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Control Copy Number: 1665
Transmittal Number: 0301-20315
Transmittal Date: 01-09-2003

To: DOC. CONTROL DESK

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Control Copy Number: 1665

Transmittal Number: 0301-20315

Transmittal Date: 01-09-2003

		Document		Sht/Sec	Changes	Rev	Status
TOC 1	TOC 2	Type	Number				
old	EPIB	PROC	RA-EP-02220			0001	APPROVED
new	EPIB	PROC	RA-EP-02220			0002	APPROVED
old	EPIB	PROC	RA-EP-02310			0001	APPROVED
new	EPIB	PROC	RA-EP-02310			0002	APPROVED
old	EPIC	PROC	RA-EP-02410			0003	APPROVED
new	EPIC	PROC	RA-EP-02410			0004	APPROVED
old	EPIC	PROC	RA-EP-02620			0001	APPROVED
new	EPIC	PROC	RA-EP-02620			0002	APPROVED
old	EPON	PROC	RA-EP-02805			0002	APPROVED
new	EPON	PROC	RA-EP-02805			0003	APPROVED
old	EPON	PROC	RA-EP-02807			0001	APPROVED
new	EPON	PROC	RA-EP-02807			0002	APPROVED

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02220

EMERGENCY CONTROL CENTER ACTIVATION AND RESPONSE

REVISION 02

Prepared by: J.M. Teal

Procedure Owner: Manager - Security

Effective Date: JAN 9 2003

Procedure Classification:

 X Safety Related
 Quality Related
 Non-Quality Related

LEVEL OF USE:
IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure outlines the steps required for activation, operation, and deactivation of the Emergency Control Center/Emergency Operations Facility (ECC/EOF) as performed by the Emergency Director Advisor, Emergency Planning Advisor, State and County Communicator and the NRC Liaison.

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

2.2.1 RA-EP-01500, Emergency Classification

2.2.2 RA-EP-02110, Emergency Notification

2.2.3 RA-EP-02010, Emergency Management

2.2.4 RA-EP-00420, Response to Prompt Notification System Malfunction

2.2.5 DBNPS Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 CENTRAL COMPUTER UNIT (CCU) – Is the personal computer that the Federal Signal Corporation's SFCDDWARE Software resides on and provides for the interface to the Remote Terminal Units (RTU) at each siren. This terminal provides for activation, polling and monitoring of the siren system. The CCUs are at the following locations: Ottawa County Sheriffs' Office, Davis-Besse Emergency Control Center/Emergency Operations Facility and at the Oak Harbor 500-Foot Tower Site.

3.2 COMPUTERIZED AUTOMATED NOTIFICATION SYSTEM (CANS) - A computer developed and used to control notification of designated personnel in the event of an emergency.

3.3 EMERGENCY CONTROL CENTER/EMERGENCY OPERATIONS FACILITY (ECC/EOF) - An area located on the first floor of the Davis-Besse Administration Building which is equipped to facilitate the control and coordination of emergency activities and assessment.

4.0 RESPONSIBILITIES

4.1 The Emergency Director Advisor is responsible for:

- 4.1.1 Assisting the Emergency Director in performing his emergency responsibilities.
- 4.1.2 Providing periodic approved information to the Company Spokesperson for release to the general public.
- 4.1.3 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.
- 4.2 The Emergency Planning Advisor is responsible for:
 - 4.2.1 Verifying proper operation of CANS and appropriate ECC/EOF staff notifications of the emergency classification.
 - 4.2.2 Verifying proper operation of the offsite sirens.
 - 4.2.3 Providing Initial Notifications and Periodic Updates to offsite agencies.
 - 4.2.4 Interacting with the liaisons that arrive at the ECC/EOF from the State of Ohio, and Ottawa and Lucas Counties.
- 4.3 The State and County Communicator is responsible for:
 - 4.3.1 Maintaining communication with Ottawa County, Lucas County and the State of Ohio.
 - 4.3.2 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.
- 4.4 The NRC Liaison is responsible for:
 - 4.4.1 Interfacing with the NRC.
 - 4.4.2 Interfacing with the NRC Incident Response Team when it arrives at Davis-Besse.
 - 4.4.3 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

5.0 INITIATING CONDITIONS

This procedure shall be used when:

- 5.1 An emergency has been declared and classified as an Alert, a Site Area Emergency, or a General Emergency.
- 5.2 Determined by the Emergency Director.

6.0 PROCEDURE

6.1 Emergency Director Advisor

- 6.1.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.
- 6.1.2 Assist the Emergency Director in turnover of responsibilities from the Control Room.
- 6.1.3 Follow events closely, be prepared to brief and assist the Emergency Director concerning procedural requirements relating to the emergency (see RA-EP-02010, Emergency Management).
- 6.1.4 Act as a liaison between the Emergency Director and Company Spokesperson.
- 6.1.5 Review checklists and notifications for completeness, as appropriate.
- 6.1.6 Assess the need to upgrade or downgrade the emergency in accordance with RA-EP-01500, Emergency Classification.

6.2 Emergency Planning Advisor

- 6.2.1 Upon arrival at the ECC/EOF, verify that CANS is operational.
 - a. Determine who has responded to CANS.
 - b. Notify the Emergency Offsite Manager of CANS status and status of the emergency response organization callout.
 - c. If necessary, initiate additional staff notifications.
- 6.2.2 Ensure status boards are updated, and assign arriving status board keepers to specific status boards.

NOTE 6.2.3

This public address system transmits to the Radiological Testing Laboratory (RTL), Technical Support Center, (TSC), Emergency Control Center/Emergency Operations Facility (ECC/EOF), the adjacent hallways, and the lunchroom at the North end of the DBAB First Floor.

6.2.3 Energize the Emergency Response Facility (ERF) PA System by:

- a. Plug the PA system jack into the ECC/EOF north wall. (Located to the left of the Dose Assessment Center sliding glass doors.)
- b. Depress the amplifier power "ON" button and observe that the power on light illuminates.
- c. Ensure that the tone switch is in the "DEFEAT" position (out).
- d. Make sure all other controls are at their assigned position, indicated by a red dot on each control.

NOTE 6.2.3.e

Microphones are located in the ECC/EOF and the TSC.

- e. Press the transmit button to make announcements.
- f. If problems are experienced, contact the Emergency Facilities Services Manager for assistance.

NOTE 6.2.4

When the siren monitoring program is on the "Map Display" screen, additional information about the colored dots can be obtained by opening the "Legend" Window. Detailed information about each siren can be obtained by positioning the pointer on the siren dot and left clicking the mouse.

- 6.2.4 From the ECC/EOF Central Computer Unit (CCU), review the siren status by:
- a. Obtaining a copy of the PNS Siren Computer Map Report Form (DBEP-051).
 - b. From the siren computer if not already selected, select the **Map** screen from the upper tool bar.
 - c. Observe the color of the "Map Display" dots and record the numbers of those sirens (dots) that are not solid green or solid blue on the PNS Siren Computer Map Report Form (DBEP-051).
 - d. Advise the Emergency Offsite Manager (EOM) of any abnormal indications.
 - e. With concurrence of the EOM, reset the "Map Display" by selecting **Reset Map** on the upper tool bar.
 - f. Periodically check the "Map Display" and report any changes to the EOM.
- 6.2.5 When the ECC/EOF is activated, assume responsibility for preparing required notifications to the State of Ohio, Ottawa County, and Lucas County.
- a. Ensure all Initial Notification and Periodic Update Forms are approved by the Emergency Offsite Manager and approved and initialed by the Emergency Director prior to transmittal to offsite agencies.

- b. Ensure an approved Initial Notification Form is transmitted to the offsite agencies in accordance with RA-EP-02110, Emergency Notification, within 15 minutes following:
 - 1. Change of the emergency classification
 - 2. Change of the protective action recommendations
 - c. Ensure an approved Periodic Update Form is provided to offsite agencies as conditions change or at least hourly in accordance with RA-EP-02110, Emergency Notification.
 - d. Notify INPO of the emergency declaration, or change in classification using the Emergency Plan Telephone Directory.
- 6.2.6 If the emergency classification changes, notify the ERO in accordance with RA-EP-02110, Emergency Notification.
- 6.2.7 Telecopy meteorological condition changes to the State of Ohio, and Ottawa and Lucas Counties.

NOTE 6.2.8

The Davis-Besse Prompt Notification System is comprised of 54 sirens. Sirens 1-5 are located in Jerusalem Township in Lucas County; the remaining 49 sirens are in Ottawa County. Ottawa County has 32 non-EPZ sirens in addition to the 49 EPZ sirens. Sirens with numbers that are greater than 90 are Ottawa County EPZ sirens. For additional information reference procedure, RA-EP-00420, Response to Prompt Notification System Malfunction.

- 6.2.8 When requested by Ottawa or Lucas County and with the EOM's concurrence, use the CCU to determine the status of siren activation:
- a. Obtain a copy of the PNS Siren Computer Map Report form (DB-EP-051).
 - b. Select **Polling** from the upper tool bar. Left clicking on **Polling** will initiate the polling sequence.

