



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064**

October 21, 2002

Craig G. Anderson, Vice President,  
Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, Arkansas 72801-0967

**SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - NRC INTEGRATED INSPECTION  
REPORT 50-313/02-04; 50-368/02-04**

Dear Mr. Anderson:

On September 21, 2002, the NRC completed an inspection at your Arkansas Nuclear One, Units 1 and 2, facility. The enclosed report documents the inspection findings, which were discussed with you and other members of your staff on September 25, 2002, and as described in Section 4OA6.

The inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the NRC has identified issues that were evaluated under the risk Significance Determination Process as having very low safety significance (Green). The NRC has also determined that violations are associated with these issues. These violations are being treated as noncited violations (NCVs), consistent with Section VI.A of the Enforcement Policy. These NCVs are described in the subject inspection report. If you contest the violations or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at the Arkansas Nuclear One facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure and your response (if any) will be made 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).

Entergy Operations, Inc.

-2-

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

*/RA/*

Linda Joy Smith, Chief  
Project Branch D  
Division of Reactor Projects

Dockets: 50-313  
50-368  
Licenses: DPR-51  
NPF-6

Enclosure:  
NRC Inspection Report  
50-313/02-04; 50-368/02-04

cc w/enclosure:  
Executive Vice President  
& Chief Operating Officer  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, Mississippi 39286-1995

Vice President  
Operations Support  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, Mississippi 39286-1995

Manager, Washington Nuclear Operations  
ABB Combustion Engineering Nuclear  
Power  
12300 Twinbrook Parkway, Suite 330  
Rockville, Maryland 20852

County Judge of Pope County  
Pope County Courthouse  
100 West Main Street  
Russellville, Arkansas 72801

Winston & Strawn  
1400 L Street, N.W.  
Washington, DC 20005-3502

Entergy Operations, Inc.

-3-

Bernard Bevill  
Radiation Control Team Leader  
Division of Radiation Control and  
Emergency Management  
Arkansas Department of Health  
4815 West Markham Street, Mail Slot 30  
Little Rock, Arkansas 72205-3867

Mike Schoppman  
Framatome ANP, Inc.  
Suite 705  
1911 North Fort Myer Drive  
Rosslyn, Virginia 22209

Technological Services  
Branch Chief  
FEMA Region VI  
800 North Loop 288  
Federal Regional Center  
Denton, Texas 76201-3698

Electronic distribution by RIV:  
 Regional Administrator (**EWM**)  
 DRP Director (**KEB**)  
 DRS Director (**EEC**)  
 Senior Resident Inspector (**RLB3**)  
 Branch Chief, DRP/D (**LJS**)  
 Senior Project Engineer, DRP/D (**JAC**)  
 Staff Chief, DRP/TSS (**PHH**)  
 RITS Coordinator (**NBH**)  
 Scott Morris (**SAM1**)  
 ANO Site Secretary (**VLH**)  
 Dale Thatcher (**DFT**)  
 RSLO (**WAM**)

R:\\_ANO\2002\AN2002-04RP-RLB.wpd

RIV:RI:DRP/D	PE:DRP/D	PE:TSS	RI:DRP/A
KDWeaver	ELCrowe	JFDrake	GLGuerra
<b>E-LJSmith</b>	<b>/RA/</b>	<b>T-LJSmith</b>	<b>T-LJSmith</b>
10/21/02	10/21/02	10/21/02	10/21/02
SRI:DRP/D	SPE:DRP/D	C:DRS/EMB	C:DRP/D
RLBywater	JAClark	CSMarschall	LJSmith
<b>E-LJSmith</b>	<b>E-LJSmith</b>	<b>E-LJSmith</b>	<b>/RA/</b>
10/21/02	10/21/02	10/21/02	10/21/02

**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Dockets: 50-313  
50-368

Licenses: DPR-51  
NPF-6

Report No: 50-313/02-04  
50-368/02-04

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One, Units 1 and 2

Location: Junction of Hwy. 64W and Hwy. 333 South  
Russellville, Arkansas

Dates: June 23 through September 21, 2002

Inspectors: R. Bywater, P.E., Senior Resident Inspector  
J. Clark, Senior Project Engineer  
E. Crowe, Project Engineer  
J. Drake, Project Engineer  
G. Guerra, Resident Inspector, South Texas Project  
W. McNeill, Senior Reactor Inspector  
K. Weaver, Resident Inspector

Approved By: Linda Joy Smith, Chief, Project Branch D  
Division of Reactor Projects

Attachment: Supplemental Information

## SUMMARY OF FINDINGS

### Arkansas Nuclear One, Units 1 and 2 NRC Inspection Report 50-313/02-04; 50-368/02-04

IR 05000313-02-04, IR 05000368-02-04; Entergy Operations, Inc.; 6/23/02 - 9/21/02; Arkansas Nuclear One, Units 1 and 2; Fire Protection, Heat Sink Performance, Maintenance Effectiveness.

The inspection was conducted by three resident inspectors, one senior project engineer, two project engineers, and a senior reactor inspector. The inspection identified three findings. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

#### **Cornerstone: Reactor Safety**

- 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 (Section 1R05).

- 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 (Section 1R07).

- 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 (Section 1R12).

