Wayne H. Jens Vice President Nuclear Operations

Detroit

2000 Second Avenue Detroit, Michigan 48226 (313) 586-4150

> February 23, 1984 EF2 - 67,132

Director of Nuclear Reactor Regulation Attention: Mr. B. J. Youngblood, Chief Licensing Branch No. 1 Division of Licensing U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Youngblood:

- Reference: Enrico Fermi Atomic Power Plant, Unit 2 NRC Docket No. 50-341
- Subject: Response to Items Requiring Resolution Evaluation of Emergency Plan Supplement No. 3, NUREG-0798, January, 1983

Attached are Detroit Edison's responses to the items requiring resolution resulting from NRC review of the Fermi 2 Radiological Emergency Response Preparedness (RERP) Plan published in Supplement 3, NUREG-0798.

All items were reviewed with Mr. Falk Kantor of your Emergency Preparedness Branch in a telephone conference on February 1, 1984. Only those requiring additional information or confirmation as per the phone conference are included in the attachment. Each item is discussed in the context to the RERP Plan review as outlined in Supplement 3. It is our understanding that with this additional information, Supplement 4, NUREG-0798 can be issued.

Should you have any questions, please call Mr. O. Keener Earle, (313) 586-4211.

Sincerely,

Tayne If Jens.

cc: Mr. P. M. Byron Mr. F. Kantor Mr. M. D. Lynch

8402270243 840223 PDR ADOCK 05000341 PDR

DETROIT EDISON'S RESPONSES

TO THE

ITEMS REQUIRING RESOLUTION EVALUATION OF THE EMERGENCY PLAN SAFETY EVALUATION REPORT RELATED TO THE OPERATION OF ENRICO FERMI ATOMIC POWER PLANT, UNIT 2 NUREG-0798 - SUPPLEMENT NO. 3 JANUARY 1983

February 1984

NUREG-0798 - SUPPLEMENT NO. 3 EVALUATION OF THE EMERGENCY PLAN RESPONSES TO ITEMS REQUIRING RESOLUTION

13.3.2.1 ASSIGNMENT OF RESPONSIBILITY (ORGANIZATION CONTROL)

Item(s) Requiring Resolution

- Identify the agencies with emergency plan responsibilities in the ingestion exposure pathway (50-mi) emergency planning zone (EPZ). Provide a map that clearly illustrates the States, provinces, cities, etc., within the ingestion exposure EPZ.
- (2) Identify the agency or agencies responsible for notifying Canadian officials of an emergency at Fermi 2, and describe the arrangements made to notify Canadian officials.

Resolution

- (1) The Fermi 2 Radiological Emergency Response Preparedness (RERP) Plan, Revision 3 will reference the State of Ohio, together with the State of Michigan and Province of Ontario, Canada.
- (2) Item closed.

13.3.2.2 ONSITE EMERGENCY ORGANIZATION

Item Requiring Resolution

Provide information on shift staffing augmentation capability before an operating license is issued, and if significant differences from the staffing objectives of Table B-1 of NUREG-0654 exist, provide justification for the differences, including a study of response times by emergency functions and possible compensating measures such as enhanced shift capability.

Resolution

Item Closed.

The Fermi 2 RERP Plan, Revision 3, will contain a revised Table B-1.

13.3.2.4 EMERGENCY CLASSIFICATION

Items Requiring Resolution

- (1) Provide the specific instrument readings and other indicators that are used as emergency action levels (EALs) in the emergency classification scheme. Correct the headings in Table D-1 of the emergency plan.
- (2) Correlate the containment (drywell) monitor and other key instrument readings, if applicable, to a range of degraded core conditions. Selected values from this analysis along with other indicators of core and containment conditions should be included in the EALs and used to initiate protective actions in accordance with the guidance in NUREG-0654, Appendix 1 for general emergencies.
- (3) Develop the methodology to classify serious events in case the containment monitor and other key instrumentation are off scale or inoperable.
- (4) Revise the emergency plan and implementing procedures to indicate that offsite authorities will be notified within 15 minutes after the applicant declares an emergency.

