December 23, 2009

Mr. Jack M. Davis
Senior Vice President and Chief Nuclear Officer
Detroit Edison Company
Fermi 2 – 210 NOC
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 21 RELATED TO THE SRP SECTIONS 2.3.1, 2.3.2, 2.3.3, 2.3.4 AND 2.3.5 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Davis:

By letter dated September 18, 2008, Detroit Edison Company (Detroit Edison) submitted for approval a combined license application pursuant to 10 CFR Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter. To support the review schedule, you are requested to respond within 45 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, I can be reached at 301-415-8148 or by e-mail at jerry.hale@nrc.gov.

Sincerely,

/RA Jeff Cruz for J. Hale/

Jerry Hale, Project Manager
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 052-033

eRAI Tracking Nos. 4120, 4122, 4123, 4125, 4126

Enclosure:
Request for Additional Information

December 23, 2009

Mr. Jack M. Davis
Senior Vice President and Chief Nuclear Officer
Detroit Edison Company
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Docket Nos. 052-033
eRAI Tracking Nos. 4120, 4122, 4123, 4125, 4126
Enclosure:
Request for Additional Information
Distribution:

PUBLIC	TKevern, NRO	SSamaddar, NRO	NGE 1/2 R/F SGreen, NRO
JCruz, NRO	MCarpentier, OGC	RidsNroDsraSbpb	RidsNroDnrlNge2
		NRO-002	

ADAMS Accession No. ML093570220

OFFICE	RASC/BC	NGE1/PM	OGC	NGE1/LPM
NAME	SSamaddar	IBerrios	M. Carpentier	TKevern
DATE	12/7/09	12/10/09	12/8/09	12/10/09

***Approval captured electronically in the electronic RAI system.**

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Request for Additional Information No. 4120 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 02.03.01 - Regional Climatology

02.03.01-1

Please revise the FSAR as necessary to be more specific when using the term “storms.”

In FSAR Subsection 2.3.1.2.1, “Wind Conditions,” as well as in other subsections, the low pressure area movements are referred to as “storm tracks.” This is somewhat ambiguous, as “storm” could be interpreted also as a thunderstorm, tropical depression, tropical storm, or hurricane.

02.03.01-2

Confirm the number of high wind events which FSAR Subsection 2.3.1.3.1.2 reports occurred in the five-county area between January 1, 1955, and December 31, 2007, and revise the FSAR as necessary.

a. The staff counted 816 high wind events (50 knots or greater) for the five-county area in the NCDC online storm database as compared to 770 reported in the FSAR. Please confirm whether (1) the number of high wind events may be under-reported in the FSAR or (2) only 770 unique high wind events occurred, as some of the events counted by the staff may have occurred simultaneously in several of the five counties.

b. FSAR Subsection 2.3.1.3.1.2 states that 770 wind events were reported between 1955 and 2007. Please discuss whether the number of actual occurrences of high wind events during this period may be higher by virtue of the reporting periods of some of the stations used having begun much later than 1955. The first year of high wind event reports for each of the five counties begin in (year in parentheses): Lenawee (1979), Monroe (1969), Washtenaw (1957), Wayne (1956), and Lucas (1956).

02.03.01-3

FSAR Table 2.0-201, Sheet 1 of 28, states under the evaluation for extreme wind exposure category that “The Fermi 3 site characteristic is Exposure Category C as this value cannot be exceeded.” Please explain this statement.

02.03.01-4

Confirm the number of tornadoes which FSAR Subsection 2.3.1.3.1.2 reports occurred in the five-county area between January 1, 1955 and December 31, 2007 and revise the FSAR as necessary.

a. The staff counted 110 tornadoes for the five-county area in the NCDC online storm database as compared to 92 reported in the FSAR. Please confirm whether (1) the number of tornadoes may be under-reported in the FSAR or (2) only 92 unique tornadoes occurred, as some of the tornadoes counted by the staff may have occurred in several of the five counties. If the 110 tornados counted by the staff are unique, please revise the FSAR statistics on tornados per year and strike probabilities.

b. FSAR Subsection 2.3.1.3.1.2 states that 92 tornadoes were reported between 1955 and 2007. Please discuss whether the number of actual occurrences of tornadoes during this period may be higher by virtue of the reporting periods of some of the stations used having begun much later than 1955. The first year of tornado reports for each of the five counties begin in (year in parentheses): Lenawee (1956), Monroe (1963), Washtenaw (1962), Wayne (1956), and Lucas (1965).

