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February 6, 2003

LIC-03-0015

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Reference: Docket No. 50-285

SUBJECT: Transmittal of Changes to Emergency Plan Implementing Procedures (EPIP) and Emergency Planning Forms (EPF)

In accordance with 10 CFR 50.54(q), 10 CFR 50, Appendix E, Section V, and 10 CFR 50.4(b)(5), please find EPIP and EPF change packages enclosed for the Document Control Desk (holder of Copy 165) and the NRC Region IV Plant Support Branch Secretary (holder of Copies 154 and 155).

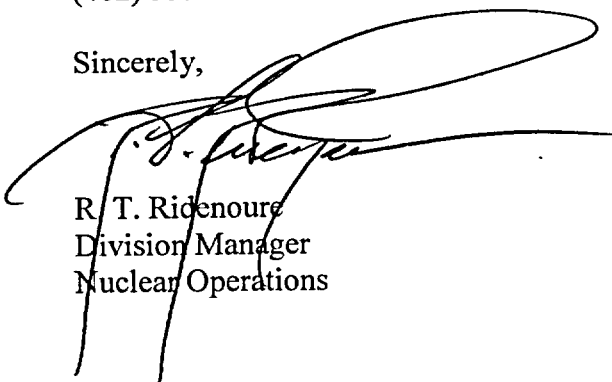
The document update instructions and summary of changes are included on the Confirmation of Transmittal form (Form EP-1) attached to each controlled copy change package. Please return the Confirmation of Transmittal forms by March 14th and 31st, 2003 respectively.

The revised documents included in the enclosed package are:

EPF Index page 1 of 3 issued 01/16/03
EPF-9 R14 page 1 and 2 of 2 issued 01/16/03
EPF-10 R16 page 1,2,3,4 of 4 issued 01/16/03
EPF-11 R12 page 1 and 2 of 2 issued 01/16/03
EPIP Index page 2 of 3 issued 01/16/03
EPIP-RR-13 R14 issued 12/09/99
EPIP Index page 1 of 3 issued 01/23/03
EPIP OSC-2 R41 issued 01/27/03
EPIP TSC-2 R3 issued 01/23/03

If you have any questions regarding the enclosed changes, please contact Mr. Carl Simmons at (402) 533-6430.

Sincerely,



R. T. Ridenoure
Division Manager
Nuclear Operations

A045

U. S. Nuclear Regulatory Commission
LIC-03-0015
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RTR/ash

Enclosures

c: NRC Region IV Plant Support Branch Secretary (2 sets)
 Alan Wang, NRC Project Manager (w/o enclosures)
 J. G. Kramer, NRC Senior Resident Inspector (w/o enclosures)
 Winston & Strawn (w/o enclosures)
 Emergency Planning Department (w/o enclosures)

Document	Document Title	Revision/Date
EPIP-OSC-1	Emergency Classification	R35 05-02-02
EPIP-OSC-2	Command and Control Position Actions/Notifications	R41 01-16-03a
EPIP-OSC-9	Emergency Team Briefings	R7 12-09-99
EPIP-OSC-15	Communicator Actions	R22 10-24-00
EPIP-OSC-21	Activation of the Operations Support Center	R12 10-29-02
EPIP-TSC-1	Activation of the Technical Support Center	R23 10-29-02
EPIP-TSC-2	Catastrophic Flooding Preparations (R0 03-22-95) DELETED (05-09-95) REINSTATED	R3 01-23-03
EPIP-TSC-8	Core Damage Assessment	R14 01-19-01
EPIP-EOF-1	Activation of the Emergency Operations Facility	R13 10-29-02
EPIP-EOF-3	Offsite Monitoring	R18 11-12-02
EPIP-EOF-6	Dose Assessment	R32 01-23-02
EPIP-EOF-7	Protective Action Guidelines	R13 10-31-00b
EPIP-EOF-10	Warehouse Personnel Decontamination Station Operation	R10 01-13-00a
EPIP-EOF-11	Dosimetry Records, Exposure Extensions and Habitability	R18 09-18-97b

Fort Calhoun Station
Unit No. 1

EPIP-OSC-2

Distribution Authorized

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EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: COMMAND AND CONTROL POSITION ACTIONS/NOTIFICATIONS

FC-68 Number: EC 29714

Reason for Change: Clarify instructions for calling the Shift Chemist and RP Techs to the Control Room. Change ERFCS-1 to OI-ERFCS-1A. Add line to show Command and Control and Relief Command and Control signatures. Delete Emergency since Co-op has changed its name. Change Agro to Blair Ag.

Requestor: M. Reller

Preparer: M. Reller

Correction (a): Page 26 (01-27-03) (Issue all pages)

COMMAND AND CONTROL POSITION ACTIONS/NOTIFICATIONS

NON-SAFETY RELATED

1. PURPOSE

- 1.1 This procedure provides guidance to the Command and Control position for implementing the Emergency Plan, making required notifications, transferring Command and Control, performing classification upgrades/downgrades and event terminations.

2. REFERENCES/COMMITMENT DOCUMENTS

- 2.1 SO-R-1, Reportability Determination
- 2.2 10 CFR 50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors
- 2.3 EPIP-OSC-1, Emergency Classification
- 2.4 EPIP-OSC-15, Communicator Actions
- 2.5 EPIP-EOF-6, Dose Assessment
- 2.6 EPIP-EOF-7, Protective Action Guidelines
- 2.7 EPIP-EOF-11, Dosimetry Records, Exposure Extensions, and Habitability
- 2.8 EPIP-EOF-21, Potassium Iodide Issuance
- 2.9 EPIP-EOF-19, Recovery Actions
- 2.10 EPIP-TSC-1, Activation of the Technical Support Center
- 2.11 EPIP-EOF-1, Activation of the Emergency Operations Facility
- 2.12 OI-ERFCS-1, Emergency Response Facility Computer System
- 2.13 FC-1188, Emergency Notification Form
- 2.14 FC-EPF-38, Blair Industrial Park Co-Op, Event Notification Form
- 2.15 Emergency Telephone Book

2.16 Commitments (other than Ongoing)

- AR 10026, NRC-89-0232
- AR 07071, LIC-88-0726

2.17 Ongoing Commitments

- AR 30816, LIC-01-0189

3. DEFINITIONS

- 3.1 ANS - "Alert Notification System" The system of sirens maintained in OPPD's designated EPZ (Emergency Planning Zone).
- 3.2 BLAIR INDUSTRIAL PARK CO-OP: NOTIFICATION SYSTEM - An organization of industries including Fort Calhoun Station that have banded together to form a warning system to notify member industries and the Washington County Dispatch Center of a potential or actual release of toxic chemicals and/or hazardous material from its facility.

- 3.3 CODE SYSTEM - A system devised by members of the Blair Industrial Park Co-Op to classify events that have occurred at the initiating facilities site. These codes are:
- CODE BLUE: A minor emergency or problem such as a fire, explosion, gas or liquid release, unusual noise or odor, abnormal or extended flaring activity or other internal event has occurred which may be visible or detectable by off-site people, but which presents NO OFFSITE THREAT and requires no protective actions. The situation is under control.
 - CODE GREEN: An emergency such as a fire, explosion, gas or liquid release or other event has occurred which affects plant operations and/or has the potential to escalate to a more serious emergency. THE SITUATION IS NOT UNDER CONTROL BUT POSES NO IMMEDIATE OFFSITE THREAT. The Washington County EOC may activate.
 - CODE YELLOW. A serious accident such as a fire, explosion, gas or liquid or other event has occurred or is imminent which seriously affects plant operations and/or poses a threat to residents or industries in the immediate vicinity of the affected industry. THE SITUATION IS NOT UNDER CONTROL AND ONSITE PROTECTIVE ACTIONS WILL BE NECESSARY. The Washington County EOC would activate.
 - CODE RED: A severe emergency such as fire, explosion, gas or liquid release or other event has occurred or is imminent which seriously affects plant operations and/or offsite areas well beyond site boundaries. THE SITUATION IS NOT UNDER CONTROL AND PROTECTIVE ACTIONS FOR NEIGHBORING INDUSTRIES AND RESIDENTS ARE NECESSARY. The Washington County EOC would fully activate at a safe location.
- 3.4 COMMAND AND CONTROL POSITION - The Shift Manager, Control Room Coordinator, Site Director or Emergency Director currently charged with the authorities and responsibilities for directing the emergency response.
- 3.5 EALs - "Emergency Action Levels"
- 3.6 EAS - "Emergency Alert System". A mass-media system providing information and instructions to the general public in the event of a nuclear or other public emergency.
- 3.7 EOF - "Emergency Operations Facility".
- 3.8 ERDS - "Emergency Response Data System". The system that transmits selected plant parameter data to the NRC Operations Center.
- 3.9 ERF - "Emergency Response Facility". The Control Room, TSC, OSC and EOF maintained for emergency response.