## Report Details

### Summary of Plant Status

Unit 1 began the inspection period at 100 percent power. On June 26, 2002, Unit 1 operators commenced a plant power reduction to 96 reactor power in response to the high pressure turbine drain valves failing open on a loss of power. During investigation, the licensee determined that the solenoid for Main Steam Drain Valve CV-6666 had electrically failed causing the fuse in the breaker which supplies power to the high pressure turbine drains to fail. Following repairs and testing of the solenoid and high pressure turbine drain valves, Unit 1 operators returned Unit 1 to 100 percent reactor power the same day. On July 17, 2002, Unit 1 operators commenced a down power to 40 percent at the request of the system dispatcher due to the unexpected loss of the 500 KV Mablevale transmission line. Following subsequent repairs and restoration by the Entergy Transmission and Distribution staff of the 500 KV Mablevale transmission line, Unit 1 operators returned Unit 1 to 100 percent power the same day. On August 31, 2002, Unit 1 operators reduced reactor power to approximately 99.5 percent and commenced a 6-day reactor coolant system T-average temperature reduction of approximately 5 °F to extend full power operation capability. On September 6, 2002, Unit 1 operators completed the T-average temperature reduction and initiated a power coastdown in anticipation of the 1R17 Refueling Outage at a rate of approximately 1.2 percent per day. Unit 1 was operating at approximately 83.5 percent power at the conclusion of the inspection period.

Unit 2 began the inspection period at 100 percent power. On July 17, 2002, Unit 2 operators commenced a power reduction to 98.5 percent reactor power due to the unexpected loss of the 500 KV Mablevale transmission line. Following restoration of the Mablevale transmission line, Unit 2 operators returned the unit to 100 percent power the same day. Unit 2 remained at or near 100 percent power throughout the remainder of the inspection period.

#### **1. REACTOR SAFETY**

##### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity [REACTOR-R]**

#### 1R01 Adverse Weather Protection (711111.01)

##### a. Inspection Scope

On August 29, 2002, in anticipation of seasonal cold weather conditions, the inspectors reviewed preparations for freeze protection of plant equipment for Unit 1 and Unit 2. The inspectors reviewed Procedure 1104.039, "Plant Heating and Cold Weather Operations," Revision 15, and Procedure 2106.032, "Unit Two Freeze Protection Guide," Revision 9. The inspectors toured areas of the plant potentially susceptible to freezing conditions to ensure that actions would be taken to protect safety-related equipment from being affected by freezing weather conditions.

##### b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial Walkdown (71111.04)

a. Inspection Scope

On, July 3, 2002, the inspectors performed a partial system walkdown of the Unit 2 Emergency Diesel Generator 1. The majority of this walkdown was performed during surveillance testing of the Emergency Diesel Generator 2. During this walkdown, the inspectors verified correct valve alignment, electric power availability, and no adverse material condition of system components. Positions of valves and electrical power breakers were compared to Procedure 2104.036, "Emergency Diesel Generator Operations," Revision 46.

On July 11, 2002, the inspectors performed a partial system walkdown of the Unit 2 control element drive mechanism control system and motor generator sets. Positions of electrical power breakers, switches, and indications were compared to System Training Manual 2-02, "Control Element Drive Mechanism Control System and Procedure 2105.009, CEDM Control System Operation, " Revision 21.

On August 26, 2002, the inspectors performed a partial system walkdown of the Unit 1 Emergency Diesel Generator 1 while Emergency Diesel Generator 2 was inoperable for testing. Procedure 1104.036, "Emergency Diesel Generator Operations," Revision 41; the Updated Final Safety Analysis Report; and System Training Manual STM 1-31, "Emergency Diesel Generators," Revision 6, were used as reference materials for this activity. This inspection included breaker and valve position verifications, gauge and annunciator reviews, and inspections for leaks an/or abnormal conditions of the Emergency Diesel Generator 1 subsystems.

On September 9, 2002, the inspectors performed a partial system walkdown of the Unit 2 Emergency Feedwater System A . This walkdown was performed while the Emergency Feedwater Pump B was taken out of service for planned maintenance. The inspectors verified correct valve alignment, electric power availability, and no adverse material condition of system components. Positions of valves and electrical power breakers were compared to Procedure 2106.006, "Emergency Feedwater System Operations," Revision 54.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown (71111.04S)

a. Inspection Scope

On July 18, 2002, the inspectors performed a complete system walkdown of accessible portions of the Unit 2 Containment Building Spray System B. This walkdown was performed during the period when the Containment Building Spray System A was taken

out of service for scheduled maintenance. During this walkdown, the inspectors verified correct valve alignment, electric power availability, and no adverse material condition of system components. Positions of valves and electrical power breakers were compared to Procedure 2104.005, "Containment Spray," Revision 41.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Routine Inspection (71111.05Q)

a. Inspection Scope

The inspectors referenced the Fire Hazards Analysis Report, Revision 7, during the following inspections to ensure that conditions were consistent with the requirements of the licensee's fire protection program for fire protection systems design, control of transient combustibles and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures:

- On July 3, 2002, the inspectors performed an inspection of the Unit 2, Emergency Diesel Generator 1 Room, Fire Area KK.
- On July 3, 2002, the inspectors performed an inspection of the Unit 2, Emergency Diesel Generator 2 Room, Fire Area JJ.
- On July 25, 2002, the inspectors performed an inspection of the Unit 1, Upper North Piping Penetration Room, Fire Area B.
- On July 25, 2002, the inspectors performed an inspection of the Unit 1, Lower North Piping Penetration Room, Fire Area C.
- On August 21, 2002, the inspectors performed an inspection of Unit 2 Fire Area GG. This included a tour of Zone 2076, electrical equipment room; and Zone 2081, upper and lower north piping penetration rooms.
- On August 21, 2002, the inspectors performed an inspection of Unit 2 Fire Area SS. This included a tour of Zone 2097, east direct current equipment room; Zone 2100, south switchgear room; and Zone 2102, east battery room.
- On August 23, 2002, the inspectors performed an inspection of Fire Area L. This included a tour of emergency diesel generator fuel storage vaults in Zones 250, 251, 252, 253, and 254.
- On August 26, 2002, the inspectors performed an inspection of Fire Area N. This included a tour of the Unit 1 intake structure and service water equipment.

