your energy partner
OPPD
Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

July 9, 2001
LIC-01-066

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)

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 change packages enclosed for the Document Control Desk (holder of Copy 165) and the NRC Emergency Response Coordinator (holder of Copies 154 and 155).

The document update instructions and summary of changes are included on the Confirmation of Transmittal (Form EP-1) form attached to each controlled copy change package. Please return the Confirmation of Transmittal forms by September 1, 2001.

The revised documents included in the enclosed package are:

EPIP Index Pages 1 & 2 issued 07/02/01
EPIP-EOF-6 R31 issued 07/02/01
EPIP-RR-22 R21 issued 07/02/01
EPIP-RR-63 R9 issued 07/02/01

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

Sincerely,

S. K. Gambhir
Division Manager
Nuclear Operations

SKG/ash

Enclosures

A045

c: T. H. Andrews, Emergency Response Coordinator (2 sets)
Alan Wang, NRC Project Manager (w/o enclosures)
W. C. Walker, NRC Senior Resident Inspector (w/o enclosures)
Winston & Strawn (w/o enclosures)

FORM EP-1
Rev. 6 (04/29/99)

OMAHA PUBLIC POWER DISTRICT

Confirmation of Transmittal for Emergency Planning Documents/Information

☐ Radiological Emergency Response Plan (RERP)
☒ Emergency Plan Implementing Procedures (EPIP)
☐ Emergency Planning Forms (EPF)
☐ Emergency Planning Department Manual (EPDM)
☐ Other Emergency Planning Document(s)/ Information

Transmitted to:
Name: Document Control Desk Copy No: 165
Tom Andrews Copy No: 154
Tom Andrews Copy No: 155

Date:_____

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

REMOVE SECTION	INSERT SECTION
EPIP Index page 1 issued 05/17/01 & 2 issued 04/27/01	EPIP Index pages 1 & 2 issued 07/02/01
EPIP-EOF-6 R30 issued 12/22/00	EPIP-EOF-6 R31 issued 07/02/01
EPIP-RR-22 R20 issued 08/24/00	EPIP-RR-22 R21 issued 07/02/01
EPIP-RR-63 R8 issued 11/02/00	EPIP-RR-63 R9 issued 07/02/01

Summary of Changes:

EPIP-EOF-6 was revised to update the reference to EAGLE 5.00 revision and add instructions for liquid release.
EPIP-RR-22 was revised to make editorial changes in the directions for reviewing dose assessments.
EPIP-RR-63 Step 4.3 was revised to delete the requirement for faxing Dose Assessment Reports to the TSC and the requirement to fax to the MRC has been changed to an "as required" basis. With the implementation of EAGLE 5.0, the term "Dose Assessment Report" was changed to "Update Report for Offsite Authorities".

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 **09/01/01** 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
☐ Document(s)/Information Transferred to:

Name: _____ Mailing Address: _____

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WP8

Fort Calhoun Station
Unit No. 1

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EPIP-EOF-6

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: DOSE ASSESSMENT

FC-68 Number: EC 26254

Reason for Change: Eagle 5.0 upgrade. Add instructions for liquid release.

Requestor: M. Reller

Preparer: R. Hankins

ISSUED: 07-02-01 2:00 pm

R31

DOSE ASSESSMENT

NON-SAFETY RELATED

1. PURPOSE

1.1 This procedure provides instructions for performing dose assessment for Ventilation Stack releases, Main Steam Line/Condenser Off-Gas releases, Containment leakage and Radwaste Building releases. It also provides instruction for estimating unmonitored release rates, and performing liquid release assessment.

2. REFERENCES/COMMITMENT DOCUMENTS

2.1 EPIP-EOF-7, Protective Action Guidelines

2.2 OI-ERFCS-1, Operation of the Emergency Response Facilities Computer System

2.3 CH-SMP-PA-0005, Monitoring of Gaseous Effluent Releases Via the Auxiliary Building Ventilation Duct Pathway

2.4 Technical Data Book TDB-IV.8, Area Monitor Setpoints

2.5 User's Guide for EAGLE 5.00

2.6 Engineering Analysis EA-FC-90-038, Manual Dose Assessment

2.7 Engineering Analysis EA-FC-90-105, Ingestion Pathway

2.8 Engineering Analysis EA-FC-90-035, EAGLE Radiological Parameters

2.9 Engineering Analysis EA-FC-93-066, EAGLE 4.0 Dose Calculation Methodology

2.10 Calculation FC-06179, TEDE and CDE conversion factors for offsite dose calculation

2.11 Commitments (other than Ongoing)

- AR 10029, IER-89-24
- AR 13302, IER-92-20
- AR 17061, LIC-95-0049/LIC-95-0230

2.12 Protective Measure Basis Document, CHP-00-038, September 28, 2000

3. DEFINITIONS

3.1 DELTA T (ΔT) TEMPERATURE - the temperature difference between 10 and 60 meters, in units of centigrade. The value displayed on the ERFCS equates to a 100ΔT[(T @ 60m - T @ 10m) x 2].

3.2 DURATION OF RELEASE - the time in hours the release is expected to continue.

3.3 DOSE - the amount of ionizing radiation that results from an amount of energy being absorbed in the human body, in units of Rem.

3.4 DOSE RATE - Dose per unit time, in units of Rem/hour.

3.5 ERFCS - Emergency Response Facility Computer System.

3.6 IMMINENT RELEASE - An impending release of the radioactive gas in Containment.

3.7 CDE - Committed Dose Equivalent.

3.8 TEDE - Total Effective Dose Equivalent.

3.9 COMMAND AND CONTROL POSITION: The position that is currently in charge of the emergency response, either the Shift Supervisor, Control Room Coordinator, Site Director or Emergency Director.

3.10 RELEASE RATE (Q) - the emission rate of the effluent in units of Curies per second from the release point.

4. PREREQUISITES

4.1 A radioactive release is suspected, imminent, or known to be in progress.

5. PROCEDURE

NOTE: If on-site meteorological data is not available, contact the National Weather Service (number in the Emergency Phone Book), and request wind speed and direction. For night time (sunset to sunrise) with no precipitation, use a ΔT of +2.0 and a stability class F. For all other conditions, use a ΔT of -1.0 and a stability class D.

5.1 To perform dose assessments in the Control Room, use Attachment 6.1.

5.2 To perform dose assessments in the TSC, use Attachment 6.2.

5.3 To perform dose assessments in the EOF, use Attachment 6.3.

5.4 When needed, perform dose assessments and updates to the states at least every 60 minutes. It is the goal of the Fort Calhoun Station to attempt to provide assessments and updates at 15 minute intervals. (AR 13302)

5.5 Retain all documentation (logs, assessments, etc.) generated or used during the emergency. At the termination, deliver all documentation to the TSC Administrative Logistics Coordinator in the TSC, or the EOF Administrative Logistics Manager in the EOF.

6. ATTACHMENTS

6.1 Dose Assessment in the Control Room

6.2 Dose Assessment in the TSC

6.3 Dose Assessment in the EOF

6.4 Computerized Dose Assessment

6.5 Unmonitored Release Assessments

Attachment 6.1 - Dose Assessment In The Control Room

1. Sign in on the Accountability Roster and put on the Personnel Identification Badge.

2. Using information from the Control Room as needed and AI-33A, B and C or ERFCS pages 197, 360 and 361 evaluate and determine the release pathways for dose assessment as follows:

NOTE: The sample Control Module for RM-052 must be in the VENT position (monitoring the Auxiliary Building Vent Stack) in order to be used for dose assessment.

NOTE: RM-062/063 are the preferred process monitors to be used for dose assessment on the Auxiliary Building Vent Stack. RM-062 is normally in-service and RM-063 is normally in Standby. When RM-062 count rate exceeds 5.0 E+06 cpm or if RM-063 exceeds 5.0 E-3 µC/cc; sample flow will automatically shift from RM-062 to RM-063 and the alarm "RM-063 AUX BLDG VENT STACK IN SERVICE" will annunciate on AI-33C. When RM-063 radiation level drops below 5.0 E-3 µC/cc, sample flow will shift to RM-062 and RM-063 will shift to Standby.

2.1 Evaluate the Auxiliary Building Vent Stack release pathway using RM-052, RM-062 and RM-063.

2.1.1 If RM-052 or RM-062 is in High Alarm, determine the source of the release to the Auxiliary Building Vent Stack.

- If the source of the release can be determined to be only from Condenser Off-gas (i.e. Off-gas is aligned to Auxiliary Building Vent Stack and there are no other release sources to the Auxiliary Building Vent Stack), then use an Iodine/Noble Gas Ratio of 0.003 for the Auxiliary Building Vent Stack release.

- Otherwise, use the default Iodine/Noble Gas Ratio of 0.02.

2.2 Evaluate the Condenser/Main Steam release pathway using RM-057, RM-064 and whether or not a primary to secondary leak has been confirmed.

