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U.S. Nuclear Regulatory Commission Docket No. 50-341 License No. NPF-43

Fermi 2

Radiological Emergency Response Preparedness Plan

Detroit Edison

	ARMS	S - INFORMATION	
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LIST OF ABBREVIATIONS

AB	-	Auxiliary Building
AM	-	Ameritech Telephone
APRM	-	Average Power Range Monitor
ARM	-	Area Radiation Monitor
BWR	-	Boiling-Water Reactors
CAS	-	Central Alarm Station
CCTV	-	Closed Circuit Television
CHRRM	-	Containment High Range Radiation Monitor
CR	-	Control Room
CWPH	-	Circulating Water Pump House
DID	-	Direct Inward Dialing
DRD	-	Direct Reading Dosimeter
EBS	-	Emergency Broadcast System
ECCS	-	Emergency Core Cooling Systems
EDG	-	Emergency Diesel Generator
EECC	•	Employe Emergency Communications Center
EECW	-	Emergency Equipment Cooling Water
EMD	-	Emergency Management Division
ENS	-	Emergency Notifications System (NRC)
EOC	-	Emergency Operations Center
EOF	-	Emergency Operations Facility
EPA	-	Environmental Protection Agency
EPs	-	Radiological Emergency Response Preparedness Implementing Procedures
EPZ	-	Emergency Planning Zone
ERF	-	Emergency Response Facility
ERIS	-	Emergency Response Information System
FEMA	-	Federal Emergency Management Agency
FRERP	-	Federal Radiological Emergency Response Plan
FSAR	-	Final Safety Analysis Report
GE	-	General Electric
GMJ	-	General Maintenance Journeyman
GPM	•	Gallons per minute
GSW	•	General Service Water
GTOC	-	General Training and Orientation Center
HPCI	-	High Pressure Coolant Injection
HVAC	-	Heating, Ventilation, and Air Conditioning
l&C	-	Instrument & Controls
INPO	-	Institute of Nuclear Power Operations
IRM	-	Intermediate Range Monitor

LIST OF ABBREVIATIONS (Con't)

JPIC	-	Joint Public Information Center
JPIT	-	Joint Public Information Team
LOCA	-	Loss of Coolant Accident
LPCI	-	Low Pressure Coolant Injection
MEMP	-	Michigan Emergency Management Plan
MREM	-	Millirem
MSIV	-	Main Stream Isolation Valve
uCi/cc	-	Microcuries per cubic centimeter
uCi/g	-	Microcuries per gram
uCi/kg	-	Microcuries per Kilogram
uCi/l	-	Microcuries per Liter
uCi/sec	-	Microcuries per second
NASS	-	Nuclear Assistant Shift Supervisor
NOAA	-	National Oceanic and Atmospheric Administration
NOC	-	Nuclear Operations Center
NRC	-	Nuclear Regulatory Commission
NSO	-	Nuclear Supervising Operator
NSRG	-	Nuclear Safety Review Group
NSS	-	Nuclear Shift Supervisor
ODCM	-	Offsite Dose Calculation Manual
OSC	-	Operational Support Center
OSRO	-	Onsite Review Organization
PAG	-	Protective Action Guideline
PBX	-	Private Branch Exchange
PRM	-	Process Radiation Monitor
PRMS	-	Process Radiation Monitoring System
RB	-	Reactor Building
RBCCW	-	Reactor Building Closed Cooling Water
RCIC	•	Reactor Core Isolation Cooling
RERP	-	Radiological Emergency Response Preparedness
RET	-	Radiological Emergency Team
RHR	-	Residual Heat Removal
RWB		Radwaste Building
SAS	-	Secondary Alarm Station
SGTS	-	Stand-by Gas Treatment System
SRV	-	Safety Relief Valve
SSE	-	Safe Shutdown Earthquake
STA	-	Shift Technical Advisor
TAC	-	Technical Assistance Center
TB	-	Turbine Building
TLD	-	Thermoluminescent Dosimeter
TSC	-	Technical Support Center

PREFACE

The Radiological Emergency Response Preparedness (RERP) Program for Fermi 2 consists of the RERP Plan, RERP Implementing Procedures (EPs), and related emergency preparedness plans and procedures of federal, state, and local government agencies. The purpose of the program is to provide protection of plant personnel and the general public, to restrict the release of radioactivity, and to secure plant systems in a stable and safe configuration in the event of an emergency situation at Fermi 2. The objectives of the Fermi 2 RERP Program are to provide:

- Effective coordination of emergency activities among onsite and offsite organizations having an emergency response role
- Early warning and clear instructions to the general public in the affected area in the event of a radiological emergency
- Continued assessment of actual or potential consequences both onsite and offsite
- Effective and timely implementation of emergency measures
- Continued maintenance of an adequate state of emergency preparedness

The RERP Plan describes the RERP Program which meets the standards of emergency plans as defined in 10CFR50.47(b), 10CFR50 Appendix E. NUREG-0654/FEMA-REP-1 Revision 1. Changes to the RERP Plan may not be made without NRC permission unless the criteria of 10CFR50.54(q) is met. Additionally, procedures which implement the RERP Plan are subject to the same regulatory criteria.

The RERP Plan is applicable to Fermi 2 and its environs, including a plume-exposure pathway Emergency Planning Zone (EPZ) extending 10 miles and an ingestion pathway EPZ extending 50 miles (See Figures A-1 and A-2). The 10-mile EPZ for the plume-exposure pathway includes all areas within 10 miles of Fermi 2 in Monroe County, Michigan; a small portion of the southern tip of Wayne County, Michigan; and a small portion of the Province of Ontario, Canada. The 50-mile ingestion pathway includes portions of Michigan, Ohio, and Canada.

The Michigan Emergency Management Plan, the Monroe County Emergency Management Plan, and the Wayne County Emergency Operations Plan describe the emergency planning and response for these respective government agencies.

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INSTRUCTIONS TO RECIPIENTS

RERP PLAN REVISION 23

Remove

Cover Page, Rev. 22 List of Effective Pages, Rev. 22 Pages i-x, Rev. 22 Section A, Rev. 20 Section B, Rev. 22 Section F, Rev. 22 Section H, Rev. 21 Section L, Rev. 20 Section P, Rev. 16 Appendix 2, Rev. 16 Appendix 4, Rev. 20

Insert

Cover Page, Rev. 23 List of Effective Pages, Rev. 23 Pages i-x, Rev. 23 Section A, Rev. 23 Section B, Rev. 23 Section F, Rev. 23 Section H, Rev. 23 Section L, Rev. 23 Section P, Rev. 23 Appendix 2, Rev. 23

A. ASSIGNMENT OF RESPONSIBILITY (ORGANIZATION CONTROL)

RERP planning for an incident at Fermi 2 is a cooperative effort involving Detroit Edison, the State of Michigan, local government agencies, federal government agencies, provincial agencies in Ontario, Canada and various organizations that provide support for these agencies. Each organization has the responsibility to assure, through coordinated planning and regularly scheduled exercises, that it can provide an effective emergency response 24 hours a day. The responsibilities of the state and local government Emergency Response Organizations are summarized in Figures A-3 through A-5. The interrelationships of the organizations supporting the Fermi 2 emergency response are shown in Figure A-6.

A.1 Detroit Edison

In the event of a radiological emergency at Fermi 2, Edison's Onsite Emergency Response Organization will initiate corrective and protective actions to control the incident and mitigate its effects. The incident will be classified as an Unusual Event, Alert, Site Area Emergency, or General Emergency based upon the criteria in Section D. Detroit Edison provides initial emergency notification of the State of Michigan via the Michigan State Police and to Monroe and Wayne Counties via the Monroe County Sheriff's Office, and Wayne County Emergency Management. These offices have communication centers staffed 24 hours a day.

Notifications and required Protective Action Recommendations to Canada will be made by Detroit Edison to the Province of Ontario, Provincial Police Headquarters once at the initial classification of an Unusual Event, Alert, Site Area Emergency, and General Emergency. All subsequent information updates will be coordinated by the Michigan Department of State Police.

Throughout an emergency situation, Detroit Edison maintains control over onsite personnel, equipment, and activities. The Manager, Nuclear Assessment/Alternate, acting as the Emergency Officer, has ultimate responsibility for the Detroit Edison emergency response. The Fermi 2 Emergency Response Organization evaluates plant, meteorological, and radiological conditions to provide timely protective action recommendations to State and/or local Emergency Response Organizations.

A.2 State of Michigan

The Governor of the State of Michigan has complete authority over offsite emergency operations and decision making when a radiological emergency occurs at Fermi 2 and a "State of Emergency" or a "State of Disaster" is declared under the provisions of Act 390 of the Public Acts of 1976. The State Director of Emergency Management (Director, Department of State Police), under the direction and auspices of the Governor, has the responsibility for coordinating the state's emergency response. The Deputy State Director of Emergency Management commands the State Emergency Management Division (EMD), which directs and coordinates various State agency responsibilities. State responsibilities include, but are not limited to, radiological assessment via environmental sampling and monitoring, implementation of protective actions (evacuation or shelter), control of food and water supplies, damage assessment, medical services, sanitation, environmental protection, dissemination of warning and notification information, security, traffic control and maintenance, public information, and crisis counseling. The Michigan Emergency Management Plan (MEMP) details the specific duties of each State agency or department.

The MEMP is activated when the Governor, as a result of available information or at the request of a county, declares a State of Emergency or a State of Disaster. When a disaster has been declared, available State resources are mobilized for the response, and state authority supersedes local authority. Local plans are also activated at this time, if not previously activated.

The State Emergency Operations Center (EOC) in Lansing is activated for coordination of state emergency activities. The EOC is staffed by State personnel in accordance with the MEMP as summarized in Figure A-6 to provide the executive liaison and data verification. Communications with the State from Detroit Edison are transmitted via direct ring or CBX telephone lines. The state has provided for, and is capable of, 24-hour-per-day operation for a protracted period of time during an emergency situation at Fermi 2.

The Department of State Police and the Department of Environmental Quality are the primary State Response Agencies during a radiological emergency. The Department of State Police is responsible for general planning, command and control, and overall direction and coordination including:

- Receiving initial notification of the emergency and notifying other state agencies.
- Providing periodic information updates to affected local governments, adjacent states, and the Joint Public Information Center (JPIC).
- Notifying and providing periodic information updates to the Province of Ontario, Canada through the Ministry of the Solicitor General in Toronto, Canada.
- Operating the State EOC
- Coordinating with local organizations to implement protective actions to evacuate and/or shelter the general population.
- Notifying the Federal Emergency Management Agency (FEMA) and other Federal agencies as required and providing liaisons to these agencies.

The Department of Environmental Quality is responsible for environmental monitoring and formulating ingestion pathway protective actions for the general public.

A.3 Local Governments

Wayne and Monroe County governments have established emergency response facilities in accordance with their individual emergency preparedness plans. Upon notification of a radiological emergency at Fermi 2, Monroe County Central Dispatch initiates notification procedures in Monroe County.

When notified of an emergency at Fermi 2, Wayne County Central Communications initiates notification procedures in Wayne County, including calling the Gibraltar, Flat Rock, and Rockwood Police Departments and the Brownstown Township Fire Department. Detroit Edison maintains communications with Wayne and Monroe Counties until the State EOC in Lansing is activated, at which time all communications with the counties are channeled through the State EOC.

The Chairperson of the Monroe County Board of Commissioners is responsible for Monroe County emergency preparedness and has the authority to declare a "State of Emergency" within the county in the event of a radiological emergency at Fermi 2. If a "State of Emergency" is declared, the Monroe County Emergency Management Plan is implemented and the Monroe County EOC is activated at the Monroe County Emergency Management Division. The EOC is staffed with personnel from county agencies as shown in Figure A-4.

The Wayne County Executive is responsible for Wayne County emergency preparedness and the implementation of the Wayne County Emergency Operations Plan. The Wayne County EOC is located at the Wayne County Emergency Management Division, Romulus, Michigan and is activated upon notification of a radiological emergency at Fermi 2. The Wayne County EOC is staffed with personnel from county agencies as shown in Figure A-5. In addition, personnel from Brownstown Township will occupy the Wayne County EOC.

County responsibilities include, but are not limited to, access and traffic control, firefighting and rescue, public warning and information, sheltering (involving food, clothing, sanitation, medical services, and counseling), decontamination centers, transportation of persons and supplies, and evacuation of the general population. These actions are directed and coordinated from the respective county EOCs. These local emergency response activities are coordinated with the state through the State EOC. Both Monroe and Wayne Counties have made provisions for and are capable of 24-hour operation for extended periods of time during an emergency situation at Fermi 2.

.4 Federal Agencies

Federal Agencies will be activated according to the Federal Radiological Emergency Response Plan to provide support to utility, state, or local authorities upon notification from the utility or state of an emergency that may affect public health and safety. The U.S. Nuclear Regulatory Commission (NRC) is responsible for conducting investigative activities associated with an emergency and verifying that emergency plans have been implemented and the appropriate agencies have been notified. The NRC is also responsible for the notification of other Federal agencies. The NRC response is described in NUREG-0845. Further actions of Federal Emergency Management Agency (FEMA) and the NRC are outlined in NUREG-0981/FEMA-51.

The U.S. Coast Guard will provide assistance through the Federal Radiological Emergency Response Plan upon request from the State of Michigan in the event that an emergency at Fermi 2 may affect activities on Lake Erie, including Canadian waters.

FEMA is responsible for ensuring that offsite protective actions are carried out appropriately and expeditiously by the state. FEMA also provides coordination of other federal emergency response agencies and provides back-up provisions to support state and local emergency response organizations.

A.5 Emergency Response Services

The nature of an emergency may require augmenting onsite response groups with offsite services, personnel, and equipment. Support from offsite organizations, such as those listed in Appendix 1, may be obtained by direct notification to the individual organization by the Emergency Director or Emergency Officer. Types of services that may be required are briefly outlined below.

A.5.1 Medical Services - In the event of an emergency involving an injury to onsite personnel, Mercy-Memorial Hospital (Monroe) or Oakwood Hospital, Seaway Center (Trenton) is called upon to provide medical aid. Detroit Edison also has a corporate medical staff of doctors and nurses for assistance.

The Control Room ensures notification of the appropriate hospital and provision of pertinent information if the injury involves radiological contamination. Radiation Protection personnel are dispatched to perform contamination surveys for the ambulance service and at the hospital.

A.5.2 Ambulance Service - Contractual arrangements have been made with an ambulance service for the transportation of patients from Fermi 2. This includes individuals who may have injuries complicated by the presence of radioactive contamination or who may have exceeded personnel exposure limits. They will be transported to either Seaway Hospital or Mercy-Memorial Hospital for treatment.

A.4

- A.5.3 Firefighting Assistance In the event the Fermi 2 Fire Brigade requires assistance with an onsite fire, the Frenchtown Fire Department will be called. All firefighting personnel periodically receive training for fighting fires involving radiological hazards.
- A.5.4 Law Enforcement Services Civil disorder or other plant security threats may require prompt augmentation of the onsite security force. In the event law enforcement services are required, the Monroe County Sheriff's Department or the local Michigan State Police barracks (Monroe Post #28) are notified.
- A.5.5 Technical Assistance Detroit Edison has entered a mutual emergency assistance agreement with Consumers Energy and Indiana Michigan Power Company. This agreement provides personnel and equipment for offsite radiation monitoring activities.

In addition, the Institute of Nuclear Power Operations (INPO) may be called for technical support. A dedicated emergency call number is capable of activating the INPO support function on a 24-hour basis. INPO will be able to provide the following support functions:

- Assistance in locating sources of emergency staff with nuclear and health physics experience.
- Analysis of the operational aspects of the incident.
- Obtaining nuclear operations experts for assistance and advice in technical matters.
- Assistance in locating sources of specialized equipment.

Technical/engineering assistance is also available from the following organizations:

- B & W Nuclear Services
- General Electric Company
- Sargent and Lundy Engineers
- NUS Corporation
- Stone and Webster

Assistance in the analysis of environmental samples will be performed by the contractor or vendor who conducts the routine Radiological Environmental Monitoring Program.

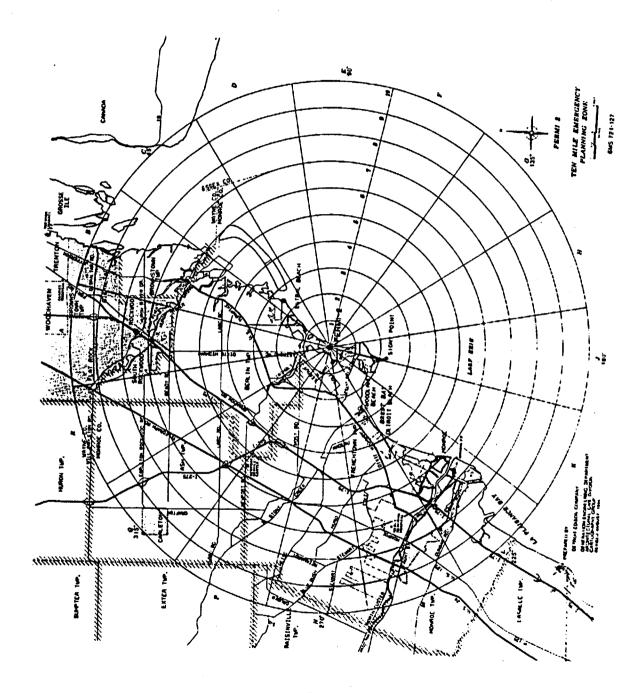
A.6 **Continuity Of Resources**

Sufficient staffing is provided to ensure that the Fermi 2 Emergency Response Organization can operate on a continuous, 24-hour basis for extended periods of time. Communications systems between Detroit Edison and offsite authorities are available and are staffed 24 hours a day. These systems are discussed in detail in Section F of this plan.

Detroit Edison's Senior Vice President, Nuclear Generation is responsible for ensuring continuity of technical, administrative, and material resources.

