APPENDIX B

U.S. NUCLEAR REAGULATORY COMMISSION REGION IV

NRC Inspection Report: 50-313/85-01

50-368/85-01

Licenses: DPR-51

NPF-6

Dockets: 50-313

50-368

Licensee: Arkansas Power and Light Company

P. O. Box 551

Little Rock, Arkansas 72203

Facility Name: Arkansas Nuclear One (ANO), Units 1 and 2

Inspection At: ANO Site, Russellville, Arkansas

Inspection Conducted: January 1-31, 1985

Inspectors: for & M Hunnicutt

W. D. Johnson, Senior Resident

Reactor Inspector

2/25/85 Date

for P. H. Harrell, Resident Reactor Inspector

Approved:

Reactor Project Section 2A

2/25/85 Date

Inspection Summary

Inspection Conducted January 1-31, 1985 (Report 50-313/85-01)

Areas Inspected: Routine, unannounced inspection including operational safety verification, maintenance, surveillance, plant startup activities, 10 CFR Part 21 report followup, 10 CFR Part 21 reportability review, LER followup, potential overpressurization review for intermediate cooling water system, and followup on previously identified items.

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The inspection involved 137 inspector-hours onsite by two NRC inspectors, including 26 inspector-hours on backshift.

Results: Within the nine areas inspected, three violations were identified (failure to provide instructions for a quality-related design change activity, paragraph 4a; failure to follow procedural requirements for design change control, paragraph 4b; and failure to follow procedure for design change completion and system turnover, paragraph 11).

Inspection Summary

Inspection Conducted January 1-31, 1985 (Report 50-368/85-01)

Areas Inspected: Routine, unannounced inspection of operational safety verification, maintenance, surveillance, 10 CFR Part 21 reportability review, LER followup, preparation for refueling, potential overpressurization review for the component cooling water system, and followup on previously identified items.

The inspection involved 106 inspector-hours onsite by two NRC inspectors, including 27 inspector-hours on backshift.

Results: Within the areas eight inspected, no violations were identified.

DETAILS

1. Persons Contacted

*J. Levine, ANO General Manager

*E. Ewing, Engineering & Technical Support Manager

*B. Baker, Operations Manager

- *L. Sanders, Maintenance Manager
- J. McWilliams, Unit 1 Operations Superintendent

M. Bolanis, Health Physics Superintendent

- R. Tucker, Electrical Maintenance Superintendent
- D. Wagner, Health Physics Supervisor *T. Cogburn, Special Projects Manager
- L. Humphrey, Administrative Manager

H. Hollis, Security Coordinator

- V. Pettus, Mechanical Maintenance Superintendent
- L. Schempp, Nuclear Quality Control Manager

*P. Campbell, Licensing Engineer

- L. Dugger, Acting I&C Maintenance Supervisor L. Gulick, Unit 2 Operations Superintendent
- *D. Lomax, Plant Licensing Supervisor
- B. McCord, Quality Control Inspector
- L. Taylor, Operations Technical Engineer

R. Blankenship, Nuclear Engineer

- G. Storey, Safety and Fire Protection Coordinator
- J. Lamb, Safety and Fire Protection Coordinator

J. Montgomery, Human Resources Supervisor

- *D. Provencher, Quality Engineering Supervisor
- B. Terwilliger, Operations Assessment Supervisor
- D. Crabtree, Mechanical Engineer M. Stroud, Electrical Engineer

B. Wilkinson, Electrical Engineer

*C. Shively, Plant Engineering Superintendent

A. Armstrong, Maintenance Coordinator

*J. Vandergrift, Training Superintendent

J. Waid, Training Supervisor

- *R. Wewers, Work Control Center Manager
- E. Force, Unit 1 Operations Training Supervisor
- J. Constantin, Unit 2 Operations Training Supervisor