2.2.1 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed, request that RM-064 be placed in service on the affected Main Steam Line.

2.2.2 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and if Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, request that Condenser Off-gas be aligned to the Auxiliary Building Vent Stack.

2.2.3 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, perform dose assessment using Condenser Off-gas a release pathway, a flow rate of 340 scfm, and use an Iodine/Noble Gas Ratio of 0.003.

2.2.4 If a primary to secondary leak is confirmed and RM-057 is not operable or is over ranged, and Condenser Off-gas is not aligned to the Auxiliary Building Vent Stack, this is an unmonitored release.

2.2.5 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is above the back ground count rate as listed in TDB-IV.7, use an Iodine/Noble Gas Ratio of 0.003.

2.2.6 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is less than or equal to the background count rate as listed in TDB-IV.7, this is unmonitored release.

2.3 Evaluate the Containment Leakage release pathway using Containment Area Monitors.

NOTE: If containment leakage is suspected to be greater than designed Containment leakage of 1.5 scfm, and the leakage is from the Containment to the stack or from the Containment to Controlled Areas of the Auxiliary Building to the Auxiliary Building Vent Stack, consideration may be given not to count the release twice if dose assessment will be performed from the Auxiliary Building Vent Stack.

2.3.1 If Containment Area Monitors RM-070 through RM-075 are in High Alarm or RM-091A and B read 1.0 R/hr or higher, perform dose assessment using Containment leakage as a release pathway.

2.3.2 **IF** any area monitors indicate > 1000 times the background listed in TDB-IV.8, **THEN** inform the Command and Control position for classification information.

2.4 Evaluate the Radwaste Building Stack as a release pathway using RM-043

2.4.1 If RM-043 is in High Alarm, perform dose assessment using the Radiological Waste Building Vent Stack as a release pathway.

Attachment 6.1 (continued)

2.5 Evaluate the liquid release pathways as follows:

2.5.1 If RM-055, Overboard Discharge Monitor is reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and the overboard discharge flow is not isolated, then a liquid release assessment must be performed.

2.5.2 If either RM-054A or RM-054B Steam Generator Blowdown Monitors are reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and blowdown flow is not isolated from the Steam Generator(s) with a primary to secondary leak, then a liquid release assessment must be performed.

2.6 Determine if there are any potentially unmonitored releases.

3. Perform dose assessment for monitored release pathways using Attachment 6.4 and for unmonitored release pathways per Attachment 6.5.

4. Review/Distribution

NOTE: The PAR information generated by EAGLE is for OPPD decision maker's information only. Actual PARs are determined by the Command and Control position. The PAR Information Worksheet should be one of the tools used for guidance in determining PARs.

4.1 If Command and Control is in the Control Room

4.1.1 Have the Command and Control position review the PAR Information Worksheet and the Update Report to Offsite Authorities.

NOTE: If a dose assessment results in a change in classification or a PAR change, ensure that the states are notified by the CR Communicator using an approved Emergency Notification form (FC-1188) prior to faxing the Update Report to Offsite Authorities.

4.1.2 If the Command and Control position approves the assessment:

- Click the "Fax/Distribute" button at the bottom of the Release Information Screen
- Select the proper distribution list(s)
- Click "OK"

4.2 If Command and Control is in the TSC:

4.2.1 Fax unsigned PAR Information Worksheet and Update Report to State and County Authorities to the TSC.

4.2.2 Inform the TSC Protective Measures Coordinator of the transmittal.

4.2.3 Record transmittal time.

Attachment 6.2 - Dose Assessment In The Technical Support Center Page 1 of 3

NOTE: Dose assessment will only be performed in the TSC in the event that the EAGLE equipment in the Control Room is unavailable or inoperable. The TSC EAGLE equipment may also be used as a backup to the equipment located at the EOF.

1. Sign in on the Accountability Roster.

2. Inform the Protective Measures Coordinator that you will be performing dose assessment in the TSC.

3. Using information from the Control Room as needed and AI-33A, B and C or ERFCS pages 197, 360 and 361 evaluate and determine the release pathways for dose assessment as follows:

   NOTE: The sample Control Module for RM-052 must be in the VENT position (monitoring the Auxiliary Building Vent Stack) in order to be used for dose assessment.

   NOTE: RM-062/063 are the preferred process monitors to be used for dose assessment on the Auxiliary Building Vent Stack. RM-062 is normally in-service and RM-063 is normally in Standby. When RM-062 count rate exceeds 5.0 E+06 cpm or if RM-063 exceeds 5.0 E-3 µC/cc; sample flow will automatically shift from RM-062 to RM-063 and the alarm "RM-063 AUX BLDG VENT STACK IN SERVICE" will annunciate on AI-33C. When RM-063 radiation level drops below 5.0 E-3 µC/cc, sample flow will shift to RM-062 and RM-063 will shift to Standby.

   3.1 Evaluate the Auxiliary Building Vent Stack release pathway using RM-052, RM-062 and RM-063.

      3.1.1 If RM-052 or RM-062 is in High Alarm, determine the source of the release to the Auxiliary Building Vent Stack.

         - **IF** the source of the release can be determined to be only from Condenser Off-gas (i.e. Off-gas is aligned to Auxiliary Building Vent Stack and there are no other release sources to the Auxiliary Building Vent Stack), **THEN** use an Iodine/Noble Gas Ratio of 0.003 for the Auxiliary Building Vent Stack release.

         - Otherwise, use the default Iodine/Noble Gas Ratio of 0.02.

   3.2 Evaluate the Condenser/Main Steam release pathway using RM-057, RM-064 and whether or not a primary to secondary leak has been confirmed.

      3.2.1 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed, request that RM-064 be placed in service on the affected Main Steam Line.

3.2.2 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and if Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, request that Condenser Off-gas be aligned to the Auxiliary Building Vent Stack.

3.2.3 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, perform dose assessment using Condenser Off-gas a release pathway, a flow rate of 340 scfm, and use an Iodine/Noble Gas Ratio of 0.003.

3.2.4 If a primary to secondary leak is confirmed and RM-057 is not operable or is over ranged, and Condenser Off-gas is not aligned to the Auxiliary Building Vent Stack, this is an unmonitored release.

3.2.5 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is above the back ground count rate as listed in TDB-IV.7, use an Iodine/Noble Gas Ratio of 0.003.

3.2.6 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is less than or equal to the background count rate as listed in TDB-IV.7, this is unmonitored release.

3.3 Evaluate the Containment Leakage release pathway using Containment Area Monitors

NOTE: If containment leakage is suspected to be greater than designed Containment leakage of 1.5 scfm, and the leakage is from the Containment to the stack or from the Containment to Controlled Areas of the Auxiliary Building to the Auxiliary Building Vent Stack, consideration may be given not to count the release twice if dose assessment will be performed from the Auxiliary Building Vent Stack.

3.3.1 If Containment Area Monitors RM-070 through RM-075 are in High Alarm or RM-091A and B read 1.0 R/hr or higher, perform dose assessment using Containment leakage as a release pathway.

3.3.2 **IF** any area monitors indicate > 1000 times the background listed in TDB-IV.8, **THEN** inform the Command and Control position for classification information.

Attachment 6.2 (continued)

3.4 Evaluate the Radwaste Building Stack as a release pathway using RM-043

3.4.1 If RM-043 is in High Alarm, perform dose assessment using the Radiological Waste Building Vent Stack as a release pathway.

3.5 Evaluate the liquid release pathways as follows:

3.5.1 IF RM-055, Overboard Discharge Monitor is reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and the overboard discharge flow is not isolated, then a liquid release assessment must be performed.

3.5.2 If either RM-054A or RM-054B Steam Generator Blowdown Monitors are reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and blowdown flow is not isolated from the Steam Generator(s) with a primary to secondary leak, then a liquid release assessment must be performed.

3.6 Determine if there are any potentially unmonitored releases.

4. Perform dose assessment for monitored release pathways using Attachment 6.4 and for unmonitored release pathways per Attachment 6.5.

5. Review

NOTE: The PAR information generated by EAGLE is for OPPD decision maker's information only. Actual PARs are determined by the Command and Control position. The PAR Information Worksheet should be one of the tools used for guidance in determining PARs.

5.1 Obtain a printout of the PAR Information Worksheet and the Update Report to Offsite Authorities.

5.2 Forward printouts to the Protective Measures Coordinator.

6. Provide detailed briefing to oncoming shift relief of emergency conditions and dose assessment status.

Attachment 6.3 - Dose Assessment in the Emergency Operation Facility

1. **IF** dose assessments are being performed in the Control Room, **THEN** contact the technician in the Control Room performing dose assessment and review all previous assessments using the fax copies.

2. **IF** dose assessments are being performed in the TSC, **THEN** contact the technician performing dose assessment in the TSC and review all previous assessments using the fax copies.

