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1CAN111502

November 17, 2015

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: Clarification of Response to Round 2 Request for Additional Information  
Adoption of National Fire Protection Association Standard NFPA-805  
Arkansas Nuclear One, Unit 1  
Docket No. 50-313  
License No. DPR-51

Dear Sir or Madam:

By email dated September 8, 2015 (Reference 7), the NRC requested additional information associated with the Entergy Operations, Inc. (Entergy) request to amend the Arkansas Nuclear One, Unit 1 (ANO-1) Technical Specifications (TS) and licensing bases to comply with the requirements in 10 CFR 50.48(a), 10 CFR 50.48(c), and the guidance in Regulatory Guide (RG) 1.205, "Risk-Informed Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants." The amendment request followed Nuclear Energy Institute (NEI) 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program under 10 CFR 50.48(c)." This submittal described the methodology used to demonstrate compliance with, and transition to, National Fire Protection Association (NFPA) 805, and included regulatory evaluations, probabilistic risk assessment (PRA), change evaluations, proposed modifications for non-compliances, and supporting attachments.

Entergy provided responses to the requested additional information (RAI) in letter dated September 22, 2015 (Reference 8). Entergy verbally committed to provide additional clarification to two of the Reference 8 responses, specifically Fire Protection Engineering (FPE) RAI 06.01b and FPE RAI 06.01c, in a conference call held with members of the NRC staff at 1400 CDT on November 10, 2015. Clarifying additional information in this regard is included in the attachment to this letter.

The additional information, as detailed in this letter, with respect to the original Entergy request (Reference 1) has been reviewed and Entergy has determined that the information does not invalidate the no significant hazards consideration included in the Reference 1 letter.

In accordance with 10 CFR 50.91(b)(1), a copy of this application is being provided to the designated Arkansas state official.

No new commitments have been identified in this letter.

If you have any questions or require additional information, please contact Stephenie Pyle at 479-858-4704.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on November 17, 2015.

Sincerely,

**ORIGINAL SIGNED BY JEREMY G. BROWNING**

JGB/dbb

Attachment: Clarification of Response to Round 2 Request for Additional Information – ANO-1  
Transition to NFPA-805

cc: Mr. Marc L. Dapas  
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NRC Senior Resident Inspector  
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U. S. Nuclear Regulatory Commission  
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Radiation Control Section  
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- REFERENCES:
1. Entergy letter dated January 29, 2014, *License Amendment Request to Adopt NFPA-805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants (2001 Edition)* (1CAN011401) (ML14029A438)
  2. NRC letter dated May 5, 2015, *Arkansas Nuclear One, Unit 1 – Request for Additional Information Regarding License Amendment Request to Adopt National Fire Protection Association Standard 805* (TAC No. MF3419) (1CNA051501) (ML15091A431)
  3. Entergy letter dated May 19, 2015, *Response to Request for Additional Information – Adoption of National Fire Protection Association Standard NFPA-805* (1CAN051501) (ML15139A196)
  4. Entergy letter dated June 16, 2015, *60-Day Response to Request for Additional Information – Adoption of National Fire Protection Association Standard NFPA-805* (1CAN061501) (ML15167A503)
  5. Entergy letter dated July 21, 2015, *90-Day Response to Request for Additional Information – Adoption of National Fire Protection Association Standard NFPA-805* (1CAN071501) (ML15203A205)
  6. Entergy letter dated August 12, 2015, *120-Day Response to Request for Additional Information – Adoption of National Fire Protection Association Standard NFPA-805* (1CAN081501) (ML15224A729)
  7. NRC email dated September 8, 2015, *Arkansas Nuclear One, Unit 1 – 2<sup>nd</sup> Round Request for Additional Information - ANO-1 NFPA 805 LAR* (TAC No. MF3419) (1CNA091501) (ML15251A220)
  8. Entergy letter dated September 22, 2015, *Round 2 Response to Request for Additional Information – Adoption of National Fire Protection Association Standard NFPA-805* (1CAN091501) (ML15265A113)
  9. NRC email dated October 6, 2015, *Arkansas Nuclear One, Unit 1 – 2<sup>nd</sup> Round Part 2 Request for Additional Information - ANO-1 NFPA 805 LAR* (TAC No. MF3419) (1CNA101501) (ML15280A114)
  10. Entergy letter dated November 4, 2015, *Second Set of Round 2 Responses to Request for Additional Information Adoption of National Fire Protection Association Standard NFPA-805* (1CAN111501) (ML15308A452)

**Attachment to**

**1CAN111502**

**Clarification of Response to Round 2 Request for Additional Information  
ANO-1 Transition to NFPA-805**

**CLARIFICATION OF RESPONSE TO ROUND 2 REQUEST FOR ADDITIONAL  
INFORMATION  
ANO-1 Transition to NFPA-805**

By email dated September 8, 2015 (Reference 7), the NRC requested additional information associated with the Entergy Operations, Inc. (Entergy) request to amend the Arkansas Nuclear One, Unit 1 (ANO-1) Technical Specifications (TS) and licensing bases to comply with the requirements in 10 CFR 50.48(a), 10 CFR 50.48(c), and the guidance in Regulatory Guide (RG) 1.205, "Risk-Informed Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants." The amendment request followed Nuclear Energy Institute (NEI) 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program under 10 CFR 50.48(c)." This submittal described the methodology used to demonstrate compliance with, and transition to, National Fire Protection Association (NFPA) 805, and included regulatory evaluations, probabilistic risk assessment (PRA), change evaluations, proposed modifications for non-compliances, and supporting attachments.

