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JAFP-14-0010
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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

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

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-059

Reference:
1. 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 (ML12053A340)
2. 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 (ML12144A142)
3. Entergy letter, Flooding Walkdown Report - Entergy's Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated November 27, 2012 (JAFP-12-0135)
4. NRC Letter, Request for Additional Information Associated with Near-Term Task Force Recommendation 2.3, Flooding Walkdowns; dated December 23, 2013 (ML13325A891)

Dear Sir or Madam:

On March 12, 2012, the NRC staff issued Reference 1 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 2, 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 3, James A. FitzPatrick Nuclear Power Plant (JAF) 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 its assessments. Accordingly, by Reference 4 the NRC staff has issued a request for addition information (RAI). The RAI questions and the JAF responses are provided in the attachment.

This letter contains no new regulatory commitments.

If you have any questions regarding this submittal, please contact Mr. Chris M. Adner, Regulatory Assurance Manager, at (315) 349-6766.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 31, 2014.

Sincerely,

Lawrence M. Coyle
Site Vice President

LMC/CMA/mh

Attachment: JAF Response to Request for Additional Information

cc: Director, Office of Nuclear Reactor Regulation
NRC Regional Administrator
NRC Resident Inspector
Mr. Mohan Thadani, Senior Project Manager
Ms. Bridget Frymire, NYSPSC
Mr. Francis J. Murray Jr., President NYSERDA

JAFP-14-0010

Attachment

JAF Response to Request for Additional Information

(2 Pages)

JAF Response to Request for Additional Information

On March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) staff issued a letter requesting additional information per Title 10 of the Code of Federal Regulations, Section 50.54(f) (hereafter called the 50.54(f) letter). The 50.54(f) letter requested that licensees conduct flooding hazard walkdowns to verify the plant configuration with the current licensing basis (CLB). James A. FitzPatrick Nuclear Power Plant (JAF) submitted the flooding hazard walkdown report by letter dated November 27, 2012. 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 submitted a request for additional information (RAI). The RAI questions and the JAF responses are provided in this attachment.

RAI Number 1: Confirmation that the process for evaluating APM was reviewed.

Response:

Entergy Nuclear Operations, Inc. has completed a review of the process used at James A. FitzPatrick Nuclear Power Plant to evaluate APMs.

RAI Number 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:

The Available Physical Margin (APM) process is now consistent with NEI 12-07 guidance. The walkdown effort followed the guidance provided in NEI 12-07. Additional actions have been taken to make the process/documentation consistent with the information provided in this RAI.

APM and a value for small margin have been established where appropriate. Those flood protection features for which a numerical APM value could not be determined were evaluated to determine if a condition of “small margin” exists.

In no instance was a classification of small margin (i.e. small APM) identified regarding the (29) passive flood protection features identified in the JAF’s “Flooding Walkdown Submittal Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Flooding” report no. JAF-RPT-12-00016 R0 and walked down at JAF.

RAI Number 3: If changes are necessary, a general description of any process changes to establish this consistency.

Response:

As stated above, the walkdown effort followed the guidance provided in NEI 12-07. APMs have been established as required, based on the walkdowns and subsequent evaluation.

As an example, APMs have been established for the electrical penetration seals (hereafter referred to as “seals”) contained in the two electrical manholes, Manhole #1 and Manhole #2, which communicate with the Reactor Building. In the most bounding condition (at Manhole #1) it was determined that the APM was greater than 1 ft. Since this is not a small margin, no further evaluation was performed regarding this RAI.

JAF Response to Request for Additional Information

RAI Number 4: APM Approach

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:

Neither Approach A or B, as described above, were used to determine the APM values for seals in either the walkdowns or the follow-up actions in response to the RAIs.

However, no entry was made into the Corrective Action Process (CAP) based on the following:

- APM values were established for both manhole penetration seals such that APM is not “undetermined” and is not “small.”

JAF Response to Request for Additional Information

- Although the seals were included in the scope of flood protection features, the seals are not included as part of the current Licensing Basis as flood protection features.

The Manhole #1 and Manhole #2 seals were inspected as part of the walkdowns for signs of degradation. These are the only seals that were inspected under the scope of flood protection features. Condition report CR-JAF-2012-07040 was initiated to address degradation found based on the Manhole #1 inspection.

In lieu of reporting an “undetermined” APM value for the manhole seals, the guidance of NEI 12-07 Section 5.8 was used to establish APMs for the inspected seals. The seals have been assigned an APM value and these values have been determined to be not “small.” The manhole seal APM values have been documented in plant records.