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RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-001

PROCEDURE TITLE: CLASSIFICATION OF EMERGENCIES

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
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FOR INFORMATION ONLY

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

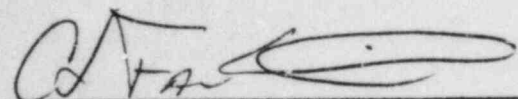
EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: CLASSIFICATION OF EMERGENCIES

PROCEDURE NO. EIP-2-001 REV. 0

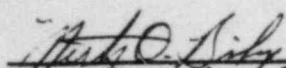
EMERGENCY PLANNING COMMITTEE REVIEW:

DATE



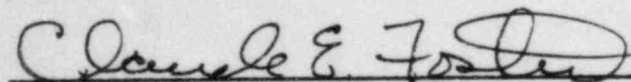
Radiation Protection/Chemistry Representative

9-24-84



Plant Operations Representative

9-24-84



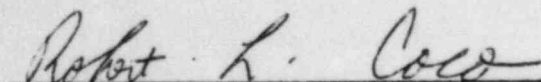
Security Representative

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Training Representative

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Technical Staff Representative

9/24/84



Nuclear Licensing Representative

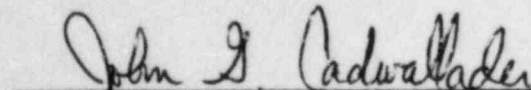
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Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

CLASSIFICATION OF EMERGENCIES

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1.0 PURPOSE

This procedure provides instructions in properly classifying emergencies and initiating actions to mitigate the consequences of an emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-002, Notification of Unusual Event
- 2.3 EIP-2-003, Alert
- 2.4 EIP-2-004, Site Area Emergency
- 2.5 EIP-2-005, General Emergency.
- 2.6 EIP-2-018, Technical Support Center - Activation

3.0 GENERAL INFORMATION

- 3.1 It is the responsibility of the Shift Supervisor to recognize and properly classify emergency conditions whenever they occur.
- 3.2 The Control Operations Foreman shall assume the responsibilities of the Shift Supervisor if the Shift Supervisor becomes incapacitated.
- 3.3 Anytime Emergency Operating Procedures (EOPs) or Abnormal Operating Procedures (AOPs) are entered this procedure shall be reviewed to determine if an emergency action level has been reached.
- 3.4 This procedure and Attachment 1 are a guide to classifying emergencies. In any situation not covered by the Emergency Action Levels in the Attachment, the Shift Supervisor must use his best judgment in determining the appropriate emergency classification.
- 3.5 For emergency action levels based on plant instruments, the indication shall be a valid indication.

4.0 PROCEDURE

- 4.1 Anytime an event occurs which has the potential of causing or resulting in a hazard to personnel onsite or offsite the Shift Supervisor shall:
 - 4.1.1 Review Attachment 1 to determine if the condition should be classified as an emergency.
 - 4.1.2 Properly classify the emergency and implement one of the following procedures as applicable.
 - 1. EIP-2-002, Notification of Unusual Event (Ref. 2.2).
 - 2. EIP-2-003, Alert (Ref. 2.3).
 - 3. EIP-2-004, Site Area Emergency (Ref. 2.4).

- 4.1.3 Assume the responsibilities of the Emergency Director until relieved by the Plant Manager or alternate.
- 4.1.4 Continue to review the emergency conditions and Attachment 1 to escalate, de-escalate or terminate the emergency as provided in the referenced procedures for each emergency classification.
- 4.2 The Plant Manager or designated alternate shall:
 - 4.2.1 Immediately upon being notified of a classified emergency, provide any assistance to the Shift Supervisor requested for terminating the emergency or mitigating the effects on personnel or property.
 - 4.2.2 If the emergency is classified as an Alert or higher, relieve the Shift Supervisor, as soon as practical of the responsibilities of Emergency Director in accordance with EIP-2-018, Technical Support Center - Activation (Ref. 2.6).
- 4.3 The Emergency Director shall continue to use this procedure to escalate, de-escalate or terminate the emergency.

END

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EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
1. ECCS initiated and water injected into reactor vessel	1. Low reactor water level indication - Level 2 OR 2. HIGH drywell pressure greater than 2 psig OR 3. ECCS initiation and injection into vessel ⁽²⁾	
2. Radiological effluent technical specification limit exceeded (Tech. Spec. 3.11.1 and 3.11.2)	1. HIGH alarm on one or more radiation monitors: a. Radwaste building ventilation exhaust b. Fuel building ventilation exhaust c. Main plant exhaust duct AND Summation of releases exceeds Tech. Spec. limits OR 2. Summation of grab sample indicate that technical specification limits have been exceeded	Implement EIP-2-002, Notification of Unusual Event

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
2. (continued)	3. Liquid radwaste effluent monitor HIGH alarm	Implement EIP-2-002, Notification of Unusual Event
	AND	
	Both isolation valves fail to close	
	OR	
	4. Cooling tower blowdown effluent monitor HIGH alarm	Implement EIP-2-002, Notification of Unusual Event
3. Fuel damage indication	1. Offgas pre-treatment radiation monitor indicates an increase of 8×10^3 mR/hr in 30 minutes	
	OR	
	2. Offgas pre-treatment radiation monitor Hi Hi alarm on greater than 4×10^4 mR/hr	
	OR	
	3. Laboratory analysis of coolant sample indicates greater than or equal to 4 uCi/gm dose equivalent I-131	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
4. Abnormal reactor coolant pressure	1. Reactor vessel pressure greater than 1100 psig	Implement EIP-2-002, Notification of Unusual Event
5. Exceeding primary coolant system leak rate technical specifications (Std. Tech. Spec. 3.4.3.2)	1. Any verified pressure boundary leakage OR 2. 5 gpm unidentified leakage OR 3. 25 gpm identified leakage	Implement EIP-2-002, Notification of Unusual Event
6. Failure of a safety or relief valve to close in Operational Conditions 1 to 3	1. Relief valve open as indicated by SRV position indicating light from acoustic monitors AND Continued increase in suppression pool temperature	Implement EIP-2-002, Notification of Unusual Event

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
7. Total loss of offsite power or loss of onsite AC power capability	<p>1. Less than 3744V on 1ENS*SWG1A and 1ENS*SWG1B buses</p> <p align="center">AND</p> <p>1RTX-XSR1C and 1RTX-XSR1D preferred station transformers lost</p> <p align="center">OR</p> <p>2. All diesel generators out of service</p>	Implement EIP-2-002, Notification of Unusual Event
8. Loss of drywell or primary/secondary containment integrity requiring technical specification shutdown ² (Tech. Spec. 3.5.3, 3.6.1, 3.6.2, 3.6.3, and 3.6.5)	<p>Exceeding one of the following Limiting Conditions for Operation (LCO):</p> <p>a. Primary Containment Integrity</p> <p>b. Drywell Integrity</p> <p>c. Suppression Pool Operability</p> <p>d. Secondary Containment Integrity</p> <p>e. Standby Gas Treatment Subsystem</p> <p>f. Fuel Building Charcoal Filtration System</p>	Implement EIP-2-002, Notification of Unusual Event

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
9. Loss of Engineered Safety Feature requiring technical specification shutdown (Tech. Spec. 3.5.1)	Exceeding the Limiting Conditions for Operation (LCO) for any <u>one</u> of the following systems: <ul style="list-style-type: none"> a. HPCS (High Pressure Core Spray) b. ADS (Automatic Depressurization System) c. LPCS (Low Pressure Core Spray System) d. LPCI (Low Pressure Coolant Injection System) 	Implement EIP-2-002, Notification of Unusual Event
10. Fire lasting more than 10 minutes following implementation of fire suppression measures	1. As reported by plant personnel or Fire Brigade Leader to the main control room OR 2. Valid fire detection device alarm AND Condition exists for more than 10 minutes following implementation of fire suppression measures.	Implement EIP-2-002, Notification of Unusual Event

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

NOTIFICATION OF UNUSUAL EVENT

Emergency Action Level	Initiating Condition	Emergency Response
11. Significant loss of vital accident assessment capability or loss of effluent monitoring capability requiring shutdown (Tech. Spec. 3.3.7.5, 3.3.7.1, and 3.3.7.10, 3.37.11 & 3.11.2)	1. Radiation monitoring instrumentation less than minimum channels operable requirement of Technical Specification requiring shutdown (Table 3.3.7.1-1)	Implement EIP-2-002, Notification of Unusual Event
	OR	
	2. Accident monitoring instrumentation less than minimum channels operable requirement of Technical Specification requiring plant shutdown (Table 3.3.7.5-1)	
	OR	
	3. Loss of offgas post-treatment radiation effluent monitors (Table 3.3.7.11-1).	
	AND	
	Loss of main plant exhaust duct radiation monitors	
12. Significant loss of Main Control Room Communications capability	Degradation of communication capability to the extent that onsite and offsite communications are severely limited as determined by Shift Supervisor	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Notification of Unusual Event

Initiating Condition	Emergency Action Level	Emergency Response
13. Security threat or attempted entry or sabotage	1. Observation of event reported by Security	Implement EIP-2-002, Notification of Unusual Event
	OR	
	2. Bomb or security threat made by telephone, letter, or other method that results in the implementation of the Security Contingency Plan	
14. Natural events near site	1. Any earthquake detected by seismic instrumentation systems	Implement EIP-2-002, Notification of Unusual Event
	OR	
	2. Flood with water level greater than 96 feet msl and increasing	
	OR	
	3. A tornado is observed to cross the site boundary	
	OR	
	4. Sustained gale force winds measured at 55 -63 mph	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

NOTIFICATION OF UNUSUAL EVENT

Initiating Condition	Emergency Action Level	Emergency Response
15. Other hazards being experienced or projected which have the <u>potential</u> for endangering the Plant	Hazard observed or notification is received by the Main Control Room.	Implement EIP-2-002, Notification of Unusual Event
	1. When an onsite aircraft crash or unusual aircraft activity over station visually observed or notification is received by the Main Control Room.	Implement EIP-2-002, Notification of Unusual Event
	OR	
	2. When a train derailment is observed onsite	
	OR	
	3. When a near or onsite explosion is observed or notification is received by the Main Control Room	Implement EIP-2-002, Notification of Unusual Event
	OR	
	4. Observation or notification is received by the Main Control Room if an onsite flammable or near-site toxic gas release that threatens personnel	
	OR	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Notification of Unusual Event

Initiating Condition	Emergency Action Level	Emergency Response
15. (continued)	5. Observation of a turbine rotating component failure causing rapid plant	
16. Other plant conditions exist that warrant increased awareness on the part of a plant operating staff or state and local authorities, or require plant shutdown under technical specifications requirements, or involve other than normal controlled shutdown (e.g., cool-down rate exceeding technical specification limits, pipe cracking found during operation)	1. Observation of event or report received by the Control Room	Implement EIP-2-002, Notification of Unusual Event
17. Transportation of over-exposed and/or contaminated injured individual from site to hospital	1. Decision by Shift Supervisor to transport individual offsite prior to decontamination OR 2. Transport offsite of any injured, overexposed individual (estimated total accumulated exposure in excess of 10 CFR20 limit)	Implement EIP-2-002, Notification of Unusual Event

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Alert

Initiating Condition	Emergency Action Level	Emergency Response
1. Severe loss of fuel clad	1. Offgas pre-treatment radiation monitor reading greater than 4×10^5 mR/hr	Implement EIP-2-003, Alert
	OR	
	2. Very high coolant activity as determined by sample analysis of 300 uCi/ml equivalent I-131	
	OR	
	3. Main stream line radiation monitor exceeds Hi-Hi alarm trip setpoint due to failed fuel radioactivity	Implement EIP-2-003, Alert
	OR	
	4. Reactor water level below top of active fuel (-160 in.)	
2. Primary coolant leak rate greater than 50 gpm with reactor at operating temperature and pressure	1. Unidentified plus identified leakage greater than 50 gpm	
3. Steam line break inside containment with MSIV HIGH leakage	1. Abnormal main steam line pressure after MSIV closure	Implement EIP-2-003, Alert
	AND	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Alert

Initiating Condition	Emergency Action Level	Emergency Response
2. (continued)	High drywell temperature greater than 135°F.	Implement EIP-2-003, Alert
	AND	
	HIGH drywell pressure greater than 1.25 psig	
	AND	
	Both trains of MS-PLCS trip or are inoperable due to low differential pressure across MSIV or HIGH MS-PLCS valve air flow	Implement EIP-2-003, Alert
4. Unexpected high radiation levels or high airborne contamination severe degradation in the control of radioactive materials	1. Alarm of area radiation monitors and confirmation of readings greater than 1,000 times normal level	
	OR	
	2. Alarm of DRMS (Digital Radiation Monitoring System) airborne ventilation monitors and confirmation of readings greater than 1,000 times normal levels	
5. Loss of offsite power and loss of all onsite AC power for less than 15 minutes	1. Less than 3744V on 1ENS*SWG1A and 1ENS*SWG1B buses	Implement EIP-2-003, Alert,
	AND	

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

Alert

Initiating Condition	Emergency Action Level	Emergency Response
5. (continued)	1RTX-XSR1C and 1RTX-XSR1D preferred station transformers lost	
	AND	
	All diesel generators out of service	
6. Loss of all onsite DC power for less than 15 minutes	1. Less than 105V on 1ENB*SWG01A and 1ENB*SWG01B distribution buses	Implement EIP-2-003, Alert
7. Loss of functions needed to maintain Plant ³ in cold shutdown	1. Loss of both standby service water loops	Implement EIP-2-003, Alert
	OR	
	2. Loss of any two of the following: <ul style="list-style-type: none"> a. Main condenser b. Safety relief valve capability c. RCIC system d. Steam condensing or shutdown and alternate shutdown cooling modes of RHR loops A and B 	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Alert

Initiating Condition	Emergency Action Level	Emergency Response
8. Failure of the reactor protection systems to initiate and complete a scram which brings the reactor subcritical	1. Indication that all control rods have not been inserted following a valid scram signal	Implement EIP-2-003, Alert
	AND	
9. Fuel handling accident with release of radioactivity to containment of Fuel Building	2. Neutron Monitoring System does not indicate reactor subcritical	Implement EIP-2-003, Alert
	1. Observation of a fuel handling accident in the spent fuel pool area	
	AND	
	HIGH alarm on one or more fuel handling area radiation monitors	
	AND	
	HIGH alarm on fuel building ventilation exhaust radiation monitors for an accident in the Fuel Building	
	OR	
	2. Observation of a fuel handling accident in the containment	
	AND	

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

Alert

Initiating Condition	Emergency Action Level	Emergency Response
9. (continued)	HIGH alarm on one or more containment radiation monitors	
	AND	
	HIGH alarm on the main Plant exhaust duct radiation monitors for an accident in the containment	
10. Fire potentially affecting safety systems	As reported by the plant personnel or the Fire Brigade leader to the Main Control Room	Implement EIP-2-003, Alert
11. Loss of all annunciators in Main Control Room for more than 15 minutes	As determined by Main Control Room operator from direct observation; Plant is not shutdown	Implement EIP-2-003, Alert
	AND	
	Transient has not occurred	
12. Radiological effluents greater than 10 times technical specification instantaneous limits (Tech. Spec. 3.11.1 and 3.11.2)	1. High alarm on one or more radiation monitors: a. Radwaste building ventilation exhaust b. Fuel building ventilation exhaust c. Main Plant exhaust duct	Implement EIP-2-003, Alert

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

Alert

Initiating Condition	Emergency Action Level	Emergency Response
12. (continued)	<p align="center">AND</p> <p>Summation of releases exceed 10 times Tech. - Spec. limit</p> <p>2. Liquid radwaste effluent monitor high alarm verified to be greater than 10 times the technical specification limit</p> <p align="center">AND</p> <p>Both isolation valves fail to close</p> <p align="center">OR</p> <p>3. Cooling tower blowdown monitor HIGH alarm verified to be greater than 10 times the technical specification limit</p>	Implement EIP-2-003, Alert
13. Ongoing security compromise	<p>1. Safeguard Contingency Event that results in adversaries commanding an area of the Plant, but not control over shutdown capability or vital islands as outlined in Security Plan</p>	Implement EI-2-003, Alert

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

Alert

Initiating Condition	Emergency Action Level	Emergency Response
14. Severe natural phenomena experienced beyond Notification of Unusual Event levels	1. An earthquake beyond OBE levels as detected on plant seismic instrumentation that does not result in another Alert-level initiating condition	Implement EIP-2-003, Alert
	OR	
	2. Flooding with water level greater than 97 feet msl and increasing	
	OR	
15. Other hazards being experienced or projected which have a significant potential for affecting plant safety:	3. A tornado strikes the facility that does not result in another Alert-level initiating condition	Implement EIP-2-003, Alert
	OR	
	4. Sustained hurricane winds measured at 64-72 mph	
	OR	
	1. Aircraft impact on the Reactor, Diesel Generator or Auxiliary Building observed or notification is received by Main Control Room	Implement EIP-2-003, Alert
	OR	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹

Alert

Initiating Condition	Emergency Action Level	Emergency Response
15. (continued)	2. Missile impact on facility with resulting damage observed or notification is received by Main Control Room	Implement EIP-2-003, Alert
	OR	
	3. Known explosion at facility resulting in major damage to Plant structures or equipment as determined by on-duty Shift Supervisor	
	OR	
	4. Entry of toxic or flammable gases into facility area observed or notification is received by Main Control Room	
	5. Turbine failure causing penetration observed or notification is received by Main Control Room	

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹****Site Area Emergency**

Initiating Condition	Emergency Action Level	Emergency Response
16. Other Plant conditions that warrant precautionary activation of Emergency Response Facilities	1. As determined by on-duty Shift Supervisor	Implement EIP-2-003, Alert
17. Evacuation of Main Control Room anticipated or required with control of shutdown at remote shutdown panels	1. As determined by on-duty Shift Supervisor	Implement EIP-2-003, Alert

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
1. Inability to maintain reactor water level	1. Low reactor water level indication - Level 1 AND High drywell pressure greater than 2 psig AND Inability to restore reactor water level	Implement EIP-2-004, Site Area Emergency
2. Degraded core with possible loss of coolable geometry core height	Reactor water level at or below top of active fuel (-160 in.) as indicated by reading on fuel zone level indicator AND Very high coolant activity as determined by sample analysis (greater than or equal to 300 uCi/gm equivalent of I-131)	Implement EIP-2-004, Site Area Emergency
3. BWR Steam line break outside containment without isolation	1. HIGH flow on an individual main steam line flow greater than 4×10^6 lbm/hr AND	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
3. (continued)	<p>2. High main steam line tunnel ambient temperature alarm</p> <p>AND</p> <p>High main steam line tunnel differential temperature alarm</p> <p>OR</p> <p>2. HIGH flow on an individual main steam line flow greater than 4×10^6 lbm/hr</p> <p>AND</p> <p>High turbine building temperature alarms</p> <p>OR</p> <p>3. RCIC high steam line flow</p> <p>AND</p> <p>Any of the following temperature alarms:</p> <p>a. HIGH main steam line tunnel ambient temperature</p>	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
3. (continued)	b. HIGH RCIC area ambient temperature alarm c. HIGH main steam line tunnel differential temperature alarm OR d. HIGH RCIC equipment area differential temperature alarm	
4. Loss of offsite power and loss of all onsite AC power for more than 15 minutes	Less than 3744V on 1ENS*SWG1A and 1ENS*SWG1B buses AND 1RTX-XSR1C and 1RTX-XSR1D preferred station transformers lost AND All diesel generators out of service AND Condition exists for more than 15 minutes	Implement EIP-2-004, Site Area Emergency
5. Loss of all vital onsite 125V DC power for more than 15 minutes	Less than 105V on 1ENB*SWG01A and 1ENB*SWG01B distribution buses	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
5. (continued)	<p style="text-align: center;">AND</p> <p>Condition exists for more than 15 minutes</p>	
6. Loss of functions needed to bring the reactor from hot shutdown to cold shutdown	<p>1. Inability to depressurize the reactor.</p> <p style="text-align: center;">OR</p> <p>2. Main condenser cooling is inoperable.</p> <p style="text-align: center;">AND</p> <p>RHR divisions A & B are inoperable</p> <p style="text-align: center;">AND</p> <p>RCIC is in operable</p>	Implement EIP-2-004, Site Area Emergency
7. Transient requiring operation of shutdown system with failure to scram (continued power generation but no core damage immediately evident)	<p>Observation of transient and initiation of shutdown systems</p> <p style="text-align: center;">AND</p> <p>Neutron Monitoring System does not indicate reactor subcritical following valid scram initiation signal.</p>	Implement EIP-2-004, Site Area Emergency
8. Major damage to spent fuel containment or fuel building (e.g., large object damages fuel or water loss below fuel level)	<p>1. Observation of event causing major structural damage to spent fuel assembly in the upper fuel pool areas or Fuel Building</p>	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
8. (continued)	<p>AND</p> <p>HIGH radiation alarm in the upper fuel pool area or Fuel Building</p> <p>OR</p> <p>2. Low water level in spent fuel pool below normal and unable to restore to normal level</p> <p>AND</p> <p>HIGH radiation alarm in upper fuel pool area or Fuel Building</p> <p>AND</p> <p>HIGH alarm on Fuel Building ventilation radiation monitor for accident in the Fuel Building</p> <p>OR</p> <p>3. Observation of a Fuel Handling accident in containment</p> <p>AND</p> <p>HIGH alarm on main plant exhaust duct radiation monitor for accident in containment</p>	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
8. (continued)	<p>AND</p> <p>Projected offsite doses based on equivalent radiation or iodine concentration levels identified in Site Area EAL 11</p>	
9. Fire compromising the function of safety system	Observation of a major fire that affects redundant safety system trains or functions	Implement EIP-2-004, Site Area Emergency
10. All alarms lost (no annunciators) for more than 15 minutes and Plant is not in shutdown	1. Observation by Shift Supervisor of loss of annunciators for more than 15 minutes	Implement EIP-2-004, Site Area Emergency
	<p>AND</p> <p>2. Plant transient initiated or in progress while all annunciators are lost</p>	
11. Effluent monitors detect levels corresponding to greater than 50 mr/hr for 1/2 hour or greater than 500 mr/hr whole body for 2 minutes, or 5 times these levels to the thyroid at the site boundary for adverse meteorology	<p>1. Containment post-accident radiation monitors Alert alarm</p> <p>OR</p> <p>2. Post-accident effluent radiation monitor confirms noble gas release rates corresponding to:</p> <p>a. (0.1) Ci/sec noble gas (30 min)</p>	Implement EIP-2-004, Site Area Emergency

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹**

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
11. (continued)	<p>b. (1.0) Ci/sec noble gas (2 min)</p> <p align="center">OR</p> <p>3. Grab samples and laboratory analysis confirm release levels of:</p> <p>a. (150) uCi/sec (30 min)</p> <p>b. (1500) uCi/sec (2 min) I-131 equivalent</p> <p align="center">OR</p> <p>4. Radiation monitoring teams report radiation or iodine concentration readings at the site boundary corresponding to:</p> <p>a. 50 mr/hr (30 min)</p> <p>b. 500 mr/hr (2 min)</p> <p>c. 1.35×10^{-7} uCi/cc I-131 equivalent (30 min)</p> <p>d. 1.35×10^{-6} uCi/cc I-131 equivalent (2 min)</p>	Implement EIP-2-004, Site Area Emergency
12. Security threat involving imminent loss of physical control of the Plant	1. Physical attack on the Plant involving imminent occupancy of Main Control Room	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

Site Area Emergency

Initiating Condition	Emergency Action Level	Emergency Response
13. Severe natural event near site being experienced or projected with Plant not in cold shutdown	1. Containment or Drywell Safe Shutdown Earthquake alarm	Implement EIP-2-004, Site Area Emergency
	OR	
	2. Flooding with water level greater than 98 feet msl	
14. Other hazards being experienced or projected with Plant not in cold shutdown	OR	Implement EIP-2-004, Site Area Emergency
	3. Winds greater than 100 mph onsite	
	1. Observed or reported aircraft crash causing damage or fire in Containment, Auxiliary, Control, or Turbine Building	
	2. Missile impact or explosion causes loss of functions needed for cold shutdown	
	OR	
	3. Entry of toxic or flammable gases into:	
	a. Main Control Room	
	AND	
	b. Remote shutdown panel rooms	

**EMERGENCY ACTION LEVELS, INITIATING CONDITIONS,
AND EMERGENCY RESPONSE¹****Site Area Emergency**

Initiating Condition	Emergency Action Level	Emergency Response
15. Other Plant conditions exist that warrant activation of Emergency Operations Centers monitoring teams and precautionary public notifications	1. As determined by the Shift Supervisor/ Emergency Director	Implement EIP-2-004, Site Area Emergency
16. Evacuation of Main Control Room and control of shutdown systems not established at remote shutdown panels in 15 minutes	1. As determined by on-duty Shift Supervisor	Implement EIP-2-004, Site Area Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
1. Effluent monitors detect levels corresponding to 1 rem/hr whole body or 5 rem/hr thyroid at the site boundary under actual meteorological conditions ⁵	1. Post accident effluent radiation monitor confirms noble gas and iodine release rates corresponding to 1 rem/hr whole body or 5 rem/hr thyroid at the site boundary for actual meteorological conditions	Implement EIP-2-005, General Emergency
	OR	
	2. Radiation monitoring teams report radiation and iodine concentration readings of 1 rem/hr whole body or 2.70×10^{-6} uCi/cc I-131 equivalent	
	OR	
	3. Containment post-accident radiation monitors HIGH alarm	
2. Loss of 2 of 3 fission product barriers with a potential loss of third barrier ⁶	1. Loss of any two of the following with potential loss of the third: <ul style="list-style-type: none"> a. Fuel cladding b. RCS pressure boundary c. Containment integrity 	Implement EIP-2-005, General Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
2. (continued)	<p>OR</p> <p>2. Loss of fuel cladding and RCS pressure boundary with potential loss of containment as indicated by:</p> <p>a. Reactor water level below top of active fuel (-160 in) with indication of the fuel damage</p> <p>AND</p> <p>b. HIGH drywell temperature (230°F) post-accident HIGH range containment monitors greater than 10^4 R/hour</p> <p>AND</p> <p>c. Sustained containment pressure greater than 15 psig</p> <p>OR</p> <p>3. Loss of RCS pressure boundary and containment integrity with potential loss of fuel cladding as indicated by:</p> <p>a. LOCA with inability to isolate break</p>	Implement EIP-2-005, General Emergency

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
2. (continued)	3. (continued)	Implement EIP-2-005, General Emergency
	AND	
	b. Failure of MSIVs to isolate containment	
	AND	
	c. Reactor water level at 160 inches and de- creasing	
	OR	
	4. Loss of containment integrity and fuel cladding with potential loss of RCS pressure boundary as indicated by:	
	a. Indication that all containment isolation valves are not closed.	
	AND	
	b. Indication of fuel cladding failure by HIGH RCS activity greater than 309 uCi/ gm I-131, or water level below the top of active fuel (-160 in) with indications of fuel damage.	
	AND	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
2. (continued)	3. (continued)	
	c. High RCS pressure greater than 1100 psig.	
3. Loss of physical control of facility	1. Physical attack on the Plant has resulted in unauthorized personnel occupying the Main Control Room.	Implement EIP-2-005, General Emergency
4. Other Plant conditions exist that make release of large amounts of radioactivity in a short time possible	1. LOCA and water level below top of the active fuel, (-160 in)	Implement EIP-2-005, General Emergency
	AND	
a. Transient (e.g., loss of offsite power) plus failure of requisite core shut-down systems (e.g., scram) Could lead to core melt in several hours with containment failure likely. More severe if pump trip does not function	All onsite and offsite AC power lost	
	AND	
	All vital onsite DC power lost	
	AND	
	Suppression pool cooling has not been initiated following a 30 minute time lapse	
	OR	
b. Small or large LOCA occurs and containment performance is unsuccessful affecting longer term success of the ECCS. Could lead to core	2. All onsite DC power lost	
	AND	

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
<p>4c. (continued) degradation or melt in several hours without containment boundary</p> <p>d. Shutdown occurs but requisite decay heat removal systems (e.g., RHR) or non-safety systems heat removal means are rendered unavailable. Core degradation or melt could occur in about 10 hours with subsequent containment failure.</p>	<p>2. (continued)</p> <p>Conditions are expected to remain in excess of 10 hours.</p>	<p>Implement EIP-2-005, General Emergency</p>
<p>5. Any major internal or external events (e.g., fires, earthquakes, substantially beyond design basis) which could cause massive common damage to Plant systems resulting in any condition 4.a. through d.</p>	<p>1. As determined by the Emergency Director</p>	<p>Implement EIP-2-005, General Emergency</p>

¹ Setpoints are subject to change pending final approval of technical specifications.

² Except for testing

³ LOCA condition is not considered.

EMERGENCY ACTION LEVELS, INITIATING CONDITIONS, AND EMERGENCY RESPONSE¹

General Emergency

Initiating Condition	Emergency Action Level	Emergency Response
<p>4c. (continued) degradation or melt in several hours without containment boundary</p> <p>d. Shutdown occurs but requisite decay heat removal systems (e.g., RHR) or non-safety systems heat removal means are rendered unavailable. Core degradation or melt could occur in about 10 hours with subsequent containment failure.</p>	<p>2. (continued) Conditions are expected to remain in excess of 10 hours.</p>	<p>Implement EIP-2-005, General Emergency</p>
<p>5. Any major internal or external events (e.g., fires, earthquakes, substantially beyond design basis) which could cause massive common damage to Plant systems resulting in any condition 4.a. through d.</p>	<p>1. As determined by the Emergency Director</p>	<p>Implement EIP-2-005, General Emergency</p>

¹ Setpoints are subject to change pending final approval of technical specifications.

² Except for testing

³ LOCA condition is not considered.

- 4 Annunciators are powered by Division I, II, and III uninterruptible power supplies. See also Alert EAL 6, Loss of all DC power.
- 5 Consider evacuation only within about 2 miles of the site boundary unless these levels are exceeded by a factor of 10 or projected to continue for 10 hours.
- 6 Recommend 2 mile radius precautionary evacuation and 5 miles downwind.
- 7 See EIP-2-007 for protective action recommendations based on plant status.

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-002

PROCEDURE TITLE: NOTIFICATION OF UNUSUAL EVENT

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

[X] No

[illegible]

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

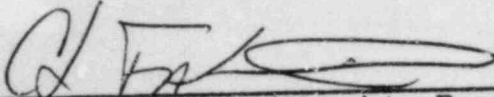
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PROCEDURE NO. EIP-2-002

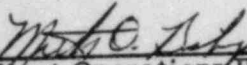
REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

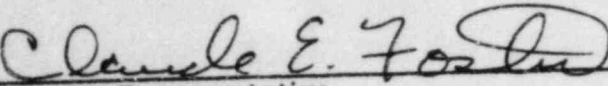
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Radiation Protection/Chemistry Representative

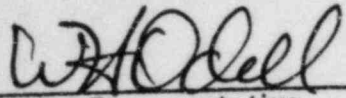
9-24-84


Plant Operations Representative

9-24-84


Security Representative

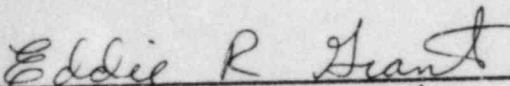
9/24/84


Training Representative

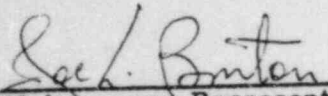
9/24/84


Technical Staff Representative

9/24/84

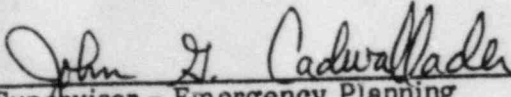

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

NOTIFICATION OF UNUSUAL EVENT

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ATTACHMENT 2	EMERGENCY DIRECTOR RESPONSIBILITY MATRIX	11

1.0 PURPOSE

- 1.1 This procedure describes the actions to be taken when an emergency condition has been classified as a **NOTIFICATION OF UNUSUAL EVENT**.
- 1.2 The purpose of offsite notifications required by this procedure are to provide systematic handling of information and decision making for **NOTIFICATION OF UNUSUAL EVENTS**.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-001, Classification of Emergencies
- 2.3 EIP-2-006, Notifications
- 2.4 EIP-2-026, Evacuation
- 2.5 EIP-2-029, Emergency Telephone Book
- 2.6 EIP-2-008, Search and Rescue
- 2.7 EIP-2-009, Medical Emergencies
- 2.8 EIP-2-010, Toxic Gas Emergencies
- 2.9 EIP-2-011, Fire Emergencies

3.0 GENERAL INFORMATION

- 3.1 A **NOTIFICATION OF UNUSUAL EVENT** is declared when events are in progress or have occurred which characterize off-normal plant conditions that could reasonably have the potential to escalate in significance, if proper action is not taken or if circumstances beyond the control of the operating shift render the situation more serious.
- 3.2 The emergency response can usually be handled by shift personnel without additional support or activation of emergency response facilities.
- 3.3 The Shift Supervisor shall assume the responsibilities of the Emergency Director until properly relieved by the designated Emergency Director (the Plant Manager or alternate) or until the emergency situation is terminated.
- 3.4 Upon being relieved of the responsibilities of the Emergency Director, the Shift Supervisor shall remain in the Main Control Room to supervise plant operations.

- 3.5 The emergency situation is classified in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2). The Classification of an emergency will not always progress in an orderly manner from a **NOTIFICATION OF UNUSUAL EVENT** through **GENERAL EMERGENCY**. Procedures EIP-2-002, 003, 004, and 005 can be used independently.
- 3.6 No releases of radioactive materials requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. If further degradation does occur, the emergency will be reclassified in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2)
- 3.7 Ultimate responsibility for assessment of emergency conditions, classification of emergencies, performing the steps of this procedure, and for directing onsite protective and corrective actions rests with the Emergency Director. **The judgment of the Emergency Director is essential for the proper control of the emergency and may take precedence over the guidelines in this procedure.**

4.0 PROCEDURE

NOTE

The steps in this procedure may be completed in any sequence. However, the following sequence is recommended. The **NOTIFICATION OF UNUSUAL EVENT** Checklist in Attachment 1 shall be used by the Emergency Director to ensure that all steps of this procedure have been completed.

4.1 Initial Actions

- 4.1.1 Obtain Attachment 1 and complete the checklist as the following actions are performed.
- 4.1.2 Ensure that the actions of applicable Emergency Operating Procedures and the immediate actions of Abnormal Operating Procedures have been initiated.
- 4.1.3 Inform inplant personnel, of the emergency classification by announcing the location, type and classification of the emergency over the Plant Public Address System twice (Repeat the announcement periodically) and direct the Security Shift Supervisor to inform onsite personnel outside the plant.
- 4.1.4 Order an evacuation of personnel from those areas with actual or potential personnel hazards in accordance with EIP-2-026, Evacuation (Ref. 2.4).

N/A	N/A	EIP-2-002	REV. O	PAGE 3	2
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- 4.1.5 Notify the Plant Manager and direct the Shift Clerk to notify the Public Affairs Personnel of the emergency situation in accordance with Attachment 3 of EIP-2-006, Notifications (Ref. 2.3).
- 4.1.6 Promptly (within about 15 minutes) notify the Louisiana Nuclear Energy Division, the Louisiana Office of Emergency Preparedness, West Feliciana Parish, East Feliciana Parish, Pointe Coupee Parish, West Baton Rouge Parish, East Baton Rouge Parish, Mississippi Highway Safety Patrol, and (within one hour) the Nuclear Regulatory Commission in accordance with EIP-2-006, Notifications (Ref. 2.3).

NOTE

Initial notification to the State of Mississippi is made to the Mississippi Highway Safety Patrol (MHSP). The MHSP notifies the Mississippi Emergency Management Agency (MEMA). When MEMA has responded to the emergency, follow-up notifications will be provided to MEMA.

Prompt notification means within approximately 15 minutes for the NOTIFICATION OF UNUSUAL EVENT class and sooner (consistent with the need for other emergency actions) for other classes. The time is measured from the time at which operators recognize that events have occurred which make declaration of an emergency class appropriate.

The Nuclear Regulatory Commission shall be notified as soon as possible and in all cases within one hour of the occurrence of any event requiring the initiation of the River Bend Station Emergency Plan.

- 4.1.7 Implement additional Emergency Plan Implementing Procedures as necessary to respond to the emergency situation using Attachment 2.
- 4.1.8 If there has been a release of radioactive materials, direct a Chemistry Technician to determine if technical specification limits have been exceeded.

NOTE

Refer to EIP-2-001, Classification of Emergencies (Ref. 2.2) to ensure that the plant is in the proper emergency classification.

4.2 Subsequent Actions

- 4.2.1 Ensure that the subsequent actions of applicable Abnormal Operating Procedures have been initiated.
- 4.2.2 Document all pertinent emergency information not itemized on the checklist in Attachment 1 including all emergency response actions performed.

N/A	N/A	EIP-2-002	REV. 0	PAGE 4 OF 12
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NOTE

The Emergency Director will initiate a log for the documentation of emergency information. The Shift Supervisor will utilize the Shift Supervisor log.

- 4.2.3 Continue to assess plant conditions.
- 4.2.4 Direct corrective actions as necessary to bring the emergency under control and to mitigate the consequences.
- 4.2.5 Notify the Mechanical Maintenance Supervisor, or alternate, (OSC Coordinator) in accordance with EIP-2-006, Notifications (Ref. 2.3), if the emergency response requires OSC operations.
- 4.2.6 Direct the Shift Clerk to call in OSC personnel to supplement the emergency response organization as needed using EIP-2-029, Emergency Telephone Book (Ref. 2.5).

NOTE

Onshift personnel are required to have multiple roles in the initial emergency response until they are augmented by the Emergency Response Organization. If one individual has the responsibility for two functions which need to be performed simultaneously, the Emergency Director will determine which function will be accomplished first.

- 4.2.7 If significant changes in the emergency situation occur, verify that the emergency classification is correct or escalate the emergency classification in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2).
- 4.2.8 Continue to monitor the progress of emergency response personnel in controlling the emergency.
- 4.2.9 Periodically make follow-up status reports to all onsite personnel keeping them apprised of personnel hazards, plant line-ups, corrective actions, and steps taken to control or mitigate the consequences of the emergency.
- 4.2.10 Make follow-up status reports to offsite government agencies and the Nuclear Regulatory Commission using EIP-2-006, Notifications (Ref. 2.3) any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant.

NOTE

Follow-up status reports to the State of Mississippi are made to MEMA when MEMA responds to the emergency.

- 4.2.11 Establish a long term relief rotation, if necessary, to ensure that personnel are not required to remain at their assigned positions for an excessive period of time.

N/A	N/A	EIP-2-002	REV. O	PAGE 5 OF 12
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4.2.12 The emergency may be terminated when the conditions for a **NOTIFICATION OF UNUSUAL EVENT** or greater are no longer met.

4.2.13 Provide a verbal summary of the emergency including the cause, a sequence of events, the protective and corrective actions performed, equipment damaged and the status of the plant to offsite government agencies including the Nuclear Regulatory Commission.

NOTE

The Plant Manager shall ensure that a written summary covering all aspects of the emergency is provided to those agencies within 24 hours.

4.2.14 Actions necessary to recover from **NOTIFICATION OF UNUSUAL EVENT** emergencies generally shall be accomplished through the normal plant organization under the direction of the Plant Manager unless otherwise directed by the Senior Vice President of the River Bend Nuclear Group.

END

NOTIFICATION OF UNUSUAL EVENT CHECKLIST (EMERGENCY DIRECTOR)

NOTE

Place N/A in steps which are not applicable. The steps on this checklist can be performed in any sequence. However, the following sequence is recommended. The procedural step and page for the actions on this checklist are provided in parentheses.

INITIAL ACTIONS

	ACTION COMPLETED	
	DATE/TIME	INITIALS
1. Actions of applicable and Emergency Operating Procedures initiated. (4.1.2 on pg. 3)	_____	_____
2. Immediate actions of applicable Abnormal Operating Procedures initiated. (4.1.2 on pg. 3)	_____	_____
3. Onsite personnel informed of the NOTIFICATION OF UNUSUAL EVENT. (4.1.3 on pg. 3)	_____	_____

NOTE

Announce location, type, and classification of the emergency over the Plant Public Address System twice.

4. Evacuation of onsite affected area(s) ordered. (4.1.4 on pg. 3)

Area(s) to be evacuated: _____

5. Plant Manager notified. (4.1.5 on pg. 4)
6. Joint Information Center Director notified (4.1.5 on pg. 4)
7. Offsite government agencies notified (4.1.6 on pg. 4):
- * a. Louisiana Nuclear Energy Division
 - * b. Louisiana Office of Emergency Preparedness

_____	_____
_____	_____
_____	_____
_____	_____

NOTIFICATION OF UNUSUAL EVENT CHECKLIST
(EMERGENCY DIRECTOR)

	ACTION COMPLETED	
	DATE/TIME	INITIALS
* c. West Feliciana Parish	_____	_____
* d. East Feliciana Parish	_____	_____
* e. Pointe Coupee Parish	_____	_____
* f. West Baton Rouge Parish	_____	_____
* g. East Baton Rouge Parish	_____	_____
* h. Mississippi Highway Safety Patrol	_____	_____
** i. Nuclear Regulatory Commission	_____	_____
* Notified within approximately 15 minutes of the occurrence of the event causing the declaration of a NOTIFICATION OF UNUSUAL EVENT .		
** Notified within one hour of the occurrence of the event causing the declaration of a NOTIFICATION OF UNUSUAL EVENT .		
8. Additional Emergency Plan Implementing Procedures implemented (4.1.7 on pg. 4 and Attachment 2 on pg. 11).		
a. EIP-2-006, Notifications	_____	_____
b. EIP-2-029, Emergency Telephone Book	_____	_____
c. EIP-2-008, Search and Rescue	_____	_____
d. EIP-2-009, Medical Emergencies	_____	_____
e. EIP-2-010, Toxic Gas Emergencies	_____	_____
f. EIP-2-011, Fire Emergencies	_____	_____
9. Chemistry Technician directed to evaluate the release of radioactive materials (4.1.8 on pg. 4).	_____	_____

NOTIFICATION OF UNUSUAL EVENT CHECKLIST
(EMERGENCY DIRECTOR)SUBSEQUENT ACTIONS

		<u>ACTION COMPLETED</u>	
		<u>DATE/TIME</u>	<u>INITIALS</u>
1.	Subsequent actions of applicable Abnormal Operating Procedures initiated (4.2.1 on pg. 4).	_____	_____
2.	Mechanical Maintenance Supervisor or alternate notified (4.2.5 on pg. 5).	_____	_____
3.	OSC personnel notified (4.2.6 on pg. 5)	_____	_____
4.	Emergency classification verified correct or reclassified (4.2.7 on pg. 5)	_____	_____

(Circle one)

Verified: Yes / No

Reclassified: Yes / No

NOTE

Follow-up status reports to the State of Mississippi are made to MEMA when that agency has responded. Follow-up status reports should be made any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant.

5. Follow-up status reports made:

- | | | |
|--|-------|-------|
| a. Onsite personnel (4.2.9 on pg. 5) | _____ | _____ |
| b. Offsite government agencies (4.2.10 on pg. 5) | _____ | _____ |
| c. Nuclear Regulatory Commission (4.2.10 on pg. 5) | _____ | _____ |

6. Long term relief organization established.
(4.2.11 on pg. 6)

7. Emergency terminated (4.2.12 on pg. 6)

8. Verbal closeout summaries completed (4.2.13 on pg. 6)

a. Offsite government agencies

b. Nuclear Regulatory Commission

9. Recovery actions initiated (4.2.14 on pg. 6)

NOTIFICATION OF UNUSUAL EVENT CHECKLIST
(EMERGENCY DIRECTOR)

		ACTION COMPLETED	
		DATE/TIME	INITIALS
10.	Pertinent emergency information not itemized in this checklist, including emergency response actions performed, have been documented. (4.2.2 on pg. 4)	_____	_____

NOTE

When this checklist is completed to this point, provide it to the Plant Manager for use in the development of the written summary for offsite government agencies and the Nuclear Regulatory Commission.

11.	Written closeout summary completed (within 24 hours):		
a.	Louisiana Nuclear Energy Division	_____	_____
b.	Louisiana Office of Emergency Preparedness	_____	_____
c.	West Feliciana Parish	_____	_____
d.	East Feliciana Parish	_____	_____
e.	Pointe Coupee Parish	_____	_____
f.	West Baton Rouge Parish	_____	_____
g.	East Baton Rouge Parish	_____	_____
h.	Mississippi Emergency Management Agency	_____	_____
i.	Nuclear Regulatory Commission	_____	_____

EMERGENCY DIRECTOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-006	EIP-2-007	EIP-2-009	EIP-2-010	EIP-2-011	EIP-2-016	EIP-2-027
1. Classify emergencies	4.1.2 (Att 1)								
2. Inform inplant personnel of the emergency and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.1.3.3							
3. Direct an evacuation of personnel from those areas with actual or potential personnel hazards (EIP-2-028)		4.1.4.3						4.1.1.4 4.2.1.6 (Att 1,15)	4.1.1.2 (Att 1,6)
4. Notify the Plant Manager of the emergency and direct the Communicator to notify the Joint Information Center Director		4.1.5.4	4.1.3 (Att 3,13)						
5. Initial notifications of offsite government agencies and the NRC		4.1.6.4	4.1.4.3 (Att 1.5)						
6. If person(s) are known to be missing or found to be missing during an accountability check implement EIP-2-008, Search and Rescue		4.1.7.4		4.1.2 (Att 1,6) *4.2.3					
7. If person(s) are injured in the Radiological Control Area or injured and contaminated, implement EIP-2-009, Medical Emergencies		4.1.7.4			**4.2.2,3 (Att 1,8) (Att 2,9)				
8. If toxic or other hazardous gases are released onsite or near the site, implement EIP-2-010, Toxic Gas Emergencies		4.1.7.4				4.2.3 (Att 2,10)			
9. If a fire is reported or detected and confirmed in the plant, implement EIP-2-011, Fire Emergencies		4.1.7.4					4.1.2 (Att 1,5) (Att 2,6)		
Additional Shift Supervisor responsibility until the TSC is operational ** Shift Supervisor's responsibility at all times									

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-006
10. If there has been a radioactive release, direct a Chemistry Technician to determine if technical specifications have been exceeded		4.1.8,4	
11. Document all pertinent emergency information not itemized on Attachment 1		4.2.2,4	
12. Direct corrective actions as necessary to control the emergency and to mitigate the consequences		4.2.4,5	
13. Direct the Shift Clerk to call in OSC personnel to supplement the emergency response organization as necessary		4.2.5,5 4.2.6,5	4.1.3,3
14. Verify emergency classification is correct or escalate the emergency classification	4.1.4,3 (Att 1,4)	4.2.7,5	
15. Continue to monitor the progress of emergency response personnel		4.2.8,5	
16. Perform followup status reports to implant personnel and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.2.9,5	
17. Perform followup status reports to offsite government agencies and the NRC		4.2.10,5	4.1.5,3 (Att 2,7)
18. Establish a long-term relief rotation, if necessary		4.2.11,6	
19. Terminate emergency		4.2.12,6	
20. Provide a verbal summary of the emergency to offsite government agencies and the NRC		4.2.13,6	
21. Initiate recovery actions as necessary		4.2.14,6	

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-003

PROCEDURE TITLE: ALERT

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-13		<i>J. Sullivan 10/2/84</i>	
			FOR INFORMATION ONLY C	

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: ALERT

PROCEDURE NO. EIP-2-003

REV. O

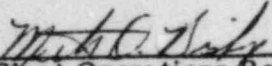
EMERGENCY PLANNING COMMITTEE REVIEW:

DATE



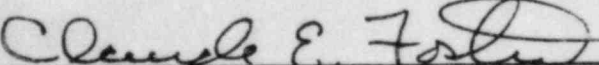
Radiation Protection/Chemistry Representative

9-24-84



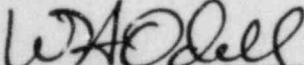
Plant Operations Representative

9-24-84




Security Representative

9/24/84



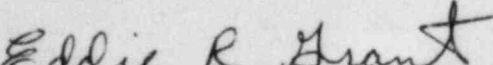
Training Representative

9/24/84



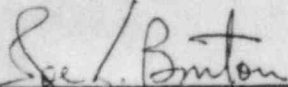
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

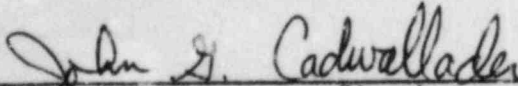
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

ALERT

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1.0 PURPOSE

- 1.1 This procedure describes the actions to be taken when an emergency condition has been classified as an **ALERT**.
- 1.2 The purposes of offsite notifications required by this procedure are to:
 - 1.2.1 Assure that emergency response personnel are readily available to respond, if the situation becomes more serious.
 - 1.2.2 Provide current status information to offsite government agencies and the Nuclear Regulatory Commission.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-001, Classification of Emergencies
- 2.3 EIP-2-006, Notifications
- 2.4 EIP-2-026, Evacuation
- 2.5 EIP-2-016, Operations Support Center - Activation
- 2.6 EIP-2-018, Technical Support Center - Activation
- 2.7 EIP-2-013, Onsite Radiological Monitoring
- 2.8 EIP-2-002, Notification of Unusual Event
- 2.9 EIP-2-019, Technical Support Center-Support Functions
- 2.10 EIP-2-017, Operations Support Center-Support Functions
- 2.11 EIP-2-029, Emergency Telephone Book
- 2.12 EIP-2-008, Search and Rescue
- 2.13 EIP-2-009, Medical Emergencies
- 2.14 EIP-2-010, Toxic Gas Emergencies
- 2.15 EIP-2-011, Fire Emergencies
- 2.16 EIP-2-012, Radiation Exposure Controls

3.0 GENERAL INFORMATION

- 3.1 The **ALERT** emergency classification is declared when events are in progress or have occurred which involve an actual or potential degradation of the level of plant safety.
- 3.2 Although the potential for limited radiological releases in excess of technical specification limits may exist, the initial assessment leading to this classification indicates that it is unlikely that an offsite hazard will be created.
- 3.3 Substantial modification of plant operating status is a highly probable corrective action, if it has not already taken place by the automatic protective systems.

- 3.4 A limited evacuation of affected station areas may be necessary, as well as alerting appropriate offsite emergency support organizations that assistance may be required, should the situation become more serious.
- 3.5 The Shift Supervisor shall assume the responsibilities of the Emergency Director until properly relieved by the designated Emergency Director (the Plant Manager or alternate) or until the emergency situation is terminated.
- 3.6 Upon being relieved of the responsibilities of the Emergency Director, the Shift Supervisor shall remain in the Main Control Room to supervise plant operations.
- 3.7 The emergency situation is classified in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2). The Classification of an emergency will not always progress in an orderly manner from a **NOTIFICATION OF UNUSUAL EVENT** through **GENERAL EMERGENCY**. Procedures EIP-2-002, 003, 004, 005 can be used independently.
- 3.8 Ultimate responsibility for assessment of emergency conditions, classification of emergencies, performing the steps of this procedure, and for directing onsite protective and corrective actions rests with the Emergency Director. **The judgment of the Emergency Director is essential for the proper control of the emergency and may take precedence over the guidelines in this procedure.**
- 3.9 The Operations Support Center and the Technical Support Center will be activated in accordance with EIP-2-006, Notifications (Ref. 2.3).
- 3.10 When the Technical Support Center is fully operational the responsibility for the direction and control of the onsite emergency response organization and offsite notifications will be transferred to the Emergency Director in the Technical Support Center.

4.0 PROCEDURE

NOTE

The actions in this procedure may be completed in any sequence. However, the following sequence is recommended. The ALERT Checklist in Attachment 1, shall be used by the Emergency Director to ensure that all steps of this procedure have been completed.

4.1 Initial Actions

- 4.1.1 Obtain Attachment 1 and complete the checklist as the following actions are performed.
- 4.1.2 Ensure that the actions of applicable Emergency Operating Procedures and the immediate actions of the applicable Abnormal Operating Procedures have been initiated.

- 4.1.3 Inform inplant personnel of the emergency classification by announcing the location, type and classification of the emergency over the Plant Public Address System twice (repeat the announcement periodically) and direct the Security Shift Supervisor to inform onsite personnel outside the plant.
- 4.1.4 Order an evacuation of personnel from those areas with actual or potential personnel hazards in accordance with EIP-2-026, Evacuation (Ref. 2.4).
- 4.1.5 Augment the onsite River Bend Station Emergency Response Organization by initiating the emergency pager system in accordance with EIP-2-006, Notifications (Ref. 2.3).

NOTE

The Operations Support Center and Technical Support Center will be activated for an ALERT in accordance with EIP-2-016, Operations Support Center - Activation (Ref. 2.5) and EIP-2-018, Technical Support Center - Activation (Ref. 2.6).

Onshift personnel will be required to have multiple roles in the initial emergency response until augmented by the Emergency Response Organization. If an individual has the responsibility for two functions which need to be performed simultaneously, the Emergency Director will determine which function will be accomplished first.

- 4.1.6 Promptly (within about 15 minutes) notify the Louisiana Nuclear Energy Division, the Louisiana Office of Emergency Preparedness, West Feliciana Parish, East Feliciana Parish, Pointe Coupee Parish, West Baton Rouge Parish, East Baton Rouge Parish, the Mississippi Highway Safety Patrol, and (within one hour) the Nuclear Regulatory Commission in accordance with EIP-2-006, Notification (Ref. 2.3).

NOTE

Initial notification to the State of Mississippi is made to the Mississippi Highway Safety Patrol (MHSP). The MHSP notifies the Mississippi Emergency Management Agency (MEMA). When MEMA has responded to the emergency follow-up notifications will be provided to MEMA.

The Nuclear Regulatory Commission shall be notified as soon as possible and in all cases within one hour of the occurrence of any event requiring the initiation of the River Bend Station Emergency Plan.

- 4.1.7 Implement additional Emergency Plan Implementing Procedures as necessary to respond to the emergency using Attachment 2.

- 4.1.8 If there has been a release of radioactive materials, direct a Chemistry Technician to determine if technical specification limits have been exceeded, and implement EIP-2-013 Onsite Radiological Monitoring (Ref. 2.7).

NOTE

Refer to EIP-2-001, Classification of Emergencies (Ref. 2.2) to ensure that the plant is in the proper emergency classification.

4.2 Subsequent Actions

- 4.2.1 Ensure that the subsequent actions of applicable Abnormal Operating Procedures have been initiated.
- 4.2.2 Document all pertinent emergency information not itemized on the checklist in Attachment 1 including all emergency response actions performed.

NOTE

The Emergency Director will initiate a log for the documentation of emergency information. The Shift Supervisor will utilize the Shift Supervisor log.

- 4.2.3 Continue to assess plant conditions.
- 4.2.4 Direct corrective actions as necessary to bring the emergency under control and to mitigate the consequences.
- 4.2.5 If significant changes in the emergency situation occur, verify that the emergency classification is correct or escalate the emergency classification in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2).
- 4.2.6 Continue to monitor the progress of emergency response personnel in controlling the emergency.
- 4.2.7 Periodically make follow-up status reports to all onsite personnel keeping them apprised of personnel hazards, plant line-ups, corrective actions, and steps taken to control or mitigate the consequences of the emergency.

NOTE

Follow-up notifications to the State of Mississippi shall be provided to MEMA when MEMA has responded to the emergency.

- 4.2.8 Make follow-up status reports to offsite government agencies and the Nuclear Regulatory Commission using the follow-up notification forms in Attachment 2 of EIP-2-006, Notifications (Ref. 2.3) any

N/A	N/A	EIP-2-003	REV. O	PAGE 5 OF 13
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time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant. (All available information itemized on the forms shall be provided.)

4.2.9 Establish a long term relief rotation, if necessary, to ensure that personnel are not required to remain at their assigned positions for an excessive period of time.

4.2.10 The Emergency Director shall:

1. Downgrade the emergency classification to a NOTIFICATION OF UNUSUAL EVENT (Refer to EIP-2-002, NOTIFICATION OF UNUSUAL EVENT, Ref. 2.8), if plant conditions no longer meet the conditions for an ALERT.

OR

2. Terminate the emergency if the plant is in a stable, safe conditions and releases of radioactivity to the environment have been terminated and no further potential for radioactivity releases exist.

4.2.11 When the emergency is terminated,

1. Provide a verbal summary of the emergency including the cause, a sequence of events, the protective and corrective actions performed, equipment damaged, the status of the plant, the amount of radioactivity released, and the areas of potential and actual contamination to offsite government agencies including the Nuclear Regulatory Commission.

NOTE

The Plant Manager shall ensure that a written summary covering all aspects of the emergency is provided to those agencies within 24 hours.

2. Deactivate the Emergency Response Organization in the:
 - a. Technical Support Center in accordance with EIP-2-019, Technical Support Center - Support Functions (Ref. 2.9).
 - b. Operations Support Center in accordance with EIP-2-017, Operations Support Center - Support Functions (Ref. 2.10).

N/A	N/A	EIP-2-003	REV. O	PAGE 6 OF 13
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4.2.12 Actions necessary to recover from an **ALERT** shall generally be accomplished through the normal plant organization under the direction of the Plant Manager unless otherwise directed by the Senior Vice President of the River Bend Nuclear Group.

END

NOTE

Place "N/A" in steps which are not applicable. The steps on this checklist can be performed in any sequence. However, the following sequence is recommended. The Procedural step and page for the actions on this checklist are provided in parenthesis.

INITIAL ACTIONS

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Actions of applicable Emergency Operating Procedures initiated (4.1.2 on pg. 3).	_____	_____
2. Immediate actions of applicable Abnormal Operating Procedures initiated (4.1.2 on pg. 3)	_____	_____
3. All onsite personnel informed of the Alert. (4.1.3 on pg. 4).	_____	_____

NOTE

Announce location, type and classification of the emergency over the Plant Public Address System twice.

4. Evacuation of onsite affected area(s) ordered. (4.1.4 on pg. 4).	_____	_____
Area(s) to be evacuated: _____		
5. Onsite Emergency Response Organization augmentation initiated (4.1.6 on pg. 4):	_____	_____
6. Offsite government agencies notified:		
* a. Louisiana Nuclear Energy Division	_____	_____
* b. Louisiana Office of Emergency Preparedness	_____	_____
* c. West Feliciana Parish	_____	_____
* d. East Feliciana Parish	_____	_____
* e. Pointe Coupee Parish	_____	_____
* f. West Baton Rouge Parish	_____	_____

		ACTION COMPLETED	
		DATE/TIME	INITIALS
* g.	East Baton Rouge Parish	_____	_____
* h.	Mississippi Highway Safety Patrol	_____	_____
** i.	Nuclear Regulatory Commission	_____	_____
*	Notified within 15 minutes of occurrence of event requiring declaration of an Alert.		
**	Notified within one hour of occurrence of event requiring declaration of an Alert.		
7.	Additional Emergency Plan Implementing Procedures implemented (4.1.7 on pg. 5 and Attachment 2 on pg.12):		
a.	EIP-2-029, Emergency Telephone Book	_____	_____
b.	EIP-2-008, Search and Rescue	_____	_____
c.	EIP-2-009, Medical Emergencies	_____	_____
d.	EIP-2-010, Toxic Gas Emergencies	_____	_____
e.	EIP-2-011, Fire Emergencies	_____	_____
f.	EIP-2-012, Radiation Exposure Controls	_____	_____
g.	EIP-2-013, Onsite Radiological Monitoring	_____	_____
8.	Chemistry Technician directed to evaluate the release of radioactive materials (4.1.8 on pg. 5)	_____	_____

SUBSEQUENT ACTIONS

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Subsequent actions of applicable Abnormal Operating Procedures initiated (4.1.8 on pg. 5).	_____	_____
2. Emergency Classification verified correct or reclassified (4.2.5 on pg. 5).		

(circle one)

Verified:	Yes / No
Reclassified:	Yes / No

NOTE

Follow-up status reports to the State of Mississippi are made to MEMA when that agency has responded to the emergency. Follow-up status reports should be made any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant.

3. Follow-up status reports performed:		
a. Onsite personnel (4.2.7 on pg. 5).	_____	_____
b. Offsite government agencies (4.2.8 on pg. 6).	_____	_____
c. Nuclear Regulatory Commission (4.2.8 on pg. 6).	_____	_____
4. Long term relief organization established. (4.2.9 on pg. 6).	_____	_____
5. Emergency terminated (4.2.10 on pg. 6).	_____	_____
6. Verbal closeout summaries completed (4.2.11 on pg. 6):		
a. Offsite government agencies	_____	_____
b. Nuclear Regulatory Commission	_____	_____
7. Pertinent emergency information not itemized on this checklist, including emergency response actions performed, are documented (4.2.2 on pg. 5)	_____	_____

	ACTION COMPLETED	
	DATE/TIME	INITIALS
8. Emergency Organization deactivated (4.2.11.2 on pg. 6).		
a. Technical Support Center	_____	_____
b. Operations Support Center	_____	_____
9. Recovery actions initiated.	_____	_____

NOTE

When this checklist is completed to this point, provide it to the Plant Manager for use in the development of the written summary for offsite government agencies and the Nuclear Regulatory Commission.

1). Written closeout summary completed (within 24 hours):		
a. Louisiana Nuclear Energy Division	_____	_____
b. Louisiana Office of Emergency Preparedness	_____	_____
c. West Feliciana Parish	_____	_____
d. East Feliciana Parish	_____	_____
e. Pointe Coupee Parish	_____	_____
f. West Baton Rouge Parish	_____	_____
g. East Baton Rouge Parish	_____	_____
h. Mississippi Highway Safety Patrol	_____	_____
i. Nuclear Regulatory Commission	_____	_____

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-006	EIP-2-008	EIP-2-009	EIP-2-010	EIP-2-011	EIP-2-026	EIP-2-027
1. Classify emergencies	4.1.2 (Att 1)									
2. Inform Inplant personnel of the emergency and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.1.3,3	4.1.3,4							
3. Direct an evacuation of personnel from those areas with actual or potential personnel hazards (EIP-2-026)		4.1.4,3	4.1.4,4						4.1.1,4 4.2.1,5 (Att 1,15)	4.1.1,2 (Att 1,6)
4. Augment the RBS Emergency Response Organization		4.1.5,4	4.1.5,5	4.1.3 (Att 3,13)						
5. Initial notifications of offsite government agencies and the NRC		4.1.6,4	4.1.6,4	4.1.4,3 (Att 1,5)						
6. If persons are known to be missing or found to be missing during an accountability check implement EIP-2-008, Search and Rescue		4.1.7,4	4.1.7,5		4.1.2 (Att 1,7) *4.2.3	4.2.3 (Att 1,8) (Att 2,9)				
7. If persons are injured in the Radiological Controls Area or injured and contaminated, implement EIP-2-009, Medical Emergencies		4.1.7,4	4.1.7,5				4.2.3 (Att 2,10)			
8. If toxic or other hazardous gases are released onsite or near the site, implement EIP-2-010, Toxic Gas Emergencies		4.1.7,4	4.1.7,5					4.1.2 (Att 1,5) (Att 2,6)		
9. If a fire is reported or detected and confirmed in the plant, implement EIP-2-011, Fire Emergencies		4.1.7,4	4.1.7,5							
10. If there has been a radioactive release, direct a Chemistry Technician to determine if technical specifications have been exceeded		4.1.8,4	4.1.8,5							

* Additional Shift Supervisor responsibility until the TSC is operational

** Shift Supervisor's responsibility at all times

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-006
11. If there has been a radioactive release, implement EIP-2-013, Onsite Radiological Monitoring			4.1.8,5	
12. Document all pertinent emergency information not itemized on Attachment 1		4.2.2,4	4.2.2,5	
13. Direct corrective actions as necessary to control the emergency and to mitigate the consequences		4.2.4,5	4.2.4,5	
14. Verify emergency classification is correct or escalate the emergency classification	4.1.4,3 (Att 1,4)	4.2.7,5	4.2.5,5	
15. Continue to monitor the progress of emergency response personnel		4.2.8,5	4.2.6,5	
16. Perform followup status reports to implant personnel and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.2.9,5	4.2.7,5	
17. Perform followup status reports to offsite government agencies and the NRC		4.2.10,5	4.2.8,6	4.1.5,3 (Att 2,7)
18. Establish a long-term relief rotation, if necessary		4.2.11,6	4.2.9,6	
19. Downgrade emergency			4.2.10.1,6	
20. Terminate emergency		4.2.12,6	4.2.10.2,6	
21. Provide a verbal summary of the emergency to offsite government agencies and the NRC		4.2.13,6	4.2.11.1,6	
22. Deactivate the Emergency Response Organization in the TSC and OSC			4.2.11.2,6	
23. Initiate recovery actions as necessary		4.2.14,6	4.2.12,7	

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-004

PROCEDURE TITLE: SITE AREA EMERGENCY

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-16		<i>[Signature]</i> 10/2/84	
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*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: SITE AREA EMERGENCY

PROCEDURE NO. EIP-2-004

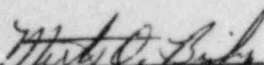
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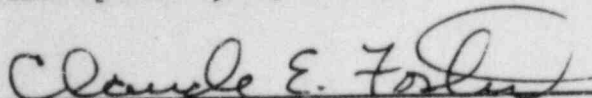
DATE


Radiation Protection/Chemistry Representative

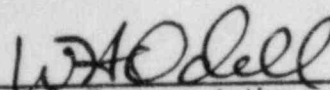
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Plant Operations Representative

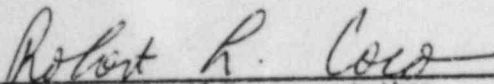
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Security Representative


9/24/84


Training Representative


9/14/84


Technical Staff Representative

9/24/84

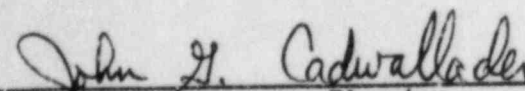

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

SITE AREA EMERGENCY

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1.0 PURPOSE

- 1.1 This procedure describes the actions to be taken when an emergency condition has been classified as a **SITE AREA EMERGENCY**.
- 1.2 The purposes of the offsite notifications required by this procedure are to:
 - 1.2.1 Assure that emergency response facilities are manned.
 - 1.2.2 Assure that offsite radiological monitoring personnel are dispatched.
 - 1.2.3 Assure that personnel required for evacuation of areas near the site are in position in case the situation becomes more serious.
 - 1.2.4 Provide consultation with offsite government agencies.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-001, Classification of Emergencies
- 2.3 EIP-2-016, Operations Support Center - Activation
- 2.4 EIP-2-013, Technical Support Center - Activation
- 2.5 EIP-2-020, Emergency Operations Facility - Activation
- 2.6 EIP-2-023, Joint Information Center Activation
- 2.7 EIP-2-006, Notifications
- 2.8 EIP-2-022, Alternate EOF - Activation and Transfer of Functions
- 2.9 EIP-2-026, Evacuation
- 2.10 EIP-2-027, Personnel Accountability
- 2.11 EIP-2-007, Protective Action Recommendation Guidelines
- 2.12 EIP-2-012, Radiation Exposure Controls
- 2.13 EIP-2-013, Onsite Radiological Monitoring
- 2.14 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.15 EIP-2-014, Offsite Radiological Monitoring
- 2.16 EIP-2-015, Post Accident Sampling Operations
- 2.17 COP-1050, Post Accident Estimation of Fuel Core Damage
- 2.18 EIP-2-003, Alert
- 2.19 EIP-2-002, Notification of Unusual Event
- 2.20 EIP-2-019, Technical Support Center - Support Functions
- 2.21 EIP-2-017, Operations Support Center - Support Functions
- 2.22 EIP-2-021, Emergency Operations Facility - Support Functions
- 2.23 EIP-2-028, Recovery
- 2.24 EIP-2-008, Search and Rescue
- 2.25 EIP-2-009, Medical Emergencies
- 2.26 EIP-2-010, Toxic Gas Emergencies
- 2.27 EIP-2-011, Fire Emergencies
- 2.28 EIP-2-024, Offsite Dose Calculations - Manual Method
- 2.29 EIP-2-029, Emergency Telephone Book

N/A

N/A

EIP-2-004

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3.0 GENERAL INFORMATION

- 3.1 A **SITE AREA EMERGENCY** classification is declared when events are in progress or have occurred which involve actual or probable major failure of plant functions needed for the protection of River Bend Station personnel and the general public.
- 3.2 There is a potential for radiological releases that may require the initiation of protective actions, including a Limited, Building, Protected Area or an Owner Controlled Area Evacuation. **The entire emergency organization will be activated.**
- 3.3 The Shift Supervisor shall assume the responsibilities of the Emergency Director until properly relieved by the designated Emergency Director (the Plant Manager or alternate) or until the emergency situation is terminated.
- 3.4 Upon being relieved of the responsibilities of the Emergency Director, the Shift Supervisor shall remain in the Main Control Room to supervise plant operations.
- 3.5 The emergency situation is classified in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2). The classification of an emergency will not always progress in an orderly manner from a **NOTIFICATION OF UNUSUAL EVENT** through **GENERAL EMERGENCY**. Procedures EIP-2-002, 003, 004, 005 can be used independently.
- 3.6 Ultimate responsibility for assessment of emergency conditions, classification of emergencies, performing the steps of this procedure, and for directing onsite protective and corrective actions rests with the Emergency Director.

NOTE

The judgment of the Emergency Director is essential for the proper control of the emergency and may take precedence over the guidelines in this procedure.

- 3.7 The Operations Support Center, Technical Support Center, Emergency Operations Facility, and the Joint Information Center will be activated for a **SITE AREA EMERGENCY** in accordance with (respectively) EIP-2-016, Operations Support Center - Activation (Ref. 2.3), EIP-2-018, Technical Support Center - Activation (Ref. 2.4), EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.5), and EIP-2-023, Joint Information Center Activation and Support Functions (Ref. 2.6).
- 3.8 When the Technical Support Center is fully operational, the responsibility for the direction and control of the onsite emergency response organization will be transferred to the Emergency Director in the Technical Support Center. The Technical Support Center staff will perform the functions of the Emergency Operations Facility staff until the Emergency Operations Facility is operational.

- 3.9 When the Emergency Operations Facility is fully operational, the responsibility for the direction and control of the offsite Emergency Response Organization, the notification of offsite government agencies, the offsite radiological and environmental assessments, the determination and recommendation of offsite protective actions, and the coordination of information provided to the general public through the Joint Information Center will be transferred to the Recovery Manager in the Emergency Operations Facility. The responsibility for the onsite emergency response will remain with the Emergency Director in the Technical Support Center.
- 3.10 If the primary Emergency Operations Facility in the River Bend Training Center becomes uninhabitable, implement EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.8).

4.0 PROCEDURE

NOTE

The steps in this procedure may be completed in any sequence. However, the following sequence is recommended. The Site Area Emergency Checklist in Attachment 1 shall be used by the Emergency Director to ensure that all steps of this procedure have been completed.

4.1 Initial Actions

- 4.1.1 Obtain Attachment 1 and complete the checklist as the following actions are performed.
- 4.1.2 Ensure that the actions of applicable Emergency Operating Procedures and the immediate actions of applicable Abnormal Operating Procedures have been initiated.
- 4.1.3 Inform inplant personnel of the emergency classification by announcing the location, type and classification of the emergency over the Plant Public Address System twice (repeat the announcement periodically) and direct the Security Shift Supervisor to inform onsite personnel outside the plant.
- 4.1.4 Direct a Protected Area Evacuation in accordance with EIP-2-026, Evacuation (Ref. 2.9) and personnel accountability in accordance with EIP-2-027, Personnel Accountability (Ref. 2.10).

NOTE

Determine if an Owner Controlled Area Evacuation is necessary.

- 4.1.5 Augment the onsite River Bend Station Emergency Response Organization by initiating the emergency pager system to activate the Operations Support Center, the Technical Support Center and the Emergency Operations Facility in accordance with EIP-2-006, Notifications (Ref. 2.7) for a **SITE AREA EMERGENCY**.

NOTE

Onshift personnel will be required to have multiple roles in the initial emergency response. If an individual has the responsibility for two functions which need to be performed simultaneously, the Emergency Director will determine which function will be accomplished first.

- 4.1.6 Promptly (within about 15 minutes) notify the Louisiana Nuclear Energy Division, the Louisiana Office of Emergency Preparedness, West Feliciana Parish, East Feliciana Parish, Pointe Coupee Parish, West Baton Rouge Parish, East Baton Rouge Parish, the Mississippi Highway Safety Patrol and (within one hour) the Nuclear Regulatory Commission in accordance with EIP-2-006, Notifications (Ref. 2.7).

NOTE

Initial notifications to the State of Mississippi is made to the Mississippi Highway Safety Patrol (MHSP). The MHSP notifies the Mississippi Emergency Management Agency (MEMA). Follow-up notifications will be provided to MEMA when MEMA responds to the emergency.

When the EOF is operational, the designated communicator in that facility shall relieve the TSC Communicator of offsite emergency notification responsibilities. One of the TSC Communicators shall remain in the TSC to facilitate communications between the TSC and the Control Room, between the TSC and OSC, and between the TSC and EOF. The other TSC Communicator shall proceed to the EOF and perform communications/notification responsibilities.

The Nuclear Regulatory Commission shall be notified as soon as possible and in all cases within one hour of the occurrence of any event requiring the initiation of the River Bend Station Emergency Plan.

- 4.1.7 If there is a potential for a release of radioactive materials or if there has been a release, implement the following Emergency Plan Implementing Procedures:
1. EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.11).
 2. EIP-2-012, Radiation Exposure Controls (Ref. 2.12).
 3. EIP-2-013, Onsite Radiological Monitoring (Ref. 2.13).

4. EIP-2-025, Offsite Dose Calculations - Computer Method (Ref. 2.14).

NOTE

If the radiation levels at the site boundary are 50 mr/hr or greater, implement EIP-2-014, Offsite Radiological Monitoring (Ref. 2.15).

4.1.8 Implement additional Emergency Plan Implementing Procedures as necessary to respond to the emergency situation using Attachment 2.

4.1.9 If there is an indication of a significant degradation of the reactor core, direct a Chemistry Technician to begin post accident sampling using EIP-2-015, Post Accident Sampling Operations (Ref. 2.16).

NOTE

Chemistry results of Reactor Coolant Activity analysis can be used to assess the extent of core damage using the information in COP-1050, Post Accident Estimation of Fuel Core Damage (Ref. 2.17).

Refer to EIP-2-001, Classification of Emergencies (Ref. 2.2) to ensure that the plant is in the proper emergency classification.

4.2 Subsequent Actions

4.2.1 Ensure that the subsequent actions of applicable Abnormal Operating Procedures have been initiated.

4.2.2 Document all pertinent emergency information not itemized on the checklist in Attachment 1 including all emergency response actions performed.

NOTE

The Emergency Director will initiate a log for the documentation of emergency information. The Shift Supervisor will utilize the Shift Supervisor log.

4.2.3 Continue to assess plant conditions.

4.2.4 Direct corrective actions as necessary to bring the emergency under control and to mitigate the consequences.

4.2.5 If significant changes in the emergency situation occur, verify that the emergency classification is correct or escalate the emergency classification in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2).

4.2.6 Continue to monitor the progress of emergency response personnel in controlling the emergency.

- 4.2.7 Periodically make follow-up status reports to all onsite personnel keeping them apprised of personnel hazards, plant line-ups, corrective actions and steps taken to control or mitigate the consequences of the emergency.

NOTE

Follow-up notifications to the State of Mississippi will be made to MEMA when MEMA responds to the emergency.

- 4.2.8 Make follow-up status reports to offsite government agencies and the Nuclear Regulatory Commission using the follow-up notification forms in Attachment 2 of EIP-2-006, Notifications (Ref. 2.7) any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant. (All available information itemized on the forms shall be provided).
- 4.2.9 Establish a long term relief rotation to ensure that personnel are not required to remain at their assigned positions for an excessive period of time.
- 4.2.10 The Emergency Director shall downgrade the emergency classification to:
1. An **ALERT**, if plant conditions no longer meet the Emergency Action Levels for a **SITE AREA EMERGENCY**. (Refer to EIP-2-003, **ALERT**, Ref. 2.18.)

OR

2. A **NOTIFICATION OF UNUSUAL EVENT**, if plant conditions no longer meet the Emergency Action Levels for an **ALERT** (Refer to EIP-2-002, **NOTIFICATION OF UNUSUAL EVENT**, Ref. 2.19.)

NOTE

Discuss the plant and emergency conditions with the Recovery Manager and determine with the Recovery Manager that the termination criteria have been met.

The Recovery Manager shall terminate the emergency if the following criteria are met:

1. The reactor is in cold shut down, is in a stable, safe configuration and adequate core cooling is available.
2. Releases of radioactivity to the environment have been terminated and no further potential for radioactivity releases exist.
3. Offsite concentrations of radioactivity in the atmosphere or in waterways have dispersed to near background levels.

4. Terminating the emergency will not impact any offsite protective actions which may be in progress.
5. The State of Louisiana, the local Parishes and the NRC concur in terminating the emergency.

4.2.11 When the emergency is terminated:

1. Provide a verbal summary of the emergency including the cause, a sequence of events, the protective and corrective actions performed, equipment damaged, the status of the plant, the amount of radioactivity released and the offsite areas of potential and actual contamination to offsite government agencies including the Nuclear Regulatory Commission.

NOTE

The Plant Manager shall ensure that a written summary covering all aspects of the emergency is provided to those agencies within 24 hours.

2. Deactivate the emergency response organization in the:
 - a. Technical Support Center in accordance with EIP-2-019, Technical Support Center - Support Functions (Ref. 2.20).
 - b. Operations Support Center in accordance with EIP-2-017, Operations Support Center - Support Functions (Ref. 2.21).

NOTE

The Recovery Manager shall deactivate the emergency response organization in the:

1. Emergency Operations Facility in accordance with EIP-2-021, Emergency Operations Facility - Support Functions (Ref. 2.22).
2. Alternate Emergency Operations Facility (if activated) in accordance with EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.8).
3. Joint Information Center in accordance with EIP-2-023, Joint Information Center Activation (Ref. 2.6).

The Recovery Manager will direct the establishment of the Recovery Organization and conduct recovery planning and operations from the Emergency Operations Facility in accordance with EIP-2-028, Recovery (Ref. 2.23). The Recovery Manager will determine the necessity for continuing Joint Information Center operations.

3. Inform the Recovery Manager when item 2 is complete.

END

N/A	N/A	EIP-2-004	REV. O	PAGE 9 OF 16
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NOTE

Place "N/A" in steps which are not applicable. The steps on this checklist can be performed in any sequence. However, the following sequence is recommended. The procedural step and page for the actions on this checklist are provided in parenthesis.

INITIAL ACTIONS

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Actions of applicable Emergency Operating Procedures initiated (4.1.2 on pg. 4).	_____	_____
2. Immediate actions of applicable Abnormal Operating Procedures initiated. (4.1.2 on pg. 4).	_____	_____
3. All onsite personnel informed of the SITE AREA EMERGENCY (4.1.3 on pg. 4).	_____	_____

NOTE

Announce location, type and classification of the emergency over the Plant Public Address System twice.

