



Entergy

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2CAN050402

May 19, 2004

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Request for Additional Information Responses for
License Renewal Application TAC No. MB8402
Arkansas Nuclear One – Unit 2
Docket No. 50-368
License No. NPF-6

Dear Sir or Madam:

By letter dated April 8, 2004 (2CNA040405), the NRC requested additional information on the Arkansas Nuclear One, Unit 2 (ANO-2) License Renewal Application (LRA) within 30 days of receipt. The requests for additional information (RAIs) are from the LRA Section 2.1, Scoping and Screening Methodology and Section 2.3, System Scoping and Screening Results. The responses to the RAIs are contained in the attachment.

There are no new commitments contained in this submittal. Should you have any questions concerning this submittal, please contact Ms. Natalie Mosher at (479) 858-4635.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 19, 2004.

Sincerely,

Timothy G. Mitchell
Director, Nuclear Safety Assurance

TGM/nbm

Attachment

A100

cc: Dr. Bruce S. Mallett
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**Attachment to
2CAN050402
RAI Responses**

Sections 2.1 and 2.3 RAI Responses

RAI 2.3-1: Section 2.1.1 states the following with respect to the scoping methodology for the heating, ventilation, and air conditioning (HVAC) systems: "Consistent with NEI 95-10, the scoping process used for the ANO-2 license renewal project began with a list of plant systems and structures, determined the functions they perform, and then determined which functions met any of the three criteria of 10CFR54.4(a). Functions that meet any of the criteria are intended functions for license renewal, and the systems and structures that perform these functions are included within the scope of license renewal." In order for the Staff to determine that you have not omitted any structures, systems, and components that should be within the scope of license renewal according to 10CFR54.4(a) describe the details of the process used to confirm whether you have included all the structures, systems, and components in such systems and structures within the scope of license renewal.

Response: In accordance with 10CFR54.21(a)(1), structures and components subject to aging management review are those that perform an intended function without moving parts or a change in configuration or properties and that are not subject to replacement based on a qualified life or specified time period. Within the systems and structures in the scope of license renewal, structures and components that are subject to an aging management review were identified in accordance with 10CFR54.21. All components within the systems identified in the LRA in Table 2.2-1a and Table 2.2-1b were conservatively considered to be within the scope of license renewal for the purpose of identifying components and structures that are subject to aging management review. In conclusion, all components within the systems identified in LRA Tables 2.2-1a and 2.2-1b, and all structures identified in LRA Table 2.2-3, were conservatively considered to be within the scope of license renewal for the purposes of identifying components and structures that are subject to aging management review.

RAI 2.3-2: In the preface to the LRA on Page 1 it is stated in the third paragraph that, "...the Tables provide a reference to the results of the aging management review for each component and commodity type. The descriptions of systems in Section 2 identify license renewal drawings that document the components subject to aging management review for mechanical systems. The drawings are provided in a separate submittal."

Also, in Section 2.1.1, "Scoping Methodology," you have stated that, "License renewal drawings were prepared to indicate components subject to aging management review. Components that are subject to aging management review based only on the criterion of 10CFR54.4(a)(2) are not indicated on the drawings."

In order for the Staff to determine that you have not omitted any structures, systems, and components that should be within the scope of license renewal according to 10CFR54.4(a) describe the process used to confirm whether you have included all the structures, systems, and components in the scope of license renewal for the HVAC systems.

Response: As stated in the response to 2.3-1, all components within the systems identified in the LRA in Table 2.2-1a and Table 2.2-1b and all structures identified in LRA Table 2.2-3, were conservatively considered to be within the scope of license renewal for the purposes of identifying components and structures that are subject to aging management review. This includes components in systems that are in scope only for 10CFR54.4(a)(2). The inclusion of systems only for 10CFR54.4(a)(2) is indicated in Table 2.2-1a under the LRA Section column by a reference to Section 2.3.3.11, Miscellaneous Systems in Scope for 10CFR54.4(a)(2).

RAI 2.3-3: The Staff requests that the applicant:

- a. Clarify whether the sealants used on the main control room envelope (MCRE) to prevent unfiltered inleakages are included in the scope of license renewal in accordance with 10CFR54.4(a), and subject to an aging management review in accordance with 10CFR54.21(a)(1). If so, provide the relevant information to complete Table 2.3.3.10. Additionally, do structural sealants (elastomers), as listed in Table 2.4-4 of the LRA, include the MCRE ductwork and component housing sealants? If the sealants are not considered subject to an aging management review, provide justification for their exclusion.
- b. Clarify whether sealants used as a pressure boundary function for the auxiliary building ventilation system are within the scope of license renewal in accordance with 10CFR54.4(a), and subject to an aging management review in accordance with 10CFR54.21(a)(1). If they are, provide the relevant information about the sealants to complete Table 2.3.3.9. If the sealants are excluded from the scope of license renewal and not subject to an aging management review, provide justification for this exclusion.

Response:

- a. Sealants or elastomers that are used on the main control room envelope, including ductwork and component housing sealants, are included in the scope of license renewal. These sealants are structural sealants used to minimize leakage into the control room. They are addressed as structural bulk commodities and are subject to aging management review as documented in Section 2.4. The sealants are listed under "Elastomers" in Table 2.4-4 of the LRA.
- b. Sealants are not credited with a function of maintaining the pressure boundary for the auxiliary building ventilation system. No sealants used in the auxiliary building ventilation system perform a license renewal intended function.

RAI 2.3-4: It seems that the penetration rooms' ventilation system (see ANO-2 Safety Analysis Report (SAR) Section 6.5, "Penetration Rooms Ventilation System") is excluded from the license renewal application. If it is addressed as part of other ventilation systems, provide related information for the penetration rooms ventilation system components that are within the scope of license renewal in accordance with 10CFR54.4(a), and subject to an aging management review in accordance with 10CFR54.21(a)(1) or provide justification for the exclusion of the penetration rooms ventilation system from the LRA.

Additionally, provide the relevant information in the aging management review table about the penetration room sealant materials used for a pressure boundary function that are within the scope of license renewal in accordance with 10CFR54.4(a) and subject to an aging management review in accordance with 10CFR54.21(a)(1) or provide justification for its exclusion.

Response: The penetration room ventilation system is not in the scope of license renewal as documented in Table 2.2-2 on page 2.2-8 of the LRA. This system is not credited in post accident offsite dose analyses and is not required to maintain potential offsite exposures comparable to those referred to in 10CFR50.34(a)(1), 10CFR50.67(b)(2), or 10CFR100.11. This system is not credited with operation during any regulated events. In addition, SAR Section 6.5.1 states that the penetration room ventilation system is not credited for iodine removal in the accident analyses. Sealants (or elastomers) are not credited with maintaining penetration room pressure boundary since the system is not relied on for accident mitigation.

RAI 2.3-5: Table 2.3.2-5 for "Hydrogen Control System Components Subject to Aging Management Review" does not list separators 2F-254 and 2F-256 shown on ANO-2 piping and instrument diagram LRA-M-2261, Sheet 3 as components requiring an aging management review. Please identify where the LRA addresses the aging management review of these components or provide a justification for excluding these components from an aging management review.

Response:

Separators 2F-254 and 2F-256 are subject to aging management review and are included under the component type "filter housing" in LRA Table 2.3.2-5.