- On September 1, 2002, the inspectors performed an inspection of the Unit 1 control room, Fire Area G, and Unit 1 control room extension, Fire Area B. Condition Reports (CR) C-2002-0722, 1-2002-1113, and C-2002-0747 were initiated following the inspectors' observations.
- On September 19, 2002, the inspectors performed an inspection of the Unit 1 hot chemistry lab, Fire Area B; and, Unit 2 hot chemistry lab, Fire Area HH. Condition Reports C-2002-0772 and C-2002-0789 were initiated as a result of the inspectors' observations.

b. Findings

Introduction

Inspectors identified a noncited violation of Unit 2 Technical Specification 6.8.1(f) for failing to control combustible materials in an area of the plant that contained safety related equipment. The inspectors determined that the violation was of very low safety significance due to the likely effectiveness of fire barriers and manual suppression before redundant equipment would be compromised.

Description

On August 21, 2002, an inspector identified a scaffold in the east battery room constructed of flame retardant treated wood (FRTW). Using industry standards, the inspector estimated the wood to be approximately 400 pounds, by multiplying the apparent board-feet of wood by 4.0 pounds. By multiplying the estimated weight of the wood by 7,000 BTU per pound, the inspector estimated the heat of combustion of the wood at 2.8 MBTU. The inspector was concerned that a large amount of combustibles was located in a zone with safety-related equipment. Upon further review of the ANO Fire Hazard Analysis, the inspector noted that this area had an administrative limit of 100 pounds of combustibles, and a total analyzed fire load of approximately 2.4 MBTU. The inspector went to the Unit 2 work control office and asked about combustible permits and/or fire impairments associated with this area. Operators informed the inspector that there were no active permits or impairments for this area. The operators further stated that no such actions would be necessary, because FRTW was noncombustible.

The inspector reviewed Procedure 1000.047, "Control of Combustibles," Revision 15. The inspector noted that Section 6.1.8 of this procedure stated that, "Wood treated with a colored pressure treated fire retardant or painted with a colored fire retardant coating shall be considered noncombustible." The inspector also noted that this procedure had several references to codes and standards, including NFPA 30 for flammable and combustible liquids, but did not include any NFPA codes or other standards for solid combustibles. The inspector spoke with ANO fire protection and licensing personnel and expressed that there seemed to be an inadequacy in their fire protection program which could be characterized as a violation of NRC requirements. These personnel stated that their characterization of fire retardant treated wood was a long-standing policy of the station, and had been utilized since the inception of the Fire Protection

Plan. The licensee stated they considered the material noncombustible from the standpoint of its flame spread index being 25. They disagreed that there was any problem with the fire protection program, or that any violation of NRC requirements had occurred.

The inspector contacted NRC regional and headquarters fire protection specialists. The specialists informed the inspector that ANO's position was contrary to industry standards and practice. They stated that ANO personnel were only looking at one aspect of combustibility, flame spread, in their consideration of a potential fire hazard. The specialists stated that industry standards also consider heat of combustion, or fire load, and smoke release in considering the combustible characteristics of a material. They gave the inspector numerous references and technical sources to confer with the licensee. The inspector discussed the details of NFPA codes and other fire protection reference documents with the fire protection engineer and with plant management. Plant management stated that they understood the concern and entered the problem into the corrective action program as CR C-2002-00783. They stated to the inspector that they intended to change the control of combustibles procedure to remove the statement that FRTW was noncombustible.

#### Analysis

The specific observation of wood, in excess of ANO fire hazard analysis limits, in the Unit 2 east battery room, an area without automatic suppression, was analyzed using the Significance Determination Process of NRC Manual Chapter 0609, Appendix F. The excessive fire load condition was considered greater than minor because the fire barrier was not adequate for the as-found conditions. The finding did not screen through the Phase 1 worksheet.

The exposure time for the finding was less than 30 days but greater than 3 days. Because the fire loading of the room exceeded that assumed in the Fire Hazards Analysis, the specialists identified a fire scenario where the 3-hour rated fire barrier of the east battery room failed. Using a fire ignition frequency of  $1.56E-3$ /year from the licensee's individual plant examination for external events, and assuming that manual suppression capability was unaffected during the exposure time, the specialists concluded that the estimated likelihood rating was "E" in Table 5.5 and Table 5.6 of Appendix F. The specialists also assumed full credit for manual fire suppression would extinguish the postulated fire before redundant safe shutdown equipment in adjoining fire areas was affected. Because redundant train safe shutdown equipment was unaffected, at least one train of remaining mitigation capability existed when using the Transients and Stuck Open Safety Valve worksheets of the ANO-2 Risk-Informed Inspection Notebook for all sequences. Therefore, the significance of the finding was determined to be of very low safety significance (Green).

During routine plant status tours, and access to other areas of the plant, inspectors noted that the licensee's use of fire retardant treated wood was prevalent. The inspectors reviewed the ANO Fire Hazard Analysis with regional specialists. They determined the areas that may present greater than very low safety significance if they contained significant amounts of FRTW. The inspectors toured these areas of the plant.

They determined that no area that was of risk importance contained FRTW. Therefore, the inspectors were satisfied that the current condition of the plant was bounded by the very low safety significance (Green) of the mentioned finding.