- | | | |
|---|-------|-------|
| 4. Protected Area Evacuation directed. (4.1.4 on pg. 4). | _____ | _____ |
| 5. Emergency Response Organization augmentation initiated (4.1.5 on pg. 5). | _____ | _____ |
| 6. Offsite government agencies notified in accordance with EIP-2-006, Notifications (4.1.6 on pg. 5): | | |
| * a. Louisiana Nuclear Energy Division | _____ | _____ |
| * b. Louisiana Office of Emergency Preparedness | _____ | _____ |
| * c. West Feliciana Parish | _____ | _____ |
| * d. East Feliciana Parish | _____ | _____ |
| * e. Pointe Coupee Parish | _____ | _____ |
| * f. West Baton Rouge Parish | _____ | _____ |
| * g. East Baton Rouge Parish | _____ | _____ |
| * h. Mississippi Highway Safety Patrol | _____ | _____ |
| ** i. Nuclear Regulatory Commission | _____ | _____ |
| * Notified within 15 minutes of the occurrence of the event causing the declaration of a SITE AREA EMERGENCY . | | |
| ** Notified within one hour of the occurrence of the event causing the declaration of a SITE AREA EMERGENCY . | | |

		ACTION COMPLETED	
		DATE/TIME	INITIALS
7.	Emergency Implementing Procedures implemented due to radioactive release or potential release (4.1.7 on pg. 5):		
a.	EIP-2-007, Protective Action Recommendation Guidelines	_____	_____
b.	EIP-2-012, Radiation Exposure Controls	_____	_____
c.	EIP-2-013, Onsite Radiological Monitoring	_____	_____
d.	EIP-2-014, Offsite Radiological Monitoring	_____	_____
e.	EIP-2-025, Offsite Dose Calculations - Computer Method	_____	_____
8.	Additional Emergency Plan Implementing Procedures implemented (4.1.8 on pg. 6):		
a.	EIP-2-029, Emergency Telephone Book	_____	_____
b.	EIP-2-008, Search and Rescue	_____	_____
c.	EIP-2-009, Medical Emergencies	_____	_____
d.	EIP-2-010, Toxic Gas Emergencies	_____	_____
	Toxic Gas: _____		
e.	EIP-2-011, Fire Emergencies	_____	_____
f.	EIP-2-024, Offsite Dose Calculations - Manual Method	_____	_____
g.	EIP-2-015, Post Accident Sampling Operations	_____	_____
h.	EIP-2-003, Alert	_____	_____
i.	EIP-2-002, Notification of Unusual Event	_____	_____
j.	EIP-2-028, Recovery	_____	_____
k.	EIP-2-018, Technical Support Center - Activation	_____	_____

	ACTION COMPLETED	
	DATE/TIME	INITIALS
1. EIP-2-019, Technical Support Center - Support Functions	_____	_____
9. Post Accident Sample directed (4.1.9 on pg. 6).	_____	_____

SUBSEQUENT ACTIONS

- | | | |
|---|-------|-------|
| 1. Subsequent actions of applicable Abnormal Operating Procedures initiated (4.2.1 on pg. 6). | _____ | _____ |
| 2. Emergency classification verified correct or reclassified (4.2.5 on pg. 6): | _____ | _____ |

(Circle One)

Verified:	Yes / No
Reclassified:	Yes / No

NOTE

Follow-up status reports to the State of Mississippi will be made to MEMA when MEMA responds to the emergency. Follow-up status reports should be made any time significant changes in emergency conditions occur and at least every 30 minutes.

- | | | |
|---|-------|-------|
| 3. Follow-up status reports made: | | |
| a. Onsite personnel (4.2.7 on pg. 7) | _____ | _____ |
| b. Offsite government agencies (4.2.8 on pg. 8) | _____ | _____ |
| c. Nuclear Regulatory Commission (4.2.8 on pg. 8) | _____ | _____ |
| 4. Long term relief organization established. (4.2.9 on pg. 7) | _____ | _____ |
| 5. Emergency classification downgraded to an (circle one) ALERT/NOTIFICATION OF UNUSUAL EVENT . (4.2.10.1 on pg. 7). | _____ | _____ |
| 6. Emergency terminated. (4.2.10.1 on pg. 7). | _____ | _____ |
| 7. Verbal closeout summaries completed: (4.2.11 on pg. 8): | | |
| a. Offsite government agencies | _____ | _____ |
| b. Nuclear Regulatory Commission | _____ | _____ |

	ACTION COMPLETED	
	DATE/TIME	INITIALS
8. Pertinent emergency information including emergency response actions performed is documented (4.2.2 on pg. 6).	_____	_____
9. Emergency response organization deactivated		
a. Technical Support Center	_____	_____
b. Operations Support Center	_____	_____
10. Inform the Recovery Manager when item 9 is complete (4.2.11.3 on pg. 9).	_____	_____

NOTE

When completed to this point, provide this checklist to the Plant Manager for use in the development of the written summary of the emergency for offsite government agencies and the Nuclear Regulatory Commission.

11. Written closeout summary completed (within 24 hours):

a. Louisiana Nuclear Energy Division	_____	_____
b. Louisiana Office of Emergency Preparedness	_____	_____
c. West Feliciana Parish	_____	_____
d. East Feliciana Parish	_____	_____
e. Pointe Coupee Parish	_____	_____
f. West Baton Rouge Parish	_____	_____
g. East Baton Rouge Parish	_____	_____
h. Mississippi Emergency Management Agency	_____	_____
i. Nuclear Regulatory Commission	_____	_____

Responsibility/EIP Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-004	EIP-2-005	EIP-2-006	EIP-2-008	EIP-2-009	EIP-2-010	EIP-2-011	EIP-2-026	EIP-2-027
1. Classify emergencies	4.1.2 (Att 1,4)											
2. Inform incident personnel of the emergency and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.1.3.3	4.1.3.4	4.1.3.4								
3. Direct an evacuation of personnel from those areas with actual or potential personnel hazards (EIP-2-026)		4.1.4.3	4.1.4.4								4.1.1.4 4.2.1.6 (Att 1,15)	4.1.1.2 (Att 1,6)
4. Direct a Protected Area Evacuation (EIP-2-028)				4.1.4.4							4.2.1.3 (Att 2,7)	4.2.1.3
5. Implement EIP-2-027, Personnel Accountability				4.1.4.4								4.1.1.2 4.2.1.3
6. Augment the RDS Emergency Response Organization			4.1.5.4	4.1.5.5	4.1.3 (Att 3,12)							
7. Initial notifications of offsite government agencies and the NRC		4.1.6.4	4.1.6.4	4.1.6.5	4.1.4.3 (Att 1,5)							
8. If personnel are known to be missing or found to be missing during an accountability check implement EIP-2-008, Search and Rescue		4.1.7.4	4.1.7.5	4.1.8.6			4.1.2 (Att 1,7) *(4,2,3)					
9. If personnel are injured in the Radiological Controls Area or injured and contaminated, implement EIP-2-009, Medical Emergencies		4.1.7.4	4.1.7.5	4.1.8.6			4.1.2 (Att 1,8) (Att 2,9)					
10. If toxic or other hazardous gases are released onsite or near the site, implement EIP-2-010, Toxic Gas Emergencies		4.1.7.4	4.1.7.5	4.1.8.6				4.2.3 (Att 2,10)				
11. If a fire is reported or detected and confirmed in the plant, implement EIP-2-011, Fire Emergencies		4.1.7.4	4.1.7.5	4.1.8.6						4.1.2 (Att 1,5) (Att 2,6)		

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-004	EIP-2-006	EIP-2-007	EIP-2-012	EIP-2-013	EIP-2-014	EIP-2-015
12. If there has been a radioactive release or there is a potential for a release, implement: EIP-2-025, Offsite Dose Calculations - Computer Method				4.1.7.4,6						
13. EIP-2-007, Protective Action Recommendation Guidelines				4.1.7.1,5		*4.1,4 *4.2,5 4.3,5				
14. EIP-2-012, Radiation Exposure Controls				4.1.7.2,5			4.1,3 *4.2,4			
15. EIP-2-013, Onsite Radiological Monitoring			4.1.8,5	4.1.7.3,5				4.1,2		
16. If there has been a radioactive release, implement EIP-2-014, Offsite Radiological Monitoring				4.1.7.4, Note, 5				4.1,2		
17. If there is an indication of core degradation, implement EIP-2-015, Post Accident Sampling Operations				4.1.8,6						4.1,2
18. Document all pertinent emergency information not itemized on Attachment 1		4.2.7,6	4.2.5,5	4.2.2,6						
19. Direct corrective actions as necessary to control the emergency and to mitigate the consequences		4.2.4,5	4.2.4,5	4.2.4,6						
20. Verify emergency classification is correct or escalate the emergency classification	4.1.4,3 (Att 1,4)	4.2.7,5	4.2.5,5	4.2.5,6						
21. Continue to monitor the progress of emergency response personnel		4.2.8,5	4.2.6,5	4.2.5,6						
22. Perform followup status reports to implant personnel and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.2.9,5	4.2.7,5	4.2.7,7						
23. Perform followup status reports to offsite government agencies and the NRC		4.2.10,5	4.2.8,6	4.2.8,7	4.1.5,3 (Att 2,7)					
24. Establish a long-term relief rotation, if necessary		4.2.11,6	4.2.9,6	4.2.9,7						

Responsibility/EIP (Section, Page No.)	EIP-2-002	EIP-2-003	EIP-2-004
25. Downgrade emergency		4.2.10.1,6	4.2.10.1,7
26. Terminate emergency	4.2.1.2,6	4.2.10.2,6	
27. Provide a verbal summary of the emergency to offsite government agencies and the NRC	4.2.13.3	4.2.11.1,6	4.2.11.1,8
28. Deactivate the Emergency Response Organization in the TSC and OSC		4.2.11.2,6	4.2.11.2,8
29. Initiate recovery actions as necessary	4.2.14,6	4.2.12,7	
30. Inform the Recovery Manager when the Emergency Response Organization is deactivated			4.2.11.3,9

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-005

PROCEDURE TITLE: GENERAL EMERGENCY

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-16		<i>K. J. Sullivan</i> 10/2/84	
			FOR INFORMATION ONLY	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

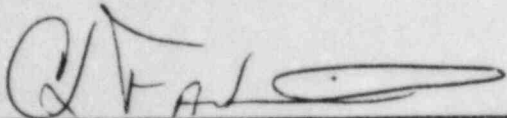
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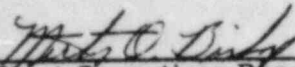
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EMERGENCY PLANNING COMMITTEE REVIEW:

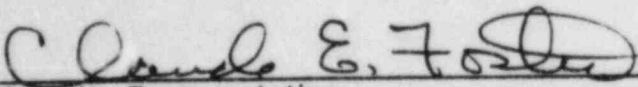
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Radiation Protection/Chemistry Representative

9-24-84


Plant Operations Representative

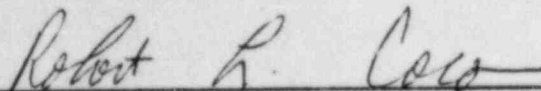
9-24-84


Security Representative

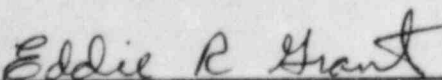
9/24/84


Training Representative

9/24/84


Technical Staff Representative

9/24/84

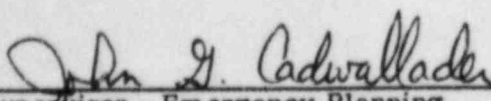

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

GENERAL EMERGENCY

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1.0 PURPOSE

- 1.1 This procedure describes the actions to be taken when an emergency condition has been classified as a **GENERAL EMERGENCY**.
- 1.2 The purpose of the offsite notifications required by this procedure are to:
 - 1.2.1 Initiate predetermined protective actions for the public.
 - 1.2.2 Provide continuous assessment of information from Gulf States Utilities Company and offsite organization measurements.
 - 1.2.3 Initiate additional measures as indicated by actual or potential releases.
 - 1.2.4 Provide consultation with offsite government agencies.
 - 1.2.5 Provide updates for the public through offsite government agencies.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-001, Classification of Emergencies
- 2.3 EIP-2-016, Operations Support Center - Activation
- 2.4 EIP-2-018, Technical Support Center - Activation
- 2.5 EIP-2-020, Emergency Operations Facility - Activation
- 2.6 EIP-2-023, Joint Information Center Activation
- 2.7 EIP-2-022, Alternate EOF - Activation and Transfer of Functions
- 2.8 EIP-2-026, Evacuation
- 2.9 EIP-2-027, Personnel Accountability
- 2.10 EIP-2-006, Notifications
- 2.11 EIP-2-007, Protective Action Recommendation Guidelines
- 2.12 EIP-2-012, Radiation Exposure Controls
- 2.13 EIP-2-013, Onsite Radiological Monitoring
- 2.14 EIP-2-014, Offsite Radiological Monitoring
- 2.15 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.16 EIP-2-015, Post Accident Sampling Operations
- 2.17 COP-1050, Post Accident Estimation of Fuel Core Damage
- 2.18 EIP-2-004, Site Area Emergency
- 2.19 EIP-2-003, Alert
- 2.20 EIP-2-002, Notification of Unusual Event
- 2.21 EIP-2-019, Technical Support Center - Support Functions
- 2.22 EIP-2-017, Operations Support Center - Support Functions
- 2.23 EIP-2-021, Emergency Operations Facility - Support Functions
- 2.24 EIP-2-028, Recovery
- 2.25 EIP-2-008, Search and Rescue
- 2.26 EIP-2-009, Medical Emergencies
- 2.27 EIP-2-010, Toxic Gas Emergencies
- 2.28 EIP-2-011, Fire Emergencies
- 2.29 EIP-2-024, Offsite Dose Calculations - Manual Method

- 2.30 EIP-2-029, Emergency Telephone Book
- 2.31 EIP-2-027, Personnel Accountability

3.0 GENERAL INFORMATION

- 3.1 A **GENERAL EMERGENCY** classification indicates that events are in progress or have occurred which involve actual or imminent substantial core degradation/melting with a potential for the loss of containment integrity. This emergency involves the potential for radiological releases which are likely to result in doses that exceed the EPA Protective Action Guidelines for plume and ingestion exposures.
- 3.2 Offsite radiological monitoring personnel will be dispatched.
- 3.3 The Recovery Manager, or the EOF Manager will update Federal, State, and local officials periodically on the station status, radiological releases, meteorological information, radiological dose projections, and affected downwind areas.
- 3.4 The Shift Supervisor shall assume the responsibilities of the Emergency Director until properly relieved by the designated Emergency Director (the Plant Manager or alternate) or until the emergency situation is terminated.
- 3.5 Upon being relieved of the responsibilities of the Emergency Director, the Shift Supervisor shall remain in the Main Control Room to supervise plant operations.
- 3.6 The emergency situation is classified in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2). The classification of an emergency will not always progress in an orderly manner from a **NOTIFICATION OF UNUSUAL EVENT** through **GENERAL EMERGENCY**. Procedures EIP-2-002, 003, 004, 005 can be used independently.
- 3.7 Ultimate responsibility for assessment of emergency conditions, classification of emergencies, performing the steps of this procedure, and for directing onsite protective and corrective actions rests with the Emergency Director.

NOTE

The judgment of the Emergency Director is essential for the proper control of the emergency and may take precedence over the guidelines in this procedure.

- 3.8 The entire Emergency Response Organization including the Technical Support Center, the Operations Support Center, the Emergency Operations Facility, and the Joint Information Center will be activated in accordance with (respectively) EIP-2-016, Operations Support Center - Activation (Ref. 2.3), EIP-2-018, Technical Support Center - Activation (Ref. 2.4), EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.5), and EIP-2-023, Joint Information Center Activation (Ref. 2.6) for a **GENERAL EMERGENCY**.

N/A	N/A	EIP-2-005	REV. O	PAGE 3 OF 16
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- 3.9 When the Technical Support Center is operational, the responsibility for the direction and control of the Emergency Response Organization will be transferred to the Emergency Director in the Technical Support Center. The Technical Support Center staff will perform the functions of the Emergency Operations Facility until that facility is operational.
- 3.10 When the Emergency Operations Facility is operational, the responsibility for the direction and control of the offsite Emergency Response Organization, the notification of offsite government agencies, the offsite radiological and environmental assessments, the determination and recommendation of offsite protective actions and the coordination of information provided to the general public through the Joint Information Center will be transferred to the Emergency Operations Facility Staff.
- 3.11 If the primary Emergency Operations Facility in the River Bend Training Center is inaccessible or uninhabitable, implement EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.7).

4.0 PROCEDURE

NOTE

The steps in this procedure may be completed in any sequence. However, the following sequence is recommended. The General Emergency Checklist in Attachment 1 shall be used by the Emergency Director to ensure that all steps of this procedure have been completed.

4.1 Initial Actions

- 4.1.1 Obtain Attachment 1 and complete the checklist as the following actions are performed.
- 4.1.2 Ensure that the actions of applicable Emergency Operating Procedures and the immediate actions of applicable Abnormal Operating Procedures have been initiated.
- 4.1.3 Inform inplant personnel, of the emergency classification by announcing the location, type and classification of the emergency over the Plant Public Address System twice (Repeat the announcement periodically) and direct the Security Shift Supervisor to inform onsite personnel outside the plant.
- 4.1.4 Direct an Owner Controlled Area Evacuation in accordance with EIP-2-026, Evacuation (Ref. 2.8) and personnel accountability of the protected area in accordance with EIP-2-027, Personnel Accountability (Ref. 2.9).
- 4.1.5 Augment the onsite River Bend Station Emergency Response Organization by initiating the emergency pager system to activate the Operations Support Center, the Technical Support Center and the

Emergency Operations Facility in accordance with EIP-2-006, Notifications (Ref. 2.10) for a **GENERAL EMERGENCY**.

NOTE

Onshift personnel will be required to have multiple roles in the initial emergency response until augmented by the Emergency Response Organization. If one individual has the responsibility for two functions which need to be performed simultaneously, the Emergency Director will determine which function will be accomplished first.

If the primary Emergency Operations Facility is inaccessible or uninhabitable, implement EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.6).

- 4.1.6 When a **GENERAL EMERGENCY** is declared, the following offsite protective actions shall be recommended immediately unless other, more extensive, protective actions have already been recommended.

1. Shelter to the 2 miles radius around the station.
2. Shelter to 5 miles radius in the downwind and adjacent sectors,

- 4.1.7 Promptly (within 15 minutes) notify the Louisiana Nuclear Energy Division, the Louisiana Office of Emergency Preparedness, West Feliciana Parish, East Feliciana Parish, Pointe Coupee Parish, West Baton Rouge Parish, East Baton Rouge Parish, the Mississippi Highway Safety Patrol and (within one hour) the Nuclear Regulatory Commission in accordance with EIP-2-006, Notifications (Ref. 2.10).

NOTE

Initial notification to the State of Mississippi is made to the Mississippi Highway Safety Patrol (MHSP). The MHSP notifies the Mississippi Emergency Management Agency (MEMA). Follow-up notifications will be provided to MEMA when MEMA responds to the emergency.

When the EOF is operational, the designated communicator in that facility shall relieve the TSC Communicator of offsite emergency notification responsibilities. One of the TSC Communicators shall remain in the TSC to facilitate communications between the TSC and the Control Room, between the TSC and OSC, and between the TSC and EOF. The other TSC Communicator shall proceed to the EOF and perform communications/notification responsibilities.

The Nuclear Regulatory Commission shall be notified as soon as possible and in all cases within one hour of the occurrence of any event requiring the initiation of the River Bend Station Emergency Plan.

- 4.1.8 If there is a potential for a release of radioactive materials or if there has been a release, implement the following Emergency Implementing Procedures:

1. EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.11).
2. EIP-2-012, Radiation Exposure Controls (Ref. 2.12).
3. EIP-2-013, Onsite Radiological Monitoring (Ref. 2.13).
4. EIP-2-014, Offsite Radiological Monitoring (Ref. 2.14).

NOTE

If priorities are established by the Emergency Director for initial emergency response actions before the Emergency Response Organization is augmented, EIP-2-014 will be implemented when site boundary radiation levels reach 50 mR/hr or greater.

5. EIP-2-025, Offsite Dose Calculations - Computer Method (Ref. 2.15).
- 4.1.9 Implement additional Emergency Implementing Procedures as necessary to respond to the emergency situation using Attachment 2.
- 4.1.10 If there is an indication of a significant degradation of the reactor core, direct a Chemistry Technician to begin post accident sampling using EIP-2-015, Post Accident Sampling Operations (Ref. 2.16).

NOTE

Chemistry results of Reactor Coolant Activity can be used to assess the extent of core damage using the information in COP-1050, Post Accident Estimation of Fuel Core Damage (Ref. 2.17).

Refer to EIP-2-001, Classification of Emergencies (Ref. 2.2) to ensure that the plant is in the proper emergency classification.

4.2 Subsequent Actions

- 4.2.1 Ensure that the subsequent actions of applicable Abnormal Operating Procedures have been initiated.
- 4.2.2 Document all pertinent emergency information not itemized on the checklist in Attachment 1 including emergency response actions taken.

NOTE

The Emergency Director will initiate a log for the documentation of emergency information. The Shift Supervisor will utilize the Shift Supervisor log.

- 4.2.3 Continue to assess plant conditions.
- 4.2.4 Direct corrective actions as necessary to bring the emergency under control and to mitigate the consequences.
- 4.2.5 If significant changes in the emergency situation occur, verify that the emergency classification is correct or escalate the emergency classification in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.2).
- 4.2.6 Continue to monitor the progress of emergency response personnel in controlling the emergency.
- 4.2.7 Periodically make follow-up status reports to all onsite personnel keeping them apprised of personnel hazards, plant line-ups, corrective actions and steps taken to control or mitigate the consequences of the emergency.

NOTE

Follow-up notifications/communications to the State of Mississippi will be made to MEMA after it is activated.

- 4.2.8 Make follow-up status reports to offsite government agencies and the Nuclear Regulatory Commission using the follow-up notification forms in Attachment 2 of EIP-2-006, Notifications (Ref. 2.10) any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant. (All available information itemized on the forms shall be provided.)
- 4.2.9 Establish a long term relief rotation to ensure that personnel are not required to remain at their assigned positions for an excessive period of time.
- 4.2.10 The Emergency Director shall Downgrade the emergency classification to:
 - 1. **A SITE AREA EMERGENCY**, if plant conditions no longer meet the Emergency Action Levels for a **GENERAL EMERGENCY**. (Refer to EIP-2-004, **SITE AREA EMERGENCY**, Ref. 2.18)

2. An **ALERT**, if plant conditions no longer meet the Emergency Action Levels for a **SITE AREA EMERGENCY**. (Refer to EIP-2-003, **ALERT**, Ref. 2.19).
3. A **NOTIFICATION OF UNUSUAL EVENT**, if plant conditions no longer meet the Emergency Action Levels for an **ALERT** (Refer to EIP-2-002, **NOTIFICATION OF UNUSUAL EVENT**, Ref. 2.20).

NOTE

The Emergency Director shall discuss the plant and emergency conditions with the Recovery Manager and determine with the Recovery Manager that the termination criteria have been met.

The Recovery Manager shall Terminate the emergency if the following criteria are met:

- a. The reactor is in cold shut down, is in a stable, safe configuration and adequate core cooling is available.
- b. Releases of radioactivity to the environment have been terminated and no further potential for radioactivity releases exist.
- c. Offsite concentrations of radioactivity in the atmosphere or in waterways have dispersed to near background levels.
- d. Terminating the emergency will not impact any offsite protective actions which may be in progress.
- e. The State of Louisiana, the local Parishes and the NRC concur in terminating the emergency.

4.2.11 When the emergency is terminated:

1. Provide a verbal summary of the emergency including the cause, a sequence of events, the protective and corrective actions performed, equipment damaged, the status of the plant, the amount of radioactivity released and the areas of potential and actual contamination to offsite government agencies including the Nuclear Regulatory Commission.

NOTE

The Plant Manager shall ensure that a written summary covering all aspects of the emergency is provided to those agencies within 24 hours.

2. Deactivate the emergency response organization in the:
 - a. Technical Support Center in accordance with EIP-2-019, Technical Support Center - Support Functions (Ref. 2.21).

N/A	N/A	EIP-2-005	REV. O	PAGE 8 OF 16
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- b. Operations Support Center in accordance with EIP-2-017, Operations Support Center - Support Functions (Ref. 2.22).

NOTE

The Recovery Manager shall deactivate the emergency response organization in the:

1. Emergency Operations Facility in accordance with EIP-2-021, Emergency Operations Facility - Support Functions (Ref. 2.23).
2. Alternate Emergency Operation Facility (if activated) in accordance with EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.7).
3. Joint Information Center in accordance with EIP-2-023, Joint Information Center Activation (Ref. 2.6).

The Recovery Manager will direct the establishment of the Recovery Organization and Conduct recovery planning and operations from the Emergency Operations Facility in accordance with EIP-2-028, Recovery (Ref. 2.24). The Recovery Manager will also determine the necessity for continuing Joint Information Center operations.

3. Inform the Recovery Manager when item 2 is complete.

END

NOTE

Place "N/A" in steps which are not applicable. The steps on this checklist can be performed in any sequence. However, the following sequence is recommended. The procedural step and page for the actions on this checklist are provided in parenthesis.

INITIAL ACTIONS

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Actions of applicable emergency operating procedures initiated. (4.1.2 on pg. 4)	_____	_____
2. Immediate actions of applicable Abnormal Operating Procedures initiated. (4.1.2 on pg. 4)	_____	_____
3. Inplant personnel informed of the GENERAL EMERGENCY . (4.1.3 on pg. 4)	_____	_____

NOTE

Announce location, type and classification of the emergency over the Plant Public Address System twice.

4. Owner Controlled Area Evacuation directed. (4.1.4 on pg. 4).	_____	_____
5. Emergency Response Organization augmentation initiated. (4.1.5 on pg. 4)	_____	_____
6. Mandatory offsite protective actions for a GENERAL EMERGENCY implemented. (4.1.6 on pg. 5)	_____	_____
7. Offsite government agencies notified in accordance with EIP-2-006, Notifications (4.1.7 on pg. 5):		
* a. Louisiana Nuclear Energy Division	_____	_____
* b. Louisiana Office of Emergency Preparedness	_____	_____
* c. West Feliciana Parish	_____	_____
* d. East Feliciana Parish	_____	_____
* e. Pointe Coupee Parish	_____	_____
* f. West Baton Rouge Parish	_____	_____
* g. East Baton Rouge Parish	_____	_____
* h. Mississippi Highway Safety Patrol	_____	_____
** i. Nuclear Regulatory Commission	_____	_____

* Notified within 15 minutes of the occurrence of the event causing the declaration of a **GENERAL EMERGENCY**.

** Notified within one hour of the occurrence of the event causing the declaration of a **GENERAL EMERGENCY**.

		ACTION COMPLETED	
		DATE/TIME	INITIALS
8.	Emergency Implementing Procedures implemented due to radioactive release or potential release (4.1.8 on pg. 5)		
a.	EIP-2-007, Protective Action Recommendation Guidelines	_____	_____
b.	EIP-2-012, Radiation Exposure Controls	_____	_____
c.	EIP-2-013, Onsite Radiological Monitoring	_____	_____
d.	EIP-2-014, Offsite Radiological Monitoring	_____	_____
e.	EIP-2-025, Offsite Dose Calculations - Computer Method	_____	_____
9.	Additional Emergency Plan Implementing Procedures implemented (4.1.9 on pg. 6)		
a.	EIP-2-029, Emergency Telephone Book	_____	_____
b.	EIP-2-008, Search and Rescue	_____	_____
c.	EIP-2-009, Medical Emergencies	_____	_____
d.	EIP-2-010, Toxic Gas Emergencies Toxic Gas: _____	_____	_____
e.	EIP-2-011, Fire Emergencies	_____	_____
f.	EIP-2-024, Offsite Dose Calculations - Manual Method	_____	_____
g.	EIP-2-015, Post Accident Sampling Operations	_____	_____
h.	EIP-2-004, Site Area Emergency	_____	_____
i.	EIP-2-003, Alert	_____	_____
j.	EIP-2-002, Notification of Unusual Event	_____	_____
k.	EIP-2-028, Recovery	_____	_____

	ACTION COMPLETED	
	DATE/TIME	INITIALS
l. EIP-2-018, Technical Support Center - Activation	_____	_____
m. EIP-2-019, Technical Support Center - Support Functions	_____	_____
10. Post Accident Sample directed. (4.1.10 on pg. 6)	_____	_____

SUBSEQUENT ACTIONS

- | | | |
|---|-------|-------|
| 1. Subsequent actions of applicable Abnormal Operating Procedures initiated. (4.2.1 on pg. 6) | _____ | _____ |
| 2. Emergency classification verified correct or reclassified (4.2.5 on pg. 7): | _____ | _____ |

(Circle One)

Verified: Yes / No
Reclassified: Yes / No

NOTE

Follow-up notifications/communications to the State of Mississippi will be made to MEMA when MEMA responds to the emergency. Followup status reports should be made any time significant changes in emergency conditions occur and at least every 30 minutes when conditions remain constant.

3. Follow-up reports made:
- | | | |
|---|-------|-------|
| a. Onsite personnel (4.2.7 on pg. 7) | _____ | _____ |
| b. Offsite government agencies (4.2.8 on pg. 7) | _____ | _____ |
| c. Nuclear Regulatory Commission (4.2.8 on pg. 7) | _____ | _____ |
4. Long term relief organization established. (4.2.9 on pg. 7)
- | | |
|-------|-------|
| _____ | _____ |
|-------|-------|
5. Emergency classification downgraded to a(n): (4.2.10 on pg. 7)
- | | |
|-------|-------|
| _____ | _____ |
|-------|-------|

(Circle One)

- | | |
|----------------------------------|----------|
| a. SITE AREA EMERGENCY | Yes / No |
| b. ALERT | Yes / No |
| c. NOTIFICATION OF UNUSUAL EVENT | Yes / No |

	ACTION COMPLETED	
	DATE/TIME	INITIALS
6. Emergency terminated. (4.2.10.1 NOTE on pg. 8)	_____	_____
7. Verbal closeout summaries completed (4.2.11.1 on pg. 8)		
a. Offsite government agencies	_____	_____
b. Nuclear Regulatory Commission	_____	_____
8. Pertinent emergency information not itemized on this checklist, including emergency response actions performed, is documented. (4.2.2 on pg. 6)	_____	_____
9. Emergency Response Organization deactivated in the (4.2.11.2 on pg. 8)	_____	_____
a. Technical Support Center	_____	_____
b. Operations Support Center	_____	_____
10. Inform the Recovery Manager when item 9 is complete (4.2.11.3 on pg. 8)		

NOTE

When completed to this point, provide this checklist to the Plant Manager for use in the development of the written summary of the emergency for offsite government agencies and the Nuclear Regulatory Commission.

11. Written closeout summary completed (within 24 hours):		
a. Louisiana Nuclear Energy Division	_____	_____
b. Louisiana Office of Emergency Preparedness	_____	_____
c. West Feliciana Parish	_____	_____
d. East Feliciana Parish	_____	_____
e. Pointe Coupee Parish	_____	_____
f. West Baton Rouge Parish	_____	_____
g. East Baton Rouge Parish	_____	_____
h. Mississippi Emergency Management Agency	_____	_____
i. Nuclear Regulatory Commission	_____	_____

EMERGENCY DIRECTOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-004	EIP-2-005	EIP-2-006	EIP-2-008	EIP-2-009	EIP-2-010	EIP-2-011	EIP-2-026	EIP-2-027
1. Classify emergencies	4.1.2 (Att 1)											
2. Inform Incident personnel of the emergency and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.1.3.3	4.1.3.4	4.1.3.4	4.1.3.4	4.1.3.4					4.1.1.4 4.2.1.6 (Att 1,15)	4.1.1.2 (Att 1,6)
3. Direct an evacuation of personnel from those areas with actual or potential personnel hazards (EIP-2-026)		4.1.4.3	4.1.4.4								4.3.1.7	4.2.1.3 (Att 2,7)
4. Direct a Protected Area Evacuation (EIP-2-026)				4.1.4.4								4.2.1.3 (Att 2,7)
5. Direct an Owner Controlled Area Evacuation					4.1.4.4						4.4.1.11	4.2.1.3 (Att 2,7)
6. Implement EIP-2-027, Personnel Accountability				4.1.4.4	4.1.4.4							4.1.1.2 (Att 1,6) 4.2.1.3 (Att 2,7)
7. Notify the Plant Manager of the emergency and direct the Communicator to notify the Emergency Communications Representative		4.1.5.4				4.1.3 (Att 3,13)						
8. Augment the RBS Emergency Response Organization			4.1.5.4	4.1.5.5	4.1.5.4	4.1.3 (Att 3,13)						
9. If a General Emergency is declared, recommend offsite protective actions					4.1.6.5							
10. Initial notifications of offsite government agencies and the NRC		4.1.6.4	4.1.6.4	4.1.6.5	4.1.7.5	4.1.4.3 (Att 1,5)						
11. If person(s) are known to be missing or found to be missing during an accountability check implement EIP-2-009, Search and Rescue		4.1.7.4	4.1.7.5	4.1.8.6	4.1.8.6		4.1.2 (Att 1,7) *(4.2.3)					
12. If person(s) are injured in the Radiological Controls Area or injured and contaminated, implement EIP-2-009, Medical Emergencies		4.1.7.4	4.1.7.5	4.1.8.6	4.1.8.6		**4.2.3 (Att 1,8) (Att 2,2)					
13. If toxic or other hazardous gases are released onsite or near the site, implement EIP-2-010, Toxic Gas Emergencies		4.1.7.4	4.1.7.5	4.1.8.6	4.1.8.6				4.2.3 (Att 2,10)			
14. If a fire is reported or detected and confirmed in the plant, implement EIP-2-011, Fire Emergencies		4.1.7.4	4.1.7.5	4.1.8.6	4.1.8.6					4.1.2 (Att 1,5) (Att 2,6)		

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-002	EIP-2-003	EIP-2-004	EIP-2-005	EIP-2-007	EIP-2-012	EIP-2-013	EIP-2-015	EIP-2-025
15. If there has been a radioactive release, direct a Chemistry Technician to determine if technical specifications have been exceeded		4.1.8.4	4.1.8.5							
16. If there has been a radioactive release or there is a potential for a release, implement:										
a. EIP-2-007, Protective Action Recommendation Guidelines				4.1.7.1,5	4.1.8.1,5	*4.1.4 *4.2.5 4.3.5	4.1.3 *4.2.4			
b. EIP-2-012, Radiation Exposure Controls				4.1.7.2,5	4.1.8.2,6			4.1.2		
c. Activate Onsite Radiological Monitoring Personnel			4.1.8.5	4.1.7.3,5	4.1.8.3,6					
17. If there has been a radioactive release or there is a potential for a release, ensure the implementation of EIP-2-025, Offsite Dose Calculations - Computer Method				4.1.7.4,6	4.1.8.5,6					*4.1.3
18. Implement EIP-2-014, Offsite Radiological Monitoring				4.1.7.4,6 Note, 5	4.1.8.4,6					
19. If there is an indication of core degradation, implement EIP-2-015, Post Accident Sampling Operations				4.1.9,6	4.1.10,6				4.1.2	
20. Document all pertinent emergency information not itemized on Attachment 1		4.2.2.4	4.2.2.5	4.2.2.6	4.2.2.8					
21. Direct corrective actions as necessary to control the emergency and to mitigate the consequences		4.2.4.5	4.2.4.5	4.2.4.6	4.2.4.6					
22. Direct the Shift Clerk to call in OSC personnel to supplement the emergency response organization as necessary		4.2.5.5 4.2.6.5			4.1.3,3					
23. Verify emergency classification is correct or escalate the emergency classification	4.1.4.3 (All 1,4)	4.2.7.5	4.2.5.5	4.2.5.6	1.1.5,7					
24. Continue to monitor the progress of emergency response personnel		4.2.8.5	4.2.6.5	4.2.6.6	4.2.6.7					
25. Perform followup status reports to implant personnel and direct the Security Shift Supervisor to ensure that all other onsite personnel are informed		4.2.9.5	4.2.7.5	4.2.7.7	4.2.7.7					

Responsibility/EIP (Section, Page No.)	EIP-2-002	EIP-2-003	EIP-2-004	EIP-2-005	EIP-2-006
26. Perform followup status reports to offsite government agencies and the NRC	4.2.10, 6	4.2.8,6	4.2.8,7	4.2.8,7	4.1.5,3 (Att 2,7)
27. Establish a long-term relief rotation, if necessary	4.2.11,6	4.2.9,6	4.2.9,7	4.2.9,7	
28. Downgrade emergency		4.2.10.1,6	4.2.10.1,7	4.2.10.1,7	
29. Terminate emergency	4.2.12,6	4.2.10.2,6	4.2.10.2,7	4.2.10.2,8	
30. Provide a verbal summary of the emergency to offsite government agencies and the NRC	4.2.13,6	4.2.11.1,6	4.2.11.1,8	4.2.11.1,8	
31. Deactivate the Emergency Response Organization in the TSC and OSC		4.2.11.2,6	4.2.11.2,8	4.2.11.2,8	
32. Initiate recovery actions as necessary	4.2.14,6	4.2.12,7			
33. Inform the Recovery Manager when the Emergency Response Organization is deactivated			4.2.11.3,9	4.2.11.3,9	

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE TITLE: NOTIFICATIONS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes
☒ No

[illegible]

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES


TITLE: NOTIFICATIONS

PROCEDURE NO. EIP-2-006

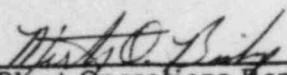
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EMERGENCY PLANNING COMMITTEE REVIEW:

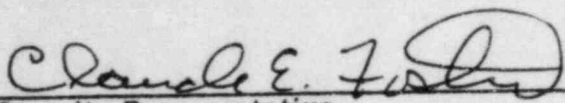
DATE


Radiation Protection/Chemistry Representative

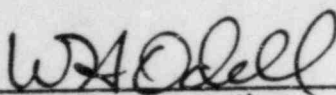
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Plant Operations Representative

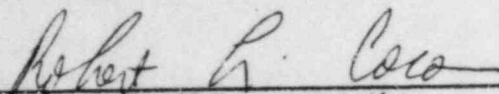
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Security Representative


9/24/84


Training Representative

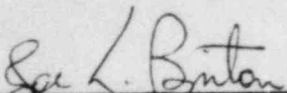
9/24/84


Technical Staff Representative

9/24/84


Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

(LATERS)

PROCEDURE NO.: EIP-2-006 TITLE: NOTIFICATIONS

PROCEDURE NO.: EIP-2-006 TITLE: NOTIFICATIONS

REVISION NO.: 0

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION (Section/Step)	PAGE NO.	BRIEF DESCRIPTION
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LATER LOCATION (Section/Step)	PAGE NO.	BRIEF DESCRIPTION
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LATER LOCATION (Section/Step)	PAGE NO.	BRIEF DESCRIPTION
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ATTACHMENT 3	ALL SECTIONS	TELEPHONE NUMBERS
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ATTACHMENT 3	ALL SECTIONS	TELEPHONE NUMBERS
--------------	--------------	-------------------

ATTACHMENT 3	ALL SECTIONS	TELEPHONE NUMBERS
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ATTACHMENT 3	NOTE	VERIFICATION METHOD
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ATTACHMENT 3	NOTE	VERIFICATION METHOD
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ATTACHMENT 3	NOTE	VERIFICATION METHOD
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NOTICE

Attachment 3 to this procedure contains proprietary information which shall not be distributed outside the Gulf States Utilities Organization.

NOTIFICATIONS

TABLE OF CONTENTS

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1.0 PURPOSE

This procedure provides instructions for notifying offsite agencies in the event of an emergency and instructions for activating the River Bend Station Emergency Response Organization.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-002, Notification of Unusual Event
- 2.3 EIP-2-003, Alert
- 2.4 EIP-2-004, Site Area Emergency
- 2.5 EIP-2-005, General Emergency
- 2.6 EIP-2-029, Emergency Telephone Book

3.0 GENERAL INFORMATION

- 3.1 Initial notification of an emergency at River Bend Station shall be accomplished from the Main Control Room. Direct telephone links have been established with the State of Louisiana, the five Parishes within the 10-mile plume exposure emergency planning zone, the State of Mississippi, and the Nuclear Regulatory Commission. In addition, telephone numbers for each of the above agencies are contained in EIP-2-029, Emergency Telephone Book (Ref 2.6) and may be used for notifications should the direct lines be inoperable. Radio communications are an available back-up notification method from the Technical Support Center (TSC) and the Emergency Operations Facility (EOF).
- 3.2 A Nuclear Equipment Operator on each shift has been designated and trained as Communicator. The Communicator shall report to the Control Room anytime an emergency is declared and implement this procedure.
- 3.3 If the TSC is staffed, the designated communicators in that facility shall relieve the Control Room Communicator of offsite emergency notification responsibilities. The Control Room Communicator shall remain in the Control Room to facilitate communications between the Control Room and the Operations Support Center (OSC). and between the Control Room and the TSC.
- 3.4 If the EOF is activated and staffed, the designated communicators in that facility shall relieve the TSC Communicator of offsite emergency notification responsibilities. One of the TSC Communicators shall remain in the TSC to facilitate communications between the TSC and the Control Room, between the TSC and OSC, and between the TSC and EOF. The other TSC Communicator shall proceed to the EOF and perform communications/notification responsibilities.

- 3.5 Offsite agency notifications shall be made within approximately 15 minutes for the Notification of Unusual Event class and sooner (consistent with the need for other emergency actions) for other classes, or within 15 minutes of escalating to a higher level emergency. Follow-up notifications to offsite agencies shall be accomplished approximately every 30 minutes following the initial notification or more often if emergency conditions change significantly.

4.0 PROCEDURE

- 4.1 Upon declaring an emergency classification, the Shift Supervisor shall:

- 4.1.1 Call the designated communicator to the Control Room if not already present.
- 4.1.2 Obtain and complete the initial notification form in Attachment 1.
- 4.1.3 Initiate the activation and augmentation of the Emergency Response Organization as indicated in EIP-2-003, Alert (Ref. 2.3); EIP-2-004, Site Area Emergency (Ref. 2.4); or EIP-2-005, General Emergency (Ref 2.5) using Attachment 3 and by directing the Shift Clerk to perform responsibilities in Attachment 3.

NOTE

For Notification of Unusual Events, call the Plant Manager and direct the Shift Clerk to call the Joint Information Center Director in accordance with Attachment 3 to inform them of the declaration of an emergency.

- 4.1.4 Direct the Communicator to notify the state and local Parishes using the information in Attachment 1 and the direct telephone lines to the notification points.
 - 4.1.5 Obtain and complete, or designate an individual on shift to complete, Attachment 2 and ensure that followup notifications are made to offsite agencies until the TSC is staffed and assumes notification responsibilities or the emergency is terminated.
- 4.2 The designated onshift Communicator shall:
- 4.2.1 Report to the Control Room immediately upon being notified of an emergency by the Shift Supervisor.
 - 4.2.2 Obtain copies of Attachment 2 and 4 of this procedure.
 - 4.2.3 Assist the Shift Supervisor in completing Attachment 1 and, when directed, make initial notification of the emergency to offsite agencies.

- 4.2.4 Notify offsite agencies of supplemental information as soon as practical following initial notifications using Attachment 2.
- 4.2.5 Make follow-up notifications to offsite agencies approximately every 30 minutes or as directed by the Shift Supervisor using Attachment 2.

NOTE

When the NRC Resident Inspector arrives onsite, the follow-up event notifications to the NRC (Part II of Attachment 2) may be discontinued. This function will be performed by the NRC Resident Inspector.

- 4.2.6 As time permits, notify the secondary organizations listed in Attachment 4.
- 4.3 The Shift Clerk shall:
 - 4.3.1 Obtain the Emergency Telephone Book (EIP-2-029, Ref. 2.6) and a copy of Attachment 3 of this procedure.
 - 4.3.2 Activate the Emergency Response Organization as directed by the Shift Supervisor using Attachment 3.
- 4.4 When the TSC is staffed and operational, the Emergency Director and one of the TSC Communicators shall assume responsibility for offsite notification followup reports using Attachment 2. Follow-up reports shall be provided approximately every 30 minutes.
- 4.5. When the EOF is staffed and operational, the Recovery Manager and one of the EOF Communicator shall assume responsibility for offsite notification follow-up reports using Attachment 2.

END

N/A	N/A	EIP-2-006	REV. O	PAGE 4 OF 16
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This is _____ with Message No. _____, at _____ hrs.,
(Name) (Time)

on _____ with _____ *Telephone No. _____/
(Date) (Site) Initials

Events are such that a/an: _____ Unusual Event _____ Site Area Emergency

_____ Alert _____ General Emergency

was declared at _____ hrs.

Brief description of event (s): _____

THE FOLLOWING INFORMATION APPLIES:

Release: _____ NO

_____ YES - Liquid; Gaseous; Other _____

Wind Speed _____ mph

Wind Direction from _____ into Sector(s) _____
(degrees) (A-R)

Recommended Protective Actions: _____ None

_____ Shelter

_____ Other _____

Other Comments: _____

A comprehensive assessment of conditions is in progress at this time.
Additional information will be provided to you as the situation develops.

Information Approved By: _____
Emergency Director

*Verification required only if notification is by Commercial Telephone.

Please acknowledge receipt of this message as your station is called (see note):

LNED	_____	Pointe Coupee Parish	_____
LOEP	_____	East Baton Rouge Parish	_____
West Feliciana Parish	_____	West Baton Rouge Parish	_____
East Feliciana Parish	_____	Mississippi State Highway Patrol	_____

Transmittal Verified: _____
Communicator Signature/Time

NOTE

If any of the agencies do not respond, call the notification point using the commercial telephone number in EIP-2-029, Emergency Telephone Book.

Initial notification to NRC Operations Center completed.

Transmittal Verified: _____
Communicator Signature/Time

File

This is _____ with Message No. _____, at _____ hrs.,
on _____ with _____ Telephone No. _____
(Name) (Date) (Site) (time)
Events are such that a/an: ☐ Unusual Event ☐ Site Area Emergency
☐ Alert ☐ General Emergency
was declared at _____ hrs.

This classification is (Escalated, De-escalated, Unchanged, Terminated) from the last report.

Reason for reclassification: _____

THE FOLLOWING INFORMATION APPLIES:

SECTION A: Radiological Release Information ☐ N/A

- This information is: A) New Information B) Unchanged
- (1) Type of Radiological Release: Liquid; Gaseous; Other _____
- (2) Time of Reactor Shutdown: _____ hrs.
- (3) Initial Time of Release: _____ hrs.
- (4) Release Terminated: NO, YES TIME TERMINATED _____ hrs.
- (5) Duration of Release: KNOWN _____ or TOTAL PROJECTED _____
(hours) (hours)
- (6) Release Rate: Noble Gas _____ Ci/sec Monitored; Calculated
Iodine _____ Ci/sec Monitored; Calculated
Particulate _____ Ci/sec Monitored; Calculated
- (7) Release Elevation: Ground Level; Elevated
- (8) Estimate of Surface Contamination In-Plant, Onsite or Offsite: _____

SECTION B: Meteorology ☐ N/A

This information is A) New Information B) Unchanged

- (1) Wind: Speed _____ mph
Direction from _____ into Sector(s) _____
(degrees) (A-R)
- (2) Stability Class: A B C D E F G
- (3) Precipitation: None; Rain; Sleet; Snow; Hail

SECTION C: Offsite Radiological Dose Consequences ☐ N/A

This is: A) New Information B) Unchanged

(1) Projected Whole Body Dose At:	Dose Rate	Projected Duration	Projected Dose
A) Site Boundary	mR/hr		mRem
B) 2 Miles	mR/hr		mRem
C) 5 Miles	mR/hr		mRem
D) 10 Miles	mR/hr		mRem

(2) Projected Thyroid Dose Commitment At:	Projected Dose
A) Site boundary	mRem
B) 2 Miles	mRem
C) 5 Miles	mRem
D) 10 Miles	mRem

(3) Affected Sectors: _____

SECTION D: Emergency Response Considerations ☐ N/A

This is A) New Information B) Unchanged

(1) Recommended Protective Actions: None; Other (Describe) _____

_____(2) Licensee Emergency Actions Underway: None; Other (Describe) _____

_____(3) Request for Offsite Support: None; Other (Describe) _____

_____(4) Prognosis for Worsening or Termination of Event based on Plant Information: None; Other (Describe) _____

_____(5) Other Comments: None; Other (Describe) _____

Information Approved By: _____

Emergency Director/Recovery Manager

SECTION E: Message Acknowledgment

Please acknowledge receipt of this message as your station is called (see note):

LNED _____

LOEP _____

West Feliciana Parish _____

East Feliciana Parish _____

Pointe Coupee Parish _____

East Baton Rouge Parish _____

West Baton Rouge Parish _____

MEMA _____

Transmittal Verified: _____

Communicator Signature/Time

NOTE

If any of the agencies do not respond, call the notification point using the commercial telephone number in EIP-2-029, Emergency Telephone Book.

PART II NRC Supplementary Event Notification Information

This is Gulf States Utilities Company, River Bend Station with Supplement
Event Notification Number _____ at _____ hours, on _____ (date).

Further Licensee Actions

Taken _____
Planned _____
Property Damage _____

Radioactivity Released (or Increased Release)?

Liquid/Gas? _____ Location/Source of Release _____ Elevation _____
Release Rate _____ Duration _____ Stopped _____
Release Monitored? _____ Amount of Release _____

Increased Radiation Levels in Plant: Location(s) _____

Radiation Level(s) _____ Areas Evacuated _____
Maximum Offsite Dose Rates _____
Integrated Dose _____

Meteorology

Wind Direction From _____ Wind Speed _____ (meter/sec or miles/hr)
Delta T _____ (°C or °F) Sigma Theta _____
Temperature _____ (°C or °F)
Stability Class A B C D E F Raining (Yes/No)

Projected Doses:

2 miles
5 miles
10 miles
Sectors

Dose Rates

Integrated Dose

Contamination (Surface): Inplant _____ Onsite _____ Offsite _____

PART II (continued)

Reactor Operations:Reactor System Status

Power Level _____

Pressure _____

Temperature _____

Flow (pumps on) _____

Cooling Mode _____

ECCS Operating/Operable _____

Containment Status

Containment Isolated? _____

Containment Temperature _____

Containment Pressure _____

Containment Radiation _____

R/hr

Standby Gas Treat System (BWR) _____

Reactivity Controls

Control Rods Inserted _____

Status of Emergency Boration System _____

Steam Plant Status

Equipment Failure _____

Feedwater Source/Flow _____

MSIVs (BWR) Closed _____

Electrical Dist. Status Normal Offsite Power Available? _____

Major Busses Power Source _____

Safeguards Busses Power Source _____

D/G Running? _____

Security/Safeguards:Bomb Threat: Search Conducted? _____

Search Results _____

Site Evacuated? _____

Extortion: Source (phone, letter, etc) _____

Location of Letter _____

Intrusion: Insider? _____

Outsider? _____

Furthest Point of Intrusion _____

Fire Arms Related? _____

Stolen/Missing Material? _____

Rx Oper/Demonstration: Size of Group _____

Demands _____

Violence? _____

Fire Arms Related? _____

PART II (continued)

Sabotage/Vandalism: Radiological? _____ Arson Involved? _____
Stolen/Missing Material? _____

Emergency Director/Recovery Manager/Time

Transmittal Verified: _____
Communicator Signature/Time

NOTE

Proprietary information indicated by [] must be removed before distributing this Attachment outside GSU.

I. Notification of Unusual Event

A. During normal daytime working hours:

1. Announce emergency on Plant Public Address System
2. Provide the information on Attachment 1 to the Joint Information Center (JIC) Director or alternate.
 - a. Activate the JIC Director pager system by dialing [(later)]; when tone is heard, dial a main Control Room telephone number for the JIC Director to call back, hang up. Record the time: _____
 - b. When JIC Director calls back, read Attachment 1.
 - c. If call back verification is not received within 15 minutes call alternate:
 - (1) Information Specialist [(later)]
 - (2) Nuclear Information Coordinator [(later)]

B. At all other times:

1. Provide the information on Attachment 1 to the Plant Manager or alternate.
 - a. Plant Manager (later)
 - b. Assistant Plant manager - Operations (later)
 - c. Assistant Plant Manager - Services (later)
2. Perform step I.A.2.

II. Alert

A. During normal daytime working hours:

1. Announce emergency classification on the Plant Public Address System, follow with "Activate the Operations Support Center and Technical Support Center."

B. At all other times:

1. Activate the pager system for Group I (OSC and JIC Director) by dialing [(later)]; when tone is heard, hang up. Record the time: _____
2. Activate the pager system for Group II (TSC) by dialing [(later)]; when tone is heard, hang up. Record the time: _____

3. Instruct the Shift Clerk to activate the OSC call list contained in EIP-2-029, Emergency Telephone Book.

NOTE

Pager system activation for all emergency response groups will be verified by (later). For individuals who have not verified pager activation within 15 minutes, call alternates using the Emergency Telephone Book (EIP-2-029).

III. Site Area Emergency

A. During normal, daytime working hours:

1. Announce emergency classification on the Plant Public Address System. Follow with **"Activate the Operations Support Center and Technical Support Center and the Emergency Operations Facility."**

B. At all other times:

1. If not already accomplished at a lower level emergency class, activate the pager system for Group I (OSC) by calling (later); when tone is heard, hang up. Record the time: _____
2. If not already accomplished at a lower level emergency class, activate the pager system for Group II (TSC) by calling (later); when tone is heard, hang up. Record the time: _____
3. Activate the pager system for Group III (EOF) by calling (later); when tone is heard, hang up. Record the time: _____
4. Instruct the Shift Clerk to activate the OSC call list contained in Section I of EIP-2-029, Emergency Telephone Book. Instruct the Shift Clerk to designate the first two Radiation Protection Technicians and the first two Chemistry Technicians contacted as offsite teams.

NOTE

Pager system activation for all emergency response groups will be verified by (later). For individuals who have not verified pager activation within 15 minutes, call alternates using the Emergency Telephone Book (EIP-2-029).

IV. General Emergency

A. During normal working hours:

Announce emergency classification on the plant public address system. Following with **"Activate the Operations Support Center, Technical Support Center" and Emergency Operations Facility."**

B. At all other times:

1. If not already accomplished at a lower level emergency class, activate the pager system for Group I (OSC) by calling (later) ; when tone is heard, hang up. Record the time: _____
2. If not already accomplished at a lower level emergency class, activate the pager system for Group II (TSC) by calling (later) ; when tone is heard, hang up. Record the time: _____
3. If not already accomplished at lower level, activate the pager system for Group III (EOF) by calling (later) ; when tone is heard, hang up. Record the time: _____
4. Instruct the Shift Clerk to activate the OSC call list contained in Section I of EIP-2-029, Emergency Telephone Book. Instruct the Shift Clerk to designate the first two Radiation Protection Technicians and the first two Chemistry Technicians contacted as offsite teams.

NOTE

Pager system activation for all emergency response groups will be verified by (later) . For individuals who have not verified pager activation within 15 minutes, call alternates using the Emergency Telephone Book (EIP-2-029).

Notify the following agencies at an Alert or higher emergency classification as time permits. Use Part I of Attachment 2 to provide information on the emergency.

Gulf States Utilities General Office—Beaumont	Direct Line or (409) 838-6631
U.S. Coast Guard	(504) 589-7101
American Nuclear Insurers	(203) 677-7305
Institute of Nuclear Power Operations (INPO)	(404) 953-0904
U.S. Geological Survey	(504) 389-0234

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-007

PROCEDURE TITLE: PROTECTIVE ACTION RECOMMENDATION GUIDELINES

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes
☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-18		<i>K. S. S. 10/2/84</i>	

FOR INFORMATION ONLY

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

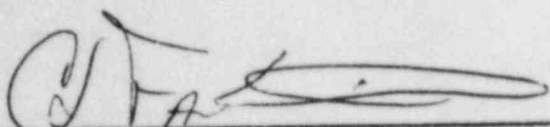
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PROCEDURE NO. EIP-2-007

REV. O

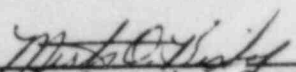
EMERGENCY PLANNING COMMITTEE REVIEW:

DATE



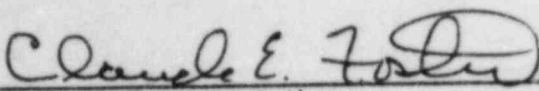
Radiation Protection/Chemistry Representative

9-24-84



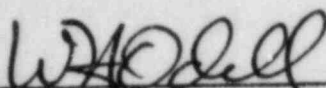
Plant Operations Representative

9-24-84



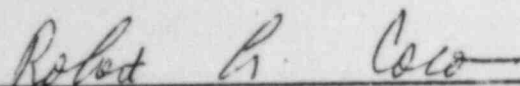
Security Representative

9/24/84



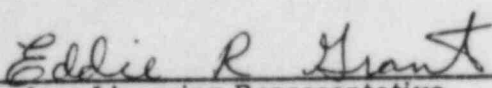
Training Representative

9/24/84



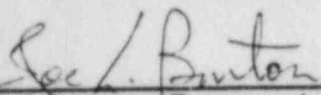
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

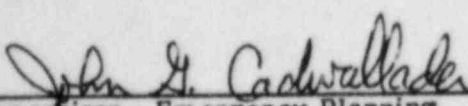
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

PROTECTIVE ACTION RECOMMENDATION GUIDELINES

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1.0 PURPOSE

This procedure provides guidelines for determining protective actions for the general public to be recommended to the appropriate State and local authorities in the event of a radiological emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.3 EIP-2-024, Offsite Dose Calculations - Manual Method
- 2.4 EIP-2-014, Offsite Radiological Monitoring
- 2.5 EIP-2-006, Notifications

3.0 GENERAL INFORMATION

- 3.1 A protective action is an action taken to avoid or reduce the effects of a nuclear emergency when the benefits derived from such an action are sufficient to offset any undesirable features or results of the protective action (i.e. constraints). The Protective Action Guideline (PAG) is the level at which the projected dose to individuals in the population or the potential dose from a rapidly escalating emergency warrants taking protective action. A PAG level under no circumstance implies an acceptable dose. It is used only to minimize the risk from an event which is occurring, may occur, or has already occurred.
- 3.2 The Environmental Protection Agency (EPA) Protective Action Guidelines have been used to develop this procedure. The EPA Protective Action Guidelines are:

<u>Whole Body</u> <u>* Integrated Dose</u>	<u>Thyroid</u> <u>* Integrated Dose</u>	<u>Protective Action To</u> <u>Be Recommended</u>
less than 1 Rem	less than 5 Rem	No specific actions for the general public
1 - 5 Rem	5 - 25 Rem	Minimum action is to shelter public
greater than 5 Rem	greater than 25 Rem	Evacuate area unless constraints make evacuation impractical

* Integrated dose levels are based on the estimated duration of the release or a predetermined default value.

- 3.3 This procedure is a guide for determining recommended protective actions. Since it is impossible to cover all potential situations, the judgment of the person responsible for recommending protective actions shall take precedence over the requirements of this procedure. However, since the protection of the general public is the ultimate concern, protective actions less stringent than those suggested by the procedure should be recommended

only if constraints (i.e. time available, traffic congestion, weather hazards) make the required actions a greater hazard to public health.

- 3.4 Field surveys should be conducted to confirm dose projections. If these surveys are available at the time that a recommendation is made, they should be considered together with the dose projection. However, a protective action recommendation should not be delayed because field survey results are not available.
- 3.5 The authority and responsibility for the selection and implementation of offsite response options rests fully with the appropriate State and local authorities. Gulf States Utilities Company has no authority with respect to imposing protective response options beyond the boundaries of the site.
- 3.6 Protective action recommendations for the general public shall be provided directly to the State and Parish government representatives by the Emergency Director (by the Recovery Manager when the Emergency Operations Facility is operational). This responsibility may not be delegated.
- 3.7 Initially the Shift Supervisor and Shift Foreman will perform the steps of this procedure. When the TSC is operational, the Emergency Director, the Radiation Protection Coordinator and the Dose Assessment/ Protective Actions Coordinator have the responsibility for actions in this procedure. When the EOF is operational the Dose Assessment Protective Actions Coordinator transfers to the EOF and the Radiation Protection Advisor performs the responsibilities of the Radiation Protection Coordinator. The Recovery Manager assumes the responsibility for recommending protective actions for the general public to offsite agencies.
- 3.8 The Protective Action Recommendation Flow Chart in Attachment 1 will be used to determine the required protective actions. The notes on Attachment 1 are guidelines and questions to be answered to assist in making protective action recommendations.
- 3.9 Attachment 2 will be used to determine the sectors of the 10-mile emergency planning zone (EPZ) that will be affected based on wind direction.

NOTE

The 10-mile EPZ is divided into 16 sectors of 22.5 degrees labeled A through R omitting the letters I and O to eliminate confusion with numerals. Attachment 2 also includes the sectors labeled in degrees.

- 3.10 The summary of evacuation time estimates in Attachment 3 shows the evacuation areas by true direction, radius of the 10-mile EPZ and the affected Protective Action Sections (PASs). The population and number of vehicles in the 10-mile EPZ are listed for each of the areas. Evacuation times for nighttime and daytime and for normal and adverse weather conditions are shown. Attachment 3 also delineates the difference in evacuation times between peak season and off-peak season.

N/A	N/A	EIP-2-007	REV. O	PAGE 3 OF 18
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- 3.11 Attachment 4 displays the PASs established by the Louisiana Nuclear Energy Division and Attachment 5 displays the population in each PAS.
- 3.12 Attachment 6 lists the special facilities (schools, hospitals, nursing homes, and prisons) within the 10-mile EPZ with the corresponding direction and distance from the station, the PAS, the population, and seasons used. Evacuation time estimates for these facilities are included in the estimates in Attachment 3.

4.0 PROCEDURE

4.1 The Dose Assessment/Protective Actions Coordinator shall:

- 4.1.1 Continually assess potential and actual releases of radioactive materials and calculate offsite integrated whole body and thyroid doses using EIP-2-025, Offsite Dose Calculations - Computer Method (Ref. 2.2).
- 4.1.2 Following the initial offsite dose calculation, complete Attachment 7 of this procedure using Attachment 1 through 6 and give it to the Radiation Protection Coordinator/Radiation Protection Advisor immediately. Subsequently, complete Attachment 7 whenever a significant change in offsite dose projections occurs.
1. Document the dose calculated from the EIP-2-025, Offsite Dose Calculations - Computer Method (Ref. 2.2) or EIP-2-024, Offsite Dose Calculations - Manual Method (Ref. 2.3) and the release duration and wind direction.
 2. Document the offsite radiological monitoring information when obtained from offsite Radiological Monitoring Teams.
 3. Use Attachment 1 to determine protective actions.
 4. Use Attachment 2 through 5 to determine the affected Sectors/PASs
 5. Use Attachment 6 to identify any special facilities/institutions in the plume pathway.
 6. Complete the coversheet of Attachment 7 with the recommended protective actions.
- 4.1.3 Direct the offsite Radiological Monitoring Team(s) to take surveys of the plume during an actual release and provide this information to the Radiation Protection Coordinator. If a release has not yet begun, direct the team(s) to an offsite location consistent with early detection of any releases from the plant.

4.2 The Radiation Protection Coordinator (or Radiation Protection Advisor) shall:

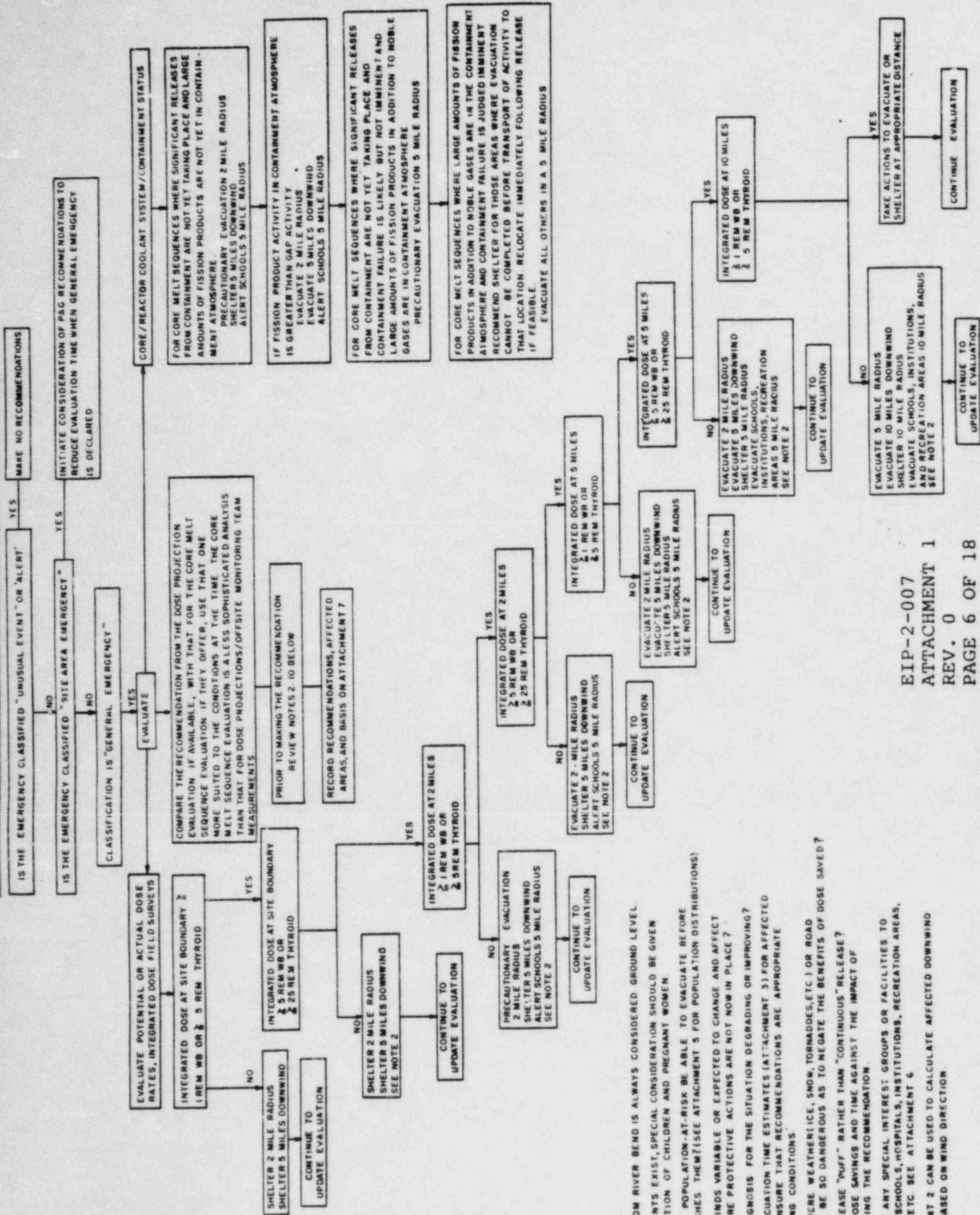
- 4.2.1 Review Attachment 7 of this procedure, completed by the Dose Assessment/Protective Actions Coordinator, and any offsite radiological monitoring data available to verify that the protective actions listed are appropriate for existing conditions.
- 4.2.2 Approve Attachment 7 and forward without delay to the Emergency Director (or Recovery Manager) and discuss the protective action recommendation(s).
- 4.2.3 Discuss protective actions to be recommended with State and Parish representatives, and the NRC if available, including the basis and reasoning used to arrive at the particular set of recommendations stated.
- 4.2.4 Review Sections affected and evacuation time estimates in Attachments 3, 4 and 5 to determine the need for prompt action depending on wind speed and weather conditions.
- 4.2.5 Continue to assess offsite conditions and update protective action recommendations anytime the situation warrants.

4.3 The Emergency Director (or Recovery Manager) shall:

- 4.3.1 Review and discuss with the Radiation Protection Coordinator (or Radiation Protection Advisor), if necessary, the protective actions to be recommended for the general public indicated on Attachment 7.
- 4.3.2 Make the recommendations directly to the senior Parish government representative available at the time.
- 4.3.3 Continue frequent contacts with State and Parish officials, providing information on escalating, deescalating or unchanged recommendations.

END

PROTECTIVE ACTION RECOMMENDATION FLOW CHART



1. RELEASE FROM RIVER BEND IS ALWAYS CONSIDERED GROUND LEVEL.
2. IF CONSTRAINTS EXIST, SPECIAL CONSIDERATION SHOULD BE GIVEN FOR EVACUATION OF CHILDREN AND PREGNANT WOMEN.
3. WOULD THE POPULATION-AT-RISK BE ABLE TO EVACUATE BEFORE PLUME REACHES THEM?(SEE ATTACHMENT 5 FOR POPULATION DISTRIBUTIONS)
4. ARE THE WINDS VARIABLE OR EXPECTED TO CHANGE AND AFFECT AREAS WHERE PROTECTIVE ACTIONS ARE NOT NOW IN PLACE?
5. IS THE PROGNOSIS FOR THE SITUATION DEGRADING OR IMPROVING?
6. REVIEW EVACUATION TIME ESTIMATES (ATTACHMENT 3) FOR AFFECTED AREA TO ENSURE THAT RECOMMENDATIONS ARE APPROPRIATE FOR EXISTING CONDITIONS.
7. WOULD SEVERE WEATHER(ICE, SNOW, TORNADOES, ETC.) OR ROAD CONDITIONS BE SO DANGEROUS AS TO NEGATE THE BENEFITS OF DOSE SAVED?
8. IS THE RELEASE "PUFF" RATHER THAN "CONTINUOUS" RELEASE? BALANCE DOSE SAVINGS AND TIME AGAINST THE IMPACT OF IMPLEMENTING THE RECOMMENDATION.
9. ARE THERE ANY SPECIAL INTEREST GROUPS OR FACILITIES TO CONSIDER? SCHOOLS, HOSPITALS, INSTITUTIONS, RECREATION AREAS, FACTORIES, ETC. SEE ATTACHMENT 6.
10. ATTACHMENT 2 CAN BE USED TO CALCULATE AFFECTED DOWNWIND SECTIONS BASED ON WIND DIRECTION.

Affected Sectors and Protective Action Sections
Based on Wind Direction

Wind Direction		Affected Sectors*	Affected Protective Action Sections		
Degrees From	Degrees to		2 Miles	5 Miles	10 Miles
168.76 - 191.25	348.76 - 11.25	A RB	1	1, 2, 3, 7	1, 2, 3, 6, 7
191.26 - 213.75	11.26 - 33.75	B AC	1	1, 2, 3, 7	1, 2, 3, 6, 7
213.76 - 236.25	33.76 - 56.25	C BD	1	1, 2, 3, 7, 11	1, 2, 3, 7, 10, 11
236.26 - 258.75	56.26 - 78.75	D CE	1	1, 3, 7, 8, 11	1, 3, 7, 8, 10, 11
258.76 - 281.25	78.76 - 101.25	E DF	1	1, 3, 4, 8, 9, 11	1, 3, 4, 7, 8, 9, 10, 11, 12, 13
281.26 - 303.75	101.26 - 123.75	F EG	1	1, 3, 4, 8, 9, 11	1, 3, 4, 8, 9, 11, 12, 13, 14
303.76 - 326.25	123.76 - 146.25	G FH	1	1, 3, 4, 8, 9, 11	1, 3, 4, 8, 9, 11, 12, 13, 14
326.26 - 348.75	146.26 - 168.75	H GJ	1	1, 4, 9	1, 4, 9, 12, 13, 14, 15, 17
348.76 - 11.25	168.76 - 191.25	J HK	1	1, 4, 9, 16	1, 4, 9, 14, 15, 16, 17
11.26 - 33.75	191.26 - 213.75	K JL	1	1, 4, 16	1, 4, 15, 16, 17, 18
33.76 - 56.25	213.76 - 236.25	L KM	1	1, 16	1, 16, 17, 18
56.26 - 78.75	236.26 - 258.75	M LN	1	1, 2, 5, 16	1, 2, 5, 16, 18
78.76 - 101.25	258.76 - 281.25	N MP	1	1, 2, 5, 16	1, 2, 5, 6, 16, 18
101.26 - 123.75	281.26 - 303.75	P NQ	1	1, 2, 5	1, 2, 5, 6
123.76 - 146.25	303.76 - 326.25	Q PR	1	1, 2, 5	1, 2, 5, 6
146.26 - 168.75	326.26 - 348.75	R QA	1	1, 2, 3, 7	1, 2, 3, 6, 7

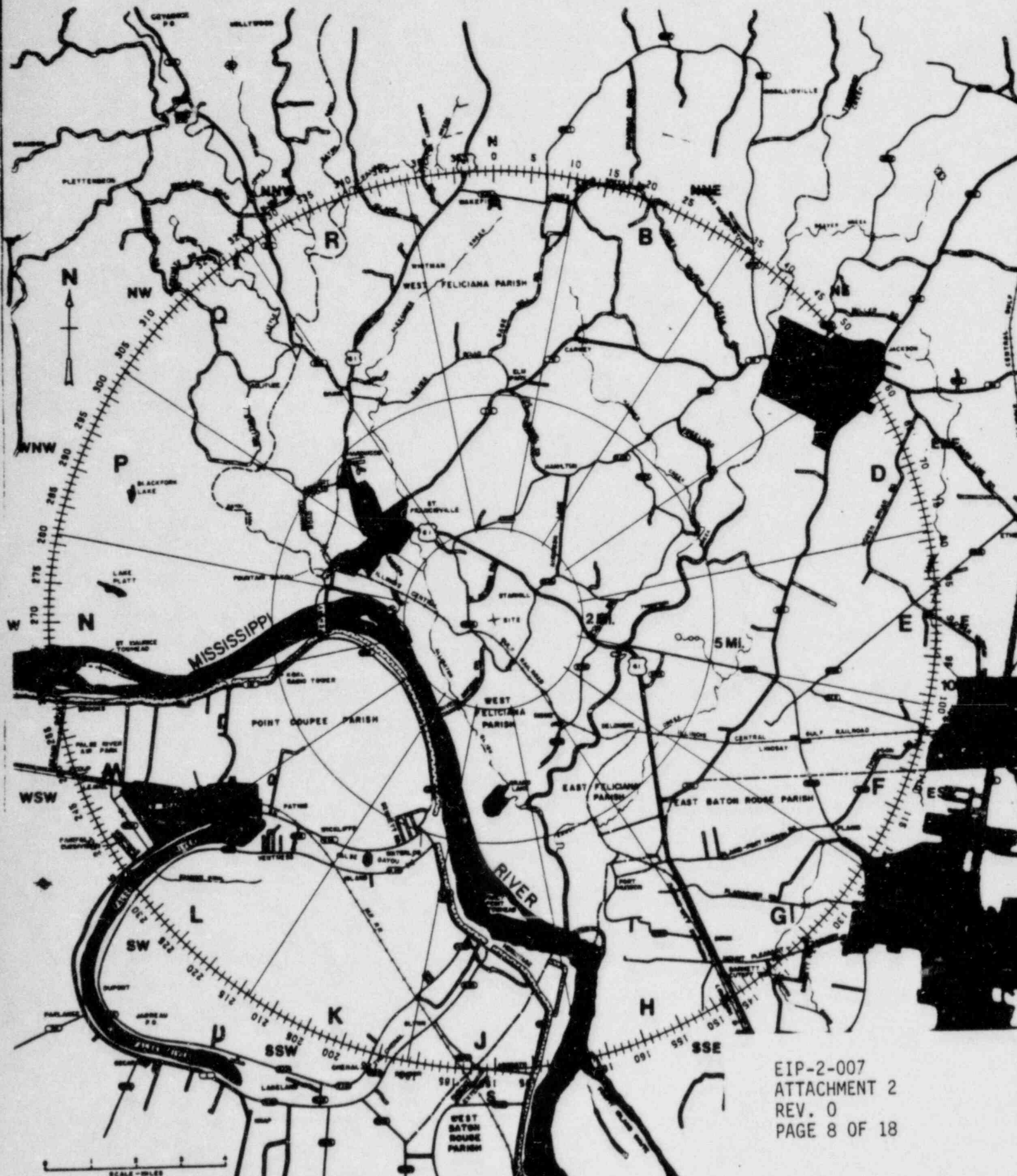
2 Mile Radius = Sections 1

5 Mile Radius = Sections 1, 2, 3, 4, 5, 7, 8, 9, 11, 16

* Centerline Sector given first

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ATTACHMENT-2
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RBS 10 MILE EPZ MAP



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EVACUATION TIME ESTIMATE SUMMARY

* Peak Season

Approximate Evacuation Area (PAS)	Population		Vehicles		General Public Evacuation Times (hours/minutes) (2)			
	Nighttime	Daytime	Nighttime	Daytime	Nighttime Weather		Daytime Weather	
					Normal	Adverse	Normal	Adverse
Full 0-2 Mile (1)	933	1160	325	420	1/32	1/42	2/35	3/0
Northwest 0-5 Mile(1,2)	4446	7137	1538	2170	1/52	2/3	2/51	3/23
Northeast 0-5 Mile(1,3)	1306	1573	421	538	1/38	1/42	2/36	3/3
Southeast 0-5 Mile (1,4, 8,9)	1421	1982	579	889	1/37	1/47	2/42	3/9
Southwest 0-5 Mile(1,16)	1255	1658	439	711	1/32	1/42	2/35	3/0
Northwest 0-10 Mile (1,2,5,6)	5815	8819	1968	2708	1/56	2/16	2/55	3/39
Northeast 0-10 Mile (1,3,7,10,11)	6034	8624	1899	2820	1/38	1/46	2/37	3/4
Southeast 0-10 Mile (1,4,8,9,12,13,14,15)	4685	5851	1707	2447	1/40	1/47	2/42	3/9
Southwest 0-10 Mile (1,16,17,18)	12311	16656	4160	5111	1/52 (2)	2/24	2/48	3/37
Full EPZ	26046	36470	8759	11826	2/12	2/55	3/27	4/41

* Peak Season is September through May

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ATTACHMENT 3
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OFF-PEAK SEASON

Approximate Evacuation Area ⁽¹⁾ (PAS)	Population		Vehicles		General Public Evacuation Times (hours/minutes ⁽²⁾)			
	Nighttime	Daytime	Nighttime	Daytime	Nighttime Weather		Daytime Weather	
					Normal	Adverse	Normal	Adverse
Full 0-2 Mile (1)	1383	1632	445	544	1/38	1/44	2/36	3/7
Northwest 0-5 Mile (1,2)	4779	5771	1599	1981	1/52	2/4	2/50	3/21
Northeast 0-5 Mile (1,3)	1756	2020	541	655	1/38	1/50	2/39	3/7
Southeast 0-5 Mile (1,4,8,9)	1871	2424	699	1003	1/38	1/47	2/42	3/9
Southwest 0-5 Mile (1,16)	1705	2130	559	835	1/38	1/44	2/36	3/7
Northwest 0-10 Mile (1,2,5,6)	6248	7299	2035	2441	1/56	2/19	2/54	3/29
Northeast 0-10 Mile (1,3,7,10,11)	6325	7258	1903	2587	1/38	1/51	2/38	3/6
Southeast 0-10 Mile (1,4,8,9,12,13,14,15)	5135	6138	1827	2526	1/40	1/47	2/42	3/9
Southwest 0-10 Mile (1,16,17,18)	12739	13551	4258	4641	1/51 ⁽³⁾	2/23	2/38	3/21
Full EPZ (1 through 18)	26298	29350	8688	10563	2/11	2/54	3/10	4/17

(1) See Attachment 4 for PAS locations.

(2) All times are rounded to nearest minute.

(3) Special facility evacuation time for Pointe Coupee Nursing Home is 2 hours 19 minutes - See Section 6.

