PMFermiCOLPEm Resource

From: Eudy, Michael
Sent: Thursday, May 30, 2013 12:09 PM
To: FermiCOL Resource
Subject: FW: Courtesy Copy of NRC3-13-0012
Attachments: NRC3-13-0012.pdf

From: Jamie D Steis [mailto:steisj@dteenergy.com]
Sent: Tuesday, April 16, 2013 8:34 AM
To: Eudy, Michael
Cc: Michael K Brandon; Govan, Tekia; Muniz, Adrian
Subject: Courtesy Copy of NRC3-13-0012

Hello,

Attached is the courtesy copy of the Fermi 3 letters, NRC3-13-0012, "DTE Electric Company Response to NRC Request for Additional Information Letter No. 83," dated April 12, 2013.

Please let me know if you have any questions.

Jamie Steis
DTE Energy
(313) 235-0394

Hearing Identifier: Fermi_COL_Public
Email Number: 1205

Mail Envelope Properties (9E28710E0B702149AEC6639728636440012B7A36A71E)

Subject: FW: Courtesy Copy of NRC3-13-0012
Sent Date: 5/30/2013 12:08:34 PM
Received Date: 5/30/2013 12:08:39 PM
From: Eudy, Michael

Created By: Michael.Eudy@nrc.gov

Recipients:
"FermiCOL Resource" <FermiCOL.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	595	5/30/2013 12:08:39 PM
NRC3-13-0012.pdf	2065243	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

10 CFR 50.47
10 CFR 50.54(q)
10 CFR 50 App E
10 CFR 52.79

April 12, 2013
NRC3-13-0012

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

References:
1) Fermi 3
Docket No. 52-033
2) Letter from Michael Eudy (USNRC) to Peter W. Smith (DTE Electric), "Request for Additional Information Letter No. 83 Related to Chapter 13 for the Fermi 3 Combined License Application," dated March 12, 2013
3) Letter from Peter W. Smith (DTE Electric) to USNRC, "Detroit Edison Company Incorporation of the Emergency Preparedness Rule Changes into the Fermi 3 COLA," NRC3-12-0029, dated December 18, 2012

Subject: DTE Electric Company Response to NRC Request for Additional Information Letter No. 83

In Reference 2, the NRC requested additional information to support the review of certain portions of the Fermi 3 Combined License Application (COLA). The responses to these Requests for Additional Information (RAIs) are provided in Attachments 1 through 13 of this letter. Information contained in these responses will be incorporated into a future COLA submission as described in the RAI responses.

In Reference 3, DTE Electric Company submitted information and Fermi 3 COLA markups related to recent Emergency Preparedness (EP) rule changes. Summaries of the commitments made by DTE Electric and impacts of the rule changes on the Fermi 3 COLA were provided in this letter. These summaries, presented as tables, have been updated with the information provided in this submittal and are included in Attachments 14 and 15.

If you have any questions, or need additional information, please contact me at (313) 235-3341.

I state under penalty of perjury that the foregoing is true and correct. Executed on the 12th day of April 2013.

Sincerely,

Peter W. Smith, Director
Nuclear Development – Licensing and Engineering
DTE Electric Company

Attachments:
1) Response to RAI Letter No. 83 (RAI Question No. 13.03-66)
2) Response to RAI Letter No. 83 (RAI Question No. 13.03-67)
3) Response to RAI Letter No. 83 (RAI Question No. 13.03-68)
4) Response to RAI Letter No. 83 (RAI Question No. 13.03-69)
5) Response to RAI Letter No. 83 (RAI Question No. 13.03-70)
6) Response to RAI Letter No. 83 (RAI Question No. 13.03-71)
7) Response to RAI Letter No. 83 (RAI Question No. 13.03-72)
8) Response to RAI Letter No. 83 (RAI Question No. 13.03-73)
9) Response to RAI Letter No. 83 (RAI Question No. 13.03-74)
10) Response to RAI Letter No. 83 (RAI Question No. 13.03-75)
11) Response to RAI Letter No. 83 (RAI Question No. 13.03-76)
12) Response to RAI Letter No. 83 (RAI Question No. 13.03-77)
13) Response to RAI Letter No. 83 (RAI Question No. 13.03-78)
14) Fermi 3 EP Rule Changes, Commitment Summary Table
15) Fermi 3 EP Rule Change Analysis and Fermi 3 COLA Impacts Summary

cc: Tekia Govan, NRC Fermi 3 Project Manager
Adrian Muniz, NRC Fermi 3 Project Manager
Michael Eudy, NRC Fermi 3 Project Manager
Bruce Olson, NRC Fermi 3 Environmental Project Manager (w/o attachments)
Fermi 2 Resident Inspector (w/o attachments)
NRC Region III Regional Administrator (w/o attachments)
NRC Region II Regional Administrator (w/o attachments)
Supervisor, Electric Operators, Michigan Public Service Commission (w/o attachments)
Michigan Department of Natural Resources and Environment
Radiological Protection Section (w/o attachments)

Attachment 1
NRC3-13-0012
(4 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-66

NRC RAI 13.03-66

10 CFR 50 Appendix E.IV.A.9 requires a detailed On-Shift Staffing Analysis of on-shift staffing to be performed and the addition of staff as necessary to match the levels determined by staffing analysis. DTE proposed a licensee condition that states, in part, "The licensee shall submit a detailed analysis of on-shift staffing, in accordance with the NRC endorsed version of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities." The staff requests for the applicant to provide and document what revision of NEI 10-05 will be used for the staffing analysis.

Response

Revision 0 of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," will be used to perform the Fermi 3 on-shift staffing analysis required by 10 CFR 50, Appendix E, Section IV.A.9.

DTE Electric commits to and proposes the following license condition to be incorporated into the Fermi 3 COLA, Part 10, as identified in the attached markup:

> *The licensee shall submit a detailed analysis of on-shift staffing, in accordance with NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," Revision 0, and the licensee shall incorporate any changes to the EP needed to bring staff to the required levels, prior to or concurrent with completion of EP ITAAC 2.0 of EP ITAAC Table 2.3.1, and no less than 180 days prior to initial fuel load.*

Proposed COLA Revision

See attached markup to Fermi 3 COLA, Part 10, Section 3.7. This markup supersedes the markup (associated with this proposed license condition) submitted in letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 1 page)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

3.7 Emergency Planning Actions

3.7.1 EALs

Because various equipment set points and other information cannot be determined until as-built information is available, the COLA does not fully address certain aspects of the Emergency Action Level (EAL) scheme. Thus, COL applicants using EAL schemes in accordance with NEI 07-01 are proposed the following license condition:

The licensee shall submit a fully developed set of site-specific EALs to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.

The fully developed site-specific EALs shall be discussed and agreed on by the State and local government authorities.

3.7.2 On-Shift Staffing

Because various analysis inputs are currently unavailable (EOPs, AOPs, Job Task Analysis, Simulator for time-motion studies, etc.), the COLA does not contain a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. Thus, the COL applicant proposes the following license condition:

The licensee shall submit a detailed analysis of on-shift staffing, in accordance with NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," Revision 0, and the licensee shall incorporate any changes to the EP needed to bring staff to the required levels, prior to or concurrent with completion of EP ITAAC 2.0 of EP ITAAC Table 2.3.1, and no less than 180 days prior to initial fuel load.

Attachment 2
NRC3-13-0012
(4 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-67

NRC RAI 13.03-67

10 CFR 50 Appendix E.IV. B.1 "Assessment Actions" states in part "…The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and state and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis." The applicant proposed a licensee condition that states:

> *"The licensee shall submit a fully developed set of site-specific EALs to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load."*

The staff finds that DTE's proposed licensee condition is not consistent with 10 CFR 50 Appendix E.IV. B.2. The staff requests for the applicant to revise the proposed license condition to be consistent with 10 CFR 50 Appendix E.IV.B.2 or, provide an acceptable justification for why the State and local governmental authorities review and approval is not is not needed in the proposed license condition.

Response

Appendix E of 10 CFR 50, Section IV.B.1 states that:

> *"The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and the state and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis."*

DTE Electric commits to and proposes the following license condition, consistent with Section IV.B.1 of 10 CFR 50, Appendix E, to be incorporated into the Fermi 3 COLA, Part 10, as identified in the attached markup:

> *The licensee shall submit a fully developed set of site-specific EALs to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EALs shall be discussed and agreed on by the State and local government authorities. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.*

The requirement for annual review of the EALs with the State and local governmental authorities is contained in Section II.D.3 of the Fermi 3 Emergency Plan. Thus, this requirement is not included in the proposed license condition.

Proposed COLA Revision

See attached markup to Fermi 3 COLA, Part 10, Section 3.7 in Attachment 1.