D. Hamblen, Quality Control Engineer

J. Benham, Instrumentation and Controls Planner

A. Wrape, Engineer (LRGO)

- D. James, Licensing Engineer (LRGO)
- W. Cawthon, Manager Electrical Engineering (LRGO)
- *M. Pendergrass, Manager Technical Services (LRGO)
- R. Lane, Manager Mechanical Engineering (LRGO)
- R. Howerton, Manager Civil Engineering (LRGO)
- D. Sikes, General Manager Engineering Services (LRGO)

*J. Orlicek, Field Engineering Supervisor

*H. Jones, Construction Manager

P. Jones, Instrumentation and Controls Superintendent

P. Rogers, Plant Licensing Engineer

*Present at exit interview.

The inspectors also contacted other plant personnel, including operators, technicians, and administrative personnel.

2. Followup on Previously Identified Items (Units 1 and 2)

(Open) Unresolved Item 313/8429-02; 368/8429-02: Discrepancies between piping and instrumentation drawings (P&IDs), operating procedures, and the as-built systems.

The NRC inspectors discussed this item with licensee management representatives. The inspectors stated that discrepancies have frequently been noted between P&IDs, operating procedures, and the as-built systems when conducting system walkdown alignment verifications. The discrepancies have mostly involved vent and drain valves, which generally have little or no operational safety significance. Typical discrepancies involve a valve being shown on the P&ID but not being installed in the plant or an installed valve not being included in the licensee's system alignment checklist. While these items do not always have the individual safety significance to be the subject of a Notice of Violation, the existence of even minor errors of this nature is cause for concern.

The licensee representatives stated that they are developing a program to address this problem. This program involves the performance of system walkdowns in conjunction with the plant labeling program. Discrepancies identified during these walkdowns would be resolved and drawings would be updated, as necessary. The NRC inspectors requested that a description of this program and a schedule for its accomplishment be provided in a letter to NRC Region IV.

(Open) Unresolved Item 313/8316-03; 368/8316-04: Failure to check implementing procedures against basic commitments and requirements.

The NRC inspector reviewed the licensee's proposed resolution to this unresolved item. The licensee had performed a review of Procedure 1063.08 against the requirements stated in 10 CFR Part 55, Appendix A. Procedural changes were made based on the results of the review. However, the NRC inspector noted to licensee personnel that this unresolved item pertained not only to the specific example cited above, but also addressed the generic question of how the licensee ensures that procedures implement basic commitments and requirements. This item will remain open pending licensee resolution of this generic issue.

(Closed) Severity Level IV Violation 313/8316-05; 368/8316-05: Failure to follow procedures in requalification training.

The NRC inspector reviewed training records to verify that licensed, nonshift personnel are attending lectures in which they have demonstrated a weakness on their last requalification examination. During the review, the inspector noted that one individual had not yet attended any lectures in a required area since the current requalification training cycle began in May 1984. The day after the inspection, the individual completed all the currently required lecture sessions for the current requalification training cycle.

The NRC inspectors discussed, with the licensee, the desirability for individuals to attend classes throughout the year as the classes are presented instead of attending all the lectures in a short period toward the end of the requalification year. The licensee representatives agreed that this approach would indeed be better and stated that they encouraged this practice. However, since it was not a regulatory requirement, and since it was not always possible for certain individuals to be available for training, the licensee representatives felt that it would be necessary, at times, to defer the training for certain individuals.

(Closed) Unresolved Item 313/8232-03: Revision and upgrading of control rod drive breaker in-service inspection procedure.

The licensee has revised and upgraded Procedure 1405.17 to address the NRC inspector's concerns.

(Closed) Open Item 313/8309-01: Revision of Procedure 1405.17 in accordance with the Safety Evaluation Report (SER) of April 5, 1983.

The licensee had revised Procedure 1405.17 to include the SER requirements.

(Closed) Severity Level IV Violation 368/8426-03: Failure to maintain a written safety evaluation required by 10 CFR Part 50.59.

