



**Northeast  
Nuclear Energy**

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The Northeast Utilities System

APR - 5 2000

Docket Nos. 50-245

50-336

50-423

B18047

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 (NRC) Staff that the following procedures were implemented on March 13, 2000:

- Emergency Plan Administrative Procedure 1.15, Revision 5, Change 1, "Management Program for Maintaining Emergency Preparedness"
- Emergency Plan Implementing Procedure (EPIP) 4400-001, Revision 5, "Millstone Unit 1 Emergency Action Levels"
- EPIP 4404, Revision 6, "Notifications and Communications"
- Emergency Plan Operating Procedure (EPOP) 4411, Revision 6, "Director of Station Emergency Operations"
- EPOP 4411B, Revision 4, "Assistant Director Emergency Operations Facility"
- EPOP 4422, Revision 4, Change 1, "Manager of Technical Support"
- EPOP 4428A, Revision 3, Change 1, "Radiological Dose Assessment Team"
- EPOP 4455C, Revision 1, Change 1, "Technical Assistant"
- EPOP 4465, Revision 5, Change 2, "Technical Information Coordinator"
- EPOP 4470, Revision 4, Change 1, "Control Room Data Coordinator"
- EPOP 4475, Revision 4, Change 1, "Manager of Resources or External Resources Coordinator"

4045

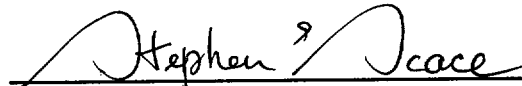
Copies of these procedures are included for your records as Attachments 1 through 11.

There are no regulatory commitments contained within this letter.

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

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in dark ink, appearing to read "Stephen E. Scace", is written over a horizontal line.

Stephen E. Scace  
Director - Nuclear Oversight and  
Regulatory Affairs

Attachments (11)

cc: H. J. Miller, Region I Administrator (2)  
Richard J. Conte, Chief, Operational Safety Branch  
L. L. Wheeler, NRC Project Manager, Millstone Unit No. 1  
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2  
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2  
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3  
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3  
P. C. Cataldo, NRC Inspector

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Attachment 1

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

Emergency Plan Administrative Procedure 1.15, Revision 5, Change 1  
Management Program for Maintaining Emergency Preparedness

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000202-075604

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPAP 1.15 Rev. No.: 005 Minor Rev.: 01

Title: Management Program for Maintaining Emergency Preparedness

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GOLD1 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.:>

Plant Mngt Staff Member - Approval

Comments:

RI/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			J/R 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"/>		
RAC 06	<input checked="" type="checkbox"/> MARIL WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Independent	<input checked="" type="checkbox"/> MARIL WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Writer's Guide	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Validation	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PORC/RI/DH Final Review and Approval

Meeting No. 00-09

*[Signature]* *[Signature]* 3/7/00  
Department Head/Responsible Individual / Date

Approval Signature

3/8/00  
Approval Date

Effective Date: 3/13/00



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

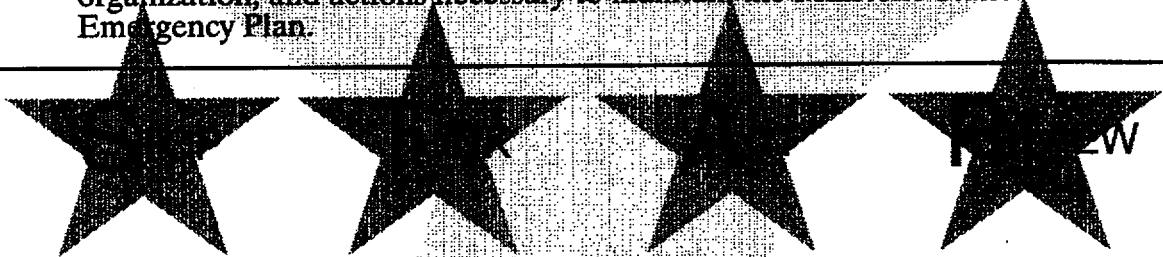


**Management Program for Maintaining  
Emergency Preparedness**

**EPAP 1.15**

**Rev. 005-01**

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



Approval Date: \_\_\_\_\_

*3/8/00*

Effective Date: \_\_\_\_\_

*3/13/00*

**Level of Use  
Information**

**Millstone All Units  
Emergency Plan Administrative Procedure**

**Management Program for Maintaining Emergency Preparedness**

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EPAP Form 1.15-1, "SERO Training and Qualification Record"

EPAP Form 1.15-2, "SERO Removal Form"

EPAP Form 1.15-3, "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 Managers.

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 Manager Emergency Planning Services Department for Maintaining Emergency Preparedness

The Manager Emergency Planning Services Department 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 department instructions and procedures and NGP 2.04, "Nuclear Incidents Response and Recovery."

Manager  
EPSD

- 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 drills and exercises.
- 1.2.4 REVIEW station procedures for impact on the Millstone Station Emergency Plan.
- 1.2.5 COORDINATE the development and distribution of emergency preparedness documents.
- 1.2.6 ESTABLISH position owners and DOCUMENT in Attachment 5.
- 1.2.7 PROVIDE SERO qualification status to Station Management on a routine basis.
- 1.2.8 PROVIDE listing of SERO members personal information to 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 deficiencies, weaknesses, and areas for improvement.
- 1.2.12 INITIATE station action items in accordance with the station corrective action program.

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- 1.2.13 Refer To Attachment 2, "Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance," and ENSURE responsible departments maintain emergency response in a state of readiness at all times.
- 1.2.14 Refer To EPAP Form 1.15-1, "SERO Training and Qualification Record," and COORDINATE completion of qualifications for each new SERO member.
- 1.2.15 ENSURE Millstone Station Emergency Plan and associated procedures are maintained.
- 1.2.16 Refer To Attachment 6, "Roles and Responsibilities for Emergency Preparedness Dose Assessment," and ENSURE areas of responsibility are carried out.
- 1.2.17 REVIEW information forwarded from Station Management in the area of emergency planning and response for possible adoption.

- End of Section 1.2 -



### 1.3 Station Management Actions for Maintaining Emergency Preparedness

CNO

1.3.1 ASSIGN SERO Team Captains.

1.3.2 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)

Station  
Management

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

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

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

1.3.6 AUTHORIZE the execution of drills and exercises.

1.3.7 ASSIGN actions to correct weaknesses and deficiencies.

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

1.3.9 Refer To and COMPLETE EPAP Form 1.15-1, "SERO Training and Qualification Record," to initiate assignment of personnel in your reporting chain to the SERO.

1.3.10 Refer To and COMPLETE EPAP Form 1.15-2, "SERO Removal Form," to initiate removal of personnel in your reporting chain from the SERO.

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

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1.3.12 REVIEW and forward to the Manager EPSD, 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
- Lesson learned from training and drills

MP Directors

1.3.13 ENSURE Department Managers provide personnel to support emergency preparedness activities.

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

1.3.15 Refer To Attachment 2, "Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance," and PROVIDE a point of contact to the Manager EPSD for listed organizations.

Department  
Heads and  
Supervisors

1.3.16 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 applicable procedure, i.e., RPM 4.8.5, "Emergency Radiological Equipment Maintenance and Inspection." (copy to EPSD)
  - Attachment 3, "Emergency Response Facility Readiness Check Report Form"

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

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

1.3.18 **IF** requested by SERO Team Captains, **ASSIGN** personnel to SERO.

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

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

- a. Team Captain
- b. Position Owner
- c. Remaining SERO members for the position
- d. Manager EPSD

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

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

- Electricians
- Mechanics
- RMTs
- HP Technicians
- GTS
- I&C Technicians

SERO Team  
Captains →

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

- Training attendance and continuing training
- Drill schedules
- Drill and exercise participation
- Approval of SERO team assignments and removals.

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1.3.24 ENSURE SERO on-call position rotation schedules are developed.

1.3.25 RESOLVE SERO staffing issues.

Position  
Owners

1.3.26 MAINTAIN SERO position activities as follows:

- a. ASSIGN personnel to owned positions.
- b. COORDINATE with the following to fill existing or potential vacancies:
  - Team Captains
  - Emergency Planning Services
  - Training
- c. ENSURE position holders maintain qualifications.
- d. 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.

Radiological  
Engineering  
Supervisor  
(SAB)

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

RDAC

1.3.28 Refer To and IMPLEMENT Attachment 7, "Radiological Dose Assessment Committee at NU."

— End of Section 1.3 —

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

1.4.3 NOTIFY Manager EPSP 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.



On-Call and  
Subject to  
Call SERO  
Members

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:

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## NOTE

1. This item does not apply to the following SERO members:
  - Chemistry Technicians
  - Electricians
  - Mechanics
  - RMTs
  - HP Technicians
  - GTS
  - I&C Technicians
  - Control Room Staff including PEOs and Shift Technician
  - Fire Brigade
  - Security Guards, Security Shift Supervisor, Alarm Station Supervisor
  - TSC Shift Manager
2. Exceptions to participation in drills may be made by Team Captain 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.
- **PERFORM** as drill controller or evaluator or position coach or mentor.

1.4.7 Refer To EPAP Form 1.15-2, "SERO Removal Form," for SERO rotation process 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.

①

- 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 any SERO Team Captain.
  - After normal working hours, NOTIFY the Unit 3 Control Room Shift Technician.

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On-Call and  
Not On-Duty  
SERO  
Positions

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

#### NOTE

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.

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

①

- 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

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

#### NOTE

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

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.
- 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.

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## NOTE

EPAP Form 1.15-3 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 –



## 1.6 Subject to Call Positions

### NOTE

1. Subject to call pager positions are assigned to teams 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

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

①

### 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 8 hrs 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 —

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**1.7 On-Shift Positions**

1.7.1 Refer To Attachment 5 and IDENTIFY reporting location.

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

**- End of Section 1.7 -**



## 1.8 Drills and Exercises

### NOTE

1. Drills are conducted as a training opportunity in order to enhance and maintain effective emergency response capabilities.
2. Major objectives of the Millstone Station Emergency Plan will be 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 walk-through or a table-top 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 Emergency Planning Services Manager 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.

Manager  
EPSD

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

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

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- 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 CONDUCT formal critique after each of the following:

- Drill
- Series of drills
- Exercise

①

– End of Section 1.8 –



## 1.9 Emergency Response Facilities and Equipment

### NOTE

1. Each ERF has equipment in place to perform functions assigned in the Millstone Station Station Emergency Plan. Emergency Preparedness Coordinators are 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 Manager EPSD.
- 1.9.4 Promptly REPORT problems to the Manager EPSD.
- 1.9.5 IF alteration or modification of ERF or equipment is required, NOTIFY the Manager EPSD prior to alteration or modification.

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 –

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## 1.10 Severe Accident Management

Manager  
EPSD

- 1.10.1 Severe accident management 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 SAMG will be conducted as part of the scheduled 6-year objectives for each operating unit. The SAMG 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 SAMG "Evaluator" training should be provided at least every two years for continuing training purposes. Training for other SAMG personnel should be provided on a 6-year frequency for continuing training purposes.

— End of Section 1.10 —

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## 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" | ①

### 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"

## 3. COMMITMENTS

- 3.1 NU Letter B14268 commits NU to have procedures to accommodate the implementation of ERDS.
- 3.2 NU Letter A06789 commits NU to surveille computer hardware (OFIS) quarterly.
- 3.3 NU Letter A02567 commits NU to monitor emergency equipment, including communications.

## 4. SUMMARY OF CHANGES

- 4.1 Added reference to MP-28-MET-PRG, "Meteorological Monitoring, in step 2.1.4.



- 4.2 Incorporated environmental requirements contained in MP-28-MET-PRG into the basis document.
- 4.3 Added note to steps 1.5.1, 1.5.3, and 1.6.1 to clarify that once the Emergency Response Facilities are staffed and operational, SERO members shall not call into the ENRS.
- 4.4 Modified steps 1.5.1, 1.5.3, and 1.6.1 to clarify that only initial pager activations shall be acknowledged.
- 4.5 Added step 1.8.3 to conduct a formal critique after each drill, series of drills, and exercises.
- 4.6 Added supplemental SERO positions to Attachment 5 with a footnote identifying these positions as not described by the Millstone Station Emergency Plan.
- 4.7 Updated titles in Attachment 5.





# **Attachment 1**

## **Emergency Preparedness Abbreviations and Definitions**

(Sheet 1 of 1)

1. ADAM – Accident Dose Assessment Model
2. ADEOF – Assistant Director Emergency Operations Facility
3. ADTS – Assistant Director Technical Support
4. AMRDA – Assistant Manager of Radiological Dose Assessment
5. ENRS – Emergency Notification and Response System. The on-site and off-site notification system including pager and phone communications.
6. EPSD – Emergency Planning Services Department
7. ERC – External Resources Coordinator
8. ERDS – Emergency Response Data System
9. IDA – Initial Dose Assessment
10. RAE – Radiological Assessment Engineer
11. RDAC – Radiological Dose Assessment Committee
12. RES – Radiological Engineering Section
13. SAMG – Severe Accident Management Guidelines
14. SNS – SERO Notification System
15. Millstone Station Emergency Plan: The Millstone Station Emergency Plan contains requirements and organizational responsibilities and serves as the license commitment document for emergency preparedness.
16. Emergency Plan Administrative Procedure (EPAP)/Implementing Procedure (EPIP)/Operating Procedure (EPOP): Procedures that implement the Station Emergency Plan.
17. 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 OFIS, ENRS, ADAM, and radio communication equipment. EPUGs are not subject to SORC approval or controlled distribution; they are kept with the equipment they describe. The Emergency Planning Services Department is responsible for maintaining EPUGs.
18. 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 Test Services personnel. Department supervision will maintain an on-call rotation schedule for these personnel.

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## Attachment 2

### Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 1 of 4)

Organization	Item	Task	Freq <sub>1</sub>	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
Corporate Telecommunication Services (B3333)	SNS, NU Pagers, Radios, ENRS	General Support and Testing	AN	
Emergency Planning Services	FSAR, Tech Specs, Aperture Cards	Maintain Control Copies in ERFs	AN	GRITS
Emergency Planning Services	Unit – Specific Procedures	Maintain Control copies in EOF	AN	OSCAR
Emergency Planning 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-OP 606
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

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## Attachment 2

### Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 2 of 4)

Organization	Item	Task	Freq <sup>1</sup>	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 EPOP 4432
Nuclear Document Services	Unit – Specific Procedures	Maintain Control Copies in TSC	AN	OSCAR
Nuclear Document Services	Emergency Preparedness EIPs/EOPs	Maintain Document Distribution and Control; Audit	AN	OSCAR
Unit 2 I&C	Meteorological Equipment	Inspect, Calibrate, and Confirm Operability	W	C-SP-400.2
Security	Station Page and Evacuation Siren	Monitor Outside Speakers when Units Conduct Test.	M/Q	C-OP 605
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

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## Attachment 2

### Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 3 of 4)

Organization	Item	Task	Freq <sup>1</sup>	Reference
I&C; SAB	Radiation Monitors	Maintenance and Calibration; Documentation		
U-1 Operations	Meteorological Tower Generator	Test <sup>2</sup>	M	SP 699
U-1 Operations	U-1 PA Speakers and Evacuation Alarm	Test	M/Q	C-OP 605
Station Maintenance	Emergency Operations Facility	Electrical and Mechanical Maintenance of HVAC	Q	Vendor Support
U-2 Operations	EOF Airlock	Test <sup>2</sup>	Q	SP 2678C
U-2 Operations	EOF Emergency Diesel Generator	Test <sup>2</sup> Operation	M	SP 2678B OP 2399A
U-2 Operations	EOF Fire Detection System	Test <sup>2</sup> Operation	Q	SP 2678D OP 2399B
U-2 Operations	EOF Vent (RAD) Filter Systems	Test <sup>2</sup>	R	SP 2678A
U-2 Operations	U-2 PA Speakers and Evacuation Alarms	Test	M/Q	C-OP 605
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 <sup>2</sup>	Q	SP 3666.2
U-3 Operations	TSC Vent (RAD) Filter System	Test <sup>2</sup>	R	SP 3666.1
U-3 Operations	U-3 PA Speakers and Evacuation Alarms	Test	M/Q	C-OP 605

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## Attachment 2

### Summary of Department Responsibilities for Facilities, Equipment, and Material Maintenance

(Sheet 4 of 4)

Organization	Item	Task	Freq <sup>1</sup>	Reference
Unit Engineering (U-1, 2, 3)	Drawings	Maintain Control Copies in ERFs.	AN	Master Control Index
Unit Operations (U-1, 2, 3)	Radio Communications (Waterford, State, Tri-Town)	Test <sup>2</sup>	D	C-OP 600.3
Unit Operations (U-1, 2, 3)	Unit Page Siren System and Evacuation Alarm	Test <sup>2</sup>	M	C-OP 605
Unit Operations (U-3)	Radiopaging ENRS Daily/Weekly Test	Test <sup>2</sup>	D, W	C-OP 608
Unit Operations (U-3)	Radiopaging ENRS/SNS Monthly Test	Test <sup>2</sup>	M	C-OP 606
Unit Chemistry (U-1,2,3)	PASS	System Surveillance		CP-(800, 2800, 3800)
Wethersfield Data Center	ERDS, OFIS [♣Comm 3.1, 3.2]	General Support and Testing	Q	EPDI 06 EPDP 10

#### 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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**Attachment 4**  
**Documentation of Testing of Dose Assessment Computer Program**  
(Sheet 1 of 1)

**NOTE**

ADAM is installed in the EOF and IDA is installed in the control rooms. ADAM, 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.

All Units

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. IF test results are *not* satisfactory, NOTIFY EPSD.

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**Attachment 5**  
**SERO Qualifications and Reporting Location (3)**  
(Sheet 1 of 8)

Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal Yes/No	Initial (4) Drill/OJT/Walk-Thru
Assistant Director Emergency Operations Facility	ADEOF	OC	EOF	No	No	Manager -- Emergency Planning Services	Yes	Drill
Assistant Manager of Radiological Dose Assessment	AMRDA	STC	EOF	No	No	Director -- Site Services	Yes	Drill
Accident Management Team Thermal and Hydraulic Engineer	AMT/TH	STC	TSC/OSC	No	Yes	Director -- Nuclear Engineering	Yes	OJT
Accident Management Team Lead	AMTL	STC	TSC/OSC	No	Yes	Director -- Nuclear Engineering	Yes	OJT
Accident Management Team Mechanical Engineer	AMTME	STC	TSC/OSC	No	Yes	Director -- Plant Engineering	Yes	OJT
Assistant Radiation Protection Supervisor	ARPS	OC	TSC/OSC	No	Yes	Director -- Site Services	Yes	OJT
Director of Station Emergency Operations	DSEO	OC	EOF	No	No	Chief Nuclear Officer	Yes	Drill
EOF Health Physics Technician	EOFHP	OC	EOF	Yes	Yes	Director -- Site Services	Yes	Drill
EOF Shift Technician	EOFST	OC	EOF	Yes	Yes	Director -- Station	No	Walk-Thru
External Resource Coordinator	ERC	STC	EOF	No	No	Director -- Nuclear Materials and Document Management	Yes	Walk-Thru (5)
Executive Spokesperson	ES	OC	Media Cntr	No	No	Chief Nuclear Officer	Yes	Walk-Thru
Fire Brigade/EMT	FB	OS	OSC AA	Yes	Yes	Director -- Site Services	No	Drill (6)
Field Team Data Coordinator	FTDC	STC	EOF	No	No	Director -- Site Services	Yes	Walk-Thru
Generations Test Services Specialist	GTS	OC	TSC/OSC	No	Yes	Director -- Site Services	No	Walk-Thru

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**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Meteorological Specialist	MET	STC	EOF	No	No	Director – Site Services	Yes	Walk--Thru
Manager of Resources	MOR	OC	EOF	No	No	Director – Nuclear Materials and Document Management	Yes	Drill
Manager of Security	MOS	STC	EOF	No	Yes	Director – Site Services	Yes	Drill
Manager Public Information	MPI	OC	EOF	No	No	Director – Nuclear Communications	Yes	Drill
Manager Radiological Consequence Assessment	MRCA	OC	EOF	No	No	Director – Site Services	Yes	Drill
Nuclear News Manager	NNM	OC	Media Cntr	No	No	Director – Nuclear Communications	Yes	Drill
Prem Operator	PREM	STC	EOF	No	No	Director Site Services	Yes	Walk–Thru
Radiological Communicator	RADCOM	STC	EOF	No	No	Director – Site Services	Yes	Walk–Thru
Radiological Assessment Engineer	RAE	STC	EOF	No	No	Director – Nuclear Engineering	Yes	Drill
Radiological Monitoring Team 3 Lead	RMT3	OC	EOF	Yes	Yes	Director – Station	Yes	Walk–Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	Director – Nuclear Oversight	Yes	Walk–Thru
Radiological Monitoring Team 4 Lead	RMT4	OC	EOF	Yes	Yes	Director – Station	Yes	Walk–Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	Director – Nuclear Oversight	Yes	Walk–Thru
Radiological Monitoring Team 5 Lead	RMT5	OC	EOF	Yes	Yes	Director – Station	Yes	Walk–Thru

\* All RMT Drivers are in one group with three people on call at all times.

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**Attachment 5**  
**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Radiological Monitoring Team Driver*	RMTDRV	OC	EOF	Yes	Yes	Director – Nuclear Oversight	Yes	Walk-Thru
NAP Radiological Monitoring Team	RMTA	OC	NAP	Yes	Yes	Director – Station	Yes	Walk-Thru
NAP Radiological Monitoring Team	RMTB	OC	NAP	Yes	Yes	Director – Station	Yes	Walk-Thru
SAP Radiological Monitoring Team	RMTC	OC	SAP	Yes	Yes	Director – Station	Yes	Walk-Thru
SAP Radiological Monitoring Team	RMTD	OC	SAP	Yes	Yes	Director – Site Services	Yes	Walk-Thru
Station Duty Officer	SDO	OS	CR	Yes	Yes	Director – Station	No	OJT
Technical Support Center Reactor Engineer	TSCRE	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	Walk-Thru
Technical Assistant	TA	STC	Media Center	No	No	Manager – Regulatory Affairs	Yes	Walk-Thru
Unit 1 Assistant Director Technical Support	U1ADTS	OC	TSC/OSC	No	Yes	Director – Station	Yes	Drill
Unit 1 Chemistry Technician	U1CHEM-TECH	OS	CR	Yes	Yes	Director – Station	No	Walk-Thru
Unit 1 Control Room Data Coordinator	U1CRDC	STC	CR	No	Yes	Director – Nuclear Training	Yes	Walk-Thru
Unit 1 Electrician	U1ELEC	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 1 Health Physics Technician	U1 HPTECH	OS	CR	Yes	Yes	Director – Station	No	Walk-Thru

\* All RMT Drivers are in one group with three people on call at all times.

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**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 1 Instrument & Control Operational Support Center	U1I&C OSC	STC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 1 Instrument & Control Technician	U1I&C TECH	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 1 Mechanic	U1MECH	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 1 Manager of Communications	U1MOC	OC	EOF	No	No	Director – Nuclear Training	Yes	Walk-Thru
Unit 1 Manager of Operational Support Center	U1MOSC	OC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 1 Manager of Technical Support Center	U1MTSC	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	Drill
Unit 1 Operational Support Center Maintenance Assistant	U1 OSCMA	STC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 1 PEO/NCO	U1PEO/NCO	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 1 Control Operator	U1CO	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 1 STA	U1STA	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 1 Technical Information Coordinator	U1TIC	STC	EOF	No	No	Director – Nuclear Training	Yes	Walk-Thru
Unit 1 Technical Support Center Electrical Engineer	U1 TSCEE	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	OJT
Unit 1 Technical Support Center Mechanical Engineer	U1 TSCME	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	OJT
Unit 1 Technical Support Center Shift Manager	U1 TSCSM	STC	TSC/OSC	No	Yes	Director – Plant Engineering	No	OJT

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**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 2 Assistant Director Technical Support	U2ADTS	OC	TSC/OSC	No	Yes	Director – Station	Yes	Drill
Unit 2 Chemistry Technician	U2CHEM-TECH	OS	CR	Yes	Yes	Director – Station	No	Walk-Thru
Unit 2 Control Room Data Coordinator	U2CRDC	STC	CR	No	Yes	Director – Nuclear Training	Yes	Walk-Thru
Unit 2 Electrician	U2ELEC	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 2 Health Physics Technician	U2HP TECH	OS	CR	Yes	Yes	Director – Station	No	Walk-Thru
Unit 2 Instrument & Control Operational Support Center	U2I&C OSC	STC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 2 Instrument & Control Technician	U2I&C TECH	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 2 Mechanic	U2MECH	OC	OSC AA	Yes	Yes	Director – Maintenance	No	Walk-Thru
Unit 2 Manager of Communications	U2MOC	OC	EOF	No	No	Director – Nuclear Training	Yes	Walk-Thru
Unit 2 Manager of Operational Support Center	U2MOSC	OC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 2 Manager of Technical Support Center	U2MTSC	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	Drill
Unit 2 Operational Support Center Maintenance Assistant	U2 OSCMA	STC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 2 PEO	U2PEO	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 2 Control Operator	U2CO	OS	CR	Yes	Yes	Director – Station	(1)	(1)

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**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 2 STA	U2STA	OS	CR	Yes	Yes	Director -- Station	(1)	(1)
Unit 2 Technical Information Coordinator	U2TIC	STC	EOF	No	No	Director -- Nuclear Training	Yes	Walk--Thru
Unit 2 Technical Support Center Electrical Engineer	U2 TSCEE	OC	TSC/OSC	No	Yes	Director -- Plant Engineering	Yes	OJT
Unit 2 Technical Support Center Mechanical Engineer	U2 TSCME	OC	TSC/OSC	No	Yes	Director -- Plant Engineering	Yes	OJT
Unit 2 Technical Support Center Shift Manager	U2 TSCSM	STC	TSC/OSC	No	Yes	Director -- Station	No	OJT
Unit 3 Assistant Director Technical Support	U3ADTS	OC	TSC/OSC	No	Yes	Director -- Station	Yes	Drill
Unit 3 Chemistry Technician	U3CHEM-TECH	OS	CR	Yes	Yes	Director -- Station	No	Walk--Thru
Unit 3 Control Room Data Coordinator	U3CRDC	STC	CR	No	Yes	Director -- Nuclear Training	Yes	Walk--Thru
Unit 3 Electrician	U3ELEC	OC	OSC AA	Yes	Yes	Director -- Maintenance	No	Walk--Thru
Unit 3 Health Physics Technician	U3 HPTECH	OS	CR	Yes	Yes	Director -- Station	No	Walk--Thru
Unit 3 Instrument & Control Operational Support Center	U3I&C OSC	STC	TSC/OSC	No	Yes	Director -- Maintenance	Yes	Drill
Unit 3 Instrument & Control Technician	U3I&C TECH	OC	OSC AA	Yes	Yes	Director -- Maintenance	No	Walk--Thru
Unit 3 Mechanic	U3MECH	OC	OSC AA	Yes	Yes	Director -- Maintenance	No	Walk--Thru

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**SERO Qualifications and Reporting Location (3)**  
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Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Unit 3 Manager of Communications	U3MOC	OC	EOF	No	No	Director – Nuclear Training	Yes	Walk – Thru
Unit 3 Manager of Operational Support Center	U3MOSC	OC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 3 Manager of Technical Support Center	U3MTSC	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	Drill
Unit 3 Operational Support Center Maintenance Assistant	U3 OSCMA	STC	TSC/OSC	No	Yes	Director – Maintenance	Yes	Drill
Unit 3 PEO	U3PEO	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 3 Control Operator	U3CO	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 3 STA	U3STA	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 3 Technical Information Coordinator	U3TIC	STC	EOF	No	No	Director – Nuclear Training	Yes	Walk – Thru
Unit 3 Technical Support Center Electrical Engineer	U3 TSCEE	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	OJT
Unit 3 Technical Support Center Mechanical Engineer	U3 TSCME	OC	TSC/OSC	No	Yes	Director – Plant Engineering	Yes	OJT
Unit 3 Technical Support Center Shift Manager	U3 TSCSM	STC	TSC/OSC	No	Yes	Director – Station	No	OJT
Unit 1 Unit Supervisor	U1US	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 2 Unit Supervisor	U2US	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 3 Unit Supervisor	U3US	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Security Guard	SECGRD	OS	POST	Yes	Yes	Director – Site Services	No	OJT
Security Shift Supervisor	SSS	OS	CAS	No	Yes	Director – Site Services	No	OJT

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**SERO Qualifications and Reporting Location (3)**  
(Sheet 8 of 8)

Position	Code	CAT	LOC	RESP	RAD	Position Owner	Drill Requirements	
							Annual Requal-Yes/No	Initial (4) Drill/OJT/Walk-Thru
Manager Radiological Dose Assessment	MRDA	OC	EOF	No	No	Director – Station Services	Yes	Drill
Unit 3 Shift Technician	U3ST	OS	CR	Yes	Yes	Director – Station	No	NA
Unit 1 Shift Manager	U1SM	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 2 Shift Manager	U2SM	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Unit 3 Shift Manager	U3SM	OS	CR	Yes	Yes	Director – Station	(1)	(1)
Alarm Station Supervisor	SECSUP	OS	CAS/SAS	Yes	Yes	Director – Site Services	No	OJT
Regulatory Liaison <sup>(7)</sup>	RL	STC	EOF	No	No	Manager – Regulatory Affairs	No	Walk-Thru
State Emergency Planning Liaison <sup>(7)</sup>	SEPL	STC	State EOC	No	No	Manager – Emergency Planning	No	Walk-Thru
Station Emergency Planning Representative <sup>(7)</sup>	SEPR	STC	EOF	No	No	Manager – Emergency Planning	No	Walk-Thru
Media Center Liaison <sup>(7)</sup>	MCL	STC	Media Center	No	No	Director Nuclear Communications	No	Walk-Thru
Rumor and Inquiry Control Liaison <sup>(7)</sup>	RICL	STC	Media Center	No	No	Director Nuclear Communications	No	Walk-Thru
Technical Briefer <sup>(7)</sup>	TB	STC	Media Center	No	No	Director – Station	No	Walk-Thru
Radiological Briefer <sup>(7)</sup>	RB	STC	Media Center	No	No	Director – Station	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.