Attachment 3
NRC3-13-0012
(7 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-68

NRC RAI 13.03-68

10 CFR 50 Appendix E Section IV.E.8.d requires nuclear power reactor licensees to have an alternative facility (or facilities) that would be accessible under threat of or experiencing hostile action and function as a staging area for augmentation of emergency response staff. The current Fermi 2 Emergency Response Plan, Revision 40 page H-4 states:

> *"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 describes the activation and support functions."*

A similar description is provided in the DTE Fermi 3 response. Since the Fermi 3 plan is a standalone plan, please specify if the space available in the Western Wayne Center been evaluated for an event that would activate both the Fermi 2 & 3 EROs, such as a security event, to ensure there is sufficient space to accommodate the additional personnel required by both EROs. The staff requests for the applicant to provide documentation of the Alternate EOF available space evaluation and revise emergency plan Alternate EOF description to include the capability to support both Fermi 2 & 3 ERO teams in the event of a site event activating both units EROs.

Response

The Fermi 2 Emergency Response Organization (ERO) assigned to report to the Emergency Operations Facility (EOF) or the Alternate EOF, if used, is as follows:

Emergency Officer	1
Nuclear Operations Advisor	1
Radiation Protection Coordinator	2
EOF Administrator	2
Security Advisor	1
Public Information Coordinator	1
Dose Assessor	1
EOF Laboratory Technician	1
Radiological Emergency Team Coordinator	1
Radiological Emergency Team Members	6
Communicators	2
Status Board Clerks	2
Administrative Support Personnel	1

Note that the EOF Laboratory Technician performs his duties in the EOF Laboratory. The Radiological Emergency Team Members are dispatched during offsite releases and working space in the EOF is not provided; however, there is space provided for team member assembly. Therefore, the fully staffed Fermi 2 ERO assigned to the EOF/Alternate EOF has 15 people.

The size and composition of the Fermi 3 ERO assigned to report to the EOF or the Alternate EOF is based on the organization chart contained in Figure II.B-4 of the Fermi 3 Emergency

Plan and Fermi 2 experience in performing the EOF functions. The Fermi 3 organization is as follows:

Emergency Officer	1
Nuclear Operations Advisor	1
Radiation Protection Coordinator	2
EOF Administrator	2
Security Advisor	1
Public Information Coordinator	1
Dose Assessor	1
EOF Laboratory Technician	1
Radiological Emergency Team Coordinator	1
Radiological Emergency Team Members	6
Communicators	2
Status Board Clerks	2
Administrative Support Personnel	1

As is the case for the Fermi 2 ERO, the EOF Laboratory Technician performs his duties in the EOF Laboratory and the Radiological Emergency Team Members are dispatched during offsite releases. Thus, working space is not provided for these ERO members. Therefore, the fully staffed Fermi 3 ERO assigned to the EOF/Alternate EOF has 15 people.

As described in the response to RAI 13.03-74 (Attachment 10), Fermi 3 intends to designate a single Emergency Officer for simultaneous events at Fermi 2 and Fermi 3. Therefore, the combined ERO for Fermi 2 and Fermi 3 would consist of 29 people. It is expected that detailed task analyses and experience may allow further reductions in staffing for some positions (e.g., EOF Administrator, Security Advisor, Administrative Support Personnel, Status Board Clerks) in the future. However, for purposes of this discussion, no reduction in staffing is considered.

Working space is also provided for 4 representatives of the state and local government agencies. Representatives from the State of Michigan, Monroe and Wayne Counties, and the Province of Ontario can be accommodated, as necessary. Based on the discussion in NSIR/DPR-ISG-01, Revision 0, and Fermi 2 experience, it is assumed that up to 10 representatives from federal agencies (NRC and FEMA) may need accommodations.

Therefore, the occupancy to be accommodated in the EOF/Alternate EOF for a simultaneous Fermi 2 and Fermi 3 event is 43 people. Assuming 75 square feet of working space per person, the EOF and Alternate EOF must have at least 3,225 square feet of usable space.

The Western Wayne Center, which houses the Fermi Alternate EOF, contains more than 3,225 square feet of usable floor space and, thus, can accommodate the staffing levels for a simultaneous event. The Western Wayne Center includes a separate conference room that is available for use by representatives of federal agencies (NRC and FEMA).

Proposed COLA Revision:

See attached markup of the Fermi 3 Emergency Plan, Section II.H.1.d.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

The EOF counting laboratory is available for the qualitative analysis of environmental samples collected by the Radiological Environmental Team, as well as a backup facility to the inplant laboratories. Laboratory facilities are described in Section II.C.3 of this Plan.

Display capability of the technical data system in the EOF includes a workstation that, at a minimum, is capable of displaying the parameters that are required of a SPDS. The SPDS function is described in Subsection 7.1.5 of the ESBWR Design Control Document. The EOF technical data system receives, stores, processes, and displays information sufficient to perform assessments of the actual and potential onsite and offsite environmental consequences of an emergency condition.

The EOF has ready access (either through hard copies or electronic media) to plant records and procedures needed for effective overall management of Fermi 3 emergency response resources, including:

Up-to-date as-built drawings, schematics, and diagrams showing conditions and locations of plant structures and systems down to the component level

Plant technical specifications

Plant operating procedures

Emergency operating procedures

Final Safety Analysis Report

Up-to-date records related to Detroit Edison, State, and local emergency management plans

Offsite population distribution data

Evacuation plans

Emergency Plan Implementing Procedures

The EOF draws its primary power from commercial power. There is electrical generator backup power to the EOF, so a loss of commercial power should not impact any of the voice or data communications equipment located in the EOF. Common Detroit Edison telecommunications infrastructure that supports EOF functions, including, but not limited to, fiber optic transmission equipment, telephone switching equipment and data network routers, is configured to operate at least one and usually multiple backup power sources in the event of a loss of commercial power. These backup sources include generator, DC battery and the UPS systems.

An Alternate EOF (AEOF) is located at Western Wayne Center, approximately 22 miles northwest of Fermi 3. 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.

, and , including a simultaneous Fermi 2 and Fermi 3 event

Activation and support functions of the Alternate EOF are described in ~~emergency plan implementing procedures~~.

Emergency Plan Implementing Procedure, "Emergency Operations Facility Activation and Operation."

e. Joint Information Center

The JIC, which serves both Fermi 2 and 3, is located approximately 12 miles west-southwest of the Fermi 3 site at the Monroe County Community College. The JIC coordinates the dissemination of information to the news media and the public during an emergency.

The JIC is the facility in which media personnel gather to receive information related to the emergency event. The JIC is also the location where approved news releases will be provided to the media for dissemination to the public.

News releases are coordinated between the EOF and JIC personnel, including representatives from Detroit Edison, the State of Michigan, Monroe and Wayne counties, the Province of Ontario, the NRC and FEMA. The JIC is operated and under the control of the State of Michigan, in accordance with Public Act 390 as a state facility. Detroit Edison is responsible for JIC logistical and administrative support and provides a representative who functions as Corporate Utility Spokesperson.

The JIC is activated at a Site Area Emergency classification or higher (or earlier, if deemed necessary). The JIC provides for:

Coordination of timely and accurate news releases for dissemination of emergency information to the news media and the general public.

Periodic media briefings to keep the news media and public updated on the emergency and provide an opportunity for questions relative to the emergency.

Control of rumors associated with the emergency.

The JIC provides work space and telephones for use of JIC personnel and also provides a bank of telephones for news media use. The JIC has communication links to the EOF, as described in Section II.F of this Plan.

The Corporate Utility Spokesperson, in conjunction with other spokespersons from offsite agencies, will be the source of public information during an emergency at the plant. The Corporate Utility Spokesperson is the primary spokesperson for Detroit Edison and has access to emergency information via interface with EOF personnel. The spokespersons will review information, coordinate all news releases, and participate in periodic media briefings to update the news media and general public concerning the emergency.

JIC staff members provide responses to media inquiries through media communicators who staff telephones that the media can call for information about an emergency. Rumors or misinformation are identified during an emergency by the media monitors and rumor control personnel who monitor media reports and public and news media calls.

Attachment 4
NRC3-13-0012
(7 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-69

Question 13.03-69:

10 CFR 50 Appendix E Section IV.A.7 requires identification of, and a description of the assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including hostile action at the site. The mark up to be inserted, at the bottom of page II-18 of the Emergency plan, states:

> *"Fermi 3 Emergency Plan implementing procedures or letters of agreement (LOAs) with ORO organizations identify ORO resource availability and their applicable integration into site activities during an emergency event, including HAB events, at the Fermi site. The procedures or LOAs identify ORO resources and coordination, for potential simultaneous on-site and off-site ORO support, including coordination between security and EP resources, which may be called upon during a radiological emergency scenario involving hostile action based events at the Fermi site."*

However, the staff finds that it does not describe the title of the EPIP to contain the described information or actions to be taken if shortfalls in ORO resources are found. The staff requests that the applicant provide the title of the ORO resources and coordination EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitment for procedure changes) as well as actions to be taken should ORO resource shortfalls are found. Please also include this information in the Emergency Plan.

