



**Entergy Operations, Inc.**  
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Arkansas Nuclear One

1CAN051502

May 28, 2015

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

**SUBJECT:** Inservice Inspection Summary Report for the Twenty-Fifth  
Refueling Outage (1R25)  
Arkansas Nuclear One – Unit 1  
Docket No. 50-313  
License No. DPR-51

Dear Sir or Madam:

Article IWA-6000 of Section XI of the 2001 Edition with the 2003 Addenda of the American Society of Mechanical Engineers (ASME) Code requires an inservice inspection summary report be submitted to the regulatory and enforcement authorities having jurisdiction at the plant site. The summary report is to contain the completed Form NIS-1, "Owner's Report for Inservice Inspection," and Form NIS-2, "Owner's Report for Repair or Replacement Activity." This 2001 Edition with the 2003 Addenda of the ASME Code is the code of record for the fourth 10-year interval at Arkansas Nuclear One, Unit-1 (ANO-1)

ASME Code Case N-532 allows Entergy Operations Inc. to prepare an Owner's Activity Report form OAR-1 in place of the code-required NIS-1 and NIS-2 forms. The latest revision of this code case used in this report, N-532-4, is listed in Regulatory Guide (RG) 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 16, Table 1, "Acceptable Section XI Code Cases." The current revision of the code case Revision 5 (N-532-5) is listed in RG 1.147, Revision 17 in the same table. Entergy Operations, Inc. did not adopt Revision 5 of the code case until after the twenty-fifth fuel cycle for ANO-1 was complete. All the plans and NIS-2a forms were prepared in accordance with Revision 4 of the code case. Revision 5 of the code case did not make any changes that would negatively impact the repair / replacement activity documentation requirements and the summary report preparation and submission requirements that are allowed by Code Case N-532-4. Therefore, prior NRC approval to implement this code case is not required.

This report is to be prepared at the completion of a refueling outage and submitted within 90 calendar days of the completion of the refueling outage. In this case the report is associated with the twenty-fifth refueling outage for ANO-1 (1R25). This outage was completed on March 1, 2015.

Attached is the completed Form OAR-1 for 1R25 for your information. Included with the form are tables listing the "Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service" and "Abstract of Repair / Replacement Activities Required for Continued Service" in accordance with Code Case N-532-4. The results that are contained in this submittal are for 1R25.

This letter contains no new commitments.

By means of this submittal, the reporting requirements of the ASME Code, Section XI, Article IWA-6000 are fulfilled for 1R25.

Should you have any questions regarding this submittal, please contact me.

Sincerely,

**ORIGINAL SIGNED BY STEPHENIE L. PYLE**

SLP/rwc

Attachment: Form OAR-1, Owner's Activity Report

cc: Mr. Marc L. Dapas  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

NRC Senior Resident Inspector  
Arkansas Nuclear One  
P. O. Box 310  
London, AR 72847

U. S. Nuclear Regulatory Commission  
Attn: Ms. Andrea E. George  
MS O-8B1  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

**Attachment to**  
**1CAN051502**  
**Form OAR-1**  
**Owner's Activity Report**

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number OAR-1431

Plant Arkansas Nuclear One / 1448 S.R. 333, Russellville, AR, 72802

Unit No. 1 Commercial service date December 19, 1974 Refueling outage no. 1R25  
(If applicable)

Current inspection interval Fourth (4<sup>th</sup>) Inspection Interval  
(1st, 2nd, 3rd, 4th, other)

Current inspection period Third (3rd) Inspection Period  
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 2001 Edition with 2003 Addenda

Date and revision of inspection plan July 18, 2013 / Revision 0 (SEP-ISI-ANO1-101) and January 27, 2015 / Revision 1 (SEP-ISI-ANO1-101)

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan Same

Code Cases used: N-532-4, N-513-3  
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations, tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 1R25 conform to the requirements of Section XI\*.  
(refueling outage number)

\* The NIS-2A form for R&R Plan number 52509981-03 could not be completed as documented in CR-ANO-1-2015-02164. This R&R plan has no effect on Table 1 or Table 2 of this OAR. An amended OAR will be issued when the NIS-2A form for R&R Plan number 52509981-03 has been completed.

