



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION IV
1600 E LAMAR BLVD
ARLINGTON, TX 76011-4511

September 2, 2014

Jeremy Browning, Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
1448 SR 333
Russellville, AR 72802-0967

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR ARKANSAS NUCLEAR ONE,
UNITS 1 AND 2 (REPORT 05000313/2014006 AND 05000368/2014006)

Dear Mr. Browning:

On August 14, 2014, the NRC completed its mid-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 July 1, 2013 through June 30, 2014. This letter informs you of the NRC's assessment of Arkansas Nuclear One, Units 1 and 2, during this period and its plans for future inspections at your facility.

The NRC determined that overall, Arkansas Nuclear One, Units 1 and 2, were 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 Degraded Cornerstone Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because of one or more Greater-than-Green Security Cornerstone inputs for Unit 1 and one Yellow finding in the Initiating Events Cornerstone for both Units 1 and 2. In a letter to you dated July 29, 2014, the NRC updated its assessment of Arkansas Nuclear One, Units 1 and 2, to be in the Degraded Cornerstone Column of the ROP Action Matrix beginning the first quarter of 2014 based on the inputs referenced above.

As a result of the Safety Culture Common Language Initiative, the terminology and coding of cross-cutting aspects were revised. All cross-cutting aspects identified during inspections conducted in calendar year 2014 reflect this revision to Inspection Manual Chapter (IMC) 0310, "Aspects Within The Cross-Cutting Areas," dated December 19, 2013. Cross-cutting aspects identified in 2013 using the 2013 terminology were converted to the latest revision in accordance with the cross-reference in IMC 0310 and during the mid-cycle assessment review were evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305, "Operating Reactor Assessment Program," dated October 18, 2013.

In addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection to review the actions taken to address the performance issues associated with the Yellow findings in accordance with Inspection Procedure 95002, "Supplemental Inspection for One Degraded

Cornerstone or Any Three White Inputs in a Strategic Performance Area.” This supplemental inspection will provide assurance that the root and contributing causes of risk-significant performance issues are understood, that the extent of condition and the extent of cause of risk-significant performance issues are identified, and that corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence. This inspection will also determine if safety culture components caused or significantly contributed to the risk-significant performance issues. The NRC will plan this inspection activity when you provide written notification of your readiness for the inspection.

The NRC also plans to conduct a supplemental inspection to review the actions taken to address the performance issues associated with the Greater-than-Green input in the Security Cornerstone. The NRC will plan this inspection activity when you provide written notification of your readiness for the inspection.

Although plant performance was within the Degraded Cornerstone Column, the NRC is still evaluating potential Greater-than-Green issues related to Unresolved Item 05000313/2013011-05; 05000368/2014009-01, “Flood Barrier Effectiveness.” These issues will be documented in NRC Inspection Report 05000313/2014009; 05000368/2014009. The final safety significance determination may affect the NRC’s assessment of plant performance and the enclosed inspection plan.

The enclosed inspection plan lists the inspections scheduled through December 31, 2015. 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 end-of-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. This inspection plan does not include security-related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, “Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events,” which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, “Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,” which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. This audit includes an onsite component in order for the NRC to evaluate licensee plans for complying with the Orders, as described in site-specific submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The date for the onsite component at your site is being coordinated with your staff. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

J. Browning

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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 Mr. Gregory Werner at (817) 200-1574 with any questions you have regarding this letter.

Sincerely,

/RA/

Marc L. Dapas
Regional Administrator
Region IV

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

Enclosure: Arkansas Nuclear One,
Units 1 and 2 Inspection/
Activity Plan

J. Browning

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Letter to Jeremy Browning from Marc L. Dapas dated September 2, 2014

SUBJECT: ANNUAL ASSESSMENT LETTER FOR ARKANSAS NUCLEAR ONE,
UNITS 1 AND 2 (REPORT 05000313/2014006 AND 05000368/2014006)

DISTRIBUTION:

