



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

June 8, 2000

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

SUBJECT: NRC INSPECTION REPORT NO. 50-313/00-07; 50-368/00-07 FOR ARKANSAS
NUCLEAR ONE

Dear Mr. Anderson:

This refers to the inspection conducted on April 2 through May 13, 2000, at the Arkansas Nuclear One, Units 1 and 2, facility. The enclosed report presents the results of this inspection. The results of this inspection were discussed on May 16, 2000, with Mr. R. Bement and other members of your staff.

This inspection was an examination of activities conducted under your licenses as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your licenses. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the ADAMS Public Library component on the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

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

Sincerely,

/RA/

P. Harrell, Chief
Project Branch D
Division of Reactor Projects

Entergy Operations, Inc.

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Docket Nos.: 50-313
50-368

License Nos.: DPR-51
NPF-6

Enclosure:
NRC Inspection Report No.
50-313/00-07; 50-368/00-07

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Only inspection reports to the following:

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NRR Event Tracking System (**IPAS**)

ANO Site Secretary (**VLH**)

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-313; 50-368
License Nos.: DPR-51; NPF-6
Report No.: 50-313/00-07; 50-368/00-07
Licensee: Entergy Operations, Inc.
Facility: Arkansas Nuclear One, Units 1 and 2
Location: 1448 S. R. 333
Russellville, Arkansas 72801
Dates: April 2 through May 13, 2000
Inspectors: R. Bywater, Senior Resident Inspector
K. Weaver, Resident Inspector
Approved by: P. Harrell, Chief, Project Branch D
Division of Reactor Projects

ATTACHMENTS:

Attachment 1: Supplemental Information
Attachment 2: NRC's Revised Reactor Oversight Process

SUMMARY OF FINDINGS

Arkansas Nuclear One
NRC Inspection Report 50-313/00-07; 50-368/00-07

The report covers a 6-week period of resident inspection. In the Reactor Safety area, the cornerstones inspected included Initiating Events, Mitigating Systems, and Barrier Integrity.

There were no inspection findings identified in these areas.

Report Details

Summary of Plant Status

At the beginning of this inspection period, Unit 1 was at 100 percent power. On April 14, 2000, Unit 1 operators reduced reactor power to approximately 85 percent for main turbine throttle valve and governor valve testing. The unit was returned to 100 percent power the same day. On April 20, Unit 1 operators reduced reactor power to approximately 75 percent due to the failure of a main turbine governor valve servo and subsequent heater drain tank high level dump valve malfunction. Repairs were completed and the unit was returned to 100 percent power on the same day. On May 5, Unit 1 operators reduced reactor power to approximately 48 percent to remove the Pleasant Hill 500 kV offsite transmission line from service for maintenance. The unit was returned to 100 percent power on May 7. Unit 1 operated at or near 100 percent power for the remainder of this inspection period.

At the beginning of the inspection period, Unit 2 was at 100 percent power. On May 5, 2000, Unit 2 operators reduced reactor power to approximately 64 percent to remove the Pleasant Hill 500 kV offsite transmission line from service for maintenance. The unit was returned to 100 percent power on May 8. Unit 2 operated at or near 100 percent power for the remainder of this inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment - Routine Inspection

a. Inspection Scope

The inspectors performed a partial walkdown of the Unit 2 emergency feedwater system. Plant procedures and drawings were used to verify the correct system lineups for the systems.

b. Observations and Findings

There were no inspection findings identified during this inspection.

1R05 Fire Protection - Monthly Routine Inspection

a. Inspection Scope

The inspectors performed tours of the plant to assess the material condition of plant fire protection equipment and proper control of transient combustibles. Specific risk significant areas assessed included the Unit 2 engineered safety feature equipment rooms in the auxiliary building.

b. Observations and Findings

There were no inspection findings identified during this inspection.

1R06 Flood Protection - Periodic Inspection

a. Inspection Scope

The inspectors performed tours of the plant to determine if adequate protection existed to protect safety-related equipment from internal flooding events. Specific risk-significant areas included the Unit 2 emergency feedwater pump rooms and Unit 2 engineered safety feature equipment rooms.

b. Observations and Findings

There were no inspection findings identified during this inspection.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

Throughout the inspection period, the inspectors reviewed weekly and daily work schedules to identify risk significant activities. The inspectors discussed risk evaluations and overall plant configuration control for planned and emergent work activities with operations and work control personnel.

The inspectors observed the activities of Unit 1 operations and maintenance personnel following the failure of a main turbine governor valve servo and subsequent heater drain tank high level dump valve malfunction.

b. Observations and Findings

There were no inspection findings identified during this inspection.

1R19 Postmaintenance Testing

a. Inspection Scope

The inspectors reviewed postmaintenance testing performed following installation of a new strainer on the inlet to the Unit 1 Service Water Bay A. The testing was performed to demonstrate that the service water system was operable with the new strainer installed.

b. Observations and Findings

There were no inspection findings identified during this inspection.

4. OTHER ACTIVITIES

4OA6 Management Meetings

.1 Exit Meeting Summary

On May 16, 2000, the inspectors conducted a meeting with Mr. R. Bement, General Manager, and other members of plant management and presented the inspection results. The managers acknowledged the findings presented and also informed the inspectors that no proprietary material was examined during the inspection.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Bement, General Manager
R. Carter, Unit 2 Operations Assistant Manager
M. Chisum, Unit 2 System Engineering Manager
M. Cooper, Licensing Specialist
C. Eubanks, Planning and Scheduling/Outage Manager
B. Gordon, Unit 2 Mechanical Maintenance Superintendent
G. Hettel, Instrumentation and Controls Superintendent
G. Higgs, Unit 1 Electrical Maintenance Superintendent
J. Hoffpauir, Unit 2 Plant Manager
D. James, Licensing Manager
K. Jeffery, Security Coordinator
R. Lane, Engineering Director
M. Little, Unit 1 Operations Assistant Manager
A. Remer, Unit 1 Mechanical Maintenance Coordinator
D. Wagner, Quality Assurance Supervisor
C. Zimmerman, Unit 1 Plant Manager

DOCUMENTS REVIEWED

Testing Work Plan 1409.656	Unit 1 "A" Service Water Bay Strainer Post Installation Testing	Revision 0
Procedure 2106.006	Emergency Feedwater System Operations	Revision 50
Drawing M-2204, Sheet 4	Emergency Feedwater	Revision 61
Condition Report CR-ANO-2-2000-167	Unit 2 ESF Room Watertight Doors Have Air Gap	May 10, 2000

ATTACHMENT 2

NRC'S REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">•Initiating Events•Mitigating Systems•Barrier Integrity•Emergency Preparedness	<ul style="list-style-type: none">•Occupational•Public	<ul style="list-style-type: none">•Physical Protection

To monitor these seven cornerstones of safety, the NRC used two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, or RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspections so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>