02.03.01-5

Confirm the number of hail events which FSAR Subsection 2.3.1.3.1.4 reports occurred in the five-county area between January 1, 1955, and December 31, 2007, and revise the FSAR as necessary.

FSAR Subsection 2.3.1.3.1.4 states that 571 hail events were reported between 1955 and 2007. Please discuss whether the number of actual occurrences of hail events during this period may be higher by virtue of the reporting periods of some of the stations used having begun much later than 1955. The first year of hail reports for each of the five counties begin in (year in parentheses): Lenawee (1963), Monroe (1963), Washtenaw (1957), Wayne (Sept.1955), and Lucas (June 1966).

02.03.01-6

Confirm the number of dust (sand) storm events which FSAR Subsection 2.3.1.3.2 and Tables 2.3-207 and 2.3-208 report occurred at Detroit Metropolitan Airport during the period 1961-1995 and revise the FSAR as necessary. The staff found one more dust (sand) storm (14:00 July 4, 1974) over the list presented in Tables 2.3-207 and 2.3-208.

02.03.01-7

Clarify the terminology presented in FSAR Subsection 2.3.1.3.3, “Probable Maximum Annual Frequency of Occurrence and Duration of Freezing Rain.”

The FSAR interchangeably uses the terms “freezing rain” and “freezing rain and ice pellets” to refer to ice events. Ice pellets are not freezing rain. In the discussion, it is sometimes confusing as to whether the two types of ice events are being spoken of separately, as a group, or interchangeably. The NCDC ice storm reports include freezing rain only. The FSAR refers to a “sub-freezing air mass near the surface,” which more accurately should be called as a “sub-freezing air layer.”

02.03.01-8

Clarify an apparent discrepancy in snowfall statistics reported in FSAR Subsection 2.3.1.3.4.2.

The FSAR states that the highest 24-hour snowfall was 62.2 cm (24.5 inches) during April of 1886 at Detroit City Airport whereas the highest 2- and 3-day snowfall occurred at the Flint recording station where 57.7 cm (22.7 inches) was reported during a 48-hour period. The reported 2- and 3-day snowfall maximum at Flint is inconsistent (i.e., lower) that the 24-hour snowfall maximum at Detroit City Airport.

02.03.01-9

Please reevaluate the winter precipitation roof loading in FSAR Subsection 2.3.1.3.4 using the criteria presented in ISG-7, “Interim Staff Guidance on Assessment of Normal and Extreme Winter Precipitation Loads on the Roofs of Seismic Category I Structures” (ADAMS Accession Number ML091490565) or justify an alternative methodology.

FSAR Subsection 2.3.1.3.4, “Weight of Snow and Ice on Structures,” assumes scuppers and drains on the roof of the ESBWR are designed to limit water accumulation to no more than 10.2 cm (4 inches) of water. This assumption conflicts with the ESBWR DCD which assumes water accumulation on the roof could reach 0.61 meters (2.0 feet), which is the height of the parapets, during the extreme winter precipitation event when the roof scuppers and drains are assumed to be clogged (see footnote ** in Table 3G.1-2 of Tier 2 of DCD Revision 6).

02.03.01-10

Revise FSAR Table 2.0-201 (Sheet 6 of 28) to identify the Fermi 3 maximum and minimum 0 percent exceedance ambient design temperature site characteristic values as the more extreme of either the historic recorded values or the 100-year return values.

10 CFR 52.79(a)(1)(iii) states, in part, that the COL FSAR shall include the meteorological characteristics of the proposed site with appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area and with sufficient margin for the limited accuracy, quantity, and time in which the historical data have been accumulated. In order to be compliant with 10 CFR 52.79(a)(1)(iii), the ambient design temperature site characteristics should be based on the more extreme or either historic or 100-year return period values. Temperatures based on a 100-year return period are considered to provide sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated as required by regulation.