- c. After the polling is complete (approximately 10 minutes), observe the color of the "Map Display" dots and record the numbers of those sirens (dots) that are not solid green on the PNS Siren Computer Map Report Form (DB-EP-051).
 - d. Advise the Emergency Offsite Manager (EOM) of any abnormal indications. Then communicate this information to the requesting offsite agency.
 - e. With concurrence of the EOM reset the "Map Display" by selecting **Reset Map** on the upper tool bar. All siren dots should change to blue.
 - f. Periodically check the "Map Display" and report any changes to the EOM.
- 6.2.9 Ensure protective actions implemented by the State of Ohio are posted on the Radiological Status Board.
- 6.2.10 Ensure protective actions implemented by the Counties are posted on the Protective Actions Taken Status Board.
- 6.2.11 Provide periodic briefings to and answer questions from the EMA Liaisons in the ECC/EOF.
- 6.2.12 Provide assistance to the Emergency Offsite Manager, as needed.
- 6.2.13 Upon deactivation of the ECC/EOF, inform the State of Ohio, Ottawa and Lucas Counties using an Initial Notification Form in accordance with RA-EP-02110, Emergency Notification.
- 6.2.14 Notify the ERO of the "All Clear" in accordance with RA-EP-02110, Emergency Notification.

6.3 State and County Communicator

- 6.3.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the DBNPS Emergency Plan Telephone Directory.
- 6.3.2 Establish and maintain communications with Ottawa and Lucas Counties, and the State of Ohio.

6.4 NRC Liaison

- 6.4.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the DBNPS Emergency Plan Telephone Directory.
- 6.4.2 When notified that an NRC Incident Response Team is being sent to Davis-Besse:
 - a. Determine as much information as possible about the response team:
 - 1. Director of Site Operations
 - 2. Number of Responders
 - 3. Estimated Time of Arrival
 - b. Advise the NRC of any special route considerations and recommend that the team report to the DBAB for their initial briefing.
 - c. Notify the following of the pending arrival:
 - 1. Emergency Director
 - 2. Emergency Offsite Manager
 - 3. Emergency Plant Manager
 - 4. Emergency Security Manager
 - 5. Company Spokesperson
 - d. Call in additional personnel as required for:
 - 1. Escorts
 - 2. Technical Briefers
 - e. Request assistance from the Emergency Facilities Services Manager to set up the NRC work areas.

7.0 FINAL CONDITIONS

This procedure shall be terminated when:

- 7.1 Plant conditions are such that the emergency has been downgraded to Unusual Event, or terminated; and the ECC/EOF has been deactivated.
- 7.2 All equipment and useable supplies have been returned to their storage location.
- 7.3 The ECC/EOF staff has been relieved of all duties associated with the operation of the ECC/EOF.
- 7.4 The Company Spokesperson has been fully briefed on plant status and planned recovery actions.

8.0 RECORDS

- 8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

- 8.1.1 None

- 8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

- 8.2.1 None

COMMITMENTS

<u>Section</u>	<u>Reference</u>	<u>Comments</u>
None	None	None

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02310

TECHNICAL SUPPORT CENTER ACTIVATION AND RESPONSE

REVISION 02

Prepared by: J.M. Teal

Procedure Owner: Manager - Security

Effective Date: JAN 9 2003

Procedure Classification:

X Safety Related

Quality Related

Non-Quality Related

LEVEL OF USE:

IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure outlines the steps required for activation, operations, and deactivation of the Technical Support Center (TSC).

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

2.1.1 RA-EP-02010, Emergency Management

2.1.2 RA-EP-02320, Emergency Technical Assessment

2.1.3 RA-EP-02510, Emergency Security Organization Activation and Response

2.1.4 RA-EP-02610, Emergency Radiation Protection Organization Activation and Response

2.1.5 RA-EP-02720, Recovery Organization

2.1.6 DBNPS Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 **CLOSED CIRCUIT TELEVISION (CCTV)** – A pre-established connection that when a video camera is attached to the cable in the Control Room, and a monitor is attached in the TSC, Control Room activities can be observed from the TSC.

3.2 **COMPUTERIZED AUTOMATED NOTIFICATION SYSTEM (CANS)**
A computer assisted system that has the following capabilities:

3.2.1 Contacting personnel through the use of pagers or the telephone system.

3.2.2 Accepting calls from authorized emergency responders.

3.2.3 Maintaining an updated list of Emergency Responders that have or have not responded.

3.3 **DATA ACQUISITION AND DISPLAY SYSTEM (DADS)** – A computer system that acquires and displays plant data. This system provides data to the Safety Parameter Display System (SPDS), Operator Aids, Emergency Response Data System (ERDS) and the Nuclear Data System (NDS).

- 3 4 EMERGENCY RESPONSE DATA SYSTEM (ERDS) – A system that is turned on during the activation of the TECHNICAL SUPPORT CENTER (TSC) that electronically transmits 54 plant parameters to the Nuclear Regulatory Commission Emergency Operating Center. This data may then be retransmitted to other agencies and the State of Ohio.
- 3 5 ENGINEERING TEAM - A team of engineers and/or technicians selected from the appropriate work groups and disciplines to evaluate specific accident conditions and propose solutions.
- 3 6 OWNER-CONTROLLED AREA (OCA) – The area contiguous with the PROTECTED AREA, designated by the owner organization to be patrolled for security purposes.
- 3.7 PROTECTED AREA (PA) – An area within the OWNER-CONTROLLED AREA encompassed by physical barriers, and to which access is controlled for security purposes.
- 3.8 TECHNICAL SUPPORT CENTER (TSC) – An area within the OWNER-CONTROLLED AREA, which has the capability to display and transmit plant status information to individuals who are knowledgeable of, and responsible for engineering and management support of reactor operations in the event of an emergency situation.
- 3 9 EMERGENCY CONTROL CENTER/EMERGENCY OPERATIONS FACILITY (ECC/EOF) – An area located on the first floor of the Davis-Besse Administration Building which is equipped to facilitate the control and coordination of emergency activities and assessment.

4.0 RESPONSIBILITIES

- 4.1 The TSC Engineering Manager shall be responsible for:
 - 4.1.1 Implementation of this procedure.
 - 4.1.2 Appointing a Lead for the Operations and Engineering support groups as required.
 - 4.1.3 Coordinate TSC Engineering activities.
 - 4.1.4 Calling out emergency response organization staff as specified in the DBNPS Emergency Plan Telephone Directory upon a failure of the Computerized Automated Notification System (CANS).
- 4.2 The TSC Engineering Lead is responsible for:
 - 4.2.1 Assisting the TSC Engineering Manager.
 - 4.2.2 Coordination of the TSC Engineering group activities.

- 4.2.3 Activation of the Emergency Response Data System (ERDS).
- 4.2.4 Setup of CCTV when requested.
- 4.2.5 Calling in additional staff as required.
- 4.3 The TSC Operations Lead is responsible for:
 - 4.3.1 Assisting the TSC Engineering Manager.
 - 4.3.2 Coordinating the activities of the TSC Operations group activities.
 - 4.3.3 Ensuring that the TSC extension of the Technical Data Loop is manned.
 - 4.3.4 Calling in additional staff as required.
- 4.4 The Recovery Advisor is responsible for:
 - 4.4.1 Assisting the Emergency Plant Manager as directed.
 - 4.4.2 Collecting plant and equipment status in preparation for entering the recovery phase.
- 4.5 The Emergency RP Manager responsibilities are described in RA-EP-02610, Emergency Radiation Protection Organization Activation and Response.
- 4.6 The Emergency Security Manager responsibilities are described in RA-EP-02510, Emergency Security Organization Activation and Response.
- 4.7 The Emergency Plant Manager responsibilities are described in RA-EP-02010, Emergency Management.

5.0 INITIATING CONDITIONS

- 5.1 Any of the following emergency conditions have been declared:
 - 5.1.1 Alert
 - 5.1.2 Site Area Emergency
 - 5.1.3 General Emergency
- 5.2 As determined by the Emergency Director.

6.0 PROCEDURE

NOTE 6.1

The TSC should be activated prior to the Emergency Director responsibilities being transferred to the TSC/ECC/EOF emergency response facilities.

6.1 Activation

6.1.1 The TSC Engineering Manager shall:

- a. Ensure personnel are present in the TSC who are capable of performing the following functions:
 1. TSC Engineering Manager
 2. One – TSC Operations or Severe Accident Management (SAM) Engineer
 3. One – TSC Engineer (Mechanical, Electrical or I&C)
 4. Core/Thermal Hydraulic Engineer
 5. Emergency RP Manager
- b. On failure of the Computerized Automated Notification System (CANS) call out emergency response organization staff as specified in the DBNPS Emergency Plan Telephone Directory.
- c. Appoint a lead for the Operations and/or the Engineering groups if appropriate for the situation.

NOTE 6.1.1.d

The ERDS System should be placed in service within one hour of declaration of an Alert, Site Area Emergency or General Emergency.

