## Arkansas Nuclear 2 1Q/2003 Plant Inspection Findings

# **Initiating Events**



Item Type: NCV NonCited Violation

Failure to adhere to Technical Specification overtime restrictions specified in NRC Generic Letter 82-12 A noncited violation of Technical Specification 6.2.2.g was identified by the inspectors on May 17, 2002, for failure to adhere to the Technical Specification overtime restrictions as specified in NRC Generic Letter 82-12, "Nuclear Power Plant Staff Working Hours," guidelines. Specifically, prior to the Unit 2 Refueling Outage 2R15, hundreds of staff members who perform safety-related activities received blanket authorization to exceed the Technical Specification required overtime limits for support of Refueling Outage 2R15 which did not constitute appropriate deviation from the guidelines for "very unusual circumstances" as identified in NRC Generic Letter 82-12. In addition, based on a sample review of the Unit 2 Operations station logs, several operations staff members were verified to have exceeded the overtime limits as part of their regular outage work schedule which was previously approved under the inappropriate blanket authorizations. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report ANO-2-2002-01339. The finding is more than minor because routine and inappropriate deviations for exceeding the NRC Generic Letter 82-12 guidelines for overtime limits is a significant contributor for worker fatigue and potential for human errors which, if left uncorrected, could become a more significant safety concern. The finding is only of very low safety significance because there were no actual adverse plant or equipment conditions identified that were attributable to worker fatigue.

Inspection Report# : 2002003(pdf)

# **Mitigating Systems**

Significance: Sep 21, 2002 Identified By: NRC Item Type: NCV NonCited Violation FAILURE TO HAVE ADEQUATE PROCEDURAL CONTROLS FOR THE USE OF FIRE RETARDANT TREATED WOOD

Green. The inspectors identified a noncited violation of Unit 2 Technical Specification 6.8.1(f). The licensee's procedure for control of combustibles inappropriately considered fire retardant treated wood, both pressure treated and coated, as a noncombustible material. This could lead to the uncontrolled use of fire retardant treated wood throughout the facility, even in excess of Fire Hazard Analysis limits for fire loads. Combustible material (fire retardant treated wood), that exceeded the amount assumed in the Fire Hazard Analysis, was found in the Unit 2 east battery room, an area without automatic suppression. The failure to have administrative or procedural controls in place that controlled this material, analyzed the potential hazard, or provided compensatory measures for the fire zone was a violation of Technical Specification 6.8.1(f) (50-368/02-04-01). This violation is being treated as a noncited violation and is in the licensee's corrective action program as Condition Report C-2002-00783. The excessive fire load condition was

considered greater than minor because the fire barrier was not adequate for the as-found conditions. This issue was characterized as a Green finding using the fire protection attachment of the Significance Determination Process. It was determined to have very low risk significance because, when manual suppression capability was credited, fire zones adjoining the Unit 2 east battery room containing redundant-train equipment were unaffected. Inspection Report# : 2002004(pdf)



## Significance: Sep 21, 2002 Identified By: NRC Item Type: NCV NonCited Violation FAILURE TO FOLLOW PROCEDURE FOR EDG HEAT EXCHANGER THERMAL PERFORMANCE TESTS

Green. The inspectors identified that a violation of Unit 1 Technical Specification 5.4.1(a) and Unit 2 Technical Specification 6.8.1(c) occurred failing to properly conduct a surveillance test on safety-related equipment. Emergency diesel generator heat exchanger thermal performance tests were not performed in accordance with procedures that were written to ensure that temperature stabilization requirements were met. The failure to follow surveillance test requirements is considered a violation of Unit 1 Technical Specification 5.4.1(a) and Unit 2 Technical Specification 6.8.1(c) (50-313/02-04-02; 50-368/02-04-02). This violation is being treated as a noncited violation and is in the licensee's corrective action program as Condition Report C-2002-00710. The issue was more than minor due to repeated failures to ensure temperature stabilization requirements during surveillance tests on multiple pieces of equipment. The issue impacted the mitigating systems cornerstone in that it affected the ability to monitor thermal performance of the emergency diesel generators. This issue was characterized as a Green finding using the Significance Determination Process because upon completion of subsequent satisfactory test performance, the issue did not represent an actual loss of safety function.

Inspection Report# : <u>2002004</u>(*pdf*)



Significance: G Sep 21, 2002

Identified By: NRC Item Type: NCV NonCited Violation

#### FAILURE TO IDENTIFY REPEAT FUNCTIONAL FAILURES.

Green. The inspectors identified a noncited violation of 10 CFR 50.65(a)(2). The licensee failed to set goals and monitor the performance of the reactor coolant system as required by 10 CFR 50.65(a)(1), from April 5, 2001, till October 12, 2001, after it had failed to demonstrate effective control of the performance of the reactor coolant system through appropriate preventive maintenance. Specifically, the licensee did not identify repetitive functional failures of a vent to fail to open. As required by 10 CFR 50.65(a)(2), effective control of system, structure, or component performance or condition through appropriate preventive maintenance must be demonstrated in order for the monitoring under Paragraph (a)(1) not to be required. The inspectors considered this violation noncited consistent with Section VI.A.1 of the NRC Enforcement Policy (50-313/02-04-03; 50-368/02-04-03). The licensee documented this violation in the licensee's corrective action program as Condition Report CR-ANO-C-2002-00734. The inspectors considered this violation more than minor because the failure to identify repeat functional failures resulted in the system not being evaluated for (a)(1) status. If the condition were left uncorrected, the lack of adequate preventive maintenance could result in additional equipment failures. The finding is not suitable for SDP evaluation because the performance failure did not result in degraded equipment. NRC management has reviewed the finding and determined it to be a Green finding of very low significance. The inspectors considered the safety significance of this violation to be low because the performance deficiency did not cause the repeat failures. Inspection Report# : 2002004(pdf)

