



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

4/13/83

MEMORANDUM FOR: Richard W. Krimm  
Assistant Associate Director  
Office of Natural and Technological Hazards  
Federal Emergency Management Agency

FROM: Edward L. Jordan, Director  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION AND  
INTERIM FINDINGS FOR FERMI 2

We have completed our review of the February 28, 1983 FEMA supplemental interim finding report on the status of offsite radiological plans and preparedness for the Enrico Fermi Atomic Power Plant, Unit 2. In accordance with FEMA/NRC Memorandum of Understanding, we are requesting further FEMA review and interim findings to provide additional clarification concerning the boundaries of the plume exposure pathway Emergency Planning Zone, the timeliness for providing protective action recommendations to the public, and training for local emergency response personnel (see enclosure).

These issues are in addition to those raised in the Monroe County petition. Please recall we requested FEMA's assistance in this regard in a letter dated March 3, 1983. In order to meet the licensing schedule and avoid impacting the applicant's projected date for operation, responses to our requests to include the Monroe County issues, should be provided by July 1, 1983. We have discussed these matters with members of your staff and plan to meet with FEMA Regional personnel on May 5, 1983, in Battle Creek, Michigan for further discussion.

Edward L. Jordan, Director  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

Enclosure:  
Comments on FEMA Report w/attachment

cc: See attached list

8502280044 850117  
PDR FOIA  
PUNTEENB4-552 PDR

#4

cc: R. C. DeYoung, IE  
J. H. Sniezek, IE  
E. L. Jordan, IE  
J. M. Taylor, IE  
S. A. Schwartz, IE  
F. G. Pagano, IE  
C. R. Van Niel, IE  
F. Kantor, IE  
H. R. Denton, NRR  
D. G. Eisenhut, NRR  
M. D. Lynch, NRR  
K. D. Cyr, ELD  
C. P. Woodhead, ELD  
M. Sanders, FEMA  
M. Hepler, FEMA

Comments on Supplemental Interim Finding Report for Fermi 2

1. Size of the Plume Exposure Pathway Emergency Planning Zone

The interim finding report includes the statement, in Section I.B, that the plume exposure pathway Emergency Planning Zone (EPZ) out to ten miles includes parts of Monroe and Wayne Counties in Michigan and the southern tip of Essex County, Canada. Our review of the Detroit Edison Company (the applicant) Radiological Emergency Response Plan indicates that although a small parcel of land in Essex County lies just inside the 10-mile radius, Essex County, Canada, is not considered for emergency planning purposes to be within the plume exposure pathway EPZ for Fermi 2.

The plume exposure pathway is defined as being about ten miles in radius and although this implies a circular area, the actual size and shape (i.e., the boundaries) of an EPZ depends upon the characteristics of a particular site. As specified in 10 CFR Part 50, Appendix E, Section III, the size of the EPZ's for a nuclear power plant are to be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.

In addition to excluding Canada, the applicant has adjusted the boundaries of the plume exposure EPZ to account for local conditions, primarily local government jurisdictional boundaries, in order to define evacuation sub-areas,

Release  
Per IE

derive evacuation time estimates, and design the prompt alert (siren) system. The plume exposure EPZ with the adjusted boundaries is shown in Figure 6 (copy attached) of the applicant's study of evacuation time estimates.

We note that the plume exposure pathway EPZ is shown in the Monroe County Emergency Operations Plan as a circle exactly ten miles in radius and is defined to consist of all cities, villages, and townships within a ten mile radius of the facility. The Michigan Emergency Preparedness Plan defines the plume EPZ to consist of all townships within a ten mile radius including all cities and villages within those townships but does not illustrate the EPZ in a figure. Neither the local or State plan makes any reference to Essex County, Canada, as being part of the plume exposure pathway EPZ.

The Commission regulations on emergency planning require an evaluation of the size of the EPZ in relation to local conditions. We believe that knowledge of the actual EPZ boundaries is an important consideration for emergency planning purposes. Therefore, we request the assistance of FEMA in evaluating the size and clarifying the boundaries of the proposed plume exposure pathway EPZ for Fermi 2.

## 2. Emergency Classification System

The interim report, in Sections II.D and III.A, states that the State and local plans provide for an emergency classification and action level scheme consistent with that of the applicant and NUREG-0654/FEMA-REP-1, Revision 1, but

is not consistent with the classification scheme contained in a 1977 State law. We understand that Michigan State agencies are considering revising the State law to be consistent with the updated emergency classification system which is included in the State and local plans. We are in agreement with FEMA that this item remains to be resolved but is not a significant deficiency at this time with regard to offsite emergency preparedness. Our position is that the emergency classification system for Fermi 2 is acceptable, so long as the standard emergency classification and action level scheme in the State and local plans remains consistent with the applicant's and this scheme continues to be utilized and understood by both onsite and offsite emergency personnel. Highlighting the inconsistency in the emergency classification system between State and Local plans and Michigan State law, should assist in correcting the situation.

### 3. Notification Methods and Procedures

In the evaluation of this planning standard, the interim finding report in Section II.E states that the plans describe systems for notification of the public, but do not address the timeliness (emphasis added). We regard the capability of offsite officials to make a prompt public notification decision to be a significant issue in establishing the adequacy of an emergency preparedness program.

The Commission regulations require, in 10 CFR Part 50, Appendix E, Section IV.D.3, that a licensee have the capability to notify responsible State and

local officials within 15 minutes after declaring an emergency and, further, the licensee must demonstrate that the State and local officials have the capability to make a public notification decision promptly on being informed by the licensee of an emergency condition. The licensee must demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ. The design objective is for offsite officials to have the capability to essentially complete the initial notification of the public within about 15 minutes following notification by plant operators of a situation requiring urgent action.

