

Davis-Besse Nuclear Power Station

Unit No. 1

Emergency Plan Implementing Procedure EI 1300.08

Emergency Control Center Activation

Record of Approval and Changes

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Date

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Section Head Date

Recommended by *BRB* 6/13/80
SRB Chairman Date

QA Approved N/A
Quality Assurance Manager Date

Approved by *TD Murray* 8/18/80
Station Superintendent Date

Revision No.	SRB Recommendation	Date	QA Approved	Date	Sta. Supt. Approved	Date
1	<i>BRB</i>	10/14/80	NA		<i>TD Murray</i>	11/11/80
2	<i>BRB</i>	1/21/81	NA		<i>TD Murray</i>	1/31/81
3	<i>Amending</i>	6/22/82	NA		<i>TD Murray</i>	7/2/82
4	<i>Amending</i>	10/19/82	NA		<i>TD Murray</i>	11/3/82
5	<i>Amending</i>	12/15/82	NA		<i>TD Murray</i>	12/29/82

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.

- 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 TED Emergency Response Organization and Local, State, and Federal agencies.

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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
- 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 Assistant Superintendent - Outage Mgmt.
- 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 and TSC.
 - 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

- 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 6, 7 and 8 in Appendix D 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 Station personnel whose emergency response is at the station and who are normally authorized non-escorted access, will be admitted upon verbal communications with security.

4 5.8.2 Support group personnel requested to respond to the site will report to the Security Station located at the north end of the Davis-Besse Administration Building for subsequent assignment.

- a. Personnel directed to the station, but who are normally granted escorted access, will be admitted unescorted upon written authorization from the Station Operations Manager.
- b. Personnel directed to the station, but who are normally granted escorted access, will be admitted with an escort upon verbal authorization from the Shift Supervisor or EDO.

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 Ion 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:

1 Pair Cloth Coveralls	-
1 Pair Rubber Shoecovers	-
1 Cloth Hood	-
1 Cloth Cap	-
1 Pair Cotton 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

<u>LOCATION</u>	<u>ITEM</u>	<u>QUANTITY</u>
CABINET 1	TI 59 Calculator	1 ea.
	TI 57 Calculator	1 ea.
	Extra Paper for Printer	-
	Log Book	1 ea.
	Procedure Checklists (EI 1300.02, 03 04, 05, 08)	10 ea.
BOOKCASE	Emergency Plan, Implementing and Supporting Procedures	2 sets
	Davis-Besse Technical Specifications	1 ea.
	State of Ohio, Michigan and Ottawa County Emergency Plans	1 ea.
*Can be stored within the ECC, but outside specific stor- age areas	*Emergency Plan Telephone Directories	5 ea.
	*Telephone Headsets	5 ea.
	*Gaitronics Headsets	1 ea.
	*10 Mile EPZ Map Board	1 ea.
	*NRC 10 Mile EPZ Map	1 ea.
	*NRC 50 Mile EPZ Map	1 ea.

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 @ _____ miles.: field monitoring reading
_____ μ ci/cc @ _____ miles: I-131 field survey
_____ Location
_____ mr/hr @ _____ miles: field monitoring reading
_____ μ ci/cc @ _____ miles: I-131 field survey
_____ Location
_____ mr/hr @ _____ miles: field monitoring reading
_____ μ ci/cc @ _____ miles: I-131 field survey
_____ Location

DAVIS-BESSE NUCLEAR POWER STATIONEmergency Nuclear IncidentEssential Information

(con't)

Part II:

A. _____ Sector(s)/Zone(s) are involved

B. _____ mr/hr @ _____ miles: whole body dose (projected 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)

D. _____ : Weather conditions (precipitation)

Part III:

A. _____
_____ : Plant conditionB. _____
_____ : 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

ACTION COMPLETED

<u>ACTION REQUIRED</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 COMPLETED</u>		
<u>ACTION REQUIRED</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 SuperintendentFiled by _____
Emergency Planning Supervisor