Resolution

 Table D-1 was revised in the Fermi 2 RERP Plan, Revision 2 to reflect the Emergency Action Levels (EALs) presented in RERP Plan Implementing Procedure EP-101.

> Calculations are currently in progress, to determine monitor readings which will be equivalent to EAL Dose Limitations at the site boundary for site area and general emergency classifications. (These monitor readings will be incorporated into the next revision of EP-101 prior to fuel load.)

(2) Use of Containment High Range Radiation Monitor to Assess Core Damage

(2) USE OF CHRRM'S TO ASSESS CORE DAMAGE

As noted in the Fermi 2 FSAR, Section H.II.F.1.3., Detroit Edison is installing redundant containment radiation monitoring channels to meet the requirements of NUREG-0737. These monitors are frequently referred to as Containment High Range Radiation Monitors (CHRRM's). Radiation levels resulting from gamma-ray emitting radionuclides in the vicinity of the detectors are indicated and recorded in the main control room and directly transferred to the Emergency Response Information System (ERIS).

As shown in FSAR figures H.II.F.1-1, 2 and 3, these detectors are located in the bulbous portion of the drywell, at elevation 605, and approximately 7' from the react. shield. The CHRRM location is shown more clearly in the at ached sketch.

During normal operations these detectors will read approximately 25 R/hr due to nitrogen-16 in nearby steam and reactor water recirculation piping.

Under accident conditions, the CHRRM's may be used as an indicator of reactor ore damage. A release of iodines and/or noble gases to the drywell will result in a uniform mixture of these gases in the drywell. The radiation field associated with these gases will be a measure of the airborne radioactivity released to the drywell.

A correlation may be made with the CHRRM reading and the amount of radioactivity released to the drywell that will become airborne. Thus, a correlation can be made for accidents ranging from a release of all coolant and core damage to a classic Regulatory Guide 1.3 Loss-of-Coolant-Accident (LOCA) which assumes the release of 100% of all noble gases and 25% of the iodines to the drywell volume. This set of curves was provided as Enclosure 2 of the Fermi 2 RERP Plan Implementing Procedure EP-540 (Enclosed).

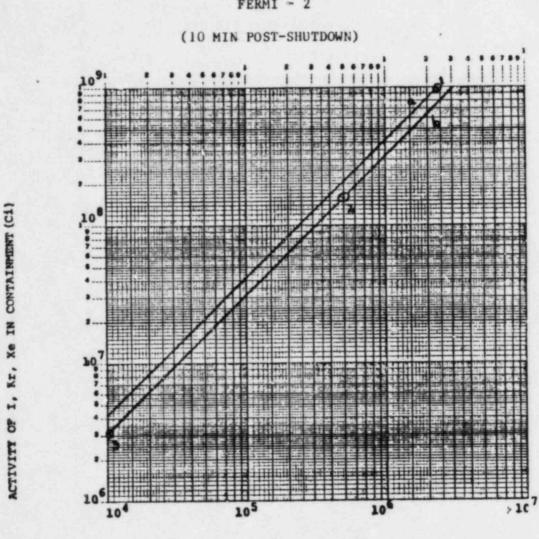
It is doubtful that the CHRRM will provide any meaningful signal for accidents such as core melts which are more serious than RG 1.3. LOCA's. To get a radiation field higher than that for 100% nobles and 25% iodines, one must assume the next most volatile class of nuclides, cesium, is heated to the point where it becomes uniformly mixed in the drywell air space. This is unlikely. In the event of a core melt, we believe the remaining nuclides would remain within the reactor pedestal and shield wall (recall, the CHRRMs are outside that wall), or in the suppression pool water and not appreciably affect the monitor reading above that already seen due to the surrounding cloud of noble gases and radioiodines. Recall again that in the TMI-2 accident, core damage was sufficient to release more than 50% of the noble gases to the containment, but the airborn iodine fraction was significantly less than 1%. Values given in the curves of Enclosure 2 of EP-540 were obtained as follows. The dose rate at the CHRRM location due to 100% of the core inventory of noble gases uniformly distributed in the drywell volume was calculated to be 1.40×10^{6} R/hr; the dose rate due to 2% of the iodines similarly distributed was found to be 7.55 x 10⁴ R/hr. From these values, the dose rate due to any postulated fraction or combination of releases may be calculated. As an example, the enclosed table has been constructed. This information will be included in a procedure.