- 3.10 ERO - "Emergency Response Organization".
- 3.11 FTS-ENS phones - NRC notification system phones, , FTS- "Federal Telecommunications System", ENS- "Emergency Notification System".
- 3.12 GE - "General Emergency".
- 3.13 KFAB - Designated Local Primary One (LP1) Emergency Alert Station located in Omaha, NE.
- 3.14 NOUE - "Notification of Unusual Event".
- 3.15 NRC - "Nuclear Regulatory Commission".
- 3.16 OSC - "Operations Support Center".
- 3.17 PARs - "Protective Action Recommendations".
- 3.18 RELEASE OF RADIOACTIVE MATERIAL - Any discharge of radioactive effluent to the environment that is a result of, or associated with, the emergency event.
- 3.19 SAE - "Site Area Emergency".
- 3.20 TSC - "Technical Support Center".

4. PREREQUISITES

- 4.1 An emergency has been declared or is to be reported per EPIP-OSC-1, Emergency Classification.

5. PROCEDURE

NOTE: Once an event has been declared, notifications must be made within the time requirements of the applicable attachment.

- 5.1 IF no Emergency has been declared and conditions for a classification level occurred but no longer exist (per EPIP-OSC-1), THEN the event must be reported as follows:
 - 5.1.1 Notify both states using the commercial line. Call Iowa at 1-515-281-3231 (24 hour #) and Nebraska at 1-402-471-7430 (normal hours) or 1-402-471-4545 (after hours).
 - 5.1.2 Request that each state have the appropriate duty officer contact the Control Room at 1-402-533-6623 for a report on the event.

- 5.1.3 Notify the NRC using the FTS-ENS phone (commercial line is a backup) per SO-R-1.
- 5.1.4 **DO NOT** complete an Attachment 6.1, but log information in the Control Room Log as necessary.
- 5.2 IF while in a declared emergency, conditions for a higher emergency classification were exceeded but have since been abated or otherwise been resolved prior to declaration, THEN the event must be **reported** as follows:
 - 5.2.1 Perform the notifications described in Attachments 6.1, 6.2 or 6.3 for the states, counties and the NRC for the current classification.
 - 5.2.2 Inform the states, counties and the NRC that a higher classification existed, but was not declared, what conditions existed that caused the emergency classification, and inform them of the time that the higher classification existed.
- 5.3 Record any additional documentation in FC-EPF-13, Emergency Response Organization Log Sheet, or the Control Room Log.
- 5.4 **IN THE CONTROL ROOM:** Perform notifications using Attachment 6.1.
- 5.5 **IN THE TSC OR EOF:** Perform notifications using Attachment 6.2 (TSC) or 6.3 (EOF).
- 5.6 IF an upgrade or downgrade of the emergency classification occurs prior to completion of the checklist, THEN perform the following:
 - 5.6.1 Complete state/county notifications for the former classification.
 - 5.6.2 Begin another Notification Attachment for the new classification.
- 5.7 Complete Attachment 6.7 when performing reliefs.
- 5.8 Retain all documentation (logs, calculation sheets, notes, etc.) generated or used during the emergency.
- 5.9 At the termination, deliver all documentation to the CR Communicator, or Admin Logistics position for your facility.

6. ATTACHMENTS

- 6.1 Notification Checklist for the Control Room

- 6.2 Notification Checklist for the TSC
- 6.3 Notification Checklist for the EOF
- 6.4 ERO Activation Announcement
- 6.5 Classification Announcement
- 6.6 Emergency Termination Guidelines
- 6.7 Relief Checklist
- 6.8 Command and Control Position Responsibilities
- 6.9 Classifying and Reporting events to the Blair Industrial Park Co-Op

Page 1 of 5

Declared at _____ / _____
Date Time
EAL # _____

Command and Control: _____

Relief: (complete Attachment 6.7) _____ Time _____

NOTE: The following steps are ordered in a suggested sequence, but the Command and Control position may modify the sequence, if necessary.

NOTE: Fort Calhoun station made a commitment to place the TSC HVAC System in the FILTERED MODE with 30 minutes of a LOCA. Both the Shift Radiation Protection Technician and the Shift Chemistry Technician have been trained to place the TSC HVAC System in the FILTERED MODE.

✓ TIME

1. Direct the:

- Shift Communicator to report to the Control Room and perform Notifications
- Shift Chemistry Technician to report to Control Room for dose assessment, chemical and hazmat analysis and support.
- Shift RP Technician for habitability, radiological support and backup dose assessment.

1.1 Ensure the TSC HVAC System was placed in FILTERED MODE by the Shift RP or Chemistry Technician enroute to the Control Room [AR 30816].

2. Is ERO to be activated?

Yes 2.1 Instruct Communicator to activate the ERO. _____

2.2 Perform plant announcement per Attachment 6.4. _____

2.3 Go to Step 4.

No Go to Step 3.

Attachment 6.1

Page 2 of 5

✓ TIME

3. Is a Management Notification (NOUE only) desired?

Yes 3.1 Direct Communicator to do a Management notification.

3.2 Perform a plant announcement, using information from the Management Notification tab in the Emergency Planning Activation Instruction Booklet.

3.3 Have Communicator make the above announcement to Training Center and Administration Building.

No Go to Step 4.

NOTE: If the emergency classification changes prior to completion of this checklist, ensure the state and county notifications are initiated as a minimum before beginning another checklist.

4. Within 15 minutes of the emergency declaration you must:

4.1 Complete required sections of the Emergency Notification Form (FC-1188)

4.2 Ensure the Communicator notifies the states and counties using the completed Emergency Notification Form.

5. Has the ERO been activated? **[AR 10026]**

Yes 5.1 Make a plant announcement for the current classification (if not done in Step 2) using Attachment 6.5.

5.2 Have Communicator make an announcement to Training Center and Administration Building (if not done in Step 2).

No Go to Step 6.

Attachment 6.1

Page 3 of 5

✓ TIME

6. Is a Site Evacuation to North Omaha necessary (required at General Emergency)? [AR 10026]

Yes 6.1 Perform a plant announcement per Attachment 6.5. _____

6.2 Have Communicator make an announcement to Training Center and Administration Building, using Evacuation Route checked. _____

No Go to Step 7.

7. Was a plant/site evacuation directed (plant evacuation at a minimum required at Alert or higher)? [AR 10026]

Yes 7.1 Have on shift crew place accountability badges in box. _____

7.2 Assign a person to log personnel in/out of the Control Room until relieved by the Accountability Clerk. _____

No Go to Step 8.

NOTE: NRC contact should be maintained from at least one facility. The FTS-ENS at the EOF can be patched in with the Control Room/TSC line if a request is made to the NRC.

8. Immediately (not later than one hour from declaration) after notification of the states and counties contact the NRC using the FTS-ENS phone (commercial phone is the backup)

8.1 Has NRC previously been notified?

Yes Then as a minimum report the classification, time and reason. _____

No First report to the NRC, use NRC Form 361 (SO-R-1).

