



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

March 2, 2005

Jeffrey S. Forbes  
Vice President Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72801-0967

SUBJECT: ANNUAL ASSESSMENT LETTER - ARKANSAS NUCLEAR ONE  
(REPORT 05000313/2005001; 05000368/2005001)

Dear Mr. Forbes:

On February 3, 2005, the NRC staff completed its end-of-cycle plant performance assessment of Arkansas Nuclear One. The end-of-cycle review for Arkansas Nuclear One involved the participation of the reactor technical divisions in evaluating performance indicators for the most recent quarter and inspection results for the period from January 1 through December 31, 2004. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

This performance review and enclosed inspection plan do not include physical protection information. A separate end-of-cycle performance review letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Overall, Arkansas Nuclear One operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Regulatory Response Column of the NRC's Action Matrix, based on one finding of low to moderate safety significance (White) in the mitigating systems cornerstone and all other inspection findings being classified as having very low safety significance (Green) and all performance indicators indicating performance at a level requiring no additional NRC oversight (Green).

In April 2004, the NRC finalized the final significance determination for a performance deficiency involving the unacceptability of the use of manual actions in lieu of providing protection for cables associated with equipment necessary for achieving and maintaining hot shutdown conditions. This finding was determined to be of low to moderate risk significance (White). A supplemental inspection, which is being conducted in accordance with Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," is in progress. The purpose of this inspection is to provide assurance that the root and contributing

causes for the White finding are understood, to provide assurance that the extent of condition and extent of cause are identified, and to provide assurance that the corrective actions are sufficient to address the root and contributing causes and prevent their recurrence.

In our annual assessment letter dated March 3, 2004, we advised you of a substantive crosscutting issue in the area of Problem Identification and Resolution. This substantive crosscutting issue was identified on the basis of a number of corrective action findings. At your request, a public meeting was held in the Region IV office on February 12, 2004, to discuss your actions to address the causes and corrective actions you had taken or planned in response to the corrective action program programmatic and implementation problems. Additionally, your letter dated July 28, 2004, detailed several corrective actions which had been implemented to improve performance. In our midcycle performance review, we acknowledged the actions you had taken to address this issue and advised you of our plans to continue to monitor your improvement in this area. While findings with crosscutting aspects in the area of problem identification and resolution were still identified during the assessment cycle, we have noted improvement in your implementation of the corrective action program. We believe that the actions you have taken have been effective in enhancing the overall effectiveness of your corrective action program. Therefore, we no longer consider your performance within this area to represent a substantive crosscutting issue and will discontinue our focused oversight.

During a public meeting held in the Region IV office on November 30, 2004, Entergy Operations, Inc. representatives identified a number of ongoing and planned actions and initiatives in the safety conscious work environment area. We plan to focus baseline inspection activities on these actions and initiatives in order to determine their impact on the work environment at Arkansas Nuclear One.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2006. In addition to the baseline inspections, NRC will also be conducting inspections related to Inspection Procedure 50001, "Steam Generator Replacement Inspection," Inspection Procedure 71007, "Reactor Vessel Head Replacement Inspection," Temporary Instructions 2515/150, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles" and 2515/160, "Pressurizer Penetration Nozzles and Steam Space Piping Connections in U.S. Pressurized Water Reactors (NRC Bulletin 2004-01)." The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the midcycle review meeting.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Troy Pruett at 817-860-8173 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Arthur T. Howell III, Director  
Division of Reactor Projects

Dockets: 50-313  
50-368  
Licenses: DPR-51  
NPF-6

Enclosure:  
Arkansas Nuclear One Inspection/Activity Plan

cc w/enclosure:  
Colonel Wayne Ruthven  
Arkansas Department of Emergency  
Management  
P.O. Box 758  
Conway, AR 72033

Don Fairbanks  
Emergency Service Coordinator  
Logan County Office of Emergency  
Services  
Logan County Courthouse  
Paris, AR 72855

