



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

April 22, 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 50-313/02-02; 50-368/02-02**

Dear Mr. Anderson:

On December 30, 2001, through March 23, 2002, the NRC completed several baseline inspections at the Arkansas Nuclear One, Units 1 and 2, facility. The enclosed report presents the results of those inspections, which were discussed on April 4, 2002, with Mr. R. Bement and other members of your staff and which were discussed on April 22, 2002, with Mr. J. Hoffpauir.

This report documents a routine resident inspection; an in-office review of a previously identified unresolved item; and, an in-office review of a revision to the industrial security plan. Within these areas, the inspections consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

This report documents two findings of very low significance (Green), one of which was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it is entered into your corrective action program, the NRC is treating the finding as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. If you contest this noncited violation, 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, Region IV; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at Arkansas Nuclear One.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories and, although the specific actions are not releaseable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the

capabilities of the current design-basis threat. From these audits, the NRC has concluded that your security program is adequate at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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).

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

50-313/02-02; 50-368/02-02

cc w/enclosure:

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-3-

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 RITS Coordinator (**NBH**)  
 Scott Morris (**SAM1**)  
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 Dale Thatcher (**DFT**)

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| RIV:RI:DRP/D     | SRI:DRP/D        | SPE:DRP/D   | C:DRS/PSB        | C:DRS/EMB        |
| KDWeaver         | RLBywater        | JAClark     | GMGood           | CSMarschall      |
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| 04/22/02         | 04/22/02         | 04/22/02    | 04/19/02         | 04/19/02         |
| C:DRP/D          |                  |             |                  |                  |
| LJSmith          |                  |             |                  |                  |
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| 04/22/02         |                  |             |                  |                  |

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**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Dockets: 50-313  
50-368

Licenses: DPR-51  
NPF-6

Report: 50-313/02-02  
50-368/02-02

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One, Units 1 and 2

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

Dates: December 30, 2001, through March 23, 2002

Inspectors: R. Bywater, P.E., Senior Resident Inspector  
J. Clark, Senior Project Engineer  
C. Paulk, Senior Reactor Inspector, Engineering and Maintenance  
Branch  
D. Schaefer, Physical Security Inspector, Plant Support Branch  
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 50-313/02-02; 50-368/02-02

IR 05000313/2002-002, IR 05000368/2002-002, on 12/30/2001-3/23/2002; Entergy Operations, Inc.; Arkansas Nuclear One, Units 1 & 2. Equipment Alignment, Maintenance Risk Assessment and Emergent Work. One Green NCV and one Green finding.

The report covered a 12-week period of resident inspection and in-office reviews by a senior project engineer, a senior reactor inspector, and a physical security inspector. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process." The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/reactors/operating/oversight.html>.

#### A. Inspection Findings

Green. A noncited violation of Technical Specification 6.8.1, was identified on March 20, 2002, for failure to have an adequate procedure to verify availability of the alternate AC diesel generator during extended outages of the Unit 2 emergency diesel generators. The licensee's procedure did not verify correct breaker alignment and indicated power supply between the alternate AC diesel generator and the onsite Class 1E distribution system. Also, the procedure did not verify correct electrical alignment of support systems required for alternate AC diesel generator availability.

This finding is more than minor because an electrical component found out-of-position that rendered the alternate AC diesel generator unavailable would increase the risk associated with extending the emergency diesel generator allowed outage time. This finding affects the mitigating systems cornerstone. This finding is only of very low safety significance because there was no actual condition found where the alternate AC diesel generator was unavailable. Additionally, administrative controls were in place to preclude work which would result in component status changes that would make the alternate AC diesel generator unavailable (Section 1R04).

Green. A finding of very low significance was identified on February 1, 2002, for failure to have procedures for implementation of NRC-required compensatory and contingency actions for extended maintenance outages of the Unit 2 emergency diesel generators. Unit 2 License Amendment 234 revised Technical Specification 3.8.1.1, Action 'b,' to allow a one-time allowed outage time extension to 10 days to restore an inoperable emergency diesel generator to operable status. The NRC Safety Evaluation Report associated with Amendment 234 identified 20 compensatory and contingency actions that were required to be implemented prior to, or during the extended allowed outage time.