3. Standby to transfer dose assessment from the Control Room (or TSC) to the EOF, as directed by the Protective Measures Manager.

4. When directed to take over dose assessment, inform the technician in the Control Room (or TSC) of your actions.

5. Using information from the Control Room as needed and AI-33A, B and C or ERFCS pages 197, 360 and 361 evaluate and determine the release pathways for dose assessment as follows:

   NOTE: The sample Control Module for RM-052 must be in the VENT position (monitoring the Auxiliary Building Vent Stack) in order to be used for dose assessment.

   NOTE: RM-062/063 are the preferred process monitors to be used for dose assessment on the Auxiliary Building Vent Stack. RM-062 is normally in-service and RM-063 is normally in Standby. When RM-062 count rate exceeds 5.0 E+06 cpm or if RM-063 exceeds 5.0 E-3 µC/cc; sample flow will automatically shift from RM-062 to RM-063 and the alarm "RM-063 AUX BLDG VENT STACK IN SERVICE" will annunciate on AI-33C. When RM-063 radiation level drops below 5.0 E-3 µC/cc, sample flow will shift to RM-062 and RM-063 will shift to Standby.

   5.1 Evaluate the Auxiliary Building Vent Stack release pathway using RM-052, RM-062 and RM-063.

      5.1.1 If RM-052 or RM-062 is in High Alarm, determine the source of the release to the Auxiliary Building Vent Stack.

      - **IF** the source of the release can be determined to be only from Condenser Off-gas (i.e. Off-gas is aligned to Auxiliary Building Vent Stack and there are no other release sources to the Auxiliary Building Vent Stack), **THEN** use an Iodine/Noble Gas Ratio of 0.003 for the Auxiliary Building Vent Stack release.

      - Otherwise, use the default Iodine/Noble Gas Ratio of 0.02.

5.2 Evaluate the Condenser/Main Steam release pathway using RM-057, RM-064 and whether or not a primary to secondary leak has been confirmed.

5.2.1 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed, request that RM-064 be placed in service on the affected Main Steam Line.

5.2.2 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and if Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, request that Condenser Off-gas be aligned to the Auxiliary Building Vent Stack.

5.2.3 If RM-057 is in High Alarm or if a primary to secondary leak is confirmed and Condenser Off-gas is being vented directly to the atmosphere via the Turbine Building Roof, perform dose assessment using Condenser Off-gas a release pathway, a flow rate of 340 scfm, and use an Iodine/Noble Gas Ratio of 0.003.

5.2.4 If a primary to secondary leak is confirmed and RM-057 is not operable or is over ranged, and Condenser Off-gas is not aligned to the Auxiliary Building Vent Stack, this is an unmonitored release.

5.2.5 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is above the back ground count rate as listed in TDB-IV.7, use an Iodine/Noble Gas Ratio of 0.003.

5.2.6 If there is a confirmed primary to secondary leak, and FW-10 is receiving steam from the affected Steam Generator, or the atmospheric Steam Dump Valve HCV-1040 is OPEN or a Steam Safety is lifting on the affected side, and RM-064 count rate is less than or equal to the background count rate as listed in TDB-IV.7, this is unmonitored release.

5.3 Evaluate the Containment Leakage release pathway using Containment Area Monitors

NOTE: If containment leakage is suspected to be greater than designed Containment leakage of 1.5 scfm, and the leakage is from the Containment to the stack or from the Containment to Controlled Areas of the Auxiliary Building to the Auxiliary Building Vent Stack, consideration may be given not to count the release twice if dose assessment will be performed from the Auxiliary Building Vent Stack.

5.3.1 If Containment Area Monitors RM-070 through RM-075 are in High Alarm or RM-091A and B read 1.0 R/hr or higher, perform dose assessment using Containment leakage as a release pathway.

5.3.2 **IF** any area monitors indicate > 1000 times the background listed in TDB-IV.8, **THEN** inform the Command and Control position for classification information.

5.4 Evaluate the Radwaste Building Stack as a release pathway using RM-043

5.4.1 If RM-043 is in High Alarm, perform dose assessment using the Radiological Waste Building Vent Stack as a release pathway.

5.5 Evaluate the liquid release pathways as follows:

5.5.1 If RM-055, Overboard Discharge Monitor is reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and the overboard discharge flow is not isolated, then a liquid release assessment must be performed.

5.5.2 If either RM-054A or RM-054B Steam Generator Blowdown Monitors are reading greater than the High Alarm Setpoint as listed in TDB-IV.7 and blowdown flow is not isolated from the Steam Generator(s) with a primary to secondary leak, then a liquid release assessment must be performed.

5.6 Determine if there are any potentially unmonitored releases.

6. Perform dose assessment for monitored release pathways using Attachment 6.4 and for unmonitored release pathways per Attachment 6.5.

Attachment 6.3 (continued)

7. Review

NOTE: The PAR information generated by EAGLE is for OPPD decision maker's information only. Actual PARs are determined by the Command and Control position. The PAR Information Worksheet should be one of the tools used for guidance in determining PARs.

7.1 Obtain a printout of the PAR Information Worksheet and the Update report to Offsite Authorities.

7.2 Forward printouts to the Dose Assessment Coordinator.

8. Provide detailed briefing to oncoming shift relief of emergency conditions and dose assessment status.

1. Logging on to EAGLE

1.1 Is terminal on, with EAGLE Main Menu page showing?

1.1.1 YES Select operational mode (emergency, drill or test), proceed to Step 1.2.

NO Re-boot the system, user name for each terminal is on the monitor, password for all machines is "eagle".

NOTE: If another terminal has network "Control" and is performing dose assessment, Coordinate the network synchronization accordingly. At the EOF work with the EOF Dose Assessment Coordinator to insure a smooth transfer of dose assessment responsibilities.

1.2 Verifying network status and control.

1.2.1 Click "View Network Status" a window will open showing the status of each EAGLE network terminal.

1.2.2 To take control of the network (with someone at other PC, preferred method):

- Have person in control click the "Release Control" button
- Click the "Take Control"
- Click "Exit"

1.2.3 To take control when no one is at the other PC:

- Click "Override Control"
- Click "Refresh"
- Click "Exit"

1.2.4 The blue lettering at the top of the EAGLE Main Menu screen should say "Network Mode/Control".

Attachment 6.4 (continued)

CAUTION

IF process monitor reading increases by 50% while performing an assessment, or the Command and Control position requests an immediate assessment, **THEN** complete the current assessment and immediately start another. **[AR 10029]**

2. Performing Dose Assessment

NOTE: While EAGLE does have graphic capabilities, typically this function will only be performed at the EOF.

2.1 Click "Atmospheric Diffusion and Dose Calculations" button.

2.2 From the Change Plume Segment Number screen:

NOTE: It is possible to redo a plume by selecting that number at this point. All data for that plume and other sequential plumes will be lost.

2.2.1 Enter "1" to start new plume series or the next sequential number to continue the current series.

2.2.2 Click "OK".

2.3 From the EAGLE Screen select:

2.3.1 Click "Control Options" to select:

- Run Mode (Normal Dose Projection, is the default)
- Release Duration (4 hours is the default)

2.3.2 Click "OK".

2.3.3 If desired, click "Current Segment Time and Date" to gain another opportunity to change the plume number.

NOTE: There are four release points listed at this point. To simplify this procedure, guidance will only be given for the Auxiliary Building Stack. The method for doing other release paths is similar. Reference the EAGLE Help menu or the EAGLE 5.0 User Manual if you need assistance with these pathways.

NOTE: For Condenser Off-gas releases, use a condenser ejector flow-rate of 340 cfm.

NOTE: For Condenser Main Steam releases, use an Iodine/Noble Gas Ratio of 0.003.

2.3.4 Click "Aux Bldg Stk" or appropriate button to enter release data:

- Select the appropriate option (the method described here will use radiation monitor data)
- Select the appropriate Rad Monitor
- Enter the current rad monitor value, click accept
- Enter the current Auxiliary Building Vent Stack flow (default is 72500), click "OK"
- Click "Change Iodine/Noble Gas Ratio", if needed, enter desired value (default is 2 e-2), click "Accept;
- If properly entered click "OK"
- Click "Return To Dose Calcs"

2.3.5 Repeat Step 2.3.4 for each release path.

2.3.6 Click "Change Met Parameters"

NOTE: For early dose assessments use the defaults for Atmospheric Mixing Conditions and Atmospheric Stability Class Method. The Protective Measures Group in the EOF should review weather conditions and adjust assessments accordingly once the EOF has assumed command and control and dose assessment.

- Select the appropriate Atmospheric Mixing Condition (Unlimited Mixing Conditions is Default), enter the Mixing Height in meters.

- Select the appropriate Atmospheric Stability Class (Delta T Method is default). If you chose other than the default enter Sigma Theta in degrees Celsius.

