

THE TOLEDO EDISON COMPANY
 DAVIS-BESSE NUCLEAR POWER STATION
 EMERGENCY PLAN IMPLEMENTING PROCEDURES
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Revision 12
 July, 1982

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.00

Station Response to Emergencies

Record of Approval and Changes

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Recommended by [Signature] 6/19/80
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QA Approved N/A
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Approved by [Signature] 8/18/80
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Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	[Signature]	1/21/81	NA		[Signature]	7/4/81
2	Amendment	6/15/82	NA		[Signature]	7/1/82

1. PURPOSE

To present a summary of the DBNPS Emergency Plan.

2. SCOPE

To present a summary of Station actions during an emergency and to outline the interface between Station procedures and Emergency Implementing Procedures (EI 1300 series).

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Davis-Besse Nuclear Power Station Emergency Plan Telephone Directory
- 3.3 TECo Corporate Radiological Emergency Response Procedure
- 3.4 Emergency Implementing Procedures EI 1300 series
- 3.5 Administrative Procedures AD 1827 series
- 3.6 EP 1202.35 Fire Emergency
- 3.7 HP 1604.01 Personnel Decontamination
- 3.8 Admin Memos 38, 39, 40

4. DEFINITIONS

- 4.1 Dose Projection - The calculated estimate of a radiation dose to individuals at a given location (usually offsite), determined from the quantity of radioactive material released and the appropriate meteorological transport and dispersion parameters.
- 4.2 Emergency Action Levels - Radiological dose rates, specific concentrations of radioactive materials; or specific instrument readings and indications (including their rate of change) that may be used as thresholds for initiating such specific emergency measures as designating a particular classification of emergency, initiating a notification procedure, or initiating a particular protective action.
- 4.3 Emergency Control Center (ECC) - A specifically designated location which is equipped to facilitate the control and coordination of emergency activities and assessments.

- 4.4 Emergency Duty Officer (EDO) - An assigned individual responsible for direction and coordination of activities during an emergency situation at the Station.
- 4.5 Emergency Operations Center (EOC) - An offsite location utilized by State, County, and other government agencies and organizations to perform assessments of radiological conditions and to coordinate offsite activities (access, evacuation, etc.).
- 4.6 Emergency Planning Zones (EPZ) - Two zones that EPA recommends be established around all nuclear power stations. One zone with a radius of 10 miles (16090 meters) for plume exposure pathway, and the other with a radius of 50 miles (80450 meters) for food ingestion pathway.

In these zones, predetermined protective action plans are needed.

- 2 | 4.7 Operations Support Center (OSC) - An area in the Station in close proximity to the Control Room to which Station personnel report and await instructions from the Shift Supervisor, Emergency Duty Officer or Station Operations Manager.
- 4.8 Projected Exposure Time (PET) - The estimated period of time that the population in the area surrounding DBNPS may be exposed to radiation as a result of an accidental airborne radioactive release. PET starts when the airborne radioactivity release is estimated to cross the Owner-Controlled Area, and ends when the radiation levels offsite are expected to return to normal.
- 4.9 Protective Action Guides (PAG's) - Projected radiological dose or dose commitment values to individuals in the general population that warrant protective action following a release of radioactive material. Protective actions would be warranted provided the reduction in individual dose is NOT offset by excessive risks to individual safety in taking the protective action. The PAG does NOT include the dose that has unavoidably occurred prior to the assessment.
- 2 | 4.10 Technical Support Center (TSC) - An area within the owner controlled area, which has the capabilities to display and transmit station 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.

5. EMERGENCY PLAN SUMMARY

- 5.1 The DBNPS Emergency Plan establishes the concepts, evaluation and assessment criteria, and protective actions that are necessary in order to limit and mitigate the consequences of potential or actual radiological emergencies. The plan provides the necessary prearrangements, directions, and organization so that all Station emergencies can be effectively and efficiently resolved in order to safeguard Station personnel, property and the general public.

6. STATION RESPONSE

- 6.1 The Station Superintendent is ultimately responsible for the assignment of responsibilities in the onsite Emergency Organization. However, the onsite Emergency Organization is predefined, and alternate assignments specified.
- 6.2 When an emergency condition is declared, the members of the normal plant organization assume duties in the onsite Emergency Organization.
- 6.2.1 The Shift Supervisor's primary responsibility is maintaining the plant in a safe condition as well as carrying out the initial steps of the EDO:
- a. Verify the existence of an emergency condition.
 - b. Notify Station personnel, the Station Superintendent, EDO, and offsite support groups as required.
 - c. Activate emergency teams.
 - d. Control access of personnel to Control Room.
 - e. Initiate immediate protective measures as required.
 - f. Verify operating status of the Plant and Station.
- 6.2.2 The Shift Supervisor assumes the role as EDO until properly relieved by the on-call EDO or his alternate.
- 6.2.3 The Control Room, during an emergency, will control the power plant to mitigate the effects of the emergency conditions.

- 6.2.4 The Assistant Station Superintendent, Operations, or his alternate, the Operations Engineer, becomes the Plant Operations Manager. He is responsible for keeping the Station Operations Manager advised of plant operations. He may assist the Shift Supervisor in directing plant activities and damage control efforts, however, ultimate authority for directing all phases of plant operations lies with the Shift Supervisor.
- 6.2.5 The Radcon Operations Manager is the Chemist and Health Physicist or the Chemical and Radiation Protection Engineer. He directs and coordinates the radioactive waste and radiological controls aspects of the recovery operation.
- 6.2.6 The Operations Engineer, or the Operations Supervisor, becomes the Plant Operations Engineer. He supervises Control Room activities, and performs on-the-spot operation analysis as required by the Shift Supervisor. The Shift Supervisor, and through him the operating shift, reports to the Operations Engineer.
- 6.2.7 Plant Maintenance, during an emergency, is directed by the Maintenance Engineer, or his alternate, the Lead Maintenance Support Engineer, or Lead Instrumentation and Control Engineer.
- 6.3 The EDO's responsibilities include:
- a. Implements appropriate protective actions to mitigate the effects of the incident. The Implementing Procedures for the plan shall provide necessary guidance. The judgment of the EDO plays a vital role in any emergency and in some cases, may take precedence over previously preplanned actions.
 - b. The safety and well-being of Station personnel.
 - c. Determination as to necessity to evacuate the Station and/or the local area.
 - d. Provides projected dose information.
 - e. Recommends to offsite emergency organizations for implementing effective protective measures for the general public.

- 6.4 Onsite Assessment Teams (OAT)
- 6.4.1 The Onsite Assessment Team is headed by the Nuclear Engineering Manager or his alternate, the Plant Nuclear Systems Engineer.
 - 6.4.2 The Team Manager supervises the analysis efforts of Company engineers, NSSS vendors, and other plant staff.
 - 6.4.3 The location of the OAT is the TSC.
 - 6.4.4 The Technical Engineer or his alternate, the Nuclear and Performance Engineer, will be in the TSC to analyze vital plant parameters and plant response.
- 6.5 Other emergency response personnel provide specialized support:
- 6.5.1 Radiation Monitoring teams (Admin Memo 42)
 - 6.5.2 First Aid Team (Admin Memo 38)
 - 6.5.3 Fire Brigade (Admin Memo 39)
 - 6.5.4 Emergency Facility Personnel
 - a. ECC (EI 1300.08)
 - b. TSC (EI 1300.07)
 - c. OSC (EI 1300.06)
- 6.6 When required, additional support is provided by the TED Corporate Emergency Organization in the form of technical, administrative, and logistical support to the onsite Emergency Organization.

7. EMERGENCY PLAN STEPS

In general, the Emergency Plan encompasses the following basic steps.

- a. Detection of the emergency
- b. Classification of the emergency
- c. Activation of the responding organization(s)

- d. Assessment of the situation
- e. Initiation of protective actions
- f. Initiation of corrective actions
- g. Aid to affected persons
- h. Periodic dissemination of updated information
- i. Reentry and recovery

7.1 Detection of the Emergency

This step of the Emergency Plan relies on the Operating Shift Crew to determine whether an abnormal situation exists based on all plant parameters, visual sightings of problems or sound engineering judgement. This step may also include actions required by Emergency Procedures, Alarm Procedures, or Abnormal Procedures, etc.

7.2 Classification of the Emergency

7.2.1 Emergencies are grouped into four (4) classifications listed below in order of increasing severity:

a. Unusual-Event

The occurrence of an event or events which indicate a potential degradation of the level of safety of the plant. Unusual Event emergencies involve minor situations that have the potential to escalate to more serious emergencies.

b. Alert

The occurrence of an event or events which involve an actual or potential substantial degradation of the level of safety of the plant. The consideration is, as in an Unusual Event, to prepare to cope with potentially more serious emergencies. Alert emergencies may involve limited release of radioactive material.

c. Site Emergency

The occurrence of an event or events which involve actual or likely major failures of plant functions needed for protection of the public. The potential for a situation hazardous to the general public is the major concern of the Site Emergency classification. There also exists a significant actual or potential release of radioactive material.

d. General Emergency

The occurrence of an event or events which involve actual or imminent core degradation with the potential for loss of containment integrity. Large amounts of radioactive material, immediately hazardous to the general public, could be released during a General Emergency.

7.2.2 The classification of the emergency is determined by comparing plant conditions with the Emergency Action Levels described in Emergency Plan Activation Procedure EI 1300.01.

7.2.3 The Shift Supervisor is responsible for determining the initial classification of the emergency.

7.3 Activation of the Responsible Organization(s)

7.3.1 Upon determination of the appropriate emergency class, the Shift Supervisor shall then refer to the appropriate emergency classification procedures:

a. Unusual Event EI 1300.02

b. Alert EI 1300.03

c. Site Emergency EI 1300.04

d. General Emergency EI 1300.05

7.3.2 The Shift Supervisor assumes the duties as interim Emergency Duty Officer and proceeds with the actions outlined in the EDO check lists provided with the above procedures. He remains the interim EDO until relieved by the assigned EDO or until the emergency is terminated.

- 7.3.3 Part of each checklist is ensuring that proper, timely notifications are made in the event of an emergency.

For example:

- a. Notification should be made to State/Local authorities (via Ottawa County Sheriff) as soon as possible (normally within 15 minutes) following the declaration of an emergency classification, as identified in 10 CFR 50 Appendix E, Section IV.D.3., Domestic Licensing of Production and Utilization Facilities.
- b. Notification should be made to the NRC as soon as possible and in all cases within one hour of the occurrence of any significant event as identified in 10 CFR 50.72, Licensing of Production and Utilization Facilities.
- 7.3.4 The EDO has some options as to which organizations and/or individuals should be activated. These decisions should be based on obtaining the best sources of information, experience and advice available.
- 7.3.5 The expected degree of involvement of participating organizations is shown in Table 1.
- 7.3.6 The Emergency Organization response to emergencies is shown in Table 2.
- 7.3.7 The Emergency Organization is shown in Figures 1 and 2.
- 7.3.8 The DBNPS Emergency Call System is shown in Figure 3.

7.4 Assessment of the Situation

Effective coordination and direction of all elements of the emergency organization requires continuing accident assessment throughout an emergency situation. Each emergency class shall invoke similar assessment methods, however each classification imposes a different magnitude of assessment effort. In the following subsections, assessment actions to be taken for each emergency classification are outlined.

7.4.1 Assessment Actions for Unusual Events

The continuing assessment actions to be performed for this classification consist of the normal monitoring of Control Room and other plant instrumentation and status indication until the situation is resolved. If a fire is the reason for the declaration of an Unusual Event, the Fire Brigade Captain, upon reporting to the fire location will make continuing assessments based on his knowledge and experience and report his findings to the Shift Supervisor on whether offsite fire fighting support is required. In the case of personnel injury and/or illness, the utilization of offsite medical assistance may be cause to declare an

Unusual Event if the injury involves personnel contamination.

7.4.2 Assessment Actions for Alerts

The assessment actions for an Alert shall include:

- a. Increased surveillance of in-plant instrumentation.
- b. If possible, the dispatching of shift personnel to the identified problem area for confirmation and visual assessment of the problem.
- c. The dispatch of onsite Radiation Monitoring Team's (RMT's) to monitor for possible releases and to provide confirmation of correct accident classification.
- d. If a radiological accident is occurring, the in-plant instrumentation necessary to obtain meteorological and radiological data for calculating or estimating projected doses will be monitored. This dose assessment activity shall continue until termination of the emergency in order that the updating of initial assessments may be provided to all concerned offsite agencies and to the EDO.

7.4.3 Assessment Actions for Site Emergencies

The assessment actions for the Site Emergency classification are similar to the actions for an Alert, however due to the increased magnitude of the possible release of radioactive material, a significantly larger assessment activity shall occur. The necessary personnel for this assessment effort shall be provided by mobilization of the onsite and offsite emergency organizations. Specifically:

- a. An increased amount of plant instrumentation shall be monitored. In particular, indications of core status (e.g., incore thermocouple readings, etc.) shall be monitored.
- b. Monitoring efforts shall be greatly increased. Onsite and offsite monitoring teams shall be dispatched. In addition to beta-gamma field measurements, the change-out of thermoluminescent dosimeters (TLD's) at frequent intervals may be performed; air sampling and collection of other environmental media for assessment of material transport and deposition shall be performed.
- c. Dose assessment activities shall be conducted more frequently, with an increased emphasis on dose projection for use as a factor in determining the necessity for protective actions. Radiological and meteorological instrumentation readings shall be used to project the dose rate various distances from the Station, and to determine the integrated dose received. In reporting the dose projections to the EDO or to offsite agencies, the dose rate, dose, and the basis for the time used for the dose estimate shall always be provided. Any confirmation of dose rates by offsite RMT's shall be reflected in reporting and/or revising dose estimate information provided to offsite and internal organizations.

7.4.4 Assessment Actions for General Emergencies

Assessment actions for the General Emergency

classification shall be the same as for the Site Emergency with a shift of emphasis to greater offsite monitoring efforts and dose projection efforts extending to distances further from the plant. Additionally, since the projected doses are likely to be much closer to the EPA PAG's, greater emphasis shall be placed on the assessment of release duration. Judgements and assumptions used for dose assessment shall always be reported.

7.5 Initiation of Protective Actions

Protective actions are emergency measures taken during or after an emergency situation that are intended to minimize or eliminate the hazard to the health and safety of the general public and/or Station personnel. Protective actions include the following:

7.5.1 Protective Cover, Evacuation, Personnel Accountability

During an emergency, sheltering may be the most effective protective action. The relocation of

personnel may also be required in order to prevent or minimize exposure to radiation and radioactive materials. In any event, personnel accountability is very important during this time. The following subsections present information on policies applicable to such situations.

a. Plant Site

All persons onsite at the time of an Alert, Site, or General Emergency, who do NOT have emergency assignments (nonessential personnel) shall be notified of the emergency classification by announcement over the public address system. These personnel shall report to assembly areas for accountability, monitoring and possible evacuation. At the assembly area, members of the emergency organization shall direct and conduct accountability, monitoring and evacuation efforts.

b. Offsite Areas

The responsibility for actions to protect persons in offsite areas rests with the State

of Ohio and Ottawa County officials. Responsibilities are described in detail in the State Plan and implemented in conjunction with the County Plan. The means to warn or advise persons involved in taking protective actions is the responsibility of the Ottawa County Disaster Services Agency (DSA) Coordinator and the Ottawa County emergency organization. Ottawa County is responsible, according to the State Plan, for the preparation and dissemination of information material on protective actions for the general public.

7.5.2 Use of Onsite Protective Equipment and Supplies

The following onsite locations have been designated as emergency assembly points and areas where emergency teams shall be assembled and equipped.

- a. Control Room/Shift Supervisor's Office
- b. Radiation Access Controlled Area (RACA) Control Point
- c. PPF
- d. Operations Support Center
- e. Emergency Control Center

7.5.2.1 Emergency equipment and supplies shall be stored in close proximity to the assembly points.

7.5.2.2 A complete list of emergency equipment and supplies can be found in appropriate procedures if the Emergency Plan.

7.5.2.3 Emergency response team members have been trained in the use of specific emergency equipment.

7.5.2.4 Emergency equipment and supplies will be used in accordance with Emergency Plan Implementing Procedures or as directed by

the Emergency Duty Officer, Shift Supervisor, or emergency team leaders.

7.5.3 Contamination Control Measures

This section describes provisions for preventing or minimizing direct or subsequent ingestion exposure to radioactive materials deposited on the ground or other surfaces.

a. Station Area

Access to the owner-controlled area is controlled. In addition, there are no areas for producing agricultural products within the owner-controlled area. Station contamination control shall be exercised in accordance with approved procedures.

b. Offsite Areas

It is the responsibility of the State Department of Agriculture, in conjunction with the Department of Health and Environmental Protection, to issue guidance and coordinate actions to control contaminated agricultural products offsite. The State of Ohio has the responsibility to act on TECo recommendations and to develop their own course of action.

7.6 Initiation of Corrective Actions

7.6.1 Detailed operating procedures are available to the operators for use during emergencies as well as during normal operations. Specific Emergency Procedures are provided to assist the operators in placing the plant in a safe condition and taking the necessary supplemental corrective actions. In addition, operations personnel are capable of taking appropriate corrective actions based on their training, knowledge and experience.

7.6.2 Selected Davis-Besse Nuclear Power Station Staff personnel, including operation, health physics, chemistry and radiochemistry, and maintenance personnel are assigned to emergency teams.

These teams are capable of responding to situations in order to assess conditions and take any

applicable corrective actions. Maintenance personnel shall provide the necessary crafts expertise to effect repair and damage control functions.

- 7.6.3 Corrective actions shall normally be planned events that are taken to mitigate the consequences of, or terminate the emergency situation. Planned radioactive releases or corrective actions that may result in a radioactive release shall be evaluated by the Emergency Duty Officer, and his staff, as far in advance of the event as is possible. Such events and data pertaining to the release shall be reported to the appropriate offsite emergency response organization and/or agencies prior to any controlled release during an emergency or post emergency situation.

7.7 Aid to Affected Persons

7.7.1 Emergency Personnel Exposure

Emergency measures may warrant the acceptance of above-normal radiation exposures. Saving a life, measures to circumvent substantial exposures to population groups, or even preservation of valuable installations, may all be sufficient cause for above normal exposures. The following are the guidelines for these emergency activities:

- a. Life-saving action 100 rem
- b. Corrective action 25 rem

Personnel involved in any of the above actions must be volunteers.

The senior Toledo Edison Management individual present shall authorize the above exposures and is responsible for maintaining exposures below these values. He shall seek advice from the Radcon Operations Manager (Chemist and Health Physicist) or members of the C&HP staff. He shall assure that measures are taken to minimize other exposures (such as internal exposure) during the conduct of emergency operations.

7.7.2 Thyroid Blocking

A ready supply of suitable thyroid blocking agent

will be maintained and available for use by Toledo Edison employees. Guidance for administration of the blocking agent will be provided by medical advisors and it will be distributed as per AD 1827.12.

7.7.3 Decontamination and First Aid

Personnel found to be contaminated shall undergo decontamination by Health Physics personnel (or other qualified personnel as specified in HP Procedures). It is preferred that personnel decontamination be performed by trained Health Physics personnel, however other TECo personnel are instructed in both decontamination and first aid procedures. Measures shall be taken to prevent the spread of contamination.

Emergency first aid and medical treatment shall be given to injured personnel who are contaminated. Station personnel, trained in first aid, shall assist contaminated personnel either at the scene of the accident or in the First Aid Room. Provisions have been made to ensure contaminated and injured personnel receive specialized medical treatment if necessary. The Magruder Memorial Hospital has agreed to accept contaminated patients for emergency medical and surgical treatment and/or observation. If affected personnel must be transported, measures shall be taken to prevent the spread of contamination.

7.7.4 Medical Transportation

Ambulance service for Davis-Besse is provided for by the Carroll Township Emergency Medical Service.

7.7.5 Medical Treatment

Arrangements for hospital and medical services for injured or contaminated/over-exposed personnel are provided for by the Magruder Memorial Hospital, REMS Corporation, the Peter Bent Brigham Memorial Hospital in Boston, Mass., and local physicians.

7.8 Reentry and Recovery

7.8.1 The Emergency Duty Officer and the Station Operations Manager have the joint responsibility for

determining and declaring when an emergency situation is stable and the Station is ready to enter the reentry and recovery phase.

- 7.8.2 The reentry and recovery phase of the Emergency Plan consists of planned and deliberate actions taken to return the plant to pre-accident levels of radiation and contamination or to conditions which are acceptable and controllable for an extended period of time.

Table 1

EMERGENCY CLASSIFICATIONS AND THE DEGREE OF INVOLVEMENT
BY PARTICIPATING GROUPS

Emergency Classification	Necessity for Protective Actions		Necessity for Corrective Actions***	Degree of Participation By Various Organizations		
	Onsite	Offsite		TECo		Offsite Agencies
				Onsite	Offsite	
Unusual Event	None	None	Possible	Notifi- cation Status*	Notifica- tion Status	Notifica- tion Status**
Alert	Possible	None	Possible	Standby Status**	Standby Status	Standby Status
Site Emergency	Probable	Possible	Probable	Action	Action	Action
General Emer- gency	Probable	Probable	Required	Action	Action	Action

* Notification Status: Organization informed of situation onsite.

** Standby Status: Organization staffs preplanned centers, establishes communications, and assembles emergency teams.

*** Action might include local fire support, ambulance service, medical assistance, or radiological assessment.

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.01

Emergency Plan Activation

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
Date

Submitted by C. E. Wells 6/13/80
Section Head Date

Recommended by [Signature] 6/13/80
SRB Chairman Date

QA Approved N/A _____
Quality Assurance Manager Date

Approved by [Signature] 8/18/80
Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	D. W. Pridemore	4/10/81	NA		[Signature]	4/16/81
2	[Signature]	7/20/81	NA		[Signature]	7/23/81
3	B. R. Boyer	6/8/82	NA		[Signature]	7/1/82

1. PURPOSE

3 | To provide guidelines for conditions at which specific emergency classifications must be declared.

2. SCOPE

3 | To specify emergency action levels and personnel judgments that are consistent with the emergency classification scheme depicted in Appendix 1 of NUREG-0654, Rev. 1.