This finding is more than minor because, if it had remained unidentified, the compensatory and contingency actions that the NRC required to be implemented to reduce the risk associated with the extended allowed outage time would not have been performed when the emergency diesel generator outage began. This finding affects the mitigating systems cornerstone. This finding is only of very low safety significance (Green) using the Reactor Safety Significance Determination Process because with the exception of NCV 50-368/2002-02-01

(Section 1R04 b.1) necessary procedural controls to implement the required compensatory and contingency actions were developed prior to commencement of the emergency diesel generator outage (Section 1R13).

B. Licensee Identified Findings

None.

## Report Details

### Summary of Plant Status

Unit 1 began the inspection period at 100 percent power. On February 15, 2002, Unit 1 operators placed the integrated control system (ICS) steam generator/reactor (SG/RX) master control station in manual in preparation for replacement of the ICS STAR module. When the ICS SG/RX master control station was returned to automatic after STAR module replacement, an unanticipated power excursion to 101.3 percent occurred. Operators placed the ICS SG/RX master control station in manual and reduced power to 99 percent within 1 minute of the event. The replacement ICS STAR module was replaced with the original STAR module. The original ICS STAR module was to remain in service until completion of the licensee's root cause evaluation. On February 16, operators returned Unit 1 to 100 percent power. Unit 1 remained at or near 100 percent power throughout the remainder of the inspection period.

Unit 2 began the inspection period at 100 percent power. On January 26, 2002, Unit 2 operators reduced reactor power to 96 percent in preparation for replacement of Heater Drain Pump 2P-8A. Following the maintenance activities, Unit 2 operators returned Unit 2 to 100 percent power on February 3. 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, Emergency Preparedness**

#### 1R04 Equipment Alignment (71111.04)

##### a. Inspection Scope

On January 16, 2002, the inspectors performed a partial system walkdown of the Unit 1 Emergency Diesel Generator 1 and essential support equipment while the Emergency Diesel Generator 2 was scheduled for a monthly surveillance test. During portions of the surveillance test procedure, the emergency diesel generator was required to be inoperable. The inspectors reviewed system alignment and procedures to ensure operability of the Emergency Diesel Generator 1 was not affected. References reviewed included:

- Procedure 1104.036, "Emergency Diesel Generator Operation," Revision 40
- Procedure 1104.029, "Service Water and Auxiliary Cooling Water System," Revision 54
- Procedure 1015.015, "Unit One Operations Forms," Revision 28
- Procedure 1107.002, "ES Electrical System Operation," Revision 18
- Procedure 1202.007, "Degraded Power," Revision 5



On March 14, 2002, the inspectors performed a partial system walkdown of the accessible portions of the Unit 1 decay heat removal system Train A. The majority of this walkdown was performed when the Unit 1 decay heat removal Train B Pump P-34B was taken out of service for maintenance. During this walkdown, the inspectors verified correct valve alignment, electric power availability, and no adverse material conditions of system components. Positions of valves and electrical power breakers were compared to Procedure 1104.004, "Decay Heat Removal Operating Procedure," Revision 68.

On March 20, 2002, the inspectors performed a partial system walkdown of the Unit 2, Emergency Diesel Generator 2 and the alternate AC diesel generator. This was performed when the Unit 2, Emergency Diesel Generator 1 was out of service for an 18-month overhaul. During this walkdown, the inspectors verified correct component alignment required for operability of the Emergency Diesel Generator 1 and availability of the alternate AC diesel generator as required by Technical Specification 3.8.1.1. References reviewed included:

- Procedure 2104.036, "Emergency Diesel Generator Operations," Revision 46
- Procedure 2104.037, "Alternate AC Diesel Generator Operations," Revisions 5 and 6
- Procedure 2107.001, "Electrical System Operations," Revision 45
- Operations Form OPS-145, "Shift Turnover Checklist - Extended EDG Outage," Revision 2/01/02
- Operations Form OPS-146, "Extended EDG Outage Coordinator Checklist," Revision 2/1/02

b. Findings

.1 Inadequate Procedure for Verification of Alternate AC Diesel Generator Availability Introduction

A noncited violation (Green) of Technical Specification 6.8.1, was identified for failure to have an adequate procedure for verification of alternate AC diesel generator availability during extended outages of the Unit 2 emergency diesel generators.