### Enforcement

The ANO fire protection program was incorporated into the Safety Analysis Report per Generic Letters 86-10 and 88-12. The license conditions of both units state that the licensee shall implement and maintain all provisions of the approved fire protection program as described in Amendment 9A to the Safety Analysis Report and as approved in the Safety Evaluation dated March 31, 1992. In these documents, the requirements were made to satisfy NRC criteria in BTP9.5-1 (1976). A specific area of BTP9.5-1 addressed the control of combustibles for fire protection program implementation. ANO Unit 2 Technical Specifications Section 6.8.1(f) written procedures be established, implemented, and maintained covering fire protection program implementation. The control of combustible materials is governed by ANO Procedure 1000.047, "Control of Combustibles," Revision 15.

On August 21, 2002, combustible material, that exceeded the Fire Hazard Analysis value, was found in the Unit 2 east battery room. No administrative or procedural controls were in place that controlled this material, analyzed the potential hazard, or provided compensatory measures for the fire zone. The inspectors determined that the licensee's interpretation that fire retardant treated wood was noncombustible, in Procedure 1000.047, was inappropriate. This methodology 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. Therefore, the inspectors considered Procedure 1000.047 to be inadequate in regard to fire retardant treated wood, and a violation of Unit 2 Technical Specification 6.8.1(f). This is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy (50-368/02-04-01).

## .2 Annual Inspection (71111.05A)

### a. Inspection Scope

The inspectors observed a fire brigade drill on August 23, 2002, in the Unit 2 turbine lube oil storage area (Fire Area B, Fire Zone 2178-AAA), to evaluate the readiness of the licensee's fire brigade to fight fires. The inspectors used the Fire Hazards Analysis, Revision 7, the ANO Pre-Fire Plan, Revision 1, and Procedures 1015.007, "Fire Brigade Organization and Responsibilities," Revision 16, and 1063.020, "Fire Brigade Training Program," Revision 13, as part of this review. The inspectors reviewed the strategies and information in the Pre-Fire Plan to verify it was consistent with the fire protection design features, fire zone boundaries, and combustible loading assumptions shown in the plan. The inspectors observed the fire brigade members' use of protective gear and conduct of communications. The inspectors observed the fire fighting equipment brought to the scene to evaluate whether sufficient equipment was brought to the fire scene to evaluate whether sufficient equipment was available for the simulated fire. The

inspectors observed fire fighting directions and radio communications between the brigade leader, brigade members, and control room.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report and licensee flood protection documents including Procedures 1203.025, "Natural Emergencies," Revision 19 and 2203.008, "Natural Emergencies," Revision 8. The inspectors conducted walkdowns of Unit 1 and Unit 2 areas susceptible to external flooding to verify that risk-significant equipment was adequately protected. The inspectors inspected flood mitigation equipment located in these areas to verify the licensee's flood mitigation plans and equipment were consistent with design requirements.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

.1 Annual Review (71111.07A)

a. Inspection Scope

The inspectors observed a heat exchanger performance test for an emergency diesel generator based upon its high ranking in the plant-specific risk assessment. The inspectors monitored the test and reviewed the test data to verify the following items: test acceptance criteria and results appropriately considered differences between testing conditions and design conditions; inspection results were appropriately categorized against pre-established engineered acceptance criteria, and were acceptable; the frequency of testing or inspection was sufficient to detect degradation prior to loss of heat removal capabilities below design-basis values; test results considered test instrument inaccuracies and differences; and the licensee had developed acceptance criteria for its bio-fouling controls.

b. Findings

Introduction

The inspectors identified a noncited violation of Unit 1 Technical Specification 5.4.1(a) and Unit 2 Technical Specification 6.8.1(c) for failing to properly conduct a surveillance test on safety-related equipment. The inspectors considered the violation to be more than minor due to multiple occurrences of errors, in both performance and acceptance

reviews, of the tests on multiple emergency diesel generators. The inspectors determined that the violation was of very low safety significance based upon subsequent satisfactory testing and analysis.

#### Description

On August 26, 2002, an inspector observed a heat exchanger performance test for Unit 1 Emergency Diesel Generator 2, conducted in accordance with ANO Procedure 1309.018, "EDG Cooler Thermal Test," Revision 3, August 2002. The inspector also reviewed the completed test documentation and data. The inspector noted that Steps 6.1.6 and 6.1.7 of the procedure called for allowing temperatures to stabilize (within +/- 0.2°F per 5 minute interval), then taking data readings at one minute intervals for at least 30 minutes of stable data. The documented data showed variations of approximately 0.5°F per minute just prior to commencing the test. The data also showed variations of temperature readings of more than 0.2°F per minute, and up to approximately 1.0°F for the overall test, during the credited test period.

The inspector brought his observations to the system engineer that had been in charge of the testing. The engineer stated that he had not observed the problem during his review. The inspector also asked about similar testing on the other station emergency diesels. The engineer subsequently informed the inspector that similar readings were accepted for the last surveillance tests on both of the Unit 2 emergency diesel generators. These tests had been conducted on August 12 and August 14, 2002. The engineer initiated CR C-2002-00710 to document the deficiency in the licensee's corrective action program. The engineer also informed the inspector that subsequent testing and evaluation of heat exchanger performance was satisfactory for all station emergency diesel generators.

#### Analysis

The inspectors used the guidance of NRC Manual Chapters 0609 and 0612 to determine the characterization of this issue. The issue was considered a performance deficiency. The inspectors determined that the issue was more than minor due to multiple occurrences, of failures to both perform and review the tests, on multiple pieces of equipment. The issue impacted the mitigating systems cornerstone in that it affected the thermal performance of the emergency diesel generators. However, based upon the subsequent satisfactory test performance, the issue did not represent an actual loss of safety function and therefore screened out of phase one of the Significance Determination Process. The issue is therefore considered to have very low safety significance (Green).