EIP-2-007

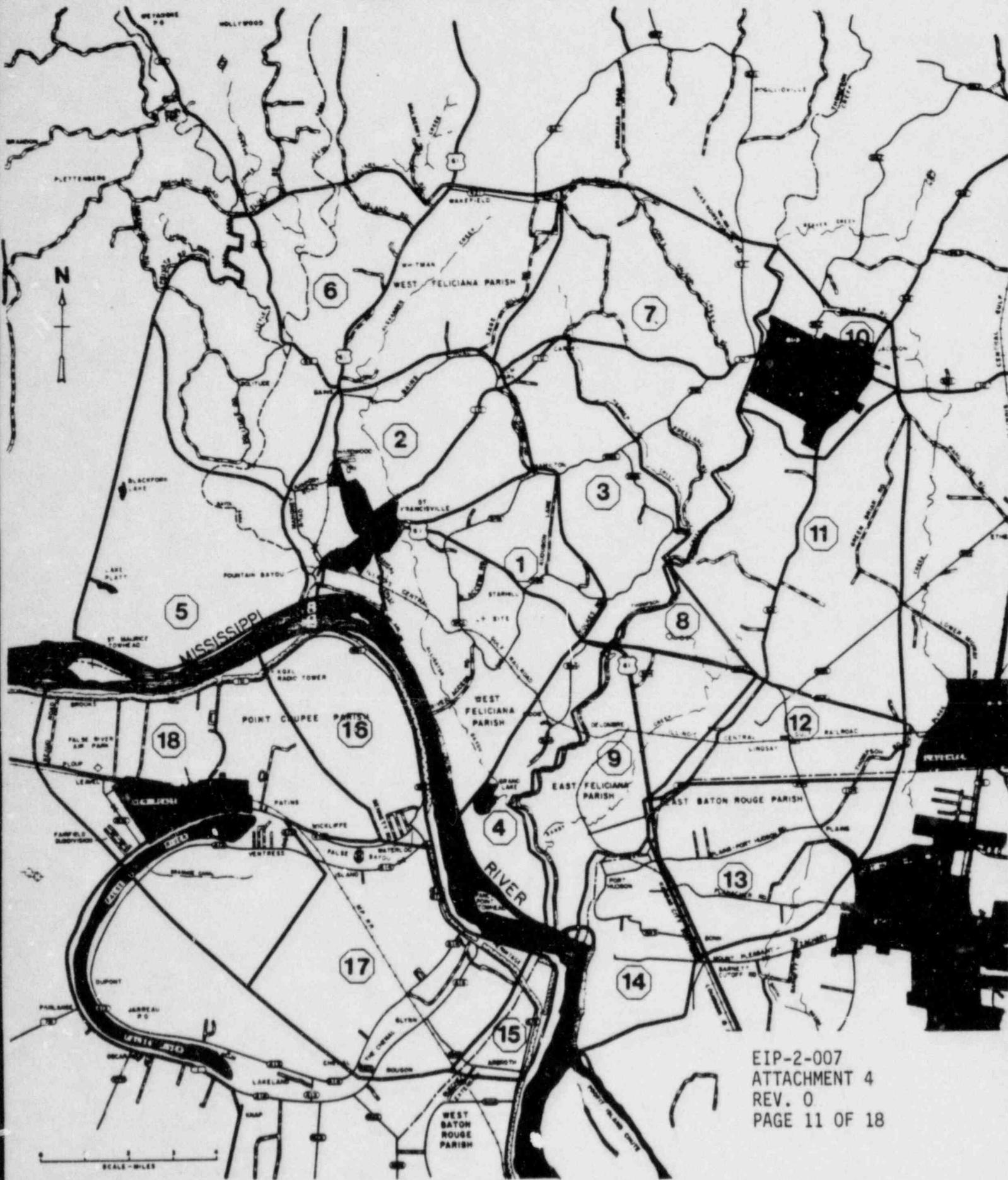
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ATTACHMENT 3

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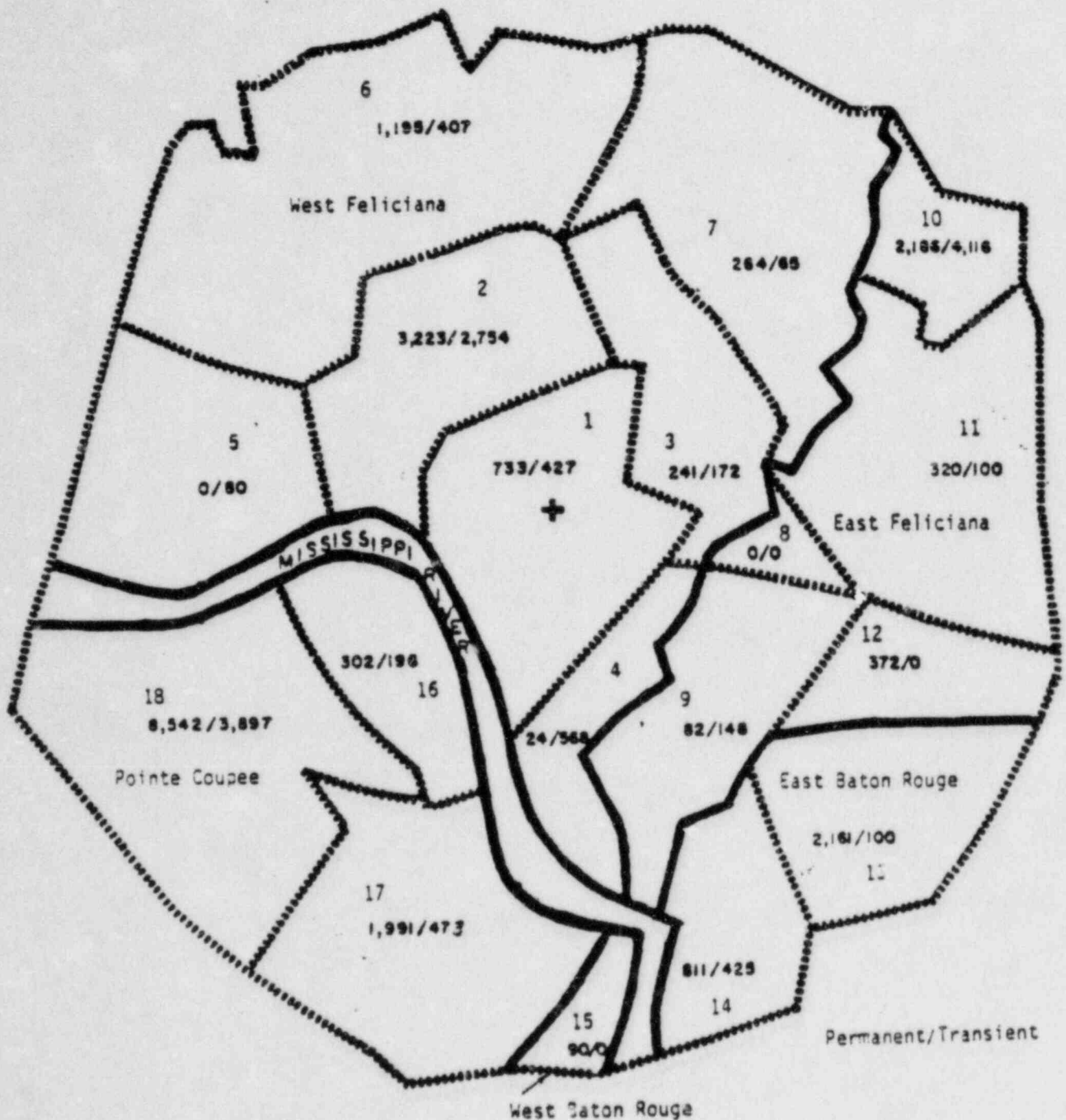
Protective Action Sections (PAS(s))

Protective Action Sections (PAS(s))



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'1985¹ Projected Permanent and Transient Populations within the Protective Action Sections (PAS(s)) of the established Plume Exposure Pathway (10 mile) EPZ for River Bend Station'



¹projected from 1980 census data

SPECIAL FACILITIES - SCHOOLS, HOSPITALS AND NURSING HOMES, AND PRISONS WITHIN THE EMERGENCY PLANNING ZONE

Reference No. (2)	Direction/ Mile	PAS	Name of Facility	Number of Users/Staff ⁽¹⁾		Seasons of Use
				Day	Night	
<u>West Feliciana Parish</u>						
<u>Schools</u>						
1	NNW/6	2	Bains Elementary	826/70	-	Fall, winter, spring
2	NNW/6	2	West Feliciana High	745/80	-	Fall, winter, spring
<u>Hospitals and Nursing Homes</u>						
3	NW/3	1	West Feliciana Parish Hospital	15/25	15/5	Year-round
4	NNE/6	7	Idlewood Nursing Home	122/25	122/10	Year-round
<u>Prisons</u>						
5	WNW/4	2	West Feliciana Parish Jail	28/2	28/2	Year-round
6	NNW/9	6	Dept. of Corrections Meat Packing Plant	35/6	-	Year-round
<u>East Feliciana Parish</u>						
<u>Schools</u>						
7	NE/10	10	Jackson Elementary	874/58	-	Fall, winter, spring
8	NE/10	10	Jackson High School	600/47	-	Fall, winter, spring
9	NE/10	10	Folkes Vocational Technical	150/19	150/9	Fall, winter, spring
<u>Hospitals and Nursing Homes</u>						
10	NE/9	10	East Louisiana State Hospital (ELSH)	500/698	500/227	Year-round
<u>Prisons</u>						
11	ENE/9	10	Dixon Correctional Institute	818/134	818/62	Year-round

RBS FSAR

TABLE D-5 (Cont)

Reference No. (2)	Direction/ Mile	PAS	Name of Facility	Number of Users/Staff ⁽¹⁾		Seasons of Use
				Day	Night	
12	NE/9	10	Jackson Special Hospital	45/15	45/8	Year-round
13	NE/9	10	Feliciana Forensic Facility at ELSH	80/46	80/23	Year-round
<u>East Baton Rouge Parish</u>						
<u>Schools</u>						
14	SE/8	13	Port Hudson Child Learning Center	87/13	-	Fall, winter, spring
<u>Hospitals and Nursing Homes - None</u>						
<u>Prisons - None</u>						
<u>Pointe Coupee Parish</u>						
<u>Schools</u>						
15	SW/8	18	Poydras	450/51	-	Fall, winter, spring
16	WSW/8	18	Rosenwald	955/73	-	Fall, winter, spring
17	SW/8	18	Catholic Elementary	466/43	-	Fall, winter, spring
18	SW/8	18	Catholic Junior High	225/15	-	Fall, winter, spring
19	SW/8	18	Catholic High	293/22	-	Fall, winter, spring
20	WSW/9	18	False River Academy	630/37	-	Fall, winter, spring
21	WSW/10	18	Memorial Area Vocational	130/18	20/2	Fall, winter, spring
22	SSW/10	18	Rougon High School	400/40	-	Fall, winter, spring
<u>Hospitals and Nursing Homes</u>						
23	WSW/10	18	Pointe Coupee General Hospital	26/50	26/25	Year-round
24	WSW/10	18	Lakeview Manor Nursing Home	120/25	120/12	Year-round

TABLE D-5 (Cont)

<u>Reference No. (2)</u>	<u>Direction Mile</u>	<u>PAS</u>	<u>Name of Facility</u>	<u>Number of Users/Staff</u> ⁽¹⁾		<u>Seasons of Use</u>
				<u>Day</u>	<u>Night</u>	
25	WSW/10	18	Pointe Coupee Nursing Home	120/40	120/15	Year-round
<u>Prisons</u>						
26	SW/8	18	Pointe Coupee Parish Jail	42/2	42/1	Year-round

West Baton Rouge ParishSchools - NoneHospitals and Nursing Homes - NonePrisons - None

(1) Data collected as of November 1982
(2) See Figure D-13 for facility location

COVER SHEET

RECOMMENDED PROTECTIVE ACTIONS (from item 5.)

- () None
() Shelter _____ miles radius around the Site
() Evacuate _____ miles radius around the Site
 and
() Shelter _____ miles downwind in Sectors _____
() Evacuate _____ miles downwind in Sectors _____
() Other recommended actions: _____

Recommendations provided to Offsite Authorities at _____
(Date/Time)

by: _____
 (Emergency Director/Recovery Manager)

1. Dose Calculations: (Circle one) Actual Potential Release
0.5 miles 2 miles 5 miles 10 miles

Whole Body Dose in Rem: -----

Thyroid Dose in Rem: -----

Estimated Release Duration _____ hours

Wind direction from _____ to _____ degrees

2. Offsite Radiological Monitoring Information:

Direct Exposure Rate (Closed window)	Iodine Dose Per 1 hour inhalation*	Distance Downwind
-----mR/hour	-----mRem at	-----miles
-----mR/hour	-----mRem at	-----miles
-----mR/hour	-----mRem at	-----miles
-----mR/hour	-----mRem at	-----miles

3. Affected Sectors/Protective Action Sections from Attachment 2:

SECTORS

PROTECTIVE ACTION SECTIONS

Shelter -----

Evacuate -----

Other actions -----

* Dose Factors for converting radioiodine concentrations to child thyroid integrated doses for a 1 hour inhalation may be found in procedure EIP-2-024, Offsite Dose Calculation - Manual Method, and EIP-2-025 Offsite Dose Calculation - Computer Method.

4. Special facilities/institutions in plume path from Attachment 6/

PROTECTIVE ACTION SECTION
FROM 4 ABOVE

INSTITUTIONS/FACILITIES

5. Recommended Protective Actions: from Attachment 1 and 4. above

() None

() Shelter _____ miles radius around plant site

() Evacuate _____ miles radius around plant site
and

() Shelter _____ miles downwind

() Evacuate _____ miles downwind

() Other actions: -----

6. Transfer Information from 5. above to Cover Sheet.

7. Prepared by: -----
Dose Assessment/Protective Action Coordinator

8. Reviewed by: -----
Radiation Protection Coordinator/Advisor

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-008

PROCEDURE TITLE: SEARCH AND RESCUE

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-7		<i>W. J. Johnson 10/2/04</i>	
			FOR INFORMATION ONLY C	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

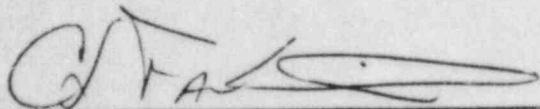
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PROCEDURE NO. EIP-2-008

REV. 0

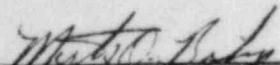
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DATE



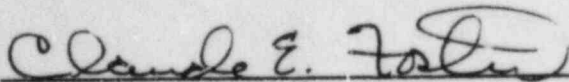
Radiation Protection/Chemistry Representative

9-24-84



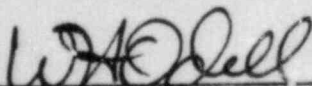
Plant Operations Representative

9-24-84



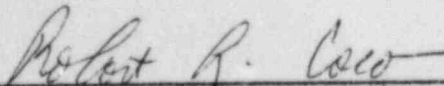
Security Representative

9/24/84



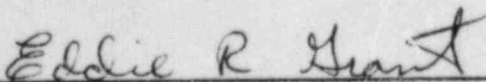
Training Representative

9/24/84



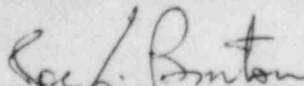
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

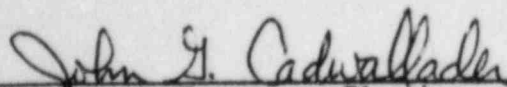
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

SEARCH AND RESCUE

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1.0	PURPOSE	2
2.0	REFERENCES	2
3.0	GENERAL INFORMATION	2
4.0	PROCEDURE	2
ATTACHMENT 1	SEARCH AND RESCUE OPERATIONS CHECKLIST (EMERGENCY DIRECTOR)	7

1.0 PURPOSE

This procedure provides instructions to personnel involved in search and rescue operations.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 Code of Federal Regulations, Title 10, Part 19 and Part 20.
- 2.3 EIP-2-009, Medical Emergencies
- 2.4 EIP-2-012, Radiation Exposure Controls
- 2.5 EIP-2-029, Emergency Telephone Book

3.0 GENERAL INFORMATION

- 3.1 The Search and Rescue Team shall be composed of at least two persons, one of whom shall be first aid qualified and, one of whom shall be trained in the use of radiation survey instruments.
- 3.2 Radiation exposure of Search and Rescue Team members shall be maintained as low as reasonably achievable and in no case shall exceed 3 Rem accumulated equivalent whole body dose for a calendar quarter unless authorized by the Emergency Director.
- 3.3 The Search and Rescue Team will consist of a Nuclear Control Operator and a Nuclear Equipment Operator unless other individuals are substituted by the Emergency Director.
- 3.4 In situations where radiation exposures of team members are likely to exceed 3 Rem in a calendar quarter, the individuals should be volunteers.
- 3.5 Women of child bearing age should not be utilized as Search and Rescue Team members when radiation exposures are expected to be in excess of 10 CFR 20 limits (3 Rem/Quarter) (Ref. 2.2).

4.0 PROCEDURE

4.1 The Emergency Director shall:

- 4.1.1 Obtain Attachment 1 and complete the checklist as the following actions are performed.
- 4.1.2 Upon receipt of information regarding personnel missing within the plant area, direct the Operations Support Center (OSC) Coordinator to activate (or activate if the OSC is not operational) the Search and Rescue Team.
- 4.1.3 Direct the Radiation Protection Coordinator (or Radiation Protection Technician if the OSC is not operational) to brief the OSC Coordinator and the Search and Rescue Team members on the radiological hazards likely to be encountered in plant areas to be searched.

- 4.1.4 Determine from the Security Supervisor the most likely areas of the plant in which the missing individual might be found.
- 4.1.5 Inform the OSC Coordinator of the specific plant areas to be searched.
- 4.1.6 Instruct the OSC Coordinator to dispatch the Search and Rescue Team as soon as they are prepared.
- 4.1.7 If requested by the Search and Rescue Team, implement EIP-2-009, Medical Emergencies (Ref. 2.3).
- 4.1.8 Authorize team members to exceed 10 CFR 20 radiation exposure limits in accordance with EIP-2-012, Radiation Exposure Controls (Ref. 2.4) if necessary.
- 4.1.9 If there is a potential for Search and Rescue Team members to receive more than 12 Rem whole body exposure during team operations, direct the Technical Support Center Administrative Coordinator to call in alternate team members, using EIP-2-029, Emergency Telephone Book (Ref. 2.5), to relieve the Search and Rescue Team members from any further operations involving radiation exposure.

4.2 The Radiation Protection Coordinator shall:

- 4.2.1 Obtain information on likely areas to be searched from the Emergency Director or Security Shift Supervisor.
- 4.2.2 Evaluate known radiological hazards in the designated search areas and determine the appropriate dosimetry and protective clothing and equipment to be used by the Search and Rescue Team members.
- 4.2.3 Determine each team member's quarterly accumulated whole body exposure.
- 4.2.4 Assist the Emergency Director in authorizing team members to exceed 10 CFR 20 radiation exposure limits in accordance with EIP-2-012, Radiation Exposure controls (Reference 2.4) if necessary,
- 4.2.5 Brief the team members and the OSC Coordinator on the radiological hazards involved, emergency exposure limits and specify dosimetry, protective clothing and equipment to be utilized.

NOTE

If practical, specific routes for the team to follow in search and rescue operations should be included in the briefing to further minimize radiation exposures of team members.

- 4.2.6 Caution the team members to read dosimeters frequently, so they will not exceed authorized exposure levels.

N/A	N/A	EIP-2-008	REV. 0	PAGE 3 OF 7
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4.3 The Operations Support Center Coordinator shall:

- 4.3.1 Upon notification from the Emergency Director that the Search and Rescue Team is to be dispatched, instruct team members to begin preparations for search and rescue operations.
- 4.3.2 Receive briefing on areas to be searched and radiological hazards in these areas from the Radiation Protection Coordinator. Update OSC status board with the most reliable information available.
- 4.3.3 Instruct team members to provide plant area monitoring information to the OSC as they pass through various areas of the plant.
- 4.3.4 Reemphasize instructions to check dosimetry frequently and to not exceed authorized exposure levels.
- 4.3.5 Instruct team members, that in the event they encounter an unusual situation, to retreat to a safe location and request further instructions from the OSC Coordinator or the Emergency Director.
- 4.3.6 Check radio communications with the team prior to their departure and instruct the team to maintain frequent contact with the OSC.

NOTE

In some areas of the plant portable radios may be an ineffective means of communications. In these areas the plant PA system or telephones should be used.

- 4.3.7 Record the team members' names, time the team is dispatched and dosimetry information, including accumulated whole body exposure for each team member in the OSC log. Document all team actions during search and rescue operations.

4.4 The Search and Rescue Team members shall:

- 4.4.1 Obtain the following from the OSC Emergency Kit:

- 1. Protective Clothing
- 2. Respiratory Protective Device
- 3. Low and high range dosimetry.
- 4. High range radiation survey instruments
- 5. Portable radio
- 6. First Aid kit

NOTE

If the radiological conditions in the plant are not changed due to the emergency, normal protective clothing requirements for the area to be entered will be followed.

If Self Contained Breathing Apparatus (SCBAs) are necessary, SCBAs with a speak easy shall be used.

- 4.4.2 Perform operational and source checks of the survey instrument and operational check of the portable radio prior to departure.
- 4.4.3 Receive briefing from the Radiation Protection Coordinator and the OSC Coordinator.
- 4.4.4 Put on the required protective clothing, dosimetry and check that the respiratory protective device functions properly.
- 4.4.5 Notify OSC Coordinator of readiness to depart.
- 4.4.6 When directed, put on respiratory protective device, turn on radiation survey meter and proceed to the first area to be searched.

NOTE

Keep radiation survey instrument on scale and report exposure rates to the OSC frequently.

- 4.4.7 Check dosimeters frequently and keep the OSC informed of accumulated exposures.
- 4.4.8 **IF EXTREMELY HIGH RADIATION LEVELS** (greater than 10 R/hour) are encountered, retreat to a safe area and request further instructions from the OSC Coordinator or the Emergency Director.
- 4.4.9 If other hazards or unusual situations are encountered report to the OSC Coordinator and request further instructions.
- 4.4.10 If the missing individual is found and requires first aid treatment:
 - 1. Check vital signs.
 - 2. Make a quick assessment of the individual's condition and the need to move the person from the present location.
 - 3. If there is no immediate hazard from the present surroundings, administer first aid on-the-spot.
 - 4. Continually observe the injured individual.
- 4.4.11 Remove the individual from the area, keeping the OSC Coordinator informed of actions taken.
 - 1. Place blankets under and in the stretcher.
 - 2. Secure the individual in the stretcher.
 - 3. Transport to ambulance pick-up point or the first aid room as applicable.

4. Continually check vital signs.

4.4.12 If assistance is needed, request additional personnel from the OSC Coordinator.

4.4.13 Upon completion of the assignment, return to the OSC following contamination control measures established at the OSC, and report accumulated exposure to the OSC Coordinator.

4.5 The Technical Support Center Administrative Coordinator shall:

4.5.1 Upon being notified by the Emergency Director or the Radiation Protection Coordinator, call in alternate Search and Rescue Team members using EIP-2-029, Emergency Telephone Book, (Ref. 2.5), to relieve team members in the OSC.

4.5.2 Keep the Emergency Director informed of team relief actions.

END

N/A	N/A	EIP-2-008	REV. 0	PAGE 6 OF 7
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SEARCH AND RESCUE OPERATIONS CHECKLIST
(EMERGENCY DIRECTOR)NOTE

Place "N/A" in steps which are not applicable.

	ACTIONS COMPLETED	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Notified of missing individual	_____	_____
2. Activate Search and Rescue Team	_____	_____
3. Security provides information on likely areas to search	_____	_____
4. Radiation Protection Coordinator provides assessment of radiological hazards	_____	_____
5. Authorize team members to exceed exposure limits: Authorized Exposure: ____ Rem	_____	_____
6. Briefing of team members by Radiation Protection Coordinator	_____	_____
7. Team dispatched	_____	_____
8. Missing individual found	_____	_____
9. EIP-2-009, Medical Emergencies implemented	_____	_____
10. Request additional team members to be called in by the Technical Support Center Administrative Coordinator	_____	_____
11. Terminate search and rescue operations	_____	_____

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-009

PROCEDURE TITLE: MEDICAL EMERGENCIES

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-12		<i>[Signature]</i> 10/2/84	
			FOR INFORMATION ONLY	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

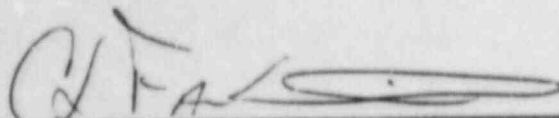
TITLE: MEDICAL EMERGENCIES

PROCEDURE NO. EIP-2-009


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EMERGENCY PLANNING COMMITTEE REVIEW:

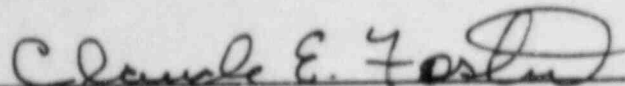
DATE


Radiation Protection/Chemistry Representative

9-24-84


Plant Operations Representative

9-24-84


Security Representative

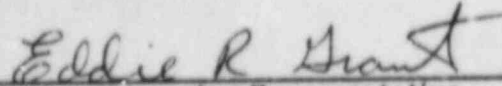
9/24/84


Training Representative

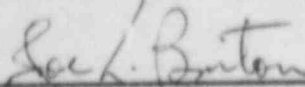
9/24/84


Technical Staff Representative

9/24/84

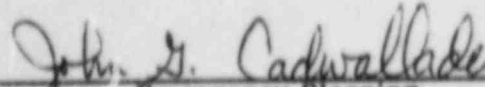

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

MEDICAL EMERGENCIES

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1.0 PURPOSE

This procedure provides instructions on handling injured or ill personnel who are contaminated or potentially contaminated and may require offsite medical treatment.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 Emergency Medical Assistance Plan
- 2.3 ADM-019, Industrial Safety
- 2.4 EIP-2-012, Radiation Exposure Controls
- 2.5 EIP-2-029, Emergency Telephone Book
- 2.6 RPP-0019, Decontamination of Areas, Tools, and Equipment
- 2.7 RPP-0018, Personnel Decontamination

3.0 GENERAL INFORMATION

- 3.1 A first aid qualified individual shall be on shift at all times. The qualified first aid individual shall be identified in the main Control Room to facilitate a rapid response to medical emergencies.
- 3.2 A plant emergency vehicle (PEV) shall be available at the site at all times and is a backup means to transport injured individuals to the hospital.
- 3.3 Ambulance service is available from the West Feliciana Parish Hospital or the Jackson Rescue Unit.
- 3.4 The First Aid Team shall consist of the designated, qualified, first aid personnel on shift (usually a Nuclear Control Operator) and an assistant (usually an assigned Nuclear Equipment Operator).
- 3.5 Plant Procedure ADM-019, Industrial Safety (Ref. 2.3) shall be used for injuries not involving contamination nor requiring transportation to the hospital.
- 3.6 A direct emergency hotline telephone is provided from the Control Room to both West Feliciana Hospital and Our Lady of the Lake Hospital.

4.0 PROCEDURE

- 4.1 Anyone discovering an injured or seriously ill person in the plant shall:
 - 4.1.1 Check vital signs of the individual (if qualified).
 - 4.1.2 Notify the main Control Room of the injury or illness using the Public Address System. Describe the exact location and nature of the injury or illness, if obvious.

- 4.1.3 Administer first aid to the extent of training and ability until the First Aid Team arrives.
- 4.1.4 Observe the patient.
- 4.1.5 Take any actions considered useful to help prevent further injury to the individual or to reduce excessive radiation exposure.
- 4.1.6 Stay at the scene to assist the First Aid Team upon their arrival.

4.2 The Emergency Director shall perform the following actions using Attachment 2 as a guide:

4.2.1 Dispatch the First Aid Team:

- 1. If the Operations Support Center (OSC) has not been activated, announce twice over the Public Address System:

"FIRST AID TEAM NEEDED AT (specify location),
ACKNOWLEDGE ANNOUNCEMENT."

NOTE

Since the First Aid Team is usually composed of a Nuclear Control Operator and a Nuclear Equipment Operator this announcement is not necessary if the team members are present in the Control Room at the time.

- 2. If the OSC is activated, direct the OSC Coordinator to dispatch the First Aid Team to the location of the injured person.

NOTE

Only the Emergency Director may authorize an increase in emergency exposure levels above the 10 CFR 20 limits.

- 3. Use EIP-2-012, Radiation Exposure Controls (Ref. 2.4) to authorize team members to exceed 10 CFR 20 radiation exposure limits if necessary.
 - 4. If the injured individual is located inside the Radiological Controlled Area, dispatch a Radiation Protection Technician to the location of the individual.
 - 5. If applicable, caution team members to read dosimeters frequently so they will not exceed authorized exposure levels.
- 4.2.2 Request, by Public Address System, that the First Aid Team report the injured person's status and any further assistance needed as soon as practical.

4.2.3 If assistance is requested at the scene:

1. And the OSC is staffed, direct the OSC to dispatch the requested additional assistance.
2. If the OSC is not staffed, dispatch additional onshift personnel to provide assistance to the First Aid Team.

4.2.4 Upon notification by the First Aid Team that transportation to the hospital is needed, call the West Feliciana Parish Hospital and request ambulance service assistance.

4.2.5 If additional or alternate means of transportation is needed, call the Jackson Rescue unit via the West Feliciana Sheriff's Office using Attachment 2.

4.2.6 If the Jackson Rescue Unit is not available dispatch an individual to prepare the plant emergency vehicle (PEV) to transport the injured person to the hospital.

4.2.7 Notify Security if an ambulance has been requested or if the PEV is to be used for transport.

4.2.8 For individuals to be transported to the hospital, obtain the following information from the First Aid Team:

1. Nature and extent of injuries.
2. Contamination levels on the person's clothing and skin.
3. First aid measures taken or planned prior to transfer.
4. Will individual be transported prior to decontamination.

4.2.9 If the injured individual is contaminated, assign a Radiation Protection Technician to accompany the ambulance or PEV to the hospital to provide radiological assistance to hospital personnel.

4.2.10 Notify the West Feliciana Hospital of the impending arrival of the injured person using Attachment 1.

NOTE

Our Lady of the Lake Regional Medical Center in Baton Rouge may also be used if an individual is injured beyond the capability of West Feliciana Hospital, or several personnel are injured at once.

4.2.11 Direct Radiation Protection to monitor and decontaminate or post any areas, which may have been contaminated in the process of moving the injured individual from the Radiological Controls Area to the ambulance, using RPP-0019, Decontamination of Areas, Tools and Equipment (Ref. 2.5).

- 4.2.12 Ensure that the completed Attachments 1, 2 and 3 are forwarded to the Plant Manager for use in developing the written summary of the emergency.

4.3 The First Aid Team shall:

- 4.3.1 Upon being notified of the location of an injured or seriously ill person:
1. If notified by Public Address Announcement, acknowledge that the announcement was heard.
 2. Obtain the nearest first aid kit, a radiation survey meter (if injured person is inside Radiation Controls Area), and proceed to the injured persons location.

NOTE

First aid kits are located in:

- a. The Main Control Room
 - b. OSC
 - c. Primary Access Point
 - d. TSC
 - e. Radiation Protection Work Area (Second Floor, Service Building)
 - f. Turbine Building
 - g. EOF
 - h. Each level of the "T" Tunnel
 - i. First Aid Room
3. Normal contamination control procedures should be ignored until the injured person has been stabilized.

NOTE

Keep radiation survey instruments on scale and report exposure rates to the Shift Supervisor frequently.

- 4.3.2 Upon arrival at the scene of the injury:
1. Check vital signs
 2. Make a quick assessment of the individual's condition and the need to move the person from the present location.
 3. If there is no immediate hazard from the present surroundings, administer first aid on-the-spot.

4.3.3 As soon as practical, notify the Emergency Director of the:

1. Nature and extent of the individual's injuries.
2. Need to transport person to the hospital.
3. Suspected contamination and the feasibility of decontamination prior to transport.
4. Need for Radiation Protection support in monitoring and decontamination of the injured individual.

NOTE

Contaminated, injured individuals should always be decontaminated in accordance RPP-0018, Personnel Decontamination (Ref. 2.7) prior to transport offsite if, in the opinion of the First Aid Team, the nature and extent of injuries will allow.

4.3.4 Continually observe patient.

4.3.5 If necessary to transport the patient to the hospital:

1. Place blankets under and in the stretcher.
2. Secure the individual in the stretcher.
3. Transport to ambulance pick-up point.
4. Continually check vital signs.

4.3.6 When the individual has been treated and released, or after transport offsite, complete the personnel injury record in Attachment 3.

4.4 The Security Shift Supervisor shall:

4.4.1 When notified that an ambulance has been requested or that the PEV will be used to transport an injured individual offsite:

1. Alert the Security Officers at the Primary Access Point (PAP) that an ambulance will be arriving from offsite or that the PEV will be leaving the site with an injured person.
2. Direct the PAP Officers to allow the ambulance or PEV immediate release from the site.
3. For an ambulance arriving from offsite direct the Security Officer to provide the ambulance kit to the ambulance attendants and accompany the ambulance to the designated loading point in lieu of the normal vehicle search procedures used for vehicles entering the Protected Area. (The rear compartment of the ambulance shall be checked for unauthorized persons.)

NOTE

Ambulance Kit contents are listed in Attachment 4.

- 4.4.2 When the ambulance or PEV leaves the Protected Area notify the Emergency Director.
- 4.5 The Radiation Protection Technician assigned to accompany the injured person to the hospital shall:
 - 4.5.1 Ensure that the Ambulance Emergency Kit is provided to the ambulance attendants.

NOTE

The Ambulance kit is located at the Primary Access Point (PAP) and is to be provided to the ambulance attendants by the Security Officer at the PAP.

- 4.5.2 If time permits, cover the floor of the ambulance (PEV) with protective covering.

NOTE

If excessive radiation exposure to the injured person is suspected, remove his dosimetry after transport from the radiation area and send it to Radiation Protection to be evaluated via one of the First Aid Team members. The injured individual's dosimetry should be replaced if additional radiation exposure is expected.

- 4.5.3 Accompany injured individual to the hospital, making contamination surveys of the injured person, to the extent possible, enroute.
- 4.5.4 At the hospital, provide assistance to hospital personnel in accordance with the Emergency Medical Assistance Plan.

NOTE

If the ambulance has been used to transport the patient, survey the ambulance prior to releasing it for further service.

- 4.5.5 At the completion of decontamination and initial medical treatment, collect all potentially contaminated waste and return it to the site.
- 4.5.6 Make a final contamination survey of hospital facilities involved.

END

NOTE

The receiving hospital must be notified as far in advance as possible when an individual is to be transported from the site.

NOTIFICATION PROCEDURE

1. Use the Hospital Emergency Hotline, or call the West Feliciana Parish Hospital Telephone No.: (504) 635-3811.
(Our Lady of the Lake Regional Medical Center may be used if necessary, telephone number: (504) 387-8826)
2. State your name, title and give a phone number for call-back verification (if Hotline is not used).
Telephone No.: _____
3. Inform the emergency room that an injured individual is being transported from the River Bend Station.
4. Provide the following information (to the extent known):
 - a. Name of individual _____
 - b. Nature and extent of injury _____

 - c. Radioactively contaminated (circle one) Yes No Unknown
 - d. Internally contaminated (circle one) Yes No Suspected Unknown
 - e. Method of transport (circle one)
Ambulance Plant Emergency Vehicle
 - f. Radiation Protection Technician accompanying ambulance or will arrive at the hospital:
Yes No
 - g. Estimated time of arrival at hospital: _____
5. Injured individual received excessive radiation exposure (only if greater than 25 Rem whole body):
(circle one) Yes No Unknown
Approximate exposure received (if known) _____

NOTE

Place "N/A" in steps which are not applicable and provide initials.

	ACTIONS COMPLETED	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. First Aid Team dispatched to location of injured person.	_____	_____
2. Request First Aid Team to report as soon as practical.	_____	_____
3. Dispatch assistance requested by first aid team.	_____	_____
4. Ambulance requested from West Feliciana Hospital by Hotline, or (504) 635-3811	_____	_____
<u>or</u>		
Jackson Rescue Unit: Call West Feliciana Sheriff's Office: (504) 635-3241		
5. Dispatch individual to prepare Plant Emergency Vehicle (PEV) for transport.	_____	_____
6. Security notified that:		
a. Ambulance will be arriving	_____	_____
b. PEV will be leaving site with injured person, or	_____	_____
7. West Feliciana Parish Hospital/ Our Lady of the Lake Regional Medical Center notified using Attachment 1.	_____	_____
8. Radiation Protection Technician assigned to go to the hospital	_____	_____
9. Follow-up surveys and decontamination or posting of areas by Radiation Protection	_____	_____
10. Report of personnel injury completed by First Aid Team Leader	_____	_____

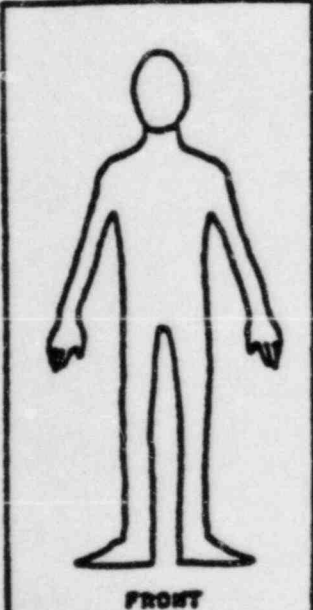
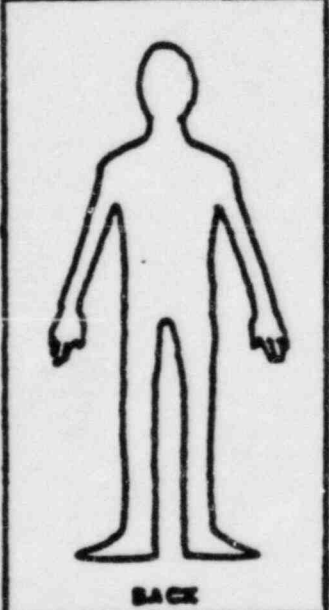



1. Name of individual _____
2. Circumstances of injury (include date and time) _____

3. Nature and extent of injuries _____

4. First aid measures employed _____

5. Patient transported to hospital? _____ Yes _____ No
Name of hospital _____
6. Patient contaminated? _____ Yes _____ No
7. Decontaminated before transport to hospital? _____ Yes _____ No
(If no, complete Item 8 below)
- 8.

LOCATION OF CONTAMINATION (INDICATE ON APPROPRIATE SKETCH OR SKETCHES)

 FRONT	 BACK	  LEFT HAND, BACK LEFT HAND, PALM RIGHT HAND, BACK RIGHT HAND, PALM	 FACE
--	---	--	---

9. Contamination levels of areas indicated in Item 8.

<u>LOCATION</u>	<u>CONTAMINATION LEVEL (indicate dpm or mr/hour)</u>
_____	_____
_____	_____
_____	_____
_____	_____

10. Additional remarks _____

Signature: _____ Date: _____
(First Aid Team Leader)

RETURN COMPLETED FORM TO THE EMERGENCY DIRECTOR

NOTE TO EMERGENCY DIRECTOR

Use information on this form to provide additional information to receiving hospital if requested. Forward this completed form to the Plant Manager with a copy to the Radiation Protection Supervisor, following the termination of the emergency.

<u>ITEM DESCRIPTION</u>	<u>QUANTITY REQUIRED</u>
1. Protective Clothing Set (White Paper Shoe Covers, Glove Liners, Surgical Gloves)	2
2. Dosimeters; Gamma (0-200 mr)	2
3. Dosimeter Charger	1
4. Thermoluminescent Dosimeters; Beta Gamma	2

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE TITLE: TOXIC GAS EMERGENCIES

☒ No

[illegible]

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: TOXIC GAS EMERGENCIES

PROCEDURE NO. EIP-2-010

REV. 0

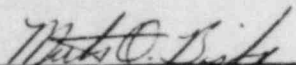
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DATE



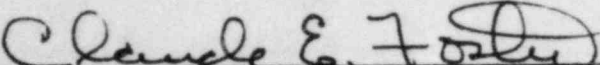
Radiation Protection/Chemistry Representative

9-24-84




Plant Operations Representative

9-24-84



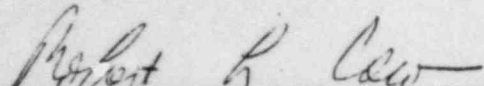
Security Representative

9/24/84



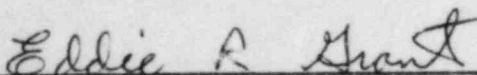
Training Representative

9/24/84




Technical Staff Representative

9/24/84



Nuclear Licensing Representative

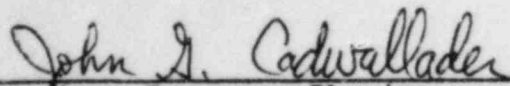
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

TOXIC GAS EMERGENCIES

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ATTACHMENT 2	TOXIC GAS EMERGENCY CHECKLIST	9

1.0 PURPOSE

This procedure provides guidance in dealing with releases of toxic gases (other than radioactive gases), either onsite or offsite, which may result in a personnel hazard onsite.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 River Bend Station Final Safety Analysis Report, Chapter 2.0
- 2.3 RHP-0103, Operation of Combustible Gas Monitor
- 2.4 RHP-0104, Air Samples for Toxic Gases
- 2.5 EIP-2-026, Evacuation
- 2.6 EIP-2-008, Search and Rescue
- 2.7 EIP-2-009, Medical Emergencies
- 2.8 EIP-2-011, Fire Emergencies
- 2.9 EMP-0107, Preoperational/Operational Oil and Hazardous Chemical Spill Prevention, Control and Countermeasure Plan
- 2.10 EMP-0106, Preoperational/Operational Resource Conservation and Recovery Act Hazardous Waste Management.

3.0 GENERAL INFORMATION

- 3.1 Analyses of emergency conditions resulting from the releases of toxic or hazardous gases, either onsite or offsite, which pose or may pose hazards to personnel onsite, are described in the FSAR (Ref. 2.2) and are considered to be unlikely; however, provisions have been made for the detection and evaluation of the effects of toxic gases on onsite personnel.
- 3.2 Radiation Protection Technicians have been trained in the use of toxic and flammable gas detection devices and, during an emergency, will perform monitoring and evaluation of these materials in concert with the Safety and Health Representative.
- 3.3 The primary means of protection for personnel onsite who may be affected by toxic or flammable gases (vapor, fumes) is evacuation of the affected areas. The Main Control Room habitability systems are designed to prevent toxic gas releases from interfering with reactor operations; however, the onsite emergency response facilities may need to be relocated depending on the toxic gas threat and the judgment of the Emergency Director.
- 3.4 The Environmental Supervisor is responsible for evaluating toxic gas releases in any area outside the contiguous plant buildings including the Control and Diesel Generator Buildings.

4.0 PROCEDURE

4.1 The first individual having knowledge of a toxic or flammable gas (vapors, fumes) release, or observes an accident onsite or near-site which may involve toxic gases shall:

4.1.1 Retreat to a safe location and immediately call the Main Control Room and report the incident, providing as much detail as possible, such as:

1. Likely toxic gas being or potentially being released
2. Observed wind direction
3. Site buildings or areas affected or in imminent danger of being affected
4. Whether personnel are involved in the accident and have been or are likely to be affected by the gas.

4.1.2 Continue to provide any applicable information concerning the emergency to the Main Control Room. Follow subsequent directions for all other site personnel.

NOTE

All personnel responding to toxic or combustible gas releases shall wear a self-contained breathing apparatus (SCBA).

4.2 The Emergency Director shall:

4.2.1 Immediately dispatch a Radiation Protection Technician and a Nuclear Equipment Operator (NEO) equipped with the appropriate monitoring equipment to the scene.

1. If combustible gas is suspected, implement RHP-0103, Operation of Combustible Gas Monitor (Ref. 2.3).
2. If toxic gas is suspected, implement RHP-0104, Air Samples for Toxic Gases (Ref. 2.4).

4.2.2 Inform the Safety and Health Representative.

4.2.3 Make the following announcement over the Plant Public Address System:

"Attention in the Plant. There is a reported toxic gas emergency with the potential to affect the following site locations (describe locations). Personnel in these areas will be provided with further information."

- 4.2.4 Obtain Attachment 2 and complete the checklist as the actions of this procedure are performed.
- 4.2.5 Implement EIP-2-026, Evacuation (Ref. 2.5), for the affected area or buildings as deemed necessary.
- 4.2.6 Implement EIP-2-008, Search and Rescue (Ref. 2.6); EIP-2-009, Medical Emergencies (Ref. 2.7); or EIP-2-011, Fire Emergencies (Ref. 2.8) as required.
- 4.2.7 Implement Main Control Room habitability controls and evaluate potential hazard using Attachment 1.
- 4.2.8 Implement EIP-2-001, Classification of Emergencies (Ref. 2.9) and determine the appropriate classification for the existing condition.
- 4.2.9 Notify security of the potential or actual emergency condition and request that access control for the affected areas be implemented.
- 4.2.10 Consider alternate locations for emergency organization augmentation personnel.
 - 1. If the TSC and OSC are affected, direct the TSC personnel to assemble at the EOF. The OSC personnel are to assemble at a safe location, onsite if possible.
 - 2. If the entire site is affected, direct operations personnel, at least two Radiation Protection Technicians and one Chemistry Technician to report to the Main Control Room to be available to perform actions as necessary to respond to the toxic gas emergency. Relocate other OSC personnel to the EOF.
- 4.2.11 If any areas outside the contiguous plant buildings including the Control and Diesel Generator Buildings are affected, notify the Environmental Supervisor.
- 4.2.12 Take any other actions considered necessary to protect the health and safety of personnel.

4.3 The Radiation Protection Technician dispatched to the scene shall:

- 4.3.1 Obtain the appropriate toxic gas monitor from the Operations Support Center equipment locker.
 - 1. For combustible or flammable gases, use the Combustible Gas Monitor.
 - 2. For toxic gases, use the Toxic Gas Air Sampler.
 - 3. For unknown situations, take both monitors.

N/A	N/A	EIP-2-010	REV. O	PAGE 4 OF 8
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4.3.2 Wear a self-contained breathing apparatus and obtain a portable radio from the OSC equipment locker.

4.3.3 Proceed with the assigned NEO towards the suspected hazard area, sampling as necessary to ensure that the hazard is properly identified.

NOTE

At least two persons must respond for toxic gas monitoring. Both must wear self-contained breathing apparatus. Both should have portable radios.

4.3.4 Keep the Emergency Director informed of any hazards encountered and the estimated magnitude of the hazard. If extensive monitoring appears to be needed, request that a relief team be assembled to continue monitoring when the team's SCBA air supply is exhausted.

NOTE

At any time unexpected hazards or extremely high levels of toxic or combustible materials are encountered, retreat to a safe location and request further directions from the Emergency Director. The Safety and Health Representative shall advise the Emergency Director if the readings are high enough to endanger personnel.

4.3.5 Following evaluation of the magnitude of the hazard, return to the TSC or Main Control Room and provide a full assessment to the Emergency Director.

4.4 The Nuclear Equipment Operator (NEO) assigned to assist the Radiation Protection Technician shall:

4.4.1 Obtain an SCBA and proceed to the OSC equipment locker or other designated location to meet the Radiation Protection Technician.

1. Procure a portable radio from the OSC equipment locker.

2. Obtain a 50 foot length of rope from the OSC equipment locker.

4.4.2 Proceed to the scene of the emergency following the Radiation Protection Technician.

NOTE

Stay well behind the Radiation Protection Technician as the hazard area is entered, but close enough to provide immediate assistance if needed.

4.4.3 If a building or area with limited visibility is to be entered, use the rope as a lead line by tying it to the Radiation Protection Technician.

4.4.4 Maintain radio contact with the Radiation Protection Technician conducting the survey and with the Emergency Director and the Safety and Health Representative (when he arrives).

4.5 The Environmental Supervisor shall:

4.5.1 Implement EMP-0107, Preoperational/Operational Oil and Hazardous Chemical Spill Prevention, Control and Countermeasure (SPCC) Plan (Ref. 2.9) and EMP-0106, Preoperational/Operational Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management (Ref. 2.10) as necessary.

4.5.2 Keep the Emergency Director informed regarding the status of a toxic gas emergency outside of the contiguous plant buildings.

END

ATTACHMENT 1

POTENTIAL TOXIC GAS SOURCES

Toxic Gas Source	Control Room Intake	Predicted Maximum Main Control Room Concentration (g/m ³)	Toxicity Limits (g/m ³)
Sulfuric acid	A	4.72×10^{-4}	$2.00 \times 10^{-3}(1)$
	B	2.95×10^{-4}	
Chlorine	A,B	See Note	$4.5 \times 10^{-2}(1)$
Aqueous ammonia	A,B	See Note	$7.0 \times 10^{-2}(1)$
Anhydrous ammonia	A,B	See Note	$5.84 \times 10^{-1}(2)$
Hydrazine	A,B	3.72×10^{-4}	$1.30 \times 10^{-3}(2)$
Sulfur dioxide	A,B	6.34×10^{-2}	$13.3 \times 10^{-2}(4,5)$

NOTE

These toxic gas could reach the toxicity limit onsite if releases result from either a trade accident on U.S. 61 or a barge accident on the Mississippi River adjacent to the site. If the Control Room is isolated within 120 seconds of the first detection of the material onsite, toxicity limits will not be exceeded in the Control Room.

Intake key: A: Local main control room air intake
B: Remote main control room air intake

Sources:

1. Regulatory Guide 1.78, June 1974
2. Registry of Toxic Effects of Chemical Substances, National Institute of Occupational Safety and Health, U.S. Department of Health, Education, and Welfare, 1978.
3. Criteria for a Recommended Standard: Occupational Exposure to Carbon Dioxide, Publication No. NIOSH 76-194, National Institute of Occupational Safety and Health, August 1976.
4. Criteria for a Recommended Standard: Occupational Exposure to Sulfur Dioxide, Publication No. HSM 99, 72-116, National Institute of Occupational Safety and Health, 1974.
5. Patty, F.A. Industrial Hygiene and Toxicology, Volume II. Interscience Publishers, New York, NY, 1963.

NOTE

Place N/A in any step that is not applicable.

- | | <u>Action Completed</u>
<u>Date/Time</u> | <u>Initials</u> |
|---|---|-----------------|
| 1. Notified of potential toxic gas hazard material (if identified) _____ | _____ | _____ |
| 2. Radiation Protection Technician and NEO dispatched to scene _____ | _____ | _____ |
| 3. Announced potential hazard over Public Address System _____ | _____ | _____ |
| 4. Notified the Safety and Health Representative (Cletus Doyle) telephone number
Work: 635-4657 Home: (504) 654-4603 | _____ | _____ |
| 5. EIP-2-026, Evacuation Implemented _____ | _____ | _____ |
| 6. EIP-2-008, Search and Rescue Implemented _____ | _____ | _____ |
| 7. EIP-2-009, Medical Emergencies Implemented _____ | _____ | _____ |
| 8. EIP-2-011, Fire Emergencies Implemented _____ | _____ | _____ |
| 9. Control Room Habitability Controls Implemented _____ | _____ | _____ |
| 10. Emergency classified in accordance with EIP-2-001, Classification of Emergencies _____ | _____ | _____ |
| 11. Security notified and Access Controls Implemented _____ | _____ | _____ |
| 12. Alternate assembly locations designated for TSC and OSC
TSC location _____ OSC location _____ | _____ | _____ |
| 13. Notified the Environmental Supervisor (if toxic gas release is outside the contiguous plant buildings). _____ | _____ | _____ |

Telephone Number: Van Conner Work: 73-4425
Home: (504) 766-6834
Alternate: Mike Herrington Work: 73-4425
Home: (504) 355-1077

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-011

PROCEDURE TITLE: FIRE EMERGENCIES

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-7		<i>J. Williams 10/2/84</i>	
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: FIRE EMERGENCIES

PROCEDURE NO. EIP-2-011

REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

DATE

[Signature]
Radiation Protection/Chemistry Representative

9-24-84

[Signature]
Plant Operations Representative

9-24-84

[Signature]
Security Representative

9/24/84

[Signature]
Training Representative

9/24/84

[Signature]
Technical Staff Representative

9/24/84

[Signature]
Nuclear Licensing Representative

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[Signature]
Maintenance Representative

9/24/84

Recommended for Approval:

[Signature]
Supervisor - Emergency Planning

9-24-84

FIRE EMERGENCIES

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1.0 PURPOSE

This procedure provides instructions for augmenting the Plant Fire Brigade during a serious fire at the River Bend Station.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 ADM-0009, Station Fire Protection Program
- 2.3 EIP-2-001, Classification of Emergencies
- 2.4 EIP-2-026, Evacuation
- 2.5 EIP-2-027, Personnel Accountability
- 2.6 EIP-2-013, Onsite Radiological Monitoring
- 2.7 RPP-0018, Personnel Decontamination
- 2.8 RPP-0019, Decontamination of Areas, Tools and Equipment
- 2.9 Plant Security Procedures

3.0 GENERAL INFORMATION

- 3.1 This procedure is not intended to provide instructions to the Fire Brigade but to provide instructions on the augmentation of the Fire Brigade by offsite support agencies along with instructions for site access control and coordination with offsite support groups.
- 3.2 Usually, a major fire presents a greater threat to the health and safety of personnel than radioactive contamination. Radiological contamination control measures should be considered but should not be allowed to hamper efforts to extinguish the fire.
- 3.3 Offsite Fire Department personnel will be directed by the Fire Brigade Leader in conjunction with the Chief, St. Francisville Fire Department.

4.0 PROCEDURE

- 4.1 Whenever a fire is reported or detected and confirmed within the plant the Emergency Director shall:
 - 4.1.1 Initiate the actions of ADM-0009, Station Fire Protection Program (Ref. 2.2).
 - 4.1.2 Obtain Attachment 2 and complete the checklist as the following actions of this procedure are performed.
 - 4.1.3 Continually assess the magnitude and location of the fire. Refer to EIP-2-001, Classification of Emergencies (Ref. 2.3) to ensure that the emergency is properly classified.

- 4.1.4 If a report from the Fire Brigade Leader indicates that the fire is beyond the capability of the Fire Brigade, request or direct the communicator to request offsite fire fighting assistance using Attachment 1.
- 4.1.5 Notify the Security Shift Supervisor of the exact location of the fire and that offsite fire fighting support has been requested.
- 4.1.6 Provide assistance to the Fire Brigade using any resources available on shift or from the Operations Support Center (OSC).
- 4.1.7 Implement EIP-2-026, Evacuation (Ref. 2.4), and EIP-2-027, Personnel Accountability (Ref. 2.5) for fire threatened areas as applicable.
- 4.1.8 If a major fire involves radioactive materials or if offsite fire fighting assistance arrives onsite, direct a Radiation Protection Technician to evaluate radiological hazards resulting from the fire by implementing EIP-2-013, Onsite Radiological Monitoring (Ref. 2.6).
- 4.1.9 Direct protective actions for onsite personnel recommended by the Radiation Protection Technician or the Radiation Protection Coordinator.
- 4.1.10 Provide the completed Fire Emergency checklist to the Plant Manager for use in the development of the written summary of the emergency.
- 4.2 When notified of the impending arrival of the offsite fire department, the Security Shift Supervisor shall:
 - 4.2.1. Notify the Security Officers at the Primary Access Point (PAP) that the St. Francisville Fire Department will be arriving to assist the Fire Brigade.

NOTE

DO NOT DELAY THE FIREMEN BY ATTEMPTING TO TAKE THEIR NAMES AT THE TIME OF ARRIVAL.

- 4.2.2 Direct the Security Officer at the PAP to issue the special Fire Department badges, including dosimetry to each fire response person as they enter the PAP gate.
- 4.2.3 Assign Security Officers to accompany the Fire Department onsite in lieu of normal vehicle search procedures and personnel access procedures.

N/A	N/A	EIP-2-011	REV. 0	PAGE 3 OF 7
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- 4.2.4 Inform the assigned Security Officers of the exact location of the fire and the positions in which the Fire Brigade Leader wishes the fire trucks placed.
 - 4.2.5 Direct the assigned Security Officers to escort the offsite Fire Department personnel to the designated location as soon as badges and dosimetry have been distributed at the PAP.
 - 4.2.6 Notify the Emergency Director at the time the offsite Fire Truck arrives at the PAP.
 - 4.2.7 Direct Security Officers at the PAP to prevent the support Fire Department personnel from leaving the site following fire fighting operations until the personnel and equipment have been surveyed for radioactive contamination and the dosimetry badges have been collected.
- 4.3 The Radiation Protection Technician (if assigned to support the Fire Brigade) shall:
- 4.3.1. Make radiological surveys of the affected area using EIP-2-013, Onsite Radiological Monitoring (Ref. 2.6) and together with information from area radiation monitors, continuous air monitors and process and effluent monitors, recommend protective actions for onsite personnel to the Emergency Director (or Radiation Protection Coordinator if the TSC is operational).
 - 4.3.2 Recommend to the Emergency Director, additional dosimetry and other protective measures for the Fire Brigade and offsite Fire Department personnel.
 - 4.3.3 At the conclusion of Fire Brigade operations conduct contamination surveys of personnel and equipment involved in fire operations. Implement RPP-0018, Personnel Decontamination (Ref. 2.7) and RPP-0019, Decontamination of Areas, Tools and Equipment (Ref. 2.8), as needed.
 - 4.3.4 Ensure that the names, social security numbers and dosimeter numbers are recorded on Attachment 3 for all offsite Fire Department support personnel. Collect dosimeters and forward to the Radiation Protection Coordinator (Radiation Protection Supervisor if the TSC is not operational) for evaluation.
 - 4.3.5 Ensure that all vehicles and equipment to be returned to the St. Francisville Fire Department or other offsite agency have been surveyed and decontaminated prior to release from the Protected Area.

END

N/A	N/A	EIP-2-011	REV. O	PAGE 4 OF 7
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REQUEST FOR FIRE SUPPORT ASSISTANCE

1. Call the St. Francisville Fire Department (504) 635-3878.
2. Give your name and title along with a telephone number for call-back verification.
Telephone Number _____
3. Provide the following information:
 - a. There is a fire at the River Bend Station beyond the capacity of onsite fire suppression capabilities.
 - b. We request your immediate assistance.
 - c. The fire is/is not in a radiological controlled area.
 - d. Upon your arrival at the plant gate you will be escorted by security to the fire scene.
 - e. Please estimate your time of arrival at the plant site. _____
Time
 - f. You may use the telephone number provided to verify this request.
4. Call the Security Shift Supervisor and inform him of the estimated time of arrival of the St. Francisville Fire Department.
5. Notify the Fire Brigade Leader of the estimated time of arrival of offsite assistance.

Name of individual requesting assistance_____
Date/Time

	ACTION COMPLETED	
	DATE/TIME	INITIALS
1. Fire alarm sounded	_____	_____
2. Announcement of fire location on Public Address System	_____	_____
3. Fire brigade activated	_____	_____
4. Emergency classified (EIP-2-001, Classification of Emergencies) Classification: _____		
5. Offsite fire support requested (Attachment 1)	_____	_____
6. Notify Security of Offsite Support request and arrival time	_____	_____
7. Radiation Protection Technician assigned to evaluate hazards	_____	_____
8. Notified of offsite Fire Department arrival	_____	_____
9. Fire fighting operations terminated	_____	_____
10. Offsite Fire Department personnel, vehicles, and equipment surveyed, decontaminated, and released from site	_____	_____
11. Offsite Fire Department dosimetry submitted to the Radiation Protection Coordinator for evaluation	_____	_____

OFFSITE FIRE SUPPORT PERSONNEL DOSIMETRY LIST (PAP Security Officer)

DOSIMETER NO

This attachment is to be complete prior to fire support personnel leaving the site. **DO NOT DELAY THE FIREMEN BY ATTEMPTING TO TAKE THIS INFORMATION AT THE TIME OF ARRIVAL.** Collect all dosimetry and forward, along with this list to the Radiation Protection Coordinator (or Radiation Protection Supervisor if the TSC is not operational) for evaluation.

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-012

PROCEDURE TITLE: RADIATION EXPOSURE CONTROLS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

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RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES


TITLE: RADIATION EXPOSURE CONTROLS

PROCEDURE NO. EIP-2-012

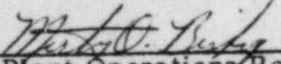
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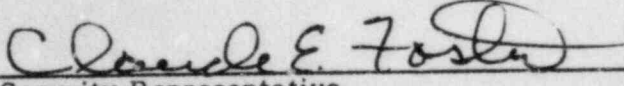
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Radiation Protection/Chemistry Representative

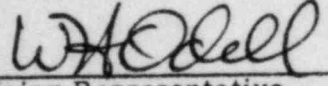
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Plant Operations Representative


9-24-84


Security Representative

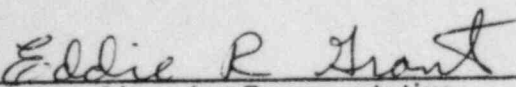
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Training Representative

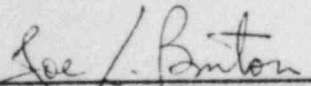
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Technical Staff Representative

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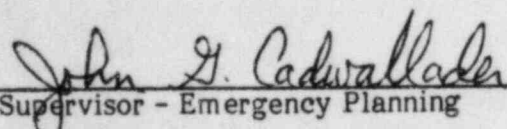

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

RADIATION EXPOSURE CONTROLS

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1.0 PURPOSE

To provide instructions for relaxing normal radiation exposure controls during an emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 River Bend Station Radiation Protection Plan
- 2.3 RSP-0203, Personnel Monitoring
- 2.4 Code of Federal Regulations, Title 10, Part 20 (10 CFR 20)
- 2.5 Code of Federal Regulations, Title 10, Part 19 (10 CFR 19)
- 2.6 EIP-2-008, Search and Rescue
- 2.7 EIP-2-009, Medical Emergencies
- 2.8 EIP-2-011, Fire Emergencies
- 2.9 EIP-2-015, Post Accident Sampling Operations

3.0 GENERAL INFORMATION

- 3.1 During a classified emergency, the administrative exposure controls of the River Bend Station Radiation Protection Plan (Ref. 2.2) and RSP-0203, Personnel Monitoring, (Ref. 2.3) are suspended; however, every effort shall be made to maintain personnel exposures within the limits established by 10 CFR 20 (Ref. 2.4).
- 3.2 Due to rapidly changing conditions during an emergency, administrative approvals for exceeding established exposure limits are suspended. Only the Emergency Director shall have authority for authorizing exposures in excess of 10 CFR 20 limits. (Included as Attachment 1 for reference).
- 3.3 During the emergency phase of an accident the Radiation Work Permit (RWP) provisions of the River Bend Radiation Protection Plan (Ref. 2.2), are suspended, but shall be re-implemented at the termination of an emergency, when the Recovery phase is initiated.
- 3.4 Any person receiving more than 12 Rem whole body dose equivalent shall be removed from any further radiation exposure for the duration of the emergency. Individuals receiving greater than 25 Rem whole body dose equivalent shall be evaluated by a physician and shall not be subjected to any further radiation exposure until approved by the Radiation Protection/Chemistry Supervisor or the Plant Manager.
- 3.5 In accordance with the Gulf States Utilities Company policy concerning exposures to females who may be pregnant, no female who suspects she is pregnant shall be assigned to the Emergency Organization. In addition, females of child bearing age should not be assigned any responsibilities during an emergency which could result in exposures in excess of the 10 CFR 20 limits.

3.6 The guidelines for emergency exposures are:

3.6.1 Whole Body Dose Equivalent

1. To save the life of another individual — 75 Rem
2. To mitigate accident consequences and prevent major releases of radioactivity to the environment — 25 Rem
3. In either case in 1 or 2 above where time permits preplanning emergency actions — 12 Rem

NOTE

All occupational doses including emergency doses are required to be included as part of an individual's accumulated dose history and can affect the individual's allowable exposure during the current quarter and subsequent quarters. Further exposure is subject to the 5(N-18) limit including emergency exposure.

3.6.2 Extremity exposures

1. To save the life of another individual, extremity exposure will not be considered.
2. To mitigate accident consequences and prevent major releases of radioactivity to the environment — 100 Rem
3. When preplanned emergency actions are possible — 18.75 Rem.

3.7 Potassium Iodide (KI) (thyroid blocking agent) shall be available in the First Aid Room in the Services Building. The Radiation Protection Coordinator and Emergency Director should consider the use of KI by emergency response personnel for actions to save a life of another individual or mitigate accident consequences and prevent major releases of radioactivity to the environment whenever radioiodine concentration is 5×10^{-5} uCi/cc or greater.

4.0 PROCEDURE

4.1 The Emergency Director shall:

- 4.1.1 When assigning members of the emergency organization to perform tasks which may result in exposures in excess of the 10 CFR 20 limits (see Attachment 1),
1. Determine the person's current exposure history from the Radiation Protection Coordinator to ensure that the person has not received an emergency exposure previously.

2. Authorize each individual a maximum exposure limit. Do not exceed the limits in section 3.6.
3. Document the authorization of each individual in the Emergency Director's log.

NOTE

When the Shift Supervisor is acting as the Emergency Director, documentation may be in the Shift Supervisor's log or an Emergency Director's Log initiated by the Shift Supervisor.

4. Ensure that any individual believed to have received greater than 12 Rem whole body dose equivalent is promptly relieved from the Emergency Organization.

4.1.2 When preplanning time is available for emergency operations.

1. Do not authorize any individual to exceed 12 Rem whole body dose equivalent.
2. Avoid using females of child bearing age in any emergency assignment likely to result in exposures greater than 10 CFR 20 limits.
3. Select volunteers, preferably over the age of 45, to perform emergency functions which may result in exposures in excess of 10 CFR 20 limits.

4.2 The Radiation Protection Coordinator shall:

- 4.2.1 Ensure that dose history information is up-to-date and is readily available for the emergency organization for ensuring that any individual who is considered for an increase in emergency exposure limit has not received an emergency exposure previously.
- 4.2.2 When time permits, consult with the Emergency Director on the methods available to prevent excessive exposures during the emergency.
- 4.2.3 Inform emergency workers who are authorized emergency exposure in excess of 10 CFR 20 limits regarding the relative risks involved with excessive radiation exposure.

NOTE

Different individuals experience different reactions to radiation exposure.

There is no precise correlation between amount of exposure and health effect. The relative risks associated with acute whole body exposure with no medical treatment are (for 0 to 25 Rems): no detectable clinical effects; delayed effects may occur; (for 25 to 100 Rems): slight transient reductions in white blood cell count; disabling sickness not common; individual should be able to proceed with usual tasks; delayed effects possible, but serious effects on the average individual are improbable. Radiation workers are trained in the relative risks of radiation exposure per 10 CFR 19 (Ref. 2.5).

4.2.4 Coordinate and supervise the medical evaluation of any individual who receives greater than 25 Rem whole body dose equivalent during emergency operations.

4.2.5 As soon as practical during an emergency, make verbal reports of radiation overexposures to the Nuclear Regulatory Commission followed by a written report within 24 hours, or at the termination of the emergency, whichever is earlier.

NOTE

This notification will be made in lieu of the reporting requirements of 10 CFR 20.403.

4.2.6 Ensure that dose equivalents received during an emergency in excess of 10 CFR 20 limits are recorded on each individual's dose history file.

4.3 The Onshift Radiation Protection Technicians shall:

4.3.1 Perform all the responsibilities of the Radiation Protection Coordinator until he arrives at the Technical Support Center.

4.3.2 Assist in evaluating radiation exposure levels likely to be encountered during emergency operations.

END

<u>ORGAN</u>	<u>LIMIT PER CALENDAR QUARTER</u>
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 occupational dose not to exceed 5 (N-18) rems where "N" equals the individual's age in years at his/her last birthday.

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-013

PROCEDURE TITLE: ONSITE RADIOLOGICAL MONITORING

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
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**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: ONSITE RADIOLOGICAL MONITORING

PROCEDURE NO. EIP-2-013

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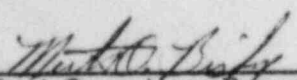
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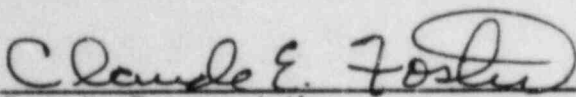
Radiation Protection/Chemistry Representative

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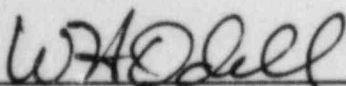
Plant Operations Representative

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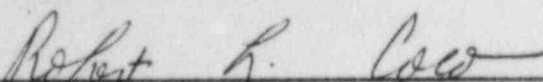
Security Representative

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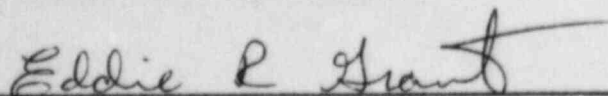
Training Representative

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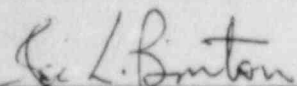
Technical Staff Representative

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Nuclear Licensing Representative

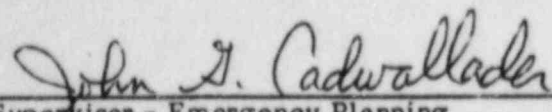
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

ONSITE RADIOLOGICAL MONITORING

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1.0 PURPOSE

This procedure provides instructions for performing radiological surveys in the plant and onsite out-of-plant during a radiological emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-012, Radiation Exposure Controls
- 2.3 RPP-0012, Operation of Portable Survey Equipment
- 2.4 RPP-0048, Operation and Calibration of Eberline RO-7
- 2.5 EIP-2-014, Offsite Radiological Monitoring

3.0 GENERAL INFORMATION

- 3.1 Onsite radiological surveys are performed for two basic purposes. One is to support emergency response team efforts inside the plant and the second is to verify release assumptions by monitoring the area outside but adjacent to the plant buildings.
- 3.2 To minimize radiation exposures to Radiation Protection personnel, general area surveys inside the plant shall not usually be conducted during an emergency. In addition, due to rapidly changing conditions, the most effective use of Radiation Protection personnel is to dispatch them with an assigned team to perform a specific task.
- 3.3 While onsite radiological monitoring will normally be accomplished by Radiation Protection personnel, the limited number of these individuals available during the initial phases of an emergency may require the Emergency Director to utilize other members of the emergency response organization. The Nuclear Control Operator (during search and rescue operations) and Chemistry personnel (during post-accident sampling operations) have been trained in the use of portable radiation survey instruments.

4.0 PROCEDURE

4.1 The Emergency Director shall:

- 4.1.1 Direct in-plant radiological surveys as necessary to assist in assessment of emergency conditions.
- 4.1.2 Assign Radiation Protection personnel to accompany emergency response teams reporting information and performing corrective actions within the plant.
- 4.1.3 Periodically direct onsite out-of-plant surveys to verify effluent monitor readings and to ensure that releases are not occurring through unmonitored release pathways.

- 4.1.4 Periodically direct radiological surveys of the Control Room, OSC, and TSC to ensure habitability during releases of radioactive materials within the plant.

4.2 Radiation Protection personnel assigned to conduct in-plant surveys shall:

- 4.2.1 Obtain high- and low-range beta-gamma radiation survey meters, survey maps and a portable radio from the OSC equipment locker.
- 4.2.2 Dress out in protective clothing and obtain a protective mask and low- and high-range dosimeters from the OSC kit.

NOTE

If airborne activities are unknown in the assigned monitoring area, a Self Contained Breathing Apparatus (SCBA) shall be worn until airborne activities can be determined.

- 4.2.3 Proceed to the assigned area or accompany the assigned emergency response team taking continuous radiation exposure rate readings along the way.

NOTE

If unexpected high radiation exposure rates are encountered or unusual circumstances exist, retreat, with the accompanying emergency response team to a safe location and request further information from the Emergency Director.

- 4.2.4 Record the radiation levels and report the levels to the OSC Coordinator (or Emergency Director if the OSC is not operational).
- 4.2.5 Check dosimetry frequently and remind emergency response team members to check their dosimeters frequently. Do not allow any individual to exceed radiation exposure limits in excess of those authorized by the Emergency Director or the Radiation Protection Coordinator in accordance with EIP-2-012, Radiation Exposure Controls (Ref 2.2).
- 4.2.6 If it becomes necessary to enter areas where radiation exposure rates in excess of 800 R/hour are expected, obtain a very high range instrument (RO-7) from the OSC to use for monitoring. Operate in accordance with RPP-0048, Operation and Calibration of Eberline RO-7 (Ref. 2.4).

4.3 Radiation Protection personnel assigned to conduct onsite out-of-plant monitoring shall:

- 4.3.1 Obtain the following equipment from the OSC equipment locker.
1. Radiation Survey Meter (RO-2)
 2. High and low range dosimeter
 3. Clean coveralls, gloves, and shoe covers (if necessary)

4. Protective mask
5. Portable radio
6. Survey Maps
7. EIP-2-013, Onsite Radiological Monitoring
8. EIP-2-014, Offsite Radiological Monitoring

4.3.2 Put on clean protective clothing (if deemed necessary by the Emergency Director or the Radiation Protection Coordinator) and receive briefing from the OSC Coordinator and Radiation Protection Coordinator concerning emergency conditions.

4.3.3 Circle the plant just inside the protected area fence, taking and recording radiation exposure rate readings. Keep in contact with the OSC by portable radio, by plant public address system, or telephone.

NOTE

If there is not an indication that a release of radioactive materials is occurring, the protective mask need not be worn during the survey, but should be carried for unexpected events.

4.3.4 If unexpected radiation levels are encountered, retreat to a safe location and notify the OSC Coordinator.

NOTE

During severe core degradation-type accidents, radiation levels outside the plant may be high (40-80 R/hour) near the plant buildings due to "shine" from radioactivity inside the structure. Stay as far away as possible from the main plant building during surveys. To determine if observed radiation levels are from released materials or from building shine, take open and closed window beta-gamma readings at the same point. If the levels are from shine alone, either from a building or an overhead plume, readings will change only slightly.

4.3.5 If directed to take an air sample, return to the OSC and obtain a portable air sampler, silver zeolite (AgZ) cartridge, and particulate filter paper. Take the air sample and perform a field estimate of activity concentrations using the method in Attachment 2 of EIP-2-014, Offsite Radiological Monitoring. Report result to the Radiation Protection Coordinator.

4.3.6 Check dosimetry frequently and maintain periodic contact with the OSC. When survey is completed return to the OSC using contamination control measures established at the OSC.

END

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-014

PROCEDURE TITLE: OFFSITE RADIOLOGICAL MONITORING

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: OFFSITE RADIOLOGICAL MONITORING

PROCEDURE NO. EIP-2-014

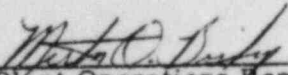
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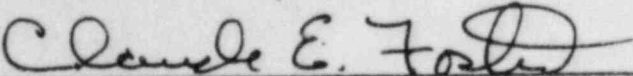
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Radiation Protection/Chemistry Representative


9-24-84


Plant Operations Representative

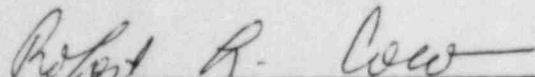
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Security Representative

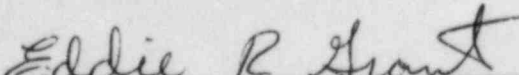
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Training Representative

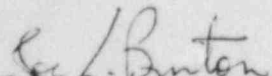
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Technical Staff Representative

9/24/84

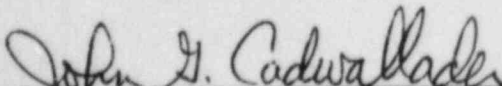

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

(LATERS)

PROCEDURE NO.: EIP-2-014

TITLE:OFFSITE RADIOLOGICAL MONITORING

REVISION NO.: 0

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION
(Section/Step)

PAGE NO.

BRIEF
DESCRIPTION

4.1.2.4 NOTE

3

Telephone Number for the Main
Control Room

OFFSITE RADIOLOGICAL MONITORING

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1.0 PURPOSE

This procedure provides instructions for offsite radiological monitoring in the plume exposure Emergency Planning Zone during a radiological emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-012, Radiation Exposure Controls
- 2.3 EIP-2-103, Emergency Equipment Inventory
- 2.4 RPP-019, Decontamination of Areas, Tools, and Equipment

3.0 GENERAL INFORMATION

- 3.1 Offsite Radiological Monitoring Teams shall be activated and dispatched anytime a Site Area Emergency is declared, or at any other time that the Emergency Director considers offsite monitoring necessary.
- 3.2 Teams will normally consist of one Radiation Protection Technician and one Chemistry Technician; however, teams may be assembled from any available personnel as long as at least one member is trained in offsite radiological monitoring.
- 3.3 Teams will be coordinated by the Offsite Dose Assessment/Protective Actions Advisor from the Emergency Operations Facility (EOF). If the EOF is not staffed at the time the teams are dispatched, coordination shall be performed from the Technical Support Center by the Offsite Dose Assessment/Protective Actions Advisor or the Radiation Protection Coordinator.
- 3.4 Two vehicles have been designated for offsite team use. The vehicles are normally used by site personnel but during an emergency will be made available for offsite teams. These vehicles are equipped with two way radios.

4.0 PROCEDURE

- 4.1 When activated, Offsite Radiological Monitoring Team members shall report to the Emergency Operations Facility (EOF), as soon as possible.
 - 4.1.1 The first team member to arrive at the EOF shall open an Offsite Survey Kit and:
 - 1. Make a rapid inventory to ensure that adequate supplies are available for use.
 - 2. Determine that the survey instruments are operable, by using the check source provided, and that instruments have current calibration stickers.
 - 3. Determine that the portable radio is operable.

4.1.2 The second team member to arrive at the EOF shall:

1. After determining that the first member is preparing the equipment and supplies for use, proceed to the PAP and secure a designated vehicle from the site.

NOTE

Ensure that the gasoline tank is greater than $\frac{1}{4}$ full and that the radio is operable before leaving the PAP. If the tank is less than full, note the fact that gasoline may be required during offsite monitoring operations.

2. Return to the EOF and assist the first member in checking out equipment and loading the kit into the vehicle.
3. Zero high-and low-range dosimeters for each team member and assign a TLD badge to each member.
4. Notify the Dose Assessment/Protective Action Advisor in the EOF, by radio, when the team is ready.

NOTE

If the EOF or the TSC are not yet staffed, call the Emergency Director in the Main Control Room by telephone, number (later) and report ready status.

- 4.1.3 The third and fourth team members to arrive shall perform item 4.1.1 and 4.1.2 and standby at the EOF for directions.

4.2 When directed, the Offsite Radiological Monitoring Team shall:

- 4.2.1 Proceed to the assigned location with survey instrument, RO-2, turned on and on scale, using the area maps provided in the kit. Figure 1 displays a map including a sector overlay.

NOTE

Surveys are to be taken outside the vehicles or at the window with the window rolled down unless otherwise instructed.

- 4.2.2 Maintain contact with the Dose Assessment/Protective Actions Advisor and continue to survey using the RO2 until directed to either take additional samples or standby outside the plume area.

NOTE

Usually the team will be directed to make plume surveys by traversing a designated route in an attempt to find the highest exposure rate along that route. Report back all survey data, above background, along the route.

- 4.2.3 Check dosimeter frequently and notify the Dose Assessment/Protective Actions Advisor when either team member approaches the 3 Rem/Quarter exposure limit.

NOTE

Do not exceed quarterly exposure limits except as authorized by the Emergency Director in accordance with EIP-2-012, Radiation Exposure Controls (Ref. 2.2).

- 4.2.4 When directed, collect and analyze air samples for radioiodine and particulate activity using the method in Attachment 2.

- 4.2.5 When directed, collect environmental samples using the methods in Attachment 3.

4.3 When offsite monitoring operations are terminated the Offsite Radiological Monitoring Team shall:

- 4.3.1 Return to the EOF and unload equipment.

- 4.3.2 Monitor equipment for contamination prior to restoring if radioiodine or particulate activity have been encountered during operations.

- 4.3.3 Turn all samples over to the Radiation Protection/EOF Habitability Technician, or deliver to an alternate facility as directed.