3. REFERENCES

- 3.1 The Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Final Safety Analysis Report, DBNPS
- 3.3 Technical Specifications, DBNPS Unit No. 1, Appendix A and B to License No. NPF3
- 3.4 Station Response to Emergencies, EI 1300.00

4. DEFINITIONS

- 4.1 Unusual Event - Event(s) are in progress or which have occurred that indicate a potential degradation of the level of safety of DBNPS.
- 4.2 Alert - Events are in progress or have occurred which involve an actual or substantial degradation of the level of safety of DBNPS.
- 4.3 Site Emergency - Events are in progress or have occurred which involve actual or likely major failures of DBNPS functions needed for the protection of the public. There also exists a significant actual or potential release of radioactive material.
- 4.4 General Emergency - Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with the potential for loss of containment integrity, and/or involve the potential for a release of radioactive particulates or gases offsite of a magnitude to exceed regulatory limits.
- 4.5 Emergency Action Levels (EAL's) - Radiological dose rates, specific contamination levels of airborne, waterborne, or surface-deposited concentrations of radioactive materials; or specific instrument readings and indications (including their rate of change) that may be used as thresholds for initiating such specific emergency measures as designating

a particular classification of emergency, initiating a notification procedure, or initiating a particular protective action.

5. EMERGENCY MEASURES

- 5.1 The Shift Supervisor, when informed that abnormal or emergency conditions (real or potential) have arisen, shall perform the necessary actions in the priority listed below:
- 5.1.1 Ensure that the immediate actions (e.g., use of Emergency Procedures) are taken for the safe and proper operation of the plant.
 - 5.1.2 Assess the information available from valid indication and using Table 1, initially classify the situation with the following considerations:
 - a. The specific emergency action levels described in Table 1 are not all inclusive. The Shift Supervisor or Emergency Duty Officer shall declare an appropriate emergency classification whenever, in his judgment, the station status warrants such a declaration. (Refer to Step 5.2.2 for guidance.)
 - b. Reaching these levels over a period of days rather than hours is not sufficient to declare the appropriate classification.
 - c. Some of the emergency action levels described are not, by their very nature, intended to be used during maintenance and/or testing situations where abnormal temperature, pressure, equipment status, etc. is expected.
 - d. All of the emergency action levels shall be considered if the plant is, or was (immediately prior to the emergency condition) in Mode 1 operating at a high power level, except for those conditions noted in the Index of Emergency Action Level Conditions, Page 4.
 - 5.1.3 Use the appropriate checklist from either the Unusual Event (EI 1300.02), Alert (EI 1300.03), Site Emergency (EI 1300.04), or General Emergency (EI 1300.05) procedure to ensure that immediate notification requirements are met and the proper Emergency Plan response is taken.

- 5.1.4 Perform additional emergency actions as time and conditions permit.
- 5.2 Operator judgment plays an important role in ensuring that during any specific event the appropriate actions are performed.
- 5.2.1 Examples:
- a. For an abnormally high lake level, operator judgment should take into consideration the lake level, wind direction, weather conditions, etc., before announcing a flood warning and initiating personnel evacuation. During a previous incident, personnel were evacuated during flood warning conditions, however it was found that this was unnecessary since the weather then cleared and no flood or hazardous situation occurred.
 - b. For localized incidents that may affect only small areas, operator judgment should take -- into consideration that an alarm, when sounded, could be followed by some amplifying instructions to aid personnel response. During a previous incident, an individual was injured requiring medical assistance. The Initiate Emergency Procedures alarm was sounded, however verbal instructions via the gai-tronics system could have been used to prevent unneeded personnel involvement and assembly.
- 5.2.2 For abnormal plant conditions that are not specifically covered in the Table 1 emergency action levels, the following criteria shall be used to assist the Shift Supervisor or Emergency Duty Officer in classifying the event based on their judgment.
- a. Unusual Event - Other plant conditions exist that warrant increased awareness on the part of the plant operations staff or State and/or local offsite authorities which are not covered under any other existing station procedure.
 - b. Alert - Other plant conditions exist that warrant precautionary activation of the Technical Support Center and Emergency Control Center and placing other key emergency personnel on standby.

- c. Site Emergency - Other plant conditions exist that warrant activation of emergency centers and monitoring teams or a precautionary notification to the public near the site.
- d. General Emergency - Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, e.g., any core melt situation.

5.3 Plant conditions should be continually evaluated to ensure the proper emergency classification is being utilized and the classification upgraded or downgraded by the Shift Supervisor and Emergency Duty Officer as conditions dictate per Table 1 and Steps 5.1.2 and 5.2.2 above.

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3 | *NOTE: When evaluating the EAL's in Table 1, the plant must be in Mode 1 or had been in Mode 1 operating at a high power level when the event initiated, except for those annotated conditions above which have been broken down and noted, as applicable, in their respective sections of Table 1.

TABLE 1

SAFETY SYSTEM FUNCTIONS

Condition	Indication(s)	Emergency Classification
3 Unplanned Initiation of ECCS with Flow into Core Indicated	<u>Any three of the four following with flow indicated:</u> 1. HPI low flow alarm and/or LPI low flow alarm (on then off) 2. HPI and/or LPI pump status lights indicate pump(s) running 3. HPI and/or LPI pump current meters indicate pump(s) running 4. HPI and/or LPI pump discharge valves indicate open	Unusual Event* (EI 1300.02)
Loss of Containment Integrity	<u>Any One of the four following requiring plant shutdown per T.S. 3.6.1.1:</u> 1.. Any penetrations required to be closed during accident conditions that are not: A. Capable of being closed by the Safety Features Actuation System, OR B. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed position except as provided in T.S. 3.6.3.1 Table 3.6-2 2. An equipment hatch is not closed and sealed 3. An airlock is not operable per T.S. 3.6.1.3 4. A sealing mechanism associated with a penetration (c.g., welds, bellows, or O-rings) becomes inoperable	Unusual Event (EI 1300.02)

NOTE: For the above asterisked (*) classification(s) the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

SAFETY SYSTEM FUNCTIONS (Con't)

Condition	Indication(s)	Emergency Classification
Loss of Engineered Safety Feature	<ol style="list-style-type: none"> 1. A Safety Features Actuation System (SFAS) functional unit shown in T.S. Table 3.3-3 becomes inoperable per T.S. 3.3.2.1 and requires plant shutdown OR 2. The Boron Injection Flow Path (operating) or Borated Water Sources (operating) become inoperable and require plant shutdown per T.S. 3.1.2.2 and 3.1.2.9 	Unusual Event (EI 1300.02)
Failure of Safety Related Safety or Relief Valve to Close	<ol style="list-style-type: none"> 1. Reactor Coolant System: <ol style="list-style-type: none"> A. Indication of flow through Pressurizer Reliefs (red light on Panel C5798 or C5799) AND B. RCS Pressure drop to <1600 psig 2. Main Steam System: (any 2 of 3) <ol style="list-style-type: none"> A. Rapid and continuing decrease in Steam Generator pressure to <500 psig B. Rapid RCS cooldown rate C. Audible steam relief noise in the Control Room lasting >10 minutes 	Unusual Event (EI 1300.02)

TABLE 1

PLANT SHUTDOWN FUNCTION

Condition	Indication(s)	Emergency Classification
Loss of any system which precludes placing the plant in cold shutdown	1. Any of the following systems become inoperable: A. Service Water System (both trains) B. Decay Heat System (both trains) C. Component Cooling Water (both trains)	Alert (EI 1300.03)
Loss of any system which precludes placing the plant in hot shutdown	1. The following systems become inoperable: A. Makeup System and HPI System OR B. Main Feedwater System and Auxiliary Feedwater System	Site Emergency (EI 1300.04)
Failure of Reactor Protection System to initiate and complete a trip	1. Any time plant parameters meet conditions requiring a trip and RPS fails to initiate and complete a trip which brings the reactor subcritical	Alert (EI 1300.03)

TABLE 1

COOLANT PUMP SEIZURE

<u>Condition</u>	<u>Indication(s)</u>	<u>Emergency Classification</u>
Coolant pump seizure with fuel damage indicated by Iodine sample > T.S. 3.4.8	1. Reactor Coolant System flow indication decreases rapidly AND 2. Confirmed Primary Coolant sample results indicate >1.0 $\mu\text{Ci}/\text{Gram}$ dose equivalent I-131	Alert (EI 1300.03)

TABLE 1

LOSS OF ASSESSMENT FUNCTIONS

Condition	Indication(s)	Emergency Classification
Control Room Indications or Alarms on Process or Effluent Parameters NOT functional to an extent requiring plant shutdown or other significant loss of assessment or communication capability	<p>Any of the Following:</p> <ol style="list-style-type: none"> 1. Radiation monitoring instrumentation < minimum channels operable requiring shutdown per T.S. requirements OR 2. RE2024A, B & C, RE2025A ,B & C and Backup Grab Sample capability become inoperable OR 3. Meteorological monitoring instrumentation < minimum necessary to perform offsite dose calculations (i.e. wind speed, wind direction, and stability class) OR 4. Post-accident instrumentation < minimum channels operable requiring plant shutdown per T.S. requirements (T.S. 3.3.3.6) OR 5. Complete failure of the plant telephone system and Gai-tronics system 	Unusual Event (EI 1300.02)
All annunciator alarms and station computer lost	<ol style="list-style-type: none"> 1. Any simultaneous loss of all annunciator alarms and the station computer 	Alert (EI 1300.03)
All annunciator alarms and station computer lost >15 minutes during plant transient	<ol style="list-style-type: none"> 1. Complete loss of all annunciator alarms and station computer lasting more than 15 minutes AND 2. Plant transient initiated or in progress 	Site Emergency (EI 1300.04)

TABLE 1

CONTROL ROOM EVACUATION

<u>Condition</u>	<u>Indication(s)</u>	<u>Emergency Classification</u>
Evacuation of Control Room required	1. Any evacuation of the Control Room with shut-down control established locally within 15 minutes	Alert (EI 1300.03)
Evacuation of Control Room and Control <u>NOT</u> established locally within 15 minutes	1. Any evacuation of the Control Room with shut-down control <u>NOT</u> established locally within 15 minutes	Site Emergency (EI 1300.04)

TABLE 1

ABNORMAL COOLANT TEMPERATURES

Condition	Indication(s)	Emergency Classification
3 Core Subcooling is Determined to be less than normal (10°)	1. As determined by Sub-Cooling graph or T_{sat} Meter Indication (TD14950 or TD14951) AND 2. As indicated by the difference between Pressurizer Temperature and T_h (use incore thermocouples temperature if T_h meter is off-scale)	Unusual Event* (EI 1300.02)
3 Coolant Temperatures and/or pressures outside of Technical Specification limits	1. As determined by the combination of Reactor Coolant Core Outlet Pressure and/or Outlet Temperature exceeding the safety limits of T.S. 2.1.1	Unusual Event* (EI 1300.02)

3 | NOTE: For the above asterisked (*) classification(s), the plant can be in any mode for the listed EAL's to be applicable.

TABLE 1

ABNORMAL PRIMARY LEAK RATE

Condition	Indication(s)	Emergency Classification
Leak Rate Requiring Plant Shutdown by TS Section 3.4.6.2	<ol style="list-style-type: none"> 1. RCS Water Inventory Balance indicates >1 GPM unidentified leakage or >10 GPM identified leakage OR 2. Measurement of controlled leakage from the Reactor Coolant Pump seals is >10 GPM total OR 3. Leakage from any RCS pressure isolation valve >5 gpm as listed in TS Table 3.4-2 	Unusual Event (EI 1300.02)
Leak Rate >50 GPM but within High Pressure Injection system capacity	<p><u>Any Two of the Four Following:</u></p> <ol style="list-style-type: none"> 1. Makeup Tank level decreasing approximately two inches per minute while RCS temperature remains steady 2. Increased activity on Containment Vessel Airborne Monitor(s) RE 4597AAA, AAB, AAC, or RE 4597BAA, BAB, BAC 3. Increase in Normal Sump level on level instruments LI 1546 A or B 4. RCS Water Inventory Balance indicates >50 GPM leakage 	Alert* (EI 1300.03)
Loss of Coolant Accident > High Pressure Injection system capacity	<ol style="list-style-type: none"> 1. Pressurizer level and pressure decreasing rapidly without an associated change in RCS temperature (RCS temperature/pressure reach saturation conditions) OR 	Site Emergency (EI 1300.04)

TABLE 1

ABNORMAL PRIMARY LEAK RATE

<u>Condition</u>	<u>Indication(s)</u>	<u>Emergency Classification</u>
	2. Containment pressure >38.4 psia and Reactor-Coolant System pressure > 0 psig	

3 | NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

ABNORMAL PRIMARY TO SECONDARY LEAK RATE

Condition	Indication(s)	Emergency Classification
Leak Rate Requiring Plant Shutdown by TS 3.4.6.2	RCS Water Inventory Balance indicates >1 GPM total Primary to Secondary leakage	Unusual Event (EI 1300.02)
	<u>And the Following:</u>	
	<ol style="list-style-type: none"> 1. Main Steam Line Radiation monitor(s) (RE 600 and/or RE 609) in the "Analyze Mode" to detect N-16 indicate increased activity OR 2. Condenser Vacuum discharge radiation monitor(s) (RE 1003A (B)) indicate increased activity AND 3. Unexplained Makeup tank level decrease while Reactor Coolant System temperature remains constant 	
Rapid failure of Steam Generator tubes (e.g., several hundred gpm primary to secondary leak rate!)	Main Steam Line Radiation monitor(s) (RE 600 and/or RE 609) in the "Analyze Mode" to detect N-16 indicate increased activity, or Condenser Vacuum discharge radiation monitor(s) (RE 1003 A (B)) indicate increased activity	Alert (EI 1300.03)
	<u>And One of the Following:</u>	
	<ol style="list-style-type: none"> 1. Rapid drop in RCS pressure 2. Rapid decrease in Pressurizer and Makeup Tank levels 3. Safety Features Actuation System (SFAS) Level 2 activates 	

TABLE 1

ABNORMAL PRIMARY TO SECONDARY LEAK RATE

Condition	Indication(s)	Emergency Classification
Rapid failure of one Steam Generator tube and loss of offsite power	4. Main Steam line radiation monitors in the "Gross Mode" indicating more than 15000 cpm net; background equals 1000 cpm	Alert (EI 1300.03)
Rapid failure of one Steam Generator tube and loss of offsite power	1. Noticable drop in RCS pressure and pressurizer level AND	Alert (EI 1300.03)
Rapid failure of one Steam Generator tube and loss of offsite power	2. The 13.8 KV BUSES are deenergized AND	Alert (EI 1300.03)
Rapid failure of one Steam Generator tube and loss of offsite power	3. Main Steam line radiation monitors in the "Gross Mode" indicating more than 15000 cpm net; background equals 1000 cpm	Alert (EI 1300.03)
Rapid failure of Steam Generator tubes (several hundred GPM leak rate indicated) and loss of offsite power	1. Indications for leak rate of 400-700 GPM AND 2. The 13.8 KV BUSES are deenergized	Site Emergency (EI 1300.04)

TABLE 1

CORE FUEL DAMAGE

Condition	Indication(s)	Emergency Classification
3 High Coolant activity sample Requiring Plant Shutdown by Technical Specifications for Iodine (T.S. 3.4.8)	<ol style="list-style-type: none"> 1. Failed Fuel Detector (RSH 1998) alarm with confirmed sample results indicating $>1.0 \mu\text{Ci}/\text{Gram}$ Dose Equivalent I-131 AND 2. Plant Shutdown required 	Unusual Event (EI 1300.02)
3 Very High Coolant activity	<ol style="list-style-type: none"> 1. Failed Fuel Detector (RSH 1998) "RC Letdown Activity High" alarm AND 2. Confirmed sample results indicate $>300 \mu\text{Ci}/\text{Gram}$ I-131 	Alert (EI 1300.03)
Core damage with inadequate core cooling determined	<ol style="list-style-type: none"> 1. Confirmed primary coolant sample results indicate: <ol style="list-style-type: none"> A. $>1.0 \mu\text{Ci}/\text{Gram}$ Dose equivalent I-131, and B. $>100/\bar{E} \mu\text{Ci}/\text{Gram}$ specific activity, AND 2. Reactor Coolant System Hot Leg temperature $>620^\circ\text{F}$ OR 3. Incore thermocouple temperatures increasing to $>700^\circ\text{F}$ 	Site Emergency (EI 1300.04)
3 Core damage with other plant conditions making a release of large amounts of radioactivity possible	<ol style="list-style-type: none"> 1. Confirmed primary coolant sample results indicate $>300 \mu\text{Ci}/\text{Gram}$ I-131 AND 2. Incore thermocouple temperatures indicate $>2000^\circ\text{F}$ AND 3. Containment radiation level is $> 10^1 \text{ R/hr}$ OR 4. Containment pressure is $>40 \text{ psia}$ 	General Emergency (EI 1300.05)

TABLE 1

CORE FUEL DAMAGE

Condition	Indication(s)	Emergency Classification
3 Core melt situations	<p>Any one of the following sequences occurs with a concurrent likely failure of containment imminent:</p> <ol style="list-style-type: none"> 1. Either a small or large LOCA occurs with a concurrent failure of the ECCS to perform leading to severe core degradation or melting 2. A transient is initiated by a loss of the main feedwater system followed by a failure of the emergency feedwater system for an extended period with core melting resulting 3. A transient occurs requiring operation of shutdown systems with failure to trip which results in core damage, or additional failures of core cooling and makeup systems occur which lead to a core melt 4. A failure of offsite and onsite power along with total loss of emergency feedwater makeup capability occurs for several hours which leads to a core melt 5. A small LOCA occurs with initially successful ECCS, however a subsequent failure of RCS heat removal systems over a period of several hours leads to a core melt 	<p>General Emergency (EI 1300.05)</p>

TABLE 1

LOSS OF FISSION PRODUCT BARRIERS

Condition	Indication(s)	Emergency Classification
Loss of 2 of 3 fission product barriers with a potential loss of the 3rd barrier	<p data-bbox="675 483 1090 584"><u>Any Two of the following conditions exist and the Third is imminent:</u></p> <ol style="list-style-type: none"> <li data-bbox="675 584 1107 685">1. Fuel clad is ruptured as indicated by grab sample results <li data-bbox="675 685 1157 752">2. A rupture of the RCS has been confirmed <li data-bbox="675 752 1174 846">3. Containment integrity has been breached and cannot be restored 	General Emergency (EI 1300.05)

NOTE: Other sections of Table 1 can be used for guidance in determining the above three conditions, as follows:

- a. For item 1, refer to "Core Fuel Damage" at the Alert and Site Emergency levels for sample result values and indications.
- b. For item 2, refer to "Abnormal Primary Leak Rate" at the Alert and Site Emergency levels for indications of a loss of primary coolant.
- c. For item 3, refer to "Safety System Functions" a Loss of Containment Integrity condition at the Unusual Event level for indications of a breach in Containment integrity.

TABLE 1

FUEL HANDLING ACCIDENT

<u>Condition</u>	<u>Indication(s)</u>	<u>Emergency Classification</u>
Fuel Handling Accident which results in the release of radioactivity to Containment or Spent Fuel Pool area	<ol style="list-style-type: none"> 1. Direct information from fuel handling personnel indicating that an irradiated fuel assembly has been damaged and radioactive gases are escaping AND 2. Fire Detection System/Radiation Monitoring System (FDS/RMS) alarms with high radiation monitor reading printed out on data logger OR 3. Local Radiation Monitoring Alarm Station alarms both audibly (horn) and visually (green light goes OFF and red light comes ON) and is reported to the Control Room 	Alert* (EI 1300.03)
Fuel Handling Accident which results in SFAS actuation	<ol style="list-style-type: none"> 1. Indications of fuel handling accident which results in the release of radioactivity to Containment or Spent Fuel Pool area AND 2. SFAS incident level one actuation on radiation in Containment or isolation of ventilation in fuel handling area based on radiation 	Site Emergency* (EI 1300.04)

NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

ABNORMAL CONTAINMENT ATMOSPHERE

Condition	Indication(s)	Emergency Classification
Increasing Containment radiation, pressure, and temperature	<p>Any Two of the Following:</p> <ol style="list-style-type: none"> 1. Containment high range monitor(s) (RE 2387 and/or RE 2389) indicate $>10^4$ mR/hr 2. Containment pressure (PI 2000, PI2001, PI2002, PI 2003) indicates >17 psia 3. Containment average air temperature (TI1356, TI 1357, TI1358) indicates $>170^\circ\text{F}$ 	Alert (EI 1300.03)
High Containment radiation, pressure and temperature	<p>Any Two of the Following:</p> <ol style="list-style-type: none"> 1. Containment high range radiation monitor(s) (RE 2387 and/or RE 2389) indicate $>10^6$ mR/hr 2. Containment pressure (PI 2000, PI2001, PI2002, PI 2003) indicates >20 psia 3. Containment average air temperature (TI1356, TI 1357, TI1358) indicates $>200^\circ\text{F}$ 4. Safety Features Actuation System (SFAS) functions have activated 	Site Emergency (EI 1300.04)
Very High Containment radiation and pressure	<p>Any Two of the Following:</p> <ol style="list-style-type: none"> 1. Containment high range radiation monitor(s) (RE 2387 and/or RE 2389) indicate $>10^7$ mR/hr 2. Containment pressure (PI 2000, PI2001, PI2002, PI 2003) indicates >40 psia 3. Safety Features Actuation System (SFAS) functions have activated and Containment Spray is operating 	General Emergency (EI 1300.05)

TABLE 1

ABNORMAL EFFLUENT RELEASE

Condition	Indication(s)	Emergency Classification
Effluent Release > limits allowed by E.T.S. 2.4.1 or E.T.S. 2.4.3	Confirmed analysis results for a gaseous or liquid release indicates > the limits given in the Environmental Technical Specifications	Unusual Event* (EI 1300.02)
Effluent release >10 times instantaneous limits allowed by E.T.S. 2.4.1 or E.T.S. 2.4.3	Confirmed analysis results for a gaseous or liquid release indicates >10 times the instantaneous limits given in the Environmental Technical Specifications	Alert (EI 1300.03)

NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

HIGH RADIATION LEVELS IN PLANT

Condition	Indication(s)	Emergency Classification
General area radiation levels or high airborne radioactivity >1000 times normal from an unidentified source, lasting more than 30 minutes	1. Fire Detection System/ Radiation Monitoring System (FDS/RMS) Console Alarm with high radiation monitor reading displayed on CRT and printed out on data logger OR	Alert* (EI 1300.03)
	2. Local Radiation Monitoring Alarm Station alarms both audibly (Horn) and visually (green light goes off and red light comes on) and is reported to the Control Room AND	
	3. An area radiation survey or airborne radioactivity sample indicates activity levels >1000 times normal	

NOTE: For the above asterisked (*) classification(s) the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

ABNORMAL RADIATION LEVELS AT SITE BOUNDARY

Condition	Indication(s)	Emergency Classification
Projected or actual radiation readings that indicate a potential dose of 100 mR Whole Body or 500 mR Child Thyroid at the Site Boundary using adverse meteorology.	1. Station Vent Monitor (RE2024C or 2025C) reading $>0.1 \mu\text{Ci/cc}$ Xe-133* for 2 hours or readings which will give an equivalent dose in <2 hours	Alert* (EI 1300.03) NOTE: (These are the applicable concentrations, however they can not be obtained from the presently installed instrumentation. They are to be used when the Kamen High range monitors are installed.
	2. Station Vent Monitor (RE2024B or 2025B) reading $>7.2 \times 10^{-6} \mu\text{Ci/cc}$ I-131 for 2 hours or readings which will give an equivalent dose in <2 hours	
	3. Radiation Monitoring Team reports radiation levels at Site Boundary <50 mR/hr for an incident projected to last 2 hours or reports of readings which will give an equivalent dose in <2 hours	
	4. Radiation Monitoring Team reports I-131 concentrations $>1.1 \times 10^{-7} \mu\text{Ci/cc}$ at Site Boundary	
*NOTE: This concentration is based on a stability class of F and wind speed of 2 mph; if actual meteorology is used, this concentration may be higher		
Projected or actual radiation readings that indicate a potential dose of 1 rem Whole Body or 5 rem Child Thyroid at the Site Boundary using adverse meteorology.	1. Grab sample, or Station Vent Monitor (RE2024C or 2025C) reading $>1.0 \mu\text{Ci/cc}$ Xe-133* for 2 hours or readings which will give an equivalent dose in <2 hours	Site Emergency* (EI 1300.04) NOTE: (These are the applicable concentrations, however they can not be obtained from the presently installed instrumentation. They are to be used when the Kamen High range
	2. Station Vent Monitor (RE2024B or 2025B) $> 7.2 \times 10^{-5} \mu\text{Ci/cc}$ I-131 for 2 hours or readings which will give an equivalent dose in <2 hours	
	3. Radiation Monitoring Team reports radiation levels >500 mR/hr at the site boundary for an incident projected to last 2 hours or which will give an equivalent dose in <2 hours	
*NOTE: This concentration is based on a stability class of F and wind speed of 2 mph; if actual meteorology is used, this concentration		

TABLE 1

ABNORMAL RADIATION LEVELS AT SITE BOUNDARY

Condition	Indication(s)	Emergency Classification
may be higher	4. Radiation Monitoring Team reports I-131 concentrations $>1.1 \times 10^{-6}$ $\mu\text{Ci/cc}$ at the Site Boundary	monitors are installed.