Regional Administrator (Marc.Dapas@nrc.gov)
Deputy Regional Administrator (Kriss.Kennedy@nrc.gov)
Acting DRP Director (Troy.Pruett@nrc.gov)
Acting DRP Deputy Director (Michael.Hay@nrc.gov)
DRS Director (Anton.Vegel@nrc.gov)
DRS Deputy Director (Jeff.Clark@nrc.gov)
Senior Resident Inspector (Brian.Tindell@nrc.gov)
Resident Inspector (Abin.Fairbanks@nrc.gov)
Resident Inspector (Matt.Young@nrc.gov)
Administrative Assistant (Gloria.Hatfield@nrc.gov)
Branch Chief (Greg.Werner@nrc.gov)
Senior Project Engineer (Cale.Young@nrc.gov)
Project Engineer (Jim.Melfi@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Public Affairs Officer (Lara.Uselding@nrc.gov)
RIV State Liaison Officer (Bill.Maier@nrc.gov)
Project Manager (Andrea.George@nrc.gov)
Branch Chief, TSB (Geoffrey.Miller@nrc.gov)
R4DRPBC@nrc.gov
R4DRSBC@nrc.gov
Director, DIRS, NRR (Scott.Morris@nrc.gov)
Deputy Director, DIRS, NRR (Allen.Howe@nrc.gov)
Acting Director, DORL, NRR (Louise.Lund@nrc.gov)
Acting Deputy Director, DORL (Michael.Markley@nrc.gov)
Director, NSIR/DPR (Rob.Lewis@nrc.gov)
Chief, PLB IV, DORL, NRR (Eric.Oesterle@nrc.gov)
Regional Counsel (Karla.Fuller@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)
Technical Support Assistant (Loretta.Williams@nrc.gov)
Congressional Affairs Officer (Jenny.Weil@nrc.gov)
RIV/ETA: OEDO (Anthony.Bowers@nrc.gov)
ROPassessment Resource@nrc.gov
ROPreports@nrc.gov
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Electronic Distribution for Arkansas Nuclear One

Arkansas Nuclear One
Inspection / Activity Plan
09/01/2014 - 12/31/2015

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
EXAM - INITIAL OPERATOR EXAM				
1	10/20/2014 10/24/2014	X02531	INITIAL EXAM- ANO UNIT 1 (1/1/15)	5
1	11/17/2014 11/21/2014	X02531	INITIAL EXAM- ANO UNIT 1 (1/1/15)	
EXAM - INITIAL OPERATOR EXAM				
2	07/20/2015 07/25/2015	X02545	INITIAL EXAM ANO (8/2015)	5
2	08/24/2015 09/05/2015	X02545	INITIAL EXAM ANO (8/2015)	
EP-1 - EP PERFORMANCE INDICATORS				
1,2	09/15/2014 09/19/2014	IP 71151-EP01		2
1,2	09/15/2014 09/19/2014	IP 71151-EP02		
1,2	09/15/2014 09/19/2014	IP 71151-EP03		
EP-3 - BIENNIAL EXERCISE INSPECTION HAB				
1,2	09/15/2014 09/19/2014	IP 7111404	Emergency Action Level and Emergency Plan Changes	5
1,2	09/15/2014 09/19/2014	IP 7111407	Exercise Evaluation - Hostile Action (HA) Event	
EB2-03 - POST-APPROVAL LICENSE RENEWAL (FOLLOWUP)				
1,2	12/01/2014 12/05/2014	IP 71003	Post-Approval Site Inspection for License Renewal	2
RS 13 PI - RADIATION SAFETY				
1,2	02/02/2015 02/06/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	2
1,2	02/02/2015 02/06/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	02/02/2015 02/06/2015	IP 71151-OR01		
1,2	02/02/2015 02/06/2015	IP 71151-PR01		
71111.08 - INSERVICE INSPECTION 1R25				
1	02/02/2015 02/13/2015	IP 7111108P	Inservice Inspection Activities - PWR	1
TSB 52B - BIENNIAL PI&R INSPECTION				
1,2	03/09/2015 03/13/2015	IP 71152B	Problem Identification and Resolution	4
1,2	03/23/2015 03/27/2015	IP 71152B	Problem Identification and Resolution	
RS 24 - RADIATION SAFETY				
1,2	06/22/2015 06/26/2015	IP 71124.02	Occupational ALARA Planning and Controls	2
1,2	06/22/2015 06/26/2015	IP 71124.04	Occupational Dose Assessment	
EB1-07 - ANO TRIENNIAL HEAT SINK PERFORMANCE				
1,2	07/20/2015 07/24/2015	IP 7111107T	Heat Sink Performance	1
EB1-21 - ANO COMPONENT DESIGN BASIS INSPECTION				
1,2	09/21/2015 10/23/2015	IP 7111121	Component Design Bases Inspection	7

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
09/01/2014 - 12/31/2015

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End				
71111.08 - INSERVICE INSPECTION 2R24					1
2	09/28/2015	10/09/2015	IP 7111108P	Inservice Inspection Activities - PWR	
EP-1 - BIENNIAL EP PROGRAM INSPECTION					1
1,2	10/05/2015	10/09/2015	IP 7111402	Alert and Notification System Testing	
1,2	10/05/2015	10/09/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1,2	10/05/2015	10/09/2015	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	10/05/2015	10/09/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
EP-2 - EP PERFORMANCE INDICATORS					1
1,2	10/05/2015	10/09/2015	IP 71151-EP01		
1,2	10/05/2015	10/09/2015	IP 71151-EP02		
1,2	10/05/2015	10/09/2015	IP 71151-EP03		

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