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 MANUAL: EPIB REVISION: 53

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001	RA-EP-02010	02	CE	1/29/1999			EMERGENCY MANAGEMENT
002	RA-EP-02110	01	CE	11/8/1999			EMERGENCY NOTIFICATION
003	RA-EP-02220	01	CE	2/5/2001			EMERGENCY CONTROL CENTER ACTIVATION AND RESPONSE
004	HS-EP-02230	03	CE	2/24/1989	C 897261	1/8/1990	DOSE ASSESSMENT CENTER ACTIVATION AND RESPONSE
					C 922045	1/1/1993	
005	HS-EP-02240	04	CE	12/29/1993	C 940669	4/22/1994	OFFSITE DOSE ASSESSMENT
					C 000388	3/30/2000	
006	RA-EP-02245	00	CE	4/8/1997	C 972719	6/11/1998	PROTECTIVE ACTION GUIDELINES
007	RA-EP-02250	00	CE	4/6/2001			RADIATION MONITORING TEAM SURVEYS
008	RA-EP-02260	00	CE	4/6/2001			RADIOLOGICAL CONTROLS IN THE DBAB
009	RA-EP-02270	01	CE	6/10/1997			FACILITIES SUPPORT
010	RA-EP-02290	01	CE	5/26/1995			EMERGENCY FACILITIES EQUIPMENT OPERATION
011	RA-EP-02310	01	CE	5/7/2001			TSC ACTIVATION AND RESPONSE
012	RA-EP-02320	01	CE	7/28/1995	C 972100	11/6/1997	EMERGENCY TECHNICAL ASSESSMENT
					C 972879	1/30/1998	
					C 990015	1/22/1999	
					C 992329	4/4/2000	

DOCUMENT CONTROL  
 NO. 1665

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02310

TECHNICAL SUPPORT CENTER ACTIVATION AND RESPONSE

REVISION 1

Prepared by: *[Signature]* 3/1/01  
Date

Sponsor: *Dmit H. Rochard* 4-4-01  
Manager - Regulatory Affairs Date

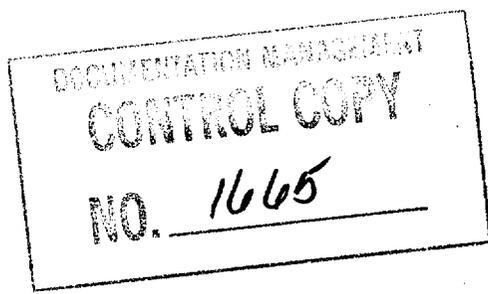
Approved by: *[Signature]* 4/18/01  
Director - Support Services Date

Approved by: *Howard W. Remondelle / [Signature]* 4/18/01  
Plant Manager Date

Effective Date: 5/7/01

Procedure Classification:

- Safety Related
- Quality Related
- Non-Quality Related





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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 DBNPS 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 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.

#### 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 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 PROCEDURENOTE 6.1

The TSC should be activated prior to the Emergency Director responsibilities being transferred to the TSC/ECC 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 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. 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 Emergency Control Center 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 briefings 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 every 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.
    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 been 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**

**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 (ECC) 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**

**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 Assistant Shift 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 00650	Provide a TSC
Entire Procedure	Q 03111 Q 02850	Positions descriptions and responsibilities
6.1.2.b.1	O 016075 O 016073 O 016249 O 015931	Emergency Response Data System (ERDS)

END