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March 31, 2000

SVP-00-071

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

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Changes to Emergency Plan Implementation Procedures.

In accordance with 10 CFR 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," Quad Cities Station is submitting the following Emergency Plan Procedures. Attachment A, "Summary of Changes," contains a brief summary of the changes to the following procedures:

QEP 0155-S08 "Station Total Release Rate Calculation Worksheets," Revision 12
QEP 0150-00 "Radiation Protection Director", Revision 48
QEP 0150-S05 "Area Radiation Monitoring System," Revision 12
QEP 0100-00 "Acting Station Director (Shift Engineer)," Revision 33
QEP 0100-01 "Acting Station Director (Implementing Procedure)," Revision 10
QEP 0100-S02 "Command and Control Turnover Form (CR)," Revision 10
QEP 0100-T01 "GSEP Emergency Procedures Implementation Guide," Revision 18
QEP 0100-T02 "Predetermined Protective Action Recommendations (PAR's) For Control Room," Revision 12
QEP 0600-00 "Onsite Emergency Facilities and Equipment", Revision 54
QEP 0600-01 "Onsite Emergency Facility"
QEP 0600-02 "Equipment Inventory," Revision 10
QEP 0600-S01 "TSC Equipment Inventory Checklist"
QEP 0600-S02 "OSC Inventory Checklist"
QEP 0600-S03 "First Aid and Decontamination Inventory Checklist"
QEP 0600-S04 "Environs Sampling and Emergency Responder Inventory Checklist"
QEP 0600-S05 "Illini Hospital Radiological Emergency Inventory Checklist"
QEP 0600-S07 "Relocation Center Inventory Checklist"
QEP 0600-T03 "Emergency Communication Networks"
QEP 0600-T04 "Emergency Communication System Location"
QEP 0300-00 "Notifications", Revision 56

A045

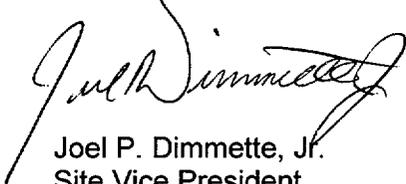
QEP 0300-01 "Notifications for GSEP Emergencies," Revision 25
QEP 0300-05 "Quarterly Test of the Emergency Response Data System (ERDS)"
QEP 0300-07 "ERDS Surveillance Test Record"
QEP 0107-00 "Assistant Station Director," Revision 22
QEP 0107-01 "Assistant Station Director Implementing Procedure," Revision 8
QEP 0105-00 "Station Director", Revision 26
QEP 0105-01 "Station Director Implementing Procedure," Revision 8
QEP 0105-S01 "Station Director Alert Checklist," Revision 14
QEP 0105-S02 "Station Director Site Area Emergency Checklist," Revision 14
QEP 0105-S03 "Station Director General Emergency Checklist," Revision 13
QEP 0105-S05 "Command and Control Turnover Form (TSC)," Revision 12
QEP 0110-00 "Operations Director" Rev 36
QEP 0110-01 "Operations Director Implementing Procedure" Rev 20
QEP 0125-00 "Administrative Director" Rev 29
QEP 0125-S05 "TSC Operations" Rev 12
QEP 0165-00 "Operations Support Center Supervisor" Rev 21
QEP 0165-01 "Operations Support Center Supervisor Implementing Procedure" Rev 10
QEP 0710-00 "Training Program", Revision 30
QEP 0710-02 "Qualification Requirements for Emergency Preparedness Coordinators Staff"
QEP 0710-03 "Offsite Support Agency Training", Revision 8
QEP 0710-S03 "Checklist for Initial Requirements for Emergency Preparedness Staff"
QEP 0710-S04 "Checklist for Level 2 Qualifications for Emergency Preparedness Staff"
QEP 0710-S05 "Checklist for Level 1 Qualifications for Emergency Preparedness Staff"
QEP 0710-S06 "Checklist for Emergency Preparedness Coordinator Qualifications"
QEP 0710-S07 "Offsite Agency Attendance Sheet"
QEP 0710-T04 "Draft Training Invitation Letter for Offsite Support Agencies"
QEP 0730-00 "Document Control and Review", Revision 38
QEP 0730-01 "Emergency Preparedness Program Document Control and Review", Revision 6
QEP 0730-02 "Offsite Support Agency Agreement Letters", Revision 6
QEP 0730-03 "Emergency Preparedness Program Audits", Revision 7
QEP 0730-S01 "Emergency Preparedness Monthly Audits", Revision 8
QEP 0730-S02 "Emergency Preparedness Quarterly Audits", Revision 10
QEP 0730-S03 "Emergency Preparedness Semi-Annual Audits", Revision 6
QEP 0730-S04 "Emergency Preparedness Annual Audits", Revision 6
QEP 0730-T01 "Document Review Responsibilities", Revision 8

Attachment B, "Revised procedures," contains the procedures.

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Should you have any questions concerning this letter, please contact
Mr. C.C. Peterson at (309) 654-2241, extension 3609.

Respectfully,



Joel P. Dimmette, Jr.
Site Vice President
Quad Cities Nuclear Power Station

Attachments:

Attachment A: Summary of Changes
Attachment B: Revised Procedures

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

Attachment A, Summary of Changes
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Procedures:

QEP 0600-01 "Onsite Emergency Facility"
QEP 0600-S01 "TSC Equipment Inventory Checklist"
QEP 0600-S02 "OSC Inventory Checklist"
QEP 0600-S03 "First Aid and Decontamination Inventory Checklist"
QEP 0600-S04 "Enviroms Sampling and Emergency Responder Inventory Checklist"
QEP 0600-S05 "Illini Hospital Radiological Emergency Inventory Checklist"
QEP 0600-S07 "Relocation Center Inventory Checklist"
QEP 0600-T03 "Emergency Communication Networks"
QEP 0600-T04 "Emergency Communication System Location"

Procedures:

QEP 0710-02 "Qualification Requirements for Emergency Preparedness Coordinators Staff"
QEP 0710-S03 "Checklist for Initial Requirements for Emergency Preparedness Staff"
QEP 0710-S04 "Checklist for Level 2 Qualifications for Emergency Preparedness Staff"
QEP 0710-S05 "Checklist for Level 1 Qualifications for Emergency Preparedness Staff"
QEP 0710-S06 "Checklist for Emergency Preparedness Coordinator Qualifications"
QEP 0710-S07 "Offsite Agency Attendance Sheet"
QEP 0710-T04 "Draft Training Invitation Letter for Offsite Support Agencies"

Description of Change:

Procedures deleted to Corporate Emergency Plan Implementing Procedures (CEPIPs.)

Procedure:

QEP 0155-S08 "Station Total Release Rate Calculation Worksheets," Revision 12
QEP 0100-01 "Acting Station Director (Shift Engineer)," Revision 33
QEP 0100-S02 "Command and Control Turnover Form (CR)," Revision 10
QEP 0100-T01 "GSEP Emergency Procedures Implementation Guide," Revision 18
QEP 0100-T02 "Predetermined Protective Action Recommendations (PAR's) For Control Room,"
Revision 12
QEP 0300-01 "Notifications for GSEP Emergencies," Revision 25
QEP 0107-00 "Assistant Station Director," Revision 22
QEP 0107-01 "Assistant Station Director Implementing Procedure," Revision 8
QEP 0105-01 "Station Director Implementing Procedure," Revision 8
QEP 0105-S01 "Station Director Alert Checklist," Revision 14
QEP 0105-S02 "Station Director Site Area Emergency Checklist," Revision 14
QEP 0105-S03 "Station Director General Emergency Checklist," Revision 13
QEP 0110-00 "Operations Director" Revision 36
QEP 0110-01 "Operations Director Implementing Procedure" Revision 20
QEP 0125-00 "Administrative Director" Revision 29
QEP 0165-00 "Operations Support Center Supervisor" Revision 21

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Procedure:

QEP 0710-00 "Training Program", Revision 30
QEP 0730-00 "Document Control and Review", Revision 38
QEP 0730-02 "Offsite Support Agency Agreement Letters", Revision 6
QEP 0730-03 "Emergency Preparedness Program Audits", Revision 7
QEP 0730-S01 "Emergency Preparedness Monthly Audits", Revision 8
QEP 0730-S02 "Emergency Preparedness Quarterly Audits", Revision 10
QEP 0730-S03 "Emergency Preparedness Semi-Annual Audits", Revision 6
QEP 0730-S04 "Emergency Preparedness Annual Audits", Revision 6
QEP 0730-T01 "Document Review Responsibilities", Revision 8

Description of Change:

Administrative changes that do not change the intent.

Procedure:

QEP 0300-05 "Quarterly Test of the Emergency Response Data System (ERDS)"
QEP 0300-S07 "ERDS Surveillance Test Record"

Description of Change:

Procedures superseded by Corporate Emergency Plan Implementing Procedures (CEPIP.)

Procedure:

QEP 0150-S05 "Area Radiation Monitoring System," Revision 12

Description of Change:

Revised Alarm setpoint for Unit 1 Recombiner Area Levels 1 and 2 to 5 m/hr.

Procedure:

QEP 0600-02 "Equipment Inventory," Revision 10.

Description of Change:

Clarifies RP responsibilities and deleted specific inventory checklists as QEPs.

Procedure:

QEP 0105-S05 "Command and Control Turnover Form (TSC)," Revision 12.

Description of Change:

Inserted standard Nuclear Generation Group form.

Procedure:

QEP 0125-S05 "TSC Operations" Revision 12.

Description of Change:

Added the following tasks: TSC/OSC PA and Synchronize clocks.

Attachment A, Summary of Changes
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Procedure:

QEP 0165-01 "Operations Support Center Supervisor Implementing Procedure" Revision 10.

Description of Change:

Deleted references to inventory checklists which were deleted.

Procedure:

QEP 0710-03 "Offsite Support Agency Training", Revision 8

Description of Change:

Deleted references to draft invitation letter and offsite agency attendance sheet

Procedure:

QEP 0730-01 "Emergency Preparedness Program Document Control and Review", Revision 6

Description of Change:

Added, "Processing of NGG Procedures" into the reference section.

**Attachment B,
Revised Procedures**

OPERATIONS DIRECTOR
IMPLEMENTING PROCEDURE

A. PURPOSE

The purpose of this procedure is to describe the responsibilities of the Operations Director in the TSC. The Operations Director determines the extent of station emergencies, initiates corrective actions, and implements protective actions for onsite personnel. The Operations Director shall report directly to the Station Director.

In the event that the Station Director becomes incapacitated and can no longer fulfill the designated responsibilities, the Operations Director shall assume the responsibilities of the Station Director.

Responsibilities assigned to the Operations Director include:

- Direct a staff in determining the nature and extent of emergencies pertaining to equipment and plant facilities.
- Initiate immediate corrective actions to limit or contain the emergency, invoking the provisions of 10CFR50.54(x) if appropriate, and specifically, when addressing Severe Accident Management (SAM) guidelines.
- Direct switching and valving operations, equipment operations, equipment checking, and miscellaneous operations as required.
- Determine the priority assigned to OSC activities.
- Organize and direct rescue operations of injured personnel. Verify that ambulance services have been notified, as required. Coordinate, along with the Radiation Protection Director, the transfer of injured and/or contaminated personnel offsite.
- Ensure adequate staffing of the Control Room and the OSC.
- In coordination with the Maintenance Director, supervise the activities of the OSC Director, and ensure the Shift Manager is informed of OSC staffing and activities.
- Identify steps or procedures that the Operations staff should be utilizing to properly respond to the emergency condition.
- Assist the Station Director in evaluating Protective Action Recommendations (PARs) and changes in Emergency Action Levels (EALs).
- Act as the TSC Liaison with the appropriate NRC Site Team Representative.
- Maintain a record of GSEP related activities.
- Assume the duties and responsibilities of the Decision-Maker when a transition to Severe Accident Management Guidelines (SAMG) is initiated.