The licensee's response to this item was dated November 16, 1984. The NRC inspector reviewed this item and response with the chairman of the Plant Safety Committee. This committee has held discussions in two meetings concerning compliance with 10 CFR Part 50.59.

(Closed) Open Item 368/8426-02: Revision of Procedure 2103.11, "Draining the Reactor Coolant System."

Since procedure modifications have been made to vent the temporary level indication to the pressurizer steam space rather than to containment atmosphere, procedural provisions to specify the low pressure nitrogen flow rate and monitor reactor coolant system pressure are not necessary.

(Closed) Severity Level IV Violation 368/8426-01: Failure to follow safety-related special maintenance procedure.

The licensee's corrective action on this item included procedural revisions to clarify the intent of the procedure and conducting training sessions for electrical maintenance personnel.

(Closed) Severity Level V Violation 368/8316-01: Failure to maintain required requalification records.

The NRC inspector selected a random sample of training records for various examinations given in 1983 and 1984. Training personnel were able to provide the proper records from the Records Management System for each examination result requested. Based on the results of this review, it appears that the loss of a portion of the 1982 training records was an isolated case.

(Closed) Unresolved Item 313/8316-02; 368/8316-03: Adequacy of quality assurance (QA) training in the general employee training (GET) program.

The NRC inspector reviewed the lesson plan for the GET program and verified that the QA training provided was adequate. The inspector also verified that the training provided in the general employee retraining sessions also adequately covered the area of QA training. It was noted during this review that a copy of the current QA manual was available in the technical library at the training center.

(Closed) Severity Level IV Violation 313/8316-04: Failure of Unit 1 operations superintendent to approve training lecture schedules.

The NRC inspector reviewed the operator training schedules for Unit 1 and verified the operations superintendent had approved the schedules as required by procedure. The inspector also verified that the Unit 2 operations superintendent had approved the Unit 2 operator training schedules.

(Closed) Open Item 313/8316-06: Training on selected portions of 10 CFR, Chapter 1.

The NRC inspector verified that training on selected portions of 10 CFR, Chapter 1 has been provided for operators during the 1983-84 and 1984-85 requalification training programs.

(Closed) Open Item 313/8332-03: Procedure revision to incorporate design changes made to reactor building sprinkler system.

Licensee management has reviewed the current procedural requirements for actions in the event of a fire in the reactor building. Based on the review, management has decided that no procedure changes are required because having the operator manually actuate the appropriate valve at the time the fire is confirmed is a more timely action and a more positive means of initiating valve actuation.

(Closed) Open Item 313/8332-02: Operator training on Unit 1 containment building fire sprinkler system.

The licensee provided a training session in the current operator requalification training cycle for the procedural requirements in the event of a fire inside containment. This training session included all personnel in the Unit 1 operations organization.

3. Licensee Event Report (LER) Followup (Units 1 and 2)

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence has been accomplished in accordance with Technical Specifications:

Unit 1

79-006/01T-0	Potential diesel generator turbocharge thrust	
83-11/03L-2	bearing damage Emergency feedwater pump thrust bearing	
	overheating	
83-17/03L-0	Steam generator tube leak	
83-26/01T-0	Diesel fuel sampling and analysis	
84-003/00	Reactor coolant system pressure transmitters	

Unit 2

83-043/03L-0	Fire watch not properly posted
83-046/03L-0	Missed surveillance on RCS gross activity
83-047/03L-0	Missed channel check on source range detectors
84-001/00	Reactor trip
84-006/00	Core protection calculator improperly bypassed
84-007/00	Reactor trip

No violations or deviations were identified.

