



Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247

December 15, 1999
LIC-99-0122

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

SUBJECT: Transmittal of Changes to Fort Calhoun Emergency Plan Implementing Procedures (EPIP) Manual

In accordance with 10 CFR 50 Appendix A Part V and 10 CFR 50.4(b)(5)(iii), please find an EPIP change package enclosed for the Document Control Center (holder of Copy 165) and the NRC Emergency Response Coordinator (holder of Copies 154, 155, and 156).

The document update instructions and summary of changes are included on the Confirmation of Transmittal (Form EP-1) attached to each controlled copy change package. Please return the Confirmation of Transmittal form by February 7, 2000.

The revised documents included in the enclosed package are:

EPIP Index, Pages 1 and 2 (dated 12/09/99)
EPIP-OSC-9, R7, issued 12/09/99
EPIP-RR-13, R14, issued 12/09/99

Please contact me if you have any questions regarding the enclosed changes.

Sincerely,

R. L. Phelps
Division Manager
Nuclear Engineering

RLP/jmh

c: T. H. Andrews, NRC Emergency Response Coordinator (3 copies)
L. R. Wharton, NRC Project Manager (w/o enclosures)
W. C. Walker, NRC Senior Resident Inspector (w/o enclosures)
Winston & Strawn (w/o enclosures)

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OMAHA PUBLIC POWER DISTRICT

Confirmation of Transmittal for
Emergency Planning Documents/Information

<input type="checkbox"/> Radiological Emergency Response Plan (RERP)	<input checked="" type="checkbox"/> Emergency Plan Implementing Procedures (EPIP)	<input type="checkbox"/> Emergency Planning Forms (EPF)
<input type="checkbox"/> Emergency Planning Department Manual (EPDM)	<input type="checkbox"/> Other Emergency Planning Document(s)/ Information	

Transmitted to:

Name: Document Control Desk Copy No: 165 Date: 12-15-99
Tom Andrews Copy No: 154
Tom Andrews Copy No: 155
Tom Andrews Copy No: 156

The following document(s) / information is forwarded for your manual:

REMOVE SECTION


EPIP Index Pgs 1 (Dtd 10/26/99) & 2 (Dtd 11/30/99)
EPIP-OSC-9 R6 issued 03/11/97
EPIP-RR-13 R13 issued 04/25/96

INSERT SECTION

EPIP Index Pgs 1 & 2 (Dtd 12/09/99)
EPIP-OSC-9 R7 issued 12/09/99
EPIP-RR-13 R14 issued 12/09/99

Summary of Changes:

EPIP-OSC-9 was reformatted per Writers Guide, changed Shift Supervisor to Shift Manager and changed reference from FCS-Safety Manual to FCSG-15.
EPIP-RR-13 was reformatted per Writers Guide.



Supervisor - Emergency Planning

I hereby acknowledge receipt of the above documents/information and have included them in my assigned manuals.

Signature: _____ Date: _____

Please sign above and return by 02/07/00 to:

Karma Boone
Fort Calhoun Station, FC-2-1
Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102-2247

NOTE: If the document(s)/information contained in this transmittal is no longer requested or needed by the recipient, or has been transferred to another individuals, please fill out the information below.

Document(s)/Information No Longer Requested/Needed

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Name: _____ Mailing Address: _____

EMERGENCY PLAN IMPLEMENTING PROCEDURE INDEX

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>	<u>REVISION/DATE</u>
EPIP-OSC-1	Emergency Classification	R32 07-29-99
EPIP-OSC-2	Command and Control Position Actions/Notifications	R34 10-07-98a
EPIP-OSC-9	Emergency Team Briefings	R7 12-09-99
EPIP-OSC-15	Communicator Actions	R18 12-02-97a
EPIP-OSC-20	Site Population Exposure Estimates	R6 11-10-95
EPIP-OSC-21	Activation of the Operations Support Center	R8 09-30-97
EPIP-TSC-1	Activation of the Technical Support Center	R20 10-08-99
EPIP-TSC-2	Catastrophic Flooding Preparations	(R0 03-22-95) DELETED 05-09-95 REINSTATED R2 02-06-96
EPIP-TSC-8	Core Damage Assessment	R11 02-25-97a
EPIP-EOF-1	Activation of the Emergency Operations Facility	R11 09-23-99a
EPIP-EOF-3	Offsite Monitoring	R16 10-26-99
EPIP-EOF-6	Dose Assessment	R27 03-11-97a
EPIP-EOF-7	Protective Action Guidelines	R12 09-01-94
EPIP-EOF-10	Warehouse Personnel Decontamination Station Operation	R9 11-01-90a
EPIP-EOF-11	Dosimetry Records, Exposure Extensions and Habitability	R18 09-18-97b
EPIP-EOF-19	Recovery Actions	R7 09-30-98
EPIP-EOF-21	Potassium Iodide Issuance	R3 09-18-97
EPIP-EOF-23	Emergency Response Message System	R5 10-12-99