Entergy provided responses to the request for additional information (RAI) by letter dated September 22, 2015 (Reference 8). Entergy verbally committed to provide additional clarification to two of the Reference 8 responses, specifically Fire Protection Engineering (FPE) RAI 06.01b and FPE RAI 06.01c, in a conference call held with members of the NRC staff at 1400 CDT on November 10, 2015. The two original RAI questions are included below for convenience, followed by additional, clarifying information for each.

**FPE RAI 06.01**

In its response to FPE RAI 06 in a letter dated June 16, 2015 (ADAMS Accession No. ML15167A503), the licensee stated that for a number of NFPA 805 Chapter 3 attributes, the compliance statement and compliance basis will be changing as described in its response. The NRC staff requests the following additional clarification related to the licensee's proposed compliance statement changes:

- b) NFPA 805 Section 3.6.1 requires that for all power block buildings, Class III standpipe and hose systems will be installed in accordance with NFPA 14, "Standard for the Installation of Standpipe, Private Hydrant, and Hose Stations." In LAR Attachment A, the licensee stated that it "Complies with Use of EEEEs" and that the requirement was evaluated by the NFPA 14 code compliance evaluation. In its response to FPE RAI 06, the licensee revised its compliance statement to "Complies with Clarification" and its compliance basis to state that the Chapter 3 requirement was evaluated by the NFPA 14 code compliance evaluation and that the standpipe and hose systems are considered Class II and have been evaluated for acceptability. The licensee further stated that the ANO-1 License Amendment 35 SER is considered for information only and does not support compliance. The NRC-endorsed guidance in NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," Revision 2, Section 4.3.1, describes the compliance statement of "Complies with Clarification" as items that are not in "literal compliance" with NFPA 805, but should transition as complies. The example given in NEI 04-02 illustrates this strategy is applied in circumstances such as compliance methods that could be considered editorial in nature. The licensee's compliance basis is not considered to be an editorial clarification, such as described in NEI 04-02, and is outside the guidance in

NEI 04-02 for being considered a “clarification.” Provide a more appropriate compliance statement such as “Complies by Previous NRC Approval” and the cited excerpts from the submittal(s) and the SER(s) that substantiate the approval, or submit a performance-based method in accordance with 10 CFR 50.48(c)(2)(vii).

- c) NFPA 805 Section 3.11.2 requires that fire barriers required by NFPA 805 Chapter 4 include a specific fire-resistance rating and that these fire barriers be designed and installed to meet the specific fire resistance rating using assemblies qualified by fire tests. In LAR Attachment A, the licensee states it “Complies with use of EEEEs” and cites excerpts from ANO-1 License Amendment 35, Section 4.11 and refers to an implementation item in LAR Attachment S (Table S-1, Item S1-31). In its response to FPE RAI 06, the licensee stated that its compliance basis will be revised to state that the requirement was evaluated by an engineering evaluation and that the ANO-1 License Amendment 35 SER is considered for information only and does not support compliance. Clarify if the compliance basis noted in FPE RAI 06 will replace the compliance basis in LAR Attachment A in its entirety and confirm if the implementation item that was described in the LAR Attachment A, compliance basis is still applicable.

#### *Response*

- b) With respect to the September 22, 2015 (Reference 8) Entergy response to this RAI question, the Compliance Statement for NFPA 805, Section 3.6.1, should be revised to “Complies with use of EEEEs” in lieu of “N/A.”

As previously stated in the Reference 8 response, the Reference Document section should be revised to remove the following, since compliance is not associated with previous NRC approval:

“ANO-1 License Amendment 35, Safety Evaluation Report, 8/22/1978, Item 4.3.1.4.”

Also as previously stated in the Reference 8 response, the Compliance Basis should be revised to state:

“The standpipe and hose systems at ANO are Class II and have been evaluated by the NFPA 14 Code Compliance Evaluation.”

- c) With respect to the September 22, 2015 (Reference 8) Entergy response to this RAI question, the Compliance Statement for NFPA 805, Section 3.11.2, should be revised to BOTH “Complies by previous NRC approval” and “Complies.” Those fire barriers which were enveloped by the NRC Safety Evaluation Report Amendment 35 for ANO-1 fall under the “Complies by previous NRC approval” portion of the statement. However, other existing fire barriers have been since added to the program and credited, which were not considered in Amendment 35. These fire barriers (wall, floor, ceiling) as described in the Reference 8 response were evaluated in Engineering Change EC-1527 and EC-1956 to document acceptability with regard to the 3-hour fire rating requirement. The barrier penetration items (doors, seals, ducts, etc.) will be inspected and modified, or provided with an adequate-for-the-hazard evaluation, as part of the effort identified in Attachment S, Table S-1, Implementation Item S1-31. The requested addition of the Note contained in the Reference 8 Entergy response to the Compliance Basis remains applicable.

## REFERENCES

1. Entergy letter dated January 29, 2014, *License Amendment Request to Adopt NFPA-805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants (2001 Edition)* (1CAN011401) (ML14029A438)
2. NRC letter dated May 5, 2015, *Arkansas Nuclear One, Unit 1 – Request for Additional Information Regarding License Amendment Request to Adopt National Fire Protection Association Standard 805* (TAC No. MF3419) (1CNA051501) (ML15091A431)
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9. NRC email dated October 6, 2015, *Arkansas Nuclear One, Unit 1 – 2<sup>nd</sup> Round Part 2 Request for Additional Information - ANO-1 NFPA 805 LAR* (TAC No. MF3419) (1CNA101501) (ML15280A114)
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