



Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802  
Tel 501 858 5000

2CAN010403

10CFR50.55a

January 16, 2004

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

Subject: Inservice Inspection (ISI) Summary Report  
Arkansas Nuclear One (ANO) – Unit 2  
Docket No. 50-368  
License No. NPF-6

Dear Sir or Madam:

Pursuant to the requirements of 10CFR50.55a, the attached Inservice Inspection (ISI) summary report for ASME Class 1 and 2 pressure retaining components and their supports for Arkansas Nuclear One, Unit 2 (ANO-2) is provided for your review. The results presented by this letter are representative of the first inspection period (extended) and second inspection period of the third ten-year inspection interval. This submittal is provided in accordance with ASME Section XI IWA-6230 and Code Case N-532-1. The attachment provides ASME form OAR-1 "Owner's Activity Report" plus tables that present: (1) an abstract of examinations and tests, (2) conditions requiring evaluation and (3) actions necessary for continued service.

This correspondence contains no commitments. Should you have any questions or comments, please contact Mr. Fred Van Buskirk at (479) 858-3155.

Sincerely,

A handwritten signature in cursive script that reads "Glenn R. Ashley".

Glenn R. Ashley  
Manager, Licensing

GRA/fpv  
Attachment

A047

cc: Dr. Bruce S. Mallett  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

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

U. S. Nuclear Regulatory Commission  
Attn: Mr. Thomas Alexion  
Mail Stop 0-7 D1  
Washington, DC 20555-0001

**Attachment**

**2CAN010403**

**Owner's Activity Report OAR-2321**

**FORM OAR-1 OWNER'S ACTIVITY REPORT**

Report Number OAR-2321

Owner Entergy Arkansas, Inc./ P.O. Box 551, TCBY Tower, Little Rock, AR, 72203  
(Name and Address of Owner)

Plant Arkansas Nuclear One / 1448 S.R. 333, Russellville, AR, 72802  
(Name and Address of Plant)

Unit No. 2 Commercial service date March 26, 1980 Refueling outage no. 2R16  
(if applicable)

Current inspection interval Third (3rd) Inspection Interval  
(1st, 2nd, 3rd, 4th, other)

Current inspection period First (1st) Inspection Period (Extended) & Second (2nd) Inspection Period  
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 1992 Edition, Portions of 1993 Addenda

Date and revision of inspection plan February 15, 2002 / Revision 1

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

**CERTIFICATE OF CONFORMANCE**

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, test, repairs, replacements, evaluations, and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. N/A Expiration Date N/A  
(if applicable)

Signed Leslie M. Long Manager, Programs & Components Date 1/15/04  
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 ABS Group Inc. of Houston, Texas have inspected the items described in this Owner's Activity Report, during the period August 4, 2002 to October 14, 2003, 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 examinations, tests, repairs, replacements, evaluations and corrective measures described 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.

C. W. Thompson Commissions NB-9985, ARK-1054 "A" "B" "N" "T" "NS"  
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-16-04

This form (E00127) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

**TABLE 1**  
**ABSTRACT OF EXAMINATIONS AND TESTS**

Examination Category	Total Examinations Required For The Interval	Total Examinations Credited For This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date For The Interval	Remarks
B-A	19	0	0.00	0.00	
B-B	4	0	0.00	25.00	
B-D	25	5	20.00	36.00	
B-G-1	254	6	2.36	30.71	
B-G-2	18	1	5.56	43.75	Code Case N-598
R-A	163	32	19.63	58.25	
B-K	15	4	26.67	46.67	
B-N-1	3	1	33.33	66.67	Accessible areas of the reactor vessel each period
B-P	7	1	14.29	42.86	
C-A	6	1	16.67	16.67	
C-B	8	4	50.00	50.00	
C-C	17	2	11.76	58.82	Code Case N-598
C-H	186	0	0.00	32.28	
D-A	11	0	0.00	36.36	Code Case N-598
D-B	58	0	0.00	33.33	
F-A	184	20	10.87	33.70	

Note: Cat. R-A still needs completion of 26 RI-ISI locations by March 26, 2004. (1st period)

Cat. C-A still needs completion of 2 inspections by March 26, 2004. (1st period)

Cat. C-H still needs completion of 2 pressure tests (partial) by March 26, 2004. (1st period)

Cat. R-A exceeds percentage requirements due to completing 63 service water inspections every period as requested by NRC.