NOTE: Use the most positive Delta-T and the slowest wind speed.

- Enter wind speed and direction, the ambient temperature and the appropriate Delta-T in the spaces provided.

- Once data is properly entered, click "OK"

2.4 Calculation

2.4.1 From the EAGLE screen click "Calculate". A red box will appear confirming the plume number which is being calculated.

NOTE: When EAGLE is done calculating the "Output Menu" box will be operational.

2.5 Viewing Calculated Results

2.5.1 Click "Output Menu"

2.5.2 From the "EAGLE Output Menu" screen click on "Release/Dose Assessment Information"

- The "Data Input" sub-page will appear allowing you to verify that the correct data was used for calculations (Click on the "Recommendations" sub-page to verify rad monitor inputs and flows)

- Click on the "Projections" sub-page to get EAGLE Calculated results in TEDE and CDE at the Site Boundary, 2 miles, 5 miles and 10 miles. (any "Projected Integrated Dose (REM)) that require protective actions per EPIP-EOF-7 will be highlighted in red)

- Click on the "Recommendation" sub-page to view EAGLE recommended Protective Action Recommendations (PARs)

2.6 Printing

2.6.1 Click "Distribute"

2.6.2 Click "Print" after it is highlighted

NOTE: A window will open and ask a "Dose Assessment Report", a PARs Worksheet" or "Both".

2.6.3 Click the option you prefer (normally both).

2.6.4 Go to the proper attachment in this procedure for your facility for distribution and approval guidance.

2.7 Follow-up Actions

2.7.1 To go to the next plume segment

- Click "Return to Output Menu"
- From the "EAGLE Output Menu" screen click "Go To Next Plume Segment"
- Click "Run Next Segment"
- Go to Step 2.3 and follow guidance as needed to change inputs, as conditions require

3. Imminent Release Assessment

3.1 Entering data

3.1.1 From the main menu click "Atmospheric Diffusion Assessment and Dose Calculations".

3.1.2 At the Plume Segment Number screen:

- Enter the appropriate plume number
- Click "OK"

3.1.3 At the EAGLE Screen select Control Options:

- Select "Imminent Release Option"
- Click "OK"

3.1.4 At the Containment Imminent Release Screen, select:

- Change Release Time; to change the time until release
- Change Containment Flow; to change Containment Pressure
- Change Radiological Data; to enter data from rad monitors or isotopes
- Hours after accident
- Click "OK"

3.1.5 Click "Calculate Initial Release Rates", to get "Projected Release Rates" in Ci/sec.

3.1.6 Click Perform Straight-line Gaussian Projection:

- At the prompt select the release duration, click "OK"
- Enter the meteorological information, click "OK"

3.1.7 The Plume Centerline Values Based on Straight-line Gaussian Diffusion Model will be displayed.

3.1.8 Hard copies of all EAGLE screens may be made by:

- With Microsoft Word open and minimized and the EAGLE window active
- simultaneously hit the "Alt" and "Print Screen" buttons
- Maximize Microsoft Word
- Click "Edit"
- Click "Paste"

4. Liquid Release Assessment

4.1 Entering Data

4.1.1 From the Main EAGLE Menu Select "Tabular Displays of Dose Calculations".

4.1.2 From that menu select the "Liquid Effluent Isotopic Activity Display".

4.1.3 At the "Projected Isotopic Activity at MUD Intake Structure Screen" enter:

- Monitor Tank flow rate (available from the Control Room)
- River flow rate
- The isotopic activity (obtain from Chemistry)
- Click "Calculate Projected Activity" button

4.1.4 Hard copies of all EAGLE screens may be made by

- With Microsoft Word open and minimized and the EAGLE window active
- Simultaneously hit the "Alt" and "Print Screen" buttons
- Maximize Microsoft Word
- Click "Edit"
- Click "Paste"

4.1.5 If the results exceed the EPA limits ensure that Command and Control position reports results to:

- MUD dispatcher
- Nebraska Emergency Management Agency

5. Errors

5.1 If an error message should appear:

5.1.1 Follow the on screen instructions.

5.1.2 If errors cannot be corrected, or other problems arise, reboot the system.

5.1.3 If the problem is still not corrected, perform dose assessment on another EAGLE terminal.

5.1.4 If printer fails, manually record dose assessment results on a FC-1188 form.

6. Graphic and Tabular displays and further guidance on dose assessment are explained in the EAGLE 5.0 User's Guide and the EAGLE help menu.

Attachment 6.5 - Determining Unmonitored Release Rates

NOTE: For determining projected release rates from the Ventilation Stack when RM-062/52 and 63 are off-scale/not available, refer to CH-SMP-PA-0005.

NOTE: For determining projected release rates from the Main Steam/Condenser Off-gas system when RM-057/64 are off-scale/not available, use Section 1

NOTE: For determining projected release rates from Containment when RM-091A/B and RM-070 through RM-075 are off-scale/not available, use Section 2.

NOTE: For determining actual release rates using Field Team data, use Section 3.

1. For unmonitored releases via Condenser Off-gas/Main Steam System:

   1.1 If RM-057 is off-scale or is not operable, and Condenser Off-gas is vented to the atmosphere via the Turbine Building Roof, perform dose assessment using RM-064 and a main steam flow in lbm/hr from the affected Steam Generator (ERFCS page 353) per the following criteria:

      1.1.1 If RM-064 is reading at or below background, use one (1) net count per minute (NCPM) for the RM-064 reading, an Iodine/Noble Gas Ratio of 0.003 and Attachment 6.4 to perform dose assessment.

      1.1.2 If RM-064 is reading above background, use the indicated reading on RM-064, and Iodine/Noble Gas Ratio of 0.003 and Attachment 6.4 to perform dose assessment.

      1.1.3 If RM-064 is off-scale high or is not operable, go to Section 1.3 below.

   1.2 For unmonitored releases via FW-10, the Atmospheric Dump Valve (HCV-1040) or a Main Steam Safety Valve, perform dose assessment per the following criteria:

      1.2.1 If RM-064 is reading at or below background use one (1) net count per minute (NCPM) for the RM-064 reading, a flow rate as determined from EAGLE, an Iodine/Noble Gas Ratio of 0.003, and Attachment 6.4 to perform dose assessment.

      1.2.2 If RM-064 is reading above background, use the indicated reading on RM-064, a flow rate as determined from EAGLE, an Iodine/Noble Gas Ratio of 0.003 and Attachment 6.4 to perform dose assessment.

      1.2.3 If RM-064 is off-scale high or is not operable, go to Section 1.3 below.

1.3 If RM-064 goes off-scale high or is otherwise known to be inoperable, perform the following:

1.3.1 Obtain direct radiation readings on the main steam lines in Room 81. Refer to Figure 6.5.1 for reading locations.

1.3.2 If the dose rate is between 0 and 100 mRem/hr, use the following equation to calculate the TEDE release rate:

$$Q_{TEDE} = (17.5)\ (\text{Contact Dose Rate in mRem/hr})$$

1.3.3 If the dose rate is >100 mRem/hr, use the following equation to calculate the TEDE release rate:

$$Q_{TEDE} = (5)\ (\text{Contact Dose Rate in mRem/hr})$$

1.3.4 Multiply the Q_{TEDE} from Step 1.3.2 or 1.3.3 by the following to obtain the Noble Gas, Iodine and Particulate release rate in Ci/sec:

(Q_{TEDE}) (0.981) = Noble Gas Release Rate in Ci/sec

(Q_{TEDE}) (0.003) = Iodine Release Rate in Ci/sec

(Q_{TEDE}) (0.009) = Particulate Release Rate in Ci/sec

1.3.5 Input the Noble Gas, Iodine and Particulate Release Rate into EAGLE dose assessment program to obtain the dose and dose rate results. (AR 17061)

2. Containment Leakage

2.1 If all Containment Area Radiation Monitors are off-scale or inoperable, perform the following:

2.1.1 Obtain direct radiation readings on containment penetrations C-2 or H-4. Refer to Figures 6.5.2 and 6.5.3 for reading locations.

2.1.2 Multiply this penetration reading by the Containment Multiplication Factor (CMF) using Figure 6.5.4, to determine an equivalent area monitor reading.

2.1.3 Insert the area monitor reading into the EAGLE dose assessment procedure to obtain the dose and dose rate results.

3. Determining Actual Release Rates from Field Team Data

NOTE: Field Teams must be dispatched, and data from the approximate plume centerline must be available in order to complete this procedure. The Field Team Specialist should be consulted for Field Team data.

3.1 Obtain FC-EPF-29 and collect the following data:

3.1.1 Date and time.

3.1.2 Downwind distance (in miles) to the sampling location.

3.1.3 Wind direction

3.1.4 Delta temperature (ΔT)

3.1.5 Wind speed

3.1.6 Diffusion factor ($\chi\mu/Q$) - Using Figure 6.5.5, determine the projected diffusion factor, based on time of day and downwind distance. During transitional periods, use the more conservative, or smaller, value.