		Airborne Release, Percentage of Inventory		CHRRM Reading,
	Accident Description	Nobles	Iodines	R/hr
1.	Normal operating environment in drywell			∾ 25-30
2.	Regulatory Guide 1.3 LOCA; sufficient core temperature to drive out all noble gases from fuel pellets	100	25	2.3x10 ⁶
3.	Fermi 2 upper bound accident	100	2	1.5x10 ⁶
4.	Gap release, 100%*	10	10	5.2×10 ⁵
5.	Environmental report LOCA (all ECCS working)	0.2	0.2	1.0×10 ⁴
6.	Release of all reactor coolant			0.01

ASSESSMENT OF CORE DAMAGES BASED ON CHRRM READING, RAD/HR

* Since the curve is linear any percentage less than 100% would be a direct multiplier.

EP-540 Rev. 0 Page 7



ESTIMATE OF ACTIVITY IN CONTAINMENT CONTAINMENT HIGH KANGE RADIATION MONITOR FERMI - 2

Radiation Level in Containment (Rad/hr)

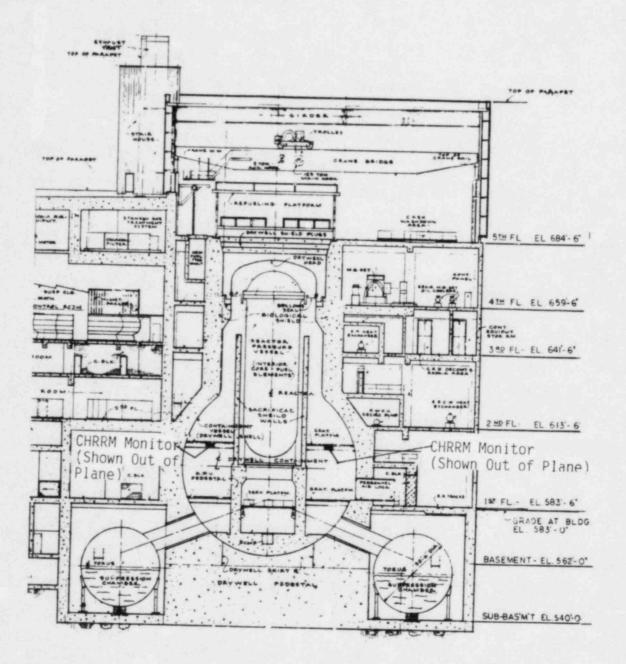
Curve "a" represents estimated activity levels in the containment following releases in which the ratio of "% noble gases released from the core" to "% iodines released from the core" is equal to 4. Curve "b" represents estimated activity levels in the containment following releases in which the above mentioned ratio is equal to 1. Specifically, the following points are plotted:

100% noble gases, 25% iodines released
 10% noble gases, 10% iodines released
 0.2% noble gases, 0.2% iodines released

Coolant activitiy is equal to 19 curies. If airborne in the containment, the radiation level would be 0.01 Pad/hr, too low to plot on this graph.