#### Enforcement

ANO Unit 1 Technical Specification 5.4.1(a) requires that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, dated February 1978. Surveillance testing of safety-related equipment is a recommended Regulatory Guide 1.33 procedure. ANO Unit 2 Technical Specification 6.8.1(c) requires that

procedures be established, implemented, and maintained for surveillance and testing of safety-related equipment.

On August 12, 14, and 26, 2002, station personnel failed to follow required steps of ANO Procedure 1309.018, "EDG Cooler Thermal Test," Revision 3, August 2002. The personnel in charge of these tests also failed to identify the errors during acceptance criteria review of the data. 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). The inspectors are treating this as a noncited violation (50-313/02-04-02; 50-368/02-04-02) consistent with Section VI.A of the NRC Enforcement Policy.

1R11 Licensed Operator Requalification Program (71111.11Q)

a. Inspection Scope

On August 6, 2002, the inspectors observed the Unit 1 licensed operator simulator qualification training Scenario ANO-1-SPG-RO-AOP/EOP, "Unannounced Casualties," conducted for Training Cycle 03-01. The inspectors compared their observations to the applicable abnormal operating procedures, the emergency plan procedures and applicable Technical Specifications. In addition, the inspectors attended the critique following the scenario held by the Unit 1 training organization to assess individual performance.

On August 8, 2002, the inspectors observed the Unit 1 licensed operator simulator qualification training Scenario ANO-1-SPG-LOR-CYCLE SPG-03-01-02, "DHR Normal/Abnormal Ops." The inspectors compared their observations to the applicable normal and abnormal operating procedures and Technical Specifications. In addition, the inspectors noted that lessons learned from a previous event in which normal decay heat removal was lost during shutdown of Unit 1 had been incorporated into this training scenario.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness Review

.1 Routine Maintenance Effectiveness Inspection (71111.12Q)

a. Inspection Scope

The inspectors independently verified that licensee personnel properly implemented 10 CFR 50.65, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The inspectors used the reactor oversight process Inspection Procedure 71111.12, "Maintenance Effectiveness," to perform the inspection. The following equipment performance problems were reviewed:

- Breaker 2B-51 D3 for Reactor Building Ventilation Fan 2VSF-31A tripped when the hand switch was taken to start (CR ANO-2-2002-1423)
- Main Feedwater Lube Oil Pump P-27B trip resulted in trip of Main Feedwater Pump B (CR ANO-1-2001-610)
- High Pressure Safety Injection Pump C inboard bearing oil bubbler emptied during a pump start (CR ANO-2-2002-1630)
- Fuse holder for auxiliary building ventilation exhaust radiation monitor was wired improperly (CR ANO-2-2002-1340)
- Pressurizer heater sleeve leakage (CR ANO-2-2002-739)
- Containment atmosphere monitor ran out of filter paper (CR ANO-2-2002-1341)

The inspectors focused the review on whether the structures, systems, or components (SSCs) that experienced problems were properly characterized in the scope of the program. They also reviewed whether the SSC failure or performance problem was properly characterized. The inspectors assessed the adequacy of the licensee's significance classification for the SSC. This included the appropriateness of the performance criteria established for the SSC (if applicable) and the adequacy of corrective actions for SSCs classified in accordance with 10 CFR 50.65 a(1) as applicable.

b. Findings

No findings of significance were identified.

.2 Biennial Periodic Evaluation Inspection (71111.12B)

Periodic Evaluation Reviews

a. Inspection Scope

The inspectors reviewed licensee implementation of the Maintenance Rule. The inspectors verified system, structure and component scoping, characterization, safety significance, performance criteria, and the appropriateness of goals and corrective actions. The inspectors reviewed the conclusion reached by the licensee with regard to the balance of reliability and unavailability for specific Maintenance Rule functions. The inspectors reviewed the following performance problems:

- Electro hydraulic control system plant level failures reported in CR 1-2000-00190
- Main steam system setpoint failures reported in CR 2-1996-00081
- Emergency feedwater system failures reported in CR 2-2000-01073

- High pressure safety injection system pump performance failures reported in CR 2-2000-01079
- Emergency diesel generator failures reported in CR 2-2001-00177
- 480 V Load center and motor control centers time delay relay failures reported in CR 2-2001-00623
- Reactor coolant system leakage reported in CRs 1-2000-00097 and 1-2001-00198

b. Findings

Introduction

The inspectors found that repeat functional failures were not being identified by the licensee and as a result the licensee did not evaluate the reactor coolant system for placement in (a)(1) status as required by the Maintenance Rule, 10 CFR 50.65.

Description

The licensee developed a performance criterion as required by 10 CFR 50.65 (a)(2) for the reactor coolant system of less than two functional failures per cycle for the function of leakage and venting. In addition, the licensee developed a second performance criterion of less than one repeat functional failure per 36 months. On February 15, 2000, the licensee documented that a hot leg level instrumentation nozzle leaked because of primary water stress corrosion cracking. They issued CR ANO-1-2000-00097 that identified the leakage as a functional failure. Also on February 15, 2000, the licensee documented that the High Point Vent Valve SV-1093 failed to open. They issued CR ANO-1-2000-00098 that identified the failure as a functional failure. On March 24, 2001, the licensee documented that a control rod drive mechanism nozzle leaked because of primary water stress corrosion cracking. They issued CR ANO-1-2001-00198 that identified the leakage as a functional failure rather than a repeat functional failure.