The 0 percent exceedance ambient design temperature Fermi 3 site characteristic values presented in Table 2.0-201 (Sheet 6 of 28) are based on historic extreme values. Please justify why these site characteristic values are not based on the more extreme of either the historic or 100-year return values. Note that FSAR Subsection 2.3.1.3.5 already states that the more extreme 100-year temperature values are considered representative of the Fermi site for design purposes.

02.03.01-11

Clarify FSAR Subsection 2.3.1.3.7.1, “Background Air Quality,” regarding jurisdiction for air quality control management.

The FSAR states that Monroe County is a member of the Air Quality Control Region (AQCR) that included the counties of the Detroit metropolitan area. However, per 40 CFR 81.43, Monroe County is in Metropolitan Toledo Interstate Air Quality Control Region (AQCR) 124 and the nonattainment status for $PM_{2.5}$ and ozone is reported as a part of the Detroit-Ann Arbor Designated Area as in 40 CFR 81.243.

02.03.01-12

In Subsection 2.3.1.3.7.1, “Background Air Quality,” the FSAR states that only annual-average $PM_{2.5}$ concentrations exceeded the ambient air quality standards. However, 24-hour average $PM_{2.5}$ concentrations at monitoring stations around the Fermi site frequently exceeded the respective 35 $\mu g/m^3$ standard as well. Consider including this fact in the FSAR. Also note that the units for $PM_{2.5}$ used in this FSAR subsection should be $\mu g/m^3$ instead of mg/m^3.

02.03.01-13

Revise the FSAR to discuss the impact on plant design and operation due to the Fermi site being located in a $PM_{2.5}$ and ozone nonattainment area.

Section C.I.2.3.1.2 of RG 1.206 and Section III.3.e of SRP 2.3.2 state that the regional air quality conditions that should be considered in the evaluation of the design and operation of the facility should be identified. FSAR Subsection 2.3.1.3.7.1 states that Monroe County is a member of an Air Quality Control Region (AQCR) that has been classified as in nonattainment for $PM_{2.5}$ and ozone National Ambient Air Quality Standards (NAAQS). Because the NAAQS have been promulgated to protect both public health and public welfare, exceedances of NAAQS in a region imply that public health and public welfare in that region may be adversely impacted and therefore plant design and operation could be affected.

02.03.01-14

Please revise the FSAR to evaluate the trends in severe weather phenomena and extremes in the proposed site vicinity and discuss whether such trends may be indicative of climate change.

SRP 2.3.1 states that the applicability of the data on severe weather phenomena that is used to represent site conditions during the expected period of reactor operation should be substantiated. SPR 2.3.1 further states that current literature on possible changes in the weather in the site region should also be reviewed to be confident that the methods used to predict weather extremes are reasonable.

Request for Additional Information No. 4122 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 02.03.02 - Local Meteorology

02.03.02-1

Please review and explain the ratios between 10-m and 60-m onsite wind speeds.

Staff experience indicates 60-m wind speeds are typically 1.2-1.6 times the magnitude of the 10-m wind speed during the day and twice or higher the magnitude at night. The Fermi wind roses appear to show approximately a factor of 2 difference for all hours combined, whereas the staff would expect more like a factor of 1.5-1.7. Please elaborate on the reason for differences of ratios between 10-m and 60-m wind speeds compared with other meteorological towers.

02.03.02-2

Did the contents of FSAR Figure 2.3-204 change from a precipitation rose in Revision 0 to a wind rose in Revision 1?

02.03.02-3

Please describe the methodology used to generate the Detroit Metropolitan Airport wind and precipitation roses presented in FSAR Figures 2.3-204 through 2.3-229.

The FSAR presents monthly and annual precipitation and wind roses for the Detroit Metropolitan Airport for the period 2003-2007. Wind directions in the Integrated Surface Hourly Data (ISHD) that were used to develop these figures are reported in the nearest 10 degrees. However, the precipitation and wind roses plotted from these data bin the wind directions into sixteen 22.5° sectors, which means the data are typically more concentrated in the four cardinal directions (N, E, S, and W). Please indicate in the FSAR if a randomization scheme was applied to the ISHD raw data to generate the Detroit Metropolitan Airport wind roses.