- d. Verify that the following equipment is energized and made ready for use:
 - 1. Emergency Response Data System (ERDS).
 - 2. Data Acquisition and Display System (DADS).
- e. Verify that the TSC has established communications with the Control Room, Operations Support Center and the Emergency Control Center/Emergency Operators Facility (ECC/EOF). The Technical Data Loop is the preferred method.
- f. Direct that available information is placed on the TSC status boards.
- g. Direct that a formal log be initiated for the TSC. Normally this log is maintained by the TSC Administrative Assistant.
- h. Brief the staff that is present and advise them that you are preparing to activate the TSC.
- i. Using the Emergency Response Facility (ERF) Public Address System on the Emergency Plant Manager's desk, make the following announcement twice:

**"THE TECHNICAL SUPPORT CENTER IS
ACTIVATED AT (time) AND (TSC Engineering
Manager's Name) IS THE TSC ENGINEERING
MANAGER.**

6.1.2 The TSC Engineering Manager, or if manned, the TSC Engineering Lead shall:

- a. Energize or make ready the following equipment in the TSC:
 1. Activate Emergency Response Data System (ERDS) utilizing Attachment 1, ERDS Activation, within one hour of event classification. If the ERDS system fails, notify the NRC Liaison in the ECC/EOF and begin sending the data every 15 minutes to the NRC by facsimile machine.
 2. Energize the Data Acquisition and Display System (DADS) terminals.
 3. Energize the electronic white boards.
 4. Other TSC equipment as required.
- b. Assign personnel to operate/monitor the Data Acquisition and Display System (DADS) terminals as needed.
- c. Communicate activation status to the TSC Engineering Manager.
- d. With concurrence of the TSC Engineering Manager callout additional engineering staff as required by the situation.

6.1.3 The TSC Engineering Manager, or if manned, the TSC Operations Lead shall:

- a. Assign an individual to man the Technical Data Loop telephone at the TSC Operations Engineering work area.
- b. Assign personnel to operate/monitor the Data Acquisition and Display System (DADS) terminals as need.
- c. Communicate activation status to the TSC Engineering Manager.
- d. With concurrence of the TSC Engineering Manager callout additional engineering staff as required by the situation.

6.1.4 The Recovery Advisor shall:

- a. Assist the TSC Manager as directed with the activation of the TSC.

6.2 Operation

6.2.1 The TSC Engineering Manager shall:

- a. Establish TSC objectives that are consistent and supportive of the event priorities established by the Emergency Director.
- b. Coordinate the development of engineering teams to evaluate event issues.
- c. Ensure adequate engineering support is available to perform engineering assessments.
- d. Coordinate additional staff callout with the Emergency Offsite Manager (EOM) and the Emergency Security Manager.
- e. Ensure RA-EP-02320, Emergency Technical Assessment is implemented as applicable.
- f. Ensure key TSC objectives and activities are tracked on the Problem Analysis Status Board.
- g. Periodically review TSC status boards for accuracy.
- h. Coordinate periodic TSC briefings with the Emergency Plant Manager. These briefing should include at a minimum, emergency classification and prognosis, potential problems, developments, required actions, review of the Problem Analysis Status Board entries and establishment TSC priorities. Briefs should occur approximately ever 60 minutes or after a significant change in event conditions. Each briefing should be summarized in the TSC formal log.
- i. Activate an alternate TSC when notified that continued DBAB operation may be threatened. The selected alternate location should have access to data, adequate telephones and reference material.
- j. Ensure detail records of TSC activities are maintained.

6.2.2 The TSC Engineering Manager, or if manned, the TSC Operations Lead shall:

- a. Coordinate the assessment activities of the technical staff.
- b. Assign activities to that team and/or team member most capable of analyzing the particular problem.
- c. Perform TSC assessment activities in accordance with RA-EP-02320, Emergency Technical Assessment.
- d. Ensure assigned status boards and logs are accurately maintained
- e. Make periodic status reports to the TSC Engineering Manager.
- f. Immediately advise the Dose Assessment Coordinator of any change or potential change in:
 - 1. Radiological release path(s)
 - 2. Release rate(s)
 - 3. Source term
 - 4. Release duration
- g. When directed, setup the Closed Circuit Television (CCTV) System between the Control Room and the TSC as per Attachment 2, Closed Circuit Television (CCTV) Operation.

6.3 Deactivation

6.3.1 The TSC Engineering Manager shall ensure the following is performed when directed by the Emergency Director to deactivate the TSC:

- a. Implement RA-EP-02720, Recovery Organization
 1. Complete the Deactivation Report as per RA-EP-02720.
 2. Complete applicable sections of the Recovery Worksheet (DBEP-063).
 3. Review those sections of RA-EP-02720, Recovery Organization, that are applicable to the Engineering Coordinator in preparation for turnover of ongoing TSC issues.
- b. Ensure that all ongoing TSC issues are turned over to the appropriate party.
- c. Ensure all parties notified by the TSC during the event are advised that the TSC is deactivating.
- d. Coordinate the review and collection of TSC logs and records. Completed records will be forwarded to the Emergency Preparedness Unit.
- e. Ensure that all TSC equipment and unused supplies have been returned to the normal standby configuration and/or location.

7.0 FINAL CONDITIONS

This procedure shall be deactivated when:

- 7.1 The indicated plant conditions are such that the emergency has been downgraded to an Unusual Event or terminated:
 - 7.1.1 AND the TSC has been deactivated,
 - 7.1.2 AND TSC personnel relieved of all duties,
 - 7.1.3 AND organizations that were notified by the TSC during the event are advised that the TSC is deactivated.
- 7.2 The Deactivation Report has been completed as per RA-EP-02720, Recovery Organization.
- 7.3 All records generated during the operations of the TSC have collected and forwarded to the Emergency Preparedness Unit.
- 7.4 All equipment and unused supplies have been returned to the normal standby configuration and/or location.

8.0 RECORDS

- 8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured and submitted to Nuclear Records Management in accordance with NG-NA-00106:
 - 8.1.1 None
- 8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management in accordance with NG-NA-00106:
 - 8.2.1 None

ATTACHMENT 1
EMERGENCY RESPONSE DATA SYSTEM (ERDS) ACTIVATION
Page 1 of 1

Overview

The DADS system will continuously send 54 points of plant data to the NRC when the ERDS system is activated. This data is hard copied every 15 minutes in the DADS computer room and may be faxed to the NRC if the computer link fails.

NOTE

If this system fails, immediately advise the Emergency Control Center/Emergency Operations Facility (ECC/EOF) NRC Liaison.

Activation

To send data to the NRC from one of the VT220 terminals in the TSC perform the following:

1. Turn the terminal Power Switch "ON".
2. Press "Return".
3. At the "Local>" prompt, enter "C" and then press "Return".
4. At the "Username" prompt, enter "ERDS" and then press "Return".
5. At the "Password" prompt, enter "ERDS" and then press "Return".
6. Enter "1" and then press "Return"

Deactivation

To log off the system, follow the computer instructions.

ATTACHMENT 2
CLOSED CIRCUIT TELEVISION (CCTV) OPERATION

Page 1 of 1

Overview

The Closed Circuit Television (CCTV) is a pre-established cable between the Control Room and the TSC that allows a television and VCR to be attached in the TSC and a standard video camera to be setup in the Control Room. The CCTV can be used to record and monitor special evolutions that are taking place in the Control Room.

Setup

- 1) Obtain the following items:
 - a) TSC components:
 - i) Television (TV)
 - ii) Video Cassette Recorder (VCR) equipped with a single male pin connector.
 - iii) Blank VCR
 - b) Control Room components:
 - i) Standard VHS video camera.
- 2) CCTV setup:
 - a) TSC setup:
 - i) Located along the east wall of the TSC protruding out of the floor near the TSC fax machine, are the cable marked for the CCTV circuit. Plug in the audio and video cable to the input jack on the VCR
 - b) Control Room setup:
 - i) Locate the audio and visual CCTV circuits along the south wall of the Control Room near the Unit Supervisor's desk.
 - ii) Connect the audio and visual connections to the camera and adjust the camera to send the required signal.
 - c) Establish communication as necessary with the Control Room camera operator.

COMMITMENTS

<u>Section</u>	<u>Reference</u>	<u>Comments</u>	
Entire Procedure	Q 03111 Q 02850	Positions descriptions and responsibilities	
6.1.2.a.1	O 016075 O 016073 O 016249 O 015931	Emergency Response Data System (ERDS)	1
6.1.1.a.2	O 17948	Assess Response to Severe Accident Conditions	1

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02410

OPERATIONS SUPPORT CENTER ACTIVATION AND RESPONSE

REVISION 04

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Procedure Owner: Manager - Security

Effective Date: JAN 9 2003

Procedure Classification:

☒ Safety Related
☐ Quality Related
☐ Non-Quality Related

LEVEL OF USE:
IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure outlines the steps required for activation, operation, and deactivation of the Operations Support Center (OSC).

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.1.2 DBNPS Emergency Plan Telephone Directory

2.2 Implementation

2.2.1 RA-EP-00600, Emergency Facilities and Equipment Maintenance Program

2.2.2 RA-EP-02420, Search and Rescue

2.2.3 RA-EP-02520, Assembly and Accountability

2.2.4 RA-EP-02530, Evacuation

2.2.5 RA-EP-02610, Emergency Radiation Protection (RP) Organization Activation and Response

2.2.6 RA-EP-02710, Reentry

2.2.7 RA-EP-02720, Recovery Organization

3.0 DEFINITIONS

3.1 Corrective Action - A measure taken to reduce or terminate an emergency.

3.2 Operations Support Center (OSC) - A location within the Protected Area where Emergency Response Teams (ERTs) can be assembled, briefed and coordinated during an emergency.