6. QEP 0400-S01, Plant Assembly Checklist.
7. QEP 0500-S02, Corrective Action Items for Plant Recovery.

H. TECHNICAL SPECIFICATION REFERENCES

1. None.

TSC OPERATIONS CHECKLIST

COMPLETE	EQUIPMENT	OPERABILITY	MINIMUM SUPPLIES
_____	1. Plant PA System	1. Adjust volume in the TSC so that it can be monitored but does not disturb activities.	1. Not applicable
_____	2. TSC/OSC PA System	1. Turn-on PA System and distribute cordless microphones to the following positions: <ul style="list-style-type: none"> • Station Director • Operations Director • Maintenance Director • Technical Director • Rad Prot Director • Security Director (microphones are located in PA System stand drawer.)	1. Not applicable.
_____	3. Facility Clocks	1. Synchronize facility clocks with Control Room. (Obtain time from Operations Director.)	1. Not applicable.
_____	4. Copy Machine	1. Run several 8 1/2 x 11 test copies.	1. One box 8 1/2 x 11 paper 2. One set of supplies to maintain copier
_____	5. Microfiche Printer	1. Make one copy of an As Built Drawing.	1. One pkg of paper 2. One set of supplies to maintain printer
_____	6. Telecopy Machines	1. Check time and date. 2. Send and receive a telecopy to another location.	1. One set of supplies to maintain each telecopy
_____	7. Computers & Printers	1. Verify that operational checks have been done by Technical Director and Environs Director.	1. One box computer paper 2. One set of supplies to maintain printers
_____	8. Emergency Lighting	1. Verify operability of emergency lighting in TSC by pushing the "TEST" button.	1. Not applicable
_____	9. Status Boards	1. Verify adequate markers and erasers are available for each status board.	1. One marker 2. One eraser

OPERATIONS SUPPORT CENTER SUPERVISOR
IMPLEMENTING PROCEDURE

A. PURPOSE

The purpose of this procedure is to describe the responsibilities of the OSC Supervisor in the OSC. The OSC Supervisor reports to the OSC Director.

Responsibilities assigned to the OSC Supervisor include:

- Assist the OSC Director in supervising personnel assigned to the OSC.
- Assist in formation of Environmental Field Teams as directed by the TSC.
- Assist in formation of Post Accident Sampling Teams.
- Maintain records of inplant survey information and radiochemistry results.
- Maintain accumulated exposure records for all essential onsite personnel:
- Coordinate with the OSC Director to organize inplant teams to support station priorities.
- Conduct inplant team dispatch briefings regarding expected activities and radiological hazards.
- Conduct periodic facility briefings on plant radiological conditions.
- Maintain a record of GSEP related activities.

B. REFERENCES

1. QEP 0150-T02, Emergency Exposure Limits.
2. QEP 0150-T04, Radiation Protection (QCRP) Procedures Applicable to Emergency Conditions.
3. QEP 0165-T02, Shift Turnover Briefing.
4. QEP 0400-01, Plant Assembly.
5. QEP 0500-01, Recovery Operations.
6. QEP 0500-T01, Emergency Response Summary.
7. QCRP 5720-04, Personnel Decontamination.
8. QCRP 5720-03, Monitoring Personnel for Radioactive Contamination.

12. QEP 0400-S01, Plant Assembly Checklist.
13. QEP 0400-S02, Site Evacuation Checklist.
14. QEP 0500-S02, Corrective Action Items for Plant Recovery.

H. TECHNICAL SPECIFICATION REFERENCES

1. None.

ACTING STATION DIRECTOR
IMPLEMENTING PROCEDURE

A. PURPOSE

The purpose of this procedure is to describe the responsibilities of the Acting Station Director in the Control Room. The Shift Manager will assume this responsibility and declare a GSEP Emergency Classification level for conditions defined in the Quad Cities Emergency Action Levels (EAL).

The Acting Station Director assumes Command and Control for the emergency response activities until relieved by the TSC Station Director or Manager of Emergency Operations (MEO) at the EOF. The Acting Station Director will be the initial person to recognize the EAL condition and make the first declaration of an emergency. Responsibilities assigned to the Acting Station Director include:

- Perform all nondelegable responsibilities as the Director or Manager in Command and Control of the emergency. Non-delegable duties are Classification, Notification, Protective Action Recommendations (PARs), Approval to exceed 10CFR20 exposure limits, and approval for thyroid blocking agents to be issued. (B.11, B.12 and B.13)
- Activate the Station Emergency Response Organization as deemed appropriate or as procedurally required. (B.11)
- Approve NARs and NRC Event Notification Worksheets prior to transmittal.
- Notify local support agencies as required in order to expedite their response to the emergency. (B.11)
- Conduct personnel assembly/accountability and evacuation of non-essential personnel at Site Emergency, General Emergency or as conditions warrant. (B.14)
- If the emergency involves a hazardous substance and/or oil discharges refer to QCOA 010-15.
- Activate the Emergency Response Data System (ERDS) as soon as possible but not later than one hour after declaring an Alert, Site Emergency, or General Emergency. (B.10)
- Maintain a record of GSEP related activities. (B.11)

When the Station Director in the TSC has assumed "Command and Control" authority, the Shift Manager will function under the direction of the Operations Director and will be responsible for directing the activities of the control room staff.

G. CHECKLISTS

1. QEP 0100-S02, Command and Control Turnover.
2. QEP 0155-S06, Environs Field Team Dispatch Log.
3. QEP 0155-S08, Station Total Release Rate Calculation Worksheets.
4. QEP 0165-S05, Emergency Exposure Limit/Potassium Iodide Issuance Approval Log.
5. QEP 0400-S01, Plant Assembly Checklist.
6. QEP 0400-S02, Site Evacuation Checklist.
7. QEP 0500-S02, Corrective Action Items for Plant Recovery.

H. TECHNICAL SPECIFICATION REFERENCES

1. None.

COMMAND AND CONTROL TURNOVER FORM (CR)

1. Current Classification EAL: _____ Time: _____ Unit: _____
 Conditions met to determine this classification: _____

2. Offsite Notification made:
 Latest NARS: _____ Utility Message #: _____ Time: _____
 State Message #: _____ Time: _____
 Latest ENS Time: _____ Continuous Communications? (Yes/No)

3. Is the relieving facility at minimum staffing and capable of performing the following non-delegable functions?
 a. Classify events? (Yes/No)
 b. Determine PAR's and make notifications? (Yes/No)
 c. Authorize exposures beyond 10CFR20 limits? (Yes/No)
 d. Authorize the use of Thyroid Blocking Agents? (Yes/No)

4. Upon transfer of Command and Control, the following will be performed by (circle one):
 a. NARS (CR/TSC/EOF)
 b. ENS (CR/TSC/EOF)
 c. HPN (TSC/EOF)
 d. Environs Teams (TSC/EOF)

Other pertinent information:

Release Occurring	(Yes/No)	ERDS Activated	(Yes/No)
Rad Concerns	(Yes/No)	In-Plant Teams	(Yes/No)
Offsite Assistant Requested	(Yes/No)	Assembly	(Yes/No)
Evacuation	(Yes/No)		

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

QEP 0100-T01
Revision 18
Reference Use

The Shift Manager (Acting Station Director) is responsible for the execution of all of the procedures listed below while the Control Room is in Command and Control. When the TSC assumes Command and Control these procedures become the responsibility of the TSC Directors.

EVENT	DESCRIPTION	ACTION	REFERENCE
<p>A. <u>DECLARING THE EMERGENCY AND INITIAL ACTIONS</u></p>			
<p>1. Natural or Manmade Event <u>OR</u> Control Room Evacuation Anticipated or Required</p>	<p>An event which has the potential to impact the safety of onsite personnel or affect safe plant operations.</p>	<p>1) Implement the appropriate QCOA 010 Block procedures.</p> <p style="text-align: center;">NOTE</p> <p>If the TSC has command and control and an Operations Director and Chemistry Director are available, turn over implementation of the QCOA procedures to the TSC.</p> <p>2) Proceed to section A.4, if a GSEP Emergency Classification level is declared.</p>	<p>QCOA 010-5. Plant Operations with the Control Room Inaccessible. QCOA 010-07. Personnel Emergencies. QCOA 010-08. Drywell Evacuation. QCOA 010-09. Earthquake. QCOA 010-10. Tornado Watch/Warning or Severe Winds. QCOA 010-11. Oil Release to the Mississippi River Event. QCOA 010-12. Fire/Explosion. QCOA 010-13. Aircraft Crash/Missile Impact. QCOA 010-14. Lock and Dam #14 Failure. QCOA 010-15. Hazardous Material Event. QCOA 010-16. Flood Emergency Procedure. QCOA 010-17. Toxic Gas/Chemical Release from Nearby Chemical Facilities. QCOA 010-19. Radioactive Liquid Spill.</p> <p>N/A</p>

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EVENT	DESCRIPTION	ACTION	REFERENCE
<p>2. Security Threat</p>	<p>A security situation which could impact the safety of onsite personnel or affect safe plant operations. Examples are:</p> <ul style="list-style-type: none"> a. Tampering b. Bomb devices discovered c. Protected or vital area intrusion d. Loss of physical control of the facility e. Other security related threats 	<ol style="list-style-type: none"> 1) Determine if an Emergency Action Level (EAL) is being met and an Emergency Classification level should be declared. 2) Coordinate activities and provide support to the Security Shift Supervisor. 3) Proceed to section A.4, if a GSEP Emergency Classification level is declared. 	<p>QEP 200-1. Classification for GSEP Conditions. QEP 200-T1. Quad Cities Emergency Action Levels.</p> <p>N/A</p>
<p>3. Initiation of QOA/QCOA or QGA procedures.</p> <p style="text-align: center;"><u>OR</u></p> <p>Degradation of system required by Technical Specifications.</p> <p style="text-align: center;"><u>OR</u></p> <p>Technical Specification LCO Exceeded.</p> <p style="text-align: center;"><u>OR</u></p> <p>Loss of communications or instrumentation such that accident assessment or off-site assessment cannot be made.</p>	<p>An event which indicates that plant systems or equipment are not performing in a normal condition.</p>	<ol style="list-style-type: none"> 1) Determine if an Emergency Action Level (EAL) is being met and Emergency Classification level should be declared. 2) Proceed to section A.4, if a GSEP Emergency Classification level is declared. 	<p>QEP 200-1. Classification for GSEP Conditions. QEP 200-T1. Quad Cities Emergency Action Levels.</p>

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EVENT	DESCRIPTION	ACTION	REFERENCE
<p>4. Declaration of a GSEP Emergency Classification level.</p> <p>a. Unusual Event.</p> <p><u>NOTE</u></p> <p>EALs are for UNPLANNED EVENTS. A planned evolution involves preplanning to address the limitations imposed by the condition, the performance of required surveillance testing, and the implementation of specific controls prior to knowingly entering the condition. PLANNED evolutions to test, manipulate, repair, perform maintenance or modifications to systems and equipment that result in an EAL Threshold Value being met or exceeded are NOT subject to GSEP reporting and activation requirements as long as the evolution proceeds as planned. These conditions MAY be subject to 10CFR50.72 reporting.</p>	<p>As defined in QEP 200-T1, Quad Cities Emergency Action Levels (EAL)</p> <p>"Command and Control" authority includes:</p> <ul style="list-style-type: none"> a. Final decision to declare the emergency classification. b. Final decision to notify and make PARs to offsite authorities. c. Authorization of personnel exposure beyond 10CFR20 limits under emergency conditions. d. Issuance of thyroid blocking agents to ComEd emergency workers and onsite personnel. 	<ul style="list-style-type: none"> 1) Announce the "Unusual Event" over the plant PA System, including the reason for the classification. 2) Immediately, initiate required notifications. 3) Assume "Command and Control" authority and responsibility for the overall coordination and response to the emergency. 4) Take necessary actions to mitigate the situation. 5) Continue to evaluate the condition against the EALs for possible change in the Emergency Classification level. 	<p>N/A</p> <p>QEP 300-1, Notification for GSEP Emergencies and QEP 300-S03, GSEP Emergency Notification Log.</p> <p>N/A</p> <p>N/A</p> <p>QEP 200-T01, Classification of Emergencies.</p>