Response:

Fermi 3 COLA Proposed License Condition 3.1 requires that DTE execute formal Letters of Agreement (LOAs) with a number of offsite organizations which are necessary to support implementation of the Fermi 3 Emergency Plan. These LOAs will identify the specific nature of arrangements in support of emergency preparedness for Fermi 3 and the Emergency Plan shall be revised to include these LOAs after they have been executed. EP ITAAC 14.0, "Exercises and Drills," and Section N of the Fermi 3 Emergency Plan, "Exercises and Drills," include ORO participation and assessment of onsite and offsite exercise objectives (e.g., potential ORO resource shortfalls), including correction if needed.

The Emergency Plan Implementing Procedure (EPIP) entitled "Maintaining Emergency Preparedness," identifies and describes the assistance expected from appropriate offsite sources (including state, local, and federal agencies) with responsibilities for coping with emergencies, including hostile action at the site. This procedure also incorporates requirements for annual reviews of these LOAs and describes actions to be taken should changes to existing Offsite Response Organization (ORO) resources be necessary (including resource shortfalls), as described in Section II.P.3 of the Fermi 3 Emergency Plan.

This procedure is listed in Appendix 6 of the Fermi 3 Emergency Plan. As is stated in Section II.P.6 of the Fermi 3 Emergency Plan, changes to this procedure are controlled in accordance with the requirements of 10 CFR 50.54(q).

Section II.P.3 of the Fermi 3 Emergency Plan is also revised to clarify actions to be taken in the event that changes or shortfalls to ORO resources are identified. Appendix 6 of the Fermi 3

Emergency Plan is revised to identify the proper Emergency Plan sections referenced for the "Maintaining Emergency Preparedness" EPIP.

Proposed COLA Revision:

See the attached markup of the Fermi 3 Emergency Plan, Sections II.B.8, II.P.3, and Appendix 6. Please note that this markup supersedes the markup associated with Section II.B.8 submitted in letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 3 page)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

c. DOE Radiation Emergency Assistance Center/Training Site (REAC/TS)

DOE REAC/TS provides medical services and health physics support and advises on health physics aspects of situations requiring medical assistance.

d. Medical and Public Health Support

A number of private sector medical service agencies provide support for Fermi 3 emergency response activities. Section II.L of this Plan provides a description of these arrangements.

e. Other Supporting Organizations

Detroit Edison has established a mutual assistance agreement with Entergy Nuclear Palisades, L.L.C. and Indiana Michigan Power to provide support during an emergency. American Nuclear Insurers (ANI) is also available to provide insurance assistance resulting from an emergency at Fermi 3. Section II.C of this Plan provides a description of these arrangements.

8. Local Emergency Response Support

Detroit Edison has established and maintains agreements with outside support agencies who do not take part in the organizational control of the emergency and provide assistance when notified during the emergency or recovery phase. These agreements identify the emergency measures to be provided; the mutually accepted criteria for implementation; and the arrangements for information exchange. The support agencies are described in Section II.L of this Plan and are available to provide the following services:

Law enforcement

Fire protection

Ambulance (medical transport)

Medical and hospital support.

Section II.L of this Plan provides a description of the arrangements for medical support services, including hospital and ambulance support.

Appendix 2 of this Plan lists certification letters for organizations providing the required service.

Fermi 3 Emergency Plan Implementing Procedure, “Maintaining Emergency Preparedness,” and Letters of Agreement (LOAs) with Offsite Response Organizations (OROs) identify and describe ORO resource availability and their applicable integration into site activities during an emergency event, including hostile action at the Fermi site. The procedure and LOAs identify ORO resources and coordination, for potential simultaneous on-site and off-site ORO support, including coordination between security and EP resources, which may be called upon during a radiological emergency scenario involving hostile action based events at the Fermi site. If changes or shortfalls in ORO resources are identified as result of periodic reviews required in Section II.P.3 or by other means (e.g., drill or exercise deficiencies), arrangements for additional or alternate resources are made and the LOAs and EPIP are updated as needed.

P. Responsibility for the Planning Effort

This section describes responsibilities associated with maintaining the Emergency Preparedness Program, including the development, review and distribution of the Emergency Plan. This section also outlines the criteria for ensuring that personnel responsible for the emergency planning effort are trained appropriate to their duties and responsibilities.

1. Training

In order to support an effective implementation of the emergency preparedness effort, Detroit Edison implements a process to provide training for the Emergency Preparedness staff consistent with applicable regulatory requirements and guidance; license conditions; other commitments; and accepted good practices. Training may include formal education, professional seminars, plant specific training, industry meetings, and other activities and forums that provide for an exchange of pertinent information.

2. Responsibility for Radiological Emergency Response Planning

The Chief Nuclear Officer is responsible for the safe and reliable operation of the Fermi 3 Plant. The Manager, Licensing has overall authority and responsibility for Emergency Preparedness (EP) for Detroit Edison; for issuance and control of the Emergency Plan; and activities associated with emergency preparedness.

The Supervisor, who reports to the Manager, Licensing is designated as the Emergency Planning Coordinator and is responsible for developing and updating the Emergency Plan and implementing and administrative procedures which support the Plan. The Supervisor-Emergency Preparedness also coordinates the development and revision of the Plan and procedures with other response organizations.

The Supervisor-Emergency Preparedness in conjunction with Nuclear Training, is responsible for ensuring that all ERO personnel complete training in emergency preparedness.

The Supervisor-Emergency Preparedness is responsible for the training of individuals responsible for the planning effort.

3. Plan Reviews and Updates

The Supervisor- Emergency Preparedness is responsible for conducting or coordinating an annual review of the Plan to ensure that the Plan and its supporting agreements are current.

Changes to the Plan are recommended based on the following considerations:

a. Issues identified during training, audits, assessments, drills, exercise emergency events

b. Changes in the Detroit Edison or plant organization.

c. Changes in the function, organization, or capabilities of offsite support agen

If changes to the supporting agreements (i.e., LOAs) are identified, arrangements for additional or alternate resources are made and the supporting agreements are updated.

(e.g., shortfalls in ORO resources)

Emergency Plan Implementing and Supporting Procedures (Typical List) and Procedure Cross-Reference to Plan

Implementing Procedures	Affected Sections of Plan
Emergency Classification	Section D
Notifications/Communications	Sections E, F
Protective Action Recommendations	Section J
Dose Assessment Methodology	Section I, Appendix 4
Onsite/Offsite Radiological Monitoring	Section I
Core Damage Assessment	Section I
Radiological Exposure Control	Section K
Evacuation and Accountability	Section J, Appendix 5
Medical Response	Sections B, L
Recovery and Reentry	Section M
Technical Support Center Activation and Operation	Sections A, B, H
Operational Support Center Activation and Operation	Sections A, B, H
Emergency Operations Facility Activation and Operation	Sections A, B, H
Joint Information Center Activation and Operation	Sections B, G, H
Administrative Procedures	
Maintaining Emergency Preparedness	Section P
Emergency Response Facilities and Equipment	Sections B, H, I
Drills and Exercises	Section N
Radiological Emergency Response Training	Section O
Public Information	Section G
Emergency Preparedness Telephone Directory	Sections E, P

Attachment 5
NRC3-13-0012
(4 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-70

NRC RAI 13.03-70

10 CFR 50 Appendix E Section IV.I requires emergency plans to contain onsite protective actions during hostile action. The mark up to be inserted, at the bottom of page II-87 of the Emergency plan, states; "Emergency Plan implementing procedures describe Fermi 3 onsite protective actions for site personnel and onsite emergency responders from HAB and other events." The staff requests for the applicant to provide the title of the Protective Actions for Onsite Personnel EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitments for procedure changes). Please include this information in the Emergency Plan.

Response

The Emergency Plan Implementing Procedure that specifies the requirements for onsite protective actions is entitled "Evacuation and Accountability." This procedure is listed in Appendix 6 of the Fermi 3 Emergency Plan.

As is stated in Section II.P.6 of the Fermi 3 Emergency Plan, changes to this procedure are controlled in accordance with the requirements of 10 CFR 50.54(q).

Proposed COLA Revision

See attached markup to Fermi 3 Emergency Plan, Sections II.J.5 and II.J.6. Please note that this markup supersedes the markup associated with these sections submitted in letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 1 page)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

monitoring and decontamination is performed using the techniques described in plant radiation protection procedures; and vehicle monitoring and decontamination is described in emergency plan implementing procedures.

4. Non-essential Personnel Evacuation and Decontamination

In the event of a Site Area Emergency or General Emergency, Detroit Edison evacuates non-essential personnel (i.e., personnel who do not have an emergency response assignment) consistent with the provisions of Section II.J.2 of this Plan. Appropriate equipment and supplies are provided from the facility to facilitate contamination monitoring and decontamination, if needed.

5. Personnel Accountability

Detroit Edison provides the capability to account for all individuals within the Protected Area and to determine the identities of any missing individuals within 30 minutes following declaration of a Site Area Emergency or General Emergency (or Alert emergency declaration if deemed appropriate). The purpose of accountability is to determine the locations of all personnel inside the Protected Area.

As individuals exit the Protected Area, they leave their identification badges with Nuclear Security personnel. Security will begin the accountability process using either the security computer system or by visual inspection using the badge exchange system and report accountability results to the Emergency Director.

