLANT OPERATING MANUAL
CHANGE/REVISION/DELETION REQUEST

Procedure No. EP-3040 Title Emergency Equipment Inventory

Effective Date Fuel Load (if different from approval date)

Complete A, B, and C

A. Change No. N/A |_| Permanent |_| Deviation Expiration Date _____

B. Revision No. 5

C. Deletion |_| YES |X| NO

DESCRIPTION OF CHANGE OR REVISION

To correct Attachment 2.3 typo

REASON FOR CHANGE, REVISION, OR DELETION

To correct inventory sheet Attachment 2.3

REQUIRED SIGNATURES

ORIGINATOR Leon L. Ogle DATE 9/5/84

SAFETY REVIEW

Does this change, revision, or deletion:

1. Change the facility as described in the FSAR? YES____ NO X
2. Change the procedures as described in the FSAR? YES____ NO X
3. Conduct tests/experiments not described in the FSAR? YES____ NO X
4. Require a change to the Technical Specifications? YES____ NO X

If the answer to any of the above is yes, complete and attach a 10CFR50.59 Safety Evaluation.

SAFETY REVIEW [signature] DATE 9/12/84

TECHNICAL REVIEW [signature] DATE 9-12-84

GROUP HEAD REVIEW [signature] DATE 9/12/84

TEMPORARY APPROVAL* (SRO) _____ DATE _____

TEMPORARY APPROVAL* _____ DATE _____

*Temporary approval must be followed by Plant Manager - Nuclear approval within 14 days.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

Title	Revision 5
1-5	Revision 5
6-10	Revision 4
11-12,17	Revision 5
13-16,18,19	Revision 4

1.0 PURPOSE

The purpose of this procedure is to describe the contents of the emergency kits/lockers and provide for the periodic inventory, calibration and maintenance requirements for the indicated emergency supplies and equipment.

2.0 REFERENCES

2.1 Waterford 3 SES Emergency Plan

2.2 HP-1-210, Health Physics Instrument Control

2.3 HP-2-430, Efficiency Determination and Statistical Checks of Single/Dual Channel Gamma Analyzers

2.4 HP-2-602, Respiratory Protection Equipment Quality Control

3.0 RESPONSIBILITIES

3.1 The Emergency Planning Coordinator is responsible for coordinating the periodic inventory of emergency kits and lockers described in this procedure.

3.2 The Health Physics Supervisor and Emergency Planning Coordinator are responsible for ensuring performance of the actual inventory as specified on the Inventory Checklists.

4.0 INITIATING CONDITIONS

Emergency equipment, stored for emergency use, shall be inventoried, inspected, and operationally checked at the following frequencies:

4.1 At least once each calendar quarter

4.2 After each use

4.3 After a plastic lock seal or breakaway lock has been found broken

4.4 Any other time specified by the Emergency Planning Coordinator or Emergency Coordinator

5.0 PROCEDURE

5.1 INVENTORY CHECKLIST

Select an Inventory Checklist from the Attachments section of this procedure. Inventory the emergency equipment as described in section 5.2.

5.2 INVENTORY

5.2.1 Check to see that breakaway seals are intact.

5.2.2 Compare contents of kit to number required on the Inventory Checklist.

5.2.3 Complete data columns on the Inventory Checklist:

5.2.3.1 Actual Quantity

5.2.3.2 Serial Number (if applicable)

5.2.3.3 Calibration Due Date (if applicable)

5.2.3.4 Operational Check (satisfactory or unsatisfactory, as applicable)

NOTE

Operational checks and maintenance will be performed in accordance with normal Health Physics procedures HP-1-210 and HP-2-430 and the technical manual for the instrument being checked.

5.2.4 Compare calibration due dates to the dates of the next scheduled inspections. If a calibration due date occurs prior to the next scheduled inspection date, replace instrument with one whose calibration expires after the next scheduled inspection date.

NOTE

Instruments shall not be removed from the kits for calibration without a replacement unless the instrument will be calibrated and returned to the kit on the same day.