8.2 Is classification an Alert or higher?

Yes Direct the STA to activate the ERDS system using OI-ERFCS-1A. _____

No Go to Step 9.

Attachment 6.1

Page 4 of 5

✓ TIME

9. Use Attachment 6.9 to prepare the notification for the Blair Industrial Park Co-op.

10. Ensure the communicator updates the states and counties using an approved Emergency Notification Form (FC-1188)

- At least hourly (from the time of the last notification) and on an hourly basis until event termination
- Within 15 minutes of a PAR change

11. Have the states requested that we activate the ANS (sirens)?

Yes 11.1 Contact the Emergency Director and request activation.

No Go to Step 12.

12. Has the state or county requested that Fort Calhoun Station activate the Emergency Alert System (EAS)?

Yes 12.1 Get the applicable EAS Message number from the state and county.

12.2 For the Primary message direct the Communicator to contact the National Weather Service using the Emergency Activations Booklet.

12.3 For all follow-up messages have the Communicator contact KFAB and give them the selected EAS message number for the requesting state.

No Go to Step 13.

13. Review conditions for upgrade or downgrade criteria.

Attachment 6.1

Page 5 of 5

✓ TIME

14. Is emergency termination possible?

Yes 14.1 Review Attachment 6.6 for termination guidelines.

14.2 Complete and approve the termination Emergency Notification Form (FC-1188).

14.3 Verify all data on the Emergency Notification Form is accurate.

14.4 Direct the Communicator to notify the states and counties using the Emergency Notification Form.

NOTE: If a Sub Area 1 evacuation was ordered Blair Industrial Park Co-Op facilities may not be staffed.

14.5 Was the Blair Industrial Park Co-Op notified?

Yes Reactivate the system and inform Co-Op members of the event termination.

No Go to Step 14.6.

14.6 Notify the NRC using the FTS-ENS phone (commercial line is backup).

14.7 Announce Emergency termination using:

- Plant Gai-Tronics
- Facility PA system
- MOP network for all other Emergency Response Facilities

No Review this list and repeat applicable steps as required.

Attachment 6.2 - Notification Checklist for the TSC

Page 1 of 4

Classification: ☐ NOUE ☐ Site Area Declared at _____ / _____
☐ Alert ☐ General EAL # _____
Date Time

Command and Control: _____

Relief: (complete Attachment 6.7) _____ Time _____

NOTE: The following steps are ordered in a suggested sequence, but the Command and Control position may modify the sequence, if necessary.

NOTE: If the emergency classification changes prior to completion of this checklist, ensure the state and county notifications are initiated as a minimum before beginning another checklist.

✓ TIME

1. Within 15 minutes of the emergency declaration you must:

1.1 Complete required sections of the Emergency Notification Form (FC-1188) _____

1.2 Ensure the COP Communicator notifies the states and counties using the completed Emergency Notification Form. _____

2. Is a Site Evacuation to North Omaha necessary (required at General Emergency)? **[AR 10026]**

Yes 2.1 Go to Attachment 6.5, to determine the evacuation route to be used, (primary or alternate) and the announcement to be made. _____

2.2 Direct the COP Communicator to make the evacuation announcement found in the Emergency Planning Activations Instruction Booklet to the Training Center and Administration Building. _____

No 2.3 Make a plant announcement per Attachment 6.5. **[AR 10026]** _____

2.4 Direct the COP Communicator to make the announcement for no site evacuation found in the Emergency Planning Activations Instruction Booklet to the Training Center and Administration Building. _____

Attachment 6.2

Page 2 of 4

✓ TIME

3. Has plant/site accountability been established?

Yes Go to Step 4.

No 3.1 Ensure CR/OSC/TSC Accountability Clerks are logging personnel in/out (if OSC/TSC are activated).

3.2 Ensure that the TSC Security Coordinator initiates the accountability procedure, if the TSC is activated.

3.3 Ensure the accountability completion time is documented in the Control Room Log.

NOTE: NRC contact should be maintained from at least one facility. The FTS-ENS at the EOF can be patched in with the Control Room/TSC line if a request is made to the NRC.

4. Immediately (not later than one hour from declaration) after notification of the states and counties ensure the NRC is contacted using the FTS-ENS phone (commercial phone is the backup)

4.1 As a minimum, report new classification time and reason.

4.2 Is new classification Alert or higher?

Yes Ensure the Control Room activated the ERDS using OI-ERFCS-1A.

No Go to Step 5.

5. Direct the Control Room to use Attachment 6.9 to prepare the notification for the Blair Industrial Park Co-Op.

6. Ensure the COP Communicator updates the states and counties using an approved Emergency Notification Form (FC-1188)

- At least hourly (from the time of the last notification) and on an hourly basis thereafter
- Within 15 minutes of a PAR change

Attachment 6.2

Page 3 of 4

✓ TIME

7. Have the states requested that we activate the ANS (sirens)?

Yes 7.1 Contact the EOF Emergency Director and request ANS activation. ____

No Go to Step 8.

8. Has a state or county requested that Fort Calhoun Station activate the Emergency Alert System (EAS)?

Yes 8.1 Get the applicable EAS Message number from the state and county. ____

8.2 For the preliminary message direct the COP Communicator to contact the National Weather Service using the Emergency Activations Booklet. ____

8.3 For all follow-up messages have the COP Communicator contact KFAB and give them the selected EAS message number for the requesting state. ____

No Go to Step 9.

9. Periodically review conditions for event upgrade or downgrade criteria. ____

10. Is emergency termination possible?

Yes 10.1 Review Attachment 6.6 for termination guidelines. ____

10.2 Complete and approve the termination Emergency Notification Form (FC-1188). ____

10.3 Verify that all Emergency Notification Form data is correct. ____

10.4 Direct the COP Communicator to notify the states and counties using the Emergency Notification Form. ____

Attachment 6.2

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✓ TIME

NOTE: If a Sub Area 1 evacuation was ordered, Blair Industrial Park Co-Op facilities may not be staffed.

10.5 Was the Blair Industrial Park Co-Op notified?

Yes Have the Control Room inform Co-Op members of the event termination. _____

No Go to Step 10.6.

10.6 Notify the NRC using the FTS-ENS phone (commercial line is backup). _____

10.7 Announce Emergency termination using:

- Plant Gai-Tronics _____
- Facility PA system _____
- MOP network for all other Emergency Response Facilities _____

No Review this list and repeat applicable steps as required. _____

FORT CALHOUN STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-OSC-2
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Attachment 6.3 - Notification Checklist for the EOF

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Classification: ☐ NOUE ☐ Site Area Declared at _____ / _____
☐ Alert ☐ General EAL # _____
Date Time

Command and Control: _____

Relief: (complete Attachment 6.7) _____ Time _____

NOTE: The following steps are ordered in a suggested sequence, but the Command and Control position may modify the sequence, if necessary.

NOTE: If the emergency classification changes prior to completion of this checklist, ensure the state and county notifications are initiated as a minimum before beginning another checklist.

✓ TIME

1. Within 15 minutes of the emergency declaration you must:

1.1 Complete required sections of the Emergency Notification Form. _____

1.2 Ensure the COP Communicator notifies the states and counties using the completed Emergency Notification Form. _____

2. Is a Site Evacuation to North Omaha necessary (required at General Emergency)? [AR 10026]

Yes 2.1 Go to Attachment 6.5, to determine the evacuation route to be used, (primary or secondary) and the announcement to be made. _____

2.2 Direct the COP Communicator to make the evacuation announcement found in the Emergency Planning Activations Instructions Booklet to the Training Center/Administration Building. _____

No 2.3 Direct the Control Room to make plant announcement per Attachment 6.5. [AR 10026] _____

2.4 Direct the COP Communicator to make the announcement for no site evacuation found in the Emergency Planning Activations Instruction Booklet to the Training Center and Administration Building. _____

3. Has plant/site accountability been established? (AR 10026)

Yes Go to Step 4.