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**Attachment 6**  
**Roles and Responsibilities for**  
**Emergency Preparedness Dose Assessment**  
(Sheet 1 of 2)

Area	EPSD	SAB/RES
<b>Emergency Plan</b> (Includes Ingestion Pathway Plan)	EPSD shall: <ul style="list-style-type: none"> <li>• Develop the Emergency Plan</li> <li>• Ensure compliance to regulatory requirements</li> <li>• Request technical support for input and review</li> <li>• Process changes and obtain necessary approvals</li> <li>• Perform necessary 50.54(q) reviews</li> </ul>	SAB/RES shall: <ul style="list-style-type: none"> <li>• Provide radiological technical expertise requested</li> <li>• Provide compliant support</li> <li>• Support the review and approval process</li> </ul>
<b>Radiological Dose Assessment Committee (RDAC)</b>	EPSD shall: <ul style="list-style-type: none"> <li>• Chair the committee</li> <li>• Develop a charter</li> <li>• Schedule meetings</li> <li>• Develop meeting minutes for RDAC members and upper management</li> <li>• Provide expertise specific to regulatory compliance</li> <li>• Provide input and make contacts to benchmark against the industry</li> <li>• Process change requests</li> </ul>	SAB/RES shall: <ul style="list-style-type: none"> <li>• Co-chair the committee</li> <li>• Provide input to charter</li> <li>• Provide technical member(s) to the RDAC</li> <li>• Develop technical justification for software / procedure changes</li> <li>• Provide radiological expertise specific to subject matter</li> </ul>
<b>Procedures</b>	EPSD shall: <ul style="list-style-type: none"> <li>• Chair CRC</li> <li>• Maintain overall approval or veto of proposed procedures and changes</li> <li>• Ensure compliance to regulatory requirements</li> <li>• Maintain procedures current / schedule biennial reviews if required</li> <li>• Process procedure change requests</li> <li>• Process procedure typing requests</li> <li>• Facilitate writers guide review by Procedures Group</li> <li>• Perform necessary 50.54(q) reviews</li> <li>• Provide V&amp;V support as necessary</li> <li>• Facilitate scheduling of PORC/SORC by Procedures Group</li> <li>• Set effective implementation dates</li> </ul>	EPSD shall: <ul style="list-style-type: none"> <li>• Provide radiological technical intent</li> <li>• Write procedure steps</li> <li>• Provide bases documents</li> <li>• Lead V&amp;V process</li> <li>• Provide V&amp;V input and approvals</li> <li>• Support necessary 50.54(q) review</li> <li>• Present technical changes to PORC/SORC for approval</li> </ul>

**Level of Use  
Information**



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**Attachment 6**  
**Roles and Responsibilities for**  
**Emergency Preparedness Dose Assessment**  
(Sheet 2 of 2)

Area	EPSD	SAB/RES
<b>Tools and Software</b>	EPSD shall: <ul style="list-style-type: none"> <li>• Own required tools and software</li> <li>• Be responsible for budgeting new purchases</li> <li>• Fund upgrades and revisions</li> <li>• Ensure compliance to regulatory requirements and intent</li> <li>• Obtain approvals for selected tools and software through RDAC (user) members before committing to a solution/purchase/change</li> <li>• Own Quality Software (QS) and associated documentation</li> </ul>	SAB/RES shall: <ul style="list-style-type: none"> <li>• Produce requirements document specifying needs, acceptance criteria and process bids</li> <li>• Recommend through the RDAC the selection of tools and software</li> <li>• Develop internal software (as necessary or as appropriate)</li> <li>• Provide development support</li> <li>• Provide testing</li> <li>• Provide QS documentation</li> <li>• Provide overall radiological technical support</li> </ul>
<b>Scenario Development</b>	EPSD shall: <ul style="list-style-type: none"> <li>• Define scenario radiological package requirements (Memo of Understanding)</li> <li>• Develop overall scenario</li> <li>• Provide long-range schedule to allow support resource planning</li> <li>• Define deliverable date for completed package</li> <li>• Provide sufficient lead time as defined in the Memo of Understanding for radiological package development</li> </ul>	SAB/RES shall: <ul style="list-style-type: none"> <li>• Provide an experienced technical lead to develop radiological data packages</li> <li>• Provide support to scenario development meetings</li> <li>• Produce radiological data packages fully meeting Memo of Understanding expectations</li> <li>• Provide completed radiological data package by the defined deliverable date</li> </ul>

**Level of Use  
Information**



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## **Attachment 7**

### **Radiological Dose Assessment Committee at Northeast Utilities**

(Sheet 1 of 1)

#### **1. Purpose:**

Ensure a regulatory compliant, effective dose assessment capability is maintained at NU's Connecticut facilities.

#### **2. Membership:**

The following functions shall be represented as members of this committee:

- Emergency Preparedness – (Emergency Planning Services) – 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 Manager of Emergency Planning Services 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 SAB/RES management for disposition.

**Level of Use  
Information**



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Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 2

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

Emergency Plan Implementing Procedure 4400-001, Revision 5

Millstone Unit 1 Emergency Action Levels

April 2000

# Document Action Request

**A** Initiated By: B. Tarallo Date: 1/6/00 Dept: SPG Ext.: 2096  
 Document No.: EPIP 4400-001 Rev. No.: 5 Chg. No.: N/A  
 Title: Millstone Unit 1 Emergency Action Levels

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

Continued ☐

**C** Change Instructions

Continued ☐

**D** Temporary Change  
Interim Approval

**E** Procedure Request/Feedback Disposition  
 (1) Plant Mngt Staff Member Print/Sign/Date (2) SM/SRO/CFH on Unit Print/Sign/Date  
 Priority: ☐ Perform Now ☐ Perform Later ☐ Rejected - See Comments  
 Activity: ☐ New ☐ Cancel ☒ Rev ☐ Minor Rev ☐ Temp Change ☐ Change ☐ OTC  
☐ Biennial Review ☐ Place in DNU ☐ Remove DNU ☐ Edit. Corr.  
 Comments: Plant Mngt Staff Member - Interim Approval

Comments:

Review Type	Print	Sign	Date	SQR Qualified		Dept.	If Comments
				Yes	No		
RAC 06	<input checked="" type="checkbox"/> Kathleen R. Burgess	<input checked="" type="checkbox"/> Kathleen R. Burgess	1/6/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	<input checked="" type="checkbox"/>
Independent	<input checked="" type="checkbox"/> DANIEL J. MEEK/0FF	<input checked="" type="checkbox"/> Dan J. Meek/0FF	1/6/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Writer's Guide	<input checked="" type="checkbox"/> BARBARA A. TARALLO	<input checked="" type="checkbox"/> Barbara A. Tarallo	1/6/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPG	
Validation	<input checked="" type="checkbox"/> THOMAS E. VERNON	<input checked="" type="checkbox"/> Thomas E. Vernon	1/6/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ops 1	

**G** Safety Evaluation/Environmental Review Attached? ☐ Yes ☒ No

**H** ☐ SQR Program Final Review and Approval  
 Approval ☐ Disapproval ☐  
 SQR Qualified Independent Reviewer \_\_\_\_\_  
 Department Head/Responsible Individual \_\_\_\_\_  
 Approval Date \_\_\_\_\_  
☒ **SORC/PORC/RI/DH Final Review and Approval**  
 Department Head/Responsible Individual 1/6/00  
 Approval Signature for  
 Approval Date and Meeting No. 1/12/00 00/02

**I** Effective Date 3/13/00 Station Admin Procedures Group OSCAR Report DC-SAP01-1, Rev. 1

# MILLSTONE UNIT 1 EMERGENCY ACTION LEVELS

IN-PLANT RADIATION		SECURITY THREAT/ DESTRUCTIVE PHENOMENA		FIRE/GASES	CLASSIFICATION
RA1	REACTOR BUILDING RADIATION (D-AA2)	TA1	SECURITY EVENT (D-HA1)		ALERT
<div>1. Area radiation monitor reading in Reactor Building or survey results indicate an UNCONTROLLED increase in radiation levels by 100 mR/hr that is not the result of a planned evolution.</div> <div>2. Valid radiation monitor reading or survey results indicate greater than 15 mR/hr in areas required to be occupied 24 hours a day.</div>		<div>1. Intrusion into the Reactor Building by a hostile force.</div> <div>2. Bomb device discovered in the Reactor Building.</div>			<div>CHARLIE-ONE</div> <div>Events are in progress or have occurred which indicate an actual or potential substantial degradation of the level of safety of the plant, to plant personnel, or to the safe containment of fuel in the spent fuel pool.</div>
		TA2	DESTRUCTIVE PHENOMENA (N/A)		
		An event that damages systems, structures, or components within the Reactor Building that may result in overexposure of site personnel or results in an uncontrolled decrease in the spent fuel pool water level or damage to spent fuel.			

EPIP Form 4400-001  
Revision 5  
Page 1 of 4


# MILLSTONE UNIT 1 EMERGENCY ACTION LEVELS

IN-PLANT RADIATION		SECURITY THREAT/ DESTRUCTIVE PHENOMENA		FIRE/GASES		CLASSIFICATION
RU1	REACTOR BUILDING RADIATION (D-AU2)	TU1	SECURITY EVENT (D-HU1)	GU1	FIRE (D-HU3)	UNUSUAL EVENT
Area radiation monitor reading in Reactor Building or survey results indicate an UNCONTROLLED increase in radiation levels by 25 mR/hr that is not the result of a planned evolution.		1. Bomb device discovered in the Protected Area (PA) or Industrial Security Zone (ISZ). 2. Vehicle crash within the PA or ISZ that could potentially affect equipment needed to maintain spent fuel integrity. 3. Confirmed intrusion within the PA or ISZ. 4. Civil disturbance within the PA or ISZ. 5. Confirmed hostage situation within the PA or ISZ.		Fire in the Reactor Building or other areas important to maintaining the integrity of the spent fuel NOT extinguished within 15 minutes of Control Room notification OR within 15 minutes of the fire alarm actuation in the Control Room.		<div>OR DELTA-ONE</div>  Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant.   <

# **MILLSTONE UNIT 1 EMERGENCY ACTION LEVELS**

FUEL POOL EQUIPMENT FAILURE	UNPLANNED OFF SITE RELEASES		JUDGEMENT		CLASSIFICATION
	OA1	EQUIPMENT MALFUNCTION (D-AA1)	JA1	JUDGEMENT (D-HA2)	ALERT
	Unplanned release of radioactivity (liquid or gaseous) to the environment >200 times REMODCM release limit for >15 minutes.		Any condition for which judgement indicates that the level of safety for the Reactor Building or other areas important for maintaining the integrity of the spent fuel is substantially degraded and which requires Station Emergency Response Organization (SERO) staffing.		<div data-bbox="1516 513 1919 613">CHARLIE-ONE</div> <p>Events are in progress or have occurred which indicate an actual or potential substantial degradation of the level of safety of the plant, to plant personnel, or to the safe containment of fuel in the spent fuel pool.</p> <div data-bbox="1675 1349 1948 1458"> EPIP Form 4400-001  Revision 5  Page 3 of 4 </div>

# MILLSTONE UNIT 1 EMERGENCY ACTION LEVELS

FUEL POOL EQUIPMENT FAILURE		UNPLANNED OFF SITE RELEASES		JUDGEMENT		CLASSIFICATION
EU1	FUEL POOL LEVEL (D-SU1)	OU1	UNPLANNED RELEASES (D-AU1)	JU1	JUDGEMENT (D-HU2)	UNUSUAL EVENT
Uncontrolled decrease in fuel pool level indicated by a low level alarm actuation with all spent fuel assemblies remaining covered by water.				Any condition for which judgement indicates the potential or actual degradation in the level of safety of the Reactor Building or other areas important to maintaining the integrity of the spent fuel.		<div>OR DELTA-ONE</div> <p>Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant.</p>
EU2	FUEL POOL TEMPERATURE (D-SU1)					
Uncontrolled heatup of the spent fuel pool such that the bulk pool temperature exceeds 150° F.						<p>EPIP Form 4400-001 Revision 5 Page 4 of 4</p>



Docket Nos. 50-245

50-336

50-423

B18047

**Attachment 3**

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

**Emergency Plan Implementing Procedure 4404, Revision 6**  
**Notifications and Communications**

**April 2000**

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

~~1220-079749~~  
000307-114034

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPIP 4404 Rev. No.: 006 Minor Rev.: \_\_\_\_\_

Title: Notifications and Communications

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.: \_\_\_\_\_

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			if Comments
				Yes	No	Dept.	
Cross. Disci	<input checked="" type="checkbox"/>	<u>P. SMALL</u>	<u>3/7/00</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ops Unit 3	None
Cross Disci	<input checked="" type="checkbox"/>	<u>J. ACKERMAN</u>	<u>3/7/00</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ops Unit 3	✓
	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
RAC 06	<input checked="" type="checkbox"/>	<u>Kathy Burgess</u>	<u>3/7/00</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EPSP	
Independent	<input checked="" type="checkbox"/>	<u>Kathy Burgess</u>	<u>3/8/00</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	✓
Writer's Guide	<input checked="" type="checkbox"/>	<u>Barbara Tarallo</u>	<u>3/7/00</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPG	✓
Validation	<input checked="" type="checkbox"/>	<u>Tom Dembek</u>	<u>3/8/00</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EPSP	✓

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SORC/PORC/R/DH Final Review and Approval

Meeting No. 00-09

Department Head/Responsible Individual / Date

Approval Signature

Approval Date

Effective Date: 3/13/00

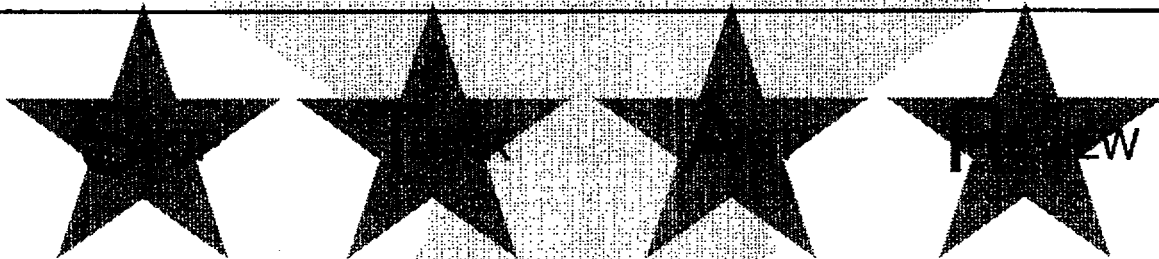
**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN IMPLEMENTING PROCEDURE**



**Notifications and Communications**

**EPIP 4404**

**Rev. 006**



Approval Date: 3/8/00

Effective Date: ~~3/16/00~~ BT 3/9/00  
3/13/00

Level of Use  
**General**

**Millstone All Units  
Emergency Plan Implementing Procedure**

**Notifications and Communications**

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## 1. PURPOSE

### 1.1 Objective

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

### 1.2 Discussion

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

- Notification of State Agencies
- Notification of Towns (Local Officials)
- Notification of NRC
- Performance of administrative actions

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

- Regulations require that notification to DEP Monitoring and Radiation Control Division and 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 to the State DEP Monitoring and Radiation Control Division and 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.

Unless an event is being de-escalated, a lower classification event IRF radiopager message shall not be reported once a higher classification event has been reported.

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" section entered and recorded and the circumstances or conditions which caused the report have 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.

## **2. PREREQUISITES**

### **2.1 General**

- 2.1.1 The event has been classified using EPIP 4400, "Event Assessment, Classification, and Reportability."
- 2.1.2 SERO activation is not required to use this procedure.
- 2.1.3 EOF activation is required to transfer notification responsibilities to the EOF.

### **2.2 Documents**

- 2.2.1 EPUG 08B, " Millstone Emergency Plan Resource Book"
- 2.2.2 EPIP 4400, "Event Assessment, Classification, and Reportability"

### **2.3 Responsibilities**

- 2.3.1 After the EOF has been activated, the EOF DSEO approves completed IRFs.
- 2.3.2 After the EOF has been activated, the MOC directs and coordinates the transfer of NRC notification responsibilities from the control room to the EOF.

2.3.3 After the EOF is activated, the ADEOF is responsible for the following:

- Direction of on-call Shift Technician
- Update and reclassification notifications
- Termination notifications

## 2.4 Definitions

2.4.1 ADEOF – Assistant Director Emergency Operations Facility

2.4.2 CV – Callback Verification (i.e., individuals by group)

2.4.3 Deactivate – To place a system, component, or organization in an inactive condition

2.4.4 UE – Unusual Event

2.4.5 Applicable unit – Any unit which is directly affected by an event

2.4.6 Incident description – “Additional Information” section of the Incident Report Form (IRF) providing a description of the event

2.4.7 Initial report – The first notification to the NRC, State and Local Officials, and applicable personnel that reports an NRC classification and State Posture Code emergency event.

2.4.8 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 applicable unit
- 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.
- A non-affected unit may be requested to assume the lead by the affected unit (e.g., loss of control room habitability).

2.4.9 Notification time – The time the IRF message is released (reported on).

- 2.4.10 Prompt notification – The official notification to the State DEP Monitoring and Radiation Control Division and Local Officials within 15 minutes of classification, and notification to the NRC immediately after notification to the State DEP and not later than one hour after declaration of an emergency classification.
- 2.4.11 Reclassification report – A prompt notification, subsequent to the initial report, to State and Local Officials, the NRC, and applicable personnel that reports an escalation or de-escalation of event classification relative to the previous report.
- 2.4.12 Shift Technician (ST) – Responsible for ENRS initiation and notifications.
- 2.4.13 Termination report – The final notification to State and Local Officials, the NRC, and applicable personnel that reports termination of the event. For Unusual Event (Delta-Two), the initial report may also serve as the termination report if the event has been corrected in time for the initial report. The “further report will not be given” block will be checked and an event termination message will be automatically printed on the IRF.
- 2.4.14 Update report – A notification, subsequent to the initial report, to State and Local Officials, the NRC and applicable personnel, that reports additional information on the event, but does *not* escalate or de-escalate classification of the event.



### 3. PRECAUTIONS

- 3.1 The potential of an incident escalating to a higher incident classification must always be a primary concern when evaluating emergency plant conditions.
- 3.2 All Unusual Events and higher reportable events may require two or more radiopager messages to be issued; the prompt report and one or more update messages with "Additional Information" updates and, as appropriate, a termination message.
- 3.3 Organization and time restrictions include the following:
- Prior to SERO activation only the SM/CR DSEO is authorized to perform classifications and authorize notifications. The CR DSEO is relieved of classification responsibility by the ADTS after TSC activation, and notification responsibility by the EOF DSEO, after EOF activation.
  - Notification of State and Local Officials via the ENRS shall be initiated within 15 minutes of the classification (or reclassification) of any Emergency Action Level Table event. (UE or above)
  - The State EOC may assume responsibility for off-site notifications.
- 3.4 If a pager, telephone, or telephone number does not function as expected, the following alternate resources should be used and the malfunction corrected at a later date:
- Tri-Town Radio
  - Alternate phone lines (trunk, cellular)
  - Alternate phone listings
- 3.5 When using ENRS, failure to select the correct scenario (i.e., classification or group to page) may result in unwarranted activation or the release of misinformation.
- 3.6 All NRC communications and notifications should be logged.
- 3.7 If Local Area Communications (LAN) are lost, and "RapidReach" primary and backup are out of service (inoperable), any messages must be sent using "EasyView Remote" followed by Faxworks Section 4.8.

- 3.8 "EasyView Remote" eliminates entering and recording the IRF.
- 3.9 If "EasyView Remote" fails, any messages must be sent using Security (SAS) assistance Section 4.8.

#### 4. INSTRUCTIONS

##### NOTE

1. For events that activate the SERO, the 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.
2. Emergency notification responsibilities of the Unit 3 Shift Technician may be delegated to another qualified ENRS operator.

Shift  
Technician in  
CR or EOF

##### 4.1 Initial Actions

4.1.1 LOG-ON to ENRS terminal.

4.1.2 COMPLETE Attachment 1, "Nuclear Incident Report Form (IRF)."

##### NOTE

1. Meteorological data is available from SPDS or OFIS.
2. If a radiological release path is unknown, the control room Met Tower 142' elevation should be used.
3. If located in the EOF, the ADEOF should be consulted for the correct Met Tower data for release path.

4.1.3 ENTER meteorological data as follows:

- IF data is available, 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.

4.1.4 OBTAIN SM or EOF DSEO authorization signature on written IRF.

Level of Use  
**General**

STOP

THINK

ACT

REVIEW

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### NOTE

Telephone calls to alert the affected unit NRC Resident Inspector of impending radiopager notification are to be performed **when time permits**.

CR DSEO or  
Designee

4.1.5 Within 1 hour, **PERFORM** the initial NRC notification, as follows:

### 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.

- a. **RECORD** applicable information for event on Attachment 4 “NRC Event Notification Form.”
- b. Refer To and **COMPLETE** Attachment 2, “NRC Notification Checklist.”
- c. **IF** ENS is not operable, Go To Section 4.9, “ENS Failure.”

– End of Section 4.1 –

Level of Use  
**General**

STOP

THINK

ACT

REVIEW

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## 4.2 Radiopager Notifications

- 4.2.1 OPEN "RapidReach Primary" folder and "RapidReach" icon.
- 4.2.2 At "RapidReach Login" screen, SELECT user ID and ENTER password.
- 4.2.3 OPEN "EasyView" icon.
- 4.2.4 At "EasyView Login" screen, SELECT user ID and ENTER password.
- 4.2.5 IF ENRS primary is *not* operable, Refer to Section 4.7 and PERFORM backup and remote operation.
- 4.2.6 ENTER IRF data, as follows:
  - a. OPEN "IRF" form.
  - b. Using Attachment 1, ENTER IRF information into IRF template.
  - c. PRINT IRF and VERIFY information is correct.
- 4.2.7 OBTAIN SM or EOF DSEO initials on printed IRF.
- 4.2.8 SAVE IRF as follows:
  - a. SELECT "File" and "Print."

### NOTE

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

- b. SELECT "Print-2-Image."
- c. At "Select Configuration" box, SELECT appropriate setup.
- d. At "Select Message to Fax," screen, SELECT "Root" tree.
- e. At "Root" tree, SELECT appropriate message (e.g., Emergency Call-Outs, etc.).

4.2.9 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."

4.2.10 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).

**NOTE**

Attachment 7, "Scenario Chart," is provided as guidance for selecting the appropriate scenario.

- c. MAXIMIZE "EasyView" screen and SELECT appropriate scenario.
- d. SELECT "lightning bolt" icon.
- e. SELECT "Set Common Message."
- f. At "Root" tree, SELECT appropriate message (e.g., Emergency Call-Outs, etc.).



## CAUTION



The scenario and message must be read and verified prior to selecting the "Start" button.

- g. STOP and VERIFY scenario and message are accurate.
- h. At "Start of Scenario" screen, SELECT "Start."

### 4.2.11 VERIFY radiopager sent, as follows:

- a. MONITOR "RapidReach Overview" screen and SELECT most recent scenario number from call-out grid box (the top box) to verify appropriate groups or individuals have been paged.
- b. VERIFY page message sent to control room console pager.

## NOTE

If either of the following conditions exist, the radiopager transmission has failed:

- Controlled pager on the console has *not* activated within approximately 3 minutes.
- No responders call in within approximately 5 minutes after release of the IRF radiopager message.

- c. IF radiopager transmission has failed using "RapidReach" Refer to Section 4.8, "ENRS Failure."
- d. MONITOR "EasyView" and "RapidReach" screens as positions call back acknowledging page.
- e. VERIFY fax is received in respective control room or EOF, as applicable.
- f. At "Overview" screen, PRINT "Groups-in-Call-Out" callback verification report.
- g. IF SERO is activated, FAX initial CV report (SERO results) to MOR (Ext. 2741 or 9-437-2741).



- h. **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 in progress.

4.2.12 **IF** ENRS is *not* operable, Refer To Section 4.8, "ENRS Failure," and EPUG 08B, "Millstone Emergency Plan Resource Book," Section "Off-Site Towns/Agencies," and **manually FAX** notifications to State and Local Officials.

– End of Section 4.2 –



### 4.3 Callback Verification

#### NOTE

Attachment 5, "Notification and Callback Guidance," provides guidance for verification of required actions.

4.3.1 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 Officials

#### 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 Bldg 475 server or EOF phone server only. (IT assistance required)

4.3.2 **PRINT** CV report (i.e., individuals in group) to document callback responses.

4.3.3 Refer To CV report and Attachment 3 and **PERFORM** the following:

- a. **DOCUMENT** non-responders
- b. **PERFORM** backup notifications

4.3.4 **PRINT** copy of SERO CV report only and FAX to EOF (Ext. 2741 or 9- 437-2741).

4.3.5 WHEN initial and backup notifications have been completed, **PRINT** final ENRS CV report.

4.3.6 IF all existing events have been terminated AND callback verifications are complete, **RESTORE** general default, as follows:

- a. **SELECT** "Rapid Reach."
- b. **SELECT** "microphone" icon. ("Show Message Window")

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- c. At "Root" tree, SELECT "Informational Message."
- d. At "Audio Message" screen, SELECT "microphone" icon.
- e. RECORD the following:  
  
"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

– End of Section 4.3 –

#### 4.4 Additional Notifications

4.4.1 IF Alert or higher, Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and PERFORM the following:

- a. DIRECT Information Technology (IT) in the Wethersfield Data Center to activate the Emergency Response Data System (ERDS) and configure ERDS for the applicable unit.

#### NOTE

The computer operator or Network Control Technician on duty in the Wethersfield Data Center may request the following Code Phrases when directed to activate ERDS:

Code 1: Nuclear Emergency

Code 2: Nuclear Exercise

Code 3: Nuclear Drill

Code 4: Millstone or NRC Request

- b. PROVIDE applicable Code Phrase for the event.