3 NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

ABNORMAL RADIATION LEVELS AT SITE BOUNDARY

Condition	Indication(s)	Emergency Classification
Projected or actual site boundary radiation readings corresponding to a whole body dose of 50 mr/hr for 1/2 hour or 500 mr/hr for 2 minutes using adverse meteorology or five times these levels for a thyroid dose.	A radiological puff release (short instantaneous release from a non-continuous source) occurs with: <ol style="list-style-type: none"> 1. Station vent monitor RE 2024C or 2025C readings and analysis indicating $9.6 \times 10^{-2} \mu\text{Ci/cc}^*$ for 1/2 hour or $.96 \mu\text{Ci/cc}^*$ for 2 min. OR 2. Station vent monitor RE 2024B or 2025B readings and analysis indicate $7.2 \times 10^{-6} \mu\text{Ci/cc}^*$ for 1/2 hour or $7.2 \times 10^{-5} \mu\text{Ci/cc}^*$ for 2 min. 	Site Emergency* (EI 1300.04)
*NOTE: These are the applicable concentrations, however they cannot be obtained from the presently installed instrumentation. They are to be used when the Kamen High range monitors are installed in the near future.		
Projected or actual site boundary radiation reading corresponding to a whole body dose of 1 R/hr or a thyroid dose of 5 R/hr using actual meteorology.	A radiological release occurs with: <ol style="list-style-type: none"> 1. Projected doses at the site boundary equate to 1 R/hr whole body or 5 R/hr thyroid (or higher) using actual meteorological data. OR 2. A Radiation Monitoring Team at the site boundary reports radiation levels at 1 R/hr or $2.27 \times 10^{-6} \mu\text{Ci/cc}$ I-131 (or higher). 	General Emergency* (EI 1300.5)

NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

CONTAMINATED PERSONNEL

Condition	Indication(s)	Emergency Classification
Transportation of contaminated injured individual(s) offsite	1. Any event which requires transportation of a contaminated injured individual to an offsite medical facility	Unusual Event* (EI 1300.02)

3 NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

MAJOR STEAM LEAK

Condition	Indication(s)	Emergency Classification
Major Steam Leak with NO Primary to Secondary leakage	Increasing Containment pressure (if leak is inside Containment) or unusually loud noise outside Containment And One of the Following: 1. Steam and Feedwater Rupture Control System (SFRCS) initiates 2. Main Steam Pressure(s) and/or Steam Generator Pressure(s) drop to <300 PSIG	Unusual Event (EI 1300.02)
Major Steam Leak with >10 GPM Primary to Secondary Leak Rate	1. Indication of a Major Steam Leak AND 2. Main Steam Line Radiation Monitor(s) (RE 600 and/or RE 609) in the "Analyze Mode" to detect N-16 indicate increased activity, AND 3. RCS Water Inventory Balance indicates >10 GPM Primary to Secondary leakage 4. Main Steam line radiation monitors in the "Gross Mode" indicating more than 15000 cpm net; background equals 1000 cpm	Alert (EI 1300.03)
Major Steam Leak with >50 GPM Primary to Secondary leak rate and fuel damage indicated	1. Indication of a Major Steam Leak AND 2. Main Steam Line radiation monitor(s) (RE 600 and/or RE 609) in the "Analyze Mode" to detect N-16 indicate increased activity AND	Site Emergency (EI 1300.04)

TABLE 1

MAJOR STEAM LEAK

Condition	Indication(s)	Emergency Classification
3. RCS Water Inventory Balance indicates >50 GPM Primary to Secondary Leak rate AND		
4. Confirmed Primary Coolant sample results indicate Dose Equivalent I-131 above acceptable limits of T.S. Figure 3.4-1 AND		
5. Main steam line radiation monitors in the "Gross Mode" indicating more than 150,000 cpm net; background equals 1,000 cpm.		

TABLE 1

MAJOR ELECTRICAL FAILURES

Condition	Indication(s)	Emergency Classification
3 Loss of offsite power or of onsite AC power capability	1. Both Emergency Diesel Generators and the Main Generator out of service simultaneously OR 2. Loss of all three 345 KV transmission lines	Unusual Event (EI 1300.02)
3 Loss of offsite power and all onsite AC power for more than 15 minutes	1. All AC buses deenergized more than 15 minutes	Site Emergency (EI 1300.04)
3 Loss of all onsite DC power	1. All DC buses deenergized as determined by breaker positions, and line voltage or amperage meters	Alert (EI 1300.03)
Loss of all onsite DC power for more than 15 minutes	1. All DC buses deenergized for more than 15 minutes	Site Emergency (EI 1300.04)

TABLE 1

FIRE

Condition	Indication(s)	Emergency Classification
Uncontrolled fire <u>NOT</u> involving a safety system, but requiring offsite support	1. Any fire at the Station that requires offsite support	Unusual Event* (EI 1300.02)
Uncontrolled fire potentially affecting safety systems and requiring offsite support	1. Any fire at the Station that requires offsite support AND 2. Has the potential to damage or degrade a safety system	Alert (EI 1300.03)
3 Fire resulting in the loss of redundant safety system trains or functions	1. Observation of a major fire that defeats the capability of redundant safety system trains which includes both trains or functions	Site Emergency (EI 1300.04)

3 NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

SECURITY THREAT

Condition	Indication(s)	Emergency Classification
Security Threat, Attempted Entry, or Attempted Sabotage	1. Report by a senior member of the Security Force of an Attempted Entry, Attempted Sabotage, or a Security Threat	Unusual Event* (EI 1300.02)
Ongoing Security Compromise	1. Report by a senior member of the Security Force that a Security Emergency is in progress	Alert* (EI 1300.03)
Imminent loss of physical control of the plant	1. Physical attack on the plant involving imminent occupancy of the Control Room or local shutdown stations	Site Emergency* (EI 1300.04)
Loss of physical control of the facility	1. Physical attack on the plant which has resulted in occupation of the Control Room or local shutdown stations by unauthorized personnel	General Emergency* (EI 1300.05)

NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

HAZARDS TO STATION OPERATIONS

Condition	Indication(s)	Emergency Classification
Aircraft crash onsite or unusual aircraft activity over facility	1. Control Room informed by Station personnel who have made a visual siting	Unusual Event* (EI 1300.02)
Aircraft crash affecting plant structures	1. Control Room informed by Station personnel who have made a visual siting	Alert (EI 1300.03)
Aircraft crash damaging vital plant systems	1. Control Room informed by Station personnel who have made a visual siting AND 2. Instrumentation readings on vital systems indicate equipment problems	Site Emergency (EI 1300.04)
Train derailment onsite	1. Control Room informed by Station personnel who have made a visual siting AND 2. Station Structures have been damaged OR 3. Danger or potential danger to Station personnel exists	Unusual Event* (EI 1300.02)
Onsite explosion	Control Room informed by Station personnel who have made a visual siting	Unusual Event* (EI 1300.02)
Onsite explosion affecting plant operations	1. Control Room informed by Station personnel who have made a visual siting AND 2. Instrumentation readings on plant systems indicate equipment problems	Alert (EI 1300.03)

NOTE: For the above asterisked (*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

HAZARDS TO STATION OPERATIONS (Con't)

Condition	Indication(s)	Emergency Classification
Explosion causing severe damage to hot shutdown equipment	1. Explosion causing either of the following combinations of systems to become inoperable: A. Makeup System and HPI System OR B. Main Feedwater System and Auxiliary Feed water System	Site Emergency (EI 1300.04)
3 Toxic or flammable gas release from its container to atmosphere at life threatening levels near or onsite	1. Control Room informed by Station personnel who have discovered it	Unusual Event* (EI 1300.02)
Uncontrolled toxic or flammable gas release at life threatening levels within plant facilities	1. Control Room informed by Station personnel who have made a visual siting OR 2. Chlorination System Trouble Alarm initiates and Station personnel verify a significant release	Alert (EI 1300.03)
Uncontrolled toxic or flammable gas release at life threatening levels within plant vital areas	1. Control Room informed by Station personnel who have made a visual siting AND 2. Chlorination System Trouble Alarm initiates and Station personnel verify a significant release OR 3. The Control Room Ventilation System automatically shuts down	Site Emergency (EI 1300.04)

NOTE: For the above asterisked(*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

HAZARDS TO STATION OPERATIONS (Con't)

Condition	Indication(s)	Emergency Classification
Turbine damage causing casing penetration	Control Room informed by Station personnel who have made a visual inspection of turbine casing	Alert (EI 1300.03)
Missile impact on plant structures	Control Room informed by Station personnel of any missile	Alert (EI 1300.03)
Missile impact causing severe damage to Hot Shutdown equipment	<ol style="list-style-type: none"> 1. Control Room informed by Station personnel of any missile impact on Hot Shutdown equipment AND 2. Instrumentation readings on Hot Shutdown equipment indicate equipment problems 	Site Emergency (EI 1300.04)

TABLE 1

NATURAL EVENTS (WITHIN OTTAWA COUNTY)

Condition	Indication(s)	Emergency Classification
Any earthquake	1. Confirmed Station Seismic Instrumentation Alarm	Unusual Event* (EI 1300.02)
3 Earthquake > Operating Basis Earthquake (OBE) levels	1. Procedure for Earthquake Evaluation (SP 1105.17) indicates earthquake >.08 g	Alert (EI 1300.03)
Earthquake >Safe Shutdown Earthquake (SSE) levels	1. Procedure for Earthquake Evaluation (SP 1105.17) indicates earthquake >.15 g	Site Emergency (EI 1300.04)
Any Tornado onsite	1. Control Room informed by Station personnel who have made a visual siting of a Tornado crossing the site boundary	Unusual Event* (EI 1300.02)
Tornado striking facility	1. Control Room informed by Station personnel who have made a visual siting	Alert (EI 1300.03)
Hurricane	1. Control Room informed by Load Dispatcher of Hurricane Watch for Ottawa County	Unusual Event* (EI 1300.02)
3 Hurricane force winds up to Design Basis Levels	1. Control Room informed by Load Dispatcher of Hurricane striking Ottawa County AND 2. Wind speed indication from the station meteorological tower is of sustained winds approaching 90 mph	Alert (EI 1300.03)

NOTE: For the above asterisked(*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.

TABLE 1

NATURAL EVENTS (WITHIN OTTAWA COUNTY) (Con't)

Condition	Indication(s)	Emergency Classification
3 Hurricane force winds > Design Basis Levels	1. Control Room informed by Load Dispatcher of Hurricane striking Ottawa County AND 2. Wind speed indication from the station meteorological tower of sustained winds above 90 mph	Site Emergency (EI 1300.04)
3 50 year flood or low water, surge or seiche	1. Control Room informed by Load Dispatcher OR 2. Control Room informed by Station personnel who have made visual siting AND 3. High Forebay level alarm or lake level indication oscillating with readings high (>580 feet I.G.L.D.) or low (<565 Feet I.G.L.D.)	Unusual Event* (EI 1300.02)
3 Flood, low water, surge or seiche at Design Levels	1. Control Room informed by Load Dispatcher OR 2. Control Room informed by Station personnel who have made visual siting AND 3. High Forebay level alarm or lake level oscillating with readings at Design Levels high (584 feet I.G.L.D.) or low 562.1 feet I.G.L.D.)	Alert (EI 1300.03)
3	NOTE: For the above asterisked(*) classification(s), the plant can be in any Mode for the listed EAL's to be applicable.	

TABLE 1

NATURAL EVENTS (WITHIN OTTAWA COUNTY) (Con't)

Condition	Indication(s)	Emergency Classification
3 Flood, low water, surge or seiche > Design Levels	1. Control Room informed by Load Dispatcher OR 2. Control Room informed by Station personnel who have made a visual siting AND 3. High Forebay level alarm or lake level indication oscillating with readings > Design Levels high (>584 feet I.G.L.D.) or low (<562.1 feet I.G.L.D.)	Site Emergency (EI 1300.04)

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.03

Alert

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by *[Signature]* 6/13/80
 SRB Chairman Date

QA Approved N/A _____
 Quality Assurance Manager Date

Approved by *[Signature]* 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<i>[Signature]</i>	1/4/81	NA		<i>[Signature]</i>	1/30/81
2	<i>[Signature]</i>	6/22/82	NA		<i>[Signature]</i>	6/22/82

1. PURPOSE

To outline the course of action and protective measures required to mitigate the consequences of Station emergency at the Alert level to safeguard Station personnel and the general public.

2. SCOPE

Describes the actions and responsibilities of Davis-Besse personnel and offsite support groups in the event the Shift Supervisor declares an Alert as identified in the Emergency Plan Activation procedure, EI 1300.01.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Station Response to Emergencies, EI 1300.00
- 3.3 Emergency Plan Activation, EI 1300.01
- 3.4 Protective Action Guidelines, AD 1827.12

4. DEFINITIONS

- 4.1 Alert - Events are in progress or have occurred which involve an actual or substantial degradation of the level of safety of DBNPS.

5. EMERGENCY MEASURES

5.1 Shift Supervisor

The Shift Supervisor, having assumed the role of interim Emergency Duty Officer and having classified the emergency as an Alert, shall assure the following actions are taken as required (See Attachment 1):

- 5.1.1 Make the appropriate notifications or sound the appropriate alarm as necessary:
 - a. Fire
 - b. Containment Evacuation
 - c. Initiate Emergency Procedures

NOTE:

The station alarm need not be sounded if downgrading from a higher classification.

5.1.2 Announce the location, type and classification of the emergency on the Station public address system twice and make the appropriate announcement as to the need for personnel assembly, non-assembly, evacuation, or non-evacuation as the conditions dictate.

5.1.3 Notify the following individuals:

a. Nuclear Security Supervisor

b. Station Superintendent

1. During normal working hours, the Station Superintendent should be reached over the Station gaitronics or telephone or by utilizing his "beeper" pager. During off normal working hours, manually telephone his office and home using the numbers listed in Administrative Memorandum No. 37. If there is no answer, then attempt a page. Upon being notified, the Station Superintendent shall then confer with the Shift Supervisor and ascertain the degree of response that may be necessitated by a plant event.

NOTE: If the Station Superintendent does NOT respond within five minutes, re-initiate the page. If he fails to respond to a second page, the Assistant Station Superintendent, Operations, should be contacted. If neither can be contacted, the Shift Supervisor should exercise his own judgement in dealing with the situation.

2. The Station Superintendent can then authorize the Shift Supervisor to tape an announcement on the Telephone Pager located in the Shift Supervisor's office. (The Station Superintendent may elect to perform this evolution himself over the telephone. If so, the Station Superintendent should call the Edison Operator and request to be connected to the Telephone Pager.)

NOTE: The announcement should include; 1) the Emergency Action Level classification, 2) the level of response required, and 3) a brief description of plant conditions.

3. The Shift Supervisor or his designee shall then activate the pagers of the key emergency response personnel as listed in Administrative Memorandum No. 37.
4. When paged (beeped), those individuals must telephone the Edison Operator who shall connect them with the Telephone Pager thus allowing them to hear the recorded message.
5. Those individuals shall then "call in" or notify additional personnel as required to provide adequate response to the event by using Administrative Memorandum No. 37.

NOTE: The NRC resident inspector can be telephoned or paged in accordance with AD 1827.17 if necessary.

2 | 5.1.4 Notification of the following agencies must occur:

NOTE: When notifying an outside agency, record the name of the individual contacted and request a return telephone call from the agency to verify notification

- 2 |
- a. Sheriff's Department, Ottawa County, as soon as possible after the declaration is made (normal notification time is approximately 15 minutes)
 - b. NRC Region III, Office of Inspection and Enforcement; NRC, NRR, Emergency Incident Response Center, Bethesda, Maryland (This is accomplished by the NRC Emergency Notification System - Red Phone) within one hour.

2 | 5.1.5 Continue in the capacity of interim Emergency Duty Officer until relieved by the assigned Emergency Duty Officer.

- 5.1.6 Assessment actions which shall include:
- a. Increased surveillance of in-plant instrumentation.
 - b. The dispatching of shift personnel to the identified problem area for confirmation and visual assessment of the problem.
 - c. The dispatching of onsite RMT's to monitor for possible releases and to provide confirmation of correct accident classification.
 - d. Surveillance (if a radiological accident is occurring) of the in-plant instrumentation necessary to obtain meteorological and radiological data required for calculating or estimating projected doses. This dose assessment activity shall continue until termination of the emergency in order that the updating of initial assessments may be provided to all concerned offsite agencies and to the EDO.
- 5.1.7 Corrective actions by plant operators shall be according to established procedures that place the plant in a safe condition.

5.2 Emergency Duty Officer (EDO)

The Emergency Duty Officer, upon being informed that an Alert has been declared, shall:

- 5.2.1 Report to the Emergency Control Center and assume the position of Emergency Duty Officer in the onsite emergency organization, relieving the Shift Supervisor of this duty.
- 5.2.2 Evaluate the information, data, and methods utilized by the Shift Supervisor in making his determination in order to ensure that the proper emergency classification has been made.
- 5.2.3 Determine to what extent the offsite and onsite emergency organizations shall be activated.
 - a. For an Alert, the emergency teams shall be activated along with all or portions of the onsite emergency organization.

- 5.2.4 If the onsite organization is required and the need exists, activate the ECC according to the Emergency Control Center Activation Procedure, EI 1300.08.
 - 5.2.5 Continue assessment actions initiated by the Shift Supervisor.
 - 5.2.6 Recommend protective actions to the Ottawa County Sheriff as required by assessment results per AD 1827.12, Protective Action Guidelines.
- 5.3 Shift Operations Personnel
- 5.3.1 Control Room operators shall maintain safe operations of the Station and minimize the potential hazards to Station personnel and the general public as directed by the Shift Supervisor.
 - 5.3.2 In the event that the Shift Supervisor is incapacitated, his duties and responsibilities indicated in Step 5.1 shall be assumed by the Assistant Shift Supervisor in the Control Room until relieved by a qualified Shift Supervisor.
 - 5.3.3 Equipment and auxiliaries operators shall maintain safe operations of the plant as directed by the Shift Supervisor.
 - 5.3.4 The Shift Technical Advisor shall provide technical and analytical support in the diagnosis of off-normal events. He shall also advise and assist the Shift Supervisor on matters pertaining to the safe and proper operation of the plant with regards to nuclear safety.
- 5.4 Shift Chemistry and Radiation Tester (C&RT)
- 5.4.1 The shift C&RT shall report immediately to the Health Physics Monitoring Room to await instructions from the Shift Supervisor or Chemist and Health Physicist.
 - 5.4.2 The shift C&RT shall provide radiological monitoring for the Fire Brigade in the event of a fire in RACA.
 - 5.4.3 The shift C&RT shall monitor all injured personnel before they leave the site. An off-shift C&RT shall accompany or meet the contaminated personnel at the offsite medical facilities.