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EVENT	DESCRIPTION	ACTION	REFERENCE
<p>b. Alert</p> <p><u>NOTE</u></p> <p>EALs are for UNPLANNED EVENTS. A planned evolution involves preplanning to address the limitations imposed by the condition, the performance of required surveillance testing, and the implementation of specific controls prior to knowingly entering the condition. PLANNED evolutions to test, manipulate, repair, perform maintenance or modifications to systems and equipment that result in an EAL Threshold Value being met or exceeded are NOT subject to GSEP reporting and activation requirements as long as the evolution proceeds as planned. These conditions MAY be subject to 10CFR50.72 reporting.</p>	<p>"Command and Control" authority includes:</p> <ol style="list-style-type: none"> a. Final decision to declare the emergency classification. b. Final decision to notify and make PARs to offsite authorities. c. Authorization of personnel exposure beyond 10CFR20 limits under emergency conditions. d. Issuance of thyroid blocking agents to ComEd emergency workers and onsite personnel. 	<ol style="list-style-type: none"> 1) Assume Command and Control and responsibility until relieved by the Station Director or MEO (EOF). 2) Announce the "Alert" over the PA System, including the reason for the classification. <ol style="list-style-type: none"> a) Announce that GSEP personnel should report to the TSC and OSC. b) Initiate Call Out per QEP 0300-04. 3) Determine public Protective Action Recommendations (PARs) to be entered on the NARS form. 4) <u>Immediately</u>, initiate required notifications. 5) Take necessary actions to mitigate the situation. 6) Activate ERDS. 7) Brief the Station Director and/or Operations Director of key conditions upon their arrival. 	<p>QEP 0300-04, Augmentation of Personnel for Emergency Response.</p> <p>QEP 100-T2, Predetermined PARs for the Control Room.</p> <p>QEP 300-1, Notification for GSEP Emergencies and QEP 300-S03, GSEP Emergency Notification Log.</p> <p>N/A</p> <p>N/A</p> <p>QEP 300-3, Activation of the Emergency Response Data System (ERDS). QEP 100-S2, Command and Control Turnover Form.</p>

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
<p>c. Site Emergency</p> <p style="text-align: center;"><u>OR</u></p> <p>General Emergency</p> <p style="text-align: center;"><u>NOTE</u></p> <p>EALs are for UNPLANNED EVENTS. A planned evolution involves preplanning to address the limitations imposed by the condition, the performance of required surveillance testing, and the implementation of specific controls prior to knowingly entering the condition. PLANNED evolutions to test, manipulate, repair, perform maintenance or modifications to systems and equipment that result in an EAL Threshold Value being met or exceeded are NOT subject to GSEP reporting and activation requirements as long as the evolution proceeds as planned. These conditions MAY be subject to 10CFR50.72 reporting.</p>	<p>Perform these actions only if the Control Room Acting Station Director has "Command and Control" authority.</p> <p style="text-align: center;"><u>OTHERWISE</u></p> <p>Continue to take necessary actions to mitigate the situation per the directions of the Operations Director in the TSC. Provide information as requested from the TSC.</p> <p>"Command and Control" authority includes:</p> <ol style="list-style-type: none"> a. Final decision to declare the emergency classification. b. Final decision to notify and make PARs to offsite authorities. c. Authorization of personnel exposure beyond 10CFR20 limits under emergency conditions. d. Issuance of thyroid blocking agents to ComEd emergency workers and onsite personnel. 	<ol style="list-style-type: none"> 1) Assume Command and Control and responsibility until relieved by the Station Director or MEO (EOF). 2) Announce the "Site or General Emergency" over the PA System, including the reason for the classification. <ol style="list-style-type: none"> a) Announce that GSEP personnel should report to the TSC and OSC. b) Initiate Call Out per QEP 0300-04. 3) Determine public Protective Action Recommendations (PARs) to be entered on the NARS form. 4) <u>Immediately</u>, initiate required notifications. 5) Take necessary actions to mitigate the situation. 6) Activate ERDS (if this has not been activated). 7) Implement plant assembly and accountability. 	<p>QEP 0300-04, Augmentation of Personnel for Emergency Response.</p> <p>QEP 100-T2, Predetermined PARs for the Control Room.</p> <p>QEP 300-1, Notification for GSEP Emergencies and QEP 300-S03, GSEP Emergency Notification Log.</p> <p>N/A</p> <p>N/A</p> <p>QEP 300-3, Activation of the Emergency Response Data System (ERDS).</p> <p>QEP 400-S1, Plant Assembly Checklist.</p>

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
c. Site Emergency <u>OR</u> General Emergency (continued)		8) Implement site evacuation. 9) Initiate preliminary Environmental Monitoring, if personnel are available and a radiological release is occurring or anticipated, by sending an RT downwind with a radio, survey instrument, and protective clothing. Direct RT to remain out of areas greater than 100 mR/hr. 10) Brief the Station Director and/or Operations Director of key conditions upon their arrival.	QEP 400-S2. Site Evacuation Checklist. QEP 155-S6. Environs Field Team Dispatch Log. QEP 100-S2. Command and Control Turnover Form.

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
B. <u>ONSITE PROTECTIVE ACTIONS</u>	These actions may be taken during the course of the emergency to protect or minimize the impact of the emergency situation to onsite personnel.		
1. Personnel Emergency.	An injury onsite requiring response by first aid trained personnel including injuries involving contamination.	Implement first aid response.	QCOA 010-7. Personnel Emergency.
2. Plant Assembly.	Plant assembly and personnel accountability are determined necessary due to plant conditions or a Site Area/General Emergency has been declared.	Implement plant assembly and accountability.	QEP 400-S1. Plant Assembly Checklist.
3. Missing Persons.	Plant accountability has identified missing personnel.	1) Announce the names of the missing persons and a Control Room phone number over the PA System and request a call back. 2) Initiate search and rescue efforts if no call back is received.	N/A

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
4. Site Evacuation.	<p>Site evacuation of personnel is determined necessary due to plant conditions or a Site or General Emergency has been declared.</p> <p>Prerequisite: Plant assembly and accountability have been completed.</p>	<ol style="list-style-type: none"> 1) Determine if selected personnel should remain onsite to assist the emergency effort. Inform security at the assembly areas of personnel who should remain. 2) Implement site evacuation. 	<p>N/A</p> <p>QEP 400-S2. Site Evacuation Checklist.</p>
5. Approval to Receive Exposure Limits.	<p>Approval to receive exposure limits transfers to the person with "Command and Control" authority.</p>	<ol style="list-style-type: none"> 1) Review exposure limit criteria and emergency exposure risk information. 2) Document and approve the request. 	<p>QEP 150-T2. Emergency Exposure Limit.</p> <p>QEP 165-S5. Emergency Exposure Limit/Potassium Iodide Issuance Approval Form.</p>
6. Issuance of thyroid blocking agents.	<p>Approval to issue thyroid blocking agents transfers to the person with "Command and Control" authority. Thyroid blocking agents should be issued for airborne exposures in excess of 25 Rem to the thyroid.</p>	<ol style="list-style-type: none"> 1) Document and approve the request. 2) Direct personnel to issue thyroid blocking agents. Thyroid blocking agents are stored in the GSEP vans, CR, TSC, and OSC. 	<p>QEP 165-S5. Emergency Exposure Limit/Potassium Iodide Issuance Approval Form.</p>

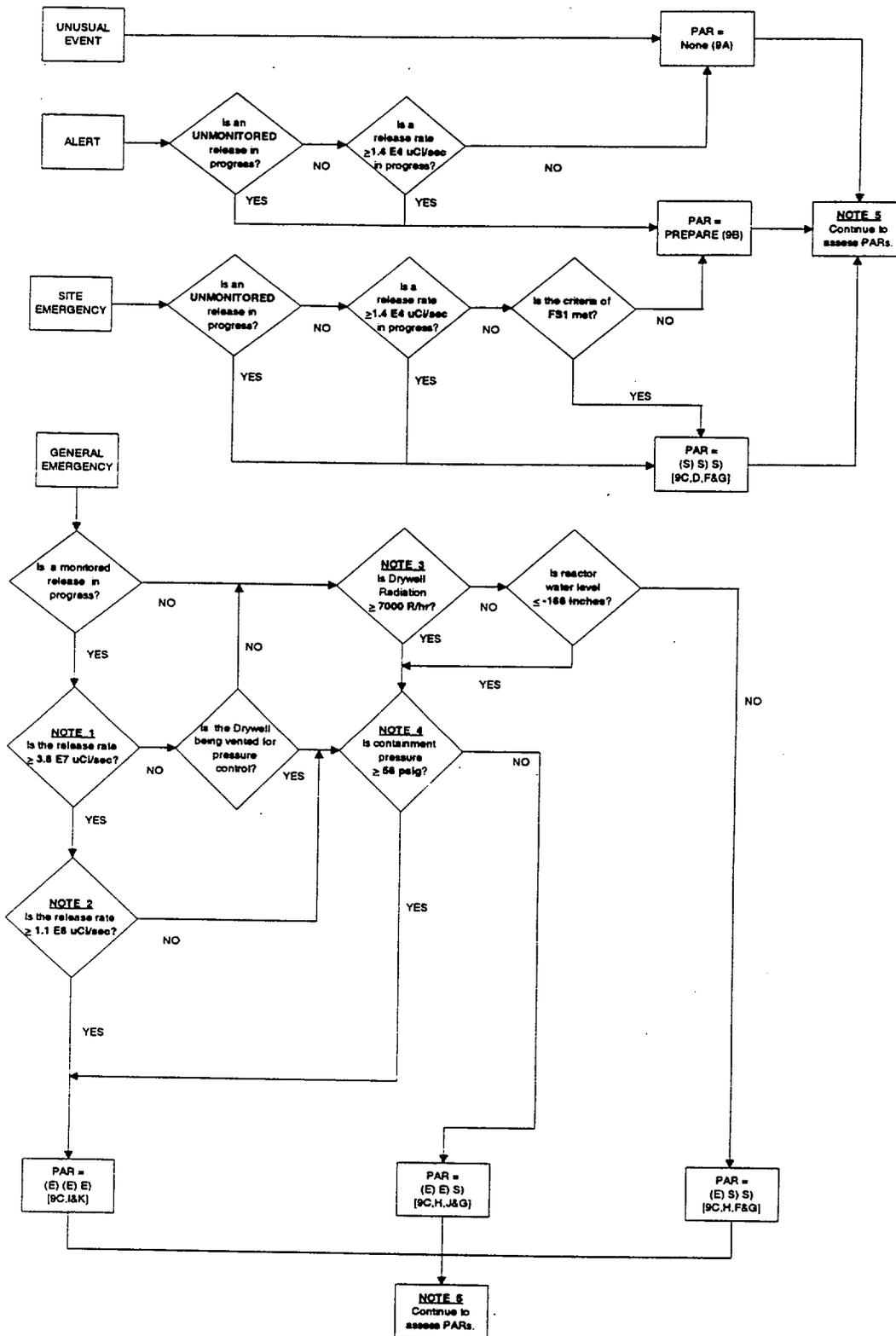
GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
<p>7. Initiation or Expected Initiation of Hardened Vent</p>	<p>A situation that requires use of the hardened vent per QCOP 1600-13.</p>	<p>1) Immediately communicate use of the hardened vent to all other ComEd emergency facilities.</p> <p style="text-align: center;"><u>NOTE</u></p> <p>IDNS and Iowa Dept. of Public Health want to be notified immediately regarding use or anticipated use of the hardened vent. IDNS - 217/785-0600 IDPH - 515/281-3478</p> <p>2) Immediately declare a Site Emergency per EAL FS1 (1.c.3 & 3.b) if Site or General Emergency not already declared.</p> <p>3) Immediately issue a NARS form indicating:</p> <p>a. Site Emergency [3C] b. Release Occurring [5C] c. PARS (s)s)s [9C,9D,9F,9G]</p> <p>if a more conservative PAR has not been previously issued.</p> <p>4) Additional analysis should be performed as soon as possible, including:</p> <p>a. Evaluate classification/ notification of General Emergency based on EAL FG1 or RG1 and related PARs.</p>	<p>QCOP 1600-13</p> <p>QEP 200-T01</p> <p>QEP 300</p>

GSEP EMERGENCY PROCEDURES IMPLEMENTATION GUIDE

EVENT	DESCRIPTION	ACTION	REFERENCE
<p>C. <u>RECOVERY/TERMINATION</u></p> <p>1. Recovery</p>	<p>As defined in GSEP, Section 5.5 and 5.6.</p>	<p>1) Announce over the PA System that recovery is being initiated.</p> <p>2) Complete a list of corrective action items jointly with the Operations Director.</p> <p>3) Assist in the development of recovery plans and procedures.</p>	<p>QEP 500-S2, Corrective Action Items for Plant Recovery.</p> <p>QEP 500-1, Recovery Operations.</p>
<p>2. Termination</p>	<p>As defined in GSEP, Section 5.5 and 5.6.</p>	<p>1) Announce the termination of the emergency over the PA System.</p> <p>2) Provide a list of any forms needing replacement in the "Emergency Response Manual" to the Administrative Director.</p> <p>3) Collect all Emergency Response Facility documentation and write an "Emergency Response Summary" report. Provide the report to the Assistant Station Director.</p> <p style="text-align: center;"><u>OR</u></p> <p>Assist the EP Coordinator in writing an "Event Investigation Report" if only an Unusual Event was declared.</p>	<p>N/A</p> <p>QEP 500-T1, Emergency Response Summary.</p> <p>QEP 500-S4, Event Investigation Report.</p>

PREDETERMINED PROTECTIVE ACTION RECOMMENDATIONS (PARs) FOR CONTROL ROOM



GENERAL NOTES

A **POTENTIAL RELEASE** is applicable when the criteria for Emergency Action Level (EAL) FS1 is met.