Description

Unit 2 License Amendment 234 revised Technical Specification 3.8.1.1, Action 'b,' to allow a one-time allowed outage time extension to 10 days to restore an inoperable emergency diesel generator to operable status if the alternate AC diesel generator was verified available. Note 1 to Technical Specification 3.8.1.1, Action b.3 made extension of the allowed outage time contingent on verification of the availability of the alternate AC diesel generator. The NRC Safety Evaluation Report associated with Amendment 234 stated that the alternate AC diesel generator will be verified available once per 8 hours while the emergency diesel generator is out of service and stated that

this was consistent with the Technical Specification requirement to verify the offsite power sources were operable.

Technical Specification 3.8.1.1, Action 'b.1,' required verification of operability of the offsite power sources by performing Surveillance Requirement 4.8.1.1.1.a every 8 hours. This task required verification of correct breaker alignment and indicated power availability of the circuits between the offsite transmission network and the onsite Class 1E distribution system.

On March 18, 2002, the licensee removed the Emergency Diesel Generator 1 from service to perform a scheduled 18-month overhaul in accordance with the extended allowed outage time provision. On March 20, the inspectors identified that Procedure 2104.037, Section 7, which was used by the licensee to verify alternate AC diesel generator availability, did not verify correct breaker alignment and indicated power supply between the alternate AC diesel generator and the onsite Class 1E distribution system. Also, the procedure did not verify correct electrical alignment of support systems required for alternate AC diesel generator availability. The licensee initiated Condition Report ANO-2-2002-0512 in response to this finding and immediately performed appropriate additional sections of Procedure 2104.037 to verify alternate AC diesel generator availability. No discrepancies were identified. Procedure 2104.037 was also revised to include these components in the 8-hour verification.

#### Analysis

This finding is more than minor because it had a credible impact on plant safety. An electrical component found out of position that rendered the alternate AC diesel generator unavailable would invalidate the assumptions of the NRC safety evaluation approving the emergency diesel generator extended allowed outage time. This finding only affects the mitigating systems cornerstone. This finding is only of very low safety significance (Green) using the Reactor Safety Significance Determination Process because there was no actual condition found where the alternate AC diesel generator was unavailable. Additionally, administrative controls were in place to preclude work which would result in component status changes that would make the alternate AC diesel generator unavailable.

#### Enforcement

Technical Specification 6.8.1, requires, in part, that written procedures shall be established, implemented, and maintained covering procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A states that procedures are required for each surveillance listed in the Technical Specifications. Contrary to the above, Procedure 2104.037, used to implement the Technical Specification requirement to verify availability of the alternate AC diesel generator was inadequate. For the 8-hour verification, Procedure 2104.037 did not require verification of correct breaker alignment and indicated power supply between the alternate AC diesel generator and the onsite Class 1E distribution system. Also, Procedure 2104.037 did not verify correct electrical alignment of support systems required for alternate AC diesel generator availability. This violation was corrected upon

discovery by the NRC inspectors and had very little potential for actual safety consequence. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. The licensee documented this finding in Condition Report ANO-2-2002-0512 (NCV 50-368/2002-02-01).

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

The inspectors reviewed the Fire Hazards Analysis Report, Revision 7, dated October 8, 2001, to determine the required fire protection design features and fire area boundaries of the following areas:

- Unit 2 Upper north piping penetration room
- Unit 2 Upper south piping penetration room
- Unit 2 Lower south piping penetration room
- Unit 2 EDG 1 Room
- Unit 1 Upper south piping penetration room

On multiple occasions during this report period, the inspectors walked down these areas to assess the licensee's control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures.

b. Findings

No findings of significance were identified.

1R05 Fire Protection - Hydrogen Storage (Temporary Instruction 2515-146 and 71111.05Q)

a. Inspection Scope

On February 11-13, 2002, the inspectors reviewed design features and performed tours of the licensee's onsite hydrogen storage facilities in order to verify compliance with applicable codes and commitments as described in NRC Inspection Manual Temporary Instruction 2515-146.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

On March 8, 2002, the inspectors toured the Unit 1 emergency diesel generator ventilation exhaust fan gallery to ensure that the area was free of debris that could foul the floor drain system during a hypothetical maximum probable precipitation event.