EMERGENCY PLAN IMPLEMENTING PROCEDURE INDEX

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>	<u>REVISION/DATE</u>
EPIP-EOF-24	EOF Backup Alert Notification System Activation	R3 09-09-99
EPIP-RR-11	Technical Support Center Director Actions	R13 04-28-94
EPIP-RR-13	Reactor Safety Coordinator Actions	R14 12-09-99
EPIP-RR-17	TSC Security Coordinator Actions	R13 11-30-99
EPIP-RR-17A	TSC Administrative Logistics Coordinator Actions	R15 09-18-97
EPIP-RR-19A	Operations Liaison Actions	R5 10-07-99
EPIP-RR-21	Operations Support Center Director Actions	R12 09-23-99
EPIP-RR-21A	Maintenance Coordinator Actions	R4 11-30-99
EPIP-RR-22	Protective Measures Coordinator/Manager Actions	R18 03-11-97
EPIP-RR-22A	Chemistry Coordinator Actions	R4 04-28-94
EPIP-RR-23	Chemistry Liaison Actions	R0 06-23-93
EPIP-RR-25	TSC/EOF Dose Assessment Coordinator Actions	R17 05-09-96
EPIP-RR-28	OSC Accountability and Dosimetry Technician Actions	R7 09-01-94a
EPIP-RR-29	EOF Administrative Logistics Manager Actions	R17 10-07-98
EPIP-RR-63	EOF Dose Assessment Assistant Actions	R7 05-30-96
EPIP-RR-66	Communication Specialist Actions	R8 08-31-99
EPIP-RR-72	Field Team Specialist Actions	R11 05-30-96
EPIP-RR-87	Radiation Protection Coordinator Actions	R6 09-30-98

Fort Calhoun Station
Unit No. 1

EPIP-OSC-9

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This procedure does not contain any proprietary information, or such information has been censored. This issue may be released to the public document room. Proprietary information includes personnel names, company phone numbers, and any information which could impede emergency response.

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: EMERGENCY TEAM BRIEFINGS

FC-68 Number: DCR 10852

Reason for Change: Reformat per Writers Guide, change Shift Supervisor to Shift Manager, change reference from FCS-Safety Manual to FCSG-15.

Initiator: Doug Levine

Preparer: Mark Reller

EMERGENCY TEAM BRIEFINGS

NON-SAFETY RELATED

1. PURPOSE

- 1.1 This procedure provides guidance to the Command and Control position or designees for dispatching emergency teams into potentially radioactive areas.

2. REFERENCES/COMMITMENT DOCUMENTS

- 2.1 FCSG-15, FCS Safety Manual
- 2.2 EPIP-EOF-11, Dosimetry Records, Exposure Extensions and Habitability
- 2.3 RP-201, Radiation Work Permits
- 2.4 FC-EPF-4, Emergency Team Briefing/Debriefing Checklist
- 2.5 Ongoing Commitments
- AR 10030, IER 89-24
 - AR 10031, IER 89-24

3. DEFINITIONS

None

4. PREREQUISITES

None

5. PROCEDURE

NOTE: The Command and Control position may waive the requirement for a Radiation Work Permit (RWP) during an emergency when the nature of the emergency requires immediate access. The Command and Control position may perform this authorization regardless of the present location of overall command and control.

NOTE: Personnel rescue and lifesaving entries are guided by FCSG-15

NOTE: As time permits, entries into evacuated areas shall be planned, made by groups consisting of two or more persons, and authorized by the Command and Control position.