Once established, accountability within the Protected Area is maintained throughout the course of the event, unless specifically terminated by the Emergency Director.

Emergency ~~plan implementing procedures describe the~~ accountability process which is consistent with the requirements of the Fermi 3 Security Plan.

Plan Implementing Procedure, "Evacuation and Accountability," describes

6. Protective Measures

Adequate supplies of radiation protection equipment are maintained for personnel remaining in or entering the Protected Area or Emergency Response Facilities (ERFs), including respiratory protection equipment, protective clothing; and radioprotective drugs. This emergency equipment is listed, maintained, and inspected in accordance with radiation protection procedures.

The Onsite Medical Facility maintains adequate amounts of potassium iodide (KI) to support the onsite ERO for emergency situations, as determined and authorized by the Emergency Director. Onsite supplies of protective clothing and respiratory protection equipment may be augmented by that provided by off-site responders, such as firefighters responding to the site.

In the event of a hostile attack against the site, conditions may dictate initiation of protective measures other than personnel assembly, accountability and evacuation.

Emergency Plan Implementing Procedure, "Evacuation and Accountability," describes the Fermi 3 onsite protective actions for site personnel and onsite emergency responders for hostile action and other events.

Attachment 6
NRC3-13-0012
(5 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-71

NRC RAI 13.03-71

10 CFR 50 Appendix E Section IV.F.2 requires each licensee to submit exercise scenarios under § 50.4 at least 60 days before use in an exercise. Element #6 "Challenging Drills and Exercises" insert #3 to be added to the Emergency plan, states:

> *"Scenarios for full participation or biennial exercises are submitted for NRC review and verification at least 60 days prior to the planned exercise. Emergency Plan implementing procedures describe submittal of exercise scenarios to the NRC as well as conformance with the eight year cycle and specific scenario requirements."*

The staff request for the applicant to provide the title of the NRC exercise scenario submittal and eight year exercise cycle requirements conformance EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitments for procedure changes). Please include this information in the Emergency Plan.

Response

The Emergency Plan implementing procedure that specifies the requirements for exercise scenarios is entitled "Drills and Exercises." This procedure is listed in Appendix 6 of the Fermi 3 Emergency Plan.

As is stated in Section II.P.6 of the Fermi 3 Emergency Plan, changes to this procedure are controlled in accordance with the requirements of 10 CFR 50.54(q).

Proposed COLA Revision

See attached markup to Fermi 3 Emergency Plan, Section II.N.1. Please note that this markup supersedes the markup associated with these sections submitted in DTE Electric letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

N. Exercises and Drills

This section describes the program of exercises and drills conducted to practice, test, and evaluate the adequacy of the emergency preparedness program, including facilities, equipment, procedures, communication links, actions of ERO personnel, and coordination between Fermi 3 and offsite emergency response organizations. Any identified drill/exercise deficiencies are evaluated and corrected. Details for conduct of drills and exercises are described in emergency plan administrative procedures.

1. Exercises

An exercise is an event that tests the integrated capability of a major portion of the basic elements existing within emergency preparedness plans and organizations. Exercises are conducted in accordance with NRC and FEMA rules (e.g.,10 CFR 50.47(b)(14) and 44 CFR 350.9).

a. Exercise Scope and Frequency

an 8

an 8

Insert 1

An emergency (biennial) exercise will be conducted at least every two (2) years. The exercise scenarios will be varied from exercise to exercise such that major elements of the plans and emergency organizations are tested within ~~a~~ 6-year period. One exercise shall start between 6:00 p.m. and 4:00 a.m. within ~~a~~ 6-year period. Exercises may be announced or unannounced and conducted under various weather conditions. The site will demonstrate emergency response to a security-based threat at least once within ~~a~~ 6-year period.

Insert 2

an 8

b. Exercise Scenarios and Participation

The State of Michigan Emergency Management Plan delineates the frequency in which the state will participate in an exercise with Detroit Edison. This participation may be either full or partial depending on the objectives of the exercise and the degree to which the state and local plans will be tested.

Full participation exercises will include appropriate offsite state, county, and provincial authorities and Fermi 3 personnel actively taking part in testing the integrated capability to adequately assess and respond to a declared emergency at the plant. Additionally, full participation exercises will include testing the major observable portions of the onsite and offsite emergency plans and mobilization of state, local, provincial, and Fermi 3 personnel and other resources in sufficient numbers to verify the capability to respond to an accident scenario. Some of the offsite response actions may be provided for evaluation in an out-of-sequence manner.

Exercises involving participation by offsite agencies will simulate an emergency that may result in the release of radioactivity to the offsite environs or the threat of such a release, sufficient in magnitude to warrant a response by offsite authorities.

an 8

Ingestion Pathway Exercises are conducted on ~~a~~ 6-year cycle. Fermi 3 participates on a rotating basis with the other fixed nuclear facilities in the State of Michigan. These

Insert 1

, including but not limited to; hostile action events, minimal or no radiological release, initial or rapid escalation to a Site Area Emergency or General Emergency, implementation of 10 CFR 50.54(hh)(2) mitigation strategies, and integration of offsite and onsite resources.

Insert 2

Scenarios for full participation or biennial exercises are submitted for NRC review and verification at least 60 days prior to the planned exercise. Emergency Plan Implementing Procedure, “Drills and Exercises,” describes submittal of exercise scenarios to the NRC as well as conformance with the 8-year cycle and specific scenario requirements.

Attachment 7
NRC3-13-0012
(5 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-72

NRC RAI 13.03-72

Appendix 7 "NUREG-0654 Cross-Reference" provides reference (Criteria H.2. page A7-21) for the Emergency Operations Facility as being established consistent with NUREG-0696, "Functional Criteria for Emergency Response Facilities." In addition, regulatory guidance provided in NUREG-0696, Subsection 4.3, "Staffing and Training," as enhanced by NSIR/DPR-ISG-01, states in part that prior to initial operation of a consolidated EOF and in at least one drill or exercise per exercise cycle thereafter, the EOF staff will demonstrate the ability to perform the additional consolidated EOF functions described in the emergency plan and revised guidance. The staff requests for the applicant to revise the emergency response plan to describe the EOF staff demonstration of its ability to perform their consolidated EOF functions established in the emergency plan and regulatory guidance in at least one drill or exercise per exercise cycle thereafter or, provide an acceptable justification for exclusion.

Response

Prior to initial operation of the Fermi Emergency Operations Facility (EOF) and at least once each subsequent 8-year exercise cycle, a drill or exercise will be conducted that demonstrates the Fermi 2 and Fermi 3 Emergency Response Organizations (EROs) can perform the consolidated Fermi 2 and Fermi 3 EOF functions described in the emergency plans. Section II.N.2.f of the Fermi 3 Emergency Plan will be revised to include this commitment.

Proposed COLA Revision

See the attached markup of the Fermi 3 Emergency Plan, Section II.N.2.f.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

d. Radiological Monitoring Drills

Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills include collection and analysis of sample media (such as water, vegetation, and soil from the Owner Controlled Area or nearby offsite areas and provisions for communications and record keeping. Collection of milk is demonstrated during conduct of ingestion pathway exercises.

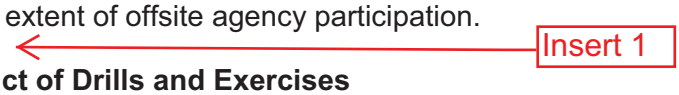
e. Radiation Protection Drills

Radiation Protection drills involving the sampling and analysis of simulated elevated radioactive airborne and liquid samples, as well as direct radiation measurements in the plant environment, shall be conducted semi-annually. These drills may be conducted in conjunction with the required biennial exercise.

f. Additional Drills

1. Additional drills will be scheduled, as necessary, to provide adequate training of personnel; provide emphasis on weak areas; and ensure an adequate level of emergency preparedness.

2. During the interval between biennial exercises, at least one (1) “off year” drill should be conducted at the plant involving principal areas of onsite emergency response capabilities. These areas include management and coordination of emergency response, accident assessment, protective action decision-making, and plant system repair and corrective action. The drill may involve no participation or limited participation by offsite agencies, although a routine offer is made to determine the extent of offsite agency participation.



3. Conduct of Drills and Exercises

Advance knowledge of a drill/exercise scenario will be kept to a minimum to allow “free play” decision making and to ensure a realistic participation by those involved.

Drill and exercise scenarios will contain, as a minimum, the following:

a. The basis objective(s) of the drill or exercise and the appropriate evaluation criteria.

b. The date(s), time period, location of the drill or exercise, and participating organizations.

c. The simulated events.

d. A list of anticipated Drill/Exercise Performance (DEP) opportunities including classification, notifications, and protective action recommendations.

e. A time schedule of real and simulated initiating events.

f. A narrative summary describing the conduct of the drill or exercise and includes such items as simulated casualties, offsite fire department assistance, rescue of personnel,

Insert 1

3. Prior to initial operation of the Fermi Emergency Operations Facility (EOF) and at least once each subsequent 8-year exercise cycle, a drill or exercise will be conducted that demonstrates the Fermi 2 and Fermi 3 Emergency Response Organizations (EROs) can perform the consolidated Fermi 2 and Fermi 3 EOF functions described in the emergency plans.