5.5 Fire Brigade

- 5.5.1 The Fire Brigade Captain shall respond to any announced fire, evaluate the situation, direct the Fire Brigade, and keep the Shift Supervisor informed of the status of the fire.
- 5.5.2 Personnel assigned to the Fire Brigade shall respond to any announced fire with appropriate fire fighting and protective equipment and extinguish the fire as directed by the Fire Brigade Captain.
- 5.5.3 The first Fire Brigade Captain arriving on the scene should remain in charge of the fire until termination of the emergency or relieved by the Fire Chief or Assistant Fire Chief.

5.6 First Aid Team

- 5.6.1 The First Aid Team Leader shall respond to any announced personnel injuries, evaluate the situation, direct the First Aid Team and keep the Shift Supervisor informed of the status of the injured individual(s).
- 5.6.2 Personnel assigned to the First Aid Team shall respond to any announced personnel injury with appropriate first aid supplies and provide the necessary first aid treatment.

2 | 5.7 Nuclear Security Force

- 5.7.1 The Nuclear Security Supervisor, upon notification by the Shift Supervisor that an Alert exists, shall implement the Industrial Security Plan Procedure, AD 1808.00.
- 2 | 5.7.2 Nuclear Security Officers shall maintain security of the Station as directed by the Guard Supervisor.

5.8 Radiation Monitoring Team (RMT)

- 5.8.1 Normally only one RMT member should be from the C&HP Section.
- 2 | 5.8.2 During normal working hours:
 - 1. Qualified RMT members who are not involved in immediate corrective actions shall report to the Radiological Testing Laboratory (RTL) or

the Emergency Control Center (ECC) for specific assignments.

2. RMT members are designated by the OSC Manager (Maintenance Engineer).
3. Onsite RMT's from the Chemistry & Health Physics Section should standby at the Health Physics Monitor Room for instructions from the Chemist & Health Physicist or his designee. They should use the survey equipment and air samplers located adjacent to the Health Physics Monitor Room, if requested to do onsite surveys.
4. Offsite RMT's requested by the Emergency Duty Officer (EDO) should report to the Emergency Control Center (ECC). They should then check out the monitoring equipment in the Radiological Testing Laboratory and standby for further instructions from the EDO.

5.8.3 During off-normal hours:

1. RMT members called in during an emergency report to the Chemist & Health Physicist or EDO in the Davis-Besse Administration Building for assignment to an onsite or offsite RMT.
2. Check out the monitoring equipment and standby in the Radiological Testing Laboratory for further directions.

5.9 Onsite Personnel

- 5.9.1 Personnel, who do NOT have specifically assigned duties during an Alert, shall proceed to the following areas:
 - a. Personnel inside RACA shall proceed to the Health Physics Monitoring Room area and wait for further instructions.
 - b. Personnel in the Protected Area shall proceed to the Operations Support Center and wait for further instructions.
 - c. Personnel outside the Protected Area shall proceed to the Construction Office Building and wait for further instructions.

- 5.10 Offsite Personnel
- 5.10.1 Personnel offsite that are notified to report to the site shall proceed to the Emergency Control Center and then to their specifically assigned locations as required and conditions permit.
- 5.11 Offsite Agencies and Organizations
- 5.11.1 The Carroll Township Ambulance Service shall provide transportation service as required for offsite medical treatment.
- 5.11.2 The H. B. Magruder Memorial Hospital shall provide offsite medical treatment for personnel as required.
- 5.11.3 The Carroll Township Fire Department shall provide primary response to fire alarms onsite as required.
- a. The Village of Oak Harbor Fire Department shall provide alternate response to fire alarms onsite as required through mutual aid with Carroll Township.
- 5.11.4 The Ottawa County Sheriff's Department is experienced in providing area control, communications assistance, and direct handling of the local population, including evacuation, should it become necessary. The Sheriff's Department provides 24 hour radio communication coverage with the Shift Supervisor at DBNPS and is the lead offsite governmental agency contacted in the event of an emergency at the site.

6. TERMINATION

- 6.1 The Emergency Duty Officer and Station Operations Manager have joint responsibility for determining and declaring when the emergency situation is stable.
- 6.2 The Emergency Duty Officer shall assure notification of all offsite organizations and TECo personnel that the emergency has terminated.
- 6.3 A written summary will follow notification of termination within 8 hours.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
ALERT

ATTACHMENT 1

NOTE: If changing from a prior emergency classification checklist, complete steps NOT already accomplished by the previous checklist. Then attach all the previous checklists used to this one. Place N/A in steps that are not applicable.

ACTION REQUIRED	ACTION COMPLETED		
	DATE	TIME	INITIALS
1. Initiate corrective action as required	_____	_____	_____
2. Make the appropriate announcement or sound the appropriate alarm	_____	_____	_____
NOTE: This step may be omitted when downgrading from a higher classification.			
3. Announce location, type of emergency on Cui-tronics twice and make the appropriate announcement as to personnel assembly as required	_____	_____	_____
4. Confirm Emergency Classification (See EI 1300.01)	_____	_____	_____
5. Conduct necessary notification:			
a. Nuclear Security Supervisor (Ext. 556 or 557)	_____	_____	_____
NOTE: In the event of a fire, the Nuclear Security Supervisor notifies the Ottawa County Sheriff who notifies the appropriate department.			
b. Edison Centrex Operator (Ext. 88-000 or 259-5000)	_____	_____	_____
NOTE: In the event of a medical emergency, the Edison Operator notifies the medical authorities and appropriate company management.			

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
ALERT (Con't)

ATTACHMENT 1

<u>ACTION REQUIRED</u>	<u>DATE</u>	<u>ACTION COMPLETED</u>	
		<u>TIME</u>	<u>INITIALS</u>
c. Station Management (See Step 5.1.3(b) of this procedure)			
1. Station Superin- tendent	_____	_____	_____
NOTE: The Station Superintendent or his designee is responsible for notifying the Ottawa County Sheriff upon declaration of an Emergency Action Level.			
2. The Key Emergency Response Personnel:	_____	_____	_____
Emergency Duty Officer, Assistant Station Superintendent Operations, Chemist and Health Physicist, Nuclear Services Director, Emergency Planning Supervisor, Nuclear Security Manager, News Media Relations Supervisor, Technical Engineer, Maintenance Engineer, and Operations Engineer.			
d. *NRC (use the Emergency Notification System - Red Phone)	_____	_____	_____
*NOTE: NRC notification must be made within one hour and should be made by station management. Health physics information should be transmitted using the NRC Health Physics Network by the Chemist and Health Physicist or his designee. (Dial 22 for NRC Headquarters - 23 for NRC Region 3 Office.)			
6. Perform applicable steps of the ECC checklist (Attachment 3 of EI 1300.08, Emergency Control Center Activation)	_____	_____	_____
7. Center Activation			
a. Emergency Control Center (EI 1300.08)	_____	_____	_____

2

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
ALERT (Con't)

ATTACHMENT 1

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
1 b. Operations Support Center (EI 1300.06)	_____	_____	_____
c. Technical Support Center (EI 1300.07)	_____	_____	_____
8. Conduct Periodic Updates for:			
a. TECo Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____
9. As conditions change, check EI 1300.01 to determine if reclassification is appropriate	_____	_____	_____
10. When the condition is resolved notify:			
a. TECo Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____

Reviewed by _____ Station Superintendent
 Filed by _____ Emergency Planning Supervisor

END

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.05

General Emergency

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by *[Signature]* 6/13/80
 SRB Chairman Date

QA Approved N/A _____
 Quality Assurance Manager Date

Approved by *[Signature]* 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<i>[Signature]</i>	1/14/81	NA		<i>[Signature]</i>	1/14/81
2	<i>[Signature]</i>	6/22/82	NA		<i>[Signature]</i>	6/28/82

1. PURPOSE

To outline the course of action and protective measures required to mitigate the consequences of a station emergency at the General Emergency level to safeguard Station personnel and the general public.

2. SCOPE

Describes the actions and responsibilities of Davis-Besse personnel and offsite support groups in the event of the Shift Supervisor declares a General Emergency in accordance with the Emergency Plan Activation procedure, EI 1300.01.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Station Response to Emergencies, EI 1300.00
- 3.3 Emergency Plan Activation, EI 1300.01
- 3.4 Emergency Offsite Dose Estimates, AD 1827.10
- 3.5 Protective Action Guidelines, AD 1827.12

4. DEFINITIONS

- 4.1 General Emergency - Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with the potential for loss of containment integrity, and/or involve the potential release of radioactive particulates or gases offsite of a magnitude to exceed regulatory limits.

5. EMERGENCY MEASURES

5.1 Shift Supervisor

The Shift Supervisor, having assumed the role of interim Emergency Duty Officer and having classified the emergency as a General Emergency, shall assure the following actions are taken as required (See Attachment 1).

- 5.1.1 Make the appropriate notifications or sound the appropriate alarm as necessary:
 - a. Fire
 - b. Containment Evacuation
 - c. Initiate Emergency Procedures

2

NOTE: The station alarm need not be sounded if downgrading from a high classification.

5.1.2 Announce the location, type and classification of the emergency on the Station public address system twice and make the appropriate announcement as to the need for personnel assembly, non-assembly, evacuation, or non-evacuation as the conditions dictate.

5.1.3 Notify the following individuals:

2

a. Nuclear Security Supervisor

b. Station Superintendent

1. During normal working hours, the Station Superintendent should be reached over the Station gairtronics or by utilizing his "beeper" pager. During off normal working hours, manually telephone his office and home using the numbers listed in Administrative Memorandum No. 37. If there is no answer, then attempt a page. Upon being notified, the Station Superintendent shall then confer with the Shift Supervisor and ascertain the degree of response that may be necessitated by the plant event.

NOTE: If the Station Superintendent does NOT respond within five minute, re-initiate the page. If he does not respond to a second page, the Assistant Station Supervisor, Operations, should be contacted. If neither respond, the Shift Supervisor should use his own judgment to deal with the situation.

2

2. The Station Superintendent can then authorize the Shift Supervisor to tape an announcement on the Telephone Pager located in the Shift Supervisor's office. (The Station Superintendent may elect to perform this evolution himself over the telephone. If so, the Station Superin-

tendent should call the Edison Operator and request to be connected to the Telephone Pager.)

NOTE: The announcement should include; 1) the Emergency Action Level classification, 2) the level of response required, and 3) a brief description of plant conditions.

3. The Shift Supervisor or his designee shall then activate the pagers of the key emergency response personnel as listed in Administrative Memorandum No. 37.
4. When paged (beeped), those individuals must telephone the Edison Operator who shall connect them with the Telephone Pager thus allowing them to hear the recorded message.
5. These individuals shall then "call in" or notify additional personnel as required to provide adequate response to the event by using Administrative Memorandum No. 37.

NOTE: The NRC resident insepctor can be telephoned or paged in accordance with AD 1827.17 if necessary.

2 | 5.1.4 Notification of the following agencies must occur:

NOTE: When notifying an outside agency, record the name of the individual contacted and request a return telephone call from the agency to verify notification.

- 2 |
- a. Sheriff's Department, Ottawa County, as soon as possible after a declaration is made (normal time is approximately 15 minutes)
 - b. NRC Region III, Office of Inspection and Enforcement; NRC, NRR, Emergency Incident Response Center, Bethesda, Maryland (This is accomplished by the NRC Emergency Notification System - Red Phone) within one hour.

- 5.1.5 Continue in the capacity of interim Emergency Duty Officer until relieved by the assigned Emergency Duty Officer.
- 5.1.6 Assessment actions which shall include:
- a. Increased surveillance of in-plant instrumentation.
 - b. Dispatching of shift personnel to the identified problem area for confirmation and visual assessment of the problem.
 - c. Dispatching of onsite RMT's to monitor for possible releases.
 - d. If a radiological accident is occurring, surveillance of the in-plant instrumentation necessary to obtain meteorological and radiological data required for calculating or estimating projected doses. This dose assessment activity shall continue until termination of the emergency in order that the updating of initial assessments may be provided to all concerned offsite agencies and to the EDO.
 - e. Greater emphasis on offsite monitoring efforts and dose projection efforts extending to distances much further from the plant. Additionally, since the projected doses are likely to be much closer to the EPA PAC's, greater emphasis shall be placed on the assessment of release duration.
- Dose assessment shall be in accordance with the Emergency Offsite Dose Estimates Procedure, AD 1827.10.
- f. Should any potential danger to the general public be determined, a precautionary evacuation out to two (2) miles may be recommended.
- 5.1.7 Corrective actions by plant operators shall be according to established procedures that place the plant in a safe condition.

5.2 Emergency Duty Officer (EDO)

The Emergency Duty Officer, upon being informed that an General Emergency has been declared, shall:

- 5.2.1 Report to the Emergency Control Center and assume the position of Emergency Duty Officer in the onsite emergency organization, relieving the Shift Supervisor of this duty.
- 5.2.2 Evaluate the information, data, and methods utilized by the Shift Supervisor in making his determination in order to ensure that the proper emergency classification has been made.
- 5.2.3 Activate the ECC according to the Emergency Control Center Activation procedure, EI 1300.08.
- 5.2.4 Continue assessment actions initiated by the Shift Supervisor.
- 5.2.5 Confer with the Emergency Operations Manager concerning distribution of a thyroid blocking agent to those TECo emergency workers involved in the Station response as specified in AD 1827.12, Protective Action Guidelines.
- 5.2.6 Recommend protective actions to the Ottawa County Sheriff as required by assessment results per AD 1827.12, Protective Action Guidelines.

5.3 Shift Operations Personnel

- 5.3.1 Control Room operators shall maintain safe operations of the Station and minimize the potential hazards to Station personnel and the general public as directed by the Shift Supervisor.
- 5.3.2 In the event that the Shift Supervisor is incapacitated, his duties and responsibilities indicated in Step 5.1 shall be assumed by the Assistant Shift Supervisor in the Control Room until relieved by a qualified Shift Supervisor.
- 5.3.3 Equipment and auxiliaries operators shall maintain safe operations of the plant as directed by the Shift Supervisor.
- 5.3.4 The Shift Technical Advisor shall provide technical and analytical support in the diagnosis of off-normal events. He shall also advise and assist the Shift Supervisor on matters pertaining to the safe and proper operation of the plant with regards to nuclear safety.

5.4 Shift Chemistry and Radiation Tester (C&RT)

- 5.4.1 The shift C&RT shall report immediately to the Health Physics Monitoring Room to await instructions from the Shift Supervisor or Chemist and Health Physicist.
- 5.4.2 The shift C&RT shall provide radiological monitoring for the Fire Brigade in the event of a fire in RACA.
- 5.4.3 The shift C&RT shall monitor all injured personnel before they leave the site. An off-shift C&RT shall accompany or meet the contaminated personnel at the offsite medical facilities.

5.5 Fire Brigade

- 5.5.1 The Fire Brigade Captain shall respond to any announced fire, evaluate the situation, direct the Fire Brigade, and keep the Shift Supervisor informed of the status of the fire.
- 5.5.2 Personnel assigned to the Fire Brigade shall respond to any announced fire with appropriate fire fighting and protective equipment and extinguish the fire as directed by the Fire Brigade Captain.
- 5.5.3 The first Fire Brigade Captain arriving on the scene should remain in charge of the fire until termination of the emergency or relieved by the Fire Chief or Assistant Fire Chief.

5.6 First Aid Team

- 5.6.1 The First Aid Team Leader shall respond to any announced personnel injuries, evaluate the situation, direct the First Aid Team and keep the Shift Supervisor informed of the status of the injured individual(s).
- 5.6.2 Personnel assigned to the First Aid Team shall respond to any announced personnel injury with appropriate first aid supplies and provide the necessary first aid treatment.

5.7 Nuclear Security Force

- 5.7.1 The Nuclear Security Supervisor, upon notification by the Shift Supervisor that a General Emergency exists, shall implement the Industrial Security Plan Procedure, AD 1808.00.

5.7.2 Nuclear Security Officers shall maintain security of the Station as directed by the Guard Supervisor.

5.8 Radiation Monitoring Team (RMT)

5.8.1 Normally only one RMT member should be from the C&HP Section.

5.8.2 During normal working hours:

1. Qualified RMT members who are not involved in immediate corrective actions shall report to the Radiological Testing Laboratory (RTL) or the Emergency Control Center (ECC) for specific assignments.
2. RMT members are designated by the OSC Manager (Maintenance Engineer).
3. Onsite RMT's from the Chemistry & Health Physics Section should standby at the Health Physics Monitor Room for instructions from the Chemist & Health Physicist or his designee. They should use the survey equipment and air samplers located adjacent to the Health Physics Monitor Room, if requested to do onsite surveys.
4. Offsite RMT's requested by the Emergency Duty Officer (EDO) should report to the Emergency Control Center (ECC). They should then check out the monitoring equipment in the Radiological Testing Laboratory and standby for further instructions from the EDO.

5.8.3 During off-normal hours:

1. RMT members called in during an emergency report to the Chemist & Health Physicist or EDO in the Davis-Besse Administration Building for assignment to an onsite or offsite RMT.
2. Check out the monitoring equipment and standby in the Radiological Testing Laboratory for further directions.

5.9 Plant Staff

Members of the plant staff that have been informed of a Site Emergency shall proceed to their designated locations and perform their assigned functions.

- 5.9.1 The Plant Operations Manager shall proceed to the Control Room. He shall direct plant operations and plant damage control efforts. He shall also keep the Station Operations Manager advised of plant operations and plant damage control efforts.
- 5.9.2 The Operations Engineer shall proceed to the Control Room. His functions are to supervise control room activities, to perform on-the-spot operational analysis as required to assist the Shift Supervisor, and keep the Plant Operations Manager informed of current plant conditions.
- 5.10 Onsite Personnel
- 5.10.1 Personnel, who do NOT have specifically assigned duties during a Site Emergency, shall proceed to the following areas:
- a. Personnel inside RACA shall proceed to the Health Physics Monitoring Room area and wait for further instructions.
 - b. Personnel in the Protected Area shall proceed to the Operations Support Center and wait for further instructions.
 - c. Personnel outside the Protected Area shall proceed to the Construction Office Building and wait for further instructions.
- 5.11 Offsite Personnel
- 5.11.1 Personnel offsite that are notified to report to the site shall proceed to the Emergency Control Center and then to their specifically assigned locations as required and conditions permit.
- 5.12 Offsite Agencies and Organizations
- 5.12.1 The Carroll Township Ambulance Service shall provide transportation service as required for offsite medical treatment.
- 5.12.2 The H. B. Magruder Memorial Hospital shall provide offsite medical treatment for personnel as required.

- 5.12.3 The Carroll Township Fire Department shall provide primary response to fire alarms onsite as required.
- a. The Village of Oak Harbor Fire Department shall provide alternate response to fire alarms onsite as required through mutual aid with Carroll Township.
- 5.12.4 The Ottawa County Sheriff's Department is experienced in providing area control, communications assistance, and direct handling of the local population, including evacuation, should it become necessary. The Sheriff's Department provides 24 hour radio communication coverage with the Shift Supervisor at DBNPS and is the lead offsite governmental agency contacted in the event of an emergency at the site.

6. TERMINATION

- 6.1 The Emergency Duty Officer and Station Operations Manager have joint responsibility for determining and declaring when the emergency situation is stable.
- 6.2 The Emergency Duty Officer shall assure notification of all offsite organizations and TECo personnel that the emergency has terminated.
- 6.3 A written summary will follow notification of termination within 8 hours.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
GENERAL EMERGENCY

ATTACHMENT 1

NOTE: If changing from a prior emergency classification checklist, complete steps NOT already accomplished by the previous checklist. Then attach all the previous checklists used to this one. Place N/A in steps that are not applicable.

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
1. Initiate corrective action as required	_____	_____	_____

2. Make the appropriate announcement or sound the appropriate alarm	_____	_____	_____
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2 | NOTE: This step may be omitted when downgrading from a higher classification.

3. Announce location, type of emergency on Gai-tronics twice and make the appropriate announcement as to personnel assembly as required. Announce no eating, drinking, or smoking until further notice.	_____	_____	_____
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2 | 4. Confirm Emergency Classification (See EI 1300.01)

5. Conduct necessary notification:			
a. Nuclear Security Supervisor (Ext. 556 or 557)	_____	_____	_____

2 | NOTE: In the event of a fire, the Nuclear Security Supervisor notifies the Ottawa County Sheriff who notifies the appropriate department.

b. Edison Centrex Operator (Ext. 88-000 or 259-5000)	_____	_____	_____
--	-------	-------	-------

2 | NOTE: In the event of a medical emergency, the Edison Operator notifies the medical authorities and appropriate company management.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
GENERAL EMERGENCY

ATTACHMENT 1 (Con't)

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>

c. Station Management
(See Step 5.1.3(b)
of this procedure)

1. Station Superin-
tendent _____

NOTE: The Station Superintendent or his designee
is responsible for notifying the Ottawa
County Sheriff upon declaration of an
Emergency Action Level.

2. The Key Emergency
Response Personnel: _____

Emergency Duty Officer, Assistant Station Superin-
tendent Operations, Chemist and Health Physicist,
Nuclear Services Director, Emergency Planning Super-
visor, Nuclear Security Manager, News Media Relations
Supervisor, Technical Engineer, Maintenance Engineer,
and Operations Engineer.

d. *NRC (use the Emergency
Notification System
- Red Phone) _____

*NOTE: The NRC notification must be made within one
hour and should be made by station management.
Health physics information should be transmitted
using the NRC Health Physics Network by the
Chemist and Health Physicist or his designee.
(Dial 22 for NRC Headquarters - 23 for NRC Region
3 Office.)

6. Perform applicable steps of
the ECC checklist (Attachment 3
of EI 1300.08, Emergency Control
Center Activation) _____

7. Center Activation Confirmation _____

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
GENERAL EMERGENCY

ATTACHMENT 1 (Con't)

<u>ACTION REQUIRED</u>	<u>DATE</u>	<u>ACTION COMPLETED</u>	
		<u>TIME</u>	<u>INITIALS</u>
a. Emergency Control Center (EI 1300.08)	_____	_____	_____
b. Operations Support Center (EI 1300.06)	_____	_____	_____
c. Technical Support Center (EI 1300.07)	_____	_____	_____
d. Emergency Support Center (EI 1300.09)	_____	_____	_____
8. Conduct Periodic Updates for:			
a. TED Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____
9. As conditions change, check EI 1300.01 to determine if reclassification is appro- priate	_____	_____	_____
10. When the condition is resolved notify:			
a. TED Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____

Reviewed by _____ Station Superintendent Filed by _____ Emergency Planning Supervisor

END

DAVIS-BESSE REVISION COVER SHEET

July 12, 1982

DATE

TO: Dir of Nuc Reg Comm

FROM: EMERGENCY PLANNING & PREPAREDNESS SUPV.