02.03.02-4

Please provide more inform in FSAR Subsection 2.3.2.2.1 regarding inputs to the SACTI cooling tower model analysis.

a. Update the FSAR to describe and justify how atmospheric stability was provided as input to the SACTI cooling tower model analysis.

   Subsection 5.3.3.1 “Heat Dissipation to the Atmosphere” of the Fermi 3 COLA Environmental Report states meteorological data elements from onsite and Detroit Metro Airport were combined into the appropriate CD-144 format for input into the SACTI cooling tower model. Neither the FSAR nor ER mentions how the stability classes are calculated; i.e., using the onsite delta-T data or the cloud/wind data at Detroit Airport. The cloud/wind data methodology at Detroit Metro Airport is expected to generate more frequent neutral conditions and less frequent unstable and stable conditions as compared to the onsite delta-T data. Consequently, behaviors of cooling tower

plumes would be expected to be somewhat different between the two data sets because of the difference in stability class distributions. Please specify whether the stability classes are from the onsite delta-T data or cloud/wind data at Detroit Airport. For the former, specify how the onsite delta-T data were converted into cloud/wind data in the CD-144 format. For the latter, please compare the SACTI results using the different stability calculation schemes.

b. Update the FSAR to justify the use of a surface roughness of 100 cm as input to the SACTI cooling tower model analysis.

   Subsection 5.3.3.1 “Heat Dissipation to the Atmosphere” of the Fermi 3 COLA Environmental Report states a surface roughness of 100 cm was selected based on the general obstruction profile typical of industrial facilities. The U.S. EPA Guidance on Air Quality Models (Appendix W to 40 CFR Part 51) suggests that urban versus rural input to dispersion modeling depends on the general land use within a 3-km radius from the source. If industrial, commercial, or compact residential land use types account for 50% or more, the area is assigned as urban. If not, the area is assigned as rural. The nearby area around the Fermi site is an industrial complex but the farther area is agricultural land or water bodies. The area of interest is somewhere between urban and rural. Please justify using a surface roughness of 100 cm, including discussing the difference in results between assuming an urban environment versus a rural environment.

c. Justify the use of mean monthly mixing heights as inputs to the SACTI cooling tower model analysis.

   FSAR Subsection 2.3.2.2.1 states mean monthly morning and afternoon mixing height data were input to the SACTI model, even though daily morning and afternoon mixing height data are available. Please justify using mean monthly morning and afternoon mixing height data instead of daily mixing data, including discussing the difference in results between the two methods.

02.03.02-5

Please update FSAR Subsection 2.3.2.2.2 to provide estimates of the likelihood of drizzle icing effects from the NDCT.

FSAR Section 2.3.2.2.2 addresses icing as a result of fogging from the NDCT plume, but icing resulting from drizzle produced by the NDCT plume is not presented.

02.03.02-6

Please revise FSAR Section 2.3.2.2 to address the effects of the natural draft cooling tower moisture and salt deposition on electrical transmission lines and electrical equipment (including transformers and switchyard).

Request for Additional Information No. 4123 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 02.03.03 - Onsite Meteorological Measurements Programs

02.03.03-1

Regulatory Guide 1.23 states that the meteorological wind sensors on the tower should be located over level, open terrain at a distance of at least 10 times the height of any nearby obstruction, if the height of the obstruction exceeds one-half the height of the wind measurement. Visual inspection during the February 2-6, 2009 Fermi 3 environmental site audit indicated that the distance from the tower to the nearest obstruction (i.e., the wooded area located west of the tower) is less than 10 obstruction heights.

a. What is the current average height of these trees and what is their closest distance to the tower?

b. The applicant stated during the audit that this was a self-identified issue entered into the Fermi 2 corrective action system in 2004 and was resolved as having no impact on the monitoring program based on a comparison with historic data collected during the past 30 years. Please describe the evaluation that closed out this issue.