Shift  
Technician in  
Control Room

4.4.2 NOTIFY American Nuclear Insurers (ANI) at 9-561-3433.

— End of Section 4.4 —

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## 4.5 Subsequent Actions

### 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 require State and Local Officials to call in (prevents system from hunting).

Shift  
Technician in  
Control Room  
or EOF

4.5.1 **IF** any of the following conditions occur, Refer To step 4.1.2 and **PERFORM** notifications:

- **IF** SERO is activated and additional messages are required, **SELECT** "SERO Activated – Send Add'l Messages," scenario.
- Update or reclassification notifications are directed
- Event is terminated **AND** event was *not* closed out in initial report

4.5.2 **IF** all existing events have been terminated **AND** callback verifications have been completed, **PERFORM** the following:

- a. Refer To step 4.3.6 and **RESTORE** ENRS general default message.
- b. **PERFORM** ENRS log-off.

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Shift  
Technician in  
Control Room

4.5.3 **IF** directed by the ADEOF or on-call Shift Technician to transfer notification responsibilities to the EOF, **PERFORM** the following:

- a. **COORDINATE** formal turnover of notification responsibilities from the control room to the Shift Technician in the EOF including the following:
  - Event status
  - Summary of communication times, content, etc.
  - Commitments for future or pending communications (e.g., update messages, NRC follow-up)

Shift  
Technician in  
EOF

- b. **REQUEST** Shift Technician in control room log-off, if necessary.
- c. **PERFORM** ENRS log-on in EOF, if necessary.
- d. **IF** EOF ENRS is *not* operable, **CONSULT** CR Shift Technician for assistance and Go To Section 4.8, "ENRS Failure," as necessary.

e. Go To step 4.1.2 and **PERFORM** notifications.

Shift  
Technician in  
Control Room

4.5.4 **WHEN** requested by the Shift Technician in the EOF, **PROVIDE** assistance, as necessary.

Shift  
Technician in  
EOF

4.5.5 **IF** directed by the ADEOF to process classification changes and updates through the State EOC, (i.e., declaration of a "State of Emergency") **PERFORM** the following:

- a. **STOP** subsequent ENRS transmissions.
- b. **IF** requested, Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," Section, "Off-Site Towns/Agencies," and manually FAX notifications to State and Local Officials.

— End of Section 4.5 —

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#### 4.6 System Restoration and Administrative Actions

Shift  
Technician In  
Control Room  
or EOF

- 4.6.1 WHEN event is terminated, REVIEW IRFs and VERIFY appropriate termination message has been issued.
- 4.6.2 ENSURE all CV reports are finalized.
- 4.6.3 OBTAIN original of the following documents for the applicable unit control room:
- Attachment 1, "Nuclear Incident Report Form (IRF)" and printout
  - Attachment 2, "NRC Notification Checklist," and Attachment 3, "State and Local Community Callback Verification Checklist, as applicable
  - Attachment 4, "NRC Event Notification Form"
  - ENRS callback verification report printout (CV report)
  - Any other completed attachments
- 4.6.4 SEND copies of the following documents to the Manager Emergency Planning Services:
- Attachment 1, "Nuclear Incident Report Form (IRF)" and printout
  - Attachment 2, "NRC Notification Checklist," and Attachment 3, "State and Local Community Callback Verification Checklist, as applicable
  - Attachment 4, "NRC Event Notification Form"
  - ENRS callback verification report printout (CV report)
  - Any other completed attachments
  - Condition Report (if applicable)
  - Log entries, as applicable

– End of Section 4.6 –

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#### 4.7 Backup and Remote Operations

- 4.7.1 IF "RapidReach Primary" does not connect, OPEN "RapidReach Backup."
- 4.7.2 IF "RapidReach Backup" connects, Refer To Attachment 6 and TRANSFER the phones.
- 4.7.3 IF "RapidReach Backup" connects and phone lines transfer correctly, Go To Section 4.2, 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 SNET Faxworks. If time permits, it is still preferable to use "EasyView Remote" because it allows State and Local Officials and SERO to call in and shows a graphical display of the positions being filled.

- 4.7.4 IF "RapidReach Backup" using the LAN does *not* connect, (leaving the phone lines in primary), SELECT the icon labeled "Primary to 475."
- 4.7.5 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"
- 4.7.6 IF "EasyView Remote Primary" does *not* connect, OPEN "RapidReach Backup" folder, and SELECT the icon labeled "Backup to EOF."
- 4.7.7 IF the connection is made, OPEN "EasyView Remote" from the "RapidReach Backup" folder and PERFORM the following:
  - a. Refer To Attachment 6 and TRANSFER the phones from primary to secondary server.
  - b. SELECT a message

- c. SELECT a scenario
- d. SELECT "Start"
- e. Go To step 4.8.3, and DISTRIBUTE IRF via SNET Faxworks.

4.7.8 **IF** no connection is made, Go to Section 4.8 and NOTIFY Security.

**- End of Section 4.7 -**



## 4.8 ENRS Failure

- 4.8.1 NOTIFY SAS (Ext. 4851) 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."

- 4.8.2 IF SAS is *not* able to assist, DIAL NU paging system (9-800-542-5154) using confidential Group Page codes for S&L Officials & SERO and ENTER numeric backup event code (i.e., 101, 201, 301, etc.).

### 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.

- 4.8.3 DISTRIBUTE IRF via SNET Faxworks as follows:

- a. IF SNET Faxworks is *not* operable, Refer To EPUG-08B, Section, "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 the fax machine**, and ENTER SNET Faxworks telephone number (9-202-216-1821).
- d. WHEN prompted for password, ENTER SNET Faxworks password (6552931) followed by 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 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 "START" push button on telecopier.

j. HANG up handset on fax machine.

4.8.4 Refer To Attachment 3, and VERIFY all required call-in radiopager holders have received the radiopager message and fax.

4.8.5 Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and NOTIFY Information Technology (IT) of ENRS failure.

4.8.6 Go To Attachment 2 and ENSURE NRC notifications have been performed.

– End of Section 4.8 –

## 4.9 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.

4.9.1 IF ENS has failed, **SELECT** one of the following methods, as applicable:

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

4.9.2 **OBTAIN** NRC Operations Center number from one of the following:

- Label on ENS telephone
- Attachment 2
- EPUG 08B
- Other listing or directory assistance (alternate number)

4.9.3 WHEN NRC is contacted, **PROVIDE** the following information:

- a. ENS is *not* operable
- b. Information recorded in Attachment 4
- c. IF event is being terminated via the report, notice of event termination.

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

4.9.5 LOG NRC communications.

— End of Section 4.9 —

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## 5. REVIEW AND SIGNOFF

5.1 The review and signoff for this procedure is located in the attachments.

## 6. REFERENCES

### 6.1 Developmental Documents

- 6.1.1 Code of Federal Regulations Title 10 Part 50; Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities"
- 6.1.2 Code of Federal Regulations Title 10 Part 50.72; "Immediate Notification Requirements for Operating Nuclear Power Reactors"
- 6.1.3 "Defueled Safety Analysis Report Unit 1," Section 6.3
- 6.1.4 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.1.5 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.1.6 "Millstone Nuclear Power Station Emergency Plan"
- 6.1.7 NUREG-0654, "Criteria for Preparation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.1.8 NUREG-0737, "Clarification of TMI Action Plan Requirements," Supplement 1, "Requirements for Emergency Response Capability"

### 6.2 Supporting Documents

- 6.2.1 EPUG-08B, "Millstone Emergency Plan Resource Book"
- 6.2.2 EPIP 4400 "Event Assessment, Classification, and Reportability"



## **7. SUMMARY OF CHANGES**

**7.1** Incorporated previously SORC approved changes 1 through 3 to revision 5.

**7.2** Reformatted procedure, as follows:

- Replaced steps in Section 4.2 with the steps formerly in Attachment 6, "Preparing and Transmitting an Incident Report Form," to streamline actions for activating and operating the ENRS.
- Rewrote procedure steps in Section 4.2 for consistency with C OP 608, "Communications – Radiopaging and ENRS Daily and Weekly Operability Tests."

**7.2.1** Changed "affected" unit to "applicable" unit in appropriate locations.

**7.2.2** Added the following to Section 3, "Precautions:"

- Step 3.6, to clarify that all NRC communications should be logged.
- Step 3.7, to clarify that if the LAN is lost, and "RapidReach" primary and backup are out of service, any messages must be sent using "EasyView Remote" followed by Faxworks.
- Step 3.8, to clarify that "EasyView Remote" eliminates entering and recording the IRF.
- Step 3.9, to clarify that if "EasyView Remote" fails, any messages must be sent using Security assistance.

**7.2.3** Added note prior to step 4.1.3 to clarify that if a radiological release path is unknown, the control room Met Tower 142' elevation should be used.

**7.2.4** Added note prior to step 4.1.3 to clarify that if located in the EOF, the ADEOF should be consulted for the correct Met Tower data for release path.

**7.2.5** Added step 4.2.5 to perform backup and remote operation if the ENRS primary is not operable.

- 7.2.6 Added note prior to step 4.2.10.c to clarify that Attachment 7, "Scenario Chart" is available as guidance for selecting a message.
- 7.2.7 Added caution note prior to step 4.2.10.g to read and verify the scenario and message for accuracy prior to selecting the "start" button.
- 7.2.8 Added step 4.2.10.g to stop and verify that the scenario and message are accurate.
- 7.2.9 Modified note prior to step 4.2.11.c by increasing the time to 3 minutes to wait for activation of the controlled console pager and 5 minutes to wait for responders to call in after the release of the IRF radiopager message.
- 7.2.10 Modified step 4.3.1 by changing DEP Radiation and Monitoring Control Division to DEP Dispatch.
- 7.2.11 Moved steps in old Section 4.4, "NRC Notification," to Attachment 2, "NRC Notification Checklist."
- 7.2.12 Added note prior to step 4.5.1 and step 4.5.1 to use the message "SERO Activated – Send Add'l Messages" if SERO is activated and additional messages are required.
- 7.2.13 Modified step 4.5.5 to clarify that classification changes and updates processed through the State EOC are performed when the State declares a "State of Emergency."
- 7.2.14 Added new Section 4.7 steps for performing backup and remote operations of the ENRS.
- 7.2.15 Modified step 4.8.1. to notify SAS to transmit a text message to both State and Local Officials and SERO if the ENRS has otherwise failed.
- 7.2.16 Added step to Attachment 2, "NRC Notification Checklist" to provide information recorded on Attachment 4 to the NRC.
- 7.2.17 Added new Attachment 7, "Scenario Chart," as guidance for page and fax notifications.

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**Attachment 2**  
**NRC Notification Checklist**  
(Sheet 1 of 1)

Date: \_\_\_\_\_ IRF No. \_\_\_\_\_

**Part I**

1. **ATTEMPT** once to notify the NRC Resident Inspector(s) using any of the following:

- \_\_\_\_\_ • NRC Resident's radiopager
- \_\_\_\_\_ • Applicable unit Resident Inspector's office or home telephone number
- \_\_\_\_\_ • Non-applicable unit Resident Inspector's office or home telephone number

Date: \_\_\_\_\_ Time: \_\_\_\_\_ notified.

- \_\_\_\_\_ 2. **IF** not able to contact the NRC Resident Inspector, **NOTIFY** the NRC Operations Center of inability to reach the Resident Inspector.

**Part II**

- \_\_\_\_\_ 1. **NOTIFY** the NRC Operations Center using one of the following methods:

ENS (FTS 2000) NRC Commercial Number	Fax Number
301-816-5100	301-816-5151
301-951-0550 (back-up)	

- \_\_\_\_\_ 2. **PROVIDE** information recorded on Attachment 4 to the NRC. |

Date: \_\_\_\_\_ Time: \_\_\_\_\_ notified.

- \_\_\_\_\_ 3. **ATTACH** this form to the Nuclear Incident Report Form (IRF).

- \_\_\_\_\_ 4. **LOG NRC communications.**

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# Attachment 3

## State and Local Community Callback Verification Checklist

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### INSTRUCTIONS:

### NOTE

Only one attempt is required for a UE backup notification.

- \_\_\_\_\_ 1. IF event is UE or higher, ATTEMPT one backup notification of non-responders.
- \_\_\_\_\_ 2. IF event is ALERT or higher and non-responders cannot be reached, PERFORM the following:
  - \_\_\_\_\_ a. CONTACT State Police Barracks Dispatcher (Troop E, 848-1201).
  - \_\_\_\_\_ b. REQUEST immediate assistance in notifying non-responders.
  - \_\_\_\_\_ c. REQUEST police confirm response with Shift Technician.

Officer Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_ IRF No: \_\_\_\_\_

State/Local Communities	Telephone Numbers		Radiopager (NUWAPS)/Pin Number	ENRS Call Back Numbers*	Time- Called	Comments
	Primary	Backup				
East Lyme ECC	739-3419	739-3410	9861	888-826-6606		
Fishers Island CEO	Southhold Town Police: 516-765-2600		9947	888-826-6606		
Groton City PD	445-2451		9862	888-826-6606		
Groton Town Emergency Dispatch	445-2497		9863	888-826-6606		
Ledyard Dispatch Center	464-7271	464-1138	9864	888-826-6606		
Lyme Emergency Dispatcher (V. Shore)	399-7921		9960	888-826-6606		
Montville Dispatch Center	848-9292	848-9293	9865	888-826-6606		
New London Dispatch Center	442-4444		9866	888-826-6606		
Old Lyme Emergency Dispatch (V.Shore)	399-7921		9973	888-826-6606		
Plum Island, N.Y. - PIADC	516-323-2500 516-323-2501		9970	888-826-6606		
Waterford Dispatch	Hotline / 442-5332/31		9867	888-826-6606		
State DEP (Dispatch)	424-3333	424-3338	9869	860-444-7469		
State OEM	566-3180	566-2074	9872	888-826-6606		
Suffolk County	516-852-4815 (911 Center) 516-924-5252		9879	888-826-6606		

NOTE: 6379 IS THE GROUP RADIOPAGER NUMBER for State/Local pagers.

\* Backup callback number 860-444-1387 (If toll free number fails, this number may be used as a backup)

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**Attachment 4**  
**NRC Event Notification Form**  
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NRC EVENT NUMBER: \_\_\_\_\_

NRC CONTACT (NAME) \_\_\_\_\_

NOTIFICATION TIME	FACILITY NAME	UNIT	CALLER'S NAME	TELEPHONE NUMBER (    )
-------------------	---------------	------	---------------	----------------------------

EVENT TIME (EST OR EDT)	EVENT DATE or IRF#	POWER (%) and MODE BEFORE	POWER (%) and MODE AFTER
-------------------------	--------------------	---------------------------	--------------------------

EVENT CLASSIFICATION	1-Hr Non-Emergency 10 CFR 50.72 (b)(1)	4-Hr Non-Emergency 10 CFR 50.72 (b)(2)
GENERAL EMERGENCY	Not Applicable Below This Line	Not Applicable Below This Line
SITE AREA EMERGENCY	(i)(A) TS Required S/D	(i) Degrade While S/D
ALERT	(i)(B) TS Deviation	(ii) RPS Actuation (SCRAM)
UNUSUAL EVENT	(ii) Degraded Condition	(ii) ESF Actuation
Not Applicable Below This Line	(ii)(A) Unanalyzed Condition	(iii)(A) Safe S/D Capability
50.72 NON-EMERGENCY	(ii)(B) Outside Design Basis	(iii)(B) RHR Capability
PHYSICAL SECURITY (73.71)	(ii)(C) Not Covered by OPs/EOPs	(iii)(C) Control of Rad Release
TRANSPORTATION	(iii) Earthquake	(iii)(D) Accident Mitigation
MATERIAL/EXPOSURE	(iii) Flood	(iv)(A) Air Release > 2 x App. B
FITNESS FOR DUTY	(iii) Hurricane	(iv)(B) Liquid Release > 2 x App. B
OTHER	(iii) Ice/Hail	(v) Offsite Medical
	(iii) Lightning	(vi) Offsite Notification
	(iii) Tornado	
	(iii) Other Natural Phenomenon	
	(iv) ECCS Discharge to RCS	
	(v) Lost ENS	
	(v) Lost Other Assessment/Comms	
	(v) Emergency Siren INOP	
	(vi) Fire	
	(vi) Toxic Gas	
	(vi) Rad Release	
	(vi) Other Hampering Safe Op.	

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# Attachment 4

## NRC Event Notification Form

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DESCRIPTION: (Fill in as available)

1. SYSTEM(S) AFFECTED:

2. ACTUATIONS & THEIR INITIATION SIGNALS:

3. CAUSES (IF KNOWN):

4. EFFECT OF EVENT ON PLANT:

5. ACTIONS TAKEN OR PLANNED:

6. ADDITIONAL INFORMATION:

NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD?	YES (EXPLAIN ABOVE)	NO
NRC RESIDENT				DID ALL SYSTEMS FUNCTION AS REQUIRED?	YES	NO (EXPLAIN ABOVE)
STATE				MODE OF OPERATION UNTIL CORRECTED:		
LOCAL				ESTIMATED RESTART DATE:		
OTHER GOV AGENCIES						
MEDIA/PRESS RELEASE						

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS

	LIQUID RELEASE		GASEOUS RELEASE		UNPLANNED RELEASE		PLANNED RELEASE		ONGOING		TERMINATED
	MONITORED		UNMONITORED		OFFSITE RELEASE		T. S. EXCEEDED		RM ALARMS		AREAS EVACUATED
	PERSONNEL EXPOSED OR CONTAMINATED				OFFSITE PROTECTIVE ACTIONS RECOMMENDED			State release path in description			

	Release Rate (Ci/sec)	%T.S. LIMIT	HOO GUIDE	Total Activity	% T.S. LIMIT	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 µCi/sec			0.01Ci
Particulate			1 µCi/sec			1 mCi
Liquid (excluding tritium & dissolved noble gases)			10 µCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN
RAD MONITOR READINGS:				
ALARM SETPOINTS				
% T.S. LIMIT (if applicable)				

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS:

LOCATION OF THE LEAK (e.g., SG#, valve, pipe, etc):

LEAK RATE:	UNITS gpm/gpd	T. S. LIMITS:	
LEAK START DATE:	TIME:	COOLANT ACTIVITY & UNITS: PRIMARY - SECONDARY -	

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

CR DSEO Signature : \_\_\_\_\_ Time: \_\_\_\_\_

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**Attachment 5**  
**Notification and Callback Guidance**  
(Sheet 1 of 1)

ACTION (X – Required)	CLASSIFICATION			
	UE (Delta–1,2)	ALERT (Charlie 1)	SAE (Charlie 2)	GE (Bravo) (Alpha)
<b><u>Nuclear IRE:</u></b>				
•Enter current meteorological data	X	X	X	X
•Enter “Additional Information” in first message	(a)			
•Enter “Additional Information” in update	X	X	X	X
•Issue termination in first message	X(a)			
•Issue termination in update message	X	X	X	X
 <b><u>CALLBACK/BACKUP NOTIFICATIONS</u></b>				
•Radiopager notifications (Att.3)	X	X	X	X
•REQUEST State Police call non–responding towns (Att.3)		X	X	X
<b><u>OTHER:</u></b>				
•ENS notification to NRC (b)	X	X	X	X
•NRC Resident notification	X	X	X	X

**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.

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**Attachment 6**  
**Switching Telephone Lines**  
(Sheet 1 of 2)

**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.

1. IF primary system is down, **PERFORM** the following:
  - 1.1 **LIFT** the dedicated ENRS handset.
  - 1.2 **PRESS** position "g" (blue button) labelled "Press for SERO Transfer."
  - 1.3 **DIAL** "2724."
  - 1.4 **WAIT** for confirmation tone (3 beeps).
2. IF confirmation tone is *not* heard, Go To step 1.

**NOTE**

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

3. **HANG** up handset and **OBSERVE** light on position "g" (blue button) illuminates, indicating transfer of SERO telephone lines.
4. **LIFT** the dedicated ENRS handset again.
5. **PRESS** position "i" (red button) labelled "Press for Transfer of State/Local to Back up."
6. **OBSERVE** the following:
  - 6.1 Light on position "i" (red button) will illuminate for a few seconds and then turn off.
  - 6.2 Light on position "h" (yellow button) labelled "Light "ON" State/Local on Back up" will illuminate and stay on, indicating transfer of State/Local lines.
7. **HANG** up handset.
8. IF either OR both lights fail to illuminate, Go To step 5.

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**Attachment 6**  
**Switching Telephone Lines**  
(Sheet 2 of 2)

**NOTE**

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

9. RESTORE phone server from secondary to primary, as follows:
  - 9.1 PRESS position "g" (blue button) labelled "Press for SERO Transfer."
  - 9.2 OBSERVE light on position "g" (blue button) is *not* lit, indicating transfer of SERO lines.
10. RESTORE State/Local line to primary server, as follows:
  - 10.1 LIFT the dedicated ENRS handset.
  - 10.2 PRESS position "j" (green button) labelled "Press to Restore State/Local to Primary," and OBSERVE the following:
    - 10.2.1 Light on position "j" (green button) labelled "Press to Restore State/Local to Primary," is lit.

**NOTE**

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

- 10.2.2 Light on position "h" (yellow button) labelled "Light "ON" State/Local on Back up," is *not* lit.
  - 10.2.3 Light on position "j" (green button) labelled "Press to Restore State/Local to Primary," is *not* lit.

**Attachment 7**  
**Scenario Chart**  
 (Sheet 1 of 1)

Scenario Name	Who is Paged	Who is Faxed	Who is called (automatic)	Who Should Call – In
Daily Radiopager Test – Unit 2	Unit 2 Control Room pager only	Unit 2 Control Room	Unit 2 Control Room	Shift Technician
Daily Radiopager Test – Unit 3	Unit 3 Control Room pager only	Unit 3 Control Room	Unit 3 Control Room	Shift Technician
ENRS Weekly Op. Test – S&L Officials	State & Local Officials (all)	No One	No One	No One
ENRS Monthly Op. Test – S&L Officials	State & Local Officials (all)	SERO State & Local Officials (all)	New London, Ledyard	14 required S & L Officials
SERO Monthly Communications Test	SERO	No One	SERO (after 15 minutes)	SERO (all)
SERO Activated – Send Add'l Messages	SERO State & Local Officials (all)	State & Local Officials (all) Unit 2 & 3 Control Rooms	New London, Ledyard SERO (after 15 minutes)	14 required S & L Officials
Echo, Fox, Golf	NNM Waterford Dispatch State DEP State OEM	Waterford Dispatch State DEP State OEM Unit 2 & 3 Control Rooms Other State & Local Agencies (courtesy call)	NNM	NNM Waterford Dispatch State DEP
Unusual Event	SERO State & Local Officials (all)	State & Local Officials (all) Unit 2 & 3 Control Rooms	NNM, MRDA, MPI Unit 1, 2, & 3 ADTS New London, Ledyard	14 required S & L Officials NNM, MRDA, MPI Unit 1, 2, & 3 ADTS
Alert	SERO State & Local Officials (all)	State & Local Officials (all) Unit 2 & 3 Control Rooms	New London, Ledyard SERO (after 15 minutes)	14 required S & L Officials SERO (all)
Site Area Emergency	SERO State & Local Officials (all)	State & Local Officials (all) Unit 2 & 3 Control Rooms	New London, Ledyard SERO (after 15 minutes)	14 required S & L Officials SERO (all)
General Emergency	SERO State & Local Officials (all)	State & Local Officials (all) Unit 2 & 3 Control Rooms	New London, Ledyard SERO (after 15 minutes)	14 required S & L Officials SERO (all)

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Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 4

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

Emergency Plan Operating Procedure 4411, Revision 6

Director of Station Emergency Operations

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000361-173513

Initiated By: Barbara Tarallo Date: 3/6/00 Department: SPG Ext.: 2096

Document No.: EPOP 4411 Rev. No.: 006 Minor Rev.: \_\_\_\_\_

Title: Director of Station Emergency Operations

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.→

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			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"/>		
RAC 06	<input checked="" type="checkbox"/> MARK E. WHITE	<i>Mark E. White</i>	3/7/00				
Independent	<input checked="" type="checkbox"/> MARK E. WHITE	<i>Mark E. White</i>	3/7/00	<input type="checkbox"/>	<input type="checkbox"/>		
Writer's Guide	<input checked="" type="checkbox"/> BARBARA A. TARALLO	<i>Barbara A. Tarallo</i>	3/7/00			SPG	✓
Validation	<input checked="" type="checkbox"/> STEVE LASH	<i>Steve Lash</i>	3/2/00				

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PORC/R/DH Final Review and Approval

00-09

Meeting No.

*Steve Lash* 3/7/00  
Department Head/Responsible Individual / Date

Approval Signature

3/8/00

Approval Date

Effective Date: 3/13/00

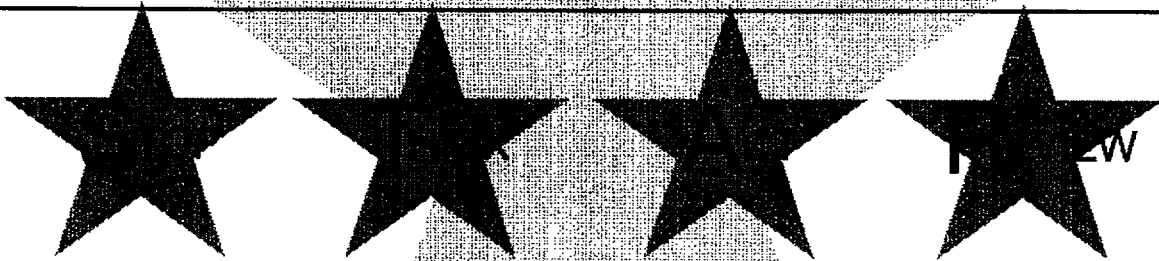
**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Director of Station Emergency Operations**

**EPOP 4411**

**Rev. 006**



Approval Date: 3/8/00

Effective Date: 3/13/00

**Level of Use  
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**Millstone All Units  
Emergency Plan Operating Procedure**

**Director of Station Emergency Operations**

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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the Director of Station Emergency Operations for emergency response actions during an emergency event. These actions include the following which cannot be delegated:

CR DSEO

- Event classification (The ADTS relieves the CR DSEO of this responsibility)

- Initiation of station emergency response
- Initiation of on-site personnel protective actions
- Authorization of mitigation and repair activities
- Authorization of emergency exposure upgrades

CR DSEO and  
EOF DSEO

- Command and control of station emergency response
- Approval of off-site Protective Action Recommendations (PARs)
- Approval of on-site evacuation
- Authorization of emergency exposure upgrades > 25 rem TEDE for life saving actions
- Authorization of off-site notifications

### 1.2 Discussion

Partial SERO activation is initiated upon declaration of an Unusual Event, Posture Code Delta-One or Delta-Two. The Shift Manager of the applicable unit becomes the CR DSEO and activates the on-shift staff only.

This procedure describes the actions of the applicable unit Shift Manager/CR DSEO, Station Duty Officer, EOF DSEO, and Station Emergency Planning Representative when an emergency event has been declared. It also provides guidance to the EOF DSEO for emergency event de-escalation, termination, and recovery operations.

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The Station Duty Officer reports to the applicable unit control room and assists the Shift Manager/CR DSEO, as directed, in carrying out delegated duties. The EOF DSEO reports to the Emergency Operations Facility.

The decision to invoke 50.54(x) and 50.54(y) for unit operations is up to the discretion of the Manager of Control Room Operations (MCRO) and shall not be implied or directed by the ADTS. The ADTS may present a strategy or procedure that implements 50.54(x) to the Manager of Control Room Operations for his consideration. The DSEO shall be informed of all actions by the ADTS.

Actions taken under 50.54(x) shall be approved, at a minimum, by a licensed Senior Operator or Certified Fuel Handler before taking the action in accordance with 10CFR50.54(y).

Suspension of safeguards is up to the discretion of the DSEO and requires 50.54 (x) to be invoked.

In situations where 50.54(x) and 50.54(y) are invoked, the NRC shall be notified using the Emergency Notification and Response System within one hour.



## **2. PREREQUISITES**

### **2.1 General**

- 2.1.1 Conditions at one or more of the Millstone Units or at the Millstone Station have deteriorated such that an UNUSUAL EVENT, Posture Code Delta–One or Delta–Two, declaration has occurred or is imminent.