- 4.3.4 Return all equipment to the EOF storeroom after replacing expended supplies and inoperable equipment.

- 4.3.5 Return vehicle to the site.

NOTE

If radioiodine or particulate activity has been encountered during operations, survey the vehicle, using the E-140/HP 210 frisker for contamination prior to returning it to the site. Vehicles found to be contaminated must be decontaminated in accordance with RPP-019, Decontamination of Areas, Tools, and Equipment (Ref. 2.4) prior to being returned to normal service.

- 4.3.6 Read and record dosimetry values and turn over reading and TLD badges to the Radiation Protection Advisor in the EOF.

- 4.3.7 Stand by at the EOF until secured or re-activated by the Radiation Protection Advisor.

END

RBS 10 MILE EPZ MAP



ATTACHMENT 1

OFFSITE SURVEY KIT INVENTORY LIST

<u>Description</u>	<u>Type Radiation Detected</u>	<u>Range</u>	<u>Quantity</u>
Low Range Portable Rate Meters (RO-2)	Beta/Gamma	0 - 5 R/hr	1
Frisker (E-140 w/HP-210T)	Beta/Gamma	0 - 50,000 cpm	1
Direct Reading	Gamma	0 - 200 mR	2
Pocket Dosimeters	Gamma	0 - 500 mR	2
Dosimeter Charger			1
SH-4 Holder			1
Termoluminescent Dosimeters (TLD's)	Beta/Gamma		2
Approx. 8 Micro Curie CS-137 Check Source			1
Air Sampler with Cartridge and Filter holder (RADECO 12 volt)			1
Particulate Filters			4 Boxes
Silver Zeolite Cartridges			5 Boxes
Full Face Filter Respirator			2
Respirator Filter, Iodine (GMR-1)			2
Masking Tape			1 Roll
Flashlight			2
Spare Flashlight Batteries			8
Spare E-140 Batteries (D Cell)			6
Spare RO-2 Batteries (9 Volt)			6
Portable Calculator			1
Walkie Talkies			1

ATTACHMENT 1**OFFSITE SURVEY KIT INVENTORY LIST**

<u>Description</u>	<u>Quantity</u>
Scissors (shears)	1
Screwdriver	1
Pliers	1
China Marker	2
Felt Tip Pens	4
Stopwatch	1
Yellow Rain Gear w/Boots	2
Protective Clothing Set, White Paper	2
Tweezers	1
Contamination Smears	1 Box
Coin Envelopes for smears	1 Box
Disposable Gloves, Surgical	1 Box
Road Maps (Area)	1
Emergency Plan Implementing Procedure EIP-2-014	1
Map of Environmental Monitoring Stations	1
Sample Station Keys	1
Poly Bags, Small	1 Box
Poly Bags, Large	1 Box
One Liter plastic containers w/caps	6
Hand Trowel (garden trowel)	1
Tape Measure	1
Adhesive Labels	1 Package

1.0 Prepare air sampler as follows:

- 1.1 Load the Radeco Air Sampler filter holder with a Silver Zeolite (AgZ) cartridge, followed by a particulate filter paper. Replace the filter retainer ring firmly.

NOTE

The AgZ cartridge has an air flow orientation arrow on the side.

- 1.2 Open the hood of the vehicle and connect the Air Sampler cables to the battery terminals, being careful to note the proper polarity. Connect the positive (+) cable to the positive (+) battery terminal and the negative (-) cable to the negative (-) battery terminal.

NOTE

Keep vehicle running during sampling to prevent discharging the battery.

- 1.3 Rest the Air Sampler on the vehicle frame in a location which is not influenced by the exhaust from the fan, preferably in front of the radiator.
- 2.0 Take an Air Sample as follows:

- 2.1 Turn on the Air Sampler and adjust the air flow rate to 2 CFM.
- 2.2 Run the Air Sampler for ten minutes, timing the sample with the stop watch provided in the kit.

NOTE

Check air flow rate frequently to maintain 2 CFM.

- 2.3 At the end of ten minutes, stop the Air Sampler, remove the battery cables, put equipment back into the vehicle, and move out of the plume to a location having low background readings on the RO-2.
- 3.0 Prepare to perform a field analysis for radioiodines and particulates.
- 3.1 Label two plastic bags with:

- 3.1.1 Location of sample
- 3.1.2 Time of sample
- 3.1.3 Duration of sample (ten minutes)
- 3.1.4 Air flow rate
- 3.1.5 RO-2 reading at sample location

- 3.2 Put on disposable gloves and remove the filter paper and cartridge from the sampler. Using tweezers, carefully separate the filter from the AgZ cartridge and place each into separate labeled bags.
- 3.3 Remove disposable gloves and place in a large plastic bag for later disposal as radioactive waste.
- 4.0 Perform Field Analysis as follows:
 - 4.1 Turn on E-140/HP 210T Frisker. Hold probe at about waist level and note background reading. Record this reading in item 4 of Data Sheet A-2.
 - 4.2 Hold the plastic bag containing the filter paper against the face of the HP 210T probe and allow time for the meter to stabilize (about one minute). Record this reading in item 5a of Data Sheet A-2.

NOTE

The "dirty" side of the filter paper should be against the probe.

- 4.3 Hold the AgZ cartridge against the HP 210T probe. Orient the cartridge so that the "point" of the air flow arrow is pointing away from the HP 210T probe. Allow about one minute for the meter to stabilize and record count rate in item 6 a of Data Sheet A-2.
- 5.0 Calculate airborne concentrations of particulate and radioiodine activities using information provided in Data Sheet A-2.
- 6.0 Report calculated concentrations to the Dose Assessment/Protective Actions Advisor in the EOF. Retain calculation Data Sheet A-2 and turn in along with labeled samples.
- 7.0 Store labeled filter and cartridge in vehicle, to be returned to the EOF at the conclusion of operations or when directed.

END

DATA SHEET A-2
AIR PARTICULATE AND RADIOIODINE ESTIMATES

1. Date/time of sample: _____
2. Location of sample: _____
3. a. Air flow rate: _____ cfm
b. Duration of sample: _____ minutes
c. Total Volume collected (a x b): _____ cubic feet
4. E-140/HP 210T background count rate _____ cpm
5. a. Filter paper count rate _____
b. Net count rate for particulates (5a - 4) _____ cpm
6. a. Silver zeolite cartridge count rate _____ cpm
b. Net count rate for radioiodines (6a-4) _____ cpm

7. Estimate of particulate activity:

$$\frac{\text{Net count rate of filter paper (5b)} \text{ cpm} \times 1.1 \times 10^{-10}}{\text{Total volume of air collected (3c)} \text{ cubic feet}} =$$

_____ uCi/cc Particulate activity

8. Estimate of radioiodine activity:

$$\frac{\text{Net count rate of silver zeolite cartridge (6b)} \text{ cpm} \times 1.6 \times 10^{-10}}{\text{Total volume of air collected (3c)} \text{ cubic feet}} =$$

_____ uCi/cc Radioiodine activity

NOTE

There is always some air particulate activity present due to Radon and Thoron daughter products in the atmosphere. These decay with a combined average half-life of about 30 minutes. If calculated particulate activity is greater than 1×10^{-8} uCi/cc, repeat the count and calculation 30 minutes after sampling, and again one hour after sampling; report this data to the Dose Assessment/Protective Actions Advisor.

NOTE

This method is designed to provide a rapid estimate of deposited radionuclides in the environment during the Emergency Phase of an accident. It is not intended to be used for detailed environmental analyses required during the Recovery Phase of an accident nor to replace or supplement the routine Environmental Sampling Program.

1.0 Several environmental samples may be useful during the Emergency Phase of an accident to provide information on deposited radionuclides which may trigger emergency protective action recommendations. These are pasture grass, surface soil, surface water, milk and, during the growing season, green garden vegetables which may be eaten directly with little or no processing, such as spinach, lettuce, or cabbage.

2.0 When directed by the Dose Assessment/Protective Actions Advisor or the Emergency Director, collect the environmental samples specified using the following procedures.

2.1 Vegetation

NOTE

If a sample of vegetation is requested, keep the following guidance in mind: collect only the edible (by humans or animals) portion, and select the sample from a representative area. Collect at least 1 kilogram (approximately 2.2 lbs.) of fresh garden vegetables, or a one meter square area of pasture grass, note the area in which the sample was taken. Do not wash or wipe any part of the sample.

2.1.1 Garden Vegetables

1. Don one pair of disposable gloves.
2. Collect at least 1 kilogram (approximately 2.2 lbs.) of vegetables for the sample.

NOTE

Collect only the exposed edible portions and, if available, collect vegetables which are likely to be eaten directly without further processing, such as spinach, lettuce or cabbage.

3. Place the sample along with the disposable gloves into a polyethylene bag.
4. Count the sample using the E-140/HP-210T by holding the probe against the side of the bag.

5. Using the adhesive labels in the equipment kit, label the sample with the following information:
 - a. Contact E-140/HP-210T reading in cpm.
 - b. Type of sample.
 - c. Sample location (be as exact as possible).
 - d. Date and time.
 - e. Name or initials of person obtaining the sample.
 - f. E-140/HP-210T Frisker background reading.
6. Deliver the sample to the EOF for analysis.

2.1.2 Pasture Grass

1. Don one pair of disposable gloves.
2. Collect all grass in a one meter square area (39 inches on a side) using the shears and tape measure provided in the kit.

NOTE

Grass may be analyzed for radioactive content based on either weight or by square area. If the grass collected is not at least one kilogram (2.2 lbs.) in weight (approximately), collect a second square meter of grass.

3. Place the sample along with the disposable gloves into a polyethylene bag.
4. Count the sample using the E-140/HP-210T by holding the probe against the side of the bag.
5. Using the adhesive labels in the equipment kit, label the sample with the following information:
 - a. Contact E-140/HP-210T reading in cpm.
 - b. Type of sample.
 - c. Sample location (be as exact as possible).
 - d. Date and time.

e. Name or initials of person obtaining the sample.

f. E-140/HP-210T Frisker background reading.

6. Deliver the sample to the EOF for analysis.

2.2 Soil

2.2.1 Don one pair of disposable gloves.

2.2.2 Dig up a square area approximately one meter (39 inches) on a side and no more than approximately one quarter inch deep. (Do not include large rocks or vegetation in the sample.)

2.2.3 Place the sample along with the disposable gloves into a polyethylene bag.

2.2.4 Count the sample using the E-140/HP-210T by holding the probe against the side of the bag.

2.2.5 Using the adhesive labels in the equipment kit, label the sample with the following information:

1. Contact E-140/HP-210T reading in cpm.

2. Type of sample.

3. Sample location (be as exact as possible).

4. Date and time.

5. Name or initials of person obtaining the sample.

6. E-140/HP-210T Frisker background reading in cpm.

2.2.6 Deliver the sample to the EOF for analysis.

2.3 Surface Water

2.3.1 Obtain a one liter sample container from the equipment kit.

2.3.2 Don one pair of disposable gloves.

2.3.3 Gently dip the container beneath the surface of the water taking care not to agitate the water or stir up sediment.

2.3.4 When the container is full, remove from the water and cap the container.

2.3.5 Wipe the container dry and place it along with the absorbent material used to wipe the container, and the gloves, into a polyethylene bag.

2.3.6 Count the sample using the E-140/HP-210T by holding the probe against the side of the tagged bottle.

2.3.7 Using the adhesive labels in the equipment kit, label the sample with the following information:

1. Contact E-140/HP-210T reading in cpm.
2. Type of sample.
3. Sample location (be as exact as possible; including depth below surface).
4. Date and time.
5. Name or initials of person obtaining the sample.
6. E-140/HP-210T Frisker background reading.

2.3.8 Deliver the sample to the EOF for analysis.

2.4 Milk

2.4.1 Obtain a sample of approximately one liter of raw milk.

NOTE

This sample should be from an independent dairy in the plume exposure pathway. The milk should not be obtained from a cooperative dairy where milk may have been mixed with milk from other dairies outside the plume exposure EPZ. If available, collect the sample from a farm where the cow's milk is used directly by the owner. (Goat's milk may also be sampled.)

2.4.2 Count the sample using the E-140/HP-210T by holding the probe against the side of sample container.

2.4.3 Using the adhesive labels in the equipment kit, label the sample with the following information:

1. Contact E-140/HP-210T reading in cpm.
2. Type of sample.
3. Sample location (be as exact as possible, including name of dairy farm owner).

4. Date and time.
 5. Name or initials of person obtaining the sample.
 6. E-140/HP-210T Frisker background reading.
- 2.4.4 Ensure all necessary precautions are taken to minimize the possibility of spoilage prior to analysis. Preservatives are not recommended for this type of sample.
- 2.4.5 Deliver the sample to the EOF for analysis.

END

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE TITLE: POST-ACCIDENT SAMPLING OPERATIONS

[X] No

[illegible]

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

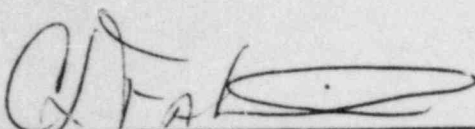
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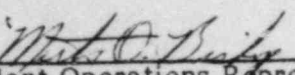
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DATE



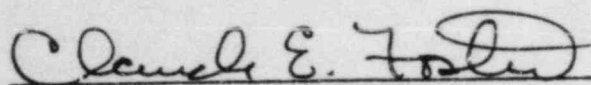
Radiation Protection/Chemistry Representative

9-24-84



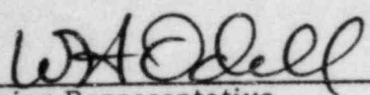
Plant Operations Representative

9-29-84



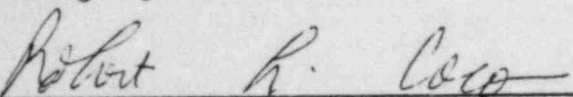
Security Representative

9/24/84



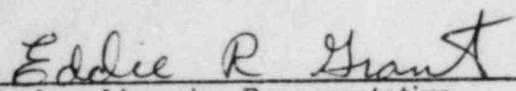
Training Representative

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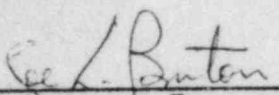
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

POST ACCIDENT SAMPLING OPERATIONS

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1.0 PURPOSE

This procedure provides guidance and instructions on post-accident sampling operations during a radiological emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-012, Radiation Exposure Controls
- 2.3 COP-1001, Post-Accident Sampling of Primary Coolant
- 2.4 COP-1002, Post-Accident Sampling of Containment Atmosphere
- 2.5 COP-1003, Post-Accident Sampling of Gaseous Effluents
- 2.6 COP-1004, Post-Accident Sampling of Liquid Effluents
- 2.7 COP-1030, Post-Accident Isotopic Analysis for Gaseous, Iodine and Particulate Activity
- 2.8 COP-1050, Post-Accident Estimation of Fuel Core Damage
- 2.9 EIP-2-007, Protective Action Recommendation Guidelines

3.0 GENERAL INFORMATION

- 3.1 Post-Accident Sampling Operations utilizing the Post-Accident Sampling System (PASS panel) will be implemented anytime the Emergency Director has indications that damage to the reactor fuel has occurred and in his opinion a post-accident sample is warranted.
- 3.2 Reactor coolant or containment atmosphere sample is to be collected and analyzed for isotopic concentration within three hours of initiation of the sampling process.
- 3.3 Radiation exposures are to be controlled during Post-Accident Sampling Operations to as low a level as possible and in no case shall any individual receive more than 5 Rem for the entire sample and analysis procedure.

4.0 PROCEDURE

4.1 The Emergency Director shall:

- 4.1.1 Whenever Control Room or ERIS information indicates that core damage may have occurred, Nuclear Chemistry Technicians may be dispatched to collect a Reactor Coolant sample or a Containment Atmosphere sample using the Post-Accident Sample System (PASS) in accordance with COP-1001, Post-Accident Sampling of Primary Coolant (Ref. 2.3) or COP-1002, Post-Accident Sampling of Containment Atmosphere (Ref. 2.4).

NOTE

It is desirable to delay the post-accident sampling operation several hours. This will permit a thorough evaluation of core degradation.

NOTE

Fuel damage indicators include high steam line radiation (greater than three times background), containment high range monitors indicate greater than 100 R/hour, and reactor water level below top of active fuel (less than -160 inches).

- 4.1.2 Request the Radiation Protection Coordinator to provide a briefing to the Nuclear Chemistry Technicians to include the known radiation levels through which the team may have to pass enroute to the PASS based on previous surveys and DRMS information.
 - 4.1.3 Direct the Chemistry/Core Damage Assessment Coordinator to implement COP-1050, Post-Accident Estimation of Fuel Core Damage (Ref. 2.8) as soon as reactor coolant activity results are available.
 - 4.1.4 Review protective actions recommended to offsite agencies compared to the actions required by EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.9) for the extent of fuel damage estimated from the PASS sample. Revise protective action recommendations as appropriate.
 - 4.1.5 If gaseous or liquid effluent monitors are offscale or inoperable, direct Nuclear Chemistry personnel to collect and analyze the appropriate samples, depending on the postulated release pathway (gaseous or liquid) using COP-1003, Post-Accident Sampling of Gaseous Effluents (Ref. 2.5) or COP-1004, Post-Accident Sampling of Liquid Effluents (Ref. 2.6).
- 4.2 The Nuclear Chemistry Technicians in the OSC shall:
- 4.2.1 Obtain high range dosimeters, protective clothing, and a high range survey instrument from the OSC equipment locker. At least two individuals are required.

NOTE

The Radiation Protection Coordinator shall determine the proper respiratory protective device to be worn depending on the accident circumstances at the time.

- 4.2.2 Receive briefing from the Radiation Protection Coordinator concerning radiological hazards existing along the route to be travelled, and the expected Reactor Coolant activity based on accident conditions.
- 4.2.3 Request authorization to receive exposure up to 5 Rems during Post-Accident Sampling Operations.

NOTE

Authorization must be approved by the Emergency Director.

- 4.2.4 Request that the analytical laboratory be prepared for the expected activities to be analyzed. Portable shielding for samples should be considered if significant fuel damage is indicated.

NOTE

If the analytical laboratory is uninhabitable provisions should be made to transport the sample to the Training Center laboratory for analysis. The Grand Gulf and Waterford Nuclear Plants are also available to provide analytical assistance through the mutual aid agreement with those facilities.

- 4.2.5 Dress out and proceed to the PASS panel, keeping in radio or telephone contact with the OSC Coordinator. Relay radiation monitoring information enroute and check dosimetry frequently. Report accumulated exposures to the OSC about every fifteen minutes.
- 4.2.6 Collect requested samples and return to the analytical laboratory. Perform analyses of samples in accordance with the referenced Chemistry procedures. Report results to the Emergency Director as soon as they are available.
- 4.2.7 At the conclusion of analytical procedures store the samples in shielded containers and decontaminate the laboratory if needed.
- 4.2.8 Return to the OSC following contamination control measures established for that facility. Report exposures received to the Radiation Protection Coordinator.

4.3 The Chemistry/Core Damage Assessment Coordinator shall:

- 4.3.1 Review results of the post-accident sample analysis received from the Sampling team.
- 4.3.2 Using COP-1050, Post-Accident Estimation of Fuel Core Damage (Ref. 2.8), estimate the extent of fuel degradation and report, as soon as possible, to the Emergency Director.
- 4.3.3 Determine the need for additional post-accident samples based on changing accident conditions.

4.4 The Radiation Protection Coordinator shall:

- 4.4.1 Brief Nuclear Chemistry technician on exposure rates likely to be encountered enroute to the PASS.

- 4.4.2 Request that the Emergency Director authorize exposure limits up to 5 Rems during post-accident sampling operations.

NOTE

Exposure limits will be authorized at the lowest level practical, consistent with the existing radiological conditions and the need for the particular sample requested. In no case will individual exposures exceed 5 Rem for post-accident sampling operations.

- 4.4.3 Ensure that close track of exposures is kept to prevent technicians from exceeding the authorized limit.
- 4.4.4 Update the Emergency Director on exposure levels encountered during sampling operations.

END

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-016

PROCEDURE TITLE: OPERATIONS SUPPORT CENTER - ACTIVATION

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-13		<i>J. Adams</i> 10/2/84	
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

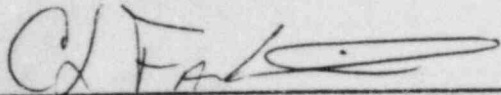
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PROCEDURE NO. EIP-2-016

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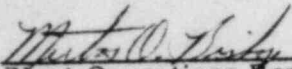
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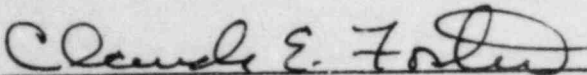
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Radiation Protection/Chemistry Representative



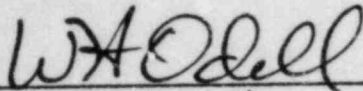
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Plant Operations Representative



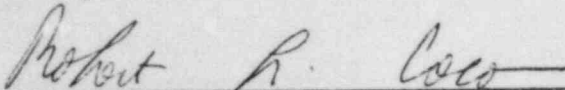
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Security Representative



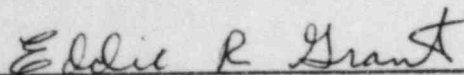
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Training Representative



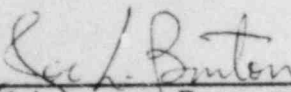
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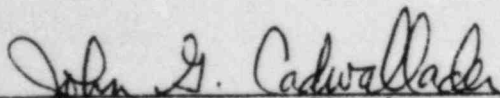
Nuclear Licensing Representative



9/24/84

Maintenance Representative

Recommended for Approval:



9-24-84

Supervisor - Emergency Planning

OPERATIONS SUPPORT CENTER - ACTIVATION

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1.0 PURPOSE

This procedure provides instructions for activation of the Operations Support Center.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-003, Alert
- 2.3 EIP-2-004, Site Area Emergency
- 2.4 EIP-2-005, General Emergency
- 2.5 EIP-2-002, Notification of Unusual Event
- 2.6 EIP-2-006, Notifications
- 2.7 EIP-2-029, Emergency Telephone Book
- 2.8 EIP-2-017, Operations Support Center-Support Functions

3.0 GENERAL INFORMATION

- 3.1 The Operations Support Center (OSC) serves as a staging area for onsite emergency response personnel during emergency response activities.
- 3.2 The OSC is also a place to brief oncoming Main Control Room personnel of the emergency condition of the plant, thus minimizing Main Control Room congestion.
- 3.3 The OSC will be activated for an Alert (EIP-2-003, Ref. 2.2), Site Area Emergency (EIP-2-004, Ref. 2.3), and General Emergency (EIP-2-005, Ref. 2.4), and as directed by the Emergency Director for a Notification of Unusual Event (EIP-2-002, Ref. 2.5).
- 3.4 The Mechanical Maintenance Supervisor, or an alternate, is notified in accordance with EIP-2-006, Notifications (Ref. 2.5). The Mechanical Maintenance Supervisor is the OSC Coordinator and has the responsibility for OSC activation.
- 3.5 The OSC is located on the third floor of the Services Building. The floor plan is shown in Figure 1.
- 3.6 The Emergency Director shall determine the location for assembly of OSC personnel if the OSC becomes uninhabitable.

4.0 PROCEDURE

4.1 Initial Actions

4.1.1 Upon declaration of an Alert, Site Area Emergency or General Emergency, the following OSC personnel shall report to the OSC:

- 1. Fire Brigade
- 2. First Aid Team
- 3. Search and Rescue Team
- 4. Radiation Protection

5. Chemistry/Radiochemistry
6. Operations
7. Mechanical Maintenance
8. Electrical Maintenance
9. I & C Technicians

NOTE

If the emergency classification is a Notification of Unusual Event the personnel listed above will be activated as needed.

Onshift personnel will be required to have multiple roles in the initial emergency response until the Emergency Response Organization is augmented. If one individual has the responsibility for two functions which need to be performed simultaneously, the Emergency Director will determine which function will be accomplished first.

Augmentation of OSC personnel will be accomplished using EIP-2-029, Emergency Telephone Book (Ref. 2.7).

4.1.2 The OSC Coordinator shall:

NOTE

The OSC Activation Checklist in Attachment 1 will be used to ensure that all of the actions of the OSC Coordinator have been completed.

1. Direct a Radiation Protection Technician to initiate radiation and airborne radioactivity surveys.

NOTE

The OSC shall be uninhabitable if radiation levels are such that OSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that OSC personnel may receive 520 times the maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

2. Report to the Emergency Director that the OSC is being activated.
3. Dispatch an available Radiation Protection Technician to the Technical Support Center to assume the duties of the Radiation Protection/TSC Habitability Technician.
4. Obtain Attachment 1 and complete the checklist as the actions of this procedure are performed.
5. Verify that the following equipment is operating properly:
 - a. Communications:

N/A	N/A	EIP-2-016	REV. O	PAGE 3 OF 13
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- (1) Main Control Room, TSC, OSC, EOF Hotline
- (2) Emergency shutdown line
- (3) At least two River Bend PBX extensions
- (4) Plant Public Address System
- (5) Portable radios (six)
- b. Lighting
- c. Ventilation
6. Report to the Emergency Director that the OSC is operational when step 2 is complete.
7. Direct rapid check of OSC emergency equipment to ensure that equipment listed in Attachment 2 is available.

NOTE

Equipment contained in sealed kits need not be inventoried if the kit seal is not broken.

8. Receive a briefing from the Emergency Director on available plant and emergency status:
 - a. Emergency classification.
 - b. Suspected cause of the emergency.
 - c. Areas of abnormal personnel hazards.
 - d. Other emergency response personnel activated.
 - e. Pertinent plant line-ups and corrective actions taken by the Emergency Director.
 - f. Any information which may be useful to the OSC Coordinator or OSC personnel.
9. Brief OSC emergency response personnel on the information received in step 6.
10. Ensure that OSC personnel card in on the accountability card reader.

NOTE

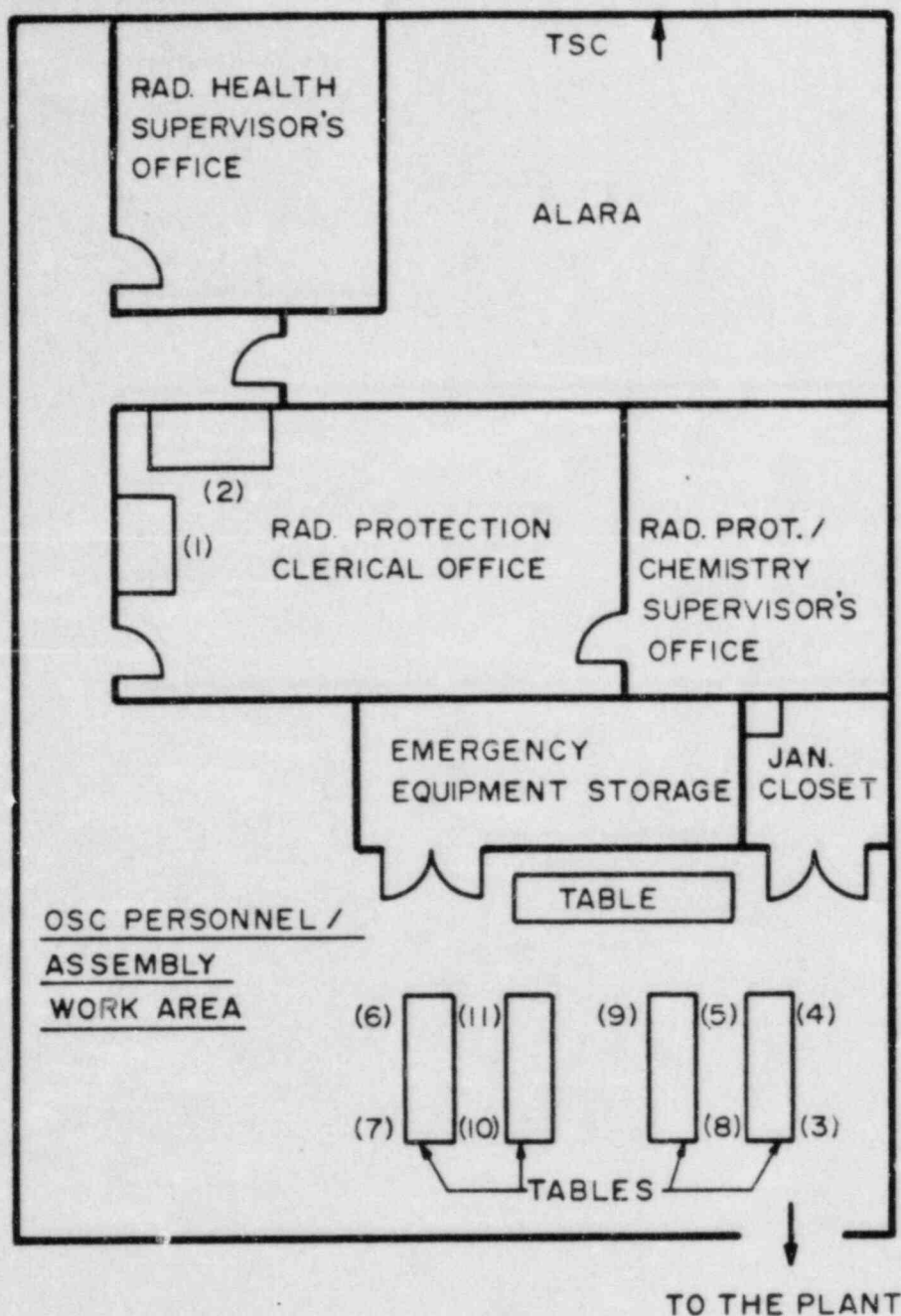
If the card reader is inoperable designate an available individual to compile a list of names and badge numbers of OSC personnel and provide it to the Secondary Alarm Station (SAS) Operator at the Primary Access Point (PAP).

N/A	N/A	EIP-2-016	REV. O	PAGE 4 OF 13
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11. Assist in providing replacement emergency equipment and necessary parts and support for emergency response personnel.
12. Record the names and functions of OSC personnel dispatched.
13. Implement EIP-2-017, Operations Support Center-Support Functions (Ref. 2.8).

END

OPERATIONS SUPPORT CENTER



PERSONNEL:

- (1) OSC COORDINATOR
- (2) RADIATION PROTECTION FOREMAN
- (3) FIRE BRIGADE (IF EMERGENCY IS NOT A FIRE)
- (4) FIRST AID TEAM
- (5) SEARCH AND RESCUE
- (6) RADIATION PROTECTION TECHNICIANS
- (7) CHEMISTRY / RADIOCHEMISTRY TECHNICIANS

- (8) OPERATIONS
- (9) MECHANICAL MAINTENANCE
- (10) ELECTRICAL MAINTENANCE
- (11) I & C TECHNICIANS

NOTE

Place "N/A" in steps which are not applicable.

The steps on this checklist shall be performed and signed off by the OSC Coordinator in the following sequence unless otherwise directed by the Emergency Director. The procedure section number is in parentheses after each step.

INITIAL ACTIONS

	Actions Completed	
	<u>Date/Time</u>	<u>Initials</u>
1. Verified OSC Habitability	_____	_____

NOTE

Habitability limits are 5 REM or 520 MPC for the duration of the emergency.

2. Emergency Director notified that the OSC is being activated, (4.1.2, 2)	_____	_____
3. Radiation Protection Technician dispatched to the TSC (4.1.2.3)	_____	_____
4. OSC equipment verified operational, (4.1.2.5)	_____	_____

a. Communications	(circle one)
(1) Main Control Room, TSC, OSC, EOF Hotline	Yes/No
(2) Emergency shutdown line	Yes/No
(3) Atleast two River Bend PBX extentions	Yes/No
(4) Plant PA System.	Yes/No
(5) Portable radios (six)	Yes/No
b. Lighting	Yes/No
c. Ventilation	Yes/No

- | | | |
|---|-------|-------|
| 5. Emergency Director notified that the OSC is operational (4.1.2.6) | _____ | _____ |
| 6. Directed a rapid check of OSC emergency equipment availability, (4.1.2.7) | _____ | _____ |
| 7. Received briefing from the Emergency Director on available plant and emergency status (4.1.2.8): | | |
| a. Emergency classification | _____ | _____ |
| b. Suspected cause of the emergency | _____ | _____ |
| c. Areas of abnormal personnel hazards | _____ | _____ |
| d. Other emergency response personnel activated | _____ | _____ |
| e. Pertinent plant line-ups and corrective actions taken by the Emergency Director | _____ | _____ |
| 8. OSC emergency response personnel briefed on information in item 7, (4.1.2.9) | _____ | _____ |
| 9. OSC personnel carded in on the accountability card reader (or a list of names and badge numbers provided to the SAS Operator) (4.1.2.10) | _____ | _____ |

10. Emergency response personnel
dispatched (4.1.2.12)

a. Fire Brigade

b. First Aid Team

c. Search and Rescue Team
(See EIP 2-008, Search and Rescue,
Step 4.3, Page 4)

d. Radiation Protection personnel

e. Chemistry personnel

f. Operations personnel

Function: _____

Actions Completed	
<u>Date/Time</u>	<u>Initials</u>

g. Maintenance personnel

Discipline/Function: _____

h. I & C personnel

Function: _____

11. EIP-2-017, Operations Support
Center-Support Functions
implemented (4.1.2.13).

ITEM DESCRIPTION	QUANTITY REQUIRED	QUANTITY AVAILABLE
1. Low Range Portable Rate Meter (RO-2): Beta/Gamma; 0 - 5 R/hr	<u>4</u>	<u> </u>
2. High Range Portable Rate Meter (6112 Teletector): Beta/Gamma; 0.1 mR/hr - 1,000 R/hr	<u>2</u>	<u> </u>
3. High Range Portable Rate Meter (RO-7): Beta/Gamma; 0 - 10,000 R/hr	<u>1</u>	<u> </u>
4. G-M Friskers (RM-14 w/260 + 210T): Beta/Gamma; 0 - 50,000 cpm	<u>5</u>	<u> </u>
5. Direct Reading Pocket Dosimeters:		
a. Gamma; 0 - 500 mR	<u>20</u>	<u> </u>
b. Gamma; 0 - 1 R	<u>20</u>	<u> </u>
c. Gamma; 0 - 10 R	<u>10</u>	<u> </u>
d. Gamma; 0 - 100 R	<u>4</u>	<u> </u>
6. Dosimeter Charger	<u>2</u>	<u> </u>
7. Alarm Dosimeters (DCA Model 1888): Gamma; 0 - 9,990 mR	<u>4</u>	<u> </u>
8. Approximately 8 Micro Curie CS-137 check source	<u>1</u>	<u> </u>
9. Thermoluminescent Dosimeters (TLD's) Beta/Gamma	<u>30</u>	<u> </u>
10. Air Sample Collector (EAS-1) (RADECO 12 Volt)	<u>4</u> <u>2</u>	<u> </u> <u> </u>
11. Continuous Air Monitor w/readout	<u>1</u>	<u> </u>
12. Particulate Filters	<u>2 boxes</u>	<u> </u>
13. Silver Zeolite Cartridges	<u>2 boxes</u>	<u> </u>
14. Self Contained Breathing Air Apparatus (P/D) (four with speak-easy)	<u>10</u>	<u> </u>
15. Spare Air Bottles	<u>10</u>	<u> </u>
16. Full Face Filter Respirator	<u>10</u>	<u> </u>
17. Respirator Filters (GMR-1)	<u>20</u>	<u> </u>

	ITEM DESCRIPTION	QUANTITY REQUIRED	QUANTITY AVAILABLE
18.	Protective Clothing Set (each to contain coveralls, shoe covers, rubbers, gloves, glove liners, hoods)	<u>20</u>	<u> </u>
19.	Protective Clothing Set, White Paper	<u>50</u>	<u> </u>
20.	Covered Stokes Stretcher w/Gurney	<u>1</u>	<u> </u>
21.	Set of First Aid Equipment and Supplies	<u>2</u>	<u> </u>
22.	Personal Injury/Contamination Forms	<u>10</u>	<u> </u>
23.	RPP-0018, Personnel Decontamination Procedure	<u>2</u>	<u> </u>
24.	RPP-0019, Decontamination of Areas, Tools and Equipment Procedure	<u>2</u>	<u> </u>
25.	Radiation Warning Signs	<u>20</u>	<u> </u>
26.	High Radiation Warning Signs	<u>20</u>	<u> </u>
27.	Contamination Warning Signs	<u>20</u>	<u> </u>
28.	Contaminated Materials Signs	<u>4</u>	<u> </u>
29.	Hot Spot Stickers	<u>15</u>	<u> </u>
30.	Radioactive Materials Tags	<u>100</u>	<u> </u>
31.	Step-Off Pads	<u>20</u>	<u> </u>
32.	Barrier Rope	<u>Approx. 500'</u>	<u> </u>
33.	Contamination Smears	<u>2 Boxes</u>	<u> </u>
34.	Smear (Coin) Envelopes	<u>2 Boxes</u>	<u> </u>
35.	Containers for Radioactive Trash and Materials	<u>3</u>	<u> </u>
36.	Containers for Radioactive Liquid	<u>5</u>	<u> </u>
37.	Poly Bags, Small	<u>1 Roll</u>	<u> </u>

ATTACHMENT 2

OPERATIONS SUPPORT CENTER EMERGENCY EQUIPMENT LIST

ITEM DESCRIPTION	QUANTITY REQUIRED	QUANTITY AVAILABLE
38. Poly Bag, Large	<u>1 Roll</u>	_____
39. Clipboard	<u>3</u>	_____
40. Notepads	<u>6</u>	_____
41. Pens	<u>6</u>	_____
42. Chalk, Marking	<u>6</u>	_____
43. Masking Tape	<u>10 rolls</u>	_____
44. Scissors	<u>1</u>	_____
45. Camera (Polaroid Type)	<u>2</u>	_____
46. Film	<u>10</u>	_____
47. Flashlights	<u>10</u>	_____
48. Spare Flashlight Bulbs	<u>5</u>	_____
49. Portable Calculator	<u>3</u>	_____
50. Walkie-Talkies	<u>6</u>	_____
51. Set of Station Survey Maps	<u>10</u>	_____
52. Emergency Plan Implementing Procedures	<u>Partial Set</u>	_____
EIP-2-008, Search and Rescue	<u>1</u>	
EIP-2-009, Medical Emergencies	<u>1</u>	
EIP-2-010, Toxic Gas Emergencies	<u>1</u>	
EIP-2-011, Fire Emergencies	<u>1</u>	
EIP-2-012, Radiation Exposure Controls	<u>1</u>	
EIP-2-013, Onsite Radiological Monitoring	<u>1</u>	
EIP-2-014, Offsite Radiological Monitoring	<u>1</u>	
EIP-2-015, Post Accident Sampling Operations	<u>1</u>	
EIP-2-016, Operations Support Center Activation	<u>1</u>	

ATTACHMENT 2

OPERATIONS SUPPORT CENTER EMERGENCY EQUIPMENT LIST

ITEM DESCRIPTION	QUANTITY REQUIRED	QUANTITY AVAILABLE
EIP-2-017, Operations Support Center Support Functions	1	
EIP-2-026, Evacuation	1	
EIP-2-027, Personnel Accountability	1	
EIP-2-029, Emergency Telephone Book	1	
53. Set of Station Floor Plan Drawings	1	
54. Ropes (100-ft)	2	
(150-ft)	2	
(225-ft)	2	
55. Life-lines (50-ft)	2	
56. Wrecking bars	4	
57. Boltcutter	4	
58. Come-alongs	2	
59. Cable Slings	4	
60. Hydraulic jacks	2	
61. Sledge hammer	2	
62. Tool Kit	2	
63. Small acetylene cutting & welding ring	2	
64. Combustible gas/oxygen analyzer	1	
65. Toxic gas monitor	1	

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-017

PROCEDURE TITLE: OPERATIONS SUPPORT CENTER - SUPPORT FUNCTION

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: OPERATIONS SUPPORT CENTER - SUPPORT FUNCTION

PROCEDURE NO. EIP-2-017

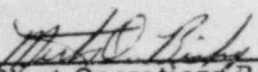
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EMERGENCY PLANNING COMMITTEE REVIEW:

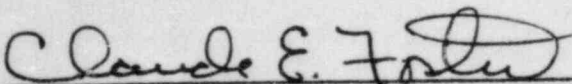
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Radiation Protection/Chemistry Representative

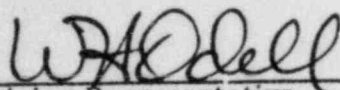
9-24-84


Plant Operations Representative


9-24-84


Security Representative

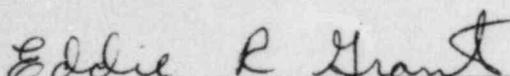
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Training Representative

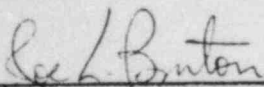
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Technical Staff Representative

9/24/84

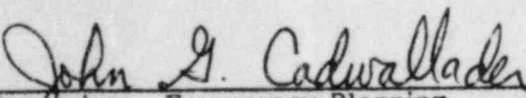

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

OPERATIONS SUPPORT CENTER - SUPPORT FUNCTIONS

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1.0 PURPOSE

This procedure provides instructions for operation, supporting functions and deactivation of the Operations Support Center.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-003, Alert
- 2.3 EIP-2-004, Site Area Emergency
- 2.4 EIP-2-005, General Emergency
- 2.5 EIP-2-002, Notification of Unusual Event
- 2.6 EIP-2-016, Operations Support Center-Activation
- 2.7 EIP-2-027, Emergency Telephone Book
- 2.8 EIP-2-012, Radiation Exposure Controls
- 2.9 EIP-2-013, Onsite Radiological Monitoring
- 2.10 EIP-2-010, Toxic Gas Emergencies
- 2.11 EIP-2-011, Fire Emergencies
- 2.12 EIP-2-026, Evacuation
- 2.13 EIP-2-018, Technical Support Center - Activation
- 2.14 EIP-2-019, Technical Support Center - Support Functions
- 2.15 EIP-2-020, Emergency Operations Facility - Activation
- 2.16 EIP-2-021, Emergency Operations Facility - Support Functions
- 2.17 RPP-0043, Personnel Frisking
- 2.18 RPP-0018, Personnel Decontamination
- 2.19 RPP-0019, Decontamination of Areas, Tools and Equipment
- 2.20 EIP-2-015, Post Accident Sampling Operations
- 2.21 EIP-2-009, Medical Emergencies
- 2.22 EIP-2-008, Search and Rescue

3.0 GENERAL INFORMATION

- 3.1 The Operations Support Center (OSC) serves as a staging area for onsite emergency response personnel during emergencies.
- 3.2 The OSC is also a place to brief oncoming Main Control Room personnel on the emergency condition of the plant, thus minimizing Main Control Room congestion.
- 3.3 The OSC will be activated for an Alert (EIP-2-003, Ref. 2.2), Site Area Emergency (EIP-2-004, Ref. 2.3) and General Emergency (EIP-2-005, Ref. 2.4) and as directed by the Emergency Director for a Notification of Unusual Event (EIP-2-002, Ref. 2.5).
- 3.4 The Mechanical Maintenance Supervisor, or an alternate, is the OSC Coordinator and has the responsibility for the direction and control of OSC operations.

3.5 Personnel assigned emergency response functions in the OSC are:

3.5.1 Fire Brigade

3.5.2 First Aid Team

3.5.3 Search and Rescue Team

3.5.4 Radiation Protection

3.5.5 Chemistry

3.5.6 Operations

3.5.7 Mechanical Maintenance

3.5.8 Electrical Maintenance

3.5.9 I & C

3.6 The OSC is activated and this procedure will be implemented in accordance with EIP-2-016, Operations Support Center-Activation (Ref. 2.6).

3.7 Emergency equipment is available in the OSC for use by emergency response personnel. (See Attachment 2 to EIP-2-016, Operations Support Center-Activation, Ref. 2.6). Additional equipment not provided in the OSC may be obtained from normal work stations.

3.8 The Emergency Director will determine the location for assembly of OSC personnel if the OSC becomes inhabitable.

4.0 PROCEDURE

4.1 OSC Operations

4.1.1 The OSC Coordinator shall:

1. Direct and control the operations of personnel dispatched in the plant from the OSC.
2. Keep the Emergency Director informed of the status of OSC operations.
3. Ensure that OSC status boards are updated.
4. Document all pertinent emergency information not listed on Attachment 1 of EIP-2-016, Operations Support Center - Activation (Ref. 2.6). including emergency response actions performed by OSC personnel.
5. Continue to monitor the progress of OSC emergency response personnel in controlling the emergency.

6. Augment the OSC emergency response organization as necessary using EIP-2-029, Emergency Telephone Book (Ref. 2.7).

NOTE

Item 7 will be performed for a Site Area Emergency and General Emergency. A long term relief rotation will be established as necessary for a Notification of Unusual Event and an Alert.

7. Establish a long term relief rotation to ensure that personnel are not required to remain at their assigned positions for an excessive period of time.
8. Periodically monitor the radiological conditions in the OSC.

NOTE

The OSC shall be uninhabitable if radiation levels are such that OSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that OSC personnel may receive 520 times maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

9. Ensure that OSC personnel are kept informed of the status of the emergency and the hazards in the plant.
10. Make recommendations to the Emergency Director regarding the emergency response and required additional equipment and material.
11. When a Site Area Emergency or General Emergency is declared, dispatch a Radiation Protection Technician to the Emergency Operations Facility to assume the responsibilities of the Radiation Protection/EOF Habitability Technician.

NOTE

If there is potential for exceeding 10 CFR 20 limits for whole body radiation exposure during emergency operations only the Emergency Director may authorize an increase in emergency exposure levels above 10 CFR 20 limits.

4.1.2 Mechanical Maintenance, Electrical Maintenance and I & C Personnel shall:

1. Card in on the accountability card reader in the OSC if a personnel accountability is in progress or for a Site Area Emergency or General Emergency.

NOTE

If the card reader is inoperable, the OSC Coordinator shall designate an available individual to compile a list of names and badge numbers of OSC personnel and provide it to the Secondary Alarm Station Operator at the Primary Access Point (PAP).

2. Receive a briefing from the Radiation Protection Foreman regarding equipment requirements and recommended routes including:
 - a. Protective clothing required
 - b. Respiratory protection required
 - c. Personnel Dosimetry
 - d. Radiation Protection Technician accompanying maintenance personnel
 - e. Routes to minimize exposure
3. Use the required protective equipment and caution to minimize personal exposure and contamination during maintenance activities.
4. Keep the OSC Coordinator informed of activities and radiation exposure.
5. Perform maintenance and corrective actions as directed by the OSC Coordinator.

4.1.3 The Radwaste Operator shall:

1. Card in on the accountability card reader in the OSC if a personnel accountability is in progress or for a Site Area Emergency or General Emergency.

NOTE

If the card reader is inoperable, the OSC Coordinator shall designate an available individual to compile a list of names and badge numbers of OSC personnel and provide it to the Secondary Alarm Station Operator at the Primary Access Point (PAP).

2. Receive a briefing from the Radiation Protection Foreman regarding equipment requirements and recommended routes including:
 - a. Protective clothing required
 - b. Respiratory protection required
 - c. Personnel Dosimetry
 - d. Routes to minimize exposure

3. Use the required protective equipment and caution to minimize personal exposure and contamination during maintenance activities.
4. Keep the OSC Coordinator informed of activities and radiation exposure.
5. Perform radwaste or other operations as directed by the OSC Coordinator.

4.1.4 The Radiation Protection Foreman shall:

1. Card in on the accountability card reader in the OSC.
2. Coordinate the activities of the Radiation Protection personnel in the OSC as directed by the OSC Coordinator or the Radiation Protection Coordinator in the TSC when that facility is activated.
3. Track whole body radiation exposures of OSC personnel responding to the emergency. (Record exposures in Radiation Protection Foreman's log.)
4. Ensure that exposure results are entered into the individuals' exposure history.
5. Provide recommendations to the OSC Coordinator and the Radiation Protection Coordinator in regard to:
 - a. Personnel exposure control
 - b. Recommended routes for performing surveys, maintenance, sampling operations and radwaste operations.
 - c. The radiological aspects of the operations listed in item b.
 - d. Protective equipment requirements.
6. Keep the OSC Coordinator and the Radiation Protection Coordinator informed of activities, OSC personnel, radiation exposures and survey data.

4.1.5 The onshift Radiation Protection Technician shall perform all of the responsibilities of the Radiation Protection Coordinator until he arrives at the TSC.

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4.1.6 Radiation Protection Personnel shall:

1. Card in on the accountability card reader in the OSC if a personnel accountability is in progress or for a Site Area Emergency or General Emergency.

NOTE

If the card reader is inoperable, the OSC Coordinator shall designate an available individual to compile a list of names and badge numbers of OSC personnel and provide it to the Secondary Alarm Station Operator at the Primary Access Point (PAP).

2. Receive a briefing from the Radiation Protection Foreman regarding equipment requirements and recommended routes including:
 - a. Protective clothing required
 - b. Respiratory protection required
 - c. Personnel Dosimetry
 - d. Routes to minimize exposure
3. Use the required protective equipment and caution to minimize personal exposure and contamination during maintenance activities.
4. Keep the OSC Coordinator informed of activities and radiation exposure.
5. Perform onsite radiological monitoring using EIP-2-013, Onsite Radiological Monitoring (Ref. 2.9), steps 4.2 and 4.3 on page 3.
6. Perform actions for toxic gas releases in accordance with EIP-2-010, Toxic Gas Emergencies (Ref. 2.10), step 4.3 on page 4.
7. Provide radiological controls assistance for the Fire Brigade in accordance with EIP-2-011, Fire Emergencies (Ref. 2.11) step 4.3, on page 4 and for maintenance, radwaste, and chemistry sampling operations as directed by the OSC Coordinator or Radiation Protection Foreman.
8. Perform radiological habitability checks periodically (radiation, airborne radioactivity and contamination) in the OSC.

NOTE

The OSC shall be uninhabitable if radiation levels are such that OSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that OSC personnel may receive 520 times maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

9. Perform personnel monitoring and assist Security Officers at assembly areas during evacuations in accordance with EIP-2-026, Evacuation (Ref. 2.12), step 4.1.2 on page 5 for a limited evacuation, step 4.2.2 on page 8 for a building evacuation, and step 4.3.2 on page 9 for a Protected Area evacuation.
10. Assume the responsibilities of the TSC Radiation Protection/TSC Habitability Technician, as directed by the Emergency Director, the OSC Coordinator or the Radiation Protection Coordinator, in accordance with EIP-2-018, Technical Support Center - Activation (Ref. 2.13), step 4.1.10 on page 8 and EIP-2-019, Technical Support Center - Support Functions (Ref. 2.14), step 4.1.10 on page 8.
11. Assume the responsibility of the EOF Radiation Protection/EOF Habitability Technician, as directed by the Emergency Director, the OSC Coordinator or the Radiation Protection Coordinator, in accordance with EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.15), step 4.1.10 on page 7 and EIP-2-021, Emergency Operations Facility - Support Functions (Ref. 2.16), step 4.1.11 on page 8.
12. Perform personnel monitoring and decontamination as necessary in accordance with RPP-0043, Personnel Frisking (Ref. 2.17) and RPP-0018, Personnel Decontamination (Ref. 2.18).
13. Perform decontamination of areas, tools and equipment as necessary in accordance with RPP-0019, Decontamination of Areas, Tools and Equipment (Ref. 2.19).

4.1.7 Chemistry/Radiochemistry personnel shall:

1. Card in on the accountability card reader in the OSC if a personnel accountability is in progress or for a Site Area Emergency or General Emergency.

NOTE

If the card reader is inoperable, the OSC Coordinator shall designate an available individual to compile a list of names and badge numbers of OSC personnel and provide it to the Secondary Alarm Station Operator at the Primary Access Point (PAP).

N/A	N/A	EIP-2-017	REV. 0	PAGE 8 of 11
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2. Receive a briefing from the Radiation Protection Foreman regarding equipment requirements and recommended routes including:
 - a. Protective clothing required
 - b. Respiratory protection required
 - c. Personnel Dosimetry
 - d. Routes to minimize exposure
3. Use the required protective equipment and caution to minimize personal exposure and contamination during maintenance activities.
4. Keep the OSC Coordinator informed of activities and radiation exposure.
5. Perform post-accident sampling in accordance with EIP-2-015, Post-Accident Sampling Operations (Ref. 2.20) as directed by the OSC Coordinator or the Chemistry/Core Damage Assessment Coordinator in the TSC (if the TSC is operational).
6. Keep the Chemistry/Core Damage Assessment Coordinator informed of activities and sample results.

4.1.8 First aid and rescue personnel will perform their assigned functions in accordance with EIP-2-009, Medical Emergencies (Ref. 2.21) and EIP-2-008, Search and Rescue (Ref. 2.22).

4.2 OSC Deactivation

4.2.1 The OSC Coordinator shall:

1. Deactivate the OSC when directed by the Emergency Director.
2. Ensure that OSC emergency equipment is restored.

NOTE

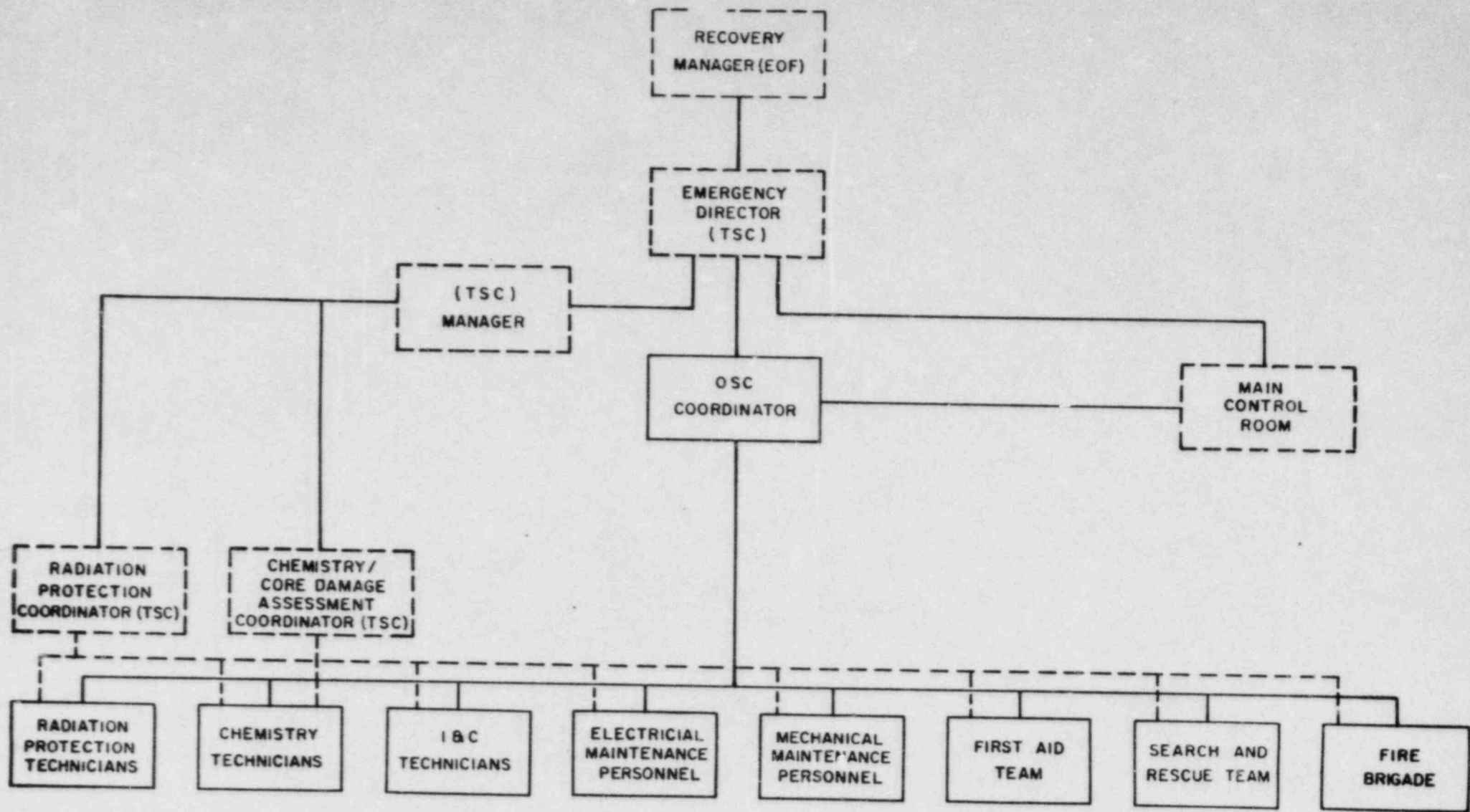
If equipment is damaged or missing ensure that the Supervisor-Emergency Planning is notified.

3. Release emergency response personnel as appropriate.
4. Ensure that emergency data including the OSC Coordinator log is turned into the Emergency Director or the Supervisor-Emergency Planning.
5. Inform the Emergency Director when the OSC is deactivated.

4.2.2 Other OSC personnel shall:

1. Restore all equipment.
2. Report damaged or missing equipment to the OSC Coordinator.
3. Ensure that they have been monitored and decontaminated, if necessary, before leaving the OSC.
4. Take personnel dosimetry to the Radiation Protection Dosimetry Office for processing.
5. Inform the OSC Coordinator when items 1 through 4 are complete.

END



— PRIMARY REPORTING

- - - SECONDARY REPORTING

IN OSC

OTHER LOCATION

OPERATIONS SUPPORT CENTER ORGANIZATION

EIP-2-017
FIGURE 1
REV. 0
PAGE 11 OF 11

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE TITLE: TECHNICAL SUPPORT CENTER - ACTIVATION

[X] No

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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

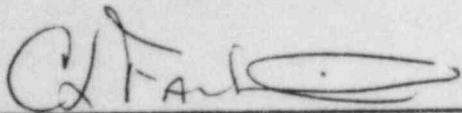
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PROCEDURE NO. EIP-2-018

REV. 0

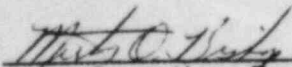
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DATE



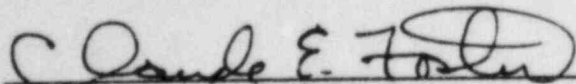
9-24-84

Radiation Protection/Chemistry Representative



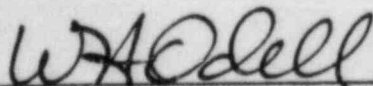
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Plant Operations Representative



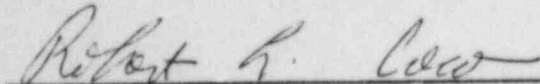
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Security Representative



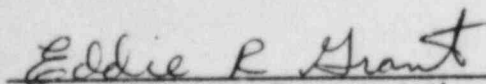
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Training Representative



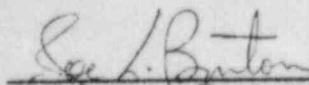
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Technical Staff Representative



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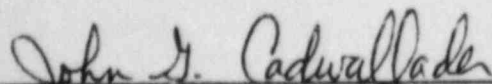
Nuclear Licensing Representative



9/24/84

Maintenance Representative

Recommended for Approval:



9-24-84

Supervisor - Emergency Planning

(LATERS)

PROCEDURE NO.: EIP-2-018

TITLE TECHNICAL SUPPORT CENTER -

REVISION NO.: 0

ACTIVATION

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION
(Section/Step)

PAGE NO.

BRIEF
DESCRIPTION

ATTACHMENT 6

20

Activation steps for ERIS

ATTACHMENT 7

21

Activation steps for DRMS

TECHNICAL SUPPORT CENTER - ACTIVATION

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1.0 PURPOSE

This procedure provides instructions for activation of the Technical Support Center.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-003, Alert
- 2.3 EIP-2-004, Site Area Emergency
- 2.4 EIP-2-005, General Emergency
- 2.5 EIP-2-006, Notifications
- 2.6 EIP-2-029, Emergency Telephone Book
- 2.7 EIP-2-001, Classification of Emergencies
- 2.8 EIP-2-019, Technical Support Center - Support Functions

3.0 GENERAL INFORMATION

- 3.1 The Technical Support Center (TSC) is an onsite emergency response facility located on the third floor of the River Bend Station Services Building, near the Main Control Room. The TSC floor plan is shown in Figure 1.
- 3.2 The TSC will be activated for an Alert (EIP-2-003, Ref. 2.2), Site Area Emergency (EIP-2-004, Ref. 2.3), and General Emergency (EIP-2-005, Ref. 2.4) or as directed by the Emergency Director.
- 3.3 The TSC staff are notified in accordance with EIP-2-006, Notifications (Ref. 2.5). The Plant Manager, or alternate when he arrives, relieves the Shift Supervisor of his responsibilities as Emergency Director.
- 3.4 The minimum staffing requirements for the TSC to be considered operational are:
 - 3.4.1 Emergency Director
 - 3.4.2 TSC Manager
 - 3.4.3 Radiation Protection Coordinator
 - 3.4.4 Dose Assessment/Protective Actions Advisor
 - 3.4.5 Radiation Protection/TSC Habitability Technician
 - 3.4.6 Operations Support Coordinator
 - 3.4.7 Communicator (at least one)

4.0 PROCEDURES

4.1 Actions for TSC Activation

- 4.1.1 The Emergency Director shall use Attachment 1 and:

- 1. Upon arrival, contact the acting Emergency Director (the Shift Supervisor) by phone or by proceeding to the Main Control Room

2. Review the current status of the emergency, including:
 - a. Background information leading up to the emergency
 - b. Indications and suspected cause of the emergency
 - c. Existing hazards to personnel
 - d. Damage to plant systems, instrumentation, and other equipment and radiation levels or radioactive releases.
 - e. Emergency classification
 - f. Corrective actions taken
 - g. Status of execution of the steps in EIP-2-001, Classification of Emergencies (Ref. 2.7) and any other emergency plan implementing procedure that has been implemented by the Emergency Director
 - h. The status of the activation of the Emergency Response Organization
 - i. The status of notification of offsite government agencies and the NRC
 - j. Present plant line-ups and plant evolutions or operations in progress
 - k. Evolutions or operations which have been directed or have been planned, but are not yet carried out
 - l. Offsite dose assessment and recommended protective actions made to offsite agencies
3. Relieve the Shift Supervisor of his responsibilities as Emergency Director

NOTE

Upon being relieved of the responsibilities of the Emergency Director, the Shift Supervisor shall remain in the Main Control Room to supervise plant operations.

4. Inform onsite emergency response personnel that the Plant Manager or alternate is the Emergency Director.
5. Ensure that the TSC is activated in accordance with this procedure.
6. Implement the appropriate Emergency Implementing Procedure for the emergency classification:

N/A	N/A	EIP-2-018	REV. O	PAGE 3 OF 21
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- a. EIP-2-003 for an Alert (Ref. 22)
 - b. EIP-2-004 for a Site Area Emergency (Ref. 2.3)
 - c. EIP-2-005 for a General Emergency. (Ref. 2.4)
7. Implement EIP-2-019, Technical Support Center - Support Functions (Ref. 2.8).
 8. Following the report from the TSC Manager that the TSC is operational:
 - a. Inform the TSC staff that the TSC is operational and
 - b. Brief the TSC staff on the information received from the Shift Supervisor.
 - c. Inform the Shift Supervisor that the TSC is operational
 9. Direct TSC staff members to begin performing their designated functions.

NOTE

The Emergency Director must focus on the overall control of the emergency response and must not be distracted from this primary responsibility.

4.1.2 The TSC Manager shall use Attachment 2 and:

1. Direct the Radiation Protection/TSC Habitability Technician to initiate radiation and airborne radioactivity surveys to ensure that the TSC is habitable.

NOTE

The TSC shall be uninhabitable if radiation levels are such that TSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that TSC personnel may receive 520 times the maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

2. Ensure that the following equipment is operating properly:

a. Communications

- (1) River Bend Station Emergency Hotline
 1. Main Control Room
 2. Emergency Operations Facility
 3. Louisiana Nuclear Energy Division
 4. Louisiana Office of Emergency Preparedness
 5. West Feliciana Parish
 6. East Feliciana Parish
 7. Pointe Coupee Parish
 8. West Baton Rouge Parish

N/A	N/A	EIP-2-018	REV. O	PAGE 4 OF 21
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9. East Baton Rouge Parish
10. Mississippi Emergency Management Agency (MEMA) (or Mississippi Highway Safety Patrol until MEMA has responded to the emergency)
 - (2) NRC - Emergency Notifications System
 - (3) NRC - Health Physics Network
 - (4) TSC- Main Control Room Hotline
 - (5) TSC - Main Control Room, OSC, EOF Hotline
 - (6) Emergency Shutdown Line
 - (7) Corporate Hotline
 - (8) Additional telephone lines as necessary
 - (a) Extensions from River Bend Station PBX (there are a total of 10)
 - (b) Direct outside line from St. Francisville (one)
 - (c) Direct outside line from Beaumont (one)
 - (d) Direct outside lines from Baton Rouge (two)
 - (9) Radio Console (in the display room)
 - (10) Data transfer equipment
- b. Lighting
- c. Ventilation
- d. Digital Radiation Monitoring System (DRMS) in accordance with Attachment 3 (reported by the Radiation Protection Coordinator or Dose Assessment/Protective Actions Advisor).
- e. Emergency Response Information System (ERIS) in accordance with Attachment 4 (reported by the Operations Support Coordinator).
3. Ensure that all TSC personnel are at their workstations. If all personnel are not available, direct the Administrative Coordinator to ensure that all TSC staff members or alternates were notified. (If the Administrative Coordinator is not available the TSC Manager shall perform this function).
 - a. Emergency Director
 - b. TSC Manager
 - c. Core Technical/Core Physics Coordinator
 - d. Mechanical Engineering Coordinator
 - e. Electrical Engineering Coordinator
 - f. Operations Support Coordinator

- g. Maintenance Support Coordinator
- h. Radiation Protection Coordinator
- i. Dose Assessment/Protective Actions Advisor (Offsite Team Coordinator)
- j. Chemistry/Core Damage Assessment Coordinator
- k. Security Coordinator
- l. Administrative Coordinator
- m. Communicators (2)
- n. Status Boards Coordinator
- o. Data Facility Coordinator
- p. Clerical/Administrative Support (2)

NOTE

If the Radiation Protection/TSC Habitability Technician is not available contact the OSC Coordinator and request that a Radiation Protection Technician be dispatched to the TSC to assume the duties of the Radiation Protection/Habitability Technician.

- q. Radiation Protection/TSC Habitability Technician
- r. Onsite Security Direction and Control

- 4. Report to the Emergency Director that the TSC is fully operational when steps 1 through 3 are complete.

4.1.3 The Administrative Coordinator shall use Attachment 3 and:

- 1. Call in two clerical/administrative personnel using EIP-2-029, Emergency Telephone Book (Ref. 2.6).
- 2. Ensure that the TSC clerical staff are at their work stations.
- 3. If any TSC staff members are not available, check with the Shift Clerk in the Main Control Room to ensure all staff members answered their pager notification or alternates were called.
- 4. If all TSC members or alternates were not contacted use EIP-2-029, Emergency Telephone Book to call the staff member or alternate.

5. Coordinate a rapid check for availability and an operational check of TSC emergency equipment using Attachment 2 with the Radiation Protection/TSC Habitability Technician.
6. Obtain replacement equipment (in Attachment 2 from the OSC or Radiation Protection personnel) or coordinate the repair or replacement of inoperable equipment as necessary.
7. Ensure that all TSC personnel card in on the TSC accountability card reader for a Site Area Emergency or General Emergency and if a Protected Area Evacuation has been implemented during an Alert.
8. Ensure that the records room contains the following current documents:
 1. Technical Specifications
 2. Station Operations Manual/Emergency Operating Procedures
 3. RBS Emergency Plan
 4. RBS Emergency Plan Implementing Procedures
 5. State/Local Emergency Plans
 6. Mutual Assistance Plan with Neighboring Utility Companies
 7. Final Safety Analysis Report
 8. Environmental Report - Operating License Stage
 9. Aperture Cards of As-Built Drawings
 10. 10 and 50-Mile EPZ Maps for River Bend Station
 11. Institute of Nuclear Power Operations Resource Manual

NOTE

If any of the documents are not current, obtain replacement documents from Station Document Control.

9. Resolve any questions regarding TSC access.

NOTE

If the card reader is inoperable, designate a Clerical Support person to compile a list of names and badge numbers of TSC personnel and provide it to the Secondary Alarm Station (SAS) Operator at the Primary Access Point (PAP).

N/A	N/A	EIP-2-018	REV. O	PAGE 7 OF 21
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10. Inform the TSC Manager when the Administrative staff are prepared to assume their functional responsibilities.

4.1.4 The Radiation Protection Coordinator shall use Attachment 4 and:

1. Ensure that the Dose Assessment/Protective Actions Advisor and the Radiation Protection/TSC Habitability Technician in the TSC and the OSC Radiation Protection staff are at their work stations.
2. Ensure that offsite radiological monitoring personnel are available at the Operations Support Center or the Emergency Operations Facility.
3. Direct the establishment of a TSC contamination control point.

NOTE

The contamination control point shall be outside or just inside of the door at the end of the labyrinth. (Door #326)

4. Direct the update of applicable status boards with initial emergency conditions.
5. Inform the TSC Manager when the TSC Radiation Protection staff is prepared to assume their functional responsibilities.

4.1.5 The Dose Assessment/Protective Actions Advisor shall:

1. Ensure that the Digital Radiation Monitoring System (DRMS) and the dose assessment program is operable using Attachment 3.
2. Implement EIP-2-025, Offsite Dose Calculations - Computer Method.

NOTE

If DRMS is inoperable, use EIP-2-024, Offsite Dose Calculations - Manual Method

3. Inform the Radiation Protection Coordinator when prepared to assume functional responsibilities.

4.1.6 The Maintenance Support Coordinator, Core Technical/Core Physics Coordinator, the Mechanical Engineering Coordinator, and the Electrical Engineering Coordinator shall inform the TSC Manager when they are prepared to perform their functional responsibilities.

4.1.7 The Operations Support Coordinator shall:

1. Ensure that the Emergency Response Information System (ERIS) is operable using Attachment 4.

NOTE

If ERIS is inoperable, establish telephone contact with operations personnel in the Main Control Room to obtain plant parameters and emergency information.

2. Direct the update of applicable status boards with initial emergency information.
3. Inform the TSC Manager when prepared to perform functional responsibilities.

4.1.8 The Chemistry/Core Damage Assessment Coordinator shall:

1. Ensure that the chemistry staff is available at the OSC.
2. Direct the update of applicable status boards.
3. Inform the TSC Manager when prepared to perform functional responsibilities.

4.1.9 The Security Coordinator shall:

1. Establish the TSC access control station at the TSC door at the end of the labyrinth (door #326).

NOTE

The other TSC doors (#306 and the third floor computer room door #302) shall be locked and access will be permitted only through the door at the end of the labyrinth (door #326).

2. Inform the Administrative Coordinator when access control is established.
3. Ensure that all personnel in the TSC are on the TSC access list provided by the Supervisor - Emergency Planning or obtain authorization for access from the Administrative Coordinator.

NOTE

Nuclear Regulatory Commission personnel shall present their federal credentials as authorization for TSC access.

4.1.10 The Radiation Protection/TSC Habitability Technician shall:

1. Perform radiation and airborne radioactivity surveys to ensure that the TSC is habitable.

NOTE

The TSC shall be uninhabitable if radiation levels are such that TSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that TSC personnel may receive 520 times maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

2. Inform the Radiation Protection Coordinator when the TSC habitability check has been performed.
3. Establish a TSC contamination control point outside or just inside of the door at the end of the labyrinth (door #326).
4. Inform the Radiation Protection Coordinator that the contamination control point has been established.
5. Perform a rapid check that the TSC emergency equipment listed in Attachment 2 is available and (where applicable) operable.

4.1.11 The Data Facility Coordinator shall:

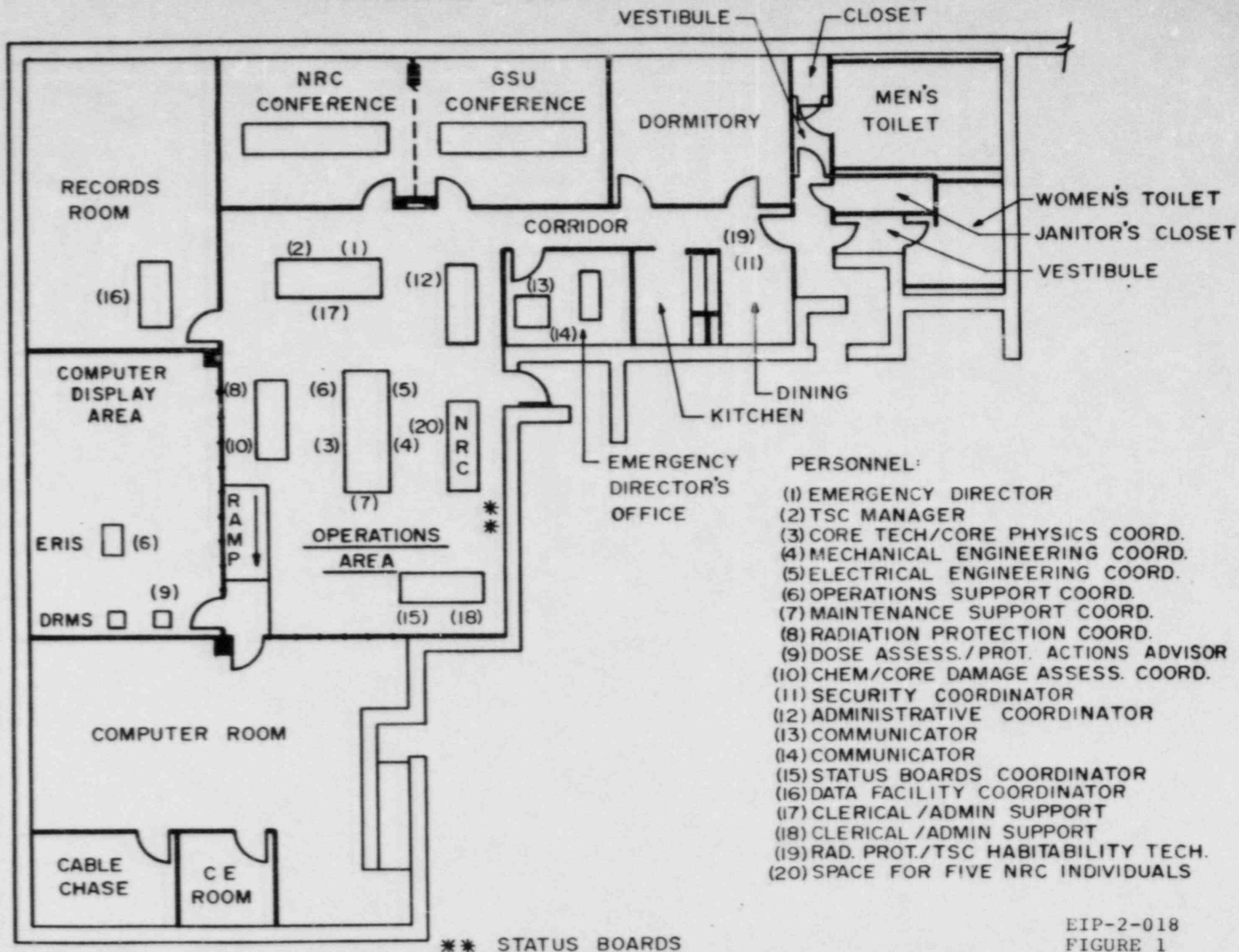
1. Ensure that data transmission equipment is operable.
2. Inform the Administrative Coordinator when prepared to perform functional responsibilities.

4.1.12 The Status Boards Coordinator shall report presence to the Administrative Coordinator and begin updating the status boards with initial emergency information.

4.1.13 The Communicators and Clerical/Administrative Support Personnel (two each) shall report their presence to the Administrative Coordinator. One Communicator shall contact the Main Control Room Communicator and receive a briefing on the status of the notifications of offsite government agencies.

END

TECHNICAL SUPPORT CENTER



PERSONNEL:

- (1) EMERGENCY DIRECTOR
- (2) TSC MANAGER
- (3) CORE TECH/CORE PHYSICS COORD.
- (4) MECHANICAL ENGINEERING COORD.
- (5) ELECTRICAL ENGINEERING COORD.
- (6) OPERATIONS SUPPORT COORD.
- (7) MAINTENANCE SUPPORT COORD.
- (8) RADIATION PROTECTION COORD.
- (9) DOSE ASSESS./PROT. ACTIONS ADVISOR
- (10) CHEM/CORE DAMAGE ASSESS. COORD.
- (11) SECURITY COORDINATOR
- (12) ADMINISTRATIVE COORDINATOR
- (13) COMMUNICATOR
- (14) COMMUNICATOR
- (15) STATUS BOARDS COORDINATOR
- (16) DATA FACILITY COORDINATOR
- (17) CLERICAL/ADMIN SUPPORT
- (18) CLERICAL/ADMIN SUPPORT
- (19) RAD. PROT./TSC HABITABILITY TECH.
- (20) SPACE FOR FIVE NRC INDIVIDUALS

** STATUS BOARDS

NOTE

Place "N/A" in steps which are not applicable. The Emergency Director must focus on overall control of the emergency response and must not be distracted from this primary responsibility.

	<u>Actions Completed</u>	
	<u>Date/Time</u>	<u>Initials</u>
1. Status of the emergency reviewed with the Shift Supervisor (acting Emergency Director) (4.1.1.2 on page 3)	_____	_____
2. Relieved the Shift Supervisor of his responsibilities as Emergency Director (4.1.1.3 on page 3)	_____	_____
3. Onsite emergency response personnel informed of the relief of the Shift Supervisor (4.1.1.4 on page 3)	_____	_____
4. Implemented applicable emergency implementing procedure for the appropriate emergency classification (4.1.1.6 on page 3)		
a. EIP-2-003, Alert	_____	_____
b. EIP-2-004, Site Area Emergency	_____	_____
c. EIP-2-005, General Emergency	_____	_____
6. Implemented EIP-2-019, Technical Support Center - Support Functions (4.1.1.7 on page 4)	_____	_____
7. TSC Manager reported that the TSC is fully operational (4.1.1.8 on page 4)	_____	_____
8. Informed the TSC staff that the TSC is operational (4.1.1.8.a on page 4)	_____	_____
9. Briefed the TSC staff on the status of the emergency (information obtained from the Shift Supervisor in Item 1) (4.1.1.8.b on page 4)	_____	_____
10. Informed the Shift Supervisor that the TSC is operational (4.1.1.8.c on page 4)		
11. TSC staff members directed to perform their designated functions in EIP-2-019, Technical support Center - Support Functions (4.1.1.9 on page 4)	_____	_____

NOTE

Place "N/A" in steps which are not applicable.