No 3.1 Direct Site Director to initiate personnel accountability. _____

✓ TIME

NOTE: NRC contact should be maintained from at least one facility. The FTS-ENS at the EOF can be patched in with the Control Room/TSC line if a request is made to the NRC.

4. Immediately (not later than one hour from declaration) after notification of the states and counties ensure the NRC is contacted using the FTS-ENS phone (commercial phone is the backup)

4.1 As a minimum, report new classification time and reason. _____

4.2 Is new classification Alert or higher?

Yes Ensure the Control Room activated the ERDS using
OI-ERFCS-1A. _____

No Go to Step 5. _____

5. Direct the Control Room to use Attachment 6.9 to prepare the notification for the Blair Industrial Park Co-Op. _____

6. Ensure the COP Communicator updates the states and counties using an approved Emergency Notification Form (FC-1188).

- At least hourly (from the time of the last notification) and on an hourly basis thereafter until event termination _____
- Within 15 minutes of a PAR change _____

7. Ensure that the staffs of each facility are given timely updates on any significant change in plant or release status, even if the emergency classification remains unchanged. _____

Attachment 6.3

Page 3 of 4

✓ TIME

8. Have the states requested that we activate the ANS (sirens)?

Yes 8.1 Direct the Administrative Logistics Manager to activate the ANS activation. _____

No Go to Step 9.

9. Has a state or county requested that Fort Calhoun Station activate the Emergency Alert System (EAS)?

Yes 9.1 Get the applicable EAS Message number from the state or county. _____

9.2 For the preliminary message direct the COP Communicator to contact the National Weather Service using the Emergency Activations Booklet. _____

9.3 For all follow-up messages have the COP Communicator contact KFAB and give them the selected EAS message number for the requesting state. _____

No Go to Step 10.

10. Periodically review conditions for event upgrade or downgrade criteria. _____

Attachment 6.3

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✓ TIME

11. Is emergency termination possible?

Yes 11.1 Review Attachment 6.6 for termination guidelines. _____

11.2 Verify that Emergency Notification Form (FC-1188) data is correct. _____

11.3 Complete and approve the termination Emergency Notification Form. _____

11.4 Direct the COP Communicator to notify the states and counties using the Emergency Notification Form. _____

NOTE: If a Sub Area 1 evacuation was ordered, Blair Industrial Park Co-Op facilities may not be staffed.

11.5 Was the Blair Industrial Park Co-Op notified?

Yes Have the Control Room inform Co-Op members of the event termination. _____

No Go to Step 11.6.

11.6 Notify the NRC using the FTS-ENS phone (commercial line is backup). _____

11.7 Direct the Site Director to announce the emergency termination using:

- Plant Gai-Tronics _____
- Facility PA system _____
- MOP network for all other Emergency Response Facilities _____

No Review this list and repeat applicable steps as required. _____

Attachment 6.4 - ERO Activation Announcement

(✓)

1. Select from the options below, the information to be announced. _____
2. Notify Security if a plant/site evacuation is planned. _____
3. Sound the Emergency Alarm for approximately 30 seconds. _____
4. Read the selected announcement over the Gai-Tronics. _____
5. Again sound the Emergency Alarm for approximately 30 seconds. _____
6. Again read the selected announcement over the Gai-Tronics. _____

ANNOUNCEMENT

“Attention all personnel...Attention all personnel...A(n) (Classification) has been declared, due to ... (state reason) ... All Emergency Response Organization personnel report to their assigned facility immediately...Personnel in the Radiation Controlled Area proceed to the RCA Access Point...No eating, drinking, smoking or chewing is allowed anywhere in THE OWNER CONTROLLED AREA until further notice...All other personnel:

Optional: NOUE _____ Continue with normal duties

Optional: NOUE _____ Evacuate to the Admin Building using the South
Required: Alert Security Access Point
Site Area

Optional: Alert _____ Evacuate to the North Omaha Power Station using the:
Site Area

Required: General _____ PRIMARY Route. (No release, or release with
wind direction $\geq 57^\circ$ and $< 304^\circ$)

_____ ALTERNATE Route. (wind direction from $\geq 304^\circ$ or
 $< 57^\circ$ with known release)

Attachment 6.5 - Classification Announcement

(✓)

NOTE: The Site Director and the Emergency Director should select the information to be announced and direct the Control Room to sound the Emergency Alarm and make the Gai-tronics announcements.

1. Select, from the options below, the information to be announced. _____
2. Notify Security if a plant/site evacuation is planned. _____
3. Sound the Emergency Alarm for approximately 30 seconds. _____
4. Read the selected announcement over the Gai-Tronics. _____
5. Sound the Emergency Alarm for approximately 30 seconds (second time). _____
6. Read the selected announcement over the Gai-Tronics (second time). _____
7. At the EOF, verify that the above steps have been completed using the Operations Liaison Circuit or other communication. _____

ANNOUNCEMENT

“Attention all personnel...Attention all personnel...A(n) (Classification) has been declared, due to...(state reason)...No eating, drinking, smoking or chewing is allowed anywhere in THE OWNER CONTROLLED AREA until further notice”... (Continue only if a plant/site evacuation is required)

All Non-Emergency Response personnel must:

Optional: NOUE _____ **Evacuate to the Administration Building using the South**
Required: Alert _____ **Security Access Point**
Site Area

Optional: Alert _____ **Evacuate to the North Omaha Power Station using the:**
Site Area
Required: General

_____ **PRIMARY Route.** (No release, or release with wind direction $\geq 57^\circ$ and $< 304^\circ$)

_____ **ALTERNATE Route.** (wind direction from $\geq 304^\circ$ or $< 57^\circ$ with known release)

Attachment 6.6 - Emergency Termination Guidelines

Page 1 of 2

NOTE: Prior to recommending establishment of recovery operations (if necessary) and termination of the Emergency Response Organization, the following conditions should be considered.

1. A Recovery Operations Manager has been designated per EPIP-EOF-19 if extensive recovery actions are needed to return the plant or environs to a pre-accident status.
2. Radiation Protection personnel are/have been monitoring access to any radiologically controlled areas of the plant necessary for recovery operations.

COMMENTS:

3. Off-site conditions allow access of personnel and needed support resources to the plant.

COMMENTS:

4. Plant status with respect to Technical Specifications has been evaluated by the Command and Control position **OR** Technical Support personnel if ERO was activated.

COMMENTS:

5. Emergency termination recommendations have been discussed with the NRC Operations Center.

COMMENTS:

6. The states of Nebraska and Iowa and the counties have been notified of the pending termination.

COMMENTS: _____

7. The transition from Emergency to Recovery phase has been discussed with the designated Recovery Operations Manager and an initial recovery operations meeting has been scheduled, if needed.

COMMENTS: _____

Additional Discussions/Comments:

Attachment 6.7 - Relief Checklist [AR 07071]

Page 1 of 2

NOTE: Prior to assuming Command and Control of an emergency, Steps 1 through 8 of the following steps must be completed.

NOTE: By signing below the person assuming Command and Control of the emergency acknowledges that they have reviewed and accept the responsibilities contained in Attachment 6.8 of this procedure.

Command & Control Position/Time: _____ / _____

Person Assuming Command & Control/Time: _____ / _____

(✓)

1. Review/Discuss cause of the emergency condition. _____
2. Review/Discuss current status of the emergency condition and classification level. _____
3. Review/Discuss current plant status. _____
4. Review/Discuss each step of current Notification Checklist (Attachments 6.1, 6.2 or 6.3), including any county/state/NRC notifications made and determine any steps **NOT** yet performed. _____
5. Review and discuss when next FC-1188 should be sent to state/counties. _____
6. Determine activation status of the ERO and ERF facilities:

Control Room:	<input type="checkbox"/> ERO Positions Activated	
TSC:	<input type="checkbox"/> Activated	<input type="checkbox"/> In Progress
OSC:	<input type="checkbox"/> Activated	<input type="checkbox"/> In Progress
EOF:	<input type="checkbox"/> Activated	<input type="checkbox"/> In Progress
MRC:	<input type="checkbox"/> Activated	<input type="checkbox"/> In Progress <input type="checkbox"/> N/A

7. Determine current status of dose assessment, habitability checks, radiological surveys and other tasks being performed by the Emergency Response Organization. _____
8. Determine if position being relieved is ready to complete the transfer of Command and Control. _____
9. WHEN both positions are ready, THEN perform the transfer of Command and Control. _____

(✓)

10. Announce your name, and who has Command and Control to the lead personnel in the following facilities, if staffed:

Control Room, TSC, OSC, EOF and MRC.