3.3 Three-Way Ringdown Phone Circuit (Green Phone) - A dedicated phone circuit which connects the following parties:

3.3.1 OSC - OSC Manager

3.3.2 Technical Support Center (TSC) - Emergency Plant Manager (EPM)

3.3.3 Control Room (CTRM) - Emergency Assistant Plant Manager (EAPM)

4.0 RESPONSIBILITIES

- 4.1 The OSC Manager shall be responsible for:
 - 4.1.1 Ensuring the implementation of this procedure.
 - 4.1.2 Reporting to the EPM and coordinating with the TSC staff to reduce the severity of the event.
 - 4.1.3 Ensuring the Emergency Response Teams (ERTs) are adequately staffed and available when required by the EPM.
 - 4.1.4 Coordinating and directing emergency maintenance and modification activities.
 - 4.1.5 Ensuring the OSC Radiation Protection (RP) Coordinator provides adequate RP support for OSC activities according to RA-EP-02610, Emergency RP Organization and Activation.
 - 4.1.6 Relocating the OSC when directed by the EPM
- 4.2 The Assistant OSC Manager shall be responsible for:
 - 4.2.1 Reporting to the OSC Manager.
 - 4.2.2 Interfacing with the OSC Materials Manager to ensure adequate emergency equipment and supplies are available to support ERT corrective actions
 - 4.2.3 Assigning essential personnel to the ERTs.
 - 4.2.4 Interfacing with the OSC RP Coordinator to ensure radiological support for ERTs.
 - 4.2.5 Ensuring the ERTs are adequately.
 - a. Briefed before each corrective action.
 - b. Debriefed after each corrective action.
 - 4.2.6 Assuming the duties of the OSC Manager in the absence of the OSC Manager.
- 4.3 The OSC Materials Manager shall be responsible for:
 - 4.3.1 Reporting to the OSC Manager
 - 4.3.2 Providing emergency equipment and supplies to support the needs of the ERTs.
 - 4.3.3 Ensuring adequate warehouse personnel are available to support the procurement and delivery of needed emergency supplies and equipment.

- 4.4 The OSC Logkeeper shall be responsible for:
 - 4.4.1 Reporting to the OSC Manager
 - 4.4.2 Calling out emergency staff as specified in the call tree section of the DBNPS Emergency Plan Telephone Directory upon a failure of the Computerized Automated Notification System (CANS).
 - 4.4.3 Maintaining the OSC log.
- 4.5 The OSC Team Briefer/Debriefers shall be responsible for:
 - 4.5.1 Reporting to the Assistant OSC Manager
 - 4.5.2 Adequately briefing ERTs before every corrective action.
 - 4.5.3 Adequately debriefing ERTs after every corrective action.
- 4.6 The Chemistry Technicians shall be responsible for sampling and analyzing various plant systems when directed.
- 4.7 The OSC Personnel Pool shall be responsible for the manning of the ERTs and other supporting roles.

5.0 INITIATING CONDITIONS

- 5.1 This procedure shall be activated at the discretion of the Emergency Director (ED) or when any of the following have been declared:
 - 5.1.1 Alert
 - 5.1.2 Site Area Emergency
 - 5.1.3 General Emergency

6.0 PROCEDURE

Steps in this procedure may be performed simultaneously.

6.1 OSC Manager

6.1.1 Activation

- a. Report to the OSC and inform the EPM of arrival.
- b. Obtain a turnover briefing from on shift maintenance personnel or the ED.
- c. Assess the need for personnel in addition to the minimum staff required for activation in Step 6.1.1.d.
- d. Ensure the following minimum staff required for activation reports to the OSC, unless engaged in an emergency corrective action.
 - 1. Two Electrical Maintenance individuals.
 - 2. Two I&C Maintenance individuals.
 - 3. Two Mechanical Maintenance individuals.
 - 4. OSC RP Coordinator.
 - 5. Two RP Technicians.
 - 6. Chemistry Technician
- e. Ensure adequate staffing of the RP Organization by the OSC RP Coordinator in accordance with RA-EP-02610, Emergency RP Organization Activation and Response.

NOTE 6.1.1 f.

Deviations may be made to DBEP-056, OSC Layout at the OSC Manager's discretion.

- f. Rearrange furniture and place equipment according to DBEP-056, Operations Support Center Layout. Remove all unnecessary furniture to avoid inhibiting OSC activities
- g. Ensure communications are established and maintained with the Control Room (CTRM) and Technical Support Center (TSC).

- h. IF additional communications are necessary,
THEN utilize the Centrex conference call feature.
- i. Ensure the OSC status boards are initiated and maintained and the OSC activities are recorded in the log book by the OSC Log Keeper.
- j. Contact the TSC using the Three-Way Ringdown Phone Circuit (green phone) or other available phone circuit to obtain an update of the emergency conditions.
- k. WHEN the minimum OSC staff is available
AND the OSC communications are established,
THEN announce that the OSC is activated
AND inform the EPM.
- l. Provide a briefing to the OSC personnel on initial conditions and expected actions.

6.1.2 Operation

- a. Ensure that all needed OSC personnel have been notified and report to the OSC. In addition to the personnel listed in 6.1.1.d., the OSC staff includes:
 - 1. OSC Manager
 - 2. Assistant OSC Manager
 - 3. OSC Operations Advisor
 - 4. Two OSC Team Briefer/Debriefers
 - 5. OSC Communicator
 - 6. OSC Document Control Clerk
 - 7. Plant Engineers as needed
 - 8. Operations Shift personnel (not in Control Room or assigned to specific tasks)
 - 9. Maintenance Pool personnel
 - 10. OSC Log Keeper

- b. IF OSC personnel can NOT be contacted,
THEN contact the Emergency Offsite Manager in the Emergency Control Center/Emergency Operations Facility (ECC/EOF),
AND request an update on the response of essential personnel.
- c. Obtain keys as required for plant access from the Shift Manager
- d. Direct the OSC RP Coordinator to perform periodic OSC radiological habitability surveys in accordance with RA-EP-02610, Emergency RP Organization Activation and Response.
- e. IF radiological conditions indicate that the habitability criteria listed in RA-EP-02610, Emergency RP Organization Activation and Response will be exceeded,
THEN inform the EPM,
AND make preparations to relocate the OSC.
- f. IF directed by the EPM to relocate the OSC,
THEN evaluate the following conditions prior to the move
 - 1. Location
 - Adequate access to the plant
 - Advisable to be located within the Protected Area
 - Upwind from the release location
 - 2. Communications capabilities should include at least three telephone circuits
 - 3. Physical size: space for approximately 35 people
 - 4. Provide access to appropriate reference materials, tools, safety equipment, etc.
 - 5. Habitability Requirements:
 - Current radiological survey of the area.
 - Adequate ventilation.
- g. Ensure adequate staffing for the following:
 - 1. First aid support
 - 2. Emergency maintenance support
 - 3. Communications support
 - 4. Fire fighting support (after the additional operation shift arrives)
 - 5. Search and Rescue.

- h. Give priority to requests for operations personnel performing corrective actions.
- i. Approve and dispatch ERTs as necessary, to support the emergency response in accordance with Section 1 (Page 1 of 2) of DBEP-024, Emergency Team Briefing/Debriefing Form.
- j. Coordinate and direct maintenance and equipment modification activities in support of corrective actions or system modification requests directed by the EPM.
- k. Update the EPM periodically on current plant conditions and current corrective actions.
- l. Ensure that the OSC Status Boards are continually updated to reflect current plant conditions and a log is maintained of OSC activities.
- m. Periodically brief the OSC personnel on current emergency conditions.
- n. Assess additional manpower requirements before dismissal of personnel.
- o. Coordinate with the Emergency Security Manager to ensure personnel accountability.
REFER TO RA-EP-02520, Assembly and Accountability.
- p. IF station evacuation is initiated,
THEN REFER TO RA-EP-02530, Evacuation.
- q. IF personnel are missing,
THEN REFER TO RA-EP-02420, Search and Rescue.
- r. IF reentry is initiated,
THEN REFER TO RA-EP-02710, Reentry.
- s. IF conditions have stabilized and are improving
THEN REFER TO RA-EP-02720, Recovery Organization.

6.1.3 Deactivation

- a. Deactivate the OSC when directed by the EPM.
- b. Ensure all assigned tasks have been completed and all ERTs have been debriefed.
- c. Perform any necessary reentry actions in accordance with RA-EP-02710, Reentry.
- d. Ensure all emergency equipment and supplies have been replaced in their specific storage locations.

- e. Ensure the emergency equipment is inventoried according to RA-EP-00600, Emergency Facilities and Equipment Maintenance Program, and report all Emergency Preparedness equipment or procedure deficiencies to the Supervisor - Emergency Preparedness
- f. Complete required actions as described in RA-EP-02720, Recovery Organization.
- g. Review records to ensure completeness, and forward all records to the Supervisor - Emergency Preparedness for transmittal to Nuclear Records Management.

