

DTE Energy
One Energy Plaza, Detroit, MI 48226-1279



10 CFR 52.79

August 22, 2014
NRC3-14-0013

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

References: 1) Fermi 3
Docket No. 52-033
2) Letter from Peter W. Smith (DTE Electric) to USNRC, "DTE Electric Company Letter Regarding Administrative Controls for Doors during Refueling," NRC3-14-0012, dated August 15, 2014

Subject: DTE Electric Company Supplemental Letter Regarding Administrative Controls for Doors during Refueling

During a public teleconference on August 21, 2014, the NRC staff provided feedback to DTE Electric on the administrative controls for doors in the Reactor Building and Fuel Building during the movement of irradiated fuel. DTE had submitted a proposed FSAR markup related to these administrative controls in Reference 2. Based on the discussions conducted during the August 21, 2014 teleconference, DTE Electric agreed to provide a revised FSAR markup.

The revised markup of the Fermi 3 COLA is contained in the attachment to this letter and supersedes that provided in Reference 2. The proposed changes will be included in the next revision of the Fermi 3 COLA.

D095
NRO

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 22nd day of August 2014.

Sincerely,



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

Attachment: Markup of the Fermi 3 COLA

cc: Adrian Muniz, NRC Fermi 3 Project Manager
Tekia Govan, NRC Fermi 3 Project Manager
David Misenhimer, NRC Fermi 3 Project Manager
Lynnea Wilkins, NRC Fermi 3 Project Manager
Jessica Umana, NRC Fermi 3 Project Manager
Sujata Goetz, NRC Fermi 3 Environmental Project Manager (w/o attachment)
Mallecia Sutton, NRC Fermi 3 Environmental Project Manager (w/o attachment)
Fermi 2 Resident Inspector (w/o attachment)
NRC Region III Regional Administrator (w/o attachment)
NRC Region II Regional Administrator (w/o attachment)
Supervisor, Electric Operators, Michigan Public Service Commission (w/o attachment)
Michigan Department of Natural Resources and Environment
Radiological Protection Section (w/o attachment)
Regina A. Borsh, Dominion Energy, Inc.
Barry C. Bryant, Dominion Energy, Inc.
Patricia L. Campbell, General Electric

**Attachment to
NRC3-14-0013**
(following 4 pages)

Markup of the Fermi 3 COLA

The following markup represents how DTE Electric intends to reflect this response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by responses to 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.

Appendix 2A ARCON96 Source/Receptor Inputs

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

2A.2.1 Meteorological Data

Add the following as the last sentence of this section.

EF3COL 2A.2-1-A

Instrumentation heights used in the analysis are described in Subsection 2.3.3.1.1 Meteorological data from 2001 through 2007 and 1985 through 1989 is used in the analysis.

2A.2.3 ARCON96 ESBWR Inputs

Replace the last sentence of the first paragraph with the following.

EF3COL 2A.2-1-A

These directions are adjusted by the difference in angle (approximately 19 degrees counterclockwise) between the true north and the Fermi 3 plant north; Fermi 3 receptor to source directions are shown in Table 2A-4R analysis.

2A.2.4 Confirmation of the ESBWR χ/Q Values

Replace this section with the following.

EF3COL 2A.2-1-A

DCD Figure 2A-1 shows the locations of the sources and receptors for ESBWR control room determinations, also used in the Fermi 3 evaluations. The dimensions of the diffuse source planes provided in DCD Table 2A-3 are determined as directed by RG 1.194, Regulatory Position 3.2.4.5, for the nearest receptor locations. ARCON96 calculations are performed for source/receptor pairs listed in DCD Table 2A-3 and Table 2A-4R using site-specific meteorological data. Results of the site-specific analysis are provided in Table 2.3-301 and Table 2.3-302 and Table 2.3-378 and Table 2.3-379.

2A.2.5 Confirmation of the Reactor Building χ/Q Values

Replace this section with the following.

Insert 1

~~During refueling, doors or personnel air locks on the east sides of the Reactor Building or Fuel Building could act as a point source that could result in control room χ/Q values that are higher than the ESBWR χ/Q values for a release in the Reactor Building. Therefore, the doors or personnel air locks are administratively controlled to remain closed.~~

2A.3 **COL Information**

	2A.2-1-A Confirmation of the ESBWR χ/Q Values
EF3 COL 2A.2-1-A	This COL item is addressed in Subsection 2.3.4.3 and in Subsection 2A.2.4.
	2A.2-2-A Confirmation of the Reactor Building χ/Q Values
EF3 COL 2A.2-2-A	This COL item is addressed in Subsection 2A.2.5.

Chapter 15 Safety Analyses

This chapter of the referenced DCD is incorporated by reference with the following departures and/or supplements.

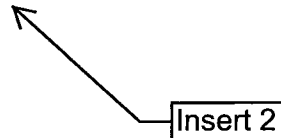
15.3 Analysis of Infrequent Events

15.3.10.5 Radiological Consequences

Add the following sentence at the end of this section.

STD SUP 15.3-1

In addition, procedures discuss the use of nuclear instrumentation to aid in detecting a possible mislocated fuel bundle after fueling operations.



Insert 1:

During movement of irradiated fuel, doors or personnel air locks on the east sides of the Reactor Building or Fuel Building could act as a point source that could result in control room χ/Q values that are higher than the ESBWR χ/Q values for a release in the Reactor Building or Fuel Building. Therefore, the doors or personnel air locks on the east sides of the Reactor Building and Fuel Building are administratively controlled to remain closed during movement of irradiated fuel.

Insert 2:

15.4.1 Fuel Handling Accident

15.4.1.2.3 Identification of Operator Actions

Add the following paragraph at the end of this section.

EF3 SUP 15.4-1

During movement of irradiated fuel, doors or personnel air locks on the east sides of the Reactor Building or Fuel Building could act as a point source that could result in control room χ/Q values that are higher than the ESBWR χ/Q values for a release in the Reactor Building or Fuel Building (See Subsection 2A.2.5). Therefore, the doors and personnel air locks on the east sides of the Reactor Building and Fuel Building are administratively controlled to remain closed during movement of irradiated fuel. Administrative control of these doors and air locks ensures that the control room habitability dose analysis for the fuel handling accident (FHA) incorporated by reference from ESBWR DCD Section 15.4.1 is bounding for Fermi Unit 3 and control room doses do not exceed the requirements of GDC 19 in the event of a FHA.