On March 20 and 21, 2002, following heavy rains in the local area, the inspectors walked down the Units 1 and 2 emergency diesel generator rooms to verify that no rain water from the outside had accumulated in these areas which could have an adverse effect on the safety-related equipment located in these rooms.

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 appropriate for the conditions. In addition, the inspectors walked down the control room and plant areas to verify that compensatory measures identified by these risk assessments were appropriately performed. The specific plant configurations included:

|  |   |
|--|---|
| February 4 through<br>February 9, 2002 | Unit 2, Emergency Diesel Generator 2 scheduled outage   |
| February 15, 2002                      | Unit 2, Emergency Diesel Generator 1 scheduled outage (deferred)  |
| March 18 through<br>March 23, 2002     | Unit 2 Emergency Diesel Generator 1 scheduled outage  |
| January 23, 2002                       | Unit 2 engineered safety features actuation system Relay Cabinet 2C-40 Power Supply failure and contingency actions |
| February 20, 2002                      | Unit 2 'A' Excore detector failure  |
| February 28, 2002                      | Unit 1 high pressure injection Valves CV-1219 and CV-1278 scheduled maintenance                                     |
| February 28, 2002                      | Startup Transformer 3 regulator control maintenance   |
| March 14, 2002                         | Unit 1 decay heat removal Pump P-34B system outage  |

b. Findings

.1 Failure to Have Procedure to Implement Required Compensatory and Contingency Actions During Unit 2 Extended Emergency Diesel Generator Outages

Introduction

A Green finding was identified for failure to have a procedure to implement required compensatory and contingency actions during extended outages of the Unit 2 emergency diesel generators.

Description

Unit 2 License Amendment 234 revised Technical Specification 3.8.1.1, Action 'b,' to allow a one-time allowed outage time extension to 10 days to restore an inoperable emergency diesel generator to operable status. The NRC Safety Evaluation Report associated with Amendment 234 identified 20 compensatory and contingency actions that were required to be implemented prior to, or during the extended allowed outage time. Among these actions were requirements to verify availability of the alternate AC diesel generator every 8 hours, prohibit use of the alternate AC diesel generator as a power peaking unit, station a dedicated operator at the alternate AC diesel generator if adverse weather conditions occur, protect the steam-driven emergency feedwater pump as a protected train component, prohibit discretionary switchyard maintenance, minimize other testing and maintenance activities, provide briefings to operations crews regarding compensatory and contingency actions, and ensure operating crews review appropriate normal and emergency operating procedures.

On February 1, 2002, the inspectors identified that the licensee had not incorporated the compensatory and contingency actions identified in NRC Safety Evaluation Report 234 into any plant procedures. The first implementation of the extended emergency diesel generator allowed outage time was scheduled for February 4, to perform an 18-month overhaul of the Emergency Diesel Generator 2. Had the finding not been identified, all of the required compensatory and contingency actions would not have been implemented when the emergency diesel generator outage began. The licensee initiated Condition Report ANO-2-2002-0223 in response to this finding and immediately developed procedural controls to implement all of the required compensatory and contingency actions prior to commencement of the outage. These procedural controls included the creation of Operations Form OPS-145, "Shift Turnover Checklist - Extended EDG Outage," and Operations Form OPS-146, "Extended EDG Outage Coordinator Checklist." With the exception of NCV 50-368/2002-02-01, the inspectors verified that the procedural controls were implemented prior to, and during the emergency diesel generator outages (See Section IR04 b.1).

Analysis

This finding is more than minor because, if it had remained unidentified, the compensatory and contingency actions that the NRC required to be implemented to reduce the risk associated with the extended allowed outage time would not have been

performed when the emergency diesel generator outage began. This finding affects the mitigating systems cornerstone. This finding is only of very low safety significance (Green) using the Reactor Safety Significance Determination Process because with the exception of NCV 50-368/2002-02-01 (Section 1R04 b.1) necessary procedural controls to implement the required compensatory and contingency actions were developed prior to commencement of the emergency diesel generator outage.

1R14 Personnel Performance During Nonroutine Evolutions (71111.14, 71153)

a. Inspection Scope

For the nonroutine events described below, the inspectors observed operator performance, reviewed operator logs, plant computer data, posttransient review reports, and interviewed licensed operators to determine what occurred and how the operators responded. Also, the inspectors determined if the response was in accordance with plant procedures and Technical Specifications.