NRC inspection Report 50-313/01-08; 50-368/01-08, Paragraph 4OA3, documented the leakage of the control rod drive mechanism nozzle. NRC inspection Report 50-313/02-05; 50-368/02-05 will document additional inspection in response to TI 2515-145 regarding circumferential cracking of reactor pressure vessel head penetration nozzles.

On April 5, 2001, the licensee documented that the High Point Vent Valve SV-1093 failed to open. They issued CR ANO-1-2001-00468 that identified the leakage as a functional failure rather than a repeat functional failure. The licensee should have evaluated the system for placement into (a)(1) based on the vent valve failures. The emergency function of this valve was to vent gases from the reactor coolant system high points to facilitate primary to secondary heat transfer via natural circulation cooling.

The licensee changed the performance criterion for the reactor coolant system from a time base of per cycle to a rolling 18 month period on June 21, 2001. On October 12, 2001, the licensee initiated CR ANO-1-2001-00802 to place the reactor coolant system in (a)(1) status because the functional failures for leakage and vent valve failures exceeded the performance criteria of less than two functional failures per 18 months, not because they were repeat functional failures. The licensee did not evaluate for placement in (a)(1) before June 21, 2001, because the failures occurred in different cycles. On September 11, 2002, after the inspectors noted the failure to identify repeat functional failures, the licensee issued CR ANO-C-2002-00734 to document the failure to identify repeat functional failures.

The licensee defined the vent valve's function was to open to vent the reactor coolant system. The inspectors considered the failure on April 5, 2001, as a repeat functional failure of the February 15, 2000, failure of a vent valve to open. As a result the licensee should have evaluated the reactor coolant system for placement in (a)(1) status. The licensee defined a function of the reactor coolant system to maintain the pressure boundary. The licensee's Technical Specifications did not explicitly require zero leakage. The inspectors concluded that the reactor coolant system leaks were not functional failures. Although the licensee did conservatively identify the leakage as functional failures, they did not identify the March 24, 2001, leakage as a repeat functional failure of the February 15, 2000, leak. The inspectors concluded that the leaks were not functional failures. Therefore, no violation occurred for these leaks.

The licensee failed to set goals and monitor the performance of the reactor coolant system from April 5, 2001 till October 12, 2001, as required by 10 CFR 50.65 (a)(1), after it had failed to demonstrate effective control of the performance of the reactor coolant system through appropriate preventive maintenance on a vent valve. The licensee did not justify why it kept the system in (a)(2). As required by 10 CFR 50.65 (a)(2), effective control of systems, structures, and components performance or condition through appropriate preventive maintenance must be demonstrated in order for the monitoring under Paragraph (a)(1) not to be required.

#### Enforcement

The inspectors determined that this was a noncited violation of 10 CFR 50.65 (a)(2) consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee documented this violation in the licensee's corrective action program as 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 (50-313/02-04-03; 50-368/02-04-03).

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors evaluated the use of the corrective action system within the Maintenance Rule Program for issues associated with risk-significant systems. The inspector accomplished this by the examination of a sample of corrective action documents listed in the attachment. The inspectors determined that the identification of problems and implementation of corrective actions was acceptable.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors evaluated and discussed with the licensee the risk assessments listed below to verify that assessments were performed when required and appropriate compensatory actions were taken. The inspectors reviewed these assessed risk configurations against actual plant conditions and any in-progress evolutions or external events to verify that the assessments were accurate, complete, and appropriated for the conditions. In addition, the inspectors walked down the control room and plant areas to verify that compensatory measures identified by the risk assessments were appropriately performed.

- Unit 2 Containment Spray Pump B system outage on July 18, 2002
- 500 kV Switchyard Breaker B5148 plant impact statement dated July 29, 2002
- Unit 2 Emergency Feedwater Pump B maintenance on September 9, 2002
- Startup Transformer 2 planned outage on September 16-18, 2002

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Evolutions (71111.14, 71753)

a. Inspection Scope

The inspectors observed the following nonroutine evolutions to verify that they were conducted in accordance with licensee procedures and Technical Specification requirements:

- On July 17, 2002, the inspectors reviewed and observed both Units 1 and 2 operator performance and response during an unexpected loss of the 500 KV Mablevale electrical line. On July 17, 2002, Unit 1 operators commenced a down power to 40 percent at the request of the system dispatcher

and Unit 2 operators commenced a down power to 98.5 percent due to this unexpected loss of the 500 KV Mablevale electrical line. Operator actions occurred in accordance with Procedure 2107.001, "Electrical System Operations," Revision 46, for Unit 2 and Procedure 1107.001, "Electrical System Operations," Revision 59, for Unit 1 respectively. Following subsequent repairs and restoration by the Entergy Transmission and Distribution staff of the 500 KV Mablevale Line, both Units 1 and 2 were returned to 100 percent power the same day.