SUBJECT: Davis-Besse EMERGENCY PLAN IMPLEMENTING PROCEDURES Manual Changes

This letter transmits additions and revisions to the Davis-Besse

EMERGENCY PLAN IMPLEMENTING PROCEDURES Manual. Control Copy 50B.

Instructions for the material are as follows:

REMOVE AND RETURN

INSERT

Revision Index, Revision 12

Revision Index, Revision 13

EI 1300.02.1
T-6015

EI 1300.02.2

EI 1300.04.1
T-6060

EI 1300.04.2

EI 1300.07.1
T-6074
T-6016

EI 1300.07.2

EI 1300.08.2
T-6051
T-6041
T-5849

EI 1300.08.3

EI 1300.10.0
T-6017

EI 1300.10.1

Date Revision Entered _____

Addressee Signature _____

RETURN TO THE OFFICE MANAGER - STOP #3050

THE TOLEDO EDISON COMPANY
 DAVIS-BESSE NUCLEAR POWER STATION
 EMERGENCY PLAN IMPLEMENTING PROCEDURES
 REVISION INDEX

<u>PAGE</u>	<u>REVISION</u>	<u>PROCEDURES</u>	<u>REVISION</u>	<u>TEMPORARY MODIFICATIONS</u>
1	0	EI 1300.00	2	
		EI 1300.01	3	
		EI 1300.02	2	
		EI 1300.03	2	
		EI 1300.04	2	
		EI 1300.05	2	
		EI 1300.06	2	
		EI 1300.07	2	
		EI 1300.08	3	
		EI 1300.09	0	
		EI 1300.10	1	
		EI 1300.11	0	T-6018
		EI 1300.12	1	T-5850, T-5918

Revision 13
 July, 1982

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.02

Unusual Event

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
Date

Submitted by C. E. Wells 6/13/80
Section Head Date

Recommended by *[Signature]* 6/13/80
SRB Chairman Date

QA Approved N/A
Quality Assurance Manager Date

Approved by *[Signature]* 8/18/80
Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<i>[Signature]</i>	1/14/81	NA		<i>[Signature]</i>	11/30/81
2	<i>[Signature]</i>	6/22/89	NA		<i>[Signature]</i>	7/2/82

1. PURPOSE

To outline the course of action and protective measures required to mitigate the consequences of a Station emergency at the Unusual Event level to safeguard Station personnel and the general public.

2. SCOPE

Describes the actions and responsibilities of Davis-Besse personnel and offsite support groups in the event the Shift Supervisor declares an Unusual Event in accordance with the Emergency Plan Activation procedure, EI 1300.01.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Station Response to Emergencies, EI 1300.00
- 3.3 Emergency Plan Activation, EI 1300.01
- 3.4 First Aid Response, AD 1827.02
- 3.5 Protective Action Guidelines, AD 1827.12

4. DEFINITIONS

- 4.1 Unusual Events - Event(s) are in progress or which occurred that indicate a potential degradation of the level of safety of DBNPS.

5. EMERGENCY MEASURES

5.1 Shift Supervisor

The Shift Supervisor, having assumed the role of interim Emergency Duty Officer and having classified the emergency as an Unusual Event, shall assure the following actions are taken as required (See Attachment 1):

- 5.1.1 Make the appropriate notifications or sound the appropriate alarm as necessary:
 - a. Fire
 - b. Containment Evacuation
 - c. Initiate Emergency Procedures

NOTE:

The station alarm need not be sounded if downgrading from a higher classification.

5.1.2 Announce the location, type and classification of the emergency on the Station public address system twice and make the appropriate announcement as to the need for personnel assembly, non-assembly, evacuation, or non-evacuation as the conditions dictate.

5.1.3 Notify the following individuals:

a. Nuclear Security Supervisor

b. Station Superintendent

1. During normal working hours, the Station Superintendent should be reached over the Station gaitronics or telephone or by utilizing his "beeper" pager. During off normal working hours, manually telephone his office and home using the numbers listed in Administration Memorandum No. 37. If there is no answer, then attempt a page. Upon being notified, the Station Superintendent shall then confer with the Shift Supervisor and ascertain the degree of response that may be necessitated by a plant event.

NOTE: If the Station Superintendent does NOT respond within five minutes, re-initiate the page. If a second page fails, the Assistant Station Superintendent, Operations, should be contacted. In the event that neither can be contacted, the Shift Supervisor should exercise his own judgement in dealing with the situation.

2. The Station Superintendent can then authorize the Shift Supervisor to tape an announcement on the Telephone Pager located in the Shift Supervisor's office. (The Station Superintendent may elect to perform this evolution himself over the telephone. If so, the Station Superintendent should call the Edison Operator and request to be connected to the Telephone Pager.)

NOTE: The announcement should include; 1) the Emergency Action Level classification, 2) the level of response required, and 3) a brief description of plant conditions.

3. The Shift Supervisor or his designee shall then activate the pagers of the key emergency response personnel as listed in Administrative Memorandum No. 37.
4. When paged (beeped), those individuals must telephone the Edison Operator who shall connect them with the Telephone Pager thus allowing them to hear the recorded message.
5. These individuals shall then "call in" and notify additional personnel as required to provide adequate response to the event by using Administrative Memorandum No. 37.

NOTE: The NRC resident inspector can be telephoned or paged in accordance with AD 1827.17 if necessary.

2 | 5.1.4 Notification of the following agencies must occur:

NOTE: When notifying an outside agency, record the name of the individual contacted and request a return telephone call from the agency to verify notification.

- 2 | a. Sheriff's Department, Ottawa County, as soon as possible after the declaration is made (normal time is approximately 15 minutes)
- b. NRC Region III, Office of Inspection and Enforcement; NRC, NRR, Emergency Incident Response Center, Bethesda, Maryland (This is accomplished by the NRC Emergency Notification System - Red Phone) within one hour.

2 | 5.1.5 Continue in the capacity of interim Emergency Duty Officer until relieved by the assigned Emergency Duty Officer.

- 2 |
- 5.1.6 Assess the situation by monitoring Control Room and other plant instrumentation;
- a. Assessment of a fire shall be performed by the individual discovering it. Confirmation should be made by the Fire Brigade Captain with recommendations to the Shift Supervisor or Emergency Duty Officer. Refer to EP 1202.35
 - b. Assessment of the condition of an injured individual and recommendations for care shall be made by the First Aid Team Leader in accordance with First Aid Response, AD 1827.02.
- 5.1.7 Corrective actions by plant operators shall be according to established procedures that place the plant in a safe condition.

5.2 Emergency Duty Officer (EDO)

The Emergency Duty Officer, upon being informed than an Unusual Event has been declare, shall:

- 5.2.1 Evaluate the information, data, and methods utilized by the Shift Supervisor in making his determination in order to ensure that the proper emergency classification has been made.
- 5.2.2 Determine to what extent the offsite and onsite emergency organizations shall be activated.
- a. For an Unusual Event, part of the onsite emergency organization and emergency teams may be activated or, depending on the circumstances, notification of key individuals may be all that is required.
- 5.2.3 Report to the Emergency Control Center if required and assume the position of Emergency Duty Officer in the onsite emergency organization, relieving the Shift Supervisor of this duty.
- 5.2.4 If the need exists, activate the ECC according to the Emergency Control Center Activation Procedure, EI 1300.08.
- 5.2.5 Continue radiological assessment actions initiated by the Shift Supervisor.

- 5.2.6 Recommend protective actions to the Ottawa County Sheriff if required by assessment results per AD 1827.12, Protective Action Guidelines.

5.3 Shift Operations Personnel

- 5.3.1 Control Room operators shall maintain safe operations of the Station and minimize the potential hazards to Station personnel and the general public as directed by the Shift Supervisor.
- 5.3.2 In the event that the Shift Supervisor is incapacitated, his duties and responsibilities indicated in Step 5.1 shall be assumed by the Assistant Shift Supervisor in the Control Room until relieved by a qualified Shift Supervisor.
- 5.3.3 Equipment and auxiliaries operators shall maintain safe operations of the Station as directed by the Shift Supervisor.
- 5.3.4 The Shift Technical Advisor shall provide technical and analytical support in the diagnosis of off-normal events. He shall also advise and assist the Shift Supervisor on matters pertaining to the safe and proper operation of the plant with regards to nuclear safety.

5.4 Shift Chemistry and Radiation Tester (C&RT)

- 5.4.1 The shift C&RT shall report immediately to the Health Physics Monitoring Room to await instruction from the Shift Supervisor or Chemist and Health Physicist.
- 5.4.2 The shift C&RT shall provide radiological monitoring for the Fire Brigade in the event of a fire in RACA.
- 5.4.3 The shift C&RT shall monitor all injured personnel before they leave the site. An off-shift C&RT shall accompany or meet the contaminated personnel at the offsite medical facilities.

5.5 Fire Brigade

- 5.5.1 The Fire Brigade Captain shall respond to any announced fire, evaluate the situation, direct the Fire Brigade, and keep the Shift Supervisor informed of the status of the fire.

- 5.5.2 Personnel assigned to the Fire Brigade shall respond to any announced fire with appropriate fire fighting and protective equipment and extinguish the fire as directed by the Fire Brigade Captain.
- 5.5.3 The first Fire Brigade Captain arriving on the scene should remain in charge of the fire until termination of the emergency or relieved by the Fire Chief or Assistant Fire Chief.

5.6 First Aid Team

- 5.6.1 The First Aid Team Leader shall respond to any announced personnel injuries, evaluate the situation, direct the First Aid Team and keep the Shift Supervisor informed of the status of the injured individual(s).
- 5.6.2 Personnel assigned to the First Aid Team shall respond to any announced personnel injury with appropriate first aid supplies and provide the necessary first aid treatment.

2 | 5.7 Nuclear Security Force

- 5.7.1 The Nuclear Security Supervisor shall implement the Industrial Security Plan, AD 1808.00, upon notification of a security threat, attempted unauthorized entry, or attempted sabotage.
- 2 | 5.7.2 Nuclear Security Officers shall maintain security of the Station as directed by the Nuclear Security Supervisor.

5.8 Onsite Personnel

Onsite personnel, who do NOT have specifically assigned duties during an Unusual Event, shall proceed according to the directions given by the Shift Supervisor over the Station public address system.

5.9 Offsite Personnel

Offsite personnel that are notified to report to the site shall proceed to the Emergency Control Center. Further directions will be given upon arrival.

5.10 Offsite Agencies and Organizations

- 5.10.1 The Carroll Township Ambulance Service shall provide transportation service as required for offsite medical treatment.
- 5.10.2 The H.B. Magruder Memorial Hospital shall provide offsite medical treatment for personnel as required.
- 5.10.3 The Carroll Township Fire Department shall provide primary response to fire alarms onsite as required.
- a. The Village of Oak Harbor Fire Department shall provide alternate response to fire alarms onsite as required through mutual aid with Carroll Township.
- 5.10.4 The Ottawa County Sheriff's Department is notified in order that local authorities may be prepared to answer inquiries generated by the public. The Sheriff's Department is also the main contact for medical and fire support agencies who respond to Davis-Besse (See Sections 5.10.1, 5.10.2 and 5.10.3 above).

6. TERMINATION

- 6.1 The Emergency Duty Officer and Station Operations Manager have joint responsibility for determining and declaring when the emergency situation is stable.
- 6.2 The Emergency Duty Officer shall assure notification of all offsite organizations and TECo personnel that the emergency has terminated.
- 6.3 A written summary will follow notification of termination within 24 hours.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
UNUSUAL EVENT

ATTACHMENT 1

NOTE: If changing from a prior emergency classification checklist, complete steps NOT already accomplished by the previous checklist. Then attach all the previous checklists used to this one. Place N/A in steps that are not applicable.

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
1. Initiate corrective action as required	_____	_____	_____

2. Make the appropriate announcement or sound the appropriate alarm	_____	_____	_____
---	-------	-------	-------

NOTE: This step may be omitted when downgrading from a higher classification.

3. Announce location, type of emergency on Cal-tronics twice and make the appropriate announcement as to personnel assembly as required	_____	_____	_____
---	-------	-------	-------

4. Confirm Emergency Classification (See EI 1300.01)	_____	_____	_____
--	-------	-------	-------

5. Conduct necessary notification:			
------------------------------------	--	--	--

a. Nuclear Security Supervisor (Ext. 556 or 557)	_____	_____	_____
--	-------	-------	-------

NOTE: In the event of a fire, the Nuclear Security Supervisor notifies the Ottawa County Sheriff who notifies the appropriate department.

b. Edison Centrex Operator (Ext. 88-000 or 259-5000)	_____	_____	_____
--	-------	-------	-------

NOTE: In the event of a medical emergency, the Edison Operator notifies the medical authorities and appropriate company management.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
UNUSUAL EVENT

ATTACHMENT 1 (Con't)

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>

c. Station Management
(See Step 5.1.3(b)
of this procedure)

1. Station Superin-
tendent _____

NOTE: The Station Superintendent or his designee
is responsible for notifying the Ottawa
County Sheriff upon declaration of an
Emergency Action Level.

2. The Key Emergency
Response Personnel: _____

Emergency Duty Officer, Assistant Station Superin-
tendent Operations, Chemist and Health Physicist,
Nuclear Services Director, Emergency Planning Super-
visor, Nuclear Security Manager, News Media Relations
Supervisor, Technical Engineer, Maintenance Engineer,
and Operations Engineer.

d. *NRC (use the Emergency
Notification System
- Red Phone) _____

*NOTE: NRC notification must be made within one hour
and should be made by station management. Health
physics information should be transmitted using
the NRC Health Physics Network by the Chemist and
Health Physicist or his designee. (Dial 22 for
NRC Headquarters - 23 for NRC Region 3 Office.)

6. Conduct Periodic Updates for:

a.	TECo Personnel	_____	_____	_____
b.	NRC	_____	_____	_____
c.	Ottawa County Sheriff	_____	_____	_____

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
UNUSUAL EVENT

ATTACHMENT 1 (Con't)

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
7. As conditions change, check EI 1300.01 to determine if reclassification is appropriate	_____	_____	_____
8. When the condition is resolved notify:			
a. TECo Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____

Reviewed by _____ Station Superintendent Filed by _____ Emergency Planning Supervisor

END

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.04

Site Emergency

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by *B. K. Boyer* 6/13/80
 SRB Chairman Date

QA Approved N/A
 Quality Assurance Manager Date

Approved by *T. O. Murray* 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<i>B. K. Boyer</i>	1/14/81	N/A		<i>T. O. Murray</i>	11/20/91
2	<i>A. M. Derry</i>	6/22/82	N/A		<i>T. O. Murray</i>	7/2/82

1. PURPOSE

To outline the course of action and protective measures required to mitigate the consequences of a Station emergency at the Site Emergency level to safeguard Station personnel and the general public.

2. SCOPE

Describes the actions and responsibilities of Davis-Besse personnel and offsite support groups in the event the Shift Supervisor declares a Site Emergency in accordance with the Emergency Plan Activation procedure, EI 1300.01.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Station Response to Emergencies, EI 1300.00
- 3.3 Emergency Plan Activation, EI 1300.01
- 3.4 Protective Action Guidelines, AD 1827.12

4. DEFINITIONS

- 4.1 Site Emergency - Events are in progress or have occurred which involve actual or likely major failures of DBNPS functions needed for the protection of the public. There also exists a significant actual or potential release of radioactive material.

5. EMERGENCY MEASURES

5.1 Shift Supervisor

The Shift Supervisor, having assumed the role of interim Emergency Duty Officer and having classified the emergency as a Site Emergency, shall assure the following actions are taken as required (See Attachment 1):

- 5.1.1 Sound the appropriate alarm:
 - a. Fire
 - b. Containment Evacuation
 - c. Initiate Emergency Procedures

NOTE: The station alarm need not be sounded when downgrading from a higher classification.

5.1.2 Announce the location, type and classification of the emergency on the Station public address system twice and make the appropriate announcement as to the need for personnel assembly, non-assembly, evacuation, or non-evacuation as the conditions dictate.

5.1.3 Notify the following individuals immediately:

a. Nuclear Security Supervisor

b. Station Superintendent

1. During normal working hours the Station Superintendent should be reached over the Station ga-tronics or by utilizing his "beeper" pager. During off normal working hours, manually telephone his office and home using the numbers listed in Administrative Memorandum No. 37. If there is no answer, then attempt a page. Upon being notified, the Station Superintendent shall then confer with the Shift Supervisor and ascertain the degree of response that may be necessitated by the plant event.

NOTE: If the Station Superintendent does NOT respond within five minutes, re-initiate the page. If a second page fails, contact the Assistant Station Superintendent, Operations. If neither can be contacted, the Shift Supervisor should exercise his own judgment in dealing with the situation.

2. The Station Superintendent can then authorize the Shift Supervisor to tape an announcement on the Telephone Pager located in the Shift Supervisor's office. (The Station Superintendent may elect to perform this evolution himself over the telephone. If so, the Station Superintendent should call the Edison Operator and request to be connected to the Telephone Pager.)

NOTE: The announcement should include; 1) the Emergency Action Level classification, 2) the level of response required, and 3) a brief description of plant conditions.

3. The Shift Supervisor or his designee shall then activate the pagers of the key emergency response individuals as listed in Administrative Memorandum No. 37.
4. When paged (beeped), those individuals must telephone the Edison Operator who shall connect them with the Telephone Pager thus allowing them to hear the recorded message.

NOTE: The NRC resident inspector can be telephoned or paged in accordance with AD 1827.17 if necessary.

5. Those individuals shall then "call in" or notify additional personnel as required to provide adequate response to the event by using Administrative Memorandum No. 37.

2 | 5.1.4 Notification of the following agencies must occur:

NOTE: When notifying an outside agency, record the name of the individual contacted and request a return telephone call from the agency to verify notification.

- 2 | a. Sheriff's Department, Ottawa County, as soon as possible after the declaration is made (normal time is approximately 15 minutes)
- b. NRC Region III, Office of Inspection and Enforcement; NRC, NRR, Emergency Incident Response Center, Bethesda, Maryland (This is accomplished by the NRC Emergency Notification System - Red Phone) within one hour.

2 | 5.1.5 Continue in the capacity of interim Emergency Duty Officer until relieved by the assigned Emergency Duty Officer.

- 5.1.6 Perform assessment actions which shall include:
- a. An increased amount of plant instrumentation shall be monitored, in particular, indications of core status (e.g., incore thermocouple readings, etc.) shall be monitored.
 - b. Monitoring efforts shall be greatly increased. Onsite and offsite monitoring teams shall be dispatched. In addition to beta-gamma field measurements, the change-out of thermoluminescent dosimeters (TLD's) at frequent intervals may be performed; air sampling and collection of other environmental media for assessment of material transport and deposition shall be performed.
 - c. Dose assessment activities shall be conducted more frequently, with an increased emphasis on dose projection for use as a factor in determining the necessity for protective actions. Radiological and meteorological instrumentation readings shall be used to project the dose rate at predetermined distances from the Station, and to determine the integrated dose received. In reporting the dose projections to the EDO or to offsite agencies, the dose rate, dose, and the basis for the time used for the dose estimate shall always be provided. Any confirmation of dose rates by offsite RMT's shall be reflected in reporting and/or revising dose estimate information provided to applicable offsite agencies.
- 5.1.7 Corrective actions by plant operators shall be according to established procedures that place the plant in a safe condition.

5.2 Emergency Duty Officer (EDO)

The Emergency Duty Officer, upon being informed that a Site Emergency has been declared, shall;

- 5.2.1 Report to the Emergency Control Center and assume the position of Emergency Duty Officer in the onsite emergency organization, relieving the Shift Supervisor of this duty.

- 5.2.2 Evaluate the information, data, and methods utilized by the Shift Supervisor in making his determination in order to ensure that the proper emergency classification has been made.
 - 5.2.3 Determine to what extent the offsite and onsite emergency organizations shall be activated.
 - a. For a Site Emergency, the emergency teams and the entire onsite emergency organization shall be activated. A major portion, if NOT all, of the offsite emergency organization may be activated.
 - 5.2.4 Activate the ECC according to the Emergency Control Center Activation Procedure, EI 1300.08.
 - 5.2.5 Continue assessment actions initiated by the Shift Supervisor.
 - 5.2.6 Recommend protective actions to the Ottawa County Sheriff as required by assessment results per AD 1827.12, Protective Action Guidelines.
 - 5.2.7 Ensure that continuous online phone communications are maintained with the State and County Emergency Operations Centers.
- 5.3 Shift Operations Personnel
- 5.3.1 Control room operators shall maintain safe operations of the Station and minimize the potential hazards to Station personnel and the general public as directed by the Shift Supervisor.
 - 5.3.2 In the event that the Shift Supervisor is incapacitated, his duties and responsibilities indicated in Step 5.1 shall be assumed by the Assistant Shift Supervisor in the Control Room until relieved by a qualified Shift Supervisor.
 - 5.3.3 Equipment and auxiliaries operators shall maintain safe operations of the plant as directed by the Shift Supervisor.
 - 5.3.4 The Shift Technical Advisor shall provide technical and analytical support in the diagnosis of off-normal events. He shall also advise and assist the Shift Supervisor on matters pertaining to the safe and proper operation of the plant with regards to nuclear safety.