On February 15, 2002, the inspectors observed and reviewed plant personnel response following a brief Unit 1 power excursion to 101.3 percent power following replacement of the ICS STAR module. Documentation reviewed included Condition Report ANO-1-2002-0201.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15, 71153)

a. Inspection Scope

The inspectors reviewed operability determinations to assess the correctness of the evaluations, the use and control of compensatory measures if needed, and compliance with the Technical Specifications. The inspectors' review included a verification that the operability determinations were made as specified by the licensee's Procedure LI-102, "Corrective Action Process," Revision 1, and Procedure 1000.104, "Condition Reporting and Immediate Reportability Determinations," Revision 17. The technical adequacy of the determinations were reviewed and compared to the Technical Specifications, Technical Requirements Manual, Updated Final Safety Analysis Report, associated design-basis documents, and licensing submittals. The operability determinations that were reviewed were documented in the following condition reports:

- ANO-1-2002-0286 High frequency service water flow vibration in Unit 1 decay heat pump room Cooler VUC-1B
- ANO-2-2000-1077 Degradation of Unit 2 Channel D excore neutron detector
- ANO-2-2002-0263 Erratic behavior of Unit 2 Channel A excore neutron detector

- ANO-1-2002-0307 Dirty ventilation filters on Unit 1 pressurizer proportional heater cabinets
- ANO-1-2002-0308 Debris in Unit 1 emergency diesel generator exhaust fan gallery
- ANO-1-2002-0309 Packing leak on Unit 1 feedwater isolation bypass drain Valve FW-22
- ANO-2-2002-0507 Grease leak on Unit 2 containment building tendon vent cap
- ANO-2-2001-1367 Manual backseating of Unit 2 Steam Generator 'B' Containment Isolation Valve 2CV-5859-2 (Review of this item was still in progress at the conclusion of this inspection period)

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

For the maintenance identified below, the inspectors observed the postmaintenance testing in the control room or locally and reviewed the test data obtained from the field. The inspectors observed whether the tests were performed in accordance with the procedures, that the procedures' acceptance criteria were addressed in the Technical Specifications, and that the results recorded met the test acceptance criteria. These maintenance items included:

- Unit 1 ICS STAR module replacement and testing in accordance with Maintenance Action Item 46332 and Engineering Request 010471E101, conducted on February 15, 2002
- Unit 1 HPI Valves CV-1219 and CV-1278 testing in accordance with Procedure 1104.002, "Makeup and Purification System Operation," Revision 54, conducted on February 28, 2002
- Unit 1 NaOH/Reactor Building Spray Valve CV-1617 testing in accordance with Procedure 1104.005, "Reactor Building Spray System Operation," Revision 41, conducted on March 13, 2002
- Unit 2, Emergency Diesel Generator 1 overspeed trip testing in accordance with Procedure 2305.049, "EDG Periodic Tests," Revision 4, conducted on March 22, 2002

- Unit 2, Emergency Diesel Generator 1, 24-hour operational test in accordance with Procedure 2104.036, "Emergency Diesel Generator Operations," Revision 46, conducted on March 23, 2002

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 1104.036, "Emergency Diesel Generator Operation," Supplement 2, "DG2 Monthly Test," Revision 40, conducted on January 16, 2002
- Procedure 1104.036, "Emergency Diesel Generator Operation," Supplement 2, "DG2 Monthly Test," Revision 40, conducted on February 11, 2002
- Procedure 1104.002, "Makeup and Purification System Operation," Supplement 1, "RCS HPI MOV Quarterly Test," Revision 54, conducted on February 28, 2002
- Procedure 1104.005, "Reactor Building Spray System Operation," Supplement 4, "Reactor Building Spray Green Train Valves Quarterly Test," Revision 4, conducted on March 13, 2002
- Procedure 2104.036, "Emergency Diesel Generator Operations," Supplement 2B, "2DG2 Monthly Test (Slow Start)," Revision 46, conducted on March 13, 2002
- Procedure 2104.036, "Emergency Diesel Generator Operations," Supplement 1C, "2DG1 Semi-Annual Test (Fast Start)," Revision 46, conducted on March 23, 2002

b. Findings

No findings of significance were identified.



