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

March 4, 2011

Christopher Schwarz
Vice President, Operations
Entergy Operations, Inc.
Arkansas Nuclear One
1448 SR 333
Russellville, AR 72802

SUBJECT: ANNUAL ASSESSMENT LETTER FOR ARKANSAS NUCLEAR ONE UNIT 1 AND UNIT 2 (REPORT 05000313/2011001 AND 05000368/2011001)

Dear Mr. Schwarz:

On February 10, 2011, the NRC completed its end-of-cycle performance review of Arkansas Nuclear One, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2010, through December 31, 2010. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined that overall, Arkansas Nuclear One, Units 1 and 2, operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Arkansas Nuclear One, Units 1 and 2, during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The NRC identified that there were thirteen Green findings for the current 12-month assessment period with documented crosscutting aspects in the human performance area. There were two crosscutting themes associated with these findings that involved the use of conservative assumptions in decision making [H.1(b)] and management oversight of work practices [H.4(c)]. While there were four Green inspection findings with documented crosscutting aspects in human performance associated with the conservative assumptions theme, we determined that this represents a recent performance trend. Once identified, you placed this issue into your corrective action program and are currently developing plans to address this issue. Because you have taken actions to address this recent performance trend, the NRC did not identify a substantive crosscutting issue in human performance. There were five Green inspection findings with documented crosscutting aspects in human performance associated with the management oversight theme. Once this adverse trend was identified, you placed this issue

into your corrective action program and performed a root cause analysis of the issue. You also recently implemented a number of broad corrective actions that appear to have reduced the trend, in that you had only one finding in this theme in the last quarter. Because your actions appear to be addressing this performance trend, the NRC did not identify a substantive crosscutting issue in human performance. We will monitor the effectiveness of your corrective actions, for both trends, during the next assessment period.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. Temporary Instruction 2515/177 Inspection, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," which remains to be scheduled, will be completed during the 2011 or 2012 calendar year. Regional personnel will contact you to establish an appropriate time for this activity.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact me at 817-860-8147 with any questions you have regarding this letter.

Sincerely,

Jeffrey A. Clark, PE
Chief, Project Branch E

Docket Nos. 50-313, 50-368
License Nos. DPR-51; NPF-6

Enclosure: Arkansas Nuclear One Inspection/Activity Plan

cc: Distribution via ListServ

Arkansas Nuclear One
Inspection / Activity Plan
03/01/2011 - 06/30/2012

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			RP123	**- RADIATION SAFETY**	3
1, 2	03/07/2011	03/11/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/07/2011	03/11/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/07/2011	03/11/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/07/2011	03/11/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	03/07/2011	03/11/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			EXAM	**- INITIAL OPERATOR EXAM**	3
1	08/01/2011	08/05/2011	X02478	INITIAL EXAM - UNIT 1 - ANO (10/2011)	
1	08/29/2011	09/02/2011	X02478	INITIAL EXAM - UNIT 1 - ANO (10/2011)	
			EP1	**- BIENNIAL EP PROGRAM INSPECTION**	1
1, 2	06/20/2011	06/24/2011	IP 7111402	Alert and Notification System Testing	
1, 2	06/20/2011	06/24/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	06/20/2011	06/24/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	06/20/2011	06/24/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	06/20/2011	06/24/2011	IP 71151	Performance Indicator Verification	
			EB1-17	**- 50.59 AND MODS**	1
1, 2	06/13/2011	06/24/2011	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			RS45	**- RADIATION SAFETY**	2
1, 2	08/01/2011	08/05/2011	IP 71124.04	Occupational Dose Assessment	
1, 2	08/01/2011	08/05/2011	IP 71124.05	Radiation Monitoring Instrumentation	
			PSB2-O8P	**- INSERVICE INSPECTION - U1**	2
1	10/03/2011	10/14/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			EB1-21	**- COMPONENT DESIGN BASIS INSPECTION**	4
1, 2	02/13/2012	03/16/2012	IP 7111121	Component Design Bases Inspection	
1, 2	02/13/2012	03/16/2012	IP 7111121-DesMargn	Risk-significant/low Design Margin Components	
1, 2	02/13/2012	03/16/2012	IP 7111121-OpAction	High Risk Operator Actions	
1, 2	02/13/2012	03/16/2012	IP 7111121-OpIssues	Operating Experience Issues	
			RS5678	**- RADIATION SAFETY TEAM**	4
1, 2	03/19/2012	03/23/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	03/19/2012	03/23/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	03/19/2012	03/23/2012	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	03/19/2012	03/23/2012	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			EP-1	**- BIENNIAL EP EXERCISE**	3
1, 2	04/09/2012	04/13/2012	IP 7111401	Exercise Evaluation	
1, 2	04/09/2012	04/13/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	

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
03/01/2011 - 06/30/2012

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			EP-1	**- BIENNIAL EP EXERCISE**	**3**
1, 2	04/09/2012	04/13/2012	IP 71151-EP01	Drill/Exercise Performance	
1, 2	04/09/2012	04/13/2012	IP 71151-EP02	ERO Drill Participation	
1, 2	04/09/2012	04/13/2012	IP 71151-EP03	Alert & Notification System	