6 2 Assistant OSC Manager

6 2.1 Activation

- a. Report to the OSC and inform the OSC Manager of arrival.
- b. Receive a briefing from the OSC Manager.
- c. IF the OSC Manager has NOT arrived, THEN assume the duties of the OSC Manager.
- d. Ensure the Gai-tronics speaker is adjusted to a level that can be heard in the OSC.

6 2.2 Operation

- a. Establish the following ERTs as necessary using qualified personnel.
 - 1. Fire Brigade Team
 - 2. First Aid Team
 - 3. Search and Rescue Team
 - 4. Emergency Repair/Operations Team
 - 5. Reentry Team
 - 6. Standby Reentry Team

NOTE 6 2.2 b

Give priority to the Emergency Operation Teams
when performing Steps b. through f

- b. Appoint a team leader for each ERT.

- c. Two dedicated members should be assigned to each team.
- d. Ensure the OSC RP Coordinator is notified before a team briefing begins so that radiological concerns and conditions can be addressed during the team briefing.
- e. Ensure that each ERT is briefed before every corrective action.
- f. Ensure the following is logged on the ERT Assignment Board:
 - 1. Team No.
 - 2. Team Members
 - 3. Dose (mrem)
 - 4. Task
 - 5. Location
- g. Ensure a debriefing is conducted as each team returns to the OSC.
- h. For Post Accident Sampling System (PASS) samples, contact the following:
 - 1. OSC RP Coordinator for radiological support.
 - 2. Emergency RP Manager for technical expertise.
 - 3. Adequate Chemistry Technicians to perform sampling.
- i. Discuss additional equipment and supply needs with the OSC Materials Manager.

6.2.3 Deactivation

- a. Ensure all ERTs have returned to the OSC and have been debriefed.
- b. Deactivate the ERTs when directed by the OSC Manager.
- c. Document and report any procedural or equipment deficiencies to the OSC Manager in accordance with RA-EP-02720, Recovery Organization.
- d. Forward all records to the OSC Manager for review.

6.3 OSC Materials Manager

6.3.1 Activation

- a. Inform the OSC Manager and Radiological Testing Laboratory (RTL) Coordinator of your arrival and location. Request that your name be placed on the OSC Emergency Organization Status Board
- b. Receive a briefing from the OSC Manager or Assistant OSC Manager
- c. Inform the RTL Coordinator about the number of warehouse personnel, and their location so that required dosimetry can be issued.
- d. Ensure adequate warehouse personnel are available to support the procurement and delivery of needed emergency supplies and equipment.
- e. Inform incoming warehouse personnel to report to the RTL for required dosimetry before proceeding to the warehouse.

6.3.2 Operation

- a. Interface with the OSC Manager and Assistant OSC Manager to provide emergency supplies and equipment when needed.
- b. Interface with the RTL Coordinator to ensure the warehouse is surveyed for radiological habitability when necessary.

6.3.3 Deactivation

- a. Return warehouse personnel supporting the emergency to normal operation.
- b. Document and report any procedural or equipment deficiencies to the OSC Manager in accordance with RA-EP-02720, Recovery Organization
- c. Forward all records generated during the emergency to the OSC Manager for review

6.4 OSC Team Briefer/Debriefer

6.4.1 Activation

- a. Report to the OSC and inform the Assistant OSC Manager of arrival
- b. Receive a briefing from the OSC Manager or Assistant OSC Manager

6.4.2 Operation

- a. Ensure the OSC RP Coordinator is notified before a team briefing begins so that radiological concerns and conditions can be addressed during the team briefing.
- b. Adequately brief ERTs before every corrective action using DBEP-024, Emergency Team Briefing/Debriefing Form.
- c. Adequately debrief ERTs when the team returns to the OSC using DBEP-024, Emergency Team Briefing/Debriefing Form.
- d. Ensure the OSC RP Coordinator is informed of results of corrective actions performed in the Radiologically Restricted Area (RRA) and complete DBEP-024, Emergency Team Briefing/Debriefing Form.

6.4.3 Deactivation

- a. Ensure DBEP-024, Emergency Team Briefing/Debriefing Form is completed.
- b. Document and report any procedural or equipment deficiencies to the OSC Manager in accordance with RA-EP-02720, Recovery Organization.
- c. Forward all records to the OSC Manager for review.

6.5 Chemistry Technicians

6.5.1 Activation

- a. Report to the OSC and inform the Assistant OSC Manager of arrival.
- b. Receive briefing from the OSC Manager or Assistant OSC Manager.

6.5.2 Operation

- a. Sample and analyze various plant systems including PASS samples when required.
- b. Interface with the Emergency RP Manager for technical expertise when required.
- c. Report all sample results to the OSC Manager.
- d. Update Emergency RP Manager on sample results.

6.5.3 Deactivation

- a. Document and report any procedural or equipment deficiencies to the OSC Manager in accordance with RA-EP-02720, Recovery Organization
- b. Forward all records to the OSC Manager for review.

6.6 OSC Logkeeper

6.6.1 Activation

- a. Report to the OSC and inform the Assistant OSC Manager of arrival.
- b. Receive a briefing from the OSC Manager or Assistant OSC Manager.
- c. On failure of CANS, call out emergency staffing as specified in the call tree section of the EPTD.

6.6.2 Operation

- a. Maintain an accurate log of OSC activities. Capture and record key decisions and events such as
 1. Equipment repairs
 2. Personnel injuries
 3. Emergency dose authorizations
 4. Potassium Iodide (KI) issuance.
 5. Modifications to the plant.

6.6.3 Deactivation

- a. Review the OSC log for readability and completeness.
- b. IF the OSC log requires alterations for clarifications, THEN enter the missing material as a late entry (L E.).
- c. Document and report any procedural or equipment deficiencies to the OSC Manager in accordance with RA-EP-02720, Recovery Organization.
- d. Forward all records to the OSC Manager for review.

7.0 FINAL CONDITIONS

- 7.1 The emergency has been downgraded to an Unusual Event or terminated and the OSC has been deactivated and OSC personnel relieved of all duties.
- 7.2 All records generated during the operation of the OSC have been reviewed and forwarded to the Supervisor - Emergency Preparedness by the OSC Manager.
- 7.3 All equipment and reusable supplies have been returned to their storage locations in accordance with RA-EP-00600, Emergency Facilities and Equipment Maintenance Program.

8.0 RECORDS

- 8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106.

- 8.1.1 Emergency Team Briefing/Debriefing Form (DBEP-024)
- 8.1.2 OSC Log

- 8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management in accordance with NG-NA-00106.

- 8.2.1 None

COMMITMENTS

Step Number	Reference	Comments
4 1	TERMS O 05726	OSC Manager responsibilities
6 1 2.d	TERMS O 13590	Precautionary surveys of OSC areas
6.1 2 a.3	TERMS O 14330	Operations Advisor
6 1.2 d	TERMS O 15155	OSC habitability surveys should include air and smear samples
6 1.2.f & g	TERMS O 15156	OSC habitability relocation criteria
Entire Procedure	TERMS Q 03111	Emergency Preparedness organization procedures
6.1 1 6.1.2	TERMS Q 02850	Technical support for operating shift

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02620

EMERGENCY DOSE CONTROL AND POTASSIUM IODIDE DISTRIBUTION

REVISION 02

Prepared by: J.M. Teal

Procedure Owner: Manager - Security

JAN 9 2003
Effective Date: _____

Procedure Classification:

☒ Safety Related
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☐ Non-Quality Related

LEVEL OF USE:
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1.0 PURPOSE

- 1.1 Provide guidance and administrative controls for radiation dose during emergency conditions.
- 1.2 Provide guidance for the administration of potassium iodide (KI) during emergency conditions.

2.0 REFERENCES

2.1 Developmental

- 2.1.1 Title 10, Code of Federal Regulations, Part 20, Standards for Protection Against Radiation
- 2.1.2 Title 10, Code of Federal Regulations, Part 50, Section 47, Emergency Plans
- 2.1.3 Title 21, Code of Federal Regulations, Part 1090, Potassium Iodide as a Thyroid blocking Agent in a Radiation Emergency
- 2.1.4 National Council on Radiation Protection (NCRP), Report No. 39, Basic Radiation Protection Criteria
- 2.1.5 National Council on Radiation Protection, (NCRP), Report No. 55, Protection of Radioiodine
- 2.1.6 Nuclear Regulatory Commission, Inspection and Enforcement (IE) Information Notice No. 84-40: Emergency Worker Doses
- 2.1.7 Environmental Protection Agency, EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
- 2.1.8 International Atomic Energy Agency (IAEA), Technical Report No. 152, Evaluation of Radiation Emergencies and Accidents
- 2.1.9 The Food and Drug Administration Approved Patient Package Insert for Commercially Packaged Potassium Iodide
- 2.1.10 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

- 2.2.1 NOP-LP-2001, Condition Report Process
- 2.2.2 RA-EP-02530, Evacuation
- 2.2.3 RA-EP-02610, Emergency Radiation Protection Organization Activation and Response

3 0 DEFINITIONS

- 3.1 Emergency Dose - Radiation dose to essential personnel conducting lifesaving or accident-mitigating actions during a declared emergency that exceeds 10 CFR 20 occupational dose limits.
- 3 2 10 CFR 20 1201 occupational dose limits for adults:
- 3.2.1 "An annual limit, which is the more limiting of -
- a The Total Effective Dose Equivalent (TEDE) being equal to 5 rems,
OR
b. The sum of the Deep-Dose Equivalent and the Committed Dose Equivalent to any individual organ or tissue other than the lens of the eye being equal to 50 rems."
- 3.2.2 "The annual limits to the lens of the eye, to the skin, and to the extremities, which are:
- a. An Eye Dose Equivalent of 15 rems,
AND
b. A Shallow-Dose Equivalent of 50 rems to the skin or to any extremity "
- 3.3 Essential Personnel - Personnel assigned specific Emergency Response Duties as identified in the DBNPS Emergency Plan.
- 3 4 Nonessential Personnel - Personnel who are not assigned specific Emergency Response Duties
- 3.5 Emergency Medical Consultant - A group which may be called upon to assist in the medical care of contaminated injured personnel or other radiation casualties.