Figure A-1

FERMI 2 10-MILE EMERGENCY PLANNING ZONE



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Figure A-2

FERMI 2 50-MILE EMERGENCY PLANNING ZONE

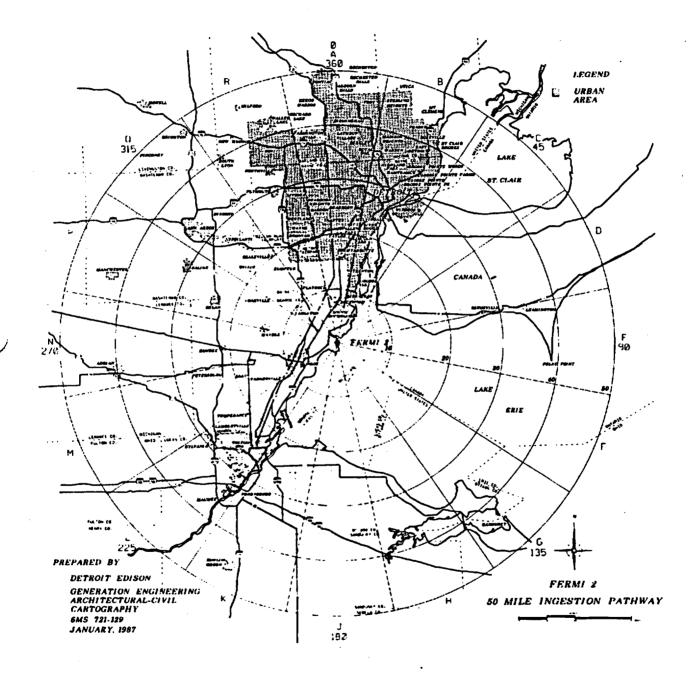


Figure A-3

STATE OF MICHIGAN AGENCY ASSIGNMENT AND FUNCTION CHART

AGENCY ASSIGNMENT DISASTER FUNCTION	AGRICULTURE	CONS & INDUS SERV*	CORRECTIONS	EDUCATION	EXECUTIVE (GOV)	ENVIRO QUALITY	MILITARY AFF	NATURAL RES	COMM HEALTH	FAMILY IND AGY	STATE POLICE	TRANSPORTATIO
Access Control				†	1		<u> </u>		<u> </u>	+	P	s
Accident/Dose Assessment	_	<u> </u>				P					S	13
Alerting				<u> </u>	1		<u> </u>		<u> </u>		P	+
Classification of Accident						s	†	┼───			s	+
Clothing, Provision of			S			<u> </u>		<u> </u>	s	P		+
Communications				<u> </u>	1	s	s	s			P	s
Crisis Counseling				†	1	<u> </u>	<u> </u>	<u>†</u> ¯−−	P	s	<u>├</u>	+
Damage Assessment		1 1				<u> </u>		t	† • • • •	<u>ا ت</u>	P	t
Decontamination Guidance						P		†				+
Direction and Control				<u> </u>	Р				1		s	╂───
Dosimetry					<u> </u>	P		1			s	
Emergency Medical Service						<u> </u>			P		<u> </u>	╂──
Evacuation Authority					Р						s	
Exposure control				<u> </u>		P					<u> </u>	+
Fire			-	[1			P			S	
Food	S		S	S			S		s	P		†
Heavy Rescue			2.1					1			<u> </u>	P
Housing				S			S		s	Р		<u>†</u>
Insurance Claims		P					_		1			t
Law Enforcement								S			P	<u> </u>
Liaison to County											P	
Liaison to Federal											Р	·
Liaison to Utility											P	
Meteorological Analysis	P					1						
Monitoring						P						1
Notification											Р	
Planning											P	
Public Health						S			P			
Public Information						S					Р	
Radioprotect. Drug Guid.		<u> </u>				S			Р			
Reentry Authority					P						S	
Sampling	S				L	P		S				
Sanitation		┨────┨							Р			
Social Services		Į		L						Р		
Traffic Control		ļļ									P	S
Training/Exercise											Р	
Transportation, Public		╎──┦	S	Р		· · ·	S		S			S
Waste Removal P = Primary Responsibility		port Resp				P *(Inst						

Figure A-4

A CENCY A COLOND (CONT		·				·		· · · · · ·					
AGENCY ASSIGNMENT			ŝ							1			
DISASTED FUNCTION	CHIEF EXECUTIVE	EMERGENCY MANAGEMENT	WARNING/COMMUNICATIONS	SCHOOL SERVICES	PUBLIC INFORMATION	DAMAGE ASSESSMENT	RADIOLOGICAL DEFENSE	LAW ENFORCEMENT	FIRE SERVICES	PUBLIC WORKS	HEALTH SERVICES	EMERGENCY MEDICAL SERVICES	HUMAN SERVICES
DISASTER FUNCTION	_											ES	=
Command & Control Alert Notifications	P	S	-		<u> </u>	 	L	L	L				
Communications		S	P	 	<u> </u>	ļ	S	S	S				
Damage Assessment		<u> </u>	Р	<u> </u>	 	<u> </u>							
Public Information				 	<u> </u>	P	L						
Accident Assessment		<u> </u>		 	P	 				I			•
EAS Activation		-	<u> </u>	· ·	<u> </u>	P	S	S	S				
Evacuation		S	P	 	ļ	L	L						
Public Health	<u> </u>	S			ļ			S	P				
Human Services		<u> </u>	 								Р		
			ļ										Р
Interagency Coordination	<u> </u>	P	ļ	ļ	L	ļ							
Mass Feeding – Care			<u> </u>	<u> </u>		L							Р
Missing Person Inquiry		<u> </u>		ļ									Р
Notification – Key Official		P	P .										
Command Post		Ļ	<u> </u>					S	P				
Fire & Rescue		ļ	<u> </u>	ļ				S	P				
Traffic Control								P	S	S			
Emergency Medical Services Law Enforcement			<u> </u>						S		S	Р	
	_	<u> </u>	Į	L				Р					
Transportation Protective Actions		<u> </u>		Р				S	S				
	P	P			L		P						
Radiation Exposure Control							Р				S		
School Services				P									
Temporary Shelter				S									Р
Decontamination				L			S		P				
EOC Operations	_	Р	L										
Utilities Coordination			S							P			
Rumor control	_				P								
Victim Identification]			Ρ.		
Water Use Restriction											P		
Transportation of Goods P = Primary Responsibility	<u> </u>									P			- <u></u> .

MONROE COUNTY EMERGENCY AGENCY ASSIGNMENT AND FUNCTION CHART

P = Primary Responsibility

S = Support Responsibility

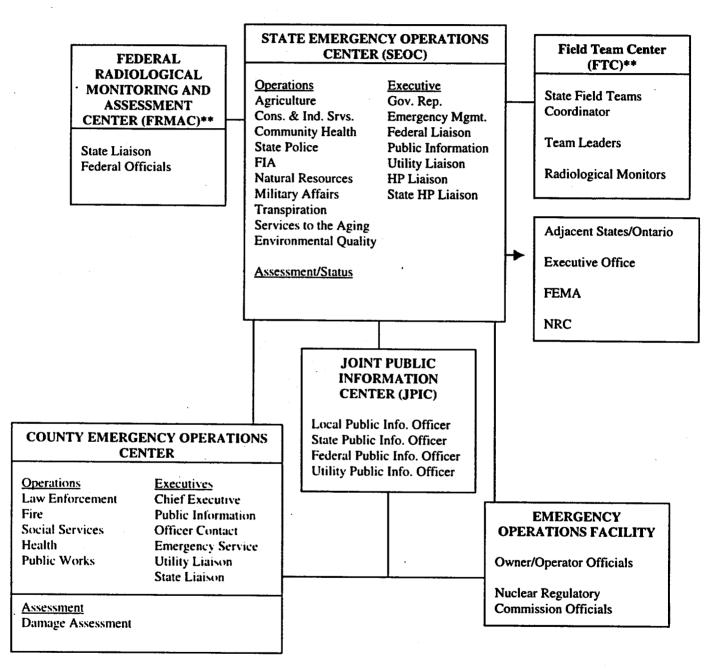
Figure A – 5

WAYNE COUNTRY EMERGENCY FUNCTION AND AGENCY ASSIGNMENT CHART

INDIVIDUAL OR ANNEX GROUP	PRIMARY FUNCTION/RESPONSIBILITY	SUPPORT FUNCTION/RESPONSIBILITY
Chief Executive	Command & Control Protective Response	Public Information
EMD Director		Command & Control, Public Information, Alert & Notification, Accident Assessment, Communications, Public Health, Social Services, Fire/Rescue, Law Enforcement, Transportation, Protective Response, Exposure Control
Communications Office	Communications, Public Information, Alert & Notification	
Damage Assessment	Accident Assessment	Accident Assessment, Exposure control
Public Information	Public Information	
Radiological Protection	Accident Assessment, Exposure Control	Protective Response
Law Enforcement	Law Enforcement, Traffic & Accident control	Fire/Rescue, Protective Response
Fire/Rescue	Fire Rescue, Emergency Medical Services	Traffic & Access Control, Protective Response, Exposure control
Health Services	Health Services	Social Services, Emergency Medical Services
Public Services	Traffic & Access Control	Public Health, Fire/Rescue, Transportation, Protective Response
Family Independence Agency	Social Services	Public Health, Emergency Medical Services, Protective Response
Schools	Public Health. Transportation	Social Services, Protective Response

Figure A-6

EMERGENCY OPERATION CENTER INTERRELATIONSHIPS*



*Under a Governor's State of Disaster/Emergency Declaration **When the FRMAC is opened, the FTC is then incorporated into FRMAC.

B. EMERGENCY RESPONSE ORGANIZATION

B.1 Nuclear Generation Organization

B.1.1 Normal Organization - The Nuclear Generation Organization includes operating, technical and administrative support, engineering, and management personnel.

Figure B-1 is a chart showing the functional levels and detailing the plant and technical support organizations. The Nuclear Generation Organization is onsite during normal working hours Monday through Friday, excluding holidays. Plant Operations, Radiation Protection, Chemistry, and Security personnel are onsite on a 24-hour basis including holidays. The minimum shift complement is specified in Technical Specifications Section 6.2, Table 6.2.2.-1.

B.1.2 Emergency Response Organization - In the event of an emergency at Fermi 2, the Emergency Response Organization is activated. The normal complement of shift personnel is augmented according to the emergency classification. The Nuclear Generation Organization provides the majority of the personnel required to staff the organization. Additional Detroit Edison personnel are called upon to provide specific expertise as required.

During an emergency, the Emergency Response Organization is located in the Control Room and the three Emergency Response Facilities (ERFs) described in Section H of this plan: Operational Support Center (OSC); Technical Support Center (TSC); and Emergency Operations Facility (EOF). It is Detroit Edison's intent to activate the ERFs based on the emergency classification. The OSC and TSC are activated at the Alert level and the EOF is activated at the Site Area Emergency level. Figures B-2 through B-5 show the organization in the Control Room, OSC, TSC and EOF.

The Emergency Response Organization is predefined by the Supervisor, RERP. Assignments to various positions are specified to provide timely, unambiguous staffing. Table B-1 shows the minimum staffing for the Fermi 2 Emergency Response Organization according to functional area, ERF, and emergency classification. Table B-1 reflects Detroit Edison's intent to achieve the 30-minute and 60-minute augmentation times indicated in Table B-1 of NUREG-0654/FEMA-REP-1 and in Supplement 1 to NUREG-0737 as a desirable goal for staffing the ERFs.

It is the goal of Detroit Edison to augment Control Room staff by the Emergency Response Organization (Table B-1) in two groups of key personnel. The first group of key personnel should be in their Emergency Response Facility within 30 minutes of an Alert being declared. However, there may be some conditions where up to 60 minutes may be required. The second group of key personnel should be in place within 60 minutes of a Site Area Emergency being declared.

B.2 Emergency Assignments

B.2.1 Responsibilities - The organization and functional responsibilities of the Emergency Response Organization personnel are outlined in Table B-2 for the key functional positions.

The Emergency Director assumes full responsibility for the emergency response measures and implementation of the RERP Plan prior to activation of the EOF. At the onset of an emergency, the Nuclear Shift Supervisor (NSS) assumes the role of the Emergency Director and retains this role until relieved of the responsibility by the Plant Manager/alternate.

The Emergency Director operates from the Control Room initially, and then from the TSC should the situation progress beyond the Unusual Event classification. Certain responsibilities may be delegated to other individuals or groups, with the exception of decisions to: (1) classify the emergency; (2) authorize radiation exposures over 10 CFR 20 limits for emergency workers; and (3) make protective action recommendations to offsite response organizations (prior to EOF activation).

Detroit Edison will implement Severe Accident Guidelines (SAG) from the TSC. Should an event require entry into SAG, the control room will interact with the TSC and transition from Emergency Operating Procedure (EOP) decision making in the control room to SAG decision making in the TSC. The TSC must be functional to implement SAG. The TSC Technical Engineer is the primary SAG decision maker, but the Emergency Director retains overall authority for SAG implementation.

When the EOF is activated, the Emergency Officer assumes overall management responsibility for the Emergency Response Organization and for all assignments in the organization. The Emergency Officer also assumes full responsibility for all coordination and interaction with offsite response organizations, with the exception of the local fire department, the ambulance service, and the hospital for contaminated injured personnel. These organizations are, and will continue to be, contacted through the Control Room. The EOF will be the focal point for meteorological data, dose assessment and projection, offsite radiological field surveys, and recommendations for protective action for the general public within the 10-mile EPZ. The Emergency Officer will approve all protective action recommendations made to the State, when the EOF is activated. The Emergency Director, EOF Staff, and Joint Public Information Center (JPIC) Corporate Spokesperson report to the Emergency Officer. The Emergency Officer: (1) ensures that the full resources of Detroit Edison are made available as required to secure the plant systems and to minimize the effects of the incident on plant personnel and the public, including the availability of other utilities, vendors, and consultants. (2) ensures that information released to the public is accurate and directed through proper channels. (3) communicates with Corporate Headquarters, and (4) ensures that the long-term emergency and recovery organizations are established.

Operations, technical, and administrative support personnel will be assigned according to the needs of each ERF. Table B-2 describes the functional duties and responsibilities of the personnel who may be present in each of the facilities.

B.3 Emergency Response Organization Interfaces

The onsite ERFs are discussed in Section H. The offsite centers are, at a minimum, Western Wayne Center and the emergency centers of the federal, state, and local response organizations. The interface among all these centers provides a logical flow of information in a direct and unambiguous manner and is based on the functional responsibilities of each center. Communications systems, as discussed in Section F, are provided to maintain these primary interfaces.

TABLE B-1 **STAFFING FOR FERMI 2 EMERGENCY RESPONSE ORGANIZATION**

Major Functions and Area	Major Tasks	Locations	Emergency Response Organizational Title	Detroit Edison Position Title/Expertise	On Shift	Alert +30 min	Site Area +60 min
Plant Operations and Assessment of Operational Aspects		CR	Nuckar Assistant Shift Supervisor		1		·
		- - -	Nuclear Supervising Operator		2		
			Non-Licensed Operator		2		
Emergency Direction and Control		CR	Emergency Director	Nuclear Shift Supervisor	1	1	1
Notification/	Notify ERO, State, local and	CR	Communicator	Communicator	1		+
Communication	Federal Authorities,	TSC	Communicator	Engineer/Technician	1	1	1
	Maintain Communications	EOF	Communicator	Engineer/Technician		1	i
Radiological Accident Assessment and	Emergency Officer	EOF	Emergency Officer	Manager			1
Support of Operational Accident Assessment	Offsite Dose Assessment	TSC	Radiation Protection Advisor	Supervisor Radiation Protection		1	
	Offsite Surveys		Offsite RET	RP Techs (c) and drivers		2.	2
	Onsite (out of plant) Surveys		Onsite RET	RP Technicians		1	1
	In plant Surveys		RP Technicians	RP Technicians	1	1	1
	Chemistry/Radiochemistry		Chemistry Technician	Chemistry Technician	1		1
Plant System Engineering, Repair and Corrective Actions	Technical Support	CR	Shift Technical Advisor	STA	1 (2)		
		CR	Reactor Engineer	Station Nuclear Engineer		1	
		TSC	Technical Engineer or Nuclear Safety Advisor	Engineer			1
		TSC	Support Engineer	Engineer			1
	Repair and Corrective Actions	OSC	Damage Control and Rescue Team	Non-licensed Operators, GMJs and I&C Techs	2 (b)	2	3
Protective Actions (In Plant)	Radiation Protection: 1. Access Control 2. HP coverage for repair, corrective actions, search and rescue, first-aid and fire-fighting 3. Personnel monitoring 4. Dosimetry		RP Technicians	RP Technicians	2 (Ь)	2	2
Firefighting			Fire Brigade		UFSAR	 	
Rescue Operations and First Aid			Damage Control and Rescue Teams		2 (b)	<u> </u>	
Site Access Control and Personnel	Security and Personnel Accountability		Nuclear Security Force		Per Security		
Accountability					Plan		

(a) Shift complement for Operational Conditions 1, 2, and 3 per Tech Specs 6.2.

(b) May be provided by shift personnel assigned other functions.
(c) Offsite surveys may be performed by qualified personnel other than RP Technicians.

TABLE B-2: EMERGENCY RESPONSE ORGANIZATION FUNCTIONAL RESPONSIBILITIES

Position	Location	Reports To	Responsibilities
Emergency	Emergenau	Chief	
Officer	Emergency Operations	Executive	Overall emergency
Onicei	Facility	•	management.
Technical Managor	гастну	Officer,	A 11 / 1
Technical Manager		Detroit	Approve all protective action
		Edison	recommendations.
			Ensure that the full resources of
Nuclear Assessment			Detroit Edison are made available
Manager			to secure the plant systems and to
			minimize the effects of the
			incident on plant personnel and
			public. This includes
Director,			availability of other utilities
Nuclear Training			and vendor resources.
			Interface with governmental
/			authorities as required.
			Ensure information released to the public is prompt an accurate and released through proper channels.
			Establish long-term emergency and recovery organizations.
			Communicate with Corporate Headquarters.
Emergency	Control	Emergency	Implement the immediate
Director	Room	Officer	onsite corrective and protective actions to bring the
, ,		• • •	incident
Nuclear Shift			under control and mitigate its
Supervisor			effects.
			Classify the emergency.
Plant Manager	Technical	Emergency	Initiate offsite notifications and
	Support Center	Officer	protective action recommendations.

TABLE B-2 (Con't)

Functional Position	Location	Reports to	Responsibilities
Emergency Director (continued)			Interface with governmental authorities as required.
			Ensure Detroit Edison personnel are called i as conditions warrant.
Superintendent,			
Operations			Ensure that information to
			be released to the public is prompt, accurate and released through proper channels.
Operations Engineer			Coordinate and direct the combined activitie
			of Detroit Edison personnel in the Control
			Room, TSC, OSC, and elsewhere on owner- controlled property.
			Authorize plant and emergency workers to
			receive radiation doses in excess of 10 CFR limits.
			Authorize the distribution and use of Potassium Iodide (KI).
		•	Obtain assistance of offsite support organizations as necessary.
			Provide oversight of Severe Accident Management
Shift	Control	Emergency	Advise the Emergency
Fechnical Advisor	Room	Director	Director on plant technical matters.
Shift Technical Advisor			Access meteorological data.
			Perform dose assessment based on potential actual radiological releases.

Functional			
Position	Location	Reports to	Responsibilities
Reactor	Control	Emergency	Analyze conditions
Engineer	Room	Director	affecting core safety.
Station Nuclear			Advise the Emergency
Engineer			Director/Nuclear Shift Supervisor on all matters relating to reactor core safety.
OSC	Operational	Emergency	
Coordinator	Support	Director	Direct maintenance operations.
	Center		Dispatch onsite emergency teams.
Work Control NASS			Advise the Emergency Director on repair activities.
			Recommend maintenance actions to mitigate the emergency.
			Provide work assignments for maintenance personnel.
Technical Engineer	Technical	Emergency	Provide recommendations to the
Engineer	Support Center	Director	Emergency Director on plant technical matters.
Supervisor,			connear matters.
Operations Work Cor	ntrol		Request technical and engineering analyses from the Nuclear Safety Advisor.
SRO, Operations Support, EOP/SAMG	i		Severe Accident Management decision make
Supervisor, Operations Support			
Operations Liaison .	Technical Support Center	Technical Engineer	Advises Technical Engineer Severe Accident Management Team
Senior Reactor			Member Monitors Plant Status
Operator			

Position	Location	Reports to	Despersibilities
	Location	Keports to	Responsibilities
Nuclear	Technical	Emergency	Advise the Emergency Director
Safety	Support	Director	on plant engineering matters.
Advisor	Center		
Director, Plant			Provide work assignments for
Support Engineeri	ing		Nuclear Engineering Support groups.
Superintendent, System Engineerii	ng		
Director, Nuclear and Reactor Engin			
Radiation	Technical	Emergency	Advise the Emergency Director
Protection	Support	Director	concerning offsite protective
Advisor	Center		action recommendations.
General			
Supervisor,			Provide work direction for radiation
RP Operations			protection and dose assessors.
			Ensure personnel exposure records are maintained.
Supervisor,			Ensure TSC habitability surveys are
Operational			performed.
LARA			Authorize the Dispatch of Onsite RETs.
upervisor,			Authorizes the Dispatch of Offsite
adiological Engir	neering		RETs until the EOF is activated.
		• •	Evaluate results of offsite environmental surve until the EOF is activated.
			Ensure that radiation protection equipment, su as dosimetry devices, respiratory protection ge and protective clothing, is issued and controlle
			as required.