- 5.4 Shift Chemistry and Radiation Tester (C&RT)
- 5.4.1 The shift C&RT shall report immediately to the Health Physics Monitoring Room to await instructions from the Shift Supervisor or Chemist and Health Physicist.
 - 5.4.2 The shift C&RT shall provide radiological monitoring for the Fire Brigade in the event of a fire in RACA.
 - 5.4.3 The shift C&RT shall monitor all injured personnel before they leave the site. An off-shift C&RT shall accompany or meet the contaminated personnel at the offsite medical facilities.
- 5.5 Fire Brigade
- 5.5.1 The Fire Brigade Captain shall respond to any announced fire, evaluate the situation, direct the Fire Brigade, and keep the Shift Supervisor informed of the status of the fire.
 - 5.5.2 Personnel assigned to the Fire Brigade shall respond to any announced fire with appropriate fire fighting and protective equipment and extinguish the fire as directed by the Fire Brigade Captain.
 - 5.5.3 The first Fire Brigade Captain arriving on the scene should remain in charge of the fire until termination of the emergency or relieved by the Fire Chief or Assistant Fire Chief.
- 5.6 First Aid Team
- 5.6.1 The First Aid Team Leader shall respond to any announced personnel injuries, evaluate the situation, direct the First Aid Team and keep the Shift Supervisor informed of the status of the injured individual(s).
 - 5.6.2 Personnel assigned to the First Aid Team shall respond to any announced personnel injury with appropriate first aid supplies and provide the necessary first aid treatment.
- 2 | 5.7 Nuclear Security Force
- 5.7.1 The Nuclear Security Supervisor, upon notification by the Shift Supervisor that a Site Emergency

exists, shall implement the Industrial Security Plan Procedure, AD 1808.00.

2 | 5.7.2 Nuclear Security Officers shall maintain security of the Station as directed by the Guard Supervisor.

5.8 Radiation Monitoring Team (RMT)

5.8.1 Normally only one RMT member should be from the C&HP Section.

5.8.2 During normal working hours:

1. Qualified RMT members who are not involved in immediate corrective actions shall report to the Radiological Testing Laboratory (RTL) or the Emergency Control Center (ECC) for specific assignments.
2. RMT members are designated by the OSC Manager (Maintenance Engineer).
3. Onsite RMT's from the Chemistry & Health Physics Section should standby at the Health Physics Monitor Room for instructions from the Chemist & Health Physicist or his designee. They should use the survey equipment and air samplers located adjacent to the Health Physics Monitor Room, if requested to do onsite surveys.
4. Offsite RMT's requested by the Emergency Duty Officer (EDO) should report to the Emergency Control Center (ECC). They should then check out the monitoring equipment in the Radiological Testing Laboratory and standby for further instructions from the EDO.

2 | 5.8.3 During off-normal hours:

1. RMT members called in during an emergency report to the Chemist & Health Physicist or EDO in the Davis-Besse Administration Building for assignment to an onsite or offsite RMT.
2. Check out the monitoring equipment and standby in the Radiological Testing Laboratory for further directions.

5.9 Plant Staff

Members of the plant staff that have been informed of a Site Emergency shall proceed to their designated locations and perform their assigned functions.

5.9.1 The Plant Operations Manager shall proceed to the Control Room. He shall direct plant operations and plant damage control efforts. He shall also keep the Station Operations Manager advised of plant operations.

5.9.2 The Operations Engineer shall proceed to the Control Room. His functions are to supervise control room activities, to perform on-the-spot operational analysis as required to assist the Shift Supervisor, and keep the Plant Operations Manager informed of current plant conditions.

5.10 Onsite Personnel

5.10.1 Personnel, who do NOT have specifically assigned duties during a Site Emergency, shall proceed to the following areas:

- a. Personnel inside RACA shall proceed to the Health Physics Monitoring Room area and wait for further instructions.
- b. Personnel in the Protected Area shall proceed to the Operations Support Center and wait for further instructions.
- c. Personnel outside the Protected Area shall proceed to the Construction Office Building and wait for further instructions.

5.11 Offsite Personnel

5.11.1 Personnel offsite that are notified to report to the site shall proceed to Emergency Control Center and then to their specifically assigned locations as required and conditions permit.

5.12 Offsite Agencies and Organizations

5.12.1 The Carroll Township Ambulance Service shall provide transportation service as required for offsite medical treatment.

- 5.12.2 The H. B. Magruder Memorial Hospital shall provide offsite medical treatment for personnel as required.
- 5.12.3 The Carroll Township Fire Department shall provide primary response to fire alarms onsite as required.
- a. The Village of Oak Harbor Fire Department shall provide alternate response to fire alarms onsite as required through mutual aid with Carroll Township.
- 5.12.4 The Ottawa County Sheriff's Department is experienced in providing area control, communications assistance, and direct handling of the local population, including evacuation, should it become necessary. The Sheriff's Department provides 24 hour radio communication coverage with the Shift Supervisor at DBNPS and the lead offsite governmental agency contacted in the event of an emergency at the site.

6. TERMINATION

- 6.1 The Emergency Duty Officer and Station Operations Manager have joint responsibility for determining and declaring when the emergency situation is stable.
- 6.2 The Emergency Duty Officer shall assure notification of all offsite organizations and TECo personnel that the emergency has terminated.
- 6.3 A written, summary will follow notification of termination within 8 hours.

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
SITE EMERGENCY

ATTACHMENT 1

NOTE: If changing from a prior emergency classification checklist, complete steps NOT already accomplished by the previous checklist. Then attach all the previous checklists used to this one. Place N/A in steps that are not applicable.

ACTION REQUIRED	ACTION COMPLETED		
	DATE	TIME	INITIALS
1. Sound the appropriate alarm	_____	_____	_____
2. Announce location, type of emergency on Gai-tronics twice	_____	_____	_____
2 NOTE: These steps may be omitted when downgrading from a higher classification.			
3. Initiate corrective action as required	_____	_____	_____
4. Confirm Emergency Classification (See EI 1300.01)	_____	_____	_____
5. Conduct necessary notification:			
2 a. Nuclear Security Supervisor (Ext. 556 or 557)	_____	_____	_____
NOTE: In the event of a fire, the Nuclear Security Supervisor notified the Ottawa County Sheriff who notified the appropriate department.			
2 b. Edison Centrex Operator (Ext. 88-000 or 259-5000)	_____	_____	_____
NOTE: In the event of a medical emergency, the Edison Operator notifies the medical authorities and appropriate Company management.			
c. Station Management (See Step 5.1.3(b) of this procedure)			
1. Station Superintendent	_____	_____	_____

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
SITE EMERGENCY

ATTACHMENT 1 (Con't)

ACTION REQUIRED	ACTION COMPLETED		
	DATE	TIME	INITIALS

NOTE: The Station Superintendent or his designee is responsible for notifying the Ottawa County Sheriff upon declaration of an Emergency Action Level.

2. The Key Emergency Response Personnel: _____

Emergency Duty Officer, Assistant Station Superintendent Operations, Chemist and Health Physicist, Nuclear Services Director, Emergency Planning Supervisor, Nuclear Security Manager, News Media Relations Supervisor, Technical Engineer, Maintenance Engineer, and Operations Engineer.

- d. *NRC (use the Emergency Notification System - Red Phone) _____

*NOTE: NRC notification must be made within one hour and should be made by station management. During an incident or abnormal occurrence, health physics information should be transmitted using the NRC Health Physics Network by the Chemist and Health Physicist or his designee. (Dial 22 for NRC Headquarters - 23 for NRC Region 3 Office.)

6. Perform applicable steps of the ECC checklist (Attachment 3 of EI 1300.08, Emergency Control Center Activation) _____
7. Center Activation Confirmation
- a. Emergency Control Center (EI 1300.08) _____
- b. Operations Support Center (EI 1300.06) _____

EDO/SHIFT SUPERVISOR
CHECKLIST FOR
SITE EMERGENCY

ATTACHMENT 1 (Con't)

ACTION REQUIRED	ACTION COMPLETED		
	DATE	TIME	INITIALS
2 c. Technical Support Center (EI 1300.07)	_____	_____	_____
d. Emergency Support Center (EI 1300.09)	_____	_____	_____
8. Conduct Periodic Updates for:			
a. TED Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____
9. As conditions change, check EI 1300.01 to determine if reclassification is appro- priate	_____	_____	_____
10. When the condition is resolved notify:			
a. TED Personnel	_____	_____	_____
b. NRC	_____	_____	_____
c. Ottawa County Sheriff	_____	_____	_____

Reviewed by _____ Station Superintendent Filed by _____ Emergency Planning Supervisor

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.07

Technical Support Center Activation

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by [Signature] 6/13/80
 SRB Chairman Date

QA Approved N/A
 Quality Assurance Manager Date

Approved by [Signature] 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	[Signature]	1/21/81	NA		[Signature]	4/20/81
2	[Signature]	6/22/82	NA		[Signature]	7/2/82

1. PURPOSE

To outline the personnel required for activation of the Technical Support Center (TSC) and their responsibilities and actions during an emergency at Davis-Besse Nuclear Power Station.

2. SCOPE

Describe the actions of personnel assigned to the TSC when the need for its activation has been determined.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Davis-Besse Nuclear Power Station Emergency Plan Telephone Directory
- 3.3 Station Response to Emergencies EI 1300.00
- 3.4 Unusual Event EI 1300.02
- 3.5 Alert EI 1300.03
- 3.6 Site Emergency EI 1300.04
- 3.7 General Emergency EI 1300.05
- 3.8 Administrative Controls EI 1300.12

4. DEFINITION

- 4.1 Technical Support Center (TSC) - An area onsite in close proximity to the Control Room which has the capability to display and transmit plant status information to the individuals who are knowledgeable of and responsible for engineering and management support of reactor operations in the event of an emergency situation.

5. ACTIONS

- 5.1 The Technical Support Center is located at the Davis-Besse site, along Ohio State Route #2, in the Davis-Besse Administration Building. The primary function of the TSC is to house and support an organization that provides management and technical assistance to the Station operations personnel during emergency conditions and to prevent or mitigate the consequences of abnormal plant conditions. The TSC provides direct voice and data communication with the Control Room and serves as a primary communications

2 | contact with the offsite emergency organization of Toledo Edison. Visual observation of the Control Room will be available through closed-circuit television (CCTV). The TSC also contains the DADS to enable the TSC staff to acquire plant data and information necessary for technical evaluations needed to handle emergency conditions and recovery operations. Two communication lines to the NRC are available for direct communication to the NRC Health Physics Network and Emergency Notification System.

The TSC contains work space for up to 25 people, including a main work area for 15 people and 3 conference areas, one of which will accommodate 8 people.

- 2 | 5.2 The TSC shall be activated at the Alert Emergency Classification level.
- 5.3 The first Station management individual to arrive at the TSC shall notify the Control Room that the TSC is manned.
- 5.4 Station Operations Manager
- 5.4.1 The primary Station Operations Manager is the Station Superintendent.
- 2 | 5.4.2 The alternate Station Operations Manager is the Assistant Station Superintendent, Operations.
- 5.4.3 The Station Operations Manager is responsible for assuring the activation of the TSC.
- 5.4.4 The Station Operations Manager should proceed to the TSC and, if NOT previously performed, notify the Control Room that the TSC is manned.
- 5.4.5 The Station Operations Manager should assure the following individuals arrive at the TSC:
- a. Nuclear Engineering Manager
 - b. Technical data communicator
 - c. Technical Engineer
 - d. Plant Instrumentation and Control Systems Engineer
 - e. Plant Nuclear Systems Engineer

5.4.6 The Station Operations Manager may establish the following telephone communications loops as needed per the DBNPS Emergency Plan Telephone Directory:

- a. Technical Data Loop
- b. Technical Management Loop
- c. Policy Management Loop
- d. Public Relations Loop

NOTE: If personnel are required as communicators, requests should be directed to the Operations Support Center.

5.4.7 The Station Operations Manager should assign an individual(s) to set-up the emergency equipment as listed in Attachment 1, as required.

5.4.8 Upon arrival, the Onsite Assessment Manager will assume control of the TSC from the Station Operations Manager.

5.5 Onsite Assessment Manager

5.5.1 The primary Onsite Assessment Manager is the Nuclear Engineering Manger.

5.5.2 The alternate Onsite Assessment Manager is the Plant Nuclear Systems Engineer.

5.5.3 The Onsite Assessment Manager, upon being informed that an Alert level emergency exist, shall proceed to the Technical Support Center (TSC).

5.5.4 The Onsite Assessment Manager's responsibilities and duties include, but are NOT limited to:

- a. Directing the engineering assessment activities of the TSC.
- b. Coordinating the engineering assessment activities of engineering support personnel from the NSSS vendor and the Architect Engineer.
- c. Ensuring that adequate mechanical, electrical, instrumentation and control, and technical

engineers are available to perform engineering assessment, as required.

- d. Ensuring that adequate support personnel are available to assist in records disposition, updating status board, and providing communications to the Control Room and Nuclear Regulatory Commission, as necessary.
- e. Reporting to the Station Operations Manager and appraising him of engineering assessment activities, equipment operation problems and any alterations in the normal lineup or operation of plant systems.

2

5.6 Technical Engineer

- 5.6.1 The primary technical engineering individual is the Technical Engineer.
- 5.6.2 The alternate technical engineering individual is the Nuclear Performance Engineer.
- 5.6.3 The Technical Engineer shall assist in coordinating and performing plant assessment activities.
- 5.6.4 The Technical Engineer shall, as necessary, assure that radiological controls are in place such as:
 - a. TSC monitored for airborne activity by operation of a portable air activity monitor.
 - b. A high/low survey instrument is utilized by personnel leaving the TSC for entry into the plant.
 - c. Stepoff pads and contamination survey instruments are provided at the entrance to the TSC from the plant when required.
- 5.6.5 The Technical Engineer shall assure that personnel assembled in the TSC are briefed on conditions and monitoring methods in place while the TSC is activated.

5.7 Radcon Operations Manager

- 5.7.1 The Radcon Operations Manager is the Chemist and Health Physicist.

- 5.7.2 The alternate Radcon Operations Manager is the Chemical and Radiation Protection Engineer.
- 5.7.3 The Radcon Operations Manager directs and coordinates the radioactive waste and radiological controls aspects of Emergency Operations and keeps the Plant Operations Manager informed of radwaste and radcon activities pursuant to the emergency.
- 5.7.4 The Radcon Operations Manager is responsible for coordinating the activities of the Health Physics Monitoring Room portion of the Operations Support Center, however he may do this from his office located in the Technical Support Center. He is also responsible for relaying health physics information over the NRC Health Physics Network phone which is located there.
- 5.7.5 The Radcon Operations Manager shall supervise the onsite radiation surveys and survey results analysis.
- 5.8 Plant Staff
- 5.8.1 Plant Staff, such as the operations engineering staff, clerical support, etc., who are NOT assigned to other emergency functions, shall (if in protected area) report to the Operations Support Center and be directed to the TSC as needed.
- 5.8.2 The Technical Engineering staff who are not assigned other emergency functions, shall report directly to the TSC.
- 5.8.3 The Plant Staff shall assist in accident assessment, as required.
- 5.9 Technical Support Center Activity
- 5.9.1 Communications with the Control Room, Emergency Support Center, Operations Support Center, Emergency Control Center, and the NRC will be established as specified by the Onsite Assessment Manager or the Station Operations Manager.
- a. The Data Acquisition and Display System (DADS) terminals in the TSC will provide sufficient station information and data communication for

personnel to evaluate and diagnose station conditions and activities so as to conduct emergency operations in an orderly manner.

- b. The DADS provide data communication between the ECC, TSC, Control Room and Emergency Support Center.
 - c. The DADS can monitor plant transients during and following most events expected to occur during the life of the station.
- 5.9.2 The condition of the reactor and essential safety-related systems shall be assessed and steps taken to assure protection of Station personnel and the public.
- 5.9.3 Analysis of plant conditions shall be performed to determine reactor core status. Containment Radiation Plots in Attachment 2 provide the relationship between containment radiation levels and the time after plant shutdown for various amounts of fuel inventory released into containment. This information can be correlated to the approximate source and damage estimates given in Table 1.
- 5.9.4 Directives issued to the Control Room shall be assessed for potential adverse consequences before issuance - this includes all offsite directives from government or company management organizations.
- a. Directives to the Control Room should be done verbally as long as there is mutual agreement to all parties that the correct action is being taken.
 - b. If a disagreement occurs between the Control Room and the TSC, a written directive from the TSC should be forwarded to the Control Room signed by the Onsite Assessment Manager or Station Operations Manager.
- 5.9.5 Contact shall be made and support requested as required from the following organizations:
- a. Babcock and Wilcox
 - b. Bechtel
 - c. Nuclear Safety Analysis Center (NOTEPAD)

- 5.9.6 A record of activities of the TSC shall be maintained to the best ability of personnel present. Record disposition shall be in accordance with EI 1300.12, Administrative Controls.
- 5.9.7 The decision to deactivate the TSC shall be made by joint concurrence of the Onsite Assessment Manager, Station Operations Manager, Shift Supervisor and other key plant personnel once accident recovery has reached a point where continuous technical assessment and advisory functions are no longer necessary to mitigate the consequences of plant conditions.

5.10 Procedure for Activation of the Alternate TSC

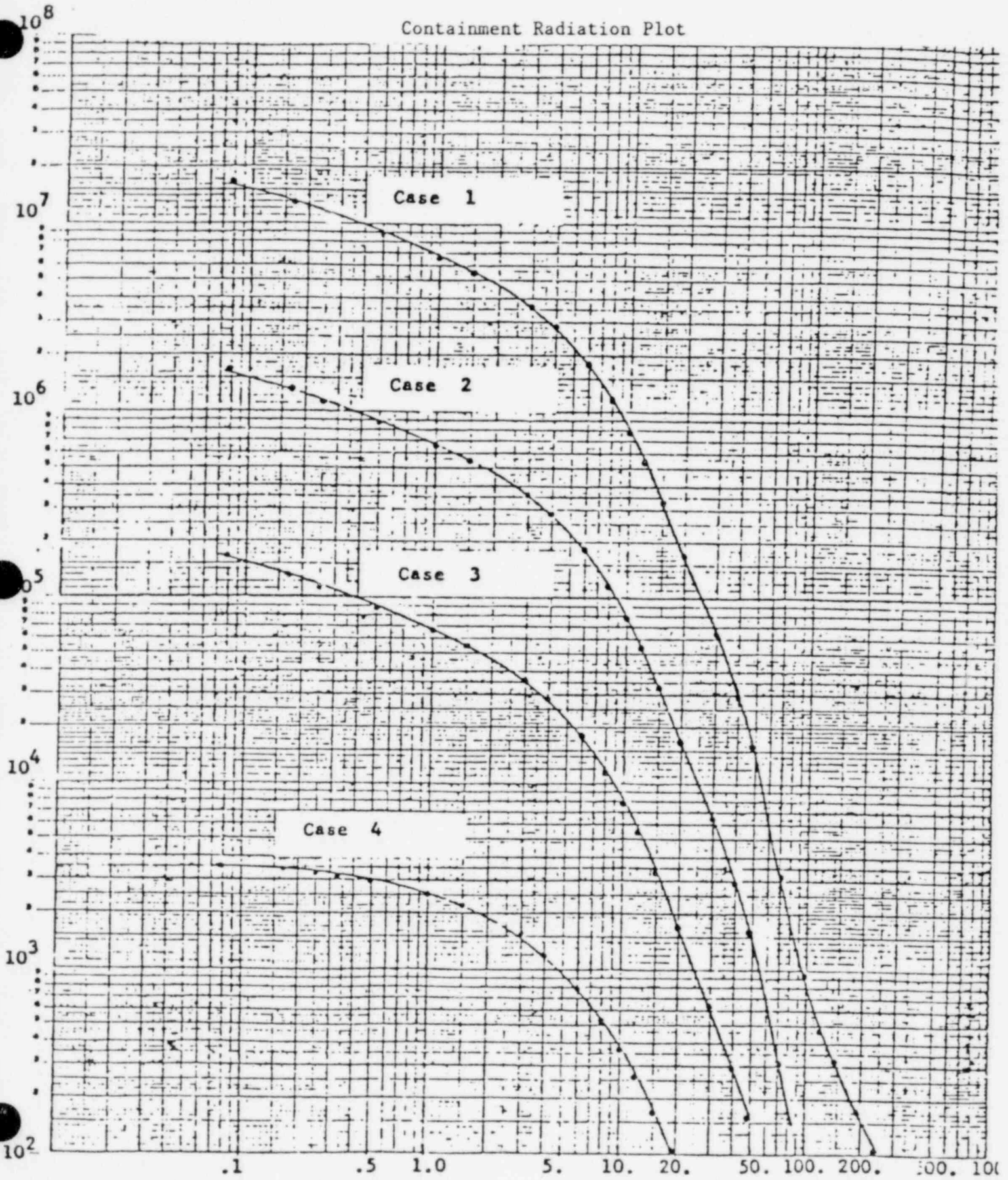
- 5.10.1 The Onsite Assessment Manager will direct the activation of an alternate TSC if the normal TSC becomes uninhabitable for any reason.
- 5.10.2 No more than three (3) persons assigned to technical support will be dispatched to the Control Room. The balance of the technical support staff (including vendor, TECo and NRC personnel) will be located at a suitable position as close to the Control Room as possible. Communications will be established by telephone, messenger, telecopier, etc. between technical support personnel and the Control Room. Also, communications will be established at least by telephone or messenger between the relocated TSC and the ECC.

Technical Support Center
Equipment List
Attachment 1

	<u>Equipment Type</u>	<u>Quantity</u>	<u>Location</u>
1.	Portable High-Range Survey Meter (1 mr/hr to 1,000 r/hr range)	1 ea.	*
2.	Portable Low-Range Survey Meter (Frisker)	1 ea.	*
3.	Portable Air Sampler	1 ea.	*

*NOTE: This equipment is available in the Instrument and Calibration Room.

Containment Radiation Plot



Containment Radiation Plot Instructions

Theoretical curves of gross gamma dose rate versus time are given for a range of potential source terms.

The curves represent direct readings for monitors RE-2004, RE-2005, RE-2006 and RE-2007 located at elevation 585, outside containment.

The calculation of monitor response did not include any particulates or iodine since the noble gases are the most significant contributors to dose rate in the containment. At the worst, neglecting the particulates adds a slight amount of conservatism since the actual presence of particulates would result in a higher monitor reading.

- NOTE: (1) The curves account for the finite containment volume seen by the detector but do not account for any monitor physical or shielding characteristics or calibration un-certainties.
- (2) The curves assume that only airborne noble gases are significant. Sprays (if used) would make the iodine and any particulate contribution insignificant. However, particulate plateout on surfaces and direct shine doses from components may make the readings unreliable.
- (3) Curve uncertainties are on the order of a factor of 2 to 5.