Attachment 8
NRC3-13-0012
(6 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-73

NRC RAI 13.03-73

10 CFR 50 Appendix E Section IV.D.3 requires alert and notification capability to include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure pathway EPZ population. Section II.E.5 "Instructions to the Public in the Plume Exposure EPZ" states in part the following:

> *"The capability exists for the prompt notification of the general public within the 10-mile Plume Exposure EPZ around the Fermi 3 site. This notification capability consists of two (2) principal elements: 1) the Alert and Notification System (ANS) and 2) the EAS radio and television stations."*

The staff requests for the applicant to revise the emergency response plan description of the required ANS capabilities to be consistent with 10 CFR 50 Appendix E.IV. D.3 or, provide an acceptable justification for exclusion.

Response

The text cited above describes the "primary method of alerting and notification" described in 10 CFR 50, Appendix E, Section IV.D.3. The "backup method" required by Section IV.D.3 was addressed in letter NRC3-12-0029, dated December 18, 2012. This letter contained a brief description of the backup method and proposed a revision to the Fermi 3 Emergency Plan. However, the following additional information is provided.

The backup Alert and Notification System (ANS) is described as a cloud-based mass notification service that can send emergency messages to geo-coded (by address) telephones throughout the Michigan portion of the Fermi 10-mile Emergency Planning Zone (EPZ). A summary of the features of the system is provided below:

- The backup ANS is operated by the Monroe County, Michigan Emergency Management Division (EMD), but also provides coverage to those portions of the Fermi 10-mile EPZ located in Wayne County, Michigan.
- The backup ANS can be activated at the Monroe County EMD office or the Fermi Emergency Operations Facility.
- The backup ANS geo-coding will allow the system to have the capability of making notifications in the vicinity of a particular siren or sirens, or in a specific evacuation zone in the Fermi EPZ.
- The backup ANS is capable of completing notifications throughout the Fermi 10-mile EPZ within the target time of 45 minutes.

The ANS design report describing the system was provided to FEMA by the State of Michigan on June 1, 2012, for review. FEMA provided its approval of the ANS, contingent on completion of a four month initial testing program, on February 12, 2013. The backup ANS is currently in operation.

Proposed COLA Revision:

See attached markup to Fermi 3 Emergency Plan, Section II.E.5. Please note that this markup supersedes the markup associated with this section submitted in letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

data; any recommended protective action recommendations; and potentially affected population/areas.

As additional information describing the emergency situation and local conditions becomes available, follow-up messages containing more detail than the initial notification will be provided.

Approval of the notification message, transmittal date and time, and offsite agencies contacted should be recorded either on the notification form or in a logbook.

3. Follow-Up Messages To Offsite Authorities

For all emergency classifications, follow-up messages from the plant to affected state and local authorities will be issued to provide further description of the emergency. The following information would be supplied to the extent the information is available and appropriate:

a. Plant contact information (location, date, time);

b. Meteorological data (wind speed and direction, stability class, and precipitation);

c. Reactor information;

d. Plant status/additional information;

e. Release/offsite dose data; calculated dose rates; and projected dose

f. Measured offsite radiation levels.

4. Disseminating Information To The Affected Public

The state and county emergency response plans describe procedures for state and county officials to make a public notification decision promptly after notification from Fermi 3 of an emergency. The system of disseminating information to the public includes notification by pre-scripted messages through appropriate broadcast media such as the EAS.

5. Instructions to the Public in the Plume Exposure EPZ

The primary

The capability exists for the prompt notification of the general public within the 10-mile Plume Exposure EPZ around the Fermi 3 site. ~~This~~ notification capability consists of two (2) principal elements: 1) the Alert and Notification System (ANS) and 2) the EAS radio and television stations.

The ANS consists of fixed sirens located throughout the 10-mile EPZ. The locations of the sirens were determined by a comprehensive engineering study which addressed population density, geographical features, siren output, and mounting heights of sirens to ensure coverage of the EPZ. Activation of the ANS sirens, when directed by county officials, will alert the population to tune to a local radio or television station affiliated with the EAS for detailed information on the emergency. Local and state actions are then instituted in accordance with the Michigan Emergency Management Plan (MEMP) to assure the implementation of appropriate protective measures.

The EAS is a network of local radio and television stations prepared to transmit or relay emergency information and instructions from the county officials to the general public.

The counties will initiate activation of the ANS upon direction by state or local authorities and as specified in existing agreements concerning system activation. The siren system is designed to be operationally segregated by county boundary within the 10-mile radius. The ANS signal will be a three (3) minute steady signal. Upon determination of the need for public notification, the ANS can be activated within 15 minutes.

To ensure the ANS is maintained in an operational state of readiness, the local agencies have agreed to a testing frequency for the system by sounding the sirens on a periodic basis that meets or exceeds FEMA guidance. Reports of inoperable equipment are provided to maintenance personnel designated by the Fermi 3 Emergency Preparedness Department. The goal of the testing and maintenance program is to identify inoperable equipment in a timely manner and to restore equipment to a functional status commensurate with FEMA operability requirements, as referenced in FEMA-REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants" (Ref. 5). In addition to the routine test and repair program, preventive maintenance of the ANS will be performed on an annual basis, as described in plant procedures.

6. Written Messages to the Public

The State of Michigan has developed EAS messages for the public which are consistent with the emergency classification scheme. These draft messages are included as part of the State of Michigan EAS Plan and contain instructions with regard to specific protective actions to be taken by occupants and visitors of affected areas. Detroit Edison will provide offsite authorities with supporting information for messages to the public. Messages may include instructions such as: take shelter and go indoors; close windows and doors; turn off ventilation systems; directions for evacuation; directions to stay tuned to specific stations for further information; ad-hoc respiratory protection (for example, handkerchief over mouth or thyroid blocking). The state and/or counties control the distribution of radio protective drugs to the general public.

County emergency response plans include a backup method to notify the general public in the event the primary methods of alerting and notification are unavailable. The backup ANS is a cloud-based mass notification service that can send emergency messages to geo-coded (by address) telephones throughout the Fermi 10-mile EPZ.

Attachment 9
NRC3-13-0012
(5 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-74

NRC RAI 13.03-74

10 CFR 50 Appendix E Section IV. E. 8.c.3 requires the capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site. The DTE response to Element #9 "Emergency Operations Facility - Performance-Based Approach" includes, in part, the following:

> *"Additionally, in the unlikely event that emergencies are declared simultaneously at Fermi 2 and Fermi 3, a single Emergency Director is designated from onsite shift management, in accordance with emergency plan implementing procedures."*

The staff requests for the applicant to provide the title of the coordination with Fermi 2 and EOF simultaneous Fermi 2 & 3 event support capabilities EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitment for procedure changes). Please include this information in the Emergency Plan.

Response

The duties and responsibilities described in the cited section of the Fermi 3 Emergency Plan, with regard to the coordination of emergency response activities for a simultaneous Fermi 2 and Fermi 3 event, were reviewed and were determined to be more appropriately performed by a single Emergency Officer in the Fermi Emergency Operations Facility (EOF). These duties and responsibilities had been previously assigned to a single designated Emergency Director in previous revisions of the Fermi 3 Emergency Plan and are revised in the Proposed COLA Revision described below.

Duties and responsibilities for the Emergency Officer are delineated in the Emergency Plan Implementing Procedure entitled, "Emergency Operations Facility Activation and Operation," and include those related to the coordination of emergency response activities for a simultaneous Fermi 2 and Fermi 3 event. This procedure is listed in Appendix 6 of the Fermi 3 Emergency Plan.

As is stated in Section II.P.6 of the Fermi 3 Emergency Plan, changes to these procedures are controlled in accordance with the requirements of 10 CFR 50.54(q).

Proposed COLA Revision:

See attached markup to Fermi 3 Emergency Plan, Section II.A.1. Please note that this markup supersedes the markup associated with this section submitted in letter NRC3-12-0029, dated December 18, 2012.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

Table II.A-1 summarizes the responsibilities and activities of the emergency response facilities under the various emergency classifications.

Coordination with Fermi 2

Detroit Edison has identified the need to coordinate emergency response actions taken at Fermi 3 with Fermi 2. As noted previously in this section, the Emergency Director is responsible for initiating notifications to affected plant staff, which may include the Fermi 2 Control Room. The notification and subsequent communications are intended to advise Fermi 2 staff of any actions they may be required to take.

~~Additionally, in the unlikely event that emergencies are declared simultaneously at Fermi 2 and Fermi 3, a single Emergency Director is designated from onsite shift management, in accordance with emergency plan implementing procedures. The Emergency Director performs those duties described in this Plan, as well as those described in the Fermi 2 Emergency Plan, and coordinates activities between the Technical Support Centers and Operational Support Centers.~~

Insert 1

State Government Response

Participating governmental agencies whose plans are interrelated with this plan include the following:

State of Michigan Emergency Management Division, Department of State Police - Has overall responsibility for planning, command and control, and overall coordination of the activities of state and local government agencies in the event of a radiological emergency.