		<u>Actions Completed</u>	
		<u>Date/Time</u>	<u>Initials</u>
1.	TSC habitability check made	_____	_____
2.	The following equipment has been checked for operability (4.1.2.2 on page 4):		
a.	Communications:		
(1)	River Bend Emergency Hotline:		
(a)	Main Control Room	_____	_____
(b)	Emergency Operations Facili	_____	_____
(c)	Louisiana Nuclear Energy Division	_____	_____
(d)	Louisiana Office of Emergency Preparedness	_____	_____
(e)	West Feliciana Parish	_____	_____
(f)	East Feliciana Parish	_____	_____
(g)	Point Coupe Parish	_____	_____
(h)	West Baton Rouge Parish	_____	_____
(i)	East Baton Rouge Parish	_____	_____
(j)	Mississippi Emergency Management Agency	_____	_____
(2)	NRC - Emergency Notifications System	_____	_____
(3)	NRC - Health Physics Network	_____	_____
(4)	TSC - Main Control Room Hotline	_____	_____
(5)	TSC - Main Control Room, OSC, EOF Hotline	_____	_____
(6)	Emergency Shutdown Line	_____	_____
(7)	Corporate Hotline	_____	_____

		<u>Actions Completed</u>	
		<u>Date/Time</u>	<u>Initials</u>
(8)	Additional telephone lines as necessary		
(a)	Extensions from River Bend Station PBX (total of 10)	_____	_____
(b)	Direct outside line from St. Francisville (one)	_____	_____
(c)	Direct outside line from Beaumont (one)	_____	_____
(d)	Direct outside lines from Baton Rouge (two)	_____	_____
(9)	Radio Console	_____	_____
(10)	Data transfer equipment	_____	_____
b.	Lighting	_____	_____
c.	Ventilation	_____	_____
d.	Digital Radiation Monitoring System (DRMS) operable (reported by Radiation Protection Coordinator or Dose Assessment/Protective Action Advisor)	_____	_____
e.	Emergency Response Information System (ERIS) operable (reported by Operations Support Coordinator)	_____	_____

NOTE

If ERIS is inoperable, the Operations Support Coordinator shall establish telephone contact with operations personnel in the Main Control Room to obtain plant parameters and emergency information.

3. All TSC personnel are prepared to assume their functional responsibilities (4.1.2.2 on page 5)

	<u>Name</u>	<u>Date/Time</u>	<u>Initial</u>
a. Emergency Director	_____	_____	_____
b. TSC Manager	_____	_____	_____
c. Core Technical/Core Physics Coordinator	_____	_____	_____
d. Mechanical Engineering Coordinator	_____	_____	_____
e. Electrical Engineering Coordinator	_____	_____	_____
f. Operations Support Coordinator	_____	_____	_____
g. Maintenance Support Coordinator	_____	_____	_____
h. Radiation Protection Coordinator	_____	_____	_____
i. Dose Assessment/Protective Actions Coordinator (Offsite Team Coordinator)	_____	_____	_____
j. Chemistry/Core Damage Assessment Coordinator	_____	_____	_____
k. Security Coordinator	_____	_____	_____
l. Administrative Coordinator	_____	_____	_____
m. Communicator (1)	_____	_____	_____
n. Communicator (2)	_____	_____	_____
o. Clerical/Administrative Support (1)	_____	_____	_____
p. Clerical/Administrative Support (2)	_____	_____	_____
q. Status Board Coordinator	_____	_____	_____
r. Data Facility Coordinator	_____	_____	_____
s. Radiation Protection/TSC Habitability Technician	_____	_____	_____
t. Onsite Security Direction and Control (located at CAS)	_____	_____	_____

4. When all TSC staff members report that they are prepared to assume their functional responsibilities, inform the Emergency Director that the TSC is fully operational (4.1.2.3 on page 6).

NOTE

Place "N/A" in steps which are not applicable.

	<u>Actions Completed</u>	
	<u>Date/Time</u>	<u>Initials</u>
1. Clerical staff available to perform assigned functions (4.1.3.2 on page 6)	_____	_____
2. The Radiation Protection TSC Habitability Technician reported that the equipment check for availability and operability is complete. (4.1.3.5 on page 7)	_____	_____
3. Equipment status documented as reported by TSC staff members	_____	_____
a. All operational	_____	_____
b. Repaired/replaced		
1. Replaced: _____	_____	_____
2. Repaired: _____	_____	_____
_____	_____	_____
Additional status information:		

4. TSC personnel have carded in on the accountability card reader (4.1.3.7 on page 7)	_____	_____
5. The records room contains the following current documents (4.1.3.8 on page 7):	_____	_____
1. Technical Specifications	Yes/No	
2. Station Operations Manual/Emergency Operating Procedures	Yes/No	
3. RBS Emergency Plan	Yes/No	

- | | | |
|-----|---|--------|
| 4. | RBS Emergency Plan Implementing Procedures | Yes/No |
| 5. | State/Local Emergency Plans | Yes/No |
| 6. | Mutual Assistance Plan with Neighboring Utility Companies | Yes/No |
| 7. | Final Safety Analysis Report | Yes/No |
| 8. | Environmental Report - Operating License Stage | Yes/No |
| 9. | Aperture Cards of As-Built Drawings | Yes/No |
| 10. | 10 and 50-Mile EPZ Maps for River Bend Station | Yes/No |
| 11. | Institute of Nuclear Power Operations Resource Manual | Yes/No |

NOTE

If any of the documents are not current, obtain replacement documents from Station Document Control.

6. Inform the TSC Manager that items 1 through 4 are completed (4.1.3.10 on page 8)

	Actions Completed	
	<u>Date/Time</u>	<u>Initials</u>
1. Radiation Protection staff available to perform assigned functions (4.1.4.1 on page 8)	_____	_____
2. Offsite radiological monitoring personnel are available at the OSC or the EOF (4.1.4.2 on page 8)	_____	_____
3. Establishment of the TSC contamination control point initiated (4.1.4.3 on page 8)	_____	_____
4. Status boards updated with initial emergency information (4.1.4.4 on page 8)	_____	_____
5. Inform the TSC Manager that items 1 through 4 are completed (4.1.4.5 on page 8)	_____	_____

Date/Time: _____

Individual Conducting Inventory: _____

NOTE**Check that the following equipment is available and functional.**

Item Description	Quantity Required	Quantity Available
1. Low Range Portable Rate Meter (RO-2) Beta Gamma; 0-5 R/hr	1	_____
2. G-M Friskers (RM-14 w/260 + 210T): Beta Gamma	2	_____
3. Direct Reading Pocket Dosimeters:	50	_____
a. Gamma; 0-500 mR	20	_____
b. Gamma; 0-1 R	20	_____
4. Dosimeter Charger	4	_____
5. Alarm Dosimeters: Gamma; 0-9, 900 mR	2	_____
6. Approximately 8 Micro Curie CS-137 Check Source	1	_____
7. Air Sample Collector (RAS-1)	2	_____
8. Particulate Filters	2 Boxes	_____
9. Silver Zeolite Cartridges	2 Boxes	_____
10. Self Contained Breathing Air Apparatus (P/D) (two with speak easy)	5	_____
11. Spare Air Bottles	10	_____
12. Full Face Filter Respirators	5	_____
13. Respirator Filters	10	_____

To be developed later

To be developed later when information becomes available

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE TITLE: TECHNICAL SUPPORT CENTER - SUPPORT FUNCTIONS

[X] No

[illegible]

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: TECHNICAL SUPPORT CENTER - SUPPORT FUNCTIONS

PROCEDURE NO. EIP-2-019

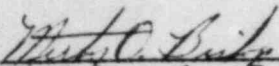
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EMERGENCY PLANNING COMMITTEE REVIEW:

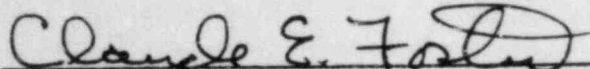
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Radiation Protection/Chemistry Representative

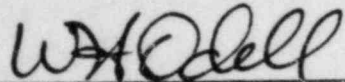
9-24-84


Plant Operations Representative

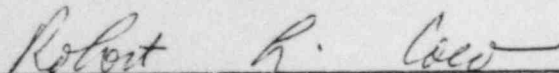
9-24-84


Security Representative

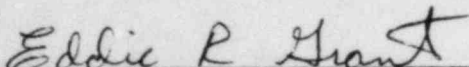
9/24/84


Training Representative

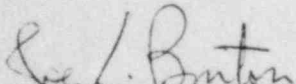
9/24/84


Technical Staff Representative

9/24/84

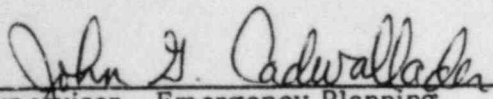

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

TECHNICAL SUPPORT CENTER - SUPPORT FUNCTIONS

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1.0 PURPOSE

This procedure provides instructions for operation, supporting functions and deactivation of the Technical Support Center.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-003, Alert
- 2.3 EIP-2-004, Site Area Emergency
- 2.4 EIP-2-005, General Emergency
- 2.5 EIP-2-006, Notifications
- 2.6 EIP-2-029, Emergency Telephone Book
- 2.7 EIP-2-002, Notification of Unusual Event
- 2.8 EIP-2-001, Classification of Emergencies
- 2.9 EIP-2-018, Technical Support Center - Activation
- 2.10 EIP-2-008, Search and Rescue
- 2.11 EIP-2-012, Radiation Exposure Controls
- 2.12 EIP-2-007, Protective Action Recommendation Guidelines
- 2.13 EIP-2-013, Onsite Radiological Monitoring
- 2.14 EIP-2-014, Offsite Radiological Monitoring
- 2.15 EIP-2-015, Post Accident Sampling Operations
- 2.16 EIP-2-026, Evacuation
- 2.17 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.18 EIP-2-024, Offsite Dose Calculations - Manual Method
- 2.19 RPP-0018, Personnel Decontamination

3.0 GENERAL INFORMATION

- 3.1 The primary functions of the Technical Support Center (TSC) staff are to:
 - 3.1.1 Assist operations personnel in the Main Control Room in mitigating the consequences of an accident and in returning the reactor to a safe condition by providing engineering, technical and management support.
 - 3.1.2 Coordinate all onsite emergency response activities and to exchange information on plant conditions with the Recovery Manager in the Emergency Operations Facility (EOF).
- 3.2 The TSC shall be activated for an ALERT (EIP-2-003, Ref. 2.2), a Site Area Emergency (EIP-2-004, Ref. 2.3), and a General Emergency (EIP-2-005, Ref. 2.4).
- 3.3 The TSC staff shall be activated in accordance with EIP-2-006, Notifications (Ref. 2.5).
- 3.4 The minimum staffing requirements for the TSC to be operational are:
 - 3.4.1 Emergency Director
 - 3.4.2 TSC Manager
 - 3.4.3 Radiation Protection Coordinator

- 3.4.4 Dose Assessment/Protective Actions Advisor
- 3.4.5 Radiation Protection/TSC Habitability Technician
- 3.4.6 Operations Support Coordinator
- 3.4.7 Communicator (at least one)

NOTE

Alternates for TSC staff members are called in using EIP-2-029, Emergency Telephone Book (Ref. 2.6).

- 3.5 Upon arrival, the Plant Manager shall relieve the Shift Supervisor of responsibilities as Emergency Director. The Emergency Director has the responsibility for the direction and control of onsite emergency response activities and for the implementation of this procedure.
- 3.6 The TSC performs the following LOF functions until that facility is activated for a Site Area Emergency or General Emergency.
 - 3.6.1 Perform notifications to offsite government agencies and the NRC
 - 3.6.2 Coordinate offsite radiological and environment monitoring.
 - 3.6.3 Perform offsite dose assessment and recommend offsite protective action recommendations.
 - 3.6.4 Interfacing with offsite government authorities.
- 3.7 The TSC is equipped to enable the TSC staff to assess plant status and make recommendations to the Emergency Director concerning plant operations corrective actions, and protective actions.
 - 3.7.1 TSC data systems are available for the following:
 - 1. Reviewing the accident sequence.
 - 2. Determining the appropriate mitigating actions.
 - 3. Evaluating the extent of damage to plant systems.
 - 4. Determining plant status during recovery.

NOTE

The TSC staff is responsible for monitoring the data available in step 3.7.2 and providing recommendations to the Emergency Director concerning plant operations, corrective actions, and protective actions.

- 3.7.2 TSC data available for evaluation shall consist of the following:
 - 1. Meteorological conditions.
 - 2. Radiological release information.

N/A	N/A	EIP-2-019	REV. O	PAGE 3 OF 30
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3. Plant radiological monitoring information.

4. Plant parameters significant for evaluating the emergency situation.

3.8 As the TSC staff arrive they are assigned tasks which provide the Emergency Director with the information and support required to evaluate and mitigate the emergency such as:

3.8.1 Plant status and dynamics prior to and during the accident.

3.8.2 Performance of accident mitigation functions.

3.8.3 Current status and trend of the accident.

3.8.4 Damage to the plant systems and equipment.

3.8.5 Status of emergency operations (including personnel activity in the plant).

3.8.6 Magnitude of any radiological release to the environment.

3.8.7 Prevailing meteorological conditions.

3.8.8 Projected levels of radioactivity resulting from an airborne or waterborne release.

3.8.9 Potential impact of radiological hazards on public health and safety.

3.8.10 Recommended protective actions.

4.0 PROCEDURE

4.1 TSC Operations

4.1.1 The Emergency Director shall use Attachment 2 and:

1. Ensure that all of the actions of the applicable Emergency Implementing Procedure for the emergency classification (EIP-2-002, Notification of Unusual Event, Ref. 2.7; EIP-2-003, Alert, Ref. 2.2; EIP-2-004, Site Area Emergency, Ref. 2.3; EIP-2-005, General Emergency, Ref. 2.4) are completed.
2. Provide the direction and control for all onsite emergency response activities.
3. Function as the Recovery Manager until relieved of these responsibilities by the Senior Vice President, River Bend Nuclear Group, or alternate.

4. Review the plant and emergency conditions (including meteorological and radiological) and verify that the emergency classification is correct or reclassify the emergency in accordance with EIP-2-001, Classification of Emergencies (Ref. 2.8).
5. Direct the development and approval of plans and methods for onsite protective and corrective actions for mitigating the consequences of the emergency.
6. Keep the Recovery Manager informed of the status of onsite emergency response activities.

4.1.2 The TSC Manager shall use Attachment 3 and:

1. Analyze plant and emergency data to directly support the Emergency Director in aiding Operations personnel with the objective of placing the plant in a safe shutdown condition in a manner which minimizes the effects on the general public.
2. Coordinate the TSC staff in the collection, retention retrieval, and transmittal of plant and emergency parameters.
3. Analyze instrument and controls problems, determine alternatives, and design and coordinate the installation of short-term instrument and controls modifications.
4. Analyze systems operation problems, determine alternatives, and design and coordinate the installation of system modifications.
5. Analyze conditions and develop guidance for Operations personnel on the protection of the reactor core.
6. When the Emergency Director deems it necessary for long term TSC organization relief rotation, direct the Administrative Coordinator to contact alternate TSC personnel using EIP-2-029, Emergency Telephone Book (Ref. 2.6).
7. Keep the Emergency Director informed of the status of items 1 through 6.

4.1.3 The Administrative Coordinator shall use Attachment 4 and:

1. Ensure that the rapid check of TSC emergency equipment by the Radiation Protection TSC Habitability Technician that was initiated in accordance with EIP-2-018, Technical Support Center - Activation (Ref. 2.8) is completed.

2. Upon notification by the Emergency Director, call in Alternate Search and Rescue Team members using EIP-2-029, Emergency Telephone Book (Ref. 2.6)
3. Ensure that all TSC personnel card in on the TSC accountability card reader for a Site Area Emergency or General Emergency and if a Protected Area Evacuation has been implemented during an Alert.

NOTE

If the card reader is inoperable, designate a Clerical Support person to compile a list of names and badge numbers of TSC personnel and provide it to the Secondary Alarm Station (SAS) Operator at the Primary Access Point (PAP).

4. Direct Clerical/Administrative staff to provide typing, filing, document retrieval and clerical services to all TSC personnel.
5. Coordinate with the Administrative/Logistics Advisor (in the EOF)
 - a. To obtain additional communications equipment and office supplies and equipment as necessary from RBS supplies or from other utilities. Provisions for additional equipment for other utilities are listed in the Mutual Assistance Plan in Appendix B of the River Bend Station Emergency Plan (Ref. 2.1).
 - b. To acquire alternate emergency organization personnel for long term relief rotation and additional GSU and other Nuclear Industry support personnel using EIP-2-029, Emergency Telephone Book (Ref. 2.6) and the Institute of Nuclear Power Operations (INPO) Resource Manual.
 - c. To obtain replacement TSC equipment (see TSC equipment list in (Attachment 2 of EIP-2-018, Technical Support Center - Activating, Ref. 2.9) from Radiation Protection personnel. TSC Equipment and other emergency and plant equipment may be obtained through provisions listed in the Mutual Assistance Plan or the INPO Resources Manual.
6. Resolve any questions regarding TSC personnel access.
7. Keep the TSC Manager informed of the status of items 1 through 6.

4.1.4 The Radiation Protection Coordinator shall use Attachment 5 and:

1. Direct the Dose Assessment/Protective Actions Advisor, the Radiation Protection/TSC Habitability Technician and Radiation Protection personnel in the OSC in accumulating radiation data and dose assessment data and in implementing radiation protection programs in support of emergency response operations.
2. If person(s) are known to be missing or found to be missing during an accountability check, implement EIP-2-008, Search and Rescue
3. Assist the Emergency Director in authorizing emergency exposure limits in excess of 10 CFR 20 limits, if necessary, in accordance with EIP-2-012, Radiation Exposure controls (Ref. 2.11)
4. If there is a release of radioactivity or there is a potential for a release,
 - a. Implement EIP-2-007, Protective Action Recommendation Guidelines
 - b. Implement EIP-2-013, onsite Radiological Monitoring (Ref. 2.13) and brief onsite radiological monitoring personnel.
5. Until the EOF is operational:
 - a. Dispatch and direct offsite radiological monitoring personnel through the Offsite Team Coordinator to evaluate radioactive releases.
 - b. Keep offsite radiological monitoring personnel informed of the status of the emergency especially in regard to those items which affect the operations of offsite monitoring personnel.
6. If there is an indication of core degradation, implement EIP-2-015, Post Accident Sampling Operations (Ref. 2.15).
7. If an Owner Controlled Area Evacuation is directed, implement EIP-2-026, Evacuation (Ref. 2.16).
8. Upon declaration of a Site Area Emergency or General Emergency, contact the OSC Coordinator and direct the dispatch of a Radiation Technician to the EOF to assume the responsibilities of the Radiation Protection/EOF Habitability Technician.

9. Coordinate with the Radiation Protection Advisor in the EOF to provide Radiation Protection support for the emergency response.
10. Provide for the decontamination of station personnel and equipment.
11. Coordinate with the Security Coordinator regarding onsite protective actions for Security Officers.
12. Ensure applicable status boards are updated with current emergency information and data.
13. Keep the TSC Manager informed of the status of items 1 through 12.

4.1.5 The Dose Assessment/Protective Actions Advisor (Offsite Team Coordinator) shall use Attachment 6 and:

1. If there has been a release of radioactivity or there is a potential for release, perform dose assessment in accordance with EIP-2-025 Offsite Dose Calculations - Computer Method (Ref. 2.17).
2. If the Digital Radiation Monitoring System (DRMS) is inoperable, implement EIP-2-024, Offsite Dose Calculations - Manual Method (Ref. 2.18).
3. Determine the need for offsite protective action recommendations in accordance with EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.12).
4. Relay the instructions and information provided by the Radiation Protection Coordinator to offsite radiological monitoring personnel.

NOTE

Keep track of the radiation exposure of all offsite radiological monitoring personnel. Exposures shall be documented in the Dose Assessment/Protective Actions Advisor's Log.

5. Document all dose assessment, offsite protective action recommendation and offsite radiological monitoring data and forward the data to the Radiation Protection Coordinator.
6. Keep the Radiation Protection Coordinator informed of the status of items 1 through 5 and any abnormal occurrences.
7. When the EOF is operational, contact the Chemistry Advisor in the EOF and request that the Chemistry Advisor or Radiation Protection Advisor ensure that DRMS is operable in the EOF.

N/A	N/A	EIP-2-019	REV. O	PAGE 8 OF 30
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8. If DRMS is operable in the EOF,

- a. Transfer dose assessment, protective action recommendations and coordination of offsite radiological monitoring personnel to the Chemistry/Core Damage Assessment Coordinator.
- b. Inform the Radiation Protection Coordinator and the TSC Manager that the Chemistry/Core Damage Assessment Coordinator is performing the functions listed in step 8.a and that the Dose Assessment/Protective Actions Advisor is proceeding to the EOF.
- c. Proceed to the EOF.
- d. Report presence to the EOF Manager and the Radiation Protection Advisor.
- e. Perform the functions listed in step 8.a in the EOF.

4.1.6 The Core Technical/Core Physics Coordinator shall:

1. Analyze core parameters to determine current conditions of the core.
2. Review proposed plant operations with respect to the effect on core conditions.
3. Develop recommendations for plant operations that would effect core conditions.
4. Keep the TSC Manager informed of the status of items 1 through 3.

4.1.7 The Operations Support Coordinator shall:

1. Operate the Emergency Response Information System (ERIS) terminal using Attachment 7 of EIP-2-018, Technical Support Center - Activation (Ref. 2.9)
2. Call in additional operations personnel to support Operations in monitoring plant parameters, analyzing plant conditions and performing system valve alignments and equipment operation.
3. Coordinate the emergency response organization objectives requiring implementation by Operations.
4. Ensure that all printed Emergency Response Information System (ERIS) data is distributed within the TSC to the TSC Manager, the appropriate engineering personnel, the Radiation Protection Coordinator and the Administrative Coordinator and to the EOF.

5. Ensure that applicable status boards are updated with current emergency information.

6. Keep the TSC Manager informed of the status of the items listed in sections 1 through 5.

4.1.8 The Maintenance Support Coordinator shall:

1. Provide advice to the TSC Manager and the Mechanical and Electrical Engineering Coordinators on plant mechanical electrical and I & C repair and corrective actions.

2. Coordinate with the OSC Coordinator regarding the performance of maintenance by OSC maintenance personnel.

3. Keep the TSC Manager informed on plant maintenance activities especially those activities which could affect the release of radioactivity offsite.

4.1.9 The Chemistry/Core Damage Assessment Coordinator shall use Attachment 7 and:

1. If there is an indication of reactor core degradation, implement EIP-2-015, Post Accident Sampling Operations (Ref. 2.15).

2. Develop and implement methods to process all liquid and gaseous radioactive waste accumulated during the emergency.

3. Provide information and recommendations to the TSC Manager concerning emergency operations that could affect the plant or the environment.

4. Direct the Chemistry Technicians in the OSC in accumulating onsite chemistry and radiochemistry data in support of emergency response operations.

5. Assist the Dose Assessment/Protective Actions Advisor in dose assessment, offsite protective action recommendations and coordination of offsite radiological monitoring personnel.

6. Perform dose assessment and recommend offsite protective actions and coordinate offsite radiological monitoring personnel while the Dose Assessment/Protective Actions Advisor is enroute to the EOF after the EOF is Operational.

7. Coordinate the distribution of samples between sampling and analytical facilities.

8. Provide recommendations to the TSC Manager on chemistry and radiochemistry problems.

9. Ensure that applicable status boards are updated with current chemistry and radiochemistry information.
10. Keep the TSC Manager informed of the status of the items 1 through 9.

4.1.10 The Security Coordinator shall use Attachment 8 and:

1. Maintain TSC access control at the TSC door number 325 at the end of the labyrinth.

NOTE

The other TSC doors (number 306 and the third floor computer room door, number 302) shall be locked and access will be permitted only through the door at the end of the labyrinth (number 326).

2. Ensure that personnel who enter the TSC are on the TSC access list provided by the Supervisor - Emergency Planning.

NOTE

Personnel access for personnel not on the access list shall be approved by the Administrative Coordinator. Nuclear Regulatory Commission personnel shall present their federal credentials as authorization for TSC access.

3. Log in all personnel who enter the TSC on the TSC entry log shown in Attachment 1.
4. Coordinate with the Radiation Protections Coordinator regarding onsite protective actions for Security Officers.
5. Keep the Administrative Coordinator informed of any problems or abnormal occurrences.

4.1.11 The Radiation Protection/TSC Habitability Technician shall use Attachment 9 and:

1. Periodically (approximately once per hour or if radiological conditions in the plant deteriorate) check the radiological monitors to ensure that TSC continues to remain habitable.

NOTE

If radiological monitors are inoperable perform radiation and airborne radioactivity surveys (approximately once per hour or if radiological conditions in the plant deteriorate). The TSC shall be uninhabitable if radiation levels are such that TSC personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that TSC personnel may receive 520 times maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

2. Complete the check of TSC emergency equipment that was initiated in EIP-2-018, Technical Support Center Activation (Ref. 2.9).
3. Maintain the TSC contamination control point.

NOTE

Contaminated personnel shall be decontaminated at the Services Building Decontamination Facility in accordance with RPP-0018, Personnel Decontamination (Ref. 2.19). Alternate Decontamination Facilities are located at the Emergency Operations Facility and the Energy Center.

4. Assist the Dose Assessment/Protective Actions Advisor in Coordinating offsite radiological monitoring personnel as necessary.
5. Perform other actions as directed by the Radiation Protection Coordinator or the Administrative Coordinator.
6. Keep the Radiation Protection Coordinator informed of the status of items 1 through 5 and the Administrative Coordinator informed of item 2.

4.1.12 The Data Facility Coordinator shall:

1. Provide for the accumulation, retention and retrieval of plant and emergency information.
2. Transmit information and documents as needed by the emergency response organization.
3. Keep the Administrative Coordinator informed of the status of items 1 and 2 and of any problems with equipment.

4.1.13 The Status Board Coordinator shall update the TSC status boards with current information obtained from the:

1. Emergency Director
2. TSC Manager
3. Radiation Protection Coordinator
4. Operations Support Coordinator
5. Chemistry/Core Damage Assessment Coordinator

4.1.14 The Mechanical Engineering Coordinator/Electrical Engineering Coordinator shall:

1. Provide advice on plant mechanical/electrical repair and corrective actions to the TSC Manager.
2. Consult with the Maintenance Support Coordinator on mechanical/electrical maintenance operations.

3. Keep the TSC Manager informed of items 1 and 2.

4.1.15 The Communicators shall use Attachment 10 and:

1. Relieve the Main Control Room Communicator of the notifications of offsite government agencies after obtaining a briefing on the status.
2. Perform notifications and communications as directed by the Emergency Director or the TSC Manager.
3. Complete and maintain notification forms for notifications to offsite government agencies.
4. Augment onsite emergency response personnel, as directed, using EIP-2-029, Emergency Telephone Book (Ref. 2.6).
5. Log all incoming and outgoing communications in the Communicator's log.
6. Keep the Emergency Director informed of the status of incoming and outgoing communications.
7. When the EOF is Operational, the TSC Communicator performing notifications to offsite government agencies shall:
 - a. Brief the EOF Communicator on the status of notifications
 - b. Turn offsite notifications over to the EOF Communicator.
 - c. Inform the Emergency Director that the EOF is performing notifications of offsite government agencies.
 - d. Proceed to the EOF to assist the EOF Communicator.
 - e. Report presence to the EOF Manager.

4.1.16 The Clerical/Administrative Support personnel shall perform functions as directed by the Administrative Coordinator.

4.1.17 The Onsite Security Direction and Control Coordinator (Security Supervisor, or alternate, shall:

1. Direct and coordinate Station Security functions in accordance with Plant Security Procedures (Ref. 2.9), applicable Emergency Implementing Procedures, or as directed by the Emergency Director.

2. Assist in resolving questions regarding access to the station and emergency response facilities in the owner controlled area.

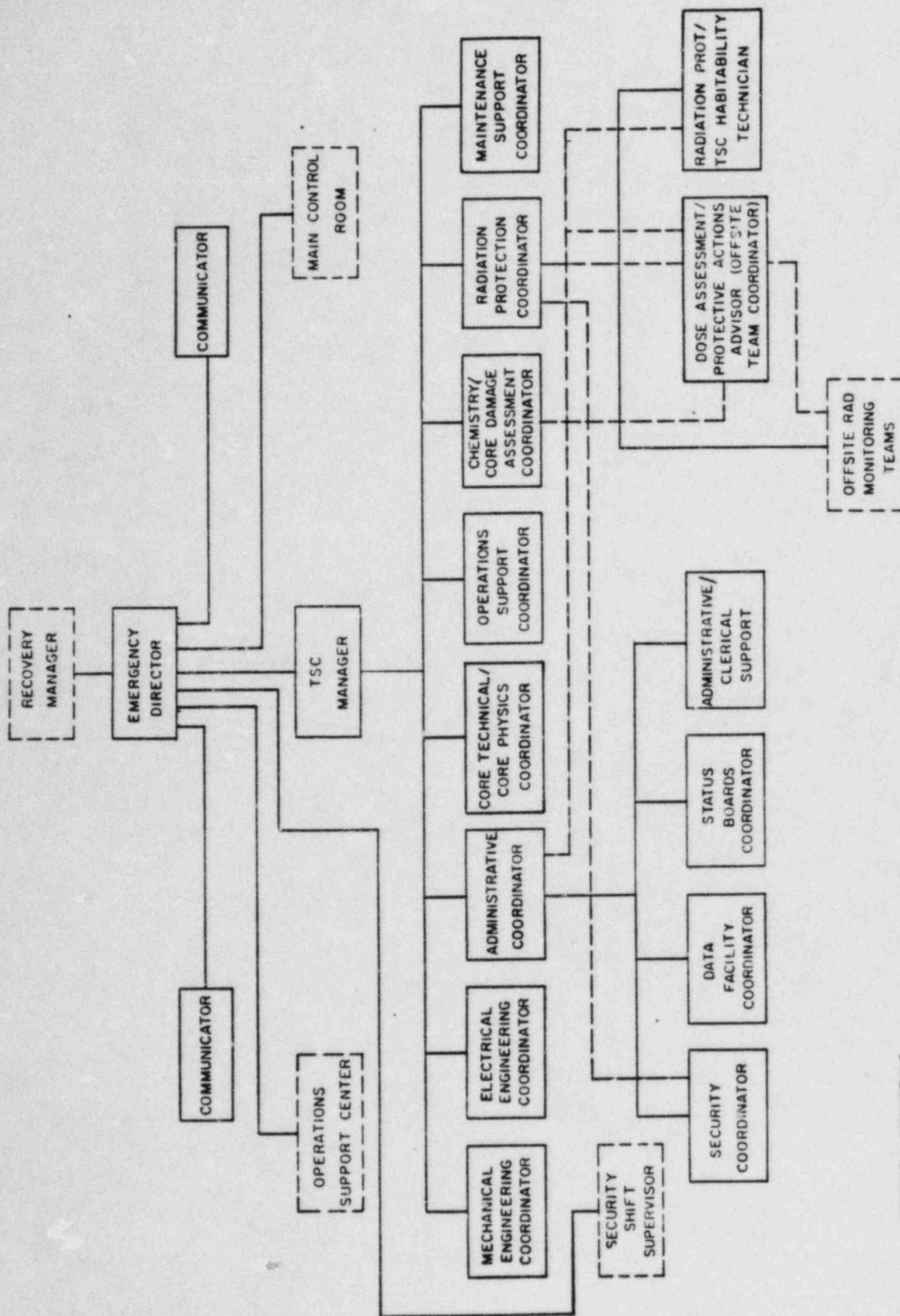
4.2 TSC Deactivation

- 4.2.1 The Emergency Director shall direct the TSC Manager to deactivate the TSC when the emergency classification is below the Alert level after concurrence from the Recovery Manager.
- 4.2.2 The TSC Manager shall release TSC personnel after:
 1. Ensuring that all plant and emergency information has been logged and filed or sent to the TSC document room.
 2. Ensure that all equipment is restored or placed in a long term storage condition.
- 4.2.3 All other TSC personnel shall:
 1. Perform items 1 and 2 of step 4.2.2.
 2. Inform the TSC Manager when item 1 of this step is complete.
- 4.2.4 The TSC Manager shall inform the Emergency Director when the TSC is deactivated.
- 4.2.5 The Emergency Director shall inform the Recovery Manager when the TSC is deactivated.

NOTE

When the emergency is terminated, the Recovery Manager will establish the Recovery Organization which will operate from the EOF.

END



— PRIMARY REPORTING
 - - - SECONDARY REPORTING
 [] IN TSC
 [] OTHER LOCATION

EIP-2-019
 FIGURE 1
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TECHNICAL SUPPORT CENTER ORGANIZATION

<u>NAME</u>	<u>RBS BADGE #</u>	<u>DATE/TIME</u>	<u>EMERGENCY ORGANIZATION TITLE</u>
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ATTACHMENT 2

EMERGENCY DIRECTOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-001	EIP-2-003	EIP-2-004	EIP-2-005	EIP-2-018	EIP-2-019
1. If an alert has been declared, implement EIP-2-003, Alert and activate the TSC		4.1,3 4.2,5 (Att 1,8) Att 2,12			4.1.1,2 (Att 1,12)	4.1.1.1,4
2. If as Site Area Emergency has been declared, implement EIP-2-004, Site Area Emergency and activate the TSC			4.1,4 4.2,6 (Att 1,10)		4.1.1,2 (Att 1,12)	4.1.1.1,4
3. If a General Emergency has been declared, implement EIP-2-005, General Emergency and activate the TSC				4.1,4 4.2,6 (Att 1,10) (Att 2, 14)	4.1.1,2 (Att 1,12)	4.1.1.1,4
4. Provide the direction and control all onsite emergency response activities						4.1.1.2,4
5. Function as the Recovery Manager until relieved of these responsibilities by the Senior Vice President, River Bend Nuclear Group, or alternate						4.1.1.3,4
6. Review the plant and emergency conditions and verify that the emergency classification is correct or reclassify the emergency	4.2.3,3					4.1.1.4,5
7. Direct the development and approval of plans and methods for onsite protective and corrective actions						4.1.1.5,5
8. If the EOF is operational, keep the Recovery Manager informed of the status of onsite emergency response activities						4.1.1.6,4
9. Direct the TSC Manager to deactivate the TSC						4.2.1,14
10. Inform the Recovery Manager when the TSC is deactivated						4.2.5,14

ATTACHMENT 3**TSC MANAGER RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-018	EIP-2-019
1. Upon declaration of an Alert, Site Area Emergency or General Emergency, activate the TSC	4.1.2,4	
2. Analyze plant and emergency data to support the Emergency Director		4.1.2.1,5
3. Coordinate the TSC staff in the collection, retention, retrieval, and transmittal of plant and emergency parameters		4.1.2.2,5
4. Analyze instrument and controls problems, determine alternates, and design and coordinate the installation of short-term instrument and controls modifications		4.1.2.3,5
5. Analyze systems operation problems, determine alternatives and design and coordinate the installation of system modifications		4.1.2.4,5
6. Analyze conditions and develop guidance for operations personnel on the protection of the reactor core		4.1.2.5,5
7. The Emergency Director, when deemed long-term relief for the TSC staff necessary, direct the Administrative Coordinator to contact alternate personnel		4.1.2.6,5
8. Keep the Emergency Director informed regarding TSC operations		4.1.2.7,5
9. Upon direction from the Emergency Director to deactivate the TSC, release TSC personnel		4.2.2.,14
10. Inform the Emergency Director when the TSC is deactivated		4.2.4,14

ATTACHMENT 4
ADMINISTRATIVE COORDINATOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-018	EIP-2-019	EIP-2-008
1. Upon declaration of an Alert, Site Area Emergency or General Emergency, activate the TSC	4.1.3,6		
2. Ensure that the rapid check of TSC emergency equipment is complete		4.1.3.1,5	
3. Upon being notified by the Emergency Director, call in alternate Search and Rescue Team members using EIP-2-029, Emergency Telephone Book		4.1.3.2,6	4.5,6
4. If a Site Area Emergency or General Emergency has been declared or a Protective Area Evacuation has been implemented, ensure that all TSC personnel card-in or the TSC accountability card reader		4.1.3.3,6	
5. Provide for the accomplishment of typing, filing, document retrieval and clerical services to all TSC personnel		4.1.3.4,6	
a. Coordinate with the Administrative /Logistic Advisor in the EOF to obtain additional communications equipment and office supplies and equipment as necessary		4.1.3.5.a,6	
b. To acquire alternate emergency organization personnel and other nuclear industry support personnel		4.1.3.5.b,6	
c. To obtain replacement for TSC equipment or coordinate the repair of TSC data transfer equipment		4.1.3.5.c,6	
6. Resolve any questions regarding TSC personnel access		4.1.3.6,6	
7. Keep the TSC Manager informed of the status of items 1 through 6		4.1.3.7,6	
8. Upon direction from the TSC Manager, deactivate the TSC		4.2.3.1,14	
9. Inform the TSC Manager when item 8 is complete		4.2.3.2,14	4.1.4.8,6

ATTACHMENT 5
RADIATION PROTECTION COORDINATOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-018	EIP-2-019	EIP-2-007	EIP-2-008	EIP-2-012	EIP-2-013	EIP-2-015
1. Upon declaration of an Alert, a Site Area or General Emergency, activate the TSC	4.1.4.8						
2. Direct the Radiation Protection staff in accumulating radiation data and dose assessment data and in implementing Radiation Protection programs in support of the emergency response		4.1.4.1,7					
3. In person(s) are known to be missing or found to be missing during an accountability check, implement EIP-2-008, Search and Rescue		4.1.4.2,7		4.2.3			
4. If emergency response personnel need authorization for exceeding 10CFR20 radiation exposure limits, implement EIP-2-012		4.1.4.3,7			4.2.4		
5. If there is a release of radioactivity or there is a potential for release:							
a. Implement EIP-2-007		4.1.4.4.a,7	4.2.5		4.2.4		
b. Implement EIP-2-013, Onsite Radiological Monitoring and brief onsite radiological monitoring personnel		4.1.4.4.b,7					
6. Until the EOF is operational, dispatch and direct offsite radiological monitoring personnel through the Dose Assessment/Protective Actions Advisor		4.1.4.5,7					
7. If there is an indication of core degradation, implement EIP-2-015, Post Accident Sampling Operations		4.1.4.6,7					4.4.4

ATTACHMENT 5**RADIATION PROTECTION COORDINATOR RESPONSIBILITY MATRIX**

Responsibility,EIP (Section, Page No.)	EIP-2-019	EIP-2-026
8. If an Owner Controlled Area Evacuation is directed, implement EIP-2-026, Evacuation	4.1.4.7,7	4.4.3,12
9. Upon declaration of a Site Area Emergency, contact the OSC and direct the OSC Coordinator to dispatch a Radiation Protection Technician to the EOF to assume the responsibilities of the Radiation Protection/EOF Habitability Technician	4.1.4.8,7	
10. Coordinate with the Radiation Protection Advisor in the EOF to provide Radiation Protection support for the emergency response	4.1.4.9,7	
11. Provide decontamination support for contaminated station personnel and equipment	4.1.4.10,8	
12. Coordinate with the Security Coordinator regarding onsite protective actions for Security Officers	4.1.4.11,8	
13. Ensure that applicable status boards are updated by the Status Boards Coordinator with current emergency information and data	4.1.4.12,8	
14. Keep the TSC Manager informed of the status of items 1 through 13	4.1.4.13,8	
15. Upon direction from the TSC Manager, deactivate the TSC	4.2.3.1,14	
16. Inform the TSC Manager when item 15 is complete	4.2.3.2,14	

ATTACHMENT 6

DOSE ASSESSMENT/PROTECTIVE ACTIONS ADVISOR (OFFSITE TEAM COORDINATOR) RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-018	EIP-2-019	EIP-2-024	EIP-2-025
1. Upon declaration of an Alert, a Site Area Emergency or General Emergency, activate the TSC		4.1.5,8			
2. If there has been a release of radioactivity or there is a potential for a release, implement EIP-2-025, Offsite Dose Calculations - Computer Method			4.1.5.1,8		4.1.3 Att 1,4
3. If DRMS is inoperable, implement EIP-2-024, Offsite Dose Calculations - Manual Method			4.1.5.2,8	4.1.3 Att 1,4	
4. Determine the need for offsite protective action recommendations in accordance with EIP-2-007, Protective Action Recommendation Guidelines	4.1.4 Att 1-7,6		4.1.5.3,8		
5. Relay the instructions and information provided by the Radiation Protection Coordinator to offsite radiological monitoring personnel			4.1.5.4,8		
6. Keep track of the radiation exposure of all offsite radiological monitoring personnel			4.1.5.4, Note, 8		
7. Document all dose assessment, offsite protective action recommendations and offsite radiological monitoring data and forward the information/data to the Radiation Protection Coordinator	4.1.2,4 Att 7,16		4.1.5.5,8	4.1.3,3 Att 1,4	4.1.2,3 Att 1,4
8. Keep the Radiation Protection Coordinator informed of the status of items 1 through 7 and any abnormal occurrences			4.1.5.6,8		
9. When the EOF is operational, contact the Chemistry Advisor in the EOF and request that the Chemistry Advisor ensure that DRMS is operable in the EOF			4.1.5.7,8		
10. If DRMS is operable in the EOF: a. Turn over dose assessment protective action or recommendations and coordination of offsite radiological monitoring personnel to the Chemistry/Core Damage Assessment Coordinator			4.1.5.8.a,9		

ATTACHMENT 6

**DOSE ASSESSMENT/PROTECTIVE ACTIONS ADVISOR (OFFSITE
TEAM COORDINATOR) RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-018	EIP-2-019	EIP-2-024	EIP-2-025
b. Inform the Radiation Protection Coordinator and the TSC Manager that the Chemistry/Core Damage Assessment Coordinator is performing the functions listed in item 10.a and that the Dose Assessment/Protective Actions Advisor is proceeding to the EOF.			4.1.5.8.b,9		
c. Proceed to the EOF			4.1.5.8.c,9		
d. Report presence to the EOF Manager and the Radiation Protection Advisor			4.1.5.8.d,9		
e. Perform the functions listed in step 10.a in the EOF			4.1.5.8.e,9		
11. If the EOF is not activated and upon direction from the TSC Manager, deactivate the TSC			4.2.3.1,14		
12. Inform the TSC Manager when item 11 is complete			4.2.3.2,14		

ATTACHMENT 7

CHEMISTRY/CORE DAMAGE ASSESSMENT COORDINATOR

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-015	EIP-2-018	EIP-2-019	EIP-2-024	EIP-2-025
1. Upon declaration of an Alert, a Site Area or General Emergency, activate the TSC			4.1.8,8			
2. If there is an indication of reactor core degradation, implement EIP-2-015, Post Accident Sampling Operations		4.3,4		4.1.9.1,10		
3. Develop and implement methods to process all liquid gaseous and solid radioactive waste accumulated during the emergency				4.1.9.2,10		
4. Provide information and recommendations to the TSC Manager concerning emergency operations that could affect the plant or the environment				4.1.9.3,10		
5. Direct the Chemistry Technicians in the OSC in accumulating onsite chemistry and radiochemistry data in support of emergency operations				4.1.9.4,10		
6. Assist the Dose Assessment/Protective Actions Advisor in dose assessment activities, offsite protective action recommendations and coordinating offsite radiological monitoring personnel	4.1.4 Att 1-7,6			4.1.9.5,10 4.1.5.1,8 4.1.5.2,8 4.1.5.3,8 4.1.5.4,8 4.1.5.5,8 4.1.5.6,8	4.1.3 Att 1,4	4.1.3 Att 1,4
7. While the Dose Assessment/Protective Actions Advisor is enroute to the EOF after the EOF is operational, a. Perform dose assessment				4.1.9.6,10 4.1.5.1,8 4.1.5.2,8 4.1.5.3,8 4.1.5.4,8		4.1.3 Att 1,4
b. Recommend offsite protective actions to the Radiation Protection Advisor	4.1.3 Att 1-7,6			4.1.9.6,10 4.1.5.3,8		
c. Coordinate offsite radiological monitoring personnel				4.1.9.6,10 4.1.5.4,8		
8. Coordinate the distribution of samples between sampling and analytical facilities				4.1.9.7,10		
9. Provide recommendations to the TSC Manager on chemistry and radiochemistry problems				4.1.9.8,10		

ATTACHMENT 7**CHEMISTRY/CORE DAMAGE ASSESSMENT COORDINATOR**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-015	EIP-2-018	EIP-2-019	EIP-2-024	EIP-2-025
10. Ensure that applicable status boards are updated by the Status Boards Coordinator with current chemistry and radiochemistry information				4.1.9.9,11		
11. Keep the TSC Manager informed of the status of items 1 through 10				4.1.9.10,11		
12. Upon direction from the TSC Manager, deactivate the TSC				4.2.3.1,14		
13. Inform the TSC Manager when item 12 is complete				4.2.3.2,14		

ATTACHMENT 8
SECURITY COORDINATOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-009	EIP-2-011	EIP-2-018	EIP-2-019	EIP-2-026	EIP-2-027	EIP-2-029
1. Upon declaration of an Alert, a Site Area Emergency or General Emergency, activate the TSC			4.1.9,9				
2. Maintain TSC access control at TSC door number 326 at the end of the labyrinth				4.1.10.1,11			
3. Ensure that the TSC door number 306 and the third floor computer room (adjacent to the TSC) door number 302 are locked				4.1.10.1, Note 11			
4. Ensure that personnel who enter the TSC are on the TSC access list				4.1.10.2,11			
5. Log in all personnel who enter the TSC on the TSC entry log				4.1.10.3,11			
6. Coordinate with the Radiation Protection Coordinator regarding onsite protective actions for Security Officers at assigned posts				4.1.10.4,11			
7. Keep the Administrative Coordinator informed of the status of items 1 through 6 and any problems or abnormal occurrences				4.1.10.5,11			
8. Coordinate the following security operations							
a. During an Alert, a Site Area Emergency or General Emergency, the Security Shift Supervisor shall direct and coordinate station security functions in accordance with plant security procedures				4.1.17,13			
b. Upon declaration of a Site Area Emergency or General Emergency during working hours (7:30am to 4:00pm), direct a Security Officer to proceed to the EOF and activate the EOF using EIP-2-020, Emergency Operations Facility - Activation and implement EIP-2-021, Emergency Operations Facility - Support Functions							4.1.8,9
c. During a medical emergency, the Security Shift Supervisor shall implement EIP-2-009, Medical Emergencies	4.4,6						

ATTACHMENT 8
SECURITY COORDINATOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-009	EIP-2-011	EIP-2-018	EIP-2-019	EIP-2-026	EIP-2-027	EIP-2-020
d. During a fire requiring offsite fire fighting assistance, the Security Shift Supervisor shall implement EIP-2-011, Fire Emergencies		4.2,3					
e. During a limited evacuation, the Security Officer dispatched to the assembly area shall implement EIP-2-027, Personnel Accountability					4.1.3,5	4.1.3,3	
f. During a building evacuation, the Security Officer dispatched to the assessment area shall implement EIP-2-026, Evacuation and EIP-2-027, Personnel Accountability					4.2.3.7	4.1.3,3	
g. During an accountability following a limited or building evacuation, the Security Supervisor shall implement EIP-2-027, Personnel Accountability						4.1.2,2	
h. During a Protected Area Evacuation, the Security Shift Supervisor shall implement EIP-2-026, Evacuation and EIP-2-027, Personnel Accountability					4.3.3,10	4.2.2,4	
i. During an accountability following a Protected Area Evacuation, the Secondary Alarm Station Operator shall implement EIP-2-027, Personnel Accountability						4.2.3,4	
j. During a Protected Area Evacuation, the Security Officers dispatched to the Evacuation Assembly Area east of the River Bend Training Center shall implement EIP-2-026, Evacuation					4.3.4,11		
k. During an Owner Controlled Area Evacuation, the Security Shift Supervisor shall implement EIP-2-026, Evacuation					4.4.2,12		
l. During an Owner Controlled Area Evacuation, the Security Officers assigned to evacuate the Owner Controlled area shall implement EIP-2-026, Evacuation					4.4.4,12		
m. During an accountability when the Security Computer is inoperable, the Security Shift Supervisor shall implement EIP-2-027, Personnel Accountability						4.3.1,5	

ATTACHMENT 8**SECURITY COORDINATOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-009	EIP-2-011	EIP-2-018	EIP-2-019	EIP-2-026	EIP-2-027	EIP-2-020
n. During an accountability when the Security Computer is inoperable, the Security Officers at the PAP shall implement EIP-2-027, Personnel Accountability						4.3.2,5	
9. Upon direction from the TSC Manager, deactivate the TSC				4.2.3.1,14			
10. Inform the TSC Manager when item 9 is complete				4.2.3.2,14			

ATTACHMENT 9**RADIATION PROTECTION/TSC HABITABILITY TECHNICIAN
RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-018	EIP-2-019
1. Upon direction from the Radiation Protection Coordinator or the OSC Coordinator, activate the TSC	4.1.10,9	
2. Check the TSC radiological monitors approximately once per hour or if radiological conditions in the plant deteriorate		4.1.11.1,11
3. Perform radiation and airborne radioactivity surveys approximately once per hour or if radiological conditions in the plant deteriorate		4.1.11.1, Note, 11
4. Complete the check of TSC emergency equipment		4.1.11.2,12
5. Maintain the TSC contamination control point		4.1.11.3,12
6. Perform actions as directed by the Radiation Protection Coordinator or the Administrative Coordinator		4.1.11.5,12
7. Assist the Dose Assessment/Protection Actions Advisor in coordinating offsite radiological monitoring personnel as necessary		4.1.11.4,12
8. Keep the Radiation Protection Coordinator and Administrative Coordinator informed of activities performed		4.1.11.6,12
9. Upon direction from the TSC Manager, deactivate the TSC		4.2.3.1,14
10. Inform the TSC Manager when item 9 is complete		4.2.3.2,14

ATTACHMENT 10
TSC COMMUNICATOR RESPONSIBILITY MATRIX

Responsibility EIP (Section, Page No.)	EIP-2-006	EIP-2-018	EIP-2-019	EIP-2-029
1. Upon declaration of an Alert, a Site Area Emergency or General Emergency, activate the TSC		4.1.13,10		
2. Relieve the Main Control Room Communicator of Offsite government agency notifications after obtaining a briefing on the status			4.1.15.1,13	
3. Perform notifications and notifications as directed by the Emergency Director of the TSC Manager	4.3,4 Att 2,7		4.1.15.2,13	
4. Complete and maintain notification forms for notifications to offsite government agencies	4.3,4 Att 2,7		4.1.15.3,13	
5. Augment the onsite emergency response personnel as directed using EIP-2-029, Emergency Telephone Book			4.1.15.4,13	I.A,1(OSC) I.B,3(TSC) I.C,6(EOF)
6. Log all incoming and outgoing communications in the Communicator's Log			4.1.15.5,13	
7. Keep the Emergency Director informed of the status of incoming and outgoing communications			4.1.15.6,13	
8. When the EOF is operational, the TSC Communicator performing notifications to offsite government agencies shall:				
a. Brief the EOF Communicator on the status of notifications			4.1.15.7.a,13	
b. Turn offsite government agency notifications over to the EOF Communicator			4.1.15.7.b,13	
c. Inform the Emergency Director that the EOF is performing notifications of offsite government agencies			4.1.15.7.c,13	
d. Proceed to the EOF to assist the EOF Communicator			4.1.15.7.d,13	
e. Report presence to the EOF Manager			4.1.15.7.e,13	
9. Upon direction from the TSC Manager, the TSC Communicator shall deactivate the TSC			4.2.3.1,14	
10. Inform the TSC Manager when item 9 is complete			4.2.3.2,14	

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-020

PROCEDURE TITLE: EMERGENCY OPERATIONS FACILITY - ACTIVATION

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-22		<i>J. J. [Signature]</i> 10/21/04	
			FOR INFORMATION ONLY C	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: EMERGENCY OPERATIONS FACILITY - ACTIVATION

PROCEDURE NO. EIP-2-020

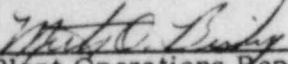
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EMERGENCY PLANNING COMMITTEE REVIEW:

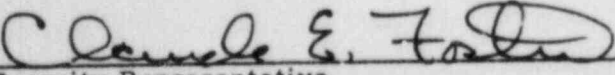
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Radiation Protection/Chemistry Representative

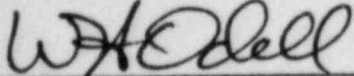
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Plant Operations Representative

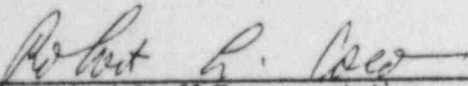
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Security Representative

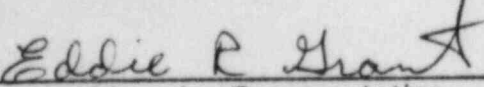
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Training Representative

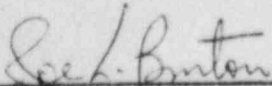
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Technical Staff Representative

9/24/84

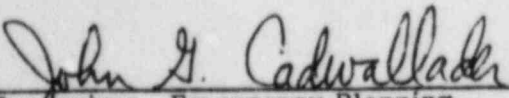

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

(LATERS)

PROCEDURE NO.: EIP-2-020

TITLE: EMERGENCY OPERATIONS FACILITY -
ACTIVATION

REVISION NO.: 0

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION
(Section/Step)

PAGE NO.

BRIEF
DESCRIPTION

14.1.9.1

9

EOF radiological monitor
operability check and monitor
location.

ATTACHMENT 6

21

Activation steps for DRMS to be provided when information is available.

ATTACHMENT 7

22

Activation steps for ERIS to be provided when information is available.

EMERGENCY OPERATIONS FACILITY - ACTIVATION

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1.0 PURPOSE

This procedure provides instructions for activation of the Emergency Operations Facility.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-004, Site Area Emergency
- 2.3 EIP-2-005, General Emergency
- 2.4 EIP-2-006, Notifications
- 2.5 EIP-2-029, Emergency Telephone Book
- 2.6 EIP-2-001, Classification of Emergencies
- 2.7 EIP-2-021, Emergency Operations Facility - Support Functions
- 2.8 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.9 EIP-2-014, Offsite Radiological Monitoring

3.0 GENERAL INFORMATION

- 3.1 The Emergency Operations Facility (EOF) is the emergency response facility located near the reactor site in the River Bend Training Center. that provides the overall management of the Gulf States Utilities Company (GSU) Emergency Response Organization.
- 3.2 The EOF shall be activated for a Site Area Emergency (EIP-2-004, Ref. 2.2) or a General Emergency (EIP-2-005, Ref. 2.3).
- 3.3 The Senior Vice President, River Bend Nuclear Group (RBNG) or alternate, is notified in accordance with EIP-2-006, Notifications (Ref. 2.4). The Senior Vice-President RBNG, or alternate, upon arrival, relieves the Emergency Director, Plant Manager or alternate, of responsibilities as Recovery Manager.
- 3.4 The EOF staff shall be activated using EIP-2-026, Notifications (Ref. 2.4).
- 3.5 The minimum staffing requirements for the EOF to be considered operational are:
 - 3.5.1 Recovery Manager
 - 3.5.2 EOF Manager
 - 3.5.3 Radiation Protection Advisor
 - 3.5.4 Operations Advisor
 - 3.5.5 Technical Advisor
 - 3.5.6 Radiation Protection/EOF Habitability Technician
 - 3.5.7 Communicator (at least one)
- 3.6 The Alternate EOF will be activated if the primary EOF in the River Bend Training Center is uninhabitable for a Site Area Emergency or General Emergency.

- 3.7 The Alternate EOF is located in the Gulf States Utilities Company (GSU) - Baton Rouge Division Service Center on Government Street in Baton Rouge, approximately 23 miles southwest of River Bend Station.

4.0 PROCEDURE

4.1 Immediate Actions for EOF Activation

4.1.1 The Recovery Manager shall use Attachment 1 and:

1. Contact the Emergency Director in the TSC (or Main Control Room if the emergency has started at a Site Area Emergency or General Emergency).
2. Review the current status of the emergency including:
 - a. Background information leading up to the emergency
 - b. Indications and suspected cause of the emergency
 - c. Existing hazards to personnel
 - d. Damage to plant systems, instrumentation and other equipment and radiation levels or releases of radioactivity
 - e. Emergency classification
 - f. Corrective actions taken
 - g. Status of the execution of the steps in EIP-2-001, Classification of Emergencies (Ref. 2.6) or other Emergency Plan Implementing Procedure
 - h. The status of the activation of the Emergency Response Organization
 - i. The status of the notification of offsite government agencies and the NRC.
 - j. Present plant line-ups and plant evolutions or operations in progress
 - k. Evolutions or operations which have been directed or have been planned, but are not yet carried out
 - l. Offsite dose assessment and protective actions recommended to offsite government agencies.
3. Relieve the Emergency Director of responsibilities as Recovery Manager.

NOTE

Upon being relieved of the responsibilities of the Recovery Manager, the Emergency Director retains the responsibility for the direction and control of the onsite emergency response activities from the TSC.

4. Inform the Emergency Response Organization (Main Control Room, OSC, TSC and EOF) that the Senior Vice President RBNG, or alternate, is the Recovery Manager.
5. Ensure that the EOF is activated in accordance with this procedure.
6. Following the report from the EOF Manager that the EOF is operational, inform the EOF staff that the EOF is operational and brief the EOF staff on the information received from the Emergency Director and implement EIP-2-021, Emergency Operations Facility - Support Functions (Ref. 2.7).
7. Inform the Emergency Director that the EOF is operational and prepared to perform notifications to offsite government agencies and the NRC to coordinate radiological and meteorological monitoring. Perform offsite dose assessment and recommend offsite protective actions and interfacing with offsite government authorities.
8. Formally accept the responsibility for the function in item 7 from the Emergency Director.
9. Direct the appropriate EOF Staff members to begin performing these functions if they are not already being performed in the EOF.

NOTE

The Recovery Manager must focus on the overall control of the GSU emergency response and must not be distracted from this primary responsibility.

4.1.2 The EOF Manager shall use Attachment 2 and

1. Ensure that the following equipment is operating properly:
 - a. Communications
 - (1) River Bend Station Emergency Hotline (RBSEH)
(Ensure that the EOF connection is operable if the RBSEH has been previously checked from the TSC).
 - (2) NRC - Emergency Notifications System (ENS) in GSU area.

- (3) NRC - Health Physics Network (HPN) in GSU area.
 - (4) Main Control Room, TSC, OSC, EOF Hotline
 - (5) Corporate Hotline
 - (6) Hospital Hotline
 - (7) Other telephone lines as necessary
 - (8) Radio console
 - (9) Rapidfax machine
- b. Lighting (Turn on light switches at both ends of the corridor)
 - c. Ventilation (Check panel in Mechanical Equipment Room (MER). If the EOF is or is expected to be, in the radiological plume, switch the ventilation damper in the MER to take a suction inside the EOF.
 - d. Radiological Monitors (Radiation Protection/EOF Habitability Technician performs this check).

NOTE

If the radiological monitors are inoperable the EOF Manager shall ensure that portable radiation and airborne radioactivity survey instruments are available. The EOF shall be uninhabitable if radiation levels are such that EOF personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that EOF personnel may receive 520 times the maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

- e. Digital Radiation Monitoring System (DRMS) in accordance with Attachment 6.
 - f. Emergency Response Information System (ERIS) in accordance with Attachment 7.
- 2. Ensure that all EOF personnel are at their work stations. If all EOF personnel are not available, direct the Administrative/Logistics Advisor to ensure that all EOF staff members or alternates were notified. (If the Administrative/Logistics Advisor is not available, request the Administrative Coordinator in the TSC to perform this function.)
 - a. Recovery Manager
 - b. EOF Manager
 - c. Radiation Protection Advisor
 - d. Dose Assessment/Protective Actions Advisor (Offsite Team Coordinator)

- e. Chemistry Advisor
- f. Operations Advisor
- g. Offsite Radiological Monitoring Personnel
- h. Administrative/Logistics Advisor
- i. Communicators (two)
- j. Status Boards Coordinator
- k. Radiation Protection/EOF Habitability Technician
- l. Technical Advisor
- m. Administrative/Clerical Support Personnel (2)
- n. Events Information Coordinator
- o. Training Center or RBS Security Officer

- 3. Ensure that status boards have been updated by the Radiation Protection Advisor, the Chemistry Advisor and the Operations Advisor or by the Status Boards Coordinator.
- 4. Inform the Recovery Manager that the EOF is fully operational when items 1 through 3 are complete.

4.1.3 The Administrative/Logistics Advisor shall use Attachment 3 and

- 1. Call in two Administrative/Clerical Staff members.
- 2. If any EOF staff members are not available, check with the Main Control Room Communicator to ensure that all EOF staff members answered their pager notification or alternates were called.
- 3. If all EOF staff members or alternates were not contacted, use EIP-2-029, Emergency Telephone Book to call the EOF staff members or alternates.
- 4. Coordinate a rapid check for availability and operability on EOF emergency equipment using Attachment 5 with the Radiation Protection/EOF Habitability Technician.
- 5. Obtain replacement equipment (in Attachment 5) from Radiation Protection Personnel.
- 6. Coordinate the repair or replacement of EOF office equipment with the appropriate GSU department or with the vendor.
- 7. Contact the Administrative Coordinator in the TSC and obtain the status on any administrative problems.
- 8. Inform the EOF Manager when the administrative staff is prepared to assume their functional responsibilities.

9. Ensure that EOF records contain the following current documents:

- (1) Technical specifications
- (2) Station Operations Manual/Emergency Operating Procedures
- (3) RBS Emergency Plan
- (4) RBS Emergency Plan Implementing Procedures
- (5) State/Local Emergency Plans
- (6) Mutual assistance plan with neighboring utility companies
- (7) Final Safety Analysis Report
- (8) Environmental Report - Operating License Stage
- (9) Aperture Cards of as-built drawing
- (10) 10 and 50 mile EPZ maps for River Bend Station
- (11) Institute of Nuclear Power Operations Resource Manual

NOTE

If any of the documents are not current, obtain replacement documents from Station Document Control.

4.1.4 The Radiation Protection Advisor shall use Attachment 4 and

1. Ensure that the Radiation Protection/EOF Habitability Technician is at the EOF.
2. Ensure that offsite radiological monitoring personnel are available at the Emergency Operations Facility or dispatched.
3. Direct the establishment of an EOF contamination control point.

NOTE

The contamination control point will be established by the Radiation Protection/EOF Habitability Technician at the door outside the EOF Decontamination Facility.

4. Contact the Radiation Protection Coordinator in the TSC and obtain the status of Radiation Protection Activities.
5. Direct the update of status boards with initial emergency conditions.
6. Inform the EOF Manager when the EOF Radiation Protection staff is prepared to assume their functional responsibilities.

4.1.5 The Technical Advisor shall contact the Core Technical/Core Physics Coordinator and obtain information and the status of the reactor and inform the EOF Manager when prepared to perform functional responsibilities.

4.1.6 The Operations Advisor shall:

1. Ensure that the Emergency Response Information System (ERIS) is operable using Attachment 7.

NOTE

If ERIS is inoperable contact the TSC and establish a direct communications link for the exchange of plant operating data. If ERIS in the TSC is operational, copies of operations data may be telecopied to the EOF. If the TSC ERIS is inoperable, establish a three-way telephone link with the Main Control Room and the TSC.

2. Contact the Operations Support Coordinator in the TSC and obtain the status of operational activities.
3. Direct the update of applicable status boards with initial emergency information.
4. Inform the EOF Manager when prepared to perform functional responsibilities.

4.1.7 The Chemistry Advisor shall:

1. Ensure that the Digital Radiation Monitoring System (DRMS) and the dose assessment program is operable using Attachment 6 and inform the Radiation Protection Advisor (in the EOF) and the Dose Assessment/Protective Actions Advisor (in the TSC) regarding the operability of DRMS.
2. Contact the Chemistry/Core Damage Assessment Coordinator and obtain the status of Chemistry/Radio-Chemistry operations.
3. Direct the update of applicable status boards.
4. Inform the EOF Manager when prepared to perform functional responsibilities.

NOTE

The actions in step 4.1.8 shall be performed by the River Bend Training Center Security Officer when that position is staffed (4:00 p.m. to 7:30 a.m.) and on weekends and holidays. During working hours (7:30 a.m. to 4:00 p.m.) a RBS Security Officer shall perform this function.

4.1.8 The EOF Security Officer shall:

1. Establish the EOF access control station at the East EOF door (number 304).

NOTE

Initially, the East EOF door (number 304) will be opened for access. When the EOF is operational, the East door to the EOF shall be locked and access shall be maintained at the West EOF door (number 318).

2. Inform the EOF Manager when access control is established.
3. Ensure that all personnel in the EOF are on the EOF access list provided by the EOF Manager or obtain authorization from the EOF Manager.

4.1.9 The Radiation Protection/EOF Habitability Technician shall:

1. Ensure that the EOF radiological monitors are operable (checking method and monitor location to be provided later).
2. If radiological monitors are inoperable, initiate radiation and airborne radioactivity surveys to ensure that the EOF is habitable

NOTE

The EOF shall be uninhabitable if radiation levels are such that EOF personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that EOF personnel may receive 520 times the maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

3. Inform the Radiation Protection Advisor when the EOF habitability check has been made.
4. Establish a contamination control point outside the EOF Decontamination Facility.
5. Initiate a rapid check of the emergency equipment listed in Attachment 5 for availability and operability.

NOTE

If emergency equipment kit seals are not broken an availability check of each item in the kit not be performed.

6. Inform the Radiation Protection Advisor when the contamination control point has been established.
- 4.1.10 The Status Boards Coordinator shall report presence to the EOF Manager and begin updating the status boards with initial emergency information from the EOF Manager, the Radiation Protection Advisor, the Chemistry Advisor and the Operations Advisor if not already updated by those individuals.

4.1.11 The offsite radiological monitoring personnel shall:

1. Report presence to the Radiation Protection Coordinator (in the TSC) or to the Radiation Protection Advisor if the EOF is operational.
2. Begin performing the steps of EIP-2-014, Offsite Radiological Monitoring (Ref. 2.9) as directed.

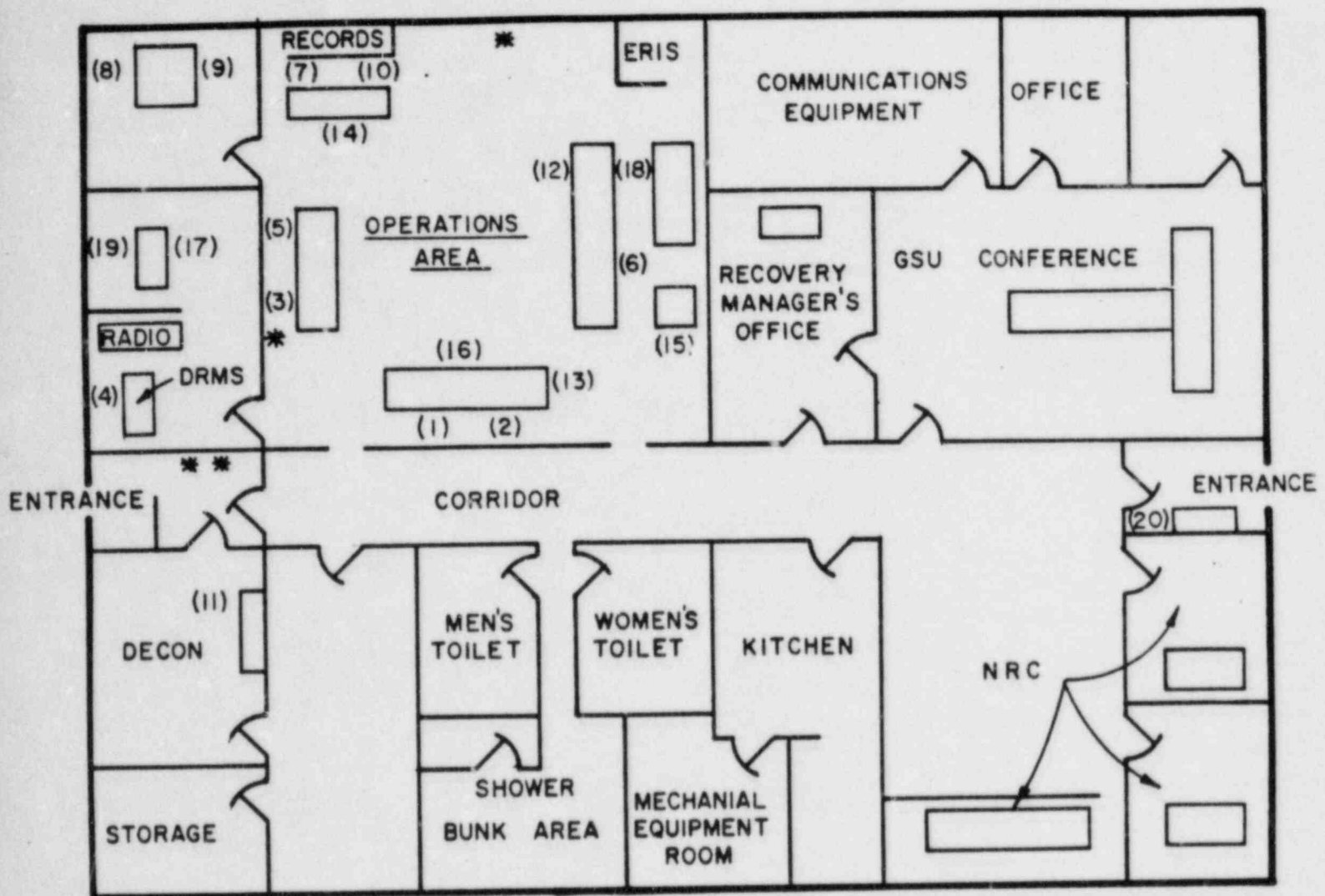
4.1.12 The Clerical/Administrative Support Personnel (two) shall report their presence to the Administrative/Logistics Advisor and request direction on what actions to perform.

4.1.13 The EOF Communicator shall:

1. Report presence to the Administrative/Logistics Advisor.
2. Contact the TSC Communicator performing notifications to offsite government agencies by means other than the RBS primary notifications system telephone and determine the status of offsite notifications.

END

EMERGENCY OPERATIONS FACILITY



PERSONNEL :

- | | |
|--|--|
| (1) RECOVERY MANAGER | (10) STATUS BOARDS COORDINATOR |
| (2) EOF MANAGER | (11) RAD. PROT. / EOF HABITABILITY TECH. |
| (3) RADIATION PROTECTION ADVISOR | (12) TECHNICAL ADVISOR |
| (4) DOSE ASSESSMENT/PROTECTIVE ACTIONS ADVISOR | (13) ADMIN./CLERICAL SUPPORT |
| (5) CHEMISTRY ADVISOR | (14) ADMIN./CLERICAL SUPPORT |
| (6) OPERATIONS ADVISOR | (15) EVENTS INFORMATION COORDINATOR |
| (7) ADMIN/LOGISTICS ADVISOR | (16) NRC DSO |
| (8) COMMUNICATOR | (17) LNER |
| (9) COMMUNICATOR | (18) MEMA |
| | (19) NRC DOSE ASSESSMENT PERSON |
| | (20) SECURITY OFFICER (**AFTER EOF IS OPERATIONAL) |

* STATUS BOARDS

NOTE:

Place "N/A" in steps which are not applicable.

IMMEDIATE ACTIONS

	<u>Actions Completed</u>	
	<u>Time/Date</u>	<u>Initials</u>
1. Status of the emergency reviewed with the Emergency Director (4.1.1.1 and 2 on page 3)	_____	_____
2. Relieved the Emergency Director of Recovery Manager responsibilities(4.1.1.3 on page 3)	_____	_____
3. Emergency Response Organization informed of the relief of the Emergency Director of Recovery Manager responsibilities (4.1.1.4 on page 4)	_____	_____
4. Following the report from the EOF Manager that the EOF is operational		
a. Inform the EOF staff that the EOF is operational (4.1.1.6 on page 4)		
b. Brief the EOF staff on the information received in item 1 (4.1.1.6 on page 4)		
5. Inform the Emergency Direction that the EOF is operational and accept the responsibility for EOF function (4.1.1.7 and 8 on page 4)	_____	_____
6. Direct the EOF staff to begin performing their functions in accordance with EIP-2-021 EOF support functions	_____	_____

		<u>Actions Completed</u>	
		<u>Time/Date</u>	<u>Initials</u>
1.	The following equipment has been operationally checked (4.1.2.1 on page 4):		
a.	Communications		
	(1) River Bend Station Emergency hotline	_____	_____
	(2) NRC-Emergency Notification System	_____	_____
	(3) NRC-Health Physics Network	_____	_____
	(4) Main Control Room, TSC, OSC, EOF Hotline	_____	_____
	(5) Corporate Hotline	_____	_____
	(6) Hospital Hotline	_____	_____
	(7) Other telephone lines as necessary (a-e from 4.1.2.1.a(7) on page 5)	_____	_____
	(8) Radio Console	_____	_____
	(9) Data transfer equipment	_____	_____
b.	Lighting	_____	_____
c.	Ventilation	_____	_____

NOTE:

If the radiological monitors are inoperable, the EOF Manager will ensure that portable radiation and airborne radioactivity survey instruments are available.

		<u>Actions Completed</u>	
		<u>Time/Date</u>	<u>Initials</u>
d.	Radiological Monitors	_____	_____
e.	Digital Radiation Monitoring System (DRMS) - reported by Chemistry Advisor	_____	_____
f.	Emergency Response Information System (ERIS) - reported by Operations Advisor	_____	_____

	<u>Name</u>	<u>Date/Time</u>	<u>Initials</u>
2. All EOF personnel are prepared to assume their functional responsibilities (4.1.2.2 on page 5)			
a. Recovery Manager	_____	_____	_____
b. EOF Manager	_____	_____	_____
c. Radiation Protection Advisor	_____	_____	_____
d. Offsite Dose Assessment/ Protective Actions Advisor (Offsite Team Coordinator)	_____	_____	_____
e. Chemistry Advisor	_____	_____	_____
f. Operations Advisor	_____	_____	_____
g. Maintenance Advisor	_____	_____	_____
h. Offsite Radiological Monitoring Personnel (two teams of two personnel each)	_____	_____	_____
i. Administrative/Logistics Advisor	_____	_____	_____
j. Communicators (1)	_____	_____	_____
(2)	_____	_____	_____
k. Status Boards Coordinator	_____	_____	_____
l. Radiation Protection/EOF Habitability Technician	_____	_____	_____
m. Technical Advisor	_____	_____	_____
n. Administrative/Clerical Support Personnel (1)	_____	_____	_____
(2)	_____	_____	_____
o. Events Information Coordinator	_____	_____	_____
p. Training Center or RBS Security Officer	_____	_____	_____

3. Status Boards updated by Radiation Protection Advisor, the Chemistry advisor and the Operations Advisor, or by the Status Boards Coordinator (4.1.2.3 on page 6) _____
4. Informed the Recovery Manager that the EOF is fully operational 4.1.2.4 on page 6. _____

	<u>Actions Completed</u>	
	<u>Time/Date</u>	<u>Initials</u>
1. Called in two Administrative/Clerical staff members (4.1.3.1 on page 6)	_____	_____
2. Coordinated with the Radiation Protection/ EOF Habitability Technician to initiate a rapid check of the equipment listed in Attachment 5 for availability and operability (where applicable) 4.1.3.4 on page 6)	_____	_____
3. Equipment status documented (4.1.3.4,5 and 6 on page 6)		
a. All operational	_____	_____
b. Repaired/replaced		
(1) Repaired _____		

(2) Replaced _____		

Additional status information: _____		

4. Contacted the Administrative Coordinator in the TSC (4.1.3.7 on page 6)	_____	_____
5. EOF document available and up-to-date (4.1.3.9 on page 7)	_____	_____
6. Informed the EOF Manager when the administrative staff is prepared to assume their functional responsibilities (4.1.3.8 on page 6)	_____	_____

1. EOF Radiation Protection staff at their
workstations (4.1.4.1 on page 7)
2. Offsite radiological monitoring personnel
are available at the EOF or dispatched
(4.1.4.2 on page 7)
3. Establishment of the EOF contamination
control point initiated (4.1.4.3 on page 7)
4. Contacted the Radiation Protection
Coordinator in the TSC (4.1.4.4 on page 7)
5. Status boards updated with initial
emergency information (4.1.4.5 on page 7)
6. Inform the EOF Manager that the EOF
Radiation Protection staff is prepared
to assume functional responsibilities
(4.1.4.6 on page 7)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Date/Time _____

Individual Conducting
Inventory _____**NOTE:****Check that the following equipment is available and functional.**

<u>Item Description</u>	<u>Quantity Required</u>	<u>Quantity Available</u>
1. Low range portable dose rate meter (RO-2) Beta/Gamma; 0-5 R/hr	2	_____
2. GM Frisker (RM-14 w/260+210T)	2	_____
3. Approx. 8 micro curie CS-137 check source		_____
4. Air sample collector (RAS-1)	2	_____
5. Air sample collector (RADECO 12 Volt clip-on)	2	_____
6. Sample Holder (RADECO)	2	_____
7. Continuous air monitor w/readout	1	_____
8. Particulate Filters	2 Boxes	_____
9. Silver Zeolite Cartridges	2 Boxes	_____
10. Personnel injury/contamination forms	25	_____
11. Protective clothing set, white paper	50	_____
12. Personnel decontamination procedure	1	_____
13. Poly bottles (1 gallon)	5	_____
14. Plastic beakers (1 liter)	5	_____
15. Poly bags, small	1 Roll	_____
16. Poly bags, large	1 Roll	_____
17. Contaminated materials signs	6	_____
18. Contamination warning signs	4	_____

Date/Time _____ Individual Conducting
Inventory _____

NOTE:

Check that the following equipment is available and functional.

<u>Item Description</u>	<u>Quantity Required</u>	<u>Quantity Available</u>
19. Step-off pads	20	_____
20. Barrier rope	Approx. 100 ft.	_____
21. Container for radioactive trash and materials	3	_____
22. Container for radioactive liquids (5 gallon)	2	_____
23. Contamination smears	1 Boxes	_____
24. Smear (coin) envelopes	1 Boxes	_____
25. Disposable gloves, surgical	5 Boxes	_____
26. Hand soap	1 gallons	_____
27. Hand cream	16 ozs.	_____
28. Lava soap	3 Bars	_____
29. Manicure set	2	_____
30. Hand (fingernail) brushes	4	_____
31. Cotton balls	2 Boxes	_____
32. Cotton swabs (Q-Tip)	2 Boxes	_____
33. Facial tissue	5 Boxes	_____
34. Eye wash solution and applicator	5	_____
35. Paper towels	1 Roll	_____
36. Seissors	1	_____
37. Clipboard	3	_____
38. Notepads	3	_____

Date/Time _____

Individual Conducting
Inventory _____**NOTE:**

Check that the following equipment is available and functional.