### **2.2 Documents**

- 2.2.1 EPIP 4400, "Event Assessment, Classification, and Reportability"
- 2.2.2 EPIP Form 4400–1, "Unit 1 Emergency Action Level Table"
- 2.2.3 EPIP Form 4400–2, "Unit 2 Emergency Action Level Table"
- 2.2.4 EPIP Form 4400–3, "Unit 3 Emergency Action Level Table"
- 2.2.5 EPIP 4404, "Notifications and Communications"
- 2.2.6 EPOP 4412, "Evacuation and Assembly"
- 2.2.7 EPOP 4417, "Manager of Control Room Operations"
- 2.2.8 EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies"
- 2.2.9 EPOP 4428G, "Protective Action Recommendations"

### **2.3 Definitions**

- 2.3.1 Activation – Minimum staffing achieved
- 2.3.2 ADEOF – Assistant Director Emergency Operations Facility
- 2.3.3 ADTS – Assistant Director Technical Support
- 2.3.4 AMRDA – Assistant Manager of Radiological Dose Assessment
- 2.3.5 ENS – Emergency Notification System
- 2.3.6 ERF – Emergency Response Facility
- 2.3.7 KI – Potassium Iodide



- 2.3.8 SEPR – Station Emergency Planning Representative
- 2.3.9 ST– Shift Technician
- 2.3.10 TIC – Technical Information Coordinator
- 2.3.11 TSC– Technical Support Center
- 2.3.12 APPOINT – To name officially
- 2.3.13 ASSUME – To undertake
- 2.3.14 PAR – Protective Action Recommendation
- 2.3.15 Emergency event – An event classified as an UNUSUAL EVENT, Posture Delta–One or Delta–Two or higher
- 2.3.16 Minimum staff – Positions depicted above the line on the facility staffing board. These positions are unit specific, as applicable.
- 2.3.17 Mission specific exposure limits – Specific exposure limits based on job task assignments for emergency teams members.

### 3. PRECAUTIONS

N/A

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#### 4. INSTRUCTIONS

##### 4.1 Procedure Entry Point Determination

4.1.1 IF you are the applicable unit Shift Manager/CR DSEO, Go To Section 4.2. |

4.1.2 IF you are the Station Duty Officer, Go To Section 4.3.

4.1.3 IF you are the EOF DSEO, Go To Section 4.4.

4.1.4 IF you are the SEPR, Go To Section 4.6. |

– End of Section 4.1 –

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## 4.2 Applicable Unit Shift Manager/CR DSEO Actions

### NOTE

1. The applicable unit Shift Manager/CR DSEO may repeat steps in Section 4.2, as necessary, until relieved by the ADTS and EOF DSEO.
2. In cases where a PAR to the DEP is not required using EPOP 4428G, "Protective Action Recommendations," a pre-determined PAR indicated by the Bravo or Alpha Posture Code will be understood by off-site officials. The Bravo pre-determined PAR consists of an approximate 2 mile radius which is Zone 1. The Alpha pre-determined PAR is an approximate 5 mile radius which is Zones 1 and 2. EPOP 4428G, "Protective Action Recommendations," Attachment 7, describes the PAR zones.
3. If the applicable unit is Unit 1, the Unit 2 SM will classify the event and become the CR DSEO.

4.2.1 IF a GENERAL EMERGENCY, Alpha has been declared or is imminent, Refer To and IMPLEMENT EPOP 4428G, "Protective Action Recommendations."

4.2.2 NOTIFY and BRIEF the following on event in progress:

- Station Duty Officer
- Non-affected unit Shift Managers

### NOTE

Classification of the emergency event is performed by the Shift Manager/CR DSEO until relieved by the ADTS.

4.2.3 CLASSIFY event and ANNOUNCE station pages, as necessary.

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## NOTE

If radiopager system is not operating as expected, the Shift Technician or Designee can perform backup notification using a special four digit SERO pager ID code and either of the following:

- Phone call to NU paging system to issue numeric event code only
- NU paging system terminal in SAS to issue numeric event code or optional descriptive text message.

\_\_\_\_\_ 4.2.4 DIRECT Shift Technician to perform State, Town, and SERO notifications.

\_\_\_\_\_ 4.2.5 NOTIFY Security Shift Supervisor of the following:

- Emergency classification
- Affected unit
- Nature of the emergency
- Increased need for security support, as necessary

\_\_\_\_\_ 4.2.6 IF an UNUSUAL EVENT has occurred, ANNOUNCE the following using the station paging system:

"AN EVENT CLASSIFICATION \_\_\_\_\_ [classification]  
HAS OCCURRED IN \_\_\_\_\_ [applicable unit]" due to  
\_\_\_\_\_ [description]. FURTHER INFORMATION  
WILL BE PROVIDED."

\_\_\_\_\_ 4.2.7 IF an UNUSUAL EVENT is being escalated, Go To step 4.2.3 and CLASSIFY event.

\_\_\_\_\_ 4.2.8 IF conditions which caused classification of the UNUSUAL EVENT have been resolved, TERMINATE the event by issuing a termination IRF and EXIT this procedure.

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4.2.9 IF an ALERT or higher has occurred, ANNOUNCE the following using the station paging system:

"AN EVENT CLASSIFICATION \_\_\_\_\_ [classification]  
HAS OCCURRED IN \_\_\_\_\_ [applicable unit]."

"ALL ON-DUTY STATION EMERGENCY RESPONSE  
ORGANIZATION PERSONNEL REPORT TO YOUR  
DESIGNATED EMERGENCY RESPONSE FACILITY."

\_\_\_\_\_ 4.2.10 REPEAT page.

4.2.11 IF any of the following has occurred, Refer To and IMPLEMENT  
EPOP 4412, "Evacuation and Assembly:"

- ALERT as defined by the Barrier Failure Reference Table
- SITE AREA EMERGENCY
- GENERAL EMERGENCY

\_\_\_\_\_ 4.2.12 IF radiation release is in progress OR is imminent, OBTAIN dose  
calculation input from the Chemistry Technician.

\_\_\_\_\_ 4.2.13 IF suspension of safeguards is approved, NOTIFY NRC within  
one hour using the Emergency Notification and Response System

4.2.14 EVALUATE radiological conditions and, if necessary,  
AUTHORIZE exposure increases as follows:

- 5 rem to <25 rem for plant operations
- $\geq 25$  rem for life saving situations (volunteer)

### NOTE

Logkeeping of classifications and events is essential for accurate  
assessment and determining sequence of events.

\_\_\_\_\_ 4.2.15 RECORD authorized exposure in logbook.

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### NOTE

If possible, briefings to the ADTS and EOF DSEO shall be conducted at the same time using Attachment 1.

\_\_\_\_\_ 4.2.16 WHEN the EOF DSEO is ready to assume EOF duties, AND the ADTS is ready to assume TSC/OSC duties, Refer To Attachment 1, and **PERFORM** the following:

- \_\_\_\_\_
- **BRIEF** the EOF DSEO and the ADTS.

### NOTE

For a Unit 1 event, the Unit 2 SM/CR DSEO will perform a turnover with the Unit 1 SM after briefing the ADTS and EOF DSEO. The Unit 1 SM then becomes the MCRO. The Unit 2 SM/CR DSEO has no further involvement in the event.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- **IF** a Unit 1 event, **PERFORM** a turnover with the Unit 1 SM.
  - **LOG** turnover of duties.
  - **RECORD** date and time of relief in logbook.
  - **Go To** EPOP 4417, "Manager of Control Room Operations."

— End of Section 4.2 —

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### 4.3 Station Duty Officer Support Function

SDO or  
Shift SRO

#### 4.3.1 ASSIST the CR DSEO, as necessary, and PERFORM the following:

- Refer To step 4.2.6 and ISSUE station pages, as directed.
- ASSIST the ST to perform initial notifications.
- ASSIST the ST to call in non—responding agencies, as necessary.
- IF continuous communications to the NRC are required, MAINTAIN the NRC ENS.
- EVALUATE plant conditions and DETERMINE need for the following:
  - On—site sheltering
  - Station access controls
  - Area evacuation
  - Unit evacuation
  - Station evacuation and assembly
- Refer To and IMPLEMENT EPOP 4412, “Evacuation and Assembly,” as necessary.

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## NOTE

If SERO personnel access to the protected area is restricted due to life-threatening conditions, TSC / OSC personnel report to the EOF.

- IF life-threatening conditions exist, **DIRECT** the SSS or MOS to restrict all access to the protected area including SERO personnel.
- IF life-threatening conditions do *not* exist, **DIRECT** the SSS or MOS to allow access of SERO personnel into the protected area to staff ERFs.
- **EVALUATE** need for outside agency assistance.
- IF outside agency assistance is requested, **NOTIFY** the SSS or MOS to provide escort support to the site for responding vehicles.

– End of Section 4.3 –

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#### 4.4 EOF DSEO Initial Actions

- \_\_\_\_\_ 4.4.1 INDICATE presence on EOF Staffing Board.
- \_\_\_\_\_ 4.4.2 RECORD date and EOF arrival time in logbook.
- \_\_\_\_\_ 4.4.3 ESTABLISH communications with the CR DSEO in the applicable unit control room.

#### NOTE

SERO activation is within 60 minutes of the time the SERO was notified.

- \_\_\_\_\_ 4.4.4 Refer To Attachment 1 and REQUEST initial briefing from the CR DSEO on emergency event conditions and plant status.
- \_\_\_\_\_ 4.4.5 CONDUCT initial briefing of SERO staff and other managers on the following emergency event conditions and plant status, as applicable:
  - \_\_\_\_\_ • Current event classification (time of trip)
  - \_\_\_\_\_ • Current conditions in progress (i.e., fire, steam, severe weather)
  - \_\_\_\_\_ • Projected event conditions
  - \_\_\_\_\_ • Status of plant and station
  - \_\_\_\_\_ • Radiological conditions
- \_\_\_\_\_ 4.4.6 WHEN EOF is minimally staffed, ANNOUNCE facility activation using EOF page.
- \_\_\_\_\_ 4.4.7 APPOINT individuals to fill SERO vacancies, as required.
- \_\_\_\_\_ 4.4.8 WHEN ready to assume EOF DSEO duties, NOTIFY the CR DSEO and Refer To and COMPLETE Attachment 1.
- \_\_\_\_\_ 4.4.9 RELIEVE the CR DSEO and ASSUME the EOF DSEO position.
- \_\_\_\_\_ 4.4.10 RECORD date and time of relief in logbook.

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## NOTE

Relief shall be loud, clear, and direct.

- \_\_\_\_\_ 4.4.11 ANNOUNCE assumption of EOF DSEO responsibilities, using the station paging system.
- \_\_\_\_\_ 4.4.12 WHEN all ERFs are activated, NOTIFY SERO managers of activation and ANNOUNCE EOF and TSC/OSC activation, using the station paging system.
- \_\_\_\_\_ 4.4.13 RECORD time of activation in logbook.

– End of Section 4.4 –



## 4.5 EOF DSEO Subsequent Actions

### NOTE

1. Steps in this section may be repeated, as necessary.
2. Whenever a GENERAL EMERGENCY Posture Code Bravo or Alpha is declared, an off-site Protective Action Recommendation must be forwarded to State officials concurrent with the 15 minute notification.
3. A PAR update must be issued within 15 minutes of the decision to update the PAR.
4. If dose assessment results are not available, PARs shall be based on plant conditions.

\_\_\_\_\_ 4.5.1 ESTABLISH continuous, open communications with the ADTS.

\_\_\_\_\_ 4.5.2 IF a GENERAL EMERGENCY is declared OR is imminent, DIRECT ADEOF to refer to and implement EPOP 4428G, "Protective Action Recommendations."

\_\_\_\_\_ 4.5.3 NOTIFY SERO of changing events using EOF page.

\_\_\_\_\_ 4.5.4 CONSULT with ADTS and ADEOF on status of each unit and station conditions.

\_\_\_\_\_ 4.5.5 IF conditions change, Refer To EPIP 4400, "Event Assessment, Classification, and Reportability," applicable unit EAL Table and PROVIDE information relevant to EAL classification changes to the ADTS.

\_\_\_\_\_ 4.5.6 IF classification changes, PERFORM the following:

- DIRECT ADEOF perform notifications.
- ANNOUNCE the following using the station page:
  - Classification changes
  - Time of classification
  - Current information regarding event

\_\_\_\_\_ 4.5.7 REPEAT page.

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### NOTE

The ADTS and MCRO should be notified prior to approving evacuation.

4.5.8 IF any of the following has occurred, Refer To and IMPLEMENT EPOP 4412, "Evacuation and Assembly:"

- ALERT as defined by the Barrier Reference Table
- SITE AREA EMERGENCY
- GENERAL EMERGENCY

### NOTE

If access to the protected area is restricted due to life-threatening conditions, SERO personnel report to the EOF.

4.5.9 IF life-threatening conditions exist, DIRECT MOS to restrict all access to protected area including SERO personnel.

4.5.10 IF life-threatening conditions do *not* exist, DIRECT MOS to allow access of SERO personnel into protected area to staff ERFs.

4.5.11 IF suspension of safeguards is approved, NOTIFY NRC within one hour using the Emergency Notification System.

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4.5.12 **PROVIDE** the Executive Spokesperson the following information via the open communications line:

- Status reports on plant and safety systems
- Event classification basis and projections
- The following actions taken at the site:
  - PPADs
  - Evacuation
  - Potassium Iodide usage
- Imminent, ongoing, or terminated radioactive releases

4.5.13 **IF** outside agency assistance is necessary, **DIRECT MOR** to contact applicable agency.

4.5.14 **IF** outside agency assistance is requested, **NOTIFY MOS** to provide escort support to the site for responding vehicles.

#### **NOTE**

The State of Connecticut may assume responsibility at a SAE or **GENERAL EMERGENCY** for subsequent local agency notifications.

4.5.15 **IF** a State of Emergency has been declared **AND** the Governor directs future classification changes and updates to be processed through the State EOC and *not* released, **PERFORM** the following:

- a. **ENSURE ADEOF** does *not* release update or escalation incident report or develop additional IRF.
- b. **ENSURE OEM and DEP** have been notified of classification change or update information by Executive Spokesperson.

4.5.16 **CONDUCT** periodic briefings via staff meetings or EOF page.

4.5.17 **IF** notified by the ADTS of 50.54(x) changes, **DIRECT** the MOC to immediately inform the NRC.

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**STOP**

**THINK**

**ACT**

**REVIEW**

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\_\_\_\_\_ 4.5.18 IF emergency exposure increases are warranted for life-saving action, Refer To EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies," and AUTHORIZE a limit.

\_\_\_\_\_ 4.5.19 IF plant conditions stabilize OR improve, Go To Section 4.7.

\_\_\_\_\_ 4.5.20 IF necessary, REPEAT Section 4.5.

– End of Section 4.5 –

#### 4.6 Station Emergency Planning Representative Response Actions

\_\_\_\_\_ 4.6.1 INDICATE presence on EOF Staffing Board.

\_\_\_\_\_ 4.6.2 RECORD date and time of arrival in SEPR logbook.

\_\_\_\_\_ 4.6.3 ATTEND DSEO briefing to obtain event conditions and plant status.

\_\_\_\_\_ 4.6.4 ASSIST the DSEO and ADEOF with EOF operations.

\_\_\_\_\_ 4.6.5 MONITOR EOF activities and ASSIST personnel with implementation of procedures, as necessary.

\_\_\_\_\_ 4.6.6 TROUBLESHOOT and REPAIR EOF equipment problems, as follows:

- \_\_\_\_\_ • IF equipment problem is within immediate capabilities, REPAIR equipment.
- \_\_\_\_\_ • IF equipment problem is *not* within immediate capabilities, OBTAIN service support through the MOR.

\_\_\_\_\_ 4.6.7 BRIEF the DSEO and ADEOF on any problems and status of corrective actions for repairing EOF equipment.

\_\_\_\_\_ 4.6.8 ASSIST EOF staff with questions on implementation of the Emergency Plan or procedures.

\_\_\_\_\_ 4.6.9 IF time permits, MONITOR implementation of the Emergency Plan and LOG suggestions for program improvements from EOF staff.

\_\_\_\_\_ 4.6.10 ESTABLISH communications with the State Emergency Planning Liaison at the State EOC and VERIFY the adequacy of the interface between the EOF and State EOC.

– End of Section 4.6 –

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#### 4.7 De-Escalation, Termination, and Recovery Operations

4.7.1 EVALUATE options for downgrading event classification as shown in Table 1.

Table 1 Guidelines for Downgrading Emergencies	
Classifications Corresponding to Improved Plant Conditions	Options
GENERAL EMERGENCY – Bravo SITE AREA EMERGENCY – Charlie–Two ALERT–Charlie–One	No Change or De–escalation or Termination or Recovery
UNUSUAL EVENT Below EAL Threshold	No Change or Termination

#### NOTE

De–escalation is an option to be used when the emergency condition is still in effect; for example, an ALERT or higher Emergency Action Level classification exists and some benefit is to be gained by declaring a lower classification.

De–escalation is not a preferred option in most cases.

4.7.2 IF de–escalation option is selected, **PERFORM** the following:

- Refer To and **COMPLETE** Attachment 2.
- NOTIFY** the NRC Site Team Leader or Director of Site Operations and State officials.
- DISCUSS** all conditions and events with the NRC Site Team Leader or Director of Site Operations.

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### NOTE

Termination is the option to be used when long term damage to the plant has not occurred. In situations involving long term damage to the plant, Recovery is the option to use.

4.7.3 IF Termination option is selected, AND long term damage to the plant has *not* occurred, **PERFORM** the following:

- a. Refer To and **COMPLETE** Attachment 3.
- b. **NOTIFY** the NRC Site Team Leader or Director of Site Operations and State officials.
- c. **DISCUSS** all conditions and events with the NRC Site Team Leader or Director of Site Operations.

### NOTE

Recovery is the preferred option in situations involving long term corrective actions to mitigate damage; for example, core damage. The "No Change" option is used until the Recovery Checklist is satisfied.

4.7.4 IF long term damage to the plant has occurred AND Recovery option is selected, **PERFORM** the following:

- a. Refer To and **COMPLETE** Attachment 4.
- b. **NOTIFY** the NRC Site Team Leader and Director of Site Operations and State officials.
- c. **DISCUSS** all conditions and events with the NRC Site Team Leader or Director of Site Operations.

4.7.5 WHEN all conditions on the applicable attachment are satisfied, **ENSURE** the ADEOF performs applicable notifications.

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4.7.6 Using the station paging system, NOTIFY SERO of the following:

- Event reclassification
- Event termination
- Event recovery

4.7.7 WHEN SERO is de-activated, DIRECT SERO managers to secure the ERFs and RECORD SERO termination in logbook.

– End of Section 4.7 –

## 5. REVIEW AND SIGNOFF

N/A

## 6. REFERENCES

### 6.1 Developmental Documents

- 6.1.1 "Defueled Safety Analysis Report Unit 1," Section 6.3.
- 6.1.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.1.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.1.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.1.5 Code of Federal Regulations 10CFR50.54(x) and 10CFR50.54(y)
- 6.1.6 NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.1.7 AR 98015071, "Evaluate Control Room / SERO Communications Flow."

### 6.2 Supporting Documents

- 6.2.1 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"
- 6.2.2 EPIP 4400, "Event Assessment, Classification, and Reportability"
- 6.2.3 EPIP 4404, "Notifications and Communications"
- 6.2.4 EPOP 4412, "Evacuation and Assembly"
- 6.2.5 EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies"
- 6.2.6 EPOP 4428G, "Protective Action Recommendations"

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## **7. SUMMARY OF CHANGES**

- 7.1 Incorporated previously SORC approved change 1 to revision 5.
- 7.2 Changed the “affected unit” to the “applicable unit” in appropriate locations.
- 7.3 Modified Section 1.2 to include the Station Emergency Planning Representative.
- 7.4 Added Station Emergency Planning Representative to the definitions step 2.3.8.
- 7.5 Added step 4.1.4 to provide a procedure entry point for the Station Emergency Planning Representative.
- 7.6 Added note prior to step 4.2.1 to clarify that if the applicable unit is Unit 1, the Unit 2 SM will classify the event and become the CR DSEO.
- 7.7 Added note to step 4.2.16 to clarify that for a Unit 1 event, the Unit 2 SM/CR DSEO will perform a turnover with the Unit 1 SM after briefing the ADTS and EOF DSEO, and the Unit 1 SM then becomes the MCRO.
- 7.8 Added a bullet to step 4.2.16 to perform a turnover with the Unit 1 SM if a Unit 1 event.
- 7.9 Added new Section 4.6 to provide instructions for the Station Emergency Planning Representative.
- 7.10 Added step to Attachment 1, “DSEO/ADTS Turnover,” to perform a turnover with the Unit 1 SM.
- 7.11 Updated procedure references.



**Attachment 1**  
**DSEO/ADTS Turnover Checklist**

(Sheet 1 of 2)

DISCUSS the status of the following items during the turnover brief:

1. Event classification level:

- ☐ GENERAL EMERGENCY  
☐ SITE AREA EMERGENCY  
☐ ALERT

- ☐ Alpha  
☐ Charlie-Two  
☐ Charlie-One

☐ Bravo

2. Event classification basis:

3. Has the ADTS relieved CR DSEO of EAL classification?

☐ Yes ☐ No

4. PAR recommendations:(GENERAL EMERGENCY only)

5. Off-site notifications performed: ☐ State/Local ☐ NRC

6. Unit status:

7. Critical Safety Functions (ADTS only):

8. Time of trip:

9. Major plant systems and equipment affected:

10. Equipment out of service:

11. Corrective actions planned or in progress and their priorities:

12. Turnover of dose calculations from the control room (Chemistry Tech) to the EOF MRDA:

13. Outstanding items awaiting action:

14. Outside agency assistance requested:

☐ Fire

☐ Police

☐ Ambulance

☐

Other:

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**Attachment 1**  
**DSEO/ADTS Turnover Checklist**  
(Sheet 2 of 2)

15. Radiological conditions:

☐ No release                      ☐ Release imminent                      ☐ Release in progress

16. Have increased exposures been authorized?                      ☐ Yes    ☐ No

17. Security controls in effect: \_\_\_\_\_  
\_\_\_\_\_

18. Evacuation and assembly:    ☐ Yes    ☐ No    Status: \_\_\_\_\_

19. Search and rescue:                      ☐ Yes    ☐ No    Status: \_\_\_\_\_

20. Procedures in use (EOPs) (ADTS only): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

21. If a Unit 1 event, turnover performed by Unit 2 SM/DSEO with Unit 1 SM, and Unit 1 SM becomes the MCRO. (no further involvement is needed from the Unit 2 SM/CR DSEO)

Date: \_\_\_\_\_ Completed By: \_\_\_\_\_  
Time: \_\_\_\_\_                      Print Name                      Signature

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## Attachment 2

### De-Escalation of Emergency Classification Checklist

(Sheet 1 of 2)

This checklist is a guideline for determining if conditions allow de-escalation of emergency classification to GENERAL EMERGENCY Bravo, SITE AREA EMERGENCY Charlie-Two, or ALERT Charlie-One. If de-escalation to UNUSUAL EVENT Delta-Two or lower is considered, Refer To and COMPLETE Attachment 3, "Termination of Emergency Event Checklist."

#### NOTE

Emergency event classifications may be de-escalated in a non-sequential order. For example, if all conditions for de-escalation to ALERT Charlie-One are satisfied, a GENERAL EMERGENCY Alpha event may be de-escalated to ALERT, Charlie-One.

All questions must be answered in the affirmative or N/A to proceed further in this checklist.

#### A. PLANT CONDITIONS

- A.1 All appropriate EOP actions, AOP actions, or both, have been completed: ..... ☐ Yes ☐ No ☐ N/A
- A.2 Appropriate safety parameters have been analyzed and plant indicators are stable or improving: ..... ☐ Yes ☐ No ☐ N/A
- A.3 All appropriate emergency repairs, emergency actions, or both, have been completed, which precludes the potential for further deterioration of plant systems: ..... ☐ Yes ☐ No ☐ N/A

#### NOTE

In situations when *no* EAL condition is in effect, Refer To Attachment 3, "Termination of Emergency Event Checklist" must be used.

- A.4 An EAL condition for a lower level classification exists: ..... ☐ Yes ☐ No ☐ N/A

#### B. COMPLETION OF MEASURES TO PROTECT PUBLIC HEALTH AND SAFETY

- B.1 All appropriate organizations have been notified of event: ..... ☐ Yes ☐ No ☐ N/A
- B.2 On-site and off-site radiological surveys have been completed and support de-escalation: ..... ☐ Yes ☐ No ☐ N/A
- B.3 All dose calculations and projections have been completed and support de-escalation: ..... ☐ Yes ☐ No ☐ N/A
- B.4 Off-site radiological conditions, both from plume and from ingestion pathway, support de-escalation: ..... ☐ Yes ☐ No ☐ N/A
- B.5 Discussion with NU representative in State EOC concludes State or local actions, such as EOC actuation, public information, and public protective actions will *not* be compromised by de-escalation: ..... ☐ Yes ☐ No ☐ N/A

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**Attachment 2**  
**De-Escalation of Emergency Classification Checklist**  
(Sheet 2 of 2)

**C. CONCURRENCE**

- C.1** NU Representative in State EOC concurs with  
and supports de-escalation: ..... ☐ Yes ☐ No ☐ N/A
- C.2** State EOC is aware of NU's intent to de-escalate or  
reclassify the event: ..... ☐ Yes ☐ No ☐ N/A
- C.3** A verbal report on decision to de-escalate has been  
provided to NRC Operations Center (Bethesda, MD)  
or On-site NRC Site Team Leader: ..... ☐ Yes ☐ No ☐ N/A

**D. AUTHORIZATION**

- D.1** DSEO authorizes de-escalation: ..... ☐ Yes ☐ No ☐ N/A

Date: \_\_\_\_\_ Completed By: \_\_\_\_\_  
Time: \_\_\_\_\_ Print Name Signature

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# Attachment 3

## Termination of Emergency Event Checklist

(Sheet 1 of 2)

This checklist is a guideline for determining if conditions allow termination of the on-call emergency response aspects for an ALERT Charlie-One or higher event in situations when long-term damage to the plant has *not* occurred.

Termination of an emergency event enables the on-site and off-site emergency response organizations to disband or reduce their staff. Termination also signifies that the risk to public health and safety and to company employees has been removed.

### NOTE

All questions must be answered in the affirmative or N/A to proceed further in this checklist.

