



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 E. LAMAR BLVD.  
ARLINGTON, TX 76011-4511

February 27, 2017

EA-16-247

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

**SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 2 - FINAL SIGNIFICANCE DETERMINATION  
OF A WHITE FINDING AND NOTICE OF VIOLATION, NRC INSPECTION  
REPORT 05000368/2017014**

Dear Mr. Anderson:

This letter provides you the final significance determination of the preliminary White finding discussed in the U.S. Nuclear Regulatory Commission's (NRC's) Inspection Report 05000368/2016011 dated January 19, 2017 (Agencywide Document Access and Management System (ADAMS) ML17019A288). The finding involved a failure to ensure that an emergency diesel generator bearing was provided with adequate lubrication. As a result, the bearing overheated and caused the emergency diesel generator to fail on September 16, 2016, during a 24-hour endurance test. The extent of damage from the failure led to the decision to shut down Unit 2 to comply with technical specifications. This finding did not present an immediate safety concern because other normal and emergency sources of power remained available, and your plant walkdowns and our inspections confirmed that this condition did not exist on other safety-related equipment.

In a telephone conversation with Mr. Neil O'Keefe, Chief, Reactor Projects Branch E, on January 20, 2017, you indicated that Entergy Operations, Inc., did not contest the characterization of the risk significance of this finding, and that you declined your opportunity to discuss this issue in a regulatory conference or to provide a written response. According to NRC Inspection Manual Chapter 0609, Attachment 1, "Significance and Enforcement Review Panel (SERP) Process," by declining the opportunity to submit a written response or to request a Regulatory Conference, the licensee relinquishes its right to appeal the final significance determination.

After considering the information developed during the inspection, the NRC has concluded that the finding is appropriately characterized as White, a finding with low to moderate safety significance.

The NRC has also determined that failure to provide adequate work instructions ensuring proper lubrication to the inboard generator bearing is a violation of Arkansas Nuclear One, Unit 2, Technical Specification 6.4.1.a, as cited in the attached Notice of Violation (Notice). The circumstances surrounding the violation were described in NRC Inspection Report 05000368/2016011.

In accordance with the NRC Enforcement Policy, the Notice is considered escalated enforcement action because it is associated with a White finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

The NRC has reviewed this finding and its causal factors in context with the performance issues that contributed to Arkansas Nuclear One being placed into Column 4 of the NRC's Action Matrix and concluded that continued oversight in Column 4 remains appropriate. After reviewing your response to the information requested in the attached Notice, the staff will consider whether it is appropriate to amend the existing Confirmatory Action Letter (ML16169A193) to include any of your corrective actions for this finding.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Kriss M. Kennedy  
Regional Administrator

Docket No. 50-368  
License No. NPF-6

Enclosure:  
Notice of Violation

cc w/encl: Electronic Distribution

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 2 - FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION, NRC INSPECTION REPORT 05000368/2017014 – DATED FEBRUARY 27, 2017

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<a href="mailto:Jeremy.Bowen@nrc.gov">Jeremy.Bowen@nrc.gov</a> ;	<a href="mailto:Matthew.Kirk@nrc.gov">Matthew.Kirk@nrc.gov</a> ;	
ROPreports Resource;	ROPAssessment Resource;	

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 By:CFO       Yes  No       Publicly Available       Sensitive      NRC-002

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## NOTICE OF VIOLATION

Entergy Operations, Inc.  
Arkansas Nuclear One, Unit 2

Docket No.: 50-368  
License No.: NPF-6  
EA-16-247

During an NRC inspection conducted from September 16 to December 21, 2016, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Technical Specification 6.4.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, "Quality Assurance Program Requirements," Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 9.a, states, in part, that maintenance that can affect the performance of safety-related equipment should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Contrary to the above, on November 11, 2014, and on June 22, 2016, the licensee failed to properly pre-plan and perform maintenance that can affect the performance of safety-related equipment in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances. Specifically, on November 11, 2014, while performing Work Order 356569, and on June 22, 2016, while performing Work Order 52656389, the licensee failed to provide adequate documented work instructions for maintenance on the Unit 2 emergency diesel generator A inboard generator bearing, a safety-related component, such that the minimum bearing oil level was correctly marked and maintained to ensure adequate lubrication to the bearing. As a result, the Unit 2 emergency diesel generator A failed on September 16, 2016, during a 24-hour endurance test.

This violation is associated with a White significance determination process finding.

Pursuant to the provisions of 10 CFR 2.201, Entergy Operations, Inc., is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region IV, 1600 East Lamar Boulevard, Arlington, Texas 76011-4511; and a copy to the NRC Resident Inspector at the Arkansas Nuclear One station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

This reply should be clearly marked as a "Reply to a Notice of Violation; EA-16-247" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Enclosure

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Website at [www.nrc.gov/reading-rm/adams.html](http://www.nrc.gov/reading-rm/adams.html), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected, and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated this 27<sup>th</sup> day of February 2017