An **UNMONITORED RELEASE** is any abnormal release that cannot be quantified within 15 minutes.

FOOTNOTES

- Note 1: Site Specific Monitor value based on a 1 Rem (TEDE dose projection at 2 miles using Annual Average meteorology.
- Note 2: Site Specific Monitor value based on a 1 Rem (TEDE) dose projection at 5 miles using Annual Average meteorology.
- Note 3: Clad Damage \geq Site Specific Containment Fission Product Barrier Threshold Value for Radiation Level.
- Note 4: Containment Design Pressure.
- Note 5: Reassess PARs based on changing unit conditions, release rates, meteorological conditions and dose projections (refer to Table 6.3-1).

NOTIFICATIONS FOR GSEP
EMERGENCIES

A. PURPOSE

The purpose of this procedure is to describe the required notifications for a GSEP emergency condition. This includes any situation which has been declared an Unusual Event, Alert, Site Area, or General Emergency. The person with "Command and Control" authority is responsible for ensuring that all required notifications are made.

B. REFERENCES

1. QEP 0200-01, Classification of GSEP Conditions.
2. QEP 0300-03, Activation of the Emergency Response Data System (ERDS).
3. QEP 0300-04, Augmentation of Personnel for Emergency Response.
4. QEP 0300-T01, State of Illinois NARS Form Instructions for Use.
5. GSEP Organization Call List.
6. Emergency Response Facility (ERF) Telephone Directory.
7. NRC Generic Letter 89-15, Emergency Response Data System.
8. ComEd Reportability Manual

C. PREREQUISITES

1. An Emergency Classification level has been declared per QEP 0200-01, Classification of GSEP Conditions.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

NOTE =

The person with "Command and Control" authority is responsible for assuring notifications are completed. Notification of State agencies for NARS and notification of the NRC for NRC Event Notification Worksheets transfers to the person/facility with "Command and Control" authority (CR, TSC, EOF).

1. Notification to the States of Illinois and Iowa must be initiated within 15 minutes of the following. The following table describes the notifications that satisfy the 15 minute requirement.
 - A classification is made.
 - The classification changes.
 - A change in radioactive release condition.
 - A change in the downwind sector when a release is potential or occurring.
 - A change is made in Protective Action Recommendations, and
 - Additional information is available which may affect a change in the State or local protective action response.

UNUSUAL EVENT/ALERT	SITE AREA/GENERAL	GENERAL EMERGENCY
1. Illinois EMA (IEMA)	1. IEMA	1. IEMA
2. Iowa Emergency Management Division (IEMD)	2. IEMD	2. IEMD
	3. Clinton Co. EOC	3. Clinton Co. EOC
	4. Scott Co. Sheriff	4. Scott Co. Sheriff
		5. Rock Island Co. Sheriff*
		6. Whiteside Co. Sheriff*

* Applicable only if GENERAL Emergency is initiating event.

2. Notification to the NRC must be made immediately following notification to the States/Countries, but no later than one hour following classification.
3. If the EOF is not available to perform hourly state agency updates, the TSC should perform this function using CEPIP 2200-01.
 - The first update is required at the top of the second hour after an Alert classification.
4. Anytime an ENS phone call is made the NRC may request to maintain an open line. This open line shall be provided, based on current staffing, until the NRC requests termination.

5. Agency and support organization notification phone numbers are provided in the Emergency Response Facility (ERF) Telephone Directory.
6. Special notification phone numbers for QOA/QCOA 0010 Block procedures not included in the ERF Telephone Directory, are provided in QCOA 0010-06, Key Phone Numbers and Checklist for Referenced QCOA 0010 Block Procedures.
7. Sequence deviations in this procedure are allowed, but all steps should be completed in the required time frame.

F. PROCEDURE

1. If an Emergency Action Level has been reached per QEP 0200-T01, Classification of GSEP Conditions, perform the following notifications:

NOTE

As available, one individual should be dedicated to making state (NARS) notifications, and other required notifications should be completed by another individual.

All efforts should be toward completing state (NARS) notifications as soon as possible since NARS notifications are required to be initiated within 15 minutes and NRC notifications are required within one hour.

- a. Complete a NARS form per instructions contained in QEP 0300-T01, State of Illinois NARS Form Instructions for Use.
- b. Obtain approval for the information to be transmitted from the individual with "Command and Control".
 - Approval should include initialing the completed NARS form.
- c. Initiate ringdown of appropriate agencies via the NARS phone system using the NARS code specified below.

Unusual Event - Use code 33
Alert - Use code 33
Site Area - Use code 43
General - Use code 43 unless General Emergency is the initiating event.
- If General is the initiating event, use NARS code 23.

QEP 0300-01
Revision 25

- (1) Complete QEP 0300-S03 with appropriate time when parties contacted (PRE) and roll call initials.
 - Message transmitted time (block 12 on the NARS form) is the time when the initial roll call is complete and the NARS message starts to be transmitted.

- d. Transmit information to appropriate agencies using approved NARS Form.
 - (1) Perform a "Post" Transmission Roll Call and document on QEP 0300-S03.

- e. If the NARS circuit is inoperable OR an agency does not respond to the initial or final roll call, the following options are available and should be considered a prioritized listing of methods to complete the notifications required.
 - (1) Contact each agency by commercial phone.
 - Extensions 2209 and 2210 (in Control Room) and 3015 (in TSC) have a speed dial and conferencing feature to facilitate prompt contact with the required agencies.
 - (2) Contact Electric Operations to complete the notification via their NARS phone.

NOTE

The EO will need the following information to complete the notification:

- List of agencies that must be contacted.
 - Appropriate NARS dial code based on the event classification.
 - Complete NARS information as it appears on the NARS form.
- (3) Telecopy the NARS form to each agency and followup with a telephone call to confirm receipt.
-
- f. If the NARS circuit and commercial phones are both inoperable, EO can be requested to make NARS notifications via their commercial phone using the following information:

- (1) All agencies requiring notification in order of priority and their outside phone numbers.
 - Refer to the following table for priorities and phone numbers.

UNUSUAL EVENT/ALERT

1. IEMA 1-800-782-7860
2. IEMD 1-515-281-3231
3. IDNS 1-217-785-0600

SITE AREA/GENERAL

1. IEMA 1-800-782-7860
2. IEMD 1-515-281-3231
3. Clinton Co. EOC 1-319-242-5712
4. Scott Co. Sheriff 1-319-326-8628
5. IDNS 1-217-785-0600

GENERAL EMERGENCY

1. IEMA 1-800-782-7860
2. IEMD 1-515-281-3231
3. Clinton Co. EOC 1-319-242-5712
4. Scott Co. Sheriff 1-319-326-8628
5. Rock Island Co. Sheriff* 1-309-794-9111
6. Whiteside Co. Sheriff* 1-815-772-4044
7. IDNS 1-217-785-0600

* Only required if GENERAL emergency is initiating event.

- (2) Complete NARS information as it appears on the NARS form including a description of the extent of communications lost to be conveyed to agencies.
 - (3) IEMA should be contacted to initiate repairs to the NARS circuit if it is found to be inoperable.
- g. For incorrect emergency notifications:
- (1) If a notification is in progress and it is determined that incorrect information has been transmitted, the agencies receiving the information should be informed that the information is incorrect, and that a new notification will be provided soon, based on the correct information.

- (2) A new NARS form should be completed using the next sequential Utility Message number.
- The new NARS form should indicate in the "Additional Information" section that: "This corrects and supersedes the previous NARS (message #) transmission. Information regarding [classification/release status, PARS, downwind sectors] has/have been corrected."
- (3) When the correct information is available, transmit it to the offsite agencies. The transmission should begin: "This is a corrected NARS transmission."
- h. Complete an NRC Event Notification Worksheet, as appropriate for the current condition.
- i. Obtain approval for the information to be transmitted to the NRC.
- Approval should include initialing the completed Event Notification Worksheet.
- j. Transmit the approved information to the NRC via the ENS phone and complete the applicable portions of QEP 0300-S03, GSEP Emergency Notification Log.

NOTE

The NRC may request continuous communication on an open line. Continuous communication does not require additional approved Event Notification Worksheets be filled out.

- (1) If continuous communication is not established with the NRC (via ENS), THEN immediate (within one hour) followup notifications to the NRC (via ENS) should be provided (using Event Notification Worksheets) under the conditions listed below:
- (a) Any further degradation in the level of plant safety, or other worsening plant conditions.
 - (b) Any change in emergency classification.
 - (c) Termination of the emergency condition.
 - (d) Results of ensuing evaluation or assessments of plant conditions.

- (e) Effectiveness of response of protective measures taken.
- (f) Information related to plant behavior that is not understood.
- (2) If the ENS phone is inoperable, NRC notification can be accomplished via commercial phone. NRC Emergency Operations Center phone number is listed under Support Groups in ERF Telephone Directory.
- k. State agency updates are performed by the Manager of Emergency Operation and the Environmental Emergency Coordinator at the EOF. If the EOF is not available to perform state updates, the TSC should make the updates using CEPIP 2200-01.
- l. Contact the on-call Duty Person/Operations Director and Station Manager.

G. CHECKLISTS

- 1. QEP 0300-S03, GSEP Emergency Notification Log.
- 2. QCOA 0010-06, Key Phone Numbers and checklist for Referenced QCOA 0010 Block Procedures.

H. TECHNICAL SPECIFICATION REFERENCES

- 1. None.

STATION DIRECTOR
IMPLEMENTING PROCEDURE

A. PURPOSE

The purpose of this procedure is to describe the responsibilities of the Station Director in the TSC. The Station Director supervises and directs the Station Emergency Response Organization. The Station Director's responsibilities include organizing and coordinating onsite emergency efforts. Additionally, the Station Director has the requisite authority, plant operating experience and qualifications to implement in-plant recovery operations.

Responsibilities assigned to the Station Director include:

- Perform all nondelegable duties as the Emergency Director in Command and Control of the emergency as outlined in Section 4.4.6 of the GSEP.
- Activate the Station Emergency Response Organization (ERO) as deemed appropriate or as procedurally required.
- Notify local support agencies as required in order to expedite their response to the emergency.
- Conduct personnel assembly/accountability and evacuation of non-essential personnel at Site Emergency, General Emergency or as conditions warrant. (Refer to Section 6.0 of the GSEP)
- If the emergency involves a hazardous substance and/or oil discharges. (Refer to QCOA 0010-15.)
- Determine if the OSC is to remain activated at the Alert classification.
- Activate the Emergency Response Data System (ERDS) as soon as possible but not later than one hour after declaring an Alert, Site Emergency or General Emergency.
- Maintain a record of GSEP related activities.

The Station Manager may go to the Control Room at the Unusual Event classification and evaluate whether further emergency organization activation is necessary. At the Alert classification, or at the Unusual Event classification if deemed necessary, the Station Manager will activate the Technical Support Center (TSC) and Operations Support Center (OSC), and upon minimum staffing of the facilities assume Command and Control from the Acting Station Director in the Control Room. When the Emergency Operations Facility (EOF) is activated and the Manager of Emergency Operations (MEO) assumes Command and Control, designated responsibilities as defined in this procedure will be transferred.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. None.