Enclosure 2 Page 1 of 1

EF-2-FSAR Page 8



ENRICO FERMI ATOMIC POWER PLANT UNIT 2 FINAL SAFETY ANALYSIS REPORT

FIGURE 1.2-20

GENERAL ARRANGEMENT DRAWING, TRANSVERSE SECTION

AMENDMENT 50 - AUGUST 1983

(3) The methodology has been developed to obtain information necessary to provide an offsite dose assessment should key monitoring instrumentation be offscale or inoperable. The key instruments are the Containment High Range Radiation Monitor (CHRRM) in the drywell and the Eberline SPING-4 and the AXMs in the SGTS. The methodology as described below will be developed as a procedure.

CHRRM

A location in the Reactor Building will be selected where a measurement of the activity in the drywell can be assessed through the biological shield using a survey meter reading and appropriate conversion factors.

OR

Using the Post Accident Sampling System, a sample of the drywell atmosphere will be obtained, a dose rate measured using an appropriate survey meter, and the dose rate converted to a CHRRM monitor reading (R/hr) using a graph developed for the purpose.

AXM

Using the existing AXM sample taps, a sample of the SGTS effluent will be obtained, a dose rate measured using an appropriate survey meter, and an estimate of Ci/cc being released through SGTS will be determined by using graphs developed for the purpose.

(4) Item Closed.

13.3.2.5 NOTIFICATION METHODS AND PROCEDURES

Item(s) Requiring Resolution

- Develop a notification form for initial messages to offsite response organizations and revise Emergency Plan Implementing Procedure EP-290, "Emergency Notifications," to ensure that notifications will be made within the 15-minute period specified in 10 CFR 50, Appendix E, Section IV.D.3.
- (2) Provide a commitment to have a prompt alert and notification system, which is in accordance with the guidance of NUREG-0654, Appendix 3, installed and operational by fuel load, or develop interim compensatory measures to provide emergency instructions to the public within the plume exposure pathway EPZ. Revise the emergency plan to reflect the deletion of mobile sirens from the alert and notification system.
- (3) Coordinate planning efforts with offsite authorities to ensure the administrative capability will exist to alert the public and make prompt protective action decisions for rapidly developing emergency situations especially during non-normal working hours.

Resolution

- (1) A generic State of Michigan notification form was developed for notification of offsite response organizations that will insure the initial notification is made within 15 minutos (RERP Plan Implementing Procedure EP-290). This procedure will be revised to describe those portions of the form that will be used for initial and follow-up messages.
- (2) A total of 31 sirens has been installed in Wayne and Monroe Counties that will be operational by fuel load. All sirens have been silent tested at the siren site and found to be operational. All that remains to make the integrated system operational is installation of the control panel at the Monroe County Sheriff's Joint Communication Center. A draft of the Prompt Notification System Design Report has been completed and is under review prior to submittal to FEMA.

The Fermi RERP Plan was revised (Revision 2, September 1983) to include the PNS and delete the mobile sirens previously discussed.

(3) Detroit Edison is continuing to coordinate planning efforts with local offsite authorities to ensure prompt notification of the general public in a rapidly moving emergency situation.

The Michigan Emergency Preparedness Plan, Annex B, Warning, page B7 (dated 6/83) refers to the local emergency operations plans for prompt notification. The draft Monroe County Plan (Appendix 1, Nuclear Facility Procedures to the Monroe County Operations Plan) in Section V.A.1 of the Basic Plan (page BP-11), the Chairperson of the Monroe County Board of Commissioners has the immediate responsibility for implementing the Monroe County Plan. The decision-making responsibility regarding protective actions is stated Section V.4, (page A-1-8) of Appendix 1, Direction and Control Annex.

Detroit Edison has, via letter, requested that more explicit information be provided in the Monroe County Plan concerning the responsibility for prompt decisionmaking and public notification during a rapidly moving event. It is anticipated this information will be included in the Plan during the next several weeks.

13.3.2.7 PUBLIC INFORMATION

Item Requiring Resolution

Submit draft public information brochures for NRC and FEMA review before fuel loading and commit to distribute the brochures to the public before operation above 5% of rated power.