3.1.7 Dose rate reported from the field team in Rem/hr.

3.1.8 Iodine air concentration reported from the field team in µCi/cc.

3.1.9 Particulate air concentration reported from the field team in µCi/cc.

3.1.10 Noble gas release rate from dose rate (Q_{NG} in Ci/sec) - Multiply the wind speed (Step 3.1.5) by the dose rate (Step 3.1.7) and by the factor provided, then divide the result by $\chi\mu/Q$ (Step 3.1.6).

3.1.11 Iodine release rate from Q_{NG} (in Ci/sec) - Multiply the noble gas release rate (Step 3.1.10) by the factor provided.

3.1.12 Iodine release rate from air sample data (in Ci/sec) -If desired, this method may be used if iodine air sample date is available from the Field Teams. Multiply the wind speed (Step 3.1.5) by the iodine concentration (Step 3.1.8), then divide the result by the $\chi\mu/Q$ (Step 3.1.6).

3.1.13 Particulate release rate from air sample data (in Ci/sec) - Multiply the wind speed (Step 3.1.5) by the particulate concentration (Step 3.1.9), then divide the result by the $\chi\mu/Q$ (Step 3.1.6).

3.2 Input Of Results

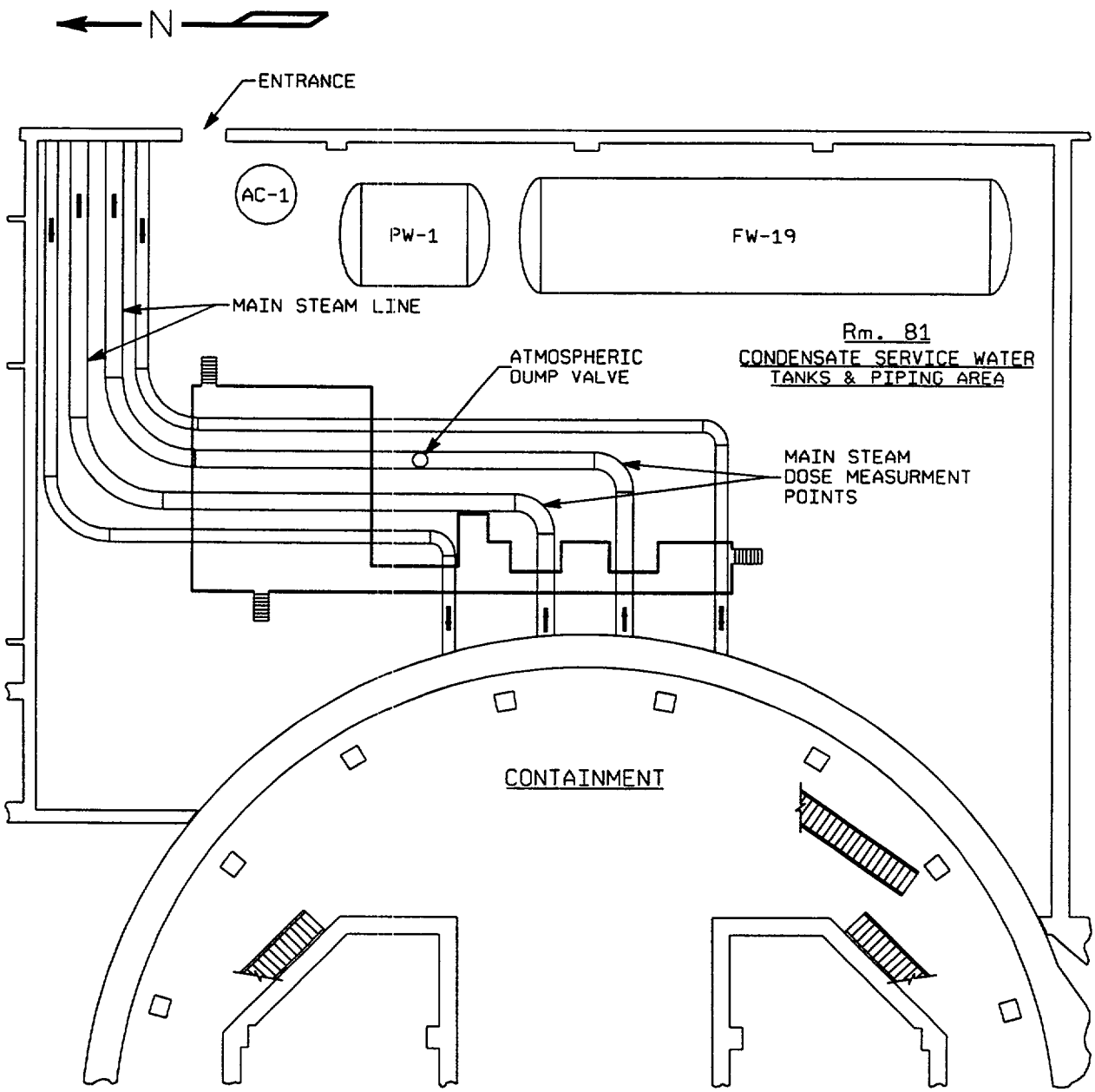
3.2.1 Upon completion of the calculations, input the release rate data into the EAGLE dose assessment procedure to obtain any dose and dose rate data as needed.

3.3 Follow-up Actions

3.3.1 Sign the assessment form and indicate the time completed.

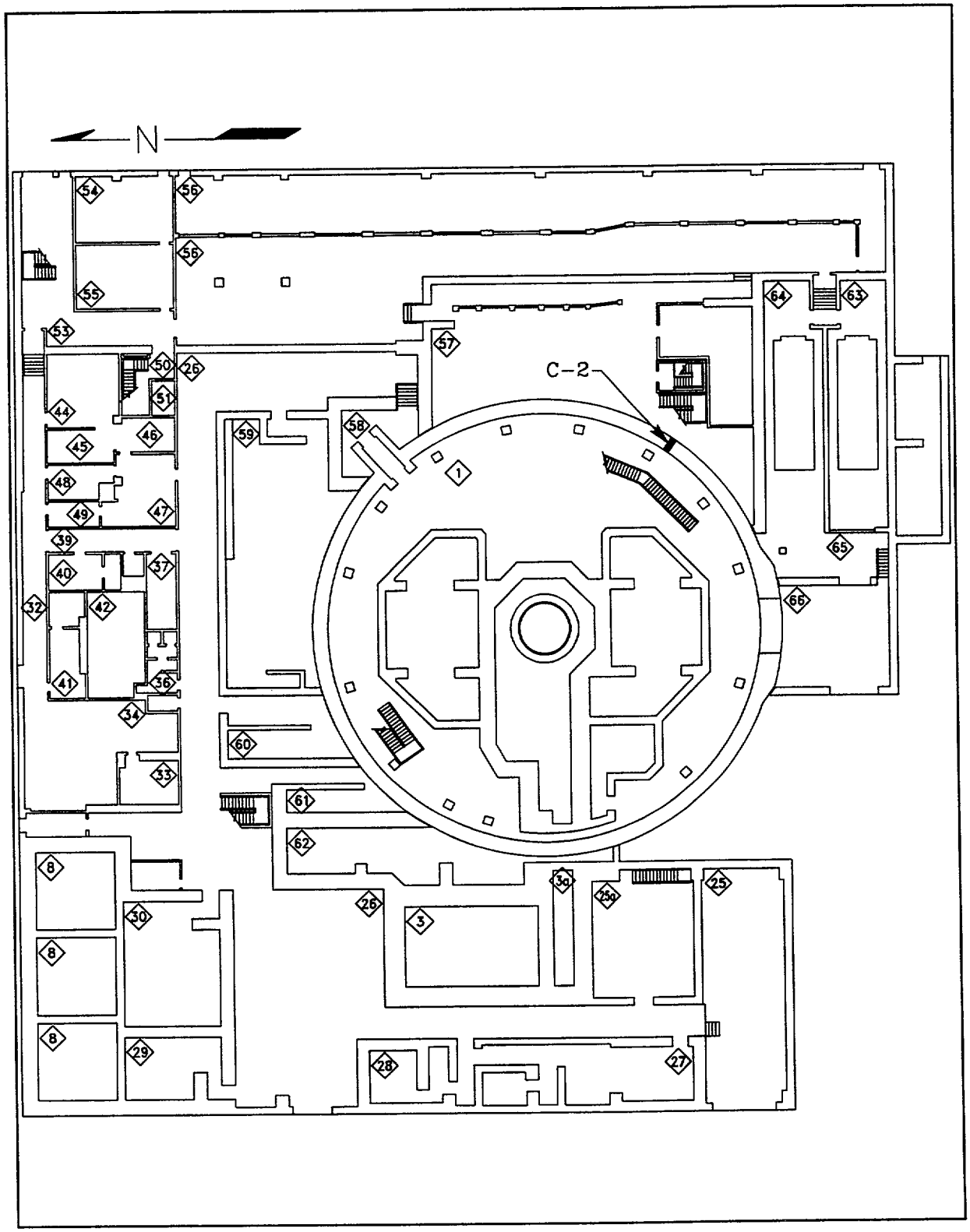
Attachment 6.5 (continued)