F. PROCEDURE

1. Upon responding to the TSC at an Alert or higher Emergency Classification level, implement the appropriate checklist QEP 0105-S01 through S04 based on the Emergency Classification level declared at the time of arrival. Use these checklists as guides to help direct emergency activities.
2. If determined as necessary at the Unusual Event, activate the TSC and OSC and implement applicable portions of QEP 0105-S01 based on the events underway.
 - Staffing level of the TSC/OSC during an Unusual Event is at the option of the Station Director.
 - Transfer of Command and Control to the TSC is not required at the Unusual Event and can remain with the Acting Station Director in the Control Room.
 - Refer to EAL HA2 (QEP 0200-T01) to evaluate a potential upgrade to an ALERT.

G. CHECKLISTS

1. QEP 0105-S01, Station Director Alert Checklist.
2. QEP 0105-S02, Station Director Site Area Emergency Checklist.
3. QEP 0105-S03, Station Director General Emergency Checklist.
4. QEP 0105-S04, Station Director Downgrade, Termination, and Recovery Checklist.
5. QEP 0105-S05, Command and Control Turnover Form.
6. QEP 0165-S05, Emergency Exposure Limit/KI Issuance Approval Form.
7. QEP 0400-S01, Plant Assembly Checklist.
8. QEP 0400-S02, Site Evacuation Checklist.
9. QEP 0500-S02, Corrective Action Items for Plant Recovery.

STATION DIRECTOR
 ALERT CHECKLIST

	(NAME)	(DATE)	TIME INITIALS	
ACTION				
A. INITIAL ACTIONS				
1.	Evaluate staffing level of TSC/OSC to determine if adequate staffing is available for the situation. Minimum TSC staffing is:		NA	NA
	<ul style="list-style-type: none"> - Station Director - Environs or Radiation Protection (RP) Director - Technical Director - Operations Director - Maintenance Director 			
2.	For any missing Directors, assign appropriate staff to function in an Acting Director role and fill out a NOD-EP.02, Emergency GSEP Participating Approval Form. Direct the Administrative Director, or available staff, to contact another Director.		NA	NA
3.	Initiate the transfer of Command and Control from the Acting Station Director in the Control Room using QEP 0105-S05, Command and Control Turnover Form.		_____	_____
4.	Review with the Technical Director the Emergency Action Levels (EALs) which could cause an upgrade to Site Area Emergency and the conditions that must be met to downgrade, terminate, or enter recovery.		NA	NA
5.	Review with the Radiation Protection Director any conditions which would require Protective Action Recommendations (PARs).		NA	NA

STATION DIRECTOR
ALERT CHECKLIST

ACTION	TIME INITIALS
6. Determine if, as a precaution, plant assembly and/or site evacuation should be initiated. <ul style="list-style-type: none"> • If determined necessary to implement a full site evacuation, direct the Security Director to initiate QEP 0400-S01, Plant Assembly Checklist, and QEP 0400-S02, Site Evacuation Checklist. • Track key actions using QEP 0105-S06, GSEP Organization Responsibility Matrix. 	NA NA
7. Direct the GSEP Advisor, if present, to assist the TSC/OSC Directors with the implementation of procedures and emergency response actions.	NA NA
8. Initiate a GSEP Log of activities. In particular, document phone calls made and received and any data or information provided to other persons.	NA NA
B. ONGOING ACTIONS	
1. Determine if the OSC is to remain activated at the Alert classification level.	GSEP LOG
2. Conduct a TSC briefing at least hourly (or as conditions change) using desktop aid as a guide.	NA NA
3. When the EOF is staffed, discuss with the MEO (EOF) whether Command and Control will be transferred to the EOF. <ul style="list-style-type: none"> • If it will be, use QEP 0105-S05 to turnover to the EOF. 	NA NA
4. Determine Station priorities which need to be tracked and direct a Status Board Recorder to log and track completion on the status board.	NA NA
5. Coordinate and manage the response activities of the onsite personnel.	NA NA

STATION DIRECTOR
ALERT CHECKLIST

ACTION	TIME INITIALS
<p>6. Periodically, evaluate plant conditions and the prognosis for the situation to improve or worsen and, in consultation with the TSC Directors, determine if changes to the current Emergency Classification level or (PAR) are needed.</p> <ul style="list-style-type: none"> Reference QEP 0200-01, Classification of GSEP Conditions. 	<p>NA NA</p>
<p><u>NOTE</u></p> <p>Station Director approval is required on NARS forms and NRC Event Notification Worksheets.</p>	
<p>7. Ensure that for each change in Emergency Classification level or PARs that state notification is initiated within 15 minutes and that NRC notifications are made immediately afterwards (until this responsibility is transferred to the EOF).</p> <ul style="list-style-type: none"> Reference QEP 0300-01, Notification for GSEP Emergencies. 	<p>NA NA</p>
<p>8. Maintain a GSEP Log of activities, phone calls, and important information.</p>	<p>NA NA</p>
<p>9. Update the Manager of Emergency Operations (MEO) on major events as they happen and the status of ongoing activities.</p>	<p>NA NA</p>
<p>10. Review requests from Directors to procure equipment, supplies, and personnel, and approve expenditures.</p>	<p>NA NA</p>
<p>11. Assist the MEO in acquisition of information for State agency updates.</p> <ul style="list-style-type: none"> If the EOF is not capable of performing the state updates, provide the updates at the top of each hour (+ 10 minutes) using CEPIP 2200-01, Attachment C. 	
<p>C. SHIFT CHANGE</p>	
<p>1. Upon arrival of your shift replacement, provide a briefing based on QEP 0105-T02, Shift Turnover Briefing. Include the Assistant Station Director in the briefing.</p>	<p>GSEP LOG</p>

STATION DIRECTOR
SITE AREA EMERGENCY CHECKLIST

	(NAME)	(DATE)		
ACTION			TIME	INITIALS
A. INITIAL ACTIONS.				
1.	Announce the new change in Emergency Classification level to the TSC, OSC, and to the plant over the Station P.A. System, including the reason for the classification.		_____	_____
2.	Verify that the Assistant Station Director is directing the required notifications per QEP 0300-01, Notifications for GSEP Emergencies.		NA	NA
3.	Direct the initiation of the following actions, if not already completed. Plant Assembly, QEP 0400-01, and Site Evacuation, QEP 0400-02.			
	a.	Implementation of QEP 0400-S01, Plant Assembly Checklist, by the Security Director.	NA	NA
	b.	Implementation of QEP 0400-S02, Site Evacuation Checklist, by the Security Director upon completion of plant assembly and accountability.	NA	NA
	c.	Site evacuation may be delayed per the Limitations and Actions in QEP 0400-02.	NA	NA
4.	If not already completed, arrange to transfer Command and Control to the EOF unless capabilities are limited such that nondelegable responsibilities cannot be assumed.		NA	NA
	• Use QEP 0105-S05 to turn over to the EOF.			
5.	If not already completed, complete the Initial Action section of QEP 0105-S01, Station Director Alert Checklist.		NA	NA
6.	Review with the Operations and Technical Director the in-plant conditions and the EALs which could cause an upgrade to General Emergency.		NA	NA

STATION DIRECTOR
SITE AREA EMERGENCY CHECKLIST

ACTION	TIME	INITIALS
7. Review with the Rad Protection Director the current PARs to ensure they are adequate and appropriate.	NA	NA
8. Determine if additional plant resources are needed, such as personnel and equipment, and direct the Administrative Director to secure the needed resources.	NA	NA
9. Review with the Technical Director the conditions that must be met to terminate or enter recovery.	NA	NA
B. ONGOING ACTIONS		
1. Conduct a TSC briefing at least hourly (or as conditions change) using desktop aid as a guide.	NA	NA
2. Determine key open items which need to be tracked on status boards.	NA	NA
3. Periodically, evaluate plant conditions and the prognosis for the situation to improve or worsen and, in consultation with the TSC Directors, determine if changes to the current Emergency Classification level or Protective Action Recommendations (PAR) are needed.	NA	NA
<ul style="list-style-type: none"> Reference QEP 0200-01, Classification of GSEP Conditions. 		
<u>NOTE</u>		
Station Director approval is required on NARS forms and NRC Event Notification Worksheets issued from the TSC.		
4. Ensure that for each change in Emergency Classification level or Protective Action Recommendation that state notification is initiated within 15 minutes and that NRC notifications are made immediately afterwards (until this responsibility is transferred to the EOF).	NA	NA
<ul style="list-style-type: none"> Reference QEP 0300-01, Notification for GSEP Emergencies. 		
5. Maintain a GSEP Log of activities, phone calls, and important information.	NA	NA

STATION DIRECTOR
SITE AREA EMERGENCY CHECKLIST

ACTION	TIME	INITIALS
6. Update the Manager of Emergency Operations (MEO) on major events as they happen and the status of ongoing activities.	NA	NA
7. Review requests from Directors to procure equipment, supplies, and personnel, and approve expenditures.	NA	NA
8. Assist the MEO in acquisition of information for the State agency updates. <ul style="list-style-type: none"> • If the EOF is not capable of performing State updates, provide these updates at the top of each hour (+ 10 minutes) using CEPIP 2200-01, Attachment C. 	_____	_____
C. SHIFT CHANGE		
1. Upon arrival of your shift replacement, provide a briefing based on QEP 0105-T02, Shift Turnover Briefing. Include the Assistant Station Director in the briefing.	_____	_____

STATION DIRECTOR
GENERAL EMERGENCY CHECKLIST

	_____ (NAME)	_____ (DATE)		
ACTION			TIME	INITIALS
A. INITIAL ACTIONS.				
1.	Announce the new change in Emergency Classification level to the TSC, OSC and to the plant over the P.A. System, including the reason for the classification.		_____	_____
2.	Verify that the Assistant Station Director and the Technical Director are implementing the required notifications per QEP 300-1, Notifications for GSEP Emergencies.		NA	NA
3.	If not already completed, arrange to transfer Command and Control to the EOF. Use QEP 0105-S05 to turnover to the EOF.		NA	NA
4.	If not already completed, complete the Initial Actions section of QEP 0105-S02, Station Director Site Area Emergency Checklist.		NA	NA
5.	Review with the Technical Director the inplant conditions and related EALs.		NA	NA
6.	Review with the Rad Protection Director the current PARs to ensure they are adequate and appropriate.		NA	NA
7.	Determine if additional plant resources are needed, such as personnel and equipment, and direct the Administrative Director to secure the needed resources.		NA	NA
8.	Review with the Technical Director the conditions that must be met to terminate or enter recovery.		NA	NA
B. ONGOING ACTIONS				
1.	Conduct a TSC briefing at least hourly (or as conditions change) using the desktop aid as a guide.		NA	NA
2.	Determine key open items which need to be tracked and direct a Status Board Recorder to log and track completion.		NA	NA

STATION DIRECTOR
GENERAL EMERGENCY CHECKLIST

ACTION	TIME	INITIALS
3. Periodically, evaluate plant conditions and the prognosis for the situation to improve or worsen and, in consultation with the TSC Directors, determine if changes to the current Emergency Classification level or Protective Action Recommendations (PAR) are needed. <ul style="list-style-type: none"> • Reference QEP 0200-01, Classification of GSEP Conditions. 	NA	NA
<p><u>NOTE</u></p> <p>Station Director approval is required on NARS forms and NRC Event Notification Worksheets issued from the TSC.</p>		
4. Ensure that for each change in Emergency Classification level or Protective Action Recommendation that state notification is initiated within 15 minutes and that NRC notifications are made immediately afterwards (until this responsibility is transferred to the EOF). <ul style="list-style-type: none"> • Reference QEP 0300-01, Notification for GSEP Emergencies. 	NA	NA
5. Maintain a GSEP Log of activities, phone calls, and important information.	NA	NA
6. Update the Manager of Emergency Operations on major events as they happen and the status of ongoing activities.	NA	NA
7. Review requests from Directors to procure equipment, supplies, and personnel, and approve expenditures.	NA	NA
8. Assist the MEO in acquisition of information for the State agency updates. <ul style="list-style-type: none"> • If the EOF is not capable of performing State updates, provide these updates at the top of each hour (I/O minutes) using CEPIP 2200-01, Attachment C. 		
<p>C. SHIFT CHANGE</p>		
1. Upon arrival of your shift replacement, provide a briefing based on QEP 0105-T02, Shift Turnover Briefing. Include the Assistant Station Director in the briefing.	_____	_____