Position	Location	Reports to	Responsibilities
Dose	Technical	Radiation	Perform onsite and offsite dose
Assessor	Support Center	Protection Advisor	assessment and projections.
Supervisor,	e e inter	11011301	Assess meteorological conditions
Radwaste Decont	amination		and projections.
Supervisor,			
Radwaste Shippin	g		· · ·
Supervisor, Radia Instruments	tion Protection		
Engineer			
Radchem	Technical	Emergency	Direct in-plant Chemistry sampling
Advisor	Support Center	Director	activities.
Supervisor, Chem Environmental Mo			Direct Radiochemistry Laboratory activities.
Sumanulaan Cham	:1		Advise Emergency Director on
Supervisor, Chem Engineering	ICAI		radwaste processing/storage/disposal
Supervisor, Chem	istry		1
Laboratory		· ·	
Security	Technical	Emergency	Ensure that site security is
Advisor	Support	Director	maintained and appropriate
General Super-	Center	•	contingency measures are implemented.
isor Security			Ensure that security and traffic
· - · · · · · · · · · · · · · · · · · ·			Operations control measures are in effect,
			including traffic direction during evacuation
Security Shift			-
Supervisor			Ensure personnel accountability procedures are implemented in the event of a radiological emergency or the need for plant/site evacuation
			Advise the Director, Nuclear Security and Emergency Director on matters related to

Functional	•	-	—	
Position	Location	Reports to	Responsibilities	
TSC	Technical	Emergency	Ensure that all notifications and	
Administrator	Support	Director	communications to offsite	
	Center		organizations are accomplished	
			within time requirements.	
Supervisor, Refue Planning, Outage	•	•		
Work Coordinator	,		Maintain and control documentation	
Outage Manageme	ent		concerning the emergency.	
Outage Coordinate			Supervise TSC communicators, and	
Outage Manageme	ent		clerical support.	
Supervisor, Scheduling SRO			Coordinate logistical support for onsite	
			emergency personnel.	
Supervisor, Work	Control		Advise the Emergency Director on matters	
Suppliate States	-		relating to personnel and equipment.	
Specialist, Strategi Planning Support	iC			
			Provide for replacement or addition of TSC personnel or equipment as conditions warrant.	
Support	Technical	Nuclear	Use ERIS SPDS to trend key plant	
Engineers	Support Center	Safety Advisor	parameters.	
Supervisor,			Advise Nuclear Safety Advisor on	
Engineering			plant engineering matters as required.	
Lead			Severe Accident Management evaluator	
Engineer				
Engineer				

Functional			
Position	Location	Reports to	Responsibilities
Radiation	Emergency	Emergency	Direct and coordinate offsite
Protection	Operations	Officer	environmental assessment activities.
Coordinator	Facility		· · · · · · · · · · · · · · · · · · ·
	-		Direct Radiological Emergency Team
			Coordinator, Dose Assessors,
~			Meteorologists, and Laboratory Tech.
Superintendent			
Radiation Protection			
			Determine survey areas for offsite RETs.
Radiation Protection			
Manager			Determine environmental
Manager			samples/surveys.
			Advise Emergency Officer on offsite
Supervisor,			protective action recommendations.
Radiological Health			protoctive action recommendations.
Engineering			Evaluate results of offsite
			environmental surveys.
			•
			Direct activities in EOF Emergency Laboratory
			Ensure personnel exposure records are
			maintained.
			Ensure EOF habitability surveys are performed
			Ensure that radiation protection equipment, suc
			as dosimetry devices, respiratory protection ge
			and protective clothing, is issued and controller
			,
		•	Implement a vehicle monitoring/decontaminati
			program.
			•

Functional			
Position	Location	Reports to	Responsibilities
Dose Assessor	Emergency Operations Facility	Radiation Protection Coordinator	Perform dose assessment and projections.
Radiological Engineer			
Engineer			Assess meteorological conditions as required.
Training Specialist			
Meteorologist	Emergency	Radiation	Assess meteorological conditions and
Engineer	Operations Facility	Protection Coordinator	projections.
Radiological Emergency Team	Emergency	Radiation	Update RET status.
Coordinator	Operations Facility	Protection Coordinator	Coordinate efforts of the Offsite RETS.
Nuclear Training Specialist, RP, Chem	& GET		
Nuclear Operations Advisor	Emergency Operations Facility	Emergency Officer	Advise Emergency Officer on plant status.
Supervisor, Operation Fraining	ns		Provide updated information to the Detroit Edison liaisons to the State of Michigan, Monroe County, and Wayn
SRO, Nuclear Training			County.

Functional Position	Location	Reports to	Responsibilities
Public Information Coordinator Licensing Engineer	Emergency Operations Facility	Emergency Officer	Prepare information under the direction of the Emergency Officer for prompt release to the Joint Public Information Center (JPIC).
EOF Administrator	Emergency Operations Facility	Emergency Officer	Ensure that all notifications and communications to offsite organizations are accomplished
Director, QA Supervisor, Inspection and			within the time requirements. Ensure communications with offsite emergency response organizations
Surveillance Supervisor, Audits			are established. Maintain and control documentation concerning the emergency.
QA Specialist, Program Support			Supervise EOF status board clerks, communicators, and clerical support.
			Coordinate logistical support for onsite emergency personnel.
Supervisor, Assessment and Support			Advise the Emergency Officer on matters relating to personnel and equipment.
••			Provide for replacement or addition of EOF personnel or equipment as conditions warrant

Functional			
Position	Location	Reports to	Responsibilities
Security Advisor	Emergency Operations Facility	Emergency Officer	Coordinate access and egress of offsite personnel to owner- controlled area.
Supervisor, Access Authorization			Advise the Emergency Officer on security matters.
Supervisor, Security Operations Support			Maintain security of the EOF.
Assistant to Director, Nuclear Security			

Figure B-1 NUCLEAR GENERATION ORGANIZATION

See UFSAR Figure 13.1-2

Figure B-2



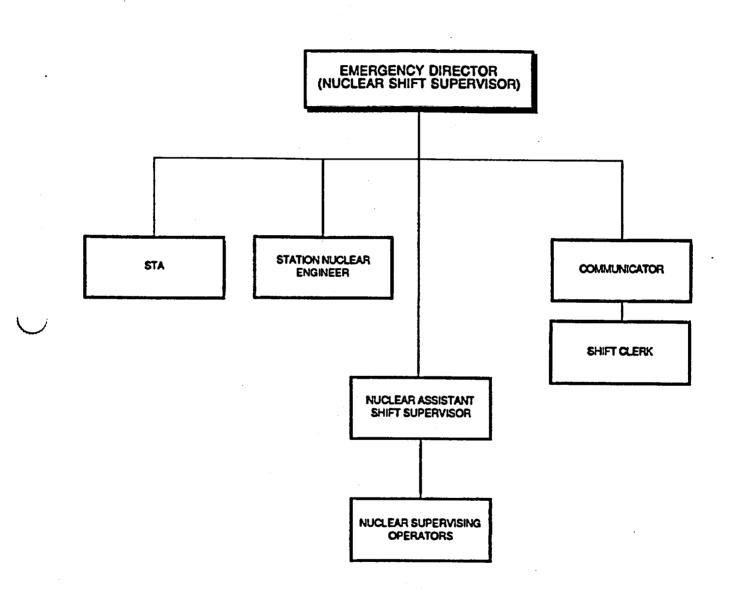
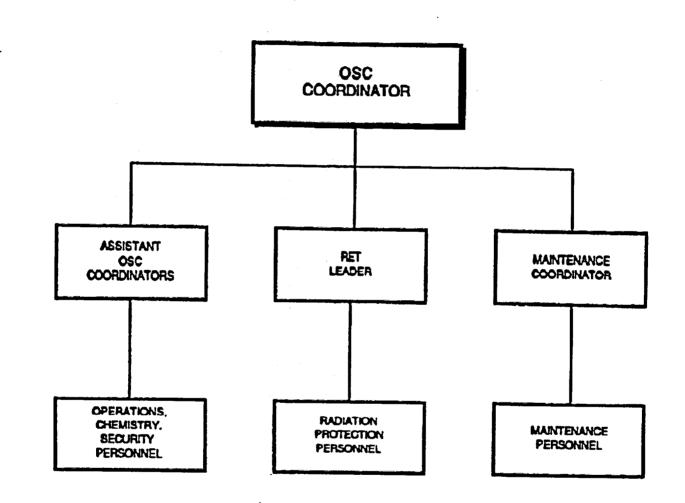


Figure B-3

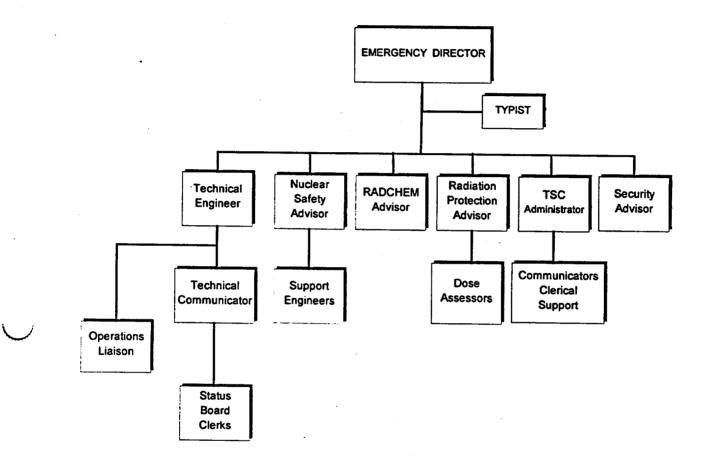


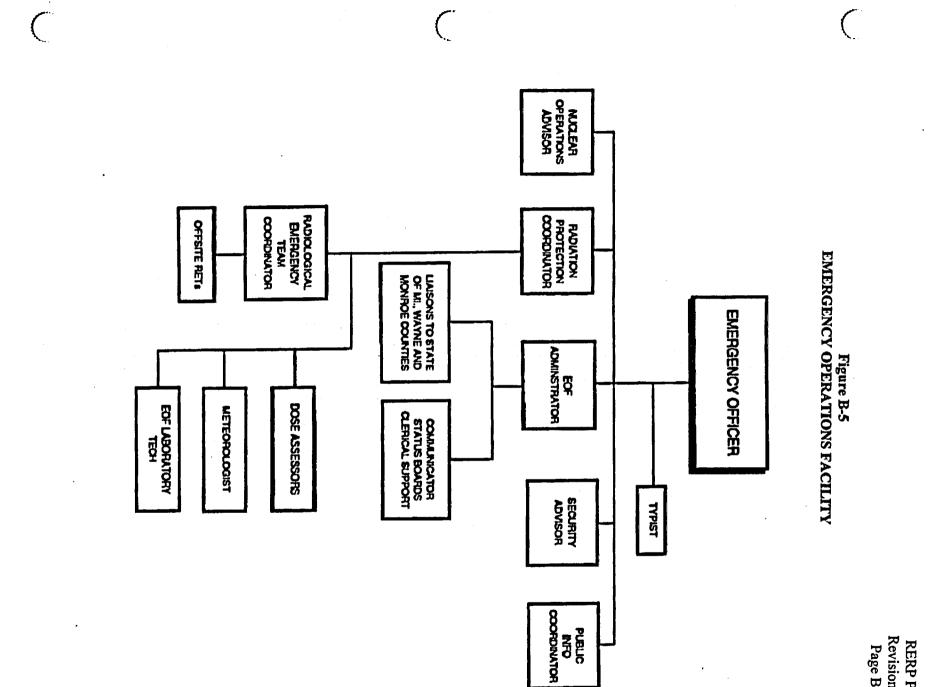


Note: Some personnel may be directed to report to the Control Room

Figure B-4







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F. EMERGENCY COMMUNICATIONS

F.1 Telephone Communications

The emergency telephone communications network (Figures F-1 and F-2) established for the Emergency Response Facilities combines Direct-Inward-Dialing (DID) lines provided by Ameritech with dedicated lines on a separate Edison-owned Private Branch Exchange (PBX) telephone system (Lucent G3SIC). An Edison-owned microwave system is also installed to provide back-up emergency communications from the Fermi 2 site. Figure F-1illustrates the interface of these systems between the various Emergency Response Facilities.

- F.1.1 PBX Lines Extensions on the Lucent system are divided into two series. One series allows communication between the Emergency Response Facilities and features DID capability, which allows an outside caller to be connected directly to an extension by prefixing the four-digit extension number with a three-digit number. The second series is unrestricted for outgoing calls; however, these extensions do not accept direct incoming calls. Sufficient PBX lines are distributed among the Emergency Response Facilities to provide adequate communications both internal and external to the site.
- F.1.2 Automatic Ring Lines Automatic ring lines are provided between key positions within the Emergency Response Facilities and also with Offsite Emergency Response Organizations. These extensions are programmed for automatic dialing.
- F.1.3 NRC Telephones FTS-2000 extensions for the Emergency Notifications System are available in the Control Room, TSC, and EOF. FTS-2000 extensions for the Health Physics Network, Protective Measures Counterpart Link, Reactor Safety Counterpart Link, Management Counterpart Link, and Local Area Network Access are available in the TSC and EOF.
- F.1.4 Microwave System An Edison-owned microwave system is installed at Fermi 2 to provide back-up emergency telephone communications. Through use of the microwave system, telephone communications are routed from the Fermi site to the General Offices in Detroit and transferred by land lines through the Ameritech Telephone central office system to any desired location. The microwave system may be accessed from the Lucent system extensions. Offsite or remote locations may be accessed via the microwave system from all telephone locations.
- F.1.5 Medical Support Facilities The Control Room maintains responsibility throughout an emergency for all communications to hospitals. Ambulance/hospital communication system maintenance is the responsibility of the ambulance and hospital services.
- F.1.6 Joint Public Information Center (JPIC) The telephone network for the JPIC, located in Monroe, is served by Ameritech as the local telephone company. The interface between the JPIC and the Onsite Emergency Response Facilities is provided through off premises stations that are switched at Ameritech Monroe and passed through Century Telephone switchgear at Newport. These provide 13 site extensions from the Onsite Emergency Response Facilities. In addition, over 30 general business lines on the Ameritech system have been installed, 10 (credit card only) of which are for use by media representatives. Provisions have been made at the JPIC to expand the number of lines for media representatives within 48 to 120 hours of notifying Ameritech of additional emergency needs.

Automatic dial numbers are also available from the JPIC Communicator to the EOF and the Edison General Offices.

F.1.7 **Telephone Equipment Maintenance** - If an emergency occurs at Fermi 2, the emergency response staff can be augmented by Detroit Edison personnel from Information Systems Organization, and a representative from Century Telephone; to serve as technical advisors to effect repairs or open additional lines for use by the Emergency Response Organization.

F.1.8 General Information

All single-line instruments in the Emergency Response Facilities have muted rings to reduce ambient noise levels.

Headsets are provided for positions where heavy telephone use is anticipated.

The Lucent G3 system has many special features available to users that include, but are not limited to, the following:

- Internal conferencing capability for up to six parties

Meet-me conference bridge for 6 party and 12 parties

Station call forwarding, which allows a party to direct incoming calls to another work area

Consultation hold, whereby a user can temporarily place a person on hold, consult with a third party, then return to the original call

The entire emergency communication system is tested on a periodic basis, consistent with communications drill requirements.

F.2 Radio Communications

The communications network at Fermi 2 also involves several radio systems to effect communications within the plant with radiological monitoring teams, maintenance teams, and Nuclear Security personnel, as well as provide backup communication modes to essential Offsite Emergency Response Organizations in the event of telephone equipment malfunctions or traffic congestion.

F.2.1 Operations and Maintenance System - There are two radio consoles normally used in the Control Room. One is installed in the operator's desk while the other is installed in the Nuclear Shift Supervisor's office. These consoles allow for direct communication to VHF hand-held portable radios on Channel 3 (Operations Channel) via the plant's radio repeater system. In addition to its local microphone, the radio console at the operator's desk has provisions to allow radio dispatching from any one of 15 remote microphone positions located at the base of each control room panel. An additional radio console is stored in the Control Room operator's desk which can be placed into service to allow for direct communication to VHF hand-held portable radios on Channel 1 (Maintenance Channel) via the plant's radio repeater system, should this alternative become necessary.

In addition to communications with Operations and Maintenance personnel as noted above, hand-held portable radio units with four-channel capability are used by the Damage Control and Rescue Teams, Fire Brigade, or Onsite Radiological Emergency Teams (RETS) to communicate with the Control Room and/or Radiation Protection personnel in the OSC and other remote parts of the plant via the radio repeater system on Channels 1 or 3. Channels 2 or 4 are utilized where direct communication between portable units is desired and the repeater system is inoperative.

- F.2.2 Offsite Radiological Emergency Teams The radio control console for directing the actions of Offsite RETs is located in the EOF/RET Dispatch Room. Each RET vehicle is equipped with a radio to provide mobile communications within a range of 20 miles. Radio communications with Offsite RETs are carried over customer service UHF frequencies assigned to Western Wayne Center.
- F.2.3 Nuclear Security System The Nuclear Security System provides communications with Nuclear Security personnel within the Owner-Controlled Area through the use of 2-channel hand-held portable radios operating through UHF frequencies and two associated repeater systems. The primary location of the radio console is the Security Building Secondary Alarm Station (SAS); however, this console is also duplicated at the Office Services Building Security annex Central Alarm Station (CAS).

Communications with the Monroe County and Wayne County Sheriff departments from the Emergency Response Facilities are through the installation of direct ring lines as described in Section F.1.2. In addition to using general business phones as a backup, the EOF Security Advisor has direct radio contact with the Michigan State Police or the Monroe County Sheriff when telephones are inoperative. The CAS and SAS have telephone-to-radio patching capability which also allows a telephone caller to be relayed to the Monroe County Sheriff or the Michigan State Police via radio.

F.3 Facsimile Transmission

Facsimile machines are provided in the Control Room, the TSC, the EOF, and the JPIC for use by emergency response and NRC personnel.

F.4 Public Address System

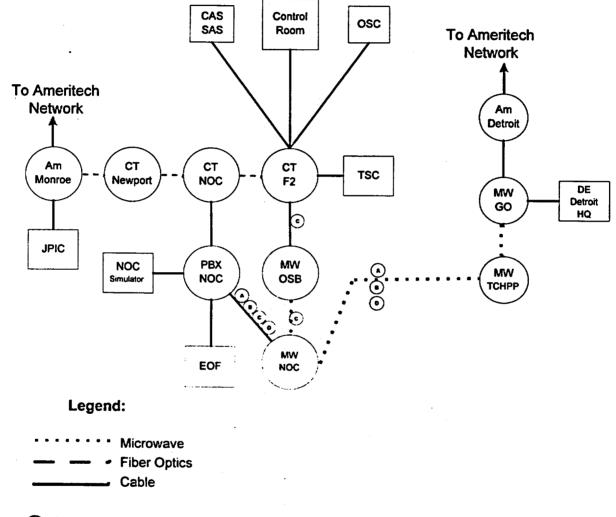
Public address systems are available in the TSC and the EOF to allow dissemination of information to emergency response personnel within these facilities.

F.5 Plant Intercom System

Extensions of the plant intercom (HiCom) system used for general plant operations are located in the TSC, the OSC, and the Control Room. Announcements made from the control room using the override feature are broadcast in all buildings onsite.

Figure F-1

EMERGENCY COMMUNICATIONS TELEPHONE NETWORK



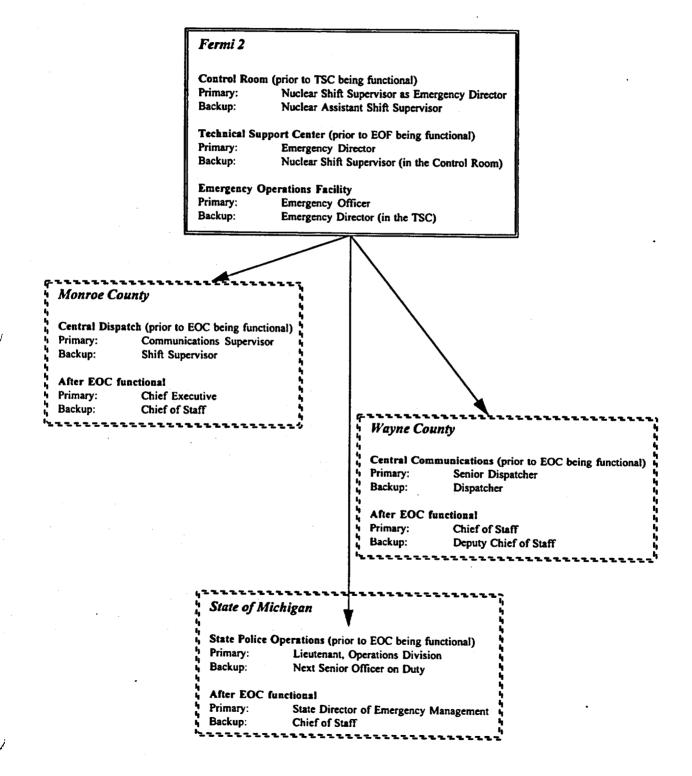
- Direct Inward Dialing Channels
- B Detroit Central Office Channels
- C Emergency Facilities Channels
- D Network Tie Lines

Emergency Response Facilities are Equipped with Direct Ring Local Central Office and Off-Premise Extensions (PBX-NOC)

СТ	Century Telephone
PBX	Private Branch Exchange
Am	Ameritech Telephone
TCHPP	Trenton Channel Power Plant

Figure F-2

PERSONNEL IN CHARGE OF COMMUNICATIONS LINKS AT FERMI 2, MONROE COUNTY, WAYNE COUNTY AND THE STATE OF MICHIGAN



EMERGENCY FACILITIES AND EQUIPMENT

This Plan Section identifies and briefly describes the functions and location of the Emergency Response Facilities (ERFs) and equipment that will be used and maintained by Edison in coordinating and performing emergency response activities.

