



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

2CAN070501

July 11, 2005

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

Subject: Inservice Inspection (ISI) Summary Report  
Arkansas Nuclear One – 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, 2 and 3 pressure retaining components and their supports for Arkansas Nuclear One, Unit 2 (ANO-2) is provided for your information. The results presented by this letter are representative of inspections performed up to and including refueling outage 2R17 during the second inspection period of the third ten-year inspection interval. This submittal is provided in accordance with ASME Section XI 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 black ink, appearing to read "Dale E. James".

Dale E. James  
Acting Director, Nuclear Safety Assurance

DEJ/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. Drew Holland  
Mail Stop 0-7 D1  
Washington, DC 20555-0001

**Attachment**

**2CAN070501**

**Owner's Activity Report OAR-2322**

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

Report Number OAR-2322

Owner Entergy Arkansas, Inc./ P.O. Box 551, 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. 2R17  
(If applicable)

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

Current inspection period 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 Clare Kearney Manager, Programs & Components Date 4/8/05  
Owner or Owner's Designee, Title  
Richard E. Hoffman 6/8/05

**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 October 15, 2003 to April 11, 2005, 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.

Carl W. Thompson Commissions NB-9985, ARK-1054 "A" "B" "N" "I" "NS"  
Inspector's Signature National Board, State, Province, and Endorsements  
Date 6-8-05

**TABLE 1  
ABSTRACT OF EXAMINATIONS AND TEST**

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	24	0	0.00	0.00	
B-B	4	0	0.00	25.00	
B-D	28	9	75.00	46.43	
B-G-1	254	76	100.00	70.78	Code Case N-598
B-G-2	18	7	87.75	55.56	
R-A	290	41	41.00	45.52	
B-K	14	5	83.33	50.00	
B-L-1	12	0	0.00	0.00	
B-L-2	4	0	0.00	0.00	
B-M-2	21	0	0.00	0.00	
B-N-1	3	1	100.00	66.67	Code Case N-598
B-N-2	22	0	0.00	0.00	
B-N-3	10	0	0.00	0.00	
B-P	7	2	80.00	57.14	
C-A	6	1	50.00	50.00	
C-B	8	2	100.00	50.00	
C-C	16	6	100.00	87.50	Code Case N-598
C-H	186	13	20.97	40.32	
D-A	11	4	100.00	72.73	Code Case N-598
D-B	48	3	18.75	39.58	
F-A	184	50	81.97	51.63	
E-D	3	1	100.00	66.67	
E-G	70	3	12.50	25.71	
E-A	3	DOME	50.00	49.99	DOME INSPECTED 2R17
L-A	2	1	100.00	50.00	2 INSPECTIONS PER INTERVAL
L-B	23	12	100.00	50.00	2 INSPECTIONS PER INTERVAL

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-D	E5.30	Reactor Building Moisture Barrier	Damage to Moisture Barrier (CR-ANO-2-2005-0673)	Yes
F-A	F1.20	Support 2GCB-9-H11	Improper Clearances (CR-ANO-2-2005-0942)	Yes (ISI # 91-111)
F-A	F1.20A	Support 2EBB-2A-H2	Deformation of fasteners (CR-ANO-2-2005-1012)	Yes (ISI # 20-020)
B-G-2	B7.70	Valve SI-16A hinge pin cover fastener	Deformation of fastener (CR-ANO-2-2005-0806)	Yes (ISI # 22-074)
F-A	F1.30A	Support 2HBC-83-H3	Improper Clearances (CR-ANO-2-2005-0454)	Yes (ISI # 72-108)
F-A	F1.20C	Support 2DCB-501-H007	Improper Configuration (CR-ANO-2-2005-0916)	Yes (ISI # 80-545)
F-A	F1.20A	Support 2GCB-9-H11	Improper Configuration (CR-ANO-2-2005-0942)	Yes (ISI # 91-111)
X-AUG	N/A	Support 2HBC-34-H1	Corrosion Products (CR-ANO-2-2005-0801)	Yes (ISI # A-100002)
X-AUG	N/A	Support 2HBC-34-H22	Corrosion Products (CR-ANO-2-2005-0801)	Yes (ISI # A-100014)

UNIT 2 INTERVAL 3 PERIOD 2  
(For Cycle 17)