Procedure:

1. Determine the Time after reactor shutdown.
2. Locate the radiation monitor Dose Rate Reading on the graph at the time after shutdown.
3. Take the ratio of the measured dose rate to the dose rate given on one of the curves for a known percent inventory. (ie., interpolate between curves.)
4. Relate the % fuel inventory released to the Approximate Source & Damage Estimates as given in Table 1. (This value should be compared to the same case number as the curve used in Step 3 above.)

Table 1

Percent of Fuel Inventory Airborne in the Containment vs.
Approximate Source and Damage Estimate

<u>Case No.</u>	<u>% Fuel* Inventory Released</u>	<u>Approximate Source and Damage Estimate</u>
1	100	100% Regulatory Guide 1.4, 100% Fuel Damage, potential core melt
2	10	10% Regulatory Guide 1.4, (or 100% NRC Gap Activity, Regulatory Guide 1.25), total clad failures, core partially uncovered
3	1	1% Regulatory Guide 1.4 (or 10% NRC Gap Activity), approximately 10% clad failure
4	-	100% coolant release

*100% Fuel Inventory = 100% Noble Gas

END

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.08

Emergency Control Center Activation

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by [Signature] 6/13/80
 SRB Chairman Date

QA Approved N/A
 Quality Assurance Manager Date

Approved by [Signature] 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<u>[Signature]</u>	<u>10/14/80</u>	<u>NA</u>		<u>[Signature]</u>	<u>11/11/80</u>
2	<u>[Signature]</u>	<u>1/21/81</u>	<u>NA</u>		<u>[Signature]</u>	<u>1/21/81</u>
3	<u>[Signature]</u>	<u>6/22/82</u>	<u>NA</u>		<u>[Signature]</u>	<u>7/2/82</u>

1. PURPOSE

To outline the personnel required for activation of the Emergency Control Center (ECC) and their responsibilities and actions during an emergency at Davis-Besse Nuclear Power Station.

2. SCOPE

Describe the actions of personnel assigned to the ECC when the need for its activation has been determined.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Davis-Besse Nuclear Power Station Emergency Plan Telephone Directory
- 3.3 Station Response to Emergencies EI 1300.00
- 3.4 Unusual Event EI 1300.02
- 3.5 Alert EI 1300.03
- 3.6 Site Emergency EI 1300.04
- 3.7 General Emergency EI 1300.05
- 3.8 Administrative Controls EI 1300.12
- 3.9 Protective Action Guidelines AD 1827.12
- 3.10 Emergency Offsite Dose Estimates AD 1827.10

4. DEFINITION

- 4.1 Emergency Control Center (ECC) - A specifically designated location which is equipped to facilitate the control and coordination of emergency activities and assessments.

5. ACTIONS

- 5.1 The ECC is located at the DBNPS site along Ohio State Route 2 in the Administration Building.
 - a. Command and control of site-related emergency efforts affecting local response within the Emergency Planning Zone originate from this center.
 - b. The ECC contains communication links necessary for coordination with offsite organizations.

- 3 |
- c. The ECC contains a terminal of the DADS (Data Acquisition and Display System) for acquiring necessary data for dose calculations.
 - d. The ECC will serve as an interface with the TECo Emergency Response Organization and Local, State, and Federal agencies.

5.2 The first Station management individual to arrive at the ECC shall notify the Control Room that the ECC is manned.

5.3 Emergency Duty Officer Activities

5.3.1 The Emergency Duty Officer (EDO) is responsible for determining the need for and assuring the activation of the ECC.

5.3.2 The EDO shall proceed to the ECC and, if NOT previously performed, notify the Control Room that the ECC is manned and perform the steps as indicated in Attachment 3.

5.3.3 The EDO shall ensure the following individuals arrive at the ECC as needed:

- a. Control Room Communicator
- b. State and County Communicator
- c. Teleprinter Operator
- d. Corporate Management Communicator
- e. Public Relations Communicator
- f. Nuclear Regulatory Commission Communicator
- g. Radiation Monitoring Team Communicator
- h. Radiation Monitoring Teams
- i. Emergency Operations Manager
- j. Emergency Planning Supervisor
- k. Community Assistance Communicator

3 |

5.3.4 The EDO may request to the Station Operations Manager that part or all of the telephone communications loops be established.

- 5.3.5 The EDO shall assign an individual(s) to set-up necessary emergency equipment (located in the ECC and Radiological Testing Lab) as listed in Attachment 1.
- 5.3.6 The EDO shall assign an individual(s) to perform dose calculations and dose assessment, and to operate the CRT terminal for the Data Acquisition and Display System..
- 5.3.7 The EDO shall ensure that Attachment 2 is completed correctly and supplied to the State and County Disaster Services Agencies.
- a. This shall be accomplished as soon as possible after the start of the emergency.
 - b. Updates to Attachment 2 shall be supplied as requested by the State and County Disaster Services Agencies.
- 5.3.8 The EDO shall assume responsibility for distribution of potassium iodide to station personnel as per AD 1827.12 and to RMT's as per AD 1850.05.
- 5.3.9 The EDO shall, when necessary, recommend protective actions for the plume exposure pathway to the State and County Disaster Services Agencies per AD 1827.12, Protective Action Guidelines.
- 5.3.10 The EDO shall assign Radiation Monitoring Teams and inform Federal, State and local officials of the affected areas by sector and zone designators as shown on Attachment 4.
- 5.4 Emergency Operations Manager
- 5.4.1 The primary Emergency Operations Manager is the Nuclear Services Director.
- 5.4.2 The alternate Emergency Operations Manager is the Staff Assistant Nuclear.
- 5.4.3 The Emergency Operations Manager, upon being informed that an emergency exists, shall proceed to the ECC.
- 5.4.4 The Emergency Operations Manager's responsibilities and duties include, but are NOT limited to:

- a. Report to the Operations Director and appraise him of emergency operations and community relations matters.
- b. Provide direction and guidance for the EDO.
- c. Notify the state and local officials that protective action for the injection pathway may be necessary.
- d. Coordinate short term community assistance activities and response to the needs of local government officials.

5.5 Emergency Planning Supervisor

- 5.5.1 The Emergency Planning Supervisor, upon being informed that an emergency exists, shall proceed to the ECC.
- 5.5.2 The Emergency Planning Supervisor's responsibilities and duties include, but are NOT limited to:
 - a. Report to the Emergency Operations Manager and appraise him of emergency response activities.
 - b. Consult with and provide assistance to the EDO.
 - c. Provide guidance needed to coordinate the various emergency response activities.
 - d. Ensure contact is made as required to the following agencies (phone numbers are found in Administrative Memorandum No. 37):
 - *1. Institute of Nuclear Power Operations (INPO)
 - 2. REMS Corporation
 - *3. American Nuclear Insurers (ANI)
 - 4. Federal Bureau of Investigation
 - 5. State of Michigan
 - 6. Department of Energy (IRAP)
 - 7. Consumer's Power Company
 - 8. Detroit Edison Company
 - 9. Cleveland Electric Illuminating Co.
 - 10. Cincinnati Gas and Electric Co.

*Must be notified at the Alert level or above.

5.6 Radiation Monitoring Teams

- 5.6.1 The first RMT to arrive at the ECC shall perform the functions listed below:
- a. Using appropriate survey instruments, survey the immediate areas surrounding the ECC.
 - b. Standby with a Radiation Monitoring Team Kit and Protective Clothing Kit. Protective clothing to be used as directed.
 - c. Check out equipment for operability.
 - d. Perform surveys offsite as directed by the EDO.
- 5.6.2 Other RMT's that arrive at the ECC:
- a. During normal working hours:
 1. Standby with a Radiation Monitoring Team Kit and Protective Clothing Kit to be used as directed.
 2. Check out equipment for operability.
 3. Perform surveys offsite as directed by the EDO.
 - b. During off-normal working hours:
 1. If not needed as an offsite RMT (as determined by EDO), assignment as onsite RMT's to the Radcon Operations Manager (at the Technical Support Center) or the Shift Supervisor (if the TSC is not as yet manned) will be made by the EDO after it is assured that additional aid is needed onsite.

5.7 Staff Personnel

- 3 |
- 5.7.1 Staff personnel such as the Nuclear Reliability Manager, and other personnel qualified as EDO who are NOT assigned to other emergency operations functions shall report to the ECC to assist the EDO, act as communicators, or perform other duties as directed by the EDO.
- 5.7.2 The staff will assist in communications as well as in assessment of the data supplied to the ECC.

- 5.7.3 The EDO may designate members of the staff to perform dose calculations and assessments.
- a. If a release of radioactive particulates or gases from the plant occurs, dose calculations should be performed in accordance with AD 1827.10, Emergency Offsite Dose Estimates.
 - b. Total population exposure should be calculated in accordance with the following:

1. Population exposure calculation:

$$\text{Dose Rate} \times \text{PET} \times \text{PPA} = \text{man rem}$$

Where:

Dose Rate = rate of exposure per unit
time in rem

PET = Projected Exposure Time or after
the release actual exposure time

PPA = Population in Plume Area

NOTE: Population values can be
derived from Figures 2-4,
2-5 and 2-6 in Section 2.0
of the DBNPS Emergency Plan.

2. Schedule for Calculation or Estimates:

8 hours after release - 1st day

24 hours after release - 1st day

every 12 hours thereafter for 3 days

daily beginning the 4th day after the
incident.

- 5.7.4 A record of activities of the ECC shall be maintained to the best ability of personnel present. Record disposition shall be in accordance with EI 1300.12, Administrative Controls.

5.8 Responding Personnel

- 5.8.1 Personnel offsite who have been requested to respond to an emergency shall proceed to the Emergency Control Center and then

to their specifically assigned locations as
required and conditions permit.

DAVIS-BESSE ADMINISTRATION BUILDING
RADIOLOGICAL TESTING LABORATORY
EQUIPMENT LIST

CABINET "1"

Survey Equipment:

RM-14 HP 260 Probe and Power Cord	1 ea.
PRM-4A with HP 210 Probe	2 ea.
PIC-6A Ior Chamber	1 ea.
PRM-7 Micro R-Meter	2 ea.
Dosimeter Charger	1 ea.
Dosimeter 0-100R	5 ea.
Dosimeter 0-5R	5 ea.
Dosimeter 0-500mR	25 ea.
TLD	25 ea.
Check Source, CS-137 (~8 μ Ci)	1 ea.
Air Sampler, DC	4 ea.
Batteries:	-
12-Volt 35-102 Booster	1 ea.
"D" Cell, 1 1/2 Volt	12 ea.
9-Volt	12 ea.
NEDA 220, 15 Volts for SK-1 Speakers	12 ea.
"AA" Penlites	12 ea.
Protective Clothing Kits, Each Contain:	12 ea.
1 Pair Cloth Coveralls	-
1 Pair Rubber Shoecovers	-
1 Cloth Hood	-
1 Cloth Cap	-
1 Pair Cottor Liner	-
1 Pair Rubber Gloves	-
1 Pair Plastic Booties	-
1 Full Face Respirator	-
Masking Tape	-
Other Protective Clothing:	
Plastic Shoe Covers	30 ea.
Disposable Rubber Gloves	2 Boxes
Cotton Glove Liners	30 ea.
Paper Coveralls	30 pairs
Miscellaneous:	
Smears	2 Boxes
Smear Folders	2 Boxes
Plastic Bags, Swirl Pack	-
Tweezers	-
Plastic Bags, Assorted	-
Extension Cord	1
Radiation Signs and Inserts	-
Rope	-

DAVIS-BESSE ADMINISTRATION BUILDING
 RADIOLOGICAL TESTING LABORATORY
 EQUIPMENT LIST

CABINET "2"

Ottawa County Maps	2 ea.
First Aid Kit	1 ea.
Data Sheet #1 for AD 1850.05	25 ea.
Data Sheet #1 for AD 1827.10	25 ea.
Data Sheet #2 for AD 1827.10	25 ea.
Stenographer Pads	-
Bottle of KI Tablets (Approx. 1000)	1 ea.
Ledger	1 ea.
Pencils and Pens	-
Felt Tip Pen	1 ea.
Particulate Filter, 2 1/4"	30 ea.
Silver Zeolite Cartridges	30 ea.
Duct Tape	-
Raincoats	12 ea.
Radio	2 ea.
Radio Charger	2 ea.
*RMT Kit, Off-Site	2 ea.
*RMT Kit, On-Site	2 ea.
Seals	-
SAM-2 Analyzers	2 ea.

Onsite Radiation Monitoring Team Kit

PIC-6A Survey Meter	1 ea.
E-520 Survey Meter	1 ea.
Flashlight	2 ea.
Dosimeter 0-500 mrem	2 ea.
Dosimeter 0-1 Rem	2 ea.
TLD	2 ea.
Smear Swipe NUCON	25 ea.
Tweezers	1 ea.
Planchet	10 ea.
Pencil	2 ea.
Note Paper	1 pad
Bag-Plastic	5 ea.
Screwdriver	1 ea.
RMT Procedure, AD 1850.05	1 set

*Can be stored outside cabinet.

DAVIS-BESSE ADMINISTRATION BUILDING
RADIOLOGICAL TESTING LABORATORY
EQUIPMENT LIST

Offsite Radiation Monitoring Team Kit

PRM-7 Micro R-Meter	1 ea.
E 520 Survey Meter	1 ea.
Flashlight	2 ea.
Dosimeter 0-500 mrem	2 ea.
TLD	2 ea.
Smear Swipe NUCON	25 ea.
Tweezer	2 ea.
Coins (Dime)	20 ea.
Planchet	10 ea.
Pencil	2 ea.
Note Paper	1 pad
Bag - Plastic	5 ea.
Screwdriver	1 ea.
RMT Procedure, AD 1850.05	1 set
County Map - Ottawa	1 ea.

DAVIS-BESSE ADMINISTRATION BUILDING
EMERGENCY CONTROL CENTER
EQUIPMENT LIST

CABINET "1"

TI 57 Calculator	1 ea.
TI 59 Calculator	1 ea.
Extra Paper for Printer	-
*Emergency Plan, Implementing Procedures and Supporting Procedures	2 sets
*Map Board	1 ea.
Ledger	1 ea.
Davis-Besse Technical Specifications	1 set
State of Ohio, Michigan and Ottawa County Emergency Plans	1 set

*Can be stored outside cabinet.

DAVIS-BESSE NUCLEAR POWER STATION
Emergency Nuclear Incident
Essential Information

Date _____ Time: _____ Sheet No.: _____

Part I:

- A. _____ : Classification of incident
- B. _____ : Time release started or is
 expected to start
- C. _____ to the _____ : Wind direction
- D. _____ m/sec.: Wind speed
- E. _____ Ci/sec: Noble gas release rate
- F. _____ Ci/sec.: Radioiodine release rate
- G. _____ : Stability Class
- H. _____ : Expected duration of release
- I. _____ mr/hr.: field monitoring reading
 _____ mr/hr: field monitoring reading
 _____ mr/hr: field monitoring reading

Part II:

- A. _____ Sector(s)/Zone(s) are involved
- B. _____ mr/hr @ _____ miles: whole body dose (pro-
 jected value)
 _____ mr/hr @ _____ miles: thyroid dose (projected
 value)

NOTE: Before acting upon the above information, reverify
 the information and ensure that all assumptions
 being made are known by the utility, State and
 local officials.

- C. _____
 _____ : Facility recommendations (stay inside or
 evacuate/distance)

DAVIS-BESSE NUCLEAR POWER STATION
Emergency Nuclear Incident
Essential Information

D. _____:Weather conditions (precipitation)

Part III:

A. _____
_____:Plant condition

B. _____
_____:Cause of incident

NOTE: When disseminating information during an actual event, if a space is skipped, insert "W/F" or "N/A" to indicate that there has NOT been a mistake and that the information will be forwarded as soon as possible.

W/F = will follow N/A = not applicable

ECC CHECKLIST

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
1. Emergency Duty Officer	_____	_____	_____
2. Perform applicable steps of the EDO/Shift Supervisor checklist in either EI 1300.03 (Alert), EI 1300.04 (Site), or EI 1300.05 (General) depending on the action level of the event.	_____	_____	_____
3. Assignment of individuals:			
a. Log keeper	_____	_____	_____
b. RMT Offsite Teams	_____	_____	_____
c. Dose Assessment Individual(s)	_____	_____	_____
d. Control Room Communicator	_____	_____	_____
e. NRC Communicator	_____	_____	_____
f. State and County Communicator	_____	_____	_____
g. RMT Communicator	_____	_____	_____
h. Teleprinter Operator	_____	_____	_____
4. Ensure offsite RMT's are sent out in downwind direction for survey per AD 1850.05	_____	_____	_____
5. Ensure offsite dose estimates are being made per AD 1827.10	_____	_____	_____
6. Assign a C&RT individual for airborne iodine counting and analysis per AD 1850.05	_____	_____	_____

ECC CHECKLIST (con't)

<u>ACTION REQUIRED</u>	<u>ACTION COMPLETED</u>		
	<u>DATE</u>	<u>TIME</u>	<u>INITIALS</u>
7. Evaluate what protective actions should be taken based on AD 1827.12 for the plume exposure pathway and make recommendations to the State and County as necessary. Affected areas should be designated as shown in Attachment 4.	_____	_____	_____
8. Complete the Essential Information form (Attachment 2) and release to the State and County Emergency Operation Centers as needed.	_____	_____	_____
9. Verify that the Shift Supervisor has requested the post accident sampling procedure AD 1850.04 be put in service per the Station Chemist and Health Physicist	_____	_____	_____
10. Ensure total population exposure calculations are made per step 5.7.3(b) of this procedure	_____	_____	_____
11. Coordinate the activities of the following individuals as necessary:			
a. Community Assistance Communicator	_____	_____	_____
b. Corporate Management Communicator	_____	_____	_____
c. Public Relations Communicator	_____	_____	_____

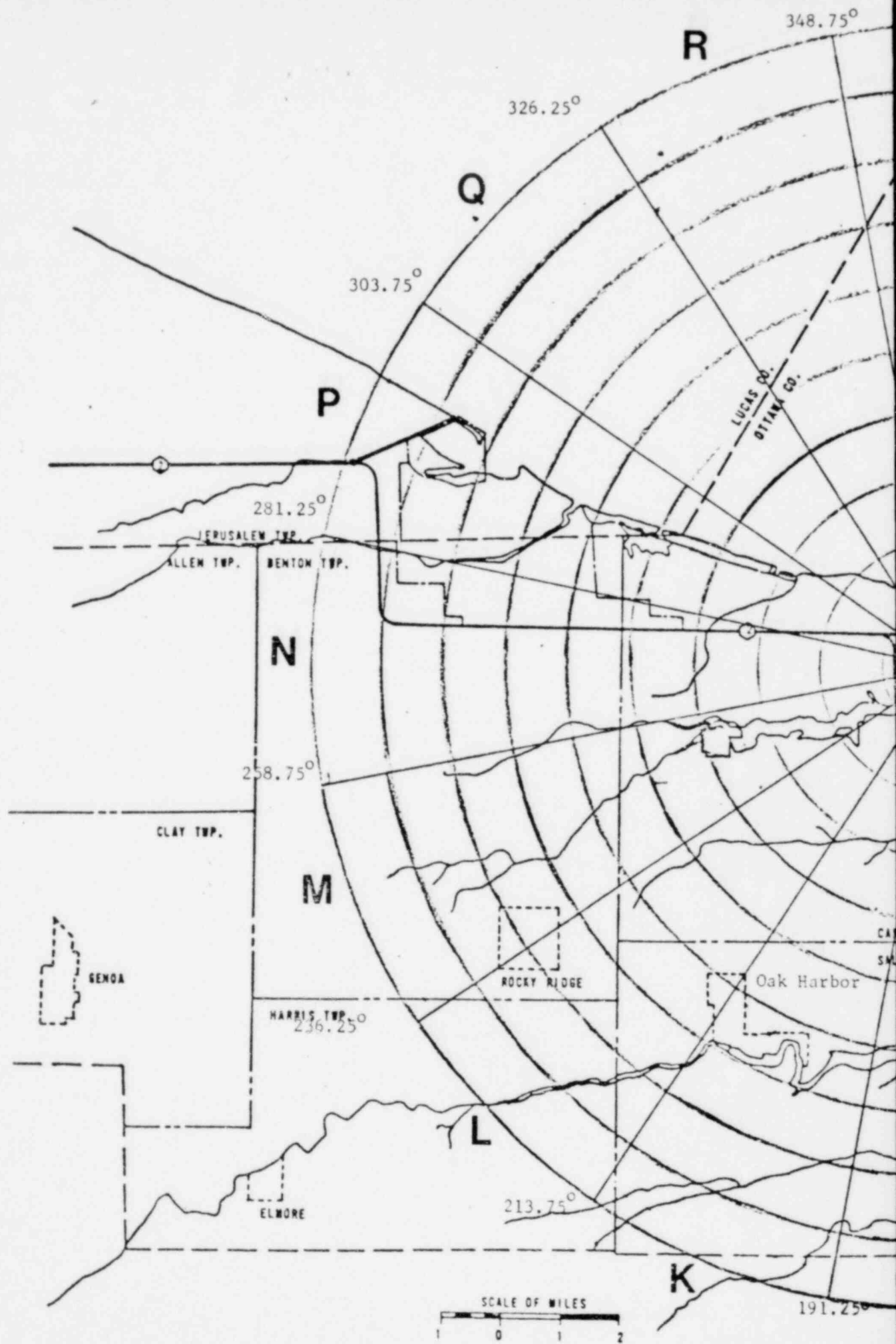
Reviewed by _____
Station Superintendent

