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2CAN090403

September 23, 2004

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

Subject: License Renewal Application Clarifications
Arkansas Nuclear One – Unit 2
Docket No. 50-368
License No. NPF-6

Dear Sir or Madam:

During recent teleconferences, the Staff requested clarifications to previously docketed requests for additional information (RAIs) responses for the Arkansas Nuclear One, Unit 2 (ANO-2) License Renewal Application (LRA). These clarifications are as follows:

- By letter dated August 18, 2004 (2CAN080401), Entergy provided a clarification for RAI 2.4-2. In addition, Entergy is including thermal insulation around hot piping penetrations in the scope of license renewal for ANO-2. Entergy performed an aging management review of the insulation. Based on consideration of the material and environment combination, its protected location, and operating experience, there are no aging effects requiring management for the insulation around hot piping penetrations.
- By letter dated September 10, 2004 (2CAN090402), Entergy provided a second clarification for RAI 3.3-2. In addition, as the plant ages, maintenance activities are not expected to decline. It is reasonable to assume that maintenance history is representative of future numbers and diverse locations of anticipated maintenance and inspection activities. Therefore, past chemistry, maintenance, and inservice inspections, combined with future anticipated inspections, constitute an adequate sample size to verify that the water chemistry control programs are managing aging effects so that intended functions will be maintained during the period of extended operation.

A100

- By letter dated September 10, 2004 (2CAN090402), Entergy provided a clarification for RAI 3.3.2.4.11-1. In the clarification, Entergy committed to a one-time inspection program for components subject to aging management review that were included for 10CFR54.4(a)(2) in auxiliary building heating and ventilation, auxiliary building sump, drain collection header, liquid radwaste management, post-accident sampling, resin transfer, regenerative waste, and spent resin systems.

This one-time inspection of selected 10CFR54.4(a)(2) components will determine whether degradation, as a result of loss of material, is occurring at a rate slow enough to ensure that the intended functions of the components will be maintained during the extended period of operation. This one-time inspection will be performed near the end of the current operating term. Aging of these components, if any, should progress slowly. Visual inspections will identify indications of loss of material due to corrosion. If such loss of material is found, an evaluation will be performed to confirm that the rate of corrosion will not result in loss of intended function during the period of extended operation. For material and environment combinations with no evidence of corrosion, or with very slow corrosion rates, no further actions will be taken. For material and environment combinations with corrosion rates such that loss of intended function due to excessive corrosion could occur during the extended period of operation, corrective actions will be taken in accordance with the corrective action program. Appropriate corrective action may consist of component replacement or additional inspections for components with the material and environment combination in which the excessive corrosion has been found.

As stated in the response to RAI 3.3.2.4.11-1, turbine building sump system components do not pose a significant hazard to safety-related equipment since they are not pressurized. However, they were conservatively included in scope and considered subject to aging management review. The turbine building sump system will be included with the eight systems discussed in the RAI response and the effects of aging on its components included for 10CFR54.4(a)(2) will be managed by the one-time inspection program.

- In addition to the above clarifications, the Safety Analysis Report Supplement (Appendix A of the LRA) will be revised as follows:

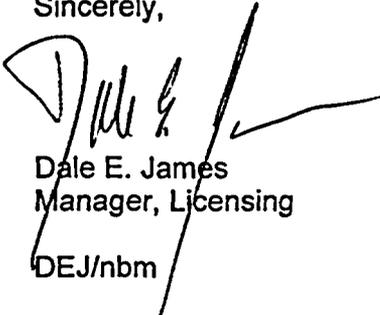
A.2.1.1 Alloy 600 Aging Management Program

This program will manage aging effects of alloy 600/690 items and alloy 52/152 and 82/182 welds in the reactor coolant system that are not addressed by the Reactor Vessel Head Penetration Inspection Program, Section A.2.1.21, and the Steam Generator Integrity Program, Section A.2.1.26. This program will detect primary water stress corrosion cracking (PWSCC) by using the examination and inspection requirements of ASME Section XI, as augmented by commitments in NRC correspondence. The Alloy 600 Aging Management Program will be initiated prior to the period of extended operation.

New commitments contained in this submittal are summarized in the attachment to 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 September 23, 2004.

Sincerely,



Dale E. James
Manager, Licensing

DEJ/nbm

Attachment

cc: Dr. Bruce S. Mallett
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Attachment to

2CAN090403

List of Regulatory Commitments

List of Regulatory Commitments

The following table identifies those actions committed to by 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	
<p>This one-time inspection of selected 10CFR54.4(a)(2) components will determine whether degradation, as a result of loss of material, is occurring at a rate slow enough to ensure that the intended functions of the components will be maintained during the extended period of operation. This one-time inspection will be performed near the end of the current operating term. Aging of these components, if any, should progress slowly. Visual inspections will identify indications of loss of material due to corrosion. If such loss of material is found, an evaluation will be performed to confirm that the rate of corrosion will not result in loss of intended function during the period of extended operation. For material and environment combinations with no evidence of corrosion, or with very slow corrosion rates, no further actions will be taken. For material and environment combinations with corrosion rates such that loss of intended function due to excessive corrosion could occur during the extended period of operation, corrective actions will be taken in accordance with the corrective action program. Appropriate corrective action may consist of component replacement or additional inspections for components with the material and environment combination in which the excessive corrosion has been found.</p>	X		Prior to July 17, 2018

<p>As stated in the response to RAI 3.3.2.4.11-1, turbine building sump system components do not pose a significant hazard to safety-related equipment since they are not pressurized. However, they were conservatively included in scope and considered subject to aging management review. The turbine building sump system will be included with the eight systems discussed in the RAI response and the effects of aging on its components included for 10CFR54.4(a)(2) will be managed by the one-time inspection program.</p>	<p>X</p>		<p>Prior to July 17, 2018</p>
<p>In addition to the above clarifications, the Safety Analysis Report Supplement (Appendix A of the LRA) will be revised as follows:</p> <p>A.2.1.1 Alloy 600 Aging Management Program</p> <p>This program will manage aging effects of alloy 600/690 items and alloy 52/152 and 82/182 welds in the reactor coolant system that are not addressed by the Reactor Vessel Head Penetration Inspection Program, Section A.2.1.21, and the Steam Generator Integrity Program, Section A.2.1.26. This program will detect primary water stress corrosion cracking (PWSCC) by using the examination and inspection requirements of ASME Section XI, as augmented by commitments in NRC correspondence. The Alloy 600 Aging Management Program will be initiated prior to the period of extended operation.</p>	<p>X</p>		<p>Upon issuance of the renewed license</p>