11. Sign your name, title and the relief time in the "Relief" space of the Notification Checklist. Initiate the appropriate Notification Checklist if transfer is between facilities.

12. Log relief information in the Command and Control position log.

Attachment 6.8 - Command and Control Position Responsibilities

The following responsibilities CAN NOT BE DELEGATED by the Command and Control position. The responsibility of their completion rests with the Command and Control position until relieved by another qualified individual or the emergency is terminated. The Command and Control position may assign other personnel to assist in conducting the actions necessary.

1. Overall **COMMAND AND CONTROL** of the Emergency Response Organization.
2. Ensuring the proper **CLASSIFICATION AND DECLARATION** of the emergency situation is made in accordance with EPIP-OSC-1 and is periodically reviewed to determine if the classification should be upgraded, downgraded or terminated.
3. Ensuring all required **NOTIFICATIONS** are made to appropriate state, local and federal officials.
4. Ensuring any appropriate **PROTECTIVE ACTION RECOMMENDATIONS** (PARs) are provided to offsite officials.
5. Authorizing OPPD emergency worker exposure extensions beyond the Federal Radiation Protection Guidance.
6. Authorizing issuance of Potassium Iodide for OPPD emergency workers.

The Command and Control position also has the following responsibilities which may be delegated to other personnel, as necessary.

7. Request for assistance from federal agencies.
8. Authorizing any emergency information to be released to the media or the general public.
9. Coordinating the transfer of emergency information from the Emergency Response Organization (ERO) to other OPPD and outside organizations called upon to assist.
10. Ensuring a timely and complete turnover of information to any qualified relief.
11. Providing information to authorized representatives of the states of Nebraska, and Iowa, and associated local governments
12. Ensuring plant operations are in compliance with Technical Specifications and other license conditions. If deviations are necessary to protect the public health and safety, they must be evaluated with respect to 10CFR50.54(x) and (y) and approved, as a minimum, by a senior licensed operator, prior to taking the action.

Attachment 6.9 - Classifying and Reporting Events to the Blair Industrial Park Co-Op
Page 1 of 3

NOTE: The purpose of this attachment is to keep members of the Blair Industrial Park Co-Op aware of significant events that have occurred at the Fort Calhoun Station. It is intended that the system be used for notification of situations which have or are anticipated to have visibility or impact beyond the Fort Calhoun station property lines. These situations may include, but are not limited to:

- Any gas or chemical leaks of significant magnitude
- Any radiation leaks of significant magnitude
- Any "news worthy" information (such as major fires, explosions, large medical response, etc.) which could result in news media interviewing neighboring industries
- Any plant evolutions resulting in large noises or having a visual impact which can be heard or seen by the public

1. INITIAL ASSESSMENT

NOTE: FC-EPF-38 is designed to aid you in gathering data prior to contacting members of the Co-Op. Existing FC-1188 and/or SO-R-1 can be used to provide the necessary information.

- 1.1 If notified of an onsite toxic chemical/hazardous material or radiological release, complete Sections 3, 5, 6 and 7 of FC-EPF-38. If all the information is not known, leave that section blank. DO NOT GIVE UNVERIFIED INFORMATION.

NOTE: Assistance in classification may be obtained from the Shift Chemist.

2. EVENT CLASSIFICATION

- 2.1 Report the event as classified (NOUE, ALERT, SITE AREA or GENERAL EMERGENCY) in Section 2 of FC-EPF-38.

Attachment 6.9

Page 2 of 3

NOTE: If the involved chemical is not listed, or further information on chemicals is desired refer to SO-G-106, "Hazardous Material Chemical Assessment and Emergency Response Guidelines", the Material Safety Data Sheet, if available, or The North American Emergency Response Guidebook.

NOTE: If the involved chemical is not listed below, refer to the North American Emergency Response Guidebook for guidelines.

2.2 If the involved chemical is one of the following, consider it a **SMALL HAZARD**:

- Acetylene
- Amerzine
- Chemtreat
- Ethanolamine
- Diesel Fuel
- Hydrazine
- Hydrogen

2.3 Use the guide below to classify the event class. The four codes are further defined in the definitions section of this procedure:

CODE	HAZARD POTENTIAL	CONDITIONS
Blue	Small or large	Situation under control - NO offsite threat
Green	Small or large	Situation NOT under control - No immediate offsite threat
Yellow	Large	Situation NOT under control - Onsite protective actions will be needed
Red	Large	Situation NOT under control - Protective actions for neighboring industries and residents needed

NOTE: All members of the Co-Op are staffed 24 hours per day except Kelly Ryan and Blair Ag. MACC may not have staff onsite on some weekends and/or holidays.

NOTE: Alternate emergency numbers and routine day to day contact numbers for all Co-Op members and other vital agencies may be found in the Emergency Phone Book under the Blair Industrial Co-Op tab.

NOTE: All Notifications to the Blair Industrial Park Co-Op should be made through the Control Room if possible.

3. NOTIFICATIONS

- 3.1 Obtain the instructions marked "Blair Industrial Park Co-Op Notification" from the Emergency Planning Activation Instructions Booklet.
- 3.2 Direct the Communicator to perform the Blair Industrial Park Co-Op Notifications.
- 3.3 If event is on-going, update the Blair Industrial Park Co-Op members as conditions warrant.

Fort Calhoun Station
Unit No. 1

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EPIP-TSC-2

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: CATASTROPHIC FLOODING PREPARATIONS

FC-68 Number: EC 29112

Reason for Change: Enhanced guidance for catastrophic flooding is being incorporated to ensure early plant shutdown and cooldown to minimize decay heat when floodwaters arrive.

Requestor: L. Kusek

Preparer: M. Reller

CATASTROPHIC FLOODING PREPARATIONS

1. PURPOSE

- 1.1 This procedure provides guidance and information to protect and align plant systems and resources, and to maintain decay heat removal in the event of an upstream dam burst or other causes of catastrophic flooding. As a result of a Missouri River Dam failure, a worst case flooding level as high as 1029 feet could be expected. Such an event would provide approximately 62 hours warning to prepare for the impending flooding. This guidance, therefore, will be appropriate if all normal means of decay heat removal become, or are expected to become, inoperable. This procedure in part could also be used to mitigate seismic, tornado, fire, and other events beyond the AOPs, i.e. beyond catastrophic design basis by using this procedure to fill the EFWST.
- 1.2 It is intended that this procedure be implemented as a cooperative effort between the Control Room, Technical Support Center (TSC) and other emergency response facilities and resources.

2. PREREQUISITES

- 2.1 Notification by the Corps of Engineers or other reliable source of an upstream dam failure or the expectation of flooding above Elevation 1009 feet that would breach flood gates and sandbags and jeopardize the plant and equipment.
- 2.2 The plant has been shutdown, or is being shutdown per appropriate operating procedures.

