

Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385



NOV 16 2001

Docket Nos. 50-245
50-336
50-423
B18514

RE: 10 CFR 50, Appendix E
10 CFR 50.47(b)(5)

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

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3
Revised Emergency Plan Procedures

The purpose of this letter is to inform the Nuclear Regulatory Commission that the following Emergency Plan Procedures have been implemented:

- MP-26-EPI-FAP01, "Control Room Emergency Operations," Major Revision 0, Minor Revision 1, transmitted via Attachment 1;
- MP-26-EPI-FAP01-001, "Control Room - Director of Station Emergency Operations (CR-DSEO)," Major Revision 0, Minor Revision 4, transmitted via Attachment 2. Attachment 2 transmits a complete copy of Major Revision 0, Minor Revision 4 to MP-26-EPI-FAP01-001, which includes previously approved but undistributed changes associated with Major Revision 0, Minor Revision 3 to MP-26-EPI-FAP01-001.
- MP-26-EPI-FAP01-002, "Manager of Control Room Operations (MCRO)," Major Revision 0, Minor Revision 1, transmitted via Attachment 3;
- MP-26-EPI-FAP01-003, "Station Duty Officer (SDO)," Major Revision 0, Minor Revision 2. Attachment 4 transmits a complete copy of Major Revision 0, Minor Revision 2 to MP-26-EPI-FAP01-003, which includes previously approved but undistributed changes associated with Major Revision 0, Minor Revision 1 to MP-26-EPI-FAP01-003.
- MP-26-EPI-FAP01-005, "Radiological Monitoring Team (RMT) #1," Major Revision 0, Minor Revision 1, transmitted via Attachment 5;
- MP-26-EPI-FAP02-001, "Assistant Director Technical Support (ADTS)," Major Revision 0, Minor Revision 1, transmitted via Attachment 6;
- MP-26-EPI-FAP02-006, "Manager of Technical Support Center (MTSC)," Major Revision 0, Minor Revision 1, transmitted via Attachment 7;

A045

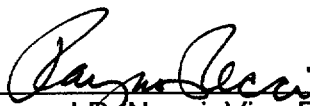
- MP-26-EPI-FAP03-001, "Manager of Operations Support Center (MOSC) - TSC/OSC," Major Revision 0, Minor Revision 1, transmitted via Attachment 8;
- MP-26-EPI-FAP04-001, "Director of Station Emergency Operations (DSEO)," Major Revision 0, Minor Revision 2, transmitted via Attachment 9;
- MP-26-EPI-FAP04-011, "Manager of Resources (MOR) or External Resources Coordinator (ERC)," Major Revision 0, Minor Revision 2, transmitted via Attachment 10;
- MP-26-EPI-FAP04-014, "Technical Information Coordinator (TIC)," Major Revision 0, Minor Revision 1, transmitted via Attachment 11;
- MP-26-EPI-FAP07, "Notifications and Communications," Major Revision 1, Minor Revision 6, transmitted via Attachment 12;
- MP-26-EPI-FAP10, "Dose Assessment," Major Revision 1, Minor Revision 1, transmitted via Attachment 13;
- EPAP 1.15, "Management Program for Maintaining Emergency Preparedness," Major Revision 7, Minor Revision 1, transmitted via Attachment 14.

There are no regulatory commitments contained within this letter.

If you have any questions concerning this submittal, please contact Mr. David A. Smith at (860) 437-5840.

Very truly yours,

DOMINION NUCLEAR CONNECTICUT, INC.



Raymond P. Necci, Vice President
Nuclear Operations - Millstone

Attachments (14)

cc: H. J. Miller, Region I Administrator (2 copies)
R. J. Conte, Chief, Operational Safety Branch, Region I

cc: w/o attachments

J. B. Hickman, NRC Project Manager, Millstone Unit No. 1
T. J. Jackson, NRC Inspector, Region I, Millstone Unit No. 1
J. T. Harrison, NRC Project Manager, Millstone Unit No. 2
NRC Senior Resident Inspector, Millstone Unit No. 2
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3
NRC Senior Resident Inspector, Millstone Unit No. 3

Docket Nos. 50-245
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Attachment 1

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP01, "Control Room Emergency Operations"
Major Revision 0, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011017-082622

Initiated By: ^{10/22 KB} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP01 Rev. No.: 000 Minor Rev.: 01

Title: Control Room Emergency Operations

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SOR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
50.54g	<input checked="" type="checkbox"/> K Burgess	K Burgess	11/1/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP6D	
Environmental Screen	<input checked="" type="checkbox"/> MARK WHITE	Mark White	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP6D	
Licensing Basis RCD	<input checked="" type="checkbox"/> K Burgess	K Burgess	10/22/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP6D	
Independent	<input checked="" type="checkbox"/> K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP6D	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

Tom Rigney 11-2-01
SQR Qualified Independent Reviewer / Date
Paul Blasek
Process Owner

Responsible Individual

10/11/21/01

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign

Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

MP-05-DC-SAP01-001

Rev. 003-01

Page 1 of 1

**Functional
Administrative
Procedure**



Millstone Station

Control Room Emergency Operations

MP-26-EPI-FAP01

Rev. 000-01

Approval Date: 11/2/01

Effective Date: 11/5/01



TABLE OF CONTENTS

1. <u>PURPOSE</u>	2
1.1 Objective.....	2
1.2 Applicability	2
1.3 Supporting Documents	2
1.4 Discussion	2
2. <u>INSTRUCTIONS</u>	6
3. <u>SUMMARY OF CHANGES</u>	7
3.1 Original issue.....	7
4. <u>ATTACHMENTS AND FORMS</u>	
Attachment 1, "Definitions and Abbreviations"	8
Attachment 2, "Responsibilities"	11
MP-26-EPI-FAP01-001, "Control Room-Director of Station Emergency Operations (CR-DSEO)"	
MP-26-EPI-FAP01-002, "Manager of Control Room Operations (MCRO)"	
MP-26-EPI-FAP01-003, "Station Duty Officer (SDO)"	
MP-26-EPI-FAP01-004, "Control Room Shift Technician (CR ST)"	
MP-26-EPI-FAP01-005, "Radiological Monitoring Team #1 (RMT #1)"	
MP-26-EPI-FAP01-006, "Chemistry Technician (Chem Tech)"	
MP-26-EPI-FAP01-007, "Control Room Data Coordinator (CRDC)"	

1. PURPOSE

1.1 Objective

This procedure provides guidance to individuals located in the Control Room (CR) who become Station Emergency Response Organization (SERO) personnel during declared emergencies.

1.2 Applicability

This procedure is performed by CR personnel for emergency events classified as Unusual Event or higher.

1.3 Supporting Documents

EPI-FAP07, "Notifications and Communications"

EPI-FAP15, "Common Forms"

EPUG-08B, "Millstone Emergency Plan Resource Book"

1.4 Discussion

1.4.1 CR-DSEO Transition to MCRO

The CR-DSEO becomes the MCRO after being relieved by the on-call DSEO. The MCRO then reports directly to the ADTS.

For a Unit 1 event, the Unit 1 CFH becomes the MCRO after performing a turnover with the Unit 2 SM/CFH (CR-DSEO for Unit 1 events).

①

1.4.2 10 CFR 50.54(x) Invocation

As discussed in the Statements of Consideration to 10 CFR Part 50, emergencies can arise during which compliance with a license condition or a Technical Specification could prevent necessary action by the licensee to protect the public health and safety. Absolute compliance with the license during these emergencies can be a barrier to effective protective action.

Unanticipated circumstances can occur during the course of an emergency which may call for responses different from any previously considered during the course of licensing. Special circumstances requiring a deviation from license requirements are not necessarily limited to transients or accidents not analyzed in the licensing process. Special circumstances can arise during emergencies involving multiple equipment failures or coincident accidents where plant emergency procedures could be in conflict with or not applicable to the circumstances. In addition, an accident can take a course different from that which was addressed when the emergency procedure was written, thus requiring a protective response at variance with a procedure required to be followed by the licensee which may ultimately be contrary to current Technical Specifications or the license condition.

10 CFR 50.54(x) will permit the licensee to take reasonable action in an emergency even though the action departs from licensing conditions or plant Technical Specifications. This action may only be taken, however, if the following criteria are met:

- The action is immediately needed to protect the public health and safety, including plant personnel.
- No action consistent with the license conditions and Technical Specifications is immediately apparent that can provide adequate or equivalent protection.
- As a minimum, a licensed senior operator approves the action.

a. Applicability Determination

The NRC can amend Technical Specifications or license conditions. The §50.54(x) regulation is not intended to apply in circumstances during which time allows this normal process to be followed. The regulation applies only to those emergency situations in which immediate action is required by the licensee to protect public health and safety and this action is contrary to a Technical Specification or license condition.

Operating outside the boundaries of approved procedures or in the absence of procedures does not in and of itself meet the threshold for invocation of §50.54(x). Also, the existence of a safety analysis (§50.59) conducted for the purpose of determining whether an unreviewed safety question exists is not sufficient to determine whether application of §50.54(x) is appropriate. §50.54(x) is not intended for use as a general regulatory protective shield for all actions not addressed by current procedures. Even after §50.54(x) has been invoked, each subsequent action taken must be evaluated for §50.54(x) applicability with all necessary approvals and notifications being made for each invocation, as appropriate.

Additionally, the §50.54(x) and (y) amendments were not written for the purpose of establishing procedures and guidance (such as SAMG) that may be useful at some future date (e.g., preplanning and contingency actions). The determination to discontinue following plant operating procedures and/or EOPS, and to begin following SAMG, by itself, does not constitute a departure from a license condition or Technical Specification and, therefore, does not require invocation of §50.54(x). Note however, it is possible that the first action directed during SAMG implementation may actually require §50.54(x) invocation.

The threshold for invocation is met only if the action being taken is not consistent with current license conditions and Technical Specifications. Additionally, the action must meet the time and safety dependent criteria previously discussed. Then and only then should the invocation of §50.54(x) be considered for approval.

b. Approval

A licensed senior operator position is the minimum level within the organization, but not the only position, authorized to approve invocation of §50.54(x). 10 CFR 50.54(y) states, "Licensee action permitted by paragraph (x) of this section shall be approved, as a minimum, by a licensed senior operator..." This wording makes it clear that such action must be approved at least by a licensed senior operator acting for the licensee. The regulation focuses on the responsibilities of facility licensees and only peripherally includes licensed senior operators. Under the provision, any licensed senior operator (licensed for the Unit involved) would be sufficient. However, during declared emergencies, more senior licensee personnel would eventually become available. The decision to depart from the license would then pass to these more senior personnel already identified in the Emergency Plan.

Ultimate responsibility for the health and safety of the general public and station personnel in an emergency resides in the highest authority in the chain of command. The persons responsible for the health and safety of the general public and station personnel are already identified in the facility license and implementing procedures. These persons include the ADTS and the DSEO following emergency response facility activation. If, however, an emergency should occur on a backshift, no licensee representative higher than a licensed senior operator in the chain of command is likely to be available. Therefore, the departure from a license condition or Technical Specification requires the approval of a licensed senior operator as a minimum.

To require any additional approvals or concurrence, such as from senior licensee representatives or the NRC, would defeat the purpose of §50.54(x). Concurrence or approval from the NRC is also not necessary, as this action would amount to a license amendment using procedures contrary to those existing for amendments. NRC concurrence would additionally shift the burden of responsibility for station safety from the licensee to the NRC.

c. Reportability

Deviations authorized pursuant to 10 CFR 50.54(x) are reportable as soon as practical and in all cases within one hour under 10 CFR 50.72(b)(1)(i)(B), or 10 CFR 50.73(a)(2)(i)(C), if not reported simultaneously with emergency notification under 10 CFR 50.72(a). When time permits, the notification is made before the protective action is taken; otherwise, it is made as soon as possible thereafter. Additionally, a Licensee Event Report will be generated and submitted to the NRC within 30 days.

d. Subsequent Actions

Following invocation of 50.54(x) and notification of the NRC, actions are taken as soon as practical to restore the plant to full compliance with Technical Specifications and all conditions of license.

1.4.3 Radiological Monitoring Team #1

During initial SERO activation, RMT #1 provides Control Room health physics support and conducts in-plant surveys and sample analysis. Upon full SERO activation, the MRCA assumes control of the RMT #1 members. An RMT #1 member will report to the MCRO for the duration of the event.

1.4.4 Initial Dose Assessment

The Initial Dose Assessment (IDA) computerized method provides the capability to perform a dose projection using effluent release information and real-time meteorology. For the purposes of calculating a total integrated TEDE, a default release duration of 2 hours may be assumed. This assumption corresponds to a period within which SERO activation will occur and a more refined dose assessment can then be performed.

This assessment is performed by a Chemistry Technician after a radiological release has occurred and all required actions critical to mitigating the plant event are completed or determined to be of a severity less than the need for performing an initial dose assessment. This is acceptable because initial EALs and PARs will be based upon plant conditions. IDA is used only as a supplement to the initial recommendations. Input provided to the CR-DSEO may be used to validate the initial protective action recommendation or classification.

Event classification, off-site agency notifications, and protective action recommendations made by the CR-DSEO should *not* be delayed by awaiting the results of this dose assessment.

1.4.5 OFIS

OFIS provides critical plant parameters to allow communication of plant data for analysis of plant conditions. OFIS may be accessed from LAN PCs.

1.4.6 Definitions and abbreviation are contained in Attachment 1.

1.4.7 Responsibilities are contained in Attachment 2.

2. INSTRUCTIONS

2.1 Refer To and complete the following, as applicable:

NOTE

Steps in the position specific checklists may be performed in any order, or more than once, as necessary.

- EPI-FAP01-001, "Control Room-Director of Station Emergency Operations (CR-DSEO)"
- EPI-FAP01-002, "Manager of Control Room Operations (MCRO)"
- EPI-FAP01-003, "Station Duty Officer (SDO)"
- EPI-FAP01-004, "Control Room Shift Technician (CR ST)"
- EPI-FAP01-005, "Radiological Monitoring Team (RMT) #1"
- EPI-FAP01-006, "Chemistry Technician"
- EPI-FAP01-007, "Control Room Data Coordinator (CRDC)"

2.2 If an action is not appropriate under existing conditions or was not necessary for the event, enter N/A when completing documentation for submittal.

3. SUMMARY OF CHANGES

3.1 **Revision 000**

3.1.1 Original issue.

3.2 **Revision 000-01**

3.2.1 Changed step 1.4.1 CR-DSEO Transition to MCRO for a Unit 1 event.

Attachment 1

Definitions and Abbreviations

(Sheet 1 of 3)

Definitions

Activation - All functions, minimum staffing requirements, and turnovers have been completed and the senior SERO position in the facility declares it active.

Alpha or Bravo - State of Connecticut posture codes issued with a GENERAL EMERGENCY classification. A technical basis for developing a PAR as a result of that classification.

Calculated Dose Rate - A dose rate calculated for actual releases based on rates derived from effluent monitor or survey readings (usually in units of mR/hr or R/hr).

Delta Temperature - An indicator of atmospheric stability which affects plume dispersion.

Dose Assessment - the act of calculating dose commitment from the release of radioactivity.

Measured Dose Rate - Dose rate based on field survey results (usually in units mR/hr or R/hr).

Minimum Staff - Positions depicted above the line on the facility staffing board which are necessary before activation may occur.

Mission Specific Exposure Limits - Specific exposure limits based on job task assignments for emergency team members.

Plant Condition - A technical basis for developing a PAR as a result of actual or imminent loss of all 3 fission product barriers, or based on high containment radiation levels.

Projected Dose - A technical basis for developing a PAR as a result of an ongoing radiological release that is projected on either a measured dose rate, or a calculated dose rate for an expected release duration (usually in units of rem).

Protective Action Recommendation (PAR) - A recommendation issued to state and local decision makers for their consideration in making a protective action decision (i.e., shelter, evacuate).

Site Boundary - For dose assessment purposes, the 0.5 miles distant from the release point.

Unmonitored Release - A suspected or actual release of radioactive material to the environment without passing through an operational process or radiation monitor.

"What If" Dose Projection - A theoretical dose projection based on the premise that the accident sequence in progress will result in the partial or total release of an assumed quantity of core inventory (usually in units of Rem).

Attachment 1

Definitions and Abbreviations

(Sheet 2 of 3)

Wind Direction - The three digit number indicating the 000°-360° degree bearing (000° and 360° being north; 180° being south) from which the wind is blowing for the representative release elevation. Changes in wind direction may also constitute the technical basis for updating a PAR after the initial PAR has been issued.

Abbreviations

ADEOF - Assistant Director Emergency Operations Facility

ADTS - Assistant Director Technical Support

AMRDA - Assistant Manager of Radiological Dose Assessment

CDE - Committed Dose Equivalent for the thyroid (usually in units of Rem)

CR-DSEO - Control Room Director of Station Emergency Operations

DDE - Deep Dose Equivalent

EAL - Emergency Action Level

ENS - Emergency Notification System

EOF - Emergency Operations Facility

ERF - Emergency Response Facility

IDA - Initial Dose Assessment (computer program)

IRF - Incident Report Form

KI - Potassium Iodide

LAN - Local Area Network

MCRO - Manager of Control Room Operations

MOS - Manager of Security

MRDA - Manager of Radiological Dose Assessment

MTSC - Manager of Technical Support Center

OFIS - Off-Site Facilities Information System

Attachment 1

Definitions and Abbreviations

(Sheet 3 of 3)

PAR - Protective Action Recommendation

PC - Personal Computer

PPADs - Personal Protective Action Decisions

SERO - Station Emergency Response Organization

SSS - Security Shift Supervisor

ST - Shift Technician

TEDE - Total Effective Dose Equivalent

TIC - Technical Information Coordinator

TSC - Technical Support Center

Attachment 2

Responsibilities

(Sheet 1 of 2)

1. Control Room Director of Station Emergency Operations (CR-DSEO)

The CR-DSEO is responsible for the following activities, which cannot be delegated, until relieved by the EOF DSEO:

- Assuming command and control of station emergency response
- Classifying events
- Authorizing off-site notifications
- Initiating station emergency response
- Authorizing mitigation and repair activities
- Approving evacuations
- Authorizing emergency exposures
- Approving off-site Protective Action Recommendations

2. Manager of Control Room Operations (MCRO)

The MCRO is responsible for the following activities:

- Recommending corrective actions to the ADTS
- Providing current plant status to the ADTS
- Recommending event classification changes to the ADTS
- Coordinating actions to mitigate degradation of plant systems with the ADTS
- Coordinating Control Room actions and equipment operability and repair team activities with the MOSC

Attachment 2

Responsibilities

(Sheet 2 of 2)

3. Station Duty Officer (SDO)

The SDO is responsible for assisting the CR-DSEO by:

- Notifying the NRC of the event via the ENS line
- Assisting the ST in making notifications (e.g., Resident Inspector, Agencies)
- Assisting with precautionary dismissal, evacuation, or assembly of personnel

4. Shift Technician (ST)

The ST is responsible for making off-site notifications.

5. Radiological Monitoring Team (RMT) #1

The RMT #1 is responsible for the following activities:

- Providing Control Room habitability and additional health physics support
- Conducting in-plant surveys and analyzing samples

6. Chemistry Technicians

The Chemistry Technicians are responsible for the following activities:

- Providing Chemistry support
- Conducting initial dose assessments

7. Control Room Data Coordinator (CRDC)

The CRDC is responsible for the following activities:

- Activating OFIS
- Retrieving required plant parameter data
- Maintaining a chronological log of events in the Control Room

Docket Nos. 50-245

50-336

50-423

B18514

Attachment 2

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP01-001, "Control Room - Director of Station Emergency Operations
(CR-DSEO)," Major Revision 0, Minor Revision 4

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011022-130941

Initiated By: M. White Date 10/22/01 Department: EPSD Ext.: 2101

Document No.: MP-26-EPI-FAP01-001 Rev. No.: 000 Minor Rev.: 04

Title: Control Room Director of Station Emergency Operations

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Support Unit 1/Unit 2 SM/MCRO Changes in Responsibilities

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
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50.54g <input checked="" type="checkbox"/>	K. Burgess	K Burgess	10/1/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	
Environmental <input checked="" type="checkbox"/>	M. White	M White	10/23/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	
RCD <input checked="" type="checkbox"/>	K. Burgess	K Burgess	10/23/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	
Licensing Basis <input type="checkbox"/>	NA			<input type="checkbox"/>	<input type="checkbox"/>		
Independent <input checked="" type="checkbox"/>	K. Burgess	K Burgess	10/1/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

Sam Reyes / 11-2-01
SQR Qualified Independent Reviewer / Date

Paul Blaisdell
Process Owner

Responsible Individual

11/02/01

Approval Date

2. ☐ SORC ☐ R/PO Final Review and Approval

Process Owner / Responsible Individual Sign

Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/05/01

11/2/01
Approval Date

11/5/01
Effective Date

Control Room - Director of Station Emergency Operations (CR-DSEO)

NOTE

If the applicable unit is Unit 1, the Unit 2 SM will classify the event and become the CR-DSEO. The Unit 1 Certified Fuel Handler (CFH) is available for evaluation of data associated with a Unit 1 event.

④

Section A: Emergency Response Immediate Actions

1. Evaluate the conditions using EPI-FAP06, "Classification and PARs."
 - ☐ Notify the SDO and Shift Technician (ST) to report to the control room and provide a briefing.
 - ☐ Review the EAL tables.
 - ☐ Evaluate the status of the fission product barriers.
2. Declare the emergency.
 - ☐ Announce the emergency declaration level and time to the CR staff and assume the role of CR-DSEO.

①

NOTE

Offsite notification shall be accomplished within 15 minutes of an emergency event classification.

①

- ☐ Direct the ST to initiate offsite notifications per EPI-FAP07, "Notifications and Communications."
3. Go To the applicable section and perform the immediate actions.
 - ☐ Unusual Event Section B
 - ☐ Alert..... Section C
 - ☐ Site Area Emergency..... Section D
 - ☐ General Emergency Section E

Section B: Unusual Event Immediate Actions

NOTE

During a security event, it may be advisable **NOT** to sound an alarm or make a PA announcement.

1. Notifications

③

- ☐ Notify the unaffected unit control room of the event.
- ☐ Activate the outside speakers.
- ☐ Review the wording for the station notification message and announce the following over the station PA system:

Attention all personnel; attention all personnel. An Unusual Event has been declared at (Unit #) due to (brief description of event). All members of the SERO stand by for further instructions. All other personnel continue with your present duties.

- ☐ Repeat the PA message.
- ☐ Log time of announcement.
- ☐ Review and approve the Incident Report Form (IRF) for transmittal.
- ☐ Refer To EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," and complete.
- ☐ Direct SDO to voice-record EPI-FAP15-001 information and fax completed form to EOF and TSC.

③

2. NRC Notification

- ☐ Direct the SDO to notify the NRC via the ENS.
- ☐ Verify the ST or SDO has contacted the resident inspector.

Section C: Alert Immediate Actions

NOTE

Hazardous conditions may impact the ability to move personnel. If hazardous conditions exist, it may be better to shelter non-essential personnel onsite.

During a security event, it may be advisable **NOT** to sound an alarm or make a PA announcement.

1. Notifications

③

- ☐ Notify the unaffected unit control room of the event.
- ☐ Request Security to restrict site access.
- ☐ Activate the outside speakers.
- ☐ Review the wording for the station notification message and announce the following over the station PA system:

Attention all personnel; attention all personnel. An Alert has been declared at (Unit # _____) due to (brief description of event _____). All SERO members report to your designated emergency response facility.

- ☐ Repeat the PA message.
- ☐ Log time of announcement.
- ☐ Review and approve the Incident Report Form (IRF) for transmittal
- ☐ Refer To EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," and complete.
- ☐ Direct SDO to voice-record EPI-FAP15-001 information and fax completed form to EOF and TSC.

③

2. NRC Notification

- ☐ Direct the SDO to notify the NRC via the ENS.
- ☐ Verify the ST or SDO has contacted the resident inspector.

3. Precautionary Dismissal

- ☐ Refer to EPI-FAP08, "Evacuation and Assembly," and conduct a precautionary dismissal as events warrant.

Section D: Site Area Emergency Immediate Actions

NOTE

Hazardous conditions may impact the ability to move personnel. If hazardous conditions exist, it may be better to shelter non-essential personnel onsite.

During a security event, it may be advisable **NOT** to sound an alarm or make a PA announcement.

1. Notifications

- ☐ Notify the unaffected unit control room of the event.
- ☐ Request Security to restrict site access.
- ☐ Activate the outside speakers.

CAUTION

Implementation of evacuation shall not be delayed once the station notification has been made.

- ☐ Review the wording for the station notification message and announce the following over the station PA system:

Attention all personnel; attention all personnel. A Site Area Emergency has been declared at (Unit #) due to (brief description of event

) . All on-duty SERO members report to your designated emergency response facility. All off-duty SERO members report to your designated Assembly Area.

- ☐ Repeat the PA message.
- ☐ Log time of announcement.
- ☐ Review and approve the Incident Report Form (IRF) for transmittal.
- ☐ Refer To EPI-FAP08, "Evacuation and Assembly," and conduct evacuation.
- ☐ Refer To EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," and complete.
- ☐ Direct SDO to voice-record EPI-FAP15-001 information and fax completed form to EOF and TSC.

2. NRC Notification

- ☐ Direct the SDO to notify the NRC via the ENS.
- ☐ Verify the ST or SDO has contacted the resident inspector.

Section E: General Emergency Immediate Actions

NOTE

Hazardous conditions may impact the ability to move personnel. If hazardous conditions exist, it may be better to shelter non-essential personnel onsite.

During a security event, it may be advisable **NOT** to sound an alarm or make a PA announcement.

1. Notifications

- ☐ Notify the unaffected unit control room of the event.
- ☐ Request Security to restrict site access.
- ☐ Activate the outside speakers.

CAUTION

Implementation of evacuation shall not be delayed once the station notification has been made.

- ☐ Review the wording for the station notification message and announce the following over the station PA system:

Attention all personnel; attention all personnel. A General Emergency has been declared at (Unit #) due to (brief description of event

). All on-duty SERO members report to your designated emergency response facility. All off-duty SERO members report to your designated Assembly Area.

- ☐ Repeat the PA message.
- ☐ Log time of announcement.
- ☐ Review and approve the Incident Report Form (IRF) for transmittal.
- ☐ Review and develop PARs in accordance with EPI-FAP06, "Classification and PARs."
- ☐ Refer To EPI-FAP08, "Evacuation and Assembly," and conduct evacuation.
- ☐ Refer To EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," and complete.
- ☐ Direct SDO to voice-record EPI-FAP15-001 information and fax completed form to EOF and TSC.

2. NRC Notification

- ☐ Direct the SDO to notify the NRC via the ENS.
- ☐ Verify the ST or SDO has contacted the resident inspector.