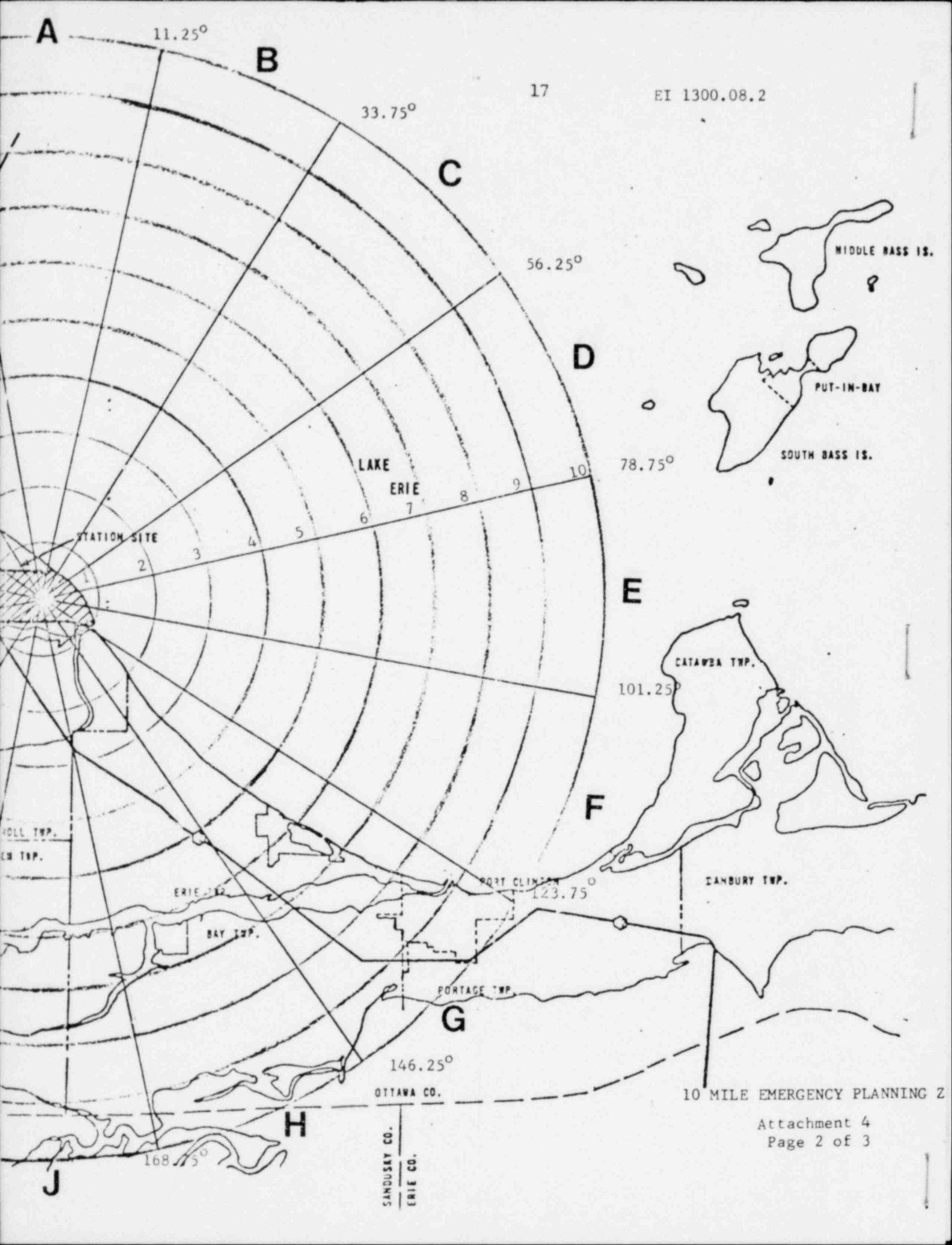
Filed by _____
Emergency Planning Supervisor

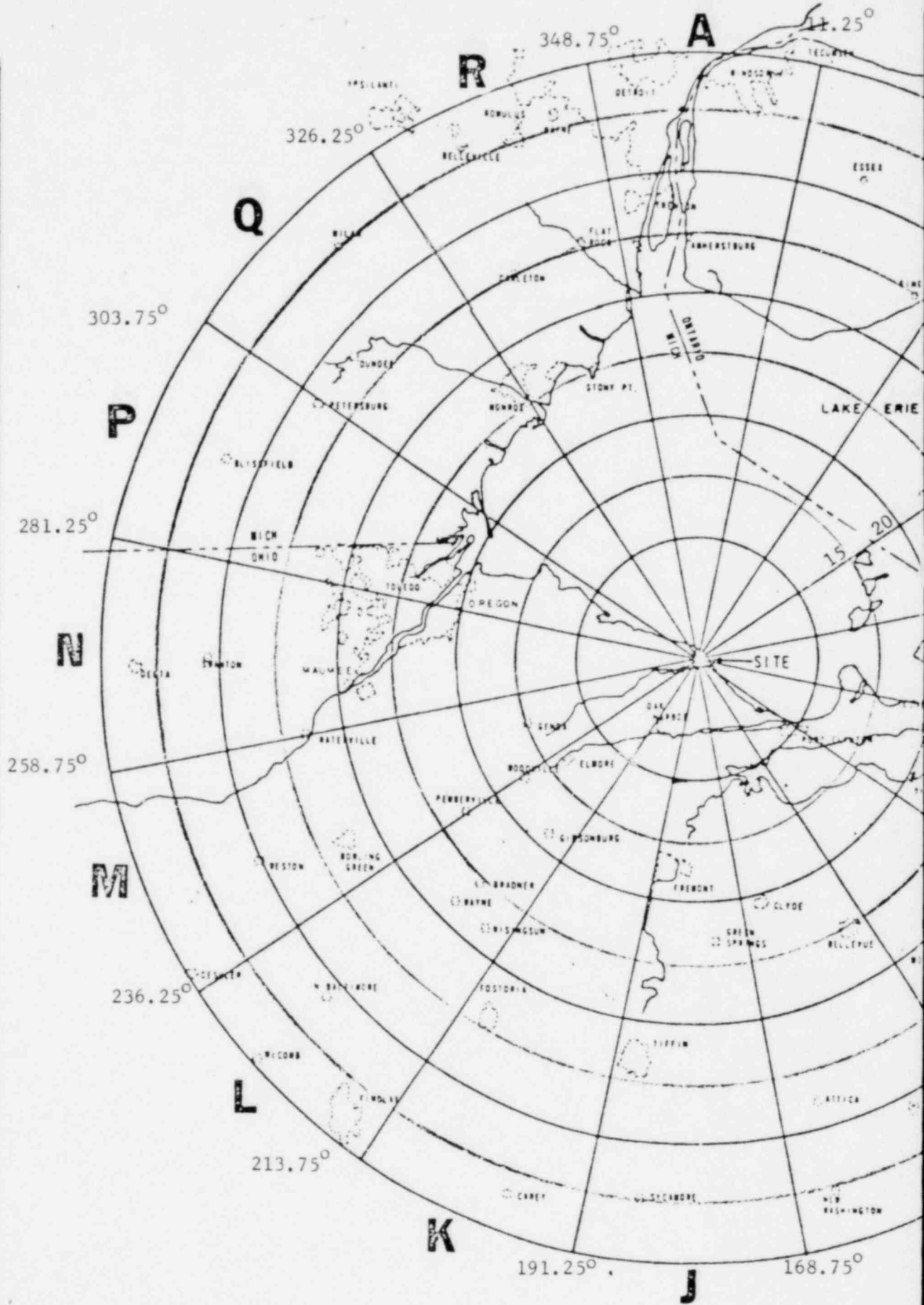
Sector and Zone Designators for
Emergency Planning Zones

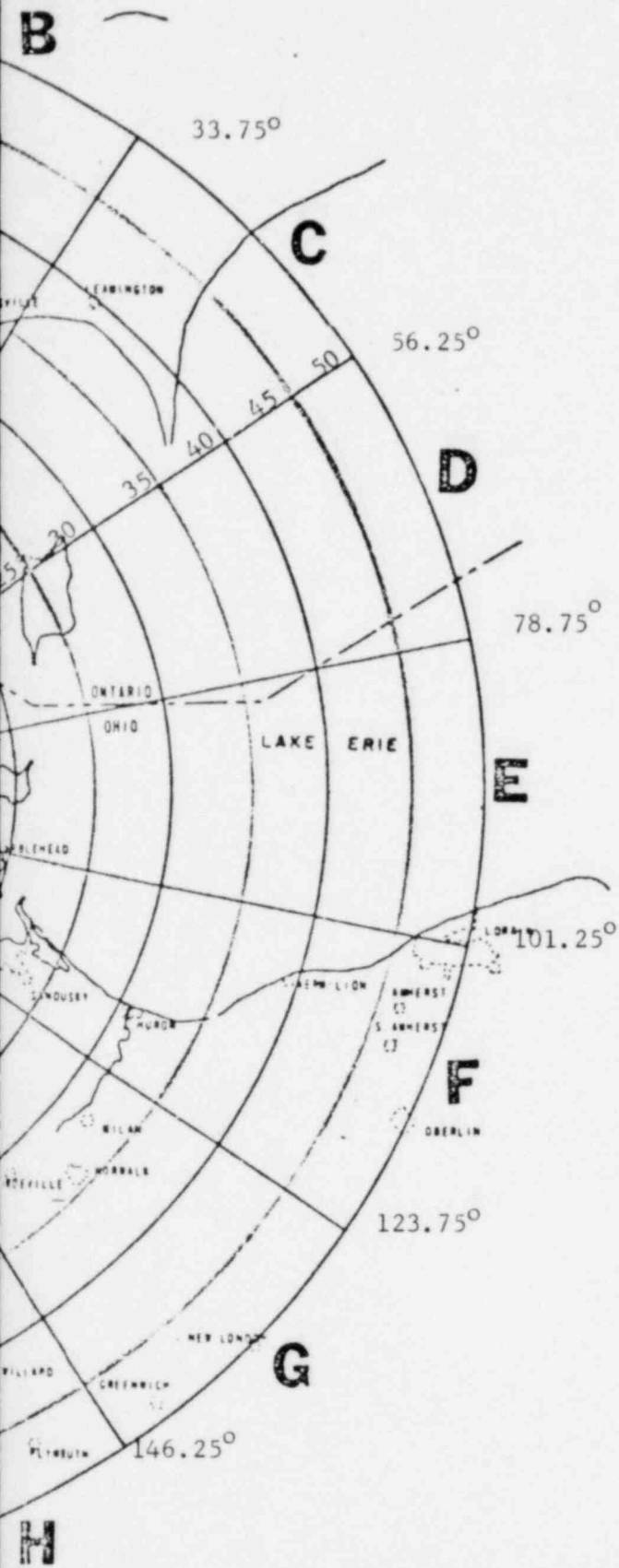
Sector Nomenclature		Zone Nomenclature	
<u>Sector in Degrees True North from Facility</u>	<u>22 1/2° Sector</u>	<u>Miles from Facility</u>	<u>Zone</u>
348.75° to 11.25°	A	0-1	1
11.25° to 33.75°	B	1-2	2
33.75° to 56.25°	C	2-3	3
56.25° to 78.75°	D	3-4	4
78.75° to 101.25°	E	4-5	5
101.25° to 123.75°	F	5-6	6
123.75° to 146.25°	G	6-7	7
146.25° to 168.75°	H	7-8	8
168.75° to 191.25°	J	8-9	9
191.25° to 213.75°	K	9-10	10
213.75° to 236.25°	L	10-15	15
236.25° to 258.75°	M	15-20	20
258.75° to 281.25°	N	20-25	25
281.25° to 303.75°	P	25-30	30
303.75° to 326.25°	Q	30-35	35
326.25° to 348.75°	R	35-40	40
		40-45	45
		45-50	50

AREA SEGMENT - An area is identified by a Sector and zone designator.
 EXAMPLE - Area F4 is that area which lies between 101.25° to 123.75° true north from the facility and between 3 and 4 miles out from the facility.









50 MILE EMERGENCY PLANNING ZONE

Attachment 4
Page 3 of 3

END

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.10

Reentry

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by [Signature] 6/13/80
 SRB Chairman Date

QA Approved N/A
 Quality Assurance Manager Date

Approved by [Signature] 8/19/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<u>Amending</u>	<u>6/29/82</u>	<u>NA</u>		<u>[Signature]</u>	<u>7/8/82</u>

PURPOSE

To outline a course of action and the protective measures required for reentry into Station areas.

2. SCOPE

Describe the actions and responsibilities of Davis-Besse personnel and offsite support groups after the Emergency Duty Officer and the Station Operations Manager have jointly determined and declared the Site or General Emergency situation stable and the Station is ready for reentry phase operations.

3. REFERENCES

3.1 Davis-Besse Nuclear Power Station Emergency Plan

4. DEFINITION

Not applicable

5. REENTRY ACTIVITIES

5.1 Initial Coordination

5.1.1 The TECo Engineering Support Director shall develop, coordinate and expedite plans and schedules for the reentry.

5.1.2 The Company Nuclear Review Board (CNRB) shall oversee the activities of the Engineering Support Director, and the Operations Director, to assure that all nuclear safety aspects of the operations are satisfied.

5.1.3 The Station Operations Manager, under the direction of the Operations Director, shall be responsible at the site for authorizing the start of reentry activities.

5.1.4 Offsite reentry activities will be coordinated with the State and County Disaster Services Agencies.

5.2 Reentry Requirements

The following are actions which shall be considered prior to authorizing reentry.

5.2.1 Assess the need for re-entry and whether the benefits to be gained offset the potential hazards to the re-entry personnel.

- 5.2.2 Review available radiation surveillance data. Determine areas potentially affected by radiation and/or contamination.
- 5.2.3 Review radiation exposures of personnel required to participate in the recovery operations.
- 5.2.4 Determine the need for additional personnel and the source of these additional personnel.
- 5.2.5 Review the adequacy of radiation survey instrumentation and equipment for quantity, type, ranges, and calibration.
- 5.2.6 Pre-plan survey team activities to include:
 - a. Areas to be surveyed
 - b. Anticipated radiation and contamination levels
 - c. Radiation survey equipment required
 - d. Shielding requirements and availability
 - e. Protective clothing and equipment required
 - f. Access control procedures (issuance of new REP's)
 - h. Decontamination requirements, and
 - i. Communications required.
- 5.2.7 Periodic determination of the estimated total population exposure.

5.3 Reentry Actions

1 | The Engineering Support Director and Operations Director shall determine the priority requirements and assure performance of the following activities through coordination with the Station Operations Manager.

- 5.3.1 Determination of the initial required recovery operations (i.e., road blocks, application of locks and safety tags, etc.).
- 5.3.2 Visual observation of hazards or potential hazards associated with the recovery operations.

- 5.3.3 Comprehensive radiation surveillance of plant facilities and define radiological problem areas.
- 5.3.4 Isolate and post areas in the plant with appropriate warning signs and rope barriers, as Radiation Areas, High Radiation Areas, and Contaminated Areas, as appropriate.
- 5.3.5 Establish re-entry teams from personnel available in the Operations Support Center (OSC), Technical Support Center (TSC), or other assembly areas. Re-entry teams shall:
- a. Consist of at least a team leader and a communicator.
 - b. Be briefed on the plan of action.
 - c. Be authorized emergency exposure limits as necessary and be advised to frequently check direct-reading dosimeters and withdraw to a safe area if assigned exposure limits are approached.
 - d. Be qualified for first aid, plant operations, health physics, and/or maintenance evaluation and corrective action as necessary for the specific re-entry evolution.
 - e. Be equipped with, or have available, appropriate emergency equipment and protection devices. Such equipment shall be tested for operability prior to re-entry.
- 5.3.6 Direct re-entry personnel to withdraw to a safe area if severe unanticipated or unplanned conditions are encountered, pending further evaluation of the re-entry effort.
- 5.3.7 Ensure that re-entry teams maintain continuous communication and a continuous status of progress is maintained.
- 5.3.8 Coordinate the return of the re-entry teams.
- a. Ensure necessary monitoring, decontaminations, and/or first aid is performed as per appropriate procedures.
 - b. Debrief team members.

c. Report results and status of re-entry teams.

5.3.9 Determine the need for additional re-entries and for initiation of recovery operations per EI 1300.11 Recovery.

1

6. FINAL CONDITIONS

- 6.1 Re-entry operations have been completed and all re-entry team members have been accounted for.
- 6.2 Debriefing of re-entry personnel has been completed and documented.

END

Stop 3060

DAVIS-BESSE REVISION COVER SHEET

July 15, 1982
DATE

TO: Dir. of The Reg Comm - N Flood

FROM: EMERGENCY PLANNING & PREPAREDNESS SUPV.

SUBJECT: Davis-Besse EMERGENCY PLAN IMPLEMENTING MANUAL Manual Changes

This letter transmits additions and revisions to the Davis-Besse
EMERGENCY PLAN IMPLEMENTING MANUAL Manual. Control Copy 506.

Instructions for the material are as follows:

REMOVE AND RETURN

INSERT

Revision Index 13
EI 1300.09.0

Revision Index 14
EI 1300.09.1

Date Revision Entered _____

Addressee Signature _____

RETURN TO THE OFFICE MANAGER - STOP #3050

THE TOLEDO EDISON COMPANY
 DAVIS-BESSE NUCLEAR POWER STATION
 EMERGENCY PLAN IMPLEMENTING PROCEDURES
 REVISION INDEX

<u>PAGE</u>	<u>REVISION</u>	<u>PROCEDURES</u>	<u>REVISION</u>	<u>TEMPORARY MODIFICATIONS</u>
1	0	EI 1300.00	2	
		EI 1300.01	3	
		EI 1300.02	2	
		EI 1300.03	2	
		EI 1300.04	2	
		EI 1300.05	2	
		EI 1300.06	2	
		EI 1300.07	2	
		EI 1300.08	3	
		EI 1300.09	1	
		EI 1300.10	1	
		EI 1300.11	0	T-6018
		EI 1300.12	1	T-5850, T-5918

Revision 14

July, 1982

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.09

Emergency Support Center Activation

Record of Approval and Changes

Prepared by G. J. Reed 5/30/80
 Date

Submitted by C. E. Wells 6/13/80
 Section Head Date

Recommended by [Signature] 6/13/80
 SRB Chairman Date

QA Approved N/A _____
 Quality Assurance Manager Date

Approved by [Signature] 8/18/80
 Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	[Signature]	7/6/82	NA		[Signature]	7/2/82

1. PURPOSE

To outline the activation of the Emergency Support Center (ESC).

2. SCOPE

To describe how the steps are taken for response to an emergency from the ESC.

3. REFERENCES

- 3.1 Davis-Besse Nuclear Power Station Emergency Plan
- 3.2 Davis-Besse Nuclear Power Station Emergency Telephone Directory
- 3.3 Station Response to Emergencies EI 1300.00
- 3.4 Unusual Event EI 1300.02
- 3.5 Alert EI 1300.03
- 3.6 Site Emergency EI 1300.04
- 3.7 General Emergency EI 1300.05
- 3.8 TECo Corporate Radiological Emergency Response Procedures
- 3.9 Public Relations Policy and Procedures Manual

4. DEFINITION

- 4.1 Emergency Support Center (ESC) - The TED Edison Plaza Building, Toledo, Ohio is designated as the ESC. Key technical and non-technical groups of the offsite emergency organization can be housed here.

5. ACTIONS

- 5.1 The Station Superintendent shall notify the Operations Director that an emergency exists.
- 5.2 Upon being informed of the emergency, the Operations Director shall notify the Emergency Director and the Vice President - Public Relations.
- 5.3 The Operations Director shall make recommendations to the Emergency Director for activation of the necessary portions of the Offsite Emergency Organization.

- 5.4 Those portions of the Offsite Emergency Organization activated will function as per the TECo Corporate Radiological Emergency Response Procedures.
- a. To facilitate Corporate emergency response, personnel have been designated a Notification Level number.
 1. Level I Directors - those personnel necessary for immediate response at the declaration of an Alert, Site, or General Emergency.
 2. Level II Directors - those personnel necessary at the declaration of a Site or General Emergency.
 3. Level III Directors - those personnel necessary at the declaration of a General Emergency to assist in a full Corporate response.
 - b. Nuclear Support is provided by the Operations Director, who has direct control of the accident management through Station personnel, and the Engineering Support Director (Nuclear Engineering & Construction Director), who is responsible for engineering and recovery planning.
 - c. The overall dissemination of information concerning the accident, emergency activities, re-entry, recovery, and on-going Corporate activities will be provided by the Public Relations Mission headed by the Public Relations Director.
 - d. The Administrative and Logistics Director will be responsible for providing support in the areas of security, personnel, transportation, procurement, and provisions.
 - e. Legal Support is provided by the Legal Director.
 - f. Indirect Support is provided by the Finance Director and the Assistant to the Chairman in the form of financial advice and community assistance advice.
- 5.5 Key Areas of the ESC are:
- a. 7th Floor - The Nuclear Engineering & Construction Division (NE&C) is located on the 7th floor of the Edison Plaza. This area includes all engineering departments, as well as the Nuclear Licensing Department. This group will provide engineering support to the Technical Support Center (TSC) and Facility

Engineering Group. A terminal of the Data Acquisition & Display System (DADS) is available in this area to acquire and transmit current data as necessary between facilities.

- b. 8th Floor - The eight floor contains the Public Relations area which will function as a center for Public Relations and community assistance efforts.
- c. 16th Floor - The Planning Center, located on the 16th floor, will serve as the Corporate Management Emergency Response Headquarters. It is equipped with all necessary communications, both radio and telephone, and other necessary emergency planning items.

5.6 The Operations Director may direct that one or more of the following telephone communications loops be established as needed per the DBNPS Emergency Plan Telephone Directory:

- a. Technical Data Loop
- b. Technical Management Loop
- c. Policy Management Loop
- d. Public Relations Loop

5.7 The V.P. Administrative Services - Nuclear or his designee shall coordinate the response activities of the ESC.

6. EMERGENCY SUPPORT

6.1 When actoted, the ESC will provide Station support for emergency operations. This support includes, but is NOT limited to:

- a. Operational Data (systems operations, set points, procedure writing, etc.)
- b. Technical Data (equipment specifications, etc.)
- c. Engineering (in-house, consultants, vendors, etc.)
- d. Quality Assurance
- e. Public Relations
- f. Personnel (operational, clerical, mutual aid personnel, etc.)
- g. Security

- h. Transportation
- i. Provisions (food, billeting, etc.)
- j. Procurement (parts, equipment, etc.)
- k. Administrative services

6.2 Requests for offsite support should be transmitted to the responsible TED Department or Mission for action per the TECo Corporate Radiological Emergency Response Procedures.

1 | 6.3 Refer to the Corporate Radiological Emergency Response Plan for a more detailed description of corporate response and responsibilities.