Resolution

Item closed

Detroit Edison submitted copies of the information brochure distributed to the general public prior to FERMEX '82 at the time SER Supplement 3 was being written. The brochure will be redistributed prior to FERMEX '84 to be held in June 1984.

13.3.2.8 EMERGENCY FACILITIES AND EQUIPMENT

Items Requiring Resolution

- Provide a commitment to establish a backup emergency operations facility in accordance with regulatory guidance or justify the absence of this facility.
- (2) Provide a commitment that the permanent emergency response facilities will be operational before fuel loading or that adequate interim facilities and equipment will be in place.
- (3) Provide the short-term meteorological study concerning lake-breeze effect on plume transport, and revise the meteorological model used to determine offsite dose projections if the effect is significant.

Resolution

(1) Item Closed.

The backup EOF location was approved by the Commissioners as stated in NRC letter Eisenhut to Jens dated January 31, 1984.

- (2) Item Closed.
- (3) The short-term meteorological study concerning lakebreeze effect was completed in October 1983. In March 1984, Detroit Edison will submit a report discussing the preliminary analysis and results of the study and an implementation schedule for changes to the meteorological and dose assessment models if the effect is determined to be significant.

13.3.2.10 PROTECTIVE RESPONSE

tems Requiring Resolution

- Develop predetermined protective action recommendations in accordance with the guidance of Appendix 1 to NUREG-0654 and incorporation of these recommendations in the emergency plan and procedures.
- (2) Revise the evacuation analysis to include an enumeration of the special facility population on an institutionby-institution basis, reduction in road capacity caused by adverse weather, and ccordination of the study with local authorities.

Resolution

- (1) Item Closed.
- (2) Item Closed.

RERP Plan Implementing Procedure EP-545 includes maps of the locations of schools, recreation areas, institutions, and dairies. Also included is a table showing evacuation times for special segments of the public under normal and adverse weather conditions.

13.3.2.12 MEDICAL AND PUBLIC HEALTH SUPPORT

Items Requiring Resolution

Specify the availability and arrangements made for backup medical facilities for the treatment of individuals involved in radiological accidents.

Resolution

Negotiations are underway with Mercy Memorial Hospital, Monroe, Michigan, as a backup medical facility. This information will be in Revision 3 of the Fermi 2 RERP Plan.

ADDITIONAL INFORMATION/FEMA CONCERNS

(1) Training Offsite Emergency Response Organizations

Detroit Edison, the Emergency Management Division of the Michigan State Police, and the local Counties have developed a four-part training program that is presented to the local offsite Emergency Response Organizations annually. The program consists of the four parts listed below:

- Part 1: Basics of Radiation and Plant Operations presented by Detroit Edison.
- Part 2: Biological Effects and Detection of Radiation presented by the Radiological Health Services Division, Public Health Department.
- Part 3: Radiological Emergency Response Plans, Organization and Procedures presented by Emergency Management Division, Michigan State Police.
- Part 4: County Radiological Emergency Response Plan presented by a County OCP representative.

This training program will be described briefly in Revision 3 to the RERP Plan. Attached is an outline and more detailed information regarding the program.

In addition to the above training, Detroit Edison will hold, on an annual basis, a seminar for the offsite emergency response decision-makers covering Emergency Action Levels, dose assessment, meteorology, and protective action recommendations. The first such seminar will precede FERMEX '84.

(2) Prompt Protective Actions by Local Offsite Response Organizations

Refer to Resolution, Item 3, Section 13.3.2.5.

(3) Status of County Plans

The Wayne County and Brownstown Township Plans have been revised to incorporate interim FEMA findings, have been signed by the required County Officials, and are ready for submittal to FEMA.

A draft of the revised Monroe County Plan has been reviewed by Detroit Edison and the State Police. The Plan was presented to the County Board of Commissioners on February 14 for acceptance as a "working document", at which time they authorized sending the document to FEMA Region V for "informal" review.