Section F: Routine and Follow-up Activities

NOTE

The initial stages of any emergency may require CR personnel to perform several required tasks. If necessary, the CR-DSEO has the authority to reassign tasks (other than classification, PARs, and emergency exposure dose extensions) to other available CR individuals.

- ☐ 1. Log all activities and decisions.
- ☐ 2. IF a release of radioactive material is in progress or is imminent, direct the Chemistry Technician to perform initial on-shift dose assessment.
- ☐ 3. Continuously evaluate or direct the evaluation of the EAL tables and fission product barriers for changes in event status.
- ☐ 4. Ensure the NRC is notified within 60 minutes of any event classification and whenever significant changes in conditions occur during the emergency.
- ☐ 5. Ensure follow-up notifications are routinely provided to the State and local agencies as appropriate.
- ☐ 6. IF the status of the fission product barriers or offsite radiological or meteorological conditions change, perform the following:
 - Evaluate the impact on PARs per EPI-FAP06, "Classification and PARs."
 - Provide changes to PARs to the State, as appropriate (non-delegable).
- ☐ 7. IF necessary, authorize extended emergency exposure limits (dose > 5 Rem is expected) and log any extensions.
- ☐ 8. IF suspension of safeguards and §50.54(x) action is invoked, ensure that the NRC is notified of the departure as soon as possible (but within one hour) using the ENS.
- ☐ 9. Direct the RMT #1 to perform control room and plant habitability surveys and sampling.
- ☐ 10. IF necessary, issue KI tablets and log time of issue.
- ☐ 11. Conduct periodic briefings with the control room staff.
- ☐ 12. IF events have been controlled to the point where termination of the emergency can be considered, Refer To EPI-FAP06, "Classification and PARs," for guidance.

Section G: Transfer of Command and Control

NOTE

Activation of the EOF and TSC/OSC should occur within 60 minutes of SERO notification.

The control room may transfer certain response functions (such as team dispatch, notification, etc.) to TSC or EOF individuals before the facilities are declared activated, provided command and control is maintained by the CR-DSEO.

It is preferred that turnover with the ADTS and the on-call DSEO be conducted at the same time but events may occur which require separate turnovers to be completed.

③

- ☐ 1. Conduct turnover with the EOF DSEO and the ADTS.

③

NOTE

For a Unit 1 event, the Unit 1 CFH becomes the MCRO after a final turnover has been performed with the Unit 2 SM. The Unit 2 SM will have no further responsibilities in the event.

④

- ☐ 2. IF a Unit 1 event, ensure the Unit 1 CFH is part of the turnover.
- ☐ 3. Upon formal relief by the DSEO, record turnover date and time in the logbook.
- ☐ 4. Conduct a briefing with the EOF DSEO and ADTS using EPI-FAP15-001, "DSEO/ADTS Briefing Sheet."
- ☐ 5. Go To EPI-FAP01-002, "Manager of Control Room Operations."

④

①

③

Prepared by: _____
Signature Print Date

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 3

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP01-002, "Manager of Control Room Operations (MCRO)"
Major Revision 0, Minor Revision 1



Document Action Request

SPG # 010918-134935

Initiated By: Kathleen Burgess Date: 09/18/2001 Department EP Ext 2490
Document No: MP-26-EPI-FAP01-002 Rev. No: 000 Minor Rev No. 01
Title: Manager of Control Room Operations

Reason for Request (attach commitments, CR's, AR's, etc)

AR 01003027-02

Select One

See MP-05-DC-SAP01 sect 2.3 to determine type of change

Continued

☒ Intent Change (SQR Independent, RCD, ENV Screen Required) ☐ Edit Corr ☒ Non-Intent Change
(Other reviews may be required. See MP-05-DC-FAP 01.1 Att 3) (Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

TPC Interim Approval

(1) Plant Mngt Staff Member Print/Sign/Date

(2) SM/SRO/CFH on Unit Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later - See Comments

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance
☐ TPC ☐ OTC ☐ Place in Void

Reviews continued		Print	Sign	Date	SQR Qualified			If Comments
					Yes	No	Dept.	
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
RCD	<input checked="" type="checkbox"/>	TOM RIGNEY	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
50.5400	<input checked="" type="checkbox"/>	KATHY BURGESS	K Burgess	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	TOM RIGNEY	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
Licensing Basis	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Independent	<input checked="" type="checkbox"/>	TOM RIGNEY	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>

An NRRL update was required? ☐ Yes

1. ☒ SQR Program Final Review and Approval

Approval ☐ Disapproval ☐

Tom Rigney 10/15/01
SQR Qualified Independent Reviewer / Date
Patricia A. Kelly for Paul D. Grant
Department Head/Responsible Individual
10/16/01
Approval Date

2. ☐ SORC ☒ RI/DH Final Review and Approval

N/A

Department Head/Responsible Individual Sign

Meeting No.

SORC Approval Signature

Approval Date

Effective Date 10/26/01

10/16/01

Approval Date

10/20/01

Effective Date

Manager of Control Room Operations (MCRO)

This form provides guidance to the MCRO once the DSEO in the EOF has assumed command and control of the event.

Section A: Ongoing Activities

NOTE

Any personnel dispatched outside the control room during an emergency are considered a 'team'.

- ☐ 1. Notify the ADTS of any teams dispatched from the control room.
- ☐ 2. Log events and periodically review entries for accuracy and completeness.
- ☐ 3. Assess plant conditions and initiate corrective actions, as necessary.
- ☐ 4. Evaluate plant conditions and recommend classification changes to ADTS using EPI-FAP06, "Classification and PARs."
- ☐ 5. Periodically, or whenever significant changes in plant conditions occur, brief control room personnel on:
 - Plant status
 - Event classification
 - Operational priorities
 - SERO status (i.e. SERO control transferred to the EOF, MOSC resource needs, etc.)
 - Changing radiological conditions
- ☐ 6. Update the ADTS on the following:
 - Event assessment
 - Requested actions
 - Associated priorities
 - Control room activities in progress
- ☐ 7. Direct RMT #1 to assess on-site radiological conditions and perform HP actions to support on-shift personnel.

Section A: Ongoing Activities

- ☐ 8. As appropriate, direct the following on-shift personnel to report to the MOSC to support in-plant corrective actions.
 - RMT #1
 - Chemistry Technicians
- ☐ 9. As appropriate, direct non-essential control room personnel (i.e., PEO, non-certified operators) to the OSC Assembly Area.
- ☐ 10. Notify the MOSC of personnel deployed from the control room.
- ☐ 11. Monitor plant conditions, strategies, and procedures for beyond design basis actions needed to protect the health and safety of the public.
- ☐ 12. IF necessary, Refer To and implement Section B, "Accident Management Decision Making - 50.54(X)."
- ☐ 13. Support PASS sampling when directed by the ADTS.
- ☐ 14. IF requested by the ADTS, Refer To EPI-FAP08, "Evacuation and Assembly," and perform actions for site assembly and evacuation.

Section B: Accident Management Decision Making - 50.54(x)

- ☐ 1. Identify scope and departure of the action.
- ☐ 2. IF time permits, obtain verbal or written approval on the strategy and procedure from the available senior SERO representative (i.e., DSEO, ADTS) using EPI-FAP02-012, "TSC Emergency Repair/Procedure Change/Assessment Recommendations," for guidance.
- ☐ 3. IF time does not permit discussion with the ADTS or DSEO, perform the following:
 - Take the departure actions necessary to protect the public or station personnel.
 - Inform the ADTS as soon as possible of the action.
- ☐ 4. Log the 10 CFR 50.54(x) actions taken.

Prepared by: _____

Signature

Print

Date

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 4

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP01-003, "Station Duty Officer (SDO)"
Major Revision 0, Minor Revision 2

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#
011017-085159

Initiated By: Kathleen Burgess Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP01-003 Rev. No.: 000 Minor Rev.: 02

Title: Station Duty Officer (SDO)

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☒ Non-Intent Change
(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
50.549 <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	
Environmental Screen <input checked="" type="checkbox"/>	MARK WHITE	for Mark	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	
Licensing Basis <input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
Independent <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	

An NRRL Update Required ☐ YES

1. ☒ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

K Burgess 11/01/01
SQR Qualified Independent Reviewer / Date
Paul Blaschke for Paul Blaschke
Process Owner
Responsible Individual
11/21/01
Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign
Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Station Duty Officer (SDO)

This form provides guidance to the SDO for emergency response actions during a declared emergency.

Section A: Initial Actions

- ☐ 1. Notify CR-DSEO of arrival and obtain briefing.
- ☐ 2. Obtain EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," from the CR-DSEO.
- ☐ 3. Record information from EPI-FAP15-001 on audix. ①
- ☐ 4. Fax copy of EPI-FAP15-001 to EOF and TSC.
- ☐ 5. IF requested, assist the CR-DSEO with precautionary dismissal or evacuation in accordance with EPI FAP08, "Evacuation and Assembly."
- ☐ 6. Contact and brief the unaffected unit Shift Manager of the event. ②

NOTE

NRC must be notified within 60 minutes of event classification. ①

- ☐ 7. Notify the NRC Operations Center per EPI-FAP07, "Notifications and Communications," and if requested, maintain continuous communications.
- ☐ 8. Assist ST in performing other initial notifications such as:
 - NRC Resident
 - Non-responding offsite agencies
 - Richmond Control Center Security Specialist
 - Other①
- ☐ 9. Notify SSS (CAS) of any restrictions on SERO access into the protected area to staff the ERFs.
- ☐ 10. IF directed by CR-DSEO, issue station announcements.
- ☐ 11. Maintain a log of significant events and communications on the SERO Log Sheet.

Section B: Recurring Actions

- ☐ 1. Assist the CR-DSEO or MCRO, as requested.
- ☐ 2. Evaluate the need for outside agency assistance and Refer To EPI-FAP07, "Notifications and Communications," for additional information.
- ☐ 3. IF outside assistance is required, notify SSS to provide escort.
- ☐ 4. Maintain continuous communications with the NRC through the ENS, as required.
- ☐ 5. Perform turnover of NRC ENS communications with the MOC following EOF activation.

Prepared by:

Signature

Print

Date

Docket Nos. 50-245

50-336

50-423

B18514

Attachment 5

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)

MP-26-EPI-FAP01-005, "Radiological Monitoring Team (RMT) #1"

Major Revision 0, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011017-085648

Initiated By: ^{10/22 KB} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP01-005 Rev. No.: 000 Minor Rev.: 01

Title: Radiological Monitoring Team (RMT) #1

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
56549	<input checked="" type="checkbox"/>	K Burgess	11/01/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Environmental	<input checked="" type="checkbox"/>	MARK WHITE	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Licensing Basis RCD	<input checked="" type="checkbox"/>	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Independent	<input checked="" type="checkbox"/>	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Process Owner

Responsible Individual

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign

Meeting No.:

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Radiological Monitoring Team (RMT) #1

This form provides guidance to RMT #1 for emergency response actions during a declared emergency.

NOTE

Upon declaration of an emergency event, three on-shift Health Physics Technicians report to the affected unit control room to comprise RMT #1. RMT #1 provides health physics support to the following:

- Affected unit control room
- Search and rescue teams
- Emergency assessment and repair teams

The actual tasks performed by RMT #1 will vary depending upon the nature of the emergency event. Additional HP Technicians may also be called to assist with OSC deployed teams.

Additional equipment is available in each HP office and in the TSC/OSC.

Section A: Initial Actions

- ☐ 1. Notify CR-DSEO/MCRO of arrival and obtain briefing.
- ☐ 2. Obtain RMT #1 kit from the control room emergency equipment locker/area.
- ☐ 3. Refer To EPI-FAP15-002, "RMT Instrument, Battery, and Source Check Sheet," and perform the following:
 - Conduct checks of control room emergency radiological equipment.
 - Replace any inoperable equipment.
 - Record results on EPI-FAP15-002.
- ☐ 4. Accompany PEO or other control room personnel dispatched by the CR-DSEO/MCRO.

Section B: Actions for a Unit 1 Event

NOTE

1. A Unit 1 event will not exceed beta skin dose limits.
2. If an RO-2A is not available, an RO-20 may be used. The dose rate calculation is identical.

-
- ☐ 1. Using RO-2A, periodically monitor Units 2 and 3 control room air.
 - ☐ 2. Log readings and calculate the dose rate using Section F, "Unit 1 Event - Whole Body Gamma and Krypton-85 Beta Dose Rate Calculations."
 - ☐ 3. Notify CR-DSEO of dose rates.

①

Section C: Actions for a Unit 2 or 3 Event

- ☐ 1. If radiation levels have increased in the following areas, Refer To and complete Section E, "Obtaining a Control Room Air Sample:"
 - Affected unit control room
 - Unaffected unit control rooms
 - Other areas that may be specified by the CR-DSEO/MCRO

Section D: Recurring Actions

- ☐ 1. Evaluate need for issuing self-reading dosimetry to on-site personnel (i.e., all control rooms, CAS/SAS) and issue dosimetry, as necessary.
- ☐ 2. Provide Health Physics support for operations, search and rescue, and emergency assessment or repair teams, as follows:
 - Notify ARPS of pending team dispatch and obtain status of radiological conditions.
 - Refer To and complete a EPI-FAP15-010 form.
 - Using the EPI-FAP15-010 form, brief the team.
 - Ensure the MCRO has notified the ADTS of the pending team dispatch.
 - Once dispatched, periodically communicate with the OSC AA using a radio or telephone.
 - Notify the ARPS upon return to the control room and provide a debrief as necessary.
- ☐ 3. Establish frisking station(s) and ensure all personnel entering the area conduct a whole body frisk, if necessary.

Section D: Recurring Actions

- ☐ 4. Request additional personnel to assist with monitoring, decontamination, or team accompaniment from the ARPS, as necessary.
- ☐ 5. Conduct habitability surveys of assigned facility including the following, as applicable:
 - Radiation
 - Contamination
 - Airborne (11 minutes at 1.9 to 2.1 cfm unless directed otherwise)
 - Continuous air monitor operability, if applicable
- ☐ 6. Periodically notify CR-DSEO/MCRO of the results of habitability surveys.

NOTE

Administrative requirements should not delay prompt action to protect health and safety.

- ☐ 7. Obtain and distribute the following items as needed:
 - Emergency dosimetry.
 - Respiratory equipment and protective clothing.
 - Radios.
- 8. IF deployment from the control room is needed, perform the following:

CAUTION

Hand held radios are not to be operated in the control room.

- ☐ a. Conduct radio operability checks and replace inoperable radios.
- ☐ b. After dispatch from control room, establish periodic communications with the CR DSEO/MCRO or OSC AA, as applicable.
- ☐ c. If radio communications are not available, use telephone or other available systems for communications.
- ☐ d. Monitor radiological and plant conditions en-route to survey locations.
- ☐ e. When the survey location is reached, perform a radiological survey.
- ☐ f. Refer To EPI-FAP15-003, "Radiation Monitoring Point Data Sheet," and record survey results.

Section D: Recurring Actions



A L A R A



The MRCA should be notified of RMT locations to keep the RMTs informed of changing plant and radiological conditions and allow rapid response to changes to the assignment.

- ☐ g. Notify CR-DSEO/MCRO and OSC AA of survey results.
- ☐ h. Upon return to the control room, brief the CR-DSEO/MCRO on radiological conditions and other activities.
- ☐ 9. Upon TSC activation, brief the MRCA on status of radiological conditions and activities performed or in progress.
- 10. When the MRCA assumes control, conduct radiological surveys as follows:
 - ☐ a. Contact the ARPS for input to the briefing.
 - ☐ b. Proceed to the survey location and conduct a radiological survey.
 - ☐ c. Notify the OSC AA of the survey results.
 - ☐ d. When directed, report to designated low background area to await further instructions.
 - ☐ e. Request updates of conditions from the OSC AA every 15-30 minutes.

Section E: Obtaining a Control Room Air Sample

NOTE

An 11-minute sample is taken to ensure lower limits of detection are met. A 5-minute air sample is collected if a significant degradation in radiological conditions has occurred.

- ☐ 1. Using the following, collect a 5-minute air sample:
 - Particulate filter
 - Iodine sample cartridge (silver zeolite or equivalent)
 - Air sampler
 - Flow of 2.0 cfm (1.9-2.1 cfm)

Section E: Obtaining a Control Room Air Sample

- ☐ 2. Using the following, count the sample cartridge:
- E-140, HP-210, and DIG-5 or equivalent instrument combination
 - Background less than 10,000 cpm
 - 24 second count ("0.4" time setting)
- ☐ 3. Review Table 1 for recommended protective actions.

Table 1 Results of Five Minute Silver Zeolite Air Samples @ 2.0 cfm Using E-140, HP-210, DIG-5 and Associated Personnel Protective Actions for Control Room Personnel			
Net Counts (24 sec count)	DEQ I-131 ($\mu\text{Ci/cc}$)	Thyroid CDE (if inhaled for 1 hour)	Recommended Personnel Protective Action Decision for Control Room Personnel
$\geq 5,000$	$\geq 7.7 \times 10^{-6}$	$\geq 10 \text{ rem}$	1. Evacuate non-essential personnel 2. Don respiratory protection 3. Send cartridge for isotopic analysis within 1 hour
$\geq 24,000$	$\geq 3.8 \times 10^{-5}$	$\geq 50 \text{ rem}$	Above actions plus: If iodine concentrations are confirmed by isotopic analysis, issue KI per EPI-FAP09
$> 95,000$ or off-scale	$> 1.5 \times 10^{-4}$	$> 200 \text{ rem}$	Above actions plus: Evacuate all CR personnel, as necessary.

- ☐ 4. Report sample results and recommended protective actions to CR-DSEO.
- ☐ 5. Send iodine cartridge for isotopic analysis.
- ☐ 6. When isotopic analysis is received, revise recommended protective actions, as necessary.

Prepared by: _____

Signature Print Date

Section F: Unit 1 Event - Whole Body Gamma and Krypton-85 Beta Dose Rate Calculations

Time of Sample	Location (CR 2, 3)	RO-2A Readings ⁽¹⁾		Krypton-85 Beta Dose Rate (OW-CW) X2 ⁽³⁾	MCRO Notified
		Closed Window ⁽²⁾	Open Window		

⁽¹⁾ RO-20 is an acceptable alternative instrument.

⁽²⁾ Whole body gamma dose rate

⁽³⁾ OW means open window reading; CW means closed window reading

RMT #1 Signature/Date: _____ / _____

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 6

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP02-001, "Assistant Director Technical Support (ADTS)"
Major Revision 0, Minor Revision 1



Document Action Request

SPG # 010913-065913

Initiated By: Kathleen Burgess

Date: 09/07/2001

Department

EP

Ext

2490

Document No: MP-26-EPI-FAP02-001

Rev. No:

000

Minor Rev No.

01

Title: Assistant Director Technical Support

Reason for Request (attach commitments, CR's, AR's, etc)

Corrective action associated with CR-01-08472

Select One

See MP-05-DC-SAP01 sect 2.3 to determine type of change

Continued

☒ Intent Change (SQR Independent, RCD, ENV Screen Required)☐ Edit Corr☒ Non-Intent Change

(Other reviews may be required. See MP-05-DC-FAP 01.1 Att 3)

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

TPC Interim Approval

(1) Plant Mngt Staff Member Print/Sign/Date

(2) SM/SRO/CFH on Unit Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later - See CommentsActivity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure

See DC-GD1.01 for guidance

☐ TPC ☐ OTC ☐ Place in Void

Reviews continued <input type="checkbox"/>		Print	Sign	Date	SQR Qualified			If Comments
					Yes	No	Dept.	
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input checked="" type="checkbox"/>	KOD	TOM RIGNEY	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
<input checked="" type="checkbox"/>	50.54	Mark White	Mark White	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Environmental	Tom Rigney	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
<input type="checkbox"/>	Licensing Basis				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Independent	Tom Rigney	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>

An NRRL update was required? ☐ Yes1. ☒ SQR Program Final Review and ApprovalApproval ☐Disapproval ☐

SQR Qualified/Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

2. ☐ SORC ☒ RI/DH Final Review and Approval

N/A

Department Head/Responsible Individual Sign

Meeting No.

SORC Approval Signature

Approval Date

Effective Date

10/26/01

10/16/01

Approval Date

10/26/01

Effective Date

Assistant Director Technical Support (ADTS)

This form provides guidance to the ADTS for emergency response actions during a declared emergency that activates the SERO.

Section A: TSC/OSC Activation/Initial Actions

NOTE

TSC/OSC activation is not required to provide immediate support to the control room.

- ☐ 1. Key into TSC/OSC.
- ☐ 2. Sign in on TSC/OSC Staffing Board.
- ☐ 3. Obtain a copy of the Incident Report Form (IRF) from the fax machine or Control Room.
- ☐ 4. Obtain additional information from the following, as necessary:
 - Voice mail box
 - Additional faxes
- ☐ 5. Initiate a log of significant events and communications on EPI-FAP15-012, "SERO Log Sheet," log date and arrival time.
- ☐ 6. Check TSC/OSC and OSCAA SERO response status as follows:
 - Verify minimum facility staff is present.
 - IF minimum staffing is not present, determine the ability of the SERO to activate as is and proceed as appropriate (i.e., all functional areas staffed).
- ☐ 7. Contact CRDSEO and discuss any significant changes since event declaration and obtain status of onsite protective actions and emergency team deployment.
- ☐ 8. Formally relieve the CRDSEO of emergency team deployment and onsite protective action responsibilities and log the date and time of relief.
- ☐ 9. Declare the TSC/OSC and OSCAA activated and record activation time on the SERO Log Sheet.
- ☐ 10. Refer To EPI-FAP15-001 "DSEO/ADTS Briefing Sheet" and obtain a briefing from the control room (CRDSEO or MCRO) and the DSEO in the EOF.
- ☐ 11. Brief the TSC/OSC on plant status and control room priorities.

Section A: TSC/OSC Activation/Initial Actions

- ☐ 12. IF the precautionary dismissal or evacuation was not performed by the CRDSEO prior to turnover, Direct CR to Refer To and Implement EPI-FAP08, "Evacuation and Assembly."

Section B: Routine Activities

- ☐ 1. Track the response of additional On-Call and Subject-to-Call SERO personnel and direct the MOR to contact personnel for unfilled positions.
- ☐ 2. Direct non-assigned TSC/OSC personnel to go to the OSC Assembly Area.
- ☐ 3. Establish TSC/OSC priorities and direct the initial response.
- ☐ 4. Notify the DSEO of any recommended changes in event classification or barrier status.
 - IF conditions change, Refer To EPI-FAP06, "Classification and PARs," for the affected unit and immediately recommend classification changes to the DSEO, as appropriate.
 - WHEN the DSEO escalates the event classification, inform personnel in the TSC/OSC and OSC Assembly Area.
- ☐ 5. IF Site Area or General Emergency is declared, Direct Control Room to refer to and implement EPI-FAP08, "Evacuation and Assembly." ①
- ☐ 6. Keep the DSEO updated on the status and priority of assessment and repair activities.
- ☐ 7. Direct and approve on-site PPADs considering the following:
 - IF time permits, discuss logistics for the on-site PPADs with the MTSC, MOSC, MOS, and MRCA.
 - IF there is a potential for an airborne radiological release affecting the TSC/OSC, announce that there will be no eating or drinking until further habitability is verified within the facilities.
 - IF there is a localized emergency (security, high radiation, fire), include its type and location in an announcement and instruct personnel to stand clear of the area.
 - Inform the DSEO of any implemented on-site PPADs.
- ☐ 8. Refer To EPI-FAP02-012, "TSC/OSC Emergency Repair/Procedure Change/Assessment Recommendations," and authorize departure from normal station operations and maintenance procedures.

Section B: Routine Activities

- ☐ 9. Develop strategies with the MTSC to address the following:
 - Prevention of severe core damage
 - Increasing time to core uncover
 - Prevention of containment failure
 - Reduction and/or termination of radiological releases to the environment
- ☐ 10. Notify the MCRO of the following:
 - Procedure development for outside design basis operations
 - TSC/OSC Priorities
 - Core thermal hydraulic analysis and time to core uncover
 - Entry into Severe Accident Management Guidelines
 - Projected plant system degradation and event conditions
- ☐ 11. Establish the following emergency assessment and repair actions:
 - Repair/evaluation priorities
 - Estimated repair times
 - Need to authorize mission specific emergency exposure upgrades to 25 Rem TEDE
 - Authorization for work assignments and reentry
- ☐ 12. Notify the DSEO of §50.54(x) use and of the requirement to notify the NRC of the departure as soon as possible.
- ☐ 13. Provide the DSEO with current and projected analyses of plant conditions and status on a routine basis.
- ☐ 14. Verify the MOSC has requested Site Fire Protection initiate monitoring of CO₂ levels in the TSC/OSC.
- ☐ 15. Brief the NRC Site Team of actions taken and planned upon their arrival in the TSC/OSC.

Section C: Emergency Exposure Controls

- ☐ 1. IF notified by the MRCA that implementation of EPI-FAP09, "Radiation Exposure Controls," is needed for emergency exposure increases or issuing KI to on-site SERO emergency workers, perform the following:
- Evaluate the emergency condition.
 - IF KI is warranted, inform the DSEO that KI will be issued to on-site SERO emergency workers.
 - IF exposure upgrades up to 25 Rem are required, inform DSEO of increase.
 - IF exposure upgrades greater than 25 Rem are required, obtain DSEO approval.
 - Refer To EPI-FAP09-003 and sign and date appropriate form, indicating approval.
- ☐ 2. Coordinate the release of contaminated person from site to a designated decontamination location.
-

Section D: Event Termination and Recovery Actions

- ☐ 1. Monitor affected unit conditions and recommend termination to Recovery actions to the DSEO when appropriate.
- ☐ 2. IF long term damage to the plant has not occurred, perform the following:
- Brief TSC/OSC on plant conditions allowing termination.
 - Direct TSC/OSC staff to return facilities to pre-emergency state of readiness.
 - Record SERO termination in logbook.
- ☐ 3. IF long term damage to the plant has occurred and Recovery option is selected, perform the following:
- Brief TSC/OSC on plant conditions and entry into Recovery.
 - Refer To and implement EPI-FAP14, "Recovery."
 - Record SERO termination in logbook.

Prepared By: _____

Signature	Print	Date
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Docket Nos. 50-245
50-336
50-423
B18514

Attachment 7

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP02-006, "Manager of Technical Support Center (MTSC)"
Major Revision 0, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011017-090040

Initiated By: ^{10/22 KB} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP02-006 Rev. No.: 000 Minor Rev.: 01

Title: Manager of Technical Support Center (MTSC)

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
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50.549 <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	
Environmental Screen <input checked="" type="checkbox"/>	MARK WHITE	Mark White	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	
Licensing Basis RCD <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/22/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	
Independent <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPsD	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

Tom Hynes 11-2-01
SQR Qualified Independent Reviewer / Date
Patricia Lundy for Carl Blum
Process Owner

Responsible Individual

11/2/01

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign
Meeting No.:

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Manager of Technical Support Center (MTSC)

This form provides guidance to the MTSC for emergency response actions during a declared emergency that activates the SERO.