Our review of the onsite emergency plan has focused on ensuring that the applicant will have the capability to detect an emergency and notify offsite officials with a protective action recommendation, if necessary, within 15 minutes of an emergency. We are confident that the physical means to alert and notify the public; i.e., the siren system in conjunction with the emergency broadcast system, will be installed and operational prior to fuel loading. Our primary concern at this stage in the licensing process is whether the administrative capability will be in place for offsite officials to make a protective action decision promptly upon notification by plant operators of an urgent emergency situation. Accordingly, we have requested the applicant to coordinate planning efforts with offsite authorities to ensure the administrative capability will exist to alert the public and make prompt protective action decisions especially for rapidly developing emergency situations during non-normal working hours. We request the assistance of FEMA in pursuing this issue with local and State officials to ensure that the requisite administrative capability is incorporated into the offsite plans and procedures.



#### 4. Radiological Emergency Response Training

The interim finding report identifies, in Sections II.0 and III.A, the lack of an integrated, comprehensive training program for emergency response personnel in offsite support areas such as police, firefighters, first aid and rescue personnel. This appears to be a significant deficiency which needs to be resolved before the plant achieves full power operation. We, therefore, request that FEMA take appropriate action to assure that an acceptable emergency preparedness training program is established and training is provided for members of the offsite emergency organization. We also intend to bring this matter to the attention of the applicant and request their assistance in assuring that adequate response training is provided for local emergency personnel prior to full-power operation of the Fermi 2 plant.

#### 5. Monroe County Petition

Our request for FEMA's assistance in addressing the emergency preparedness issues raised by Monroe County is contained in the letter to Richard W. Krimm, FEMA from Edward L. Jordan, NRC dated March 3, 1983.

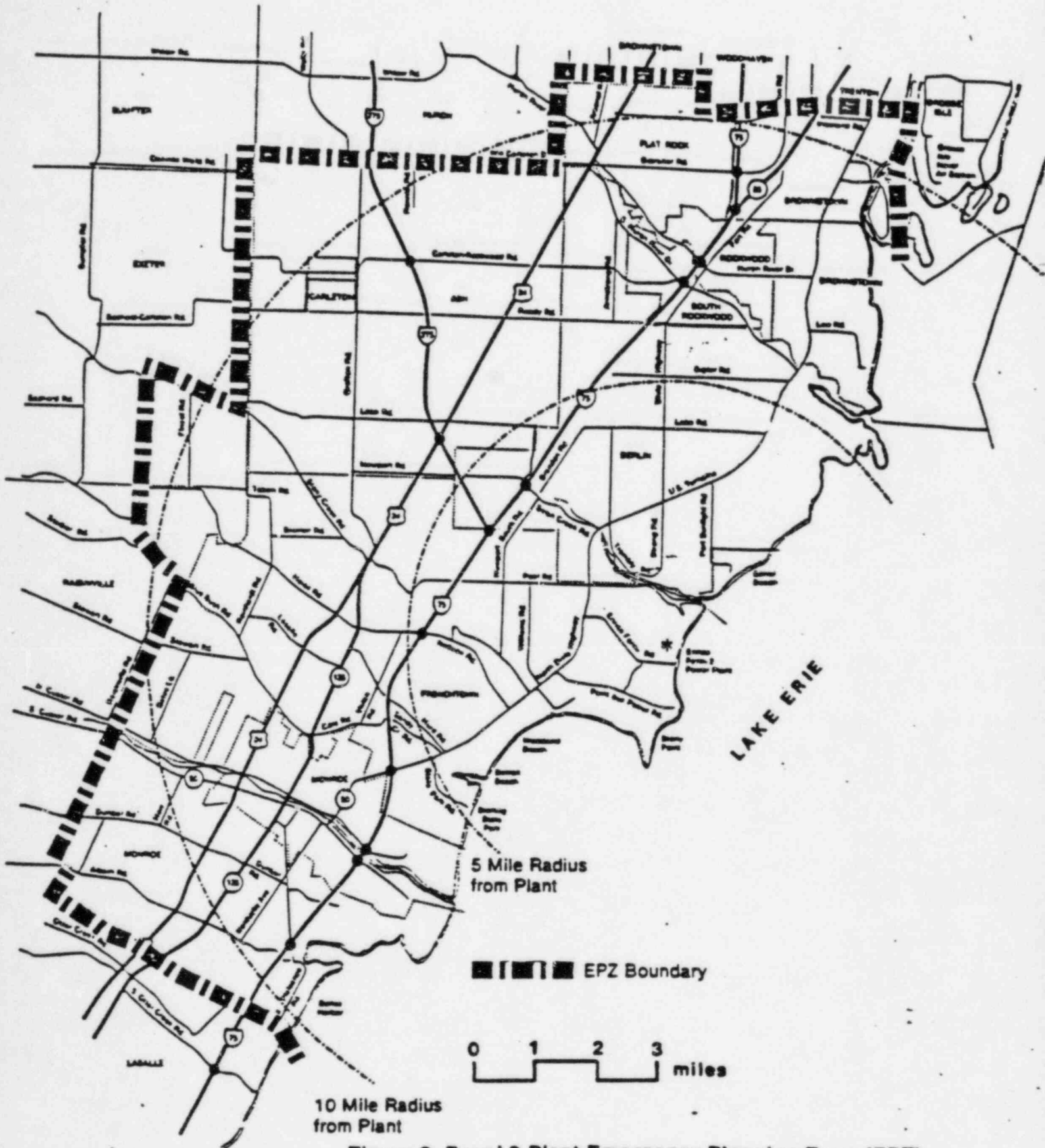


Figure 6. Fermi 2 Plant Emergency Planning Zone (EPZ)