COMMAND AND CONTROL TURNOVER FORM (TSC)

1. Current Classification EAL: _____ Time: _____ Unit: _____
 Conditions met to determine this classification: _____

2. Offsite Notification made:
 Latest NARS: _____ Utility Message #: _____ Time: _____
 State Message #: _____ Time: _____
 Latest ENS Time: _____ Continuous Communications? (Yes/No)

3. Is the relieving facility at minimum staffing and capable of performing the following non-delegable functions?
 a. Classify events? (Yes/No)
 b. Determine PAR's and make notifications? (Yes/No)
 c. Authorize exposures beyond 10CFR20 limits? (Yes/No)
 d. Authorize the use of Thyroid Blocking Agents? (Yes/No)

4. Upon transfer of Command and Control, the following will be performed by (circle one):
 a. NARS (CR/TSC/EOF)
 b. ENS (CR/TSC/EOF)
 c. HPN (TSC/EOF)
 d. Environs Teams (TSC/EOF)

Other pertinent information:

Release Occurring	(Yes/No)	ERDS Activated	(Yes/No)
Rad Concerns	(Yes/No)	In-Plant Teams	(Yes/No)
Offsite Assistant Requested	(Yes/No)	Assembly	(Yes/No)
Evacuation	(Yes/No)		

B. WORKSHEET FOR THE MAIN CHIMNEY SPING MIDRANGE
(Use only when SPING Low Range (03-05) indicates High Alarm)

1. Obtain the reading for the main chimney midrange noble gas monitor from the SPING Control Terminal using QCOP 1700-11 (DATA 03-07 ENTER). _____ $\mu\text{Ci/cc}$
2. Obtain the main chimney flow rate from panel 912-4. If not available, obtain value from point history #R134 or see QEP 0155-02, Section E.1 for default values. _____ kcfm
3. Determine if either Unit One or Unit Two has clad damage. IF any of the following is/was met, THEN the cladding may be considered to be damaged:
 - coolant activity $\geq 300 \mu\text{Ci/gr I-131}$ dose equivalent or,
 - reactor water level $\leq -191"$ or,
 - drywell rad monitors $\geq 1750 \text{ R/hr}$ uncorrected or,
 - Main Steam Line radiation $\geq \text{Hi Hi Alarm}$ or,
 - Drywell or Torus hydrogen $\geq 6\%$.

Circle one.

CLAD DAMAGE NO CLAD DAMAGE _____ Initials

4.
 - a. Time of reading in B.1 _____
 - b. Time of shutdown _____
 - c. Time between shutdown and reading (4a-4b) _____

NOTE

IF no clad damage exists, THEN B.5 will be 1.
IF clad damage exists, THEN use the time determined in B.4.c. to determine B.5.

5. Release Rate Correction Factor from QEP 0155-T07 = _____
6. Main Chimney Release Rate (Ensure constant value of 5.24E05 is included in calculation):
(5.24E05)(B1 _____ $\mu\text{Ci/cc}$)(B2 _____ Kcfm)(B5 _____) = _____ $\mu\text{Ci/sec}$
7. IF the Reactor Building Vent (RBV) is NOT isolated, THEN add the release rate determined in B.6 to the RBV release rate from QEP 0155-S08, Section E, F, G, or H.

Total Station Release Rate: _____ $\mu\text{Ci/second}$

Completed By

Date/Time

Checked By

C. WORKSHEET FOR THE MAIN CHIMNEY SPING LOW RANGE.
 (Optional: Use only when no SPING High Alarms exist)

1. Obtain the reading for the main chimney low range noble gas monitor from the SPING Control Terminal using QCOP 1700-11 (DATA 03-05 ENTER). (IF using computer point R130 to obtain data you must multiply the PCI/CC value by 10^{-6} to obtain $\mu\text{Ci/cc}$ value.) _____ $\mu\text{Ci/cc}$

2. Obtain the main chimney flow rate from panel 912-4. _____ kcfm
 If not available, obtain value from point history #R134 or see QEP 0155-02, Section E.1 for default values.

3. Determine if either Unit One or Unit Two has clad damage. IF any of the following is/was met, THEN the cladding may be considered to be damaged:
 -coolant activity $\geq 300 \mu\text{Ci/gr}$ I-131 dose equivalent or,
 -reactor water level $\leq 191"$ or,
 -drywell rad monitors $\geq 1750 \text{ R/hr}$ uncorrected or,
 -Main Steam Line radiation $\geq \text{Hi Hi Alarm}$ or,
 -Drywell or Torus hydrogen $\geq 6\%$.

Circle one: CLAD DAMAGE NO CLAD DAMAGE _____ Initials

4. a. Time of reading in C.1. _____
 b. Time of shutdown _____
 c. Time between shutdown and reading (4a-4b) _____

NOTE

IF no clad damage exists, THEN C.5 will be 1.
 IF clad damage exists, THEN use the time determined in C.4.c. to determine C.5.

5. Release Rate Correction Factor from QEP 0155-T06 = _____

6. Release Rate (Ensure constant value of $5.24\text{E}05$ is included in calculation):
 $(5.24\text{E}05)(\text{C1} \text{ } \mu\text{Ci/cc})(\text{C2} \text{ } \text{Kcfm})(\text{C5} \text{ }) = \text{ } \mu\text{Ci/sec}$

7. IF the Reactor Building Vent (RBV) is NOT isolated, THEN add the release rate determined in C.6 to the RBV release rate from QEP 0155-S08.
 Total Station Release Rate: _____ $\mu\text{Ci/second}$

 Completed By Date/Time Checked By

NOTE

Use this worksheet only if the RBV is not isolated.

E. WORKSHEET FOR THE RBV HIGH RANGE MONITOR
(Use only when RBV SPING Mid Range (01-07) indicates High Alarm)

NOTE

IF the RBV SPING is NOT available, RBV release rate can be estimated using Worksheet H.

1. Obtain the reading for the RBV high range noble gas _____ $\mu\text{Ci/cc}$ monitor from the SPING Control Terminal using QCOP 1700-11 (DATA 01-09 ENTER).
2. Obtain the RBV flow rate (computer point R135 or _____ kcfm multiply the number of RBV Exhaust Fans running by 48).
3. Determine if either Unit One or Unit Two has clad damage. IF any of the following is/was met, THEN the cladding may be considered to be damaged:
 - coolant activity $\geq 300 \mu\text{Ci/gr}$ I-131 dose equivalent or,
 - reactor water level $\leq -191"$ or,
 - drywell rad monitors $\geq 1750 \text{ R/hr}$ uncorrected or,
 - Main Steam Line radiation $\geq \text{Hi Hi Alarm}$ or,
 - Drywell or Torus hydrogen $\geq 6\%$.

Circle one: CLAD DAMAGE NO CLAD DAMAGE _____ Initials
4.
 - a. Time of reading in E.1 _____
 - b. Time of shutdown _____
 - c. Time between shutdown and reading (4a-4b) _____

NOTE

IF no clad damage exists, THEN E.5 will be 1.
IF clad damage exists, THEN use the time determined in E.4.c. above to determine E.5.

5. Release Rate Correction Factor from QEP 0155-T08 = _____
6. RBV Release Rate (Ensure constant value of $5.24\text{E}05$ is included in calculation):
($5.24\text{E}05$)(E1 _____ $\mu\text{Ci/cc}$)(E2 _____ Kcfm)(E5 _____) = _____ $\mu\text{Ci/sec}$
7. Add the value obtained in step E.6. to the Main Chimney release rate from worksheet A, B, C, or D.

Completed By

Date/Time

Checked By

H. ALTERNATE WORKSHEET FOR REACTOR BUILDING VENT (RBV) RELEASE RATE.

NOTE

Perform this calculation only if the Reactor Building Ventilation is not or cannot be ISOLATED.

NOTE

This worksheet should be used only when the RBV SPING is Not available.

1. Obtain current RBV radiation monitor readings from the 901(2)-2 panels, and subtract the background readings (from RBV Ch A/B recorder 1(2)-1705-21) indicated prior to the start of the release.

1A. ___ mR/hour - ___ mR/hour(background) = ___ mR/hour

1B. ___ mR/hour - ___ mR/hour(background) = ___ mR/hour

2A. ___ mR/hour - ___ mR/hour(background) = ___ mR/hour

2B. ___ mR/hour - ___ mR/hour(background) = ___ mR/hour

2. Multiply the highest corrected reading from each unit by 7200 $\mu\text{Ci}/\text{sec}/\text{mR}/\text{hour}$ and add the results to obtain RBV release rate in $\mu\text{Ci}/\text{second}$.

1A or 1B ___ mR/hour * 7200 = ___ $\mu\text{Ci}/\text{second}$

2A or 2B ___ mR/hour * 7200 = ___ $\mu\text{Ci}/\text{second}$

___ Total $\mu\text{Ci}/\text{second}$

3. Add the total value (in $\mu\text{Ci}/\text{second}$) to the value calculated for the Main Chimney release rate on worksheet A, B, C, or D. The resultant sum is the Station Total Release Rate.

<u>QEP 150-T1</u> Procedure Deleted (See QEP 175-T1)	Rev. 3	03-01-91
<u>QEP 0150-T02</u> Emergency Exposure Limits and Risks	Rev. 6	12-13-95
<u>QEP 0150-T03</u> Shift Turnover Briefing	Rev. 5	05-13-99
<u>QEP 0150-T04</u> Radiation Protection (QCRP) Procedures Applicable to Emergency Conditions	Rev. 7	11-18-99
<u>QEP 150-T5</u> Procedure Deleted (no longer needed)	Rev. 5	12-29-93
<u>QEP 150-T6</u> Procedure Deleted (See QEP 175-T3)	Rev. 3	03-01-91
<u>QEP 150-T7</u> Procedure Deleted (See QEP 175-T4)	Rev. 3	03-01-91
<u>QEP 0150-T08</u> Procedure Deleted (See QEP 0150-T09)	Rev. 5	08-09-96
<u>QEP 0150-T09</u> Protective Action Recommendations	Rev. 9	09-10-99
<u>QEP 150-T10</u> Recommended Protective Actions for Gaseous Release Conditions	Rev. 5	04-15-97

AREA RADIATION MONITOR SYSTEM

UNIT ONE

QEP 0150-S05
Revision 12
Information Use

STATION NO.	BUILDING	ELEV	COLUMN	DETECTOR LOCATION	RANGE (MR/HR)	ALARM SETPOINT (MR/HR)	POINT ID #	READING (MR/HR)
1	Rx Bldg	690-6	H-15	Refueling Floor Low Range	.01-100	5		_____
2	Rx Bldg	690-6	H-15	Refueling Floor High Range	10-1,000,000	100	R100	_____
3	Rx Bldg	690-6	N-14	Refueling Floor Equip. Hatch	0.01-100	15		_____
4	Rx Bldg	666-6	N-14	New Fuel Storage Area	0.1-1000	5		_____
5	Rx Bldg	666-6	L-18-19	Contaminated Equipment Storage	0.01-100	10		_____
6	Rx Bldg	647-6	M-15	Fuel Pool Pump Area	0.01-10000	25		_____
7	Rx Bldg	647-6	M-18	Control Rod Drive Storage & Repair Room	0.1-1000	20		_____
8	Rx Bldg	647-6	J-17	Cleanup Instrument Rack Area	0.01-10000	10	R101	_____
9	Rx Bldg	623-0	J-18-19	Cleanup Pump Area	0.01-10000	10		_____
10	Rx Bldg	623-0	M-13-41	Mezzanine Floor Access Area	0.01-100	5		_____
11	Rx Bldg	595-0	K-18-19	South CRD Module Area	0.01-10000	10	R102	_____
12	Rx Bldg	595-0	K-13-14	North CRD Module Area	0.01-10000	10	R103	_____
13	Rx Bldg	595-0	J-H-13	TIP Drive Area	0.01-10000	5		_____
14	Rx Bldg	595-0	H-14-15	TIP Cubicle	1-10,000	5,000		_____
15	Rx Bldg	554-0	N-17	Torus Area	1-10,000	50	R104	_____
16	Rx Bldg	554-0	G-15	HPCI Cubicle	1-10,000	100	R105	_____
17	Rx Bldg	554-0	G-14	RCIC Cubicle	1-10,000	100	R106	_____
18	Turb Bldg	639-0	E-25	Operating Floor Access - South	0.01-100	3	R107	_____
19	Turb Bldg	639-0	D-14	Operating Floor Elevator Area	0.01-100	5		_____
20	Turb Bldg	626-6	C-20-21	Air Ejector Area - 1B	0.01-100	1		_____
21	Turb Bldg	626-6	C-18-19	Air Ejector Area - 1A	0.01-100	3		_____
22	Turb Bldg	623-0	G-25	Reactor Control Room	0.01-100	0.5	R109	_____
23	Turb Bldg	595-0	C-19	Feedwater Heater Area W. Hallway	0.1-1000	10		_____
24	Turb Bldg	595-0	G-21	Feedwater Pump Area	0.01-100	5	R108	_____
25	Turb Bldg	572-6	D-18	Control Rod Drive Feed Pump Area	0.1-1000	25		_____
26	Turb Bldg	547-0	D-E-19	Condensate/Booster Pump	0.01-100	35		_____
27	Radwaste	597-0	C-14	Radwaste Control Room	0.01-100	1		_____