H.1 **Emergency Response Facilities**

The ERFs that have been established at Fermi 2 to assist Control Room personnel in mitigating the consequences of accidents and responding to abnormal operating conditions are the Technical Support Center (TSC), the Operational Support Center (OSC), and the Emergency Operations Facility (EOF).

The ERFs are staffed by the emergency organization as described in Section B. The minimum staffing for the ERFs varies, as described in Section B, depending upon the class of emergency as determined by the emergency action levels discussed in Section D. The ERFs are activated as soon as possible after an emergency is declared.

The ERFs are linked by a comprehensive communications network to provide reliable and timely communications between the Control Room, the ERFs and offsite Emergency Response Organizations. The communications network provides dedicated telephone lines, general business lines, intercoms, public address speakers, microwave communications, data transmission, and radio link capabilities. Detailed information on the communication capabilities is provided in Section F.

Emergency Response Information System (ERIS) equipment is provided to gather, store, and display data in the Control Room, the TSC, and the EOF. This enables personnel to analyze plant conditions and to make appropriate recommendations regarding protective actions for emergency personnel and the public. The ERIS is described in Section H.4 and in greater detail in the Fermi 2 Updated Final Safety Analysis Report (UFSAR).

The TSC and the EOF have information centers containing the necessary up-to-date plant records, procedures, Technical Specifications, and as-built drawings to aid emergency personnel in their technical analysis and evaluation of emergency conditions. Procedures have been developed for ensuring that the most current revisions of these controlled documents are being maintained.

The ERFs provide adequate space to accommodate assigned emergency response personnel. There is sufficient space for the operation and maintenance of communications and data transmission equipment, data acquisition and display equipment, and other instrumentation required at the respective facilities. Storage space is provided for the necessary emergency supplies, protective equipment, plant documentation, and administrative materials.

H.

The TSC and EOF each provide a consultation room and provisions for a small staff of Nuclear Regulatory Commission (NRC) personnel. Provisions include desks, chairs, and telephone lines.

The following sections describe the individual ERFs and their corresponding specific functions. Additional detailed information regarding the design, construction, and habitability of the ERFs is provided in the UFSAR.

H.1.1 Control Room - The Control Room is located on the third floor of the Auxiliary Building and is designed to meet 10 CFR 50, Appendix A, Criterion 19. The habitability standards are described in Chapter 6 of the UFSAR. The Control Room contains instrumentation, controls, and displays for monitoring and controlling the plant operating and safety systems during emergency events and for mitigating the consequences of an emergency. Safe operation of the reactor and plant manipulations are performed by licensed Control Room personnel under the supervision of the Nuclear Shift Supervisor.

Initial emergency response measures, as shown below, are exercised from the Control Room under the direction of the Emergency Director (Nuclear Shift Supervisor).

- Plant operations
- Direction and control
- Accident assessment/meteorology
- Corrective actions
- Radiological assessment
- Protective actions (onsite; offsite until TSC is functional)
- Communications (licensee/offsite response organizations)

The Control Room is the initial onsite communications center during an emergency. It has a reliable communications system providing communication capabilities to the NRC, Offsite Emergency Response Organizations, OSC, TSC, EOF, and all areas of the plant.

H.1.2 Technical Support Center - When emergency conditions escalate to an Alert status, coordination of the emergency response measures shifts from the Control Room to the Technical Support Center under the direction of the Emergency Director (Plant Manager/alternate). The Emergency Director coordinates activities in the TSC and interfaces with the Control Room, the OSC, and the EOF.

The TSC is the emergency operations work area for senior technical, engineering, and management personnel; other licensee designated technical and administrative support personnel; and a small staff of NRC personnel. The TSC provides plant management and technical support to Control Room personnel and relieves the reactor operators of peripheral duties not directly related to reactor system manipulations during an emergency. The TSC may also be used to provide technical support during recovery operations following an emergency. TSC personnel perform the functions listed below for an Alert, Site Area Emergency, and General Emergency as listed below until the EOF is functional.

- Direction and control
- Accident assessment
- Corrective actions
- Plant system engineering
- Radiological assessment
- Protective actions (onsite; offsite until EOF is functional)
- Site access control
 - Communications (licensee/offsite response organizations)

When functional, the TSC becomes the primary onsite communications center during an emergency. It has a reliable communications system providing communication capabilities with the Control Room, the OSC, the EOF, the NRC, and other offsite agencies. The system provides for the immediate exchange of information on plant status and operations, notifications to Federal, State, and local agencies, and inter-communications within the TSC. The communications system consists of dedicated and general business telephone lines, a microwave system, the plant intercom, a public address system, and data transmission equipment.

The TSC is located at the southeast end of the plant within the Protected Area on the ground floor of a two-story Office Building Annex. The TSC is habitable during postulated radiological emergencies to the same degree as the Control Room (Design Criteria 19), with the exception of redundant filter systems. TSC construction provides special shielding and an HVAC system designed to facilitate the occupation of all necessary personnel for winter and summer environmental radiological accident conditions. Portable airborne and area radiation monitors that alarm locally are provided. In the event that the TSC becomes uninhabitable, TSC functions are divided between the Control Room and an alternate facility such as the EOF as directed by the Emergency Director.

H.1.3 Operational Support Center - The OSC is a designated assembly point near the Control Room. It is located at the north end of the third floor of the Turbine Building. The OSC provides an area for the coordination of shift personnel to support emergency response operations without causing congestion in the Control Room. Personnel reporting to the OSC may include the Fire Brigade, the Damage Control and Rescue Team, the Onsite Radiological Emergency Teams, instrument technicians, and general maintenance personnel.

The OSC is activated for an Alert, Site Area Emergency, or General Emergency. The OSC Coordinator integrates OSC activities and dispatches emergency personnel on assignments as directed by the Emergency Director.

The OSC has dedicated telephone lines to both the Control Room and the TSC and a dial telephone for communications with other onsite and offsite locations. Portable radios are also available to complement or serve as backup to the telephones and for onsite emergency teams.

In the event that the OSC becomes uninhabitable, an area of the machine shop is designated as the alternate OSC. The machine shop is located on the first floor of the Office Services Building.

- H.1.4 Emergency Operations Facility The EOF is a command post for the overall management of the offsite emergency response including the coordination of radiological and environmental assessments, the determination of protective actions for the public, and the management of the recovery operations stated below:
 - Radiological assessment
 - Offsite protective actions
 - Offsite radiological monitoring
 - Environmental sample analysis
 - Public information
 - Communications (licensee/offsite response agencies)

The EOF is on the first floor of the Nuclear Operations Center (NOC) and is approximately 6000 feet southwest of the Fermi 2 Plant on owner-controlled property. Supporting facilities at the NOC include the plant simulator, plant training offices, training classrooms, space for news reporters, etc. Access is available to the facility from two directions via roads under the control of Edison.

The EOF has been designed for habitability in the event of a postulated accidental radioactive release from Fermi 2. The design includes shielding (protection factor of 20), HVAC system with HEPA filters, and portable airborne radioactivity and area radiation monitors that alarm locally to assure that personnel exposures to radiological hazards do not exceed 10 CFR 20 limits.

The EOF is activated for a Site Area Emergency or General Emergency. The Emergency Officer is responsible for the integration of EOF activities and the offsite emergency response.

The Radiological Emergency Team (RET) Coordinator coordinates the Offsite RET field surveys by radio, as directed by the Radiation Protection Coordinator, from the RET Dispatch Room in the EOF.

The EOF counting laboratory is available for the qualitative analysis of environmental samples collected by the RET, as well as a backup facility to the inplant laboratories. Laboratory facilities are described in Section H.3.2.2.

An extensive communications system is provided in the EOF, which includes communications to the TSC, the Offsite RETs, the NRC, the State Emergency Operations Center (EOC), and intercommunications within the EOF. The system consists of dedicated and general business telephone lines, a microwave system, radios, plant HiCom monitor, a public address system, and data transmission equipment.

The State of Michigan and the Province of Ontario may dispatch representatives to the EOF as they deem necessary to support emergency response activities. The EOF contains provisions such as desks, chairs, telephones, and data transmission equipment to support these representatives. The EOF provides a consultation room and provisions for a small staff of NRC personnel.

An alternate EOF is located at the Western Wayne Center, approximately 22 miles northwest of Fermi 2. The facility has adequate communications equipment and sufficient space to accommodate the additional personnel required for continuity of dose projection and decision making capability, including coordination of the offsite teams. Portable equipment is provided for the personnel to perform their assigned functions. Procedures are in place which describe the activation and support functions.

H.2 Onsite Monitoring Systems

Onsite monitoring systems used to initiate emergency measures in accordance with Section D, as well as those for conducting ongoing assessment, include geophysical phenomena monitors, radiological monitors, process monitors, and fire and combustion product detectors.

H.2.1 Geophysical Phenomena

H.2.1.1 Meteorological Monitoring - The meteorological monitoring system at Fermi 2 presently meets the requirements of Regulatory Guide 1.23.

The onsite 60-meter meteorological tower has meteorological sensors that include a temperature differential network, a sigma theta signal conditioner, and a precipitation gauge capable of real-time data acquisition. A secondary meteorological system consists of redundant sensors mounted on the 60-meter tower that are independent of the primary system and require redundant signal conditioners, digital data acquisition systems, and power supplies. A block diagram of the modified system is shown in Figure H-1, Block Diagram of Detroit Edison Meteorological Data Acquisition System, and Table 1, Meteorological Parameters, indicates the parameters measured.

The meteorological system is capable of providing the following types of data upon request from dial-up terminals in the Control Room, TSC, and EOF:

- Instantaneous values
- One-minute blocked averages
- Fifteen-minute blocked averages
- Fifteen-minute running average
- One-hour blocked average
- Twelve-hour, fifteen-minute blocked historical file

In addition, the system has the capability of being remotely interrogated on a simultaneous basis by multiple users.

For accident assessment, the ERIS gathers real-time data and performs the required meteorological calculation as stated in Section I.

- H.2.1.2 Hydrological Monitoring The National Oceanic and Atmospheric Administration (NOAA) has an official gauging station in the Fermi 2 intake canal that records Lake Erie water levels.
- H.2.1.3 Seismic Monitoring Strong motion triaxial accelerographs are installed in different locations of the reactor/auxiliary building to measure the basic ground motion/time history acceleration, as well as the seismic motion. Passive earthquake recording instrumentation has been provided to measure various ground motion and in structure response spectra. The passive instruments serve as backup for the active sensors.
- H.2.2 Radiological Monitoring The area, effluent, portable, and post-accident radiation monitors are listed in Table H-2 through Table H-5:
 - Table H-2, Typical Area Radiation Monitors
 - Table H-3, Radiological Effluent Monitors
 - Table H-4, Typical Portable Monitors
 - Table H-5, Post-Accident Process and Effluent Radiation Monitors
- H.2.3 Process Monitors The process monitors are listed in Table H-6, Process Radiation Monitors.
- H.2.4 Fire and Combustion Product Detectors Fire and combustion product detectors are installed throughout the plant to monitor various vital areas. These are classified as ionization, photoelectric, thermal fixed-temperature, and thermal rate-of-rise detectors.

H.3 Offsite Monitoring Systems

- H.3.1 Geophysical Phenomena
 - H.3.1.1 Meteorological Monitoring The meteorological monitoring system at Fermi 2 is operated to NRC standards. Sufficient redundancy is built into the system so only under the most unusual circumstances would site data be unavailable. Should any of the parameters required for dose assessment be unavailable from Fermi 2, worst case meteorology can be assumed. Additional supplementary wind direction and wind speed data is available via a computer Nowcast System using several 10-meter towers located in various directions from the site. This system is operated and maintained by Detroit Edison's Technical and Engineering Services Department. This system is not maintained to NRC standards and may be subject to change. Also, National Weather Service (NWS) data is available by contacting the nearest NWS office via telephone, and a contract is in place with Weather Services International for forecast data.

- H.3.1.2 Hydrological Monitoring NOAA has gauging stations at Gibraltar, Michigan, about 10 miles north-northeast of the plant on the Detroit River, and Toledo Ohio, about 22 miles south-southwest of the plant on Lake Erie. Data will be obtained from the Toledo station by calling the Toledo Coast Guard should the gauge at Fermi 2 become inoperable.
- H.3.1.3 Seismic Monitoring Seismic data will be obtained from the University of Michigan at Ann Arbor, Michigan as a backup resource.

H.3.2 Radiological Monitoring

- H.3.2.1 Offsite Monitoring An ongoing Radiological Environmental Monitoring Program (REMP) is consistent with the Fermi 2 Technical Specifications. The program is described in detail in the Fermi 2 Offsite Dose Calculation Manual.
- H.3.2.2 Laboratory Facilities The EOF laboratory is the designated facility for the receipt and analysis of environmental samples during emergencies. The inplant Chemistry and Rad Protection laboratories are also available for the analysis of environmental samples.

The calibration and operational readiness of all laboratory equipment is assured in accordance with plant procedures. Typical equipment capabilities for all laboratory facilities are listed in Table H-7, Typical Laboratory Capabilities.

Provisions for analyses of environmental samples have also been established with the contractor or vendor who conducts the routine REMP program.

H.4 Emergency Response Information System (ERIS)

The function of ERIS is to scan plant instrumentation and gather, display, and store data needed to analyze and exchange information on plant conditions between emergency response facilities. ERIS equipment is located in the Control Room, the TSC, and the EOF. The ERIS is described in detail in the UFSAR.

The ERIS computer interfaces with the meteorological computer to provide and retain the data needed to project offsite doses. The following information can be acquired or determined through the ERIS:

- Plant status and dynamics prior to and during the accident
- Safety parameter display system
- Trending of the accident
- Status of the operation
- Quantity of radioactive gases released to the environment
- Prevailing meteorological status
- Radiological accident assessment (impact of dose on public health and safety)
- Record of monitored parameters for the duration of an emergency

H.5 Emergency Equipment and Supplies

Equipment and supplies needed to support the emergency response effort fall in general categories:

- Communications equipment
- Protective clothing
- Respiratory protection equipment
- Radiological monitoring equipment
- Environmental sampling equipment
- Decontamination supplies
- Miscellaneous tools and equipment
- Data and reference material

Radiation Protection emergency equipment and supplies are listed in Radiation Protection Procedure 67.000.405. Backup equipment and supplies are available at designated plant storage locations.

The operational readiness of Radiation Protection emergency equipment and supplies is ensured by conducting inventories at least quarterly in accordance with Radiation Protection Procedure 67.000.405. Kits containing decon or protective clothing supplies only are inventoried at least annually in accordance with Radiation Protection Procedure 67.000.405. Equipment/instruments will be physically checked at the time of the inventory and those instruments that require calibration prior to the next inspection are replaced with calibrated ones. Calibration intervals are based on the recommendations of the manufacturer and previous operational history. Perishable supplies, such as batteries, are replaced as required at the time of the inventory.

TABLE H-1: METEOROLOGICAL PARAMETERS

10-Meter Level

Wind Speed Wind Direction Air Temperature Dew Point (a) Sigma Theta

60-Meter Level

Wind Speed Wind Direction

Miscellaneous

Temperature Difference (60-10M) Precipitation at Ground Level (a) Pasquill Stability Class

a. Available from the primary system only.

TABLE H-2: TYPICAL AREA RADIATION MONITORS (8)

I.D. Number ^(b)	Location(c)	Range	Function
D21-N106	G-13-3-AB	10 ⁻ 2-10 ² mR/hr	Main Control Room Monitor
D21-N107	F-9-SB-RB	10 ⁻ 1-10 ³ mR/hr	SE Corner Monitor
D21-N108	B-10-SB-RB	10 ⁻ 1-10 ³ mR/hr	SW Corner Room Monitor
D21-N109	B-15-SB-RB	10 ⁻ 1-10 ³ mR/hr	NW Corner Room Monitor
D21-N110	G-17-SB-RB	10 ⁻ 1-10 ³ mR/hr	NE Corner Room Monitor
D21-N111	G-11-SB-RB	10 ⁻ 1-10 ³ mR/hr	HPCI Room Monitor
D21-N115	F-15-5-RB	10-2-10 ² mR/hr	Water Activity & Criticality Monitor
D21-N123	M-17-1-RWB	10 ⁻ 2-10 ² mR/hr	Radwaste Control Room
D21-N128	G-11-4-AB	10 ⁻ 2-10 ² mR/hr	Personnel Protection- Stand-by Gas Treatment System (SGTS)
D21-N132	G-13-1-AB	10 ⁰ -10 ⁴ mR/hr	Operating Information
D21-N145	C-12-1-RB	10 ⁻ 1-10 ³ mR/hr	Drywell Maintenance Monitor

(a) Table H-2 does not include all the Area Radiation Monitors (ARM) in the plant, but is typical of those available.

- (b) Detector and/or channel number
- (c) Locations by column-row-floor-building

RB = Reactor Building; AB = Auxiliary Building; RWB = Radwaste Building; SB = Sub Basement

TABLE H-3: RADIOLOGICAL EFFLUENT MONITORS

I.D. Number ^(a)	Location(b)	Туре	Function
D11-P293	Е-3-1-СWPH	Liquid Effluent	Monitor Liquid Discharges to Lake Erie
D11-P281	NP-17-2-RWB	Gaseous Effluent	Monitor Gaseous Discharges from RW Building
D11-P279	N-3-3-TB	Gaseous Effluent	Monitor Gaseous Discharges from Turbine Building
D11-P275	H-15-4-AB	Gaseous Effluent	Monitor Gaseous Discharges from SGTS
D11-P276	G-13-4-AB	Gaseous Effluent	Monitor Gaseous Discharges from SGTS
D11-P280	F-10-5-AB	Gaseous Effluent	Monitor Gaseous Discharges from Reactor Building

(a) Panel number, detectors located in panels.

 (b) Locations by column-row-floor-building Buildings are CWPH = Circulating Water Pump House; AB = Auxiliary Building; TB = Turbine Building; RWB = Radwaste Building

TABLE H-4: TYPICAL PORTABLE MONITORS(a)

- Contamination (personnel, wounds, equipment, areas) -Friskers (hand-held and PCM 1A) GM detectors/Gas flow proportional
- Radiation detection and measurement -GM survey meter/ion chamber survey meters
- High range radiation GM survey meter with range to 1000 R/hr
 - Airborne Radioactivity (particulates, radioiodine gaseous) Continuous Air Monitors Long Term Air Samplers (>24 hrs) Short Term Air Samplers (<24hrs)

(a) The Fermi 2 Updated Final Safety Analysis Report provides a description of portable monitors in Chapter 12.

TABLE H-5: POST-ACCIDENT PROCESS AND EFFLUENT RADIATION MONITORS

I.D. Number	Location	Туре	Function
D11-N443A(a)	Drywell	Post-Accident ARM	Monitor Post-Accident Radiation Level in Containment
D11-N443B(a)	Drywell	Post-Accident ARM	Monitor Post-Accident Radiation Level in Containment
D11-P300A(b)	G-12-5-AB	Post-Accident Effluent PRM	Monitor Post-Accident SGTS Effluent
D11-P300B(b)	G-12-5-AB	Post-Accident Effluent PRM	Monitor Post-Accident SGTS Effluent

(a) Detector and/or channel number

(b) Panel numbers, detectors located in panels.

TABLE H-6: PROCESS RADIATION MONITORS⁽²⁾

I.D.				
Number(b)	Location(c)	Туре	Range	Function
D11-N004A,B	M-0-3-TB	PRM	10 ⁰ -10 ⁶ mR/hr Info	Monitor Off-Gas-Advisory
D11-N006A,B	G-12-1-RB	PRM	10 ⁰ -10 ⁶ mR/hr	Limit Fission
D11-N006C,D	G-11-1-RB	PRM	10 ⁰ -10 ⁶ mR/hr	Product Carryover
D11-N008	J-8-1-TB	PRM	10-1-10 ⁶ cps	Detect In-leakage to GSW
D11-N009	H-13-1-AB	PRM	10 ⁻ 1-10 ⁶ cps	Detect In-Leakage to RBCCW
DII-N10A,B	F-13-3-RB	PRM	10 ⁻ 2-10 ² mR/hr	Monitor Fuel Pool
D11-NI0C,D	B-13-4-RB	PRM	10 ⁻ 2-10 ² mR/hr	Exchange & Initiate SGTS
D11-N400A	A-12-2-RB	PRM	10 ¹ -10 ⁷ cpm	Monitor In-leakage
D11-N400B	D-10-2-RB	PRM	10 ¹ -10 ⁷ cpm	to EECW
D11-N401A	B-15-2-RB	PRM	10 ¹ -10 ⁷ cpm	Monitor to in-leakage
D11-N401B	B-10-2-RB	PRM	10 ¹ -10 ⁷ cpm	to RHR Service water
D11-N408	F-10-4-RB	PRM	10 ¹ -10 ⁷ cpm	Monitor Reactor Building Vent for Fission Products
D11-N410	G-10-4-RB	PRM	10 ¹ -10 ⁷ cpm	Monitor Reactor Building Vent for Fission Products

(a) The Fermi 2 Updated Final Safety Analysis Report provides a detailed description of the Process Radiation Monitoring System in Chapter 11.