4 0 RESPONSIBILITIES

- 4 1 The Emergency Director, or when designated, the Emergency Plant Manager, shall be responsible for emergency dose authorizations and administration of potassium iodide (KI) to essential personnel
- 4 2 The Emergency Radiation Protection (RP) Manager shall be responsible for evaluating, recognizing, and formally recommending in writing, to the Emergency Director the need for emergency dose authorization and KI administration to essential personnel at DBNPS.
- 4.3 The Dose Assessment Coordinator shall be responsible for evaluating, recognizing, and formally recommending in writing to the Emergency RP Manager the need for emergency dose authorization and KI administration to essential personnel outside the Protected Area

5.0 INITIATING CONDITIONS

- 5.1** After declaration of an emergency, this procedure shall be initiated upon either of the following conditions:
 - 5.1.1** An essential person has or is likely to receive dose in excess of the amounts specified in Step 3.2.
 - 5.1.2** A projected Committed Dose Equivalent (CDE) of 25 rems or greater to the thyroid has been or is likely to be received by an essential person.

6.0 PROCEDURE6.1 Authorization of Emergency Dose

- 6.1.1 The Emergency Director, or when designated, the Emergency Plant Manager, shall:
- a. Evaluate the risk of not performing the task against the anticipated dose associated with performing the task before authorizing emergency dose.
 - b. Authorize individual dose in excess of the 10 CFR 20 occupational dose limits as listed in Step 3.2

NOTE 6.1.2

It is preferable to document authorization by the Emergency Director, or when designated, the Emergency Plant Manager, before the exposure. However, verbal authorization may be granted and then documented as soon as possible

6.1.2 The following guidelines are provided for emergency dose

- a. Personnel performing emergency tasks should be volunteers familiar with the consequences of radiation dose
 - b. Declared pregnant individuals shall not be used.
 - c. Emergency dose should be limited to once in a lifetime for any individual.
 - d. When possible, the individual should be over the age of 45.
 - e. Personnel shall not enter any area where dose rates are unknown, unmonitored, or cannot be determined.
 - f. All attempts should be made to keep emergency dose ALARA.
 - g. The individual's dose history should be available for review
- 6.1.3 Authorize increased dose for workers performing emergency services using the following guidance:
- a. Limit doses to the following when protecting valuable property and lower doses are not practical:

1. 10,000 mrem TEDE
2. 30,000 mrem to the lens of the eye
3. 100,000 mrem:
 - Total Organ Dose Equivalent (TODE)
 - Shallow Dose Equivalent (SDE) to the skin of the whole body or to any extremity

WARNING 6.1.3.b

The following guidelines may be exceeded only in extreme situations. The personnel involved in exceeding these guides, shall be volunteers and made fully aware of the risks involved with this dose prior to receiving this dose.

- b. Limit doses to the following when protecting large populations or performing life-saving activities and lower doses are not practical:

1. 25,000 mrem TEDE
2. 75,000 mrem to the lens of the eye
3. 250,000 mrem SDE

- 6.1.4 The briefer and individual who will receive the emergency dose shall fill in the information required on ED 8058, Emergency Dose Authorization, and obtain the Emergency RP Manager's signature before receiving the emergency dose.

- a. Individual should review Attachment 1.

- 6.1.5 For any dose in excess of the 10 CFR 20 occupational dose limits specified in Step 3.2, the Emergency RP Manager shall:

- a. Notify the Medical Director when emergency doses have been authorized. (The phone number is listed in the Emergency Plan Telephone Directory under *Other Resources/Medical Director*.)
- b. Call the Emergency Medical Consultant for follow-up care and further evaluation, as required. (The phone number is listed in the Emergency Plan Telephone Directory under *Other Resources/Medical Consultants*.)

- 6.1.6 IF radiological surveys or dosimetry data indicate conditions approaching the dose limits for nonessential personnel as stated in RA-EP-02610, Emergency Radiation Protection Organization Activation and Response,

THEN the Emergency Director, with the recommendations from the Emergency RP Manager, should consider evacuation of the affected personnel according to RA-EP-02530, Evacuation.

6.2 Administration of Potassium Iodide (KI)

- 6.2.1 The Emergency Director, or when designated, the Emergency Plant Manager shall authorize the use of KI.
- 6.2.2 The Emergency RP Manager shall recognize the need and formally recommend in writing, KI distribution to essential personnel inside the protected area.
- 6.2.3 The Dose Assessment Coordinator shall recognize the need and formally recommend in writing to the Emergency RP Manager, KI distribution to essential personnel outside the protected area.
- 6.2.4 The Emergency RP Manager and/or the Dose Assessment Coordinator should
 - a Calculate, measure, or estimate the airborne radioiodine concentration in an essential person's breathing zone.
 - b. IF the concentration exceeds $2 \times 10^{-5} \mu\text{Ci/cc}$ for one hour ($2 \times 10^{-6} \mu\text{Ci/cc}$ for ten hours), or the Committed Dose Equivalent (CDE) to the thyroid is likely to exceed 25 rems,

THEN determine if KI should be administered to essential personnel.

WARNING 6.2.4 c.

Individuals who have known allergies to iodine shall not be issued KI.

- c. After briefing the Emergency Director or his designee and receiving authorization for the administration of KI, ensure the following
 - 1. Notify those who are to receive KI, to report to a designated location for distribution.

NOTE 6.2.4.c.2

KI is stored in the Operations Support Center (OSC) and in the Radiological Testing Laboratory (RTL).

2. Inform the individual that taking KI is voluntary.
3. The individual who will receive KI should fill in the information and sign the Potassium Iodide Administration Form, ED 8057.

CAUTION 6.2.4.c.4

KI has the following effectiveness in blocking radioiodine uptake by the thyroid:

- 90% blockage if administered within the first hour after exposure.
- 50% blockage if administered within four hours after exposure.
- KI is ineffectual if administered more than 14 hours after exposure.

4. Issue one 130 mg KI tablet to each individual.
5. Notify the Medical Director when KI is issued.
6. The Emergency RP Manager should contact the Emergency Medical Consultant and request follow-up care for KI administration. (The phone number is listed in the Emergency Plan Telephone Directory under *Other Resources/Medical Consultants*.)
7. The Emergency RP Manager shall ensure one 130 mg KI tablet is issued daily for ten days or as directed by the Emergency Medical Consultant and record each issuance on Potassium Iodide (KI) Administration Form, ED 8057.
8. The Emergency RP Manager shall ensure that bioassay analysis is provided in order to determine the effectiveness of KI administration and estimate the dose commitment.
9. Forward the completed Emergency Dose Authorization forms to the Emergency RP Manager and Emergency Director for review and signatures.

7.0 FINAL CONDITIONS

- 7.1 Refer to NOP-LP-2001, Condition Report Process, to describe the actions necessary to investigate and report the radiation dose of an individual over the occupational limits stated in 10 CFR 20.
- 7.2 The completed forms have been:
 - 7.2.1 Submitted and reviewed by the Emergency Director
 - 7.2.2 Submitted and reviewed by the Manager - Radiation Protection
 - 7.2.3 Submitted and reviewed by the Manager – Regulatory Affairs.

