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

Joseph M. Farley Nuclear Plant – Units 1 and 2
Response to the Request for Additional Information Associated with
Near-Term Task Force Recommendation 2.3, Flooding Walkdowns

References:

1. NRC Letter, Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the NTTF Review of Insights from the Fukushima Daiichi Accident, dated March 12, 2012. ML12073A348.
2. NRC Letter, Endorsement of Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012. ML12144A142.
3. Letter to NRC, Joseph M. Farley Nuclear Plant - Units 1 and 2, Flooding Recommendation 2.3 Walkdown Report, dated November 27, 2012. ML13004A251.
4. NRC Letter, Request for Additional Information Associated with NTTF Recommendation 2.3, Flooding Walkdowns, dated December 23, 2013. ML13325A891.

Ladies and Gentlemen:

On March 12, 2012, the NRC staff issued Reference 1 requesting information in accordance with 10 CFR 50.54(f). Enclosure 4 of that letter contains specific Requested Information associated with Near-Term Task Force Recommendation 2.3 for Flooding. Using NEI 12-07, as endorsed by the NRC in Reference 2, Southern Nuclear Operating Company (SNC) submitted Reference 3 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 the assessments. Accordingly, by Reference 4 the NRC staff has issued a request for additional information (RAI). The RAI questions and the responses are provided below:

NRC RAI 1: Confirm that the process for evaluating APM was reviewed.

SNC Response: Southern Nuclear Operating Company has completed a review of the process used at the Joseph M. Farley Nuclear Plant – Units 1 and 2 to evaluate APMs.

NRC RAI 2: Confirm that the APM process is now or was always consistent with the guidance in NEI 12-07 and discussed in this RAI.

SNC Response: The original walkdown effort followed the guidance provided in NEI 12-07. Additional actions have been taken to make the process consistent with the information provided in this RAI.

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

SNC Response: While the original walkdown effort followed the guidance provided in NEI 12-07, small margins have now been defined. Also, a specific APM had not been assigned to the seals associated with flood protection features. These items have now been addressed in accordance with the guidance provided in this RAI and entered into the corrective action process, as appropriate, for further evaluation.

NRC 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.

SNC Response: Neither Approach A nor B, as described above, were used to determine the APM values for seals. All seals were inspected as part of the original walkdowns for signs of degradation, and corrective actions were taken, if required. As part of the actions taken to address this RAI, the seals have been assigned an APM value of "undetermined" and have been entered into the Corrective Action Program for further evaluation of their available physical margin. Implementation of interim actions will be pursued, if necessary.

This letter contains no new NRC commitments. If you have any questions, please contact John Giddens at 205.992.7924.

Mr. B. L. Ivey states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,



Mr. B. L. Ivey
Vice President - Regulatory Affairs

BLI/JMG

Sworn to and subscribed before me this 29th day of January, 2014.

Nancy Louise Henderson
Notary Public

My commission expires: March 23, 2014

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Ms. C. A. Gayheart, Vice President – Farley
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