4. Operational Safety Verification (Units 1 and 2)

The NRC inspectors observed control room operations, reviewed applicable logs, and conducted discussions with control room operators. The inspectors verified the operability of selected emergency systems, reviewed tagout records, and verified proper return-to-service of affected components. Tours of accessible areas of the units were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibration. In addition, the inspectors ensured that maintenance requests had been initiated for equipment in need of maintenance. The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The NRC inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. The NRC inspectors walked down the accessible portions of the Unit 1 reactor building spray system to verify operability. The walkdown was performed using Procedure 1104.05 and Drawing M-236. During the walkdown, minor discrepancies were noted between the system drawing, operations procedure, and as-built plant configuration. These discrepancies were identified to licensee personnel for correction of the appropriate documents. For additional discussion on this subject, see Unresolved Item 313/8429-02; 368/8429-02 in Section 2 of this report.

In NRC Inspection Report 313/84-37; 368/84-37, the inspectors noted that discrepancies identified during a walkdown of the Unit 1 emergency feedwater (EFW) system would be reviewed in greater detail during this inspection period. The results of this review are discussed below.

a. During the walkdown of the Unit 1 EFW system, the NRC inspectors noted that two valves for the EFW turbine-driven pump bearing cooling water line were shown on the P&ID but were not installed in the plant. The inspectors questioned the licensee as to why the valves were missing. The licensee reviewed the system status and determined that the valves had been removed by the construction contractor (Bechtel) because the valves and associated tubing and supports interfered with personnel access to ongoing piping modifications. Although the two valves that were removed were not part of the EFW system modification, there are

provisions in the design change control process that allow removal of interferences. Any item removed is tracked by a list maintained in the design change package (DCP). Once modifications have been completed, all items removed are then reinstalled based on the DCP list. In this particular case, the description of the interference did not state any valves were removed, but stated "remove seal water tubing & support." It is felt that this incomplete description was the reason the system tubing and supports were installed without reinstallation of the two valves. The licensee has notified the construction contractor to provide a more thorough itemization in the DCP of components temporarily removed. The licensee also performed a safety evaluation on the omission of the two valves from the system. The evaluation concluded that safe operation of the plant was not affected by the missing valves. The NRC inspectors concurred with this evaluation in that the valves are provided for maintenance activities and are not necessary for system operability.

During the discussion of this item with the licensee, the NRC inspectors questioned the licensee as to what instructions have been issued to control which components, parts, or systems, unaffected by the design change, could be removed by the construction contractor if they were deemed to be interferences. The licensee stated that there were no controls to limit this activity by the contractors. Failure to provide instructions or procedures for an activity affecting quality is an apparent violation. (313/8501-01)

b. During walkdown of the EFW system, it was noted by the inspectors that the P&IDs for the system did not correctly identify all the changes made during recent system modifications. The inspectors discovered that the DCP (80-1083A) used to modify the electrical portions of the EFW system had failed to note that the P&ID (M-204, Sheet 3) for the EFW system was an affected drawing. Due to this error, the P&ID did not correctly reflect the location of various handswitches, alarms, and position indications in the system. In addition, Drawing M-206, Sheet 1, was not updated to reflect a design change which removed the handswitch and position indications of the following valves from panels C16 and C18:

CV-2666 CV-2667 CV-2617 CV-2692 CV-2691

This is an apparent violation. (313/8501-02)

c. Valve CV-2666 was not included in the system alignment sheets for emergency feedwater. Licensee personnel informed the NRC inspector that they intended to treat this valve as an ASME Section II, category E valve (locked valves). This valve was subsequently added to the category E valve checklist, Attachment F to Procedure 1102.01. d. Other minor discrepancies were noted on the P&IDs during the walkdown. These discrepancies consisted of items of an editorial nature and did not appear to be of consequence to the safe operation of the plant. Appropriate licensee personnel have been notified and have agreed to correct the appropriate documents during the next scheduled revision.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under Technical Specifications, 10 CFR, and administrative procedures.