- On August 7, 2002, the inspectors reviewed both Units 1 and 2 operator performance and response when seven switchyard breakers unexpectedly opened during the performance of postmaintenance testing on 500 Kv Switchyard Breaker B5148. The event resulted in a lockout of the switchyard autotransformer, which made the Startup Transformer 1 for Unit 1 and Startup Transformer 3 for Unit 2 inoperable. The inspectors verified that both the Unit 1 and Unit 2 operators declared the Startup Transformers 1 and 3 inoperable and entered the appropriate applicable Technical Specification action statements. During investigation and troubleshooting by the transmission and distribution personnel, they discovered that a mechanical failure had occurred on 500 Kv Breaker B5122 which initiated the event. Operability of the switchyard autotransformer, and both Startup Transformers 1 and 3 were subsequently restored the same day, which was within the Technical Specification allowed outage time. Applicable Technical Specification action statements were then exited.
- On September 1, 2002, the inspectors observed Unit 1 operators conduct an infrequently performed test/evolution briefing and perform a reactor coolant system T-average reduction maneuver in accordance with Procedure 1102.004, "Power Operation," Attachment P, and "End of Cycle 17 T-AVE Reduction," Revision 41. The inspectors also reviewed the engineering document supporting this maneuver, Engineering Request 2002-1004-000, "ANO-1 End of Core Tave Reduction Maneuver," Revision 0.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed operability determinations to assess the correctness of evaluations, the use of compensatory measures, if needed, and compliance with the Technical Specifications. The inspectors' review included a verification that operability determinations were made as specified by the licensee's Procedure LI-102, "Corrective Action Process," Revision 2, and Procedure 1000.104, "Condition Reporting and Immediate Reportability Determinations," Revision 17. The technical adequacy of the determinations was reviewed and compared to the Technical Specifications, Technical

Requirements Manual, Updated Final Safety Analysis Report, associated licensing-basis documentation, as appropriate. The operability determinations that were reviewed were documented in the following condition reports:

- ANO-2-2002-01829 Evaluation of Emergency Feedwater Pump 2P7A Service Water Suction Pressure Switch 2PIS-0711-2
- ANO-1-2001-00549 Evaluation of leakage from Valve MU-1235-2, Pressurizer Level Control Valve CV-1235 outlet isolation valve
- ANO-2-2002-01535 Evaluation of leakage from 2PSV-5697 relief valve flange for the Shutdown Cooling Heat Exchanger Line B

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors conducted interviews with operators, operator workaround program managers, and quality assurance personnel. The inspectors reviewed the Units 1 and 2, and common control room deficiency and operator workaround lists to determine the number of operator workarounds that existed and to assess the cumulative effect of the workarounds.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19 and 71004)

a. Inspection Scope

For the maintenance activities and power uprate startup testing activities identified below, the inspectors observed the postmaintenance testing activities in the control room or locally and/or reviewed the test data obtained from the field. The inspectors observed whether the tests were performed in accordance with procedures, that the procedures' acceptance criteria were consistent with the Technical Specifications and the supporting license change application, and the results recorded met the test acceptance criteria. In addition, the inspectors verified that startup test deficiencies were recorded and resolved. These activities included:

- Unit 2 Boric Acid Makeup Pump B testing in accordance with Procedure 2104.003, "Chemical Addition," Supplement 2, "BAM Pump (2P-39B) Quarterly Test," Revision 30, conducted on July 24, 2002

- Unit 1 High Pressure Injection Pump C testing in accordance with Procedure 1104.002, "Makeup & Purification System Operation," Revision 56, conducted on August 7, 2002
- Unit 2 startup testing in accordance with Procedure 2409.714, "NSSS Data Collection for Cycle 16," Revision 0, conducted on May 15-24, 2002, at the 100 percent power plateau

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed from either the control room or locally the performance of and/or reviewed the documentation for, the following surveillance tests. This was done to verify that the surveillance tests were performed in accordance with approved licensee procedures and met Technical Specification requirements. In addition, the applicable test data was also reviewed to verify whether they met Technical Specifications, Updated Final Safety Analysis Report, and licensee procedure requirements.

- Procedure 2104.036, "Emergency Diesel Generator Operations, " Supplement 2B, and "2DG2 Monthly Test (Slow Start)," Revision 46, conducted on July 3, 2002
- Procedure 2104.036, "Emergency Diesel Generator Operations, "Supplement 1A, and "2DG1 Monthly Test (Slow Start)," Revision 46, conducted on July 19, 2002
- Procedure 1305.003, "M/U & Purification Sys. Integrity Test & Leak Rate Determination," Revision 9, conducted on July 23, 2002

b. Findings

No findings of significance was identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the implementation of Maintenance Action Instruction (MAI) 70519 controlled temporary alteration in accordance with Engineering Request 2002-0904-000, which was implemented on August 2, 2002, to install a temporary power supply to allow the Unit 1 control rod drive relative position indication (RPI) indications to function properly. The inspectors confirmed that this

temporary alteration was implemented and installed as authorized by MAI 70519 and Procedure 1000.028, "Control of Temporary Alterations," Revision 23.

b. Findings

No findings of significance were identified.

**Cornerstone: Emergency Preparedness [EP]**

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed portions of the announced emergency preparedness drill conducted on September 4, 2002, to evaluate emergency response organization performance by focusing on the risk-significant activities of classification, notification, and protective action recommendations. The inspectors also assessed personnel recognition of abnormal plant conditions, the transfer of emergency responsibilities between facilities, communications, and the overall implementation of the emergency plan. The drill was conducted using the Unit 1 simulator and all onsite response facilities (emergency operations facility, technical support center, and the operations support center) were activated.

b. Findings

No findings of significance were identified.

**3. SAFEGUARDS  
Cornerstone: Physical Protection [PP]**

3PP3 Response to Contingency Events (71130.03)

The Office of Homeland Security (OHS) developed a Homeland Security Advisory System (HSAS) to disseminate information regarding the risk of terrorist attacks. The HSAS implemented five color-coded threat conditions with a description of corresponding actions at each level. NRC Regulatory Information Summary (RIS) 2002-12a, dated August 19, 2002, "NRC Threat Advisory and Protective Measures System," discusses the HSAS and provides additional information on protective measures to licensees.

a. Inspection Scope

On September 10, 2002, the NRC issued a safeguards advisory to reactor licensees to implement the protective measures described in RIS 2002-12a in response to the Federal government declaration of threat level Orange. Subsequently, on September 24, 2002, the OHS downgraded the national security threat condition to Yellow and a corresponding reduction in the risk of a terrorist threat.