#### A. PLANT CONDITIONS

- A.1 Plant conditions, systems, and equipment have been restored or replaced such that the plant is *not* in an EAL condition for an Alert or higher classification: ..... ☐ Yes ☐ No ☐ N/A
- A.2 Plant equipment status has been analyzed and systems are in a stabilized and safe condition: ..... ☐ Yes ☐ No ☐ N/A
- A.3 Unplanned gaseous releases, effluent releases, or both, to environment have been terminated: ..... ☐ Yes ☐ No ☐ N/A
- A.4 The potential for future unplanned gaseous releases, effluent releases, or both, in excess of technical specifications have been mitigated: ..... ☐ Yes ☐ No ☐ N/A
- A.5 All plant personnel have been accounted for and are in a safe environment: ..... ☐ Yes ☐ No ☐ N/A
- A.6 All identified security threats have been contained or eliminated: ..... ☐ Yes ☐ No ☐ N/A
- A.7 The core is adequately covered, cooled, and containment integrity is intact: ..... ☐ Yes ☐ No ☐ N/A
- A.8 The appropriate plant safety systems are operable: ..... ☐ Yes ☐ No ☐ N/A
- A.9 Primary containment leakage, secondary containment leakage, or both, has been stopped or controlled within technical specification limits: ..... ☐ Yes ☐ No ☐ N/A

#### B. COMPLETION OF MEASURES TO PROTECT PUBLIC HEALTH AND SAFETY

- B.1 All appropriate organizations have been notified of event: ..... ☐ Yes ☐ No ☐ N/A
- B.2 On-site and off-site radiological surveys have been completed and support termination: ..... ☐ Yes ☐ No ☐ N/A
- B.3 Dose calculations and projections have been completed and support termination: ..... ☐ Yes ☐ No ☐ N/A
- B.4 Discussion with NU Representative in State EOC concludes State or local actions, such as EOC actuation, public information, and public protective actions will *not* be compromised by termination: ..... ☐ Yes ☐ No ☐ N/A

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**Attachment 3**  
**Termination of Emergency Event Checklist**  
(Sheet 2 of 2)

**C. CONCURRENCE**

- C.1** NU Representative in State EOC concurs with and supports termination: ..... ☐ Yes ☐ No ☐ N/A
- C.2** Executive Vice President of Nuclear Engineering and Operations concurs with and supports termination: ..... ☐ Yes ☐ No ☐ N/A
- C.3** NU Representative in State EOC has informed State of Connecticut's Governor (or his representative), Office of Emergency Management, and Department of Environmental Protection of NU's intent to terminate the event: ..... ☐ Yes ☐ No ☐ N/A
- C.4** A verbal report on decision to terminate has been provided to NRC Operations Center (Bethesda, MD) or On-site NRC Site Team Leader: ..... ☐ Yes ☐ No ☐ N/A
- C.5** Appropriate press releases and coordination measures have been completed: ..... ☐ Yes ☐ No ☐ N/A

**D. AUTHORIZATION**

- D.1** DSEO authorizes termination: ..... ☐ Yes ☐ No ☐ N/A

Date: \_\_\_\_\_ Completed By: \_\_\_\_\_  
Time: \_\_\_\_\_ Print Name Signature

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## Attachment 4

### Activation of Recovery Organization Checklist

(Sheet 1 of 1)

After long-term damage (i.e., core damage) has occurred, and the plant has been stabilized, activation of the Recovery Organization is warranted. This checklist is a guideline for determining if conditions allow activation of the Recovery Organization. It is recognized that radiation surveys and decontamination of on-site areas, off-site areas, or both, will be the responsibility of the Recovery Organization.

#### NOTE

All questions must be answered in the affirmative or N/A to proceed further in this checklist.

#### A. PLANT CONDITIONS

#### NOTE

Plant conditions may be considered stable even if one or more fission product barriers is still lost.

- A.1 The plant is in a stable condition; i.e., plant equipment status has been analyzed and plant systems are in a stabilized or safe condition: ..... ☐ Yes ☐ No ☐ N/A
- A.2 Major radioactive releases have been terminated and the potential for future unplanned effluent releases in excess of technical specifications have been mitigated: ..... ☐ Yes ☐ No ☐ N/A
- A.3 The potential for a substantial degradation in level of plant safety *no* longer exists: ..... ☐ Yes ☐ No ☐ N/A

#### B. CONCURRENCE

- B.1 NU Representative in State EOC agrees the State EOC and local community actions will *not* be compromised: ..... ☐ Yes ☐ No ☐ N/A
- B.2 Senior Vice President and Chief Nuclear Officer – Millstone has approved the Recovery Organization activation: ..... ☐ Yes ☐ No ☐ N/A

#### C. NOTIFICATION

- C.1 A verbal report on decision to enter Recovery has been provided to NRC Operations Center (Bethesda, MD) or NRC Site Team Leader: ..... ☐ Yes ☐ No ☐ N/A
- C.2 Following the transition briefing to the Recovery Organization by the DSEO, the Director of the Recovery Organization will assume command and control of SERO. .... ☐ Yes ☐ No ☐ N/A

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Checklist Completed by: \_\_\_\_\_  
Print Name

DSEO Signature: \_\_\_\_\_

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50-336  
50-423  
B18047

Attachment 5

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

Emergency Plan Operating Procedure 4411B, Revision 4  
Assistant Director Emergency Operations Facility

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000301-173253

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPOP 4411B Rev. No.: 004 Minor Rev.:       

Title: Assistant Director Emergency Operations Facility

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-6001 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.:-

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			✓ Com- ments
				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"/>		
RAC 06	<input checked="" type="checkbox"/> MARK WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Independent	<input checked="" type="checkbox"/> MARK WHITE	<i>[Signature]</i>	3/7/00	<input type="checkbox"/>	<input type="checkbox"/>		
Writer's Guide	<input checked="" type="checkbox"/> BARBARA A. TARALLO	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPG	✓
Validation	<input checked="" type="checkbox"/> SPENS HOOK	<i>[Signature]</i>	3/2/00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SORC/PORC/R/DH Final Review and Approval

00-09  
Meeting No.

*[Signature]* 3/7/00  
Department Head/Responsible Individual / Date

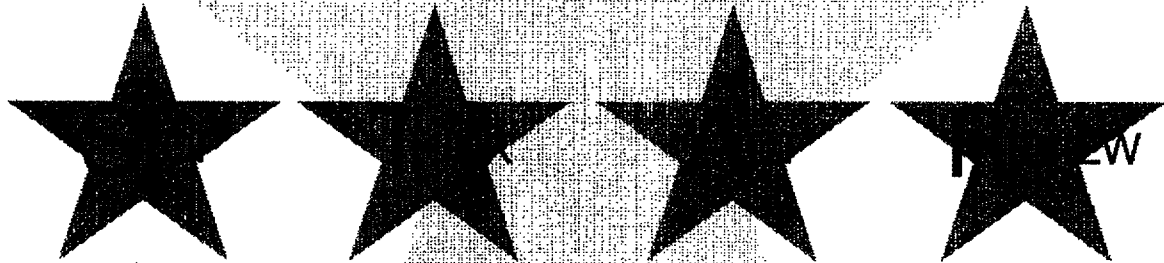
Approval Signature

3/8/00

Approval Date

Effective Date: 3/13/00

**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Assistant Director Emergency Operations  
Facility**

**EPOP 4411B**

**Rev. 004**

Approval Date: 3/8/00

Effective Date: 3/13/00

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**Millstone All Units  
Emergency Plan Operating Procedure**

**Assistant Director Emergency Operations Facility**

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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the Assistant Director Emergency Operations Facility for emergency response actions during an event which activates the SERO. These actions include the following:

- Providing input for classification changes based on radiological conditions
- Developing, recommending, and updating off-site Protective Action Recommendations (PARs) to the EOF DSEO
- Providing notifications for upgrades, updates, de-escalation, and termination, as necessary, via the Emergency Response and Notification System
- Approving emergency exposure upgrades in excess of 10CFR20 limits for off-site personnel (e.g., Radiological Monitoring Teams)
- Authorizing potassium iodide (KI) use for SERO personnel
- Coordinating on-site and off-site radiological assessment of the event
- Coordinating communications of plant status to the NRC, State, and public
- Managing all press releases from the MPI
- Authorizing contaminated personnel to leave the station

### 1.2 Discussion

This procedure describes the actions of the Assistant Director Emergency Operations Facility, the State Emergency Planning Liaison, and the Regulatory Liaison when an ALERT, Posture Code Charlie-One or higher emergency event has been declared.

The ADEOF reports to the EOF and is responsible for directing and managing the MRDA, Assistant MRDA, MRCA, MPI, MOC, RL, and SEPL. The ADEOF reports to and assists the EOF DSEO.



## **2. PREREQUISITES**

### **2.1 Documents**

- 2.1.1 EPIP 4400, "Event Assessment, Classification, and Reportability"
- 2.1.2 EPIP Form 4400-1, "Unit 1 Emergency Action Level Table"
- 2.1.3 EPIP Form 4400-2, "Unit 2 Emergency Action Level Table"
- 2.1.4 EPIP Form 4400-3, "Unit 3 Emergency Action Level Table"
- 2.1.5 EPOP 4413, "Potassium Iodide Tablet Control and Issue"
- 2.1.6 EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies"
- 2.1.7 EPUG 08B, "Millstone Emergency Plan Resource Book"
- 2.1.8 EPOP 4428G, "Protective Action Recommendations"
- 2.1.9 EPOP 4455, "Manager of Public Information"
- 2.1.10 EPOP 4460, "Manager of Communications"





## 2.2 Definitions

- 2.2.1 ADEOF – Assistant Director Emergency Operations Facility
- 2.2.2 ADTS – Assistant Director Technical Support
- 2.2.3 AMRDA – Assistant Manager Radiological Dose Assessment
- 2.2.4 ASSUME – To undertake
- 2.2.5 CDE – Committed Dose Equivalent
- 2.2.6 DISCUSS – To verbally exchange ideas in order to reach conclusions
- 2.2.7 EAS – Emergency Alert System
- 2.2.8 ENRS – Emergency Notification and Response System
- 2.2.9 ERDS – Emergency Response Data System
- 2.2.10 HPN – Health Physics Network
- 2.2.11 KI – Potassium iodide
- 2.2.12 MOC – Manager of Communications
- 2.2.13 MPI – Manager of Public Information
- 2.2.14 MRCA – Manager of Radiological Consequence Assessment
- 2.2.15 MRDA – Manager of Radiological Dose Assessment
- 2.2.16 RL – Regulatory Liaison
- 2.2.17 ST – Shift Technician
- 2.2.18 SEMO – State Emergency Management Office (NY)
- 2.2.19 SEPL – State Emergency Planning Liaison
- 2.2.20 TEDE – Total Effective Dose Equivalent



### 3. PRECAUTIONS

N/A

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#### 4. INSTRUCTIONS

##### 4.1 Initial Actions

- 4.1.1 INDICATE presence on EOF Staffing Board.
- 4.1.2 LOG date and arrival time in logbook.
- 4.1.3 OBTAIN briefing from EOF DSEO.

#### NOTE

If succession of the ADEOF to the position of EOF DSEO becomes necessary, actions shall immediately be taken to obtain a fully qualified DSEO.

- 4.1.4 IF the EOF DSEO is unavailable, ASSUME the position of DSEO and PERFORM the following:
  - a. DIRECT the MOR to immediately obtain a fully qualified DSEO.
  - b. ASSIGN an individual to assume the ADEOF role.
  - c. Go To EPOP 4411, "Director of Station Emergency Operations."
- 4.1.5 Refer To Attachment 1, and CONDUCT briefings with the following:
  - MRDA
  - AMRDA
  - MRCA
  - MPI
  - MOC
  - RL
- 4.1.6 WHEN EOF is activated and ST arrives, DIRECT control room ST to be be relieved of further ENRS notification responsibilities.

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- 4.1.7 **IF** a release is imminent or in progress, **ENSURE** EOF High Radiation Ventilation Filtration System is activated by MRCA or Designee.

**– End of Section 4.1 –**

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## 4.2 Subsequent Actions

### NOTE

1. Steps in Section 4.2 are repeated on a recurring basis, as necessary.
2. The ADEOF provides input on classification changes to the EOF DSEO based on radiological conditions. The ADEOF and ST will be responsible, as a team, for notifying off-site officials of classification changes and updates.
3. Whenever a GENERAL EMERGENCY, Posture Code Bravo or Alpha is declared, an off-site Protective Action Recommendation must be forwarded to State Officials concurrent with the 15 minute notification.
4. A PAR update must be issued within 15 minutes of the decision to update the PAR.
5. If dose assessment results are not available, PARs shall be based on plant conditions.

4.2.1 IF a GENERAL EMERGENCY is declared or is imminent, Refer To EPOP 4428G, Protective Action Recommendations," and REVIEW off-site dose assessment results from the MRDA.

4.2.2 IF radiological or meteorological conditions change, DISCUSS changes with the MRDA and MRCA as follows:

- a. Refer To EPIP 4400, "Event Assessment, Classification, and Reportability," and DETERMINE if radiological EALs have been met.
- b. DISCUSS EAL classification input with the EOF DSEO.

4.2.3 DIRECT the MRCA to refer to and implement EPOP 4413, "Potassium Iodide Tablet Control and Issue," for issuance of KI to SERO emergency workers.

4.2.4 DIRECT the MRCA to refer to and implement EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies," and AUTHORIZE emergency exposure increase up to 25 rem to off-site SERO personnel, as necessary.



### NOTE

If the Governor has declared a State of Emergency and has directed all future notifications to be processed by the State EOC, IRFs or updates shall not be released via ENRS unless directed by the Governor.

- 4.2.5 IF a State of Emergency has been declared by the Governor AND the State has directed all future notifications to be processed by the State EOC, STOP future IRFs released from the site, and PERFORM the following:
- a. COMPLETE information—only IRFs for upgrades or updates.
  - b. ISSUE IRF to EOF DSEO for communicating to Executive Spokesperson.
  - c. FAX IRF to Executive Spokesperson or Nuclear News Manager.

### NOTE

Performance of IRF updates is recommended hourly to keep all parties current.

- 4.2.6 IF classification changes OR IRF updates are required, DIRECT the ST to refer to and implement EPIP 4404, "Notifications and Communications."
- 4.2.7 CONDUCT periodic briefings with the following:
- MRDA
  - AMRDA
  - MRCA
  - MPI
  - MOC
  - RL

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- 4.2.8 CONDUCT periodic briefings via telephone of the State Emergency Planning Liaison at the State EOC.
- 4.2.9 VERIFY all press release information is technically correct prior to obtaining approval from EOF DSEO to release to Nuclear News Manager at the State EOC.
- 4.2.10 OBTAIN authorization for release from EOF DSEO.
- 4.2.11 AUTHORIZE release of Nuclear Network messages from the MPI.
- 4.2.12 IF a release is imminent or in progress, ENSURE EOF High Radiation Ventilation Filtration System is activated by MRCA or Designee.
- 4.2.13 AUTHORIZE release of contaminated personnel from site to a designated decontamination location.
- 4.2.14 IF informed the NRC will dispatch a Site Team to the station, DIRECT the Regulatory Liaison to refer to Section 4.3 and prepare for NRC Site Team arrival.
- 4.2.15 NOTIFY NRC site team members of radiological assessments and actions to date.
- 4.2.16 WHEN plant conditions stabilize or improve, PROVIDE support to EOF DSEO for the following:
- De-escalation
  - Termination
  - Transition to recovery operations

— End of Section 4.2 —



### 4.3 Regulatory Liaison Actions

4.3.1 WHEN informed the NRC site Team will be dispatched to the station, **PERFORM** the following:

- a. Using a commercial phone, **ESTABLISH** communications with the NRC Regional Office and **REQUEST** the names, positions, and estimated time of arrival of NRC Site Team.
- b. **RECORD** the names and positions of NRC Site Team members on Attachment 3.
- c. **REQUEST** the NRC Site Team report to the EOF for site access processing and initial briefing.

4.3.2 **ARRANGE** site access for NRC Site Team with the MOS.

4.3.3 **ARRANGE** transportation to the TSC/OSC with the MOR.

4.3.4 Refer To Attachment 3 and **CONFER** with the ADEOF and ADTS to identify SERO counterparts for NRC Site Team members.

4.3.5 **COMPILE** the following for the NRC Site Team:

- All issued IRFs obtained from the ADEOF
- All issued news releases obtained from the MPI
- All issued EAS advisories obtained from the MPI

4.3.6 WHEN the NRC Site Team arrives, **PERFORM** the following:

- a. **DIRECT** the NRC Site Team to the EOF to obtain a briefing.
- b. **PROVIDE** copies of the following information to NRC Site Team members:
  - 1) IRFs
  - 2) News releases
  - 3) EAS advisories

4.3.7 Refer To Attachment 2, "Guidance for Initial Briefing of NRC Site Team," and **BRIEF** the NRC Site Team.

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- 4.3.8 **IF** time and conditions permit, **REQUEST** the DSEO brief the NRC site Team.
- 4.3.9 **PERFORM** periodic inquiries of NRC counterparts and **DETERMINE** if the following NRC needs are adequate:
- Facility workstations (phones, power outlets, seating etc.)
  - Information flow and availability is adequate
  - Commitments made by SERO are being met in a timely manner
- 4.3.10 **ATTEND** meeting with NRC Site Team and **DOCUMENT** the following:
- Briefing topics and discussions
  - NRC requests for information or action
  - Commitments made to the NRC, including due dates or times
  - Individuals assigned to respond to NRC requests or commitments
- 4.3.11 **MAINTAIN** current status of action items needed to meet NRC requests or commitments.
- 4.3.12 **ADVISE** the ADEOF or ADTS of any actions which will *not* be completed by the committed due date or time.

– End of Section 4.3 –

#### **4.4 State Emergency Planning Liaison Actions**

- 4.4.1 NOTIFY the State Operations Officer and the ADEOF of your arrival in the State Emergency Operations Center.
- 4.4.2 VERIFY operability of communications equipment between the Station and State EOC.
- 4.4.3 COORDINATE response actions with the following:
  - State Operations Officer to ensure efficiency of activities
  - NY SEMO Representative at the State EOC to provide information on Station activities
- 4.4.4 CONTACT the ADEOF to report on the status of operations at the State EOC and to obtain briefing on the status of activities at the EOF.
- 4.4.5 ASSIST State EOC staff with questions on implementation of the Emergency Plan or procedures.
- 4.4.6 MAINTAIN a log of significant events and activities.
- 4.4.7 ATTEND State EOC staff briefings.
- 4.4.8 STANDBY for escalation, de-escalation, or close-out of the emergency.

**– End of Section 4.4 –**



## 5. REVIEW AND SIGNOFF

5.1 N/A

## 6. REFERENCES

### 6.1 Developmental Documents

- 6.1.1 "Defueled Safety Analysis Report Unit 1," Section 6.3.
- 6.1.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.1.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.1.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.1.5 Code of Federal Regulations 10CFR50.54(x) and 10CFR50.54(y)
- 6.1.6 NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

### 6.2 Supporting Documents

- 6.2.1 EPIP 4400, "Event Assessment, Classification, and Reportability"
- 6.2.2 EPIP Form 4400-1, "Unit 1 Emergency Action Level Table"
- 6.2.3 EPIP Form 4400-2, "Unit 2 Emergency Action Level Table"
- 6.2.4 EPIP Form 4400-3, "Unit 3 Emergency Action Level Table"
- 6.2.5 EPOP 4413, "Potassium Iodide Tablet Control and Issue"
- 6.2.6 EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies"
- 6.2.7 EPOP 4428G, "Protective Action Recommendations"
- 6.2.8 EPOP 4455, "Manager of Public Information"
- 6.2.9 EPOP 4460, "Manager of Communications"
- 6.2.10 EPUG 08B, "Millstone Emergency Plan Resource Book"

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## **7. SUMMARY OF CHANGES**

- 7.1 Added the State Emergency Planning Liaison and Regulatory Liaison positions to Section 1.2.**
- 7.2 Added Emergency Notification and Response System (ENRS), Emergency Alert System (EAS), Health Physics Network (HPN), Regulatory Liaison (RL), State Emergency Management Office (SEMO), and State Emergency Planning Liaison (SEPL) to Section 2.2.**
- 7.3 Added Regulatory Liaison to the briefing list in steps 4.1.5 and 4.2.7.**
- 7.4 Added step 4.2.8 to conduct periodic briefings via telephone of the State Emergency Planning Liaison at the EOC.**
- 7.5 Added step 4.2.14 to direct the Regulatory Liaison to prepare for NRC Site Team arrival if informed the NRC will dispatch a Site Team to the station.**
- 7.6 Added new Section 4.3 instructions for the Regulatory Liaison actions.**
- 7.7 Added new Section 4.4 instructions for the State Emergency Planning Liaison actions.**
- 7.8 Added Regulatory Liaison briefing to Attachment 1.**
- 7.9 Added new Attachment 2, "Guidance for Initial Briefing of NRC Site Team."**
- 7.10 Added new Attachment 3, "NRC Site Team Composition."**
- 7.11 Updated references section.**



**Attachment 1**  
**Briefing Sheet**  
(Sheet 1 of 1)

**MRDA/AMRDA/MRCA – INITIAL BRIEFING**

- Initial dose assessment results
- On-site and off-site radiological conditions
- On-site and off-site protective actions
- HPN data passed to NRC

**MPI – INITIAL BRIEFING**

- Press releases
- Rumors to date

**MOC – INITIAL BRIEFING**

- Plant parameter data being provided to NRC:
  - ERDS
  - ENS
- Questions being posed for ADEOF response

**RL – INITIAL BRIEFING**

- NRC Site Team status

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**Attachment 2**  
**Guidance for Initial Briefing of NRC Site Team**  
(Sheet 1 of 2)

- \_\_\_\_\_ • Accident classification and basis
- \_\_\_\_\_ • Status of safe shutdown equipment
- \_\_\_\_\_ • Status of RX Coolant Systems and equipment
- \_\_\_\_\_ • Status of core cooling
- \_\_\_\_\_ • Status of heat removal processes
- \_\_\_\_\_ • Status of containment integrity
- \_\_\_\_\_ • Equipment outages of concern
- \_\_\_\_\_ • Any signs of tampering or sabotage
- \_\_\_\_\_ • Current plant conditions of high priority and efforts underway to mitigate
- \_\_\_\_\_ • Radiological conditions for the following:
  - \_\_\_\_\_ • In-plant or containment
  - \_\_\_\_\_ • Releases in progress or projected
  - \_\_\_\_\_ • Consequences of projected releases
- \_\_\_\_\_ • PARs to the State(s)
- \_\_\_\_\_ • Protective actions or precautionary actions taken or underway in State(s)
- \_\_\_\_\_ • Deaths, persons unaccounted for, injuries, personnel exposures, contaminations

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**Attachment 2**  
**Guidance for Initial Briefing of NRC Site Team**  
(Sheet 2 of 2)

- \_\_\_\_\_ • Supplemental assistance to Licensee from the outside (INPO, vendors, utilities, contractors)
- \_\_\_\_\_ • Site access provisions and routes
- \_\_\_\_\_ • Counterpart names and locations
- \_\_\_\_\_ • Any other personnel safety issues

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**Attachment 3**  
**NRC Site Team Composition**  
 (Sheet 1 of 3)

The following table represents the expected composition of the NRC Site Response Team. Actual team composition may vary.

Name	NRC Position	SERO Counterpart	SERO Name	Location	NRC Telephone	SERO Telephone
	Director of Site Operations (DSO)	Director of Station Emergency Operations (DSEO)		EOF		
	Reactor Safety Coordinator (RCS)			EOF		
	Reactor Safety Assistant Coordinator			EOF		
	Reactor Safety Operations Coordinator (RSOC)	Assistant Director Technical Support (ADTS)		TSC		
	Reactor Systems Operations Specialist	Manager TSC (MTSC)		TSC		
	RSCL Communicator	N/A		TSC		
	RSCL	N/A		EOF		
	Communicator					
	Senior Resident Inspector	TSC		TSC		
	Resident Inspector			CR		
	Government Liaison Coordinator (GLC)	Dept. of Environmental Protection Rep.		EOF		

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**Attachment 3**  
**NRC Site Team Composition**  
 (Sheet 2 of 3)

Name	NRC Position	SERO Counterpart	SERO Name	Location	NRC Telephone	SERO Telephone
	Government Liaison Assistant			EOF		
	State EOC Coordinator	CT Office of Emergency Management (OEM) Director		State EOC		
	Status Summary Communicator	N/A		EOF		
	Public Affairs Coordinator	N/A		EOF		
	Public Affairs Coordinator	Executive Spokesperson/ – Nuclear News Manager		Armory JIC		
	Technical Briefer	Technical Briefer		Armory JIC		
	Emergency Response Coordinator	Manager of Resources (MOR) or Regulatory Liaison		EOF		
	Communications Specialist	N/A		EOF		
	Protective Measures Coordinator (PMC)	Assistant Director Emergency Operations (ADEOF)		EOF		

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**Attachment 3**  
**NRC Site Team Composition**  
(Sheet 3 of 3)

<b>Name</b>	<b>NRC Position</b>	<b>SERO Counterpart</b>	<b>SERO Name</b>	<b>Location</b>	<b>NRC Telephone</b>	<b>SERO Telephone</b>
	Protective Measures Assistant Coordinator			EOF		
	Environmental Assessment Coordinator	Manager of Radiological Dose Assessment		EOF		
	Dose Assessor	Radiological Assessment Engineer		EOF		
	HPN Communicator	HPN Communicator		EOF		
	PMCL Communicator	N/A		EOF		
	PMCL Communicator	N/A		TSC		
	Radiation Safety Coordinator	Manager of Radiological Consequences Assessment (MRCA)		EOF		
	Health Physics Coordinator	Assistant Radiation Protection Supervisor (ARPS)		OSC		

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Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 6

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

Emergency Plan Operating Procedure 4422, Revision 4, Change 1  
Manager of Technical Support

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000301-173022

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPOP 4422 Rev. No.: 004 Minor Rev.: 01

Title: Manager of Technical Support

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.⇒

Plant Mngt Staff Member - Approval

Comments:

RI/DPC Print Name and Date

Continued ☐

Reviews	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"/>		
RAC 06 <input checked="" type="checkbox"/>	MARIL WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSPD	
Independent <input checked="" type="checkbox"/>	MARIL WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSPD	
Writer's Guide <input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		
Validation <input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PORC/RI/DH Final Review and Approval

00-09  
Meeting No.

*[Signature]* 3/7/00  
Department Head/Responsible Individual / Date

*[Signature]*  
Approval Signature

3/8/00  
Approval Date

Effective Date: 3/13/00

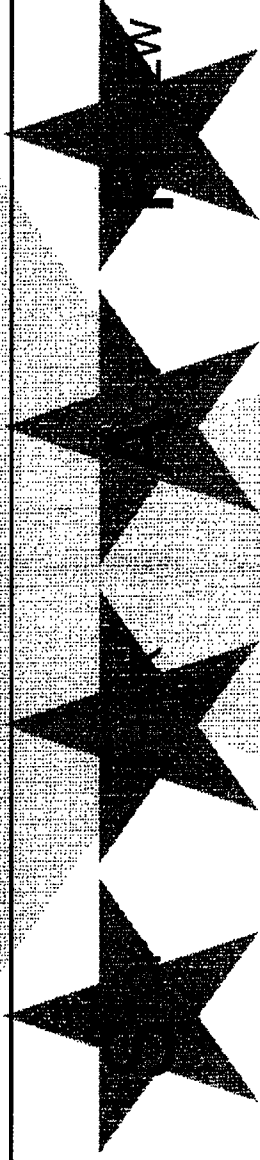
MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE



Manager of Technical Support Center

EPOP 4422

Rev. 004--01



Approval Date:

3/8/00

Effective Date:

3/13/00

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**Millstone All Units  
Emergency Plan Operating Procedure**

**Manager of Technical Support Center**

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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the Manager of Technical Support Center and Technical Support Center staff for emergency response actions during an event which activates the SERO. These actions include:

- Analyzing plant conditions and status
- Providing input to emergency classifications
- Determining emergency event cause and corrective actions
- Developing action plans to mitigate emergency conditions
- Interfacing with the Accident Management Team in performing analysis of plant conditions and corrective actions
- Providing technical support to the Assistant Director of Technical Support, Manager of Control Room Operations, and Manager of Operational Support Center
- Identifying and resolving existing and potential engineering and technical problems
- Developing procedures for PORC or 10 CFR 50.54(x) approval

### 1.2 Discussion

SERO activation is initiated upon declaration of an ALERT, Posture Code Charlie–One, or higher classification event or as deemed necessary by Station Management by declaring an ALERT.



## **2. PREREQUISITES**

### **2.1 General**

N/A

### **2.2 Documents**

2.2.1 TSC Logbook

2.2.2 EPUG 01, "Time Sharing Option Equipment (TSO)"

2.2.3 EPIP 4400, "Event Assessment, Classification, and Reportability"

2.2.4 EPUG 06, "TSC HVAC User's Guide"

### **2.3 Definitions**

2.3.1 ADTS – Assistant Director Technical Support

2.3.2 AMTL – Accident Management Team Leader

2.3.3 DSEO – Director of Station Emergency Operations

2.3.4 GTS – Generation Test Services

2.3.5 HVAC – Heating, Ventilation, and Air Conditioning

2.3.6 Minimum staff – Positions depicted above the line on the facility staffing board. These are the affected unit positions as applicable.