Section A: Initial Actions

- ☐ 1. Key into TSC/OSC.
- ☐ 2. Sign in on TSC Staffing Board.
- ☐ 3. Evaluate event and select plant parameters critical to monitoring plant status.
- ☐ 4. Direct the Unit 3 Control Room to refer to OP3349, "Modcomp Process Computer System Operations," and perform actions to shift the process computer (SPDS) from the Computer Room II console to the TSC console.

NOTE

If OFIS and SPDS are inoperable, data may be obtained by requesting the CRDC to complete and fax the following forms, as applicable, at the desired interval:

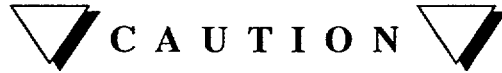
EPI-FAP15-007, "Critical Parameter Data Sheet - MP1"

EPI-FAP15-008, "Critical Parameter Data Sheet - MP2"

EPI-FAP15-009, "Critical Parameter Data Sheet - MP3"

- ☐ 5. Perform tracking and trending at 15-30 minute intervals, or as necessary.
- ☐ 6. Obtain copy of pre-event and critical plant parameter data for affected unit.
- ☐ 7. Assign staff member to perform the following:
 - Maintain a record of significant communications and events on EPI-FAP15-012, "SERO Log Sheet."
 - Record names of TSC staff in SERO Logsheet.
 - Log information, as directed by the ADTS.
- ☐ 8. Assign staff members to maintain status boards with the following information:
 - Reactor Status (power level, time of trip, etc.)
 - Chronology of key events
 - Critical parameters
 - Unit status
 - Safety related equipment out of service
- ☐ 9. Notify the ADTS when minimum staffing requirements for TSC are met.

Section B: Recurring Activities



The TSC/OSC HVAC system will change mode of operation upon a Unit 3 CBI signal. The Outside Air Supply Damper [3H WS*MOD 30] isolates for 30 minutes following a CBI.

- ☐ 1. IF CBI occurs, Direct a staff member to refer to Section C, "TSC/OSC Ventilation Alignment," and verify ventilation system operation.

NOTE

Actions for a Loss of Power and Loss of Coolant Accident are a design basis commitment for Unit 3. Similar requirements exist for Unit 2.

- ☐ 2. IF event is Loss of Off-Site Power or Loss of Coolant Accident, Direct TSC staff to provide AC power load shedding recommendations within 24 hours of LOP or LOCA.
- ☐ 3. Perform the following within 4 hours of LOP or LOCA event:
- IF Unit 2, evaluate need to order emergency diesel generator fuel to extend on-site capacity and direct the MOR to order fuel, as required.
 - IF Unit 3, direct MOR to place an order for emergency diesel generator fuel and specify delivery is required within 24 hours.
- ☐ 4. IF fuel oil cannot be delivered within the specified time, perform the following:
- Refer To affected unit procedures and evaluate load shedding alternatives.
 - Provide recommendations to the ADTS and MCRO.
- ☐ 5. IF requested by the MOSC, review EPI-FAP15-010, "Emergency Team Briefing Sheet" to provide additional information as necessary to teams prior to deployment.
- ☐ 6. Coordinate development of emergency repair strategies to support emergency teams, as required.
- ☐ 7. Analyze plant steady-state and dynamic behavior prior to and during the event and determine cause and course of mitigation/stabilization efforts event.
- ☐ 8. Evaluate the emergency event based on degraded plant conditions and perform the following:
- a. Review repair requirements and priorities for correcting the condition.
 - b. Recommend changes in priorities to the ADTS as required.

Section B: Recurring Activities

NOTE

EPI-FAP02-012, "TSC/OSC Emergency Repair/Procedure Change/Assessment Recommendations," does not supercede normal procedure change requirements. It allows flexibility in fast moving events.

- ☐ 9. Refer To EPI-FAP02-012, "TSC/OSC Emergency Repair/Procedure Change/Assessment Recommendations," and develop strategies and procedures.
- ☐ 10. Brief MRCA on the following:
 - Technical data/operations that may affect radiological releases or radiation levels throughout the facility.
 - Accident sequence.
 - Radiation release paths.
 - Core uncover time.
 - Performance information regarding radioactivity mitigating systems.

Prepared by: _____

Signature

Print

Date

Section C: TSC/OSC Ventilation Alignment

NOTE

The TSC/OSC HVAC System automatically shifts to the emergency filtered recirc mode upon receipt of a Train A or Train B signal. After 30 minutes with CBI signal still present, the system shifts to the emergency filtered intake mode.

1. Check that no smoke, solvents, or other potential atmospheric contaminants have been released inside the TSC/OSC.

CAUTION

Do not activate the emergency filtered recirc. mode if smoke, solvents, or other contaminants are present.

2. IF contaminants are present, immediately notify the ADTS and Unit 3 SM and request additional assistance and guidance to prevent activation of the emergency filtered recirc mode.
3. Verify the TSC/OSC ventilation automatically aligns to emergency filter recirc mode. Refer To 3HWS-PNLVP6 panel located in the west northwest corner of the ventilation equipment room, at the head of the main TSC/OSC stairway to the outside as follows:
 - a) 3HWS-MOD29, lavatory exhaust fan damper closed
 - b) 3HWS-FN1, lavatory exhaust fanoff
 - c) 3HWS-MOD33, outside air supply to ACU1 damperclosed
 - d) 3HWS-MOD31, recirc air from TSC/OSC to FLT1 damper..... open
 - e) 3HWS-FLT1, TSC/OSC ventilation filter unitrunning
 - f) 3HWS-ACU1, TSC/OSC air conditioning unitoff
4. Refer To blue 3HWS-PNLP7 panel in the southeast corner of the equipment room and verify 3HWS-FLT1, TSC/OSC ventilation filter unit flow is between 1800 and 2200 cfm.
5. IF the system is not correctly aligned, perform the following:
 - a) Notify the ADTS and the Unit 3 SM.
 - b) Request Unit 3 SM provide assistance.
 - c) Refer to OP 3315E, "Technical Support Center Ventilation," and align the system.

6. IF estimated that the system can not be aligned within 30 to 60 minutes, complete the following actions:
 - a) Notify the ADTS.
 - b) Evaluate the need to reduce staffing.
 - c) Consider the need to evacuate the facility.
7. WHEN 30 minutes have elapsed, verify the system has automatically aligned to the emergency filter intake mode.
8. WHEN instructed by Unit 3 SM or the ADTS, verify the HVAC system has been restored to normal mode.

Section D: Event Termination Activities

When notified by ADTS of termination, perform the following activities:

- ☐ 1. Verify the TSC HVAC system has been restored to normal mode.
- ☐ 2. Direct the Unit 3 Control Room to refer to OP3349, "Modcomp Process Computer System Operations," and perform actions to shift the process computer (SPDS) from the TSC console to the Computer Room II console.

Prepared by: _____
Signature Print Date

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 8

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP03-001, "Manager of Operations Support Center (MOSC) - TSC/OSC"
Major Revision 0, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG# 011017-090532

Initiated By: ^{10/22/01} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP03-001 Rev. No.: 000 Minor Rev.: 01

Title: Manager of Operations Support Center (MOSC)

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☒ Non-Intent Change
(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			✓ If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
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50.549	NA			<input type="checkbox"/>	<input type="checkbox"/>		
Environmental Screen	MARK WHITE	<i>[Signature]</i>	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	
Licensing Basis	NA			<input type="checkbox"/>	<input type="checkbox"/>		
Independent	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	

An NRRL Update Required ☐ YES

1. ☒ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

K Burgess 11/1/01
SQR Qualified Independent Reviewer / Date
Patricia Leachy for Paul Blaisdell
Process Owner
Responsible Individual
11/02/01
Approval Date

2. ☐ SORC ☐ R/PO Final Review and Approval

Process Owner / Responsible Individual Sign
Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Manager of Operations Support Center (MOSC) - TSC/OSC

This form provides guidance to the MOSC for emergency response actions during a declared emergency that activates the SERO.

Section A: Initial Actions

- ☐ 1. Key into the TSC/OSC.
- ☐ 2. Sign in on TSC/OSC Staffing Board and log date and arrival time on the SERO Log Sheet.
- ☐ 3. Maintain a log of significant events and communications on the SERO Log Sheet.
- ☐ 4. Consult with ADTS or CR DSEO and receive a briefing on conditions, priorities and any teams dispatched by the control room prior to OSC activation. | ①
- ☐ 5. Brief OSC staff on current plant and radiological conditions.
- ☐ 6. Refer To EPI-FAP15-010, "Emergency Team Briefing Sheet," and assemble, brief and dispatch emergency teams.
- ☐ 7. Designate OSC Assistant(s) to remain in OSC and dispatch remaining OSC Assistants to the OSC Assembly Area to coordinate resources and brief teams.
- ☐ 8. Obtain names and position titles of SERO personnel in OSC Assembly Area.
- ☐ 9. Verify OSC staff perform the following:
 - Key into TSC/OSC or OSC Assembly Area card reader.
 - Frisk upon entry to OSC, as applicable.
 - Enter name on minimum staffing board.
 - Maintain status boards and logs.
 - Establish and maintain communications with the OSC AA.
 - Maintain awareness of event classification and constraints.
- ☐ 10. Notify the ADTS when OSC activation staffing requirements are met.
- ☐ 11. Brief the following staff on current plant conditions and classification:
 - OSC Assembly Area personnel
 - Deployed emergency teams

Section A: Initial Actions

- ☐ 12. Contact the OSC AA and request Site Fire Protection personnel report to the TSC/OSC and establish CO₂ monitoring.
- ☐ 13. IF a site evacuation is initiated, perform the following:
 - Provide Security the names, EIDs, and locations of emergency team personnel in the field.
 - Notify OSC AA of the evacuation directive.
- ☐ 14. Consult with the ADTS or CR DSEO, as necessary, to determine the following:
 - Description and priority of assignments.
 - Authorization for deployment of emergency team.
- ☐ 15. Notify the ADTS of the time and location of emergency teams dispatched.

NOTE

PASS laboratory setup takes about one hour. PASS results are due within three hours of request.

- ☐ 16. Contact the control room to determine if Chemistry Technicians were dispatched to conduct PASS laboratory setup.
 - IF PASS laboratory setup has not been initiated, dispatch Chemistry Technicians from OSC Assembly Area to initiate setup.
 - IF Chemistry Technicians are not available in OSC Assembly Area, contact the control room and determine availability of on-shift Chemistry Technicians.
 - IF on-shift Chemistry Technicians are not available, contact the MOR and request additional Chemistry Technicians be sent to the OSC Assembly Area.
- ☐ 17. WHEN informed of a fire, hazardous material spill, or medical emergency inside the Protected Area, perform the following:
 - Verify the control rooms and Site Fire Protection have been notified of the emergency, including the nature and location of emergency.
 - Determine the need to dispatch an OSC Assistant or Health Physics Technician to the scene to interface with the Site Fire Protection Leader.
 - Notify the ADTS.

Section B: Recurring Actions

NOTE

On-shift PEOs remain under the direction of the MCRO, unless released to the OSC.

- ☐ 1. Track the response of additional On-Call and Subject-to-Call SERO personnel and notify the ADTS when all positions are filled.
- ☐ 2. WHEN emergency team is requested, Perform the following:
 - Consult with the ADTS to determine the description and priority of the assignment, as necessary.
 - Notify the OSC AA to assemble a team, complete a EPI-FAP15-010, "Emergency Team Briefing Sheet," and initiate team briefing.
 - Obtain ADTS authorization and direct the OSC AA to dispatch the team.
 - Notify the ADTS of the emergency team dispatch time and destination once deployed.
- ☐ 3. Contact the OSC AA and verify the OSC Assistant has established communications with emergency team leader at 15 to 30 minute intervals (or as required by the situation) and is updating the team on plant and radiological conditions.
- ☐ 4. Update location and status of emergency teams on status board.
- ☐ 5. Direct OSC Assistant to perform the following when emergency teams return:
 - Complete the debriefing section of EPI-FAP15-010, "Emergency Team Briefing Sheet," and retain all forms when completed.
 - Contact the MOSC and brief on results (fax debrief form if appropriate).
 - Update log and status board.
- ☐ 6. Notify the ADTS of results of each emergency team assignment.
- ☐ 7. Consult ADTS periodically to review current conditions, priorities, and emergency team status.
- ☐ 8. Provide periodic updates to OSC and OSC AA staff on current plant and radiological conditions and review roles and responsibilities.
- ☐ 9. Develop relief shift plan with MOR and OSC Assistants.

Section B: Recurring Actions

- ☐ 10. Arrange for delivery of the following OSC materials, as required, with MOR to sustain the following on-site operations:
- Repair equipment and supplies
 - Radiological and decontamination supplies
 - Protective clothing
 - SCBA refills
 - Fire-fighting equipment
- ☐ 11. If the OSC AA is determined to be uninhabitable, consult with the MRCA and ADTS to determine an alternate location.

Section C: Termination

- ☐ 1. WHEN event termination is initiated by the DSEO, perform the following:
- Recall and debrief teams (ensure work is completed, systems/components are in a safe configuration and documented prior to securing activities).
 - Record event termination on the SERO Log Sheet.
 - Review log sheets and forms and ensure all appropriate entries have been made.
 - Collect procedure sections and team briefing sheets.
 - Place MOSC Notebook and materials on MOSC desk.

Prepared by: _____

Signature

Print

Date

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 9

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP04-001, "Director of Station Emergency Operations (DSEO)"
Major Revision 0, Minor Revision 2



Document Action Request

SPG # 010913-072632

Initiated By: Kathleen Burgess Date: 09/07/2001 Department EP Ext 2490

Document No: MP-26-EPI-FAP04-001 Rev. No: 000 Minor Rev No. 02

Title: Director Emergency Operations Facility

Reason for Request (attach commitments, CR's, AR's, etc)

Corrective action associated with CR-01-08472

Select One

See MP-05-DC-SAP01 sect 2.3 to determine type of change

Continued

☒ Intent Change (SQR Independent, RCD, ENV Screen Required)
(Other reviews may be required. See MP-05-DC-FAP 01.1 Att 3)

☐ Edit Corr

☒ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

TPC Interim Approval

(1) Plant Mngt Staff Member Print/Sign/Date

(2) SM/SRO/CFH on Unit Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later - See Comments

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance
☐ TPC ☐ OTC ☐ Place in Void

Reviews continued <input type="checkbox"/>		Print	Sign	Date	SQR Qualified			If Comments
					Yes	No	Dept.	
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input checked="" type="checkbox"/>	RCD	Tom Rigney	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPBD	<input type="checkbox"/>
<input checked="" type="checkbox"/>	50.54	Mark White	Mark White	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPBD	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Environmental	Tom Rigney	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPBD	<input type="checkbox"/>
<input type="checkbox"/>	Licensing Basis				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input checked="" type="checkbox"/>	Independent	Tom Rigney	Tom Rigney	10/15/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPBD	<input type="checkbox"/>

An NRRL update was required? ☐ Yes

1. ☒ SQR Program Final Review and Approval

Approval ☐ Disapproval ☐

Tom Rigney 10/15/01

SQR Qualified Independent Reviewer / Date

Paul A. Fuchs for Paul B. Borchert

Department Head/Responsible Individual

10/16/01

Approval Date

2. ☐ SORC ☒ RI/DH Final Review and Approval

N/A

Department Head/Responsible Individual Sign

Meeting No.

SORC Approval Signature

Approval Date

Effective Date 10/26/01

10/16/01

Approval Date

10/26/01

Effective Date

Director of Station Emergency Operations (DSEO)

Section A: EOF Activation/Transfer of Command and Control

- ☐ 1. Sign in on the EOF Staffing Board and log date and arrival time on the SERO Log Sheet.
- ☐ 2. Obtain a copy of the Incident Report From (IRF) from the fax machine or call Control Room for IRF information.
- ☐ 3. Obtain additional information from the following, as necessary:
 - Voice recording of briefing sheet
 - Additional faxes

NOTE

For a Unit 1 event, the Unit 2 SM is the CR-DSEO.

- ☐ 4. Contact CR-DSEO and discuss the following:
 - Any significant changes since event declaration
 - Current status on classification, notification, and PARs.
- ☐ 5. Check EOF SERO response status as follows:
 - Verify minimum facility staff is present.
 - IF minimum staffing is not present, determine the ability of the SERO to activate as is and proceed as appropriate (i.e., all functional areas staffed).
- ☐ 6. Formally relieve the CR-DSEO of Command and Control, classification, notification, and PAR responsibilities, and log the date and time of relief.
- ☐ 7. Declare the EOF activated and record EOF activation time on the SERO Log Sheet.
- ☐ 8. Announce the following message using the station paging system (repeat once):

Attention all station personnel. This is (name), the DSEO. I am assuming command and control of the Station Emergency Response Organization. The EOF is declared activated at this time. Currently, Millstone Station is in (classification level: _____) for (Unit # _____) due to (brief description of event: _____)

- ☐ 9. Perform an update briefing with the CR-DSEO and the ADTS using EPI-FAP15-001, "DSEO/ADTS Briefing Sheet," as a guide.

Section A: EOF Activation/Transfer of Command and Control

- ☐ 10. Brief the EOF Managers on the event.
- ☐ 11. Establish contact with the Richmond Corporate Executive and provide input on the event.
- ☐ 12. Establish frequent communications with the ADTS and the ES.

①

Section B: Classification Upgrade Immediate Actions

1. Evaluate the conditions using EPI-FAP06, "Classification and PARs."
 - ☐ Review the initiating condition with the TIC and the ADTS for recommendations on plant-related EALs.
 - ☐ Consult with the MRDA for recommendations on radiological-related EALs.
 - ☐ Consult with the MOS for recommendations on security-related EALs.
2. Perform Station Notifications as follows:
 - ☐ Notify the ADTS of the classification upgrade.
 - ☐ Direct the ST to initiate offsite notifications.
 - ☐ IF a General Emergency has been declared, direct the ADEOF to develop PARs.
 - ☐ Announce the emergency declaration level and time to the station staff via plant page announcement as follows:

NOTE

During a security event, it may be advisable **NOT** to sound an alarm or make an announcement.

- Call Control Room and ensure outside speakers are activated.
- Announce the following over the station PA system:

Attention all personnel; attention all personnel. A (classification level) has been declared at (Unit #) due to (brief description of event).

- Repeat the PA message.
 - Log the time of announcement.
- ☐ Announce that there will be no eating or drinking until further habitability is verified.
 - ☐ Log time of completion.
3. Perform state notification as follows:
 - ☐ Direct the ADEOF to assist in completing the IRF.
 - IF an offsite State of Emergency does not exist, approve the IRF for transmittal.
 - IF an offsite State of Emergency does exist and the Governor has directed all future notifications be processed through the State EOC, approve the IRF and provide it only to the Executive Spokesperson.
 - ☐ IF a General Emergency has been declared, review and approve PARs and directly notify the DEP.

Section B: Classification Upgrade Immediate Actions

4. Perform NRC notifications as follows:

- ☐ Verify the MOC notifies the NRC via the ENS.
- ☐ Direct the ADEOF to contact the resident inspector if he/she is not on site.

5. Perform additional notifications as follows:

- ☐ Inform the Executive Spokesperson of the event.
- ☐ IF NRC Site Team DSO is present, discuss the classification with him/her.
- ☐ Inform the Richmond Corporate Executive of the event.

| ①

Section C: Routine Activities

- ☐ 1. Track the response of additional On-Call and Subject-to-Call SERO personnel and direct the MOR to contact personnel for unfilled positions.
- ☐ 2. Direct the TIC to continuously man the Operations Net and review the EAL tables and fission product barriers for changes in event status.
- ☐ 3. Obtain periodic input from the ADTS on the following:
 - Plant status and mission priorities.
 - Fast-breaking events.
 - Impact on EALs.
- ☐ 4. Ensure updates of the event are routinely provided to the State and local agencies.
- ☐ 5. Approve all news releases forwarded from the ADEOF before transmitting to the JMC.
- ☐ 6. IF the fission product barrier status, offsite radiological conditions, or meteorological conditions change, perform the following:
 - Refer to Section B and evaluate the conditions.
 - Direct the ADEOF to evaluate the impact on PARs.
 - Provide changes to PARs to the State, as appropriate.
- ☐ 7. Obtain the status on any precautionary dismissal, evacuation and accountability activities in progress from the MOS.
- ☐ 8. Authorize extended emergency exposure limits for lifesaving actions (dose > 25 Rem is expected) as appropriate when recommended by the ADTS for onsite personnel and the ADEOF for offsite personnel.
- ☐ 9. IF suspension of safeguards or other §50.54(x) action is invoked, instruct the MOC to notify the NRC as soon as possible (not to exceed one hour).
- ☐ 10. Notify the SERO of any significant changes in conditions using the PA system.
- ☐ 11. Review and provide concurrence for any Severe Accident Management strategy that could potentially affect the general public or offsite activities.
- ☐ 12. Request assistance from federal authorities to support the station response efforts, as necessary.
- ☐ 13. Approve relief schedules developed by the MOR.
- ☐ 14. Ensure EOF habitability controls have been considered for events involving increased radiation levels around the facility.

Section C: Routine Activities

- ☐ 15. Conduct periodic briefings with the ADEOF and facility managers.
- ☐ 16. Periodically provide the Executive Spokesperson with the following information via the open communications line:
 - Event/Plant Status using EPI-FAP15-001, "DSEO/ADTS Briefing Sheet."
 - News releases prepared or in progress.
- ☐ 17. Refer To EPI-FAP15-001, " DSEO/ADTS Briefing Sheet," and periodically update the Richmond Corporate Executive on the event status. | ①
- ☐ 18. Consult with the ADTS and ADEOF on the status of each unit and station conditions.
- ☐ 19. Before NRC Site Team arrival, direct the Regulatory Liaison to prepare information for NRC briefing.
- ☐ 20. Periodically discuss conditions and events with the NRC Site Team Leader or Director of Site Operations.
- ☐ 21. IF events have been controlled to the point where termination of the emergency can be considered, Refer To EPI-FAP06 for guidance.

Prepared by: _____

Signature

Print

Date

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 10

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP04-011, "Manager of Resources (MOR) or External Resources
Coordinator (ERC)," Major Revision 0, Minor Revision 2

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011017-090849

Initiated By: ^{10/22/01} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP04-011 Rev. No.: 000 Minor Rev.: 02

Title: Manager of Resources (MOR) or External Resources Coordinator (ERC)

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change
(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			✓ If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
RCD <input checked="" type="checkbox"/>	K.Burgess	K.Burgess	10/22/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
50.549 <input checked="" type="checkbox"/>	K.Burgess	K.Burgess	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Environmental Screen <input checked="" type="checkbox"/>	MARK WHITE	Mark White	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Licensing Basis ^{10/21/01} <input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
Independent <input checked="" type="checkbox"/>	K.Burgess	K.Burgess	10/24/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐
Tom Riquelme / 11/2/01
SQR Qualified Independent Reviewer / Date
Process Owner
Patricia Auding / 11/2/01
Responsible Individual
Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign
Meeting No.: _____
SORC Approval Signature
Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Manager of Resources (MOR) or External Resources Coordinator (ERC)

This form provides guidance to the MOR/ERC for emergency response actions during events that activate the SERO.

Section A: Initial Actions

NOTE

EPUG-08B, "Millstone Emergency Plan Resource Book," contains the phone numbers for SERO personnel, Offsite governmental officials and emergency responders, and support resources points of contact.

- ☐ 1. Sign in on the EOF Staffing Board and log date and arrival time on the SERO Log Sheet.
- ☐ 2. Notify the ADEOF of arrival and obtain a status briefing.
- ☐ 3. Maintain a log of significant events and communications on the SERO Log Sheet.
- ☐ 4. Obtain the SERO call-back verification report from the fax in the MOC's office.
- ☐ 5. Perform Assembly Area activities in accordance with EPI-FAP08, "Evacuation and Assembly."
- ☐ 6. Complete a Section D report for on-shift and first relief shift personnel when all of the facilities are activated and fully staffed (Refer To Section B.3 for shift relief).
- ☐ 7. Determine need for essential resources.
- ☐ 8. Notify INPO that the SERO has been activated.

Section B: Recurring Actions

- ☐ 1. Coordinate obtaining extra personnel for any emergency facility that requires additional assistance as follows:
 - Contact the necessary individuals.
 - Refer To EPI-FAP15-011, "Fitness for Duty Questionnaire," and determine if notified personnel are fit for duty.
 - IF notified personnel are determined fit for duty, request personnel to report to the EOF.
 - Upon arrival, coordinate access for the responders into the Protected Area with Security as necessary.
- ☐ 2. Transfer additional support personnel to respective ERFs as follows:
 - Consult the MRDA to determine safe access routes for transporting personnel to the station.
 - Issue an Emergency Vehicle Pass to each vehicle transporting personnel from the EOF to the station.
- ☐ 3. Prepare shift relief schedules and rosters as follows:
 - a. Consult with the DSEO and SERO managers to determine shift personnel requirements.
 - b. Notify personnel of the following:
 - Shift assignment
 - Shift duration
 - Reporting time
 - Reporting location
 - c. Record shift assignments next to the SERO position on Section D and designate as shift 1, 2, or 3.
- ☐ 4. Notify the following of the emergency:
 - Purchasing Department
 - Maintenance Support Services Department
 - Site Services Department
 - Nuclear Document Services Personnel
 - Transportation Department
 - Richmond Corporate Operations Center

I ①

Section B: Recurring Actions

- ☐ 5. Request Information Technology provide support personnel to the EOF, as necessary.
- ☐ 6. Request photocopier services provide support personnel to the EOF, as necessary.
- ☐ 7. Contact the Maintenance Support Services Department for the following resources:
 - Craft Labor
 - Tools
 - Equipment
- ☐ 8. Contact the Purchasing Department for the following resources:
 - Consulting Services
 - Expense Account Services
 - Temporary Housing
 - Food
- ☐ 9. Contact the Site Services Department for the following resources:
 - Supplies
 - Vehicles
 - Heavy Machinery
- ☐ 10. Contact the Transportation Department for the following resources:
 - Vehicles
 - Equipment
 - Supplies
 - Personnel
- ☐ 11. Consult the DSEO to determine the need for outside agency assistance.
- ☐ 12. Obtain DSEO approval before requesting equipment or services over \$100,000.
- ☐ 13. Contact the Richmond Corporate Operations Support for the following additional resources:
 - Additional transportation needs
 - Petty cash
 - Legal, insurance, and treasury services
 - Any other corporate resources, as necessary

①

Section B: Recurring Actions

- ☐ 14. Obtain additional support for services from INPO, as necessary.
- ☐ 15. Coordinate with the Regulatory Liaison to support the following, as necessary:
 - NRC site team
 - Supporting organizations

NOTE

The following events may require large amounts of bottled breathing air:

- Environmental or radiological release that threatens control room habitability
- Fire or chemical release
- Conditions projected to exhaust or restrict access to SCBA deployment on-site

- ☐ 16. IF event requires large amounts of bottled breathing air, perform the following:
 - a. Request Emergency Equipment and Services Personnel provide the following:
 - Additional bottles
 - Refills
 - Additional SCBAs for relief teams.

