UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 2, 2008

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

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

Dear Mr. Mitchell:

On August 6, 2008, the NRC staff completed its performance review of Arkansas Nuclear One, Units 1 and 2, for the first half of the calendar year 2008 assessment cycle. Our technical staff reviewed performance indicators 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.

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

Plant performance for the most recent quarter 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.

In our 2007 annual assessment letter dated March 3, 2008, we advised you of a substantive crosscutting issue in the area of human performance at Arkansas Nuclear One (ADAMS ML 080630293). Specifically, we identified a crosscutting theme in the component of decision making (instances of not using conservative assumptions and failure to verify the validity of underlying assumptions used). A crosscutting theme continued to be identified in this area during this assessment cycle. Four Green findings were related to this theme, affecting the mitigating systems cornerstone. Examples include: a failure to adequately monitor the performance of the emergency switchgear chillers in accordance with the Maintenance Rule, a repeat instance of failing to properly monitor the performance of the emergency switchgear chillers in accordance with the maintenance rule, inadequate stroke time testing of emergency feedwater flow control valves, and the failure to adequately monitor the performance of the alternate AC emergency diesel generator in accordance with the Maintenance Rule. To address these problems, we understand your staff has conducted an apparent cause determination to identify potential recommendations for improvement in this area, have provided supervisor and management training on conservative decision making, and briefed all

engineering staff on the importance of past issues and current decision making items. Additionally, a new crosscutting theme was identified in the component of resources (assuring that personnel use complete and accurate procedures and work packages). Four Green findings were related to this theme, affecting the mitigating systems and barrier integrity cornerstones. Examples include: a failure to implement adequate fire brigade staffing during fire scenarios requiring an alternative shutdown of Unit 2 coincident with a remote shutdown of Unit 1, unacceptable preconditioning of a Unit 1 emergency feedwater flow control valve prior to inservice testing, inadequate containment airlock leakage testing, and a failure to maintain Unit 2 containment closure capability during an outage. To address these problems, we understand your staff has conducted a common cause evaluation. However, you haven't yet specified corrective measures to address this issue.

Consistent with the guidance in NRC Inspection Manual Chapter 0305, because there has been a substantive crosscutting issue in the area of human performance in the decision making component for two consecutive assessment letters, you are requested to schedule a public meeting with the NRC to discuss your plans to address this issue. The human performance substantive crosscutting issue will remain open until we determine, through the implementation of focused baseline inspections, that corrective actions have been effective.

The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through December 31, 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 9 months of the inspection plan are tentative and may be revised at the end-of-cycle 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 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 Wayne Walker of my staff at 817-276-6523 to make arrangements for the public meeting and to discuss any questions you have regarding this letter or the inspection plan.

Sincerely,

Dwight D. Chamberlain

Dwight D. Chamberlain, Director
Division of Reactor Projects

Enclosure: Arkansas Nuclear One Inspection/Activity Plan

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

cc: w/Enclosure

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SUNSI Review Completed: WCW ADAMS: ☑Yes ☐ No Initials: WCW
☑Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☑Non-Sensitive

R:_REACTORS\EOC and Midcycle\Midcyle Assessment Letters\2008\ANO.doc ML

RIV:C:DRP/E	D:DRS	D:DRP	
WCWalker	RJCaniano	DDChamberlain	
/RA/	/RA/		
8/18/08	8/26/08	8/27/08	

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

Arkansas Nuclear 1
Inspection / Activity Plan
09/01/2008 - 12/31/2009

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	EXAM	**- INITIAL EXAMINATION - UNIT 1**	**3**			
1	X02359	ANO UNIT 1 - INITIAL EXAM (09/08)		09/08/2008	09/12/2008	Not Applicable
	RP-ORS2	**- OCCUPATIONAL RADIATION SAFETY-ALARA**	**1**			
1	IP 7112101	Access Control to Radiologically Significant Areas		09/15/2008	09/19/2008	Baseline Inspections
1	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
	EB1-08	**- U1 INSERVICE INSPECTION**	**2**			
1	IP 2515/172	Reactor Coolant System Dissimiliar Metal Butt Welds		10/27/2008	11/07/2008	Generic Safety Inspecti
1	IP 7111108P	Inservice Inspection Activities - PWR		10/27/2008	11/07/2008	Baseline Inspections
	RP-ORS3	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
1	IP 7112101	Access Control to Radiologically Significant Areas		11/03/2008	11/07/2008	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		11/03/2008	11/07/2008	Baseline Inspections
1	IP 71151-OR01	Occupational Exposure Control Effectiveness		11/03/2008	11/07/2008	Baseline Inspections
	PSB2-52B	**- BIENNIAL PI&R INSPECTION**	**4**			
1	IP 71152B	Identification and Resolution of Problems		01/26/2009	01/30/2009	Baseline Inspections
1	IP 71152B	Identification and Resolution of Problems		02/09/2009	02/13/2009	Baseline Inspections
	RP-ORS4	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
1	IP 7112101	Access Control to Radiologically Significant Areas		02/09/2009	02/13/2009	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		02/09/2009	02/13/2009	Baseline Inspections
1	IP 71151	Performance Indicator Verification		02/09/2009	02/13/2009	Baseline Inspections
	EB2-07T	**- TRIENNIAL HEAT SINK INSPECTION**	**1**			
1	IP 7111107B	Heat Sink Performance		05/11/2009	05/15/2009	Baseline Inspections
	EB1-21T	**- CDBI**	**7**			
1	IP 7111121	Component Design Bases Inspection		07/06/2009	07/10/2009	Baseline Inspections
1	IP 7111121	Component Design Bases Inspection		07/20/2009	07/31/2009	Baseline Inspections
	711111B	**- BIENNIAL REQUAL INSPECTION**	**3**			
1	IP 7111111B	Licensed Operator Requalification Program		07/20/2009	07/24/2009	Baseline Inspections
	RP-ORS5	**- OCCUPATIONAL RADIATION SAFETY - ACCESS**	**1**			
1	IP 7112101	Access Control to Radiologically Significant Areas		08/31/2009	09/04/2009	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		08/31/2009	09/04/2009	Baseline Inspections
1	IP 71151	Performance Indicator Verification		08/31/2009	09/04/2009	Baseline Inspections