Cat. C-B still needs completion of 2 inspections by March 26, 2004.(1st period)

Total exams credited are for the second period.

**TABLE 2**

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

Examination Category	Item Number	Item Description	Flaw Characterization (IWA-3300)	Flaw or Relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)
E-A	E1.12	Reactor Building Liner Plate	Arc Strikes (CR-ANO-2-2003-1544)	No
F-A	F1.40	2P-89A Pump Base Skid	Endplate Weld Separated (CR-ANO-2-2003-1216)	Yes (ISI # 88-001)

UNIT 2 INTERVAL 3 PERIOD 2  
(For Cycle 16)

**TABLE 3**  
**ABSTRACT OF REPAIRS, REPLACEMENTS OR CORRECTIVE MEASURES REQUIRED FOR CONTINUED SERVICE**

CODE CLASS	REPAIR, REPLACEMENT OR CORRECTIVE MEASURE	ITEM DESCRIPTION	DESCRIPTION OF WORK	FLAW OR RELEVANT CONDITION FOUND DURING SCHEDULED SECTION XI EXAMINATION OR TEST (YES/NO)	DATE COMPLETED	REPAIR/REPLACEMENT PLAN NUMBER AND MAI OR WO NUMBER
2	Replacement	Valve	Replaced disc on 2CV-4817	No	10/09/2003	Plan # 01-2123, WO 50245185
2	Replacement	Valve	Replaced disc on 2CV-5036-2	No	09/29/2003	Plan # 01-2164, WO 50242727
2	Replacement	Valve	Replaced disc on 2CV-5075-1	No	10/10/2003	Plan # 01-2165, WO 50242730
2	Replacement	Valve	Replaced disc on 2CV-4816	No	10/06/2003	Plan # 02-2052, WO 50246705
3	Replacement	Pump	Replaced casing fasteners on 2P-40A	No	01/02/2003	Plan # 02-2093, MAI 58554
3	Replacement	Valve	Replaced disc on 2FP-2A	No	01/02/2003	Plan # 02-2094, MAI 60127
2	Replacement	Valve	Replaced flange fasteners on 2PSV-4835	No	10/04/2002	Plan # 02-2116, MAI 52934
3	Replacement	Heat Exchanger	Corrected 2E-47A/B foot length	No	08/22/2002	Plan # 02-2129, MAI 69722
3	Replacement	Cooling Coil	Replaced 2VUC-1D, Invoked CC N416-1	No	02/08/2003	Plan # 02-2214, MAI 77074
3	Replacement	Cooling Coil	Installed flanges on 2VUC-1D, Invoked CC N416-1. Modified supports 2HCC-277-H13, 2HCC-279-H7 & 2HCC-279-1-H8 to facilitate 2VUC-1D replacement	No	02/08/2003	Plan # 02-2215, MAI 71369
3	Repair & Replacement	Valve/Piping	Repaired pinhole leak on valve 2SW-25A & replaced piping, Invoked CC N416-1	No	01/31/2003	Plan # 02-2216, MAI 76151
2	Replacement	Pump	Replaced casing fasteners on 2P-35A	No	10/13/2003	Plan # 03-2012, WO 50277738
3	Replacement	Valve	Replaced disc on 2SW-72	No	10/06/2003	Plan # 03-2014, WO 50259220
2	Replacement	Valve	Replaced disc on 2SI-3A	No	10/07/2003	Plan # 03-2019, WO 50245520
2	Replacement	Tank	Replaced inlet pipe flange studs on 2T-4	No	09/30/2003	Plan # 03-2026, WO 50258723
2	Replacement	Piping	Installed new piping Wye fitting for 2GCB-9-8"	No	09/17/2003	Plan # 03-2053, WO 50272646
2	Replacement	Piping	Replaced valve 2SI-7A with 8" piping, Invoked CC N-416-1	No	10/02/2003	Plan # 03-2055, WO 50266724
2	Replacement	Piping	Replaced valve 2SI-7B with 8" piping, Invoked CC N-416-1	No	10/02/2003	Plan # 03-2056, WO 50266725

UNIT   2   INTERVAL   3   PERIOD   2    
(For Cycle 16)