5. Monthly Surveillance Observation (Units 1 and 2)

The NRC inspector observed the Technical Specification required surveillance testing on the Unit 1 emergency feedwater pump turbine (overspeed test per Procedure 1106.06, Supplement V) and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with Technical Specifications and procedure requirements, that test results were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector also witnessed portions of the following test activities:

- Unit 1 emergency feedwater system flow path and automatic actuation verification, Procedure 1106.06, Supplement IV
- Unit 1 makeup and purification system check valve and control valve stroke test, Procedure 1104.02, Supplement V
- Unit 1 emergency feedwater pump P7A annual test, Procedure 1106.06, Supplement II
- Unit 2 emergency feedwater pump 2P7A annual test, Procedure 2106.06, Supplement II
- Unit 2 electrical system alignment check, Procedure 2107.01, Supplement IV
- Unit 1 weekly check of inverters, and 4160V, 6900V, 480V, and 125V load centers, Procedure 1107.01, Supplement V
- Unit 1 electrical equipment room emergency air conditioning system monthly test, Procedure 1104.27
- Unit 1 emergency feedwater indication and control channel ±C' monthly test, Procedure 1304.147

 Unit 2 containment spray system sodium hydroxide pump monthly test, Procedure 2104.05, Supplement 4

No violations or deviations were identified.

Monthly Maintenance Observation (Units 1 and 2)

Station maintenance activities of safety-related systems and components listed below were observed to ascertain that they were conducted in accordance with approved procedures, Regulatory Guides, and industry codes or standards; and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to ensure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed:

- Unit 2 boric acid makeup pump bearing replacement (JO 78407)
- Unit 1 high pressure injection valve CV-1227 repair (JO 78520)
- Uncouple Unit 1 emergency feedwater pump P7A from turbine J0 82229)
- Calibrate Unit 1 P7A speed indicator (JO 82224)
- Repair motor-operated potentiometer on Unit 1 emergency diesel generator (JO 81874)
- Unit 2 plant protection system matrix relay card testing (Work Plan 2408.19)
- Unit 2 service water pump discharge pressure switch repair (JO 81900)
- Inspection of Unit 1 steam-driven emergency feedwater pump steam strainer (JO 52486)

No violations or deviations were identified.

7. Part 21 Report Followup (Unit 1)

The Paul-Monroe Energy Products Company notified the NRC on August 10, 1984, of the existence of a potential defect in the spherical bearing housing design on eight reactor coolant pump (RCP) snubbers installed in Unit 1. Paul-Monroe made the notification to the NRC and affected licensees in accordance with the requirements of 10 CFR Part 21.

The specific defect identified by Paul-Monroe concerns an evaluation and analysis that indicated the snubber blind end cover may experience stress above the yield point of the material of fabrication. This condition may cause plastic deformation which could cause failure of the snubber at or below the rated load level.

The licensee performed an evaluation of the potential defect and determined that plant operation could continue in a safe manner. The licensee concluded that the RCP snubbers identified in the Paul-Monroe notification would be able to perform their function during a seismic event.

During the recent refueling shutdown (1R6), the licensee removed the snubbers and disassembled them for inspection. A visual inspection was performed on all snubber parts and no defects or anomalies were noted in the blind end caps. However, minor defects were noted with other parts of the snubber. Installation of the bearing race was not as required by the vendor drawing in that the bearing race slot was aligned with the axis of the piston rod. The drawing indicates the bearing race slot should be installed at a 90 degree angle to the axis of the piston rod. In addition, licensee personnel noted that there appeared to be a chemical reaction between the snubber metallic parts and the phenolic seals used in the snubber. This reaction caused a localized buildup of corrosion products between the phenolic seal and adjacent metallic surfaces. Licensee personnel did not feel the bearing race orientation or corrosion product buildup affected the operation or function of any of the snubbers inspected. This conclusion was based on the absence of damage to the bearing race and the ability to move the snubber parts. However, licensee personnel did state that the corrosion buildup may affect snubber operation if allowed to go unchecked.

To prevent further problems with corrosion buildup, the licensee replaced all phenolic-type seals with seals made of tefzel. The snubber blind caps were replaced with new ones provided by Paul-Monroe. The snubbers were reassembled and tested at faulted load conditions. No problems were noted during the tests.