# **Barrier Integrity**

# **Emergency Preparedness**

# **Occupational Radiation Safety**

Significance: Feb 20, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

# FAILURE TO PROVIDE ADEQUATE JUSTIFICATIONS FOR WORK ACTIVITY DOSE ESTIMATE ADJUSTMENTS

IR 050000313-03-02, IR 05000368-03-02; Entergy Operations, Inc.; 12/29/02 - 03/22/03; Arkansas Nuclear One, Units 1 and 2; Evaluations of Changes, Tests, or Experiments; Temporary Plant Modifications; ALARA Planning and Controls. Green. The inspectors identified a noncited violation of Units 1 and 2 Technical Specifications 5.4.1.a and 6.8.1.a, respectively, because the licensee failed to follow procedural requirements. Specifically, the licensee failed to provide the reason radiation work permits and work activity dose estimates were revised as required by Procedure NMM RP-105, Revision 1, Section 5.8. The inspectors determined that this finding was associated with the Occupational Radiation Safety Cornerstone program and process attributes (ALARA planning/projected dose) and affected the objective of the cornerstone, which is to protect the worker from exposure to radiation. Therefore, the finding was greater than minor. The occurrence involved a failure to maintain or implement, to the extent practical, procedures needed to achieve occupational doses that were ALARA, which resulted in unplanned, unintended occupational collective dose for a work activity. Therefore, the safety significance of the finding was evaluated using the Occupational Radiation Safety SDP. However, because the licensee's 3-year rolling average collective dose was not greater than 135 person-rem/unit, the finding had no more than very low safety significance. Inspection Report# : 2003002(pdf)

Significance: Apr 19, 2002 Identified By: NRC

Item Type: NCV NonCited Violation

## Failure to follow radiation work permit requirements

A noncited violation of Technical Specification 6.8.1 was identified by the inspectors because radiation workers did not follow procedural guidance related to the radiation work permit system. Section 4.6.1 of Administrative Procedure RP-105, "Radiation Work Permits," Revision 1, states that radiation workers are responsible for reviewing their radiation work permit and complying with the protective requirements. On April 16, 2002, two maintenance personnel working on a scaffold platform on the 335-foot elevation in the Unit 2 reactor building did not comply with the applicable requirements of their radiation work permit when they failed to contact radiation protection personnel to determine the radiological conditions in which they would be working. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report ANO-2-2002-00778. This violation was considered more than minor because the failure to comply with the radiation work permit requirements has a credible impact on safety and the potential for unplanned or unintended dose. The safety significance of this violation was determined to be very low by the Occupational Radiation Safety Significance Determination Process because there was no substantial potential for overexposure.

Inspection Report# : 2002003(pdf)



Apr 19, 2002

Identified By: NRC Item Type: NCV NonCited Violation

## Failure to prevent unauthorized entry into a locked high radiation area

A noncited violation of Technical Specification 6.13.1 was identified by the inspectors on April 18, 2002, because an accessible area of the Unit 2 reactor building in which a individual could receive a dose greater than 1000 millirems in 1 hour was not locked to prevent unauthorized entry. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report ANO-2-2002-00822. This violation was more than minor because the failure to prevent unauthorized entry to a locked high radiation area has a credible impact on safety and the potential for unplanned or unintended dose. The safety significance of this violation was determined to be very low by the Occupational Radiation Safety Significance Determination Process because there was no substantial potential for an overexposure. Inspection Report# : 2002003(pdf)

## **Public Radiation Safety**



Significance: May 24, 2002

Identified By: NRC Item Type: NCV NonCited Violation

### FAILURE TO COMPLY WITH DOT HAZARD COMMUNICATION REQUIREMENTS

Green. A noncited violation of 10 CFR 71.5 was identified by the team because the licensee did not comply with the applicable requirements of the U.S. Department of Transportation regulations in 49 CFR Parts 170-189. Specifically, the licensee did not include the proper shipping name on shipping papers, as required by 49 CFR 172.202(a)(1), and did not properly mark packages with the proper shipping name and identification number, as required by 49 CFR 172.301(a). Contaminated equipment and components were shipped as low specific activity material instead of surface contaminated objects. The failure to properly communicate the hazard involved with a radioactive shipment was a performance deficiency. The finding was more than minor because it was associated with one of the Public Radiation Safety cornerstone attribute (Transportation Program) and affected the associated cornerstone objective. The finding involved occurrences in the licensee's radioactive material transportation program that were contrary to NRC or Department of Transportation regulations. Using the Public Radiation Safety Significance Determination Process, the team determined the finding had very low safety significance because radiation limits were not exceeded, the package was not breached during transit, the licensee was not refused low level burial ground access, waste was not underclassified, the licensee did not fail to make notifications, and no certificate of compliance problems were involved. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report CR-ANO-2-2002-00413.

Inspection Report# : 2002006(pdf)

# **Physical Protection**

Significance: N/A Jan 10, 2003

Identified By: NRC Item Type: FIN Finding Verification of Compliance With Interim Compensatory Measures Order

On February 25, 2002, the NRC imposed by Order, Interim Compensatory Measures to enhance physical security. The inspectors determined that, overall, the licensee appropriately incorporated the Interim Compensatory Measures into the site protective strategy and access authorization program; developed and implemented relevant procedures; ensured that the emergency plan could be implemented; and established and effectively coordinated interface agreements with offsite organizations.

Inspection Report# : 2003006(pdf)

# Miscellaneous

Last modified : May 30, 2003