CODE CLASS	REPAIR, REPLACEMENT OR CORRECTIVE MEASURE	ITEM DESCRIPTION	DESCRIPTION OF WORK	FLAW OR RELEVANT CONDITION FOUND DURING SCHEDULED SECTION XI EXAMINATION OR TEST(YES/NO)	DATE COMPLETED	REPAIR/REPLACEMENT PLAN NUMBER AND MAI OR WO NUMBER
1	Replacement	Valves	Replaced 2CVC-1186 & 2CVC-1187, Invoked CC N-416-1	No	10/12/2003	Plan # 03-2065, WO 50243918
2	Replacement	Valves	Replaced 2CVC-22A & 2CVC-69A, Invoked CC N-416-1	No	08/15/2003	Plan # 03-2066, WO 50271356
3	Replacement	Piping	Replaced cooling coil 2VCC-2B inlet/outlet flanges, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2070, WO 50267093
3	Replacement	Piping	Replaced cooling coil 2VCC-2A inlet/outlet flanges, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2071, WO 50267093
2	Replacement	Valve	Replaced disc on 2CV-5056-2	No	10/10/2003	Plan # 03-2073, WO 50276063
2	Repair	Piping	Non-welded repairs required on the new Wye fitting, 2GCB-9-8"	No	09/25/2003	Plan # 03-2074, WO 50272646
2	Repair	Piping	Relocated code data name plate for 2GCB-9-6" piping	No	09/04/2003	Plan # 03-2075, WO 50272646
2	Replacement	Support	Replaced kicker on 2DCB-500-1-H003	No	09/15/2003	Plan # 03-2076, WO 50266813
1	Replacement	Valve	Replaced 2PSV-4634	No	10/12/2003	Plan # 03-2077, WO 27991
3	Replacement	Piping	Pre-fabricated 2FO-0714A, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2083, WO 27811
3	Replacement	Piping	Pre-fabricated 2FO-0798A, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2084, WO 27811
3	Replacement	Piping	Replaced flow orifice 2FO-1526	No	10/01/2003	Plan # 03-2085, WO 27594
1	Replacement	Valve	Replaced disc on 2CV-4651	No	10/13/2003	Plan # 03-2088, WO 29828
3	Replacement	Piping	Installed 2FO-0714A, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2089, WO 27810
3	Replacement	Piping	Installed 2FO-0798A, Invoked CC N-416-1	No	10/10/2003	Plan # 03-2090, WO 27811
1	Replacement	Pressurizer	Replaced MNSA2 clamp on nozzle F4 for 2T-1	No	10/12/2003	Plan # 03-2095, WO 50266597
1	Replacement	Pressurizer	Replaced MNSA2 clamp on nozzle C2 for 2T-1	No	10/12/2003	Plan # 03-2094, WO 50266597

UNIT 2 INTERVAL 3 PERIOD 2  
(For Cycle 16)

CODE CLASS	REPAIR, REPLACEMENT OR CORRECTIVE MEASURE	ITEM DESCRIPTION	DESCRIPTION OF WORK	FLAW OR RELEVANT CONDITION FOUND DURING SCHEDULED SECTION XI EXAMINATION OR TEST(YES/NO)	DATE COMPLETED	REPAIR/REPLACEMENT PLAN NUMBER AND MAI OR WO NUMBER
1	Repair	Vessel	Non-welded repair on ICI nozzle # 83 of 2R-1	No	10/04/2003	Plan # 03-2096 , WO 50266596
1	Repair	Vessel	Non-welded repair on ICI nozzle # 84 of 2R-1	No	10/04/2003	Plan # 03-2097, WO 50266596
1	Replacement	Snubber	Replaced 2CCA-24-H19 snubber	Yes	10/06/2003	Plan # 03-2106, WO 50274412
MC	Repair	RB Liner Plate	Identified/Evaluated arc strikes	No	11/06/2003	Plan # 03-2108, WO 30467
3	Replacement	Support	Replaccd 2DBC-7-H002 welded bracket	No	10/12/2003	Plan # 03-2111, WO 27811
3	Replacement	Support	Installed 2DBC-8-H2A	No	10/12/2003	Plan # 03-2112, WO 27810
3	Replacement	Piping	Installed 2" half-coupling on 2HBC-106-10"	No	10/08/2003	Plan # 03-2113, WO 30264

Note: Table 3 is an abstract of all Repair/Replacement activities performed during cycle 16.