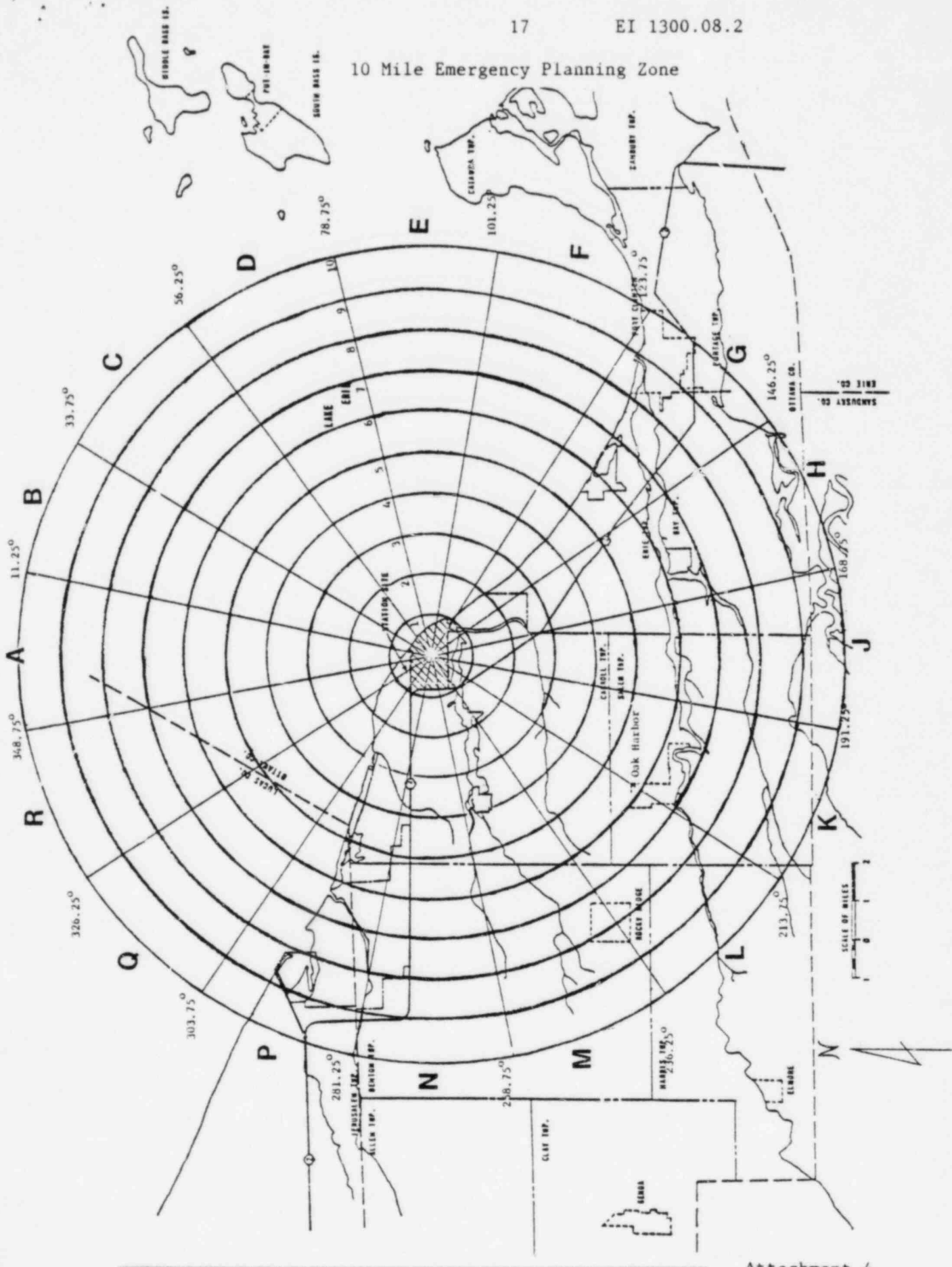
Sector and Zone Designators for
Emergency Planning Zones

Sector Nomenclature		Zone Nomenclature	
Sector in Degrees True North from Facility	22 1/2° Sector	Miles from Facility	Zone
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