2.3.7 MTSC – Manager of Technical Support Center

2.3.8 O.O.S. – Out of Service

2.3.9 OSC – Operational Support Center

2.3.10 CONVENE – To assemble

2.3.11 TIC – Technical Information Coordinator





### 3. PRECAUTIONS

- 3.1 The TSC/OSC ventilation system is designed for 20 persons. Capacity may be exceeded (40 people up to 6 hours), without exceeding CO<sub>2</sub> limits, for team briefings, turnovers, ALARA, or if TSC/OSC is monitored.
- 3.2 Personnel transiting through, i.e., Health Physics Technicians, Emergency Teams, etc., are not counted against the maximum of 20 persons.
- 3.3 The Outside Air Supply Damper [3H WS\*MOD 30] isolates for 30 minutes following a Unit 3 CBI.



## 4. INSTRUCTIONS

### 4.1 Initial Actions

#### NOTE

Support may be provided to the control room prior to TSC activation.

- 4.1.1 INDICATE presence in TSC by keying into TSC security card reader and placing name on TSC staffing board.
- 4.1.2 ENSURE TSC personnel maintain accountability by properly using key cards to enter and exit TSC.
- 4.1.3 ENSURE TSC station paging speaker volume is audible.
- 4.1.4 SYNCHRONIZE clocks in TSC and OSC with the control room.
- 4.1.5 IF a Unit 3 event, DIRECT the Unit 3 Control Room to refer to OP 3349, "Modcomp Process Computer System Operations," and perform actions to shift the process computer (SPDS) from the Computer Room II console to the TSC console. ①
- 4.1.6 ASSIGN a staff member to access SPDS, as necessary.
- 4.1.7 ASSIGN TSC staff member to Refer To EPUG 01, "Time Sharing Option Equipment (TSO)," and access OFIS for the affected unit.
- 4.1.8 EVALUATE event and SELECT plant parameters critical to monitoring plant status.
- 4.1.9 DIRECT tracking and trending be performed at 15–30 minute intervals or, as necessary.
- 4.1.10 OBTAIN copy of pre–event and critical plant parameter data for affected unit.
- 4.1.11 IF OFIS and SPDS are inoperable, REQUEST data from TIC.



4.1.12 ASSIGN unaffected unit TSC staff member to perform the following:

- Maintain a record of significant communications and events in TSC Logbook.
- Record names of TSC staff in TSC Logbook.
- Log information as directed by the ADTS.
- Review TSC staff roles and responsibilities.

4.1.13 ASSIGN TSC staff members to maintain status boards with the following information:

- Time of trip
- Chronology of key events
- Critical parameters
- Unit status
- Safety related equipment – O.O.S.

4.1.14 WHEN TSC is minimally staffed, NOTIFY the ADTS.



## CAUTION



The TSC 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.

4.1.15 DIRECT TSC staff member refer to EPUG 06, "TSC HVAC User's Guide," and perform the following:

- a. Verify TSC HVAC breakers on power panel  
"3LAA-PNLTSC-1" closed.
- b. Determine TSC HVAC System mode of operation.

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- c. **IF** notified by Unit 3 Control Room of CBI, **ENSURE** the following:
  - TSC HVAC System is in emergency operation mode
  - Outside air supply damper opens after 30 minutes
- d. **IF** TSC HVAC equipment is inoperable, **NOTIFY** the Unit 3 MOSC, if available, or Unit 3 Control Room.
- e. Notify MTSC of Air Handling and High Radiation Filtration System status.

**– End of Section 4.1 –**



## 4.2 Subsequent Actions

### NOTE

Steps in Section 4.2 may be repeated, as necessary.



### CAUTION



TSC outside air supply isolates for 30 minutes following CBI.

- 4.2.1 IF CBI occurs, Refer To step 4.3.1 and **VERIFY** mode of operation.
- 4.2.2 **ANALYZE** ongoing conditions and events as follows:
  - a. Refer To EPIP 4400, "Event Assessment, Classification, and Reportability," and **VERIFY** emergency event classification is consistent with current plant condition.
  - b. **DETERMINE** potential for change in plant conditions that will effect event classification.
  - c. **PROVIDE** input to ADTS on event classification.

### NOTE

GTS may assist in evaluating electrical problems and may be dispatched via the OSC to perform assessments.

- 4.2.3 **EVALUATE** emergency based on degraded plant conditions and **PERFORM** the following:
  - a. **REVIEW** repair requirements and priority of repairs for correcting the condition.
  - b. **RECOMMEND** changes in priorities to the ADTS, as required.

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## NOTE

Integrated briefings should be conducted prior to team deployment.

- c. PROVIDE the following information, as requested by the MOSC, to teams prior to deployment:
    - Plan of corrective actions
    - Detailed discipline-specific briefings of tasks
    - Technical guidance
    - Plant drawings and procedures
  - d. Refer To Attachment 1 and DEVELOP emergency repair procedures to support emergency teams, as required.
  - e. MAINTAIN log of plant configuration control changes.
- 4.2.4 IF personnel are available, DIRECT AMTL to maintain Critical Parameters Board.
- 4.2.5 RECOMMEND to ADTS strategies necessary for the following:
- Prevent severe core damage
  - Prevent containment failure
  - Reduce radiological releases
  - Prevent spent fuel damage
- 4.2.6 ANALYZE plant steady-state and dynamic behavior prior to and during the event and DETERMINE cause and course of emergency event.
- 4.2.7 CONSULT ADTS to obtain priorities.
- 4.2.8 COORDINATE evaluations and repairs with MOSC.



- 4.2.9 **ESTABLISH** priorities with ADTS concurrence and **DIRECT** Accident Management Team members to perform the following:
- Thermal hydraulic evaluations
  - Look ahead strategies
  - Time to core uncover calculations
  - Possible release pathways
- 4.2.10 **DEVELOP** corrective actions with Accident Management Team and **RECOMMEND** action plans to mitigate plant damage to ADTS.
- 4.2.11 **DETERMINE** vital equipment needed to mitigate the event.
- 4.2.12 **DEVELOP** alternate electrical or mechanical system lineups to recover damaged or out-of-service vital equipment.
- 4.2.13 **WHEN** AMTL arrives, **PROVIDE** briefing on plant status.
- 4.2.14 Refer To Attachment 1, as necessary, and **FORWARD** recommendations to ADTS.
- 4.2.15 **UPDATE** status board to reflect current strategies.
- 4.2.16 **DEVELOP** appropriate procedures and corrective actions to mitigate event.



### NOTE

1. The Station Technical Support Center may develop strategies and procedures that go beyond design basis accident management to limit core damage, prevent containment failure, reduce radiological releases, and prevent damage to the spent fuel.
2. Any departure from station procedures and EOPs is processed as appropriate by the MCRO and ADTS using Attachment 1 and Attachment 2. PORC is the normal method of approving procedure changes; however, in a fast moving event, PORC may be replaced by the 50.54(x) and 50.54(y) process.
3. The decision to invoke 10CFR50.54(x) is up to the discretion of the Shift Manager/MCRO and shall not be directed by the ADTS. Actions taken under 50.54(x) shall be approved, at a minimum, by a licensed Senior Operator or Certified Fuel Handler before taking the action in accordance with 10CFR50.54(y). The DSEO and MOC are responsible for notifying the NRC of the action.

4.2.17 **IF** actions not covered by EOPs are necessary to protect public health and safety, DEVELOP strategies and procedures for the following:

- Limiting core damage
- Preventing containment failure
- Reducing radiological releases
- Limiting spent fuel damage

### NOTE

Attachment 1 does not supercede normal procedure change requirements. It allows flexibility in fast moving events.

4.2.18 **PERFORM** the following:

- a. Refer To and **COMPLETE** Attachment 1 for developed strategies and procedures.
- b. **FORWARD** completed Attachment 1 to the MCRO and ADTS for review and approval.

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4.2.19 ENSURE developed strategies and procedures receive approval, as necessary.

4.2.20 WHEN EOPs are not projected to be successful, DIRECT AMTL to perform the following, as necessary, based on plant conditions:

- Estimate minimum injection rate required to remove decay heat by boiling and COMPARE to actual injection rate.
- Estimate time to core uncover.
- Estimate timing of core damage progression subsequent to core uncover.
- Estimate containment pressurization that might occur due to hydrogen burn using current containment hydrogen content.
- Develop recommended accident management strategy.

4.2.21 CONSULT with MRDA as follows:

- PROVIDE technical data that may affect radiological releases.
- PROVIDE the following:
  - Accident sequence
  - Radiation release paths
  - Core uncover time
  - Performance information regarding radioactivity mitigating systems

4.2.22 INFORM the MRDA regarding expected progression of core damage or spent fuel damage.

4.2.23 WHEN SERO termination is ordered by the EOF DSEO, PERFORM the following:

- a. NOTIFY TSC staff of SERO termination.
- b. IF a Unit 3 event, 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.

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- c. RECORD SERO termination in TSC Logbook.

– End of Section 4.2 –

#### 4.3 TSC HVAC Operation



### CAUTION



The TSC 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.

- 4.3.1 DIRECT TSC staff member refer to EPUG 06, "TSC HVAC User's Guide," and perform the following:
- a. Verify TSC HVAC breakers on power panel "3LAA-PNLTSC-1" are closed.
  - b. Determine TSC HVAC System mode of operation.
  - c. WHEN a CBI occurs, ENSURE the following:
    - TSC HVAC System is in emergency operation mode
    - Outside air supply damper opens after 30 minutes
  - d. IF TSC HVAC equipment is inoperable, NOTIFY the Unit 3 MOSC, if available, or Unit 3 Control Room.
  - e. NOTIFY MTSC of Air Handling and High Radiation Filtration System status.

– End of Section 4.3 –

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## 5. REVIEW AND SIGNOFF

5.1 N/A

## 6. REFERENCES

- 6.1 "Final Safety Analysis Report Unit 1," Appendix G
- 6.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.5 NUREG-0654, Revision 1, "Criteria for Preparation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.6 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"
- 6.7 EPOP 4400, "Event Assessment, Classification, and Reportability"
- 6.8 EPOP 4411, "Director of Station Emergency Operations"
- 6.9 EPOP 4417, "Manager of Control Room Operations"
- 6.10 EPOP 4419, "Manager of Operational Support Center"
- 6.11 EPOP 4470, "Control Room Data Coordinator"
- 6.12 EPUG 01, "Time Sharing Option Equipment (TSO)"

## 7. SUMMARY OF CHANGES

Summary of Changes – Change 1

- 7.1 Added instructions in step 4.1.5 and step 4.2.23.b to direct the Unit 3 Control Room to align the TSC console and Computer Room II console, as appropriate.

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## Attachment 1

### TSC Emergency Repair/Procedure Change/Assessment Recommendations

(Sheet 1 of 1)

State plant conditions warranting the following recommendations/procedure change:  
(for example: RWST low, containment pressure increasing, loss of power, spent fuel heatup, etc.)

---

---

---

1. State recommendations for ADTS approval, identifying the scope and limitations of departure.  
(attach supporting documents):

☐ Manager of Control Room Operations action:

---

---

☐ Manager of Operational Support Center action:

---

---

2. State implementation cautions (for example: personal safety risks).

---

---

3. State time constraints for action:

---

---

YES NO

4. Is there time to convene a PORC to change implementation? ☐ ☐

(If YES, process normal change paperwork in parallel.)

(If NO, then 10CFR50.54(x) and 50.54(y) must be invoked, and Step 7 completed))

5. Completed By: \_\_\_\_\_  
(MTSC)

6. ADTS Approval: \_\_\_\_\_

7. MCRO Approval: (may occur via phone)  
\_\_\_\_\_ (required if 50.54(x) is being invoked)

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**Attachment 2**  
**Accident Management Decision Making Beyond EOPs and Design Basis**  
(Sheet 1 of 1)

In an accident sequence not covered by EOPs, the Manager of Control Room Operations may take reasonable action, including departure from a license condition or a Technical Specification, if such action is immediately needed to protect the health and safety of the public. It must be apparent that no action consistent with license conditions and Technical Specifications will provide adequate protection.

In a slow moving situation, the station Technical Support Center will develop strategies and procedures that go beyond design basis accident management to limit core damage, prevent containment failure, and reduce radiological releases. These strategies or procedures may be implemented with approval of the ADTS and the Manager of Control Room Operations. In the absence of such procedures, the Manager of Control Room Operations, on his own authority, may take actions immediately needed to protect the health and safety of the public, keeping the ADTS informed.

The decision to invoke 10CFR50.54(x) is up to the discretion of the Manager of Control Room Operations and shall not be directed by the ADTS. The ADTS may present a strategy or procedure that implements 50.54(x) to the Manager of Control Room Operations for his consideration. The DSEO shall be informed of all actions related to 50.54(y) by the ADTS.

In situations where 50.54(x) is invoked, the NRC shall be notified immediately using the Emergency Notification System (ENS).

In accordance with 50.54(y), licensee action permitted by 50.54(x) shall be approved, as a minimum, by a license Senior Operator before taking action.

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50-336  
50-423  
B18047

Attachment 7

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

Emergency Plan Operating Procedure 4428A, Revision 3, Change 1  
Radiological Dose Assessment Team

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000307-091520

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPOP 4428A Rev. No.: 003 Minor Rev.: 01

Title: Radiological Dose Assessment Team

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr. =>

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			J/R 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"/>		
RAC 06	<input checked="" type="checkbox"/> MARK WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Independent	<input checked="" type="checkbox"/> MARK WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP5D	
Writer's Guide	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
Validation	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SORC/PORC/RI/DH Final Review and Approval

Meeting No. 00-09

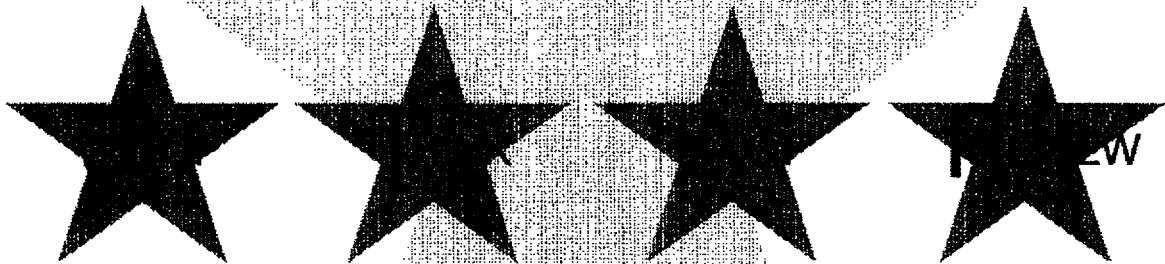
Department Head/Responsible Individual / Date

Approval Signature

Approval Date

Effective Date: 3/13/00

**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Radiological Dose Assessment Team**

**EPOP 4428A**

**Rev. 003-01**

Approval Date: 3/8/00

Effective Date: 3/13/00

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**Millstone All Units  
Emergency Plan Operating Procedure**

**Radiological Dose Assessment Team**

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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the RDATE for emergency response actions during an event that activates the SERO. These actions include the following:

- Assessing release pathway
- Preparing meteorological data
- Performing field measurements
- Performing dose assessment
- Communicating with State and NRC dose assessment staff
- Performing core damage estimates

### 1.2 Discussion

The RDATE includes the following:

- 2 – Assistant Managers of Radiological Dose Assessment
- 1 – Manager of Radiological Dose Assessment
- 2 – Radiological Assessment Engineers
- 1 – Field Team Data Coordinator
- 1 – Meteorological Team Member

| ①

The MRDA reports to the ADEOF. Other RDATE positions report to the MRDA.

The RDATE monitors radiological conditions beyond the protected areas and ensures protective actions provided to state officials are adequate to protect public health and safety in accordance with US EPA guidance.



The RDATE provides key information to the ADEOF and EOF DSEO that may influence classification, as well as protective action decision making, both on-site and off-site. The RDATE also performs core damage assessments, as applicable to the site, using data obtained from the PASS, CTMT, or other information, such as radiation levels and provides input to severe accident management decision makers for determining the course of action that will least impact public health and safety.

The RDATE's first objective is to assess the radiological release pathway and obtain meteorological data most representative of the radiological release or potential radiological release. This data will be required by the ADEOF in the development (or update) of the PAR provided to state and local decision makers, or for event classification evaluations.

The RDATE'S second objective is to ensure that Radiological Field Monitoring Teams are dispatched and located in areas where any radiological release will be measured and reliable data obtained.

The RDATE's third objective is to assess and alert the ADEOF and EOF DSEO when information indicates there has been a significant change in conditions. The RDATE will assess the changes in terms of maximum projected dose at the site boundary, 5 miles downwind, and 10 miles and beyond, if necessary.



## **2. PREREQUISITES**

### **2.1 General**

N/A

### **2.2 Documents**

- 2.2.1 EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies"
- 2.2.2 EPOP 4429, "Radiation Monitoring Team Deployment and Control"
- 2.2.3 EPOP 4439, "Unit 1 Core Damage Estimate"
- 2.2.4 EPOP 4440, "Unit 2 Core Damage Estimate"
- 2.2.5 EPOP 4441, "Unit 3 Core Damage Estimate"
- 2.2.6 EPOP 4435, "Drywell/Containment Curie Level Estimate"
- 2.2.7 EPOP 4445, "Unit 1 Rx Coolant and Liquid Waste PASS"
- 2.2.8 EPOP 4446, "Unit 1 Stack and Drywell Air PASS"
- 2.2.9 EPOP 4447, "Unit 2 Rx Coolant and Liquid Waste PASS"
- 2.2.10 EPOP 4448, "Unit 2 Vent and Containment Air PASS"
- 2.2.11 EPOP 4449, "Unit 3 Rx Coolant and Liquid Waste PASS"
- 2.2.12 EPOP 4450, "Unit 3 Vent and Containment Air PASS"
- 2.2.13 EPUG 08B, "Millstone Emergency Plan Resource Book"
- 2.2.14 EPOP 4428E, "Post Accident Release Rates"
- 2.2.15 EPOP 4428F, "Refined Dose Assessment"
- 2.2.16 EPOP 4428J, "HPN Communications"
- 2.2.17 EPUG-01, "Time Sharing Option Equipment"
- 2.2.18 EPUG-05, "Radiological Communications"

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## **2.3 Definitions**

- 2.3.1 ADEOF – Assistant Director Emergency Operations Facility
- 2.3.2 ADTS – Assistant Director Technical Support
- 2.3.3 AMRDA – Assistant Manager of Radiological Dose Assessment
- 2.3.4 AMT – Accident Management Team
- 2.3.5 AMTL – Accident Management Team Leader
- 2.3.6 ASSESS – To determine the importance, size, or value of
- 2.3.7 CDE – Committed Dose Equivalent for the thyroid
- 2.3.8 DEP – Department of Environmental Protection
- 2.3.9 DDE – Deep Dose Equivalent
- 2.3.10 DEPLOY – Send or dispatch teams and materials to appropriate locations
- 2.3.11 EAL – Emergency Action Level
- 2.3.12 EDAN – Environmental Data Acquisition Network
- 2.3.13 EPZ – Emergency Planning Zone
- 2.3.14 FTDC – Field Team Data Coordinator
- 2.3.15 MCRO – Manager of Control Room Operations
- 2.3.16 MOR – Manager of Resources
- 2.3.17 MOS – Manager of Security
- 2.3.18 MRCA – Manager of Radiological Consequence Assessment
- 2.3.19 MRDA – Manager of Radiological Dose Assessment
- 2.3.20 MTSC – Manager of Technical Support Center
- 2.3.21 MTM – Meteorological Team Member



- 2.3.22 OFIS – Off–Site Facility Information System
- 2.3.23 PAG – Protective Action Guideline
- 2.3.24 PAR – Protective Action Recommendation
- 2.3.25 PASS – Post Accident Sampling System
- 2.3.26 POSL – Production Operations Services Laboratory
- 2.3.27 PRIORITIZE – To list in order of priority
- 2.3.28 PROJECT – To plan or estimate
- 2.3.29 RAE – Radiological Assessment Engineer
- 2.3.30 RMT – Radiological Monitoring Team
- 2.3.31 RDAT – Radiological Dose Assessment Team
- 2.3.32 TEDE – Total Effective Dose Equivalent
- 2.3.33 TIC – Technical Information Coordinator

### 3. PRECAUTIONS

N/A



#### 4. INSTRUCTIONS

##### 4.1 Procedure Entry Point Determination

4.1.1 IF you are the MRDA or AMRDA, Go To Section 4.2.

4.1.2 IF you are the RAE, Go To Section 4.3.

4.1.3 IF you are the FTDC, Go To Section 4.4.

– End of Section 4.1 –



## 4.2 Manager of Radiological Dose Assessment

MRDA and  
AMRDA

4.2.1 INDICATE presence on EOF Staffing Board.

4.2.2 RECORD date and arrival time in MRDA logbook.

MRDA or  
Designee

4.2.3 OBTAIN event conditions and status from the following, as appropriate:

- ADEOF
- EOF DSEO
- AMTL
- OFIS
- Other sources



### CAUTION



Met tower instrumentation problems or maintenance may cause problems in obtaining representative met data. The control room is aware of met tower data problems.

PAR decision making and dose assessment is based on 15 minute average data that is representative for the radiological release pathway or potential pathway. The EDAN and MP3 OFIS provide 15 minute average data.

The MP1 and MP2 OFIS may only provide instantaneous readings which at any given moment may *not* accurately identify average plume direction. Data should be trended.

4.2.4 NOTIFY the Shift Technician or on-shift Chemistry Technician to determine if any problems exist when obtaining meteorological data from the primary met tower.

4.2.5 OBTAIN 15 minute average meteorological data and units from one of the following:

- a. Meteorological Team Member
- b. EDAN computer terminal located in the EOF
- c. MP3 OFIS

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- d. Control room via the TIC
- e. MP1 or MP2 trended OFIS data
- f. Vendor supplied data (EPUG 08B, "Millstone Emergency Plan Resource Book")

### NOTE

Wind direction data is critical to making Protective Action Recommendations and accurate dose projections. The data is provided in the form of a 3 digit number between 0–360 representing the bearing from which the wind is blowing at the representative release height (0 is from north).

If no release is ongoing, the default height is the 142' elevation at MP.

Meteorological data and forecasts may have a significant effect on the classification and protective action recommendations. The MTM should be consulted.

- 4.2.6 **IF** radiation measurements or projections show EALs are being compromised, **PROVIDE** input on emergency classification change to ADEOF.
- 4.2.7 **DETERMINE** meteorological data most representative of release or potential release and **DISCUSS** with ADEOF.
- 4.2.8 **IF** a General Emergency has been declared, **NOTIFY** ADEOF any time actual or forecasted meteorological or radiological conditions require an updated PAR to be issued.
- 4.2.9 **ASSEMBLE** off-site RMTs and **DIRECT** teams to prepare for dispatch.





## CAUTION



1. An Alert or higher declaration automatically approves exposure increases to 4.5 rem TEDE less annual exposure to date. If dosimetry records are unavailable for prompt deployment, a 1.5 rem TEDE limit may be assumed. (4.5 rem emergency worker limit minus 3 rem contractor limit).
2. Off-site RMTs should be ready for deployment soon after arrival. Deployment should *not* be delayed.

- 4.2.10 **IF** not constrained, DEPLOY off-site RMT to vicinity of site boundary in downwind direction.
- 4.2.11 COORDINATE RMT access to locked site areas with the MOS, as necessary.
- 4.2.12 Refer To EPUG-05, "Radiological Communications," and INITIATE communications with deployed RMTs.
- 4.2.13 **IF** ready to assume turnover of dose assessment responsibilities, **PERFORM** the following:
  - a. OBTAIN off-site dose calculation from on-shift Chemistry Technician in affected unit control room.
  - b. RELIEVE on-shift Chemistry Technician of off-site dose calculation responsibilities.
  - c. REQUEST Chemistry Technician notify MCRO of relief.
  - d. NOTIFY ADEOF of dose assessment relief from Chemistry Technician.
- 4.2.14 ASSESS personnel resources and ESTABLISH individual work priorities (e.g., off-site dose assessment strategy for RDAT) using Attachment 1.





## CAUTION



The ADEOF, DSEO, and MRCA must be immediately notified any time off-site radiological conditions change significantly or are expected to change.

Time permitting, "What If Calculations" are encouraged. Results shall be described as "preliminary information" in discussions with the ADEOF and DEP, until such time as the DSEO directs a change in Protective Action Recommendations as a result of the "What If" assumptions and results.

### 4.2.15 PRIORITIZE RDAT activities as follows:

- a. MONITOR ongoing or possible radiological release pathways via the following:
  - OFIS
  - TIC
  - AMT
- b. MAINTAIN meteorological data representative of release elevations.
- c. IDENTIFY maximum off-site dose rates (both TEDE and CDE thyroid) in vicinity of site boundary and within 10 miles downwind.
- d. OBTAIN meteorological forecast data.
- e. PROJECT site boundary and 5 mile TEDE and CDE thyroid based on the following:
  - Effluent radiation monitor readings
  - On-site radiation surveys
- f. Refer To EPOP 4428J, "HPN Communications," and COMMUNICATE dose assessment information to State DEP and NRC.
- g. MAINTAIN Off-Site Radiological Survey Data Status Board in EOC current.

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- h. DEVELOP "What If Dose Projections" for known source terms released to CTMT or RCS.
- i. IF approved by the ADEOF, DEVELOP "Worst Case Dose Projections" for severe accident sequences in cooperation with AMTL or MTSC.

4.2.16 Refer To and IMPLEMENT the following, as necessary:

- NUC EPOP 4428 E, "Post Accident Release Rates"
- EPOP 4428F, "Refined Dose Assessment"
- EPOP 4435, "Drywell/Containment Curie Level Estimate"
- EPOP 4440, "Unit 2 Core Damage Estimate"
- EPOP 4441, "Unit 3 Core Damage Estimate"
- The applicable PASS procedure:
  - EPOP 4445, "Unit 1 RX Coolant and Liquid Waste PASS"
  - EPOP 4446, "Unit 1 Stack and Drywell Air PASS"
  - EPOP 4447, "Unit 2 RX Coolant and Liquid Waste PASS"
  - EPOP 4448, "Unit 2 Vent and Containment Air PASS"
  - EPOP 4449, "Unit 3 RX Coolant and Liquid Waste PASS"
  - EPOP 4450, "Unit 3 Vent and Containment Air PASS"



## CAUTION



RMTs should be dispatched to define the PAG boundaries beyond the 10 mile EPZ when projections or field monitoring data indicate this may occur.

4.2.17 NOTIFY ADEOF of results of calculations or assessments.

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4.2.18 IF dose projections indicate EPA PAGs may be exceeded beyond the 10 mile EPZ, **PERFORM** the following:

- a. **NOTIFY ADEOF** and **REQUEST** authorization to dispatch RMTs beyond 10 mile EPZ.
- b. **DISPATCH** RMTs and **PROJECT** dose based on RMT readings.
- c. **NOTIFY ADEOF** of boundaries to areas beyond 10 mile EPZ that may exceed EPA PAGs.

4.2.19 **NOTIFY** POSL sampling personnel of conditions and expected actions, as necessary.



4.2.20 Refer To Table 1, and DETERMINE if limits have been exceeded.

Table 1 EPA PAG Limits			
Protective Action Recommendation (PAR) Based on Dose			
IF	Condition is	THEN	Action
	Site Boundary TEDE < 1 rem		No further action
	Site Boundary to 5 mile peak CDE < 5 rem		No further action
	Site Boundary TEDE ≥ 1 rem		Immediately notify ADEOF
	Site Boundary to 5 mile peak CDE > 5 rem		Immediately notify ADEOF
	5 Mile TEDE ≥ 1 rem		Immediately notify ADEOF
	5 Mile CDE ≥ 5 rem		Immediately notify ADEOF
	10 Mile TEDE ≥ 1 rem		Immediately notify ADEOF
	10 Mile CEDE ≥ 5 rem		Immediately notify ADEOF

4.2.21 CONSULT with State DEP in State EOC on the following:

- Dose assessments and field team coordination
- RMT data
- Meteorological data

4.2.22 CONSULT with MTSC or AMTL as follows:

- PROVIDE radiological data that may affect plant recovery plans.
- OBTAIN the following, as applicable:
  - Accident sequence
  - Radiation release paths
  - Performance information regarding radioactivity mitigating systems
  - Core uncover time
- COMPARE results of radiologically based core damage estimates with results obtained using thermal hydraulic methods.