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	Repair	Valve	Machined disc for valve 2SI-10C	No	11/5/2003	Plan # 02-2066, WO 50248967
3	Replacement	Valve	Replaced disc for valve 2FP-2A	No	11/13/2003	Plan # 03-2003, WO 50271938
3	Repair	Valve	Re-installed body to bonnet seal weld on valve 2CV-1563-1	No	4/9/2004	Plan # 03-2011, WO 78462
1	Replacement	Steam Generator	Install mechanical tube plugs on 2E-24A	No	4/6/2005	Plan # 03-2033, WO 50274522
1	Replacement	Steam Generator	Install mechanical tube plugs on 2E-24B	No	4/6/2005	Plan # 03-2037, WO 50274523
3	Replacement	Pump	Replaced pump wet end on 2P-4C	No	8/23/2004	Plan # 03-2045, WO 50269225
2	Replacement	Valve	Replaced valves 2CVC-22B & 2CVC-69B. N-416-1	No	2/26/2004	Plan # 03-2058, WO 50271357
2	Replacement	Valve	Replaced valves 2CVC-22C & 2CVC-69C. N-416-1	No	12/8/2003	Plan # 03-2059, WO 50271358
2	Replacement	Pipe	Replace 2HCB-60-3" pipe N-416-2	Yes	4/4/2005	Plan # 03-2067, WO 25594
2	Replacement	Valve	Replaced disc on valve 2SI-3B	No	4/11/2005	Plan # 03-2091, WO 29921
2	Repair	Pump	Repaired pump skid for 2P-89A	Yes	11/10/2004	Plan # 03-2125, WO 31733
3	Replacement	Support	Installed new support 2HCC-55-H7	No	8/26/2004	Plan # 04-2067, WO 50271615
3	Replacement	Support	Installed new supports 2HCC-56-H6 & H8	No	8/26/2004	Plan # 04-2068, WO 50271615
3	Replacement	Support	Installed new supports 2HCC-56-H7 & H9	No	8/26/2004	Plan # 04-2069, WO 50271615
3	Replacement	Support	Modify support 2HCC-63-H1	No	8/26/2004	Plan # 04-2070, WO 50271615
3	Replacement	Support	Install new support 2HCC-63-H12	No	8/26/2004	Plan # 04-2071, WO 50271615
3	Replacement	Pipe	Modify 2HCC-55-3" piping	No	8/26/2004	Plan # 04-2072, WO 50271615
3	Replacement	Pipe	Modify 2HCC-56-3" piping N-416-2	No	9/9/2004	Plan # 04-2073, WO 50271615

UNIT 2 INTERVAL 3 PERIOD 2  
(For Cycle 17)

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
3	Replacement	Pipe	Modify 2HCC-59-3" piping. N-416-2	No	8/30/2004	Plan # 04-2074, WO 50271615
3	Replacement	Pipe	Modify 2HCC-59-3" piping. N-416-2	No	9/10/2004	Plan # 04-2075, WO 50271615
3	Replacement	Support	Install new support 2HCC-59-H38	No	9/26/2004	Plan # 04-2076, WO 50271615
3	Replacement	Support	Install new support 2HCC-59-H39	No	9/26/2004	Plan # 04-2077, WO 50271615
2	Replacement	Valve	Replaced valve 2CV-5056-2. N-416-2	No	4/9/2005	Plan # 04-2090, WO 36359
3	Replacement	Pipe	Install new flanges for 2VCC-2D header piping. N-416-2	No	4/5/2005	Plan # 04-2097, WO 37454
1	Replacement	Valve	Replaced body to bonnet fasteners on valve 2SI-14D	No	4/9/2005	Plan # 04-2102, WO 50275361
1	Replacement	Valve	Replaced valve 2RC-5E. N-416-2	No	4/9/2005	Plan # 04-2103, WO 30420
2	Replacement	Valve	Replaced valve 2CV-5016-2. N-416-2	No	4/9/2005	Plan # 04-2104, WO 38635
VIII	Replacement	Tank	Replaced manway fasteners on 2T-4	No	4/8/2005	Plan # 04-2112, WO 30538
3	Replacement	Pump	Replaced pump wet end on 2P-4B	No	12/4/2004	Plan # 04-2115, WO 27994
2	Replacement	Valve	Tack weld disc on valve 2SI-3B	No	3/24/2005	Plan # 04-2116, WO 29921
2	Replacement	Valve	Replaced B/B fasteners on 2CVC-139	No	3/30/2005	Plan # 04-2121, WO 50242602
2	Replacement	Support	Replaced spring can on 2DBB-1-H18	No	4/5/2005	Plan # 05-2002, WO 36869
2	Replacement	Valve	Replaced valve 2CV-4816. N-416-2	No	4/9/2005	Plan # 05-2003, WO 33952
3	Replacement	Cooling Coil	Replaced 2VUC-6A	No	4/5/2005	Plan # 05-2005, WO 38322
3	Replacement	Pipe	Installed flanges on 2HCC-249 pipe for 2VUC-6A. N-416-2	No	3/30/2005	Plan # 05-2006, WO 38322
3	Replacement	Cooling Coil	Replaced 2VUC-6B	No	4/5/2005	Plan # 05-2010, WO 50266877
3	Replacement	Pipe	Installed flanges on 2HCC-255 pipe for 2VUC-6B. N-416-2	No	3/30/2005	Plan # 05-2011, WO 50266877
1	Replacement	Valve	Replaced disc on valve 2SI-13A	No	4/9/2005	Plan # 05-2016, WO 50272572
2	Replacement	Valve	Installed nipple on spare valve for 2PSV-5047 (S/N N99283-00-0003)	No	3/24/2005	Plan # 05-2018, WO 57252
1	Replacement	Valve	Replaced valve 2PSV-4633	No	4/9/2005	Plan # 05-2020, WO 62464
1	Replacement	Valve	Replaced valve 2RC-5D. N-416-2	No	4/9/2005	Plan # 05-2021, WO 62370