Upon approval of the Monroe County Plan, the three plans, together with the revised Michigan Emergency Preparedness Plan, will be submitted to FEMA for final review.

STATE OF MICHIGAN



JAMES J. BLANCHARD, GOVERNOR

EMERGENCY MANAGEMENT DIVISION

LOWER LEVEL 111 S. CAPITOL AVENUE LANSING, MICHIGAN 48913 PHONE: \$17 373-0817

DEPARTMENT OF STATE POLICE

January 31, 1984

Mr. Philip Scheuerman Planner/Trainer Monroe City-County Office of Civil Preparedness 106 East First Street Monroe, Michigan 48161

Dear Mr. Scheuerman:

This letter is in response to your request for more information on the radiological emergency preparedness (REP) training program. As you are aware, the Emergency Management Division (EMD) is coordinating the provision of state and utility resources to the counties to assist them in providing training as required by NUREG-0654. This training program is an attempt to effectively utilize the resources of each participant, provide coordination of efforts, and to ensure a quality training program with continuity from year to year. One of the key points of the program is the definition of responsibilities and abilities. Each level of government has the responsibility te train its workers so they are able to respond to a nuclear accident. Consequently the four part training program was developed to ensure this responsibility was met.

Under this program, each entity covers the areas that they are responsible for. That is, state covers state functions, utility covers utility functions, and county covers county functions. This delineation of responsibilities supports the same responsibilities found in the plans.

The major points of the training support program are presented below. This is an elaboration of our October 6, 1983, letter:

- 1. NUREG-0654 requires that all emergency workers be provided with training.
- 2. These areas are plant operations and facilities, basic nuclear physics, biological effects of radiation, radiological emergency preparedness at the state and local level, support organizations' responsibilities and procedures, and some specialized training as needed.
- 3. The October 6, 1983, letter contained an outline of the training program as provided by the state.

Mr. Philip Scheuerman Page Two January 31, 1984

- 4. The Atomic Safety and Licensing Board has reviewed and approved this program during the fuel pool hearings at Big Rock Point.
- The training of county/local personnel is a county responsibility under the county emergency operations plan.
- 6. The EMD will assist the county in the training by providing instructors to cover parts I, II, and III of the program.
- The EMD will assist the county in developing its presentation under part IV of the program, but the presentation of this material is a county responsibility.
- 8. The EMD will support the county in a "train the trainer" type program.
- 9. The training program is simed at all of the emergency workers who would be involved in a response to an incidert at Fermi 2. These workers fall into two general categories: those who would be within the primary emergency planning zone or who would be assigned to decontamination/reception facilities; and those who would have responsibilities outside the primary emergency planning zone. These workers are identified in the county emergency operations plan, Appendix 1. Therefore, one of the first steps in the training program is for the county to identify all of the agencies/departments and the number of persons in each who would be involved in emergency departments contained in NUREG. The county may have additional agencies involved.
- 10. One of the key groups to be trained are the EOC personnel. This includes all agency/department heads and their alternative involved in EOC operations, and communications personnel. Our experience in other counties has shown that this group is one of the easiest to train because they are command personnel, in contact with each other on a regular basis, are usually involved in coordination of activities, and are knowledgeable of each others' responsibilities. The area where they need the most information is in EOC communications/message flow, and this area can be covered easily in the training program. These people know their jobs; the program just pulls it all together for them.
 - 11. Similarly, most emergency workers also know what to do in an emergency; be it nuclear or non-nuclear. Their function does not vary greatly from what their non-nuclear actions are. The four part program provides them with the information they need for radiological emergencies. The most common concerns are notification procedures, functions, and radiation exposure control/dosimetry. This is rather straight forward information which has been covered very well in a one hour presentation.