4.2.23 CONSULT with MRCA on radiological conditions and on-site personnel protective actions decisions.

4.2.24 PROVIDE brief to RDAT on plant status.

4.2.25 REQUEST additional personnel from MOR, as necessary.

4.2.26 Refer To EPOP 4425, "Personnel Radiation Exposure Control and Dosimetry Issue During Nuclear Emergencies," and ENSURE off-site RMT exposure limits and TEDE to DDE ratios are established.

4.2.27 NOTIFY MRCA and State DEP of TEDE to DDE ratio.



4.2.28 **PROVIDE** the following to Environmental Sampling Team, (POSL) as necessary:

- Meteorological data
- Plant status
- Sample, including TLD, collection directions

4.2.29 **MAINTAIN** radiological status boards.

**– End of Section 4.2 –**





### 4.3 Radiological Assessment Engineers

- 4.3.1 INDICATE presence on EOF Staffing Board.
- 4.3.2 NOTIFY MRDA of arrival.
- 4.3.3 RECORD date and arrival time in RAE logbook.
- 4.3.4 Refer To EPOP 4428E, "Post-Accident Release Rates," and EPOP 4428F, "Refined Dose Assessment," and CALCULATE projected off-site dose rates based on the following, as necessary, or as directed by the MRDA:
  - Measured off-site dose rates
  - Effluent monitor readings
  - IF time permits, a normalized release rate
- 4.3.5 Refer To one of the following, as applicable, and CALCULATE core damage estimates, as necessary, or as directed by the MRDA:
  - EPOP 4440, "Unit 2 Core Damage Estimate"
  - EPOP 4441, "Unit 3 Core Damage Estimate"
- 4.3.6 PROVIDE results of assessments to MRDA.
- 4.3.7 PROVIDE results of RMT field surveys to MRDA including the following:
  - Correlation to dose estimate calculations
  - Location of plume
- 4.3.8 ESTABLISH and MAINTAIN communications with State Dose Assessment Team.

①

— End of Section 4.3 —



#### 4.4 Field Team Data Coordinator

- 4.4.1 INDICATE presence on EOF Staffing Board.
- 4.4.2 NOTIFY MRDA of arrival.
- 4.4.3 RECORD date and arrival time in FTDC logbook.
- 4.4.4 DEVELOP a plume tracking strategy using recommendations from the following:
  - MRDA
  - AMRDA
  - RAE
- 4.4.5 WHEN directed by MRDA, Go To and IMPLEMENT EPOP 4429, "Radiation Monitoring Team Deployment and Control."

– End of Section 4.4 –



5. REVIEW AND SIGNOFF

N/A

6. REFERENCES

- 6.1 "Millstone Station Emergency Plan"
- 6.2 Manual of Protective Action Guidelines and Protective Actions for Nuclear Incidents, EPA 400-R-92-001, October 1991
- 6.3 EPOP 4428G, "Protective Action Recommendations"

7. SUMMARY OF CHANGES

Summary of Changes – Change 1

- 7.1 Performed minor editorial corrections.
- 7.2 Changed staffing from 1 RAE to 2 RAEs in step 1.2.
- 7.3 Added step 4.3.8 for the RAE to establish and maintain communications with the State Dose Assessment Team.
- 7.4 Changed Attachment 1 to indicate that the second RAE is usually assigned to establish communications with the DEP.



**Attachment 1**  
**Suggested MRDA/AMRDA Tasks**  
(Sheet 1 of 2)

**TASKS THAT THE MRDA NORMALLY DOES NOT DELEGATE**

1. Assumes command of RDAT – managing team, priorities, briefings
2. Determines RDAT readiness, requesting additional staff from MOR (request clerk if needed)
3. Manages dose projections, what-if calcs, dose assessment beyond 10 miles, core damage estimates
4. Interfaces with ADEOF, providing advise on classification and PARs
5. Notifys ADEOF if actual/forecasted met or rad conditions affect classification or PAR
6. Attends DSEO briefings
7. Communicates with MRCA regarding on-site rad levels (AMRDAs also communicate with MRCA)
8. Approves exposure limit upgrades (applies TEDE/DDE ratio – keeping MRCA and DEP informed)
9. Manages recovery operations

**TASKS FOR MRDA AND AMRDAs**

1. Enters name on staffing board, name and arrival time in MRDA logbook
2. Promptly/overtly informs ADEOF/DSEO of first measured off-site dose
3. Promptly/overtly informs ADEOF/DSEO of significant rad and met changes

**Level of Use  
Information**



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**Attachment 1**  
**Suggested MRDA/AMRDA Tasks**  
(Sheet 2 of 2)

**DELEGATED TO AMRDA #1 (Usually the team—assigned AMRDA)**

1. Initiates meteorological input; providing meteorological reports until MTM arrives
2. Signs met data sheets
3. Notifies met when the release elevation is different than the default elevation
4. Develops RMT strategy (consider likely plume touchdown point)
5. Briefs field teams, or ensuring the MRDA briefs field teams
6. Maintains MRDA log
7. Initiates/monitors OFIS
8. Requests RCS, containment, and PASS samples (notifies ADTS)
9. Communicates with the AMTL, MTSC, or TIC for data — following accident progression to determine barrier failure potential, source terms and release point
10. Converts rad monitor readings to release rates
11. Reviews procedures to check compliance
12. Assumes duties of the RAE or FTDC when either is absent

**DELEGATED TO AMRDA #2 (Additional AMRDA)**

1. DEP Communications (usually assigned to second RAE)
2. If appropriate, performs turnover from on—shift Chemistry Technician; requesting on—shift Chemistry Technician notify the MCRO of relief; notifies ADEOF of turnover (after DSEO takes control)
3. Performs NRC/HPN communications
4. Assists making entries in MRDA log
5. Monitors OFIS
6. Maintains off—site radiological board
7. Manages POSL
8. Assumes duties of the RAE or FTDC when either is absent

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Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 8

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

Emergency Plan Operating Procedure 4455C, Revision 1, Change 1  
Technical Assistant

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000225-094402

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPOP 4455C Rev. No.: 001 Minor Rev.: 01

Title: Technical Assistant

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GOLD1 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.:

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews		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"/>		
RAC 06	<input checked="" type="checkbox"/>	MARIL WHITE	<i>[Signature]</i>	3/7/00			ERPD	
Independent	<input checked="" type="checkbox"/>	MARIL WHITE	<i>[Signature]</i>	3/7/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERPD	
Writer's Guide	<input type="checkbox"/>							
Validation	<input type="checkbox"/>							

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SORC/PORC/R/DH Final Review and Approval

00-09  
Meeting No.

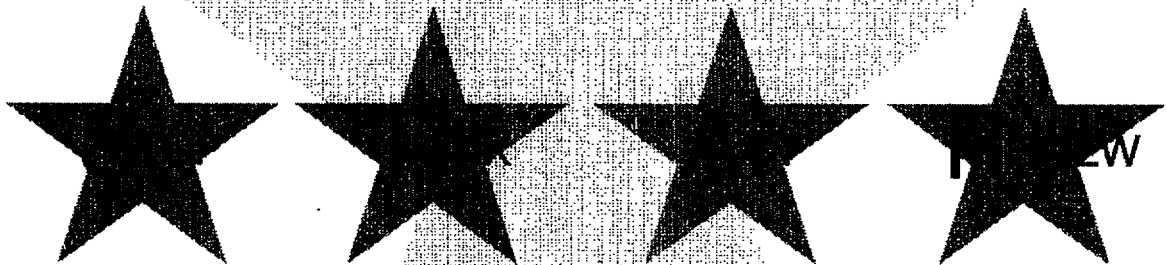
*[Signature]* 3/7/00  
Department Head/Responsible Individual / Date

*[Signature]*  
Approval Signature

3/8/00  
Approval Date

Effective Date: 3/13/00

**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Technical Assistant**

**EPOP 4455C**

**Rev. 001-01**

Approval Date: 3/8/00

Effective Date: 3/13/00

**Level of Use  
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**Millstone All Units  
Emergency Plan Operating Procedure**

**Technical Assistant**

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## **1. PURPOSE**

### **1.1 Objective**

Provide guidance to the Technical Assistant, located at the Hartford Armory, for events which activate the Station Emergency Response Organization. These actions include the following:

- Gathering technical information from the site
- Operating OFIS in the State EOC
- Interfacing with the State DEP, as necessary

### **1.2 Discussion**

The Technical Assistant provides the NU contingent at the State EOC with information technically current with the events in progress. The Technical Assistant's main points of contact are the Executive Spokesperson, the Technical Information Coordinator at the EOF, or the Control Room Data Coordinator in the control room.

Information regarding roles and responsibilities is contained in Attachment 1, "Supplemental Information."

## **2. PREREQUISITES**

### **2.1 General**

2.1.1 N/A

### **2.2 Documents**

2.2.1 EPUG 08B, "Millstone Emergency Preparedness Resource Book"

### **2.3 Definitions**

2.3.1 CRDC – Control Room Data Coordinator

2.3.2 PIO – Public Information Officer

2.3.3 TIC – Technical Information Coordinator



### 3. PRECAUTIONS

- 3.1 It is important to conduct required communications at regular intervals (e.g., 30–90 minutes) to prevent communication overload (especially with the TIC and CRDC) or missed communications of important events.

#### 4. INSTRUCTIONS

4.1 After arrival at the State EOC, **VERIFY** the availability of the following:

- **OFIS**
- **Telephones**
- **Procedures and media materials**

#### **NOTE**

The OFIS Manual provides additional instructions for operating OFIS.

4.2 **LOG** on to OFIS as follows:

4.2.1 **IF** the "NU IRG" screen does *not* appear, **PERFORM** the following:

- a. **TURN** the computer terminal off.
- b. **CONTACT** the NU IRG Help Line (24 hr. Operation at 721-4000) and **REQUEST** IRG turn on or reset the "Hartford Armory OFIS terminal" (terminal ID "HA361T01").

4.2.2 **TYPE** "cicsofis" and **PRESS** keypad "**Enter.**"

4.3 At "Logon ID" screen, **TYPE** "mp840zr" and **PRESS** "**Tab.**"

4.4 At "Logon ID" screen, **TYPE** "stasta" and **PRESS** keypad "**Enter.**"

4.5 **IF** the screen does *not* clear, **PRESS** "**Clear.**"

4.6 At the blank screen, **TYPE** "ofis," and **PRESS** keypad "**Enter.**"

#### **NOTE**

EPUG 08B, "Millstone Emergency Preparedness Resource Book," is available as a guide for telephone numbers.

4.7 Refer To EPUG 08B, as necessary, and **OBTAIN** additional information by phoning the TIC at the EOF.

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①

4.8 IF the TIC is unavailable, REQUEST the CRDC provide information.

4.9 PROVIDE assistance to the Executive Spokesperson, as directed.

#### NOTE

Attachment 2, "Technical Assessment Briefing Sheet," provides a checklist of information which may be useful to the Executive Spokesperson.

4.10 Refer To and COMPLETE Attachment 2, as necessary.

4.11 MAINTAIN Executive Spokesperson logbook, as directed.

4.12 IF monitoring of selected OFIS data points is requested, Refer To Attachment 3 and MAINTAIN data.

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## **5. REVIEW AND SIGNOFF**

5.1 N/A

## **6. REFERENCES**

6.1 EPUG 01, "Time Sharing Option Equipment"

6.2 EPOP 4455B, "Executive Spokesperson"

6.3 EPOP 4465, "Technical Information Coordinator"

6.4 EPOP 4470, "Control Room Data Coordinator"

## **7. SUMMARY OF CHANGES**

Summary of Changes – Revision 1, Minor Revision 1

7.1 Deleted TA logbook in step 4.1.

7.2 Replaced step 4.2 with detailed OFIS login instructions.

7.3 Added step 4.10 to refer to and complete Attachment 2 if plant conditions change.

7.4 Added step 4.12 to refer to Attachment 3 and maintain data if monitoring of selected OFIS points is requested.

7.5 Added step 4.11 to provide option for TA to keep ES log.

7.6 Added Attachment 2 to standardize and expedite TA briefings.

7.7 Added Attachment 3 to provide format for tracking special OFIS parameters.

7.8 Added note prior to step 4.10 to clarify use of Attachment 2.



**Attachment 1**  
**Supplemental Information**  
(Sheet 1 of 2)

The following is a description of the individuals that have public information responsibilities:

1. The Station Duty Officer is the public information point of contact in the applicable unit control room prior to EOF activation.
2. The EOF DSEO is responsible for approving all news releases.
3. The ADEOF is responsible for the technical review of all news releases.
4. The NU Executive Spokesperson is an NU management representative. This individual carries a Level 2 radiopager and receives notification of Unusual Event or higher classification events.

The Executive Spokesperson represents NU at Governor's briefings and official news conferences at the State EOC. The Executive Spokesperson and the nuclear information staff are the only individuals authorized to make official statements on behalf of NU.

5. The Nuclear News Manager is a nuclear information representative. This individual carries a Level 1 radiopager and receives notification of all nuclear events.

The Nuclear News Manager approves news releases for all events until the EOF is activated.

The Nuclear News Manager reports to the Executive Spokesperson and directs the overall public information response for NU. At the Armory, the Nuclear News Manager will serve as the official spokesperson until relieved by the NU Executive Spokesperson.

The Nuclear News Manager coordinates with the Governor's Press Secretary to determine if the Joint Media Center in Hartford should be activated, or if a company media center should be established at the site Information and Science Center.

6. The Technical Assistant is a nuclear organization representative. This individual carries a Level 2 radiopager and receives notification of Unusual Events or higher classification events.

The Technical Assistant reports to the Executive Spokesperson and provides technical and plant-specific information to keep him apprised of the event.

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**Attachment 1**  
**Supplemental Information**  
(Sheet 2 of 2)

7. The Manager of Public Information is a nuclear information representative. This individual carries a Level 2 radiopager and receives notification of Unusual Event or higher classification events.

The Manager of Public Information reports to the Nuclear News Manager and is the primary contact point for information concerning the event, however, information is coordinated through the Assistant Director Emergency Operations Facility.

The following NCS and NU staff will be called in as needed to carry out public information emergency functions:

- The Media Center Liaison reports to the Nuclear News Manager at the Hartford Armory. This individual coordinates with a State Public Information Officer to oversee the operations of the Joint Media Center and responds to media inquiries. The Media Center Liaison supervises the Technical and Radiological Briefers in the JMC.
- The Rumor and Inquiry Control Liaison reports to the NNM at the Hartford Armory. This individual coordinates with a State Public Information Coordinator to oversee the operations of the Joint Rumor and Inquiry Control Center.
- The Technical Briefer reports to the Media Center Liaison at the Hartford Armory. This individual provides technical plant-specific information to the media between official news conferences.
- The Radiological Briefer reports to the Media Center Liaison at the Hartford Armory. This individual provides radiological information to the media between official news conferences.

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**Attachment 2**  
**Technical Assistant Briefing Sheet**  
(Sheet 1 of 1)

UPDATE TIME: \_\_\_\_\_

EVENT DESCRIPTION

<b>CLASSIFICATION:</b>	<b>UNUSUAL EVENT</b>	<b>ALERT</b>	<b>SITE AREA EMERGENCY</b>	<b>GENERAL EMERGENCY</b>
------------------------	--------------------------	--------------	--------------------------------	------------------------------

TIME DECLARED: \_\_\_\_\_

**BARRIER STATUS:**

<b>RCS:</b>	<b>INTACT</b>	<b>BREACHED</b>
-------------	---------------	-----------------

<b>FUEL CLADDING:</b>	<b>INTACT</b>	<b>BREACHED</b>
-----------------------	---------------	-----------------

<b>CONTAINMENT:</b>	<b>INTACT</b>	<b>BREACHED</b>
---------------------	---------------	-----------------

**OFFSITE DOSES:** N/A  
ACTUAL:  
MEASURED:  
AFFECTED AREAS:

PROJECTED:  
AFFECTED AREAS:

RELEASE PATH: N/A SCRUBBED/FILTERED \_\_\_\_\_

POWER SOURCES:

SIGNIFICANT EQUIPMENT OOS:

PARAMETERS TO MONITOR:

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**Attachment 3**  
**Specific Parameter Monitoring**  
 (Sheet 1 of 1)

Parameter	OFIS Code	Time	Time	Time	Time	Time	Time

①

NOTES:

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Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 9

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

Emergency Plan Operating Procedure 4465, Revision 5, Change 2  
Technical Information Coordinator

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000307-094312

Initiated By: Barbara Tarallo Date: 3/6/00 Department: SPG Ext.: 2096

Document No.: EPOP 4465 Rev. No.: 005 Minor Rev.: 02

Title: Technical Information Coordinator

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GD01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID ☐ Edit Corr.:→

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			J/E 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"/>		
RAC 06	<input checked="" type="checkbox"/>	Kathy Burgess	3/8/00			EPSD	
Independent	<input checked="" type="checkbox"/>	Kathy Burgess	3/8/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSD	✓
Writer's Guide	<input type="checkbox"/>					SPG	
Validation	<input type="checkbox"/>					BT 3/8/00	

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PORC/R/DH Final Review and Approval

00-09  
Meeting No.

3/8/00  
Department Head/Responsible Individual / Date

Approval Signature

3/8/00  
Approval Date

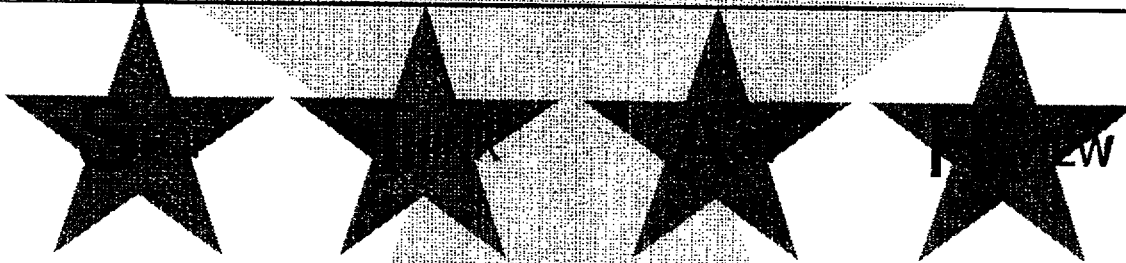
Effective Date: 3/13/00

**MILLSTONE NUCLEAR POWER STATION**  
**EMERGENCY PLAN OPERATING PROCEDURE**



**Technical Information Coordinator**

**EPOP 4465**  
**Rev. 005-02**



Approval Date:

3/8/00

Effective Date:

3/13/00

Level of Use  
Information

**Millstone All Units  
Emergency Plan Operating Procedure**

**Technical Information Coordinator**

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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the TIC for emergency response actions during an event which activates the SERO. These actions include:

- OFIS operation
- Providing requested plant parameter data
- Informing DSEO/ADEOF of critical parameters impacting classification and PARs
- Maintaining chronology of key events status board

### 1.2 Discussion

OFIS provides critical plant parameters to allow communication of plant data to SERO members for analysis of plant conditions. The OFIS program may be accessed from either LAN PCs or TSO terminals located in the EOF, TSC, and unit CRs.

The TIC is stationed in the EOF and performs actions at the direction of the MOC, DSEO, and ADEOF.

The TIC obtains data from the CRDC if either the data is not available on OFIS, or OFIS is not available.

The TIC also provides information to the NU State EOC Technical Assistant and the TSC staff, as requested.

## 2. PREREQUISITES

### 2.1 General

N/A

### 2.2 Documents

2.2.1 EPUG-01, "Time Sharing Option Equipment (TSO)"

### 2.3 Definitions

2.3.1 ADEOF- Assistant Director Emergency Operations Facility

2.3.2 LAN- Local Area Network

2.3.3 PAR - Protective Action Recommendation

2.3.4 TA - Technical Assistant (NU State EOC)

2.3.5 TSO - Time Sharing Option

2.3.6 MPI - Manager of Public Information

## 3. PRECAUTIONS

N/A





#### 4. INSTRUCTIONS

##### 4.1 Initial Actions

- 4.1.1 INDICATE presence on EOF staffing board.
- 4.1.2 RECORD date and EOF arrival time in TIC Logbook.
- 4.1.3 MAINTAIN a record of significant communications and events in TIC Logbook.
- 4.1.4 ESTABLISH communications with the affected unit CRDC and PERFORM the following:
  - DETERMINE event conditions and status.
  - ENSURE clocks synchronize with plant process computer.
  - INSTRUCT CRDC maintain a chronology of major CR actions, including ONP and EOP procedures entered on OFIS screen A14 (Bulletin Board).
  - ENTER CRDCs names on EOF staffing board.

#### NOTE

EPUG-01, "Time Sharing Option Equipment (TSO)," contains instructions for accessing TSO programs from LAN PCs.

- 4.1.5 Refer To the EPUG-01, "Time Sharing Option Equipment (TSO)," and ACCESS OFIS.
- 4.1.6 DIRECT actions of non-affected unit TICs and ASSIST DSEO, as necessary.
- 4.1.7 NOTIFY DSEO and ADEOF of potential changes to emergency classification or plant conditions which may affect PARs.



- 4.1.8 **IF** OFIS is operable, **MAINTAIN** the Critical Parameter Status Board and **INFORM** DSEO and ADEOF as follows:
- Approximately every 15 minutes
  - At frequency directed by ADEOF
  - As critical parameters change
- 4.1.9 **ESTABLISH** communications with the NU State EOC Technical Assistant and **PROVIDE** information, as requested.
- 4.1.10 **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 Attachment 4.
  - b. **NOTIFY** affected unit CRDC of Description/Plant ID for required data and **OBTAIN** data from one of the following:
    - Telephone
    - Fax machine
    - Manually entered data screen
  - c. **PROVIDE** data to requestor.
- 4.1.11 **IF** OFIS is inoperable, **PERFORM** the following:
- a. **OBTAIN** data from CRDC and **RECORD** on one of the following, as applicable:
    - Attachment 1, "Critical Parameter Data Sheet – MP1"
    - Attachment 2, "Critical Parameter Data Sheet – MP2"
    - Attachment 3, "Critical Parameter Data Sheet – MP3"
  - b. **MAINTAIN** Critical Parameters Status Board at 15 minute intervals.



- c. CONSULT the following to determine if additional data is required and DETERMINE Description/Plant ID:
- DSEO
  - ADEOF
  - MOC
  - NU State EOC Technical Assistant
- d. OBTAIN requested data from affected unit CRDC and RECORD on Attachment 4.
- e. PROVIDE completed Attachment 4 to requestor.
- f. UPDATE Attachment 4 with changing plant parameter data and PROVIDE to requestor approximately every 15 minutes.

– End of Section 4.1 –



## 4.2 Subsequent Actions

### 4.2.1 MAINTAIN and UPDATE the following:

- Critical Parameters Status Board
- Chronology of Key Events Status Board

### 4.2.2 IF SERO managers located in on-site Emergency Response Facilities request plant parameter data, TRANSFER data by telephone or fax machine.

### 4.2.3 PROVIDE technical assistance to the following, as requested:

- MOC
- TA
- MPI
- Other SERO managers

### 4.2.4 PROVIDE recommendations for shift relief to the MOR, as requested.



**4.2.5 WHEN SERO termination is directed by the DSEO, PERFORM the following:**

- a. ENSURE SERO status is recorded on the following:
  - Critical Parameters Status Board
  - Chronology of Key Events Status Board
- b. TERMINATE OFIS.
- c. RECORD SERO termination in TIC Logbook.
- d. COPY TIC Logbook entries.
- e. SEND the following documents to the Emergency Planning Coordinator:
  - TIC Logbook entry copy
  - Completed procedure attachments

**– End of Section 4.2 –**



## 5. REVIEW AND SIGNOFF

N/A

## 6. REFERENCES

- 6.1 "Final Safety Analysis Report Unit 1," Appendix G
- 6.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.5 NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.6 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"
- 6.7 EPIP 4404, "Notifications and Communications"
- 6.8 EPOP 4460, "Manager of Communications"
- 6.9 EPOP 4470, "Control Room Data Coordinator"
- 6.10 EPOP 4475, "Manager of Resources"
- 6.11 EPUG-01, "Time Sharing Option Equipment (TSO)"
- 6.12 EPOP 4428G, "Protective Action Recommendations"

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## 7. SUMMARY OF CHANGES

Summary of Changes – Rev. 005, Change 01

- 7.1 Incorporated previously SORC approved change 1 to revision 5.
- 7.2 Added MP3 SLCRS high range rad monitor and its associated computer ID to Attachment 3.

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**Attachment 1**  
**Critical Parameter Data Sheet – MP1**  
(Sheet 1 of 1)

PARAMETER (EAL Threshold)	Computer ID	TIME					
MP1 Kaman Hi–Range Monitor Reading (.07/.7/2 uCi/cc)	RAD 042 RM–1705–19A 1004						
SFP Level	N/A						
SFP Temperature	N/A						

\* Note: If these specific points are not available, others that measure an equivalent parameter may be used.

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**Attachment 2**  
**Critical Parameter Data Sheet – MP2**  
(Sheet 1 of 1)

PARAMETER (EAL Threshold)		TIME					
Barrier Affected	*Computer ID						
RCS Subcooling (30 deg F) – RCS	CETHSUB-313						
RVLMS Reading (0%) – Fuel	RXLVL-A-310 RXLVL-B-311						
Core Exit Thermocouple Reading (800/1300 deg F) – Fuel, CTMT	INTAMX-324						
RM-8240/8241 (300/5/1200 r/hr) – Fuel, RCS, CTMT	R8240-1002 R8241-1003						
CTMT Pressure (10 psig) – CTMT	P9783-807						
MP2 Kaman Vent Monitor Reading (.02/.2/2 uCi/cc) – Offsite Releases	RIC8168-1005						
MSL Monitor (RM-4299A/B/C) Reading (0.03/.3/2 r/hr) *(R4299 A, B, C – 1012, 1013, 1014) – Offsite Releases	R4299A-1012 R4299C-1013 R4299C-1014						
MP1 Kaman Hi-Range Stack Monitor Reading (.07/.7/2 uCi/cc) *(RU1-1004) – Offsite Releases	RU1-1004						

\* Note: If these specific points are not available, others that measure an equivalent parameter may be used.

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**Attachment 3**  
**Critical Parameter Data Sheet – MP3**  
(Sheet 1 of 1)

PARAMETER (EAL) Threshold		TIME				
Barrier Affected	*Computer ID					
RCS Subcooling (32 deg F/115 deg F Adverse CTMT) – RCS	*CVSUBC001–358					
RVLMS (32%) Plenum – Fuel	*CVPLENLV1A/B–305/306					
Core Exit TC Temperature (718/1200 deg F) – Fuel	*CVCETMX–307					
RE–04A/05A Reading (500/5/2000 r/hr) – Fuel, RCS, CTMT	*RMS–R04A/R05A					
CTMT Pressure (60 PSIA) – CTMT	*CVCTPRESS–801					
MP3 Kaman Vent Monitor (RE–10A) Reading (.01/.1/.8 uCi/cc)	*CVHVR–10A1 CVHVR10B–1013/1014					
MP1 Kaman Hi–Range Monitor Reading (.07/.7/2 uCi/cc)	*RM1705–19A–1004					
MP3 SLCRS Hi–Range Monitor Reading	CVHVR19A–1015					

\* Note: If these specific data points are not available, others that measure the parameter may be used.

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Rev. 005–02  
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## Unit: \_\_\_\_\_ Date: \_\_\_\_\_

[illegible]

STOP THINK ACT REVIEW

EPOP 4465  
Rev. 005-02  
14 of 14

Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 10

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

Emergency Plan Operating Procedure 4470, Revision 4, Change 1  
Control Room Data Coordinator

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000007-094549

Initiated By: Barbara Tarallo Date: 3/6/00 Department: SPG Ext.: 2096

Document No.: EPOP 4470 Rev. No.: 004 Minor Rev.: 01

Title: Control Room Data Coordinator

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.:-

Plant Mngt Staff Member - Approval

Comments:

RI/DPC Print Name and Date

Continued ☐

Reviews	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"/>		
RAC 06	<input checked="" type="checkbox"/> Kathy Burgess	Kathy Burgess	3/8/00			EPSP	
Independent	<input checked="" type="checkbox"/> Kathy Burgess	Kathy Burgess	3/8/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPSP	✓
Writer's Guide	<input type="checkbox"/>					SPG	
Validation	<input type="checkbox"/>					BT 3/8/00	

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PORC/RI/DH Final Review and Approval

00-09  
Meeting No.

