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Arkansas Nuclear One

OCAN041410

April 30, 2014

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

SUBJECT: Revised Response to NRC 10 CFR 50.54(f) Request for Information Regarding Near-Term Task Force (NTTF) Recommendation 2.3, Flooding Arkansas Nuclear One – Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6

- REFERENCES:
1. NRC Letter to Entergy, *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 Dai-ichi Accident*, March 12, 2012 (ML12053A340) (OCNA031208)
 2. Entergy Letters to NRC, *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 NTTF Review of Insights from the Fukushima Dai-ichi Accident*, dated November 27, 2012, (ML12334A008 and ML12334A006) (1CAN111202 and 2CAN111202)
 3. NRC Letter to Entergy, *Request for Additional Information (RAI) Associated with NTTF Recommendation 2.3, Flooding Walkdowns*, dated December 23, 2013 (ML13325A891) (OCNA121304)
 4. Entergy Letter to NRC, *Update to Response to NRC 10 CFR 50.54(f) Request for Information Regarding NTTF Recommendation 2.3, Flooding - Review of Available Physical Margin (APM) Assessments*, dated January 31, 2014 (ML14031A183) (OCAN011404)

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) which contains specific Requested Information associated with NTTF Recommendation 2.3 for Flooding. By Reference 2, Entergy Operations, Inc. (Entergy) initially submitted the Flooding Walkdown Reports for Arkansas Nuclear One (ANO).

The NRC issued RAIs concerning APM by Reference 3. By Reference 4 Entergy committed to respond to the APM RAIs and provide revised Flooding Walkdown Reports by April 30, 2014. The flooding walkdowns have been completed; however, additional time is needed to compile the results and finalize the reports; therefore, Entergy will provide the revised Flooding Walkdown Reports by May 15, 2014. In accordance with Entergy's commitment management procedure, the NRR Project Manager was notified of the delay on April 29, 2014. Attachment 1 provides responses to the APM RAIs.

This letter contains a new regulatory commitment which is identified in Attachment 2. Should you have any questions regarding this submittal, please contact Stephenie Pyle at 479.858.4704.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 30, 2014.

Sincerely,

Original signed by Jeremy G. Browning

JGB/nbm

Attachments: 1. Responses to APM RAIs for ANO
2. List of Regulatory Commitments

cc: Mr. Marc L. Dapas
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U. S. Nuclear Regulatory Commission
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Attachment 1 to

0CAN041410

**Responses to Available Physical Margin (APM) Requests for Additional
Information (RAIs) for Arkansas Nuclear One (ANO)**

Responses to APM RAIs for ANO

RAI 1: Provide confirmation that the process for evaluating APM was reviewed.

Entergy Operations, Inc. has completed a review of the process used at ANO-1 and ANO-2 to evaluate APMs.

RAI 2: Provide confirmation that the APM process is now or was always consistent with the guidance in Nuclear Energy Institute (NEI) 12-07 and discussed in this RAI.

The original walkdown effort intended to follow the guidance provided in NEI 12-07. For the subsequent walkdown effort, additional actions have been taken to make the process consistent with the information provided in this RAI including the definition of small margin.

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

As stated above, the original walkdown effort intended to follow the guidance provided in NEI 12-07; however, discrepancies were identified in the original walkdown reports. As a result a subsequent walkdown effort has been performed, and APM is being documented. For the subsequent walkdown effort, the definition for a small margin was updated to be consistent with the information provided in this RAI.

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 Corrective Action Program (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.**

Approach A is being used to determine APM if seal pressure ratings are known; Approach B is being used to determine APM for seals if seal pressure ratings are not known. When the seal pressure rating is not known, the APM for these seals is assumed to be greater than the pre-established small-margin threshold value. The conditions described above are being met because the APM for the barrier in which the seal is located is greater than the small-margin threshold value, and the seals were designed, procured, and installed in accordance with the ANO licensing basis. The seals are being inspected as part of the walkdowns for signs of degradation, and corrective actions are being taken, when required.

Attachment 2 to

OCAN041410

List of Regulatory Commitments

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The following table identifies those actions committed to by Entergy Operations, Inc. (Entergy) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check One)		SCHEDULED COMPLETION DATE (If Required)
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
Provide revised Flooding Walkdown Reports	X		May 15, 2014