<u>Item Description</u>	<u>Quantity Required</u>	<u>Quantity Available</u>
39. Pens	3	_____
40. Chalk, Marking	3	_____
41. Masking tape	1 Roll	_____
42. Plastic sheet	1 Roll	_____
43. Logbook	2	_____
44. Flashlights	2	_____
45. Spare flashlight batteries	4	_____

To be developed later

To be developed later

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-021

PROCEDURE TITLE: EMERGENCY OPERATIONS FACILITY - SUPPORT FUNCTIONS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-33		<i>[Signature]</i> 10/2/84	
			FOR INFORMATION ONLY	
			C	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

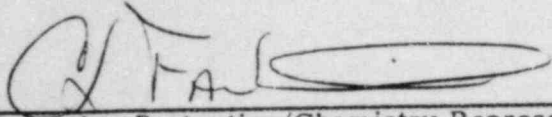
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PROCEDURE NO. EIP-2-021

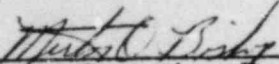
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EMERGENCY PLANNING COMMITTEE REVIEW:

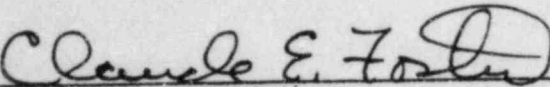
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Radiation Protection/Chemistry Representative

9-24-84


Plant Operations Representative

9-24-84


Security Representative

9/24/84


Training Representative

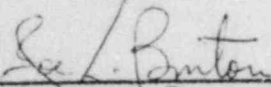
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Technical Staff Representative

9/24/84

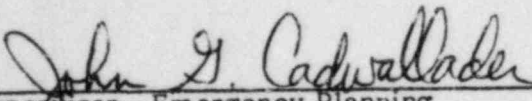

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

EMERGENCY OPERATIONS FACILITY - SUPPORT FUNCTIONS

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1.0 PURPOSE

This procedure provides instructions for operations, support functions and deactivation of the Emergency Operations Facility.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-004, Site Area Emergency
- 2.3 EIP-2-005, General Emergency
- 2.5 EIP-2-006, Notifications
- 2.6 EIP-2-023, Joint Information Center Activation
- 2.7 EIP-2-028, Recovery
- 2.8 EIP-2-020, Emergency Operations Facility - Activation
- 2.9 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.10 EIP-2-007, Protective Action Recommendation Guidelines
- 2.11 EIP-2-024, Offsite Dose Calculations - Manual Method
- 2.12 EIP-2-014, Offsite Radiological Monitoring
- 2.13 EIP-2-022, Alternate EOF - Activation and Transfer of Functions
- 2.14 EIP-2-018, Technical Support Center - Activation
- 2.15 EIP-2-019, Technical Support Center - Support Functions
- 2.16 EIP-2-029, Emergency Telephone Book

3.0 GENERAL INFORMATION

- 3.1 The primary functions of the Emergency Operations Facility (EOF) staff are to:
 - 3.1.1 Provide overall management of the Gulf States Utilities Company (GSU) emergency response activities.
 - 3.1.2 Evaluate the magnitude and effects of actual or potential radioactive releases from the River Bend Station.
 - 3.1.3 Recommend appropriate offsite protective actions to the offsite government agencies.
 - 3.1.4 Coordinate the GSU emergency response activities with those of the local, State and Federal emergency response organizations, including the NRC and FEMA.
 - 3.1.5 Provide current information on conditions potentially affecting the public to local, state and federal agencies and the general public through the Joint Information Center (JIC).
 - 3.1.6 Function as the post-accident recovery management center for both onsite and offsite activities.
- 3.2 The EOF will be activated for a **Site Area Emergency** (EIP-2-004, Ref. 2.2) and a **General Emergency** (EIP-2-005, Ref. 2.3).

- 3.3 The EOF staff will be activated using EIP-2-006, Notifications (Ref. 2.5).
- 3.4 Upon arrival the Senior Vice President of the River Bend Nuclear Group, or alternate, relieves the Emergency Director of responsibilities as Recovery Manager. The Recovery Manager has the responsibility for overall management of the GSU emergency response activities and the implementation of this procedure. The Emergency Director retains the responsibility for the direction and control of onsite emergency response activities.
- 3.5 As the EOF staff arrive, they are assigned tasks which provide the Recovery Manager with the information and support required to evaluate and mitigate the emergency such as:
- 3.5.1 Plant status and dynamics prior to and during the accident.
 - 3.5.2 Performance of accident mitigation functions.
 - 3.5.3 Current status and trend of the accident.
 - 3.5.4 Damage to the plant systems and equipment.
 - 3.5.5 Status of emergency operations (including personnel activity in the Plant).
 - 3.5.6 Magnitude of any radiological release to the environment.
 - 3.5.7 Prevailing meteorological conditions.
 - 3.5.8 Projected levels of radioactivity resulting from an airborne or waterborne release.
 - 3.5.9 Potential impact of radiological hazards on public health and safety.
 - 3.5.10 Protective Action recommendations.
- 3.6 The Alternate EOF will be activated if the primary EOF in the River Bend Training Center is uninhabitable for a Site Area Emergency or General Emergency.
- 3.7 The Alternate EOF is located in the Gulf States Utilities Company (GSU) - Baton Rouge Division Service Center on Government Street in Baton Rouge, approximately 23 miles southeast of River Bend Station.

4.0 PROCEDURE

4.1 EOF Operations

4.1.1 The Recovery manager shall use Attachment 2 and:

1. Ensure that offsite dose assessment and offsite radiological monitoring are being performed.
2. Recommend appropriate offsite protective actions to offsite government agencies.
3. If a General Emergency is declared, recommend the following mandatory offsite protective actions.
 - a. Shelter to the 2 mile radius around the station
 - b. Shelter to the 5 mile radius in the downwind and two adjacent sectors.
4. Ensure that notifications are performed to offsite government agencies.
5. Provide overall management of the GSU emergency response activities.
6. Coordinate GSU emergency response activities with those of the local, state and federal emergency response organizations including the NRC and FEMA.
7. Approve all news releases and provide current information on conditions potentially affecting the public to local, state and federal agencies and the general public through the JIC.
8. Keep the RBS Emergency Response Organization informed on the status of the emergency.
9. When applicable discuss the plant and emergency conditions with the Emergency Director to determine if the emergency may be downgraded or if the termination criteria in EIP-2-004, Site Area Emergency or EIP-2-005, General Emergency have been met.
10. Implement EIP-2-028, Recovery (Ref. 2.7) when the emergency is terminated.

NOTE

The JIC shall be activated by the Public Affairs staff in accordance with EIP-2-023, Joint Information Center Activation (Ref. 2.6) at the discretion of the Recovery Manager.

4.1.2 The EOF Manager shall use Attachment 3 and:

1. Coordinate the activities of the EOF staff
2. Contact the TSC Manager and obtain information on the diagnosis and prognosis of the accident, the estimates of radioactivity releases, and the prevailing meteorological conditions.
3. Respond to requests for additional information from offsite government authorities regarding the accident either on the RBS emergency hotline or by telephone.
4. Ensure that the Parish Emergency Operation Center (EOC) liaisons have been notified and the liaison are enroute to their respective EOCs.
5. Coordinate the activities of the EOF access control Security Officer and authorize personnel access to the EOF as necessary.
6. Receive any responding representatives from offsite emergency response agencies and assist in their information and communication needs.
7. When deemed necessary by the Recovery Manager, direct the Administrative/Logistics Advisor to arrange for long term relief rotation.
8. Keep the Recovery Manager informed on the status of items 1 through 8.

4.1.3 The Administrative/Logistics Advisor shall use Attachment 4 and:

1. Ensure that the rapid check of EOF emergency equipment that was initiated in accordance with EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.8) is completed.
2. Coordinate personnel to provide office support functions including typing, reproduction, office supplies and office furniture. Special items include photography services and facility/area maps that may be required.
3. Call in Emergency Response Organization alternates to establish long term relief rotation when directed by the EOF Manager using EIP-2-029, Emergency Telephone Book (Ref. 2.16).

NOTE

The Administrative/Logistics Advisor shall coordinate the functions listed below with the normal GSU organization that normally performs these functions. Outside resources such as the Institute of Nuclear Power Operations (INPO Resource Manual) or the companies listed in the mutual assistance agreement/Appendix B of the RBS Emergency Response Plan (Ref 2.1). The following functions shall be required for long-term emergency response.

4. Make motel, airline and temporary trailer arrangements.
5. Coordinate the registration of support personnel and general personnel orientation.
6. Acquire additional communications equipment to meet the requirements of the augmented emergency organization coordinate with the GSU communications department.
7. Function as the emergency organization purchasing agent with responsibility for contract negotiation/administration and material control.
8. Arrange for the administering of the petty cash fund and expense accounts.
9. Provide for the handling of payroll matters.
10. Provide for food deliveries and for the operation of the field kitchen in the EOF.
11. Meet the manpower needs of the Emergency Response Organization both in the technical and operational support disciplines (INPO and the Mutual Assistance Agreement).
12. Ensure that clerical support is available from the Administrative Department.
13. Arrange for motor pool facility staffing and vehicles for the emergency response organization from outside the Baton Rouge or St. Francisville areas.
14. Arrange for shuttle services between surrounding motels and airports.
15. Keep the EOF Manager Informed of the status of items 1 through 14.

4.1.4 The Radiation Protection Advisor shall use Attachment 5 and:

1. Direct the Dose Assessment/Protective Actions Advisor and the Radiation Protection/EOF Habitability Technician in the EOF in accumulating radiological data and dose assessment data.

2. Recommend offsite protective actions as appropriate.
3. Dispatch and direct offsite radiological monitoring personnel through the Dose Assessment/Protective Actions Advisor or the Chemistry Advisor in order to evaluate radioactive releases.
4. Provide instructions for offsite radiological monitoring personnel regarding obtaining samples and survey, controlling exposures and tracking the plume.
5. Keep offsite radiological monitoring personnel informed of the status of the emergency especially in regard to those items which affect the operations of offsite monitoring personnel.
6. Advise the Radiation Protection Coordinator in the TSC upon request.
7. Provide information to responding representatives from offsite emergency response agencies regarding possible offsite radiological consequences.
8. Interpret the offsite radiological data obtained and update the EOF staff and offsite authorities with the results, in terms of both real-time measurements and, to the extent possible, projected radiological exposures.
9. Ensure that applicable status boards are updated with current emergency information, by the Status Boards Coordinator.
10. Keep the EOF Manager informed on the status of items 1 through 9.

4.1.5 The Dose Assessment/Protective Actions Advisor (Offsite Team Coordinator) shall use Attachment 6 and:

1. Perform dose assessment in accordance with EIP-2-025, Offsite Dose Calculations - Computer Method (Ref. 2.9), and recommend offsite protective actions in accordance with EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.10), as necessary, to the Radiation Protection Advisor.
2. If DRMS in the EOF becomes inoperable:
 - a. And DRMS is operable in the TSC, contact the Chemistry/Core Damage Assessment Coordinator in the TSC and request that he perform dose assessment, recommend offsite protective actions and coordinate offsite radiological monitoring personnel until the Dose

Assessment/Protective Actions Advisor returns to the TSC, and proceed to the TSC.

or

b. And DRMS is inoperable in the TSC, implement EIP-2-024, Offsite Dose Calculations - Manual Method (Ref. 2.11).

3. Relay the instructions and information provided by the Radiation Protection Advisor to the offsite radiological monitoring personnel.

NOTE

Keep track of Radiation Exposure of all Offsite Radiological Monitoring Personnel. Exposures shall be documented in the Dose Assessment/Protective Actions Advisor's log.

4. Document all dose assessment, offsite protective action recommendations and offsite radiological monitoring data and forward the data to the Radiation Protection Advisor.
5. Keep the Radiation Protection Advisor informed of the status of items 1 through 4 and any abnormal occurrences.

4.1.6 The Technical Advisor shall:

1. Analyze core parameters to determine current conditions in the core.
2. Review proposed plant operations with respect to the effect on core condition.
3. Coordinate with the Core Technical/Core Physics Coordinator (in the TSC) in the development of recommendations for plant operations that would affect core conditions.
4. Keep the EOF Manager informed of the status of items 1 through 3.

4.1.7 The Operations Advisor shall:

1. Assist in coordinating the emergency response organization objectives requiring implementation by Operations.

2. Analyze plant and emergency parameters using Emergency Response Information System (ERIS) and Attachment 7 of EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.8).
3. Ensure that all printed data from the ERIS is distributed within the EOF to the EOF Manager, the Radiation Protection Advisor and the Chemistry Advisor.

NOTE

If ERIS is inoperable, contact the TSC and establish a direct communications link for the exchange of plant operations data. If ERIS in the TSC is operational, copies of operations data may be telecopied to the EOF. If TSC ERIS is inoperable, establish a three-way link with the Control Room and the TSC.

4. Ensure that applicable status boards are updated with current emergency information.
5. Keep the EOF Manager informed of the status of items 1 through 4.

4.1.8 The Chemistry Advisor shall use Attachment 7 and:

1. Assist the Chemistry/Core Damage Assessment Coordinator in the TSC in the development and implementation of methods to process all liquid and gaseous radioactive waste accumulated during the emergency.
2. Provide information and recommendations to the EOF Manager concerning emergency operations that could affect the plant or the environment.
3. Assist the Dose Assessment/Protective Actions Advisor in dose assessment activities, offsite protective action recommendations and coordination of offsite radiological monitoring personnel.
4. Coordinate the distribution of samples between sampling and analytical facilities with the Chemistry/Core Damage Assessment Coordinator in the TSC.
5. Provide recommendations to the EOF Manager on chemistry and radiochemistry problems.
6. Ensure that applicable status boards are updated with current chemistry and radiochemistry information by the Status Boards Coordinator.
7. Keep the EOF Manager informed of items 1 through 6.

N/A	N/A	EIP-2-021	REV. O	PAGE 9 OF 33
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NOTE

The actions in Step 4.1.9 shall be performed by the River Bend Training Center Security Officer when the position is staffed (4:00 p.m. to 7:30 a.m.) and on weekends and holidays. During working hours (7:30 a.m. to 4:00 p.m.) a RBS Security Officer shall perform this function.

4.1.9 The EOF Security Officer shall:

1. Maintain EOF access control at the West EOF door (number 318)

NOTE

Initially, the East EOF (number 304) door is used for access. When the EOF becomes operational, the East door to the EOF shall be locked and the Security Officer will admit only those authorized access by the EOF Manager through the West EOF door.

2. Ensure that personnel who enter the EOF are on the EOF access list provided by the Supervisor - Emergency Planning.

NOTE

Nuclear Regulatory Commission personnel will present their federal credentials as authorization for EOF access.

Questions regarding personnel access should be resolved by the EOF Manager or the Security Supervisor.

3. Log all personnel who enter the EOF on the EOF entry log shown in Attachment 1.
4. Keep the EOF Manager informed of any problems or abnormal occurrences.

4.1.10 The Radiation Protection/EOF Habitability Technician shall use Attachment 8 and:

1. Check the radiological monitors approximately once per hour or every 15 minutes if the plume is moving over the EOF to ensure that the EOF continues to remain habitable.

NOTE

If radiological monitors are inoperable, perform radiation and airborne radioactivity surveys approximately once per hour or every 15 minutes if the plume is moving over the EOF. The EOF shall be uninhabitable if radiation levels are such that EOF personnel may receive a radiation exposure of 5 Rem or airborne radioactivity levels are such that EOF personnel may receive 520 times the maximum permissible concentration (MPC) for the radionuclide present. Both limits are for the duration of the emergency.

2. Complete the check of EOF emergency equipment that was initiated in accordance with EIP-2-020, Emergency Operations Facility - Activation (Ref. 2.8).
3. Maintain the EOF contamination control point at the West EOF door (number 318).
4. Perform other actions as directed by the Radiation Protection Advisor or the Administrative/Logistics Advisor.
5. Assist the Dose Assessment/Protective Actions Advisor in coordinating offsite radiological monitoring personnel as necessary.
6. Operate the EOF Decontamination Facility as necessary.
7. Keep the Radiation Protection Advisor informed of the status of items 1 through 6.
8. Keep the Administrative/Logistics Advisor informed of items 1, 2, 3 and 4.

4.1.11 The Status Board Coordinator shall update the EOF status boards with current emergency information obtained from the:

1. Recovery Manager
2. EOF Manager
3. Radiation Protection Advisor
4. Operations Advisor
5. Chemistry Advisor

4.1.12 The offsite radiological monitoring personnel shall:

1. Perform the steps in EIP-2-014, Offsite Radiological Monitoring (Ref. 2.12).
2. Keep the Radiation Protection Advisor informed of radiological conditions, location and cumulative whole body radiation exposure through the Offsite Team Coordinator.

4.1.13 The Communicators shall use Attachment 9 and:

1. After receiving a briefing from the TSC Communicator performing notifications to offsite government agencies on the status of offsite notifications, relieve the TSC Communicator of the function of notifications to offsite government agencies.

NOTE

Upon relief of the function of offsite notifications, the TSC Communicator who had been performing this function shall proceed to the EOF to assist the EOF Communicator.

2. Perform notifications and communications as directed by the Recovery Manager or the EOF Manager.
3. Complete and maintain notification forms for notifications to offsite government agencies and the NRC.
4. Log all incoming and outgoing communications in the Communicator's log.
5. Keep the Recovery Manager and EOF Manager informed of the status of incoming and outgoing communications.

NOTE

The Events Information Team (consisting of the Events Information Coordinator and a Technical representative) will proceed initially to the TSC and remain there until the EOF is operational. When the EOF is operational, the Events Information Team will operate from the EOF.

4.1.14 The Events Information Team shall monitor the emergency as it progresses and keep the Joint Information Center staff informed of any changes in conditions or information.

4.1.15 The Administrative/Clerical Support personnel shall perform functions as directed by the Administrative/Logistics Advisor.

4.2 EOF Deactivation

4.2.1 The Recovery Manager shall:

1. Direct the EOF Manager to deactivate the EOF Emergency Response Organization after discussion with the Emergency Director, offsite government agencies and the NRC when the emergency classification is below the Site Area Emergency level.
2. Implement EIP-2-028, Recovery (Ref. 2.7) and determine the personnel needed in the Recovery Organization which shall operate from the EOF.
3. Determine the necessity of maintaining the JIC operational during Recovery Operations depending upon the impact that Recovery may have on the general public.

4.2.2 The EOF Manager shall:

1. Direct EOF personnel to deactivate the EOF emergency response organization.
2. Ensure that all plant and emergency information has been logged and filed, or sent to the EOF Records Room.
3. Ensure that all equipment is restored or placed in a long-term storage condition.

4.2.3 All other EOF Emergency Response Organization personnel shall:

1. Perform items 2 and 3 of step 4.2.2.
2. Inform the EOF Manager when item 1 of this step is complete.

4.2.4 The EOF Manager shall inform the Recovery Manager when the EOF Emergency Response Organization is deactivated.

4.3 Emergency Operations Facility Uninhabitable

4.3.1 If the EOF in the River Bend Training Center becomes uninhabitable, the Recovery Manager shall:

1. Direct the Dose Assessment/Protective Actions Advisor to return to the TSC to perform his functions.
2. Direct the Dose Assessment/Protective Actions Advisor to transfer the direction and control of offsite radiological monitoring personnel back to the TSC.
3. Inform the Louisiana Nuclear Energy Division (LNED) and the NRC dose assessment individuals that they have the option of proceeding to the TSC or the Alternate EOF to perform their functions.
4. Direct the Events Information Team to return to the TSC.
5. Direct the Communicator who is performing notifications to offsite government agencies to transfer that function back to the TSC.
6. Direct the Radiation Protection/EOF Habitability Technician to proceed to the OSC.

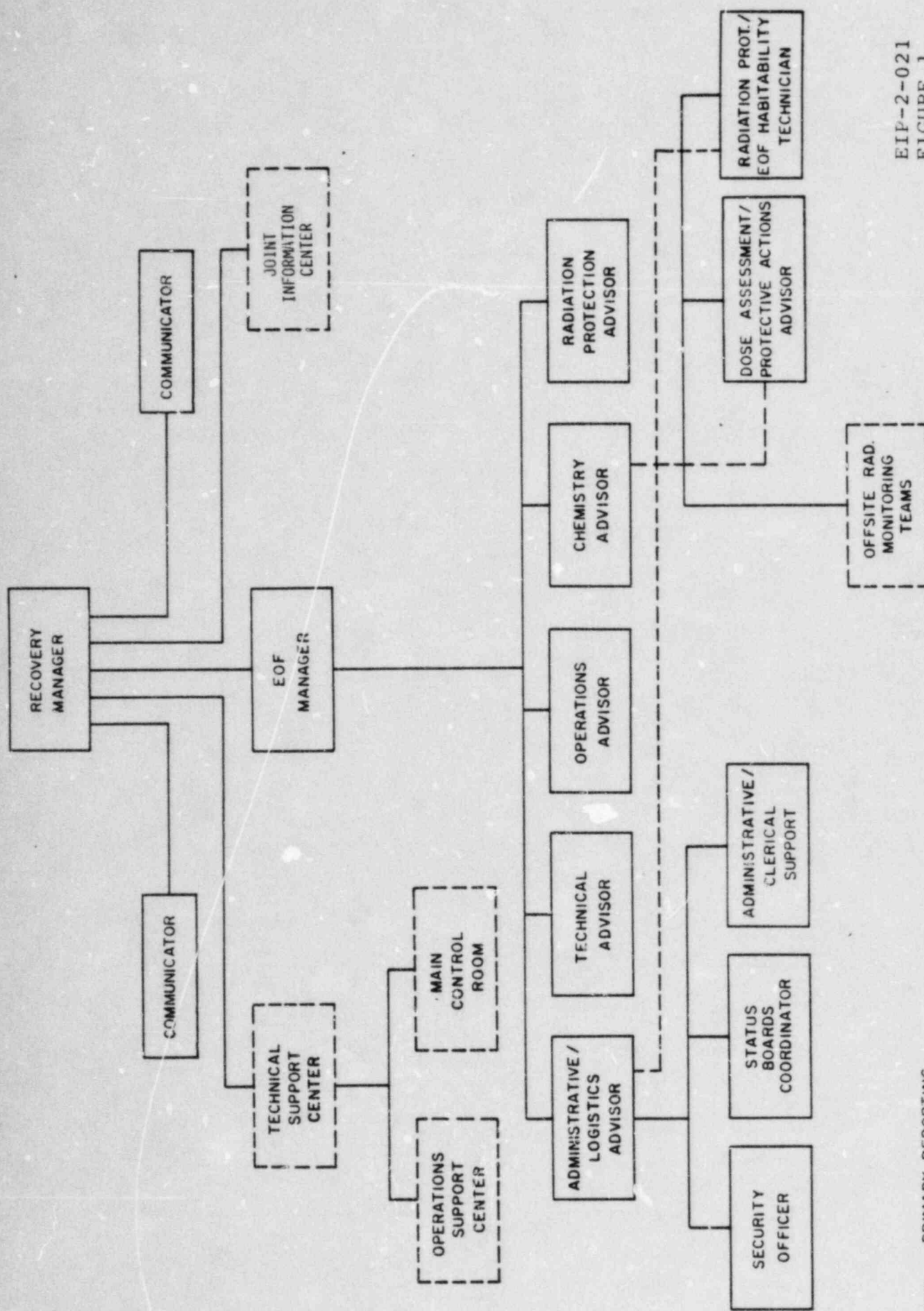
7. Direct the remainder of the EOF staff (except the Training Center Security Officer who reports to the Security Shift Supervisor for direction) to proceed to the Alternate EOF in the GSU - Baton Rouge Division Service Center on Government Street in Baton Rouge.
8. Proceed to the Alternate EOF and implement EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.13).

4.3.2 If the EOF becomes uninhabitable:

1. The Dose Assessment/Protective Actions Advisor shall:
 - a. Transfer (after briefing) dose assessment, offsite protective action recommendations and the coordination of offsite radiological monitoring personnel to the Chemistry/Core Damage Assessment Coordinator in the TSC.
 - b. Inform offsite radiological monitoring personnel to report to the Chemistry/Core Damage Assessment Coordinator in the TSC until the Dose Assessment/Protective Actions Coordinator returns to the TSC.
 - c. Proceed to the TSC and perform functions in accordance with EIP-2-019, Technical Support Center - Support Functions (Ref. 2.15).
2. The Events Information Team shall:
 - a. Proceed to the TSC and perform assigned functions.
 - b. Keep the Joint Information Center Director, the Recovery Manager and the Emergency Director informed of status.
3. The Communicator who is performing notifications to offsite government agencies shall:
 - a. Brief the TSC Communicator on the status of notifications to offsite government agencies.
 - b. Transfer the function of offsite notifications to the Communicator in the TSC.
 - c. Inform the Recovery Manager when this action has been completed.
 - d. Proceed to the Alternate EOF.

4. The Radiation Protection/EOF Habitability Technician shall proceed to the OSC.
5. The following EOF staff shall proceed to the Alternate EOF and perform their functional responsibilities in accordance with EIP-2-022, Alternate EOF - Activation and Transfer of Functions (Ref. 2.13):
 - a. Recovery Manager
 - b. EOF Manager
 - c. Administrative/Logistics Advisor
 - d. Radiation Protection Advisor
 - e. Technical Advisor
 - f. Operations Advisor
 - g. Chemistry Advisor
 - h. Status Boards Coordinator
 - i. Communicators (two)
 - j. Administrative/Clerical Support personnel (two)

END



PRIMARY REPORTING

SECONDARY REPORTING

IN EOF

OTHER LOCATION

EMERGENCY OPERATIONS FACILITY ORGANIZATION

EIP-2-021
FIGURE 1
REV. 0
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EMERGENCY OPERATIONS FACILITY ENTRY LOG

[illegible]

ATTACHMENT 2**RECOVERY MANAGER RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-005	EIP-2-006	EIP-2-020	EIP-2-021
1. Upon notification of a Site Area Emergency or General Emergency, activate the EOF			4.1.1,3	
2. Ensure that offsite dose assessment and offsite radiological monitoring are being performed				4.1.1.1,4
3. Recommend appropriate offsite protective actions to offsite government agencies				4.1.1.2,4
4. If a General Emergency is declared recommend mandatory offsite protective actions	4.1.6,5			4.1.3,4
5. Ensure that notifications to offsite government agencies are performed		4.1.5,3		4.1.1.4,4
6. Provide overall management of GSU emergency response activities				4.1.1.5,4
7. Coordinate GSU emergency response activities with those of the local, state and federal emergency response organizations				4.1.1.6,4
8. Approve all news releases and provide current information on conditions potentially affecting public to local state and federal agencies and the general public through the JIC				4.1.1.7,4
9. Keep the Emergency Response Organization informed on the status of the emergency.				4.1.1.8,4

ATTACHMENT 2
RECOVERY MANAGER RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-004	EIP-2-005	EIP-2-021
10. Discuss the plant and emergency conditions with the Emergency Director to determine if the emergency may be downgraded or if the termination criteria in EIP-2-004, Site Area Emergency or EIP-2-005, General Emergency have been met.	4.2.10,7	4.2.10,3 Note, 8	4.1.1.9,4
11. After discussions with the Emergency Director, offsite government agencies and the NRC and when the Emergency is below the Site Area Emergency level, direct the EOF Manager to deactivate the EOF Emergency Response Organization	4.2.11.2.b Note, 8	4.2.11.2.b Note, 9	4.2.1.1,12
12. Initiate Recovery Planning when the emergency is terminated	4.2.11.2.b Note, 8	4.2.11.2.b Note, 9	4.1.1.10,4 4.2.1.2,12
13. Determine the necessity for maintaining the JIC operational	4.2.11.2b Note, 8	4.2.11.2.b Note, 9	4.2.1.2,12
14. If the EOF in the River Bend Training Center becomes uninhabitable, a. Direct the Dose Assessment/ Protective Actions Advisor to return to the TSC to perform functions.			4.3.1.1,13
b. Direct the Dose Assessment/ Protective Actions Advisor to transfer the direction and control of offsite radiological monitoring personnel back to the TSC			4.3.1.2,13

ATTACHMENT 2**RECOVERY MANAGER RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-004	EIP-2-005	EIP-2-021
c. Inform the Louisiana Nuclear Energy Division (LNED) and the NRC dose assessment individuals that they have the option of proceeding to the TSC or proceed to the Alternate EOF to perform their functions.			4.3.1.3,13
d. Direct the Events Information Team to return to the TSC.			4.3.1.4,13
e. Direct the Communicator who is performing notifications to off-site government agencies to transfer this function back to the TSC Communicator			4.3.1.5,13
f. Direct the Radiation Protection/ EOF Habitability Technician to proceed to the OSC.			4.3.1.6,13
g. Direct the remainder of the EOF staff (except the Security Officer maintaining access control who reports to the Security Shift Supervisor for direction) to proceed to the Alternate EOF in the GSU - Baton Rouge Division Service Center on Government Street in Baton Rouge.			4.3.1.7,14
h. Proceed to the Alternate EOF and implement EIP-2-022, Alternate EOF - Activation and Transfer of Functions			4.3.1.8,14

ATTACHMENT 3**EOF MANAGER RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-020	EIP-2-021
1. Upon notification of a Site Area Emergency or General Emergency, activate the EOF	4.1.2,5	
2. Coordinate the activities of the EOF staff with those of the TSC staff		4.1.2.1,5
3. Contact the TSC Manager and obtain information on the diagnosis and prognosis of the accident, the estimates of radioactivity releases, and prevailing meteorological conditions		4.1.2.2,5
4. Provide the offsite government authorities with the accident diagnosis and prognosis information necessary for the office authorities to implement their emergency plans.		4.1.2.3,5
5. Ensure that the parish EOC liaisons have been notified and the liaisons are enroute to their respective EOCs.		4.1.2.4,5
6. Coordinate the activities of the EOF access control Security Officer and authorize personnel access to the EOF as necessary		4.1.2.5,5
7. Receive any responding representatives from offsite emergency response agencies and assist in their information and communications needs		4.1.2.6,5
8. When deemed necessary by the Recovery Manager, direct the Administrative/Logistics Advisor to arrange for long-term relief rotation		4.1.2.7,5

ATTACHMENT 3**EOF MANAGER RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-020	EIP-2-021
9. Keep the Recovery Manager informed on the status of items 1 through 8.		4.1.2.8,5
10. Upon direction from the Recovery Manager, direct EOF personnel to deactivate the EOF		4.2.2.1,13
a. Deactive the EOF Emergency Response Organization		
b. Ensure that all plant and emergency information has been logged and filed.		4.2.2.2,13
c. Ensure that all equipment is restored or placed in a long-term storage condition		4.2.2.3,13
11. Inform the Recovery Manager when the EOF Emergency Response Organization is deactivated		4.2.4,13

ATTACHMENT 4**ADMINISTRATIVE/LOGISTICS ADVISOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-020	EIP-2-021
1. Upon notification of a Site Area Emergency or General Emergency, activate the EOF	4.1.3,6	
2. Ensure that EOF emergency equipment check is completed by the Radiation Protection/EOF Habitability Technician		4.1.3.1,5
3. Coordinate Clerical/Administrative personnel to provide office support functions including typing reproduction, office supplies etc.		4.1.3.2,5
4. Call in Emergency Response Organization alternates for long-term relief when directed by the EOF Manager		4.1.3.3,5
5. Make motel, airline and temporary trailer arrangements for support personnel from other companies and agencies		4.1.3.4,6
6. Coordinate the registration of support personnel and general personnel orientation		4.1.3.5,6
7. Procure additional communications equipment to meet the requirements of the augmented emergency organization		4.1.3.6,6
8. Function as the emergency organization purchasing agent with responsibility for contract negotiation/administration and material control		4.1.3.7,6
9. Arrange for the administering of the petty cash fund and expense accounts		4.1.3.8,6

ATTACHMENT 4**ADMINISTRATIVE/LOGISTICS ADVISOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-020	EIP-2-021
10. Provide for the handling of payroll matters		4.1.3.9,6
11. Provide for food deliveries and for the operation of the field kitchen in the EOF		4.1.3.10,6
12. Meet the manpower needs of the Emergency Response Organization both in the technical and operational support disciplines		4.1.3.11,6
13. Ensure that clerical support is available from the Administrative Department		4.1.3.12,6
14. Arrange for motor pool facility staffing and vehicles for support personnel from outside the area		4.1.3.13,6
15. Arrange for shuttle services between surrounding motels and airports.		4.1.3.14,6
16. Keep the EOF Manager informed on the status of items 1 through 15		4.1.3.15,6
17. Upon direction from the EOF Manager deactivate the EOF		4.2.3.1,13
18. Inform the EOF Manager when item 17 is complete		4.2.3.2,13

ATTACHMENT 5

RADIATION PROTECTION ADVISOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021
1. Upon notification of a Site Area Emergency or General Emergency, activate the EOF.		4.1.4,7	
2. Direct the Dose Assessment/Protective Actions Advisor and the Radiation Protection/EOF Habitability Technician in accumulating radiological data			4.1.4.1,6
3. If there is a release or there is a potential for a release:			
a. Implement EIP-2-007	4.2,5		4.1.4.2,7
b. Dispatch and direct offsite radiological monitoring personnel through the Dose Assessment/Protective Actions Advisor			4.1.4.3,7
c. Provide instructions for offsite radiological monitoring personnel			4.1.4.4,7
d. Keep offsite radiological monitoring personnel informed of the status of the emergency in regard to those items which affect the operations of offsite monitoring personnel.			4.1.4.5,7
4. Advise the Radiation Protection Coordinator in the TSC upon request			4.1.4.6,7
5. Provide information to responding representatives from offsite emergency response agencies regarding possible offsite radiological consequences			4.1.4.7,7

ATTACHMENT 5**RADIATION PROTECTION ADVISOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021
6. Interpret the offsite radiological data obtained and update the EOF staff and offsite authorities with the results			4.14.8,7
7. Ensure that applicable status boards are updated with current emergency information			4.1.4.9,7
8. Keep the EOF Manager informed on the status of items 1 through 7			4.1.4.10,7
9. Upon direction from the EOF Manager, deactivate the EOF			4.2.3.1,13
10. Inform the EOF Manager when item 9 is complete			4.2.3.2,13

ATTACHMENT 6**DOSE ASSESSMENT/PROTECTIVE ACTIONS ADVISOR (OFFSITE
TEAM COORDINATOR) RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021	EIP-2-024	EIP-2-025
1. If there has been a release of radio-activity or there is a potential for a release, implement EIP-2-025, off-site Dose Calculations - Computer Method			4.1.5.1,7		4.1,3 Att 1, 4
2. If DRMS in the EOF becomes inoperable, a. And DRMS in the TSC is operable transfer functions to the Chemistry Core Damage Assessment Coordinator and proceed to the TSC			4.1.5.2.a,7		
b. And DRMS in the TSC is inoperable implement EIP-2-024, Offsite Dose Calculations - Manual Method			4.1.5.2.b,8	4.1,3 Att 1, 4	
3. Determine the need for offsite protective action recommendations in accordance with EIP-2-007, Protective Action Recommendation Guidelines	4.1,4 Att 1-7, 6		4.1.5.1,7		
4. Relay the instructions and information provided by the Radiation Protection Advisor to offsite radiological monitoring personnel			4.1.5.3,8		
5. Keep track of the Radiation exposure of all offsite radiological monitoring personnel			4.1.5.3, Note, 8		
6. Document all dose assessment, offsite protective action recommendations and offsite radiological monitoring data and forward the information/data to the Radiation Protection Advisor	4.1.2,3 Att 7, 16		4.1.5.4,8	4.1.2,3 Att 1, 4	4.1.2,3 Att 1, 4

ATTACHMENT 6**DOSE ASSESSMENT/PROTECTIVE ACTIONS ADVISOR (OFFSITE
TEAM COORDINATOR) RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021	EIP-2-024	EIP-2-025
7. Keep the Radiation Protection Advisor informed of the status of items 1 through 7 and any abnormal occurrences			4.1.5.5,8		
8. Upon direction from the EOF Manager, deactivate the EOF			4.2.3.1,13		
9. Inform the EOF Manager when item 8 is complete			4.2.3.2,13		
10. Upon direction from the Recovery Manager to activate the Alternate EOF: a. Transfer (after briefing) dose assessment, offsite protective action recommendations and the coordination of offsite radiological monitoring personnel to the Chemistry/Core Damage Assessment Coordinator in the TSC			4.3.2.1a,14		
b. Inform offsite radiological monitoring personnel to report to the Chemistry/Core Damage Assessment Coordinator in the TSC			4.3.2.1.b,14		
c. Proceed to the TSC and perform functions in accordance with EIP-2-019, Technical Support Center - Support Functions			4.3.2.1.c,14		

ATTACHMENT 7
CHEMISTRY ADVISOR RESPONSIBILITY MATRIX

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021	EIP-2-024	EIP-2-025
1. Upon declaration of a Site Area or General Emergency, activate the EOF		4.1.7,8			
2. Assist the Chemistry/Core Damage Assessment Coordinator in the development and implementation methods to process all liquid, and gaseous radioactive waste accumulated during the emergency			4.1.8.1,9		
3. Provide information and recommendations to the EOF Manager concerning emergency operations that could affect the plant or the environment			4.1.8.2,9		
4. Assist the Dose Assessment/Protective Actions Advisor in dose assessment activities, offsite protective action recommendations and coordinating offsite radiological monitoring personnel.	4.1.3 Att 1-7,6		4.1.8.3,9 4.1.5.1,7 4.1.5.3,8 4.1.5.4,8 4.1.5.5,8	4.1.3 Att 1,4	4.1.2 Att 1,4
5. Coordinate the distribution of samples between sampling and analytical facilities with the Chemistry/Core Damage Assessment Coordinator in the TSC.			4.1.8.4,9		
6. Provide recommendations to the EOF Manager on Chemistry and radio-chemistry problems			4.1.8.5,9		
7. Ensure that applicable status boards are updated by the Status Boards Coordinator with current chemistry and radiochemistry information			4.1.8.6,9		

ATTACHMENT 7**CHEMISTRY ADVISOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-007	EIP-2-020	EIP-2-021	EIP-2-024	EIP-2-025
8. Keep the EOF Manager informed of the status of items 1 through 7			4.1.8.7,9		
9. Upon direction from the EOF Manager, deactivate the EOF			4.2.3.1,13		
10. Inform the EOF Manager when item 9 is complete			4.2.3.2,13		

ATTACHMENT 8**RADIATION PROTECTION/EOF HABITABILITY TECHNICIAN
RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-020	EIP-2-021
1. Upon direction from the Radiation Protection Coordinator or the OSC Coordinator, activate the EOF	4.1.9,9	
2. Check the EOF radiological monitors approximately once per hour or every 15 minutes if the plume is moving over the EOF		4.1.10.1,10
3. If EOF radiological monitors are inoperable, perform radiation and airborne radioactivity surveys approximately once per hour or every 15 minutes if the plume is moving over the EOF		4.1.10.1, Note, 10
4. Complete the check of EOF emergency equipment		4.1.10.2,11
5. Maintain the contamination control point		4.1.10.3,11
6. Perform actions as directed by the Radiation Protection Advisor or the Administrative/Logistics Advisor		4.1.10.4,11
7. Assist the Dose Assessment/Protective Actions Advisor in coordinating off-site radiological monitoring personnel as necessary		4.1.10.5,11
8. Operate the EOF Decontamination Facility as necessary		4.1.10.6,11
9. Keep the Radiation Protection Advisor and Administrative/Logistics Coordinator informed of activities		4.1.10.7& 8,11
10. Upon direction from the EOF Manager, deactivate the EOF.		4.2.3.1,13
11. Inform the EOF Manager when item 10 is complete		4.2.3.2,11

ATTACHMENT 9**EOF COMMUNICATOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-006	EIP-2-020	EIP-2-021
1. Upon notification of a Site Area or General Emergency, activate the EOF		4.1.13,10	
2. After a briefing from the TSC Communicator, relieve the TSC Communicator of the function of notifications of offsite government agencies			4.1.13.1,11
3. Perform notifications and communications as directed by the Recovery Manager or EOF Manager	4.4,4 Att 2,7		4.1.13.2,12
4. Complete and maintain notification forms for notifications to offsite government agencies	4.4,4 Att 2,7		4.1.13.3,12
5. Log all incoming and outgoing communications in the Communicator's log.			4.1.13.4,12
6. Keep the Recovery Manager and the EOF Manager informed of the status of incoming and outgoing Communications			4.1.13.5,12
7. Upon Direction from the EOF Manager, deactivate the EOF			4.2.3.1,13
8. Inform the EOF Manager when item 7 is complete			4.2.3.2,13
9. Upon direction from the Recovery Manager a. Brief the TSC Communicator on the status of offsite notifications			4.3.2.3.a,14

ATTACHMENT 9**EOF COMMUNICATOR RESPONSIBILITY MATRIX**

Responsibility/EIP (Section, Page No.)	EIP-2-006	EIP-2-020	EIP-2-021
b. Transfer the function of offsite notifications to the Communicator in the TSC			4.3.2.3.b,14
c. Inform the Recovery Manager when the function of offsite notifications has been transferred to the TSC			4.3.2.3.c,14
10. Proceed to the Alternate EOF			4.3.2.3.d,15

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-022

PROCEDURE TITLE: ALTERNATE EOF - ACTIVATION AND TRANSFER OF FUNCTIONS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

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RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: ALTERNATE EOF - ACTIVATION AND TRANSFER OF FUNCTIONS

PROCEDURE NO. EIP-2-022

REV. O

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ALTERNATE EOF - ACTIVATION AND TRANSFER OF FUNCTIONS

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1.0 PURPOSE

This procedure provides instructions for activation, operation, support functions, and deactivation of the Alternate Emergency Operations Facility (EOF).

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-006, Notifications
- 2.3 EIP-2-001, Classification of Emergencies
- 2.4 EIP-2-023, Emergency Communications Staff Activation and Support Functions
- 2.5 EIP-2-028, Recovery
- 2.6 EIP-2-029, Emergency Telephone Book

3.0 GENERAL INFORMATION

- 3.1 The Alternate EOF shall be activated if the primary EOF in the River Bend Training Center is inaccessible or uninhabitable for a Site Area Emergency or General Emergency.
- 3.2 The Alternate EOF is located in the Gulf States Utilities Company (GSU) - Baton Rouge Division Service Center on Government Street in Baton Rouge, approximately 23 miles southeast of River Bend Station.
- 3.3 The Alternate EOF shall be staffed by the same individuals or alternates that would staff the primary EOF except the Dose Assessment/Protective Actions Advisor, the Radiation Protection/EOF Habitability Technician, the Security Officer, and the Events Information Team.
- 3.4 The Senior Vice President River Bend Nuclear Group (RBNG), or alternate, is notified in accordance with EIP-2-006, Notifications (Ref. 2.2). Upon arrival the Senior Vice President RBNG, relieves the Emergency Director of responsibilities as Recovery Manager.
- 3.5 The Alternate EOF staff shall be activated using EIP-2-006, Notifications (Ref. 2.2).
- 3.6 The minimum staffing requirements for the Alternate EOF to be considered operational are:
 - 3.6.1 Recovery Manager
 - 3.6.2 EOF Manager
 - 3.6.3 Radiation Protection Advisor
 - 3.6.4 Operations Advisor
 - 3.6.5 Technical Advisor
 - 3.6.6 Communicator (at least one)

3.7 The functions of the Alternate EOF staff are:

- 3.7.1 Provide overall management of the Gulf States Utilities Company (GSU) emergency response activities.
- 3.7.2 Evaluate the magnitude and effects of actual or potential radioactive releases from the River Bend Station.
- 3.7.3 Recommend appropriate offsite protective actions to the offsite government agencies.
- 3.7.4 Coordinate the GSU emergency response activities with those of the local, State and Federal emergency response organizations, including the NRC and FEMA.
- 3.7.5 Provide current information on conditions potentially affecting the public, local, state and federal agencies and the general public through the Alternate Joint Information Center (JIC).

3.8 The following EOF functions shall be performed from the TSC:

- 3.8.1 The Dose Assessment/Protective Actions Advisor (Offsite Team Coordinator) remain in or proceed to the TSC and report to the Radiation Protection Coordinator.
- 3.8.2 The offsite radiological monitoring personnel shall report to the Radiation Protection Coordinator through the Offsite Team Coordinator.
- 3.8.3 The Events Information Team shall proceed to the TSC.
- 3.8.4 Notifications to the NRC.
- 3.8.5 Notifications to offsite government agencies until the alternate EOF is operational.

3.9 As the Alternate EOF staff arrive, they are assigned tasks which shall provide the Recovery Manager the information and support required in order to evaluate and mitigate the emergency such as:

- 3.9.1 Plant status and dynamics prior to and during the accident.
- 3.9.2 Performance of accident mitigation functions.
- 3.9.3 Current status and trend of the accident.
- 3.9.4 Damage to the plant systems and equipment.
- 3.9.5 Status of emergency operations (including personnel activity in the plant).
- 3.9.6 Magnitude of any radiological release to the environment.

3.9.7 Prevailing meteorological conditions.

3.9.8 Projected levels of radioactivity resulting from an airborne or waterborne release.

3.9.9 Potential impact of radiological hazards on public health and safety.

3.9.10 Offsite protective action recommendations.

3.10 The Alternate EOF floor plan is shown in Figure 1.

4.0 PROCEDURE

4.1 Alternate EOF Activation

4.1.1 The Recovery Manager shall use Attachment 1 and:

1. Contact the Emergency Director in the TSC (or Main Control Room if the emergency has started at a Site Area Emergency or General Emergency).
2. Review the current status of the emergency including:
 - a. Background information leading up to the emergency.
 - b. Indications and suspected cause of the emergency.
 - c. Existing hazards to personnel.
 - d. Damage to plant systems, instrumentation and other equipment and radiation levels or releases of radioactivity.
 - e. Emergency classification.
 - f. Corrective actions taken.
 - g. Status of the execution of the steps in EIP-2-001, Classification of Emergencies (Ref. 2.3) or other Emergency Plan Implementing Procedure.
 - h. The status of the activation of the Emergency Response Organization.
 - i. The status of the notification of offsite government agencies and the NRC.
 - j. Present plant line-ups and plant evolutions or operations in progress.

- k. Evolutions or operations which have been directed or have been planned, but are not yet carried out.
- l. Offsite dose assessment and recommended protective actions recommended to offsite government agencies.
3. Relieve the Emergency Director of his responsibilities as Recovery Manager.

NOTE

Upon being relieved of the responsibilities of the Recovery Manager, the Emergency Director retains the responsibility for the direction and control of onsite emergency response activities.

4. Inform the Emergency Response Organization (Main Control Room, OSC, TSC and EOF) that the Senior Vice President RBNG, or alternate, is the Recovery Manager operating from the Alternate EOF.
5. Ensure that the Alternate EOF is activated in accordance with this procedure.
6. Following the report from the Alternate EOF Manager that the Alternate EOF is operational, inform the Alternate EOF staff that the Alternate EOF is operational and brief the staff on the information received from the Emergency Director.
7. Inform the Emergency Director that the Alternate EOF is operational and formally accept responsibility for notifications of offsite government agencies (except the NRC) and for interfacing with offsite government authorities.

NOTE

The Recovery Manager must focus on the overall control of the GSU emergency response and must not be distracted from this primary responsibility.

4.1.2 The Alternate EOF Manager shall use Attachment 2 and

1. Ensure that the following equipment is operating properly:
 - a. Communications
 - (1) River Bend Station Emergency Hotline (RBSEH) (Ensure that the Alternate EOF connection is operable if the RBSEH has been previously checked from the TSC).
 - (2) Corporate hotline.

N/A	N/A	EIP-2-022	REV. 0	PAGE 5 OF 17
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- (3) River Bend PBX telephone lines.
- (4) GSU OPX telephone lines.
- (5) Radio console (in dispatch office).
- (6) Data transfer equipment (computer printers).

NOTE

The Alternate EOF is adjacent to the Baton Rouge Energy Management System facilities which has additional communications capabilities to supplement the Alternate EOF.

b. Lighting

- 2. Ensure that all Alternate EOF personnel or their alternates are prepared to assume their functional responsibilities.
 - a. Recovery Manager
 - b. Alternate EOF Manager
 - c. Radiation Protection Advisor
 - d. Chemistry Advisor
 - e. Operations Advisor
 - f. Administrative/Logistics Advisor
 - g. Communicators (two)
 - h. Status Boards Coordinator
 - i. Technical Advisor
 - j. Administrative/Clerical Support Personnel (two)
- 3. Contact the TSC Manager and obtain the status of the plant and the emergency.
- 4. Report to the Recovery Manager that the EOF is fully operational when items 1 and 2 are complete.

4.1.3 The Administrative/Logistics Advisor shall use Attachment 3 and

- 1. Ensure that the Alternate EOF Administrative/Clerical Support personnel are at their work stations.
- 2. Ensure that the status boards are updated with initial emergency information.
- 3. Contact the Administrative Coordinator in the TSC and obtain the status on any administrative problems.
- 4. Inform the Alternate EOF Manager when the Administrative staff is prepared to assume their functional responsibilities.

4.1.4 The Radiation Protection Advisor shall:

1. Contact the Radiation Protection Coordinator in the TSC and obtain the status on Radiation Protection Activities.
2. Direct the update of status boards with initial emergency conditions.

NOTE

The Alternate EOF status are updated with initial information by the Radiation Protection Advisor, the Chemistry Advisor and the Operations Advisor or the Status Boards Coordinator. The Status Boards Coordinator continually updates status boards after the initial update.

3. Inform the Alternate EOF Manager when prepared to assume functional responsibilities.

4.1.5 The Technical Advisor shall contact the Core Technical/Core Physics Coordinator in the TSC and obtain the status of the reactor and inform the Alternate EOF Manager when prepared to perform their functional responsibilities.

4.1.6 The Operations Advisor shall:

1. Obtain initial emergency information.

NOTE

If ERIS in the TSC is operational, copies of operations data may be telecopied to the Alternate EOF. If the TSC ERIS is inoperable, establish a three-way communications link with the Main Control Room and the TSC.

2. Contact the Operations Support Coordinator in the TSC and obtain the status of the plant and of Operations activities.
3. Direct the update of applicable status boards with initial emergency information.
4. Inform the Alternate EOF Manager when prepared to perform functional responsibilities.

4.1.7 The Chemistry Advisor shall:

1. Contact the Chemistry/Core Damage Assessment Coordinator in the TSC and obtain the status of Chemistry and radiochemistry activities.
2. Direct the update of applicable status boards.
3. Inform the Alternate EOF Manager when prepared to perform functional responsibilities.

- 4.1.8 The Status Boards Coordinator shall report presence to the Administrative/Logistics Advisor and begin updating the status boards with initial emergency information.
- 4.1.9 The two Administrative/Clerical Support Personnel shall report their presence to the Administrative/Logistics Advisor.
- 4.1.10 The Communicators shall report presence to the Administrative/Logistics Advisor. One Communicator shall contact the TSC communicator by other means than the RBS emergency hotline and receive a briefing of notifications to offsite government agencies.

NOTE

Notifications to the NRC remains the responsibility of the NRC Resident. Inspector at River Bend Station.

4.2 Alternate EOF Operations

4.2.1 The Recovery Manager shall:

- 1. Provide overall management of the GSU emergency response activities.
- 2. Recommend appropriate offsite protective actions to offsite government agencies.
- 3. Coordinate GSU emergency response activities with those of the local, state and federal emergency response organization including the NRC and FEMA.

NOTE

The Radiation Protection Advisor, the Operations Advisor, the Chemistry Advisor shall record initial information on the status boards or provide the information to the Status Boards Coordinator for recording.

- 4. Provide current information on conditions potentially affecting the public to local, State and Federal agencies and the general public through the (JIC).

NOTE

The JIC shall be activated by the Public Affairs staff in accordance with EIP-2-023, Joint Information Center Activation (Ref. 2.4) at the discretion of the Recovery Manager.

- 5. Keep the Emergency Response Organization informed on the status of the emergency.

N/A	N/A	EIP-2-022	REV. 0	PAGE 8 OF 17
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6. Implement EIP-2-028, Recovery (Ref. 2.5) when the emergency is terminated.

4.2.2 The Alternate EOF Manager shall:

1. Coordinate the activities of the EOF staff with those of the onsite emergency response organization.
2. Contact the TSC Manager and obtain information on the diagnosis and prognosis of the accident condition, the estimates of radioactivity releases, and the prevailing meteorological conditions.
3. Respond to requests for additional information from offsite government authorities regarding the accident either on the RBS emergency hotline or by telephone.
4. Ensure that the Parish Emergency Operations Center (EOC) liaisons have been notified and the liaisons are enroute to their respective EOCs.
5. Receive any responding representatives from offsite emergency response agencies and assist in their information and communication needs.
6. When deemed necessary by the Recovery Manager, direct the Administrative/Logistics Advisor to arrange for long-term relief rotation.
9. Keep the Recovery Manager informed of Alternate EOF operations.

4.2.3 The Administrative/Logistics Advisor shall:

1. Provide office support functions including typing, reproduction, office supplies, and office furniture. Special items include photography services and facility/area maps that may be required.
2. Call in Emergency Response Organization alternates to establish long term relief rotation when directed by the EOF Manager using EIP-2-029, Emergency Telephone Book (Ref. 2.3).

NOTE

The Administrative/Logistics Advisor shall coordinate the functions listed below with the normal GSU organization that normally performs these functions. Outside resources such as the Institute of Nuclear Power Operations (INPO Resources Manual) or the companies listed in the mutual assistance agreement (Appendix B of the RBS Emergency Plan, Ref. 2.1). The following functions shall be required for long-term emergency response.

N/A	N/A	EIP-2-022	REV. 0	PAGE 9 OF 17
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3. Make motel, airline, and temporary trailer arrangement.
4. Coordinate the registration of support personnel and general personnel orientation.
5. Acquire additional communications equipment to meet the requirements of the overall emergency organization. Coordinate with the GSU Communications Department for this function.
6. Function as the emergency organization purchasing agent with responsibility for contract negotiation/administration and material control.
7. Arrange for the administration of the petty cash fund and expense accounts.
8. Provide for the handling of payroll matters.
9. Provide for food deliveries and for the operation of a field kitchen in the Alternate EOF.
10. Meet the manpower needs of the Emergency Response Organization both in the technical and operational disciplines. (INPO and the Mutual Assistance Agreement).
9. Ensure that clerical support is available from the GSU Administration Departments.
11. Arrange for motor pool facility staffing and vehicles for the emergency organization from outside of the Baton Rouge or St. Francisville areas.
12. Arrange for shuttle services between surrounding motels and airports.
13. Keep the Alternate EOF Manager informed of items 1 through 12.

4.2.4 The Radiation Protection Advisor shall:

1. Recommend offsite protective actions as appropriate to the Recovery Manager. Information shall be obtained from the Radiation Protection Coordinator or the Dose Assessment/Protective Action Advisor in the TSC.
2. Advise the Radiation Protection Coordinator in the TSC upon request.
3. Provide information to responding representatives from offsite emergency response agencies regarding possible offsite radiological consequences.

4. Interpret the offsite radiological data obtained and update the EOF staff and offsite authorities with the results, in terms of both real-time measurements and, to the extent possible, projected radiological exposures.
5. Keep the Alternate EOF Manager informed of items 1 through 4.

4.2.5 The Technical Advisor shall:

1. Analyze core parameters to determine current conditions in the core.
2. Review proposed plant operations with respect to the effect on core condition.
3. Coordinate with the Core Technical/Core Physics Coordinator (in the TSC) in the development of recommendations for plant operations that would affect core conditions.
4. Keep the Alternate EOF Manager informed of the status of items 1 through 3.

4.2.6 The Operations Advisor shall:

1. Assist in coordinating the emergency response organization objectives requiring implementation by Operations.
2. Obtain Emergency Response Information System (ERIS) data by telephone or rapidfax from the TSC or Main Control Room.

NOTE

If ERIS in the TSC is operational, copies of operations data may be telecopied to the EOF. If TSC ERIS is inoperable, establish a three-way link with the Control Room and the TSC.

3. Ensure that all ERIS data printouts are distributed within the Alternate EOF to the Alternate EOF Manager, the Radiation Protection Advisor and the Chemistry Advisor.
4. Ensure that applicable status boards are updated with current emergency information.
5. Keep the Alternate EOF Manager informed of the status of items 1 through 4.

4.2.7 The Chemistry Advisor shall:

1. Assist the Chemistry/Core Damage Assessment Coordinator in the TSC in the development and implementation of methods to

process all liquid and gaseous radioactive waste levels accumulated during the emergency.

2. Provide information and recommendations to the Alternate EOF Manager concerning emergency operations that could affect the plant or the environment.
3. Coordinate the distribution of samples between sampling and analytical facilities with the Chemistry/Core Damage Assessment Coordinator in the TSC.
4. Provide recommendations to the Alternate EOF Manager on chemistry and radiochemistry problems.
5. Ensure that applicable status boards are updated with current chemistry and radiochemistry information by the Status Boards Coordinator.
6. Keep the EOF Manager informed of items 1 through 5.

4.2.8 The Status Boards Coordinator shall update the EOF status boards with current emergency information obtained from the:

1. Recovery Manager
2. EOF Manager
3. Radiation Protection Advisor
4. Operations Advisor
5. Chemistry Advisor

NOTE

The initial update may be performed by any of the individuals listed in step 4.2.8.

4.2.9 The Communicators shall:

1. Perform notifications and communications as directed by the Recovery Manager or the Alternate EOF Manager.
2. Complete and maintain notification forms for notifications to offsite government agencies except the NRC.
3. Log all incoming and outgoing communications in the Communicator's log.
4. Keep the Recovery Manager and Alternate EOF Manager informed of the status of incoming and outgoing communications.

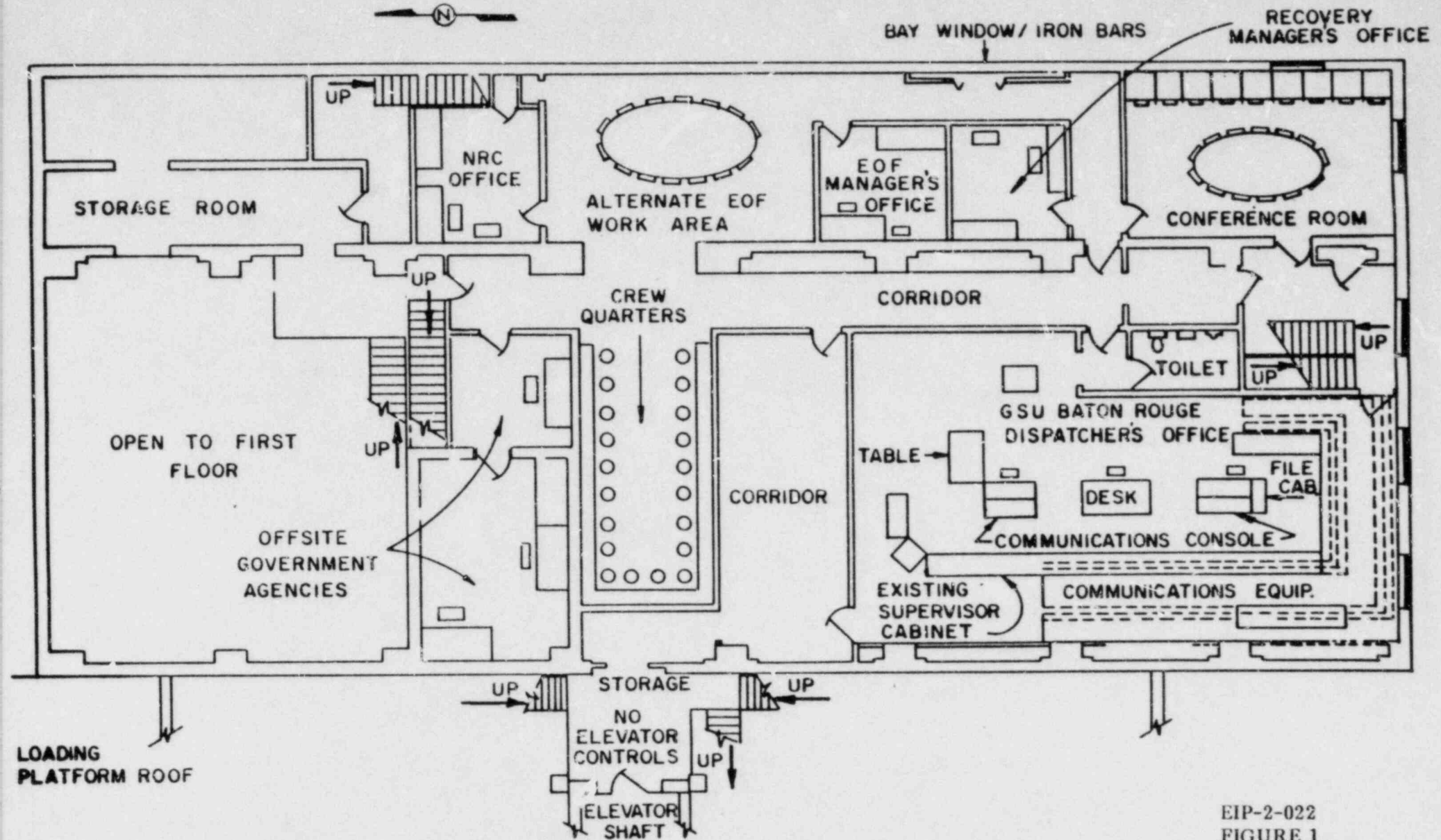
4.2.10 The Administrative/Clerical Support personnel shall perform functions as directed by the Administrative/Logistics Advisor.

4.3 Alternate EOF Deactivation

- 4.3.1 The Recovery Manager shall direct the Alternate EOF Manager to deactivate the Alternate EOF Emergency Response Organization after discussions with the Emergency Director, offsite government agencies and the NRC when at a minimum, the emergency classification is below the Site Area Emergency level.
- 4.3.2 The Recovery Manager shall implement EIP-2-028, Recovery (Ref. 2.5) and determine the personnel needed in the Recovery Organization which shall operate from the EOF in the River Bend Training Center
- 4.3.3 The Alternate EOF Manager shall release Alternate EOF personnel after performing the following:
1. Ensure that all plant and emergency information has been logged and or sent to the EOF in the River Bend Training Center Records Room.
 2. Ensure that all equipment is restored or placed in a long term storage condition.
- 4.3.4 All other Emergency Response Organization personnel shall:
1. Perform items 1 and 2 of step 4.3.3.
 2. Inform the Alternate EOF Manager when item 1 of this step is complete.
- 4.3.5 The Alternate EOF Manager shall inform the Recovery Manager when the Alternate EOF Emergency Response Organization is deactivated.

END

ALTERNATE EMERGENCY OPERATIONS FACILITY (GSU GOVERNMENT STREET SERVICE CENTER - SECOND FLOOR)



NOTE:

Place "N/A" in steps which are not applicable.

	<u>Actions Completed</u>	
	<u>Time/Date</u>	<u>Initials</u>
1. Status of the emergency reviewed with the Emergency Director (4.1.1.2 on page 4)	_____	_____
2. Relieved the Emergency Director of Recovery Manager responsibilities (4.1.1.3 on page 5)	_____	_____
3. Emergency Response Organization informed of the relief of the Emergency Director (4.1.1.3 on page 5)	_____	_____
4. Following the report from the alternate EOF Manager (4.1.1.6 on page 5):	_____	_____
a. Informed Alternate EOF Staff that Alternate EOF is operational	_____	_____
b. Brief the Alternate EOF Staff on the information received in item 1.	_____	_____
5. Informed the Emergency Director that the Alternate EOF is operational (4.1.1.7 on page 5)	_____	_____
6. Formally accepted the responsibility of offsite notifications (except the NRC)	_____	_____

ALTERNATE EOF ACTIVATION CHECKLIST (Alternate EOF Manager)

1. The following equipment has been operationally checked (4.1.2.1 on page 5):

a. Communications

- (1) River Bend Station Emergency hotline
- (2) Corporate Hotline
- (3) River Bend Station PBX lines as necessary
- (4) Radio Console
- (5) GSU OPX lines
- (6) Data transfer equipment

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

b. Lighting

_____	_____
-------	-------

Name

Date/Time

Initials

2. All alternate EOF personnel are prepared to assume their functional responsibilities (4.1.2.2 on page 6)

- a. Recovery Manager
- b. Alternate EOF Manager
- c. Radiation Protection Advisor
- d. Chemistry Advisor
- e. Operations Advisor
- f. Administrative/Logistics Advisor
- g. Communicators (1)
(2)
- h. Status Boards Coordinator
- i. Technical Advisor
- j. Administrative/Clerical Support Personnel (1)
(2)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ALTERNATE EOF ACTIVATION CHECKLIST
(Administrative/Logistics Advisor)

	<u>Actions Completed</u>	
	<u>Time/Date</u>	<u>Initials</u>
1. Administrative/Clerical support staff available at their workstations (4.1.3.1 on page 6)	_____	_____
2. Status boards updated with initial emergency information (4.1.3.2 on page 6)	_____	_____
3. Contacted the Administrative Coordinator in the TSC	_____	_____
4. Inform the Alternate EOF Manager when Administrative/Clerical personnel are at their work stations.	_____	_____

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-023

PROCEDURE TITLE: JOINT INFORMATION CENTER STAFF ACTIVATION AND FUNCTIONS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-5		<i>[Signature]</i> 10/2/84	
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

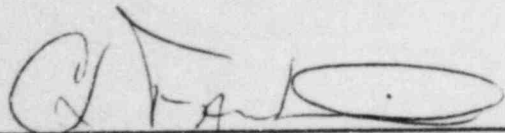
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PROCEDURE NO. EIP-2-023

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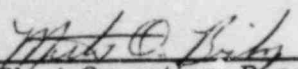
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DATE



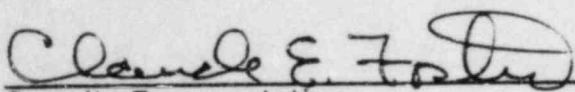
Radiation Protection/Chemistry Representative

9-24-84



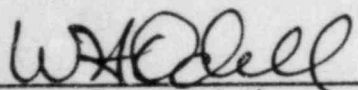
Plant Operations Representative

9-29-84



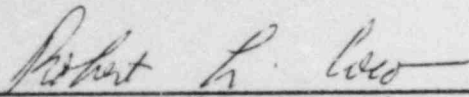
Security Representative

9/24/84



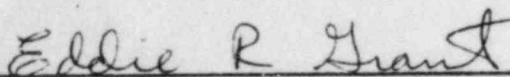
Training Representative

9/24/84



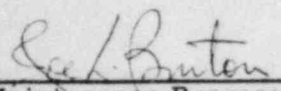
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

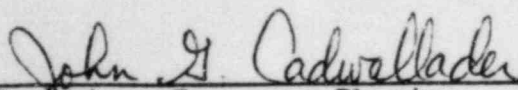
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

JOINT INFORMATION CENTER STAFF ACTIVATION AND FUNCTIONS

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1.0 PURPOSE

This procedure describes the activation of the Joint Information Center (JIC) and the staff functions related to the Onsite Emergency Response Organization in providing information concerning the emergency to the news media and the general public.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-002, Notification of Unusual Event
- 2.3 EIP-2-006, Notification
- 2.4 JIC-001, Joint Information Center Staff Notification
- 2.5 JIC-002, Events Information Team
- 2.6 JIC-004, Joint Information Center Director
- 2.7 JIC-016, Logistics Manager

3.0 GENERAL INFORMATION

- 3.1 The JIC is located on the first floor of the Nuclear Training Center and functions to disseminate information to the news media and the general public during an emergency at River Bend Station.
- 3.2 The JIC is staffed by Gulf States Utilities personnel along with representatives from the State of Louisiana and the parishes within the ten-mile Emergency Planning Zone (EPZ) for River Bend Station.
- 3.3 The JIC is activated and staffed for Site Area Emergency and General Emergency classifications. At the Alert emergency classification, the JIC Director shall determine the extent to which the Center is activated and staffed depending on the circumstances of the emergency. News media and public information releases will be handled through the normal Louisiana Communication Division of Gulf States Utilities at the Notification of Unusual Event emergency classification.
- 3.4 For the Notification of Unusual Event, the JIC Director is notified directly by the Onshift Emergency Organization in accordance with EIP-2-002, Notification of Unusual Event (Ref. 2.2). For the Alert, Site Area or General emergencies, the JIC Director, the Event Information Coordinator, and the JIC Logistics Manager are notified through the Group II paging systems in accordance with EIP-2-006, Notifications (Ref. 2.3).
- 3.5 An alternate location for the JIC is provided at the GSU Government Street Building in Baton Rouge in the event that the primary location becomes uninhabitable or is not functional.

4.0 PROCEDURE

4.1 The JIC Director shall:

- 4.1.1 Upon being notified of a Notification of Unusual Event emergency at RBS, determine if a news release is appropriate and take steps to provide information to the news media through the normal Louisiana Communications Division staff.

NOTE

All technical information provided to the news media or general public from the JIC, concerning an emergency at RBS must be approved in advance by the Emergency Director or Recovery Manager.

- 4.1.2 Upon receiving pager notification of an Alert emergency at RBS, contact the Control Room using the telephone number provided on the back of the pager and receive initial information concerning the emergency.
 - 4.1.2.1 After assessing the particular emergency situation, contact the Logistics Manager using JIC-001, Joint Information Center Staff Notification (Ref. 2.4) and direct partial or full activation of the JIC.
 - 4.1.2.2 Following partial or full activation of the JIC, proceed to the JIC and carry out duties and responsibilities in accordance with JIC-004, Joint Information Center Director (Ref. 2.6).
 - 4.1.2.3 If partial or full activation of the JIC is not directed, take steps to release information concerning the emergency through the normal Louisiana Communications Division organization.
- 4.1.3 Upon receiving pager notification of a Site Area Emergency or General Emergency, verify the notification by dialing the pager verification telephone number provided on the back of the pager and then proceed to the JIC and carry out duties and responsibilities in accordance with JIC-004, Joint Information Center Director (Ref. 2.6).
- 4.1.4 If notified at any time that the JIC is inaccessible or not functional, direct relocation of the JIC staff to the alternate facility at the Government Street Building in Baton Rouge.
 - 4.1.4.1 If the JIC has already been staffed and subsequently becomes uninhabitable, request that Security assist in the orderly withdrawal of all news media representatives and

JIC staff members from the JIC and provide directions to the alternate facility.

4.1.4.2 If the JIC has not been staffed, contact the Logistics Manager and direct that the alternate facility is to be used when activating the JIC staff.

4.1.5 Participate in the initial Recovery Planning Meeting following termination of an emergency at a Site Area Emergency or General Emergency classification and determine the extent to which the JIC should remain operational during the Recovery phase.

4.1.6 Deactivate the JIC and make assignments for any follow-up news release during Recovery operations.

4.2 The Events Information Coordinator shall:

4.2.1 Upon notification of an Alert, Site Area Emergency or General Emergency through the pager system, verify receipt of the notification by using the pager verification telephone number provided on the back of the pager, contact a technical representative for the Events Information Team using JIC-001, Joint Information Center Staff Notification (Ref. 2.4) and proceed to the Technical Support Center.

4.2.2 Upon arrival at the Technical Support Center, together with the Technical representative, request a briefing on the emergency from the Emergency Director or Technical Support Center Manager.

4.2.3 Provide information to the JIC staff concerning the emergency in accordance with JIC-002, Events Information Team (Ref. 2.5).

4.2.4 When notified that the EOF is staffed and operational, proceed to that facility, along with the Technical Representative, and continue to carry out duties and responsibilities in accordance with JIC-002, Events Information Team (Ref. 2.5).

4.3 The Events Information Team Technical Representative shall:

4.3.1 Upon being notified of JIC activation by the Events Information Coordinator, proceed to the Technical Support Center.

4.3.2 Assist the Events Information Coordinator in preparing and forwarding information concerning the emergency to the JIC staff in accordance with JIC-002, Events Information Team (Ref. 2.5).

4.3.3 Relocate to the Emergency Operations Facility when it is operational and continue to assist the Events Information Coordinator.

4.4 The Logistics Manager shall:

- 4.4.1 Upon being directed by the JIC Director at an Alert emergency, activate the JIC staff, to the extent determined by the JIC Director, in accordance with JIC-001, Joint Information Center Staff Notification (Ref. 2.4).
- 4.4.2 Upon receiving pager notification of a Site Area Emergency or General Emergency, activate the JIC staff using JIC-001, Joint Information Center Staff Notification (Ref. 2.4), then proceed to the JIC.
- 4.4.3 Upon arrival at the JIC, carry out duties and responsibilities in accordance with JIC-016, Logistics Manager (Ref. 2.7).

End

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-024

PROCEDURE TITLE: OFFSITE DOSE CALCULATION - MANUAL METHOD

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
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**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES


TITLE: OFFSITE DOSE CALCULATION - MANUAL METHOD

PROCEDURE NO. EIP-2-024

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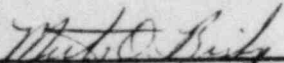
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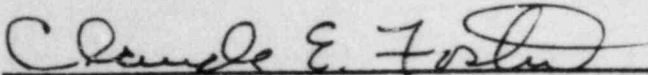
9-24-84

Radiation Protection/Chemistry Representative



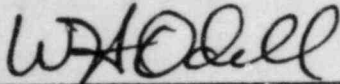
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Plant Operations Representative



9/24/84

Security Representative



9/24/84

Training Representative



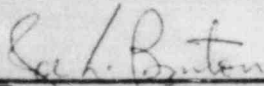
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Technical Staff Representative



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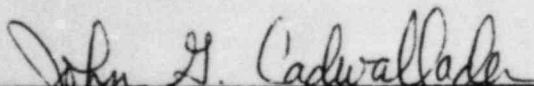
Nuclear Licensing Representative



9/24/84

Maintenance Representative

Recommended for Approval:



9-24-84

Supervisor - Emergency Planning

(LATERS)

PROCEDURE NO.: EIP-2-024

TITLE: OFFSITE DOSE CALCULATION

REVISION NO.: 0

MANUAL METHOD

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION
(Section/Step)

PAGE NO.

BRIEF
DESCRIPTION

2.4

2

Circ. ID number not available for ODCM

OFFSITE DOSE CALCULATIONS - MANUAL METHOD

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ATTACHMENT 1: Dose Calculation Worksheet

ATTACHMENT 2: Manual Calculation for Offsite Gaseous Activity

1.0 PURPOSE

This procedure provides a methodology for predicting offsite radiation exposure rates from an actual or potential release of radioactive materials from the plant.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-025, Offsite Dose Calculations - Computer Method
- 2.3 EIP-2-007, Protective Action Recommendation Guidelines
- 2.4 (Later), Off-Site Dose Calculation Manual

3.0 GENERAL INFORMATION

- 3.1 Initial and follow-up calculations using this method shall be completed by the Shift Foreman until relieved by the Dose Assessment/Protective Actions Advisor in the Technical Support Center (TSC).
- 3.2 This procedure shall be used by the Dose Assessment/Protective Actions Coordinator when the Digital Radiation Monitoring System (DRMS), dose assessment mode, is inoperable.
- 3.3 Offsite dose calculations shall be initiated anytime a Site Area Emergency or General Emergency is declared due to a radiological accident, or any other time the Emergency Director or Recovery Manager deems necessary.
- 3.4 Offsite radiation exposure rates, calculated using this procedure shall be used to recommend protective actions for the general public in accordance with EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.3).
- 3.5 When the Emergency Operations Facility (EOF) is operational, the Dose Assessment/Protective Actions Advisor shall brief the Chemistry Advisor in the EOF on dose assessment activities and protective action recommendations and relocate to the EOF. The Chemistry Advisor shall perform dose assessment activities and be responsible for protective action recommendations while the Dose Assessment/Protective Actions Advisor is enroute.
- 3.6 Assessment of offsite radiation exposure rates and projected integrated doses shall be completed initially within approximately fifteen minutes of the declaration of a Site Area Emergency or General Emergency, when these declarations are based on a radiological emergency, and follow-up estimates shall be completed approximately every thirty minutes following the initial projections or sooner if release rates change.

3.7 The minimum information required to use this procedure and the source of that information are:

3.7.1 Radioactivity concentrations being released are available from the Main Control Room or DRMS.

3.7.2 Flow rate of release pathway, effluent vent flow rate(s) or liquid flow rate as indicated in the Main Control Room.

NOTE

If instrumentation is inoperable or not available, flow rates may be estimated based on operations experience for the initial calculations.

3.7.3 Meteorological conditions within the ten mile EPZ as indicated by the plant meteorological tower. Parameters needed include wind direction, wind speed and an indication of atmospheric stability, (e.g. temperature change with height above the ground (ΔT)). These parameters are indicated in the Main Control Room.

4.0 PROCEDURE

4.1 Dose Projection for Airborne Release

4.1.1 Obtain a copy of "Attachment 1" and record the data as required.

NOTE

If a specific item of data is not available, refer to other options listed in section 4.1.10.

4.1.2 Set up the Printer for operation as follows:

- a. Turn on-off switch to "ON".
- b. Place Mode switch to "MAN".
- c. Place the intensity switch to the mid position.

NOTE

Printer can be powered by either self contained battery (approximately 4 hours continuous use), or by the A/C battery power supply. Printer must be on!

NOTE: Ensure that calculator keyboard overlay is installed.

4.1.3 Turn on calculator by depressing the "ON" button. Check the display, if the word(s) "ALPHA" and/or "PRGM" appear in display go to Step 4.1.4, otherwise proceed to Step 4.1.5.

4.1.4 The ALPHA and PRGM functions must be cleared prior to performing dose calculations.

- a. To clear the ALPHA function, depress the "ALPHA" Key. (ALPHA in the display should disappear.)
- b. To clear the PRGM function, depress the "PRGM" Key. (PRGM in the display should disappear.)

4.1.5 Check the display for the word USER, if it appears in display proceed to Step 4.1.6. If not in display, depress the "USER" Key until word appears.

4.1.6 Meteorology Sub-Routine

- a. Depress the MET Key. (A)
- b. Key in the wind speed in miles per hour (mph) from the 10m (30') sensor; push the "R/S" Key.
- c. Key in the wind direction in degrees, from the 10m (30') sensor; push the "R/S" Key.
- d. The Calculator now provides for an option. The preferred method is Method #1, (if delta T value is not available see section 4.1.10.) Key in 1; push the "R/S" Key.
- e. Key in the delta T temperature in Degrees Fahrenheit; push the "R/S" Key.

NOTE

The "CHS" Key is used to input negative values. Enter the numerical value then push the "CHS" Key.

- f. For record purpose the calculator asks for Release Point, enter the appropriate number followed by the "R/S" Key.

- | | | |
|----------------------|---|---|
| 1. Main Plant Vent | = | 1 |
| 2. Radwaste Building | = | 2 |
| 3. Fuel Building | = | 3 |

- g. Key in the flow rate of the release point in CFM, push the "R/S" Key.

- h. The calculator prints out the Stability Class, and a Table of Xu/Q values for the exclusion area boundary (EAB) and 1 to 10 miles.
- i. "Press Key" should appear in the display.

4.1.7 Release Rate Sub-Routine

- a. Press the "REL" Key (B)
- b. The calculator provides for 2 options, the following steps describe the initial method to be used and then the preferred method that should be used when Chemistry results of the release are available.
- c. Enter the Noble Gas Release Rate in Ci/sec; push the "R/S" Key.
- d. The calculator will now print the Noble Gas Release Rate in Ci/sec and the Iodine Release Rate in Ci/sec.

The above method assumes a 1000:1 Noble Gas to Iodine ratio. Verification by Chemistry of the actual Iodine Release Rate should be done as soon as possible. Use the following method to adjust the release rate, based on Chemistry results.

- e. Push the "REL" Key (B)
- f. Enter the vent concentration of gross noble gases (CONC NG) from a grab sample analysis in uCi/cc, then press "R/S."
- g. Enter vent concentration of gross radioiodine (CONC I) in uCi/cc, then press "R/S."

NOTE

To key in the value of 1×10^{-6} you would key in "1", then the "EEX", then the "CHS" Key, then the "6".

4.1.8 Dose Rate Sub-Routine

- a. Press the "DOSE" Key (c).
- b. Enter the Time in hours since the Rx has been shut down, push "R/S" Key.
- c. Enter the anticipated expected hours of duration of the release (if unknown, enter the value of 8); push the "R/S" Key.

- d. The calculator now calculates the dose rate (mRem/hr) and projected dose (Rems) based on the Data in the Meteorology and Release Rate Subroutines and time since Rx S/D, and release duration estimate.
- e. The values printed in the tables for Thyroid and Whole Body doses should be used to prepare recommendations for protective actions as described in EIP-2-007 (Ref. 2.3).

4.1.9 The projected doses are based on the information in all three subroutines. If data changes, enter the appropriate subroutine, key in the old and new data as appropriate and then enter the dose subroutine which will generate new tables based on the current information in the calculator.

NOTE

If for any reason the calculator will not function go to Attachment 2 and use the manual-manual method for dose calculation.

4.1.10 Alternate options in the calculator.

- a. If delta T (150-30 ft) is not available, the other two options are described below.
- b. If 2 is selected, enter sigma-theta (degrees) and "R/S".
- c. If 3 is selected, enter DAY/NITE 1, 2?. If DAY (1) is selected, the calculator will ask SOLAR RAD 1, 2, 3?