(b) Detector and/or channel number

(c) Locations by column-row-floor-building Buildings are: RB = Reactor Building; AB = Auxiliary Building; TB = Turbine Building

TABLE H-7: TYPICAL LABORATORY CAPABILITIES

Inplant Chemistry Capabilities

- Gamma emitting isotopic analyses
- Gross Beta/Gamma activity (total activity)
- Low energy Beta (H-3) emitting isotopic identification
- H₂ and O₂ determination in air
- Trace metals determination
- pH determination
- Conductivity determination
- Boron determination
- Chlorides specification determination
- Lubricants identification
- Dissolved gas determination

EOF Chemistry Capabilities

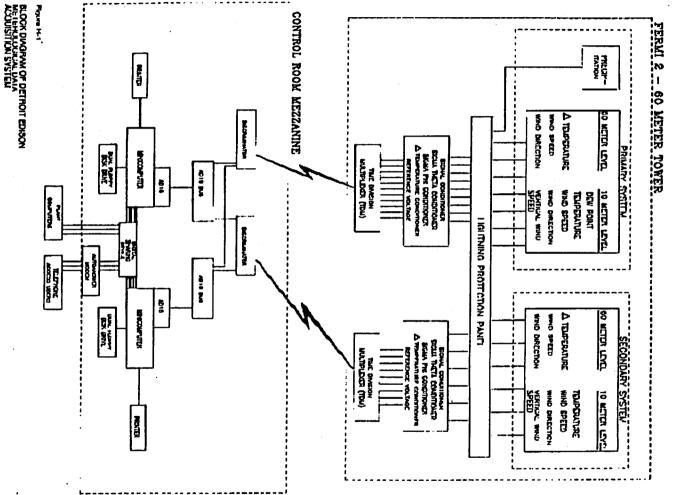
- Gamma emitting isotopic analyses
- Gross Beta/Gamma activity (total activity)
- H₂ and O₂ determination in air
- pH determination
- Boron determination

Radiation Protection

- Gamma emitting isotopic analyses
- Alpha/Beta detection
- Gross Beta/Gamma measurement

FIGURE H-1:

BLOCK DIAGRAM OF DETROIT EDISON METEOROLOGICAL DATA ACQUISITION SYSTEM



L. MEDICAL SUPPORT

This Plan Section describes the arrangements made for medical services for contaminated injured personnel.

. ...

L.1 Offsite Support

L.1.1 Hospitals - Arrangements have been made for medical treatment of Fermi 2 personnel who may have injuries complicated by the presence of radioactive contamination and/or overexposure to radiation. The primary treatment facility is Mercy-Memorial Hospital, Monroe, Michigan. A back-up medical facility is established at Oakwood Hospital, Seaway Center in Trenton, Michigan, located approximately 12 miles from the plant.

Mercy-Memorial Hospital and Oakwood Hospital, Seaway Center are adequately supplied and equipped to receive and treat contaminated patients. Detroit Edison maintains emergency cabinets containing contamination control supplies and dosimeters at both hospitals.

L.1.2 Services - In addition, Detroit Edison will co-ordinate medical emergency activities and ensure that the following are provided:

Immediate telephone consultation for the hospital staff and/or Fermi 2 personnel with respect to evaluation and treatment of individuals involved in a radiological medical emergency

A radiation emergency medical team to assist in the implementation of the emergency medical plan, if required

Written procedures that implement an emergency medical plan for the treatment of radiation-related injuries

- Written procedures regarding radiological medical emergencies detailing actions to be taken onsite
- Written procedures regarding radiological medical emergencies detailing actions to be taken onsite for offsite transportation of injured/contaminated individuals and hospital notifications
- Recommendations regarding facilities, equipment, and supplies required for effective implementation of the emergency medical plan
- Annual training of plant, ambulance, and hospital personnel who have emergency medical responsibilities

An annual emergency medical drill providing immediate evaluation and critique of the results

- Backup radio-bioassay laboratory services for the evaluation of body burdens and exposure consequence
- Arrangements, as required, for the medical evaluation and/or treatment of radiological casualties at a definitive care center for specialized treatment

L.2 Onsite First Aid Capability

A Registered Nurse is usually onsite during normal working hours 5 days a week. In addition, at least two persons qualified in first aid methods equivalent to Red Cross multi-media training will be onsite at all times. First aid to injured personnel can normally be performed in conjunction with any needed decontamination. However, if immediate treatment of the injury is vital, medical treatment takes precedence over decontamination efforts. This philosophy also extends to offsite emergency care involving radioactive contamination.

L.3 Transportation Arrangements

Contractual arrangements have been made with EMTS Ambulance Service for the transportation of patients from Fermi 2 who may have injuries complicated by the presence of radioactive contamination or who may have exceeded personnel exposure limits.

. RESPONSIBILITY FOR THE PLANNING EFFORT: DEVELOPMENT, PERIODIC REVIEW, AND DISTRIBUTION OF RERP PLANS

This Plan Section identifies key personnel who are responsible for developing, reviewing, and updating the RERP Plan, discusses the RERP format, and describes the review process.

P.1 Responsibilities

The Director, Licensing has overall authority and responsibility for RERP planning for Detroit Edison. The Supervisor, RERP is responsible for developing and updating the RERP Plan and its implementing and administrative procedures. The Supervisor, RERP coordinates the development and revision of the plan and procedures with other response organizations. The Supervisor, RERP will identify the supporting procedures required by other groups.

The Supervisor, RERP in conjunction with Nuclear Training, is responsible for ensuring that all Emergency Response Organization personnel complete training in emergency preparedness.

The Supervisor, RERP is responsible for the training of individuals responsible for the planning effort.

P.2 Format of the RERP Plan

The RERP Plan is written in the following format:

- Each Plan section corresponds to a similarly titled section in NUREG-0654/FEMA-REP-1, Revision 1, November 1980, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (see Appendix 5).
- A specific table of contents is provided.
- A list of implementing and administrative procedures is found in Appendix 3. A list of supporting procedures and documents is found in Appendix 4.

P.

P.3 **Review and Revision of the RERP Plan**

The Supervisor, RERP is responsible for ensuring that an annual review of the Plan is conducted. The Letters of Agreement (Appendix 1) between the Fermi 2 Emergency Response Organization and offsite agencies will also be reviewed and updated as required at that time. Changes are recommended based on the following considerations:

- Written critiques and evaluations of drills and exercises, especially recommended corrective actions
- Changes in company or plant organization
- Changes in function or organization of support agencies, including necessary revisions to letters of agreement
- Changes in state or federal regulations or regulatory guidance
- Changes in state or local emergency plans
- Modifications to the plant or site that could affect emergency planning, including modifications to plant systems, emergency equipment, or emergency facilities, etc
- **Changes to Technical Specifications**
- Recommendations from other organizations, such as state and federal agencies and other utilities
- Significant changes in the areas surrounding the site, such as changes in population density or land usage
- Changes in capabilities of supporting organizations, including local hospitals, ambulance services, fire departments, etc.
- Changes in other plant operating or administrative procedures

Revisions to the RERP Plan are reviewed by affected organizations and approved by the Onsite Review Organization (OSRO). Revised pages indicate where revisions were made and controlled copies are distributed. Documents concerned with review of the RERP Program are retained for at least 5 years.

The Plan shall contain an appendix listing, by number and title those procedures required to implement the Plan. This listing shall cross-reference the RERP Plan Section implemented by each implementing or administrative RERP procedure. The Plan also contains a cross-reference to each section of NUREG-0654 required to be implemented in the Fermi 2 RERP Program in Appendix 5.

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P.4 Review and Revision of RERP Program

P.4.1 Independent Review - An independent audit of the RERP Program is to be conducted in accordance with 10 CFR 50.54 (t). The review will address all aspects of the RERP Program, including the Plan, implementing and administrative procedures, training, readiness, testing, equipment, and interfaces with the state and local government agencies. This independent review may be conducted in conjunction with a scheduled exercise. Recommended correction actions and any proposed revisions to the RERP Plan are documented and reviewed. The Supervisor, RERP, is responsible for recommending revisions to be made to the RERP Plan or other corrective actions as appropriate.

END OF RERP PLAN TEXT

Standard Operating Procedure

APPROVALS

This Michigan Southeastern Local Area EAS plan was developed and approved by the Michigan Southeastern emergency Alert Committee, and the National Weather Service in cooperation with the Michigan State Police Emergency Management Division and County Emergency Management officials.

/s/	<u>1/22/97</u>
Mr. Ed Buterbaugh, Chairperson	Date
Southeaster Local Area Emergency Communications Committee	
/s/	1/22/97
/s/ Mr. Gregory Urbiel, Vice chairperson	Date
Southeastern Local Area Emergency Communications Committee	Duit
ls/	1/22/07
/s/ Mr. Larry Estack, Co-Chairperson	<u>1/22/97</u> Date
Michigan State Emergency Communications Committee	Dale
/s/ Co-Chairperson	<u>1/22/97</u> Date
Michigan State Emergency Communications Committee	Duit
Michigan State Emergency Communications Committee	
/s/	<u>1/22/97</u>
/s/ Mr. Gary Campbell	<u>1/22/97</u>
/s/ Mr. Gary Campbell National Weather Service Office, White Lake, MI /s/	<u>1/22/97</u>
/s/ Mr. Gary Campbell National Weather Service Office, White Lake, MI _/s/ _t. Ralph J. Hobrat, Coordinator	<u>1/22/97</u> Date
/s/ Mr. Gary Campbell National Weather Service Office, White Lake, MI /s/	<u>1/22/97</u> Date <u>1/22/97</u>

SOUTHEASTERN MICHIGAN EAS PLAN

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Purpose

This Document provides procedures agreed upon by the broadcast and cable industry which will permit designated federal, state and local government officials to issue emergency information, instructions and warning to the general public of the South Eastern Michigan Area by activating the South Eastern Michigan Area Emergency Alert System (EAS).

I. Authority

Title 47 USC 151,154(i), (o), 303 (r), 524 (g) and 606. 47 CFR, Part 11, Federal Communications Commission (FCC) Rules and Regulations.

II. General Information

A. The South Eastern Michigan EAS System will utilize digital message encoding/decoding equipment which complies with the standards of the FCC rules, Part 11, and is certified by the Commission.

B. This plan was prepared by members of the South Eastern Michigan Emergency Alert System (EAS) Emergency Communications Committee (ECC) in cooperation with the Michigan State Police Emergency Management Division (EMD), and the Nation Weather Service (NWS) and County Emergency Management Agencies. The plan provides background data and prescribes specific procedures for the broadcast and cable television media to disseminate emergency information and warnings to the general public throughout the State of Michigan, at the request of designated federal, state and local government officials, known as Notifiers. The South Eastern Michigan EAS Plan may be activated on a day-to-day basis in response to an occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from a natural or man-made cause. It should be noted that operational area EAS activation for weather warnings, other than tornado warnings will occur only under extreme circumstances or during the failure of the NWR transmission system. Participating stations are encouraged to broadcast all local weather warnings promptly.

C. The plan provides for access to the EAS by designated officials (notifiers) working through two local primary (LP) stations. They are: WJR-AM (LP-1), WWJ-AM (LP-2). The South Eastern Michigan EAS Local Area, previously known as Operational Area, consists of the following five counties: Macomb, Monroe, Oakland, St. Clair, Wayne.

D. Acceptance of or participation in this plan shall not be deemed to prohibit a broadcast licensee or cable TV operator from exercising independent discretion and responsibility in any given situation. Stations originating EAS emergency communications shall be deemed to have conferred rebroadcast authority.

E. This plan shall be considered an appendix to, and part of, the Michigan State EAS Plan.

F. EAS Designations: The FCC has provided for EAS Stations Designations which reflect the EAS status of every broadcaster and cable operator. Below is a listing of these designations. Consult the State of Michigan EAS Plan, the "FCC mapbook" or Attachment II of this plan to determine our EAS designation.

NP (National Primary) = Sole source of national EAS alerts. These stations (Primary Entry Point or PEP stations) will feed national level alerts to the State Primary stations. At present there are no national stations located in Michigan. Signals from outstate NP stations will be picked up by the state primary station and distributed either directly or via state relay stations to each EAS Local Area.

SP (State Primary) = In Michigan, WKAR FM 90.5 MHz, East Lansing Michigan serves as the origination station for all state level EAS alerts, as well as, the distribution point for all national level EAS alerts.

SR (State Primary) = In Michigan, several key FM stations will serve in this capacity to relay emergency announcements from the SP station to other LP stations in the state.

LP (Local Primary) = Key stations in each of Michigan's twelve (12) local areas. There will be at least two in each area. The LP-1 is the primary stations. The LP-2 is the alternate Local Primary station. Local Primary 1 and 2 stations are to be monitored by participating stations in the area.

PN (Participating National) = Most broadcasters and cable operators are designated as PN. They monitor the area LP stations and deliver EAS alerts directly to the general public in case of a national level emergency.

NN (Non-participating National) = Broadcasters who hold an "NN Authorization" from the FCC to sign off their station after a national EAS activation. There are very few of these in Michigan.

III. Michigan EAS Configuration

The Michigan goal for EAS is the development of a fully automated system that will allow notifiers through dedicated encoders to selectively provide Michigan citizens with family emergency information and warnings.

It is realized that at the initial implementation of the Michigan EAS much of the system will rely on broadcast station staff to air messages based on verbal requests from notifiers. Hopefully, within the year of system implementation, many notifiers will obtain EAS encoder equipment. Once this equipment is in place, notifiers with EAS equipment will be able to activate EAS directly through their LP-1 and LP-2 stations. Notifiers with out EAS equipment must handle requests for EAS activation verbally, but are encouraged to purchase necessary equipment as soon as possible, to speed the dissemination of information with greater accuracy.

LP stations serve as the primary contact point for EAS entry and therefor, carry an extra EAS responsibility. With this in mind, a key criteria for the selection of Michigan State Primary (SP) and Local Primary (LP) stations was their ability to provide 24-hour staffing, and provide adequate signal coverage of this area.

The process of selecting monitoring assignments in the Michigan EAS structure was based on station coverage areas with an emphasis on the ability to span state, local area and county boundaries. This focus provides Michigan with an approach for disseminating EAS messages over all stations with broadcast coverage serving an impacted area regardless of the physical location of the transmitter or cable head-end equipment. To achieve this capability, cross monitoring and multiple Local Primary (LP) monitoring assignments are required. While this monitoring scheme creates some additional burden on LP stations in hardware procurement and configuration, the benefits of specific and through coverage fare outweighs these burdens.

The ability to fully utilize the automated technology of the new EAS to assure 24 hour system reliability and selective signaling was key to the setting of our Michigan EAS goal. Throughout the long range development of the Michigan EAS, emphasis will be placed on configuring a fully automated but interruptible system. Emphasis will be placed on notifiers obtaining EAS encoders and on the reliable interface of the National Weather Service's Specific Area Message Encoder (SAME) into the Michigan EAS structure. Michigan EAS monitoring assignments specify the monitoring of the Local Area LP-1 and LP-2 (and, in some cases, an alternate LP-3 station) by all broadcasters and cable operators and recommend the monitoring of the NOAA weather radio station issuing weather warnings for counties within their coverage area. In the South Eastern Michigan operational area monitoring of NOAA Weather radio is required where reception is possible. In areas where NOAA Weather radio cannot be received, the 67khz subcarrier of WYST (97.1mhz) should be monitored. This subcarrier will retransmit NOAA weather radio on a full time basis.

IV. Originating Stations

A. The originating stations for the South Eastern Michigan Local Area are WJR (760 kHz), designated Local Primary (LP-1) and WWJ (950 kHz), LP-2.

The 24-hour EAS emergency number for the LP-1 and LP-2 stations for this area are included in Attachment A-VI.

B. An NOAA weather radio station (KEC63, 162.550 MHz) will provide National Weather Service warnings for this area and is required to be monitored by all participating stations.

VI. EAS Message Protocol

The EAS Systems uses a four part message structure for emergency activation. The four parts are: (1) The preamble and EAS header codes; (2) the audio attention signal; (3) The EAS message audio text; and (4) the preamble and the end-of-message code. The description of the protocol that follows is provided for informational purposes only, since

the actual generation of EAS messages using FCC type accepted Encoder/Decoder equipment will be much easier and user friendly than this text suggests. In actual practice, the equipment software will allow generating the header and end-of-message codes using plain English entries, through menu prompts. The equipment user interface works much like a bank ATM machine. The FCC protocol is as follows:

(1) The Preamble and EAS Header

The preamble and EAS header code contains specific information related to the origination, handling and routing of the EAS message. The code is transmitted by and EAS encoder three times with a one second pause between transmissions. The code format is as follows:

(Preamble) ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL

The preamble portion of this code contains a consecutive string of date bits used to clear the system equipment, set the equipment automatic gain control and set the decoder clocking cycles. This is a fixed code that is used at the beginning of all EAS headers and end of message codes.

The ZCZC = (start of ASCII code) – Send automatically by the EAS Encoder.

The ORG = (the originator code) - Pre-set once by user, then sent automatically by the encoder. The following originator codes will be used as part of the Michigan EAS.

ORIGINATOR	CODE
Broadcast Station or Cable system	EAS
Civil authorities	CIV
Emergency Action Notifications	EAN (National use only)
Nation Weather Service	WXR
Primary Entry Point system	PEP (National use only)

EEE = (the event code) – Determined by the user each time an alert is sent. Indicates the nature of the EAS activation. See paragraph VI, C, for the list of event codes to be used in the Michigan EAS. Those event codes marked ** are required to be programmed as presets in all EAS decoders by FCC rules. Those events codes marked * are specified to be programmed as pre-sets in all EAS decoders of stations and cable systems participating in the Michigan EAS system.

PSSCCC = (the location code) - determined by the user each time an alert is sent. This code indicates the geographic area affected by the EAS alert. Up to 31 location codes can be put into one EAS alert header. The location code uses Federal Information Processing System (FIPS) numbers to define areas. The PSSCCC code breakout is as follows:

The "P" defines county subdivisions as indicated in the following table. A "0" in the "P" position indicates and entire county:

1 = NW	2 = NC	3 = NE
4 = WC	5 = C	6 = EC
7 = SW	8 = SC	9 = SE

(Michigan does not anticipate using county subdivisions at the present time. Therefore, an "0" should be used as the "P" code.

The SS defines the state the EAS is being issued for. The SS codes for Michigan and adjacent states are as follows:

Illinois	17
Indiana	18
Michigan	26
Ohio	39
Wisconsin	- 55

The CCC refers to the county affected. A 000 in this code refers to an entire state. The three digit Michigan county FIPS codes: For South Eastern Michigan are as follows:

Wayne	163
Macomb	099
Monroe	115
Oakland	125
St. Clair	147

+TTTT = (Duration of alert) - Determined by user each time alert is sent. This code is in 15 minute segments up to one hour, and 30 minute segments beyond one hour. The code is as follows: 15 min. = +0015; 30 min. = +0030; 45 min. = +0045, one hour = +0100; one hour 30 min = +0130, etc. Except for weather related alerts, a one hour minimum is recommended to allow enough time for messages to reach all necessary distribution points.

JJHHM = (Date/Time stamp) - Attached automatically by the encoder. JJJ is the three digit Julian day of the year. The HHMM is the time in hours and minutes using 24-hour universal coordinated time. In Michigan, universal coordinated time can be determined by adding five hours to Eastern Standard Time (EST) or four hours to Daylight Saves Time (DST). This code remains unchanged for all re-transmissions.