Figure 6.5.1 - Main Steam Headers Radiation Dose Measurement Point Locations



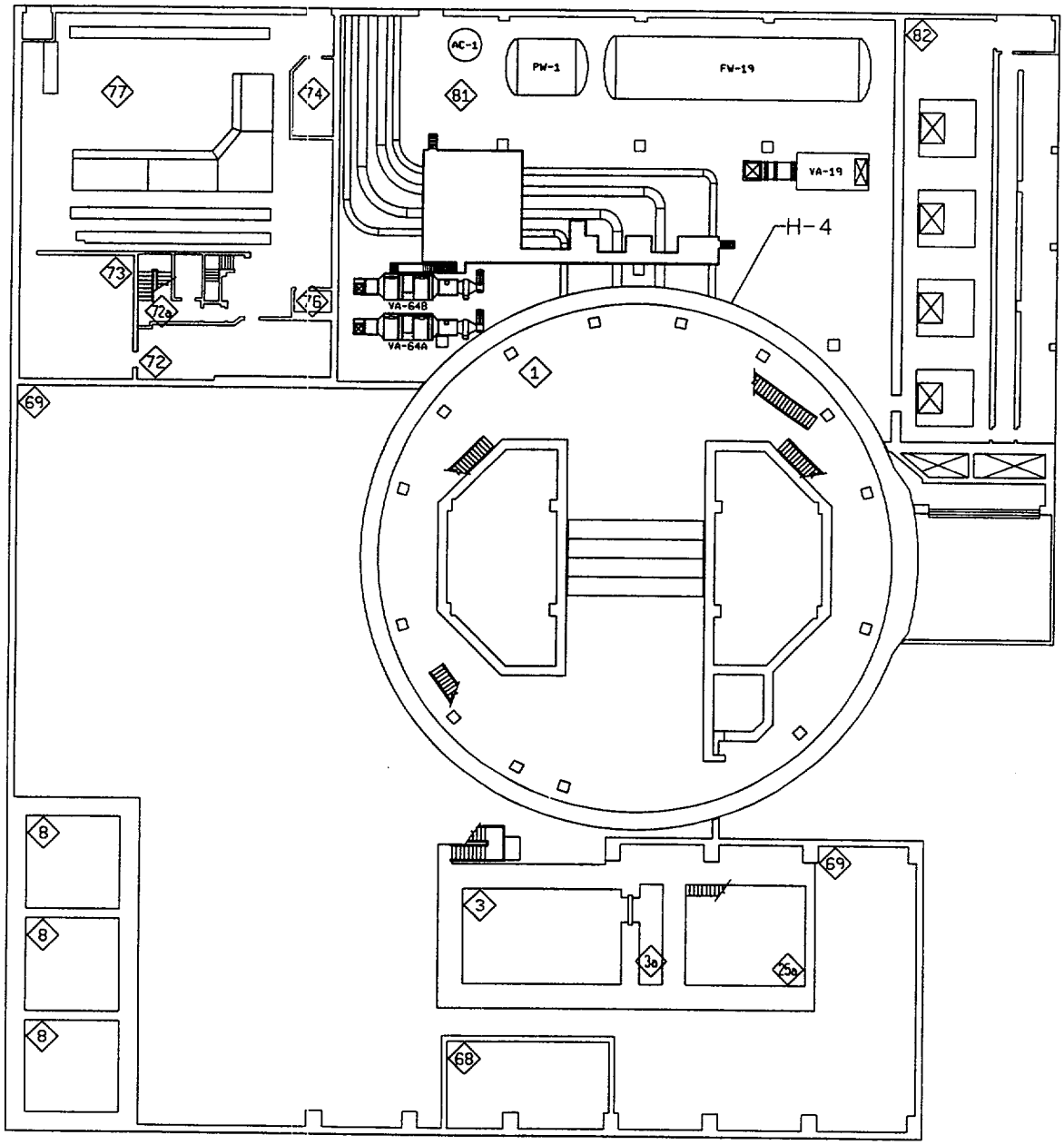
Attachment 6.5 (continued)

Figure 6.5.2 - Auxiliary Building - Plant Elevation 1007'-0" & 1013'-0



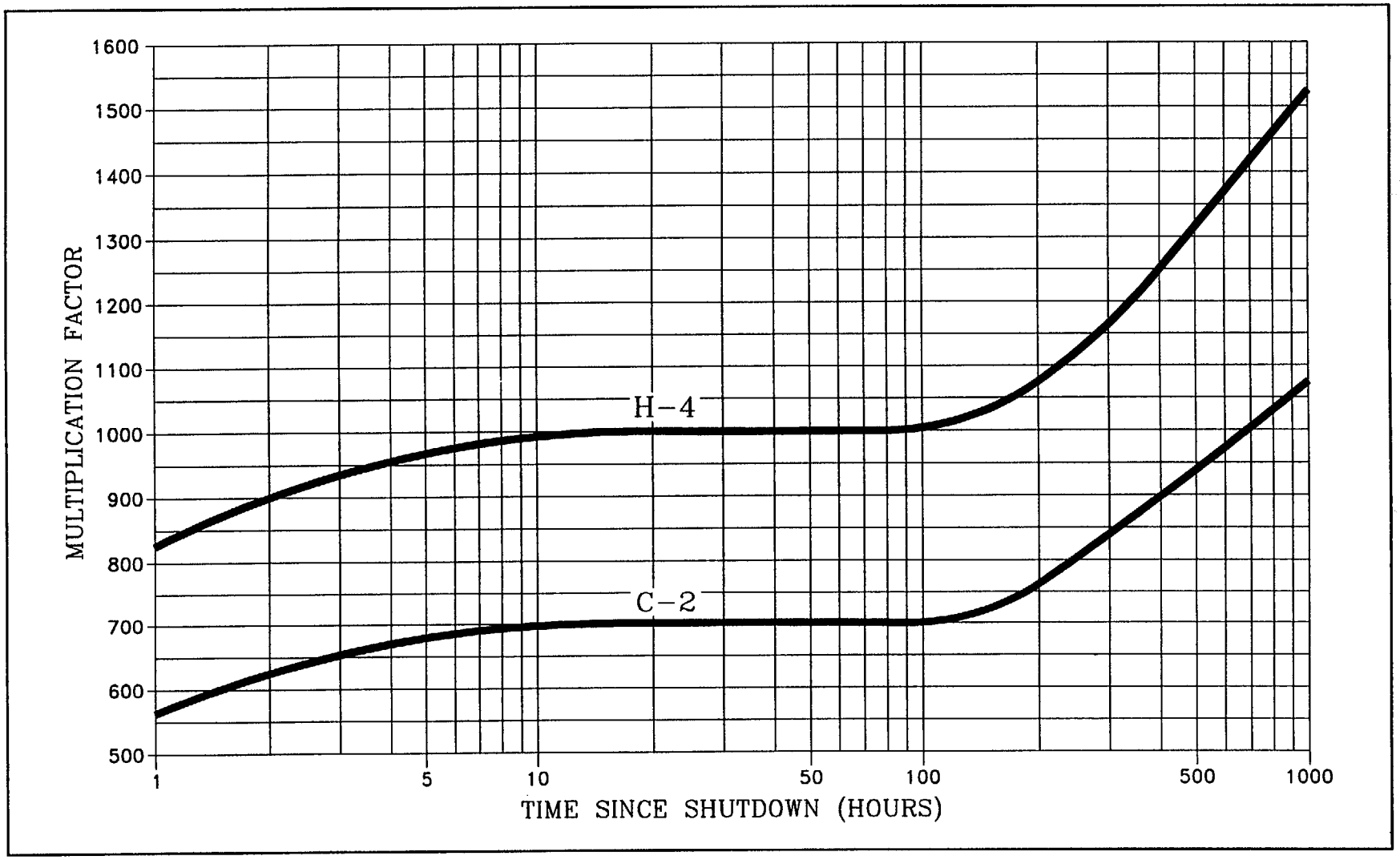
Attachment 6.5 (continued)

