



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

August 30, 2005

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

**SUBJECT: MIDCYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
ARKANSAS NUCLEAR ONE**

Dear Mr. Forbes:

On August 4, 2005, the NRC staff completed its performance review of Arkansas Nuclear One for the first half of the calendar year 2005 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous 12 months. 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 in order for you 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 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.

Plant performance for the most recent quarter for Units 1 and 2 was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Although plant performance was within the Licensee Response Column, the significance of an inspection finding is still under review using the Significance Determination Process. This finding involves an inadequate maintenance procedure that resulted in damaging a reactor coolant pump seal and required placing the Unit 2 reactor in a reduced inventory condition for repair. When the significance of this finding is finalized, our assessment of your plant's safety performance may change.

While plant performance for the most recent quarter was in the Licensee Response column of the Action Matrix, Arkansas Nuclear One, Unit 1, was in the Regulatory Response Column of the Action Matrix at the beginning of this assessment period based on one finding of low to moderate safety significance in the Mitigating Systems Cornerstone. This finding involved the unacceptable use of manual actions in lieu of providing protection for cables associated with equipment required for achieving and maintaining hot shutdown conditions. The NRC conducted a supplemental inspection in accordance with Inspection Procedure 95001,

"Inspection for One or Two White Inputs in a Strategic Performance Area." The NRC concluded that your extent of condition review and corrective actions were appropriate and the finding was closed in NRC Inspection Report 05000313/2005-011; 05000368/2005-011, dated March 31, 2005.

Based on your performance this period, the NRC has identified a substantive crosscutting issue in the area of problem identification and resolution (PIR). This substantive crosscutting issue was identified based on six Green findings related to prioritization and correction of known conditions adverse to quality. The NRC recognizes that Entergy had previously implemented actions to improve the effectiveness of your corrective action program, particularly in the area of problem identification. These actions were taken, in part, in response to a previously identified PIR substantive crosscutting issue. However, during this assessment period, the NRC identified that corrective actions taken in response to long-standing degradation of the emergency cooling pond spillway/dam structure have not been effective. This finding revealed multiple performance insights involving the adequacy of past improvement initiatives, the willingness to accept long-standing degraded equipment, and the degree of rigor in the approach to problem resolution. In addition to this finding, several other corrective action findings involving multiple cornerstones were identified during this assessment period. Other examples of failure to take appropriate corrective actions for identified deficiencies included failure to generate guidance for resetting rod control system faults that resulted in operators temporarily exceeding licensed rated thermal power, failure to promptly correct a deficient containment isolation valve design, and failure to prevent recurring noncompliances with boric acid corrosion control program procedures.

During baseline inspections, the NRC will focus on selecting problem identification and resolution inspection samples related to implementation of corrective actions, particularly for long-standing and recurring, previously identified conditions. During the NRC semiannual trend review of your corrective action program, we will review your efforts to identify and track instances of ineffective or untimely corrective actions. Focused NRC oversight of this area will no longer be necessary when our inspections indicate that your actions have been effective in improving the implementation of corrective actions related to identified deficiencies, particularly in the prevention of long-standing and repetitive problems.

In our annual assessment letter, dated March 2, 2005, we discussed our plans to conduct focused baseline inspections of your actions and initiatives in the safety conscious work environment area. These inspections identified a number of positive safety culture enhancements that have been implemented by Entergy. As a result, focused inspections within this area are no longer warranted.

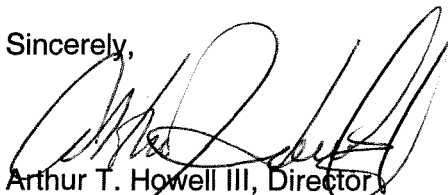
The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through March 31, 2007. In addition to the baseline inspections, NRC will also be conducting inspections related to Inspection Procedure 50001, "Steam Generator Replacement Inspection," Inspection Procedure 71007, "Reactor Vessel Head Replacement Inspection," and Temporary Instruction 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 the early resolution of any scheduling conflicts and personnel availability issues well 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 end-of-cycle 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact David N. Graves at (817) 860-8147 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



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

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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>		4			
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>OB-INIT - INITIAL EXAM</b>		4			
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>		1			
1,2	IP 7111107B	Heat Sink Performance		08/29/2005	09/02/2005	Baseline Inspections
	<b>ACRSA - ACCESS CONTROL TO RAD SIGNIFICANT AREAS</b>		1			
1,2	IP 7112102	ALARA Planning and Controls		10/31/2005	11/03/2005	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/31/2005	11/03/2005	Baseline Inspections
	<b>EB08P - ISI U1</b>		3			
1	IP 2515/160	Pzr Pene Nozzles & Strm 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>		1			
1,2	IP 7112102	ALARA Planning and Controls		04/03/2006	04/07/2006	Baseline Inspections
	<b>EPI - EMERG PREPAREDNESS EXERCISE</b>		3			
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>RP TEAM - RP SAFETY TEAM INSPECTION</b>		5			
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 (REMP) And Radioactive Material Control F		06/05/2006	06/09/2006	Baseline Inspections
	<b>EB02/17 - PERMANENT MODS/50.59</b>		3			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		06/12/2006	06/16/2006	Baseline Inspections

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

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
2	<b>OB-INIT</b> - ANO2 INITIAL EXAM		4			
	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
1, 2	<b>OB-RQ</b> - ANO2 REQUALIFICATION INSP		3			
	IP 7111111B	Licensed Operator Requalification Program		07/24/2006	07/28/2006	Baseline Inspections
1, 2	<b>PEB</b> - MAINTENANCE RULE BIENNIAL		1			
	IP 7111112B	Maintenance Effectiveness		08/14/2006	08/18/2006	Baseline Inspections
1, 2	<b>ACRSA</b> - ACCESS CONTROL TO RAD SIGNIFICANT AREAS		1			
	IP 7112101	Access Control to Radiologically Significant Areas		09/25/2006	09/29/2006	Baseline Inspections
1, 2	<b>ALARA2</b> - ALARA PLANNING AND CONTROLS		1			
	IP 7112102	ALARA Planning and Controls		01/08/2007	01/12/2007	Baseline Inspections
1, 2	<b>PIR</b> - ANO PIR INSPECTION		5			
	IP 71152B	Identification and Resolution of Problems		01/22/2007	01/26/2007	Baseline Inspections
1, 2	IP 71152B	Identification and Resolution of Problems		02/05/2007	02/09/2007	Baseline Inspections
1, 2	<b>07B</b> - HEAT SINK INSPECTION		2			
	IP 7111107B	Heat Sink Performance		02/26/2007	03/02/2007	Baseline Inspections

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

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- M. Thadani, NRR Project Manager (**MCT**)
- D. Holland, NRR Project Manager (**DGH1**)
- T. Bergman, Chief, TRPS/OEDO (**TAB**)

SISP Review Completed:   \_dng   ADAMS:  Yes     No    Initials:   \_dng    
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