UNIT ONE

STATION NO.	BUILDING	ELEV	COLUMN	DETECTOR LOCATION	RANGE (MR/HR)	ALARM SETPOINT (MR/HR)	POINT ID #	READING (MR/HR)
28	Radwaste	597-0	B-13-14	Radwaste Operating Area - South Wall	0.01-100	3		_____
29	Radwaste	572-0		Radwaste Pump Room Access	0.01-100	60		_____
30	Radwaste	620-0		Radwaste Centrifuge Access	0.01-100	5		_____
1-1743A	Rx Bldg.	690-6	N-15	Refueling Floor West Wall	1.0-1,000,000	25		_____
1-1743B	Rx Bldg.	690-6	H-14	Refueling Floor East Wall	1.0-1,000,000	25		_____
1-1735A	Turb Bldg.	658-10	G-H-16	Rx Bldg Vent System	.01-100	3 Hi Hi		_____
1-1735B	Turb Bldg	658-10	G-H-6	Rx Bldg Vent System	.01-100	3 Hi Hi		_____
31	Filter	574-6		Carbon Bed Vault	1.0-1,000,000	1000	R110	_____
32	Turbine	648-6	CD-18	Recombiner Area Level 1	.01-100	5		_____
33	Turbine	668-0	CD-18	Recombiner Area Level 2	.01-100	5		_____
35	Radwaste	591-0	East Wall	Max Recycle Bldg	1-10,000	400		_____
36	Radwaste	596-11	SW Corner	Radwaste Tank Farm	0.1-1,000	10		_____
1-1705-2A/D	Rx Bldg			Steam Line Rad	1.0-1,000,000	15XN	R115	_____
1-1705-3A	Turbine			Off-Gas Monitor A	1.0-1,000,000		R116	_____
1-1705-3B	Turbine			Off-Gas Monitor B	1.0-1,000,000		R117	_____
1-2419A	Rx Bldg			Drywell Rad Monitor A	1-1E8 R/hr	20,000	R123 (R/hr)	_____
1-2419B	Rx Bldg			Drywell Rad Monitor B	1-1E8 R/hr	20,000	R122 (R/hr)	_____

TIME READINGS TAKEN _____ DATE _____ BY _____

UNIT TWO

STATION NO.	BUILDING	ELEV	COLUMN	DETECTOR LOCATION	RANGE (MR/HR)	ALARM SETPOINT (MR/HR)	POINT ID #	READING (MR/HR)
1	Rx Bldg.	690-6	H-11	Refueling Floor Low Range	0.01-100	5		_____
2	Rx Bldg.	690-6	H-11	Refueling Floor High Range	10-10 ⁶	100	R200	_____
3	Rx Bldg.	647-6	M-11	Fuel Pool Pump Area	0.01-10,000	25		_____
4	Rx Bldg.	647-6	J-9	Cleanup Inst. Rack Area	0.01-10,000	10	R201	_____
5	Rx Bldg.	623-0	J-7-8	Cleanup Pump Area	0.01-10,000	10		_____
6	Rx Bldg.	595-0	K-13	South CRD HYD Area	0.01-10,000	10	R202	_____
7	Rx Bldg.	595-0	K-7	North CRD HYD Area	0.01-10,000	10	R203	_____
8	Rx Bldg.	595-0	H-13	Tip Drive Area	0.01-10,000	5		_____
9	Rx Bldg.	595-0	H-11-12	Tip Cubicle	1-10,000	5000		_____
10	Rx Bldg.	554-0	N-9	Torus Area	1-10,000	50	R204	_____
11	Rx Bldg.	554-0	G-11	HPCI Cubicle	1-10,000	100	R205	_____
12	Rx Bldg.	554-0	G-12	RCIC Cubicle	1-10,000	100	R206	_____
13	Turb. Bldg.	639-0	F-1	Operating Floor	0.01-100	3	R207	_____
14	Turb. Bldg.	626-6	C-5	Air Ejector Area	0.01-100	3		_____
15	Turb. Bldg.	626-6	C-8-9	Air Ejector Area	0.01-100	10		_____
16	Rx Bldg.	666-6	N-17	Standby Gas Treatment Unit 1	0.01-10,000	20		_____
17	Turb. Bldg.	595-0	C-7	Feedwater Heater Area	0.1-1000	5		_____
18	Turb. Bldg.	595-0	G-5	Feedwater Pump Area	0.01-100	20	R208	_____
19	Turb. Bldg.	595-0	D-13	Condensate Demin. Panel	0.01-100	1		_____
20	Turb. Bldg.	595-0	G-11	Safe Shutdown Pump Area	0.1-1000	1		_____
21	Turb. Bldg.	572-6	D-8	CRD Feedwater Pump Area	0.1-1000	25		_____
22	Turb. Bldg.	547-0	E-7	Condensate Booster Pump Area	0.01-100	15		_____
23	Rx Bldg.	666-6	N-9	Standby Gas Treatment Unit 2	0.01-10,000	20		_____
2-1743A	Rx Bldg.	690-6		Refueling Floor	1.0-1,000,000	25		_____
2-1743B	Rx Bldg.	690-6		Refueling Floor	1.0-1,000,000	25		_____
2-1735A	Turb. Bldg.	658-10		Rx Bldg. Vent System	.01-100	3 Hi Hi		_____
2-1735B	Turb. Bldg.	658-10		Rx Bldg. Vent System	.01-100	3 Hi Hi		_____

UNIT TWO

STATION NO.	BUILDING	ELEV	COLUMN	DETECTOR LOCATION	RANGE (MR/HR)	ALARM SETPOINT (MR/HR)	POINT ID #	READING (MR/HR)
25	Filter Bldg.	561		Charcoal Vault	1.0-1,000,000	2000	R210	_____
26	Turb. Bldg.	648-6	CD-8	Recombiner Level 1	.01-100	5		_____
27	Turb. Bldg.	668-0	CD-8	Recombiner Level 2	.01-100	5		_____
28	Filter Bldg.	561-0		Filter House Level 1	.01-100	0.5		_____
29	Filter Bldg.	574-6		Filter House Level 2	.01-100	0.5		_____
30	Filter Bldg.	594-6		Filter House Level 3	.01-100	0.5		_____
2-1705-2A/D	Rx Bldg.			Steam Line Rad	1.0-1,000,000	15XN	R215	_____
2-1705-3A	Turbine			Off-Gas Monitor A	1.0-1,000,000		R216	_____
2-1705-3B	Turbine			Off-Gas Monitor B	1.0-1,000,000		R217	_____
2-2419A	Rx Bldg			Drywell Rad Monitor A	1-1E8 R/hr	20,000	R223 (R/hr)	_____
2-2419B	Rx Bldg			Drywell Rad Monitor B	1-1E8 R/hr	20,000	R222 (R/hr)	_____

TIME READINGS TAKEN _____ DATE _____ BY _____

UNIT 1/2

STATION NO.	BUILDING	ELEV	COLUMN	DETECTOR LOCATION	RANGE (MR/HR)	ALARM SETPOINT (MR/HR)	POINT ID #	READING (MR/HR)
1	Rx Bldg	690-6		Reactor Building Crane	0.1-1000	15		_____
2	Radwaste	605-0		Radwaste Catwalk Shield - East Wall	1-10,000	10		_____
3	Radwaste	595-0		Radwaste North Truckbay - North Wall	0.1-1,000	5		_____
4	Radwaste	598-0	B-13	Radwaste Barreling Line - North Wall	1-10,000	N/A		_____
5	Radwaste	608-11	C-11	Mixing Tank	10-100,000	N/A		_____
6	Radwaste	608-11	C-11	Mixing Tank Room	10-100,000	N/A		_____
7	Radwaste	608-11		Valve Room on Decant Line	1-10,000	N/A		_____

EQUIPMENT INVENTORY

A. PURPOSE

The purpose of this procedure is to assure the availability and up-to-date calibration of equipment and supplies dedicated for use during emergency situations. The Emergency Preparedness (EP) Coordinator and Radiation Protection (RP) Director are responsible for the implementation of this procedure. The performance of equipment inventories is in accordance with QEP 0730-S02.

B. REFERENCES

1. QEP 0730-S02, Emergency Preparedness Quarterly Audit.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. The equipment and supplies listed reflect a minimum quantity for effective emergency use. Additional supplies may be present without being included on the inventory lists.
2. When supplies fall below the minimum quantity required, inform the EP Coordinator that additional supplies must be ordered.
3. Copies of completed and reviewed inventory checklists are to be maintained in the EP file.
4. Emergency response facilities activated for a drill or emergency should have a complete inventory following deactivation.
5. Radiation Protection department is responsible for performing the following GSEP inventories:
 - Operations Support Center (OSC)
 - First Aid and Decontamination
 - Environs Sampling and Emergency Responder
 - Illini Hospital
 - Relocation Center
6. Inventory Checklist will be maintained and controlled by EP as Training and Reference Materials (TRMs), and are accessible under the "GSEP" Folder on the 'L-Drive'.

5. Inventory of the Illini Hospital supplies.
 - a. Perform a quarterly inventory of all items listed on QEP 0600-S05, Illini Hospital Radiological Emergency Inventory Checklists.
 - b. Contact the Illini Hospital (The ER Head Charge Nurse or Housekeeping) to establish times to perform the inventory.
 - c. Obtain appropriate keys from Radiation Protection Management, from the key cabinet located in the RT Meeting room, or from the Illini Hospital ER Head Charge Nurses/Housekeeping.
 - d. Remove instruments for recalibration and replace them with like calibrated equipment if their calibration will expire before the next audit.
 - e. Replace any missing/depleted supplies or equipment.
 - f. Complete and sign the checklist for review by the EP Coordinator.

6. Inventory of Relocation Center emergency supplies:
 - a. Perform a quarterly inventory of all items listed on QEP 0600-S07, Relocation Center Inventory Checklist.
 - b. Contact the Fulton Middle School Principal to establish a time to perform the inventory.
 - c. Remove instruments for recalibration and replace them with like calibrated equipment, if their calibration will expire before the next audit.
 - d. Complete and sign the checklist for review by the EP Coordinator.
 - e. Replace any missing/depleted supplies or equipment.
 - f. Lock the cabinet after the inventory.

G. CHECKLISTS

NOTE

Checklists will be maintained as EP Training and Reference Materials (TRMs), and are accessible electronically under the "GSEP" Folder on the 'L-Drive'.

1. TRM 0600-S01, TSC/CR Inventory Checklist.
2. TRM 0600-S02, OSC Inventory Checklist.
3. TRM 0600-S03, First Aid and Decontamination Inventory Checklist.

OFFSITE SUPPORT AGENCY
TRAINING

A. PURPOSE

The purpose of this procedure is to provide criteria for offsite support agency training for organizations which would be requested to support the Quad Cities Nuclear Station during an emergency. The training provided by Quad Cities Station and/or Corporate EP will include the Annual Offsite Agency Meeting and the Annual Offsite Agency Training Session(s).

Hospital and ambulance service specialized training will be provided by Corporate EP to health care professionals (local hospitals and ambulance personnel) for the handling and care of contaminated and injured personnel.