LLLLLLL = (Eight character ID, identifies the broadcaster, cable operator, NWS office, or Civil authority sending or relaying the message.) All eight digit positions must be used. Dashes must not be used. After initial programming, the EAS encoder will

automatically affix this code to all outgoing EAS messages. The LLLLLLL codes in Michigan will follow the convention shown the examples given below:

WGRYAMFM	—	Broadcast Station Combo
WILSWHZZ	-	Broadcast station combo (w/diff calls)
WJR (AM)_	-	Single broadcast station
WWJ (AM)_	-	Single broadcast station
WDIV (TV)	-	Television Station
WILX-TV_	-	Television Station
KDTX/NWS	-	NWS, NOAA weather radio
MARQCOEM	-	County Emergency Management
		(Example, Marquette County)
MARQCOSO	-	County Sheriff (example, Marquette County)
MSP/EOC	-	Michigan State Emergency Management Division

"L" codes for county notifier encoders can be found in Attachment IV to this plan. "L" codes for cable systems will be assigned by the SECC Cable Chairman by July 1, 1997.

(2) Audio Attention Signal

The audio attention signal is a two-tone signal transmitted after the EAS header code. This signal is eight (8) seconds in duration and serves to alert listeners to an upcoming emergency broadcast.

(3) EAS Message Text.

The EAS message text is the actual text of the emergency message to be transmitted. All South Eastern Michigan Local Area EAS messages will begin with the statement: "We interrupt this program to activate the South Eastern Michigan Local Area Emergency Alert System, for special emergency information" and end with the statement: "This concludes this message regarding the activation of the South Eastern Michigan Local Area Emergency Area Emergency Alert System. Stay tuned to this station for further information." This audio message including open, close and body must be limited to two (2) minutes in order to fit within the recording space provided in the EAS Decoders.

(4) End-of-Message Code

The end-of-message, generated by pushing a button, is the preamble followed by a string of four ASCII "N" characters. The end-of-message code is transmitted by the encoder three times with one second pauses between transmissions. Its purpose is to return automated broadcast programming equipment to normal programming after an EAS interruption.

B. The EAS Protocol described above is taken from the FCC Rules, Part 11, and shall be used exclusively by the Michigan EAS System. Each participating station, subject cable system and notifiers in the state shall program their EAS Decoder/Encoder to facilitate the proper functioning of the system as described in this Local Area Plan.

C. Michigan Event Codes

Whether used under the authority of the Michigan State EAS Plan, or any of the 12 Local Area EAS Plans, the following are the only Event Codes to be used in Michigan by anyone for any purpose. No codes can be used in Michigan by anyone for any purpose. No codes can be added with out SECC/FCC approval. Local Areas wishing to use a code not on this list should submit that code request to the SECC for FCC approval and subsequent addition to the list. This list shall be maintained as a "Master List" for all event codes used in the State of Michigan. The SECC recommends pre-setting this entire list in your decoder.

MANDATED FCC EVENT CODES

Emergency Action Notifications	EAN***
Emergency Action Termination	EAT***
National Information Center	NIC
National Periodic Test	NPT
Required Monthly Test	RMT**
Required Weekly Test	RWT**
Tornado Watch	TOA
Tornado Warning	TOR*
Severe Thunderstorm Watch	SVA
Sever Thunderstorm Warning	FFA
Flash flood Watch	SVR
Flash Flood Warning	FFW*
Flash Flood Statement	FFS
Flood Watch	FLA
Flood Warning	FLW
Flood Statement	FLS
Winder Storm Watch	WSA
Winter Storm Warning	WSW
Blizzard Warning	BZW
High Wind Watch	HWA
High Wind Warning	HWW
Evacuate Immediate	EVI*
Civil Emergency Message	CEM*
Practice/Demo Warning	DMO

MICHIGAN ADOPTED SPECIAL EVENT CODES

Closed Circuit Test	CCT
Earthquake Warning	EQW*
Fire Warning	FRW
Fog Warning	FOW
Gas Leak Emergency	GLE*
Icy Road Warning	IRW
Industrial Plant Emergency	IPE*
Law Enforcement Emergency	LEE*

MICHIGAN ADOPTED SPECIAL EVENT CODES (continued)

Local Area Emergency	LAE*
Marine Warning	MRW
Military Emergency	MLE
Nuclear Power Plant Emergency	NPE*
Nuclear Power Plant Test	NPT
Radiological Emergency	RDE*
School Closing Emergency	SCE
Shelter in Place Advisory	SIP
State Emergency Test	SET*
State Emergency	STE*
Toxic Spill Emergency	TSE*
Telephone Outage Emergency	TOE*

*** Already pre-set in all decoders by FCC Rules

** Required Tests

* Specified to be pre-set in decoders, as a minimum, per the Michigan State EAS Plan.

D. Michigan Location codes (PSSCCC):

Michigan does not anticipate using the "P" code at the present time. A "0" should be entered for the "P" code. The remaining five (5) digits ("SSCCC") indicate the state, "26" for Michigan, and county as listed below:

Alcono	26001	. .	
Alcona	26001	Lake	26085
Alger	26003	Lapeer	26087
Allegan	26005	Leelanau	26089
Alpena	26007	Lenawee	26091
Antrim	26009	Livingston	26093
Arenac	26011	Luce	26095
Baraga	26013	Mackinac	26097
Barry	26015	Macomb	26099
Bay	26017	Manistee	26101
Benzie	26019	Marquette	26103
Berrien	26021	Mason	26105
Branch	26023	Mecosta	26107
Calhoun	26025	Menominee	26109
Cass	26027	Midland	26111
Charlevoix	26029	Missaukee	26113
Cheboygan	26031	Monroe	26115
Chippewa	26033	Montcalm	26117
Clare	26035	Montmorency	26119
Clinton	26037	Muskegon	26121
Crawford	26039	Newaygo	26123
Delta	26041	Oakland	26125
Dickinson	26043	Oceana	26127

26045	Ogemaw	26129
26047	Ontonagon	26131
26049	Osceola	26133
26051	Oscoda	26135
26053	Ostego	26137
26055	Ottawa	26139
26057	Presque Isle	26141
26059	Saginaw	26145
26061	Roscommon	26143
26063	St. Clair	26147
26065	St. Joseph	26149
26067	Sanilac	26151
26069	Schoolcraft	26153
26071	Shiawassee	26155
26073	Tuscola	26157
26075	Van Buren	26159
26077	Washtenaw	26165
26079	Wayne	26163
26081	Wexford	26165
26083		
	26049 26051 26053 26055 26057 26059 26061 26063 26065 26067 26069 26071 26073 26075 26075 26079 26081	26047Ontonagon26049Osceola26051Oscoda26053Ostego26055Ottawa26057Presque Isle26059Saginaw26061Roscommon26063St. Clair26065St. Joseph26067Sanilac26069Schoolcraft26071Shiawassee26075Van Buren26077Washtenaw26079Wayne26081Wexford

VII. Monitoring Assignments

As indicated in Paragraph V, WJR is the South Eastern Michigan Local Area Primary station (LP-1) and will be originator for South Eastern Michigan Local Area EAS messages. WWJ, the alternate Local Primary station (LP-2) will serve as the alternate originator for the South Eastern Michigan Local Area EAS and will monitor WJR. All South Eastern Michigan Local Area stations and cable systems shall monitor WJR and WWJ. (See Attachments I and III). In addition to the LP stations, all participating stations and cable systems are required to monitor the National Oceanic and Atmospheric Administration (NOAA) weather radio station KEC63.

B. If monitoring difficulties are experienced, the local area chairman should be consulted in resolving the problem. The local area chairman will co-ordinate any waiver necessary with the SECC chairman and the FCC.

VIII. Responsibilities of Participating Stations

A. Stations serving the Michigan EAS system are the key to the effective dissemination of emergency information to the public. Stations shall re-transmit as a minimum any emergency message carrying event codes: CEM, EAN, EAT, EVI, RMT, or TOR which affect any county in their secondary coverage area. This will ensure message dissemination through all broadcast and cable media which may have listeners, views or subscribers in the area affected by the emergency. This will require effort and attention to detail in EAS decoder programming, station operational planning and staff training. Station engineers or other responsible personnel should be sure that their station procedures and encoder/decoder programming adhere to this plan. Your local area chairperson, adjoining area chairperson the state chairperson will assist you if questions arise regarding the implementation of this plan.

B Participating stations must program their EAS decoders to accept emergency messages carrying location codes for all counties which are covered, in whole or in part, by their secondary coverage contour.

IX. Notification Procedures

A. *Notifiers*: The Emergency Management coordinator for each of the five (5) counties in the South Eastern Michigan Local Area are the designated officials authorized to request activation of the EAS and are known as notifiers. All other local officials must request EAS activation through the authorized notifiers.

B. At the initial implementation of the Michigan EAS, notification will rely on verbal contact with the Local Primary (LP) station for notification requests. Until such time as the notifier has the proper encoding equipment the Local Primary Station will authenticate the request by telephone call-back using the telephone verification list included in Attachment III. As EAS encoders are installed at the county or city Emergency Operations Centers (EOC), automated notification will become the primary EAS activation method.

C. Requests for Activation: Requests for activation of the South Eastern Michigan Local Area EAS for civil emergencies will be made by contacting WJR (LP-1) for this operational area. Refer to Attachment A-VI for telephone number. If the LP-1 station cannot be reached, the LP-2 station should be contacted. Emergency communications from designated notifiers will be handled immediately. Notifiers should have all information to be broadcast prepared and ready to read prior to requesting an EAS activation. Prepared information should contain the type of emergency, area affected and action that should be taken.

D. Authentication: Authentication of all requests for activation of the South Eastern Michigan Local Area EAS made by telephone will be verified by call back. See Attachment A-VI for verification numbers.

E. Severe Weather Warnings: The national Weather Service (NWS) will serve as the primary notifier for sever weather warnings and subsequent weather information. Detailed activation procedures have been agreed upon by the NWS and the LP stations. The primary means of NWS activation for the Michigan EAS will be over the NOAA Weather Radio Specific Area Message Encoder (SAME) through station monitoring of the NOAA weather radio system. In the even of failure of the NOAA weather radio system the NWS will contact the LP-1 and LP-2 stations directly by phone for EAS activation in sever weather situations. The LP-1, LPO2 stations will relay warnings for all counties in the area.

X. Broadcasters' Procedure

A. *Pre-formatted Alert:* Upon receipt of a pre-formatted EAS alert from an appropriate notifier and verification has been made of this authenticity, the appropriate LP station shall retransmit that alert immediately.

B. Verbal Activation Request: Upon receipt of a request to activate the south Eastern Michigan EAS from an appropriate notifier via a telephone call, and verification has been made of its authenticity, the appropriate LP station shall proceed as follows:

(1) Determine and prepare the text of the message to be broadcast.

(2) Prepare the EAS message header to include the EAS protocol with the proper originator, event, location codes, effective time and attention signal.

(3) Transmit the EAS message header and attention tones.

(4) Broadcast the emergency announcement audio, not to exceed two minutes in length. All South Eastern Michigan Local Area EAS messages are to be formatted and preceded with the following beginning and ending statements: "WE INTERRUPT THIS PROGRAM TO ACTIVATE THE SOUTH EASTERN MICHIGAN LOCAL AREA EMERGENCY ALERT SYSTEM BECAUSE OF AN EMERGENCY AFFECTING THE AREA."

(Text of the emergency announcement)

"THIS CONCLUDES THIS MESSAGE REGARDING ACTIVATION OF THE SOUTH EASTERN MICHIGAN LOCAL AREA EMERGENCY ALERT SYSTEM. STAY TUNED TO THIS STATION FOR FURTHER INFORMATION."

(5) Transmit the EAS end-of-message code.

C. All broadcast stations and cable systems in the South Eastern Local Area monitoring and key LP stations will be alerted by the EAS decoders based on the even and location codes contained in the EAS digital header. Upon receipt of a valid EAS message each station or cable system should retransmit the message with in 15 minutes of receipt.

D. To avoid unnecessary escalation of public confusion, all broadcast stations must be cautious in providing information and news pertaining to the emergency. All messages must be based on definite and confirmed facts. This can best be assured by using the notifiers or originating station's own audio as transmitted through the EAS decoder/encoder equipment.

E. Upon completion of the EAS transmission, appropriate notations must be entered into the station log. It is suggested that the FCC's EAS office be notified of EAS activation by filing FCC form 201.

XI Legal Matters

As a reminder to broadcasters, the following legal points are made regarding emergency alert operations. (for complete information, consult FCC Rules and Regulations, Part 11.)

A. While the broadcast of EAS messages is encouraged, use of Michigan EAS material is solely up to the discretion of individual station or cable system management. Although the activation of the EAS is discretional at the state and local levels, if it is activated, all communications facilities within the affected area that are participating in the EAS at the state or local level are expected to take part in the activation and to follow the requirements of the FCC's rules, the EAS Operating Handbook, the State EAS Plan and this Local Area Plan. (See FCC Rules, Part 11, Secs. 11.21, 11.41 and 11.55).

B. All participating stations have permission to rebroadcast Michigan EAS messages. Such rebroadcast permission begins with issuance of the EAS signaling and alert tones, and ends with the EAS end-of-message code. Stations are encouraged to configure their EAS encoders for automatic relay of EAS messages. Unattended stations must operate EAS encoders for automatic relay of EAS messages.

C. In the event of an EAS activation, stations with certain power, pattern and operating hours limitations may forego those limitations subject to FCC Rules and Regulations.

XII. Steps Stations should Take To Participate In the Southeastern Michigan Local Area Emergency Alert Systems

A. The success of the South Eastern Michigan Local Area EAS will hinge entirely upon the operating staff and equipment configuration of each broadcast station at the time of a weather warning or other emergency which justifies activation of the Michigan EAS.

B. All Michigan EAS stations must have an EAS Encoder/Decoder fed by audio from their LP-1, LP-2 and NWS monitoring assignments. A list of additional NOAA radio stations covering is provided in Attachment IV. Encoder/Decoders must be programmed (pre-set) to accept EAS messages carrying all the FCC required event codes (normally done by the equipment manufacturer). The SECC encourages stations and cable operators to pre-set all event codes shown in Paragraph VI.

C. As a minimum, those required by the FCC and those shown with a single asterisk must be pre-set in order to participate in the Michigan EAS system. Decoders should be programmed to accept any county location code within the station's secondary coverage contour. Unless a facility is attended 24 hours, encoder/decoders should be configured to automatically rebroadcast properly addressed EAS messages. EAS equipment should be configured to notify station personnel of any EAS activation. LP stations must program their decoders for additional location codes as prescribed in the State EAS plan. Cable systems should program their decoders to cover any county location code covered by their system.

D. Placement of the EAS equipment is critical. It must be placed where regular station personnel can hear it and observe the message printer on the decoder, should it be activated at any time.

E. Each station is unique in the role that it plays in the EAS system. Questions related to this plan or on the specific details and requirements for fulfilling the needs of the specific area should be addressed to the South Eastern Michigan Local Area EAS chairperson or vice chairperson.

F. Stations should, based on this plan, devise their own standard operating procedures, and those procedures should be posted at the EAS equipment for quick reference by station personnel to use as a guide at the time of activation, nor can station personnel be expected to remember what to do after studying this plan. This plan must be applied to each station. Therefore a clear, concise step-by-step operating procedure, readily available, for operating personnel to use at the time of an emergency, is absolutely necessary if the EAS is to be successful.

G. The EAS has both audio and video capabilities. Television stations and cable TV systems participating in the Michigan EAS must have systems configured at all times to air the EAS message crawl as well as audio during EAS messages. All participating stations and cable systems are encouraged to purchase EAS equipment with multiple monitoring capability. This must include as a minimum the ability to monitor two assigned over-the-air LP broadcast stations plus a NOAA weather radio station. For LP-1 and LP-2 stations equipment should also allow for the telephone interface of notifiers' encoders or the interface of existing remote pickup unit equipment, if appropriate. Local Primary stations should pay particular attention to their multiple monitoring responsibilities when selecting EAS equipment.

H. All participating stations should assign a permanent input on their master control console to receive program audio from the LP station sources as shown on the station monitoring chat in Attachment I.

XIII. Test Procedures

A. EAS weekly tests of the EAS header and end-of-message codes must be conducted by all stations in accordance with FCC Rules. This is known as the Required Weekly Test (RWT).

B. South Eastern Michigan Local Area monthly tests will be originated by the South Eastern Michigan Local Primary (LP) stations or from county Emergency Operations Centers on the following schedule. Tests will be conducted in accordance with FCC Rules and Regulations. Tests must be re-transmitted within 15 minutes of receipt by all participating EAS stations. Tests originating from County Emergency Operations Centers will be initiated by the county Emergency Management Agency on a rotational basis.

MONTH	TIME FRAME	Station	Orig. Source
January	Day/8:30 AM to Local Sunset	LP-1	County EOC
February	Night/Local Sunset to 8:30 AM	LP-2	Station Staff
March	Day/Statewide Tornado Test	SP	State EOC
April	Night/Local sunset to 8:30 AM	LP-1	Station Staff
May	Day/8:30 AM to Local Sunset	LP-2	County EOC
June	Night/Local Sunset to 8:30 AM	LP-2	Station Staff
July	Day/8:30 AM to Local Sunset	LP-1	County EOC
August	Night/Local Sunset to 8:30 AM	LP-1	Station Staff
September	Day/8:30 AM to Local Sunset	LP-2	County EOC
October	Night/Local Sunset to 8:30 AM	SP	State EOC
November	Day/8:30 AM to Local Sunset	LP-1	Michigan State Police
			(Northville)
December	Night/Local Sunset to 8:30 AM	LP-2	Station Staff

C. Statewide EAS tests will be conducted twice each year and will count as the required monthly test for the month in which it runs. One of these tests will take place as part of the Michigan "Severe Weather Awareness Week" activities, held in March of each year. This test will be conducted on a Wednesday in March at 09:50 AM, or such other time as can be determined. A second statewide EAS test will be conducted in October between the hours of Local sunset and 8:30 AM. The SECC will send a mailing to all stations announcing these tests. Statewide EAS tests will be originated by the Michigan State Police from the State Emergency Operations Center (EOC), in East Lansing. Every attempt will be made to adjust the test times so that all broadcast stations can accommodate the inclusion of the RMT with minimal interruption of their programming within the 15 minute retransmission requirements.

D. The following script will be used for statewide tests or Local Area monthly tests:

"THIS IS A COORDINATED MONTHLY (STATEWIDE/LOCAL TEST OF THE EMERGENCY ALERT SYSTEM, ORIGINATING FROM THE (______ COUNTY EMERGENCY OPERATIONS CENTER)

OR (EAS LOCAL PRIMARY STATION FOR THIS AREA.)

OR (MICHIGAN STATE POLICE EMERGENCY OPERATIONS CENTER IN LANSING) EQUIPMENT THAT CAN QUICKLY WARN YOU DURING EMERGENCIES IS BEING TESTED.

IF THIS HAD BEEN AN ACTUAL EMERGENCY, SUCH AS A TORNADO, A TOXIC MATERIAL RELEASE, NUCLEAR PLANT INCIDENT, OR OTHER STATE OR LOCAL EMERGENCY THAT AFFECTS YOUR SAFETY, OFFICAL MESSAGES WOULD HAVE FOLLOWED THE ALERT TONE.

THIS STATION SERVES THE (EAS AREA NAME) AREA.

THIS CONCLUDES THIS TEST OF THE EMERGENCY ALERT SYSTEM."

XIV. Michigan EAS emergency Communications Committee (ECC)

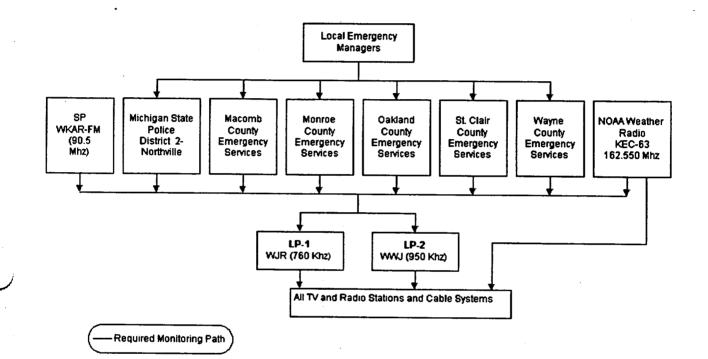
Emergency Communications Committee (ECC) Chairperson and Vice Chairperson are appointed by the Federal Communications Commission (FCC).