C A U T I O N

Refills are usually provided from a cascade system of storage tanks replenished by a compressor. Running the compressor at a facility on or near the site during a radiological release may contaminate the air in the cascade system.

- b. IF radiological event is in progress and the Fire Training cascade system requires filling by compressor, request off-site organizations refill bottles.
- c. Coordinate bottle transport between points of use and refill facilities.

Section C: Termination

- ☐ 1. IF directed by the DSEO to terminate the SERO, perform the following: | ①
- Notify departments, corporate, and agencies supporting the site with resources that the event has been terminated.
 - Cancel any orders for resources no longer needed as a result of the termination.

Prepared by: _____

Signature

Print

Date

Section D: SERO Facility Shift Staffing**TSC/OSC Combined Facility**☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
<i>Minimum Staffing - 60 Minute Response</i>			
MRCA			
TSCRE			
UADTS			
UADTS			
UMOSC			
UMTSC			
UMTSC			
UTSCEE			
UTSCEE			
UTSCME			
UTSCME			
<i>Augmented Staffing - Subject to Call</i>			
AMTL			
AMT TH			
AMT ME			
MOS			
RAD COM			
UOSCMA			
UTSC SM			

Any route restrictions: ☐ No ☐ Yes

Section D: SERO Facility Shift Staffing

OSC Assembly Area

☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
Minimum Staffing - 60 Minute Response			
ARPS			
GES			
RMT #2A			
RMT #2B			
RMT #2C			
RMT #2D			
UELEC			
UELEC			
UI&C Tech			
UI&C Tech			
UMECH			
UMECH			
UMOSC			
Augmented Staffing - Subject to Call			
CBETS Operator			
UI&C OSC			
UI&C OSC			
UOSCMA			
UTSC SM			
UTSC SM			

Any route restrictions: ☐ No ☐ Yes

MP-26-EPI-FAP04-011

Rev. 000-02

Page 7 of 11

Section D: SERO Facility Shift Staffing**Unit 1**☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
Certified Fuel Handler			
PEO (Unit 1)			

②

Unit 2 or Unit 3 Control Room (Circle One)☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
SM/MCRO			
US			
STA			
CO			
CO			
PEO			
PEO			

Station Shift Support☐ Shift 1 ☐ Shift 2 ☐ Shift 3

POSITION	NAME	NUMBER	PAGER
SDO			
Shift Tech			
RMT #1			
RMT #1			
RMT #1			
Chem Technician			
Chem Technician			
UCRDC			
UCRDC			

Any route restrictions: ☐ No ☐ Yes

Section D: SERO Facility Shift Staffing

EOF

☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
<i>Minimum Staffing - 60 Minute Response</i>			
ADEOF			
DSEO			
EOF HP			
EOF Shift Technician			
MOR			
MPI			
MRDA			
RMT #3			
RMT Driver			
RMT #4			
RMT Driver			
RMT #5			
RMT Driver			
UMOC			
UTIC			
<i>Augmented Staffing - Subject to Call</i>			
AMRDA			
AMRDA			
ERC			
FTDC			
MET Assistant			
RAD COMM			
RAE			
Regulatory Liaison			
Station EP Representative			
State EP Representative			
UMOC			
UTIC			

Any route restrictions: ☐ No ☐ Yes

Section D: SERO Facility Shift Staffing

State EOC

☐ Shift 1 ☐ Shift 2 ☐ Shift 3

Shift From: _____ (hrs) To: _____ (hrs)

POSITION	NAME	PHONE	PAGER
<i>Minimum Staffing - 60 Minute Response</i>			
Exec Spokesperson (ES)			
NNM			
<i>Augmented Staffing - Subject to Call</i>			
Media Liaison			
Rad Briefer			
Rumor and Inquiry Control			
Technical Briefer			
Technical Assistant			

Any route restrictions: ☐ No ☐ Yes

Simulator Foyer

MP-26-EPI-FAP04-011
Rev. 000-02
Page 11 of 11

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 11

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP04-014, "Technical Information Coordinator (TIC)"
Major Revision 0, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

011017-091251

Initiated By: ^{10/22 KB} ~~Kathleen Burgess~~ Mark White Date 10/15/01 Department: EPSD Ext.: 2101

Document No.: MP-26-EPI-FAP04-014 Rev. No.: 000 Minor Rev.: 01

Title: Technical Information Coordinator (TIC)

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)
Minor revision to support changes in Unit 1 Shift Staffing

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			✓ If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
50.549 <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	
Environmental Screen <input checked="" type="checkbox"/>	MARK WHITE	Mark White	10/17/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	
Licensing Basis RCD <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/22/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	
Independent <input checked="" type="checkbox"/>	K Burgess	K Burgess	10/21/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

Tom Riquelme 11-2-01
SQR Qualified Independent Reviewer / Date

Paul Blaisdell
Process Owner

Responsible Individual

11/2/01

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign

Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/5/01

11/2/01
Approval Date

11/5/01
Effective Date

Technical Information Coordinator (TIC)

This form provides guidance to the TIC for emergency response actions during an event that activates the SERO.

Section A: Initial Actions

- ☐ 1. Sign in on the EOF Staffing Board and log date and arrival time on the SERO Log Sheet.
- ☐ 2. Notify DSEO of arrival and obtain event conditions and status update.
- ☐ 3. Maintain a log of significant events and communications on the SERO Log Sheet.

NOTE

For a Unit 1 event, the Unit 2 and Unit 3 CRDCs report to the Unit 2 control room.

①

- ☐ 4. Establish communications via the Operations Net with CRDC, TSC-SM, and State EOC Technical Assistant and perform the following:
 - a. Determine the event conditions and status.
 - b. Ensure the EOF clocks are synchronized with the plant process computer.
 - c. Instruct the CRDC to provide a chronology of major control room actions, including ONP and EOP procedures.
- ☐ 5. Record the names of the CRDCs on EOF Staffing Board.
- ☐ 6. Access OFIS per EPI-FAP15-006, "OFIS Instructions."

①

Section B: Subsequent and Recurring Actions

- ☐ 1. Direct actions of the other TIC, as necessary.
- ☐ 2. Monitor the Operations Net and provide input or request clarification, as necessary.
- ☐ 3. Review EPI-FAP06 for EAL initiating conditions and determine Fission Product Barrier Status and track possible paths to escalation.
- ☐ 4. Notify the DSEO and the ADEOF of potential changes to emergency classification or plant conditions which may affect PARs.

Section B: Subsequent and Recurring Actions

- ☐ 5. Provide DSEO and ADEOF with the following event updates:
 - Procedures in use (e.g. EOPs, AOPs, etc.)
 - Changing plant parameters
 - Fast-breaking events
 - Barrier Status (i.e. Barriers failed or potential for failure)

- ☐ 6. IF the ADEOF or SERO Managers request plant parameter data *not* available on OFIS, perform the following:
 - a. Record Description/Plant ID of requested data on EPI-FAP15-004, "Plant Parameter Data Requested/Provided."
 - b. Notify affected unit CRDC of the data requested and obtain data via telephone, fax machine, or manually (data screen entry).
 - c. Provide data to the individual who made the request.

- ☐ 7. IF OFIS is operable, maintain the Critical Parameters status board and inform the DSEO approximately every 15 minutes or as significant changes occur.

- ☐ 8. IF OFIS is inoperable, perform the following:
 - a. Obtain data verbally from the CRDC and record it on one of the following, as applicable:
 - EPI-FAP15-007, "Critical Parameter Data Sheet - MP1"
 - EPI-FAP15-008, "Critical Parameter Data Sheet - MP2"
 - EPI-FAP15-009, "Critical Parameter Data Sheet - MP3"
 - b. Maintain and update the Critical Parameters status board at 15 minute intervals.
 - c. Consult with personnel on the Operations Net and determine if additional data is required.
 - Obtain requested data from the CRDC and record on applicable Critical Parameter Data Sheet.
 - Provide the completed form to the requestor.
 - Update changing plant parameter data and provide data to requestor approximately every 15 minutes or until no longer requested.

Section B: Subsequent and Recurring Actions

- ☐ 9. Provide technical assistance to the following, as requested:
- DSEO
 - MOC
 - TA
 - MPI
 - Other SERO Managers
- ☐ 10. Maintain and update the Chronology of Key Events status board and Critical Parameters status board as significant events occur.
- ☐ 11. Provide recommendations for shift relief to the MOR, as requested.

Section C: Termination Actions

- ☐ 1. WHEN SERO termination is directed by the DSEO, perform the following:
- Terminate OFIS.
 - Record SERO termination in TIC Logbook.

Prepared by: _____

Signature

Print

Date

Docket Nos. 50-245

50-336

50-423

B18514

Attachment 12

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)

MP-26-EPI-FAP07, "Notifications and Communications"

Major Revision 1, Minor Revision 6

6/28/01
Approval Date

6/29/01
Effective Date

Document Action Request

SPG# 010905-101305

Initiated By: K. Burgess Date 9/17/01 Department: EPSD Ext.: 2490

Document No.: MP-26-EPI-FAP07 Rev. No.: 001 Minor Rev.: 06

Title: Notifications and Communications

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

AR 01005566-09

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☒ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☐ Non-Intent Change
(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supersede

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			✓ If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
50.54(g) <input checked="" type="checkbox"/>	K Burgess	K Burgess	9/18/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	
Environmental <input checked="" type="checkbox"/>	K. Burgess	K Burgess	9/18/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	
Cross Disc. <input checked="" type="checkbox"/>	G. Knight	G. Knight	9/18/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	OPS	✓
RCD <input checked="" type="checkbox"/>	K. Burgess	K Burgess	9/18/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	
Licensing Basis <input type="checkbox"/>	NA			<input type="checkbox"/>	<input type="checkbox"/>		
Independent <input checked="" type="checkbox"/>	T. Rigney	T. Rigney	9/18/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	

Intentionally Left Blank

1. ☒ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐

K Burgess 9/19/01
SQR Qualified Independent Reviewer / Date

Paul D. Smith
Process Owner

9/22/01
Responsible Individual

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign
Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 11/7/01

**Functional
Administrative
Procedure**



Millstone Station

Notifications and Communications

MP-26-EPI-FAP07

Rev. 001-06

Approval Date: 9/27/01

Effective Date: 11/7/01



Table of Contents

1. <u>PURPOSE</u>	3
1.1 Objective.....	3
1.2 Applicability	3
1.3 Supporting Documents	3
1.4 Discussion	3
2. <u>INSTRUCTIONS</u>	5
2.1 Nuclear Incident Report Form (IRF) Radiopager Notification	5
2.2 Callback Verification.....	8
2.3 NRC Notifications	9
2.4 Additional Notifications	9
2.5 Sending Additional IRF Messages	11
2.6 System Restoration and Administrative Actions.....	12
2.7 Backup and Remote Operation.....	14
2.8 ENRS Failure.....	15
2.9 ENS Failure	17
2.10 Switching Telephone Lines	18
2.11 Deactivating ERDS	20
3. <u>SUMMARY OF CHANGES</u>	21
 ATTACHMENTS AND FORMS	
Attachment 1 Definitions and Abbreviations.....	22
Attachment 2 Responsibilities.....	24
Attachment 3 Notification Locations	25
Attachment 4 Unit Event Backup Codes.....	26
Attachment 5 Notification and Callback Guidance.....	27
 MP-26-EPI-FAP07-001, "Nuclear Incident Report Form (IRF)"	
MP-26-EPI-FAP07-002, "NRC Notification Checklist"	
MP-26-EPI-FAP07-003, "NRC Event Notification Form"	

1. PURPOSE

1.1 Objective

Provide guidance to the Shift Technician, or other qualified ENRS operator, for performing prompt notifications of reportable events classified as NRC and State Posture Code emergency events.

1.2 Applicability

Conditions exist which have been assessed by the Shift Manager/DSEO and classified as an emergency.

Conditions have been stabilized and the DSEO is preparing to terminate the emergency and enter into Recovery.

1.3 Supporting Documents

EPI-FAP06, "Classification and PARs"

EPUG-08B, "Millstone Emergency Plan Resource Book"

1.4 Discussion

This procedure ensures timely completion of the following, in descending order of priority:

- Notification of the State of Connecticut Department of Environmental Protection (DEP)
- Notification of other offsite entities (i.e., Local, State)
- Notification of the NRC
- Performance of additional notifications (Information Technology, ANI, Corporate etc.)
- Performance of administrative actions

①

Reporting time limits for NRC and State Posture Code emergency events are as follows:

- Regulations require that notification to CT State DEP, Division of Radiation, and to the local officials shall be accomplished within 15 minutes of an emergency event classification (e.g., Unusual Event and above).
- NRC regulations require the licensee to notify the NRC immediately after notification of state and local agencies, but not later than one hour after declaration of an emergency classification.

In situations involving multiple events at different units, the event classification reported shall reflect the most severe event. For example, if Unit 2 is experiencing an Alert (Charlie-One) event and Unit 3 is experiencing a Site Area Emergency (Charlie-Two) event, the event shall be reported as a Site Area Emergency (Charlie-Two) event. The lesser event shall be reported in an update radiopager message. Both events shall be reported to the NRC via the ENS.

The IRF is processed with the "Additional Information" section being filled in and recorded.

If an IRF is to be released with the "Additional Information" (incident description) section entered and recorded, and the circumstances or conditions which caused the report have already been corrected, only one IRF is required. The following applies:

- The event is self terminating with the release of the initial IRF.
- The "A further report will not be given" block shall be checked.

For events that activate the SERO, the on-shift Unit 3 Shift Technician may be relieved of notification responsibilities by an on-call Shift Technician in the EOF. In this case, a formal turnover of notification responsibilities from the control room to the EOF is required.

Emergency notification responsibilities of the Unit 3 Shift Technician may be delegated to another qualified ENRS operator.

Definitions and abbreviations are contained in Attachment 1.

Responsibilities are contained in Attachment 2.

2. INSTRUCTIONS

2.1 Nuclear Incident Report Form (IRF) Radiopager Notification

2.1.1 Log onto the ENRS terminal.

2.1.2 Complete a written copy of EPI-FAP07-001, "Nuclear Incident Report Form (IRF)."

NOTE

1. Meteorological data is available from SPDS or OFIS.
2. If the release pathway is unknown, the Met Tower 142' elevation data should be used.
3. The CR-DSEO or the ADEOF should be consulted for the appropriate Met data for the release path.

2.1.3 Enter meteorological data as follows:

- IF data is available, verify the appropriate Met Tower level reading is being used and enter data in "Current Site Wind" and "Forecast Site Wind" sections.
- IF data is not available, enter NA in the "Current Site Wind" and "Forecast Site Wind" sections.

2.1.4 Obtain DSEO authorization signature on the written IRF.

2.1.5 Open "RapidReach Primary" folder and "RapidReach" icon.

2.1.6 At "RapidReach Login" screen, select user ID and enter the password.

2.1.7 Open "EasyView" icon.

2.1.8 At "EasyView Login" screen, select user ID and enter the password.

2.1.9 IF ENRS primary is not operable, Refer To Section 2.7 and perform backup or remote operation.

2.1.10 Enter IRF data, as follows:

- a. Open "IRF" form.
- b. Using the completed EPI-FAP07-001, enter the information into IRF template.
- c. Print IRF and verify information is correct.

2.1.11 Obtain DSEO initials on the IRF printout.

2.1.12 Save IRF as follows:

- a. Select "File" and "Print."

NOTE

Saving the IRF form to "Print-2-Image" attaches the fax to the radiopager message.

- b. Select "Print-2-Image."
- c. At the "Selection Configuration" box, select appropriate setup.
- d. At the "Select Message to Fax" screen, select "Root" tree.
- e. At the "Root" tree, select appropriate message (e.g., Emergency Call-Outs, etc.).
- f. Maximize "RapidReach" screen
- g. Select "microphone" icon ("Show Message Window").

5

2.1.13 Transmit IRF message as follows:

- a. At "Root" tree, select appropriate message.
- b. Listen to the "Alpha Pager Message" and verify information is correct (message may be recorded again, if necessary).
- c. Maximize "EasyView" screen and select appropriate scenario.
- d. Select the lightning bolt icon.
- e. Select "Set Common Message."
- f. At "Root" tree, select appropriate message (e.g., Emergency Call-Outs, etc.).



1. Failure to select the correct scenario (i.e., classification or group page) may result in unwarranted activation or the release of misinformation.
2. The scenario and message must be read and verified before selecting the "Start" button.

4

- g. Stop and verify scenario and message are accurate.
- h. At "Start of Scenario" screen, select "Start."

2.1.14 **IF** the wrong scenario has been chosen, perform the following:

- a. Immediately terminate callout.
- b. Notify the appropriate SM/DSEO of the incorrect message.

6

- c. Direct Security at SAS to transmit retraction to state and local responders and SERO using backup paging terminal.
- d. Provide Security with a retraction message such as "DISREGARD PREVIOUS EVENT MESSAGE. A NEW PAGER MESSAGE WILL FOLLOW."
- e. WHEN retraction message is received, Refer To step 2.1.13 and transmit corrected message.

NOTE

Recording the IRF audio message shall be completed immediately after transmitting the IRF message and prior to step 2.1.16.

2.1.15 Record IRF data, as follows :

- a. Maximize "RapidReach" screen.
- b. Select "microphone" icon ("Show Message Window").
- c. At "Root" tree, select "Informational Message."
- d. At "Audio Message" screen, select "microphone" icon.
- e. Record entire IRF.
- f. Verify recorded information is satisfactory and select "OK."

NOTE

Attachment 3, "Notification Locations," provides information on which individuals and agencies are notified.

2.1.16 Verify radiopager sent, as follows:

- a. Monitor the "RapidReach Overview" screen and select the most recent scenario number from call-out grid box (the top box) to verify appropriate groups or individuals have been paged.
- b. Verify that the page message was sent to the control room console pager.
- c. IF no responders call in within 5 minutes after release of the message, consider the transmission as failed and Refer To Section 2.8, "ENRS Failure."
- d. Monitor "EasyView" and "RapidReach" screens as positions call back acknowledging page.
- e. Refer To Section 2.4 and activate the ERDS link.
- f. Verify fax is received in respective control room or EOF, as applicable.
- g. At "Overview" screen, print "Groups-in-Call-Out" callback verification report.

- h. IF SERO is activated, fax initial CV report (SERO results) to the MOR.
- i. IF call-out is complete or a new call-out needs to be initiated, select the red traffic light in "EasyView" to deactivate the call-out process.

2.1.17 IF ENRS is not operable, Refer To Section 2.8, "ENRS Failure," and EPUG 08B, "Millstone Emergency Plan Resource Book," Section "Off-Site Town/Agencies," and manually fax notifications to state and local officials.

2.2 Callback Verification

NOTE

Attachment 3, "Notification and Callback Guidance," provides guidance for verification of required actions.

2.2.1 IF the following have not called in, attempt callback verification within approximately 15 minutes after event message has been transmitted:

- State of Connecticut DEP Dispatch
- State and local responders

NOTE

Callback verification via printed CV report can not be performed from a "client" server if the radiopager message was transmitted via "EasyView Remote." This information can be obtained from Building 475 server or EOF phone server only. (IT assistance required)

2.2.2 Print CV report (i.e., report by group) to document callback responses.

2.2.3 Refer To CV report and perform the following:

- a. Document non-responders.

NOTE

1. Only one attempt is required for a UE backup notification.
2. The group RADIOPAGER number for State/Local pagers is 860-332-0059.

①

- b. Refer to EPUG-08B and attempt one backup notification of non-responders.
- c. IF event is ALERT or higher and non-responders cannot be reached, perform the following:
 - 1) Contact State Police Barracks Dispatcher (Troop E)
 - 2) Request immediate assistance in notifying non-responders.
 - 3) Request police confirm response to the message.
- d. Perform backup notifications.

2.2.4 Print copy of SERO CV report only and fax to EOF.

2.2.5 Print the final ENRS CV report when initial and backup notifications have been completed.

2.3 NRC Notifications

NOTE

1. State of Connecticut posture codes, (e.g., Delta-One, etc.) shall not be used when notifying the NRC of reportable events.
2. It is good practice to notify the NRC of the next planned report, e.g., one hour.

2.3.1 Record applicable information for an event on EPI-FAP07-003, "NRC Event Notification Form."

2.3.2 Refer To and complete EPI-FAP07-002, "NRC Notification Checklist."

2.3.3 IF ENS is *not* operable, go to Section 2.9, "ENS Failure."

2.4 Additional Notifications

NOTE

ERDS activation is required for an Alert or higher classification.

2.4.1 Activating the Emergency Response Data System (ERDS)

- a. At plant process computer terminal for Unit 2:
 - 1) Locate the Unit 2 PPC TOP_MENU display.
 - 2) Select the SPDS button.
 - 3) Select the Initiate ERDS button to activate ERDS transmission.
 - 4) Select Yes to confirm activation.
- b. At plant process computer terminal for Unit 3:
 - 1) Select NSSS menu page 3 of 3.
 - 2) Select Function F11 Activate/Terminate ERDS.
 - 3) Select Function F1 to activate ERDS transmission.
 - 4) Select Function F12 to confirm activation.
- c. Verify ERDS activation as follows:
 - 1) At the Unit 2 or Unit 3 TOP_MENU display of an OFIS terminal, select OFIS menu button.
 - 2) Select ERDS Point List button.
 - 3) Verify "Data Transmission to the NRC ERDS" is "INITIATED."

NOTE

"ERDS Status" shows the current status of the modem connection with the NRC. By design, the NRC will refuse the first connection request. ERDS send software will automatically retry the connection until a connection is established. If the connection is lost during an ERDS session, the ERDS send software will try to reconnect. The NRC should accept the second connection request.

- 4) Verify "ERDS Status" is "Link Active."
- 5) IF "ERDS Status" has not changed to "Link Active" after 3 minutes, notify IT of an ERDS connection failure.

NOTE

The time of the last data transmission should update every 15 seconds, as long as the link is active.

- 6) WHEN a "Link Active" status is obtained, Verify "Time of Last Data Transmission to the NRC" has been updated.
 - d. Contact the NRC to verify ERDS data is being received.
- 2.4.2 Ensure American Nuclear Insurers (ANI) is notified.
- 2.4.3 IF an Unusual Event or higher, Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and notify the Richmond Control Center Security Specialist.

①

2.5 Sending Additional IRF Messages

NOTE

The following “scenario message” should be used if SERO is activated and additional messages are required, including the event termination message, because the SERO is not required to call in once activated.

“SERO ACTIVATED – SEND ADD’L MESSAGES”

This scenario was designed to page BOTH groups (State and Local Officials and SERO) but only requires state and local officials to call in.

2.5.1 IF any of the following conditions occur, Refer To step 2.1.2 and perform notifications:

- SERO is activated and additional messages are required. Select the “SERO Activated – Send Add’l Messages,” scenario.
- Update or reclassification notifications are directed.
- The emergency has been terminated and was not closed out in initial report.

2.5.2 IF all existing events have been terminated and callback verifications have been completed, perform the following:

- a. Refer To Section 2.6 and restore ENRS general default message.
- b. Perform ENRS log-off.

2.6 System Restoration and Administrative Actions

2.6.1 Ensure all CV reports are finished.

2.6.2 IF all existing events have been terminated and callback verifications are complete, restore general default as follows:

- a. Select "RapidReach."
- b. Select "microphone" icon. ("Show Message Window")
- c. At "Root" tree, select "Informational Message."
- d. At "Audio Message" screen, select "microphone" icon.
- e. Record the following message:

"There is no information presently available for Millstone Station."
- f. Verify recorded information is satisfactory and select "OK."
- g. From "Root" tree, select event message used ("Emergency Call-Outs," etc.).
- h. Select red minus button in fax box on lower right of screen.
- i. Select "Yes" to delete and observe "Same as alpha pager" in fax message box.
- j. Close the following:
 - 1) "RapidReach"
 - 2) "EasyView"
 - 3) "IRF" word document

2.6.3 Review IRFs and verify appropriate termination message has been issued.

2.6.4 Obtain original of the following documents for the applicable unit control room:

- EPI-FAP07-001, "Nuclear Incident Report Form (IRF)," and printout.
- EPI-FAP07-002, "NRC Notification Checklist," as applicable.
- EPI-FAP07-003, "NRC Event Notification Form."
- ENRS callback verification report printout (CV report).
- Any other completed attachments.

2.6.5 Send copies of the following documents to the Manager, Emergency Planning Services:

- EPI-FAP07-001, "Nuclear Incident Report Form (IRF)" and printout.
- EPI-FAP07-002, "NRC Notification Checklist," as applicable.
- EPI-FAP07-003, "NRC Event Notification Form"
- ENRS callback verification report printout (CV report)
- Any other completed attachments
- Condition Report (if applicable)
- Log entries, as applicable

2.7 Backup and Remote Operation

- 2.7.1 IF "RapidReach Primary" does not connect, open "RapidReach Backup."
- 2.7.2 IF "RapidReach Backup" connects, Refer To Section 2.10, "Switching Telephone Lines," and transfer the phones.
- 2.7.3 IF "RapidReach Backup" connects and phone lines transfer correctly, go to Section 2.1, and perform the same steps as for "RapidReach Primary" using "RapidReach Backup" and "EasyView Backup."

NOTE

If unable to connect to either the primary or backup via the LAN, "RapidReach" may not be used to fax or record the IRF into the "Informational Message." Faxes must then be sent via the SNET Faxworks. If time permits, it is preferable to use "EasyView Remote" to allow State and local officials and SERO to call in and provide a graphical display of the positions being filled.

- 2.7.4 IF "RapidReach Backup" using LAN does not connect (leaving the phone lines in primary), select the icon labeled "Modem to Primary Server."
- 2.7.5 IF the connection is made, select "EasyView Remote" from the "RapidReach Primary" folder and perform the following:
 - a. Select a message
 - b. Select a scenario
 - c. Select "Start"
 - d. Refer To Section 2.4 and activate the ERDS link.
- 2.7.6 IF "EasyView Remote Primary" does *not* connect, open "RapidReach Backup" folder and select the icon labeled "Backup to EOF."
- 2.7.7 IF the connection is made, open "EasyView Remote" from the "RapidReach Backup" folder and perform the following:
 - a. Refer To Section 2.10 and transfer the phones from primary to secondary server.
 - b. Select a message.
 - c. Select a scenario.
 - d. Select "Start."
 - e. Go to step 2.8.3, and distribute IRF via SNET Faxworks.
- 2.7.8 IF no connection is made, go to Section 2.8 and notify Security.

