

J. Todd Conner
Site Vice President

DTE Energy Company
6400 N. Dixie Highway, Newport, MI 48166
Tel: 734.586.4849 Fax: 734.586.5295
Email: connerj@dteenergy.com

DTE Energy



10 CFR 50.54

January 30, 2014
NRC-14-0005

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

- References:
- 1) Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43
 - 2) NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated March 12, 2012, Accession No. ML12073A348.
 - 3) NRC Letter to Nuclear Energy Institute, Endorsement of Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012, Accession No. ML12144A142
 - 4) DTE Electric Letter, "Detroit Edison's Response to March 12, 2012 Information Request Regarding Flood Protection Walkdowns," NRC-12-0076, dated November 26, 2012
 - 5) NRC Letter, Request for Additional Information Associated with Near-Term Task Force Recommendation 2.3, Flooding Walkdowns; dated December 23, 2013, Accession No. ML13325A891
 - 6) DTE Electric Letter, "DTE Electric Submittal of Flooding Hazard Reevaluation Report in Response to March 12, 2012 Information Request Regarding Flood Protection Evaluations," NRC-13-0013, dated March 8, 2013

Subject: Update to Response to NRC 10 CFR 50.54(f) Request for Information Regarding Near-Term Task Force Recommendation 2.3, Flooding - Review of Available Physical Margin (APM) Assessments

On March 12, 2012, the NRC staff issued Reference 2 requesting information pursuant to Title 10 of the Code of Federal Regulations 50.54(f). Enclosure 4 of that letter contains specific Requested Information associated with Near-Term Task Force Recommendation 2.3 for Flooding. Per Reference 3, the NRC endorsed Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012. By Reference 4, DTE Electric submitted the final report in response to the request for information.

One of the requirements of NEI 12-07 is to identify the available physical margin (APM) associated with each applicable flood protection feature, determine if the margin provided is small, and evaluate any small margins that have potentially significant consequences through the corrective action process. The results of this effort were to be maintained on site for future NRC audits.

Following the NRC staff's initial review of the walkdown reports, regulatory site audits were conducted at a sampling of plants. Based on the walkdown report reviews and site audits, the staff identified additional information necessary to allow them to complete their assessments. Accordingly, by Reference 5 the NRC staff has issued a request for addition information (RAI).

The Enclosure to this letter provides DTE's response to the RAI.

No new commitments are being made in this submittal.

Should you have any questions or require additional information, please contact Mr. Kirk R. Snyder, Manager, Industry Interface at (734) 586-5020.

Sincerely,



Enclosure: Response to Request for Near-Term Task Force Recommendation 2.3,
Flooding - Review of Available Physical Margin (APM) Assessments

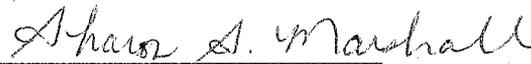
cc: NRC Project Manager
NRC Resident Office
Reactor Projects Chief, Branch 5, Region III
Regional Administrator, Region III
Michigan Public Service Commission,
Regulated Energy Division (kindschl@michigan.gov)

I, J. Todd Conner, do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.



J. Todd Conner
Site Vice President
Nuclear Generation

On this 30 day of January, 2014 before me personally appeared J. Todd Conner, being first duly sworn and says that he executed the foregoing as his free act and deed.



Notary Public

SHARON S. MARSHALL
NOTARY PUBLIC, STATE OF MI
COUNTY OF MONROE
MY COMMISSION EXPIRES Jun 14, 2019
ACTING IN COUNTY OF *Monroe*

**Enclosure to
NRC-14-0005**

**Fermi 2 NRC Docket No. 50-341
Operating License No. NPF-43**

Response to Request for Additional Information

**Near-Term Task Force Recommendation 2.3, Flooding -
Review of Available Physical Margin (APM) Assessments**

Response to Request for Additional Information

RAI-1

Confirmation that the process for evaluating APM was reviewed:

Response

DTE has completed a review of the process used at Fermi 2 to evaluate APMs.

RAI-2

Confirmation that the APM process is now or was always consistent with the guidance in NEI 12-07 and discussed in this RAI.

Response

As described in the Fermi 2 flooding walkdown report (Reference 4), APM data were collected and documented on the Walkdown Record Forms; which have been retained and are available for NRC audit and inspection. The walkdown report also documented that no conditions related to small APM with large consequences (indicative of a cliff-edge effect) were identified.