State Emergency Communications Committee (SECC) members include a State Co-Chairperson, a Cable Co-Chairperson, a State Vice Chairperson, the Chairperson and Vice Chairperson of the Southeastern Michigan Local Areas, a representative of the Governor's Office, a representative of the Michigan State Police, a representative of the National Weather Service and other voluntary members appointed by the SECC. The Southeastern Michigan and the State ECC Co-Chairpersons and Vice Chairperson are listed in Attachment V.

XV. Acronyms

EAS	Emergency Alert System
FEMA	Federal Emergency Management Agency
EOC	Emergency Operations Center
FCC	Federal Communications Commission
LP-1	Local Primary Station
LP-2	Local Primary Station, alternate
LP-3	Local Primary Station, alternate
LECC	Local Emergency Communications Committee
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
RPU	Remote Pickup Unit
SAME	Specific Area Message Encoder
SECC	State Emergency Communications Committee

Southeastern Michigan EAS Monitoring Chart



Attachment II

WBRB – AM	, MI Phone: Fax: Status: PN Frequency or CH.: 1430 KHZ Facility: .5/.5 KW / DA-2 U City of License: MT. CLEMENS, MACOMB County Fips: 26099
WCAR – AM	32500 Parklane St, Garden City, MI 48135-1527 Phone: 313-252-1111 Fax: 313-525-3608 Status: PN Frequency or CH.: 1090 KHZFacility: .5/.25 KW / DA-2 U City of License: LIVONIA, WAYNE County Fips: 26163
WCHB – AM	32790 Henry Ruff Road, MI Romulus, MI 48174 Phone: 313-278-1440 Fax: Status: PN Frequency or CH.: 1200 KHZ Facility: .7/.25 KW / DA-2 U City of License: TAYLOR, WAYNE County Fips 26163
WDFN – AM	2930 E. Jefferson Ave., Detroit MI 48207-5029 Phone: 313-259-4323 Fax: 313-259-9079 Status: PN Frequency or CH.: 1130 KHZ Facility: 10./50. KW / DA-2 U City of License: DETROIT, WAYNE County Fips: 26163
WDOZ – AM	P.O. Box 1310 Dearborn, MI 48121-1310 Phone: 313-846-8500 Fax: 313-846-1068 Status: PN Frequency or CH.: 1310 KHZ Facility: .5/.5 KW / DA-2 U City of License: DEARBORN, WAYNE County Fips: 26163
WEXL – AM	317 E. 11 Mile Rd.Royal Oak, MI 48067-2736Phone: 248-544-2200Fax:Status: PNFrequency or CH.:1340 KHZFacility: 1/1. KW / DA-2 UCity of License:ROYAL OAK, OAKLAND CountyFips: 26125
WHLS – AM	808 Huron Avenue Port Huron, MI 48060-3705 Phone: 810-987-1450 Fax: 810-987-9380 Status: PN Frequency or CH.: 1450 KHZ Facility: 1. KW / ND-1 U City of License: PORT HURON, ST. CLAIR County Fips: 26147
WIFN – AM	P.O. Box 310 Marine City, MI 48039-0310 Phone: 810-764-8893 Fax: 810-765-8894 Status: PN Frequency or CH.: 1590 KHZ Facility: .102/1. KW / DA-2 U City of License: MARINE CITY, ST. CLAIR County Fips: 26147
WJR – AM	2100 Fisher Building Detroit, MI 48202 Phone: 313-876-4440 Fax: 313-875-9022 Status: LP-1/BSPP Frequency or CH.: 760 KHZ Facility: 50 KW / ND-1 U
• · · · ·	City of License: DETROIT, WAYNE County Fips: 26163

- WLLZ AM
 22150 Greefield Road, Suite 200
 Oak Park, MI 48237

 Phone: 248-968-4100
 Fax: 248-962-4100
 Status: PN

 Frequency or CH.:
 560 KHZ Facility: .027/.500 KW / DA-2 U
 City of License: MONROE, MONROE County
- WLQV AM
 29200 Vassar St., Ste 650
 Livonia, MI
 48152-2116

 Phone: 248-477-4600
 Fax: 248-477-6911
 Status: PN

 Frequency or CH.:
 1500 KHZ
 Facility: 5/50. / DA-2 U

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WNZK AM 21700 Northwestern Hwy., Ste, 1190 Southfield, MI 48075 Phone: 248-557-3500 Fax: 248-557-3241 Status: PN Frequency or CH.: 690 KHZ Facility: 1. KW / DA-D D City of License: Westland, Wayne, County Fips: 26163
- WPHM AM
 2379 Military St.
 Port Huron, MI 48060-6662

 Phone: 810-987-4100
 Fax: 810-987-4045
 Status: PN

 Frequency or CH.:
 1380 KHZ
 Facility: 5.-5. KW / DA-2 U

 City of License:
 PORT HURON, ST. CLAIR County
 Fips: 26147
- WPON AM2222 Franklin Rd.
Phone: 248-332-8883Bloomfield Hills, MI 48302-0330
Fax: 248-332-5470Status: PN
Status: PN
Facility: 0.76/1. KW / DA-2 U
City of License: WALLED LAKE, OAKLAND CountyWPON AMCountyFips: 26125
- WQBH AMPenobscot Ste. 2050Detroit, MI 40226-4009Phone: 313-965-4500Fax: 313-965-4608Status: PNFrequency or CH.:1400 KHZFacility:1. KW / ND-1 UCity of License:DETROIT, WAYNE CountyFips: 26163
- WUFL AM
 P.O. Box 1030
 Sterling Heights, MI 48311-1030

 Phone: 810-263-1030
 Fax: 810-228-1030
 Status: PN

 Frequency or CH.:
 1030 KHZ
 Facility: 5. KW / ND-1 U

 City of License:
 STERLING HEIGHTS, MACOMB County
 Fips: 26099
- WWJ AM
 16550 W. 9 Mile Road
 Southfield, MI 48075-4705

 Phone: 248-423-3300
 Fax: 248-423-3326
 Status: LP-2/BSPP

 Frequency or CH.:
 950 KHZ Facility:
 5/5. KW / DA-N U

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WXYT AM
 P.O. Box 905
 Southfield, MI 48037-0905

 Phone: 248-569-8000
 Fax: 248-569-9866
 Status: PN

 Frequency or CH.:
 1270 KHZ
 Facility: 5./5. KW / DA-N U

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WAHS FM2950 Waukegan St.Auburn Hills, MI 48326-3264Phone: 248-852-3961Fax: 248-Status: PNFrequency or CH.:89.5 MHZFacility: .100 KW / 43 METERSCity of License:AUBURN HILLS, OAKLAND CountyFips: 26125

- WVFH-FM4200 Andover RoadBloomfield Hills, MI48302-2000Phone: 248-645-4740Fax: 248-454-4744Status: PNFrequency or CH.:88.1 MHZFacility: .36 KW / 55 METERSCity of License:BLOOMFIELD HILLS, OAKLAND CountyFips: 26125
- WBLD FM4925 Orchard Lake Rd.West Bloomfield, MI 48323-2964Phone: 248-851-8930Fax:Status: PNFrequency or CH.:89.1 MHZFacility:.015 KW / 49 MetersCity of License:WEST BLOOMFIELD, OAKLAND CountyFips: 26125
- WCHB FM
 2994 E. Grand Blvd.
 Detroit, MI 48202-3134

 Phone: 313-871-0590
 Fax: 313-871-8770
 Status: PN

 Frequency or CH.:
 105.9 MHZ
 Facility:
 20.0 KW / 221 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WCSX FM1 Radio Plaza St.Detroit, MI 48220-2140Phone: 248-398-7600Fax: 248-398-2012Status: PNFrequency or CH.:94.7 MHZFacility: 13.5 KW / 290 METERSCity of License:BIRMINGHAM, OAKLAND CountyFips: 26125
- WDET FM
 4600 Cass Ave.
 Detroit, MI 48201-1222

 Phone: 313-577-4146
 Fax: 313-577-1300
 Status: PN

 Frequency or CH.:
 101.9 MHZ
 Facility: 79. KW / 137 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WDRQ FM28411 Northwestern Hwy., Ste. 1000Southfield, MI 48034-5540Phone: 248-354-9300Fax: 248-354-1474Status: PNFrequency or CH.:93.1 MHZFacility: 26.5 KW / 204 METERSCity of License:DETROIT, WAYNE CountyFips: 26163
- WDTR FM
 9345 Lawton St.
 Detroit, MI
 48206-1905

 Phone: 313-596-3507
 Fax: 313-596-3517
 Status: PN

 Frequency or CH.:
 90.9
 Facility: 42. KW / 165 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WEJY-FM1275 n. Macomb St.Monroe, MI 48162-3128Phone:Fax:Status: PNFrequency or CH.:97.5 MHZFacility:OB KW / 41 METERSCity of License:MONROE, MONROE CountyFips:26115
- WGPR FM3146 E. JeffersonDetroit, MI48207Phone: 313-259-8862Fax: 313-259-6662Status: PNFrequency or CH.:107.5 MHZFacility: 50 KWCity of License:DETROIT, WAYNE CountyFips: 26163

- WGTR FM624 Grand river Avenue
Phone: 810-987-3200Port Huron, MI 48060-3817
Fax: 810-987-3325Phone: 810-987-3200Fax: 810-987-3325Status: PN
Frequency or CH.: 102.3 MHZFrequency or CH.: 102.3 MHZFacility: 3. KW / 97 METERS
City of License: PORT HURON, ST. CLAIR CountyFips: 26147
- WHFR FM5101 Evergreen Road
Phone: 313-846-9634Dearborn, MI 48128-2407Phone: 313-846-9634Fax:Status: PNFrequency or CH.:89.3 MHZFacility: .270 KW / 30 METERSCity of License:DEARBORN, WAYNE CountyFips: 26163
- WHPR FM, MIPhone: 810-956-0109Fax:Status: PNFrequency or CH.: 88.1 MHZFacility: .011 KW / 32 METERSCity of License:HIGHLAND PARK, WAYNE CountyFips: 26163
- WHYT FM2100 Fisher Building
Phone: 313-871-3030Detroit, MI 48202
Fax: 313-871-1744Status: PN
Status: PN
Frequency or CH.: 96.3 MHZ
Facility: 20.0 KW / 240 METERS
City of License: DETROIT, WAYNE CountyStatus: PN
Fips: 26163
- WJLB FM645 GriswoldDetroit, MI48226-4044Phone: 313-965-2000Fax: 313-965-2000Status: PNFrequency or CH.:97.9 MHZFacility:50 KW / 149 METERSCity of License:DETROIT, WAYNE CountyFips: 26163
- WKQI FM
 15401 10 Mile Rd.
 Oak Park, MI 48237-1467

 Phone: 248-967-3750
 Fax: 248-967-0840
 Status: PN

 Frequency or CH.:
 95.5 KHZFacility:
 100. KW / 131 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WMUZ FM12300 Radio PlazaDetroit, MI48228-1029Phone: 313-272-3434Fax: 313-272-5045Status: NNFrequency or CH.:103.5 MHZFacility:50. KW / 142 METERSCity of License:DETROIT, WAYNE CountyFips: 26163
- WMXD FM
 645 Griswold
 Detroit, MI
 48226-4004

 Phone: 313-965-2000
 Fax: 313-965-2000
 Status: PN

 Frequency or CH.:
 92.3
 Facility: 50. KW / 140

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WNFA FM2865 Maywood Drive
Phone: 810-985-3260Port Huron, MI 48060-7719
Fax: 810-985-7712Status: PN
Status: PN
Frequency or CH.: 88.3 MHZFrequency or CH.:88.3 MHZFacility: 1.30 KW / 61 METERS
City of License: PORT HURON, ST. CLAIR CountyFips: 26147
- WNIC FMP.O. BOX 1310Dearborn, MIPhone: 313-846-8500Fax: 313-846-1068Status: PNFrequency or CH.:100.3 MHZFacility: 32. KW / 183 METERSCity of License:DEARBORN, WAYNE CountyFips: 26163

- WOMC FM
 2201 Woodward Hts
 Detroit, MI
 48220-1521

 Phone: 248-546-9600
 Fax: 248-546-5446
 Status: PN

 Frequency or CH.:
 104.3 MHZ
 Facility:
 190 KW / 110 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WOPR FM13701 Oak park Blvd.Oak Park, MI 48237-2080Phone: 248-548-9677Fax:Status: NNFrequency or CH.:90.3 MHZFacility:.016 KW / 29 METERSCity of License:OAK PARK, OAKLAND CountyFips: 26125
- WORB FM27055 Orchard Lake Rd.Farmington Hills, MI 48334-4556Phone: 248-471-7789Fax:Status: PNFrequency or CH.:90.3 MHZFacility: .012 KW / 42 METERSCity of License:FARMINGTON HILLS, OAKLAND CountyFips: 26125
- WORW FM1799 Krafft RdPort Huron, MI48060-8606Phone: 810-984-2675Fax:Status: PNFrequency or CH.:91.9 MHZFacility:.180 KW / 6 METERSCity of License:PORT HURON, ST. CLAIR CountyFips: 26147
- WOVI FM , MI Phone: 248-344-8300 Fax: Status: PN Frequency or CH.: 89.5 MHZ Facility: .1 KW / 32 METERS City of License: NOVI, OAKLAND County Fips: 26125
- WPHS FM30333 Hoover Rd.Warren, MI48093-6532Phone: 810-751-3689Fax:Status: PNFrequency or CH.:89.1 MHZFacility: .100 KW / 30 METERSCity of License:WARREN, MACOMB CountyFips: 26099
- WQRS FM28588 Northwestern Hwy.Southfield, MI 48034-8334Phone: 248-355-1051Fax:Status: NNFrequency or CH.:105.1 MHZFacility:20.0 KW / 239 METERSCity of License:DETROIT, WAYNE CountyFips: 26163
- WRIF FM
 I Radio Plaza St.
 Detroit, MI 48220-2140

 Phone: 248-547-0101
 Fax: 810-398-2012
 Status: PN

 Frequency or CH.:
 101.1 MHZ
 Facility:
 27.0 KW / 268 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WSAQ FM
 808 Hurone Ave.
 Port Huron, MI 48060-3705

 Phone: 810-987-1450
 Fax: 810-987-9380
 Status: PN

 Frequency or CH.:
 107.1 MHZ
 Facility:
 6.0 KW / 91 METERS

 City of License:
 PORT HURON, ST. CLAIR County
 Fips: 26147

- WSDP FM 46181 Joy Road Canton, MI 48187-1316 Phone: 313-451-6266 Fax: Status: NN Frequency or CH.: 88.1 MHZ Facility: .200 KW / 22 METERS City of License: PLYMOUTH, WAYNE County Fips: ##
- WSGR FM 323 Erie St. Port Huron, MI 48060-3812 Phone: 810-984-5064 Fax: Status: NN Frequency or CH.: 91.3 MHZ Facility: .120 KW / 13 METERS City of License: PORT HURON, WAYNE County Fips: 26147
- WSHJ FM
 24675 Lahser Rd.
 Southfield, MI
 48034-3238

 Phone: 248-746-8630
 Fax: 810-746-8631
 Status: PN

 Frequency or CH.:
 88.3 MHZ
 Facility: .125 KW / 91 METERS

 City of License:
 SOUTHFIELD, OAKLAND County
 Fips: 26125
- WTWR FM 7 S. Monroe St. Monroe, MI 48161-2230 Phone: 313-424-6600 Fax: Status: PN Frequency or CH.: 98.3 MHZ Facility: 1.40 KW / 142 METERS City of License: MONROE, MONROE County Fips: 26115
- WVMV FM
 31555 W. 14 Mile Rd.
 Farmington Hills, MI 48334-1286

 Phone: 248-855-5100
 Fax: 248-855-1302
 Status: PN

 Frequency or CH.:
 98.7 MHZ
 Facility: 50. KW / 141 METERS

 City of License:
 DETROIT, WAYNE County
 Fips; 26163
- WWBR FM
 850 Stephenson Hwy
 Troy, MI
 48083-1163

 Phone: 248-589-7900
 Fax: 248-583-8295
 Status: PN

 Frequency or CH.:
 102.7 MHZ
 Facility:
 50. KW / 152 METERS

 City of License:
 MOUNT CLEMENS, MACOMB County
 Fips: 26099
- WWWW FM
 2930 E. Jefferson Ave.
 Detroit, MI
 48207-5029

 Phone: 313-259-4323
 Fax: 313-259-9079
 Status: PN

 Frequency or CH.:
 106.7 MHZ
 Facility:
 61. KW / 155 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WYCD FM
 26555 Evergreen Rd
 Southfield, MI
 48076-4230

 Phone: 248-799-0600
 Fax: 248-358-9216
 Status: PN

 Frequency or CH.:
 99.5 MHZ
 Facility: 21,0 KW / 230 METERS

 City of License:
 DETROIT, WAYNE County
 Fips: #26163#
- WKRK FM
 16555 W.. 9 Mile Rd.
 Southfield, MI 48075-4705

 Phone: 248-423-33(0)
 Fax: 248-423-3326
 Status: PN

 Frequency or CH.:
 97.1 MHZ
 Facility:
 12.0 KW / METERS

 City of License:
 DETROIT, WAYNE County
 Fips: 26163
- WADL TV15 Mile RoadClinton Township, MI4848035202Phone: 810-790-3838Fax: 810-790-3841Status: PNFrequency or CH.:CH38Facility: 5000 KW / 192 METERESCity of License:MT. CLEMENS, MACOMB CountyFips: 26099

WDIV – TV 550 W. Lafavette Blvd. Detroit, MI 48226-3123 Phone: 313-222-0444 Fax: 313-222-5092 Status: PN Frequency or CH.: CH 04 Facility: 100 KW / 306 METERS City of License: **DETROIT**, WAYNE County Fips: ##26163 WJBK – TV P.O. Box 2000 Southfield, MI 48037-2000 Phone: 248-557-2000 Fax: 248-552-0280 Status: PN Frequency or CH.: CH 02 Facility: 100 KW / 305 METERS City of License: DETROIT, WAYNE County Fips: 26163 WKBD – TV 26905 W. 11 Mile Rd. Southfield, MI 48034-2292 Phone: 248-350-5050 Fax: 248-355-2692 Status: PN Frequency or CH.: CH 50 Facility: 2340 KW / 293 METERS City of License: SOUTHFIELD, WAYNE County Fips: 26163 WROK – TV . MI Phone: 248-544-6663 Fax: Status: Frequency or CH.: Facility: /. City of License: ROYAL OAK, OKALND County Fips: 26125 WTVS – TV 7441 2nd Ave. Detroit, MI 48240202-270102 Phone: 313-873-7200 Fax: 313-876-8179 Status: PN Frequency or CH.: CH 56 Facility: 2090 KW / 293 METERS City of License: DETROIT, WAYNE County Fips: 26163 WWJ - TVStroh River Place #6200 Detroit, MI 48207 Phone: 313-259-6288 Fax: 313-259-9674 Status: PN Frequency or CH.: CH 62 Facility: 1000 KW / 296 METERS City of License: DETROIT, WAYNE County Fips: **26163** WXON – TV 27777 Franklin Rd., Ste. 1220 Southfield, MI 48034-8262 Phone: 248-355-2020 Fax: 248-355-0368 Status: PN Frequency or CH.: CH 20 Facility: 1200 KW / 293 METERS City of License: SOUTHFIELD, WAYNE County Fips: 26163 WXYY-TV P.O. Box 987 Southfield, MI 48037-0987 Phone: 248-827-7777 Fax: 248-827-4454 - Status: PN Frequency or CH.: CH 07 Facility: 316 KW / 305 METERS City of License: DETROIT, WAYNE County Fips: 26163

Attachment II

Cable Stations

Booth American Company 333 West Fort Street Detroit, MI 48226 T - (313) 202-3360 F - (313) 202-3390

Comcast Cablevision 12775 Lyndon Detroit, MI 48227 T (313) 934-2519 F - (313) 934 9490

Comcast Cable 24744 Eureka Taylor, MI 48180 T – (313) 946-6010 F – (313) 946-4421

Comcast Cable Grosse Pointe 15001 Charlevoix Ave. Grosse Pointe Park, MI 48230 T – (313) 822-9200

Comcast Cable of Inkster 2680 Michigan Ave. Inkster, MI 48141 T – (313) 561-5252

Comcast Cable 29414 Pardo Road Garden City, MI 48135 T - (313) 427-4940 Time Warner of Livonia 14525 Farmington Road Livonia, MI 48151 T – (313) 422-2810