5.2.5 Replace batteries kept in the kit with new batteries.

5.2.6 Check protective clothing (inspect for tears, rips or worn spots). Replace as necessary.

5.2.7 Check all respirators in accordance with HP-2-602 (if applicable). Replace as necessary.

5.2.8 Repack emergency kit/locker and seal.

5.2.9 Record all deficiencies and actions taken to resolve the deficiencies under the "Comments" section.

5.2.10 Sign and date the Inventory Checklist.

5.2.11 Repeat steps in section 5.0 until all attachments are completed.

6.0 FINAL CONDITIONS

6.1 All Inventory Checklists have been completed.

6.2 All deficiencies have been resolved.

6.3 All attachments have been forwarded to the Emergency Planning Coordinator.

7.0 ATTACHMENTS

7.1 Inventory Checklist - OSC Emergency Locker

7.2 Inventory Checklist - Field Monitoring Kits (A,B,C, Onsite Monitoring Kit)

7.3 Inventory Checklist - Personnel Decon Kit (1,2,3)

7.4 Inventory Checklist - TSC HP Emergency Locker

7.5 Inventory Checklist - EOF HP Emergency Locker

7.6 Inventory Checklist - HP Ambulance Kit

7.7 Inventory Checklist - Assembly Area Supervisor Kit

7.8 Inventory Checklist - HP Hospital Locker (West Jefferson, Ochsner)

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY: HP Supervisor

DESCRIPTION: OSC Emergency Locker

LOCATION: Service Building 2nd Floor - HVAC Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
RO2	1					
RO2A	1					
Teletector	1					
Teletector	1					
PIC-6A	1					
PIC-6A	1					
Ludlum 177 w/Pancake Probe	1					
Air Sampler (H. Vol.)	1					
Dosimeter Charger	1					
Ludlum 12 w/Pancake Probe	1					
TLD's	20					
Dosimeter 0-200 MR	20					
Dosimeter 0-10 R	20					
CS-137 Button Check Source	1					
Portable Radio	5					
Portable Radio Charger	5					
SCBA	10					
SCBA Spare Air Cylinders	10					
Air Purifying Resp. w/Cannisters	30					
PC Coveralls (sets)	40					
PC Cloth Hoods (sets)	40					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY: HP Supervisor

DESCRIPTION: OSC Emergency Locker

LOCATION: Service Building 2nd Floor - HVAC Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
PC Plastic Booties (sets)	40					
PC Rubber Overshoes (sets)	40					
Potassium Iodide (KI) (box)	1					
Barricade Ribbon (roll)	6					
Radiation Signs w/Inserts	25					
Large Yellow Plastic Bags	50					
Small Yellow Plastic Bags	50					
Tape 2" (roll)	8					
Stopwatch	1					
Plastic Suits	20					
Air Sampling Filters (box)	1					
Air Sampling Envelopes	50					
Silver Zeolite Cartridges	10					
Smears (box)	1					
"D" Cell Battery	30					
"C" Cell Battery	8					
"AA" Cell Battery	4					
9V Battery	12					
Clipboard	6					
Survey Forms	10					
Stepoff Pads	5					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

cc: Central Records - Original

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: OSC Emergency Locker

LOCATION: Service Building 2nd Floor-HVAC Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
PC Rubber Gloves (sets)	40					
PC Cotton Glove Inserts (sets)	40					
Sample Bags	50					
Flash Light	9					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

cc: Central Records-Original

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: Field Monitoring Kits A B C and Onsite Monitoring Kit

LOCATION: Service Building 2nd Floor - HVAC Room (Circle One)

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
RO2A	1					
Air Sampler (battery)	1					
CS-137 Button Check Source	1					
Ba-133 Cartridge Check Source	1					
Ludlum 2218 w/NaI Detector *	1					
Detector Cable *	1					
Sample Holder *	1					
Potassium Iodide (KI) (Bottles)	2					
EP-2-060 Rev.	1					
EP-2-061 Rev.	1					
Survey Location Maps	1					
Writing Tablets	2					
Clipboards	2					
Pens	6					
Mark-a-lot	1					
Flashlights	2					
Air Sample Filters - 2" (box)	1					
Air Sample Envelopes	30					
Silver Zeolite Cartridges	10					
Sample Bags (Whirl Paks)	30					
Tape - 2" roll	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

* Located in OSC Emergency Locker.

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY: HP Supervisor

DESCRIPTION: Field Monitoring Kits A B C and Onsite Monitoring Kit

LOCATION: Service Building 2nd Floor - HVAC Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
"D" Cell Batteries	12					
Stopwatch	1					
Screwdriver	1					
9 Volt Battery	3					
Shovel	1					
Smears	50					
1 Liter Container	1					
Scissors	1					
Roll of Dimes	1					
Paper Coveralls (set)	3					
Cotton Insert Gloves (sets)	3					
Rubber Gloves (sets)	3					
Log Sheets	10					
Ludlum 177 or 12 w/Pancake Probe	1					
Shoe Covers (sets)	2					
Full Face Respirators	2					
Comb, Part, and Charc.Cartridges	2					
Sample Bags (12" x 24")	10					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVE / CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: Personnel Decon Kit 1 2 3 (Circle One)

LOCATION: EOF/OSC

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Ludlum 12 or 177 w/Pancake Probe	1					
Ludlum 12 or 177 w/Pancake Probe	1					
CS-137 Button Check Source	1					
EP-2-032 Rev.	1					
EP-2-060 Rev.	1					
Plastic Bags (assorted)	12					
Cloth Towels	10					
Soft Brush	2					
Shaving Cream (can)	2					
Razors	5					
Hard Soap (bars)	2					
Disposable Gloves (box)	1					
Paper Towels (pkg.)	1					
Flashlight	1					
"D" Cell Battery	6					
1 Liter Container	1					
Sterile Bandages (box)	2					
Masslin Cloth	10					
Smears	Box					
Tweezers	1					
Scissors	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVE / CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: Personnel Decon Kit 1 2 3 (Circle One)
LOCATION: EOF/OSC

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Q-Tips (box)	1					
Facial Tissue (pack)	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: TSC HP Emergency Locker