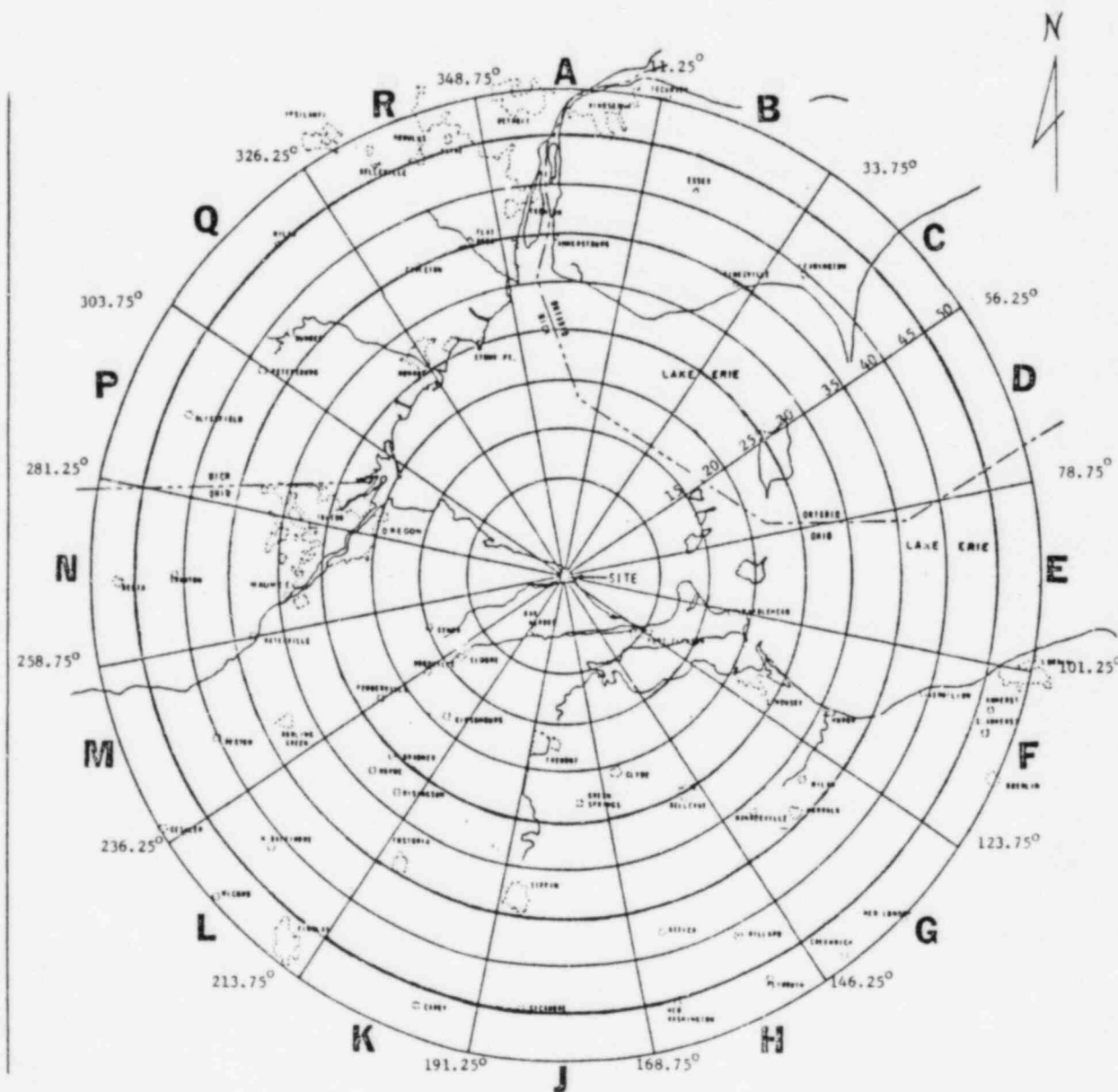
AREA SEGMENT - An area is identified by a Sector and zone designator.

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.

10 Mile Emergency Planning Zone



50 Mile Emergency Planning Zone



END

Attachment 4
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