



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 6, 2023

ANO Site Vice President  
Arkansas Nuclear One  
Entergy Operations, Inc.  
N-TSB-58  
1448 S.R. 333  
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - AUDIT PLAN TO SUPPORT  
REVIEW OF REQUEST FOR ALTERNATIVE ANO-CISI-002 REGARDING  
CONTAINMENT INSERVICE INSPECTION FREQUENCY  
(EPID L-2022-LLR-0080)

Dear Sir or Madam:

By letter dated November 10, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22316A001), Entergy Operations, Inc. (Entergy, the licensee) submitted a request to use an alternative to certain requirements of subsection IWL of the American Society for Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," at Arkansas Nuclear One, Units 1 and 2. Per the ASME Code, the periodic visual examination and physical testing of containment building concrete are required in accordance with table IWL-2500-1 L-A, as well as physical testing of unbonded post-tensioning systems in accordance with table IWL-2500-1 L-B. The licensee also proposed an alternative to the requirements of paragraph IWL-2523 to limit the scope of wire strands required to be removed (under subparagraph IWL-2523.1) and examined (in accordance with subparagraph IWL-2523.2).

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the licensee's alternative request and determined that a regulatory audit would assist in the timely completion of the review. The NRC staff will conduct a regulatory audit to support its review in accordance with the enclosed audit plan. A regulatory audit is a planned activity that includes the examination and evaluation of primarily non-docketed information.

The audit will be conducted to increase the NRC staff's understanding of the request and identify information that will need to be docketed to support the NRC staff's regulatory findings. The audit will be conducted from February 13, 2023, through April 7, 2023, through an online portal (also known as electronic portal, ePortal, or electronic reading room) established by Entergy. The enclosed audit plan was discussed with your staff on February 6, 2023.

If you have any questions, please contact me at (301) 415-4037 or by email at [Thomas.Wengert@nrc.gov](mailto:Thomas.Wengert@nrc.gov).

Sincerely,

*/RA/*

Thomas J. Wengert, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosure:  
Audit Plan

cc: Listserv

REGULATORY AUDIT PLAN  
TO SUPPORT REVIEW OF ALTERNATIVE REQUEST ANO-CISI-002  
REGARDING CONTAINMENT INSERVICE INSPECTION FREQUENCY  
ENERGY OPERATIONS, INC.  
ARKANSAS NUCLEAR ONE, UNITS 1 AND 2  
DOCKET NOS. 50-313 AND 50-368

1.0 BACKGROUND

By letter dated November 10, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22316A001), Entergy Operations, Inc. (Entergy, the licensee) submitted a request to use an alternative to certain requirements of subsection IWL of the American Society for Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components" at Arkansas Nuclear One, Units 1 and 2 (ANO, Units 1 and 2). Per the ASME Code, the periodic visual examination and physical testing of containment building concrete are required in accordance with table IWL-2500-1 L-A, as well as physical testing of unbonded post-tensioning systems in accordance with table IWL-2500-1 L-B. The licensee also proposed an alternative to the requirements of paragraph IWL-2523 to limit the scope of wire strands required to be removed (under subparagraph IWL-2523.1) and examined (in accordance with subparagraph IWL-2523.2).

The U.S. Nuclear Regulatory Commission (NRC) staff has determined the need for a regulatory audit to be conducted in accordance with the Office of Nuclear Reactor Regulation Office Instruction LIC-111, Revision 1, "Regulatory Audits" (ML19226A274), for the NRC staff to examine the licensee's non-docketed information with the intent to gain a better understanding of the alternative request, to verify information, and to identify information that may require docketing to support the basis of the NRC staff's licensing decision.

2.0 REGULATORY AUDIT BASIS

The NRC staff (i.e., audit team) will perform the audit to support its evaluation of whether the licensee's request provides plant specific examination results on ANO, Units 1 and 2, as a basis for the proposed deviations from the ASME Code, Section XI, subsection IWL requirements.

3.0 REGULATORY AUDIT SCOPE AND METHODOLOGY

The audit team will review the licensee's tendon surveillance reports, calculations, and analyses supporting the proposed alternative. The audit team will use this review to determine if the licensee needs to submit any additional information in support of the requested changes in order to support conclusions for the NRC staff's safety evaluation.