State of Michigan Department of Environmental Quality - Has overall responsibility for the lead technical response role in the event of a radiological emergency, including environmental monitoring and exposure control.

State of Michigan Department of Community Health - Has overall responsibility to protect the public health and safety of the general public from the hazards of radiation.

State of Michigan Response

The Governor of the State of Michigan has complete authority over offsite emergency operations and decision making when a radiological emergency occurs at Fermi 3, and a "State of Emergency" or a "State of Disaster" is declared under the provisions of Act 390 of the Public Acts of 1976. Other responsibilities include authorizing use of state resources and requesting assistance from federal government agencies.

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

Insert 1

Additionally, in the unlikely event that emergencies are declared simultaneously at Fermi 2 and Fermi 3, a single Emergency Officer is designated from DTE Energy senior management, in accordance with Emergency Plan Implementing Procedure, “Emergency Operations Facility Activation and Operation.” The Emergency Officer performs those duties described in this Plan, as well as those described in the Fermi 2 Emergency Plan, and coordinates emergency response activities between the Fermi 2 and Fermi 3 Emergency Response Organizations.

Attachment 10
NRC3-13-0012
(7 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-75

NRC RAI 13.03-75

10 CFR 50 Appendix E Section IV. E.8.c.3 requires the capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site. The DTE emergency plan section II.H.1.d. Emergency Operations Facility (EOF) contains a description of the EOF design and capabilities, two of which are:

- *The EOF, which serves both Fermi 2 and 3, is the location where the Emergency Officer will direct a staff in overall company activities involved with an emergency. The EOF is located on the first floor of the Nuclear Operations Center (NOC) and is approximately 5,000 feet southwest of Fermi 3 on owner-controlled property. Supporting facilities at the NOC include the plant simulator, plant training offices, training classrooms, and space for news reporters; and*
- *It is of sufficient size to accommodate about 40 people, including 25 Detroit Edison personnel and nine (9) NRC representatives. The EOF contains available workspace for representatives from offsite governmental agencies (State of Michigan, Monroe and Wayne counties, and the Province of Ontario) who may dispatch representatives as they deem necessary to support emergency response activities.*

The DTE emergency plan describes sharing the available EOF space with the Fermi 2 ERO. Please specify if the available EOF space has been evaluated for an event that would activate both the Fermi 2 & 3 EROs to ensure there is sufficient space to accommodate the additional personnel required by both EROs. The staff requests for the applicant to provide documentation of EOF available space evaluation and revise emergency plan EOF description to include the capability to support both Fermi 2 & 3 ERO teams in the event of a site event activating both units EROs.

Response

The Fermi 2 Emergency Response Organization (ERO) assigned to report to the Emergency Operations Facility (EOF) or the Alternate EOF, if used, is as follows:

Emergency Officer	1
Nuclear Operations Advisor	1
Radiation Protection Coordinator	2
EOF Administrator	2
Security Advisor	1
Public Information Coordinator	1
Dose Assessor	1
EOF Laboratory Technician	1
Radiological Emergency Team Coordinator	1
Radiological Emergency Team Members	6
Communicators	2
Status Board Clerks	2
Administrative Support Personnel	1

Note that the EOF Laboratory Technician performs his duties in the EOF Laboratory. The Radiological Emergency Team Members are dispatched during offsite releases and working space in the EOF is not provided; however, there is space provided for team member assembly. Therefore, the fully staffed Fermi 2 ERO assigned to the EOF/Alternate EOF has 15 people.

The size and composition of the Fermi 3 ERO assigned to report to the EOF or the Alternate EOF is based on the organization chart contained in Figure II.B-4 of the Fermi 3 Emergency Plan and Fermi 2 experience in performing the EOF functions. The Fermi 3 organization is as follows:

Emergency Officer	1
Nuclear Operations Advisor	1
Radiation Protection Coordinator	2
EOF Administrator	2
Security Advisor	1
Public Information Coordinator	1
Dose Assessor	1
EOF Laboratory Technician	1
Radiological Emergency Team Coordinator	1
Radiological Emergency Team Members	6
Communicators	2
Status Board Clerks	2
Administrative Support Personnel	1

As is the case for the Fermi 2 ERO, the EOF Laboratory Technician performs his duties in the EOF Laboratory and the Radiological Emergency Team Members are dispatched during offsite releases. Thus, working space is not provided for these ERO members. Therefore, the fully staffed Fermi 3 ERO assigned to the EOF/Alternate EOF has 15 people.

As described in the response to RAI 13.03-74, DTE Electric intends to designate a single Emergency Officer for simultaneous events at Fermi 2 and Fermi 3. Therefore, the combined ERO for Fermi 2 and Fermi 3 would consist of 29 people. It is expected that detailed task analyses and experience may allow further reductions in staffing for some positions (e.g., EOF Administrator, Security Advisor, Administrative Support Personnel, Status Board Clerks) in the future. However, for purposes of this discussion, no reduction in staffing is considered.

Working space is also provided for 4 representatives of the state and local government agencies. Representatives from the State of Michigan, Monroe and Wayne Counties, and the Province of Ontario can be accommodated, as necessary. Based on the discussion in NSIR/DPR-ISG-01, Revision 0, and Fermi 2 experience, it is assumed that up to 10 representatives from federal agencies (NRC and FEMA) may need accommodations.

Therefore, the occupancy to be accommodated in the EOF/Alternate EOF for a simultaneous Fermi 2 and Fermi 3 event is 43 people. Assuming 75 square feet of working space per person, the EOF and Alternate EOF must have at least 3,225 square feet of usable space.

The EOF contains more than 3,225 square feet of usable floor space and thus, can accommodate the staffing levels for a simultaneous event. The EOF includes a separate conference room designated for use by representatives of federal agencies.

Proposed COLA Revision:

See the attached markup of the Fermi 3 Emergency Plan, Section II.H.1.d and the Fermi 3 COLA, Part 10, Section 2.3, Table 2.3-1, Item 8.2.1.

Markup of Fermi 3 COLA
(following 2 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

d. Emergency Operations Facility (EOF)

The EOF, which serves both Fermi 2 and 3, is the location where the Emergency Officer will direct a staff in overall company activities involved with an emergency. The EOF is located on the first floor of the Nuclear Operations Center (NOC) and is approximately 5,000 feet southwest of Fermi 3 on owner-controlled property. Supporting facilities at the NOC include the plant simulator, plant training offices, training classrooms, and space for news reporters.

The EOF is activated at an Alert level emergency or higher. The EOF provides for:

Management of the overall emergency response;

Performance of non-delegable functions when in command and control;

Offsite protective actions;

Offsite radiological monitoring;

Environmental sample analysis;

Public information;

Communications (Detroit Edison and state/counties)

The EOF was designed with the following considerations:

The location provides optimum functional and availability characteristics for carrying out overall strategic direction of Fermi 3 onsite and offsite support operations; determination of public protective actions to be recommended to offsite officials, and coordination of Federal, State and county agencies.

10

43

29

It is of ~~sufficient~~ size to accommodate ~~about 40 people~~, including ~~25~~ Detroit Edison personnel and ~~nine (9) NRC~~ representatives. The EOF contains available workspace for representatives from offsite governmental agencies (State of Michigan, Monroe and Wayne counties, and the Province of Ontario) who may dispatch representatives as they deem necessary to support emergency response activities.

from federal agencies (NRC and FEMA).

The EOF can accomodate both Fermi 2 and Fermi 3 EROs simultaneously, if necessary.

The EOF has been designed for habitability in the event of a postulated accidental radioactive release from Fermi 3. 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 (Ref. 1).

The EOF contains an extensive communications system which includes communications to the TSC, offsite Radiological Environmental Teams, the NRC, the offsite Emergency Operations Centers (EOCs), and intrafacility communications. In addition, the EOF has facsimile, computer transmission, and electronic transfer capabilities, as described in Section II.F of this Plan.

Table 2.3-1
ITAAC For Emergency Planning

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
	8.2 The licensee has established an emergency operations facility (EOF). [H.2] ITAAC Element addressed in: COL EP II.H.1.d	8.2 An inspection of the EOF will be performed.	8.2.1 A report exists that confirms the EOF is greater than ~~279~~ square meters (~~3000~~ square feet). 8.2.2 The EOF includes shielding with a protection factor of 20. 8.2.3 The EOF HVAC system includes the capability to isolate and filter outside air with HEPA filters. 8.2.4 The EOF includes portable airborne radioactivity and area radiation monitors with local alarm capability. 8.2.5 Voice transmission and reception have been accomplished between the EOF and TSC. 8.2.6 Voice transmission and reception have been accomplished between the EOF, the control room, TSC, and the following organizations: NRC, the State of Michigan, Monroe County, and Wayne County. 8.2.7 Acquisition, display and evaluation of radiological, meteorological, and plant system data specified in emergency plan implementing procedure, “Dose Assessment Methodology,” needed to determine offsite protective action recommendations has been accomplished at the EOF.
	8.3 The means exists to initiate emergency measures, consistent with Appendix 1 of NUREG-0654/FEMA-REP-1, Rev. 1. [H.5] ITAAC Element addressed in: COL EP II.H.4	8.3 An analysis of emergency plan implementing procedures will be performed.	8.3 The means to initiate emergency measures, described in section II.H.4 of the Fermi 3 Combined License Application Emergency Plan are addressed in emergency plan implementing procedures, “Emergency Classification.”