2.8 ENRS Failure

2.8.1 Notify SAS to transmit a text message to both State and local officials and SERO responders to include the following:

- [Applicable unit] [NRC Classification] [State Posture code] [Major EAL heading] [Minor EAL heading (code)] "Report to facility."
- Example: [MP3] [GE] [Alpha] [Barrier failure] [BG1] "Report to facility."

2.8.2 IF SAS is not able to assist, perform the following:

- a. Dial paging system using confidential group page codes for the State and Local Officials and the SERO.
- b. When prompted, enter the password.
- c. Refer To Attachment 4, "Unit Event Backup Codes," and enter numeric backup event code.

NOTE

1. This section is performed *only* when ENRS has failed or radiopager transmission was performed via "EasyView Remote."
2. A fax cover sheet is not required when distributing the IRF via SNET FaxWorks.

2.8.3 Distribute IRF via SNET FaxWorks as follows:

- a. IF SNET FaxWorks is not operable, Refer To EPUG 08B, "Offsite Towns/Agencies," and manually fax notification to State and local officials.
- b. Place completed IRF in telecopier feeder tray.
- c. Lift handset connected to fax machine, and enter SNET FaxWorks telephone number.
- d. When prompted for password, enter SNET Faxworks password followed by and asterisk (*).
- e. When prompted, enter "1" to send a fax.
- f. When prompted for choice of fax transmission schedule, enter "1" for immediate dispatch.
- g. When prompted for destination or distribution list number, enter "002" followed by an asterisk (*).

- h. When prompted for next destination, enter pound key (#) to indicate there are no more destinations.
- i. When a steady fax tone is heard, press the "Start" button on the telecopier.
- j. Hang up handset of fax machine.

2.8.4 Refer To Section 2.4 and activate the ERDS link.

②

2.8.5 Verify all required call-in radiopager holders have received the radiopager message and fax as follows:

- a. Document non-responders.

NOTE

1. Only one attempt is required for a UE backup notification.
2. The group RADIOPAGER number for State/Local pagers is 860-332-0059.

①

- b. Refer To EPUG-08B and attempt one backup notification of non-responders.
- c. IF event is ALERT or higher and non-responders cannot be reached, perform the following:
 - 1) Contact State Police Barracks Dispatcher (Troop E)
 - 2) Request immediate assistance in notifying non-responders.
 - 3) Request police confirm response to the message.
- d. Perform backup notifications.

2.8.6 Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and notify Information Technology of ENRS failure.

2.8.7 Refer To EPI-FAP07-002, "NRC Notification Checklist," and ensure NRC notifications have been performed.

2.8.8 Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and notify the Richmond Control Center Security Specialist.

①

2.9 ENS Failure

NOTE

1. This section is performed only when dedicated ENS lines have failed.
2. In an emergency, with loss of other communications, the state or local police may be contacted by radio and requested to place a call to the NRC.

2.9.1 IF ENS has failed, select one of the following methods, as applicable:

- Commercial telephone line
- Cellular telephone (station management or personal vehicle)
- Radio (state or local police to place call)

2.9.2 Obtain NRC Operations Center number from one of the following:

- Label on ENS telephone
- EPI-FAP07-002, "NRC Notification Checklist"
- EPUG 08B, "Millstone Emergency Plan Resource Book"
- Other listing or directory assistance (alternate number)

2.9.3 When NRC is contacted, provide the following information:

- a. ENS is not operable
- b. Information recorded in EPI-FAP07-003, "NRC Event Notification Form"
- c. IF event is being terminated via the report, notice of event termination.

2.9.4 Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and notify telecommunications personnel (not on-call) of ENS failure.

2.9.5 Log NRC communications.

2.10 Switching Telephone Lines

NOTE

If the ENRS primary phone server is down, a communication failure has occurred. Telephone lines will need to be switched to the secondary phone server.

2.10.1 Switching the Phone Server from Primary to Secondary

- a. Lift the dedicated ENRS handset.
- b. Press position “g” (blue button) labeled “Press for SERO Transfer.”
- c. Dial “2724.”
- d. Wait for confirmation tone (3 beeps).
- e. IF confirmation tone is *not* heard, go to step 2.10.1.a.

NOTE

The light will stay on to indicate the successful transfer of telephone lines.

- f. Hang up the handset and observe light on position “g” (blue button) illuminates, indicating transfer of SERO telephone lines.
- g. Lift the dedicated ENRS handset again.
- h. Press position “i” (red button) labeled, “Press for Transfer of State/Local to Back-up” and observe the following:
 - Light on position “i” (red button) will illuminate for a few seconds and then turn off.
 - Light on position “h” (yellow button) labeled, “Light ‘ON’ State/Local on Backup,” will illuminate and stay on, indicating a transfer of State/Local lines.
- i. Hang up the handset.
- j. IF either OR both lights fail to illuminate, go to step 2.10.1.h.

NOTE

If the ENRS phone server is on the secondary system, green lights will be illuminated on the telephone.

2.10.2 Restoring the Phone Server from Secondary to Primary

- a. Press position “g” (blue button) labeled “Press for SERO Transfer.”
- b. Observe that the light on position “g” (blue button) is not lit, indicating transfer of SERO lines.

2.10.3 Restoring the State/Local Lines to the Primary Server

- a. Lift the dedicated ENRS handset.
- b. Press position “j” (green button) labeled “Press to Restore State/Local to Primary” and observe the following:
 - Light on position “j” (green button) labeled “Press to Restore State/Local to Primary” is lit.

NOTE

Lights on position “h” and position “j” will go out after illumination.

- Light on position “h” (yellow button) labeled “Light ‘ON’ State/Local on Backup” is not lit.
- Light on position “j” (green button) labeled “Press to Restore State/Local to Primary” is not lit.

2.11 Deactivating ERDS

2.11.1 At plant process computer terminal for Unit 2:

- a. Locate the Unit 2 PPC TOP_MENU display.
- b. Select the SPDS button.
- c. Select the Terminate ERDS button to terminate ERDS transmission.
- d. Select Yes to confirm termination.

2.11.2 At plant process computer terminal for Unit 3:

- a. Select NSSS menu page 3 of 3.
- b. Select Function F11 Activate/Terminate ERDS.
- c. Select Function F2 to terminate ERDS transmission.
- d. Select Function F12 to confirm termination.

2.11.3 Verify ERDS Termination as follows:

- a. At the Unit 2 or Unit 3 TOP_MENU display of an OFIS terminal, select OFIS menu button.
- b. Select ERDS Point List button.
- c. Verify "Data Transmission to the NRC ERDS" is "TERMINATED."
- d. Verify "ERDS Status" is "ERDS Link Not Connected."
- e. Verify "Time of Last Data Transmission to the NRC" is no longer updating.

3. SUMMARY OF CHANGES

Revision 001-06

- 3.1 Added step 2.1.14 to describe actions if the wrong scenario has been chosen.
(AR 01005566-09)

Revision 001-05

- 3.1 Added steps f and g to step 2.1.12 to clarify how to prepare the IRF for transmittal.

Revision 001-04

- 3.2 Moved Caution Box and steps g and h from step 2.1.14 to step 2.1.13.

Revision 001-03

- 3.3 Reversed the order of step 2.1.13 and 2.1.14.
3.4 Added Note Box preceding step 2.1.14 to record the IRF voice message immediately after transmitting the IRF.
3.5 Added Note Box after Section 2.4 for when ERDS is required to be activated.

Revision 001-02

- 3.6 Added step 2.1.15.e to activate the Emergency Response Data System (ERDS) link.
3.7 Added step 2.7.5.d to activate the ERDS link.
3.8 Added step 2.8.4 to activate the ERDS link if there is an ENRS failure.

Revision 001-01

- 3.9 Added notification to Corporate in step 1.4.
3.10 Updated group radiopager numbers for state and local pagers in step 2.2.3 and step 2.8.4.
3.11 Added step 2.4.3 to notify Richmond Control Center Security Specialist if an Unusual Event or higher.
3.12 Added step 2.8.7 to notify the Richmond Control Center Security Specialist.
3.13 Deleted the reference to the trunk line to the Corporate exchange in step 2.9.1.
3.14 Added Richmond Control Center Security to notification locations in Attachment 3.

Attachment 1

Definitions and Abbreviations

(Sheet 1 of 2)

Definitions

Deactivate - To place a system, component, or organization in an inactive condition.

Incident Description - "Additional Information" section of the Incident Report Form (IRF) providing a simple description of the event.

Immediate Notification - Notification to the NRC of emergency, not to exceed 60 minutes of state verification.

Initial Report - The first notification to the NRC, State and Local Officials and Agencies, and applicable personnel that reports an NRC classification and State Posture Code emergency event.

Lead Unit - The unit which assumes classification responsibilities for reportable events. The lead unit may be any of the following:

- In unit specific events, the affected unit (For a Unit 1 event, Unit 2 is the lead unit until the DSEO and ADTS arrive).
- For non-unit specific events, (i.e., station security, hurricane, earthquake, fitness for duty, etc.) Unit 3 is the lead unit, unless otherwise designated.
- In situations involving multiple events, the unit experiencing the most severe event has the lead.
- For non-unit specific events (i.e., hurricane, earthquake, etc.), Unit 3 is the lead unit.
- A non-affected unit may be requested to assume the lead by the affected unit (e.g., loss of control room habitability).

Notification Time - The time at which the IRF message is released (reported on).

Prompt Notification - The official notification of State and Local Officials and Agencies is within 15 minutes following initial classification; official notification of the NRC is as soon as possible, but within 60 minutes of State notification via the ENS; and for reclassification of an NRC and State Posture Code emergency event. [State 22a-135-1]

Reclassification Report - A prompt notification, subsequent to the initial report, to State and Local Officials and Agencies, the NRC, and applicable personnel that reports an escalation or de-escalation of event classification relative to the previous report.

Attachment 1

Definitions and Abbreviations

(Sheet 2 of 2)

Termination Report - The final notification to State and Local Officials and Agencies, the NRC, and applicable personnel that reports termination of the event. For Unusual Event (Delta-Two) or lower events, the initial report may also serve as the termination report if the event has been corrected in time for the initial report or has self-terminated. The "Additional Information" section shall be completed in these instances with a termination message.

Update Report - A notification, subsequent to the initial report, to State and Local Officials and Agencies, the NRC, and applicable personnel, that reports additional information on the event, but does not escalate or de-escalate classification of the event. The Update Report is issued approximately 60 minutes after the Initial or Reclassification Report.

Abbreviations

ADEOF - Assistant Director Emergency Operations Facility

CV - Callback Verification

SM - Shift Manager

UE - Unusual Event

Attachment 2 Responsibilities

(Sheet 1 of 1)

1. The CR-DSEO is responsible for directing the Shift Technician (ST) to complete notifications and approving Incident Report Forms (IRFs) until relieved by the DSEO.
2. The ST is responsible for completing off-site notifications.
3. After the EOF has been activated, the DSEO is responsible for approving completed IRFs; the Manager of Communications (MOC) is responsible for NRC communications; and the Assistant Director of Emergency Operations Facility (ADEOF) is responsible for directing the on-call ST to update and terminate off-site notifications.

Attachment 3 Notification Locations

(Sheet 1 of 1)

Scenario: Unusual Event

Who is Paged:	SERO State and Local Officials (all)
Who is Faxed:	State and Local Officials (all) Unit 2 & 3 Control Rooms Richmond Control Center Security
Who is Called (automatic):	NNM, MRDA, MPI, all Unit ADTSs New London, Ledyard
Who Should Call-In:	14 required S&L Officials NNM, MRDA, MPI, all Unit ADTSs

1

Scenario: Alert, Site Area Emergency, and General Emergency

Who is Paged:	SERO State and Local Officials (all)
Who is Faxed:	State and Local Officials (all) Unit 2 & 3 Control Room Richmond Control Center Security
Who is Called (automatic):	New London, Ledyard SERO (after 15 minutes)
Who Should Call-In:	14 required State and Local Officials SERO (all)

1

Attachment 4

Unit Event Backup Codes

(Sheet 1 of 1)

NOTE

If a Unit Event Backup Code notification (e.g., ID 101, 201, 301) is received, ENRS has failed.

Personnel on-call, or subject to call must immediately report to their emergency response facility for an Alert or higher classification. Table 1 indicates the event and unit involved for each designated code. For an Unusual Event, no call-in is required, however, personnel should standing by for further information.

Table 1: Unit Event Backup Codes

Event	Unit 1	Unit 2	Unit 3
Unusual Event	101	201	301
Alert	102	202	302
Site Area Emergency	N/A	203	303
General Emergency	N/A	303	403
Drill-Come In	777	777	777
Drill-Call In	888	888	888

Attachment 5 Notification and Callback Guidance

(Sheet 1 of 1)

ACTION (✓ = Required)	CLASSIFICATION			
	UE (Delta-1, 2)	ALERT (Charlie 1)	SAE (Charlie 2)	GE (Bravo) (Alpha)
<u>Nuclear IRF:</u>				
• Enter current meteorological data	✓	✓	✓	✓
• Enter "Additional Information" in first message	(a)			
• Enter "Additional Information" in update	✓	✓	✓	✓
• Issue termination in first message	✓(a)			
• Issue termination in update message	✓	✓	✓	✓
<u>CALLBACK/BACKUP NOTIFICATIONS</u>				
• Radiopager (EPI-07-03)	✓	✓	✓	✓
• REQUEST State Police call non-responding towns (EPI-07-03)	✓	✓	✓	✓
<u>OTHER:</u>				
• ENS notification to NRC (b)	✓	✓	✓	✓
• NRC Resident notification	✓	✓	✓	✓

NOTES:

- a. An Unusual Event (Delta-One or Delta-Two) may be terminated in the initial report if additional information has been reported.
- b. Due to notification to State of CT DEP.

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 13

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Procedures Implementing (EPI) Functional Administrative Procedure (FAP)
MP-26-EPI-FAP10, "Dose Assessment"
Major Revision 1, Minor Revision 1

8/22/01
Approval Date

8/23/01
Effective Date

Document Action Request

SPG#

010129-103451

Initiated By: Tom Gilbert Date 10/10/01 Department: EPSD Ext.: 3465

Document No.: MP-26-EPI-FAP10 Rev. No.: 001 Minor Rev.: 01

Title: Dose Assessment

Reason for Request/Action (attach commitments, CRs, ARs, OEs etc)

Remove step on accessing OFIS via the mainframe.

AR 01005048-04

Continued ☐

Select one (See MP-05-DC-SAP01 sect 2.3 to determine type of change)

☐ Intent Change (SQR Independent, RCD, Env Screen Required)
Other reviews may be required. See MP-05-DC-FAP 01.1 att 3

☐ Edit Corr.:

☒ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

Plant Mgmt Staff Member - Approval

TPC Interim Approval

(1) Plant Mgmt Staff Member Print/Sign/Date

(2) SM/SRO/CFH Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
Environ Screen <input checked="" type="checkbox"/>	Tom Gilbert	<i>Tom Gilbert</i>	10/11/01	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
RCD <input checked="" type="checkbox"/>	Tom Gilbert	<i>Tom Gilbert</i>	10/11/01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EPSD	
SD-SYA <input checked="" type="checkbox"/>	Tom Gilbert	<i>Tom Gilbert</i>	10/10/01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EPSD	
Independent <input checked="" type="checkbox"/>	Tom RIBNEY	<i>Tom RIBNEY</i>	10/16/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	

An NRRL Update Required ☐ YES

1. ☐ SQR Program Final Review and Approval

Approval ☐ Disapproval ☐

Tom RIBNEY / 10-16-01
SQR Qualified/Independent Reviewer / Date

Process Owner

Responsible Individual

10/17/01

Approval Date

2. ☐ SORC ☐ RI/PO Final Review and Approval

Process Owner / Responsible Individual Sign

Meeting No.: _____

SORC Approval Signature

Approval Date

Effective Date: 10/19/01

**Functional
Administrative
Procedure**



Millstone Station

**Dose Assessment
MP-26-EPI-FAP10
Rev. 001-01**

Approval Date: 10/17/01

Effective Date: 10/19/01



TABLE OF CONTENTS

1. <u>PURPOSE</u>	3
1.1 Objective.....	3
1.2 Applicability	3
1.3 Documents	3
1.4 Discussion	3
2. <u>INSTRUCTIONS</u>	6
2.1 Selecting and Initiating Dose Calculations.....	6
2.2 Control Room OFIS Access for IDA Dose Calculations	7
2.3 Control Room IDA Dose Calculations.....	9
2.4 EOF IDA Dose Calculations	11
2.5 MIDAS Dose Calculations	13
2.6 Calculating Thyroid CDE From a Field Air Sample	19
3. <u>SUMMARY OF CHANGES</u>	20

ATTACHMENTS AND FORMS

Attachment 1, "Definitions and Abbreviations"	21
Attachment 2, "Responsibilities"	22
Attachment 3, "Data Sources".....	23
Attachment 4, "Reference Information"	27

MP-26-EPI-FAP10-001, "IDA - Data Input Information"

MP-26-EPI-FAP10-002, "MIDAS - Data Input Information"

MP-26-EPI-FAP10-003, "Doses for Protective Action Recommendation"

MP-26-EPI-FAP10-004, "Thyroid CDE Calculation Based on Field Air Sample Worksheet"

MP-26-EPI-FAP10-005, "Unit 1 Dose Calculation for Fuel Handling Accident"

1. PURPOSE

1.1 Objective

Provide methods for calculating dose equivalents around the Millstone Nuclear Power Station for actual or potential airborne releases to use in assessing radiological event classifications and dose based general public protective action recommendations.

1.2 Applicability

An emergency has been declared.

Events require the projection of off-site doses due to an actual or potential release of radioactive materials near or beyond the site boundary.

1.3 Documents

1.3.1 EPUG 07, "Accident Dose Assessment Model (ADAM) User's Guide"

1.4 Discussion

Dose assessment requires an understanding of the purpose for the analysis (e.g., off-site protective actions), knowledge of the physical situation (i.e., release point), knowledge of the available release rate, and dose rate calculational models, including their limitations and personnel requirements and a validation by comparison to field measurements.

Radiological emergency classification and dose based protective action recommendations are based on the TEDE and the thyroid CDE. Potential exposure pathways within this procedure include:

- External gamma dose (DDE) from noble gases in the plume
- External gamma dose (DDE) from ground shine from deposited radioactive material
- CEDE from inhalation of plume activity

Two computer programs can be used within this procedure, MIDAS (Meteorological Information and Dose Assessment System) and IDA (Initial Dose Assessment).

MIDAS

All MIDAS accident calculations (TEDE, CDE, EDE, etc.) are performed in accordance with EPA 400 and NRC guidance. An unlimited number of fixed field monitoring points can be displayed on MIDAS maps. MIDAS can accommodate up to 10 design basis accident scenarios for each unit. The MIDAS roadmap is centered on the site stack and contains features such as the EPZ or IPZ towns, roads, railroads, bodies of water, and field monitoring points. MIDAS accident reports contain site specific protective action recommendations.

The MIDAS software can handle up to four release points per unit. Each release point is calculated separately and merged together spatially on a grid. The output reports are then plotted and printed from the gridded results. Release points can have multiple sources and are distinguished only by physical features that affect dispersion. The MIDAS software

performs range checking on all data and numeric entries. The input ranges are in user friendly site specific files. The MIDAS software also has a user friendly mouse screen input. The user selects from large boxes that are easy to read and understand. The MIDAS accident software is set up so that the user is required to make a minimum of entries. Each menu has a default duration and monitor flow (if required). In most cases, other than automatic runs, the user has the option to change these values before proceeding with the run. The MIDAS accident software has many methods of source term entry. The data can be automatic, manually entered, default values, or preplanned scenario data. The scenario data are typically used for drills. The MIDAS software can calculate dose and release rates down to 1.0 E-17 and has the capability to back calculate from field data. Once the release rate is established, based on the location of the field monitoring reading, the normal variable trajectory dose calculations are made. The MIDAS software takes into account the affect of daughter in-growth.

The MIDAS software can be run from each PC workstation connected to the central server where the real time meteorological and effluent data will be stored. All software changes under system manager control will be made on the central server and sent to each PC workstation. The accident model can be run using manually entered data as a stand-alone computer calculation if data are not available from the central server. MIDAS accepts and displays data only in English units.

MIDAS utilizes both dry and wet deposition depending on existing weather conditions. Different deposition velocities and rainout rates are used depending on the precipitation rate.

All MIDAS emergency dose calculations for plume and ingestion pathway are made on a polar fine grid with 64 direction sectors by 56 downwind distances typically out to 50 miles. This distance and detail of the grid is under user control in a site specific edit. The grid approach allows plume tracking to follow changes in weather conditions.

The age of the fuel for fuel handling accidents can be taken into account through the design basis accidents. Different mixes can be entered for the various fuel ages required.

All MIDAS reports are available in tabular format. In most cases, reports are also available as color plots. The graphical data are always plotted on site specific maps with contours depicting various projected dose or concentration levels. All MIDAS plots have "point of interest" capability. This allows the user to select any point on the map and immediately display numerical text giving dose or dose rate information. There is no limit to the number of points that can be selected. The wind speed is adjusted up or down to the actual release height using the Power Law. Before all calculations are made, the user has the opportunity to check both the meteorological and radiological data to be used for each release point calculation. The MIDAS software has editors for both meteorological and radiological data.

The following methods can be used to perform dose assessment using MIDAS:

- **What If** - Provides an integrated dose based on an assumed future release. Typically done in anticipation of a barrier failure to assist in classification and to project dose based PARs for comparison with plant based PARs.
- **Real Time** - Based on releases in progress in order to project radiological conditions and validate the adequacy of the current classification level and PARs.
- **Normalized** - Based on an assumed release rate of noble gas and iodine or monitor reading. Normalized dose calculations could be run with near-term or current forecast meteorological data and anticipated release points, etc. The results are used to establish ratios with field data should releases occur. The ratio can then be used to estimate the release rate for noble gas or iodines.

IDA

IDA, developed in-house, is written to be user friendly. IDA estimates plume centerline TEDE, thyroid CDE, CEDE, plume, and ground DDE values. The results provided by the program comply to EPA-400 methodology and represent an "estimate" of off-site dose equivalents that would result due to real time user inputs (i.e., met data and monitor data) as well as specified accident conditions (i.e., filtered release, sprays operating, fuel degradation, accident type, and decontamination factors).

IDA is a database program based on results obtained from the NRC's RASCAL code, version 2.1. RASCAL was run for multiple accident and meteorological conditions and the results were placed in a Microsoft Access data file. The RASCAL generated results provide all aspects of the resulting dose assessment. The site specific inputs that determine the accident, determine the appropriate RASCAL results to use. The noble gas source term is calculated using defined monitor conversion methods, or can be input by the user. Assumptions for various release pathways were incorporated into IDA to determine eventual release height of the resulting plume.

2. INSTRUCTIONS

2.1 **Selecting and Initiating Dose Calculations**

2.1.1 IF in the EOF, perform dose assessment as follows:

- a. Ensure the Meteorological Assistant refers to EPI-FAP04-010, "Meteorological Assistant," Table 1, and determines if fumigation potential exists.
- b. IF the release is from the site stack AND fumigation potential exists, run projections using ground release and an "E" stability class until fumigation conditions cease to exist.

NOTE

Attachment 4, "Reference Information," is available, as required, to perform dose calculations.

2.1.2 Select the appropriate dose assessment method from one of the following:

- IF a Unit 1 event, Go To EPI-FAP10-005, "Unit 1 Dose Calculation for Fuel Handling Accident."
- IF performing dose calculations from the Control Room using IDA, Go To Section 2.2.
- IF performing dose calculations from the EOF using IDA, Go To Section 2.4.
- IF performing dose calculations using MIDAS, Go To Section 2.5.
- IF calculating thyroid CDE from a field air sample, Go To Section 2.6

2.2 Control Room OFIS Access for IDA Dose Calculations

NOTE

If a monitored and unmonitored release are occurring simultaneously, only the field monitoring data is used to calculate dose.

2.2.1 Refer To EPI-FAP10-001, "IDA - Data Input Information" and obtain information for Part 1 and Part 3, Column A of the section from the CR-DSEO or Designee.

2.2.2 IF accessing the OFIS program through a personal computer, perform the following:

- a. Open the "OFIS" icon.
- b. Select "Connect to Millstone LAN" from the "Millstone OFIS Connection Menu."
- c. Select "MP3 OFIS" or "MP2 OFIS" from the "Millstone Station PPC Top Menu," as applicable.
- d. Select "Meteorological (A11)" from the "MP3 OFIS" or "MP2 OFIS" menu, as applicable.
- e. IF connection is *not* successful, connect to the "MP3 PPC" or "MP2 PPC," as follows:
 - 1) Open the "OFIS" icon.
 - 2) Select "Connect to MP3 PPC or MP2 PPC" from the "Millstone OFIS Connection Menu," as applicable.
 - 3) Select "OFIS" from the "MP3 PPC" or "MP2 PPC Top Menu," as applicable.
 - 4) Select "Meteorological (A11)" from the "MP3 OFIS" or "MP2 OFIS" menu," as applicable.
- f. Refer To and complete EPI-FAP10-001, "IDA - Data Input Information" Part 2 (Meteorology).

①

NOTE

The CR-DSEO is the source of data if OFIS is not available or functioning. To ensure OFIS is current, the time and date should be checked.

- g. IF meteorological data is *not* available on OFIS, request the CR-DSEO or Designee provide data from an alternate source and press the "Page Up" (↑) arrow.

- h. Enter one of the following commands into OFIS, as applicable, to obtain monitor and flow parameters and record in EPI-FAP-10-001, Part 3 :
- IF Unit 3, select "Radioactivity (A10)."
 - IF Unit 2, select the top level display icon and perform the following:
 - 1) Select "MP2 OFIS."
 - 2) Select "Radioactivity (A10)."
- i. IF designated OFIS item is *not* available, perform the following:
- 1) Refer To Attachment 3, "Data Sources," and select an alternate source.
 - 2) Consult CR-DSEO or TIC on method to obtain data.
- j. Close the "R*TIME Data Viewer" window.
- k. Close the Millstone "OFIS Connection Menu" window.

2.3 Control Room IDA Dose Calculations

NOTE

A back-up computer is located in the TSC if the Control Room PC is not available.

2.3.1 Select IDA icon from the designated Control Room PC.

2.3.2 Refer To EPI-FAP10-001, "IDA - Data Input Information," Part 1, and enter the following on the "Accident Description" screen:

- Unit affected
- Accident type
- Fuel damage state
- IF applicable, containment sprays "YES" (on) or "NO" (off)

NOTE

1. If reactor is still critical, the reactor shutdown date and time should be left blank.
2. If a fuel drop accident, most recent refueling date and time must be estimated by the CR-DSEO and entered.