5.1 Form emergency teams using the following guidelines:

- 5.1.1 Assign an operator to the team if plant equipment or systems will be operated.
- 5.1.2 Assign or prepare a Radiation Work Permit (RWP) per RP-201 as deemed necessary by appropriate Radiation Protection personnel.
- 5.1.3 Evaluate dose limits for emergency team personnel. If necessary, obtain exposure extensions per EPIP-EOF-11.
- 5.1.4 Designate a team leader

5.2 Brief the team using EPF-4. Sections which do not apply should be marked N/A. Include the following items, as they apply: [AR 10030]

- 5.2.1 The assigned task
- 5.2.2 Plant conditions
- 5.2.3 Radiological conditions (RWP)
- 5.2.4 Dosimetry required
- 5.2.5 Planned exposure or maximum dose rate shall comply with the ALARA concept
- 5.2.6 Protective equipment required
- 5.2.7 Tools and equipment
- 5.2.8 Special instructions

5.2.9 Route of travel

5.2.10 Communications (radio, Gaitronics, or phone)

5.3 Review the following applicable items with the emergency team:

5.3.1 Do not operate any plant systems unless directed to do so by the Shift Manager.

5.3.2 Read dosimeters frequently.

5.3.3 If encountered dose rates exceed maximum dose rate limits, withdraw to an area of lower radiation levels, inform the OSC, and evaluate alternate actions.

5.3.4 Do not deviate from the planned program unless unanticipated conditions require performing an act which would reduce the emergency condition.

5.4 Maintain accountability of the emergency team using communications and the OSC Team Status Board. **[AR 10031]**

5.5 Debrief the emergency team upon their return to the OSC. Use the EPF-4 to note the following information:

5.5.1 Observed safety/radiological hazards

5.5.2 Actual radiation, contamination, and airborne levels found

5.5.3 Problems encountered and general observations

6. ATTACHMENTS

None

Fort Calhoun Station
Unit No. 1

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EPIP-RR-13

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: REACTOR SAFETY COORDINATOR ACTIONS

FC-68 Number: DCR 10956

Reason for Change: Reformat per Writers Guide.

Initiator: Doug Levine

Preparer: Mark Reller

REACTOR SAFETY COORDINATOR ACTIONS

NON-SAFETY RELATED

1. PURPOSE

- 1.1 The purpose of this procedure is to provide guidance to the Reactor Safety Coordinator in performing actions in response to an emergency at Fort Calhoun Station.

2. REFERENCES/COMMITMENT DOCUMENTS

- 2.1 EPIP-TSC-8, Core Damage Assessment
- 2.2 INPO Emergency Resources Manual
- 2.3 Commitment Documents
- AR 11809, LIC-91-189R

3. DEFINITIONS

NONE

4. PREREQUISITES

NONE

5. PROCEDURE

NOTE: The attached checklist is designed as a reminder of actions which are required to be performed during an emergency condition.

- 5.1 Use Attachment 6.1, Reactor Safety Coordinator Checklist, as an aid to completing required actions.
- 5.2 Use Attachment 6.2, Alternative Monitoring of Critical Plant Parameters, when the ERF computer system is inoperable or suspected of providing incorrect information.
- 5.3 Use Attachment 6.3, Methods of Monitoring and Processing Contaminated Condensate Following Steam Generator Tube Rupture, to establish hotwell level indication and to provide method of processing contaminated liquid.
- 5.4 At the completion of the shift or at event termination, initial the steps which are completed.

- 5.5 Retain all documentation (logs, calculation sheets, notes, etc.) generated or used during the emergency. At the termination, deliver all documentation to the TSC Administrative Logistics position in the TSC.

6. ATTACHMENTS

- 6.1 Reactor Safety Coordinator Checklist
- 6.2 Alternative Monitoring of Critical Plant Parameters
- 6.3 Methods of Monitoring and Processing Contaminated Condensate Following a Steam Generator Tube Rupture