The inspectors interviewed licensee personnel and security staff, observed the conduct of security operations, and assessed licensee implementation of the threat level Orange protective measures. Inspection results were communicated to the region and headquarters security staff for further evaluation.

b. Findings

No findings of significance were identified.

**4. Other Activities [OA]**

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

On July 30 through August 01, 2002, and September 16-20, 2002, the inspectors reviewed Units 1 and 2 operations stations logs, monthly operating logs, and condition reports for the third and fourth quarters of 2001 and the first and second quarters of 2002 to verify the accuracy and completeness of the data used to calculate and report the following performance indicators in accordance with Procedure LI-107, "NRC Performance Indicator Process," Revisions 1 and 2.

- Unit 1 unplanned SCRAMS per 7000 critical hours
- Unit 1 unplanned SCRAMS with loss of normal heat removal
- Unit 1 unplanned power transients per 7,000 critical hours
- Unit 1 reactor coolant system activity
- Unit 2 unplanned SCRAMS per 7000 critical hours
- Unit 2 unplanned SCRAMS with loss of normal heat removal
- Unit 2 unplanned power transients per 7,000 critical hours
- Unit 2 reactor coolant system activity

The inspectors evaluated licensee performance indicator collection and reporting practices against the standards of NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

The inspector presented the inspection results of the biennial Maintenance Rule implementation inspection to Mr. R. Bement, General Manager, Plant Operations, and other members of the licensee's management staff at the conclusion of the inspection

on September 13, 2002. The licensee acknowledged the findings presented. The inspector had a followup telephone exit meeting on October 1, 2002.

The resident inspectors presented the inspection results of the resident inspections to Mr. C. Anderson, Vice President, Operations, and other members of the licensee's management staff on September 25, 2002. The licensee acknowledged the findings presented. The inspectors noted that while proprietary information was reviewed, none would be included in this report.

**ATTACHMENT  
SUPPLEMENTAL INFORMATION**

KEY POINTS OF CONTACT

Licensee

R. Allen, Unit 1 Systems Engineering Supervisor  
C. Anderson, Vice President, Operations  
G. Ashley, Manager, Licensing  
R. Bement, General Manager Plant Operations  
M. Chisum, System Engineering Manager, Unit 1  
M. Cooper, Licensing Specialist  
S. Cotton, Director, Nuclear Safety Assurance  
N. Eggemeyer, Manager, Technical Support  
R. Fowler, Senior Emergency Planner  
D. Hawkins, Licensing Specialist  
J. Hoffpauir, Plant Manager, Operations  
I. Jacobson, Component Engineer  
M. Lloyd, Probabilistic Safety Assessment Engineer  
D. Lomax, System Engineering Manager, Unit 2  
T. Mitchell, Operations Manager, Unit 2  
K. Nichols, Manger, Design Engineering  
R. Partridge, Superintendent, Chemistry  
B. Robinson, System Engineering Supervisor  
K. Tate, Supervisor, Access Authorization, Fitness-for-Duty, Medicalt  
J. Walker, Probabilistic Safety Assessment Engineer  
W. Walker, Fire Protection Engineer  
T. Woodson, System Engineer  
C. Zimmerman, Plant Manager, Support

ITEMS OPENED AND CLOSED

50-368/02-04-01	NCV	Failure to have adequate procedural controls for the use of fire retardant treated wood (Section 1R05).
50-313/02-04-02; 50-368/02-04-02	NCV	Failure to follow procedure for EDG heat exchanger thermal performance tests (Section 1R07).
50-313/02-04-03; 50-368/02-04-03	NCV	Failure to identify repeat functional failures (Section 1R12).

DOCUMENTS REVIEWED

In addition to the documents called out in the inspection report, the following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

Condition Reports

CR-ANO-1-2000-00097	CR-ANO-1-2001-00802	CR-ANO-C-2000-00243
CR-ANO-1-2000-00098	CR-ANO-2-1996-00081	CR-ANO-C-2001-00070
CR-ANO-1-2000-00162	CR-ANO-2-2000-00292	CR-ANO-C-2001-00114
CR-ANO-1-2000-00172	CR-ANO-2-2000-00320	CR-ANO-C-2001-00129
CR-ANO-1-2000-00190	CR-ANO-2-2000-01073	CR-ANO-C-2001-00362
CR-ANO-1-2001-00142	CR-ANO-2-2000-01079	CR-ANO-C-2001-00547
CR-ANO-1-2001-00198	CR-ANO-2-2001-00177	CR-ANO-C-2002-00682
CR-ANO-1-2001-00468	CR-ANO-2-2001-00623	CR-ANO-C-2002-00691
CR-ANO-1-2001-00746	CR-ANO-2-2001-00737	CR-ANO-C-2002-00734
CR-ANO-1-2001-00747	CR-ANO-2-2001-00945	

LO-ALO-C-2002-00151

Miscellaneous

Number	Title	Revision/ Date
5010.017-ATT-4	ANO 2001 Maintenance Rule (a)(3) Periodic Assessment	002-00-0

Procedures

Number	Title	Change
DC-121	Maintenance Rule	0
	Entergy SW Maintenance Rule Desktop Guide	0