Figure 6.5.3 - Auxiliary Building - Plant Elevation 1036'-0



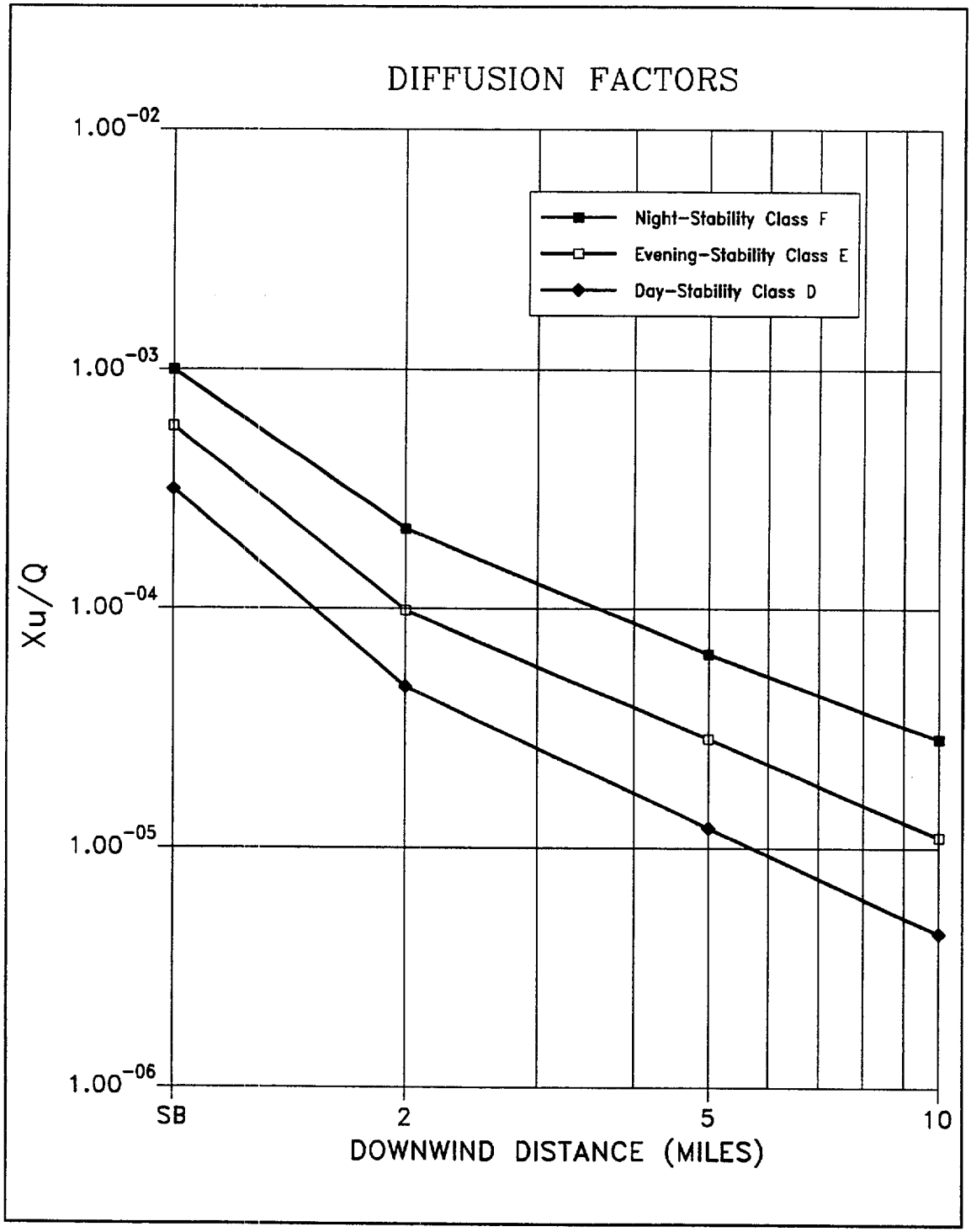
Attachment 6.5 (continued)

Figure 6.5.4 - Containment Multiplication Factor (CMF)



Attachment 6.5 (continued)

Figure 6.5.5 - Diffusion Factors



WP8

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Fort Calhoun Station
Unit No. 1

EPIP-RR-22

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: PROTECTIVE MEASURES COORDINATOR / MANAGER ACTIONS

FC-68 Number: EC 26255

Reason for Change: Editorial changes in directions for reviewing dose assessments.

Requestor: M. Reller

Preparer: R. Hankins

ISSUED: 07-02-01 2:00 pm

R21

PROTECTIVE MEASURES COORDINATOR / MANAGER ACTIONS

NON-SAFETY RELATED

1. PURPOSE

1.1 This procedure provides guidance to the Protective Measures Coordinator and the Protective Measures Manager for performing actions in response to an emergency at Fort Calhoun Station.

2. REFERENCES/COMMITMENT DOCUMENTS

2.1 EPIP-EOF-6, Dose Assessment

2.2 EPIP-EOF-7, Protective Action Guidelines

2.3 EPIP-EOF-21, Potassium Iodide Issuance

2.4 EPIP-EOF-11, Dosimetry Records, Exposure Extensions and Habitability

2.5 EPIP-TSC-1, Activation of the Technical Support Center

2.6 FC-EPF-6, Estimated Exposure Worksheet

2.7 CR 199500262

2.8 Commitment (Other than Ongoing)

- AR 13302, IER-92-20, Closed
- AR 11809, LIC-91-189R, Closed
- AR 13301, IER-92-20, Closed

3. DEFINITIONS

None

4. PREREQUISITES

None

5. PROCEDURE

NOTE: When needed, complete dose assessments and updates to the states at least every 60 minutes. It is the goal of the Fort Calhoun Station to attempt to provide assessments and updates at 15 minute intervals. (AR 13302)

5.1 The Protective Measures Coordinator will use Attachment 6.1 as an aid to completing required actions.

5.2 The Protective Measures Manager will use Attachment 6.2 as an aid to completing required actions.

5.3 Review the procedure and appropriate checklists, and accomplish the applicable steps both upon initial activation and periodically, as required, thereafter.

5.4 Retain all documentation (logs, calculation sheets, notes, etc.) generated or used during the emergency. At the termination, deliver all documentation to the Administrative Logistics Manager in the EOF, or the TSC Administrative Logistics Coordinator in the TSC.

6. ATTACHMENTS

6.1 Protective Measures Coordinator Checklist

6.2 Protective Measures Manager Checklist

Attachment 6.1 - Protective Measures Coordinator Checklist

Maintain a log of all key activities

	✓	INIT/TIME
NOTE: Actions taken may be performed out of sequence based on judgement of the user.		
1. Upon arrival:		
1.1 Sign in on Accountability Roster	___	
1.2 Obtain worker packet	___	
1.3 Put on Personnel Identification badge	___	
1.4 Assist in activation of the TSC per EPIP-TSC-1	___	____/____
2. Interface with:		
2.1 Control Room Dose Assessment Specialist to determine Status of dose assessment.	___	
2.2 OSC Radiation Protection Coordinator:		
• to determine plant radiological conditions	___	
• to coordinate response efforts	___	
2.3 Field Teams to brief and assign duties.	___	____/____
3. Report to the Site Director/TSC Director the status of:		
3.1 In-plant response	___	
3.2 Dose Assessment	___	
3.3 Field Team response	___	
3.4 Plant radiological conditions	___	____/____

Attachment 6.1
(continued)

	✓	INIT/TIME
4. Assess any planned or imminent releases for potential impact to the public.		
NOTE: CHP Communicator may perform this task.		
4.1 Prior to starting any release notify (use the CHP or commercial phone line):		
• Nebraska Emergency Management Agency	___	
• Nebraska Department of Health R&L	___	
• Iowa Emergency Management Division	___	
• Iowa Department of Public Health	___	____/____
5. If a release is in progress or suspected and the release path is not immediately known: **[AR 11809]**		
5.1 Request an that assessment team (i.e., Operations, Engineering, dose assessment personnel) be assigned by the Site Director or TSC Director.	___	
5.2 Coordinate with the team to ensure they:		
• Verify that a release is actually in progress	___	
• Determine the source and release path of any release	___	
• Report team findings to the appropriate position	___	____/____

Attachment 6.1
(continued)

✓ INIT/TIME

NOTE: Although it is the Command and Control Position's duty to ensure that the Emergency Notification Forms (FC-1188) are accurate, approved and issued per the requirements of EPIP-OSC-2, your position should assist in ensuring that these requirements are met.

6. If Command and Control is in the TSC update the states and counties as follows:

   NOTE: If dose assessment is being performed in another facility and Command and Control is in the TSC, have the PAR Worksheet and Update Report for Offsite Authorities faxed to the TSC for approval.