Time Warner of Redford P.O. Box 39178 Redford, MI 48239 (313) 538-1313

Time Warner Cable 15200 Mercantile Dearborn, MI 48120 T – (313) 336-4300

Continental Cablevision 2800 S. Gulley Road Dearborn Heights, MI 48125 T - (313) 277-1050 F - (313) 277-1796

Continental Cablevision 8465 Ronda Drive Canton, MI 48187 T - (313) 459-7300

TCI Cablevision Downriver 21170 Allen Road Woodhaven, MI 48183 T - (313) 675-8304 F - (313-675-1987

Omnicom Cablevision 12750 Huron River Drive Romulus, MI 48174 T – (313) 459-7300

Attachment II

Cable Stations

Wyandotte Municipal Services CATV Department 3005 Biddle Ave. Wyandotte, MI 48192 T - (313) 282-7100

Cablevision Industries of Dearborn/Wayne 15200 Mercantile Drive Dearborn, MI 48120 T - (313) 336-4300F - (313) 271-2600

Horizon Cablevision Lansing Road Charlotte, MI 48813 T (517) 543-1245

Comcast Cable of SE Michigan 6095 Wall Street Sterling Heights, MI 48077 T - (810) 978-8780 F - (810) 978-1511

Comcast Cable 20936 Kelly Road East Pointe, MI 48021 T – (313) 772-1023

Comcast of Pontiac 1300 Cresent Lake Road Waterford, MI 48327 T – (248) 674-0500 F – (248) 673-7572

Continental Cablevision 27432 Grosebeck Highway Roseville, MI 48066 T – (810) 779-3421 F 0 (810) 779-0635 Continental Cablevision 27800 Franklin Road Southfield, MI 48034 T – (248) 353-3905 F – (248) 353-0141

Harron Communications 5580 New Haven Road Chesterfield, MI 48051 T - (800) 427-7622 F - (800) 749-1101

Booth Communications 645 South Eaton Birmingham, MI 48009 T – (248) 540-6739 F – (248) 540-6739

Comcast Cablevision 3008 Airpark Drive Flint, MI 48507 T – (810) 235-6112

Continental Cablevision 32030 John R Madison Heights, MI 48071 T - (248) 583-1350

TCI Cablevision of Oakland County 4500 Delemere Blvd. Royal Oak, MI 48073 T – (248) 549-8288 F – (248) 549-6389

TCI Cablevision 3166 Martin Road Walled Lake, MI 48390 T - (248) 669-2288

Attachment II

Cable Stations

Time Warner Cable of Oakland 2598 37635 Enterprise Court Farmington Hills, MI 48018 T - (248) 553-7300F - (248) 553-4829

DF Cablevision 14300 Fenton Road Fenton, MI 48430 T - (810) 750-9965 F - (810) 750-1988

Monroe Cablevision 428 S. Monroe Monroe, MI 48161 T - (313) 241-2225

C-Tech Cable System 1145 Telegraph Road Monroe, MI 48161 T – (313)

Continental Cablevision 2505 S. Industrial Hwy. Ann Arbor, MI T – (313) 429-4923

Attachment III

Southeastern Michigan EAS Local Area Notifier List and

Verification Phone Numbers

St. Clair County Emergency Management 204 Bard Street Port Huron, Michigan 48060 Coordinator: Mr. Jeffrey Friedland 24 Hour Emergency Verification Number: 810-985-8115 Non-Emergency Number: 810-987-1710

Macomb County Emergency Management 43565 Elizabeth Road Mt. Clemens, Michigan 48043 Director: Charles Seehase 24 Hour Emergency Verification Number: 810-469-5502 Non-Emergency Number: 810-469-5270

Wayne County Emergency Management 10250 Middlebelt Road Detroit, Michigan 48242 Director: Mark Sparks 24 Hour Emergency Verification Number: 313-942-3600 Non-Emergency Number: 313-942-5289

National Weather Service, NOAA 9200 White Lake Road White Lake, Michigan 48386 WCM: Darin Figurskey 24 Hour Emergency Verification Number: 248-625-4139 Non-Emergency Number: 248-625-3309

Attachment III

Southeastern Michigan EAS Local Area Notifier List and

Verification Phone Numbers

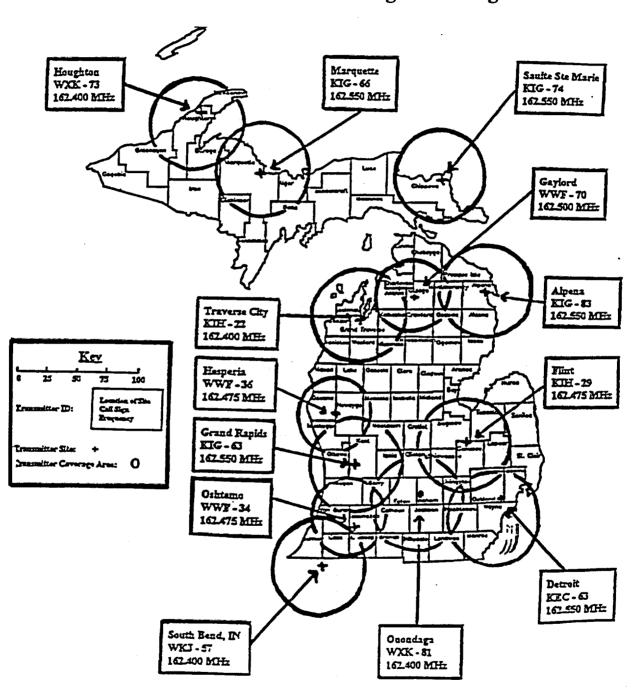
Michigan State Police, Northville 42145 West Seven Mile Road Northville, Michigan 48167 Contact: Lt. Ralph J. Holbrat 24 Hour Emergency Verification Number: 313-256-9887

Michigan State Police, East Lansing Operations 714 S. Harrison Road East Lansing, Michigan 48833 Operations Lieutenant 24 Hour Emergency Verification Number: 517-336-6100

Oakland County Emergency Management 1200 N. Telegraph road Pontiac, Michigan 48341 24 Hour Emergency Verification Number: 248-858-5300 (If Auto Attendant Is On Push "0")

Monroe County Emergency Management 965 S. Raisinville Road Monroe, Michigan 48161-9700 Director: Mitch Yudasz Jr. 24 Hour Emergency Verification Number: 313-243-7070

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Attachment IV NOAA Weather Radio Coverage in Michigan

Attachment V

Local ECC Members

Ed Buterbaugh – Committee Chairman WJR Radio 2100 Fisher building Detroit, MI 48202 313-873-9703

Gregory Urbiel – Committee Vice Chairman WWJ Radio 16550 W. Nine Mile Road Southfield, MI 48086 248-423-3366

Lt. Ralph Hobrat Michigan State Police Northville Emergency Management Division 42145 W. Seven Mile road Northville, MI 48167 248-380-1055

Darin Figurskey National Weather Service, NOAA 9200 White Lake Road White Lake, MI 48386 248-625-3309

Charles Seehase Macomb County Emergency Management 43565 Elizabeth Road Mt. Clemens, MI 48043 810-469-5270

Mitch Yudasz Jr. Monroe county Emergency Management 965 S. Raisinville Road Monroe, MI 48161-9700 313-241-6400

Attachment V

Local ECC members

Colleen Prosyniuk Oakland County Emergency Management 1200 N. Telegraph Road Pontiac, MI 48341 248-858-5324

Jeffrey Friedland St. Clair County Emergency Management 204 Bard Street Port Huron, MI 48060 810-987-1710

Sanford M. Altschul Wayne County Emergency Management 10250 Middlebelt Road Detroit, MI 48142 313-942-5289

Ross Lusk – Engineering Manager WVMV - FM 31555 W. fourteen Mile Road Suite 102 Farmington Hills, MI 48034 248-354-9300

Mark Phelps – Engineering Manager WDRQ – FM 28411 Northwestern Highway #1000 Southfield, MI 48034 248-855-5100

Dick Howard chief Engineer WHLS Radio 808 Huron Ave Port Huron, MI 48060 810-987-1450

Attachment V

Local ECC members

Gene Wilczak – Manager of Technical Operations WJBK – TV 16550 W. Nine Mile Rd Southfield, MI 48075 248-552-5284

Tom Christie – chief Engineer WJLB/WMXD 633 Penobscott Building Detroit, MI 48226 313-965-9898 (Ext. 303)

Larry Estlack – EAS State Coordinator WLAJ-TV 53, Chief Engineer 5813 Pennsylvania PO box 27307 Lansing, MI 48909-7307 517-394-5300

Karole L. White – President Michigan Association of Broadcasters 810 N. Washington Avenue Lansing, MI 48906 800-968-7622 / 517-484-7444

Attachment VI

Emergency Access Numbers for LP-1, LP-2 Stations

Listed below are the 24 hour Emergency Access numbers for the LP-1 (WJR) and LP-2 (WWJ) stations. When calling these numbers to request EAS activation, please ask for the Operator or Newsperson in charge.

<u>WJR (LP-1)</u> 313-875-5554 313-873-2370

WWJ (LP-2) 248-423-3369 248-423-3333

FIPS code	county.	Call letters	Frequency	EAS Code	Street Address	City	Zip Code	Phone Number	Fax Number
26099	Macomb	WADL-TV	38		15 Mile Road	Clinton Township	48035	8107903838	8107903841
26099	Macomb	WPHS-FM*	89.1		30333 Hoover Raod	Warren	45093-6532	8107513689	
26099	Macomb	WUFL-AM	1030		42669 Garfield Road - suite 328	Clinton Township	48038	8102631030	8102281030
26099	Macomb	WWBR-FM (was wdzr)	102.7		850 Stephenson Hwy Ste 405	Тгоу	48083-1163	2485897900	2485898295
26115	Monroe	WEJY-FM*	97.5		1275 N Macomb St	Monroe	48162-3128	3132411663	-
26115	Monroe	WLLZ-AM (was whnd)	560		12300 Radio Place	Detroit	48228	3132723434	3132725045
26115	Monroe	WTWR-FM	98.3		7 S Monroe St	Monroe	48161-2230	3132426600	3132426599
26125	Oakland	WAHS-FM*	89.5		2950 Waukegan St	Auburn Hills	48326-3264	2488523961	2488520595
26125	Oakland	WBFH-FM*	88.1		4200 Andover Rd	Bloomfield	48302-2000	2486454740	2486320393 2486454744
26125	Oakland	WBLD-fm	89.3		4925 Orchard Lake Rd	Hills West	48323-2964	2488518930	
26125	Oakland	WCSX-FM	94.7		I Radio Plaza St	Bloomfield Detroit	48220-2140	2483987600	2485427700
26125	Oakland	WDRQ-FM (was witi)	93.1		28411 Northwestern Hwy Ste 1000	Southfield	48034-5540	2483549300	2483541474
26163	Oakland	WDWB-TV (was wxon)	20		27777 Franklin Rd. Ste 1220	Southfield	48034-8262	2483552020	2483550368
26125	Oakland	WEXL-AM	1340		12300 Radio Place	Detroit	48228	3132723434	3132725045
26163	Oakland	WJBK-TV	2		PO Box 2000	Southfield	48037-2000	2485572000	2485520280
26163	Oakland	WOMC-FM	104.3		2201 Woodward Hts	Detroit	48220-1521	2485469600	2485465446
26125	Oakland	WORB-FM*	90.3		27055 Orchard Lake Rd	Farmington Hills	48334-4556	2484717789	240.040.0440
26125	Oakland	WOVI-FM*	89.5		24062 Taft Rd	Novi	48375-3022	2484491508	2484491519
26125	Oakland	WPON-AM	1460		2222 Franklin Rd	Bloomfield Hills	48302-0330	2483328883	2483325470
26125	Oakland	WROK TV			211 S Williams St	Royal Oak	48067-2619	2485446663	2485461546
26125	Oakland	WSHJ-FM*	88.3		24675 Lahser Rd	Southfield	48034-3238	2487468630	2487468631
26147		WGRT-FM	102.3		624 Grand River Ave	Port Huron	48060-3817	8109873200	8109873325
26147		WHLS-AM	1450		808 Huron Ave	Port Huron	48060-3705	8109871450	8109879380
26147	St. Clair	WHYT-AM (was wifn)	1590		2379 Military St	Port Huron	48060-6662	8109874100	8109874045
26147	St. Clair	WNFA-FM*	90,7		2865 Maywood Dr	Port Huron	48060-7719	8109853260	8109857712
26147		WORW-FM*	91.9		1799 Krafft Rd	Port Huron	48060-8606	8109842675	8109842747
26147		WPHM-AM	1380		2379 Military St	Port Huron	48060-6662	8109874100	
26147		WSAQ-FM	107 1		808 Huron Ave	Port Huron	48060-3705	8109871450	8109879380
26147	St. Clair	WSGR-FM*	91.3		323 Ene St	Port Huron	48060-3812	8109845064	
26163	Wayne	WCAR-AM	1090		32500 Parklane St	Garden City	48135-1527	7345251111	7435253608
26163	Wayne	WDET-FM	101.9		4600 Cass Ave	Detroit	48201-1222	3135774146	3135771300
26163	Wayne	WDFN-AM	1130		2930 E. Jefferson Ave	Detroit	48207-4210	3132594323	3135299817
26163	Wayne	WDIV-TV	4		550 W. Lafayette Blvd	Detroit	48226-3123	3132220444	3132220471
26163	Wayne	WDTJ-AM (was wchb)	1200		2994 E Grand Blvd.	Detroit	48202	3138710590	3138718770
26125	Wayne	WETJ-FM (was wehh)	105.9		2994 E Grand Blvd.	Detroit	48202-3134	3138710590	31387818770
26163	Wayne	WDTR-FM*	90.9		9345 Lawton St	Detroit	48206-1905	3135963507	3135963517
26163	Wayne	WGPR-FM	107.5		3146 Jefferson East	Detroit	48207	3132898862	
26163	Wayne	WHFR-FM*	89.3		5101 Evergreen Rd	Dearborn	48128-2407	3138459634	3138456321
26163	Wayne	WHPR-FM*	88.1		15851 Woodward	Highland Park	48203	8109560109	
26163	Wayne	WJLB-FM	97.9		645 Griswold #633	Detroit	48226-4004	3139652000	3139659970
26163	Wayne	WJR-AM	760	LP-1	2100 Fisher Building	Detroit	48202	3138754440	3138759022
26163	Wayne	WKBD-TV	50		26905 W 11 Mile Rd. #50	Southfield	48034-2292	2483505050	2483552692

FIPS code	county	Call letters	Frequency	EAS Code	Street Address	City	Zip Code	Phone Number	Fax Number
26163	Wayne	WKQI-FM	95.5		15401 W 10 Mile Rd	Oak Park	48237-1467	2489673750	2488670840
26163	Wayne	WKRK-FM (was wyst)	97.1		16550 W 9 Mile Rd	Southfield	48075-4705	2484233300	2484233326
26163	Wayne	WLQV-AM	1500		29200 Vassar St Ste 650	Livonia	48152-2116	2484774600	2484776911
26163	Wayne	WMUZ-FM	103.5		12300 Radio Place	Detroit	48228	3132723434	3132725045
26163	Wayne	WMXD-FM	92.3		645 Griswold #633	Detroit	48226-4004	3139652000	3139659970
26163	Wayne	WNIC-FM	100.3		PO Box 1310	Dearborn	48121-1310	3138468500	3138461068
26163	Wayne	WNZK-AM	680		21700 Northwestern Hwy Ste 1190	Southfield	48075-4916	2485573500	2485573241
26163	Wayne	WPLT-FM	96.3		2100 Fisher Building	Detroit	48202	3138713030	3138759636
26163	Wayne	WQBH-AM	1400		Penobscot Ste 2050	Detroit	48226-4009	3139654500	3139654608
26163	Wayne	WRIF-FM	101.1		I Radio Plaza St	Detroit	48220-2140	2485470101	2483982012
26163	Wayne	WSDP-FM*	8 8.1		46181 Joy Road	Canton	48187-1316	7344167732	7344167791
26163	Wayne	WTVS-TV	56		7441 2nd Avenue	Detroit	48202-2701	3138737200	3138768179
26163	Wayne	WVMV-FM (was wllz)	98.7		31555 W 14 Mile Rd	Farmington Hills	48334-1239	2488555100	2488551302
26163	Wayne	WWJ-AM	950	LP-2	16550 W 9 Mile Rd	Southfield	48075-4705	2484233300	2484233326
26163	Wayne	WWJ-TV	62		300 Stroh River Place, #6200	Detroit	48207	3132596386	3132599674
26163	Wayne	WWWW-FM	106.7		2930 E Jefferson Ave	Detroit	48207-5029	3132594323	3132599079
26163	Wayne	WXDG-FM (was wqrs)	105.1		28588 Northwestern Hwy Ste 200	Southfield	48034-8334	2483551051	2483553485
26163	Wayne	WXYT-AM	1270		PO Box 905	Southfield	48037-0905	2485698000	2485699866
26163	Wayne	WXYZ-TV	7		PO Box 789	Southfield	48037-0789	2488277777	2488274454
26163	Wayne	WYDC-FM	99.5		26555 Evergreen Rd Ste 675	Southfield	48076-4230	2487990600	2483589216
26163	Wayne	WYUR-AM (was wdoz)	1310		860 W Long Lake Road	Bloomfield Hills	48302	2484339987	2482585572

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APPENDIX 4

LIST OF SUPPORTING PROCEDURES AND DOCUMENTS IDENTIFIED IN THE PLAN

SUPPORTING PROCEDURES AND DOCUMENTS IDENTIFIED IN PLAN

INDEX

- 1. 10 CFR 20 (Sections B,H,I,K)
- 2. 10 CFR 50.47 (Preface)
- 3. 10 CFR 50.54(q) (Preface)
- 4. 10 CFR 50.54(t) (Section P)
- 5. 10 CFR 50, Appendix A (Section H)
- 6. 10 CFR 50, Appendix E (Preface)
- 7. 10 CFR 50, Appendix E, Section F (Section N)
- 8. 10 CFR 50, Appendix I (Section I)
- 9. 44 CFR 350 (Section N)
- NUREG-0654/FEMA-REP-1, Revision 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (Preface, Sections B,J,P)
 - 11. NUREG-0845, Revision 1, Agency Procedures for the NRC Incident Response Plan (Sections A,C)
- 12. NUREG-0737, Clarification of TMI Action Plan Requirements (Sections B,I)
- 13. NUREG-0981/FEMA-51, NRC/FEMA Operational Response Procedures for Response to a Commercial Nuclear Reactor Accident (Section A)
- 14. U.S. NRC Regulatory Guide 1.23, Onsite Meteorological Programs (Safety Guide 23) (Section H)
- 15. Act 390 of the Public Acts of 1976 (Section A)
- 16. Fermi 2 Updated Final Safety Analysis Report (Sections B,H,I)
- 17. Fermi 2 Technical Specifications (Preface, Sections B,D,I)
- EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Sections J,K)
- 19. Federal Radiological Emergency Response Plan (Sections A,C)

SUPPORTING PROCEDURES AND DOCUMENTS IDENTIFIED IN PLAN

INDEX (continued)

20.	Michigan Emergency Management Plan (Preface, Sections A,C)
21.	Monroe County Emergency Management Plan (Preface, Section A, C)
22.	Wayne County Emergency Operations Plan (Preface, Section A, C)
23.	Sandia Report, SAND 77-1725, Public Protection Strategies for Potential Nuclear Reactor Accidents: Sheltering Concepts with Existing Public and Private Structures (Section J)
24.	JB/A, Inc., Evacuation Time Estimate Analyses for the Enrico Fermi Atomic Power Plant Unit 2 Plume Exposure Pathway Emergency Planning Zone (Section J)
25.	MRP09, Respiratory Protection, (Section K)
26.	Radiation Protection Procedure 67.000.400, Personnel Decontamination and Assessment, (Section J)
27.	Radiation Protection Procedure 67.000.405, Maintenance and Inventory of Radiation Protection Emergency Kits, (Sections H, J)

28. Fermi 2 Offsite Dose Calculation Manual (D, H, I, J)

- Selection, Training, and Qualification Program Description QP-ER-665 (Section O) 29.
- 29.100.01, Sheet 5, Secondary Containment and Rad Release (Section D) 30.
- 29.100.01, Sheet 6, Curves, Cautions and Tables (Section D) 31.
- 20.000.018, Control of the Plant From the Dedicated Shutdown Panel (Section D) 32.
- 20.000.019, Shutdown From Outside the Control Room (Section D) 33.

END