02.03.03-2

Please verify all the instrumentation information provided in FSAR Table 2.3-289, including sensor performance specifications and system accuracies, and update FSAR Table 2.3-289 accordingly. Please also identify any deviations from the guidance provided in Regulatory Guide 1.23.

a. Based on February 2-6, 2009 Fermi 3 environmental site audit, it appears that the wind speed and wind direction sensor manufacturer is incorrectly stated in FSAR Table 2.3-289 (i.e., Climet instead of Met One/Climatronics).

b. FSAR Table 2.3-288 states the dew point monitoring system is a lithium chloride sensor whereas FSAR Table 2.3-289 states the dew point sensor is a EG&G model #110S-M which is a chilled mirror sensor.

02.03.03-3

Section C.I.2.3.3 of Regulatory Guide 1.2.06 states that the FSAR should describe the meteorological measurements program calibration and maintenance procedures. Please describe the calibration practices (e.g., bearing torque measurements, wind tunnel testing) used to ensure that the wind sensors starting thresholds meet the starting threshold criteria presented in Regulatory Guide 1.23.

02.03.03-4

FSAR Section 2.3.3.1.2 states that sensor accuracies are within the limits specified in Regulatory Guide 1.23. During the February 2-6, 2009 Fermi 3 environmental site audit, the Fermi meteorological system engineer indicated that the secondary delta-temperature (delta-T) channel ($\Delta T = T_{60m} - T_{10m}$) recorded values were consistently 0.2 °C higher than the primary delta-temperature channel. The staff also observed this offset in the primary and secondary delta-T channel readouts during the site audit. This

0.2 °C “offset” appears to be greater than the ±0.1 °C delta-T channel accuracy specified in Regulatory Guide 1.23 and could affect stability class determination.

a. Please indicate which delta-T channel appears to have the more accurate measurements.

b. Please describe the impact of this delta-T channel offset on the atmospheric dispersion and deposition factors presented in FSAR Sections 2.3.4 and 2.3.5.

c. Please describe the correction actions to be taken to address this apparent deviation from Regulatory Guide 1.23 criteria.

02.03.03-5

FSAR Tables 2.3-269 through 2.3-284 supposedly present joint frequency distributions of wind speed and direction by stability class at the 10-meter and 60-meter levels of the Fermi onsite meteorological tower for the five-year period 2003 through 2007. Please explain the following apparent discrepancies.

a. This five-year period contains 43,842 hours, yet the number of observations reported in FSAR Tables 2.3-269 (10-meter level, all stability categories) and 2.3-277 (60-meter level, all stability categories) are 17,533 and 17,520, respectively.

b. The number of occurrences of stability classes A, B, C, D, E, F, and G reported in FSAR Tables 2.3-270 through 2.3-276 are 3043, 955, 937, 5867, 3932, 1655, and 802, respectively. The sum of these number of occurrences (17,191) is different from number of occurrences for all stability classes shown in FSAR Table 2.3-269 (17,533). Likewise, the number of occurrences of stability classes A, B, C, D, E, F, and G reported in FSAR Tables 2.3-278 through 2.3-284 are 3043, 955, 937, 5865, 3931, 1650, and 797, respectively. The sum of these number of occurrences (17,178) is different from number of occurrences for all stability categories shown in FSAR Table 2.3-277 (17,520).

02.03.03-6

A comparison of stability class frequency distributions (based on the onsite meteorological tower 60m-10m delta-temperature measurements) between 1974-1975 (from Fermi 2 UFSAR Table 2.3-11) and 2002-2007 (from Fermi 3 FSAR Tables 2.3-292 through 2.3-298) is shown below:

Stability Class Frequency Distribution (Values in Percent)

Stability Class	Period of Record	
	1974-1975	2002-2007
A	9.2	20.1
B	2.1	5.4
C	2.4	5.2
D	30.3	30.7
E	40.5	24.5
F	10.3	9.4
G	5.3	4.6

a. Please explain the 11.0 percent annual increase in A stability occurrences (from 9.2 percent to 20.1 percent) and the 15.9 percent annual decrease in E stability occurrences (from 40.5 percent to 24.5 percent) between these two periods of record.

b. A review of the 2001-2007 hourly delta-temperature measurements provided to the staff in the response to environmental RAI AQ2.7-3 (dated October 30, 2009) indicates that during the period 2004-2007 approximately 420 occurrences per year on average were recorded when the autoconvective lapse rate of -3.4 °C/100 meters was exceeded (i.e., the density of the atmosphere increases with height). Many of these hours exceeded a lapse rate of -5.0 °C/100 meters. Please explain the relatively frequent occurrence (~5 % of the time annually) of such extreme unstable conditions during this period.