Attachment 6.1 - Reactor Safety Coordinator Checklist

Page 1 of 2

**** Maintain a log of all key activities ****

- | | <u>(✓)</u> | <u>INIT/TIME</u> |
|--|------------|------------------|
| 1. Sign in on the Accountability Roster, obtain worker packet and put on the Personnel Identification Badge. | | / |
| 2. Receive a briefing on plant and core status from the TSC Director. | | / |
| 3. Periodically review the following steps and perform as required: | | |
| 3.1 Develop and propose recommendations for plant operations that would ensure safer core conditions. | | _____ |
| 3.2 Direct performance of core damage calculations using EPIP-TSC-8. | | _____ |
| NOTE: High Auxiliary Building Radiation Levels or rising SIRWT levels following a RAS (Recirculation Actuation Signal) may indicate a backflow of fission products/coolant from the Containment Building via the recirculation line and SIRWT Suction Header Isolation Valves LCV-383-1/2 into the SIRWT and out the SIRWT Vents into the Auxiliary Building. | | |
| 3.3 Provide results of core damage assessment to the TSC Director. | | _____ |
| 3.4 Review proposed normal and out of normal plant operations to determine possible changes affecting core status. | | _____ |

Attachment 6.1 - Reactor Safety Coordinator Checklist
(continued)

**** Maintain a log of all key activities ****

(√) INIT/TIME

NOTE: The following step applies to a LOCA involving the generation of hydrogen inside of Containment.

- | | | | |
|-----|--|-------|---------------|
| 3.5 | Ensure the Hydrogen Analyzers (VA-81A/B) are calibrated by I&C daily. Reference procedure IC-ST-VA-0030 and IC-ST-VA-0031 for guidance on the adjustments. | _____ | |
| 3.6 | Evaluate the need for a hydrogen recombiner. Refer to INPO Emergency Resources Manual for availability. | _____ | |
| 3.7 | If it is determined that an assessment team is needed to verify if any radioactive release is in progress or to determine the source and release path of any release in progress, your group may be requested to provide personnel to assist with this task. They are to coordinate with and report any findings to the Protective Measures Coordinator [AR 11809] | _____ | _____ / _____ |
| 4. | Establish a 24 hour staffing roster for the following positions and deliver it to the TSC Administrative Logistics Coordinator: | | |
| 4.1 | Reactor Engineer; | _____ | |
| 4.2 | Electrical/I&C Systems Engineer; | _____ | |
| 4.3 | Primary Systems Engineer; | _____ | |
| 4.4 | Secondary Systems Engineer; | _____ | _____ / _____ |
| 5. | Provide detailed briefing to oncoming shift relief of emergency conditions and status of dose assessment. | | _____ / _____ |

Attachment 6.2 - Alternative Monitoring Of Critical Plant Parameters

This attachment outlines the steps necessary to monitor plant parameters when the ERF computer system is inoperable or suspected of providing incorrect information.

Input to the ERF Computer System is provided by the Qualified Safety Parameter Display System (QSPDS), a redundant system contained in two cabinets on the south wall of the Control Room. Both cabinets have a display screen to provide information on plant conditions.

NOTE: Notify the Shift Manager before opening any Control Room cabinet doors.

To access the QSPDS display screens, open the inward-facing cabinet doors.

Inside is a sheet listing the contents of pages programmed for the QSPDS display screen. Select the page containing the plant information desired by pressing the "page" key followed by the page number, then press the execute key.

For Example: Page 213 = CETC: The four highest and next highest CET temperatures.

Page 331 = CORE MAP

Page 321 = HJTC TEMP

Page 101 = CORE

In the unlikely event that both QSPDS computers are inoperable or supplying incorrect information, plant conditions can be determined by converting the instrument output voltage measured at the cabinet for a given variable. Contact the Plant I & C staff to make this measurement. They will read the instrument output voltage and use the QSPDS Vendor Manuals to convert this value into the proper units.

Attachment 6.3 - Methods Of Monitoring And Processing Contaminated
Condensate Following A Steam Generator Tube Rupture

**** Maintain a log of all key activities ****

INIT/TIME

1. Establish condenser hotwell level indication.
 - 1.1 **IF** condenser vacuum is maintained, **THEN** connect heavy wall clear tubing between condenser hotwell drain valve on northeast corner of FW-1B and MS-401. /

OR

- 1.2 **IF** condenser vacuum is broken, **THEN** establish indication per procedure GM-RR-FW-0103. /
2. Transfer contaminated condensate to waste disposal system.
 - 2.1 Fill S/G via condensate pump as outlined in AOP-28.
 - 2.2 Drain S/G to waste disposal as directed in OI-FW-6. /
3. Clean condensate contained in hotwell.
 - 3.1 Contact vendor to provide decontamination skid.
 - 3.2 Connect skid and process condensate using OI-FW-10. /