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

March 3, 2008

Timothy G. Mitchell
Vice President Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802-0967

SUBJECT: ANNUAL ASSESSMENT LETTER – ARKANSAS NUCLEAR ONE (NRC INSPECTION REPORT 05000313/368-2008001)

Dear Mr. Mitchell:

On February 6, 2008, the NRC staff completed its performance review of Arkansas Nuclear One (ANO), Units 1 and 2. Our technical staff reviewed performance indicators for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. 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.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the security cornerstone review and resultant inspection plan.

Overall, ANO Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, 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 performance indicators indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process baseline inspections at your facility.

The NRC staff has identified a substantive crosscutting issue in the human performance area at Arkansas Nuclear One. There was a total of 14 Green findings with crosscutting aspects in the human performance area. A crosscutting theme was identified in the component of decision making (instances of not using conservative assumptions and failure to verify the validity of underlying assumptions used). Six Green findings were related to this theme, affecting the Initiating Events, Mitigating Systems, and Barrier Integrity cornerstones. Examples include: a failure to control critical design parameters of a control room damper during a modification to address a previous failure of the damper, a failure to adequately monitor the performance of the emergency switchgear chillers in accordance with the maintenance rule, and a failure to follow applicable work management procedures while conducting instrumentation and control maintenance to adjust a limiting safety system setting parameter associated with the reactor

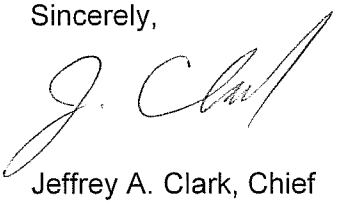
protection system. To address these problems, we understand your staff has conducted an apparent cause determination to identify potential recommendations for improvement in this area. However, full implementation of these actions is not yet complete, and we have a concern with the progress of your corrective actions given the nature of the findings and observations during NRC inspections. Therefore, this substantive crosscutting issue in human performance was identified and will remain open until we determine, through the implementation of focused baseline inspections, that corrective actions implemented in accordance with your improvement initiatives have adequately addressed these issues.

The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through June 30, 2009. The inspection plan is provided to allow for the 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 nine months of the inspection plan are tentative and may be revised at the midcycle review.

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 me at 817-860-8147 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



Jeffrey A. Clark, Chief
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Dockets: 50-313
50-368
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Enclosure: Arkansas Nuclear One Inspection/Activity Plan

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ANO
Inspection / Activity Plan
03/01/2008 - 06/30/2009

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	EB1-08	**- U2 INSERVICE INSPECTION**	2			
2	IP 7111108P	Inservice Inspection Activities - PWR		03/17/2008	03/28/2008	Baseline Inspections
	RP-ORS1	**- OCCUPATIONAL RADIATION SAFETY - ACCESS**	1			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		03/24/2008	03/28/2008	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		03/24/2008	03/28/2008	Baseline Inspections
2	IP 71151-OR01	Occupational Exposure Control Effectiveness		03/24/2008	03/28/2008	Baseline Inspections
1	IP 71151-PR01	RETS/ODCM Radiological Effluent		03/24/2008	03/28/2008	Baseline Inspections
	EP1	**- EP EXERCISE**	3			
1, 2	IP 7111401	Exercise Evaluation		05/19/2008	05/23/2008	EP Baseline Inspection
1, 2	IP 7111404	Emergency Action Level and Emergency Plan Changes		05/19/2008	05/23/2008	EP Baseline Inspection
1, 2	IP 71151-MS06	MSPI - Emergency AC Power System		05/19/2008	05/23/2008	Baseline Inspections
	EB1-17T	**- 50.59 & PERMANENT PLANT MODS**	3			
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		06/09/2008	06/20/2008	Baseline Inspections
1, 2	IP 7111117B	Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications		06/09/2008	06/20/2008	Baseline Inspections
	REQUAL	**- BIENNIAL REQUALIFICATION AN2 BRQ AN1 ARQ**	4			
1, 2	IP 7111111B	Licensed Operator Requalification Program		07/07/2008	07/11/2008	Baseline Inspections
	RP TEAM	**- RADIATION SAFETY TEAM INSPECTION**	5			
1, 2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		07/07/2008	07/11/2008	Baseline Inspections
1, 2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		07/07/2008	07/11/2008	Baseline Inspections
1, 2	IP 7112202	Radioactive Material Processing and Transportation		07/07/2008	07/11/2008	Baseline Inspections
1, 2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program		07/07/2008	07/11/2008	Baseline Inspections
	EXAM	**- INITIAL EXAMINATION - UNIT 1**	3			
1	X02359	ANO UNIT 1 - INITIAL EXAM (01/08)		08/11/2008	08/15/2008	Not Applicable
1	X02359	ANO UNIT 1 - INITIAL EXAM (01/08)		09/08/2008	09/12/2008	Not Applicable
	RP-ORS2	**- OCCUPATIONAL RADIATION SAFETY-ALARA**	1			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		09/15/2008	09/19/2008	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		09/15/2008	09/19/2008	Baseline Inspections
1	IP 71151-OR01	Occupational Exposure Control Effectiveness		09/15/2008	09/19/2008	Baseline Inspections
2	IP 71151-PR01	RETS/ODCM Radiological Effluent		09/15/2008	09/19/2008	Baseline Inspections
	EB1-08	**- U1 INSERVICE INSPECTION**	2			
1	IP 7111108P	Inservice Inspection Activities - PWR		10/27/2008	11/07/2008	Baseline Inspections
	RP-ORS3	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	1			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		11/03/2008	11/07/2008	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		11/03/2008	11/07/2008	Baseline Inspections

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

ANO
Inspection / Activity Plan
03/01/2008 - 06/30/2009

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	RP-ORS3	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
1	IP 71151-OR01	Occupational Exposure Control Effectiveness		11/03/2008	11/07/2008	Baseline Inspections
2	IP 71151-PR01	RETS/ODCM Radiological Effluent		11/03/2008	11/07/2008	Baseline Inspections
	EB2-52B	**- BIENNIAL PI&R INSPECTION**	**4**			
1, 2	IP 71152B	Identification and Resolution of Problems		01/26/2009	01/30/2009	Baseline Inspections
1, 2	IP 71152B	Identification and Resolution of Problems		02/09/2009	02/13/2009	Baseline Inspections
	RP-ORS4	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		02/09/2009	02/13/2009	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		02/09/2009	02/13/2009	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		02/09/2009	02/13/2009	Baseline Inspections
	EB2-07T	**- TRIENNIAL HEAT SINK INSPECTION**	**1**			
1, 2	IP 7111107B	Heat Sink Performance		04/27/2009	05/01/2009	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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SUNSI Review Completed: GBM ADAMS: √ Yes □ No Initials: GBM
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