



10 CFR 52.79

July 29, 2009
NRC3-09-0022

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

References: 1) Fermi 3
Docket No. 52-033
2) Letter from Mark Tonacci (USNRC) to Peter W. Smith (Detroit Edison),
"Request for Additional Information Letter No. 8 Related to the SRP Sections
02.04 for the Fermi 3 Combined License Application," dated June 30, 2009

Subject: Detroit Edison Company Response to NRC Request for Additional Information
Letter No. 8

In the referenced letter, the NRC requested additional information to support the review of certain portions of the Fermi 3 Combined License Application (COLA). The response to the following Request for Additional Information (RAI) is provided as Attachment 1 of this letter:

- RAI Question 02.04-1 Hydrology

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

DO95
NRD

I state under penalty of perjury that the foregoing is true and correct. Executed on the 29th day of July 2009.

Sincerely,



Peter W. Smith, Director
Nuclear Development – Licensing & Engineering
Detroit Edison Company

Attachment: 1) Response to RAI Letter No. 8 (Question No. 02.04-1)

Enclosures: 1) Drawing #1 – FSAR Fig 2.4-215 superimposed on FSAR Fig 2.4-214
2) Drawing #2 – FSAR Fig 2.4-217 superimposed on FSAR Fig 2.1-214
3) Drawing #3 – Swan Creek with HEC-RAS Cross Sections Shown
4) Drawing #4 – Swan Creek with HEC- RAS Cross Sections Shown (Focused on Swan Creek Area)
5) Detroit Edison Drawing 6SE 0721-51(Base Map)
6) Detroit Edison Drawing 6SE 0721-51(Sheet 1 of 6)
7) Detroit Edison Drawing 6SE 0721-51(Sheet 2 of 6)
8) Detroit Edison Drawing 6SE 0721-51(Sheet 3 of 6)
9) Detroit Edison Drawing 6SE 0721-51(Sheet 4 of 6)
10) Detroit Edison Drawing 6SE 0721-51(Sheet 5 of 6)
11) Detroit Edison Drawing 6SE 0721-51(Sheet 6 of 6)
12) Fermi 2 Drawing 6A721-2100
13) Fermi 2 Drawing 6A721-2101

cc: Jack M. Davis, Senior Vice President and Chief Nuclear Officer (w/o Enclosures)
Mark Tonacci, NRC Fermi 3 Project Manager (w/ 2 copies of Enclosures)
Stephen Lemont, NRC Fermi 3 Environmental Project Manager (w/o Enclosures)
Fermi 2 Resident Inspector (w/o Enclosures)
NRC Region III Regional Administrator (w/o Enclosures)
NRC Region II Regional Administrator (w/o Enclosures)
Supervisor, Electric Operators, Michigan Public Service Commission (w/o Enclosures)
Michigan Department of Environmental Quality
Radiological Protection and Medical Waste Section (w/o Enclosures)

Attachment 1
NRC3-09-0022

Response to RAI Letter No. 8
(RAI Tracking No. 3203)

RAI Question No. 02.04-1

NRC RAI 02.04-1

The staff has reviewed FSAR Section 2.4. In accordance with 10 CFR 100.20(c) and 10 CFR 52.79(a)(1)(iii), the NRC staff requests that the applicant provide additional mapping and modeling used to determine the hydrologic characteristics of the site. The staff specifically requests the following information:

- 1. A map showing the drainage system for Fermi 3 overlaid with topography and site features.*
- 2. Figure 2.4-214 and Figure 2.4-215 – superimposed on each other.*
- 3. A map identifying the elevations of significant features and identifying the datum.*
- 4. Information identifying the resolution for maps used in the Swan Creek watershed delineation and the maps.*
- 5. Topographic map of Swan Creek with HEC-RAS cross-sections shown.*
- 6. Large scale topographic maps such as those with site survey data map provided at audit.*
- 7. Topographic maps for Fermi 2.*
- 8. An electronic map of the Swan Creek watershed with a 1:24,000 scale*
- 9. STWAVE input/output files*
- 10. HEC-RAS input/output files*
- 11. ACES input/output files*