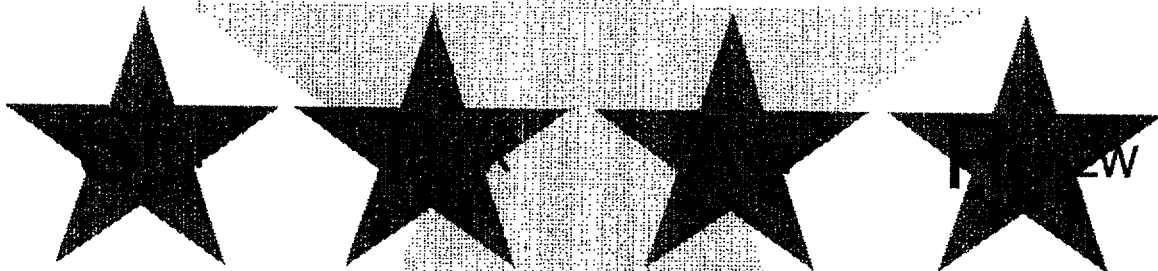
Department Head/Responsible Individual / Date

Approval Signature

3/8/00  
Approval Date

Effective Date: 3/13/00

**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Control Room Data Coordinator**

**EPOP 4470**

**Rev. 004-01**

Approval Date: 3/5/00

Effective Date: 3/13/00

**Level of Use  
Information**

**Millstone All Units  
Emergency Plan Operating Procedure**

**Control Room Data Coordinator**

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**Level of Use  
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## 1. PURPOSE

### 1.1 Objective

Provide guidance to the CRDC for emergency response actions during an event that activates the SERO. These actions include the following:

- OFIS operation
- Retrieval of requested plant parameter data

### 1.2 Discussion

SERO activation is normally initiated upon declaration of an ALERT, Posture Code Charlie–One or higher event.

OFIS provides critical plant parameters to allow communication of plant data to SERO members for analysis of plant conditions. OFIS may be accessed from either LAN PCs or TSO terminals located in the EOF, TSC, and unit control rooms.

This procedure also provides instructions for manually obtaining data if OFIS is inoperable.

## 2. PREREQUISITES

### 2.1 General

N/A

### 2.2 Documents

2.2.1 EPUG–01, “Time Sharing Option Equipment (TSO)”

2.2.2 EPUG–08B, “Millstone Emergency Plan Resource Book”





## 2.3 Definitions

2.3.1 ENS – Emergency Notification System

2.3.2 LAN – Local Area Network

2.3.3 OFIS – Off-Site Facilities Information System

2.3.4 PC – Personal Computer

2.3.5 TSO – Time Sharing Option

## 3. PRECAUTIONS

N/A



#### 4. INSTRUCTIONS

##### 4.1 Affected Unit CRDC Actions

4.1.1 PERFORM the following upon arrival in the control room:

- NOTIFY the CR DSEO/MCRO of arrival.
- CONSULT with appropriate control room personnel and TIC to determine event conditions and status.
- PROVIDE names of CRDCs to TIC.

#### NOTE

1. The affected unit CRDC may delegate responsibility for OFIS operation in the affected unit control room to a non-affected unit CRDC.
2. EPUG-01, "Time Sharing Option Equipment (TSO)," contains instructions for accessing TSO programs from LAN PCs.

4.1.2 Refer To EPUG -01, "Time Sharing Option Equipment (TSO)," and ACCESS OFIS.

4.1.3 IF OFIS in inoperable, Go To step 4.1.7.

4.1.4 MAINTAIN a chronology of the following major control room actions, as appropriate, on OFIS screen A14 (Bulletin Board):

- AOPs
- ONPs
- EOPs
- Significant events and communications
- Data requested by TIC

4.1.5 REVIEW affected unit bypass/jumper log to determine if any Reactor Vessel Level sensors will be providing inappropriate data on OFIS.

- 4.1.6 **INFORM** TSC staff of Reactor Vessel Level sensor and bypass/jumper status.
- 4.1.7 **IF** OFIS is inoperable, **PERFORM** the following:
- a. **NOTIFY** the TIC of OFIS inoperability.
  - b. Refer To one of the following Critical Parameter Data Sheets and **RECORD** the types of plant parameter data specific to the affected unit requested by the TIC:
    - Attachment 1, "Critical Parameter Data Sheet – MP1"
    - Attachment 2, "Critical Parameter Data Sheet – MP2"
    - Attachment 3, "Critical Parameter Data Sheet – MP3"
  - c. Refer To EPUG–08B, "Millstone Emergency Plan Resource Book," and **TRANSFER** Critical Parameter Data Sheet to the TIC by telephone or fax machine.
  - d. **OBTAIN** and **PROVIDE** requested plant parameter data at the frequency directed by the TIC.
- 4.1.8 **WHEN** notified of SERO termination by the TIC, **PERFORM** the following:
- a. **IF** OFIS is operable, **RECORD** SERO termination on OFIS screen A14 and **TERMINATE** OFIS.
  - b. **COLLECT** CRDC generated paperwork and **SEND** to the Emergency Preparedness Coordinator.

## 4.2 Non-Affected Unit CRDC Actions

- 4.2.1 NOTIFY the affected unit CRDC upon arrival in the affected unit control room.
- 4.2.2 IF the affected unit CRDC has *not* arrived in the affected unit control room, PERFORM the following:
  - a. Refer To step 4.1.1 and PERFORM affected unit CRDC actions.
  - b. CONTINUE to perform affected unit CRDC actions until relieved by the affected unit CRDC.
- 4.2.3 PROVIDE assistance to the affected unit CRDC.
- 4.2.4 IF directed by the affected unit CRDC to operate OFIS, Refer To EPUG-01, "Time Sharing Option Equipment (TSO)," and ACCESS OFIS.
- 4.2.5 PROVIDE plant parameter data to the affected unit CRDC and TIC, as directed.



## **5. REVIEW AND SIGNOFF**

N/A

## **6. REFERENCES**

- 6.1 "Final Safety Analysis Report Unit 1," Appendix G
- 6.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.5 NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.6 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"
- 6.7 EPIP 4404, "Notifications and Communications"
- 6.8 EPOP 4422, "Manager of Technical Support Center"
- 6.9 EPOP 4460, "Manager of Communications"
- 6.10 EPOP 4465, "Technical Information Coordinator"
- 6.11 EPUG-01, "Time Sharing Option Equipment (TSO)"
- 6.12 EPUG-08B, "Millstone Emergency Plan Resource Book"

## **7. SUMMARY OF CHANGES**

Summary of Changes – Revision 004, Change 01.

- 7.1 Added MP3 SLCRS high range rad monitor and its associated computer ID to Attachment 3.

**Level of Use  
Information**



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**Attachment 1**  
**Critical Parameter Data Sheet – MP1**  
(Sheet 1 of 1)

PARAMETER (EAL Threshold)	*COMPUTER ID	TIME							
MP1 Kaman Hi-Range Monitor Reading(.07/.7/2 uCi/cc)	RAD 042 RM-1705-19A 1004								
SFP Level	N/A								
SFP Temperature	N/A								

\* NOTE: If these specific data points are not available, others that measure an equivalent parameter may be used.

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**Attachment 2**  
**Critical Parameter Data Sheet – MP2**  
(Sheet 1 of 1)

PARAMETER (EAL Threshold) Barrier Affected	*COMPUTER ID	TIME						
RCS Subcooling (30 deg F) – RCS	CETHSUB–313							
RVLMS Reading (0%) – Fuel	RXLVL–A–310 RXLVL–B–311							
Core Exit Thermocouple Reading (800/1300 deg F) – Fuel, CTMT	INTAMX–324							
RM–8240/8241 (5/300/1200 R/hr) – Fuel, RCS, CTMT	R8240–1002 R8241–1003							
CTMT Pressure (10 psig) – CTMT	P9783–807							
MP2 Kaman Vent Monitor Reading (.02/.2/2 uCi/cc) – Offsite releases	RIC8168–1005							
MSL Monitor (RM–4299A/B/C) Reading (0.03/.3/2 R/hr) – Offsite Releases	R4299A–1012 R4299B–1013 R4299C–1014							
MP1 Kaman Hi–Range Stack Monitor Reading (.07/.7/2 uCi/cc) – Offsite Releases	RU1–1004							

\* NOTE: If these specific data points are not available, others that measure an equivalent parameter may be used.

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**Attachment 3**  
**Critical Parameter Data Sheet – MP3**  
(Sheet 1 of 1)

PARAMETER (EAL Threshold) Barrier Affected	*COMPUTER ID	TIME						
RCS Subcooling (32 deg F/115 deg F Adverse (CTMT) RCS	CVSUBCOOL-358							
RVLMS (19%) Plenum – Fuel	CVPLENLVLA/B -305/306							
Core Exit TC Temperature (718/1200 deg F) – Fuel	CVCETMX-307							
RE-04A/05A Reading (5/500/2000 R/hr) – Fuel, RCS, CTMT	RMS-R04A/R05A -1001/1002							
CTMT Pressure (60 PSIA) – CTMT	CVCTPRESS-801							
MP3 Kaman Vent Monitor (RE-10A) Reading (.01/.1/.8 uCi/cc)	CVHVR10A1 CVHVR10B- 1013/1014							
MP1 Kaman Hi-Range Monitor Reading (.07/.7/2 uCi/cc)	RM1705-19A-1004							
MP3 SLCRS Hi-Range Monitor Reading	CVHVR19A1-1015							

\* NOTE: If these specific data points are not available, others that measure the parameter may be used.

**Level of Use  
Information**



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①





Docket Nos. 50-245  
50-336  
50-423  
B18047

Attachment 11

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

Emergency Plan Operating Procedure 4475, Revision 4, Change 1  
Manager of Resources or External Resources Coordinator

April 2000

01/27/00  
Approval Date

01/31/00  
Effective Date

## Document Action Request

SPG#

000307093848

Initiated By: Barbara Tarallo Date: 3/7/00 Department: SPG Ext.: 2096

Document No.: EPOP 4475 Rev. No.: 004 Minor Rev.: 01

Title: Manager of Resources or External Resources Coordinator

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

Continued ☐

Instructions:

Continued ☐

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 ☐ Rejected - See Comments

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

See DC-GDL01 for guidance

☐ TPC ☐ OTC ☐ Place in VOID

☐ Edit Corr.:→

Plant Mngt Staff Member - Approval

Comments:

R/DPC Print Name and Date

Continued ☐

Reviews	Print	Sign	Date	SQR Qualified			7/11 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"/>		
RAC 06	<input checked="" type="checkbox"/> <u>MARL WLORE</u>	<u>[Signature]</u>	<u>3/7/00</u>			<u>EP5D</u>	
Independent	<input checked="" type="checkbox"/> <u>MARL WLORE</u>	<u>[Signature]</u>	<u>3/7/00</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>EP5D</u>	
Writer's Guide	<input type="checkbox"/>						
Validation	<input type="checkbox"/>						

Safety Evaluation/Environmental Review Attached?

☐ Yes ☒ No

a. ☐ SQR Program Final Review and Approval  
Approval ☐ Disapproval ☐

SQR Qualified Independent Reviewer / Date

Department Head/Responsible Individual

Approval Date

b. ☒ SQR/PCRC/R/DH Final Review and Approval

00-09  
Meeting No.

[Signature] 3/7/00  
Department Head/Responsible Individual / Date

[Signature]  
Approval Signature

3/8/00  
Approval Date

Effective Date: 3/13/00

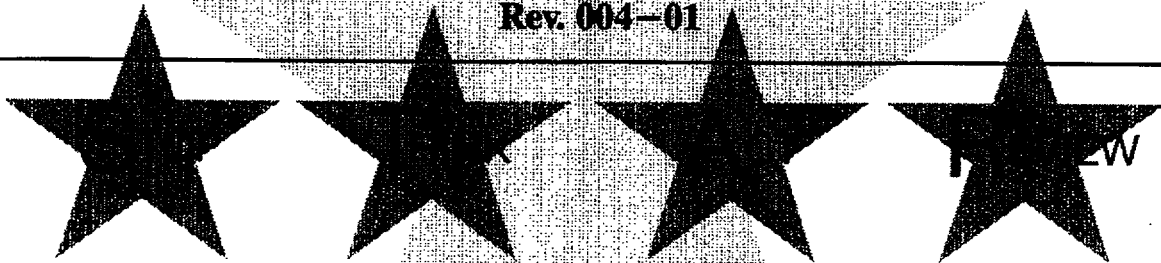
**MILLSTONE NUCLEAR POWER STATION  
EMERGENCY PLAN OPERATING PROCEDURE**



**Manager of Resources or External Resources  
Coordinator**

**EPOP 4475**

**Rev. 004-01**



Approval Date: 3/8/00

Effective Date: 3/13/00

**Millstone All Units  
Emergency Plan Operating Procedure**

**Manager of Resources or External Resources Coordinator**

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## **1. PURPOSE**

### **1.1 Objective**

Provide guidance to the Manager of Resources (MOR) or the External Resources Coordinator (ERC) for emergency response actions during an event which activates the SERO. These actions include:

- Providing station personnel, equipment, or supplies requested by SERO managers
- Acquiring off-site resources (personnel, equipment, housing, food, financial and legal services)
- Coordinating support requests from federal regulatory agencies that have responded to Millstone Station

### **1.2 Discussion**

SERO activation is initiated upon declaration of an ALERT, Posture Code Charlie-One, or higher event.

The MOR and the ERC are stationed in the EOF. The MOR reports directly to the EOF DSEO and the ERC reports directly to the MOR.

This procedure may be initiated by either the MOR or the ERC. The first responder, either an MOR or ERC, will assume the lead MOR position for the event.

## **2. PREREQUISITES**

### **2.1 General**

N/A

### **2.2 Documents**

2.2.1 MOR Logbook

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

### **2.3 Definitions**

2.3.1 ADEOF – Assistant Director Emergency Operations Facility

2.3.2 ADTS – Assistant Director Technical Support



- 2.3.3 AMRDA – Assistant Manager Radiological Dose Assessment
- 2.3.4 AMT – Accident Management Team
- 2.3.5 ASK – To request
- 2.3.6 CRDC – Control Room Data Coordinator
- 2.3.7 ERF – Emergency Response Facility
- 2.3.8 FTDC – Field Team Data Coordinator
- 2.3.9 GES – Generation Electrical Services
- 2.3.10 MCRO – Manager of Control Room Operations
- 2.3.11 MOC – Manager of Communications
- 2.3.12 MOS – Manager of Security
- 2.3.13 MOSC – Manager of Operational Support Center
- 2.3.14 MPI – Manager of Public Information
- 2.3.15 MRCA – Manager of Radiological Consequence Assessment
- 2.3.16 MRDA – Manager of Radiological Dose Assessment
- 2.3.17 MTSC – Manager of Technical Support Center
- 2.3.18 RAE – Radiological Assessment Engineer
- 2.3.19 RL – Regulatory Liaison
- 2.3.20 STA – Shift Technical Advisor
- 2.3.21 SEPL – State Emergency Planning Liaison
- 2.3.22 SEPR – Station Emergency Planning Representative
- 2.3.23 TIC – Technical Information Coordinator

### 3. PRECAUTIONS

N/A



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#### 4. INSTRUCTIONS

##### 4.1 Initial Actions

- 4.1.1 INDICATE presence in EOF on SERO Staffing Board.
- 4.1.2 RECORD date and EOF arrival time in the MOR logbook.
- 4.1.3 NOTIFY the EOF DSEO of arrival.
- 4.1.4 OBTAIN SERO call-back fax from MOC office and OBSERVE status of SERO call-back response.
- 4.1.5 DETERMINE if primary or secondary responder for minimum staffing positions has responded.
- 4.1.6 IF the primary or the secondary responder for minimum staffing positions has *not* responded, PERFORM the following:
  - a. OBTAIN qualified personnel from the OSC Assembly Area.
  - b. IF qualified personnel are *not* in the OSC Assembly Area, Refer To EPUG 08B "Millstone Emergency Plan Resource Book," and NOTIFY an individual for each unstaffed position.
  - c. Refer To Attachment 1 and DETERMINE if notified personnel are fit for duty.
  - d. IF notified personnel are determined fit for duty, REQUEST personnel report to assigned ERF.
- 4.1.7 RECORD names of SERO personnel responding to on-site ERFs on Attachment 2.
- 4.1.8 DETERMINE if primary or secondary responder for augmented staffing positions has responded.
- 4.1.9 IF the primary or secondary responder for augmented staffing positions has *not* responded, PERFORM the following:
  - a. OBTAIN qualified personnel from the OSC Assembly Area.





- b. IF qualified personnel are *not* in the OSC Assembly Area, Refer To EPUG 08B "Millstone Emergency Plan Resource Book," and NOTIFY an individual for each unstaffed position.
  - c. Refer To Attachment 1 and DETERMINE if notified personnel are fit for duty.
  - d. IF notified personnel are determined fit for duty, REQUEST personnel report to assigned ERF.
- 4.1.10 RECORD names of SERO personnel responding to on-site ERFs on Attachment 2.
  - 4.1.11 DETERMINE if any essential resources are needed (personnel or equipment).
  - 4.1.12 MAINTAIN a record of significant communications and events in the logbook.
  - 4.1.13 Refer To EPUG 08B, "Millstone Emergency Plan Resource Book," and NOTIFY INPO the SERO has been activated.

#### 4.2 Subsequent Actions

### NOTE

Steps in Section 4.2 may be repeated, as necessary.

- 4.2.1 RESPOND to requests for additional personnel.
- 4.2.2 IF qualified personnel are *not* in the OSC Assembly Area, Refer To EPUG 08B, and CONTACT individuals.
- 4.2.3 Refer To Attachment 1 and DETERMINE if notified personnel are fit for duty.
- 4.2.4 IF notified personnel are determined fit for duty, REQUEST personnel report to EOF.
- 4.2.5 SUPERVISE assembly of SERO additional support personnel reporting to EOF.



4.2.6 **IF** no requests exist for off-site resources, Refer to EPUG 08B, "Millstone Emergency Plan Resource Book," and NOTIFY the following of emergency:

- NUSCo Purchasing Department
- Maintenance Support Services Department
- Site Services Department
- Nuclear Document Services personnel
- NUSCo Transportation Department
- NUSCo Treasury Department

4.2.7 REQUEST Information Technology provide site support staff to the EOF.

4.2.8 REQUEST photocopier services contractor provide site support staff to the EOF.

4.2.9 REQUEST Maintenance Support Services Department obtain the following to supplement on-site resources, as necessary:

- Craft labor
- Tools
- Equipment

4.2.10 REQUEST NUSCo Purchasing Department obtain the following, as necessary:

- Consulting services
- Expense account services
- Temporary housing
- Food



4.2.11 REQUEST Site Services Department obtain the following, as necessary:

- Supplies
- Vehicles
- Heavy machinery

4.2.12 IF transportation assistance is needed, REQUEST NUSCo Transportation Department deliver the following to the site:

- Vehicles
- Equipment
- Supplies
- Personnel

4.2.13 COORDINATE transportation of additional support personnel as follows:

- CONSULT the MRCA to determine safe access routes and radiological conditions to the site and NOTIFY off-site services of routes. | ①
- CONSULT MRDA to determine safe access routes for transportation of personnel from EOF to the station.
- ISSUE Emergency Vehicle Pass and radio (optional) to each vehicle transporting personnel from EOF to the station. | ①

4.2.14 CONSULT EOF DSEO to determine the need for outside agency assistance (i.e., ambulance, fire department, hospital).

4.2.15 IF petty cash reserves are needed, NOTIFY the Treasury Department of the need.

4.2.16 IF the cost of requested equipment or services exceeds \$100,000, OBTAIN prior approval from the DSEO.

4.2.17 PREPARE for shift relief as follows:

- a. CONSULT EOF DSEO and SERO managers to determine shift relief personnel requirements.



b. NOTIFY personnel of the following:

- Shift assignment
- Shift duration
- Reporting time
- Reporting location

c. RECORD shift assignments next to position on Attachment 2 and DESIGNATE as shift 1, 2, or 3.

d. IF any personnel currently on-site are to be used for shift relief, OBTAIN EOF DSEO approval and DIRECT personnel to report home and stand by for shift relief notification.

4.2.18 OBTAIN additional support for services from INPO, as necessary.

4.2.19 OBTAIN the following, as necessary:

- Legal services
- Insurance services
- Treasury services

4.2.20 PROVIDE the following support, as requested:

- 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

4.2.21 **IF** event requires large amounts of bottled breathing air, **PERFORM** the following, as necessary:

- **REQUEST** Emergency Equipment and Services personnel provide the following, as applicable:
  - Additional bottles
  - Refills
  - Additional SCBAs for relief teams



## CAUTION



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.

- **IF** a radiological event is in progress **AND** the Fire Training cascade system requires filling by compressor, **REQUEST** off-site organizations refill bottles.
- **COORDINATE** transport of bottles between points of use and refill facilities.



4.2.22 **IF** directed to terminate SERO by the EOF DSEO, **PERFORM** the following:

- **NOTIFY** departments and agencies supporting the site with resources, of termination.
- **IF** resources have been ordered, **CANCEL** the order.



## 5. REVIEW AND SIGNOFF

N/A

## 6. REFERENCES

### 6.1 Developmental Documents

- 6.1.1 "Defueled Safety Analysis Report Unit 1," Section 6.3
- 6.1.2 "Final Safety Analysis Report Unit 2," Appendix 12A
- 6.1.3 "Final Safety Analysis Report Unit 3," Section 13.3
- 6.1.4 "Millstone Nuclear Power Station Emergency Plan"
- 6.1.5 NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- 6.1.6 NUREG-0737, "Clarification of TMI Action Plan Requirements, Supplement 1, Requirements for Emergency Response Capability"

### 6.2 Supporting Documents

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

## 7. SUMMARY OF CHANGES

### Summary of Changes – Revision 4, Change 1

- 7.1 Added Regulatory Liaison, State Emergency Planning Liaison, and Station Emergency Planning Representative to the definitions section.
- 7.2 Added step 4.2.7 to request Information Technology provide site support staff to the EOF.
- 7.3 Added step 4.2.8 to request copy services contractor provide site support staff to the EOF.
- 7.4 Changed MRDA to MRCA in step 4.2.13.
- 7.5 Added the option to issue a radio to each vehicle transporting personnel from the EOF to the station in step 4.2.13.



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- 7.6 Added the Regulatory Liaison, Station Emergency Planning Representative, Rumor & Inquiry Control Liaison, Media Center Liaison, and State Emergency Planning Liaison to the listing of personnel in Attachment 2.
- 7.7 Increased RAE staffing from 1 to 2 in Attachment 2.





**Attachment 1**  
**Fitness For Duty Questionnaire**  
(Sheet 1 of 1)

1. ASK each individual called in for unscheduled SERO duties the following questions:

1.1	Are you available for unscheduled work?	YES	NO
1.2	Have you taken any medication or drugs, or consumed alcohol, which might affect your ability to perform assigned duties?	YES	NO
1.3	Have you consumed any alcoholic beverages within the past five (5) hours?	YES	NO
1.4	Do you feel fit to perform your assigned duties?	YES	NO

2. IF the responses to all questions are within the unshaded boxes, INSTRUCT the individual to report to the EOF.
3. IF the response to any question is within a shaded box, CONTACT the next listed individual qualified to fill the position.
4. IF no individual can be found who responds within only unshaded boxes, EVALUATE those individuals contacted as follows:
- 4.1 IF the individual responded "YES" to question 1.2 OR 1.3, DETERMINE the extent of substance usage.
- 4.2 IF the individual states he feels fit to perform his assigned duties AND the individual's skills are essential, TAKE appropriate measures to ensure the safety of the individual, public, fellow employees, and company property.
5. IF assistance in evaluating responses in step 4. is necessary, CONSULT the EOF DSEO to determine the extent and approval of alternative measures.



**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 1 of 6)

Shift Assignment: \_\_\_\_\_

**Minimum Staffing – On–Call (60 Minute Response)**

EOF		TSC/OSC	
ADEOF	_____	ARPS	_____
DSEO	_____	GES	_____
EOF HP	_____	TSCRE	_____
EOF ST	_____	UADTS	_____
MOR	_____	UELEC	_____
MPI	_____	UI&CTECH	_____
MRCA	_____	UMECH	_____
MRDA	_____	UMOSC	_____
RMT #3 (4 or 5)	_____	UMTSC	_____
RMT A or RMT B	_____	TSCEE	_____
RMT C or RMT D	_____	TSCME	_____
RMT Driver	_____		
UMOC	_____		

**Augmented Staffing – On–Call (60 Minute Response)**

EOF		TSC/OSC	
RMT #3 (4 or 5)	_____	UADTS	_____
RMT #3 (4 or 5)	_____	UADTS	_____
RMT A or RMT B	_____	UELEC	_____
RMT C or RMT D	_____	UELEC	_____
RMT Driver	_____	UI&CTECH	_____
RMT Driver	_____	UI&CTECH	_____
UMOC	_____	UMECH	_____
UMOC	_____	UMECH	_____
		UMOSC	_____
		UMOSC	_____



**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 2 of 6)

**Augmented Staffing – On – Call (60 Minute Response) (Continued)**

**EOF**

**TSC/OSC**

UMTSC

UMTSC

UTSCEE

UTSCEE

UTSCME

UTSCME

**Augmented Staffing – Subject to Call (up to 8 hours)**

**EOF**

**TSC/OSC**

AMRDA

AMT/TH

AMRDA

AMT/ME

ERC

AMTL

FTDC

UI&COSC

MET

UI&COSC

MOS

UI&COSC

CBETS

UOSCMA

RADCOM

UOSCMA

RADCOM

UOSCMA

RAE

UTSCSM

RAE

UTSCSM

UTIC

UTSCSM

RL

SEPR

STOP

THINK

ACT

REVIEW

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**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 3 of 6)

**OSC Assembly Area**

GES	_____
UELEC	_____
UELEC	_____
UI&CTECH	_____
UI&CTECH	_____
UMECH	_____
UMECH	_____

**Others:**

HPTECH	_____
ADMIN	_____
MAINT	_____
ENG	_____
CHEM	_____
PMMS PLN	_____
OPs	_____
TECH BRIEFER	_____
RAD BRIEFER	_____



**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 4 of 6)

**Control Room – Units 2 or 3 Event**

Unit Supervisor (US)	_____
STA	_____
RO	_____
RO	_____
PEO	_____
PEO	_____
MCRO	_____
SDO	_____
RMT #1	_____
RMT #1	_____
RMT #1	_____
Chem Technician	_____
Chem Technician	_____
Shift Technician	_____
UCRDC	_____
UCRDC	_____
UCRDC	_____



**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 5 of 6)

**Control Room – Unit 1 Event**

MCRO/SM  
(Certified Fuel Handler) \_\_\_\_\_

Non–Certified  
Operator \_\_\_\_\_

RMT #1 \_\_\_\_\_

RMT #1 \_\_\_\_\_

RMT #1 \_\_\_\_\_

Chem Technician \_\_\_\_\_

Chem Technician \_\_\_\_\_

Shift Technician\* \_\_\_\_\_

SDO \_\_\_\_\_

UCRDC \_\_\_\_\_

UCRDC \_\_\_\_\_

UCRDC \_\_\_\_\_

**\*May perform notifications from Unit 2 or Unit 3**



**Attachment 2**  
**SERO Facility Shift Staffing**  
(Sheet 6 of 6)

**On – Call (60 minute response)**

**Media Center**

Executive Spokesperson (ES) \_\_\_\_\_

Nuclear News Manager (NNM) \_\_\_\_\_

**Augmented Staffing – Subject to Call (up to 8 hours)**

Technical Assistant (TA) \_\_\_\_\_

Rumor and Inquiry Control Liaison \_\_\_\_\_

Media Center Liaison \_\_\_\_\_

State Emergency Planning Liaison \_\_\_\_\_

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