UNIT 2 INTERVAL 3 PERIOD 2  
(For Cycle 17)

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	Pressurizer	Installed MNSA2 on 2T-1 for nozzles H4, C4, G3, U3, J2, P2, V1, P1 & X3	No	4/11/2005	Plan # 05-2025, WO 53378
3	Replacement	Valve	Replaced valve 2MS-39A disc	No	4/9/2005	Plan # 05-2026, WO 58644
3	Replacement	Valve	Replaced valve 2MS-39B disc	No	4/9/2005	Plan # 05-2027, WO 58648
3	Replacement	Pipe	Replaced 2XJ-14B & 2XJ-15B	No	4/11/2005	Plan # 05-2028, WO 50965678
3	Replacement	Pipe	Replaced 2XJ-14A & 2XJ-15A	No	4/11/2005	Plan # 05-2030, WO 50965681
1	Replacement	Valve	Replaced valve 2RC-5B. N-416-2	No	4/9/2005	Plan # 05-2031, WO 62537
1	Replacement	Valve	Replaced valve 2RC-5C. N-416-2	No	4/9/2005	Plan # 05-2032, WO 62537
2	Replacement	Valve	Replaced valve 2PSV-5047	No	4/9/2005	Plan # 05-2035, WO 57252
2	Replacement	Pipe	Installed nipple for 2PSV-5067. N-416-2	No	4/1/2005	Plan # 05-2036, WO 57253
2	Replacement	Valve	Installed valve 2PSV-5067	No	4/11/2005	Plan # 05-2037, WO 57253
1	Repair	Pressurizer	Excavate PWSCC indications	No	4/7/2005	Plan # 05-2038, WO 53378
1	Replacement	Pressurizer	Modify nozzle X1 on 2T-1	No	4/11/2005	Plan # 05-2039, WO 53378
IWE	Replacement	Containment	Replaced 2C-1 hatch bolting	Yes	4/6/2005	Plan # 05-2040, WO 62837
3	Replacement	Pipe	Install new flanges for 2VCC-2C header piping. N-416-2	No	4/5/2005	Plan # 05-2042, WO 30416
3	Replacement	Pipe	Modify 2HBC-83-30" piping	No	4/4/2005	Plan # 05-2044, WO 38583
3	Replacement	Support	Replaced lower threaded rod on 2HBC-50-H2	No	4/9/2005	Plan # 05-2045, WO 63100
1	Replacement	Support	Replaced clamp fasteners on 2CCA-32-H4	No	4/11/2005	Plan # 05-2050, WO 30420
3	Repair	Pipe	Base metal repair on 2HBC-50-3/4"	No	4/6/2005	Plan # 05-2052, WO 62924
1	Replacement	Support	Modify support 2CCA-32-H4	No	4/7/2005	Plan # 05-2053, WO 30420
MC	Repair	Containment Moisture Barrier	Resealed damaged areas of the moisture barrier. Removed wire from moisture barrier.	Yes	4/14/05	WO# 40900 (CR-ANO-2-2005-1247). Exempt from R/R rules of IWA-4000 by IWA-4111.

Note: Table 3 is an abstract of all Repair/Replacement activities performed during cycle 17 due to site procedure requirements.