3. REFERENCES/COMMITMENT DOCUMENTS

- 3.1 Fort Calhoun PRA IPEEE to the NRC, dated Dec 31, 1993
- 3.2 OP-4, Load Change and Normal Power Operation
- 3.3 OP-3A, Plant Shutdown
- 3.4 AOP-01, Acts of Nature, Section 1 - Flood
- 3.5 AOP-05, Emergency Shutdown
- 3.6 GM-RR-AE-1002, Flood Control Preparedness for Sandbagging
- 3.7 PE-RR-AE-1001, Floodgate Installation and Removal
- 3.8 PE-RR-AE-1002, Installation of Portable Steam Generator Makeup Pumps

4. DEFINITIONS

4.1 Catastrophic Flooding - flooding which is expected to rise above elevation 1009 feet.

5. PROCEDURE

NOTE: Use Attachment 6.1, Catastrophic Flood Preparation Checklist, to track progress of this procedure.

5.1 Determine the best alignment of the electrical distribution systems to supply electrical power from the diesel generators in expectation that offsite power may be lost.

- The 161 KV switchyard building will begin flooding at elevation 1005'6".
- The west 345 KV switchyard building will begin flooding at elevation 1005'9".
- The east 345 KV switchyard building will begin flooding at elevation 1007'6".
- The air louver openings for Diesel Generator 1 will be covered at a flood elevation of 1020'6".

5.2 Request that the Control Room maintain pressurizer level at "no load" level after the plant is shut down to provide an adequate steam space for a potential Reactor Coolant System (RCS) temperature increase.

5.3 Request that the Control Room raise Steam Generator level to 100% Narrow Range in anticipation of loss of all Feedwater.

5.4 Request that the Site Director/Shift Manager authorize the installation of portable steam generator makeup pumps per PE-RR-AE-1002, Installation of Portable Steam Generator Makeup Pumps. The number of pumps required will depend upon the anticipated decay heat load. The required flow rate is equal to 110 gpm per percent full power (gpm/%).

5.5 When flooding of equipment required for shutdown cooling is imminent, ensure steam generators are available, secure shutdown cooling, and close all valves communicating directly with the RCS (e.g., HCV-348). (Suggest that HCV-348 be closed two days after shutdown to reduce the possibility of an interfacing system LOCA.)

5.6 Continue decay heat removal by feeding and steaming at least one steam generator.

NOTE: The following action will minimize the damage done by flooding and reduce the effort required to restore equipment, post-flood.

5.7 Install plant floodgates per PE-RR-AE-1001.

5.8 Perform sandbagging per GM-RR-AE-1002, Attachments 9.5 and 9.6 if desired.

5.9 Sealup outside openings in the south wall of the switchgear room.

5.10 Install hose extensions to the Fuel Oil storage tank vent stacks per GM-RR-AE-1002.

(✓)

- FO-1, Diesel Generator
- FO-10, Auxiliary Boiler and FW-54
- FO-27, Diesel Fire Pump

5.11 If loss of Auxiliary Feedwater is imminent, perform the following steps:

NOTE: A total of 220,000 gallons of water will be required to remove decay heat for 3.5 days after flooding occurs at the site.

5.11.1 Before the EFWST has lost its water inventory fill the EFWST with river water via a portable pump and then begin feeding one of the steam generators with a portable makeup pump. Reference PE-RR-AE-1002.

5.11.2 Manually open one or more Main Steam Safety Valves (MSSVs) to provide a steaming path. It is important to maintain the steam pressure as close as possible to atmospheric due to limited capability of the portable pumps.

5.12 Additional alternate protective actions may be taken as described in Attachment 6.2.

6. ATTACHMENTS

6.1 Catastrophic Flood Preparation Checklist

6.2 Alternate Actions (Optional)

Attachment 6.1 - Catastrophic Flood Preparation Checklist

Page 1 of 2

(✓)

1. Upon notification of an upstream dam break, or an expected flood elevation greater than 1009 feet verify with the U.S. Army Corps of Engineers and get an estimated time of arrival of flood waters at the Fort Calhoun Station. _____
2. Shutdown the plant as directed by AOP-01 prior to the impending flood, cool down and initiate shutdown cooling actions. _____
3. Adjust pressurizer level to provide an "adequate" steam space for potential temperature increases. _____
4. Prepare the portable pumps so that they are available to feed the Steam Generators after the flood crest arrives, per PE-RR-AE-1002. Stage a supply of fuel for the pumps on the Turbine Building deck, elevation 1036 feet, or in Room 81. _____
5. Prepare the electrical distribution system for a controlled loss of the 161 KV and 345 KV power supplies, and subsequent transfer to the Emergency Diesel Generators. _____
6. Prepare for a controlled loss of the 13.8 KV power supply to site facilities when flood waters reach grade level. _____
7. Direct the TSC Security Coordinator to establish contingencies for loss of the Security System. _____
8. Normal means of communication will be lost due to flood waters. Establish alternate means of communication, i.e., radios, cell phones, and portable generators (if desired), with Operations, Security, and Maintenance personnel who will remain in plant facilities prior to and throughout the flood. _____
9. Coordinate the stockpiling of food and water for personnel who will remain in the plant throughout the flood. _____
10. Coordinate the removal of all valued records and equipment possible that will not be protected from the flood waters. _____

Attachment 6.1 - Catastrophic Flood Preparation Checklist

Page 2 of 2

(✓)

11. Since power will not be available for forced ventilation in Room 81 or the Turbine Building, steps must be taken to preclude the buildup of carbon monoxide in these areas. Such steps could include ducting the exhaust to the outdoors or providing adequate fresh air ventilation. That could mean removing the blowout panels in Room 81 and propping open all available doors to provide ventilation through the room. The Turbine Building windows may need to be removed to allow natural air flow through that building. _____
12. Prepare for the eventual loss of power from the Emergency Diesel Generators when floodwaters begin entering the switchgear rooms and/or the diesel rooms (elevation 1011'). _____
13. Evacuate all nonessential personnel from the plant facilities by four hours prior to the flood arrival. _____
14. Raise Steam Generator levels to 100% narrow range in anticipation of loss of all Feedwater. _____
15. Isolate the Containment. _____
16. Manually OPEN MSSVs as necessary to control Steam Generator pressure. _____
17. After all Feedwater is lost, begin feeding the Steam Generators with the gasoline powered portable pumps, and continue steaming Steam Generators with the MSSVs to remove decay heat. _____
18. Maintain steam generator inventory by filling to the onset of water relief, then stopping feeding for eleven hours to maintain 50% steam generator (S/G) inventory or eighteen hours to maintain 20% S/G inventory. Repeat the process. (If the S/Gs were full at the time, dryout would occur after twenty-two hours and severe core damage would occur after ten additional hours). A total of 220,000 gallons of water is needed to remove decay heat for 3.5 days after the flood arrives at the site. _____
19. Some leakage will occur from the RCS during the flood. Once the flood recedes, arrange for RCS makeup with a pump capable of pumping at about 200 psi. _____
20. Once the flood recedes, arrange for Steam Generator makeup capability since the gasoline powered pumps may not have enough lift to pull water from the river. _____

Attachment 6.2 - Alternate Actions (Optional)

1. An alternate method of protecting valuable equipment would be to "moth ball" it by applying a coating of grease, by spraying with paraffin or plastic, or by enclosure in a waterproof polyethylene or vinyl film. Equipment so protected can be submerged for considerable periods and later put back in operation with a minimum of expense compared to the cost of restoring unprotected equipment.
2. Otherwise, the motors, other vital electrical relay components, and mechanical equipment should be removed and stored above the flood level. The goal of flood proofing is loss reduction, however it is accomplished.
3. Sewers that are to be valved off should be cast iron, steel, or reinforced concrete. Storage tanks should be anchored and weighted down, to prevent flotation. Fuses and circuit breakers should be clearly marked and accessible so power can be secured to affected components if flooding begins. This will protect against fires and the loss of life due to electrical shocks.
4. Windows and vents just above and below the projected water surface should be sealed to prevent the entry of flood waters. They may also need to be reinforced.
5. The feasibility of flood proofing substantially constructed buildings shows that, in the course of time, the benefits in flood damage avoided outweighs the initial cost of flood proofing by approximately 5 to 1.