300

3,225

Attachment 11
NRC3-13-0012
(4 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-76

NRC RAI 13.03-76

10 CFR 50 Appendix E Section IV.E.8.c provides performance-based criteria applicable to EOFs. NUREG-0696, Section 4, "Emergency Operations Facility," provides criteria for EOF functions, location, structure, habitability, and instrumentation, along with other considerations for EOF capabilities. One of the described functions is staffing and activation of the facility within time frames and at emergency classification levels defined in the licensee emergency plan. Section II.B.1 "Onsite Emergency Organization" (page II-13) of the DTE emergency response plan contains the following description of ERF staffing efforts:

> *"Table II.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 (Ref. 11) as a desirable goal for facility staffing."*

The staff finds the description of establishing "a desirable goal for facility staffing" is not in accordance with the ERF staffing capability guidance in NUREG-0654/FEMA-REP-1, NUREG-0737Supplement 1 or NUREG-0696. The staff requests for the applicant to revise the emergency response plan description of ERF staffing capabilities to be consistent with guidance in NUREG-0654/FEMA-REP-1 NUREG-0737 Supplement 1 and NUREG-0696, or provide an acceptable justification for difference.

Response

Section II.B.1 of the Fermi 3 Emergency Plan will be revised to remove the text "as a desirable goal for facility staffing" from the paragraph cited above.

Proposed COLA Revision

See the attached markup of the Fermi 3 Emergency Plan, Section II.B.1.

Markup of Fermi 3 COLA
(following 1 page)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

B. Emergency Response Organization

This section describes the Fermi 3 ERO, including key positions and associated responsibilities. This section outlines the staffing requirements which provide initial emergency response actions and provisions for timely augmentation of onshift personnel, when required. The following Emergency Plan Implementing Procedures, as listed in Appendix 6 of this plan, provide additional details regarding ERO position descriptions, responsibilities, and major tasks of ERO staffing required for initial emergency response actions and provisions for timely augmentation:

- Notifications/Communications
- Technical Support Center Activation and Operation
- Operational Support Center Activation and Operation
- Emergency Operations Center Activation and Operation
- Joint Information Center Activation and Operation

1. Onsite Emergency Organization

The minimum staff required to conduct routine and immediate emergency operations is maintained at the plant consistent with 10 CFR 50.54(m) and the Fermi 3 Technical Specifications. Section 13.1 of the Final Safety Analysis Report provides the details of the normal plant organization, including reporting relationships.

Upon declaration of an emergency, designated members of the normal staff complement fulfill corresponding roles within the ERO. For example, Radiation Protection personnel participate in radiation protection activities; Security personnel perform Security activities; Engineering personnel focus on plant assessment and technical support for operations; and Operations personnel focus on plant operations.

Upon declaration of an emergency, the Shift Manager will assume the role and responsibilities of Emergency Director. The Shift Manager and Operations staff will evaluate plant status and the degree of safety degradation, based on plant instrumentation and reports from technical personnel making actual examination of equipment.

Onshift personnel are considered to be immediately available to respond to the emergency situation and initiate emergency response actions. The normal complement of shift personnel is augmented according to the emergency classification. The full ERO will be activated at an Alert, Site Area Emergency, or General Emergency. Table II.B-1 describes minimum onshift staffing requirements and augmented staffing according to functional areas, Emergency Response Facility (ERF), and emergency classification. Table II.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 (Ref. 11) ~~as a desirable goal for facility staffing~~.

Figures II.B-1 through II.B-4 describe the ERO in the Control Room, OSC, TSC, and EOF.

Attachment 12
NRC3-13-0012
(4 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-77

NRC RAI 13.03-77

10CFR 50.47(b)(10) and Part 50 Appendix E Section IV states the following:

> *"Nuclear power reactor licensees shall use NRC approved evacuation time estimates (ETEs) and updates to the ETEs in the formulation of protective action recommendations and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies."*

The DTE emergency plan section II.J.7 "Protective Action Recommendations and Bases" in part states the following, concerning basis for developing a PAR, "Public Protective Action Recommendations (PARs) are based on plant conditions, estimated offsite doses, or some combination of both." The finds that this is not in accordance with 10 CFR 50.47(b)(10) or Appendix E Section IV.3. The staff requests for the applicant to revise the emergency response plan description of PAR development to be consistent with 10 CFR 50 Appendix E.IV.3 or, provide an acceptable justification for the difference.

Response

Section II.J.7 of the Fermi 3 Emergency Plan will be revised to be consistent with 10 CFR 50, Appendix E, Section IV.3 with regard to the use of Evacuation Time Estimate (ETE) information in the development of Protective Action Recommendations (PARs).

Proposed COLA Revision:

See attached markup to Fermi 3 Emergency Plan, Section II.J.7.

Markup of Fermi 3 COLA
(following 1 page)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

The Emergency Director makes decisions regarding appropriate protective measures based on evaluation of site conditions, including input from the Nuclear Security. If, based on the judgment of the Emergency Director, personnel assembly, accountability, and evacuation may result in undue hazards to site personnel, the Emergency Director may direct other protective measures, including:

Evacuation of personnel from areas and buildings perceived as high-value targets

Site evacuation by opening, while continuing to defend, security gates

Dispersal of key personnel

Onsite sheltering

Staging of ERO personnel in alternate locations pending restoration of safe conditions

Implementation of accountability measures following restoration of safe conditions

7. Protective Action Recommendations and Bases

In a radiological emergency, an estimate must be made of the radiation dose that affected population groups may potentially receive. A protective action is taken to avoid or reduce the effects of the projected radiation dose. The Protective Action Guideline (PAG) is a predetermined level of the projected dose to individuals in the population at which protective actions are warranted.

Detroit Edison recommends protective actions to the State of Michigan and Monroe and Wayne county and governmental agencies, as described in emergency plan implementing procedures. The State of Michigan, in conjunction with Monroe and Wayne counties, is responsible for implementation of protective actions for the general public. The State of Michigan, Monroe County, and Wayne County emergency management plans describe the provisions to implement measures for the Plume Exposure Pathway EPZ for state and local emergency response personnel, and the general public. Provisions include the following:

Maps showing evacuation routes/areas, congregate care centers, and shelter areas.

Maps showing population distribution around the Fermi 3 site.

Methods for notifying all segments of the transient and resident population.

Means for protecting handicapped, institutionalized, or confined individuals whose mobility may be impaired.

Methods for registering and monitoring evacuees at reception centers.

Means of relocation, including reception centers; access control; and evacuation routes and methods.

Methods for protecting the public from consumption of contaminated foodstuffs.

Public Protective Action Recommendations (PARs) are based on plant conditions, estimated offsite doses, or some combination of both. Detroit Edison provides PARs promptly to affected state and county government officials.

The information contained in the Evacuation Time Estimate is also used in the formulation of PARs.

Attachment 13
NRC3-13-0012
(6 pages)

Response to RAI Letter No. 83
(eRAI Tracking No. 7030)

RAI Question No. 13.03-78

NRC RAI 13.03-78

The DTE Cross Reference of Fermi 3 Emergency Plan to Other Regulations and Regulatory Documents In Accordance with Regulatory Guide 1.206 Section C.I.13.3.1 change submittal beginning on page S03-2 the Part 1, 10 CFR 50, Appendix E – Cross-Reference table begins with IV A. The staff finds that this is not in accordance with 10 CFR 50, Appendix E.IV which begins with E.IV.1 thru 7. The staff requests for the applicant to revise the emergency response plan Appendix E - Cross-Reference table to be consistent with 10 CFR 50 Appendix E.IV. 1 - 7 or, provide an acceptable justification for exclusion.

Response

The 10 CFR 50, Appendix E – Cross-Reference table is revised to include cross-reference to 10 CFR 50, Appendix E, Sections IV.1-7.

Proposed COLA Revision

See the attached markup of the Fermi 3 COLA, Part 5, Cross Reference of Fermi 3 Emergency Plan to Other Regulations and Regulatory Documents In Accordance with Regulatory Guide 1.206 Section C.I.13.3.1 Part 1,10 CFR 50, Appendix E - Cross-Reference table.

Note: Some of these references cite the proposed COLA markups in NRC3-12-0029.