David Freeman  
Acting Emergency Service Coordinator  
Pope County  
No. 4 Emergency Lane  
Russellville, AR 72801

The Honorable Steve Pfeifer  
Mayor of Danville  
P.O. Box 69  
Danville, AR 72833

Charlie Smith  
Emergency Service Coordinator  
Yell County Courthouse  
Union Street  
Dardanelle, AR 72834

The Honorable Bill Elsken  
Mayor of Paris  
P.O. Box 271  
Paris, AR 72855

Fred Taylor  
Emergency Service Coordinator  
Johnson County Office of Emergency  
Services  
P.O. Box 546  
Clarksville, AR 72830

The Honorable Billy Helms  
Mayor of Clarksville  
205 Walnut Street  
Clarksville, AR 72830-3005

The Honorable Carolyn McGee  
Mayor of Dardanelle  
P.O. Box 360  
Dardanelle, AR 72834

Entergy Operations, Inc.

-4-

The Honorable Johnny Waldo  
Mayor of Dover  
P.O. Box 258  
Dover, AR 72837

The Honorable Jerry Don Barrett  
Mayor of Atkins  
P.O. Box 128  
Atkins, AR 72823

The Honorable Raye Turner  
Mayor of Russellville  
P.O. Box 428  
Russellville, AR 72811

The Honorable Edwin Price  
Mayor of London  
P.O. Box 130  
London, AR 72847

The Honorable Stewart Nelson  
Mayor of Morrilton  
City Hall  
P.O. Box 583  
Morrilton, AR 72110

The Honorable Brad Wear  
Judge of Yell County  
Danville Courthouse  
P.O. Box 219  
Danville, AR 72833

The Honorable Jimmy Hart  
Judge of Conway County  
117 South Moose, Room 203  
Morrilton, AR 72110

The Honorable Mike Jacobs  
Judge of Johnson County  
P.O. Box 278  
Clarksville, AR 72830

The Honorable Edgar Holt  
Judge of Logan County  
Room 22  
Paris, AR 72855

Senior Vice President  
& Chief Operating Officer  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, MS 39286-1995

Vice President  
Operations Support  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, MS 39286-1995

Manager, Washington Nuclear Operations  
ABB Combustion Engineering Nuclear  
Power  
12300 Twinbrook Parkway, Suite 330  
Rockville, MD 20852

County Judge of Pope County  
Pope County Courthouse  
100 West Main Street  
Russellville, AR 72801

Winston & Strawn  
1400 L Street, N.W.  
Washington, DC 20005-3502

Bernard Bevill  
Radiation Control Team Leader  
Division of Radiation Control and  
Emergency Management  
Arkansas Department of Health  
4815 West Markham Street, Mail Slot 30  
Little Rock, AR 72205-3867

James Mallay  
Director, Regulatory Affairs  
Framatome ANP  
3815 Old Forest Road  
Lynchburg, VA 24501

Institute of Nuclear Power Operations (INPO)  
Records Center  
700 Galleria Parkway SE, Suite 100  
Atlanta, GA 30339

Entergy Operations, Inc.

-5-

Misty Sutton  
Emergency Service Coordinator  
P.O. Box 119  
Morrilton, AR 72110

- Electronic distribution by RIV:  
 Regional Administrator **(BSM1)**  
 DRP Director **(ATH)**  
 DRS Director **(DDC)**  
 DRS Deputy Director **(MRS)**  
 Senior Resident Inspector **(RWD)**  
 Branch Chief, DRP/D **(TWP)**  
 Senior Project Engineer, DRP/D **(GEW)**  
 Team Leader, DRP/TSS **(RLN1)**  
 RITS Coordinator **(KEG)**  
**RidsNrrDipmlipb**  
 V. Dricks, PAO **(VLD)**  
 W. Maier, RSLO **(WAM)**  
 C. Gordon **(CJG)**  
 DRS Branch Chiefs **(LJS, MPS1, ATG, JAC)**  
 S. Richards, Chief, NRR/DIPM/IIPB **(SAR)**  
 M. Case, Deputy Dir. for Inspection and Programs **(MJC)**  
 B. Sheron, Associate Dir. for Project Licensing and Technical Analysis **(BWS)**  
 B. Wetzel, Acting Chief, ROPMS, OEDO **(TAB)**  
 H. Berkow, Director, LPD4, NRR/DLPM **(HNB)**  
 A. Howe, Chief, PDIV-1, NRR/DLPM **(AGH1)**  
 T. Alexion, NRR Project Manager **(TWA)**