1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the implementation of the Temporary Alteration 02-2-001/Engineering Request 2002-0095-000, ESFAS Auxiliary Relay Cabinet 2C40 Temporary Power Supply to confirm it was installed as authorized per Procedure 1000.102, "Plant Modification Process," Revision 8, and Procedure 1000.028, "Control of Temporary Alterations," Revision 23.

b. Findings

No findings of significance were identified.

**Emergency Preparedness (EP)**

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed portions of the announced emergency preparedness drill conducted on February 27, 2002, to evaluate emergency response organization performance and adequacy of the licensee's critique process. 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)**

3EP4 Security Plan Changes (71130.04)

a. Inspection Scope

During an in-office review, the inspectors reviewed the Industrial Security Plan, Revision 42, dated February 19, 2002, to determine if requirements of 10 CFR 50.54(p) had been met.

b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES (OA)

##### 4OA3 Event Followup (71153, 71111.04, 71111.15)

NRC Information Notice 2002-11: Recent Experience with Degradation of Reactor Pressure Vessel Head.

NRC Bulletin 2002-01: Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity.

Following identification of control rod drive mechanism nozzle cracking and thinning of the reactor pressure vessel head at the Davis-Besse Nuclear Power Station which was documented in the above NRC generic communications, the inspectors reviewed Unit 1 videotaped inspection records and interviewed licensee personnel to assess the as-left condition of the Unit 1 reactor vessel head following repairs and cleaning during the 2001 refueling outage. The inspectors observed that the Unit 1 reactor vessel head was left in a clean condition and had no evidence of base metal degradation. The licensee initiated Condition Report ANO-C-2002-0210 to document its evaluation of this industry issue. Additional inspection regarding this issue for Units 1 and 2 is planned and will be performed in accordance with NRC Inspection Manual Temporary Instruction 2515/145.

##### 4OA5 Other

(Closed) Unresolved Item 50-313/9909-07; 50-368/9909-07: Evaluation of Combined Effects of a Throttled Butterfly Valve with a Clean Heat Exchanger

During a safety system engineering inspection, an NRC team identified the lack of formal analysis to demonstrate the ability of containment air coolers to perform their safety functions with throttled outlet valves and clean heat exchangers. Licensee personnel initiated Condition Report ANO-C-1999-0213 to address this issue. A region-based inspector conducted an in-office review of the licensee's actions and evaluations performed to address this issue.

No findings of significance were identified.

##### 4OA6 Management Meetings

###### Exit Meeting Summary

The inspectors presented the results of the industrial security plan revision evaluation to Mr. M. Higgins, Security Superintendent, on March 22, 2002. The licensee acknowledged the findings presented.

The resident inspectors presented the inspection results to Mr. R. Bement, General Manager, and other members of the licensee's management staff on April 4, 2002, and to Mr. J. Hoffaur, Plant Manager - Operations on April 22, 2002. The licensee acknowledged the findings presented.



**ATTACHMENT  
SUPPLEMENTAL INFORMATION**

PARTIAL LIST OF PERSONS CONTACTED

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M. Cooper, Licensing Specialist  
S. Cotton, Director, Nuclear Safety Assurance  
C. Eubanks, Manager, Maintenance  
D. Hawkins, Licensing Specialist  
M. Higgins, Superintendent, Security  
J. Hoffpauir, Plant Manager - Operations  
J. Kowalewski, Director, Engineering  
J. Miller, Manager, Training and Development  
T. Mitchell, Manager, Unit 2 Operations  
L. Schwartz, Manager, Unit 2 Systems Engineering  
C. Tyrone, Manager, Quality Assurance

ITEMS OPENED AND CLOSED

Opened

|                   |     |  |
|-------------------|-----|--|
| 50-368/2002-02-01 | NCV | Inadequate procedure to verify availability of the alternate AC diesel generator during extended outages of the Unit 2 emergency diesel generators (Section 1R04). |
|-------------------|-----|--|

Closed

|  |     |  |
|--|-----|--|
| 50-368/2002-02-01                      | NCV | Inadequate procedure to verify availability of the alternate AC diesel generator during extended outages of the Unit 2 emergency diesel generators (Section 1R04). |
| 50-313/1999-09-07<br>50-368/1999-09-07 | URI | Evaluation of combined effects of a throttled butterfly valve with a clean heat exchanger (Section 4OA5).  |