8.0 RECORDS

- 8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106
 - 8.1.1 None
- 8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management in accordance with NG-NA-00106.
 - 8.2.1 Emergency Dose Authorization (ED 8058)
 - 8.2.2 Potassium Iodide (KI) Administration (ED 8057)

ATTACHMENT 1: HEALTH EFFECTS DUE TO RADIATION EXPOSURE

Page 1 of 1

TABLE 1**Health Effects Associated With Whole-Body Absorbed Doses Received Within a Few Hours^a
(EPA 400 Table 2-3)**

Whole Body Absorbed Dose (Rad)	Early Fatalities ^b (Percent)	Whole Body Absorbed Dose (Rad)	Prodromal Effects ^c (Percent Affected)
140	5	50	2
200	15	100	15
300	50	150	50
400	85	200	85
460	95	250	98

- a. Risks will be lower for protracted exposure periods.
- b. Supportive medical treatment may increase the dose at which these frequencies occur by approximately 50 percent.
- c. Forewarning symptoms of more serious health effects associated with large doses of radiation

TABLE 2**Approximate Cancer Risk to Average Individuals from 25 Rem Effective
Dose Equivalent Delivered Promptly
(EPA 400 Table 2-4)**

Age at Exposure (Years)	Appropriate Risk of Premature Death (Deaths per 1,000 persons exposed)	Average Years of Life Lost if Premature Death Occurs (Years)
20 to 30	9.1	24
30 to 40	7.2	19
40 to 50	5.3	15
50 to 60	3.5	11

COMMITMENTS

<u>Step Number</u>	<u>Reference</u>	<u>Comments</u>
4.1	TERMS 0 13454	Emergency Dose Authorization
6.1.3	TERMS 014577	Guidelines as stated in EPA-400-R-92-001
6.1.2.e	TERMS 0 16239	RP Response to Fires

Davis-Besse Nuclear Power Station

EMERGENCY PLAN OFFNORMAL PROCEDURE

RA-EP-02805

DAVIS-BESSE EMERGENCY TELEPHONE SYSTEM

REVISION 3

Prepared by: B.W. Cope

Procedure Owner: Manager - Security

Effective Date: JAN 9 2003

Procedure Classification:

 Safety Related
 Quality Related
 X Non-Quality Related

LEVEL OF USE:

GENERAL REFERENCE

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1.0 PURPOSE2.0 REFERENCES2.1 Developmental

2.1.1 None

2.2 Implementation

2.2.1 IS-DP-00026, Guidelines for Alarm Station Operations

3.0 DEFINITIONS

3.1 None

4.0 RESPONSIBILITIES

4.1 As described in IS-DP-00026, Guidelines for Alarm Station Operations

5.0 INITIATING CONDITIONS

This procedure shall be implemented when:

5.1 An emergency is reported to the SAS Operator.

6.0 PROCEDURE6.1 GO TO IS-DP-00026, Guidelines for Alarm Station Operations.7.0 FINAL CONDITIONS

IS-DP-00026, Guidelines for Alarm Station Operations has been implemented

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106

8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 None

COMMITMENTS

<u>Section</u>	<u>Reference</u>	<u>Comments</u>
None		

Davis-Besse Nuclear Power Station

EMERGENCY PLAN OFF NORMAL OCCURRENCE PROCEDURE

RA-EP-02807

EMERGENCY HELICOPTER LANDING ZONES

REVISION 02

Prepared by: Paul F. Timmerman

Procedure Owner: Manager - Security

Effective Date: JAN 9 2003

Procedure Classification:

☐ Safety Related
☐ Quality Related
☒ Non-Quality Related

LEVEL OF USE:
IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure provides guidelines for the use of the Davis-Besse Helicopter Landing Zones within the Davis-Besse Owner-Controlled Area.

2.0 REFERENCES

2.1 Developmental

2.1.1 RA-EP-02000, Medical Emergencies

2.1.2 IS-DP-00026, Guidelines for Alarm Station Operations

2.2 Implementation

None.

3.0 DEFINITIONS

3.1 DAVIS-BESSE HELICOPTER LANDING ZONES – The Davis-Besse Nuclear Power Station (DBNPS) Designated Helicopter Landing Zone is the area south of the Personnel Processing Facility (PPF) (Attachment 1, Designated Helicopter Landing Zone). An Alternate Landing Zone may be utilized which meets the requirements of step 6.1.2.a.

4.0 RESPONSIBILITIES

4.1 The Supervisor – Security Shift shall dispatch Nuclear Security personnel to meet the helicopter, ensure landing zone is clear of debris and safety rules are followed.

5.0 INITIATING CONDITIONS

This procedure shall be implemented whenever a helicopter is expected to land within the Owner Controlled Area of the Davis-Besse Nuclear Power Station.

Note 6 0

During medical emergencies, Carroll Township or a mutual aid fire department should respond to Davis-Besse to assist in the landing of Life Flight.

6.0 PROCEDURE

6.1 Use of the Davis-Besse Emergency Helicopter Landing Zone

6.1.1 The expecting party shall:

- a. Notify the Supervisor – Security Shift of the expected arrivals of a helicopter.
- b. Provide escorts for personnel arriving in the helicopter, as necessary.

6.1.2 The Supervisor – Security Shift shall:

- a. Ensure that the Designated Helicopter Landing Zone is cleared of all obstructions. (Refer to Attachment 1, Designated Helicopter Landing Zone.)
- b. If necessary, determine an Alternate Landing Zone using the following criteria.
 1. Landing zone is at least 100 feet square; or larger when high winds are a factor.
 2. Landing zone is as smooth and flat as possible.
 3. Landing zone is clear of trees, wires, emergency vehicles, signs, fallen branches, snow and other loose debris.
- c. Dispatch members of the Nuclear Security Force to mark the Designated Helicopter Landing Zone, or Alternate Landing Zone, with the following (Refer to Attachment 2, Night Landing Zone):
 1. Orange pylons at each corner and one pylon at the zone periphery in the direction that the wind is blowing from during daylight hours.

NOTE 6.1.2.c.2

Flares are stored in the Security Armory in the PPF. Flares are also contained in each of the four-wheel RMT vehicle tool kits.

2. Flares at each corner and one flare at the zone periphery in the direction that the wind is blowing from when pylons cannot be easily seen.
- d. Control access to the landing zone to ensure the safety of the helicopter and its personnel.
- e. Arrange for the rapid transport of medical personnel to the injury scene, if appropriate.
- f. Ensure that a member of the Nuclear Security Force stays with the helicopter.
- g. Ensure that the personnel arriving by helicopter have been provided with escorts if admittance to the Protected Area is required.

6.2 General Safety Precautions for Helicopter Arrivals and Departures

6.2.1 The following precautions for approaching the helicopter shall be adhered to by all personnel (Refer to Attachment 3, Safe Approach Zones):

- a. Keep spectators at least 200 feet from the area. Keep emergency personnel at least 100 feet from the area.
- b. Eye and hearing protection should be worn whenever the helicopter blades are in motion.
- c. At no time shall anyone approach the tail of the helicopter. Always approach the helicopter from the front.
- d. Never approach the helicopter when blades are in motion, unless directed otherwise by the pilot and/or flight crew.
- e. Never approach a helicopter without first establishing eye contact with the pilot and receiving a signal to proceed.
- f. No smoking or running within 50 feet of the helicopter.

- g. For Life Flight operations, do not assist crew members in opening or closing the doors of the helicopter. The flight crew is responsible for loading and unloading equipment and patient(s).

7.0 FINAL CONDITIONS

- 7.1 The helicopter has departed the Owner Controlled Area.