LOCATION: +46 RAB, TSC-ECC

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Ludlum 177 or Ludlum 12 w/Probe	1					
PIC-6A	1					
PIC-6A	1					
Air Sampler (Hi Vol.)	1					
Dosimeter 0-1 R	10					
Dosimeter 0-200 MR	40					
Dosimeter Charger	1					
TLD's	15					
Stopwatch	1					
Tape 2" (roll)	5					
Clipboard	6					
Silver Zeolite Cartridges	10					
Air Sampler Envelopes	50					
Air Filter Paper 47mm (box)	1					
Potassium Iodide (KI) (box)	1					
SCBA's	18					
SCBA Spare Air Cylinders	18					
Flashlights	10					
6V Lanterns	10					
6V Batteries (box)	1					
"D" Cell Batteries	24					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY: HP Supervisor

DESCRIPTION: EOF HP Emergency Locker

LOCATION: J.A. Jones Building, LNED Office Closet

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Ludlum 177 or Ludlum 12 w/Probe *	2					
PIC-6A	1					
CS-137 Button Check Source	1					
Dosimeter 0-200 MR	40					
TLD's	40					
PC Coveralls (sets)	20					
PC Cloth Hood (sets)	20					
PC Rubber Gloves (sets)	20					
PC Cotton Glove Inserts (sets)	20					
PC Plastic Booties (sets)	20					
PC Rubber Overshoes (sets)	20					
Full Face Respirators	25					
Comb. Part. and Char. Cartridges	25					
Flashlight	3					
"D" Cell Battery	10					
Stopwatch	1					
Clipboard	6					
Tape "2" (roll)	6					
Potassium Iodide (box)	1					
6V Lanterns	12					
6V Batteries (box)	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

* Located at EOF Entrance and Dose Projection Area.

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY: HP Supervisor

DESCRIPTION: EOF HP Emergency Locker

LOCATION: J.A. Jones Building, LNED Office Closet

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Air Sampler (Hi-Vol)	1					
Silver Zeolite Cartridges	10					
Air Sampling Filters (box)	1					
Large Yellow Plastic Bags	50					
Small Yellow Plastic Bags	50					
Air Sampling Envelopes	50					
Sample Bags	50					
Dosimeter Charger	1					
Pens (Box)	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: HP Ambulance Kit

LOCATION: Service Building 2nd Floor - HVAC Room, -4 Control Point (Circle One)

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Ludlum 12 w/Pancake Probe	1					
Rubber Gloves	6					
Cotton Glove Inserts	6					
Tape (roll)	1					
Absorbent Paper (pkg)	1					
Pens	2					
Survey Forms - Skin Contamination	10					
Clipboard	1					
Smears	100					
TLD's	10					
Plastic Booties	6					
Pre-Cut Herculite	1					
"D" Cell Batery	8					
Barricade Tape (Roll)	1					
Paper Coveralls (sets)	3					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

cc: Central Records - Original

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY Emergency Planning Coordinator

DESCRIPTION: Assembly Area Supervisor

LOCATION: OSC Supervisor's Locker

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Bull Horn	1					
Air Horn	1					
Flashlight	1					
Roll of Dimes	1					
Portable Radio w/Charger	1					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____

Emergency Planning Coordinator

cc: Central Records - Original

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: HP Hospital Locker

LOCATION: West Jefferson, Ochsner (Circle One)

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Beta/Gamma Meter E-520	1					
Ludlum 12 or 177 w/Pancake Probe	1					
Ludlum 12 or 177 w/Pancake Probe	1					
Dosimeter 0-1 R	15					
CS-137 Button Check Source	1					
Tape "2" (roll)	4					
Absorbent Paper (or Herculite)	1					
Radiation Rope/Ribbon (feet)	100					
Radiation Signs w/Inserts	24					
15 Gallon Poly Bottles	4					
Plastic Liners (Dozen)	5					
Stepoff Pads	6					
Scissors	2					
Radioactive Material Sticker (roll)	2					
Yellow & Magenta Tape (roll)	1					
Stanchions	6					
Clipboard w/Dosimeter ID Numbers	1					
Black Ball Point Pens	12					
Felt Tip Marking Pens	6					
Notebooks	6					
Writing Tablets	12					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator

INVENTORY CHECKLIST

INVENTORY RESPONSIBILITY HP Supervisor

DESCRIPTION: HP Hospital Locker

LOCATION: West Jefferson, Ochsner (Circle One)

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE	CONDITION SAT/UNSAT	COMMENTS
Pencils	24					
Grease Pencils	6					
Smears	Box					
Envelopes	10					
Decontamination Table Top	1					
Hose - 25 ft.	1					
Hand Shower Connection	1					
Outlet Connection	1					
Potassium Iodide (bottle)	1					
Cassette Tape Recorder	1					
Blank Cassette	1					
Batteries (D/AA)	8/4					
Decon Soap	1					
Dosimeter Charger	1					
TLDs	15					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Health Physics Supervisor

REVIEWED BY: _____ DATE: _____
Emergency Planning Coordinator