1 = incoming strong, 2 = incoming moderate, 3 = incoming slight
- d. If NITE (2) is selected, the calculator will ask for CLD/NESS PRCNT (percent of cloudiness). Enter percent cloudiness and "R/S".
- e. Key in PT OF RLS (point of release) as follows:

1 = Main Stack Exhaust Vent, 2 = Radwaste Building Vent, 3 = Fuel Handling Building Vent

then press "R/S".
- f. Enter flow rate of release point in CFM; then "R/S"

The calculator will then print out the CHI u/Q ($m^{-1} sec^{-1}$).

4.1.11 Field Survey Sub-Routine

N/A	N/A	EIP-2-024	REV 0	PAGE 6 OF 28
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NOTE

This module determines release rate by back calculating field readings to release point.

- a. Convert field team estimated iodine concentration at the point of interest to dose by multiplying the iodine concentration in uCi/cc by the appropriate dose conversion factor from the following table:

<u>Time after Reactor shutdown hrs</u>	<u>Iodine Dose Conversion Factor; mRem/uCi/cc (1 hour)</u>
2.0	1.9×10^{-9}
2.5	2.2×10^{-9}
3.0	2.8×10^{-9}
3.5	3.2×10^{-9}
4.0	3.6×10^{-9}
4.5	3.7×10^{-9}
6.5	4.2×10^{-9}
8.0	4.4×10^{-9}
10.0	4.6×10^{-9}
16.0	5.4×10^{-9}
32.0	6.9×10^{-9}

- b. Press the Field Survey Key (D).
- c. Enter field reading of dose rate whole body (D RATE WB) in mRem/hr then press "R/S".
- d. Key in radioiodine dose rate (D RATE THY) in mRem/hr (from a. above) then press "R/S".
- e. Enter the distance from the plant in miles (DISTANCE) then press "R/S".
- f. Key in the time since reactor shutdown (TIME) in hours, then press "R/S".
- g. Calculator will now print out the Noble Gas and Iodine release rate in Ci/sec based on dose rate readings in the field and MET data in memory.

4.2 Dose Projection for Liquid Release

- 4.2.1 This method is used to determine the need for recommending protective actions due to release of liquid, via the Cooling Tower Blowdown Line.
- 4.2.2 This go-no-go comparison is based upon the EPA Protective Action Guide of 0.5 Rem per ingestion.
- 4.2.3 Assign a chemistry technician to draw a sample of cooling tower blowdown in a one liter bottle. After the sample has been drawn, ensure the bottle is wrapped in plastic to prevent the spread of contamination.
- 4.2.4 Have the technician measure the activity of the sample using an RM-14 with an HP-210 probe (frisker), and report the count rate (cpm).
- 4.2.5 If the count rate is greater than 4.5×10^5 cpm, this indicates that the concentration in the river (assuming minimal dilution flow) may have exceeded the EPA recommended Preventive Action Level for ingestion.
 - a. Inform the Emergency Director to notify the State LOEP that restriction on use of the river water should be implemented.
 - b. Have chemistry perform an isotopic analysis of the sample.
 - c. Notify the Environmental Supervisor to implement appropriate environmental monitoring.
 - d. Re-evaluate the dose commitment based on chemistry results using the methodology in the Offsite Dose Calculation Manual (ODCM) (Reference 2.4).
- 4.2.6 If the count rate is less than 4.5×10^5 cpm refer to EIP-2-001 for appropriate emergency classification and notification.

ATTACHMENT 1

Wind Speed : u (30ft Level) _____

Wind Direction: 30ft Level (from) _____

Atmospheric Stability (150-30ft) Δ Temp. _____

Release Point (circle one)

- 1 - Main Plant Vent
- 2 - Radwaster Building
- 3 - Fuel Building

Release Point Flow Rate _____

CFM

Release Point Noble Gas Release Rate _____

Ci/sec

ATTACHMENT #2

Manual Calculation of Off Site Doses from Gaseous Releases

1.0 Meteorological and Release Conditions

Obtain a copy of the Dose Projection Worksheet-A. Record the date and time.

1.1 Obtain wind speed (item 1) for 30ft. level from either the Control Room or local tower readouts. Convert the wind speed in miles per hour to meters per second.

1.2 Obtain the wind direction (item 2) from the Control Room or local tower readouts.

1.3 Determine atmospheric stability class (item 3 a, b) using one of the following methods:

1.3.1 Obtain the 150-30ft temperature difference (item 3a) from the Control Room or local tower readout. Choose the correct stability class from the following table.

<u>Delta-T (F)</u> <u>150-30 ft.</u>	<u>Stability</u> <u>Class</u>	<u>Atmospheric</u> <u>Condition</u>
-1.22 or less	A	Extremely Unstable
-1.22 to -1.08	B	Moderately Unstable
-1.09 to -0.95	C	Slightly Unstable
-0.96 to -0.31	D	Neutral
-0.32 to 0.96	E	Slightly Stable
0.96 to 2.5	F	Moderately Stable
Greater than 2.5	G	Extremely stable

1.3. If delta-T is not available, choose the stability class using the 30ft wind speed from item 1 and the following table:

<u>30ft.</u> <u>Wind</u> <u>Speed</u> <u>(mph)</u>	<u>DAY TIME</u>			<u>NIGHT</u>	
	<u>Incoming</u> <u>Strong</u>	<u>Solar</u> <u>Moderate</u>	<u>Radiation</u> <u>Slight</u>	<u>Degree of Cloudiness</u> <u>≤ 50%</u>	<u>> 50%</u>
4	A	A-B	B		
4-6	A-B	B	C	E	F
7-10	B	B-C	C	D	E
11-13	C	C-D	D	D	D
14	C	D	D	D	D

Note: The degree of cloudiness is defined as that fraction of the sky above the local apparent horizon that is covered by clouds. The neutral Class D should be assumed for heavy overcast conditions during day or night.

- 1.4 Select the point of release (item 4a)
- 1.5 Record the vent flow rate identified in item 4b in cubic feet per minute.
- 1.6 Select the Isopleth Overlay which represents the stability class (item 3). Record the selection on item 5. Place the Isopleth Overlay on EPZ map.

2.0 Determination of Release Rates

The release rate will be determined from the concentration of radioactive materials and the vent flow rate. Obtain a copy of the Dose Projection Worksheet-B. There are two ways of obtaining the release rate 1) from the DRMS output or 2) from grab sample analyses.

Note: Obtain isotopic analysis from vent sample as early as possible, in accordance with COP-1003, Post Accident Sampling of Gaseous Effluents.

- 2.1 If sample results are not available, obtain the gross noble gaseous release rate (Ci/sec) from the DRMS computer terminal and record on (Worksheet B, Item 2.1).
- 2.2 Divide the Noble Gas Release rate by 1000 to determine the Iodine Release rate and record in 2.1.2.
- 2.3 If sample results are available, then determine release rates as follows: Record the vent gross noble gas concentration (uCi/cc) on Worksheet-B (item 2.2a). Record the gross radioiodine concentration (uCi/cc) on Worksheet-B (item 2.2b).

- 2.4 Calculate the release rates for noble gases and radioiodines on Worksheet-B as follows:

$$Q = X \cdot F \cdot 4.72 \times 10^{-4}$$

Q = The release rate of noble gas (NG) or radioiodines (I) (Ci/sec).

X = The vent concentration of noble gases (NG).

F = The vent flow rate (CFM).

4.72×10^{-4} = The product of two conversion factors: 472 cc/sec/CFM and $\times 10^{-6}$ Ci/uCi

3.0 Offsite Dose Projections

The meteorological and release conditions, along with the release rates, will be used to determine noble gas and radioiodine concentrations at a point of interest (POI). The concentrations will then be compared with the time since shutdown to derive dose rates.

3.1 Exclusion Area Boundary (EAB) Dose Projection

3.1.1 From Table 1 select X_u/Q for the exclusion area boundary for the Stability Class on Worksheet-A item 3c, or from the Isopleth Overlay. Record on Worksheet-C.

3.1.2 To determine the noble gas concentration at this point, multiply the noble gas release rate from Worksheet-B by the selected X_u/Q .

3.1.3 Enter the wind speed (u) from item 1 on Worksheet-A on Worksheet-C.

3.1.4 Divide the result of step 3.1.2 by the wind speed in meters per second, to obtain the concentration at the EAB.

$$X_{NG} = Q_{NG} (X_u/Q) / u$$

X_{NG} = Noble gas concentration at EAB (uCi/cc)

Q_{NG} = Noble gas release rate from Worksheet-B (Ci/sec)

(X_u/Q) = Atmospheric dispersion coefficient at the Exclusion Area Boundary or point of the highest likely concentration ($m^{-1} sec^{-1}$).

u = Wind speed at point of release (m/sec).

3.1.5 To determine the dose rate due to noble gas concentration, select the gamma factor (f_{gamma}) from Table below for the closest time since shutdown.

WHOLE BODY DOSE FACTORS

<u>Time Since Shutdown (hrs)</u>	<u>(f_{gamma}) (mRem/hr/uCi/cc)</u>
2.0	3.87×10^5
2.5	3.00×10^5
3.0	2.50×10^5
3.5	2.20×10^5
4.0	1.83×10^5
4.5	1.70×10^5
6.5	1.40×10^5
8.0	1.04×10^5
10.0	9.40×10^4
16.0	5.29×10^4
32.0	3.70×10^4

- 3.1.6 Multiply the noble gas concentration by the (f_{gamma}) factor. The result is in mRem/hr.

$$X_{NG} \cdot (f_{\gamma}) = DR/WB \text{ (mRem/hr)}$$

- 3.1.7 To determine the one hour child thyroid dose commitment, the radioiodine concentration must first be calculated. Multiply the radioiodine release rate by the exclusion area Xu/Q. Divide the result by the wind speed in meters per second.

$$X_I = Q_I \cdot (Xu/Q) / u$$

$$X_I = \text{Radioiodine concentration at EAB (uCi/cc).}$$

$$Q_I = \text{Radioiodine release rate from Worksheet-B (Ci/sec).}$$

$$(Xu/Q) = \text{Atmospheric dispersion coefficient at the Exclusion Area Boundary or point of highest likely concentration (m}^{-2}\text{).}$$

$$u = \text{Wind speed at the point of release (m/sec).}$$

- 3.1.8 To determine the one hour child thyroid dose commitment due to radioiodine concentration, select the child thyroid factor (f_{CT}) from Table below.

CHILD THYROID DOSE FACTORS

Time Since Shutdown (hrs)	f_{CT} (mRem/uCi/cc)
2.0	1.9×10^9
2.5	2.2×10^9
3.0	2.8×10^9
3.5	3.2×10^9
4.0	3.6×10^9
4.5	3.7×10^9
6.5	4.2×10^9
8.0	4.4×10^9
10.0	4.6×10^9
16.0	5.4×10^9
32.0	6.9×10^9

- 3.1.9 Multiply the radioiodine concentration by the child thyroid factor. The results are for child thyroid one hour inhalation exposure.

$$X_I \cdot f_{CT} = DR_{CT} \quad (\text{mRem/CT for 1 hour})$$

3.2 Dose at any other Distance

For protective action recommendations, dose projections will be calculated at the Exclusion Area Boundary, 2, 5, and 10 miles. This step will allow dose projections to be performed at any distance from the EAB.

- 3.2.1 Select the Xu/Q for the distance of interest from:

Table 1 - at selected distances, for appropriate Stability Class.

Isopleth Overlay - for any point of interest.

- 3.2.2 Divide the Xu/Q at the distance of interest by the Xu/Q from step 3.1. Multiply the result by the dose rate derived in Step 3.1. The result is the dose rate at the distance of interest.

$$DR_{POI} = DR_O \frac{(Xu/Q)_{POI}}{(Xu/Q)}$$

DR_{POI} = The dose rate at the point of interest (mRem/hr, whole body; or mRem, child thyroid for one hour).

DR_O = The dose rate derived in step 3.1 (mRem/hr, whole body; or mRem, child thyroid for one hour).

4.0 Determination of Offsite Dose

In Step 3.2, dose rate projections were calculated. To formulate protective action recommendations, dose projections must be calculated for the Exclusion Area Boundary, 2, 5, and 10 miles. Obtain a copy of Worksheet-D and perform calculations on the Worksheet.

4.1 Contact the Emergency Director to determine the duration of release (hrs). If no duration of release can be determined, use the default value of 8 hours.

4.2 Determine the whole body dose and child thyroid dose as follows:

$$D(\text{Rem}) = DR \cdot t/1000$$

D = Dose for the duration of release (Rem).

DR = The whole body dose rate (mRem/hr) or the one hour child thyroid dose (mRem).

t = Duration of release in hours.

1000 = Conversion Factor (mRem/Rem)

4.3 Repeat calculation of 2, 5, and 10 miles along centerline.

DOSE PROJECTION WORKSHEET-B
DETERMINATION OF RELEASE RATES

2.1 DRMS Release Rate (if applicable)

2.1.1 Noble Gas _____ Ci/sec

2.1.2 Radioiodine _____ Ci/sec

2.2 Vent Gross Concentrations (if available)

2.2.a Noble Gas:

$$\begin{array}{ccccccc} X \text{ (VNG)} & \times & F & \times & 4.72 \times 10^{-4} & = & Q(\text{NG}) \\ \hline \text{uCi/cc} & \times & \text{CFM} & \times & 4.72 \times 10^{-4} & = & \text{_____ Ci/sec} \end{array}$$

2.2.b Radioiodine:

$$\begin{array}{ccccccc} X \text{ (VI)} & \times & F & \times & 4.72 \times 10^{-4} & = & Q(\text{I}) \\ \hline \text{uCi/cc} & \times & \text{CFM} & \times & 4.72 \times 10^{-4} & = & \text{_____ Ci/sec} \end{array}$$

Time of Calculation: _____

Date of Calculation: _____

Name/Title: _____ / _____

DOSE PROJECTION WORKSHEET-C

OFFSITE DOSE RATE PROJECTIONS

3.1 Exclusion Area Boundary or (Location) _____

Noble Gas/Whole Body:

$$\begin{aligned} Q_{NG} & \times (Xu/Q)_O / u = X_{NG} \\ \text{Ci/sec} & \times \text{_____} / \text{m/sec} = \text{uCi/cc} \\ X_{NG} & \times (f_{\gamma}) = DR_{WB} \text{ (mRem/hr)} \\ \text{uCi/cc} & \times \text{_____} = \text{(mRem/hr)}_{WB} \end{aligned}$$

Radioiodine Child Thyroid:

$$\begin{aligned} Q_I & \times (Xu/Q)_O / u = X_I \\ \text{Ci/sec} & \times \text{_____} / \text{m/sec} = \text{uCi/cc} \\ X_I & \times (f_{CT}) = DR_{CT} \text{ (one hour mRem)}_{CT} \\ \text{uCi/cc} & \times \text{_____} = \text{_____ (one hour mRem)}_{CT} \end{aligned}$$

3.2 POI Dose Rate Projection

Location _____

Whole Body:

$$\begin{aligned} ((Xu/Q)_{POI} / (Xu/Q)_O) \times DR_O & = DR_{POI} \\ (\text{_____} / \text{_____}) \times \text{_____} & = \text{(mRem/hr)}_{WB} \end{aligned}$$

Child Thyroid:

$$\begin{aligned} ((Xu/Q)_{POI} / (Xu/Q)_O) \times DR_O & = DR_{POI} \\ (\text{_____} / \text{_____}) \times \text{_____} & = \text{(one hour mRem)}_{CT} \end{aligned}$$

DOSE PROJECTION WORKSHEET-C
OFFSITE DOSE RATE PROJECTIONS
 (continued)

Location _____

Whole Body:

$$\begin{aligned} (X_u/Q)_{POI} & / (X_u/Q)_O \times DR_O = DR_{POI} \\ (\quad) & / \quad \times \quad = (mRem/hr)_{WB} \end{aligned}$$

Child Thyroid:

$$\begin{aligned} (X_u/Q)_{POI} & / (X_u/Q)_O \times DR_O = DR_{POI} \\ (\quad) & / \quad \times \quad = (one\ hour\ mRem)_{CT} \end{aligned}$$

Location _____

Whole Body:

$$\begin{aligned} (X_u/Q)_{POI} & / (X_u/Q)_O \times DR_O = DR_{POI} \\ (\quad) & / \quad \times \quad = (mRem/hr)_{WB} \end{aligned}$$

Child Thyroid:

$$\begin{aligned} (X_u/Q)_{POI} & / (X_u/Q)_O \times DR_O = DR_{POI} \\ (\quad) & / \quad \times \quad = (one\ hour\ mRem)_{CT} \end{aligned}$$

Time of Calculation: _____

Date of Calculation: _____

Name/Title: _____/_____

DOSE PROJECTION WORKSHEET-D

DETERMINATION OF OFFSITE DOSES

4.1 Dose Calculation

Location _____

Whole Body:

$$(\text{DR} \times t) / 1000 = D_{WB}$$

$$(\text{mRem/hr} \times \text{hours}) / 1000 = \text{Rem}_{WB}$$

Child Thyroid:

$$(\text{DR} \times t) / 1000 = D_{CT}$$

$$(\text{mRem/hr} \times \text{hours}) / 1000 = \text{Rem}_{CT}$$

Location _____

Whole Body:

$$(\text{DR} \times t) / 1000 = D_{WB}$$

$$(\text{mRem/hr} \times \text{hours}) / 1000 = \text{Rem}_{WB}$$

Child Thyroid:

$$(\text{DR} \times t) / 1000 = D_{CT}$$

$$(\text{ } \times \text{ }) / 1000 = \text{Rem}_{CT}$$

Time of Calculation: _____

Date of Calculation: _____

Name/Title: _____/_____

DOSE PROJECTION WORKSHEET-D
DETERMINATION OF OFFSITE DOSES
 (continued)

Location _____

Whole Body:

$$(\quad DR \quad \times \quad t \quad) \quad / \quad 1000 \quad = \quad D_{WB}$$

$$(\quad \frac{mRem}{hr} \quad \times \quad \frac{\quad}{hours} \quad) \quad / \quad 1000 \quad = \quad \frac{\quad}{\quad} Rem_{WB}$$

Child Thyroid:

$$(\quad DR \quad \times \quad t \quad) \quad / \quad 1000 \quad = \quad D_{CT}$$

$$(\quad \frac{mRem}{hr} \quad \times \quad \frac{\quad}{hours} \quad) \quad / \quad 1000 \quad = \quad \frac{\quad}{\quad} Rem_{CT}$$

Location _____

Whole Body:

$$(\quad DR \quad \times \quad t \quad) \quad / \quad 1000 \quad = \quad D_{WB}$$

$$(\quad \frac{mRem}{hr} \quad \times \quad \frac{\quad}{hours} \quad) \quad / \quad 1000 \quad = \quad \frac{\quad}{\quad} Rem_{WB}$$

Child Thyroid:

$$(\quad DR \quad \times \quad t \quad) \quad / \quad 1000 \quad = \quad D_{CT}$$

$$(\quad \frac{mRem}{hr} \quad \times \quad \frac{\quad}{hours} \quad) \quad / \quad 1000 \quad = \quad \frac{\quad}{\quad} Rem_{CT}$$

Time of Calculation: _____

Date of Calculation: _____

Name/Title: _____ / _____

STABILITY CLASS A

mile

$\frac{X_u}{Q}$

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.251E-03	0.737E-04	0.270E-04	0.121E-04	0.626E-05	0.337E-05	0.190E-05	0.112E-05	0.684E-06	0.443E-06
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.300E-06	0.210E-06	0.151E-06	0.112E-06	0.842E-07	0.668E-07	0.634E-07	0.604E-07	0.577E-07	0.553E-07
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.531E-07	0.510E-07	0.492E-07	0.474E-07	0.458E-07	0.443E-07	0.429E-07	0.416E-07	0.404E-07	0.393E-07
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.383E-07	0.373E-07	0.365E-07	0.357E-07	0.349E-07	0.341E-07	0.333E-07	0.323E-07	0.314E-07	0.307E-07
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.301E-07	0.295E-07	0.289E-07	0.283E-07	0.278E-07	0.273E-07	0.268E-07	0.263E-07	0.258E-07	0.254E-07
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.250E-07	0.245E-07	0.241E-07	0.238E-07	0.234E-07	0.230E-07	0.227E-07	0.223E-07	0.220E-07	0.217E-07
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.214E-07	0.211E-07	0.208E-07	0.205E-07	0.203E-07	0.200E-07	0.197E-07	0.195E-07	0.192E-07	0.190E-07
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.188E-07	0.185E-07	0.183E-07	0.181E-07	0.179E-07	0.177E-07	0.175E-07	0.173E-07	0.171E-07	0.169E-07
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.168E-07	0.166E-07	0.164E-07	0.162E-07	0.161E-07	0.159E-07	0.158E-07	0.156E-07	0.155E-07	0.153E-07
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.152E-07	0.150E-07	0.149E-07	0.147E-07	0.146E-07	0.145E-07	0.144E-07	0.142E-07	0.141E-07	0.140E-07

STABILITY CLASS B

mile

Xu
Q

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.401E-03	0.152E-03	0.750E-04	0.434E-04	0.273E-04	0.180E-04	0.124E-04	0.887E-05	0.655E-05	0.499E-05
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.390E-05	0.311E-05	0.252E-05	0.207E-05	0.172E-05	0.144E-05	0.122E-05	0.104E-05	0.900E-06	0.783E-05
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.680E-06	0.577E-06	0.493E-06	0.423E-06	0.366E-06	0.318E-06	0.278E-06	0.245E-06	0.216E-06	0.192E-06
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.171E-06	0.152E-06	0.137E-06	0.123E-06	0.111E-06	0.101E-06	0.913E-07	0.831E-07	0.758E-07	0.693E-07
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.636E-07	0.584E-07	0.537E-07	0.496E-07	0.458E-07	0.424E-07	0.393E-07	0.364E-07	0.338E-07	0.321E-07
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.316E-07	0.311E-07	0.306E-07	0.301E-07	0.296E-07	0.292E-07	0.288E-07	0.284E-07	0.280E-07	0.276E-07
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.272E-07	0.268E-07	0.265E-07	0.261E-07	0.258E-07	0.254E-07	0.251E-07	0.248E-07	0.245E-07	0.242E-07
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.293E-07	0.237E-07	0.234E-07	0.231E-07	0.229E-07	0.226E-07	0.224E-07	0.221E-07	0.219E-07	0.217E-07
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.214E-07	0.212E-07	0.210E-07	0.208E-07	0.206E-07	0.204E-07	0.202E-07	0.200E-07	0.198E-07	0.196E-07
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.194E-07	0.193E-07	0.191E-07	0.189E-07	0.188E-07	0.186E-07	0.184E-07	0.183E-07	0.181E-07	0.180E-07

STABILITY CLASS C

mile	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Xu	0.550E-03	0.258E-03	0.143E-03	0.907E-04	0.628E-04	0.462E-04	0.355E-04	0.281E-04	0.229E-04	0.190E-04
Q	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
	0.161E-04	0.138E-04	0.120E-04	0.106E-04	0.940E-05	0.842E-05	0.760E-05	0.691E-05	0.631E-05	0.580E-05
	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
	0.535E-05	0.495E-05	0.460E-05	0.429E-05	0.401E-05	0.375E-05	0.352E-05	0.331E-05	0.312E-05	0.294E-05
	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
	0.278E-05	0.263E-05	0.249E-05	0.236E-05	0.224E-05	0.213E-05	0.203E-05	0.194E-05	0.185E-05	0.177E-05
	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
	0.170E-05	0.163E-05	0.156E-05	0.150E-05	0.145E-05	0.139E-05	0.134E-05	0.130E-05	0.125E-05	0.121E-05
	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
	0.117E-05	0.113E-05	0.109E-05	0.106E-05	0.103E-05	0.995E-06	0.964E-06	0.935E-06	0.908E-06	0.882E-06
	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
	0.857E-06	0.834E-06	0.812E-06	0.792E-06	0.773E-06	0.755E-06	0.737E-06	0.721E-06	0.704E-06	0.690E-06
	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
	0.675E-06	0.661E-06	0.648E-06	0.635E-06	0.623E-06	0.611E-06	0.599E-06	0.588E-06	0.577E-06	0.566E-06
	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
	0.556E-06	0.545E-06	0.535E-06	0.526E-06	0.516E-06	0.507E-06	0.498E-06	0.489E-06	0.480E-06	0.472E-06
	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
	0.463E-06	0.455E-06	0.447E-06	0.439E-06	0.432E-06	0.424E-06	0.417E-06	0.409E-06	0.402E-06	0.395E-06

STABILITY CLASS D

mile

Xu
Q

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.106E-02	0.462E-03	0.309E-03	0.217E-03	0.161E-03	0.125E-03	0.997E-04	0.820E-04	0.690E-04	0.591E-04
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.513E-04	0.452E-04	0.401E-04	0.360E-04	0.325E-04	0.296E-04	0.271E-04	0.249E-04	0.230E-04	0.213E-04
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.198E-04	0.185E-04	0.173E-04	0.163E-04	0.153E-04	0.145E-04	0.137E-04	0.129E-04	0.123E-04	0.117E-04
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.111E-04	0.106E-04	0.101E-04	0.968E-05	0.926E-05	0.888E-05	0.853E-05	0.819E-05	0.788E-05	0.759E-05
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.732E-05	0.706E-05	0.682E-05	0.660E-05	0.638E-05	0.618E-05	0.599E-05	0.581E-05	0.564E-05	0.548E-05
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.532E-05	0.517E-05	0.504E-05	0.490E-05	0.477E-05	0.465E-05	0.454E-05	0.443E-05	0.432E-05	0.422E-05
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.412E-05	0.492E-05	0.393E-05	0.384E-05	0.376E-05	0.368E-05	0.360E-05	0.353E-05	0.345E-05	0.338E-05
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.332E-05	0.325E-05	0.319E-05	0.312E-05	0.307E-05	0.301E-05	0.295E-05	0.290E-05	0.285E-05	0.280E-05
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.275E-05	0.270E-05	0.265E-05	0.261E-05	0.257E-05	0.253E-05	0.248E-05	0.245E-05	0.241E-05	0.327E-05
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.233E-05	0.230E-05	0.227E-05	0.223E-05	0.220E-05	0.217E-05	0.214E-05	0.211E-05	0.208E-05	0.205E-05

STABILITY CLASS E

mile

Xu
Q

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TABLE 1

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.208E-02	0.621E-03	0.464E-03	0.352E-03	0.274E-03	0.219E-03	0.179E-03	0.150E-03	0.128E-03	0.111E-03
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.973E-04	0.864E-04	0.773E-04	0.698E-04	0.635E-04	0.581E-04	0.535E-04	0.494E-04	0.459E-04	0.428E-04
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.400E-04	0.375E-04	0.353E-04	0.333E-04	0.315E-04	0.298E-04	0.283E-04	0.270E-04	0.257E-04	0.245E-04
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.235E-04	0.225E-04	0.215E-04	0.207E-04	0.199E-04	0.191E-04	0.185E-04	0.178E-04	0.172E-04	0.166E-04
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.161E-04	0.156E-04	0.151E-04	0.146E-04	0.142E-04	0.138E-04	0.134E-04	0.130E-04	0.127E-04	0.123E-04
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.120E-04	0.117E-04	0.114E-04	0.111E-04	0.108E-04	0.106E-04	0.103E-04	0.101E-04	0.984E-05	0.962E-05
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.940E-05	0.919E-05	0.899E-05	0.880E-05	0.861E-05	0.843E-05	0.826E-05	0.809E-05	0.793E-05	0.778E-05
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.763E-05	0.749E-05	0.735E-05	0.722E-05	0.709E-05	0.697E-05	0.685E-05	0.674E-05	0.663E-05	0.653E-05
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.643E-05	0.634E-05	0.624E-05	0.616E-05	0.607E-05	0.599E-05	0.591E-05	0.584E-05	0.576E-05	0.569E-05
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.562E-05	0.555E-05	0.549E-05	0.542E-05	0.536E-05	0.530E-05	0.523E-05	0.517E-05	0.511E-05	0.505E-05

STABILITY CLASS F

mile

Xu
Q

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.491E-02	0.149E-02	0.744E-03	0.557E-03	0.469E-03	0.397E-03	0.340E-03	0.294E-03	0.257E-03	0.227E-03
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.202E-03	0.182E-03	0.165E-03	0.150E-03	0.138E-03	0.127E-03	0.118E-03	0.110E-03	0.103E-03	0.964E-04
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.907E-04	0.856E-04	0.810E-04	0.768E-04	0.730E-04	0.695E-04	0.664E-04	0.634E-04	0.607E-04	0.502E-04
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.559E-04	0.538E-04	0.517E-04	0.499E-04	0.481E-04	0.464E-04	0.449E-04	0.434E-04	0.421E-04	0.408E-04
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.395E-04	0.384E-04	0.373E-04	0.362E-04	0.352E-04	0.343E-04	0.334E-04	0.325E-04	0.317E-04	0.309E-04
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.302E-04	0.295E-04	0.288E-04	0.282E-04	0.275E-04	0.269E-04	0.264E-04	0.258E-04	0.253E-04	0.248E-04
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.243E-04	0.238E-04	0.234E-04	0.230E-04	0.225E-04	0.221E-04	0.217E-04	0.214E-04	0.210E-04	0.207E-04
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.203E-04	0.200E-04	0.197E-04	0.194E-04	0.191E-04	0.188E-04	0.185E-04	0.182E-04	0.179E-04	0.177E-04
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.174E-04	0.172E-04	0.169E-04	0.167E-04	0.165E-04	0.163E-04	0.160E-04	0.158E-04	0.156E-04	0.154E-04
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.152E-04	0.150E-04	0.148E-04	0.147E-04	0.145E-04	0.143E-04	0.141E-04	0.140E-04	0.138E-04	0.137E-04

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TABLE 1

STABILITY CLASS G

mile

Ku
Q

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.114E-01	0.343E-02	0.174E-02	0.109E-02	0.756E-03	0.605E-03	0.550E-03	0.500E-03	0.457E-03	0.418E-03
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.384E-03	0.355E-03	0.329E-03	0.305E-03	0.285E-03	0.266E-03	0.250E-03	0.235E-03	0.222E-03	0.209E-03
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.198E-03	0.188E-03	0.179E-03	0.171E-03	0.163E-03	0.156E-03	0.149E-03	0.143E-03	0.137E-03	0.132E-03
3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
0.127E-03	0.122E-03	0.118E-03	0.114E-03	0.110E-03	0.106E-03	0.103E-03	0.994E-04	0.964E-04	0.935E-04
4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
0.908E-04	0.882E-04	0.857E-04	0.834E-04	0.812E-04	0.791E-04	0.772E-04	0.753E-04	0.735E-04	0.717E-04
5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0
0.701E-04	0.685E-04	0.670E-04	0.656E-04	0.642E-04	0.629E-04	0.616E-04	0.604E-04	0.592E-04	0.581E-04
6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0
0.570E-04	0.560E-04	0.550E-04	0.540E-04	0.530E-04	0.521E-04	0.513E-04	0.504E-04	0.496E-04	0.488E-04
7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0
0.480E-04	0.473E-04	0.465E-04	0.458E-04	0.451E-04	0.445E-04	0.438E-04	0.432E-04	0.426E-04	0.420E-04
8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
0.414E-04	0.409E-04	0.403E-04	0.398E-04	0.393E-04	0.388E-04	0.383E-04	0.378E-04	0.373E-04	0.369E-04
9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0
0.364E-04	0.360E-04	0.356E-04	0.352E-04	0.348E-04	0.344E-04	0.340E-04	0.336E-04	0.332E-04	0.329E-04

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-025

PROCEDURE TITLE: OFFSITE DOSE CALCULATIONS - COMPUTER METHOD

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes
☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-4		<i>W. J. Adams 10/2/84</i>	
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: OFFSITE DOSE CALCULATIONS - COMPUTER METHOD

PROCEDURE NO. EIP-2-025

REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

DATE

[Signature]
Radiation Protection/Chemistry Representative

9-24-84

[Signature]
Plant Operations Representative

9-24-84

Claude E. Foster
Security Representative

9/24/84

[Signature]
Training Representative

9/24/84

[Signature]
Technical Staff Representative

9/24/84

Eddie R. Grant
Nuclear Licensing Representative

9-24-84

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Maintenance Representative

9/24/84

Recommended for Approval:

[Signature]
Supervisor - Emergency Planning

9-24-84

(LATERS)

PROCEDURE NO.: EIP-2-025

TITLE: OFFSITE DOSE CALC. -

REVISION NO.: 0

COMPUTER METHOD

The following is a list of "missing" and/or "tentative information" (i.e., LATERS) in this procedure. The department or section responsible for this procedure shall update it when the information becomes available.

LATER LOCATION
(Section/Step)

PAGE NO.

BRIEF
DESCRIPTION

Attachment 1

4

DRMS Calculation Method

OFFSITE DOSE CALCULATIONS - COMPUTER METHOD

TABLE OF CONTENTS

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3.0 GENERAL INFORMATION	2
4.0 PROCEDURE	2
ATTACHMENT 1 OFFSITE DOSE CALCULATIONS USING THE DIGITAL RADIATION MONITORING SYSTEM	4

(LATER)

1.0 PURPOSE

This procedure provides instructions for performing offsite dose calculations using the Digital Radiation Monitoring System (DRMS).

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-024, Offsite Dose Calculations - Manual Method
- 2.3 EIP-2-007, Protective Action Recommendation Guidelines

3.0 GENERAL INFORMATION

- 3.1 Offsite dose calculations shall be initiated anytime a Site Area Emergency or General Emergency is declared due to a radiological accident, or any other time the Emergency Director or Recovery Manager deems necessary.
- 3.2 The Shift Foreman is responsible for initial and follow-up offsite dose calculations until relieved by the Dose Assessment/Protective Actions Advisor in the TSC.
- 3.3 When the Emergency Operations Facility (EOF) is operational, the Dose Assessment/Protective Actions Advisor shall brief the Chemistry Advisor (in the EOF) on dose assessment activities and protective action recommendations and relocate to the EOF. The Chemistry Advisor shall perform dose assessment activities and be responsible for protective action recommendations while the Dose Assessment/Protective Actions Advisor is enroute.
- 3.4 All dose calculations shall be performed using the DRMS, offsite dose calculation mode, unless the terminal is inoperable. If the terminal is inoperable, implement EIP-2-024, Offsite Dose Calculation - Manual Method (Ref. 2.2).
- 3.5 Offsite radiation exposure rates shall be used to predict actual or potential exposures to individuals in the general public and calculated values shall be used to recommend protective actions for the general public in accordance with EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.3).
- 3.6 Assessment of offsite radiation exposure rates and integrated doses should be completed initially within approximately fifteen minutes of the declaration of a Site Area Emergency or General Emergency, when declarations are based on a radiological (core damage) emergency, and follow-up calculations should be completed approximately every thirty minutes following initial projections or sooner if release rates change significantly.

4.0 PROCEDURE

4.1 The Dose Assessment/Protective Actions Advisor shall:

- 4.1.1 Initiate DRMS Offsite Dose Calculations using Attachment 1.
- 4.1.2 Complete Attachment 7 to EIP-2-007, Protective Action Recommendation Guidelines (Ref. 2.3), and give it to the Radiation Protection Coordinator, or the Emergency Director (TSC), or the Radiation Protection Advisor, or Recovery Manager (EOF) as soon as possible.
- 4.1.3 Repeat calculations approximately every 30 minutes or whenever release rates change significantly.

END

ATTACHMENT 1 OFFSITE DOSE CALCULATIONS USING THE DIGITAL RADIATION MONITORING SYSTEM

(LATER)

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-026

PROCEDURE TITLE: EVACUATION

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

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RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

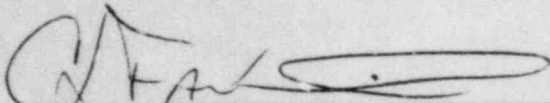
TITLE: EVACUATION

PROCEDURE NO. EIP-2-026

REV. 0

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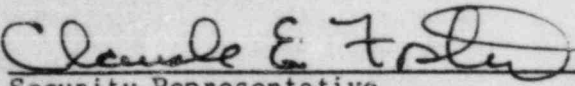
DATE


Radiation Protection/Chemistry Representative

9-24-84


Plant Operations Representative

9-24-84


Security Representative

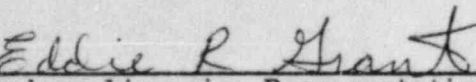
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Training Representative

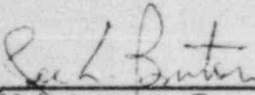
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Technical Staff Representative

9/24/84

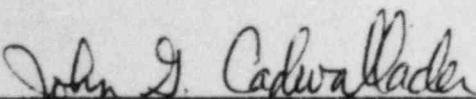

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

EVACUATION

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1.0 PURPOSE

This procedure provides the steps to be followed if a Limited, Building, Protected Area, or Owner Controlled Area Evacuation becomes necessary.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 Code of Federal Regulations, Title 10, Part 20 (10 CFR 20)
- 2.3 RPP-0018, Personnel Decontamination
- 2.4 EIP-2-027, Personnel Accountability
- 2.5 EIP-2-009, Medical Emergencies
- 2.6 EIP-2-008, Search and Rescue
- 2.7 RPP-0019, Decontamination of Areas, Tools and Equipment
- 2.8 RPP-0038, Release of Areas, Tools and Equipment

3.0 GENERAL INFORMATION

- 3.1 A **Limited Evacuation** is defined as the withdrawal of personnel from a room or area onsite.
- 3.2 A **Building Evacuation** is defined as the withdrawal of personnel from an affected building within the Protected Area.
- 3.3 A **Protected Area Evacuation** is defined as the withdrawal of all non-essential personnel from the Protected Area. Non-essential personnel are defined as all station personnel not assigned to the emergency organization and any contractor personnel or visitors onsite at the time.
- 3.4 An **Owner Controlled Area Evacuation** is defined as the withdrawal of all non-essential personnel from the entire owner controlled area. This area extends from the Mississippi River to Route 61, and from Police Jury Road on the South to the North boundary of the River Bend Site property (see Figure 1).
- 3.5 A Limited Evacuation will be implemented if any of the following occur during a declared emergency:
 - 3.5.1 Unscheduled area radiation monitor high level alarms are received.
 - 3.5.2 Unevaluated airborne activities in excess of the Maximum Permissible concentrations (MPCs) as specified in Appendix B to 10 CFR 20 (Ref. 2.2) are encountered.
 - 3.5.3 Excessive surface contamination or large quantities of radioactive liquids are spilled.
 - 3.5.4 Other emergency conditions occur, such as fire or toxic gas encounters that may endanger human health or safety as determined by the Emergency Director.

- 3.6 A Building Evacuation will be implemented if either of the following occur:
- 3.6.1 Criteria for a Limited Evacuation are exceeded in two or more large operating areas within a single building.
 - 3.6.2 An unexpected or uncontrolled exposure rate in excess of the expected exposure rate as indicated by two or more widely separated area radiation monitors alarming within a single building.
- 3.7 A Protected Area Evacuation will be implemented if any of the following occur:
- 3.7.1 Criteria for a Building Evacuation is exceeded in two or more buildings.
 - 3.7.2 A Site Area Emergency has been declared.
 - 3.7.3 In the opinion of the Emergency Director a Protected Area Evacuation should be implemented to protect the health and safety of personnel.
- 3.8 An Owner Controlled Area Evacuation will be implemented if either of the following occur:
- 3.8.1 A General Emergency has been declared.
 - 3.8.2 In the opinion of the Emergency Director a hazard exists onsite with the potential of affecting the health and safety of individuals outside the Protected Area.
- 3.9 The Primary Access Point is the normal Security gate entrance at the North side of the Protected Area (see Figure 1).
- 3.10 The Alternate Evacuation Point is the gate in the Protected Area fence on the south side of the Protected Area (see Figure 1).
- 3.11 The Evacuation Assembly Area East is the intersection of highway 61 and the Plant Access Road in front of the Nuclear Training Center (see Figure 1).
- 3.12 The Evacuation Assembly Area West is at the Energy Center near the intersection of the Plant Access Road and Route 965 (see Figure 1).
- 3.13 The Alternate Evacuation Point Assembly Area is at the intersection of the Plant Access Railroad and Police Jury Road (see Figure 1).

4.0 PROCEDURE

4.1 Limited Evacuation

4.1.1 The Emergency Director shall:

1. Sound the emergency alarm.
2. Announce the following over the Public Address System at least twice:

**"ATTENTION IN THE PLANT, EVACUATE (Specify Area).
EVACUATED PERSONNEL ASSEMBLE IN THE SECOND
FLOOR HALLWAY OF THE SERVICE BUILDING OUTSIDE THE
RADIOLOGICAL CONTROLLED AREA CONTROL POINT."**

NOTE

If the second floor hallway of the Service Building is included in the hazard area, designate an alternate assembly area for evacuated personnel. (e.g. first floor of the Service Building or outside the Main Control Room).

3. Obtain Attachment 1 and complete the checklist as the actions of this procedure are performed.
4. Dispatch a Radiation Protection Technician to the assembly area to perform personnel monitoring and decontamination in accordance with RPP-0018, Personnel Decontamination (Ref 2.3).
5. Request Security to dispatch an officer to the assembly area to assist in personnel accountability in accordance with EIP-2-027, Personnel Accountability (Ref 2.4).
6. If notified by the Radiation Protection Technician at the assembly area that an individual is injured, implement EIP-2-009, Medical Emergencies (Ref 2.5).
7. If notified by Security that an individual may still be within the hazard area perform the following:
 - a. Announce the following over the Public Address System:
**"(Name of Individual) REPORT YOUR LOCATION TO THE
CONTROL ROOM IMMEDIATELY!"**
 - b. Repeat the announcement at least twice, waiting approximately one minute between announcements.

- c. If after approximately two minutes following the second announcement the individual has not reported, implement EIP-2-008, Search and Rescue (Ref 2.6).
- 8. Take any additional actions necessary to mitigate the hazard and to protect the health and safety of personnel.
- 4.1.2 The Radiation Protection Technician dispatched to the assembly area shall:
 - 1. Determine if any evacuees are injured and, if so:
 - a. Report this fact to the Emergency Director immediately.
 - b. Administer first aid procedures to the extent of capability until relieved by the designated first aid person on shift.
 - c. Assist in implementing EIP-2-009, Medical Emergencies (Ref 2.5) until injured persons no longer need assistance or are removed from the assembly area.
 - 2. Assist the Security Officer in determining if all persons in the evacuated area have been accounted for in accordance with EIP-2-027, Personnel Accountability (Ref. 2.4).
 - 3. Perform radiological monitoring of evacuees and implement RPP-0018, Personnel Decontamination (Ref. 2.3) as necessary.

NOTE

If significant radioactive contamination is found in excess of the limits specified in RPP-0018, Personnel Decontamination, (Ref. 2.2) on any individual in the assembly area, notify the Emergency Director and the OSC of the individual's evacuation route and that this route may be contaminated.

- 4. Upon completion of personnel surveys, monitor the assembly area for radioactive contamination.
 - 5. Upon completion of the above tasks, return to the Operations Support Center (OSC) unless otherwise directed by the OSC Coordinator or the Emergency Director.
- 4.1.3 The Security Officer dispatched to the assembly area shall:
 - 1. Perform personnel accountability in accordance with EIP-2-027, Personnel Accountability (Ref. 2.4).
 - 2. Report any missing persons to the Emergency Director immediately.

N/A	N/A	EIP-2-026	REV.O	PAGE 5 OF 16
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3. Remain at the assembly area until re-directed.

4.2 Building Evacuation

- 4.2.1 The Emergency Director shall:

1. Sound the emergency alarm.
2. Announce the following over the Public Address System at least twice:

**"ATTENTION IN THE PLANT, EVACUATE (Specify Building).
EVACUATED PERSONNEL ASSEMBLE IN THE SECOND
FLOOR HALLWAY OF THE SERVICE BUILDING OUTSIDE THE
RADIOLOGICAL CONTROLLED AREA CONTROL POINT."**

NOTE

If the second floor hallway of the Service Building Dining Area is included in the hazard area, designate an alternate assembly area for evacuated personnel. (e.g., first floor of the Service Building or outside the Main Control Room).

3. Obtain Attachment 1 and complete the checklist as the actions of this procedure are performed.
4. Dispatch a Radiation Protection Technician to the assembly area to perform personnel monitoring and decontamination in accordance with RPP-0018, Personnel Decontamination (Ref 2.3).
5. Request Security to dispatch an officer to the assembly area to assist in personnel accountability in accordance with EIP-2-027, Personnel Accountability (Ref 2.4).
6. If notified by the Radiation Protection Technician at the assembly area that an individual is injured, implement EIP-2-009, Medical Emergencies (Ref 2.5).
7. If notified by Security that an individual may still be within the hazard area perform the following:

- a. Announce the following over the Public Address System:

**"(Name of Individual) REPORT YOUR LOCATION TO THE
CONTROL ROOM IMMEDIATELY!"**

- b. Repeat the announcement at least twice, waiting approximately one minute between announcements.

- c. If after approximately two minutes following the second announcement the individual has not reported, implement EIP-2-008, Search and Rescue (Ref 2.6).
 8. Take any additional actions necessary to mitigate the hazard and to protect the health and safety of personnel.
- 4.2.2 The Radiation Protection Technician dispatched to the assembly area shall:
 1. Determine if any evacuees are injured and, if so:
 - a. Report this fact to the Emergency Director immediately.
 - b. Administer first aid procedures to the extent of capability until relieved by the designated first aid person on shift.
 - c. Assist in implementing EIP-2-009, Medical Emergencies (Ref 2.5) until injured persons no longer need assistance or are removed from the assembly area.
 2. Assist the Security Officer in determining if all persons in the evacuated area have been accounted for in accordance with EIP-2-027, Personnel Accountability (Ref. 2.4).
 3. Perform radiological monitoring of evacuees and implement RPP-0018, Personnel Decontamination (Ref. 2.3) as necessary.

NOTE

If significant radioactive contamination is found in excess of the limits specified in RPP-0018, Personnel Decontamination, (Ref. 2.2) on any individual in the assembly area, notify the Emergency Director and the OSC of the individual's evacuation route and that this route may be contaminated.

4. Upon completion of personnel surveys, monitor the assembly area for radioactive contamination.
 5. Upon completion of the above tasks, return to the Operations Support Center (OSC) unless otherwise directed by the OSC Coordinator or the Emergency Director.
- 4.2.3 The Security Officer dispatched to the assembly area shall:
 1. Perform personnel accountability in accordance with EIP-2-027, Personnel Accountability (Ref. 2.4).
 2. Report any missing persons to the Emergency Director immediately.

3. Remain at the assembly area until redirected.

4.3 Protected Area Evacuation

4.3.1 The Emergency Director shall:

1. Notify Security that the Protected Area is being evacuated.

NOTE

See descriptions of Evacuation points and assembly areas in sections 3.9 - 3.13 and Figures 1 and 2. Determine the appropriate route depending on the potential hazard threat and the wind direction.

2. Sound the emergency alarm.
3. Make the following announcement over the Public Address System:

"Attention: All non-essential personnel evacuate the Protected Area. Use the (Specify Primary Access Point or Alternate Evacuation) access point. Assemble at the Evacuation Assembly Area (Specify East or West assembly area). The assembly area is located at (Give Location). Emergency Response Personnel report to your assigned facility."
4. Repeat steps 2 and 3 at least twice.
5. Obtain Attachment 2 and complete the checklist as the actions of this procedure are performed.
6. Dispatch a Radiation Protection Technician to the Assembly Area to perform personnel monitoring and decontamination in accordance with RPP-0018, Personnel Decontamination (Ref. 2.3).
7. Upon receipt of the accountability report from Security, and:
 - a. All personnel have been accounted for, direct the Radiation Protection Technician at the Assembly Area to release non-contaminated personnel to their residences.
 - b. Individuals are missing and are presumed to be still within the Protected Area, initiate the following:

- (1) Announce over the Public Address System:

**"ATTENTION IN THE PLANT. (Name of Individual)
(s) REPORT YOUR LOCATION TO THE CONTROL ROOM IMMEDIATELY!"**

- (2) Wait approximately one minute and repeat the announcement.
- (3) If after approximately two minutes following the second announcement the individual has not responded, implement EIP-2-008, Search and Rescue (Ref. 2.6).

NOTE

A clue to the individuals general location may be obtained by having Security report the last area in which the individual entered or exited according to the Security computer.

- (4) Notify Security at the Assembly Area and request that the missing individual be searched for among the evacuees.

8. Implement any additional emergency actions necessary to protect the health and safety of personnel.

4.3.2 The Radiation Protection Technician at the assembly area shall:

1. Monitor assembled personnel and decontaminate in accordance with RPP-0018, Personnel Decontamination, (Ref. 2.3) using the equipment and facilities available at the Emergency Operations Facility if Evacuation Assembly area East is used.

NOTE

If the Evacuation Assembly Area West is used, decontamination may be accomplished at the Energy Center. If the Alternate Evacuation Point Assembly Area is used, no decontamination facilities are available and contaminated personnel will have to be transported to another location for decontamination. In this instance, request guidance from the Radiation Protection Coordinator in the TSC or the Emergency Director.

2. After completion of personnel surveys, begin surveys and decontamination of vehicles in accordance with RPP-0019, Decontamination of Areas, Tools and Equipment (Ref. 2.7) and RPP-0038, Release of Areas, Tools and Equipment (Ref. 2.8).
3. Keep monitored personnel and vehicles separated from those unmonitored.
4. When notified by the Emergency Director, begin releasing monitored/decontaminated personnel and vehicles. Instruct personnel to take routes leading away from the Plant Site and that they should not stop, unless directed by Security or law enforcement officers, until they are well away from the site.

NOTE

It is likely that during a severe emergency requiring Protected Area Evacuation, the roadways surrounding the plant site will be blockaded by law enforcement officers. When releasing evacuees from the assembly point, coordination with Law Enforcement Agencies should be accomplished by Security to facilitate evacuees transportation through the roadblocks.

5. Upon completion of monitoring all personnel and vehicles at the assembly point, return to assigned Emergency Response Facility.
- 4.3.3 Upon being notified of a Protected Area Evacuation, the Security Shift Supervisor shall:
1. Inform the Primary Access Point (PAP) of the Evacuation and the need to move personnel quickly through the badge readers. Personnel monitoring (portal monitoring) is not required for evacuating personnel.

NOTE

If onsite hazards are severe the Security Officers at the PAP may be directed to open the drive gate and allow evacuees to exit through that gate, depositing their badges in a container as they pass.

2. If the Alternate Evacuation Point is to be used, direct Security Officers to open the gate and allow evacuees to exit, collecting their badges as they pass, or directing them to card-out on the card readers provided at the Alternate Evacuation Point.
3. Notify the Security Officers stationed at the River Bend Training Center that a Protected Area Evacuation is in progress.
4. Direct Security Officers at the Secondary Alarm Station (SAS) to initiate accountability procedures in accordance with EIP-2-027, Personnel Accountability (Ref. 2.4). Accountability will be conducted at the Central Alarm Station (CAS) by the SAS Operator if the SAS is uninhabitable.
5. Notify the Energy Center that a Protected Area Evacuation is in progress and direct Energy Center personnel to evacuate all personnel from that facility immediately.

NOTE

Anyone at the Energy Center, including the staff are to leave by driving away from the Plant Site on Route 965 North to Highway 61.

4.3.4 Security Officers at the River Bred Training Center shall:

1. Direct traffic and provide guidance to evacuees as they arrive at the Center. Have individuals leave their vehicle parked on the roadway and assemble on the lawn in front of the Training Center.
2. If the Evacuation Assembly Area West or Alternate Evacuation Point Assembly Areas are to be used, and a spare Security Officer is available, dispatch an Officer to the designated Assembly Area to assist.
3. Assist the Radiation Protection Technician at the Assembly Area by instituting crowd control measures and search for missing individuals when requested.
4. If necessary, request that the Security Shift Supervisor coordinate the release of evacuees from the Assembly Area with Offsite Law Enforcement Agencies.

4.4 Owner Controlled Area Evacuation

4.4.1 The Emergency Director shall:

1. If a Protected Area Evacuation has not been initiated, implement Section 4.3 of this procedure.
2. Request that Security Officers make a tour of the Owner Controlled Area, using vehicles equipped with external Public Address Systems, to warn anyone present in the Area to evacuate immediately.
3. Direct the Radiation Protection Coordinator to provide a briefing to Security Officers designated to perform the area sweeps to describe any hazards in the area or areas to be avoided in the traverse of the owner controlled area.
4. Obtain Attachment 3 and complete the checklist as the actions of this procedure are performed.
5. If circumstances warrant, direct personnel at the Assembly Area to relocate to a point more distant from the plant.
6. Take any other actions necessary to protect the health and safety of personnel and the public.

4.4.2 The Security Shift Supervisor shall:

1. Assign Security Officers to tour the Owner Controlled Area making announcements concerning the emergency.

NOTE

Officers are not to depart on this assignment until being briefed by the Radiation Protection Coordinator on expected hazards.

2. Instruct the Officers to make two complete traverses of the Area, depending on hazards expected, and to report by radio any pertinent information including completion of the assignment

4.4.3 The Radiation Protection Coordinator shall:

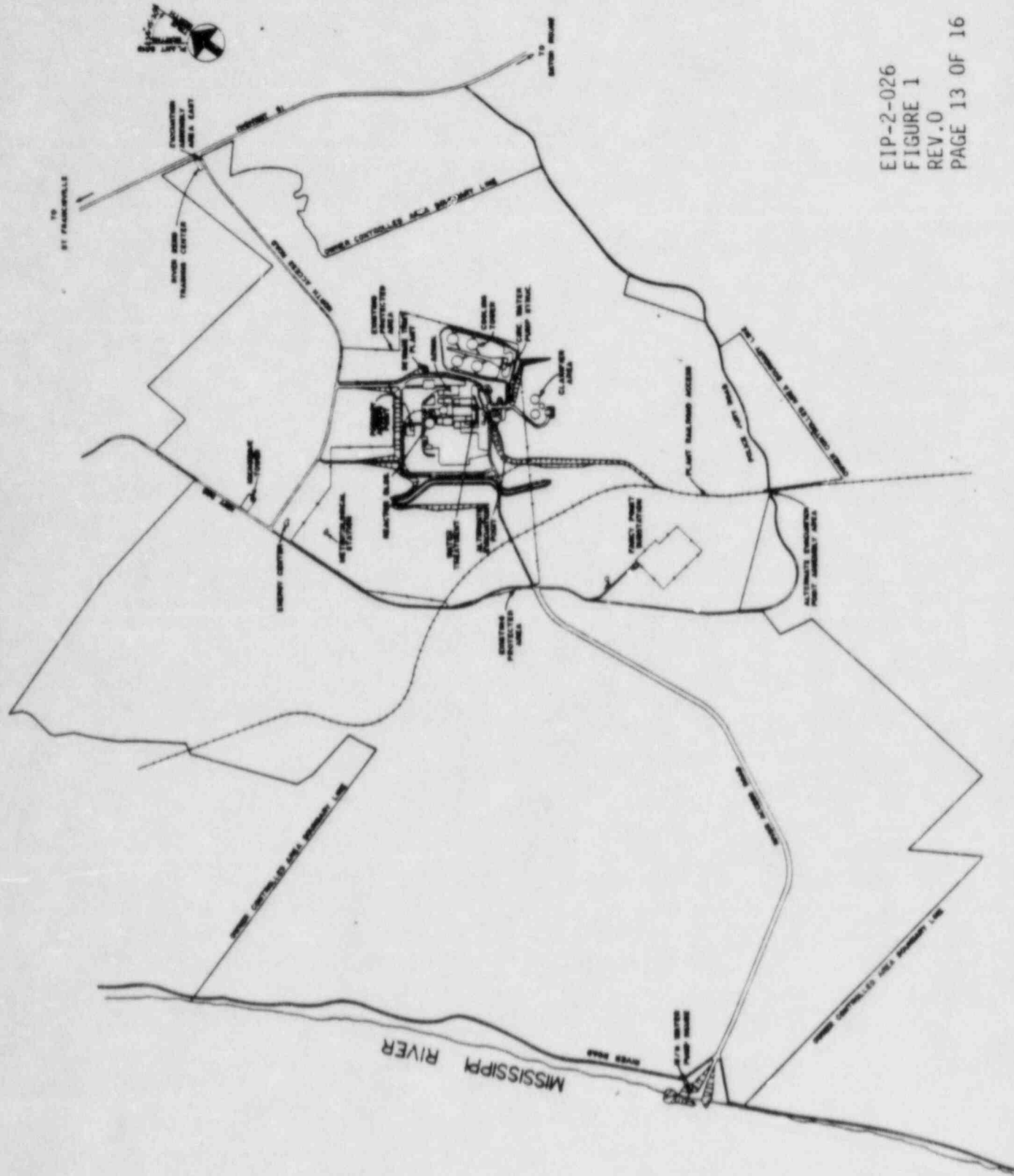
1. Upon being notified of an Owner Controlled Area Evacuation, determine the existent or potential hazards in the area and brief the designated Security Officers on the hazards including dosimetry required, areas to be avoided, respiratory protection and any other protective measures necessary to protect the Officers.
2. Dispatch a Radiation Protection Technician with a survey instrument to accompany the Security Officers if the hazards cannot be evaluated, or if conditions are changing rapidly.

4.4.4 Security Officers assigned to evacuate the Owner Controlled Area shall:

1. Receive a briefing from the Radiation Protection Coordinator.
2. Traverse the Owner Controlled Area as directed by the Security Shift Supervisor making announcements concerning the emergency and directing individuals to leave the area immediately.
3. Report back to the Security Shift Supervisor if any unusual circumstances are encountered or when the sweeps are completed.

END

EVACUATION POINTS AND ASSEMBLY AREAS



EIP-2-026
FIGURE 1
REV.0
PAGE 13 OF 16

ATTACHMENT 1 LIMITED OR BUILDING EVACUATION CHECKLIST

NOTE

Place "N/A" in steps which are not applicable.

		ACTION COMPLETED	
		<u>DATE/TIME</u>	<u>INITIALS</u>
1.	Emergency Alarm sounded	_____	_____
2.	Assembly Area specified	_____	_____
	Circle one:		
	Evacuation Assembly Area East		
	Evacuation Assembly Area West		
	Alternate Evacuation Point Assembly Area		
3.	Evacuation announced over Public Address System (twice)	_____	_____
		_____	_____
4.	Radiation Protection Technician dispatched to assembly area	_____	_____
5.	Security requested to initiate accountability	_____	_____
6.	Report of missing individual received	_____	_____
7.	Public address request for individual to report	_____	_____
		_____	_____
8.	EIP-2-008, Search and Rescue Implemented	_____	_____
9.	Contaminated areas documented	_____	_____
10.	Release Security Officer from Assembly Area	_____	_____
11.	Evacuated personnel released from Assembly Area	_____	_____

ATTACHMENT 2 PROTECTED AREA EVACUATION CHECKLIST**NOTE****Place "N/A" in steps which are not applicable.**

		ACTION COMPLETED	
		<u>DATE/TIME</u>	<u>INITIALS</u>
1.	Security notified	_____	_____
2.	Evacuation point specified	_____	_____
	Circle one:		
	Primary Access Point		
	Alternate Evacuation Point		
3.	Assembly area specified	_____	_____
	Circle one:		
	Evacuation Assembly Area East		
	Evacuation Assembly Area West		
	Alternate Evacuation Point Assembly Area		
4.	Emergency alarm sounded	_____	_____
5.	Public address announcements	_____	_____
		_____	_____
6.	Radiation Protection Technician dispatched to assembly area	_____	_____
7.	Accountability report received	_____	_____
8.	Public address request for individual(s) to report	_____	_____
		_____	_____
9.	EIP-2-008, Search and Rescue implemented	_____	_____
10.	Security at assembly area requested to search for missing individual(s) among evacuees	_____	_____
11.	Non-essential personnel released from assembly area	_____	_____

ATTACHMENT 3**OWNER CONTROLLED AREA EVACUATION CHECKLIST****NOTE**

**IF THIS EVACUATION IS TO BE ACCOMPLISHED IN CONJUNCTION
WITH A PROTECTED AREA EVACUATION COMPLETE ITEMS 1 THROUGH 6 OF
ATTACHMENT 2 FIRST.**

Place "N/A" in steps which are not applicable.

		ACTION COMPLETED	
		<u>DATE/TIME</u>	<u>INITIALS</u>
1.	Request that Security designate Officers to make sweeps of the owner controlled area	_____	_____
2.	Radiation Protection Coordinator briefing for Security Officers	_____	_____
3.	Security Officers depart on sweeps	_____	_____
4.	Report of owner controlled area clear	_____	_____

APPROVAL SHEET

PROCEDURE NO: EIP-2-027

PROCEDURE TITLE: PERSONNEL ACCOUNTABILITY

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

[illegible]

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

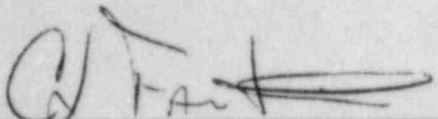
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PROCEDURE NO. EIP-2-027

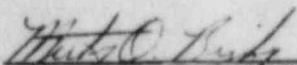
REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

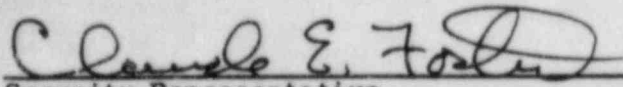
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Radiation Protection/Chemistry Representative

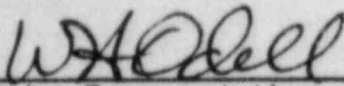
9-24-84


Plant Operations Representative

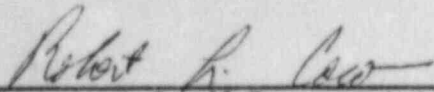
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Security Representative

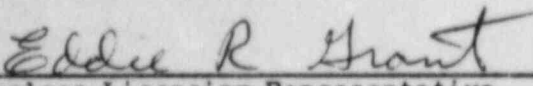
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Training Representative

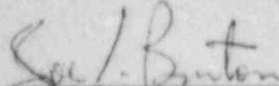
9/24/84


Technical Staff Representative

9/24/84

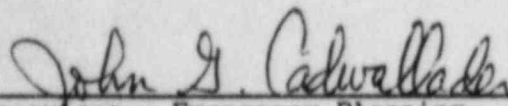

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

PERSONNEL ACCOUNTABILITY

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1.0 PURPOSE

This procedure provides a method of accounting for personnel following an evacuation of a **limited area, building, the Protected Area or the Owner Controlled Area.**

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-026, Evacuation
- 2.3 EIP-2-008, Search and Rescue

3.0 GENERAL INFORMATION

- 3.1 Accountability is defined as determining that all personnel have left a specifically evacuated area, building, the Protected Area or the Owner Controlled Area as described in EIP-2-026, Evacuation (Ref. 2.2).
- 3.2 Accountability following a Protected Area evacuation shall be completed and reported to the Emergency Director within approximately 30 minutes of the initiation of the evacuation.
- 3.3 Due to the unknown number of non-utility personnel who may be within the Owner Controlled Area at the time of an emergency, no accountability of this area can be accomplished

4.0 PROCEDURE

4.1 Accountability following a Limited Area or Building Evacuation:

4.1.1 The Emergency Director shall:

- 1. Direct Security to perform an accountability of the evacuated area at the designated Assembly Area.
- 2. Direct Security to establish controls to prevent anyone from re-entering the evacuated area unless cleared by the Emergency Director.
- 3. If there is any doubt as to the presence of personnel in the evacuated area implement EIP-2-008, Search and Rescue (Ref. 2.3).
- 4. Complete the Accountability Checklist for Limited Areas or Buildings in Attachment 1.

4.1.2 The Security Shift Supervisor shall:

- 1. Assign a Security Officer to the Assembly Area to obtain a list of assembled personnel.

2. Direct the Secondary Alarm Station (SAS) Operator to obtain a print-out of all personnel carded into the general area, or building if the area or building have Security card access requirements.
3. Receive reports from the Security Officer at the Assembly Area and relay information to the Emergency Director.
4. If all personnel cannot be positively accounted for notify the Emergency Director immediately.

4.1.3 The Security Officer assigned to the Assembly Area shall:

1. Quickly question personnel assembled to determine whether it is known that an individual is still within the evacuated area or building.

NOTE

Foremen, fellow workers, and Radiation Work Permits (RWP) are the best source of information as to how many persons were working in a particular area or building and if all are present at the Assembly Area.

2. If questions regarding evacuees indicate everyone is out of the area then record the names of assembled personnel and report these to the SAS to be compared to the card access list.
3. If there is any doubt as to whether anyone might still be within the evacuated area, contact the Security Shift Supervisor immediately.

NOTE

Do not allow assembled persons to institute a search for friends or fellow workers in the evacuated area.

4. Remain at the Assembly Area until otherwise directed.

4.2 Accountability following a Protected Area Evacuation:

4.2.1 The Emergency Director shall:

1. Direct Security to perform a Protected Area Accountability.
2. Instruct all emergency response personnel in the Operations Support Center (OSC) and the Technical Support Center (TSC) to card in on the special accountability card readers provided in these facilities.

NOTE

If emergency personnel have already been dispatched, contact the OSC and obtain a list of team members who are onsite but not within the OSC, TSC or control room.

3. Implement EIP-2-008, Search and Rescue (Ref 2.3) as necessary to locate any missing personnel.
4. Direct the Security Shift Supervisor to implement Access Control for the Protected Area. Anyone entering must be authorized by the Emergency Director.
5. Complete the Protected Area accountability checklist in Attachment 2.

4.2.2 The Security Shift Supervisor shall:

1. Direct the Security Officer at the SAS to perform an accountability of Protected Area personnel.

NOTE

Instruct the SAS operator to allow time for all personnel badges to be carded into the Primary Access Point or the Emergency Response Facility card readers prior to beginning the accountability process.

2. Report the completed accountability results to the Emergency Director within approximately 30 minutes of the initiation of this procedure.
3. For any missing personnel identify:
 - a. The individual(s) name.
 - b. The last plant location in which the individual was recorded to have entered by card reader.
 - c. That the individual has been determined not to be present at the designated Assembly Area.
4. At the completion of accountability direct Security Officers to establish access control so that no one may enter the Protected Area unless authorized by the Emergency Director.

4.2.3 The SAS Operator shall:

1. When directed by the Security Shift Supervisor, initiate a computer print-out of all personnel remaining within the Protected Area.

2. When the print-out is complete, report to the Security Shift Supervisor the names and locations (if able to identify this) of personnel within the Protected Area but not in the Control Room, OSC or TSC.

NOTE

Security Officers remaining on assigned posts within the Protected Area should be identified to the Security Shift Supervisor and the Emergency Director so that proper protective measures can be instituted where necessary.

4.3 Alternate Protected Area Accountability:

4.3.1 If the Security Computer is inoperable the Security Shift Supervisor shall:

1. Direct Security Officers at the Primary Access Point to collect badges of evacuating personnel.
2. Direct the Control Room, OSC and TSC to compile a list of all personnel present in those facilities, or are known to be on an emergency assignment.
3. Direct the officer at the Primary Access Point (PAP) to insert all collected badges into the badge rack and make a visual determination of personnel remaining within the Protected Area.
4. Report Accountability results to the Emergency Director as soon as the process is completed.

4.3.2 The Officers at the Primary Access Point (PAP) shall:

1. Insert all collected badges into the badge rack.
2. Obtain lists of personnel from the Control Room, OSC and TSC.
3. Visually match the lists with the missing site badges on the badge rack.
4. Report missing site badges for personnel not on the lists to the Security Shift Supervisor.

END

**ATTACHMENT 1 ACCOUNTABILITY FOLLOWING A LIMITED AREA OR PLANT
BUILDING EVACUATION (Emergency Director)**

NOTE

Place "N/A" in steps which are not applicable.

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Directed Security to complete accountability for the evacuated area or plant building	_____	_____
2. Received accountability report	_____	_____
3. Dispatched Search and Rescue Team	_____	_____
4. Established access control at evacuated area or building	_____	_____

ATTACHMENT 2 ACCOUNTABILITY FOLLOWING A PROTECTED AREA EVACUATION
(Emergency Director)

NOTE

Place "N/A" in steps which are not applicable.

	<u>ACTION COMPLETED</u>	
	<u>DATE/TIME</u>	<u>INITIALS</u>
1. Directed Security to perform protected area accountability	_____	_____
2. Instructed all personnel in the OSC and TSC to punch-in on the accountability card readers	_____	_____
3. Received report of accountability from the Security Supervisor (within approximately 30 minutes of initiation of accountability)	_____	_____
4. Implemented EIP-2-008, Search and Rescue	_____	_____
5. Protected area access control implemented	_____	_____

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-028

PROCEDURE TITLE: RECOVERY

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-7		<i>J. Williams 10/2/84</i>	
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*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

**RIVER BEND STATION
PROCEDURE REVIEW**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: RECOVERY

PROCEDURE NO. EIP-2-028

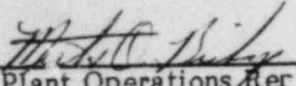
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EMERGENCY PLANNING COMMITTEE REVIEW:

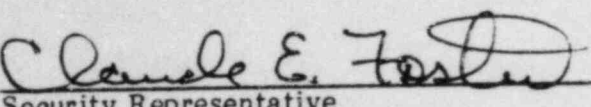
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Radiation Protection/Chemistry Representative

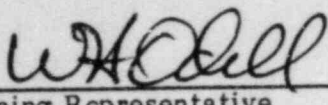
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Plant Operations Representative

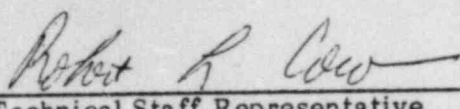
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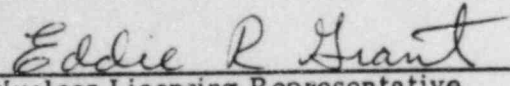

Security Representative

9/24/84

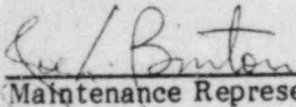

Training Representative

9/24/84


Technical Staff Representative

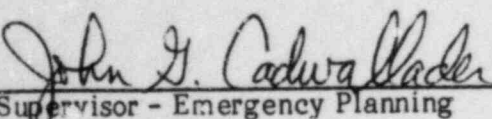

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

RECOVERY

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1.0 PURPOSE

This procedure provides instructions concerning the establishment of a Recovery Planning Organization and the implementation and conduct of recovery operations.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-004, Site Area Emergency
- 2.3 EIP-2-005, General Emergency
- 2.4 EIP-2-006, Notifications
- 2.5 EIP-2-017, Operations Support Center - Support Functions
- 2.6 EIP-2-019, Technical Support Center - Support Functions
- 2.7 EIP-2-021, Emergency Operations Facility - Support Functions

3.0 GENERAL INFORMATION

- 3.1 Recovery actions are generally linked to Re-entry operations; however, for the purpose of this procedure Recovery shall be considered actions taken by GSU to return the plant to an operating condition, while Re-entry is intended to mean actions taken by State and local government agencies to return evacuated personnel from the general public safely to their homes.
- 3.2 Although EIP-2-004, Site Area Emergency (Ref. 2.2), and EIP-2-005, General Emergency (Ref. 2.3), provide for deescalation to lower emergency classifications, the emergency may be terminated and a recovery instituted from any emergency classification provided each of the following criteria are met:
 - 3.2.1 The reactor is in cold shut down, is in a stable safe configuration and adequate core cooling is available.
 - 3.2.2 Releases of radioactivity to the environment have been terminated and no further potential for radioactivity releases exist.
 - 3.2.3 Offsite concentrations of radioactivity in the atmosphere or in waterways have dispersed to near background levels.
 - 3.2.4 Terminating the emergency will not impact any offsite protective actions which may be in progress.
 - 3.2.5 The State of Louisiana, the local Parishes and the NRC concur in terminating the emergency.
- 3.3 A recovery organization shall not usually be established for emergencies which have never reached a classification higher than an Alert. Recovery actions in these cases shall be accomplished through the normal plant organization unless otherwise directed by the Senior Vice President - River Bend Nuclear Group.

- 3.4 The Recovery Manager is responsible for the establishment of the Recovery Planning Organization and the implementation and conduct of recovery operations.

4.0 PROCEDURE

- 4.1 When emergency conditions have stabilized such that the criteria listed in Section 3.2 above have been met, the Recovery Manager shall:
- 4.1.1 Discuss termination of the emergency with state and local Parish government representatives and the NRC.
 - 4.1.2 Determine, in conjunction with the EOF Staff, the organizational structure of the Recovery Planning Organization. See Attachment 1 for an example Recovery Planning Organization.
 - 4.1.3 Direct the EOF Manager to activate the Recovery Planning Organization by contacting the individuals selected and notifying them that they have been designated as part of the Recovery Planning Organization.

NOTE

Some members of the Recovery Planning Organization will already be present as part of the Emergency Response Organization, while others may have to travel from the General Office in Beaumont, Texas. Since the emergency will have been terminated by the time all members are assembled, there is no urgency in having the entire Recovery Planning Organization present at the EOF prior to the implementation of recovery planning.

- 4.1.4 When all actions noted above have been completed and the state and local governments and the NRC concur:
- 1. Terminate the emergency by notifying onsite and offsite personnel using EIP-2-006, Notifications (Ref. 2.4).
 - 2. Initiate deactivation of the OSC, TSC, and EOF in accordance with EIP-2-017, Operations Support Center - Support Functions (Ref. 2.5); EIP-2-019, Technical Support Center - Support Functions (Ref. 2.6); and EIP-2-021, Emergency Operations Facility - Support Functions (Ref. 2.7).
 - 3. Activate the Recovery Planning Organization by notifying onsite personnel that a recovery has been instituted. All personnel assigned to the Recovery Planning Organization should report to the EOF (if not already present).
- 4.1.5 When the Recovery Planning Organization has been assembled, discuss the emergency including the causes, initiating events, damage to equipment, uninhabitable areas of the plant, steps necessary to restore the plant to an operating condition, deviations from

Technical Specifications which may be needed to correct damaged equipment, special procedures to be prepared to begin corrective actions, and personnel availability from GSU organizations and from offsite sources to implement recovery operations. (See Attachment 2 for an example of Recovery Planning Meeting Agenda.)

4.2 The EOF Manager shall:

- 4.2.1 Upon notification that a Recovery is to be implemented, contact the designated personnel and request that they report to the EOF, if not already there, to begin recovery planning.

NOTE

Recovery planning may commence prior to the termination of the emergency but personnel who are part of the emergency response organization should not leave their assigned position until the emergency is actually terminated.

- 4.2.2 Request that the Administrative/Logistics Advisor increase the administrative staff to provide support for recovery plan development and procedure writing. The actual number shall depend on the magnitude of the recovery planning effort and shall be decided by the EOF Manager at the time.

4.3 The Recovery Planning Organization shall:

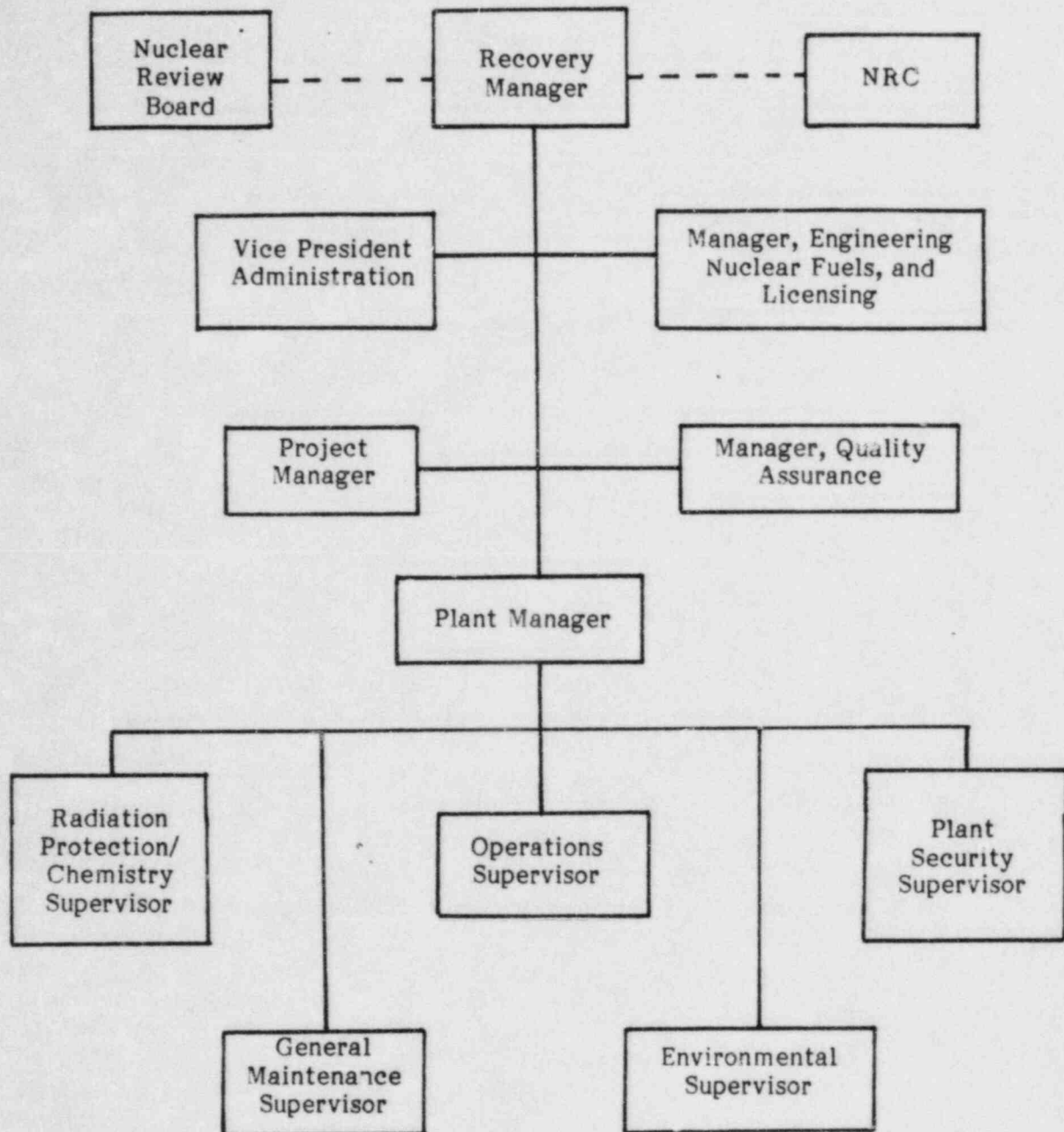
- 4.3.1 Develop a comprehensive plan for returning the River Bend Station to an operating condition. The Recovery Plan should contain:
1. A description of the processes necessary to restore the plant to an operating condition. This description should be developed in phases such as clean-up, repair, testing, and start-up.
 2. A description of any deviations to plant technical specifications necessary to restore the facility, and how these deviations shall be controlled (procedurally), along with an estimate of the time such deviations shall be required to be in effect.
 3. Radiation exposure and contamination control measures to be employed during each phase of the recovery including the disposition of radioactive and contaminated waste generated during the emergency or postulated to be generated during recovery operations.
 4. An estimate of radioactive materials, either gaseous or liquid, which may be released to the environment during recovery operations and the impact of such releases on the population in the vicinity of the plant. (Such releases may include pre-planned venting of containment or other systems which could release gaseous radioactivity.)

NOTE

In some cases, normal operating procedures may be used to implement portions of the recovery plan. In these cases, the Recovery Plan should indicate how the normal operating procedures interface with special recovery procedures developed by the Recovery Planning Organization.

- 4.3.3 Upon approval of the Recovery Plan and procedures, implement the plan to restore the River Bend Station to an operating condition.

END

**NOTE**

The exact composition of the Recovery Planning Organization need not be determined at the time of an emergency and will depend on the type of accident and the extent of consequences.