8.0 RECORDS

- 8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

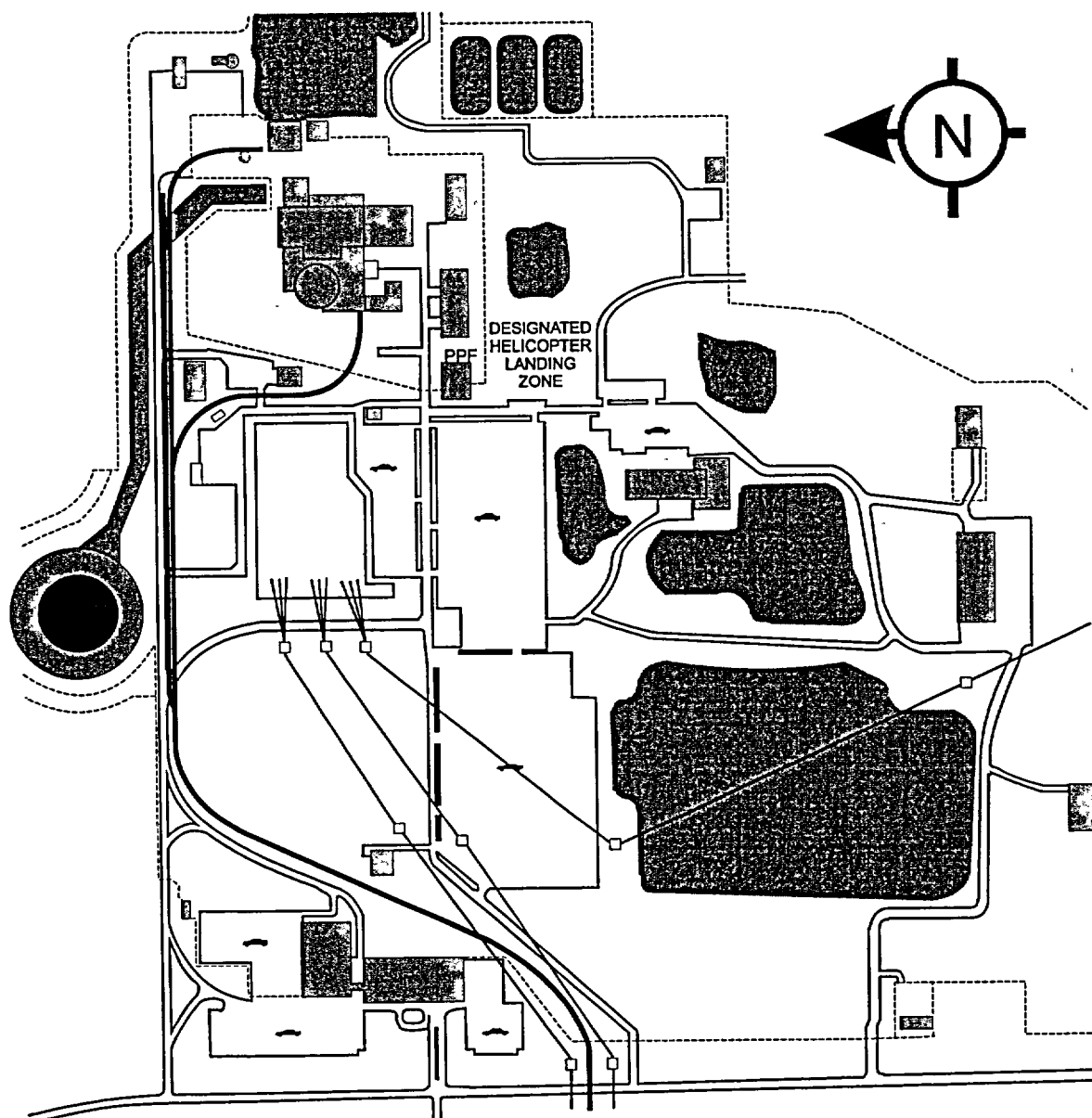
- 8.1.1 None

- 8.2 The following non-quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

- 8.2.1 None

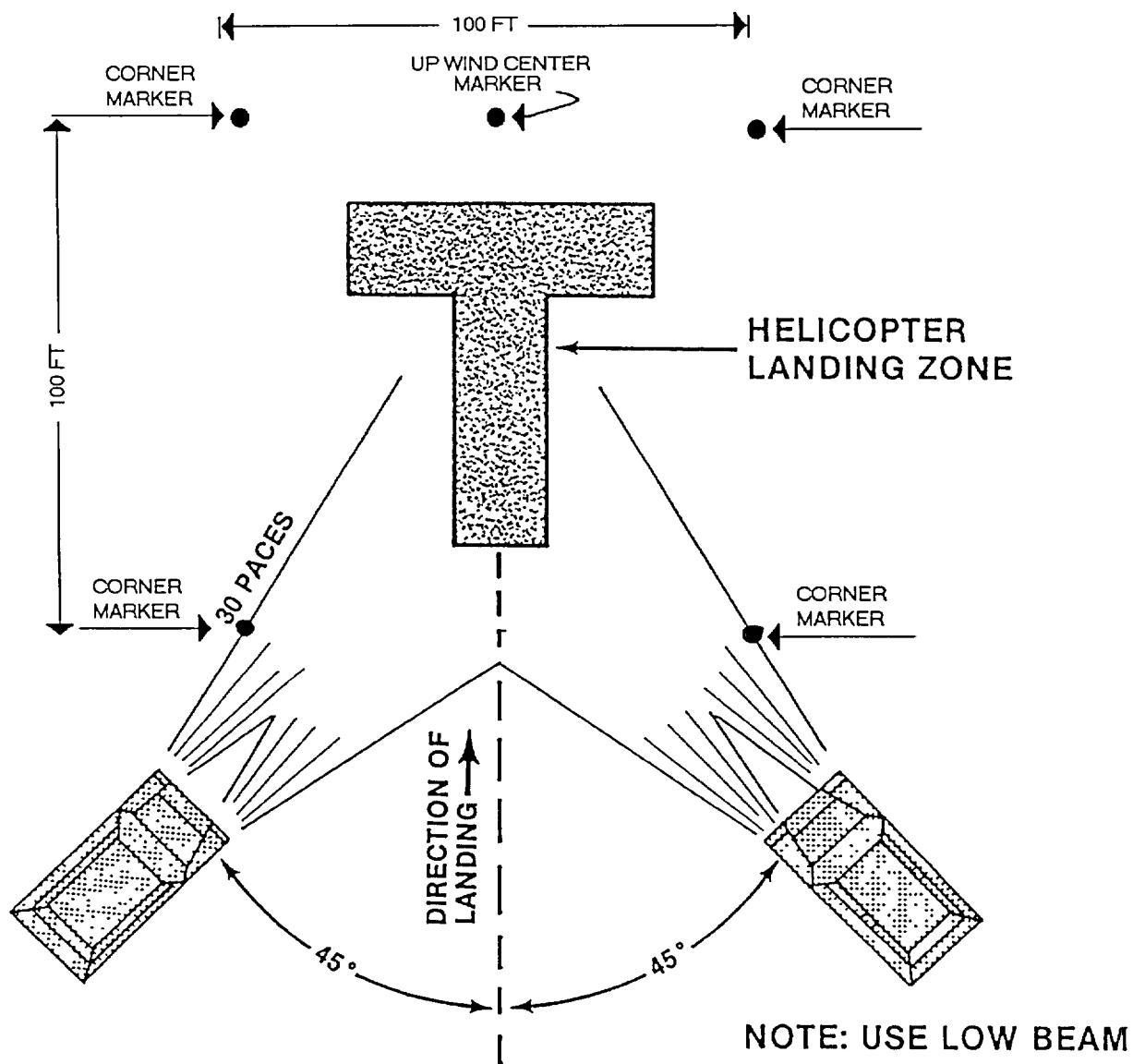
ATTACHMENT 1: DESIGNATED HELICOPTER LANDING ZONE

Page 1 of 1



ATTACHMENT 2: NIGHT LANDING ZONE

Page 1 of 1



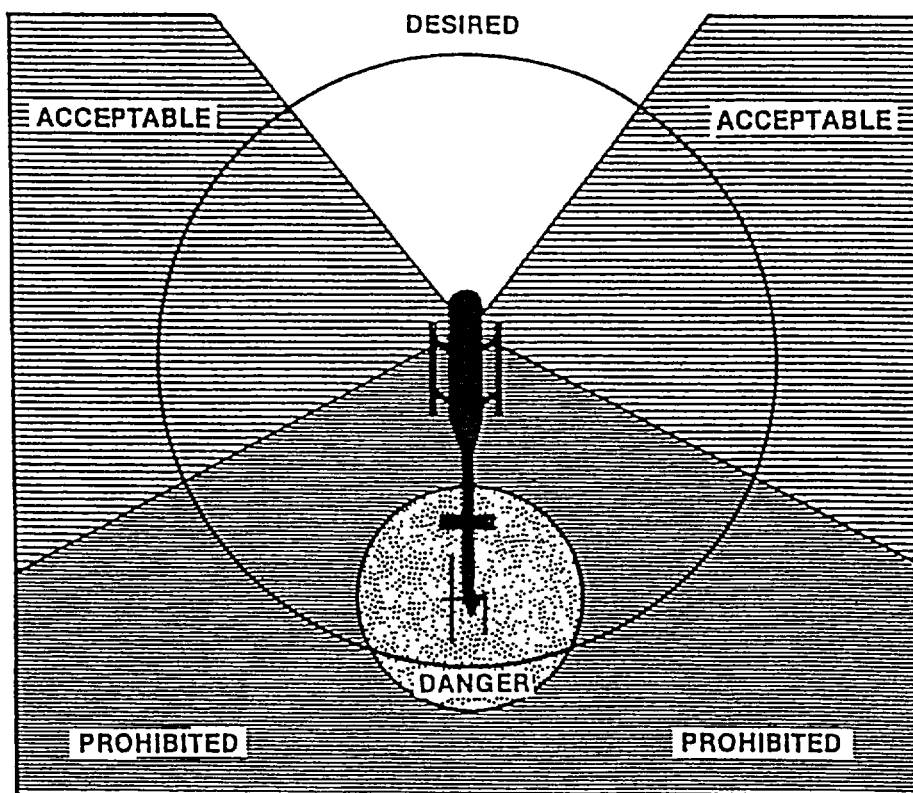
Additional guidance

1. Beware of any hazards such as power lines, fences, trees, etc., that the pilot may not be able to see
2. Park vehicles with low beams on approximately 40 to 50 feet from helicopter landing area, offset from helicopter approach route.
3. Never shine lights at helicopter which may blind pilot.

ATTACHMENT 3: SAFE APPROACH ZONES

Page 1 of 1

SAFE APPROACH ZONES



Safety considerations when boarding or exiting helicopters:

1. Wait for permission to board or exit from pilot.
2. Approach or leave the helicopter from near the front so the pilot can see you at all times.
3. No smoking around the helicopter.
4. Hats and other loose items should be secured to protect against rotor winds.
5. Keep long-handled tools, litters, radio antenna, and similar items away from rotor blades.
6. Keep your head down at all times. The slower the rotor blades are turning, the lower they will dip towards the ground.
7. Never approach or leave a helicopter from any side where the ground is higher than where the helicopter is standing, you may walk into a rotor blade.

Emergency Helicopter
Landing Zones

10

RA-EP-02807
Revision 02

COMMITMENTS

<u>Section</u>	<u>Reference</u>	<u>Comments</u>
None	None	None