SISP Review Completed:   TWP   ADAMS: / Yes    G No    Initials:   TWP    
 / Publicly Available    G Non-Publicly Available    G Sensitive    / Non-Sensitive

S:\DRP\DRPDIR\EOC 2004\Assessment Letters\ANO.wpd

RIV:DRP/D	D:DRS	D:DRP		
TWPruett;mjs	DDChamberlain	ATHowell		
<i>/RA/</i>	<i>/RA/</i>	<i>/RA/</i>		
2/23/05	2/25/05	2/28/05		

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

**Arkansas Nuclear One**  
**Inspection / Activity Plan**  
**03/04/2005 - 09/30/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
<b>SG-RVH - U1 STEAM GENERATOR &amp; RVH REPLACEMENT</b>			<b>4</b>			
1	IP 50001	Steam Generator Replacement Inspection		01/01/2005	12/31/2005	Other Routine
1	IP 70307	Containment Integrated Leak Rate Test Review		01/01/2005	12/31/2005	Other Routine
1	IP 70313	Containment Integrated Leak Rate Test Surveillance		01/01/2005	12/31/2005	Other Routine
1	IP 70323	Containment Leak Rate Test Results		01/01/2005	12/31/2005	Other Routine
1	IP 71007	Reactor Vessel Head Replacement Inspection		01/01/2005	12/31/2005	Other Routine
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		01/01/2005	12/31/2005	Baseline Inspections
1	IP 7111108P	Inservice Inspection Activities - PWR		01/01/2005	12/31/2005	Baseline Inspections
1	IP 7111117A	Permanent Plant Modifications		01/01/2005	12/31/2005	Baseline Inspections
1	IP 71152	Identification and Resolution of Problems		01/01/2005	12/31/2005	Baseline Inspections
<b>EB08P - ISI U2 - VESSEL VOLUMETRICS (TI-150/152)</b>			<b>2</b>			
2	IP 2515/150	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-02)		03/21/2005	03/25/2005	Safety Issues
2	IP 2515/160	Pzr Pene Nozzles & Strm Space Piping Connections in U.S. PWRs [NRC Bulletin 2004-01]		03/21/2005	03/25/2005	Safety Issues
2	IP 7111108P	Inservice Inspection Activities - PWR		03/21/2005	03/25/2005	Baseline Inspections
2	IP 7111108P	Inservice Inspection Activities - PWR		04/04/2005	04/08/2005	Baseline Inspections
<b>EB21/02 - SSD&amp;PC/50.59</b>			<b>5</b>			
1,2	IP 7111121	Safety System Design and Performance Capability		05/23/2005	05/27/2005	Baseline Inspections
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		06/06/2005	06/10/2005	Baseline Inspections
1,2	IP 7111121	Safety System Design and Performance Capability		06/06/2005	06/10/2005	Baseline Inspections
<b>ALARA3 - ALARA PLANNING AND CONTROLS</b>			<b>1</b>			
1,2	IP 7112102	ALARA Planning and Controls		06/20/2005	06/24/2005	Baseline Inspections
<b>OB-EP2 - EMERG PREPAREDNESS PROGRAM INSPECTION</b>			<b>1</b>			
1,2	IP 7111402	Alert and Notification System Testing		06/27/2005	07/01/2005	Baseline Inspections
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		06/27/2005	07/01/2005	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		06/27/2005	07/01/2005	Baseline Inspections
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		06/27/2005	07/01/2005	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		06/27/2005	07/01/2005	Baseline Inspections
<b>OB-RQ - REQUAL INSPECTION</b>			<b>2</b>			