Document	Document Title	Revision/Date
FC-EPF-1	Alert Notification System Accidental Activation Report Form	R7 11-29-01
FC-EPF-2	Offsite Monitoring Log	R3 03-15-01
FC-EPF-3	Administration of Potassium Iodide Tablets	R1 11-07-00
FC-EPF-4 NCR	Radiological Emergency Team Briefing Checklist	R2 12-13-94
FC-EPF-5	Emergency Worker Extension	R4 02-14-02
FC-EPF-6	Estimated Exposure Worksheet	R4 11-07-00
FC-EPF-7	Estimated Exposure Log	R2 04-01-98
FC-EPF-8	Sample Worksheet	R6 07-23-02
FC-EPF-9	OSC 24-Hour Staffing Schedule	R14 01-16-03
FC-EPF-10	CR/TSC 24-Hour Staffing Schedule	R16 01-16-03
FC-EPF-11	EOF 24-Hour Staffing Schedule	R12 01-16-03
FC-EPF-12	MRC 24 Hour Staffing Schedule	R3 02-14-02
FC-EPF-13	Emergency Response Organization Log Sheet	R0 01-17-91
FC-EPF-14	Emergency Response Organization Assignment Form	R10 01-15-02

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OSC 24-HOUR STAFFING SCHEDULE			
DATE:		TIME:	
OSC POSITION		SHIFT 1 _____ Name	SHIFT 2 _____ Name
MIN*	OSC DIRECTOR		
MIN*	RP TECHNICIAN (1 of 8 RP)		
MIN*	RP COORDINATOR (2 of 8 RP)		
AUG	RP TECHNICIAN (3 of 8 RP)		
AUG	RP TECHNICIAN (4 of 8 RP)		
AUG	RP TECHNICIAN (5 of 8 RP)		
AUG	RP TECHNICIAN (6 of 8 RP)		
AUG	RP TECHNICIAN (7 of 8 RP)		
AUG	ACCOUNTABILITY/DOSIMETRY TECHNICIAN (8 of 8 RP)		
AUG	CHEMISTRY TECHNICIAN (1 of 2)		
AUG	ELECTRICAL MAINTENANCE TECHNICIAN (1 of 4)		
AUG	ELECTRICAL MAINTENANCE TECHNICIAN (2 of 4)		
AUG	I&C TECHNICIAN (1 of 2)		
AUG	MECHANICAL MAINTENANCE (MM/SFM) (1 of 4)		
AUG	OPERATIONS LIAISON		
SPT	CHEMISTRY COORDINATOR		
SPT	CHEMISTRY TECHNICIAN (2 of 2)		
SPT	ERMS OPERATOR		
SPT	I&C TECHNICIAN (2 of 2)		
SPT	MAINTENANCE COORDINATOR (1 of 2)		
SPT	MAINTENANCE COORDINATOR (2 of 2)		
SPT	MAINTENANCE PLANNER (ELEC/I&C)		
SPT	MAINTENANCE PLANNER (MECH)		
SPT	MECHANICAL MAINTENANCE (MM/SFM) (2 of 4)		
SPT	MECHANICAL MAINTENANCE (MM/SFM) (3 of 4)		
SPT	MECHANICAL MAINTENANCE (MM/SFM) (4 of 4)		
SPT	RADIO OPERATOR (1 of 2)		
SPT	RADIO OPERATOR (2 of 2)		
SPT	STORE KEEPER		
SPT	ELECTRICAL MAINTENANCE TECHNICIAN (3 of 4)		
SPT	ELECTRICAL MAINTENANCE TECHNICIAN (4 of 4)		

*Minimum staffing requires OSC Director, RP Coordinator or RP Technician, and one additional person to form a team

NOTE. The expectation is to have a 24-hour schedule developed within 1 hour AFTER the center is AUGMENTED for the 1st shift and within 6 hours for the 2nd shift

Approved Signature.	Date/Time: /
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DEVELOPMENT OF THE OSC 24-HOUR STAFFING SCHEDULE
USE IN CONJUNCTION WITH EPIP-OSC-21

1. Obtain the Duty Roster and a copy of form FC-EPF-9 from the Procedure Rack in the OSC.
 2. The CR Coordinator will determine a start time for the current shift and for second shift and relay this information over the MOP line. Obtain this information from the OSC Director and write this information on the FC-EPF-9 form.
- NOTE:** Everyone scheduled to fill a position must be noted as a Status 1 on the Duty Roster.
- NOTE:** Ensure that personnel having more than one ERO position are not staffed for more than one position or shift – indicated on roster with ALT designations.
- NOTE:** Ensure personnel that are placed on the 24-hour staffing schedule are not listed on the work schedule to report for normal shift duty (e.g. Shift Chemist/Shift RP).
3. Determine who is staffing each position and write their name on the form in Shift 1.
 4. Determine other personnel who have reported, select someone and write their name on the form for Shift 2.
 5. Before extra personnel are released to go home, ensure they are aware if they have been placed on the 24-hour staffing schedule and at what time they are expected to report to relieve the current shift.
 6. FAX the completed FC-EPF-9 to the TSC Administrative Logistics Coordinator in the TSC. Use the FAX number listed on the Emergency Response Telephone Numbers sheet for FSC Technical Support Center EP Specialist.

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CR/TSC 24-HOUR STAFFING SCHEDULE			
CR POSITION		Shift 1 _____ Name	Shift 2 _____ Name
AUG	CR COORDINATOR		
AUG	ENS COMMUNICATOR		
AUG	CR OPS LIAISON		
AUG	EQUIPMENT OPERATOR		
SPT	MEDICAL RESPONDER		
SPT	CR DATA COLLECTOR		
SPT	CR DOSE ASSESSMENT SPECIALIST		
SPT	CR ACCOUNTABILITY CLERK		
SPT	CR EXTRA OPERATOR		

NOTE: The expectation is to have a 24-hour schedule developed within 1 hour AFTER the center is AUGMENTED for the 1st shift and within 6 hours for the 2nd shift.

Approved Signature: _____	Date/Time: _____ / _____
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DEVELOPMENT OF THE CONTROL ROOM 24-HOUR STAFFING SCHEDULE

1. Obtain the Duty Roster from the CR Coordinator kit in the CR gear locker.
2. Determine a start time for the current shift and second shift and record on the form.
3. Relay this information to the other facilities via the MOP line to ensure consistency.

NOTE: Everyone scheduled to fill a position must be noted as Status 1 on the Duty Roster.

NOTE: Ensure that personnel having more than one ERO position are not staffed for more than one position or shift – indicated on roster with ALT designations.

NOTE: Ensure personnel that are placed on the 24-hour staffing schedule are not listed on the work schedule to report for the Operations Shift.

4. Determine who is staffing the CR ERO positions and write their names in the Shift 1 column.
5. Determine other personnel who have reported, select someone for each position and write their name in the Shift 2 column.
6. Before extra personnel are released to go home, ensure they are aware if they have been placed on the 24-hour staffing schedule and at what time they are expected to report to relieve the current shift.
7. FAX the completed FC-EPF-10 to the TSC Administrative Logistics Coordinator in the TSC. Use the FAX number listed on the Emergency Response Telephone Numbers sheet for FCS Technical Support Center EP Specialist.