Mr. Philip Scheuerman Page Three January 31, 1984

- 12. In the part IV presentation, the county emergency services coordinator covers county notification procedures, EOC operations, general communications, coordination of resources, public information, and dosimetry. The specific annex officers then cover their annexes' functions and responsibilities. It has been our experience in other counties that the differences in functions and procedures for emergency workers from their daily operations to emergency operations are minimal. Once these areas of differences are covered, most workers feel comfortable with REP.
- 13. Our experience in other counties shows that there are less than 500 workers that need to participate in the training program. More commonly, there are 200 to 300. This is because we use a train the trainer type approach. That is, you identify key personnel who will be involved at the EOC, at department offices, and in supervisory roles, train them, and then they can pass the information along to their workers. For example, the School Annex Officer and alternatives at the EOC need to be involved in the training as do school superintendents and principals. These last two would pass the information along to the teachers just as they would in other types of emergency response (tornadoes, etc.).
- 14. Given all of the above, the county officials become the key for training local workers. An assist you in setting up a schedule, for the development of the part IV presentation, and the development of training material. The state will have a booklet for all workers (Nuclear Incident Briefing Material) as well as outlines for each part.
- 15. This training program is on an annual basis. We will assist you in retraining all personnel each year and updating the program as needed. There is a continual feedback into the presentations from experience gained in the program.
- 16. Specialized training will be provided as needed. For example, decontamination procedures.

This program has been successful in other parts of the state. We can maximize state, utility, and county time and personnel by holding large training sessions for mixed functional groups and covering parts I, II, III, and the first half of part IV. This should take about four hours. The last half of part IV can be covered in smaller groups over a longer period of time. I would expect that all of the county and local workers could be provided with the training program in two weeks if sessions were held at a large facility. In other counties, we have held three sessions a day (9 a.m., 1 p.m., and 7 p.m.) for five days and covered all of the workers. This gives people a variety of times to attend so their schedules are not disrupted. Mr. Philip Scheuerman Page Four January 31, 1984

Using this approach, training in Monroe County could be started soon and cover all the personnel needed in a short period of time.

If you have any questions, please feel free to contact me.

Sincerely,

Daniel M. Sibo

Daniel M. Sibo, AICP Pre-Disaster Services Section

DMS: cmh

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NUREG 0654

TRAINING SUPPORT FOR

OFF-SITE ORGANIZATIONS

TRAINING PROGRAM PRESENTATION OUTLINE

PART 1: Easics of Radiation and Plant Operations: (Utility)

I. PLANT OPERATIONS

(General description of type of reactor, operations, etc.)

II. PLANT EMERGENCY OPERATIONS PLAN AND FACILITIES

(General purpose of emergency plan and emergency facilities (TSC, EOF))

III. ATOMIC AND NUCLEAR STRUCTURE

- A. The Nuclear Atom
 - 1. Size
 - 2. Components
 - a. Nuclear
 - b. Electrons
- B. The Nucleus
 - 1. Neutrons and Protons
 - 2. Nomenclature and Symbols
 - a. Elements
 - b. Isotopes

IV. RADIOACTIVITY

- A. Radioactive Decay
 - 1. Nuclear Stability
 - 2. Modes of Decay
 - a. Alpha Decay
 - b. Beta Decay
 - 3. Gamma Emission
- B. Decay Laws
 - 1. Activity: the Currie
 - 2. Half life
- C. Radioactive Materials
 - 1. Natural Sources
 - 2. Artificial Sources
- V. RADIATION ENVIRONMENT
 - A. Natural Background
 - 1. Cosmic Rays
 - 2. Earth and Building Materials
 - 3. Internal Sources
 - B. Man-made Sources
 - 1. Medical Exposures
 - 2. Nuclear Power
 - 3. Other

PART 2: Biological Effects and Detection of Radiation: (State Rad. Health)