1	IP 7111111B	Licensed Operator Requalification Program		07/11/2005	07/15/2005	Baseline Inspections
2	IP 7111111B	Licensed Operator Requalification Program		07/11/2005	07/15/2005	Baseline Inspections
<b>OB-INIT - INITIAL EXAM</b>			<b>4</b>			
1	X02287	ANO UNIT 1 (06/05) - INITIAL EXAM		08/22/2005	08/26/2005	Not Applicable
1	X02287	ANO UNIT 1 (06/05) - INITIAL EXAM		09/12/2005	09/16/2005	Not Applicable
<b>PEB-07B - HX PERFORMANCE</b>			<b>1</b>			
1,2	IP 7111107B	Heat Sink Performance		08/29/2005	09/02/2005	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Arkansas Nuclear One**  
**Inspection / Activity Plan**  
**03/04/2005 - 09/30/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>ACRSA - ACCESS CONTROL TO RAD SIGNIFICANT AREAS</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		10/31/2005	11/03/2005	Baseline Inspections
	<b>EB08P - ISI U1</b>		<b>2</b>			
1	IP 2515/160	Pzr Pene Nozzles & Stm Space Piping Connections in U.S. PWRs [NRC Bulletin 2004-01]		11/14/2005	11/18/2005	Safety Issues
1	IP 7111108P	Inservice Inspection Activities - PWR		11/14/2005	11/18/2005	Baseline Inspections
1	IP 7111108P	Inservice Inspection Activities - PWR		11/28/2005	12/02/2005	Baseline Inspections
	<b>ALARA - ALARA PLANNING AND CONTROLS</b>		<b>1</b>			
1,2	IP 7112102	ALARA Planning and Controls		04/03/2006	04/07/2006	Baseline Inspections
	<b>EP1 - EMERG PREPAREDNESS EXERCISE</b>		<b>3</b>			
1,2	IP 7111401	Exercise Evaluation		04/24/2006	04/28/2006	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		04/24/2006	04/28/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		04/24/2006	04/28/2006	Baseline Inspections
	<b>EB02/17 - PERMANENT MODS/50.59</b>		<b>3</b>			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		05/22/2006	05/26/2006	Baseline Inspections
1,2	IP 7111117B	Permanent Plant Modifications		05/22/2006	05/26/2006	Baseline Inspections
	<b>RP TEAM - RP SAFETY TEAM INSPECTION</b>		<b>3</b>			
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		06/05/2006	06/09/2006	Baseline Inspections
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		06/05/2006	06/09/2006	Baseline Inspections
1,2	IP 7112202	Radioactive Material Processing and Transportation		06/05/2006	06/09/2006	Baseline Inspections
1,2	IP 7112203	Radiological Environmental Monitoring Program		06/05/2006	06/09/2006	Baseline Inspections
	<b>OB-INIT - ANO2 INITIAL EXAM</b>		<b>4</b>			
2	X02294	ANO UNIT 2 INITIAL EXAM (07/06)		06/26/2006	06/30/2006	Not Applicable
2	X02294	ANO UNIT 2 INITIAL EXAM (07/06)		07/17/2006	07/21/2006	Not Applicable
	<b>OB-RQ - ANO2 REQUALIFICATION INSP</b>		<b>3</b>			
1,2	IP 7111111B	Licensed Operator Requalification Program		07/24/2006	07/28/2006	Baseline Inspections
	<b>PEB - MAINTENANCE RULE BIENNIAL</b>		<b>1</b>			
1,2	IP 7111112B	Maintenance Effectiveness		08/14/2006	08/18/2006	Baseline Inspections
	<b>ACRSA - ACCESS CONTROL TO RAD SIGNIFICANT AREAS</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/25/2006	09/29/2006	Baseline Inspections