The Fermi 2 Flooding Hazard Reevaluation Report (Reference 6) concluded that the approach used to determine APM followed the guidance provided in NEI 12-07. The reevaluation report also concluded that the new flood hazard analysis, described in the reevaluation report, did not provide results that degraded the APMs identified during the flooding walkdowns.

Additional actions, described in the response to RAI-3, have been taken to make the process consistent with the information provided in this RAI.

RAI-3

If changes are necessary, a general description of any process changes to establish this consistency.

Response

The following changes to the APM evaluation process were made in the review of the guidance provided in this RAI:

During the flooding walkdowns, a numerical value had not previously been established to define "small APM", rather engineering judgment was utilized to determine if a "small

APM" existed. As part of the actions taken as a result of this RAI, a value has been established to define "small APM." and the walkdown records have been reviewed and updated. The conclusion that no instances of "small APM" with large consequences exist was confirmed.

A specific APM had not been assigned to some of the seals associated with flood protection features. This issue was addressed as described in the response to RAI-4 below.

These issues have now been addressed in accordance with the guidance provided in this RAI. The NEI 12-07 Walkdown Record Forms and the revisions made as part of the Fermi 2 response to this RAI have been retained on site for NRC audit.

RAI-4

As a result of the audits and subsequent interactions with industry during public meetings, NRC staff recognized that evaluation of APM for seals (e.g., flood doors, penetrations, flood gates, etc.) was challenging for some licensees. Generally, licensees were expected to use either Approach A or Approach B (described below) to determine the APM for seals:

- a) If seal pressure ratings were known, the seal ratings were used to determine APM (similar to example 2 in Section 3.13 of NEI 12-07). A numerical value for APM was documented. No further action was performed if the APM value was greater than the pre-established small-margin threshold value. If the APM value was small, an assessment of "significant consequences" was performed and the guidance in NEI 12-07 Section 5.8 was followed.
- b) If the seal pressure rating was not known, the APM for seals in a flood barrier is assumed to be greater than the pre-established small-margin threshold value if the following conditions were met: (1) the APM for the barrier in which the seal is located is greater than the small-margin threshold value and there is evidence that the seals were designed/procured, installed, and controlled as flooding seals in accordance with the flooding licensing basis. Note that in order to determine that the seal has been controlled as a flooding seal, it was only necessary to determine that the seal configuration has been governed by the plant's design control process since installation. In this case, the APM for the seal could have been documented as "not small".

As part of the RAI response, state if either Approach A or Approach B was used as part of the initial walkdowns or as part of actions taken in response to this RAI. No additional actions are necessary if either Approach A or B was used.

If neither Approach A or B was used to determine the APM values for seals (either as part of the walkdowns or as part of actions taken in response to this RAI), then perform the following two actions:

Enter the condition into the CAP (note: it is acceptable to utilize a single CAP entry to capture this issue for multiple seals). CAP disposition of "undetermined" APM values for seals should consider the guidance provided in NEI 12-07, Section 5.8. The CAP disposition should confirm all seals can perform their intended safety function against floods up to the current licensing basis flood height. Disposition may occur as part of the Integrated Assessment. If an Integrated Assessment is not performed, determine whether there are significant consequences associated with exceeding the capacity of the seals and take interim action(s), if necessary, via the CAP processes. These actions do not need to be complete prior to the RAI response.

Report the APM as "undetermined" and provide the CAP reference in the RAI response.

Response

Two types of seals were encompassed in the Fermi 2 flooding walkdowns, penetration seals and watertight door seals. The approach for each is described below:

- a) Approach A was used for penetration seals. During the initial walkdown effort an APM value was determined based on the seal pressure rating. Engineering judgment was used to determine whether or not the seal APM should be considered to have a "small APM." Subsequently, as part of the actions taken in response to this RAI, a numerical value for small APM was established and used to determine whether or not a small APM exists.
- b) An APM for watertight door seals was not determined during the flooding walkdowns since such a determination would require an engineering evaluation beyond the scope of the walkdown effort. As part of the actions taken in response to this RAI, Approach B was used to determine that the APM for the watertight door seals was "not small."

In each case, no instances of small APM with significant consequences were identified.