- Current (now) and reactor shutdown date and time
- Release duration (2 hour default unless instructed otherwise by the CR-DSEO)

2.3.3 Select "Next."

2.3.4 Refer To EPI-FAP10-001, "IDA - Data Input Information," Part 2, and enter all of the following on the "Meteorology" screen:

- Wind speeds from the 033', 142', and 374' elevations
- Wind directions from the 033', 142', and 374' elevations
- Delta temperatures from the 142' and 374' elevations

NOTE

1. If the unmonitored ground release pathway is selected, no other release pathway can be selected.
2. IDA can accept up to two NON GROUND release pathways.
3. If multiple NON GROUND release pathways are chosen, only the two LOWEST elevation pathways are entered.

2.3.5 Select "Next."

2.3.6 Refer To EPI-FAP10-001, "IDA - Data Input Information," Part 3, and enter the following on the "Release Pathways" screen:

- Active release pathways
- Filters operating, if applicable
- Number of safeties releasing, if applicable
- Flow rates using default values or OFIS

2.3.7 Select "Next."

NOTE

Plant monitor data is zeroed if unmonitored field team data is entered.

2.3.8 Refer To EPI-FAP10-001, "IDA - Data Input Information," Part 3, and enter the following on the "Monitor" screen:

- Applicable radiation monitor readings
- Applicable field team reading (If unmonitored release)

2.3.9 Select "Finish."

2.3.10 Press "Printer" icon and select "All."

2.3.11 Press "OK" to print output.

2.3.12 IF printer is *not* available, Refer To EPI-FAP10-003, "Doses for Protective Action Recommendation," and manually record data.

2.3.13 Attach EPI-FAP10-001, "IDA - Data Input Information," to printed output or to EPI-FAP10-003, "Doses for Protective Action Recommendation."

2.3.14 Refer To EPI-FAP10-001, "IDA - Data Input Information," and perform verification of input data from Output Summary.

2.3.15 Submit results to the CR-DSEO.

2.3.16 IF warranted by changing conditions, repeat Sections 2.3 and notify CR-DSEO of changes.

2.4 EOF IDA Dose Calculations

2.4.1 Select the following from the designated EOF PC:

- a. IDA icon
- b. "OPTION"
- c. "EXTENDED"

2.4.2 Enter the following information on the "Accident Description" screen:

- Affected unit
- Accident type
- Fuel damage state
- If applicable, containment sprays "YES" (on) or "NO" (off)

NOTE

If the reactor is still critical, leave the reactor shutdown date and time as a blank.

- Current (now) and reactor shutdown date and time
- Release duration (2 hour default unless instructed otherwise by the MRDA)

2.4.3 Select "Next."

2.4.4 Enter the following on the "Meteorology" screen:

- Wind Speeds from the 033', 142', and 374' elevations in metric units
- Wind directions from the 033', 142', and 374' elevations
- Delta temperatures from the 142', and 374' elevations in metric units

2.4.5 Select "Next."

NOTE

1. If the unmonitored ground release pathway is chosen, no other release pathway can be selected.
2. IDA can accept up to two non-ground release paths.
3. If multiple non-ground release pathways are chosen, only the two lowest elevation pathways shall be entered.

2.4.6 Enter the following on the "Release Pathways" screen:

- Release Pathways

- Filters operating (if applicable)
- Number of safeties releasing (if applicable)
- Flow rates using default values or OFIS

2.4.7 Select "Next."

NOTE

1. Plant monitor data is zeroed if unmonitored field team data is entered. If field team data is entered first, the code will not allow monitor data input.
2. Iodine release rates are inversely proportional to DF. If iodine release rates need to be reduced by a factor of 100, the DF must be increased by a factor of 100.

2.4.8 Enter the following on the "Monitor" screen:

- Applicable radiation monitor readings
- Applicable field team reading (if unmonitored release)
- Applicable noble gas release rate (if available)
- Applicable DF based on field team comparisons to calculated values

2.4.9 Press "Enter" and calculate Source Term Ci/sec.

2.4.10 Select "Finish" and calculate TEDE and Thyroid CDE.

2.4.11 Print the report.

2.4.12 Review the results and verify the inputs to the calculations prior to releasing data.

2.4.13 IF performed by the RAE, submit results to the MRDA.

2.5 MIDAS Dose Calculations

2.5.1 Refer To and complete the following Sections as appropriate:

- a. IF performing a projection using manual entry of radiation monitor data, EPI-FAP10-002 Section A, "Manual Entry of Radiation Monitor Data."
- b. IF performing a "What-If" projection for a LOCA in containment, EPI-FAP10-002 Section B, "What-If Based Upon LOCA in Containment."
- c. IF performing a back calculation based on field data, EPI-FAP10-002 Section C, "Back Calculation Based Upon Field Monitoring."
- d. IF MIDAS is *not* available, Go To step 2.5.46.

2.5.2 Select the "MIDAS" icon.

2.5.3 Ensure the site selection is set to "Millstone."

2.5.4 Select the appropriate affected unit.

2.5.5 Set "Accident Run Menu Selection" to correspond to the applicable data sheet section.

2.5.6 Select "OK."

2.5.7 Ensure the following:

- a. Data source is set to "Manual Entry" on the spreadsheet.
- b. Appropriate release points have check marks.
- c. "Exit Flow to Environment" is correct for the projected release point.
- d. "Initial Display Radius" is adequate (typically set to 13 miles).

2.5.8 Select the "Next" down arrow.

2.5.9 Ensure the Dose Calculation Mode is set to "Projected PAG."

NOTE

Projection times are integrated duration (stay) times starting from the current time. The plume transit time must be considered as well as the evacuation time estimates to ensure the projection time will encompass the entire dose.

2.5.10 Ensure the "Start of Exposure" is appropriate.

2.5.11 Ensure the "Exposure Times" are set to "0.25," "2," "6," and "12."

2.5.12 Select the "Next" down arrow.

2.5.13 Ensure the "Release Option" is set to mode from the applicable section.

2.5.14 Select "Confirm."

2.5.15 IF the calculation mode is "Manual Radiation Monitor Mode," perform the following:

- a. Select "New" on the spreadsheet control menu.
- b. Select "OK" on the warning dialog box.

NOTE

All required meteorological data must be entered on the blue highlighted time line.

- c. Enter met data on the time step for the beginning of the release.
- d. Select "OK" at the bottom of the met spreadsheet.



C A U T I O N



Only one monitor per release point (i.e., stack low or stack high range monitor) shall be entered.

- e. Enter the applicable monitor/flow data on the same time step as in "Met Data."
- f. Select "OK" at the bottom of the Met and Vent Flow spreadsheet.
- g. Select "Event Tree" at the bottom of the page.
- h. Using the pull down boxes, select the type of accident and associated conditions for the same time step as in the Met and Vent Flow spreadsheets.
- i. Select "OK."
- j. Ensure the "Event Tree" is appropriate.
- k. Select the "Next" down arrow.
- l. Set "Data and Time" of trip by using one of the following methods:
 - Select by clicking in the associated time window using the thumb wheels.
 - Select "At Current Time" and manually adjust, as necessary.



2.5.16 IF the calculation mode is "What If Based Upon LOCA in Containment," perform the following:

- a. Ensure "Data Source" is set to Manual Entry on the spreadsheet.
- b. Select "OK."
- c. Complete the "Event Tree" by using the pull down boxes to set the type of accident and associated conditions.

- d. Enter containment leak rate as a percent as shown in Table 1



Table 1 Design Basis Leak Rate	
Unit	%/Day
MP2	0.5
MP3	0.3

- e. Select either day or hour, as appropriate for the selected leak rate.
- f. Select "OK."
- g. Select "New" on the spreadsheet control menu.
- h. Select "OK" on the warning dialog box.

 **CAUTION** 

All required meteorological data must be entered on the blue highlighted time line.

- i. Select "Met Data" on the time step for the beginning of the release.
- j. Select "OK" at the bottom of the met spreadsheet.

 **CAUTION** 

Only one monitor per release point shall be entered. The lower of the two containment monitors must be chosen. If it is not already chosen, only one release elevation must be selected.

- k. Enter the applicable containment monitor reading.
- l. Select the "Next" down arrow.

2.5.17 IF the calculation mode is "Back Calculation from Field Data," perform the following:

- a. Select the appropriate release height (ground or elevated).
- b. Enter closed window field monitoring reading near the plume centerline in mR/hr.
- c. Enter the distance from the release point in miles.
- d. Select "OK."
- e. Complete the "Event Tree" by using the pull down boxes to select the type of accident and associated conditions.
- f. Select "OK."
- g. Select "New" on the spreadsheet control menu.



CAUTION



All required meteorological data must be entered on the blue highlighted time line.

- h. Enter met data on the time step for the beginning of the release.
- i. Select "OK" at the bottom of the met spreadsheet.
- j. Select the "Next" down arrow.



CAUTION



"Start of Release" defaults to the time step of input for the first non-zero rad monitoring reading.

2.5.18 IF known, set "Remaining Duration."

2.5.19 IF "Remaining Duration" is *not* known, set 2 hours as the default.

2.5.20 Select "Start Calc."

2.5.21 Upon completion of calculations, ensure the projected time is set to 12 hours.

2.5.22 Under "Special Reports" select "State."

2.5.23 Select "Confirm."

2.5.24 Select "Printer" icon.

2.5.25 Select "OK."

2.5.26 IF acceptable results are obtained, submit the "State Report" to the MRDA.

2.5.27 Select "X" in the upper right corner to close the "State Report" window.

2.5.28 Under "Special Reports" select "Met/Rad Summary."

2.5.29 Select "Confirm."

2.5.30 Ensure time is set to current time step.

2.5.31 Select "Print" icon.

2.5.32 Select "OK."

2.5.33 Select "X" in upper right corner to close "Met/Rad Summary" window.

2.5.34 Ensure the following options are selected at the bottom of the screen:

- TEDE
- Integrated Dose
- Graphic

2.5.35 Select "Confirm."

2.5.36 Select the "Printer" icon.

2.5.37 Ensure the following options are selected at the bottom of the screen:

- CDE Thyroid
- Integrated Dose
- Graphic

2.5.38 Select "Confirm."

2.5.39 Select the "Printer" icon.

2.5.40 Ensure the following options are selected at the bottom of the screen:

- Special Report
- RMP

2.5.41 Select "Confirm."

2.5.42 Select the "Printer" icon.

2.5.43 Document the run by placing copies of the following in the Computer Run notebook:

- State Report
- Special Report/Rad Met Summary
- RMP
- TEDE Integrated 12 hour Graphic
- CDE Thyroid Integrated 12 hour Graphic

2.5.44 Select "End Run" to complete.

2.5.45 Select appropriate option to perform the following:

- a. Run the next time step
- b. Exit the program

NOTE

EPUG 07, "Accident Dose Assessment Model (ADAM) User's Guide," provides information on ADAM operation.

2.5.46 Refer To Section 2.4, "EOF IDA Dose Calculations," and perform IDA calculations.

2.5.47 Using IDA release rate results, perform ADAM run to determine DDE dose rates and iodine concentrations.

2.5.48 Verify input information on ADAM input summary sheet and initial sheet.

2.5.49 Ensure RDAT member performs an independent review of ADAM inputs.

2.5.50 Compare ADAM results to field team measurements and discuss results with the MRDA.

2.5.51 IF IDA release rates need to be revised, Go To step 2.5.46.

2.6 Calculating Thyroid CDE From a Field Air Sample

2.6.1 Obtain air sample data from the FTDC or Designee.

2.6.2 Refer To EPI-FAP10-004, "Thyroid CDE Calculation Based on Field Air Sample Worksheet," and record the following:

- Location
- Time of sample
- Field air sample results (ccpm)

2.6.3 Determine the appropriate calculation method based on time since reactor shutdown and the I-131 Dose Equivalent Concentration.

2.6.4 IF the air sample was analyzed by gamma analysis, determine I-131 DEQ.

2.6.5 Calculate thyroid CDE for 1 hour of inhalation.

2.6.6 Notify the MRDA of the results.

3. SUMMARY OF CHANGES

3.1 Revision 001

- 3.1.1 Incorporated previously approved change 1 and change 2 to revision 000.
- 3.1.2 Modified step 2.1.1.b by adding a condition to clarify that a release must be from the site stack.
- 3.1.3 Added information to step 2.1.2 to clarify that the user must go to Section 2.6 if calculating thyroid CDE from field air samples.
- 3.1.4 Added information to step 2.4.4 to clarify that wind speeds and delta temperatures must be entered on the Meteorology screen in metric units.
- 3.1.5 Added Table 1 to step 2.5.16 to identify the design basis leak rate for containment.
- 3.1.6 Added EBFS, SLCRS, and WRGM to Attachment 1, "Definitions."
- 3.1.7 Modified Attachment 3, Data Sources," as follows:
- 3.1.8 Deleted met data for Unit 1 and Unit 2.
- 3.1.9 Added references to MP2 WRGM and MP2 WRGM flow.
- 3.1.10 Added MP3 SLCRS, normal monitor, extended monitor, and flow to monitor data.
- 3.1.11 Corrected default flow rates for MP2 and MP3 on Attachment 4, "Reference Information."
- 3.1.12 Added note to Attachment 4, "Reference Information," to clarify that the default flow rate for MP2 was set at 12,000 cfm for consistency between Unit 2 and Unit 3.
- 3.1.13 Changed references in EPI-FAP10-001, "IDA Data Input Information," from stack gas radiation, radiation HI RNG, and flow rate to MP2 WRGM and MP3 SLCRS.
- 3.1.14 Added references to MP2 WRGM and MP3 SLCRS and corrected exposure time in EPI-FAP10-002, "Midas Input Information."
- 3.1.15 Performed Writer's Guide and minor editorial corrections throughout procedure.

3.2 Revision 001-01

- 3.2.1 Deleted step on accessing OFIS from mainframe computer. OFIS is not available from mainframe.

Attachment 1

Definitions and Abbreviations

(Sheet 1 of 1)

Definitions

Committed Dose Equivalent (CDE) - The dose equivalent to an individual organ or tissue that will be received from an intake of radioactive material during the 50 year period following the intake.

Committed Effective Dose Equivalent (CEDE) - the sum of the products of the CDEs and their weighting factors. The weighting factors account for the relative sensitivities of different organs to radiation.

Deep Dose Equivalent (DDE) - External exposure at a 1 cm tissue depth.

Fumigation Potential - Seashore meteorology conditions can combine infrequently to create an atmospheric downdraft called a fumigation that converts elevated releases to ground level.

Mixed Mode Release - A release at a level of, or above, but lower than twice the height of adjacent solid structures.

Radiation Monitoring Points (RMP) - Set of site-specific monitoring locations.

Total Effective Dose Equivalent (TEDE) - The sum of the DDE and the CEDE.

Abbreviations

CDE - Committed Dose Equivalent

CEDE - Committed Effective Dose Equivalent

DCF - Dose Conversion Factor

DDE - Deep Dose Equivalent

EBFS - Enclosure Building Filtration System (MP2)

IDA - Initial Dose Assessment computer program

IPZ - Ingestion Pathway Zone

MIDAS - Meteorological Information and Dose Assessment System

MRDA - Manager of Radiological Dose Assessment

PAR - Protective Action Recommendation

RASCAL - Radiological Assessment System for Consequence Analysis. The dose assessment model used by the NRC.

RDAT - Radiological Dose Assessment Team

SLCRS - Supplementary Leak and Collection Removal System (MP3)

WRGM - Wide Range Gas Monitor (MP2)

Attachment 2 Responsibilities

(Sheet 1 of 1)

Manager of Radiological Dose Assessment (MRDA) - Responsible for determining when the Emergency Operations Facility will assume offsite dose assessment responsibilities from the Control Room and for performing IDA dose calculations as necessary.

Radiological Assessment Engineer (RAE) - Responsible for performing the appropriate calculations.

On-Shift Chemistry Technician - Responsible for performing initial dose assessment if available until relieved by the MRDA.

Attachment 3 Data Sources

(Sheet 1 of 2)

UNIT 1 - Monitor Data					
Data	Units	Primary Source		Backup Source	
		Obtain From	Label	Obtain From	Label
MP1 Spent Fuel Pool Island (Area Rad Monitor)	mR/hr	Control Room Panel	RM-SFPI-01	Remote Location	RM-SFPI-01

UNIT 2 - Monitor Data					
Data	Units	Primary Source		Backup Source	
		Obtain From	Label	Obtain From	Label
MP2 WRGM (Site Stack)	μCi/cc	Unit 2 OFIS (A10)	R8169 or RU1	Control Room Panel	RM-8169
MP2 WRGM Flow (Site Stack)	SCFM	Unit 2 OFIS (A10)	F8169	Control Room Panel	FC-8169
MP2 Vent Monitor	cpm	Unit 2 OFIS (A10)	R8132B	Control Room panel	PT.2: r 8132B
MP2 KAMAN Mid or High Range Vent Monitor	μCi/cc	Unit 2 OFIS (A10)	RIC8168	Control Room panel	RIC 8168
MP2 Vent Flow	CFM	Control Room panel	PT.3: F 8412	None Available	
MP2 Steam Line Monitors					
4299A	R/hr	Unit 2 OFIS (A10)	R4299A	Control Room Panel	R 4299A
4299B	R/hr	Unit 2 OFIS (A10)	R4299B	Control Room Panel	R 4299B
4299C	R/hr	Unit 2 OFIS (A10)	R4299C	Control Room Panel	R 4299C

Attachment 3 Data Sources

(Sheet 2 of 2)

UNIT 3 - Monitor Data					
Data	Units	Primary Source		Backup Source	
		Obtain From	Label	Obtain From	Label
MP3 SLCRS Normal Monitor (Site Stack)	µCi/cc	Unit 3 OFIS (A10)	CVHVR19B	Control Room Remote Indicating Panel	HVR19B
MP3 SLCRS Extended Monitor (Site Stack)	µCi/cc	Unit 3 OFIS (A10)	CVHVR19A1	Control Room Remote Indicating Panel	HVR19A
MP3 SLCRS Flow(Site Stack)	SCFM	Unit 3 OFIS (A10)	CVFE19	Rad Monitor Console	
MP3 KAMAN Normal Range Vent Monitor	µCi/cc	Unit 3 OFIS (A10)	CVHVR10B	Control Room panel	RIC-5A3HVR*RIY10B
MP3 KAMAN Mid or High Range Stack Monitor	µCi/cc	Unit 3 OFIS (A10)	CVHVR10A1	Control Room panel	RIC-4A3HVR*RIY10A
MP3 Vent Flow	CFM	Unit 3 OFIS (A10)	CVFE10	KAMAN Computer	RE10 process flow
MP3 Steam Line Monitors					
RE 75	µCi/cc	Unit 3 OFIS (A10)	CVMSS75	KAMAN Computer	MSS75
RE 76	µCi/cc	Unit 3 OFIS (A10)	CVMSS76	KAMAN Computer	MSS76
RE 77	µCi/cc	Unit 3 OFIS (A10)	CVMSS77	KAMAN Computer	MSS77
RE 78	µCi/cc	Unit 3 OFIS (A10)	CVMSS78	KAMAN Computer	MSS78
Met Data					
Data	Units	Primary Source		Backup Source	
		Obtain From	Label	Obtain From	Label
WS033	mph	Unit 3 OFIS (A11)	CVWS033MPH	Unit 3 PPC	CVWS033MPH
WS142	mph	Unit 3 OFIS (A11)	CVWS142MPH	Unit 3 PPC	CVWS142MPH
WS374	mph	Unit 3 OFIS (A11)	CVWS374MPH	Unit 3 PPC	CVWS374MPH
DT142	°F	Unit 3 OFIS (A11)	CVDT142F	Unit 3 PPC	CVDT142F
DT374	°F	Unit 3 OFIS (A11)	CVDT374F	Unit 3 PPC	CVDT374
WD033	deg from	Unit 3 OFIS (A11)	CVWD033	Unit 3 PPC	CVWD033
WD142	deg from	Unit 3 OFIS (A11)	CVWD142	Unit 3 PPC	CVWD142
WD374	deg from	Unit 3 OFIS (A11)	CVWD374	Unit 3 PPC	CVWD374

Attachment 4 Reference Information

(Sheet 1 of 3)

Mnemonic Definitions:

AT = Ambient Temperature

DT = Differential in Temperature (to determine stability class)

WS = Wind Speed

WD = Wind Direction (listed as the direction the wind is from)

Conversion Formulas:

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$$

$$\Delta ^{\circ}\text{C} = \Delta ^{\circ}\text{F} \times 0.556$$

$$\text{m/sec} = \text{mph} \times 0.447$$

DT 142

<u>Differential Temperature ($^{\circ}\text{F}$)</u>	<u>Stability Class</u>
$\text{DT} \leq -1.25$	A
$-1.25 < \text{DT} \leq -1.10$	B
$-1.10 < \text{DT} \leq -0.90$	C
$-0.90 < \text{DT} \leq -0.36$	D
$-0.36 < \text{DT} \leq +0.72$	E
$+0.72 < \text{DT}$	F

DT 374

<u>Differential Temperature ($^{\circ}\text{F}$)</u>	<u>Stability Class</u>
$\text{DT} \leq -3.6$	A
$-3.6 < \text{DT} \leq -3.3$	B
$-3.3 < \text{DT} \leq -2.9$	C
$-2.9 < \text{DT} \leq -1.1$	D
$-1.1 < \text{DT} \leq +2.7$	E
$+2.7 < \text{DT}$	F

Default Flow Rates

<u>MP2</u>	<u>MP3</u>
Site Stack..... 12,000 cfm*	Site Stack 12,000 cfm
Vent 64,000 cfm	SLCRS 12,000 cfm
Safety 6,000 cfm per	Vent..... 210,000 cfm
Dump 7,375 cfm	Safety 6,000 cfm per
Terry 550 cfm	Dump..... 3,500 cfm
EBFS..... 11,000 cfm	Terry..... 1,200 cfm

*Set at 12,000 cfm for consistency between Unit 2 and Unit 3.

Attachment 4 Reference Information

(Sheet 2 of 3)

Wind Directions and Distances to Nearest Land and Site Boundary

Wind Direction (From)	Downwind Direction	Downwind Sector	MP1, MP2, Ground & MP2 Mixed		MP3 Ground & Mixed		MP1 Stack	
			Nearest Land	Nearest Site Boundary	Nearest Land	Nearest Site Boundary	Nearest Land	Nearest Site Boundary
169°-191°	349°-011°	A (N)	1,138 m	1,138 m	924 m	924 m	1,695 m	1,695 m
192°-213°	012°-033°	B (NNE)	997 m	997 m	1,550 m	1,550 m	813 m	813 m
214°-236°	034°-056°	C (NE)	620 m	620 m	841 m	841 m	496 m	496 m
237°-258°	057°-078°	D (ENE)	1,070 m	620 m	602 m	602 m	1,101 m	496 m
259°-281°	079°-101°	E (E)	1,600 m	620 m	1,300 m	602 m	1,410 m	496 m
282°-303°	102°-123°	F (ESE)	1,900 m	620 m	1,690 m	602 m	1,640 m	496 m
304°-326°	124°-146°	G (SE)	31,700 m	620 m	33,000 m	602 m	31,700 m	496 m
327°-348°	147°-168°	H (SSE)	12,390 m	620 m	22,200 m	631 m	12,390 m	496 m
349°-011°	169°-191°	J (S)	11,800 m	620 m	16,100 m	602 m	11,800 m	496 m
012°-033°	192°-213°	K (SSW)	13,030 m	620 m	18,300 m	602 m	13,030 m	496 m
034°-056°	214°-236°	L (SW)	3,430 m	620 m	3,380 m	602 m	3,660 m	496 m
057°-078°	237°-258°	M (WSW)	3,100 m	620 m	3,050 m	602 m	3,270 m	496 m
079°-101°	259°-281°	N (W)	2,830 m	620 m	2,700 m	602 m	3,050 m	496 m
102°-123°	282°-303°	P (WNW)	2,550 m	620 m	2,310 m	602 m	2,660 m	649 m
124°-146°	304°-326°	Q (NW)	1,930 m	620 m	684 m	602 m	997 m	710 m
147°-168°	327°-348°	R (NNW)	915 m	915 m	694 m	694 m	1,029 m	1,029 m

NOTES

1. Meter - m
2. Nearest site boundary is given as 620 m from the MP2 stack for water sectors (D through Q).
3. Nearest site boundary is given as 602 m from the MP3 ventilation vent for water sectors (D-G and J-Q).
4. Nearest site boundary is given as 496 m from the site stack for water sectors (D through N).

Attachment 4 Reference Information

(Sheet 3 of 3)

Stability Dependent $X \cdot \mu/Q$ Values per Release Height Site Stack 374' Release

Distance Miles	Stability Class					
	A	B	C	D	E	F
0.3	1.7E-5*	6.8E-6	3.4E-7	1.6E-12	1.0E-20	< 1.0E-20
0.5	6.6E-6	1.3E-5*	5.4E-6	1.9E-8	1.5E-12	1.0E-20
1	1.4E-6	6.6E-6	9.9E-6*	2.1E-6	8.9E-8	1.1E-11
2	7.4E-7	1.9E-6	4.8E-6	5.3E-6*	1.8E-6	3.7E-8
3	5.2E-7	8.9E-7	2.6E-6	5.3E-6	3.1E-6	2.5E-7
4	4.0E-7	5.0E-7	1.6E-6	4.2E-6	3.5E-6*	5.6E-7
5	3.3E-7	4.3E-7	1.1E-6	3.4E-6	3.5E-6	8.4E-6
10	1.7E-7	2.3E-7	3.1E-7	1.6E-6	2.5E-6	1.4E-5*

MP Rooftop Release

Distance Miles	Stability Class					
	A	B	C	D	E	F
0.3	2.3E-5*	5.0E-5*	5.2E-5*	1.3E-5	9.1E-7	1.4E-10
0.5	6.9E-6	2.7E-5	4.4E-5	3.6E-5*	1.2E-5	2.5E-7
1	1.4E-6	7.7E-6	1.8E-5	3.4E-5	3.5E-5*	1.4E-5
2	7.4E-7	2.0E-6	5.7E-6	1.7E-5	2.6E-5	2.6E-5*
3	5.2E-7	9.0E-7	2.8E-6	1.0E-5	1.8E-5	2.4E-5
4	4.0E-7	5.1E-7	1.7E-6	6.9E-6	1.3E-5	2.0E-5
5	3.3E-7	4.3E-7	1.1E-6	5.1E-6	1.0E-5	1.7E-5
10	1.7E-7	2.3E-7	3.2E-7	1.9E-6	4.5E-6	9.0E-6

MP Ground Release

Distance Miles	Stability Class					
	A	B	C	D	E	F
0.3	2.5E-5*	7.3E-5*	1.4E-4*	2.6E-4*	3.7E-4*	4.9E-4*
0.5	7.0E-6	3.1E-5	6.6E-5	1.5E-4	2.5E-4	3.8E-4
1	1.4E-6	8.0E-6	2.0E-5	5.8E-5	1.1E-4	2.0E-4
2	7.5E-7	2.0E-6	5.9E-6	2.1E-5	4.3E-5	9.1E-5
3	5.2E-7	9.0E-7	2.8E-6	1.2E-5	2.5E-5	5.6E-5
4	4.0E-7	5.1E-7	1.7E-6	7.6E-6	1.7E-5	3.9E-5
5	3.3E-7	4.3E-7	1.1E-6	5.5E-6	1.3E-5	3.0E-5
10	1.7E-7	2.3E-7	3.2E-8	2.0E-6	5.1E-6	1.3E-5

*Denotes location of maximum concentration.