<u>Item</u>	<u>Individual Responsible</u>
1. Purpose of the Meeting	Recovery Manager
2. Summary of Accident	Plant Manager (Emergency Director)
a. Causes	
b. Initiating events	
c. Chronology of Events	
3. Status of Plant and People	Plant Manager (Emergency Director)
a. Personnel radiation exposure summary	
b. Plant contamination summary	
c. Status of plant systems and equipment, including damage to equipment and uninhabitable areas of the Plant	
4. Safety Concerns	Manager, Engineering Nuclear Fuels and Licensing
5. Quality Assurance Considerations	Manager, Quality Assurance
6. Tentative Plan and Schedule	Recovery Manager
a. Steps necessary to restore the plant to operation	
b. Deviations from the Technical Specifications needed to correct damaged equipment	
c. Special procedures to be prepared to begin corrective actions	
d. Personnel availability from GSU and offsite sources	
7. Assignments	Recovery Manager

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-029

PROCEDURE TITLE: EMERGENCY TELEPHONE BOOK

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

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RIVER BEND STATION
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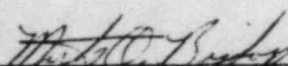
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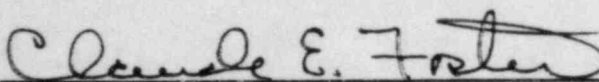
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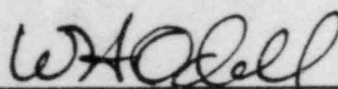
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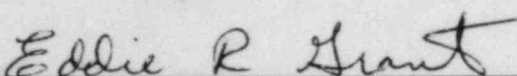


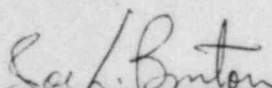
Radiation Protection/Chemistry Representative9-24-84

Plant Operations Representative9-24-84

Security Representative9/24/84

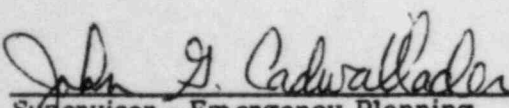
Training Representative9/24/84

Technical Staff Representative9/24/84

Nuclear Licensing Representative9-24-84

Maintenance Representative9/24/84

Recommended for Approval:



Supervisor - Emergency Planning9-24-84

(LATER'S)

PROC. NO. EIP-2-029 TITLE EMERGENCY TELEPHONE BOOK REV. NO. 0

The following is a list of "missing" and/or "tentative information" — (LATER'S) — in this procedure. The responsible Section Supervisor shall update this procedure as the information becomes available.

(LATER) LOCATION

SECTION/STEP

PAGE

BRIEF DESCRIPTION

Throughout the entire procedure.

Individual's names

and telephone numbers

EIP-2-029

EMERGENCY TELEPHONE BOOK

Rev. O - June 29, 1984

NOTICE

**THIS PROCEDURE CONTAINS PROPRIETARY INFORMATION AND SHALL NOT
BE DISTRIBUTED OUTSIDE THE GULF STATES UTILITIES ORGANIZATION**

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2. The Shift Clerk shall be directed to call the following groups until the numbers of individuals in parentheses are contacted. As each individual is contacted, the Shift Clerk shall state **"Activate the Operations Support Center for an Emergency Response"** and **initial the line after the individual's name**. When the appropriate number of individuals have been contacted, notify the ~~Shift~~ Control Room Communicator or the Shift Supervisor.

a. Mechanical Maintenance (2)

TELEPHONE #

INITIAL*

(Master Repairman)

(Master Repairman)

(Repairman 1st class)

(Repairman 1st class)

b. Electrical Maintenance (2)

(Master Electrician)

(Master Electrician)

(Electrician 1st Class)

(Electrician 1st Class)

c. I & C (1)

(Master I & C Technician)

(Master I & C Technician)

(Master I & C 1st Class)

(Master I & C 1st Class)

* Initial of the individual is reached.

	TELEPHONE #	INITIAL*
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

* Initial if the individual is reached.

f. First Aid/Rescue (1)

	TELEPHONE #	INITIAL*
(Off-duty Nuclear Control Operator)	_____	_____
(Off-duty Nuclear Control Operator)	_____	_____
(Off-duty Nuclear Control Operator)	_____	_____

* Initial if the individual is reached.

B. Technical Support Center

1. The Control Room Communicator shall activate the TSC personnel by:

- a. Calling the Group II pager number (later) ; when tone is heard, hang up. Record the time: _____

- b. Verify that the following individuals signaled that the page was received (see Attachment 3, EIP-2-006, Notifications):

- (1) _____ Emergency Director
(Plant Manager)
- (2) _____ TSC Manager
(Supervisor - Reactor Systems)
- (3) _____ Core Technical Coordinator
(Supervisor--Engineering Analysis)
- (4) _____ Mech Engineering Coordinator
(Supervisor - Mechanical Engineering)
- (5) _____ Elec Engineering Coordinator
(Supervisor - Electrical Engineering)
- (6) _____ Operations Support Coordinator
(Operations Supervisor)
- (7) _____ Maintenance Support Coordinator
(General Maintenance Supervisor)
- (8) _____ Radiation Protection Coordinator
(Rad Protection Supervisor)
- (9) _____ Dose Assess/Protection Actions
Advisor
(Health Physicist - Operations)
- (10) _____ Chem/Core Damage Assmt. Coord.
(Chemistry Supervisor)
- (11) _____ Administrative Coordinator
(Tech. Mat'l's & Plant Services
Supervisor)
- (12) _____ Communicator
(Systems Engineer #1)
- (13) _____ Communicator
(Systems Engineer #2)
- (14) _____ Status Boards Coordinator
(Engineer #1)
- (15) _____ Data Facility Coordinator
(Document Control Supervisor)

- c. If call back verification is not received within 15 minutes of activating the page system, instruct the Shift Clerk to call an alternate for any position not verifying pager notification from the following list:

	TELEPHONE #	INITIAL*
<u>Emergency Director</u>		
Assistant Plant Manager - Operations	_____	_____
Assistant Plant Manager - Services	_____	_____
<u>TSC Manager</u>		
Process Systems Supervisor	_____	_____
Control Systems Supervisor	_____	_____
<u>Core Technical/Core Physics Coordinator</u>		
Nuclear Fuels Engineer	_____	_____
Senior Nuclear Safety Engineer	_____	_____
<u>Mechanical Engineering Coordinator</u>		
Senior Mechanical Engineer	_____	_____
Mechanical Engineer	_____	_____
<u>Electrical Engineering Coordinator</u>		
Senior Electrical Engineer	_____	_____
Electrical Engineer #1	_____	_____
<u>Maintenance Support Coordinator</u>		
I & C Supervisor #1	_____	_____
Electrical Supervisor	_____	_____
<u>Radiation Protection Coordinator</u>		
Radiation Protection Foreman #2	_____	_____
Radiation Protection Foreman #3	_____	_____
Radiation Protection/Chemistry Supervisor	_____	_____

* Initial if the individual is reached.

	TELEPHONE #	INITIAL*
<u>Dose Assessment/Protective Actions Coordinator</u>		
<u>(Offsite Team Coordinator)</u>		
Health Physicist (Radiation Health)	_____	_____
Health Physicis (Operations)	_____	_____
<u>Chemistry/Core Damage Assessment Coordinator</u>		
Lead Chemist	_____	_____
Chemical Foreman	_____	_____
<u>Administrative Coordinator</u>		
Supervisor - Materials, Bldgs, and Grounds	_____	_____
Materials Foreman	_____	_____
<u>Communicators (two)</u>		
Systems Engineer #3	_____	_____
Systems Engineer #4	_____	_____
<u>Status Boards Coordinator</u>		
Engincer #2	_____	_____
Engineer #3	_____	_____
<u>Data Facility Coordinator</u>		
Document Control Clerk #1	_____	_____
Document Control Clerk #2	_____	_____

* Initial if the individual is reached.

- d. When notified of TSC activation, the Administrative Coordinator shall call two clerical/administrative assistants from the below list:

	TELEPHONE #	INITIAL*
_____	_____	_____
_____	_____	_____

* Initial if the individual is reached.

- | | | |
|------|------------------------------------|---------------------------------|
| (8) | _____ | Status Boards Coordinator |
| | (Engineer #4) | |
| (9) | _____ | Technical Advisor |
| | (Supervisor - Nuclear Engineering) | |
| (10) | _____ | West Feliciana Parish Liaison |
| | (Assistant Engineer #1) | |
| (11) | _____ | East Feliciana Parish Liaison |
| | (Nuclear Engineer #1) | |
| (12) | _____ | Pointe Coupee Parish Liaison |
| | (Nuclear Engineer #2) | |
| (13) | _____ | East Baton Rouge Parish Liaison |
| | (Results Engineer #1) | |
| (14) | _____ | West Baton Rouge Parish Liaison |
| | (Technical Staff Specialist) | |

- c. If call back verification is not received within 15 minutes of activating the page system, instruct the SAS Operator to call an alternate for any position not verifying pager from the following list:

	TELEPHONE #	INITIAL*
<u>Recovery Manager</u>		
VP River Bend Nuclear Group	_____	_____
VP Administration	_____	_____
<u>EOF Manager</u>		
Senior Emergency Planner	_____	_____
Emergency Planner	_____	_____
<u>Radiation Protection Advisor</u>		
Radiological Health Supervisor	_____	_____
Environmental Supervisor	_____	_____
<u>Chemistry Advisor</u>		
Chemistry Foreman #2	_____	_____
Rad/Chem Section Coordinator	_____	_____

* Initial if the individual is reached.

	TELEPHONE #	INITIAL*
<u>Operations Advisor</u>		
Off-Duty Shift Supervisor #3	_____	_____
Off-Duty Shift Supervisor #4	_____	_____
<u>Administrative/Logistics Advisor</u>		
Records Supervisor	_____	_____
Administrator - Records Management	_____	_____
<u>Communicators</u>		
Systems Engineer #5	_____	_____
Systems Engineer #6	_____	_____
<u>Status Boards Coordinator</u>		
Engineer #5	_____	_____
Engineer #6	_____	_____
<u>Technical Advisor</u>		
Senior Nuclear Engineer	_____	_____
Nuclear Engineer #3	_____	_____

* Initial if the individual is reached.

- d. When notified of EOF activation, the Administrative/Logistics Advisor shall call two clerical/administrative assistants from the below list:

	TELEPHONE #	INITIAL*
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

* Initial if the individual is reached.

	TELEPHONE #	INITIAL*
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

* Initial /f the individual is reached.

- e. Upon his arrival at the EOF, the Administrative/Logistics Advisor shall ensure that the Parish Liaisons acknowledged their page along with Group III (EOF). If not, call an alternate from the list below and assign the Parish EOC.

	TELEPHONE #	INITIAL*
Alt: Nuclear Engineer #4	_____	_____
Alt: Nuclear Engineer #5	_____	_____
Alt: Nuclear Engineer #6	_____	_____

* Initial /f the individual is reached.

D. Emergency Communications Center

1. The Main Control Room Communicator shall dial the pager number for the Duty Emergency Communications Representative (ECR); when tone is heard, hang up. Record the time: _____
2. If call back verification is not received within 15 minutes, call:

	TELEPHONE #	INITIAL*
Administrator of Louisiana Communications	_____	_____
Information Specialist	_____	_____

* Initial /f the individual is reached.

SECTION II: EMERGENCY RESPONSE FACILITIES

TELEPHONE

A. Main Control Room

- | | | |
|---------------------|----------------|-------|
| 1. Shift Supervisor | Direct line or | _____ |
| 2. Communicator | Direct line or | _____ |

B. Operations Support Center

- | | | |
|--|----------------|-------|
| 1. Operations Support Center Coordinator | Direct line or | _____ |
| 2. Radiation Protection | Direct line or | _____ |
| 3. Counting Room | Direct line or | _____ |
| 4. Personnel Assembly Work Area | Direct line or | _____ |

C. Technical Support Center

- | | | |
|---|----------------|-------|
| 1. Emergency Director | Direct line or | _____ |
| 2. Administrative Coordinator | Direct line or | _____ |
| 3. Chemistry/Core Damage Assmt Coordinator | Direct line or | _____ |
| 4. Communicator/Core Physics | Direct line or | _____ |
| 5. Core Technical Coordinator | Direct line or | _____ |
| 6. Data Facility Coordinator (Document Room) | Direct line or | _____ |
| 7. Dose Assmt/Protective Actions Advisor | Direct line or | _____ |
| 8. Electrical Engineering Coordinator | Direct line or | _____ |
| 9. Maintenance Support Coordinator | Direct line or | _____ |
| 10. Mechanical Engineering Coordinator | Direct line or | _____ |
| 11. Operations Support Coordinator | Direct line or | _____ |
| 12. Radiation Protection Coordinator | Direct line or | _____ |
| 13. Security Coordinator | Direct line or | _____ |
| 14. Security Shift Supervisor (Also by Radio) | Direct line or | _____ |
| 15. TSC Manager | Direct line or | _____ |

TELEPHONE

D. Emergency Operations Facility

- | | | |
|--|----------------|-------|
| 1. Recovery Manager | Direct line or | _____ |
| 2. Administrative Support Section | Direct line or | _____ |
| 3. Administrative/Logistics Advisor | Direct line or | _____ |
| 4. Chemistry Advisor | Direct line or | _____ |
| 5. Chemistry - Alternate Counting Facility | Direct line or | _____ |
| 6. Communicator | Direct line or | _____ |
| 7. Decontamination Facility (offsite teams) | Direct line or | _____ |
| 8. EOF Manager | Direct line or | _____ |
| 9. Public Information Coordinator | Direct line or | _____ |
| 10. Dose Assessment Protective Actions Advisor | Direct line or | _____ |
| 11. Operations Advisor | Direct line or | _____ |
| 12. Radiation Protection Coordinator | Direct line or | _____ |
| 13. Technical Advisor | Direct line or | _____ |

E. Emergency Communications Center

- | | | |
|--------------------------------------|----------------|-------|
| 1. GSU Public Spokesperson | Direct line or | _____ |
| 2. Emergency Communications Director | Direct line or | _____ |

SECTION III: OFFSITE GOVERNMENT AGENCIES

TELEPHONE #

A. State of Louisiana

1. LNER _____

2. LOEP _____

B. Local Parishes

1. West Feliciana Parish Sheriff's Office _____

2. West Feliciana Parish Civil Defense _____

3. East Feliciana Parish Sheriff's Office _____

4. East Feliciana Parish Civil Defense _____

5. Pointe Coupee Parish Sheriff's Office _____

6. Pointe Coupee Parish Civil Defense _____

7. West Baton Rouge Parish Sheriff's Office _____

8. West Baton Rouge Parish Civil Defense _____

9. East Baton Rouge Parish Sheriff's Office _____

10. East Baton Rouge Parish Civil Defense _____

C. State of Mississippi

1. Mississippi Highway Safety Patrol _____

2. MEMA _____

D. Nuclear Regulatory Commission

1. River Bend Station Resident Inspector _____

2. NRC Operations Center - Bethesda, MD _____

ENS or _____

3. Region IV _____

SECTION IV: OFFSITE SUPPORT AGENCIES

TELEPHONE

A. Local Support Services

- | | | |
|---|----------------|-------|
| 1. West Feliciana Parish Hospital | Direct line or | _____ |
| 2. Our Lady of the Lake Regional Medical Center | Direct line or | _____ |
| 3. St. Francisville Volunteer Fire Department | | _____ |
| 4. St. Francisville Police Department | | _____ |
| 5. Jackson City Police Department | | _____ |
| 6. New Roads Police Department | | _____ |
| 7. Baton Rouge City Police Department | | _____ |

B. Mutual Aid Services

- | | |
|--|-------|
| 1. Louisiana Power and Light Company | _____ |
| 2. Mississippi Power and Light Company | _____ |
| 3. Arkansas Power and Light Company | _____ |
| 4. Middle South Services | _____ |

C. Gulf States Utilities Companies -
Corporate Office

Direct line or _____

D. Gulf States Utilities Companies -
General Offices

- | | |
|----|-------|
| 1. | _____ |
| 2. | _____ |
| 3. | _____ |
| 4. | _____ |
| 5. | _____ |
| 6. | _____ |

TELEPHONE

E. Contract and Technical Services

1. General Electric-Nuclear Services Department
2. Stone and Webster Engineering Corporation
3. Department of Energy (REACTS)
4. Department of Energy (Health Physics)
5. U.S. Coast Guard
6. Institute of Nuclear Power Operations (INPO)
7. U.S. Geological Survey

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-100

PROCEDURE TITLE: PROCEDURE REVIEW, REVISION AND APPROVAL

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-5		<i>[Signature]</i> 10/2/84	
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*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

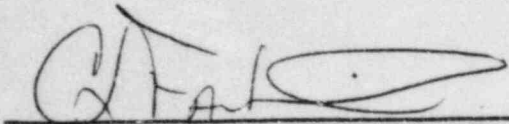
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PROCEDURE NO. EIP-2-100

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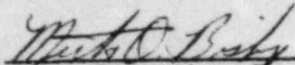
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DATE



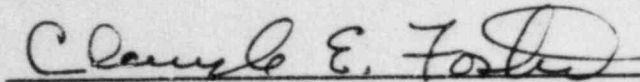
Radiation Protection/Chemistry Representative

9-24-84



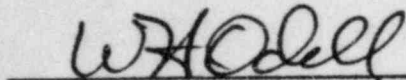
Plant Operations Representative

9-24-84



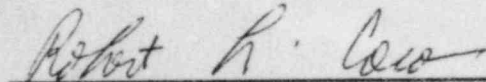
Security Representative

9/24/84



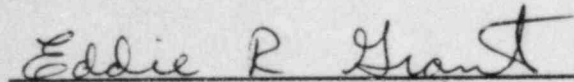
Training Representative

9/24/84



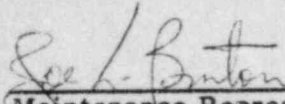
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

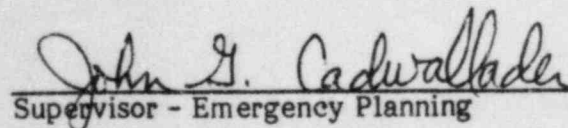
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

PROCEDURE REVIEW, REVISION AND APPROVAL

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1.0 PURPOSE

This procedure provides instructions for the review, revision and approval of Emergency Implementing Procedures (EIPs).

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 10 CFR 50, Domestic Licensing, Part 50.54q
- 2.3 River Bend Station FSAR, Technical Specifications, Section 6, Administrative Controls
- 2.4 10 CFR 50, Domestic Licensing, Part 50.47b and Appendix E
- 2.5 Plant Support Procedure No. SSP-1-001, Rev. A, Preparation, Revision and Control of Plant Support Procedures.

3.0 GENERAL INFORMATION

- 3.1 All Emergency Implementing Procedures (EIPs) shall be reviewed annually. Specific procedures listing emergency telephone numbers will be reviewed and updated at least quarterly.
- 3.2 The Supervisor - Emergency Planning is responsible for ensuring that EIPs are periodically reviewed as required by this procedure.
- 3.3 The periodic review required by this procedure shall be conducted in addition to the reviews required by EIP-2-101, Periodic Review of the Emergency Plan.

4.0 PROCEDURE

4.1 The Supervisor - Emergency Planning shall:

- 4.1.1 Review the procedures and recommend any changes that are required as a result of the following:
 - 1. Written critiques and evaluations of drills and exercises, especially recommended corrective actions.
 - 2. Changes in company or plant organization.
 - 3. Changes in function or organization of support agencies, including necessary revisions to letters of agreement.
 - 4. Changes in state or federal regulations or regulatory guidance.
 - 5. Changes in state or local emergency plans.
 - 6. Modifications to the plant or site which could affect emergency planning, such as modifications to plant systems, emergency equipment, and Emergency Facilities.
 - 7. Changes to Technical Specifications.

8. Recommendations from other organizations, such as state and federal agencies and other utilities.
 9. Findings of Nuclear Regulatory Commission inspections.
 10. Changes in capabilities of supporting organizations, such as local hospitals, ambulance services, and fire departments.
- 4.1.2 Transmit a draft of the procedure (change) to the Support Services Department for editing and distribution for review. All EIPs shall be reviewed by the members of the Emergency Planning Committee as a minimum.
 - 4.1.3 Resolve comments with the responsible reviewers or their supervisor.
 - 4.1.4 Following comment resolution, prepare the procedure for final typing and return to the Support Services Department.
 - 4.1.5 Initiate Interim Procedure Changes (IPCs) as necessary in accordance with Reference 2.5.
 - 4.1.6 Forward approved changes to procedures to the Director Nuclear Training so that changes can be incorporated into training and qualification programs as soon as possible following the changes.

NOTE

Any changes to procedures shall be submitted by Nuclear Licensing to the NRC as specified in 10 CFR 50, Appendix E (Ref. 2.4).

4.2 The Emergency Planning Committee (EPC) shall:

- 4.2.1 Provide a cross disciplinary review of the procedure to include comments from the departments which may be impacted by changes to the procedure.
- 4.2.2 Verify that the actions specified by the revised procedure:
 1. Comply with 10 CFR 50.54q (Ref. 2.2) and do not result in decreased emergency preparedness.
 2. Continue to meet the standards of 10 CFR 50.47(b) and 10 CFR 50, Appendix E (Ref. 2.4).

NOTE

Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the NRC, in accordance with 10 CFR 50.54q (Ref. 2.2).

4.2.3 Document review and approval on the Approval Sheet for Emergency Plan Implementing Procedures (Attachment 1) or provide additional comments on a Comment Control Form.

4.2.4 Return these results to the Support Services Department within five working days of receipt of the procedure.

4.3 The Support Service Department shall:

4.3.1 Prepare the draft procedure or revision for distribution for review.

4.3.2 Distribute the procedure to the Emergency Planning Committee using the EIP Approval Sheet (Attachment 1).

4.3.3 Receive comments on Comment Control Forms and forward to the Supervisor-Emergency Planning for resolution.

4.3.4 Following resolution of comments and approval of the final version by the Emergency Planning Committee and the Supervisor - Emergency Planning, prepare the final version of the procedure.

4.3.5 Submit the procedure along with a transmittal letter, to the Vice President RBNG for final approval.

4.3.6 Process any Interim Procedure Changes (IPCs) submitted by the Supervisor - Emergency Planning in Accordance with Reference 2.5.

4.3.7 Ensure distribution of approved procedures or IPCs in accordance with Reference 2.5.

END

**RIVER BEND STATION
APPROVAL
PLANT SUPPORT PROCEDURES**

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: _____

PROCEDURE NO. _____ REV. _____

EMERGENCY PLANNING COMMITTEE REVIEW:

DATE _____

Radiation Protection/Chemistry Representative_____
Plant Operations Representative_____
Security Representative_____
Training Representative_____
Technical Staff Representative_____
Nuclear Licensing Representative_____
Maintenance Representative

Recommended for Approval:

Supervisor - Emergency Planning

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-101

PROCEDURE TITLE: PERIODIC REVIEW OF THE EMERGENCY PLAN

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-7		<i>J. Sullivan 10/2/84</i>	

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RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: PERIODIC REVIEW OF THE EMERGENCY PLAN

PROCEDURE NO. EIP-2-101

REV. 0

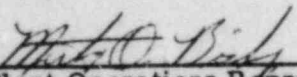
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DATE



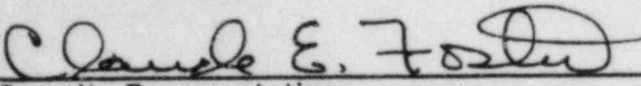
Radiation Protection/Chemistry Representative

9-24-84



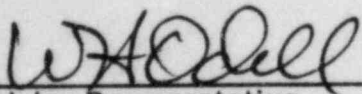
Plant Operations Representative

9-24-84



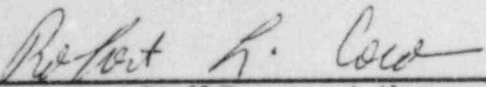
Security Representative

9/24/84



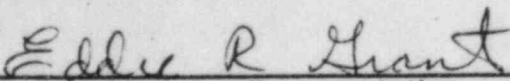
Training Representative

9/24/84



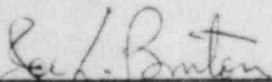
Technical Staff Representative

9/24/84



Nuclear Licensing Representative

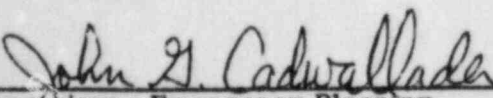
9-24-84



Maintenance Representative

9/24/84

Recommended for Approval:



Supervisor - Emergency Planning

9-24-84

PERIODIC REVIEW OF THE EMERGENCY PLAN

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1.0 PURPOSE

This procedure provides instructions for the review, revision and approval of the River Bend Station Emergency Plan.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 River Bend Station FSAR, Technical Specifications, Section 6, Administrative Controls
- 2.3 10 CFR 50, Domestic Licensing, Part 50.47 b and Appendix E
- 2.4 10 CFR 50, Domestic Licensing, Part 50.54 q
- 2.5 10 CFR 50, Domestic Licensing, Part 50.54 t

3.0 GENERAL INFORMATION

The Emergency Plan shall be reviewed annually. The Supervisor - Emergency Planning is responsible for ensuring that the Plan is periodically reviewed as required by this procedure.

4.0 PROCEDURE

4.1 Emergency Plan Review

- 4.1.1 The Supervisor - Emergency Planning shall designate an individual to conduct the annual review of the Emergency Plan.
- 4.1.2 The reviewer assigned shall:
 - 1. Review the Plan and recommend changes that are required as a result of the following:
 - a. Written critiques and evaluations of drills and exercises, especially recommended corrective actions.
 - b. Changes in company or plant organization.
 - c. Changes in function or organization of support agencies, including necessary revisions to letters of agreement.
 - d. Changes in state or federal regulations or regulatory guidance.
 - e. Changes in state or local emergency plans.
 - f. Modifications to the plant or site which could affect emergency planning, such as modifications to plant systems, emergency equipment and Emergency Facilities.
 - g. Changes to Technical Specifications.
 - h. Recommendations from other organizations, such as state and federal agencies and other utilities.

- i. Findings of Nuclear Regulatory Commission (NRC) inspections.
 - j. Findings resulting from the Annual Audit of the Emergency Preparedness Program.
2. Document the results of the review in a letter to the Supervisor - Emergency Planning. The letter should state the areas reviewed (with those listed above, as a minimum), the results for each area, and the recommended changes.

4.2 Emergency Plan Revisions

4.2.1. The Supervisor - Emergency Planning shall:

1. Transmit changes to the Emergency Plan to the Emergency Planning Committee (EPC) for their review and comments.
2. Upon resolution of comments, attach an Emergency Plan Change Form (Attachment 1) to each change, file a copy of the change, in the Emergency Planning Department file and forward the original with the Submittal Form to the Facility Review Committee for their review.
3. Revise Emergency Plan to reflect approved changes.
 - a. Indicate revision number on all pages of the revised Plan. Portions changed will be indicated by the revision number and a vertical line in the margin. Only the last revision need be indicated in the margin.
 - b. File the Change Submittal Forms with the approved original and all related documentation indicating the modification was incorporated.
 - c. Submit the approved revisions to the Support Services Department for distribution.
4. Determine if changes to the EIPs are warranted and initiate changes in accordance with EIP-2-100, Procedure Review, Revision and Approval. A copy of the previously approved revision(s) should be maintained in file.

NOTE

Any changes to the Plan shall be submitted to the NRC as specified in 10 CFR 50, Part 50.54 q and Appendix E (Ref. 2.3 and 2.4)

4.2.2 The Facility Review Committee (FRC) will:

1. Review the proposed revisions to the Emergency Plan and verify that the actions specified by the revised Plan:

- a. Comply with 10 CFR 50.54 q (Ref. 2.3) and do not result in decreased emergency preparedness.
- b. Continue to meet the standards of 10 CFR 50.47 b and 10 CFR 50, Appendix E (Ref. 2.5).

NOTE

Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the NRC, in accordance with 10 CFR 50.54 q (Ref. 2.4).

2. Indicate their approval on the applicable Change Submittal Form (Attachment 1) for each change and forward all recommended changes to the Plant Manager for concurrence.

4.2.3 The Plant Manager shall:

Forward the revisions to the Vice-President River Bend Nuclear Group for final approval and sign-off on the applicable Change Submittal Form (Attachment 1).

NOTE

Approval should be returned to the Supervisor-Emergency Planning as soon as practical for incorporation into the Plan.

4.2.4 Offsite Agencies and Support Groups

If changes to the Emergency Plan affect State or local emergency plans, emergency plans for offsite support agencies, letters of agreement or procedures for contractors or support groups, the Supervisor - Emergency Planning shall submit changes to the appropriate groups for their review and action prior to submission to the Facility Review Committee.

4.2.5 Training

The Supervisor - Emergency Planning shall forward approved changes to the Emergency Plan to the Director of Nuclear Training so that changes can be incorporated into training and qualification programs, as soon as possible following the change.

4.3. Annual Audit

4.3.1 The Nuclear Review Board (NRB) shall:

1. In accordance with 10 CFR 50.54(t) (Ref. 2.5), arrange for an annual, independent audit of the River Bend Station Emergency Preparedness Program by persons who have no direct responsibility for implementation of the emergency preparedness program. The audit will include a review of the following:

- a. Emergency Plan
 - b. Emergency Implementing Procedures (EIPs)
 - c. Training
 - d. Drills and exercises
 - e. Equipment maintenance
 - f. Interface with state and local governments
2. Provide audit findings to the Vice President, RBNG and the Supervisor-Emergency Planning for corrective actions.
3. Ensure that the Emergency Preparedness Program continues to meet the requirements of 10 CFR 50.54 (q) (Ref. 2.4).

END

ATTACHMENT 1 EMERGENCY PLAN CHANGE SUBMITTAL FORM

Date _____

EMERGENCY PLAN CHANGE SUBMITTAL FORM

Reason for Change: _____

Prepared by: _____ Date: _____

Submitted by: _____ Date: _____

Recommended Approval:

Supervisor-Emergency Planning: _____ Date: _____

Facility Review Committee: _____ Date: _____

Assistant Plant Manager-Operations

Date: _____

Operations Supervisor

Date: _____

Assistant Plant Manager-Services

Date: _____

General Maintenance Supervisor

Date: _____

Rad/Chem Supervisor

Date: _____

Reactor Engineering Supervisor

Date: _____

Supervisor, Site Engineering

Date: _____

Operations Quality Assurance Supervisor

Concur:

Plant Manager: _____ Date: _____

Approval:

Vice-President River Bend - Nuclear Group:

Date: _____

Comment No.	Page or Paragraph No.	Comment	Author Disposition
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RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-102

PROCEDURE TITLE: TRAINING, DRILLS AND EXERCISES

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

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RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: TRAINING, DRILLS AND EXERCISES

PROCEDURE NO. EIP-2-102

REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

DATE

[Signature]
Radiation Protection/Chemistry Representative

9-24-84

[Signature]
Plant Operations Representative

9-24-84

[Signature]
Security Representative

9/24/84

[Signature]
Training Representative

9/24/84

[Signature]
Technical Staff Representative

9/24/84

[Signature]
Nuclear Licensing Representative

9-24-84

[Signature]
Maintenance Representative

9/24/84

Recommended for Approval:

[Signature]
Supervisor - Emergency Planning

9-24-84

TRAINING, DRILLS AND EXERCISES

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1.0 PURPOSE

This procedure establishes the basic training requirements for personnel who perform emergency functions and describes the program for planning and conducting drills and exercises.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 10 CFR 50, Domestic Licensing, Part 50.47 b and Appendix E
- 2.3 RBPP 1.8, Qualification and Training Records

3.0 GENERAL INFORMATION

3.1 Applicability

This procedure will be used by personnel who are assigned to develop, plan, schedule, conduct and evaluate emergency preparedness training, drills and exercises.

3.2 Definitions

3.2.1 Drill

A Drill is a supervised event aimed at evaluating, developing, and maintaining skills in a particular operation.

3.2.2 Exercise

An Exercise is an event which tests the overall functions and capabilities of organizations involved in responding to an emergency situation. An exercise shall simulate an emergency that results in offsite radiological releases which require response by offsite authorities.

3.2.3 Controller

A Controller is a member of an exercise control group. Each controller may be assigned to one or more activities or functions for the purpose of keeping the action going according to a scenario, resolving differences (acting as an umpire), supervising, and otherwise assisting as needed.

3.2.4 Evaluator

An Evaluator is a member of an exercise evaluation group. He or she may also serve in a dual capacity as both a Controller and Evaluator. Each Evaluator may be assigned to one or more activities or functions for the purpose of evaluating, recording, critiquing, and making recommendations for improvement.

3.3 Precautions

- 3.3.1 When contacting any organization during a drill or exercise, the individual making the contact will emphasize that a drill or exercise is in progress and that an actual emergency condition does not exist.
- 3.3.2 All announcements on the page system during a drill or exercise shall be prefaced and ended with the words: "This is a drill (or exercise)."
- 3.3.3 The Emergency Implementing Procedures (EIPs) and Emergency Operating Procedures (EOPs) require protective and corrective actions which involve the operation of plant equipment, such as air dampers or valves. Drill or exercise observers should be informed that such steps will not be performed but should be simulated by the appropriate personnel. To the extent possible, such simulation should include all actions up to actually performing the equipment operations. For some drills or exercises the Supervisor - Emergency Planning may position observers at certain equipment locations to ensure that equipment is not inadvertently operated.

4.0 PROCEDURE

4.1 Training

- 4.1.1 All personnel, onsite and offsite, who are responsible for performing emergency functions required by the Emergency Plan and EIPs shall have appropriate training as described in this procedure.
- 4.1.2 The training program will consist of classroom instruction, procedure "walk-throughs" to coach emergency response personnel in the proper use of procedures, and practical drills to provide individuals an opportunity to demonstrate the ability to perform assigned emergency functions in a simulated emergency situation.
- 4.1.3 The Supervisor - Emergency Planning shall:
 - 1. Coordinate with the Nuclear Training Coordinator - Technical in the preparation, planning and scheduling of training for all GSU personnel.
 - 2. Coordinate emergency training for offsite emergency response and support organization personnel, such as law enforcement, medical and fire department personnel.
- 4.1.4 The Nuclear Training Coordinator - Technical shall:
 - 1. Ensure that individuals receive the appropriate emergency training and refresher training annually.

2. Coordinate the planning and scheduling of training sessions with the Supervisor - Emergency Planning and GSU Department Heads/Section Supervisors.
3. Issue notices of training schedules to all employees. Notices should indicate which individuals should plan to attend specific courses in order to comply with the initial qualification and annual refresher training requirements.
4. Assist, if requested, with the preparation and implementation of the training program for the offsite emergency response and support organization personnel described in Section 4.1.3.2.
5. Maintain training records for all GSU emergency response personnel in accordance with RBPP 1.8, Qualification and Training Records (Ref. 2.3).

4.1.5 All River Bend Station employees are indoctrinated on the Emergency Plan and EIPs through the General Employee Training Program. The training provided through this program with regard to emergency planning is conducted on an annual basis with provisions for prompt indoctrination of new employees. The objectives of this training are:

1. Familiarize personnel with the scope, applicability, and implementation of the Emergency Plan and Procedures.
2. Instruct all station personnel in their responsibilities during an emergency.
3. Keep personnel informed of any changes in the Emergency Plan and Procedures.

4.1.6 Personnel receive, as a minimum, the following instruction concerning Emergency Planning:

1. General content of the Emergency Plan and EIPs.
2. Individual employee responsibilities with regard to familiarization with station alarms and response to alarms and use of communications systems during an emergency.
3. Procedures and requirements associated with personnel evacuation, accountability, and contamination control criteria.

4.1.7 Personnel assigned to the emergency response organization receive specialized training for their respective assignments, as identified in the Training Matrix (Attachment 1).

NOTE

Personnel who perform their normal duties, for example fire brigade, will not receive any special training.

4.2 Drills and Exercises

4.2.1 Periodic drills and exercises will be conducted to verify the emergency preparedness of participating organizations and agencies.

4.2.2 The Supervisor - Emergency Planning shall:

1. Ensure accomplishment of the minimum number of drills required by the Emergency Plan.
2. Coordinate with the Nuclear Training Coordinator - Technical, GSU Department Heads and offsite agencies in planning and scheduling drills and exercises.
3. Ensure that communications tests are performed as described in Section 4.2.6.1 (b) and review documentation associated with the tests.
4. Direct development of drill and exercise scenarios and necessary support material.
5. Review drill and exercise scenarios and forward copies of scenarios to the Emergency Planning Committee (EPC) for their review.
6. Forward necessary drill/exercise advance materials to state/local/federal government agencies.
7. Assign personnel to control and evaluate drills/exercises.
8. Conduct a pre-drill/exercise conference with controllers, evaluators, representatives of participating offsite organizations and other drill/exercise staff personnel to discuss the scenario, conduct of the drill/exercise, necessary precautions and to distribute evaluation forms.
9. Manage the conduct of the drill or exercise according to the scenario.
10. Conduct a post drill/exercise critique, collect evaluation forms and document all identified deficiencies and recommended corrective actions.

11. Based on critique comments, complete a written evaluation of the drill or exercise, describing the results of the critique and recommended corrective actions and a schedule for completion of corrective actions.
12. Forward a copy of the evaluation to the Emergency Planning Committee and the Plant Manager.
13. Direct follow up and corrective actions resulting from drills/exercises, such as the need for additional training, revision of procedures or procurement of equipment.
14. Document completion of corrective actions.
15. Maintain drill and exercise records on file for a period of five years.

4.2.3 The Nuclear Training Coordinator - Technical shall:

1. Coordinate with the Supervisor - Emergency Planning and GSU Department Heads in planning and scheduling drills and exercises.
2. Maintain documentation concerning the participation of personnel in training, drills or exercises in accordance with RBPP 1.8, Qualification and Training Records (Ref. 2.3).

4.2.4 The Emergency Planning Committee (EPC) shall review drill/exercise scenarios.

4.2.5 The Shift Supervisor shall:

1. Implement communications tests described in Section 4.2.6.1.b.(1) and verify that tests are completed as assigned.
2. Document communications tests conducted and forward results to the Supervisor - Emergency Planning on a monthly basis.

4.2.6 Drills

1. Types and Frequency

a. Communications Drills

- (1) Communications between the River Bend Station emergency response facilities (Control Room, TSC and EOF), the State of Louisiana and Mississippi, local EOCs and station field assessment teams shall be tested annually.

- (2) Communications drills shall test both the applicable circuits and ability of communicators to understand the content of messages passed.

b. Communications Tests

- (1) Communication links with the State of Louisiana and local Parishes, used for initial notifications of an emergency, within the plume exposure pathway EPZ shall be tested monthly.

NOTE

The emergency hot-line will be tested monthly every third month, as an alternate notification method, the two-way radio system will be tested, and the regular telephone will be used in order to verify telephone numbers.

- (2) Communications from the TSC and EOF to the NRC Headquarters and NRC Regional Office Operations Center shall be tested monthly.

c. Fire Drills

Fire Drills will be conducted in accordance with River Bend Station Fire Protection Procedures.

d. Medical Emergency Drills

- (1) Medical emergency drills, which involve a simulated contaminated individual and which provide for participation by local support agencies such as ambulance and hospital services, shall be conducted annually.
- (2) Offsite portions may be performed as part of the required annual exercise.

e. Radiological Monitoring Drills

Radiological monitoring drills shall be conducted annually, and will include the collection and analysis of sample media such as water, grass, soil, and air from the owner-controlled and nearby offsite areas.

f. Radiation Protection Drills

- (1) Radiation protection drills, which involve response to and analysis of simulated elevated airborne and liquid samples, as well as direct radiation measurements in the environment, shall be conducted semi-annually.

- (2) Analysis of in-plant liquid samples with simulated, elevated radiation levels including use of the post-accident sampling system are included in radiation protection drills.

g. Evacuation and Site Accountability Drills

- (1) An evacuation drill is conducted annually, so that personnel are aware of proper routes and assembly points.
- (2) An accountability drill is held simultaneously to ensure that all personnel have either been evacuated or accounted for onsite.
- (3) Evacuation and accountability drills may be performed as part of the required annual exercise.

h. Additional drills will be scheduled by the Supervisor - Emergency Planning, as necessary, to provide adequate training of personnel, provide emphasis on weak areas, and to ensure an adequate level of emergency preparedness.

2. Scenario Requirements

- a. As a minimum, drill scenarios shall contain provisions for the following:
 - (1) Basic objective(s) of the drill and appropriate evaluation criteria.
 - (2) Time period, place(s) of the drill and participating individuals.
 - (3) Narrative summary which describes the conduct of the drill.
 - (4) Assignments for drill controllers and evaluators.

4.2.7 Exercise Description

1. Frequency

An exercise which simulates a Site Area Emergency or General Emergency will be conducted annually.

2. Scenario Requirements

a. As a minimum, exercise scenarios shall contain provisions for the following:

- (1) Basic objective(s) of the exercise and appropriate evaluation criteria.
- (2) Time period, place(s) of the exercise, and the participating organizations.
- (3) Simulated events.
- (4) Time schedule of real and simulated initiating events.
- (5) Narrative summary which describes the conduct of the exercise and includes such items as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological emergency teams, and public information activities.
- (6) Assignments for controllers and evaluators.
- (7) Messages and evaluation forms for use by exercise staff personnel.
- (8) Observers from federal, state, and local government agencies, as agreed upon between GSU and the observing agency.

b. In addition to the requirements listed in Section 2.a, the following additional requirements are pertinent for exercise scenarios:

- (1) Scenarios shall simulate an emergency that results in offsite radiological releases which require responses by offsite authorities.
- (2) Scenarios will be varied from year to year so that over a five year period all major portions of the Emergency Plan and emergency response organization are tested.
- (3) Once every six years, the annual exercise will be initiated between 6:00 p.m. and midnight and once between midnight and 6:00 a.m.

- (4) Exercise scenarios will allow for free play and decision-making by participants. This may require optional flowpaths to be written into the scenario.
- (5) Annual exercise scenarios will provide for the mobilization of state and local agencies to verify their capability to respond to an accident involving an offsite radiological release. Periodic participation by federal response organizations will be invited.

END

RBS Emergency Plan
Training Matrix

	Module 1: Emergency Response Organization and Facilities	Module 2: Communications/ Notifications	Module 3: Emergency Classification	Module 4: Radiological Assmt and Prot. Action Recommendations	Module 5: Dose Assessment Methodology	Module 6: Radiation Protection/ Chemistry Emergency Response	Module 7: NEO/NCO Emergency Response Training	Module 8: Management Control of Emergencies	Module 9: Security	Module 10: Tech. Support Center	Module 11: Operations Support Center	Module 12: Emergency Operations Facility	Module 13: Joint Information Center Staff
Shift Supervisors/ Shift Foreman	X	X	X	X	X			X	*	X		*	X
Nuclear Control Operators	X						X						
Nuclear Equipment Operators	X	X					X						
Shift Clerks	X	X											
Emergency Director	X		X	X				X		X			
TSC Manager	X	X	X	X				X		X			
Core Technical/Core Physics Coordinator	X			X						X			
Chemical/Core Damage Assessment	X			X	X	X				X			
Engineering Coord.	X									X			
Operations Support Coordinator	X		X	X						X			
Maintenance Support Coordinator	X									X			
Radiation Protection Coordinator	X		X	X	X	X				X			
Admin. Coordinator	X	X								X			
Data Facility Coord.	X									X			
TSC Clerical/Admin. Support Personnel	X									X			
Communicators	X	X								X		X	
Status Boards Coord.	X									X		X	
Security Supervisor	X								X				
Security Staff									X				

* Shift Supervisors only

[illegible]

APPROVAL SHEET

PROCEDURE NO: EIP-2-103

PROCEDURE TITLE: EMERGENCY EQUIPMENT INVENTORY

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

[X] No

[illegible]

*Be specific (e.g., QA/R number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

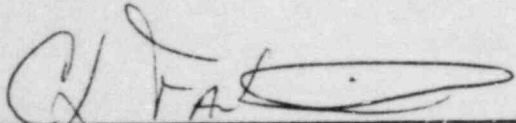
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PROCEDURE NO. EIP-2-103

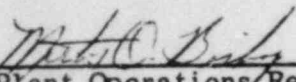
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EMERGENCY PLANNING COMMITTEE REVIEW:

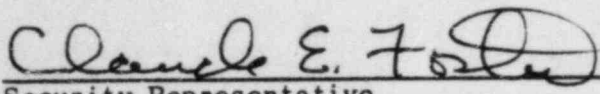
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Radiation Protection/Chemistry Representative

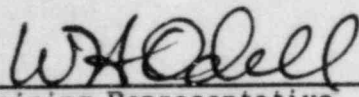
9-24-84


Plant Operations Representative

9-24-84


Security Representative

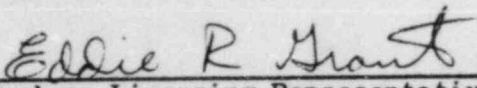
9/24/84


Training Representative

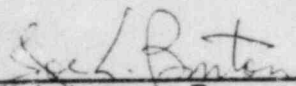
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Technical Staff Representative

9/24/84

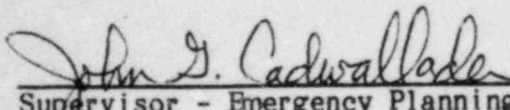

Nuclear Licensing Representative

9-24-84


Maintenance Representative

9/24/84

Recommended for Approval:


Supervisor - Emergency Planning

9-24-84

EMERGENCY EQUIPMENT INVENTORY

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1.0 PURPOSE

- 1.1 The purpose of this procedure is to provide for the periodic inventory, inspection and operational checking of emergency equipment and supplies to ensure that the equipment and supplies are available and functional.
- 1.2 This procedure is applicable to the Supervisor - Emergency Planning, the Radiation Protection Supervisor, and to personnel assigned to verify the availability and operability as appropriate, of emergency equipment and supplies which may be required during an emergency.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 RPP-0004, Operation and Calibration of RAS-1 Type Air Sample
- 2.3 RHP-0014, Pocket Dosimeter Calibration and Control
- 2.4 RPP-0039, Operation and Calibration of the Continuous Air Monitor
- 2.5 RPP-0049, Emergency Equipment Inventory
- 2.6 RPP-0085, Operation and Calibration of the Eberline PRM-6
- 2.7 RPP-0087, Operation and Calibration of the Eberline RM-14
- 2.8 RPP-0089, Operation and Calibration of the Eberline RO-2/2A
- 2.9 RPP-0091, Operation and Calibration of the Teletector 6112 B & D

3.0 GENERAL INFORMATION

- 3.1 All emergency equipment and supplies shall be inventoried and inspected at least once each calendar quarter; after each use; and any time it is suspected that the emergency equipment has been tampered with, used for unauthorized purposes, or a kit is found unsealed.
- 3.2 Respiratory equipment shall be inspected at least once each month and inventoried in accordance with step 3.1 above.
- 3.3 Emergency equipment and supplies shall be maintained at the following locations:
 - 3.3.1 Control Room
 - 3.3.2 Technical Support Center (TSC)
 - 3.3.3 Operations Support Center (OSC)
 - 3.3.4 Emergency Operations Facility (EOF)
 - 3.3.5 First Aid Room
 - 3.3.6 Plant Emergency Vehicle
 - 3.3.7 River Bend Energy Center
 - 3.3.8 West Feliciana Parish Hospital
 - 3.3.9 Our Lady of the Lake Regional Medical Center

NOTE

First aid kits shall be maintained in the Main Control Room, TSC, OSC, EOF, Radiation Protection Work Area, First Aid Room, Turbine Building, the "T" Tunnel and at the Primary Access Point.

4.0 PROCEDURE

4.1 The Radiation Protection Supervisor shall:

- 4.1.1 Schedule quarterly inventories of the emergency equipment listed in Attachments 1 through 10, Inventory Checklists.
- 4.1.2 Assign an individual to conduct inventories of the emergency kits in accordance with RPP-0049, Emergency Equipment Inventory.
- 4.1.3 Supervise the calibration and testing of radiation monitoring equipment in accordance with applicable procedures, listed in Section 2.3 through 2.9.
- 4.1.4 Direct the immediate correction of identified deficiencies or documentation of deficiencies for corrective action.

NOTE

If a kit deficiency which cannot be corrected in one day, significantly reduces the capability of the kit, notify the Supervisor - Emergency Planning and the Plant Manager immediately.

- 4.1.5 Ensure the availability of sufficient reserves of instruments and equipment from normal station inventories to replace instruments/equipment removed from the emergency kits for calibration or repair.
- 4.1.6 Review all inventories and transmit inventory results to the Supervisor - Emergency Planning for review and filing.

4.2 The Supervisor - Emergency Planning shall:

- 4.2.1 Review the results of inventories and ensure that action is taken to correct all identified deficiencies.
- 4.2.2 Coordinate with the Radiation Protection Supervisor to modify the content of Emergency Kits, as well as to provide for additional equipment and supplies as necessary, based on procedure review or critiques of drills and exercises.
- 4.2.3 Maintain all completed inventories on file for a minimum of five years.

END

ATTACHMENT 1: INVENTORY CHECKLIST

DESCRIPTION:	Main Control Room Emergency Kit
<p>1. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>2. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>3. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>4. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>5. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>6. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>7. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>8. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>9. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p> <p>10. Emergency Kit: A kit containing a flashlight, a first aid kit, a fire extinguisher, and a communication device.</p>	

INVENTORY

Radiation Protection Supervisor

LOCATION:

RESPONSIBILITY:

[illegible]

INVENTORY CONDUCTED BY:

DATE: _____

REVIEWED BY:

Radiation Protection Supervisor

DATE: _____

REVIEWED BY:

Supervisor - Emergency Planning

DATE: _____

ATTACHMENT 1: INVENTORY CHECKLIST

DESCRIPTION:	Main Control Room Emergency Kit
1. 100% Oxygen	100% Oxygen
2. 100% Nitrogen	100% Nitrogen
3. 100% Argon	100% Argon
4. 100% Helium	100% Helium
5. 100% Hydrogen	100% Hydrogen
6. 100% Fluorine	100% Fluorine
7. 100% Chlorine	100% Chlorine
8. 100% Sulfur	100% Sulfur
9. 100% Phosphorus	100% Phosphorus
10. 100% Potassium	100% Potassium
11. 100% Sodium	100% Sodium
12. 100% Calcium	100% Calcium
13. 100% Magnesium	100% Magnesium
14. 100% Zinc	100% Zinc
15. 100% Iron	100% Iron
16. 100% Copper	100% Copper
17. 100% Silver	100% Silver
18. 100% Gold	100% Gold
19. 100% Platinum	100% Platinum
20. 100% Palladium	100% Palladium
21. 100% Rhodium	100% Rhodium
22. 100% Ruthenium	100% Ruthenium
23. 100% Cobalt	100% Cobalt
24. 100% Nickel	100% Nickel
25. 100% Manganese	100% Manganese
26. 100% Chromium	100% Chromium
27. 100% Vanadium	100% Vanadium
28. 100% Titanium	100% Titanium
29. 100% Zirconium	100% Zirconium
30. 100% Niobium	100% Niobium
31. 100% Molybdenum	100% Molybdenum
32. 100% Technetium	100% Technetium
33. 100% Rhenium	100% Rhenium
34. 100% Osmium	100% Osmium
35. 100% Iridium	100% Iridium
36. 100% Platinum	100% Platinum
37. 100% Gold	100% Gold
38. 100% Silver	100% Silver
39. 100% Copper	100% Copper
40. 100% Zinc	100% Zinc
41. 100% Iron	100% Iron
42. 100% Nickel	100% Nickel
43. 100% Manganese	100% Manganese
44. 100% Chromium	100% Chromium
45. 100% Vanadium	100% Vanadium
46. 100% Titanium	100% Titanium
47. 100% Zirconium	100% Zirconium
48. 100% Niobium	100% Niobium
49. 100% Molybdenum	100% Molybdenum
50. 100% Technetium	100% Technetium
51. 100% Rhenium	100% Rhenium
52. 100% Osmium	100% Osmium
53. 100% Iridium	100% Iridium
54. 100% Platinum	100% Platinum
55. 100% Gold	100% Gold
56. 100% Silver	100% Silver
57. 100% Copper	100% Copper
58. 100% Zinc	100% Zinc
59. 100% Iron	100% Iron
60. 100% Nickel	100% Nickel
61. 100% Manganese	100% Manganese
62. 100% Chromium	100% Chromium
63. 100% Vanadium	100% Vanadium
64. 100% Titanium	100% Titanium
65. 100% Zirconium	100% Zirconium
66. 100% Niobium	100% Niobium
67. 100% Molybdenum	100% Molybdenum
68. 100% Technetium	100% Technetium
69. 100% Rhenium	100% Rhenium
70. 100% Osmium	100% Osmium
71. 100% Iridium	100% Iridium
72. 100% Platinum	100% Platinum
73. 100% Gold	100% Gold
74. 100% Silver	100% Silver
75. 100% Copper	100% Copper
76. 100% Zinc	100% Zinc
77. 100% Iron	100% Iron
78. 100% Nickel	100% Nickel
79. 100% Manganese	100% Manganese
80. 100% Chromium	100% Chromium
81. 100% Vanadium	100% Vanadium
82. 100% Titanium	100% Titanium
83. 100% Zirconium	100% Zirconium
84. 100% Niobium	100% Niobium
85. 100% Molybdenum	100% Molybdenum
86. 100% Technetium	100% Technetium
87. 100% Rhenium	100% Rhenium
88. 100% Osmium	100% Osmium
89. 100% Iridium	100% Iridium
90. 100% Platinum	100% Platinum
91. 100% Gold	100% Gold
92. 100% Silver	100% Silver
93. 100% Copper	100% Copper
94. 100% Zinc	100% Zinc
95. 100% Iron	100% Iron
96. 100% Nickel	100% Nickel
97. 100% Manganese	100% Manganese
98. 100% Chromium	100% Chromium
99. 100% Vanadium	100% Vanadium
100. 100% Titanium	100% Titanium

LOCATION:

INVENTORY

RESPONSIBILITY:

Radiation Protection Supervisor

[illegible]

INVENTORY CONDUCTED BY:

DATE:

REVIEWED BY:

DATE:

REVIEWED BY:

DATE:

Radiation Protection Supervisor

Supervisor - Emergency Planning

ATTACHMENT 1: INVENTORY CHECKLIST

INVENTORY DESCRIPTION: Main Control Room Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Protective Clothing Sets (includes hood, coveralls, shoe covers, rubbers, gloves, glove liners)	10					
Chalk (marking)	6					
Flashlights	5					
Spare Flashlight Batteries	4					
Clipboards	3					
Note Pads	6					
Pens	6					
Masking Tape	2 rolls					
Contamination Smears	1 box					
Smear (coin) envelopes	1 box					
Poly Bags (small)	1 roll					
Poly Bags (large)	1 roll					
Radiation Warning Signs	2					
High Radiation Warning Signs	2					
Contamination Warning Signs	2					
Radioactive Material Tags	10					

INVENTORY CONDUCTED BY: _____ DATE: _____

REVIEWED BY: Radiation Protection Supervisor DATE: _____

REVIEWED BY: Supervisor - Emergency Planning DATE: _____

LOCATION:

DATE:

ATTACHMENT 2: INVENTORY CHECKLIST

INVENTORY DESCRIPTION: TSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor LOCATION:

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Low Range Portable Rate Meter (RO-2):						
Beta/Gamma 0 - 5 R/hr	1					
G-M Friskers (RM-14 w/260 + 210T):						
Beta/Gamma 0 - 50,000 cpm	2					
Direct Reading Pocket Dosimeters:						
Gamma; 0 - 500 mR	20					
Gamma; 0 - 1 R	20					
Dosimeter Charger	2					
Alarm Dosimeters:						
Gamma; 0 - 9,900 mR	2					
Approx 8 micro Curie CS-137 check source	1					

INVENTORY CONDUCTED BY: DATE: _____

REVIEWED BY: Radiation Protection Supervisor DATE: _____

REVIEWED BY: Supervisor - Emergency Planning DATE: _____

ATTACHMENT 2: INVENTORY CHECKLIST

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

DESCRIPTION:

LOCATION:

[illegible]

INVENTORY CONDUCTED BY:

DATE:

REVIEWED BY:

Radiation Protection Supervisor

DATE:

REVIEWED BY:

Supervisor - Emergency Planning

DATE:

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Low Range Portable Rate Meter (RO-2):						
Beta/Gamma 0 - 5 R/hr	4					
High Range Portable Rate Meter						
(6112 Teletector)						
Beta/Gamma; 0.1 - 1,000 R/hr	2					
High Range Portable Rate Meter (RO-7):						
Beta/Gamma; 0 - 10,000 R/hr	1					
G-M Friskers (RM-14 w/260 + 210T):						
Beta/Gamma 0 - 50,000 cpm	5					
Direct Reading Pocket Dosimeters:						
Gamma; 0 - 500 mR	20					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Gamma; 0 - 1 R	20					
Gamma; 0 - 10 R	10					
Gamma; 0 - 100 R	4					
Dosimeter Charger	2					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Alarm Dosimeters (DCA Model 1888):						
Gamma; 0 - 9, 990 mR	4					
Air Sample Collector with Cartridge and Filter Holder (RADECO 809B)	2					
Thermoluminescent Dosimeters (TLD's)						
Beta/Gamma	30					
Approx 8 micro Curie CS-137 check source	1					
Air Sample Collector (RAS-1)	4					
Continuous Air Monitor With Readout	1					
Particulate Filters	2 boxes					
Silver Zeolite Cartridges	2 boxes					
Self-Contained Breathing Air Apparatus (P/D) (four with speak easy)	10					
Spare Air Bottles	10					
Full Face Filter Respirator	10					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Respirator Filters (GMR-1)	20					
Protective Clothing Set (includes coveralls, shoe covers, rubbers, gloves, glove liners, hoods)	20					
Protective Clothing Set, White Paper	50					
Covered Stokes Stretcher w/Gurney	1					
First Aid Kit	1					
Personnel Injury/Contamination Forms	10					
Personnel Decontamination Procedure	2					
Radiation Warning Signs	20					
High Radiation Warning Signs	20					
Contamination Warning Signs	20					
Contaminated Materials Signs	4					
Hot Spot Stickers	15					
Radioactive Materials Tags	100					
Step-Off Pads	20					
Barrier Rope	Approx. 500 feet					
Contamination Smears	2 boxes					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY DESCRIPTION: OSC Emergency Kit
RESPONSIBILITY: Radiation Protection Supervisor LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Smear (coin) Envelopes	2 boxes					
Containers for Radioactive Trash and Materials	3					
Containers for Radioactive Liquids	5					
Poly Bag (small)	1 roll					
Poly Bag (large)	1 roll					
Clipboard	3					
Notepads	6					
Pens	6					
Chalk, Marking	6					
Masking Tape	10 rolls					
Scissors	1					
Camera (Polaroid Type)	2					
Film	10					
Flashlights	10					
Spare Flashlight Batteries	4					
Portable Calculator	3					
Walkie-Talkies	6					
Logbooks	2					

INVENTORY CONDUCTED BY: _____ DATE: _____
 REVIEWED BY: _____ DATE: _____
 REVIEWED BY: _____ DATE: _____
 Radiation Protection Supervisor
 Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Tape Recorder	1					
90 Minute Tapes	2					
Set of Station survey Maps	10					
Set of Station Floor Plan Drawings	1					
Rescue/Damage Control Equipment List						
Ropes (100-ft)	2					
Ropes (150-ft)	2					
Ropes (225-ft)	2					
Life-lines (50-ft)	2					
Wrecking bars	4					
Boltcutter	4					
Come-alongs	2					
Cable Slings	4					
Hydraulic Jacks	2					
Sledge Hammer	2					
Tool Kit	2					
Small Acetylene Cutting & Welding Rig	2					
Combustible gas/oxygen analyzer	1					
Toxic Gas Monitor	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 3: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: OSC Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Emergency Plan Implementing Procedures:						
EIP-2-008: Search and Rescue	1					
EIP-2-009: Medical Emergencies	1					
EIP-2-010: Toxic Gas Emergencies	1					
EIP-2-011: Fire Emergencies	1					
EIP-2-012: Radiation Exposure Controls	1					
EIP-2-013: Onsite Radiological Monit.	1					
EIP-2-014: Offsite Radiological Monit.	1					
EIP-2-015: Post-Accident Sampling Oper	1					
EIP-2-016: Operations Support Center -						
Activation	1					
EIP-2-017: Operations Support Center -						
Support Functions	1					
EIP-2-026: Evacuation	1					
EIP-2-027: Personnel Accountability	1					
EIP-2-029: Emergency Telephone Book	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Logbook	1					
Low Range Portable Rate Meter (RO-2)						
Beta/Gamma; 0 - 5 R/hr	2					
G-M Friskers (RM-14 w/260 + 210T)						
Beta/Gamma; 0 - 50,000 cp,	2					
Approx 8 micro Curie CS-137 check source	1					
Air Sample Collector (RAS-1)	2					
Air Sample Collector (RADECO 809B)	2					
Continuous Air Monitor With Readout	1					
Particulate Filters	2 boxes					
Silver-Zeolite Cartridges	2 boxes					
Personnel Injury/Contamination Forms	25					
Personnel Decontamination Procedure	11					
Protective Clothing Set, White Paper	50					
Poly Bottles (1 gallon)	5					
Plastic Beakers (1 liter)	5					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Emergency Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Poly Bags (small)	1 roll					
Poly Bags (large)	1 roll					
Contaminated Materials Sign	6					
Contamination Warning Sign	4					
Step-Off Pads	20					
Barrier Rope	Approx. 100 feet					
Container for Radioactive Liquids						
(5 gallons)	2					
Contamination Smears	1 box					
Smear (coin) Envelopes	1 box					
Disposable Gloves, Surgical	5 boxes					
Hand Soap	1 gallon					
Hand Cream	16 oz.					
Soap, Bars	3					
Manicure Set	2					
Hand (fingernail) brushes	4					
Cotton Balls	2 boxes					
Cotton Swabs (Q-Tip)	2 boxes					
RMC Decontamination Kit	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

LOCATION: Emergency Equipment Storage Room

INVENTORY CONDUCTED BY: _____	DATE: _____
REVIEWED BY: _____ Radiation Protection Supervisor	DATE: _____
REVIEWED BY: _____ Supervisor - Emergency Planning	DATE: _____

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #1

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Low Range Portable Rate Meter (RO-2):						
Beta/Gamma 0 - 5 R/hr	1					
Friskers (E-140 w/HP-210T):						
Beta/Gamma 0 - 50,000 cpm	1					
Direct Reading Pocket Dosimeters:						
Gamma; 0 - 200 mR	2					
Gamma; 0 - 500 mR	2					
Dosimeter Charger	1					
SH-4 Holder	4					
Thermoluminescent Dosimeters (TLD's)						
Beta/Gamma	2					
Approx 8 micro Curie CS-137 check source	1					
Air Sample Collector With Cartridge						
and Filter Holder (RADECO 809B)	1					
Particulate Filters	2 boxes					
Silver Zeolite Cartridges	2 boxes					
Full Face Filter Respirator	2					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #1

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Respirator Filters, Iodine (GMR-1)	2					
Masking Tape	1 roll					
Flashlight	2					
Spare Flashlight Batteries	6					
Spare RO-2 Batteries (9 volt)	2					
Portable Calculator	1					
Walkie-Talkies	1					
Scissors (shears)	1					
Screwdriver	1					
Pliers	2					
Pens	3					
China Marker	1					
Stopwatch	1					
Yellow Rain Gear With Boots	2					
Protective Clothing Set, White Paper	2					
Tweezers	1					
Contamination Smears	1 box					
Smear (coin) Envelopes	1 box					
Disposable Gloves, Surgical	1 box					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #1

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Road Maps (Area)	1					
Emergency Plan Implementing Procedure:						
EIP-2-014: Offsite Rad. Monitoring	1					
Map of Envir. Monitoring Stations	1					
Sample Station Keys	1					
Poly Bags (small)	1 box					
Poly Bags (large)	1 box					
One Liter Plastic Containers w/caps	6					
Hand Trowel (garden)	1					
Tape Measure	1					
Adhesive Labels (large)	1 pkg					
Dimes	\$2.00					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: Radiation Protection Supervisor

DATE: _____

REVIEWED BY: Supervisor - Emergency Planning

DATE: _____

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #2

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Low Range Portable Rate Meter (RO-2):						
Beta/Gamma 0 - 5 R/hr	1					
Frisker (E-140 w/HP-210T):						
Beta/Gamma 0 - 500,000 cpm	1					
Direct Reading Pocket Dosimeters:						
Gamma; 0 - 200 mR	2					
Gamma; 0 - 500 mR	2					
Dosimeter Charger	1					
SH-4 Holder	1					
Thermoluminescent Dosimeters (TLD's)						
Beta/Gamma	2					
Approx 8 micro Curie CS-137 check source	1					
Air Sample Collector With Cartridge						
and Filter Holder (RADECO 809B)	1					
Particulate Filters	2 boxes					
Silver Zeolite Cartridges	2 boxes					
Full Face Filter Respirator	2					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #2

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Respirator Filters, Iodine (GMR-1)	2					
Masking Tape	1 roll					
Flashlight	2					
Spare Flashlight Batteries	6					
Spare RO-2 Batteries (9 volt)	2					
Portable Calculator	1					
Walkie-Talkies	1					
Scissors (shears)	1					
Screwdriver	1					
Pliers	1					
Pens	3					
China Marker	1					
Stopwatch	1					
Yellow Rain Gear With Boots	2					
Protective Clothing Set, White Paper	2					
Tweezers	1					
Contamination Smears	1 box					
Smear (coin) Envelopes	1 box					
Disposable Gloves, Surgical	1 box					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 4: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: EOF Offsite Emergency Kit #2

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: Emergency Equipment Storage Room

[illegible]

INVENTORY CONDUCTED BY:

DATE: _____

REVIEWED BY:

Radiation Protection Supervisor

DATE: _____

REVIEWED BY:

Supervisor - Emergency Planning

DATE: _____

ATTACHMENT 5: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: First Aid Room Emergency Equipment

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
G-M Frisker (RM-14 w/260 + 210T and check source) Beta/Gamma;						
0 - 50,000 cpm	1					
Protective Clothing Set, White Paper	20					
Personnel Injury/Contamination Forms	25					
Personnel Decontamination Procedure	2					
Treatment Table	1					
Resuscitator	1					
Canvas Stretcher	1					
Wire Basket Stretcher	1					
Set of First Aid Equipment/Supplies	2					
Contaminated Materials Sign	2					
Poly Bags (small)	1 box					
Poly Bags (large)	1 box					
Poly Bottles (1 gallon)	5					
Plastic Beakers (1 liter)	5					
Disposable Gloves, Surgical	4 boxes					
RMC Decontamination Kit	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

DRY CHECKLIST

DESCRIPTION:	First Aid Room Emergency Equipment
1. First Aid Kit	1. First Aid Kit
2. Band-Aids	2. Band-Aids
3. Gauze Pads	3. Gauze Pads
4. Antiseptic Wipes	4. Antiseptic Wipes
5. First Aid Manual	5. First Aid Manual
6. First Aid Training Course	6. First Aid Training Course
7. First Aid Certification	7. First Aid Certification
8. First Aid Supplies	8. First Aid Supplies
9. First Aid Station	9. First Aid Station
10. First Aid Room	10. First Aid Room

LOCATION:

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

[illegible]

INVENTORY CONDUCTED BY:

REVIEWED BY:

Radiation Protection Supervisor

REVIEWED BY:

Supervisor - Emergency Planning

DATE:

DATE:

DATE:

ATTACHMENT 6: INVENTORY CHECKLIST

[illegible]

LOCATION: _____

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

[illegible]

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____

ATTACHMENT 7: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: River Bend Energy Center Decon Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
G-M Frisker (RM-14 w/260 + 210T and check source) 0 - 50,000 cpm	1					
Set of First Aid Equipment and Supplies	1					
Personnel Injury/Contamination Forms	25					
Personnel Decontamination Procedure	2					
Protective Clothing Set, White Paper	50					
Poly Bottles (1 gallon)	10					
Plastic Beakers (1 liter)	10					
Poly Bags (small)	1 box					
Poly Bags (large)	1 box					
Contaminated Materials Sign	6					
Step-Off Pads	20					
Container for Radioactive Trash and Materials	1					
Containers for Radioactive Liquids (15 gallon)	3					
Contamination Smears	1 box					
Smear (coin) Envelopes	1 box					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: Radiation Protection Supervisor

DATE: _____

REVIEWED BY: Supervisor - Emergency Planning

DATE: _____

ATTACHMENT 7: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: River Bend Energy Center Decon Kit

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Disposable Gloves, Surgical	5 boxes					
Hand Soap	1 gallon					
Hand Cream	16 oz.					
Lava Soap, Bars	5					
Manicure Set	2					
Hand (fingernail) brushes	5					
Cotton Balls	2 boxes					
Cotton Swabs (Q-Tips)	2 boxes					
Facial Tissue	5 boxes					
Eye Wash Solution and Applicator	2					
Paper Towels	1 roll					
Scissors	1					
Clipboard	3					
Notepads	3					
Pens	3					
Chalk, Marking	3					
Masking Tape	1 roll					
Plastic Sheet	1 roll					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 7: INVE.

DESCRIPTION: Kiver Bend Energy Center Decon Kit

LOCATION:

[illegible]

Page 31 of 38

ATTACHMENT 8: INVENTORY CHECKLIST

West Feliciana Parish Hospital

INVENTORY

DESCRIPTION Emergency Equipment

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Decontamination Table Top With Splash						
Guard, Stretcher Insert (2) 15-Gallon						
Poly Vinyl Water Containers	1					
Contaminated Waste Container, 35-Gallon						
With Mobile Base	2					
Decontamination Kit	1					
Bioassay Sample Taking Kit	1					
Mobile Storage Cart, Built to Contain						
Items Listed	1					
Lead Container for High Activity						
Specimen	1					
Masking Tape, 2" Width	10					
Radiation Warning Rope, Cut to Fit REA	1					
Radiation Warning Signs	10					
Radiation Sign Inserts	15					
Hose With Low Pressure Showerhead,						
Prerinse With Brass Spray Head						
and Chrome-Plated Hose Adapter	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 8: INVENTORY CHECKLIST

West Feliciana Parish Hospital

DESCRIPTION: Emergency Equipment

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION:

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Step-Off Pads, Plastic Laminate,						
Bold Type Printing	2					
Protective Clothing Packs (including						
2 surgical gowns, 2 aprons, 2 pair						
surgical gloves, 1 mask, 1 cap, and						
2 pair shoe covers)	20					
Laminated Accident Posters	2					
Stanchions, Metal	4					
Herculite (pre-cut to fit REA), Yellow						
(Decon Room, Ambulance Entrance),						
Green (Buffer Zone), and White						
(Patient Exit)	sufficient					
Plastic Trash Can Liners	10					
RM-14 Count Rate Meter	2					
E-120 Dose Rate Meter	1					
O-200 mR SRDs	10					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

Supervisor - Emergency Planning

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

DESCRIPTION:

LOCATION:

[illegible]

INVENTORY CONDUCTED BY:

DATE: _____

REVIEWED BY:

DATE: _____

REVIEWED BY:

DATE: _____

Radiation Protection Supervisor

Supervisor - Emergency Planning

ATTACHMENT 9: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: Our Lady of the Lake Regional Medical Center Emergency Equip.

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Decontamination Table Top With Splash						
Guard, Stretcher Insert (2) 15-Gallon						
Poly Vinyl Water Containers	1					
Contaminated Waste Container, 35-Gallon						
With Mobile Base	2					
Decontamination Kit	1					
Bioassay Sample Taking Kit	1					
Mobile Storage Cart, Built to Contain						
Items Listed	1					
Lead Container for High Activity						
Specimen	1					
Masking Tape, 2" Width	10					
Radiation Warning Rope, Cut to Fit REA	1					
Radiation Warning Signs	10					
Radiation Sign Inserts	15					
Hose With Low Pressure Showerhead,						
Prerinse With Brass Spray Head						
and Chrome-Plated Hose Adapter	1					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

ATTACHMENT 9: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: Our Lady of the Lake Regional Medical Center Emergency Equip.

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Step-Off Pads, Plastic Laminate, Bold Type Printing	2					
Protective Clothing Packs (including 2 surgical gowns, 2 aprons, 2 pair surgical gloves, 1 mask, 1 cap, and 2 pair shoe covers)	20					
Laminated Accident Posters	2					
Stanchions, Metal	4					
Herculite (pre-cut to fit REA), Yellow (Decon Room, Ambulance Entrance), Green (Buffer Zone), and White (Patient Exit)	sufficient					
Plastic Trash Can Liners	10					
RM-14 Count Rate Meter	2					
E-120 Dose Rate Meter	1					
O-200 mR SRDs	10					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

**Our Lady of the Lake Regional
Medical Center Emergency Equip.**

INVENTORY

RESPONSIBILITY: Radiation Protection Supervisor

DESCRIPTION:

LOCATION:

[illegible]

INVENTORY CONDUCTED BY:

DATE:

REVIEWED BY:

DATE:

REVIEWED BY:

DATE:

Supervisor - Emergency Planning

ATTACHMENT 10: INVENTORY CHECKLIST

INVENTORY

DESCRIPTION: First Aid Kits

RESPONSIBILITY: Radiation Protection Supervisor

LOCATION: _____

ITEM DESCRIPTION	NUMBER REQUIRED	ACTUAL QUANTITY	SERIAL NUMBER	CALIBRATION DUE DATE (IF APPLICABLE)	CONDITION SAT/UNSAT	COMMENTS
Standard						
Gulf States Utilities						
First Aid Kit to include:						
First Aid Spray	1 can					
Ammonia Inhalant	1 box					
Poison Ivy Cream	2 boxes					
Sting-Kill Swabs	2 boxes					
Regular Swabs	1 pkg.					
Triangular Bandage	1					
Bandage Compress 4"	1					
Bandage Compress 2"	1					
Gauze Bandage 2"	1					
Gauze Bandage 4"	1					
Adhesive Bandage 1"	2 boxes					
Adhesive Tape 1/2"	1 box					
Eye Wash Solution	1					
Merthiolate Applicators	2 boxes					

INVENTORY CONDUCTED BY: _____

DATE: _____

REVIEWED BY: _____

DATE: _____

Radiation Protection Supervisor

REVIEWED BY: _____

DATE: _____

Supervisor - Emergency Planning

RIVER BEND STATION

APPROVAL SHEET

STATION SUPPORT MANUAL PROCEDURES

PROCEDURE NO: EIP-2-104

PROCEDURE TITLE: MAINTENANCE OF EMERGENCY TELEPHONE NUMBERS

SAFETY RELATED ACTIVITY INVOLVED? ☐ Yes

☒ No

REV. NO.	TOTAL PAGES ISSUED	REASON* FOR REVISION	APPROVED BY (SIGNATURE/DATE)	EFFECTIVE DATE
0	1-5		<i>J. Sullivan 10/2/84</i>	
			FOR INFORMATION ONLY C	

*Be specific (e.g., QAFR number, Regulatory Guide No., commitment, etc.).

RIVER BEND STATION
PROCEDURE REVIEW

EMERGENCY PLAN IMPLEMENTING PROCEDURES

TITLE: MAINTENANCE OF EMERGENCY TELEPHONE NUMBERS

PROCEDURE NO. EIP-2-104

REV. 0

EMERGENCY PLANNING COMMITTEE REVIEW:

DATE

[Signature]
Radiation Protection/Chemistry Representative

9-24-84

[Signature]
Plant Operations Representative

9-24-84

Charles E. Foster
Security Representative

9/24/84

W. H. Odell
Training Representative

9/24/84

Robert L. Cow
Technical Staff Representative

9/24/84

Eddie R. Grant
Nuclear Licensing Representative

9-24-84

Lee L. Burton
Maintenance Representative

9/24/84

Recommended for Approval:

John D. Cadwallader
Supervisor - Emergency Planning

9-24-84

MAINTENANCE OF EMERGENCY TELEPHONE NUMBERS

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1.0 PURPOSE

This procedure provides guidance for the maintenance of emergency telephone numbers.

2.0 REFERENCES

- 2.1 River Bend Station Emergency Plan
- 2.2 EIP-2-009, Medical Emergencies
- 2.3 EIP-2-011, Fire Emergencies
- 2.4 EIP-2-029, Emergency Telephone Book
- 2.5 EIP-2-102, Training, Drills and Exercises
- 2.6 10 CFR 50, Domestic Licensing, Appendix E

3.0 GENERAL INFORMATION

The Supervisor - Emergency Planning is responsible for the periodic updating of telephone numbers.

4.0 PROCEDURE

4.1 The Supervisor - Emergency Planning shall:

4.1.1 Maintain a master copy of EIP-2-029, Emergency Telephone Book (Ref 2.4), and ensure updating as follows:

1. Daily

- a. Review listing of newly hired and terminating personnel submitted by the Personnel Department.
- b. List revised/additional information on Attachment 1, Changes to Emergency Telephone Book.
- c. Forward copies of Attachment 1 showing updated information to the Control Room, Technical Materials and Plant Services Supervisor, and Document Control.
- d. Instruct personnel to make pen and ink changes as necessary to EIP-2-029, Emergency Telephone Book (Ref. 2.4).

2. Quarterly

Ensure that all Emergency Telephone Numbers are reviewed for accuracy and updated as follows:

- a. Transmit Attachment 2, Verification of Emergency Telephone Book, to all emergency response organization personnel requesting verification of telephone numbers.

- b. Review changes, make revisions, and ensure the reissue of the Emergency Telephone Book, through Document Control, as necessary.
- c. Update EIP-2-029, Emergency Telephone Book, copies in the EOF.

3. Offsite Contacts

Review documentation of communications tests, as described in EIP-2-102, Training, Drills and Exercises (Ref. 2.5), and resolve deficiencies which have been identified.

- 4.1.2 Ensure that hospital and fire department telephone numbers in EIP-2-009, Medical Emergencies, and EIP-2-011, Fire Emergencies (Ref. 2.2 and 2.3), are reviewed and updated at least quarterly.
- 4.2 The Personnel Department shall provide a listing of newly hired and terminating personnel to the Supervisor - Emergency Planning on a daily basis.
- 4.3 The Shift Supervisor shall:
 - 4.3.1 Update the Control Room Copy of EIP-2-029, Emergency Telephone Book, using Attachment 1, Changes to Emergency Telephone Book.
 - 4.3.2 Document communications tests in accordance with EIP-2-102, Training, Drills and Exercises (Ref. 2.5), and submit results to the Supervisor - Emergency Planning.
- 4.4 The Technical Materials and Plant Services Supervisor shall be responsible for updating the emergency telephone books in the Technical Support Center (TSC) and Operations Support Center (OSC) as described in 4.3.1.
- 4.5 Document Control personnel will distribute EIP-2-029, Emergency Telephone Book, in accordance with the controlled copy distribution list for Emergency Plans and Procedures.

END

ATTACHMENT 1**CHANGES TO EMERGENCY TELEPHONE BOOK**

MEMO TO: Control Room
Technical Materials and Plant Services Supervisor
Supervisor - Document Control

Date _____

CHANGES TO EMERGENCY TELEPHONE BOOK

Please make pen and ink changes to EIP-2-079, Emergency Telephone Book, as follows:

Name of Individual or Organization	Page No.	Add	Delete	Change	
				From	To
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Signed: _____

Return this form to the Supervisor - Emergency Planning by: _____

Date _____

Memo To: _____

From: Supervisor - Emergency Planning

In accordance with Emergency Plan Implementing Procedure EIP-2-104, Maintenance of Emergency Telephone Numbers, the telephone number of each individual assigned to the emergency response organization must be verified correct each calendar quarter.

Your telephone number is listed as _____

This number is Correct

Incorrect
(give correct number) _____

Signed: _____

Return this verification form by _____ to the Supervisor - Emergency Planning.