Markup of Fermi 3 COLA
(following 3 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

Part 1, 10 CFR 50, Appendix E - Cross-Reference

Insert new rows IV.1 to IV.7

REGULATION	STATEMENT	E PLAN	COMMENTS
IV A.	The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensees emergency organization	II.B.1; II.B.3; II.B.4	
IV A.	and the means for notification of such individuals in the event of an emergency.	II.E.1	
IV A.1	A description of the normal plant operating organization.	II.B.1; II.B.4 Table II.B-1 Figure II.B-1	
IV A.2.a	A description of the onsite emergency response organization with a detailed discussion of: Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency.	II.A.1; II.B.1; II.B.2; II.B.3; II.B.4 Table II.B-1 Table II.B-2 Figures II.B-1 through II.B.4	
IV A.2.b	Plant staff emergency assignments;	II.B.4 Table II.B-1 Table II.B-2 Figures II.B-1 through II.B-4	
IV A.2.c	Authorities, responsibilities, and duties of an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures.	II.B.3	
IV A.3	A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization.	II.B.6	
IV A.4	Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.	Table II.B-1; Table II.B-2 II.D.1.D.i; II.E.3.h&i; II.H.10; II.I.6; II.I.9; II.J.7; Appendix 4, Radiological Monitoring and Assessment	

Insert

Part 1, 10 CFR 50, Appendix E – Cross Reference

REGULATION	STATEMENT (add to statement)	E PLAN (add to E Plan)	COMMENTS (add to comments)
IV. 1	The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, *i.e.*, organization for coping with radiological emergencies, assessment actions, activation of emergency organization, notification procedures, emergency facilities and equipment, training, maintaining emergency preparedness, recovery, and onsite protective actions during hostile action. In addition, the emergency response plans submitted by an applicant for a nuclear power reactor operating license under this part, or for an early site permit (as applicable) or combined license under 10 CFR part 52, shall contain information needed to demonstrate compliance with the standards described in § 50.47(b), and they will be evaluated against those standards.	See below, IV.2 through IV H	
IV. 2	This nuclear power reactor license applicant shall also provide an analysis of the time required to evacuate various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations, using the most recent U.S. Census Bureau data as of the date the applicant submits its application to the NRC.	Appendix 5	Complete ETE included in COLA Part 5, COLA Part 10 Section 3.7.3
IV. 3	Nuclear power reactor licensees shall use NRC approved evacuation time estimates (ETEs) and updates to the ETEs in the formulation of protective action recommendations and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.	II.J.7, II.J.8; II.P.3	Complete ETE included in COLA Part 5, COLA Part 10 Section 3.7.3
IV. 4	Within 365 days of the later of the date of the availability of the most recent decennial census data from the U.S. Census Bureau or December 23, 2011, nuclear power reactor licensees shall develop an ETE analysis using this decennial data and submit it under § 50.4 to the NRC. These licensees shall submit this ETE analysis to the NRC at least 180 days before using it to form protective action recommendations and providing it to State and local governmental authorities for use in developing offsite protective action strategies.	N/A	See Item IV.7
IV. 5	During the years between decennial censuses, nuclear power reactor licensees shall estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent US Census Bureau annual resident population estimate and State/local government population data, if available	II.P.3	

IV. 6	If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the nuclear power reactor licensee's currently NRC approved or updated ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase. The licensee shall submit the updated ETE analysis to the NRC under § 50.4 no later than 365 days after the licensee's determination that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to State and local governmental authorities for use in developing offsite protective action strategies.	II.P.3	
IV. 7	After an applicant for a combined license under part 52 of this chapter receives its license, the licensee shall conduct at least one review of any changes in the population of its EPZ at least 365 days prior to its scheduled fuel load. The licensee shall estimate EPZ permanent resident population changes using the most recent U.S. Census Bureau annual resident population estimate and State/local government population data, if available. If the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ, to increase by 25 percent or 30 minutes, whichever is less, from the licensee's currently approved ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase. The licensee shall submit the updated ETE analysis to the NRC for review under § 50.4 of this chapter no later than 365 days before the licensee's scheduled fuel load.	N/A	COLA Part 10. Section 3.7.3

Attachment 14
NRC3-13-0012
(3 pages)

Fermi 3 EP Rule Changes, Commitment Summary Table

Rule Element	Related Fermi 3 Commitment Number	Commitment	Commitment Completion Date
1. On-Shift Staffing Analysis (Part 50 Appendix E Section IV.A.9	COM ITAAC-3.7-001	(Proposed License Condition) The Licensee shall submit a detailed analysis of on-shift staffing, in accordance with the NRC endorsed version of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," Revision 0, and the licensee shall incorporate any changes to the EP needed to bring staff to the required levels, prior to of concurrent with completion of EP ITAAC 2.0 of EP ITAAC Table 2.3.1, and not less than 180 days prior to initial fuel load.	Prior to or concurrent with completion of EP ITAAC 2.0 of EP ITAAC Table 2.3.1, and no less than 180 days prior to initial fuel load.
2. Emergency Action Levels for Hostile Actions (Part 50 Appendix E Section IV.B)	COM FSAR-13.4-031	(Proposed License Condition) The Licensee shall submit a fully developed set of site-specific EALs to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EALs shall be discussed and agreed on by the state and local government authorities. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.	180 days prior to initial fuel load.
6. Challenging Drills and Exercises (10 CFR 50 Appendix E Section IV.F.2	COM EP-II.N-001	Prior to initial operation of the Fermi Emergency Operations Facility (EOF) and at least once each subsequent 8-year exercise cycle, a drill or exercise will be conducted that demonstrates the Fermi 2 and Fermi 3 Emergency Response Organizations (EROs) can perform the consolidated Fermi 2 and Fermi 3 EOF functions described in the emergency plans	Prior to initial EOF use and once every 8-year exercise cycle

10. Evacuation Time Estimate Updating (10 CFR 50.47(b)(10) and Part 50 Appendix E Section IV)	COM ITAAC-3.7-002	(Proposed License Condition) The licensee shall submit a detailed review of the Fermi 3 ETE analyses (including a review of updated population data within the Fermi 3 EPZ) at least one year prior to initial fuel load. If warranted based on this review, the licensee shall incorporate any changes into the Fermi 3 ETE and the Fermi 3 EP. The licensee shall submit the ETE review and any applicable ETE and EP changes to the NRC no later than one year prior to initial fuel load.	One year prior to initial fuel load.

Attachment 15
NRC3-13-0012
(4 pages)

Fermi 3 EP Rule Change Analysis and Fermi 3 COLA Impacts Summary

Fermi 3 EP Rule Change Analysis and Fermi 3 COLA Impacts Summary

Rule Element	Fermi 3 Part 5 EP (Other COLA Parts) Change Required	Fermi 3 Part 10 Change Required	Existing Fermi 3 Commitment	New Fermi 3 Commitment
1. On-Shift Staffing Analysis (Part 50 Appendix E Section IV.A.9)	No EP Changes (Update FSAR Table 1.6-201)	Proposed License Condition Section 3.7 "Emergency Planning Actions"	none	COM ITAAC-3.7-001 (Proposed License Condition)
2. Emergency Action Levels for Hostile Actions (Part 50 Appendix E Section IV.B)	none	none	COM FSAR-13.4-031 (Proposed License Condition)	none
3. Emergency Response Organization Augmentation at Alternate Facility (Part 50 Appendix E Section IV.E.8.d)	EP Section II.H.1.d	none	none	none
4. Licensee Coordination with Offsite Response Organizations (Part 50 Appendix E Section IV.A.7)	EP Section II.B.8	none	none	none
5. Protective Actions for Onsite Personnel (Part 50 Appendix E Section IV.I)	EP Section II.J.6	none	none	none

Fermi 3 EP Rule Change Analysis and Fermi 3 COLA Impacts Summary

Rule Element	Fermi 3 Part 5 EP (Other COLA Parts) Change Required	Fermi 3 Part 10 Change Required	Existing Fermi 3 Commitment	New Fermi 3 Commitment
6. Challenging Drills and Exercises (Part 50 Appendix E Section IV.F.2)	EP Section II.N.1.a, EP Section II.N.1.b, and EP Section II.N.2.f	none	none	COM EP-II.N-001
7. Alert and Notification System Backup Means (Part 50 Appendix E Section IV.D.3)	EP Section II.E.5	none	none	none
8. Emergency Declaration Timeliness (Part 50 Appendix E Section IV.C.2)	EP Section II.D	none	none	none
9. Emergency Operations Facility - Performance-Based Approach (Part 50 Appendix E Section IV.E.8.c.3)	EP Section II.A.1.b and EP Section II.H.1.d	none	none	none
10. Evacuation Time Estimate Updating (10 CFR 50.47(b)(10) and Part 50 Appendix E Section IV)	EP Section II.P.3 and EP Section II.J.7	ITAAC 10.0 Protective Response Planning Standard, and Proposed License Condition, Section 3.7 "Emergency Planning Actions"	none	COM ITAAC-3.7-002 (Proposed License Condition)

Fermi 3 EP Rule Change Analysis and Fermi 3 COLA Impacts Summary

Rule Element	Fermi 3 Part 5 EP (Other COLA Parts) Change Required	Fermi 3 Part 10 Change Required	Existing Fermi 3 Commitment	New Fermi 3 Commitment
11. Amended Emergency Plan Changes Process (10 CFR 50.54(q))	none	none	none	none