

DTE Energy



10 CFR 52.79

June 19, 2013
NRC3-13-0021

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 (Detroit Edison) to USNRC, "Detroit Edison Company Interim Response to NRC Request for Additional Information Letter No. 79," NRC3-12-0030, dated October 12, 2012

Subject: DTE Electric Company Submittal of FWSC and CB MSM Benchmark Summary Reports

In Reference 2, DTE Electric Company provided a detailed description of the site-specific soil-structure interaction (SSI) analyses required to respond to RAI 03.07.02-9. Specifically, regarding the structure-soil-structure-interaction (SSSI) analyses, Reference 2 stated:

To evaluate the effect of the FWSC and its fill concrete foundation on the CB, the CB and FWSC will both be included in a single SASSI model. Because of the size of the combined CB and FWSC model, it is expected that the FWSC will need to be modeled with the MSM in order to maintain the ability to capture frequencies up to at least 50 Hz. If the use of the MSM is necessary for the FWSC, the MSM will be benchmarked against the DM for the FWSC. Since the FWSC is much smaller than the RB/FB, the use of quarter models is not expected to be necessary for the FWSC.

During development of the combined Control Building (CB) and Firewater Service Complex (FWSC) model, it was determined that the size of the combined model necessitates the use of the Modified Subtraction Method (MSM) for both the CB and FWSC portions of the model in order to ensure that frequencies up to at least 50 Hz are captured. The CB model will continue to utilize the Direct Method (DM) for all other analyses described in Reference 2.

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Because the use of the MSM is necessary for both the CB and FWSC portions of the model, the MSM must be benchmarked against the DM for both the CB and FWSC. Both the CB and FWSC are much smaller than the RB/FB, and thus, the use of quarter models in these benchmarking analyses is not necessary. The MSM benchmark summary reports for the CB and FWSC are provided in Attachments 1 and 2, respectively.

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 19th day of June 2013.

Sincerely,



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

- Attachments:
- 1) Sargent & Lundy Report SL-011874, "Modified Subtraction Method (MSM) Control Building Benchmark Summary Report," Revision 0, dated June 10, 2013
 - 2) Sargent & Lundy Report SL-011863, "Modified Subtraction Method (MSM) Firewater Service Complex Benchmark Summary Report," Revision 0, dated May 21, 2013

cc: Adrian Muniz, NRC Fermi 3 Project Manager
Tekia Govan, NRC Fermi 3 Project Manager
Michael Eudy, NRC Fermi 3 Project Manager (w/o attachments)
Bruce Olson, NRC Fermi 3 Environmental Project Manager (w/o attachments)
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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)