- I. BASICS
 - A. Radiation Effects on Ceils
 - 1. Cell Damage
 - 2. Sensitivity to Radiation
 - B. Units of Radiation Dose
 1. Rad
 - I. Rad
 - 2. Rem
 - C. Acute vs. Chronic Doses
- **II. RADIATION EFFECTS ON ORGANISMS**
 - A. Acute Doses
 - 1. Radiation Sickness Syndrome
 - 2. Sources of Data
 - B. Chronic Doses
 - 1. Genetic Effects
 - 2. Somatic Effects
 - 3. Rates of Incidence
- III. RADIATION DETECTION
 - A. Interaction of Radiation with Matter
 - 1. Energy Deposition
 - 2. Range of Travel
 - 3. Cerenkov Glow
 - B. Instruments
 - 1. Counters and Survey Meters
 - 2. Dosimeters
 - a. Film Badges
 - b. Thermo-luminescent Detectors
- IV. RADIATION ENVIRONMENT
 - A. Radiation Protection
 - 1. Standards
 - a. General Population
 - b. Occupational Standards
 - 2. Practices
 - a. Time, Distance, and Shielding
 - b. Records
 - B. Radiation Risk in Perspective
 - 1. Comparison with Other Environmental Insults
 - 2. Comparison with Other Risks
 - C. Exposure vs. Contamination

MSP/EMD 10-83

PART 3: Radiological Emergency Response Plans (State Emergency Mgmt. Div.)

INTRODUCTION

- A. Purpose
- B. Objectives

I. RADIOLOGICAL EMERGENCY RESPONSE PLANS

- A. Purpose
- B. Legal Basis
- C. Michigan Act 390 of 1976

II. MAJOR ORGANIZATIONAL STRUCTURES AND RESPONSIBILITIES

- A. Levels of Government Involvement
- B. Emergency Service Concepts
- C. Federal Level
- D. State Level
- E. Local Level
- F. Utility

III. PROCEDURES WITHIN THE PLAN

- A. Plan vs. Procedures
- B. Emergency Response Procedures and Example
- C. Protective Actions
- D. Evacuation Concepts

IV. RECOVERY

- A. General
- B. Operations

V. SUMMARY

PART 4: County Radiological Emergency Response Plan: (County Coordinator, et al.)

- I. SUPPORT ORGANIZATIONS' STRUCTURES AND RESPONSIBILITIES
 - A. Notification Procedures
 - B. EOC Operations
 - C. Communications
 - D. Coordination of Resources
 - E. Public Information 1. JPIC
 - F. Procedures for Handling Dosimetry

II. RESPONSIBILITIES BY FUNCTION UNDER LOCAL PLAN

Detroit NISON 2000 1 as cont Avenue Defroit, Michigan 40520 (313) 237-8000

February 8, 1984

Mr. Jon R. Eckert Director/Coordinator Monroe City-County Office of Civil Preparedness County Courthouse 106 E. First Street Monroe, MI 48161

Dear Jon:

We have been reviewing the Monroe County Plan and previously forwarded our comments to you. However, we have discovered one area that needs to be addressed further. That area relates to the county response in a very fast moving incident, e.g., when we go right into a General Emergency. Your plan should state that the Chairperson of the Board of Commissioners has the authority and will make an immediate protective action recommendation. Your plan should state how this will be done given the guidance and requirements specified in NUREG-0654 FEMA/REP-1. In addition, you should identify who else has the authority to make such a recommendation if the chairperson cannot be reached.

As a suggestion, you might consider including an "automatic" protective action recommendation for this particular situation or base it on exactly what we recommend to you. We have an automatic recommendation whenever we enter the General Emergency classification. Our automatic minimum protective action recommendation is to shelter in a two-mile radius and five miles downwind. Both FEMA and the NRC will be looking for predetermined protective actions at this classification for this situation.

If you have any questions, I can be reached at 586-4320.

Sincerely,

Tom Randayo

Thomas Randazzo -Supervisor Radiological Emergency **Response** Preparedness

TR:bhl

NEEP/84/054

cc: Lt. J. Tyler