Docket Nos. 50-245
50-336
50-423
B18514

Attachment 14

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

Emergency Preparedness Administrative Procedure (EPAP) 1.15,
"Management Program for Maintaining Emergency Preparedness"
Major Revision 7, Minor Revision 1

08/22/01
Approval Date



08/23/01
Effective Date

Document Action Request

SPG # 011016-131916

Initiated By: Kathleen Burgess Date: 10/16/2001 Department EP Ext 2490
Document No: EPAP 1.15 Rev. No: 007 Minor Rev No. 01
Title: Management Program for Maintaining Emergency Preparedness

Reason for Request (attach commitments, CR's, AR's, etc)

Select One

See MP-05-DC-SAP01 sect 2.3 to determine type of change

Continued

☐ Intent Change (SQR Independent, RCD, ENV Screen Required)
(Other reviews may be required. See MP-05-DC-FAP 01.1 Att 3)

☐ Edit Corr

☒ Non-Intent Change

(Only SQR Independent Review and Env. screen Required)

Editorial Correction Approval

TPC Interim Approval

Plant Mngt Staff Member - Approval / Date

(1) Plant Mngt Staff Member Print/Sign/Date

(2) SM/SRO/CFH on Unit Print/Sign/Date

Procedure Request/Feedback Disposition

Priority: ☒ Perform Now ☐ Perform Later - See Comments

Activity: ☐ Revision ☒ Minor Revision ☐ Cleanup Rev ☐ Biennial Review ☐ Cancellation ☐ Supercedure
See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in Void

Reviews continued <input type="checkbox"/>	Print	Sign	Date	SQR Qualified			If Comments
				Yes	No	Dept.	
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Env Screen	Kathy Burgess	Tom Krogner	11/1/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>
Licensing Basis				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Independent	Mark White	for white	10/22/01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP&D	<input type="checkbox"/>

An NRRL update was required? ☐ Yes

1. ☒ SQR Program Final Review and Approval

Approval ☒ Disapproval ☐
SQR Qualified Independent Reviewer / Date
Department Head/Responsible Individual
Approval Date

2. ☐ SORC ☒ RI/DH Final Review and Approval

N/A
Department Head/Responsible Individual Sign
Meeting No.
SORC Approval Signature
Approval Date

Effective Date 11/5/01

**MILLSTONE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS ADMINISTRATIVE
PROCEDURE**

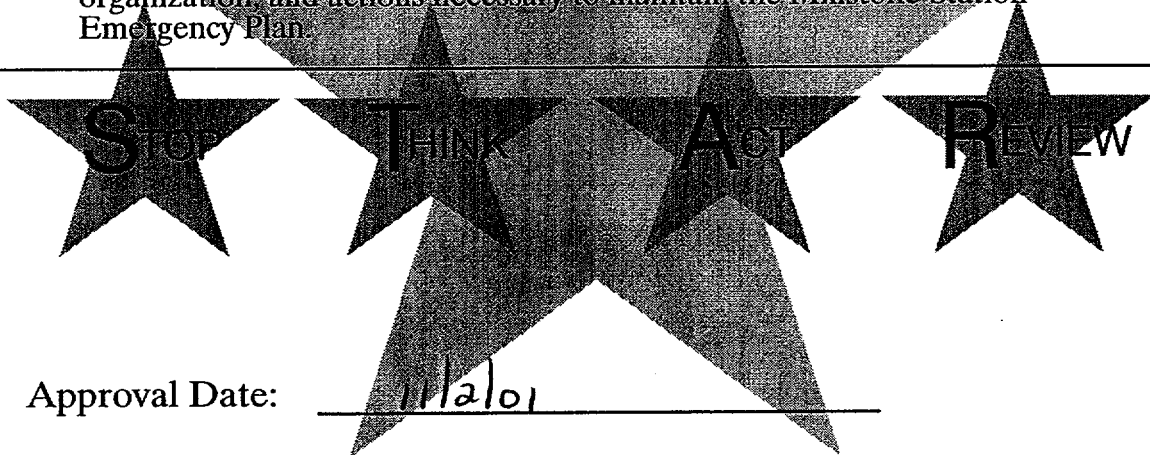


**Management Program for Maintaining
Emergency Preparedness**

EPAP 1.15

Rev. 007-01

This procedure describes sources of information, responsibilities,
organization, and actions necessary to maintain the Millstone Station
Emergency Plan.



Approval Date: 11/2/01

Effective Date: 11/5/01

**Level of Use
Information**

**Millstone All Units
Emergency Plan Administrative Procedure**

Management Program for Maintaining Emergency Preparedness

TABLE OF CONTENTS

1.	INSTRUCTIONS	3
1.1	Station Personnel	3
1.2	Responsibilities of the Emergency Planning Process Owner for Maintaining Emergency Preparedness	4
1.3	Station Management Actions for Maintaining Emergency Preparedness	6
1.4	SERO Personnel	10
1.5	On-Call Positions	13
1.6	Subject to Call Positions	16
1.7	On-Shift Positions	17
1.8	Drills and Exercises	18
1.9	Emergency Response Facilities (ERFs) and Equipment	20
1.10	Severe Accident Management	21
2.	REFERENCES	22
3.	COMMITMENTS	23
4.	SUMMARY OF CHANGES	24

**Level of Use
Information**



EPAP 1.15
Rev. 007-01
1 of 42

ATTACHMENTS AND FORMS

Attachment 1, "Emergency Preparedness Abbreviations and Definitions"	26
Attachment 2, "Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance"	27
Attachment 3, "Emergency Response Facility Readiness Check Report Form"	31
Attachment 4, "Documentation of Testing of Dose Assessment Computer Program"	32
Attachment 5, "SERO Qualifications and Reporting Locations"	33
Attachment 6, "Roles and Responsibilities for Emergency Preparedness Dose Assessment"	40
Attachment 7, "Radiological Dose Assessment Committee	42
EPAP 1.15-001, "SERO Training and Qualification Record"	
EPAP 1.15-002, "SERO Removal Form"	
EPAP 1.15-003, "Unit Event Backup Codes"	



1. INSTRUCTIONS

1.1 Station Personnel

Additional personnel may be required to support the SERO in an emergency. These personnel are integrated into the organization as required by SERO Position Owners.

Station personnel may also be required to participate in station evacuation drills. Advance notification will be provided via station information notices.

– End of Section 1.1 –



1.2 Responsibilities of the Emergency Planning Process Owner for Maintaining Emergency Preparedness

The Emergency Planning Process Owner (EPPO) has overall responsibility for the Nuclear Emergency Preparedness Program and is the Chair of the Emergency Preparedness Curriculum Advisory Committee. Responsibilities are defined in Emergency Planning Services documents and NGP 2.04, "Nuclear Incidents Response and Recovery."

EPPO →

- 1.2.1 RESPOND to emergency preparedness audits and evaluations.
- 1.2.2 IMPLEMENT SERO on-call schedules and performance reports.
- 1.2.3 DEVELOP and CONDUCT station Emergency Planning drills and exercises.
- 1.2.4 Biennially REVIEW station procedures in accordance with the QAP, MP-02-OST-BAP01, "Quality Assurance Program Topical Report," and MP-05-DC-SAP01, "Administration of Manuals, Procedures, Guidelines, Handbooks, and Forms," and REVIEW additional changes for impact on the Millstone Station Emergency Plan.
- 1.2.5 COORDINATE the development and distribution of emergency preparedness documents.
- 1.2.6 ESTABLISH SERO position owners and DOCUMENT in Attachment 5.
- 1.2.7 PROVIDE SERO qualification status to SERO position owners on a routine basis.
- 1.2.8 PROVIDE listing of SERO members personal information to SERO position owners for verification on a routine basis.
- 1.2.9 At least quarterly, PROVIDE SERO Roster to SERO organization.
- 1.2.10 REVIEW the development of emergency preparedness training curriculum.
- 1.2.11 ENSURE station personnel correct identified emergency preparedness conditions adverse to quality and areas for improvement.

Level of Use
Information



EPAP 1.15
Rev. 007-01
4 of 42

- 1.2.12 Refer To Attachment 2, "Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance," and ENSURE responsible process owners maintain emergency response in a state of readiness at all times.
- 1.2.13 Refer To EPAP 1.15-001, "SERO Training and Qualification Record," and COORDINATE completion of qualifications for each new SERO member.
- 1.2.14 ENSURE Millstone Station Emergency Plan and associated procedures are maintained.
- 1.2.15 Refer To Attachment 6, "Roles and Responsibilities for Emergency Preparedness Dose Assessment," and ENSURE responsibilities are carried out.
- 1.2.16 REVIEW emergency planning and response information forwarded from Station Management for possible adoption.
- 1.2.17 COORDINATE with off-site agencies and local officials, and ENSURE off-site Emergency Plan Program is maintained and areas of responsibility are effectively carried out.

– End of Section 1.2 –



1.3 Station Management Actions for Maintaining Emergency Preparedness

CNO

1.3.1 ASSIGN Senior Management to DSEO position.

NOTE

Minimum staffing is two persons in any position in order to support extended event periods with at least two shifts (12 hours each). It is recommended that for on-call and subject-to-call positions, a fifth individual be qualified to quickly fill any unexpected team vacancies.

SERO
Position
Owners

1.3.2 MAINTAIN a "4 team" rotation for SERO duty (i.e., red, white, blue, gold).

1.3.3 IF vacancies exist, ENSURE weekly rotation coverage is provided by remaining position holders during reduced staffing periods.

1.3.4 ENSURE adequate station support is provided for emergency preparedness functions.

1.3.5 AUTHORIZE the conduct of drills and exercises.

1.3.6 ENSURE personnel within reporting chain who are assigned to SERO maintain their SERO qualifications.

1.3.7 Refer To and COMPLETE EPAP 1.15-001, "SERO Training and Qualification Record," to initiate assignment of personnel in your reporting chain to the SERO.

1.3.8 Refer To and COMPLETE EPAP 1.15-002, "SERO Removal Form," to initiate removal of SERO personnel in your reporting chain.

1.3.9 Refer to Attachment 5, "SERO Qualifications and Reporting Location," and REVIEW for assigned SERO position owners.

Level of Use
Information



EPAP 1.15
Rev. 007-01
6 of 42

1.3.10 REVIEW and FORWARD to the EPPO, industry or regulatory information regarding any aspect of emergency planning or emergency response including but not limited to the following:

- Information from utility self–assessments
- NRC communications and proposed regulations
- Results of technical studies and assessments
- Information from ongoing research programs
- Lessons learned from training and drills

MPOs and VP,
Nuclear Tech
Svcs,
Millstone

1.3.11 ENSURE personnel are provided to support emergency preparedness activities.

1.3.12 REVIEW drill critiques and ENSURE applicable corrective actions are implemented.

1.3.13 Refer To Attachment 2, “Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance,” and PROVIDE a point of contact to the EPPO for listed organizations.

Process
Owners and
Team Leads

1.3.14 Refer To Attachment 2 and PERFORM the following:

- a. ASSIGN personnel to perform applicable actions.
- b. VERIFY actions are scheduled and documented as complete via one of the following:
 - AITTS
 - PMMS
 - Automated work order
 - Completion of inventory from RPM 4.8.5, “Emergency Radiological Equipment Maintenance and Inspection.” (copy to EPSD)
 - Attachment 3, “Emergency Response Facility Readiness Check Report Form”

Level of Use
Information



EPAP 1.15
Rev. 007–01
7 of 42

- c. **VERIFY** emergency equipment and instruments are operationally available at least once each quarter and after each use.

1.3.15 **ENSURE** personnel are briefed on extent of drill participation.

1.3.16 **IF** requested by SERO Team DSEOs, **ASSIGN** personnel to SERO.

1.3.17 **ENSURE** the department list of SERO members in NUTIMS is current.

1.3.18 **IF** a SERO vacancy occurs, **NOTIFY** the following:

- a. Team DSEO
- b. MPOs and VP, Nuclear Technical Services, Millstone
- c. Remaining SERO members for the position
- d. EPPO

1.3.19 **PROVIDE** personnel to participate in emergency response scenario development, drills, and exercises.

1.3.20 **MAINTAIN** SERO on-call independent rotation schedules for the following positions:

- Electricians
- Mechanics
- RMTs
- GES
- I&C Technicians

Team DSEO →

1.3.21 **OVERSEE** team activities including the following:

- Training attendance and continuing training
- Drill schedules
- Drill and exercise participation

1.3.22 **ENSURE** SERO on-call position rotation schedules are developed.

1.3.23 **RESOLVE** SERO staffing issues.

Level of Use
Information



EPAP 1.15
Rev. 007-01
8 of 42

SERO
Position
Owners

1.3.24 MAINTAIN SERO position activities as follows:

- a. ASSIGN personnel to owned positions.
- b. COORDINATE with the following to fill existing or potential vacancies:
 - Team DSEO
 - Emergency Planning Services Department
 - Training
- c. ENSURE position holders maintain qualifications.
- d. Refer To EPAP 1.15–002 and AUTHORIZE removal of individuals from SERO.
- e. NOTIFY other position holders of actual or pending vacancies and ESTABLISH formal rotation of duty to compensate for vacancy.
- f. MAINTAIN position staffing.

NFSA

1.3.25 Refer To Attachment 6, “Roles & Responsibilities for Emergency Preparedness Dose Assessment,” and ENSURE areas of responsibility are carried out.

RDAC

1.3.26 Refer To and IMPLEMENT Attachment 7, “Radiological Dose Assessment Committee at NU.”

– End of Section 1.3 –

Level of Use
Information



EPAP 1.15
Rev. 007–01
9 of 42

1.4 SERO Personnel

It is the expectation of management that the SERO pager remain on, operable, and monitored so that emergency pager messages may be received and responded to appropriately.

If an emergency event occurs, pagers will display the following:

- Affected unit
- NRC classification
- State posture code
- Major EAL heading

1.4.1 Refer To Attachment 5, "SERO Qualifications and Reporting Location," and IDENTIFY reporting location.

1.4.2 IF pager fails to operate properly, OBTAIN a replacement from one of the following:

- During normal working hours, REQUEST EPPO provide replacement pager.
- After normal working hours, REQUEST Security Shift Supervisor provide replacement pager from NAP Security Office.

1.4.3 NOTIFY EPPO of any changes to the following:

- Work extension
- Pager number
- Home phone number
- Employment status

1.4.4 Refer To Attachment 5 and NTP 7.212, "Training Program Description," and MAINTAIN job specific and SERO qualifications current.

1.4.5 Refer To Attachment 5 and MAINTAIN qualifications and proficiency for initial qualification of emergency response duties as follows:

- Refer To NTP 7.212, "Training Program Description," and COMPLETE SERO Training.
- COMPLETE respirator qualifications required by SERO position.
- COMPLETE radworker qualifications required by position.
- MAINTAIN "Fitness for Duty" program requirements.
- MAINTAIN station access required by assigned position.
- MAINTAIN job specific requirements including license or certification, as appropriate.

1.4.6 MAINTAIN qualifications and proficiency for annual requalification by performing one of the following:

NOTE

Exceptions to participation in drills may be made by Team DSEO in consultation with EP Management on a case by case basis.

- PERFORM as the designated responder (not a called-in back-up) in at least one drill annually in accordance with Attachment 5.
- PERFORM as one of the following for related position:
 - Drill controller.
 - Evaluator
 - Position coach or mentor



1.4.7 Refer To EPAP 1.15–002, “SERO Removal Form,” and COMPLETE all information including the following:

- Individual being removed
- Replacement named to fill vacancy
- Approval and concurrences, as appropriate

– End of Section 1.4 –



1.5 On-Call Positions

NOTE

Weekly on-call duty assignment turnover will be completed on Tuesday by 10:00 A. M.

On-Call and
On-Duty
SERO
Positions

1.5.1 PERFORM the following while on-call and on-duty:

- ADHERE to the fitness for duty policies.
- REMAIN within 60 minutes travel time of reporting location.

NOTE

Once the Emergency Response Facilities are staffed and operational, SERO members shall not call back into the Emergency Notification and Response System.

- ACKNOWLEDGE initial pager activations.

1.5.2 IF not available for duty, PERFORM the following:

- a. CONTACT another qualified individual and TRANSFER duty to the individual, ensuring an understanding of the exact date and time of relief.
- b. IF not able to obtain a replacement, PERFORM the following:
 - During normal working hours, CONTACT SERO Team DSEO.
 - After normal working hours, NOTIFY the Unit 3 Control Room Shift Technician.

Level of Use
Information



EPAP 1.15
Rev. 007-01
13 of 42

1.5.3 IF on-call and *not* on-duty, **PERFORM** the following:

NOTE

1. The approximate 10 minute wait to acknowledge pager activations is to allow for initial calls by on-call and on-duty responders to access the system.
2. Once the Emergency Response Facilities are staffed and operational, SERO members shall not call back into the Emergency Notification and Response System.

- a. IF fit for duty AND within 60 minutes travel time of reporting location, **ACKNOWLEDGE** initial pager activations after waiting approximately 10 minutes.
- b. IF *not* fit for duty and contacted by the MOR, **COMPLY** with the instructions provided.

1.5.4 Using SERO call-in card instructions, **PERFORM** the following to acknowledge pager activations:

NOTE

1. For open positions, the caller will be instructed to report. For filled positions, subsequent callers will be directed to remain available.
2. Do not hang up until the system has disconnected.
3. If a position is not acknowledged, the vendor will automatically page and dial the home telephone number of all personnel assigned to a position until the position is filled.

- a. IF a real event notification is received (not a test, drill, or exercise), **DIAL** the toll-free telephone number and **COMPLY** with the instructions provided.
 - 1) **ENTER** individual identification (PIN) code.
 - 2) IF position is open, **LISTEN** to the information and **RESPOND** appropriately.
 - 3) IF position is *not* open, **REMAIN** available to respond.



- b. **IF** a real event notification is received (not a test, drill, or exercise) **AND** acknowledgement can *not* be made via telephone, **REPORT** to assigned emergency response facility.

NOTE

If Unit Event codes are received, the ENRS is not available to provide any information to callers. EPAP 1.15–003 provides information on unit event backup codes.

- c. **IF** a unit event code (e.g., ID 101, 201, 301) is received, immediately **REPORT** to assigned emergency response facility.

– End of Section 1.5 –

Level of Use
Information



EPAP 1.15
Rev. 007–01
15 of 42

1.6 Subject to Call Positions

NOTE

1. Subject to call pager positions are assigned to teams only for training and drill scheduling purposes.
2. The approximate 10 minute wait to acknowledge pager activations is to allow for initial calls by on-call and on-duty responders to access the system.
3. Once the Emergency Response Facilities are staffed and operational, SERO members shall not call back into the Emergency Notification and Response System.

- 1.6.1 IF fit for duty, ACKNOWLEDGE initial pager activations after waiting approximately 10 minutes.

NOTE

1. Subject to call position holders are expected to staff their position as soon as possible. It is not considered acceptable to wait up to 4 hours to fill a position.
2. If a position is vacant, the DSEO may elect to fill the position by appointment until a fully qualified individual is available.
3. All Accident Management Team positions shall be staffed within 90 minutes of notification.

- 1.6.2 IF not fit for duty and contacted by the MOR, COMPLY with the instructions provided.

NOTE

For open positions, the caller will be instructed to report. For filled positions, subsequent callers will be directed to remain available.

- 1.6.3 Using SERO call-in card, DIAL the toll-free telephone number and COMPLY with the instructions provided.

– End of Section 1.6 –

Level of Use
Information



EPAP 1.15
Rev. 007-01
16 of 42

1.7 On-Shift Positions

1.7.1 Refer To Attachment 5 and IDENTIFY reporting location.

1.7.2 WHEN notified of an Unusual Event, REPORT to affected unit control room.

1.7.3 WHEN notified of an Alert, Site Area Emergency, or General Emergency, REPORT to the designated reporting location.

Shift
Technician
and Station
Duty Officer

All On-shift
SERO
Positions

– End of Section 1.7 –

Level of Use
Information



EPAP 1.15
Rev. 007-01
17 of 42

1.8 Drills and Exercises

NOTE

1. Drills provide a training opportunity to enhance and maintain effective emergency response capabilities.
2. Major objectives of the Millstone Station Emergency Plan are exercised annually. Exercises differ from drills in that the primary result of an exercise is a critical assessment of emergency response capability.
3. In order to fully evaluate SERO performance capability, back-up staffing (e.g., trainees) will normally not be allowed during evaluated drills or exercises.
4. "Hands-On/OJT" drills will be conducted when it is determined that additional training or experience will enhance an individual, selected group, facility staff or the SERO's ability to respond to emergency conditions. This training evaluation may take the form of a walkthrough or a tabletop discussion of an evolution or operation. This type of training evaluation is distinct from those described in Section 1.8.1 in that the focus is limited and will generally not include an integrated response.
5. Actual emergency plan activations may be credited in place of selected drills if the EPPO deems it appropriate. Generally an Alert or higher level emergency may be substituted for a drill. Such events may also replace an exercise with NRC approval.

EPPO

1.8.1 Refer To the EP 6 year objectives schedule and CONDUCT the following drills and tests, as appropriate:

- Health Physics Drills
- Radiological Monitoring Drills
- Chemistry Drills
- Medical Emergency Drills
- Communication tests
- Emergency Plan Training Drills

Level of Use
Information



EPAP 1.15
Rev. 007-01
18 of 42

- Exercises
- Off-site public alerting siren tests
- Off-hour Drills
- Assembly and Accountability Drills

1.8.2 REQUEST drill support from other departments, as applicable.

1.8.3 ENSURE Nuclear Training Department conducts fire drills.

1.8.4 CONDUCT formal critique after each of the following:

- Drill
- Series of drills
- Exercise

– End of Section 1.8 –



1.9 Emergency Response Facilities (ERFs) and Equipment

NOTE

1. Each ERF has equipment in place to perform functions assigned in the Millstone Station Emergency Plan. The EPPO is authorized to perform unannounced, periodic walk-through inspections of ERFs.
2. Additional facility and equipment responsibilities are detailed in OA-8, "Ownership, Maintenance, and Housekeeping of Site Buildings and Facilities, and Equipment," and Emergency Planning Services Department Instruction EPDI 06, "Emergency Facilities and Equipment."

Station
Personnel

- 1.9.1 Refer To Attachment 2, "Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance," and ENSURE facilities are maintained, as assigned.
- 1.9.2 PERFORM equipment check or maintenance at required intervals and after each use.
- 1.9.3 Refer To Attachment 3, "Emergency Response Facility Readiness Check Report Form," or other appropriate documentation and PROVIDE documentation of completed activities to the EPPO.
- 1.9.4 Promptly REPORT problems to the EPPO.
- 1.9.5 IF alteration or modification of ERF or equipment is required, NOTIFY the EPPO before alteration or modification is performed.

Unit
Chemistry
Technicians
and RAE

- 1.9.6 Refer To Attachment 4, "Documentation of Testing of Dose Assessment Computer Program," and TEST dose assessment computer program.

– End of Section 1.9 –

Level of Use
Information



EPAP 1.15
Rev. 007-01
20 of 42

1.10 Severe Accident Management

EPPO

- 1.10.1 Severe accident management (SAM) documents developed for the Millstone units will be owned by the Emergency Planning Services Department. Technical expertise for the contents of the documents will be provided by the Unit Operations Department and the Safety Analysis Branch.
- 1.10.2 Drills requiring implementation of SAM Guidelines (SAM-G) will be conducted as part of the scheduled 6-year objectives for each operating unit. The SAM-G drill objectives shall test and evaluate the unit severe accident management response capabilities. The drill scenario shall be of sufficient complexity and challenge to require the development of multiple SAM strategies. Drill core objectives will be included in accordance with EPDI-07, "Drill and Exercise Manual."
- 1.10.3 SAM-G training shall be provided on a 6-year frequency for continuing training purposes.

– End of Section 1.10 –

Level of Use
Information



EPAP 1.15
Rev. 007-01
21 of 42

2. REFERENCES

2.1 Developmental Documents

- 2.1.1 Millstone Nuclear Power Station Emergency Plan
- 2.1.2 NUREG-0654, Revision 1, "Criteria for Preparation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 2.1.3 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"
- 2.1.4 MP-28-MET-PRG, "Meteorological Monitoring"
- 2.1.5 AR 99016164-01, "Review of Millstone Emergency Plan for impact on Chemistry Technician"
- 2.1.6 AR 99016508-03, "Nuclear Training Department conducts fire drills"
- 2.1.7 AR 99016508-06, "Specify off-site responsibilities of Manager EPSD"
- 2.1.8 AR 00002141-04, "Remove Unit 1 personnel from Station Director Position Owner responsibilities"

2.2 Supporting Documents

- 2.2.1 TQ 1, "Personnel Qualification and Training"
- 2.2.2 NGP 2.04, "Nuclear Incidents Response and Recovery"
- 2.2.3 NTP 7.212, "Training Program Description"
- 2.2.4 RPM 4.8.5, "Emergency Radiological Equipment Maintenance and Inspection."
- 2.2.5 OA 8, "Ownership, Maintenance, and Housekeeping of Site Buildings and Facilities and Equipment"
- 2.2.6 QAP, MP-02-OST-BAP01, "Quality Assurance Program Topical Report"



2.2.7 MP-05-DC-SAP01, "Administration of Manuals, Procedures, Guidelines, Handbooks, and Forms

3. COMMITMENTS

- 3.1 NU Letter B14268 commits Millstone to have procedures to accommodate the implementation of ERDS.
- 3.2 NU Letter A06789 commits Millstone to surveille computer hardware (OFIS) quarterly.
- 3.3 NU Letter A02567 commits Millstone to monitor emergency equipment, including communications.



4. SUMMARY OF CHANGES

Rev 007-01

- 4.1 Changed organization for testing Unit 1 PA speakers, radio communications, and unit page, siren system, and evacuation alarm to Unit 2 Operations in Attachment 2.
- 4.2 Changed organization for maintaining control copies of drawings in the Emergency Response Facilities to Unit 2 Engineering in Attachment 2.
- 4.3 Deleted Unit 1 PEO/CO position in Attachment 5.
- 4.4 Changed Unit 1 CFH/MCRO; initial Drill Requirements to Walk-Thru; and annual requalification to "No" in Attachment 5.