#### 4.0 INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT

The NRC staff requests that the licensee have the following information (identified as references in the attachment to the enclosure to the letter dated November 10, 2022) readily available and accessible for the NRC staff's review via an internet-based portal:

- "30th Year Unit 1 Containment Building Tendon Surveillance and Concrete Inspection at Arkansas Nuclear One / Post Tensioning Surveillance Report," prepared by Precision Surveillance Corporation, Revision 1, dated October 30, 2004
- "Final Report for the 35th Year Tendon Surveillance at ANO Unit 1/Document No. AN-N1029-501," prepared by Precision Surveillance Corporation, Revision 0, dated May 18, 2009
- "Final Report for the 40th Year (10th Period) Tendon Surveillance at Arkansas Nuclear One Unit 1 / Document No. REP-1086-510," prepared by Precision Surveillance Corporation, Revision 1, dated October 24, 2013
- "Final Report for the 45th Year Containment Structure Tendon Surveillance at Arkansas Nuclear One Unit 1 / Document No. REP-1138-510," prepared by Precision Surveillance Corporation, Revision 0, dated October 14, 2018
- "Final Report for the ANO Unit 2 30th Year (8th Period) Tendon Surveillance," prepared by Precision Surveillance Corporation, Revision 0, dated September 15, 2010
- "Final Report for the 35th Year Unit 2 Tendon Surveillance at Arkansas Nuclear One Power Plant," prepared by Precision Surveillance Corporation, Revision 0, dated October 16, 2014
- "Final Report for the 40th Year Containment Structure Tendon Surveillance at Arkansas Nuclear One Unit 2," prepared by Precision Surveillance Corporation, Revision 0, dated September 24, 2020
- ANO Calculation CALC-99-E-0015-01, "Predicted Tendon Prestress Forces for 20 Year License Extension," Revision 0, dated November 2013
- ANO Calculation CALC-97-E-0009-24, "Unit 2 Tendon Surveillance Wire Force Curves," Revision 1, dated December 1997
- ANO (Unit 2) Calculation CALC-97-E-0009-05, "Containment Side Shell Design Report," Revision 2, dated June 2022.

Based on the review of the above documents, the NRC staff will determine whether it needs to request any additional documents to be made available on the portal, or whether additional information needs to be submitted on the docket for the staff to complete the review of the requested changes.

## 5.0 TEAM ASSIGNMENTS

The audit team will consist of the following NRC staff:

- George Wang, Structural Engineer
- Bryce Lehman, Structural Engineer
- Thomas Wengert, Project Manager

## 6.0 LOGISTICS

The audit will be conducted from February 13, 2023, through April 7, 2023, through an online portal (also known as electronic portal, ePortal, or electronic reading room) established by Entergy.

If requested, the audit team will conduct a telephone conference with the licensee for the purposes of introducing the team, discussing the scope of the audit, and describing the information to be made available on the internet portal. The audit team will also confirm with the licensee if the information made available on the online portal contains any sensitive or proprietary information. The audit team expects to request that representatives of Entergy answer audit team questions during the audit related to information provided on the portal at a mutually agreeable day and time by telephone conference. An exit meeting/call will be held at the conclusion of the audit.

The NRC staff does not foresee the need for an onsite visit or in-person discussions between the NRC and licensee staff to discuss information to be provided on the portal at this time. However, if the need for a such a meeting is identified in the future, the audit plan will be revised, and the schedule for the audit will be adjusted accordingly. The NRC project manager will coordinate any changes to the audit schedule and location with the licensee.

## 7.0 SPECIAL REQUESTS

The audit team would like access to the documents listed in section 4.0 above through an online portal that allows the audit team to access documents via the internet. The following conditions associated with the online portal must be maintained throughout the duration that the audit team has access to the online portal:

- The online portal will be password-protected, and separate passwords will be assigned to the NRC staff who are participating in the audit.
- The online portal will be sufficiently secure to prevent the NRC staff from printing, saving, downloading, or collecting any information on the online portal.
- Conditions of use of the online portal will be displayed on the login screen and will require acknowledgement by each user.

Username and password information should be provided directly to the NRC staff. The NRC project manager will provide to Entergy the names and contact information of the NRC staff who will be participating in the audit. All other communications should be coordinated through the NRC project manager.

## 8.0 DELIVERABLES

An audit summary will be prepared within 90 days of the completion of the audit. If the NRC staff identifies information during the audit that is needed to support its regulatory decision, the NRC staff will issue requests for additional information to the licensee.

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - AUDIT PLAN TO SUPPORT REVIEW OF REQUEST FOR ALTERNATIVE ANO-CISI-002 REGARDING CONTAINMENT INSERVICE INSPECTION FREQUENCY (EPID L-2022-LLR-0080) DATED FEBRUARY 6, 2023

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GWang, NRR  
BLEhman, NRR  
WOrders, NRR

**ADAMS Accession No.: ML23030A628**

**\*by e-mail**

OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DEX/ESEB/BC*
NAME	TWengert	PBlechman	ITseng
DATE	1/20/2023	1/31/2023	1/27/2023
OFFICE	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4/PM*	
NAME	JDixon-Herrity	TWengert	
DATE	2/6/2023	2/6/2023	

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