Detroit Edison Response

1. FSAR Figure 2.4-214 shows the existing sub-basin drainage areas in the general area that Fermi 3 will be located. FSAR Figure 2.4-215 shows the final grade drainage areas with Fermi 3 constructed. FSAR Figure 2.4-217 shows the final grade drainage areas with Fermi 3 constructed assuming that the underground storm drains and culverts are completely blocked. Drawing #1 (Enclosure 1) shows FSAR Figure 2.4-215 superimposed on top of FSAR Figure 2.4-214 and Drawing # 2 (Enclosure 2) shows FSAR Figure 2.4-217 superimposed on top of Figure 2.4-214. These drawings show the relationship of the Fermi 3 final grade drainage areas to the existing drainage areas in the vicinity of the area to be developed.
2. Drawing #1 (Enclosure 1) provides the Fermi 3 drainage map (FSAR Figure 2.4-215) overlaid on the site topography and site features (FSAR Figure 2.4-214) in the area where Fermi 3 will be located.
3. Drawings #1 and #2 show the elevation of the power block, including all safety related features, for Fermi 3. These drawings identify the contours corresponding to an elevation of 585 feet NAVD 88 and each solid contour line corresponds to a change in elevation of one foot. As identified in FSAR Section 2.4.2.3, the Fermi 3 plant grade elevation is 589.3 feet NAVD 88.

4. The resolution for delineation of the Swan Creek watershed is 10 meters.
5. Drawing #3 (Enclosure 3) provides a topographical map of Swan Creek near the Fermi site with the HEC-RAS cross-sections added. This drawing shows the cross-sections, the delineation of the banks of Swan Creek and the Swan Creek watershed. Drawing #4 (Enclosure 4) provides a close-up of an excerpt from Drawing # 3 focusing on the Swan Creek area.
6. Topographical maps with the site survey data are provided in Enclosures 5 through 11 to this letter. Detroit Edison Drawings 6SE 0721-051(Base Map), 6SE 0721-051(Sheet 1 of 6), 6SE 0721-051 (Sheet 2 of 6), 6SE 0721-051 (Sheet 3 of 6), 6SE 0721-051 (Sheet 4 of 6), 6SE 0721-051 (Sheet 5 of 6), 6SE 0721-051 (Sheet 6 of 6) provide detailed survey data of the Fermi 3 site.
7. Current topographical maps for Fermi 2 are not available. Fermi 2 Drawings 6A721-2100 and 6A721-2101 (Enclosures 12 and 13) are provided. These drawings depict the site layout of Fermi 2 and contain spot elevations at a number of locations.
8. An electronic map of the Swan Creek watershed with a 1:24,000 scale is being provided in to the NRC in Detroit Edison letter to the NRC, NRC3-09-0019.
9. STWAVE input/output files are being provided to the NRC in Detroit Edison letter to the NRC, NRC3-09-0019.
10. HEC-RAS input/output files are being provided to the NRC in Detroit Edison letter to the NRC, NRC3-09-0019.
11. ACES input/output files are being provided to the NRC in Detroit Edison letter to the NRC, NRC3-09-0019.

Proposed COLA Revision

None

**Enclosures 1 through 13
NRC3-09-0022**

Hard Copy Drawings referenced in RAI Response

- 1) Drawing #1– FSAR Fig 2.4-215 superimposed on FSAR Fig 2.4-214**
- 2) Drawing #2 – FSAR Fig 2.4-217 superimposed on FSAR Fig 2.1-214**
- 3) Drawing #3 – Swan Creek with HEC-RAS Cross Sections Shown**
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- 12) Fermi 2 Drawing 6A721-2100**
- 13) Fermi 2 Drawing 6A721-2101**

The 13 subsequently listed drawings/figures were individually added to ADAMS, which are available for viewing in ADAMS.

These drawings can be accessed within the ADAMS package or by performing a search on the Document/Report Number.