Signed Jamie GoBell James Lee Bell / ASME Section XI Repair/Replacement Engineer Date 5/20/2015  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arkansas and employed by HSB Global Standards of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 14374, ARK-1569, A, N, I  
Inspector's Signature National Board, State, Province, and Endorsements  
Date 05/21/15

**TABLE 1**

**ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE**

<b>Examination Category and Item Number</b>	<b>Item Description</b>	<b>Evaluation Description</b>
N/A	Through wall leak in the 8 inch by 6 inch reducer in piping line class HCC-12 just above E-27B.	Flaw was evaluated in accordance with ASME Code Case N-513-3 as documented in CR-ANO-1-2014-01170.
N/A	Leak in butt weld number FW-4 in 10 inch Service Water on isometric 13-SW-103 near CV-3812. This leak is on B31.1 piping; however, ANO has elected to treat this piping as if it were Section III, Class 3.	Flaw was evaluated in accordance with ASME Code Case N-513-3 as documented in EC-50205.
Notes: ANO, Unit 1, 4 <sup>th</sup> Interval, 3 <sup>rd</sup> Period.		

**TABLE 2**

**ABSTRACT OF REPAIR / REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE**

<b>Code Class</b>	<b>Item Description</b>	<b>Description of Work</b>	<b>Date Completed</b>	<b>Repair / Replacement (R&amp;R) Plan Numbers and Work Order (WO) Number</b>
2	Pipe	Replaced piping to repair a pinhole leak in a ¾ inch socket weld on P-36C Make-up pump suction piping branch line to safety valve PSV-1243 and PT-1248.	16-Oct-2013	00364170-01 Ref. CR-ANO-1-2013-02798
2	Heat Exchanger	Replaced heat exchanger to correct a through-wall leak in the E-30 Pressurizer sample cooler coil.	1-Mar-2015	WO number 00366938-06 Ref. CR-ANO-1-2013-00530
3	Pipe	Replaced section of piping downstream of valve SF-23 to correct a through-wall leak at a welded lug on pipe support HCC-16-H2.	28-Jul-2014	00216005-01 Ref. CR-ANO-1-2014-00340, CR-ANO-1-2014-00931
T3	Pipe	Replaced a section of HBD-46 10 inch Service Water (SW) piping to repair a leak in butt weld number FW-4 as shown on isometric 13-SW-103 upstream of CV-3812. This leak is on B31.1 piping, however, ANO has elected to treat this piping as if it were Section III Class 3 (T3).	24-Feb-2015	00381953-01 Ref. CR-ANO-1-2014-00586
3	Pipe	Replace a section of the HCC-15 piping to correct a through-wall leak in the 3 inch nominal pipe size (NPS) pipe at the branch connection weld for vent SF-1015.	27-Aug-2014	00236813-01 Ref. CR-ANO-1-2014-01165

**TABLE 2  
(Continued)**

<b>Code Class</b>	<b>Item Description</b>	<b>Description of Work</b>	<b>Date Completed</b>	<b>Repair / Replacement (R&amp;R) Plan Numbers and Work Order (WO) Number</b>
3	Pipe	Performed weld repair to correct Spent Fuel Pool (SFP) piping leak at 6 inch by 8 inch reducer above connection to E-27B.	24-Feb-2015	00389851-01 Ref. CR-ANO-1-2014-01170
3	Pipe	Performed weld repair to correct a through-wall leak in the 3 inch NPS SFP piping at the upstream weld to valve SF-17A.	27-Aug-2014	00391903-04 Ref. CR-ANO-1-2014-01340
2	Snubber	Replaced pipe support snubber HS-22 on pipe EBB-1-14 due to functional test failure on high bleed rate of 10.67 inches per minute in compression which exceeded the allowable rate of 10.0 inches per minute.	11-Feb-2015	00364979-04 Ref. CR-ANO-1-2015-00475
T3	Pipe	Replace flange and pipe to repair SW leak in 10 inch pipe downstream of CV-3815. This leak is on B31.1 piping, however, ANO has elected to treat this piping as if it were Section III Class 3 (T3).	16-Dec-2014	00399134-01 Ref. CR-ANO-1-2014-01936

Notes: ANO, Unit 1, 4<sup>th</sup> Interval, 3<sup>rd</sup> Period.