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

Arkansas Nuclear 2
Inspection / Activity Plan
09/01/2008 - 12/31/2009

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	RP-ORS2	**- OCCUPATIONAL RADIATION SAFETY-ALARA**	**1**			
2	IP 7112101	Access Control to Radiologically Significant Areas		09/15/2008	09/19/2008	Baseline Inspections
2	IP 7112102	ALARA Planning and Controls		09/15/2008	09/19/2008	Baseline Inspections
2	IP 71151-PR01	RETS/ODCM Radiological Effluent		09/15/2008	09/19/2008	Baseline Inspections
	RP-ORS3	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
2	IP 7112101	Access Control to Radiologically Significant Areas		11/03/2008	11/07/2008	Baseline Inspections
2	IP 7112102	ALARA Planning and Controls		11/03/2008	11/07/2008	Baseline Inspections
2	IP 71151-PR01	RETS/ODCM Radiological Effluent		11/03/2008	11/07/2008	Baseline Inspections
	PSB2-52B	**- BIENNIAL PI&R INSPECTION**	**4**			
2	IP 71152B	Identification and Resolution of Problems		01/26/2009	01/30/2009	Baseline Inspections
2	IP 71152B	Identification and Resolution of Problems		02/09/2009	02/13/2009	Baseline Inspections
	RP-ORS4	**- OCCUPATIONAL RADIATION SAFETY - ALARA**	**1**			
2	IP 7112101	Access Control to Radiologically Significant Areas		02/09/2009	02/13/2009	Baseline Inspections
2	IP 7112102	ALARA Planning and Controls		02/09/2009	02/13/2009	Baseline Inspections
2	IP 71151	Performance Indicator Verification		02/09/2009	02/13/2009	Baseline Inspections
	EXAM	**- INITIAL EXAM**	**5**			
2	X02404	INITIAL EXAM UNIT 2-ANO (8/2009)		07/27/2009	07/31/2009	Not Applicable
2	X02404	INITIAL EXAM UNIT 2-ANO (8/2009)		08/31/2009	09/04/2009	Not Applicable
	EB2-07T	**- TRIENNIAL HEAT SINK INSPECTION**	**1**			
2	IP 7111107B	Heat Sink Performance		05/11/2009	05/15/2009	Baseline Inspections
	EB1-21T	**- CDBI**	**7**			
2	IP 7111121	Component Design Bases Inspection		07/06/2009	07/10/2009	Baseline Inspections
2	IP 7111121	Component Design Bases Inspection		07/20/2009	07/31/2009	Baseline Inspections
	711111B	**- BIENNIAL REQUAL INSPECTION**	**3**			
2	IP 7111111B	Licensed Operator Requalification Program		07/20/2009	07/24/2009	Baseline Inspections
	RP-ORS5	**- OCCUPATIONAL RADIATION SAFETY - ACCESS**	**1**			
2	IP 7112101	Access Control to Radiologically Significant Areas		08/31/2009	09/04/2009	Baseline Inspections
2	IP 7112102	ALARA Planning and Controls		08/31/2009	09/04/2009	Baseline Inspections
2	IP 71151	Performance Indicator Verification		08/31/2009	09/04/2009	Baseline Inspections
	EB1-08P	**- INSERVICE INSPECTION**	**2**			
2	IP 2515/172	Reactor Coolant System Dissimiliar Metal Butt Welds		09/21/2009	10/30/2009	Generic Safety Inspecti
2	IP 7111108P	Inservice Inspection Activities - PWR		09/21/2009	10/30/2009	Baseline Inspections

This report does not include INPO and OUTAGE activities.
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