Rev 007

- 4.5 Changed NUQAP to QAP in step 1.2.4 and step 2.2.6.
- 4.6 Added VP, Technical Services, Millstone as the owner for the Assessment Process in steps 1.3.11 and 1.3.18.
- 4.7 Changed RAE, SAB to Nuclear Fuels and Safety Analysis in step 1.3.25, Attachment 6 and Attachment 7.
- 4.8 Added Unusual Event as a classification in step 1.7.2 for ST and SDO positions to report to their designated emergency response facilities.
- 4.9 Added "NFSA" to Attachment 1 abbreviations.
- 4.10 Deleted reference to OFIS users guide in Attachment 1.
- 4.11 In Attachment 2, updated references for C-OP 600.1 to C-SP 600.1; updated SP 699 to C-SP 600.12; updated C-OP 600.3 to C-SP 600.3.
- 4.12 In Attachment 2, changed frequency for testing the Met Tower Generator from quarterly to monthly; changed responsible organization to Unit 2 Operations.
- 4.13 In Attachment 5, changed Master Process Owner (MPO) for the ARPs, EOF HP Tech, MRCA, Rad Com, RMTs 3-4-5, RMT A-B-C-D, and Radiological Briefer to MPO Operate the Asset. Changed MPO Assessment to VP, Technical Services, Millstone. Changed Chief Nuclear Officer to VP and Senior Nuclear Executive.

- 4.13 In Attachment 5, changed Master Process Owner (MPO) for the ARPs, EOF HP Tech, MRCA, Rad Com, RMTs 3-4-5, RMT A-B-C-D, and Radiological Briefer to MPO Operate the Asset. Changed MPO Assessment to VP, Technical Services, Millstone. Changed Chief Nuclear Officer to VP and Senior Nuclear Executive.
- 4.14 In Attachment 5, changed initial drill requirement for security guard from on-the-job to Protective Services training.
- 4.15 Deleted reference to PORC in Attachment 6.



Attachment 1

Emergency Preparedness Abbreviations and Definitions

(Sheet 1 of 1)

1. ADEOF – Assistant Director Emergency Operations Facility
2. ADTS – Assistant Director Technical Support
3. AMRDA – Assistant Manager of Radiological Dose Assessment
4. ENRS – Emergency Notification and Response System. The on-site and off-site notification system including pager and phone communications.
5. EPPO – Emergency Planning Process Owner
6. EPSD – Emergency Planning Services Department
7. ERC – External Resources Coordinator
8. ERDS – Emergency Response Data System
9. IDA – Initial Dose Assessment
10. MIDAS – Meteorological Information and Dose Assessment Model
11. MPO – Master Process Owner
12. NFSA – Nuclear Fuels and Safety Analysis
13. RAE – Radiological Assessment Engineer
14. RDAC – Radiological Dose Assessment Committee
15. RES – Radiological Engineering Section
16. SAM-G – Severe Accident Management Guidelines
17. Millstone Station Emergency Plan: The Millstone Station Emergency Plan contains requirements and organizational responsibilities and serves as the license commitment document for emergency preparedness.
18. Emergency Plan Administrative Procedure (EPAP)/Functional Administrative Procedure (FAP): Procedures that implement the Station Emergency Plan.
19. Emergency Preparedness User's Guide (EPUG): A document providing general guidance on how to operate or maintain specific emergency preparedness facilities and equipment such as ENRS and radio communication equipment. EPUGs are not subject to SORC approval. The Emergency Planning Services Department is responsible for maintaining the accuracy of EPUGs.
20. SERO on-call independent rotation: On-call personnel not assigned to a SERO Team (i.e., Mechanics, Electricians, I&C Technicians, Radiological Monitoring Teams, Health Physics Technicians, and Generation Electrical Services personnel). Department supervision will maintain an on-call rotation schedule for these personnel.

**Level of Use
Information**



EPAP 1.15
Rev. 007-01
26 of 42

Attachment 2

Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 1 of 4)

Organization	Item	Task	Freq ₁	Reference
CL&P Eastern Regional Test Group, Willimantic	Public Alerting System	Inspect and Conduct Testing	Q, A	Eastern Regional Test Group, Procedure 00I 003 EPDI 05
Chemistry	EOF Multi Channel Analyzer	Inspect and Conduct Testing	AN	RPM; ANSI
Computer Services	ERF Computer Hardware, Software, and Connections	Maintenance, Surveillance, and Control	AN	Help Desk DC 11 EPDI 06
Telecommunication Services	Pagers, Radios, ENRS	General Support and Testing	AN	
Nuclear Document Services	FSAR, Tech Specs, Aperture Cards	Maintain Control Copies in ERFs	AN	GRITS
Nuclear Document Services	Unit – Specific Procedures	Maintain Control copies in EOF	AN	Passport
Nuclear Document Services	EOF and TSC Aperture Card Readers	Update and Check	Q	NDM 04
Emergency Planning Services	SERO Notification System	Test and Maintain	M	EPDI 06 C-SP 600.1
Emergency Planning Services	ERF Phone and Fax Equipment	Perform Operability Check	M,Q	EPDI 06
Emergency Planning Services	ERF Radios	Perform Operability Check	Q	EPDI 06
Emergency Planning Services	ERF Support Equipment, Furniture, and Supplies [♣ Comm. 3.3]	Maintain and Conduct Inventories	Q, AEU	EPDI 06
Emergency Planning Services	ERF Communications	Surveillance	M	EPDI 06
Emergency Planning Services	OFIS	Perform Operability Test	M	EPDI 06

**Level of Use
Information**



EPAP 1.15
Rev. 007-01
27 of 42

Attachment 2

Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 2 of 4)

Organization	Item	Task	Freq ¹	Reference
Health Physics Support	Emergency Response HP Supplies and Equipment	Maintenance, Surveillance, and Calibration	Q, AEU	RPM 4.8.5
Health Physics Support (Respiratory Protection)	Respiratory Protection Equipment	Maintenance	Q	RPM 2.3.5
Motor Pool	RMT Vehicles	Mechanical and Operational Inspection and Maintenance	Q	
RAE, Chemistry Technicians	ERF Dose Assessment Computers	Check Operability	W,M	EPAP 1.15, Att. 4 EPUG 07 FAP10
Nuclear Document Services	Unit – Specific Procedures	Maintain Control Copies in TSC	AN	Passport
Nuclear Document Services/EPSP	Emergency Planning FAPs	Maintain Document Distribution and Control; Audit	AN	Passport
Unit 2 I&C	Meteorological Equipment	Inspect, Calibrate, and Confirm Operability	Q	C–SP–400.2
Security	Station Page and Evacuation Siren	Monitor Outside Speakers when Units Conduct Test.	M/Q	C–SP 600.1
Security	CR/Security Hot Links	Phone Checks	D	Security Procedure
Site Facilities	Emergency Response Facilities	Building Services (Janitorial, Plumbing, Lighting)	AN	
Emergency Planning Services	Millstone EPlan Resource Book	Update	Q	EPUG 08B

**Level of Use
Information**



EPAP 1.15
Rev. 007–01
28 of 42

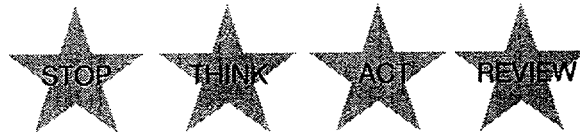
Attachment 2

Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 3 of 4)

Organization	Item	Task	Freq ¹	Reference
I&C; SAB	Radiation Monitors	Maintenance and Calibration; Documentation		
U-2 Operations	Meteorological Tower Generator	Test ²	M	C-SP 600.12
U-2 Operations	U-1 PA Speakers	Test	M/Q	C-SP 600.1
Station Maintenance	Emergency Operations Facility	Electrical and Mechanical Maintenance of HVAC	Q	Vendor Support Provided
U-2 Operations	EOF Airlock	Test ²	Q	SP 2678C
U-2 Operations	EOF Emergency Diesel Generator	Test ² Operation	M	SP 2678B OP 2399A
U-2 Operations	EOF Fire Detection System	Test ² Operation	Q	SP 2678D OP 2399B
U-2 Operations	EOF Vent (RAD) Filter Systems	Test ²	R	SP 2678A
U-2 Operations	U-2 PA Speakers and Evacuation Alarms	Test	M/Q	C-SP 600.1
Station Maintenance	Technical Support Center (TSC)	Electrical and Mechanical Maintenance of HVAC	Q	AWO on 3TS-3900J
Station Maintenance	Technical Support Center (TSC)	Emergency Lights	Q	MP 3780AE
U-3 Operations	TSC Emergency Power (TSC)	Test ²	Q	SP 3666.2
U-3 Operations	TSC Vent (RAD) Filter System	Test ²	R	SP 3666.1
U-3 Operations	U-3 PA Speakers and Evacuation Alarms	Test	M/Q	C-SP 600.1

**Level of Use
Information**



EPAP 1.15
Rev. 007-01
29 of 42

Attachment 2

Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 4 of 4)

Organization	Item	Task	Freq ¹	Reference
Unit Engineering (U-2, 3)	Drawings	Maintain Control Copies in ERFs.	AN	Master Control Index
Unit Operations (U-2, 3)	Radio Communications (Waterford, State, Tri-Town)	Test ²	D	C-SP 600.3
Unit Operations (U-2, 3)	Unit Page, Siren System and Evacuation Alarm	Test ²	M	C-SP 600.1
Unit Operations (U-3)	Radiopaging ENRS Daily/Weekly Test	Test ²	D, W	C-OP 608
Unit Operations (U-3)	Radiopaging ENRS Monthly Test	Test ²	M	C-OP 606
Unit Chemistry (U-2,3)	PASS	System Surveillance		CP-(2800, 3800)
IT	ERDS, OFIS [♣Comm 3.1, 3.2]	General Support and Testing	Q	EPDI 06 EPDP 10

①

NOTE

1. D = Daily, W = Weekly, M = Monthly, Q = Quarterly, R = Refuel Outage, A = Annual (not to exceed 25% of surveillance period) AN = As Necessary, AEU = After Each Use. All are also as required by drills, audits, revisions, etc.
2. Maintenance, repair, and test follow up is passed to applicable Unit Maintenance Departments.

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Information**



EPAP 1.15
Rev. 007-01
30 of 42

Attachment 3

Emergency Response Facility Readiness Check Report Form

(Sheet 1 of 1)

[illegible]

Complete and return to Emergency Planning Services Department.

Signature _____

Ext.

Date _____

Level of Use Information



EPAP 1.15
Rev. 007-01
31 of 42

Attachment 4
Documentation of Testing of Dose Assessment Computer Program
(Sheet 1 of 1)

NOTE

MIDAS is installed in the EOF and IDA is installed in the control rooms. MIDAS, IDA, and other approved dose assessment models such as RASCAL may also be installed on computers in the EOF, TSC, or other ERFs.

Radiological Assessment Engineer (RAE)

1. Monthly, VERIFY operability of the Emergency Operations Facility dose assessment computer program and printer and ENSURE results match test case.
2. COMPLETE surveillance log.
3. IF test results are *not* satisfactory, NOTIFY EPSD.

Unit Chemistry Technicians

- | | | |
|------------------|---|--|
| Unit 3 | → | 1. Monthly, VERIFY operability of the Technical Support Center Initial Dose Assessment computer and ENSURE results match test case. |
| Unit 2
Unit 3 | → | 2. Weekly, VERIFY operability of control room initial dose assessment computer program and printer and ENSURE results match test case. |
| | | 3. COMPLETE surveillance log. |
| | | 4. <u>IF</u> test results are <i>not</i> satisfactory, NOTIFY EPSD. |

Level of Use
Information



EPAP 1.15
Rev. 007-01
32 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 1 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal Yes/No	Initial (4) Drill/OJT/Walk-Thru
Assistant Director Emergency Operations Facility	ADEOF	OC	EOF	No	No	VP, Technical Services, Millstone	Yes	Drill
Assistant Manager of Radiological Dose Assessment	AMRDA	STC	EOF	No	No	MPO Operate the Asset	Yes	Drill
Accident Management Team Thermal and Hydraulic Engineer	AMT/TH	STC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Accident Management Team Lead	AMTL	STC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT/SAM (8)
Accident Management Team Mechanical Engineer	AMTME	STC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Assistant Radiation Protection Supervisor	ARPS	OC	OSC AA	No	Yes	MPO Operate the Asset	Yes	OJT
Director of Station Emergency Operations	DSEO	OC	EOF	No	No	VP and Senior Nuclear Executive	Yes	Drill
EOF Health Physics Technician	EOFHP	OC	EOF	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
EOF Shift Technician	EOFST	OC	EOF	Yes	Yes	MPO Operate the Asset	No	Walk-Thru
External Resource Coordinator	ERC	STC	EOF	No	No	MPO Procure the Asset	Yes	Walk-Thru (5)
Executive Spokesperson	ES	OC	Media Cntr	No	No	VP and Senior Nuclear Executive	Yes	Walk-Thru
Fire Brigade/EMT	FB	OS	OSC AA	Yes	Yes	MPO Support Services	No	Drill (6)
Field Team Data Coordinator	FTDC	STC	EOF	No	No	MPO Operate the Asset	Yes	Walk-Thru
Generations Electrical Services Specialist	GES	OC	OSC AA	No	Yes	MPO Maintain the Asset	No	Walk-Thru

Level of Use
Information



EPAP 1.15
Rev. 007-01
33 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 2 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Meteorological Assistant	MET	STC	EOF	No	No	MPO Support Services	Yes	Walk-Thru
Manager of Resources	MOR	OC	EOF	No	No	MPO Procure the Asset	Yes	Drill
Manager of Security	MOS	STC	TSC/OSC	No	Yes	MPO Support Services	Yes	Drill
Manager Public Information	MPI	OC	EOF	No	No	MPO Communications	Yes	Drill
Manager Radiological Consequence Assessment	MRCA	OC	TSC/OSC	No	Yes	MPO Operate the Asset	Yes	Drill
Nuclear News Manager	NNM	OC	Media Cntr	No	No	MPO Communications	Yes	Drill
CBETS Operator	CBETS	STC	OSC AA	No	Yes	MPO Support Services	Yes	Walk-Thru
Radiological Communicator	RADCOM	STC	EOF OSC AA	No	Yes	MPO Operate the Asset	Yes	Walk-Thru
Radiological Assessment Engineer	RAE	STC	EOF	No	No	MPO Manage the Asset	Yes	Drill
Radiological Monitoring Team 3 Lead	RMT3	OC	EOF	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	VP, Technical Services, Millstone	Yes	Walk-Thru
Radiological Monitoring Team 4 Lead	RMT4	OC	EOF	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	VP, Technical Services, Millstone	Yes	Walk-Thru
Radiological Monitoring Team 5 Lead	RMT5	OC	EOF	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru

* All RMT Drivers are in one group with three people on call at all times.

Level of Use
Information



EPAP 1.15
Rev. 007-01
34 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 3 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	VP, Technical Services, Millstone	Yes	Walk-Thru
NAP Radiological Monitoring Team	RMTA	OC	NAP	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
NAP Radiological Monitoring Team	RMTB	OC	NAP	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
SAP Radiological Monitoring Team	RMTC	OC	SAP	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
SAP Radiological Monitoring Team	RMTD	OC	SAP	Yes	Yes	MPO Operate the Asset	Yes	Walk-Thru
Station Duty Officer	SDO	OS	CR	Yes	Yes	MPO Operate the Asset	No	OJT
Technical Support Center Reactor Engineer	TSCRE	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	Walk-Thru
Technical Assistant	TA	STC	Media Center	No	No	VP, Technical Services, Millstone	Yes	Walk-Thru
Chemistry Technician	CHEM-TECH	OS	CR	Yes	Yes	MPO Operate the Asset	No	Walk-Thru
RMT #1	HPTECH	OS	CR	Yes	Yes	MPO Operate the Asset	No	Walk-Thru
Unit 1 Technical Support Center Shift Manager	U1 TSCSM	STC	TSC/OSC	No	Yes	MPO Operate the Asset	No	OJT

* All RMT Drivers are in one group with three people on call at all times.

Level of Use
Information



EPAP 1.15
Rev. 007-01
35 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 4 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 2 Assistant Director Technical Support	U2ADTS	OC	TSC/OSC	No	Yes	MPO Operate the Asset	Yes	Drill
Unit 2 Control Room Data Coordinator	U2CRDC	STC	CR	No	Yes	MPO Training	Yes	Walk-Thru
Unit 2 Electrician	U2ELEC	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru
Unit 2 Instrument & Control Operational Support Center	U2I&C OSC	STC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 2 Instrument & Control Technician	U2I&C TECH	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru
Unit 2 Mechanic	U2MECH	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru
Unit 2 Manager of Communications	U2MOC	OC	EOF	No	No	MPO Training	Yes	Walk-Thru
Unit 2 Manager of Operational Support Center	U2MOSC	OC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 2 Manager of Technical Support Center	U2MTSC	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	Drill
Unit 2 Operational Support Center Maintenance Assistant	U2 OSCMA	STC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 2 PEO	U2PEO	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 2 Control Operator	U2CO	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)

Level of Use
Information



EPAP 1.15
Rev. 007-01
36 of 42

Attachment 5
SERO Qualifications and Reporting Location (3)
(Sheet 5 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 2 STA	U2STA	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 2 Technical Information Coordinator	U2TIC	OC	EOF	No	No	MPO Training	Yes	Walk-Thru
Unit 2 Technical Support Center Electrical Engineer	U2 TSCEE	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Unit 2 Technical Support Center Mechanical Engineer	U2 TSCME	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Unit 2 Technical Support Center Shift Manager	U2 TSCSM	STC	TSC/OSC	No	Yes	MPO Operate the Asset	No	OJT
Unit 3 Assistant Director Technical Support	U3ADTS	OC	TSC/OSC	No	Yes	MPO Operate the Asset	Yes	Drill
Unit 3 Control Room Data Coordinator	U3CRDC	STC	CR	No	Yes	MPO Training	Yes	Walk-Thru
Unit 3 Electrician	U3ELEC	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru
Unit 3 Instrument & Control Operational Support Center	U3I&C OSC	STC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 3 Instrument & Control Technician	U3I&C TECH	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru
Unit 3 Mechanic	U3MECH	OC	OSC AA	Yes	Yes	MPO Maintain the Asset	No	Walk-Thru

**Level of Use
Information**



EPAP 1.15
Rev. 007-01
37 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 6 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 3 Manager of Communications	U3MOC	OC	EOF	No	No	MPO Training	Yes	Walk-Thru
Unit 3 Manager of Operational Support Center	U3MOSC	OC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 3 Manager of Technical Support Center	U3MTSC	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	Drill
Unit 3 Operational Support Center Maintenance Assistant	U3 OSCMA	STC	TSC/OSC	No	Yes	MPO Maintain the Asset	Yes	Drill
Unit 3 PEO	U3PEO	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 3 Control Operator	U3CO	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 3 STA	U3STA	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 3 Technical Information Coordinator	U3TIC	OC	EOF	No	No	MPO Training	Yes	Walk-Thru
Unit 3 Technical Support Center Electrical Engineer	U3 TSCEE	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Unit 3 Technical Support Center Mechanical Engineer	U3 TSCME	OC	TSC/OSC	No	Yes	MPO Manage the Asset	Yes	OJT
Unit 3 Technical Support Center Shift Manager	U3 TSCSM	STC	TSC/OSC	No	Yes	MPO Operate the Asset	No	OJT
Unit 2 Unit Supervisor	U2US	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 3 Unit Supervisor	U3US	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Security Guard	SECGRD	OS	POST	Yes	Yes	MPO Support Services	No	(9)
Security Shift Supervisor	SSS	OS	CAS	No	Yes	MPO Support Services	No	OJT

Level of Use
Information



EPAP 1.15
Rev. 007-01
38 of 42

Attachment 5

SERO Qualifications and Reporting Location (3)

(Sheet 7 of 7)

Position	Code	CAT	LOC	RESP	RAD	SERO Position Owners	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Manager Radiological Dose Assessment	MRDA	OC	EOF	No	No	MPO Operate the Asset	Yes	Drill
Unit 3 Shift Technician	U3ST	OS	CR	Yes	Yes	MPO Operate the Asset	Yes	OJT
Unit 1 CFH/MCRO	CFH	OS	CR	Yes	Yes	MPO Operate the Asset	No	Walk-Thru
Unit 2 Shift Manager	U2SM	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Unit 3 Shift Manager	U3SM	OS	CR	Yes	Yes	MPO Operate the Asset	(1)	(1)
Alarm Station Supervisor	SECSUP	OS	CAS/SAS	Yes	Yes	MPO Support Services	No	OJT
Regulatory Liaison ⁽⁷⁾	RL	STC	EOF	No	No	VP, Technical Services, Millstone	No	Walk-Thru
State Emergency Planning Liaison ⁽⁷⁾	SEPL	STC	State EOC	No	No	VP, Technical Services, Millstone	No	Walk-Thru
Station Emergency Planning Representative ⁽⁷⁾	SEPR	STC	EOF	No	No	VP, Technical Services, Millstone	No	Walk-Thru
Media Center Liaison ⁽⁷⁾	MCL	STC	Media Center	No	No	MPO Communications	No	Walk-Thru
Rumor and Inquiry Control Liaison ⁽⁷⁾	RICL	STC	Media Center	No	No	MPO Communications	No	Walk-Thru
Technical Briefer ⁽⁷⁾	TB	STC	Media Center	No	No	MPO Operate the Asset	No	Walk-Thru
Radiological Briefer ⁽⁷⁾	RB	STC	Media Center	No	No	MPO Operate the Asset	No	Walk-Thru

(1) Credit will be taken for drill completion when performed as part of Licensed Operator Initial Training (LOIT), Licensed Operator Requalification Training (LORT), Shift Technical Advisor (STA) Program, and Plant Equipment Operator (PEO) Training.

(2) Deleted

(3) Additional qualification requirements are contained in NTP 7.212.

(4) Participation in a drill may satisfy the walk-thru qualifications for initial training.

(5) Walk-thrus include use of any equipment, identification and location of reference materials, and a knowledge of the facility layout. Training, Emergency Planning, or job incumbents qualify for conducting walk-thrus.

(6) Tracked by Fire Training Department.

(7) Supplemental positions not described in the Millstone Station Emergency Plan.

(8) SAM required for initial qualifications

(9) Security Guard training is provided by Protective Services personnel.

Level of Use
Information

STOP

THINK

ACT

REVIEW

EPAP 1.15

Rev. 007-01

39 of 42

Attachment 6
Roles and Responsibilities for
Emergency Preparedness Dose Assessment
(Sheet 1 of 2)

Area	EPPO	NFSA
Emergency Plan (Includes Ingestion Pathway Plan)	EPPO shall: <ul style="list-style-type: none"> Develop the Emergency Plan Ensure compliance to regulatory requirements Request technical support for input and review Process changes and obtain necessary approvals Perform necessary 50.54(q) reviews 	NFSA shall: <ul style="list-style-type: none"> Provide radiological technical expertise requested Provide compliant support Support the review and approval process
Radiological Dose Assessment Committee (RDAC)	EPPO shall: <ul style="list-style-type: none"> Chair the committee Develop a charter Schedule meetings Develop meeting minutes for RDAC members and upper management Provide expertise specific to regulatory compliance Provide input and make contacts to benchmark against the industry Process change requests 	NFSA shall: <ul style="list-style-type: none"> Co-chair the committee Provide input to charter Provide technical member(s) to the RDAC Develop technical justification for software / procedure changes Provide radiological expertise specific to subject matter
Procedures	EPPO shall: <ul style="list-style-type: none"> Maintain overall approval or veto of proposed procedures and changes Ensure compliance to regulatory requirements Maintain procedures current / schedule biennial reviews if required Process procedure change requests Process procedure typing requests Facilitate writer's guide review by Procedures Group Perform necessary 50.54(q) reviews Provide V&V support as necessary Facilitate scheduling of SORC by Procedures Group Set effective implementation dates 	NFSA shall: <ul style="list-style-type: none"> Provide radiological technical content Write procedure steps Provide bases documents Lead V&V process Provide V&V input and approvals Support necessary 50.54(q) review Present technical changes to SORC for approval

Level of Use
Information



EPAP 1.15
 Rev. 007-01
 40 of 42

Attachment 6
Roles and Responsibilities for
Emergency Preparedness Dose Assessment
(Sheet 2 of 2)

Area	EPPO	NFSA
Tools and Software	EPPO shall: <ul style="list-style-type: none"> • Own required tools and software • Be responsible for budgeting new purchases • Fund upgrades and revisions • Ensure compliance to regulatory requirements and intent • Obtain approvals for selected tools and software through RDAC (user) members before committing to a solution/purchase/change • Own Quality Software (QS) and associated documentation 	NFSA shall: <ul style="list-style-type: none"> • Produce requirements document specifying needs, acceptance criteria and process bids • Recommend through the RDAC the selection of tools and software • Develop internal software (as necessary or as appropriate) • Provide development support • Provide testing • Provide QS documentation • Provide overall radiological technical support
Scenario Development	EPPO shall: <ul style="list-style-type: none"> • Define scenario radiological package requirements (Memo of Understanding) • Develop overall scenario • Provide long-range schedule to allow support resource planning • Define deliverable date for completed package • Provide sufficient lead time as defined in the Memo of Understanding for radiological package development 	NFSA shall: <ul style="list-style-type: none"> • Provide an experienced technical lead to develop radiological data packages • Provide support to scenario development meetings • Produce radiological data packages fully meeting Memo of Understanding expectations • Provide completed radiological data package by the defined deliverable date

**Level of Use
Information**



EPAP 1.15
 Rev. 007-01
 41 of 42

Attachment 7
Radiological Dose Assessment Committee
(Sheet 1 of 1)

1. Purpose:

Ensure a regulatory compliant, effective dose assessment capability is maintained at Millstone facilities.

2. Membership:

The following functions shall be represented as members of this committee:

- Emergency Preparedness – (EPPO) – Chairperson
- Radiological Engineering – (Rad. Engineering Services) – Co-chairperson
- Station Health Physics
- Training – (EP Training, Chem/HP training, as available)
- Computer Support – (Information Technology, as available)
- Station Chemistry (as available)
- State Department Environmental Protection (as available)
- Environmental Services (as available)

3. Responsibilities:

This committee is responsible to provide the technical, regulatory based review and recommendations for all changes to calculations methodologies, procedures, software or other tools as applicable to performing the function of off-site dose assessment during emergency situations.

4. Meetings:

This committee shall meet on a no less frequent basis than once per calendar quarter in order to review functional status. Meeting notes shall be published and maintained on file in the Emergency Planning Services Department.

5. Authority:

This committee will forward recommended assignments to the EPPO to assign work to the appropriate organization in order to maintain the full capability of emergency dose assessment. The assigned members shall be sufficiently conversant in the issues to have acceptance authority for their respective organizations.

6. Disposition of Issues:

Issues identified shall be dispositioned through the use of the AITTS assignments. Where disagreement of assignment exist, this issue shall be raised to EP and NFSA management for disposition.

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Information**



EPAP 1.15
Rev. 007-01
42 of 42