   6.1 Dose assessment is being performed:

   - Review the current PAR Worksheet form ___
   - Assign PARs per EPIP-EOF-7 ___
   - Review the classification level and prognosis ___
   - If correct, forward to Site Director for approval ___
   - Ensure that the Update Report for Offsite Authorities is faxed to the states ___
   - As requested, if a classification and/or a PAR change is required assist in initiating Emergency Notification Form (FC-1188) ___ _____/_____

   6.2 If dose assessment is not being performed:

   - As requested, assist the Command and Control Position in completing an Emergency Notification Form (FC-1188). ___
   - As requested, forward the approved Emergency Notification Form to the COP Communicator for state/county updates. ___ _____/_____

Attachment 6.1
(continued)

	✓	INIT/TIME
7. Ensure the COP Communicator properly updates the Radiological Status Board. (AR 13301)		____/____
NOTE: You or a designee may be required to assist the CHP Communicator.		
8. Ensure that the CHP Communicator is providing radiological information to:		
8.1 The states using the Conference Health Physics (CHP) Network or commercial line as a backup.	___	
8.2 The NRC using the Health Physics Network (HPN) or commercial line as a backup.	___	____/____
9. If required, coordinate the protective measures process for in-plant teams and Field Teams use:		
• EPIP-EOF-21, Potassium Iodide Issuance	___	
• EPIP-EOF-11, Dosimetry Issuance, Extensions and Habitability	___	
• FC-EPF-6, Estimated Exposure Worksheet	___	____/____
10. Provide periodic updates on radiological conditions to the Site and TSC Directors and TSC staff.		____/____
11. As required, provide a detailed briefing to your relief covering:		
• Emergency conditions	___	
• Actions taken (current status)	___	____/____

Attachment 6.2 - Protective Measures Manager Checklist

Maintain a log of all key activities

	✓	INIT/TIME

NOTE: Actions taken may be performed out of sequence based on judgement of the user.

1. Upon arrival:

   1.1 Sign in on Security Roster ___

   1.2 Put on Personnel Identification badge ___ _____/_____

2. Interface with:

   2.1 The EOF Dose Assessment Coordinator or the TSC Protective Measures Coordinator to determine:

   - Status of dose assessment ___
   - Status of and actions taken by Field Teams ___

   2.2 The TSC Protective Measures Coordinator to determine:

   - Onsite radiological conditions ___
   - In-plant teams actions ___ _____/_____

3. Report your findings from Step 2 to the Emergency Director. _____/_____

   NOTE: The MRC Technical Liaison need not report to the EOF if MRC is being activated and may be briefed by telephone.

4. Brief the Site Representative and MRC Technical Liaison on the following:

   - The event ___
   - Status of the plant ___
   - Radiological concerns ___
   - PAR's given to the states ___

   4.1 Instruct the Site Representative to obtain his worker package. ___

   4.2 If conditions warrant, dispatch the Site Representative to the Iowa State EOC. ___

Attachment 6.2
(continued)

	✓	INIT/TIME
4.3 If the MRC is being activated, dispatch the MRC Technical Liaison.	___	____/____
5. Assess any planned or imminent releases for potential impact to the public.		
NOTE: If representatives of the following agencies are in the EOF you or a designee may talk to them directly.		
NOTE: CHP Communicator may perform this task.		
5.1 Prior to starting any release notify (use the CHP or commercial phone line):		
• Nebraska Emergency Management Agency	___	
• Nebraska Department of Health R&L	___	
• Iowa Emergency Management Division	___	
• Iowa Department of Public Health	___	____/____
6. Upon concurrence of Emergency Director and the Dose Assessment staff initiate actions to transfer dose assessment to the EOF.		____/____

Attachment 6.2
(continued)

✓ INIT/TIME

NOTE: Although it is the Command and Control Position's duty to ensure that the Emergency Notification Forms (FC-1188) are accurate, approved and issued per the requirements of EPIP-OSC-2, your position should assist in ensuring that these requirements are met.

7. If Command and Control is in the EOF update the states and counties as follows:

   NOTE: If dose assessment is being performed in another facility and Command and Control is in the EOF, have the PAR Worksheet and Update Report for Offsite Authorities faxed to the EOF for approval.

   7.1 If dose assessment is being performed:

   - Review the current PAR Worksheet form ___
   - Assign PARs per EPIP-EOF-7 ___
   - Review the classification level and prognosis ___
   - If correct, forward to Command and Control position for approval ___
   - Ensure that the Update Report for Offsite Authorities is faxed to the states ___
   - As requested, if a classification and/or a PAR change is required assist in initiating Emergency Notification Form (FC-1188) ___

   7.2 If dose assessment is not being performed:

   - As requested, assist the Command and Control Position in completing an Emergency Notification Form (FC-1188). ___
   - As requested, forward the approved Emergency Notification Form to the COP Communicator for state/county updates. ___ _____/_____

Attachment 6.2
(continued)

	✓	INIT/TIME
8. Ensure the COP Communicator properly updates the PAR Status Board. **[AR 13301]**		____/____
NOTE: You or a designee may be required to assist the CHP Communicator.		
9. Ensure that the CHP Communicator is providing radiological information to:		
9.1 The states using the Conference Health Physics (CHP) Network or commercial line as a backup.	___	
9.2 The NRC using the Health Physics Network (HPN) or commercial line as a backup.	___	____/____
10. If required, coordinate guidance for the protective measures process use:		
• EPIP-EOF-21, Potassium Iodide Issuance	___	
• EPIP-EOF-11, Dosimetry Issuance, Extensions and Habitability	___	
• FC-EPF-6, Estimated Exposure Worksheet	___	____/____
11. Provide periodic updates on radiological conditions to:		
• Emergency Director	___	
• EOF Staff	___	
• State Representatives (at the EOF)	___	____/____
12. If the states request, call in OPPD environmental personnel.		____/____
13. If the plant is evacuated, coordinate the arrival of evacuees with the EOF Administrative Logistics Manager.	___	
13.1 If required, evaluate the evacuated site population exposure using FC-EPF-6.	___	____/____
14. As required, provide detailed briefing to your relief covering:		
• Emergency conditions	___	
• Actions taken (current status)	___	____/____

WP8

Fort Calhoun Station
Unit No. 1

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EPIP-RR-63

EMERGENCY PLAN IMPLEMENTING PROCEDURE

Title: EOF DOSE ASSESSMENT ASSISTANT ACTIONS

FC-68 Number: EC 26256

Reason for Change: Remove requirement to Fax Dose Assessments to the TSC. Make faxing to MRC a "as required" basis. Add terminology for "Update Report for Offsite Authorities".

Requestor: Mark Reller

Preparer: Rhonda Hankins

ISSUED: 07-02-01 2:00 pm

R9

EOF DOSE ASSESSMENT ASSISTANT ACTIONS

NON-SAFETY RELATED

1. PURPOSE

1.1 This procedure provides guidance to the EOF Dose Assessment Assistant in performing duties in the event of an emergency at Fort Calhoun Station.

2. REFERENCES

2.1 Emergency Telephone Book

3. DEFINITIONS

NONE

4. PREREQUISITES

NONE

5. PROCEDURE

NOTE: Attachment 6.1 is a guideline for completion of your duties. Tasks should be completed on an as needed basis throughout your shift.

5.1 Review Attachment 6.1, perform duties as required.

5.2 Retain all documentation (logs, calculation sheets, notes etc.) that you generated or used during your shift.

5.2.1 Upon event termination or at the end of your shift, turn in all documentation to the EOF Administrative Logistics Manager or designee.

6. ATTACHMENTS

6.1 EOF Dose Assessment Assistant Guideline

Attachment 6.1 - EOF Dose Assessment Assistant Guideline

Maintain a log of all key activities

INITIALS/DATE

1. Put on your position identification badge _____/_____

2. Inform the Protective Measures Group of your arrival. _____/_____

3. Provide the Dose Assessment Specialist ERFCS data as required. _____/_____

4. Fax each approved Update Report to Offsite Authorities to:

   NOTE: The fax machine in the EOF should be programmed to fax to all of the required facilities. Instructions for faxing are located on or near each fax machine.

   4.1 State of Iowa

   - STARC EOC (Des Moines)

   4.2 State of Nebraska

   - State EOC (Lincoln)

   4.3 OPPD

   - MRC (as requested) _____/_____

Attachment 6.1 - EOF Dose Assessment Assistant Guideline
(continued)

5. Distribute each approved EAGLE Update Report to Offsite Authorities to the following people in the EOF:

   5.1 OPPD

   - Emergency Director
   - Protective Measures Manager
   - EOF Dose Assessment Group (Specialist)
   - EOF Technical Liaison
   - EOF CHP Communicator

   5.2 State of Iowa

   - Rad Team Coordinator
   - Representative

   5.3 State of Nebraska

   - Health and Human Services Regulation Licensure
   - Rad Team Coordinator
   - Governor's Authorized Representative

   5.4 Nuclear Regulatory Commission

   - Director of Site Operations
   - Protective Measures Group _____/_____

6. Update Status Board following each dose assessment. _____/_____

7. Provide a detailed briefing to your shift relief of any actions taken and current emergency status. _____/_____