The EP Coordinator is responsible for the implementation of this procedure and for scheduling and providing training to offsite support agencies. Corporate EP is responsible for the Annual Offsite Agency Meeting.

B. REFERENCES

1. QEP 730-T4, Support Agency List.
2. GSEP Section 8.2, Training.
3. 10CFR50 App. E, Section IV.
4. QEP 730-S4, Emergency Preparedness Annual Audit.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. The Offsite Agency Meeting and the Offsite Agency Training shall be offered on an annual basis.
2. The Annual Offsite Agency Meeting should cover current issues in emergency planning of interest to the group.

- Clean up.

F. PROCEDURE

1. Offsite Agency Training.

- a. Determine agencies that will be invited to Station training using QEP 730-T4, Support Agency List. Make arrangements for use of facilities for the training.
- b. Draft and mail a training invitation letter to the support agencies to be invited.
- c. Prepare a course outline and handout material for the training covering topics outlined in section F.3.
- d. Document training attendance and file training attendance sheets and a copy of training materials in the Quad Cities Nuclear Station GSEP file.

2. Hospital and Ambulance Service Training.

- a. Verify that Corporate EP has offered training to the hospital and ambulance service for transport and medical treatment of contaminated injured personnel under audit form QEP 0730-S04.

G. CHECKLISTS

1. None.

H. TECHNICAL SPECIFICATION REFERENCES

1. None.

EMERGENCY PREPAREDNESS PROGRAM
DOCUMENT CONTROL AND REVIEW

A. PURPOSE

The purpose of this procedure is to describe the process for review, approval, and distribution of the GSEP Plan, Quad Cities Station Annex, Quad Cities Station (QEP) Emergency Procedures, agreement letters, and phone directories.

B. REFERENCES

1. GSEP, Section 8.5 Distribution, Review, and Updating of the GSEP, GSEP Annexes, and Corresponding Documents.
2. QCAP 1100-2, Station Procedure Distribution and In Plant Procedure Control.
3. AD-AA-101, Processing of NGG Procedures.
4. QEP 730-2, Offsite Support Agency Agreement Letters.
5. QEP 730-3, Emergency Preparedness Program Audits and Surveillances.
6. QEP 730-T1, Document Review Responsibilities.
7. QEP 730-T4, Support Agency List.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. None.

OFFSITE SUPPORT AGENCY
AGREEMENT LETTERS

A. PURPOSE

The purpose of this procedure is to provide criteria for establishing and documenting agreements with agencies that would support the Quad Cities Nuclear Generating Station during an accident.

Letters of Agreement are maintained with non-ComEd support groups as listed in the Quad Cities GSEP Annex.

The EP Coordinator is responsible for the implementation of this procedure.

B. REFERENCES

1. Generating Stations Emergency Plan (GSEP), Sections 4.5, 8.1.3 and 8.1.5.
2. GSEP Annex for Quad Cities Nuclear Power Station, Section 4.2.
3. QEP 730-T4, Support Agency List.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. Agreement letters are to be updated on a two-year cycle.
2. Letters of agreement are not required for State, Local, and Federal Agencies which have approved agency emergency plans which define response actions for the Quad Cities Nuclear Generating Station unless additional response actions are needed beyond the approved emergency plans.

F. PROCEDURE

1. The EP Coordinator should draft an agreement letter for each of the support agencies the station is responsible for, using QEP 730-T4, Support Agency List.
2. The agreement letters should include the type of support being requested.
3. Mail two copies of the agreement letter and a self-addressed stamped envelope to the support agencies. One copy is to be signed and retained by the agency and one is to be signed and returned to Quad Cities Station.

EMERGENCY PREPAREDNESS
PROGRAM AUDITS

A. PURPOSE

The purpose of this procedure is to insure that the audits required by GSEP are performed in accordance with the specified intervals. The EP Coordinator is responsible for implementing this procedure

B. REFERENCES

1. QEP 0710-01, GSEP Position Training Requirements.
2. QEP 0710-03, Offsite Support Agency Training.
3. CEPIP 1100-01, Exercise and Drill Program.
4. QEP 0730-02, Offsite Support Agency Agreement Letters.
5. QEP 0730-T01, Document Review Responsibilities.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. Deviation from the designated schedule must be approved by the EP Coordinator.
2. Each audit requirement shall be performed within the specified interval.

F. PROCEDURE

1. Perform program audits on or before the "Date Due" as indicated on QEP 0730-S01, QEP 0730-S02, QEP 0730-S03 and QEP 0730-S04, Emergency Preparedness Audits, unless otherwise authorized by EP Coordinator. Initial the "Initials" column upon satisfactory completion of the audit.
2. Enter the date on which the audit was performed in the "Date Performed" column.
3. If any discrepancies exist, notify EP Supervision as to action concerning disposition of the open item.
4. Retain any other documentation used in conducting the audit and turn over to EP Coordinator for retention purposes.

EMERGENCY PREPAREDNESS MONTHLY AUDIT
FOR THE MONTH OF _____

AUDIT REQUIREMENT	PROCEDURE REFERENCE	DATE DUE	DATE PERFORMED	INITIALS
MONTHLY COMMUNICATION TEST	CEPIP 1100-00			
ASSEMBLY PROGRAM UPLOAD TEST	N/A			
TSC - INSPECT SUPPLIES, DOCUMENTS, AND FACILITIES *	N/A			
OSC - INSPECT SUPPLIES, DOCUMENTS, AND FACILITIES *	N/A			
VERIFY PRE-RECORDED CALLOUT MESSAGE FOR "GROUP" PAGE	QEP 0300-04			
CONDUCT ANNOUNCED CAN SYSTEM TEST (VERIFY SCENARIO) #	QEP 0300-04			
CONDUCT ANNOUNCED TEST OF "GROUP" PAGE (1st WEDNESDAY AT NOON) #	N/A			
VERIFY OPERATION OF GSEP CELLULAR PHONES	N/A			
DRILLS/EXERCISES THIS MONTH (QAA 04-90-15)				
	Report Received	Open Items Tracked	Report Received	Open Items Tracked
- Augmentation Y/N	Y/N/NA	Y/N/NA	- Environs Y/N	Y/N/NA Y/N/NA
- HRSS Y/N	Y/N/NA	Y/N/NA	- Medical Y/N	Y/N/NA Y/N/NA
- HP Implant Y/N	Y/N/NA	Y/N/NA	- Exercise Y/N	Y/N/NA Y/N/NA
- Tabletop Y/N	Y/N/NA	Y/N/NA	- Pre-Exercise Y/N	Y/N/NA Y/N/NA

Reviewed By	Date	Initials
EP Coordinator		

* Inspection for overall facility cleanliness and organization
Test may be waived by EP Coordinator

PROCEDURE: QEP 0730-03

EMERGENCY PREPAREDNESS QUARTERLY AUDIT

QEP 0730-S02
Revision 10
Reference Use

FOR _____ QUARTER OF _____

AUDIT REQUIREMENT	QEP REFERENCE	DATE DUE	DATE PERFORMED	INITIALS
Review/Update the GSEP Organization Call List*	0730-T01			
Review/Update of Emergency Response Facilities Telephone Directory (Quad Cities Section)	0730-T01			
Review/Update Support Agency Phone Numbers (QCOA 010-6)	0730-T01			
TSC Emergency Equipment and Supplies Inventory	0600-S01			
OSC Emergency Equipment and Supplies Inventory	0600-S02			
First Aid and Decon Inventory	0600-S03			
Environs Sampling Inventory	0600-S04			
Hospital Radiological Emergency Inventory	0600-S05			
Relocation Center Inventory Checklist	0600-S07			
Review TSC/HRSS ventilation surveillance for necessity	QCTS 0420-1,2,3			
ERDS Testing	0300-05			

Reviewed by	Date	Initials
EP Coordinator		

*

EMERGENCY PREPAREDNESS SEMI-ANNUAL AUDIT
FOR THE _____ HALF OF _____ (YEAR)

AUDIT REQUIREMENT	PROCEDURE REFERENCE	DATE DUE	TARGET DUE DATE	DATE PERFORMED	INITIALS
Health Physics Drill Documentation	CEPIP 1100-01				
Offshift Augmentation Drill Documentation	CEPIP 1130-01				
Assembly Siren Testing	N/A				

Reviewed by _____	Date _____	Initials _____
EP Coordinator _____		

EMERGENCY PREPAREDNESS ANNUAL AUDIT

FOR _____ (YEAR)

AUDIT REQUIREMENT	PROCEDURE REFERENCE	DATE DUE	TARGET DUE DATE	DATE PERFORMED	INITIALS
Offsite Agency Meeting ⁽²⁾	QEP 0710-03				
Offsite Agencies Training ⁽¹⁾	QEP 0710-03				
Verify Completion of Hospital and Ambulance Service Training ⁽²⁾	QEP 0710-03				
Critique of GSEP Training Programs (Every 2 Years)	QEP 0710-01				
Confirmation (Agreement Letters) of Availability for Assistance of Offsite Agencies (Every 2 Years)	QEP 0730-T04				
News Media Training ⁽²⁾	GSEP 8.2				
Environmental Monitoring Drill	CEPIP 1100-01				
Medical Emergency Drill	CEPIP 1100-01				
Assembly and Accountability Drill	CEPIP 1100-01				
Annual GSEP Exercise: ⁽³⁾ • "Off-Year" Integrated Drill • Biennial Evaluated Exercise • "Off-Hours" Activation	CEPIP 1100-01				
Distribution of Information Booklet ⁽²⁾	N/A				

⁽¹⁾ Involves those organizations who potentially would need site access to provide assistance during an emergency (QEP 0730-T04).

⁽²⁾ Responsibility of Corporate EP. Station EP Coordinator shall verify and document completion.

⁽³⁾ Conducted "Off-Hours" (1800-0600 Hours) once every six years.

EMERGENCY PREPAREDNESS ANNUAL AUDIT
(Continued)

AUDIT REQUIREMENT	PROCEDURE REFERENCE	DATE DUE	TARGET DUE DATE	DATE PERFORMED	INITIALS
GSEP Manual Review ⁽²⁾	N/A				
Quad Cities GSEP Annex Review ⁽²⁾	N/A				
Review of QEPs (Every 2 Years)	0730-T01				
Review of QOA/QCOA 0010 Procedure Blocks (Every 2 Years)	0730-T01				
Review Completeness of Monthly, Quarterly, and Semi-Annual Audit Forms for Current Year.	0730-S01, S02 730-S03				
Annual Communications Drill	CEPIP 1100-01				
Verification of NARS "Backup" Phone Programming	N/A				
Training of Station Emergency Personnel	GSEP ACMI				

REVIEWED BY	DATE	INITIALS
EP Coordinator		

⁽²⁾ Responsibility of Corporate EP. Station EP Coordinator shall verify and document completion.

DOCUMENT REVIEW RESPONSIBILITIES

DOCUMENT	REVIEW CYCLE	RESPONSIBILITY FOR INITIATING CHANGES AND REVIEWS	RESPONSIBILITY FOR PERFORMING REVIEW	RESPONSIBILITY FOR APPROVAL	RESPONSIBILITY FOR DISTRIBUTION
1. GSEP Plan and Quad Cities GSEP Annex	Annually	Corporate Emergency Preparedness	Corporate Emergency Preparedness	PORC, NSRB, (if Revisions Made)	Corporate Emergency Preparedness
2. Quad Cities Emergency Procedures (QEP) and QCOA 0010 Block Procedures	Every Two Years	EP Coordinator	EP Coordinator	QCAP 1100-04	QCAP 1100-04
3. Emergency Response Facilities (ERF) Telephone Directory	Quarterly	Corporate Emergency Preparedness	EP Coordinator for Quad Cities Related Phone Numbers	Corporate Emergency Preparedness	Corporate Emergency Preparedness
4. Quad Cities GSEP Organization Call List	Quarterly	EP Coordinator	EP Coordinator	Station Manager	EP Coordinator
5. Key Phone Numbers and Checklists for Referenced QCOA 0010 Block Procedures	Quarterly	EP Coordinator	EP Coordinator	QCAP 1100-04	QCAP 1100-04
6. Agreement Letters	Every Two Years	QEP 0730-02	QEP 0730-02	N/A	N/A