02.03.03-7

In accordance with criteria specified in Section C.8 of Regulatory Guide 1.23, please discuss any provisions that will be in place to obtain representative meteorological data (e.g., wind speed and direction representative of the 10-meter level and an estimate of atmospheric stability) from alternative sources during an emergency if the site meteorological monitoring system should be unavailable.

Request for Additional Information No. 4125 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 02.03.04 - Short Term Atmospheric Dispersion Estimates for Accident Releases

02.03.04-2

Portions of the EAB and outer boundary of the LPZ extend over Lake Erie. Revise the FSAR as necessary to discuss the impact of changes in surface temperature and roughness resulting from over-water trajectories on the resulting offsite short-term atmospheric dispersion estimates.

02.03.04-3

FSAR Section 2.3.4.1 states the PAVAN computer code (NUREG/CR-2858) was used to generate the offsite (EAB and LPZ) short-tem (accident) atmospheric dispersion (CHI/Q) estimates. FSAR Tables 2.3-292 through 2.3-299 present the 2002-2007 joint frequency distribution (JFD) of wind direction and wind speed by atmospheric stability class used by the applicant to execute PAVAN. Copies of the applicant's PAVAN input and output files were also provided in response to environmental RAI AQ2.7-4 dated September 30, 2009.

The staff performed an independent evaluation of the applicant's PAVAN results by generating a JFD from the 2002-2007 hourly onsite meteorological database provided in response to environmental RAI AQ2.7-3 dated October 30, 2009 and rerunning the PAVAN computer code. The staff's JFD was based on the wind speed classes presented in Table 3 of Revision 1 to RG 1.23 (i.e., calm, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0 and > 10.0 m/s). The staff's results were more conservative (i.e., higher) than those generated by the applicant's PAVAN run. The staff believes its more conservative results are primarily due to the difference in the frequency of calm winds between the applicant's JFD and the staff's JFD.

The staff agrees with the applicant's results in that the ESE sector has the maximum sector CHI/Q values that also bound the 5 percent overall site CHI/Q values. FSAR Tables 2.3-292 through 2.3-299 show a total of 212 hours of calm wind were recorded during 2002-2007, with a total of 9 of the 212 hours of calm winds being assigned to the WNW sector (which is the upwind sector to the ESE sector). On the other hand, the staff's analysis of the 2002-2007 hourly database identified a total of 464 hours of calm wind, with approximately 82 of the 464 hours calm winds being assigned to the WNW sector based on the RG 1.145 criterion that wind directions during calm conditions should be assigned in proportion to the directional distribution of non-calm winds with speeds less than 1.5 meters per second.

a. Please explain why there are differences in the number of hours of calm winds presented in FSAR Tables 2.3-292 through 2.3-299 versus the number of hours of calm winds reported during 2002-2007 in the hourly database provided in response to environmental RAI AQ2.7-3.

b. Please explain how the calm winds were assigned to wind direction sectors in FSAR Tables 2.3-292 through 2.3-299 and justify any deviations from the methodologies presented in RG 1.23 and RG 1.145.

02.03.04-4

FSAR Section 2.3.4.3 states the onsite atmospheric dispersion (CHI/Q) estimates were generated using the ARCON96 computer code in accordance with the guidance provided in RG 1.194. Please provide in electronic form the meteorological input file and all the output files associated with these ARCON96 computer code runs. These data are required by the staff to perform independent evaluations and assessments of the resulting onsite CHI/Q estimates.

Request for Additional Information No. 4126 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 02.03.05 - Long-Term Atmospheric Dispersion Estimates for Routine Releases

02.03.05-2

FSAR Section 2.3.5 provides estimates of long-term CHI/Q and D/Q values extending to a distance of 80 km (50 mi) from the station. Some of these CHI/Q and D/Q values represent plume transport over water for significant distances. Revise the FSAR as necessary to discuss the impact of changes in surface temperature and roughness resulting from over-water trajectories on the resulting long-term atmospheric dispersion and deposition estimates.