CR/TSC 24-HOUR STAFFING SCHEDULE			
TSC POSITION		Shift 1 _____ Name	Shift 2 _____ Name
MIN	SITE DIRECTOR		
MIN	TSC COP COMMUNICATOR		
MIN	TSC PROTECTIVE MEASURES COORDINATOR		
MIN	TSC REACTOR SAFETY COORDINATOR		
AUG	TSC ELEC/I&C SYSTEMS ENGINEER (1 of 2)		
AUG	TSC PRIMARY SYSTEMS ENGINEER		
AUG	FIELD TEAM TECHNICIAN RED		
AUG	FIELD TEAM DRIVER RED		
AUG	FIELD TEAM TECHNICIAN BLUE		
AUG	FIELD TEAM DRIVER BLUE		
AUG	TSC OPS LIAISON		
SPT	ADMIN LOGISTICS COORDINATOR		
SPT	TSC ELEC/I&C SYSTEM ENGINEER (2 of 2)		
SPT	TSC DIRECTOR		
SPT	REACTOR ENGINEER		
SPT	TSC SECONDARY SYSTEMS ENGINEER		
SPT	SECURITY COORDINATOR		
SPT	TSC CHP COMMUNICATOR		
SPT	EMERGENCY RESPONSE COORDINATOR		
SPT	ADMIN ASSISTANT (1 of 2)		
SPT	ADMIN ASSISTANT (2 of 2)		
SPT	SITE DIRECTOR SECRETARY (1 of 2)		
SPT	SITE DIRECTOR SECRETARY (2 of 2)		
SPT	TSC STATUS BOARD KEEPER		

NOTE: The expectation is to have a 24-hour schedule developed within 1 hour AFTER the center is AUGMENTED for the 1st shift and within 6 hours for the 2nd shift.

Approved Signature	Date/Time /
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DEVELOPMENT OF THE TSC/OSC/CR 24-HOUR STAFFING SCHEDULE
USE IN CONJUNCTION WITH EPIP-TSC-1

1. Obtain the Duty Roster from the TSC Administrative Logistics Coordinators kit and a copy of form FC-EPF-10 from the Procedure Rack in the TSC.
2. The CR Coordinator will determine a start time for the current shift and for second shift and relay this information over the MOP line. Obtain this information from the TSC Site Director and write this information on the FC-EPF-10 form.

NOTE: **Everyone scheduled to fill a position must be noted as a Status 1 on the Duty Roster.**

NOTE: **Ensure that personnel having more than one ERO position are not staffed for more than one position or shift – indicated on roster with ALT designations.**

3. Provide the Control Room Coordinator your fax number and ask them to fax you their completed FC-EPF-10 form.
4. Provide the OSC Maintenance Coordinator your fax number and ask them to fax you their completed FC-EPF-9 form.
5. Determine who is staffing each position and write their name on the form in Shift 1.
6. Determine other personnel who have reported, select someone and write their name on the form for Shift 2.
7. It is the responsibility of the TSC Administrative Logistics Manager to ensure all positions in the Control Room, OSC and TSC are filled with qualified individuals and personnel are notified of their report times.
8. Before extra personnel are released to go home, ensure they are aware if they have been placed on the 24-hour staffing schedule and at what time they are expected to report to relieve the current shift.
9. The final Shift Schedule should be signed by the TSC Administrative Logistics Coordinator and distributed/posted for personnel to view.

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EOF 24-HOUR STAFFING SCHEDULE			
EOF POSITION		Shift 1 _____ Name	Shift 2 _____ Name
MIN	EMERGENCY DIRECTOR		
MIN	EOF COP COMMUNICATOR		
MIN*	EOF PROTECTIVE MEASURES MANAGER		
MIN	EOF DOSE ASSESSMENT SPECIALIST		
MIN*	EOF DOSE ASSESSMENT COORDINATOR		
AUG	EOF ADMIN LOGISTICS MANAGER		
AUG	EOF INFORMATION SPECIALIST		
AUG	EOF OPS LIAISON		
AUG	FIELD TEAM SPECIALIST		
SPT	EOF TECHNICAL LIAISON		
SPT	EOF CLERICAL ASSISTANT		
SPT	EMERGENCY DIRECTOR SECRETARY		
SPT	DES MOINES SITE REPRESENTATIVE		
SPT	IT SPECIALIST		
SPT	EOF CHP COMMUNICATOR		
SPT	COMMUNICATIONS SPECIALIST		
SPT	EMERGENCY RESPONSE COORDINATOR		
SPT	EOF SECRETARY		
SPT	EOF DOSE ASSESSMENT ASSISTANT		
SPT	EOF STATUS BOARD KEEPER		

NOTE: The expectation is to have a 24-hour schedule developed within 1 hour AFTER the center is AUGMENTED for the 1st shift and within 6 hours for the 2nd shift.

- Minimum staffing requires one of either position.

Approved Signature	Date/Time: /
--------------------	--------------

DEVELOPMENT OF THE EOF 24-HOUR STAFFING SCHEDULE
USE IN CONJUNCTION WITH EPIP-EOF-1

1. Obtain the Duty Roster from the EOF Administrative Logistics Manager kit and a copy of form FC-EPF-11 from the Procedure Rack in the EOF.
2. The CR Coordinator will determine a start time for the current shift and for second shift and relay this information over the MOP line. Obtain this information from the EOF Emergency Director and write this information on the FC-EPF-11 form.

NOTE: **Everyone scheduled to fill a position must be noted as a Status 1 on the Duty Roster.**

NOTE: **Ensure that personnel having more than one ERO position are not staffed for more than one position or shift – indicated on roster with ALT designations.**

3. Determine who is staffing each position listed on the form write their name on the FC-EPF-11 form in the column entitled Shift 1.
4. Determine other personnel who have reported, select someone for second shift and write their name on the FC-EPF-11 form in the column entitled Shift 2.
5. Before extra personnel are released to go home, ensure they are aware if they have been placed on the 24-hour staffing schedule and at what time they are expected to report to relieve the current shift.
6. The final Shift Schedule should be signed by the EOF Administrative Logistics Manager and distributed/posted for personnel to view.

Document	Document Title	Revision/Date
EPIP-EOF-19	Recovery Actions	R7 09-30-98
EPIP-EOF-21	Potassium Iodide Issuance	R4 11-07-00
EPIP-EOF-23	Emergency Response Message System	R5 10-12-99
EPIP-EOF-24	EOF Backup Alert Notification System Activation	R3 09-09-99
EPIP-RR-11	Technical Support Center Director Actions	R14 02-29-00
EPIP-RR-13	Reactor Safety Coordinator Actions	R14 12-09-99a
EPIP-RR-17	TSC Security Coordinator Actions	R15 12-10-02
EPIP-RR-17A	TSC Administrative Logistics Coordinator Actions	R20 11-07-02
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	R21 07-02-01
EPIP-RR-22A	Chemistry Coordinator Actions	R6 12-07-01
EPIP-RR-25	EOF Dose Assessment Coordinator Actions	R20 11-15-01
EPIP-RR-28	OSC Accountability and Dosimetry Technician Actions	R8 09-25-01

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

Correction (a): Page 6 (01-16-03)

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>(v)</u> | <u>INIT/TIME</u> |
|--|---------------|------------------|
| 1. Sign in on the Accountability Roster, obtain worker packet and put on the Personnel Identification Badge. | | <u> / </u> |
| 2. Receive a briefing on plant and core status from the TSC Director. | | <u> / </u> |
| 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. | <u> </u> | |
| 3.2 Direct performance of core damage calculations using EPIP-TSC-8. | <u> </u> | |
|
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. | <u> </u> | |
| 3.4 Review proposed normal and out of normal plant operations to determine possible changes affecting core status. | <u> </u> | |

Attachment 6.1 - Reactor Safety Coordinator Checklist
(continued)

Page 2 of 2

**** 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. | <u> </u> | |
| 3.6 | Evaluate the need for a hydrogen recombiner. Refer to INPO Emergency Resources Manual for availability. | <u> </u> | |
| 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] | <u> </u> | <u> / </u> |
| 4. | Establish a 24 hour staffing roster for the following positions and deliver it to the TSC Administrative Logistics Coordinator: | | |
| 4.1 | Reactor Engineer; | <u> </u> | |
| 4.2 | Electrical/I&C Systems Engineer; | <u> </u> | |
| 4.3 | Primary Systems Engineer; | <u> </u> | |
| 4.4 | Secondary Systems Engineer; | <u> </u> | <u> / </u> |
| 5. | Provide detailed briefing to oncoming shift relief of emergency conditions and status of dose assessment. | | <u> / </u> |

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 EOP-06.

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.

 /