



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

March 4, 2015

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

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR ARKANSAS NUCLEAR ONE,
UNITS 1 AND 2 (REPORT 05000313/2014001 AND 05000368/2014001)**

Dear Mr. Browning:

On February 19, 2015, the Nuclear Regulatory Commission (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, 2014, through December 31, 2014. This letter informs you of the results 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 the performance at Arkansas Nuclear One, Units 1 and 2, during the most recent quarter was within the Multiple/Repetitive Degraded Cornerstone Column of the NRC's Reactor Oversight Process (ROP) Action Matrix, because of one Yellow finding in the Initiating Events Cornerstone for Units 1 and 2, and one Yellow finding in the Mitigating Systems Cornerstone for Units 1 and 2.

In a letter to you dated June 23, 2014 (ML14174A832), the NRC informed you of its final significance determination associated with an inspection finding in the Initiating Events Cornerstone for Units 1 and 2 that was identified in the first quarter of 2014. That finding, which the NRC concluded was of substantial safety significance (Yellow), involved your staff's failure to provide adequate oversight for the planned movement of the Unit 1 turbine stator in March 2013 using a temporary hoisting assembly.

In a letter to you dated January 22, 2015 (ML15023A076), the NRC informed you of its final significance determination associated with an inspection finding in the Mitigating Systems Cornerstone for Units 1 and 2 that was identified in the third quarter of 2014. That finding, which the NRC concluded was of substantial safety significance (Yellow), involved your staff's failure to design, construct, and maintain the Units 1 and 2 auxiliary building and emergency diesel fuel storage building flood barriers so that they would protect safety-related equipment from flooding.

In addition, based on the results of a Frequently Asked Question (FAQ) review completed by the ROP Working Group on February 19, 2015, we understand that you will be updating your reported Unplanned Scrams per 7,000 Critical Hours PI in the Initiating Events Cornerstone for Unit 2, and that the revised PI result will be White for the second and third quarters of 2014, and Green for the fourth quarter of 2014.

Given the significance of the findings referenced above, the NRC determined that the performance at Arkansas Nuclear One, Units 1 and 2, has been in the Multiple/Repetitive Degraded Cornerstone Column of the ROP Action Matrix since the beginning of the third quarter of 2014.

In addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs or One Red Input." This supplemental inspection will: 1) provide the NRC with additional information to be used in deciding whether the continued operation of the facility is acceptable and whether additional regulatory actions are necessary to arrest declining licensee/plant performance; 2) provide an independent assessment of the extent of risk-significant issues to aid in the determination of whether an unacceptable margin of safety or security exists; 3) independently assess the adequacy of the programs and processes used by the licensee to identify, evaluate, and correct performance issues; 4) independently evaluate the adequacy of programs and processes in the affected strategic performance areas; 5) provide insight into the overall root and contributing causes of identified performance deficiencies; and 6) evaluate the licensee's third-party safety culture assessment and conduct a graded assessment of the licensee's safety culture based on the results of the evaluation. The NRC will plan this inspection activity when you provide written notification of your readiness for the inspection.

Additional supplemental inspections to review the actions taken to address the performance issues associated with the Yellow findings and White PI discussed above are being considered. You will receive separate notification of our decision to conduct, and the scheduling of, these inspections.

The enclosed inspection plan lists the inspections scheduled through June 30, 2016. 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 supplemental inspections discussed above, including the IP 95003, are also not currently scheduled in the enclosed inspection plan. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. We 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.

Additionally, an NRC audit of licensee efforts towards compliance with Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," is ongoing for various sites. The audit includes an onsite visit for the NRC staff to evaluate mitigating strategies as described in the licensee submittals, and to receive and review information relative to associated open items. This onsite audit will occur prior to the first unit at the site achieving compliance with the Orders, and the

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audit will aid NRC staff in developing a final Safety Evaluation for the site. The audit at your site has been scheduled for the week of April 20, 2015. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management 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. Ryan Lantz 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

Arkansas Nuclear One
 Inspection / Activity Plan
 03/01/2015 - 06/30/2016

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			EXAM - INITIAL OPERATOR EXAM		5
2	07/20/2015	07/25/2015	X02545	INITIAL EXAM ANO (8/2015)	
2	08/24/2015	09/05/2015	X02545	INITIAL EXAM ANO (8/2015)	
			EB2-03 - POST-APPROVAL LICENSE RENEWAL (FOLLOWUP)		2
1,2	03/16/2015	03/20/2015	IP 71003	Post-Approval Site Inspection for License Renewal	
			TSB 52B - BIENNIAL PI&R INSPECTION		4
1,2	04/27/2015	05/01/2015	IP 71152B	Problem Identification and Resolution	
1,2	05/11/2015	05/15/2015	IP 71152B	Problem Identification and Resolution	
			ISFSI - ROUTINE LOADING INSPECTION		1
1	05/18/2015	05/22/2015	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			RS 24 - RADIATION SAFETY		2
1,2	06/22/2015	06/26/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	06/22/2015	06/26/2015	IP 71124.04	Occupational Dose Assessment	
			EB1-07 - ANO TRIENNIAL HEAT SINK PERFORMANCE		1
1,2	07/13/2015	07/17/2015	IP 7111107T	Heat Sink Performance	
			EB1-21T - ANO COMPONENT DESIGN BASIS INSPECTION		7
1,2	08/03/2015	09/04/2015	IP 7111121	Component Design Bases Inspection	
			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	Drill/Exercise Performance	
1,2	10/05/2015	10/09/2015	IP 71151-EP02	ERO Readiness	
1,2	10/05/2015	10/09/2015	IP 71151-EP03	Alert & Notification System Reliability	
			EB2-05XT - TRIENNIAL FIRE PROTECTION INSPECTION		4
1,2	06/06/2016	06/10/2016	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
1,2	06/20/2016	06/24/2016	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
			RS 5678 - RADIATION SAFETY - TEAM		4
1,2	06/27/2016	07/01/2016	IP 71124.05	Radiation Monitoring Instrumentation	

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
03/01/2015 - 06/30/2016

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
RS 5678 - RADIATION SAFETY - TEAM					4
1,2	06/27/2016	07/01/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	06/27/2016	07/01/2016	IP 71124.07	Radiological Environmental Monitoring Program	
1,2	06/27/2016	07/01/2016	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	

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See next page

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DATE	3/2/15	3/12/15	3/2/15	3/3/15	3/4/15

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Letter to Jeremy Browning from Marc L. Dapas, dated March 4, 2015

SUBJECT: ANNUAL ASSESSMENT LETTER FOR ARKANSAS NUCLEAR ONE,
UNITS 1 AND 2 (REPORT 05000313/2014001 AND 05000368/2014001)

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