No violations or deviations were identified.

8. 10 CFR Part 21 Review (Units 1 and 2)

The NRC inspector reviewed the licensee noncompliance reporting system to verify that the program complies with the requirements of 10 CFR Part 21 and that the program is being properly implemented. In addition, the inspector verified that all required postings of 10 CFR Part 21 information had been made.

The licensee system for reporting of abnormal conditions and nonconformances uses a form called Report of Abnormal Conditions (RAC). The individual discovering an abnormality initiates a RAC and supplies all the information needed for evaluation of reportability. The individual's supervisor then evaluates the condition for initial reportability. Once the initial evaluation is complete, the condition is further evaluated by licensee management to determine if the condition is reportable under any of the NRC requirements.

The NRC inspector reviewed a sampling of RACs that were generated between September and December, 1984. The review was performed to verify compliance with licensee requirements on reportability. During this review, the inspector noted no instances where the licensees reportability review was not complete and well documented. Based on the above results, it appears the licensee is complying with the requirements of 10 CFR Part 21.

No violations or deviations were identified.

9. Surveillance - Refueling (Unit 1)

The NRC inspector reviewed the results of the integrated engineered safeguards system test which was performed during the refueling outage in accordance with Procedure 1305.06. This test serves to meet several Technical Specification refueling frequency surveillance requirements for systems and components actuated by the engineered safeguards system.

The NRC inspector found that the test had been performed by qualified personnel using currently calibrated test equipment. Test prerequisites were completed and appropriate data were recorded. Reports of Abnormal Conditions (RACs) were prepared by licensee personnel for the components that failed to properly actuate. The NRC inspector's review of these RACs included the licensee's description of the failure cause, the reportability review, and the corrective action. Following repairs, these components were subsequently retested satisfactorily.

No violations or deviations were identified.

Preparation For Refueling (Unit 2)

The NRC inspector attended a 4-hour requalification training lecture for Unit 2 licensed operators. Topics discussed included:

- Control of heavy loads
- Control and accountability of special nuclear material
- Mode 6 operations logs
- Various procedures used in preparation for refueling
- Cleanliness controls around the reactor vessel
- · Operation of the fuel handling equipment
- · Refueling accident
- Transfer canal seal plate failure
- Refueling technical specification limiting conditions for operation and surveillance requirements

Nonlicensed operators were also in attendance. The lesson was well organized and clearly presented.

No violations or deviations were identified.

11. Plant Startup Activities (Unit 1)

The NRC inspector observed the performance test of the emergency feedwater indication and control (EFIC) system. The test was performed during hot shutdown using Procedure 1409.47. The purpose of the test was to verify proper system operation and interaction with other systems to supply feedwater at the required flow rate and pressure. The test was performed successfully without any noted deficiencies or anomalies. The inspector also reviewed the test procedure to verify the test documentation was completed in accordance with licensee requirements. No problems were noted.

The NRC inspector also observed plant startup to criticality following the refueling shutdown. The startup was performed in accordance with Procedure 1302.07, "Determination of Critical Boron Concentration." The procedure requires that an estimated critical boron concentration calculation be performed prior to commencement of dilution. For a successful startup, the calculated boron concentration must agree with the actual critical boron concentration within plus/minus 100 ppm. The actual concentration was within 100 ppm of the estimated concentration. During the startup, no discrepancies or problems were noted. The reactor was taken critical at approximately 2000 hours on January 17, 1985.

The NRC inspectors reviewed job order status to verify the effectiveness of this means of tracking maintenance and design change completion to indicate readiness for system operation and plant heatup and startup. Overall Administrative Procedure 1000.24, "Control of Maintenance" prescribes the job order for administratively controlling maintenance and the installation of design changes. Section 4 of the job order form is used to describe the work which has been completed and to document the system release to operations. Section 5 of the job order form is used to document completion of any post-maintenance test or checkout and the shift supervisor's acceptance of the system for operation. The NRC inspectors found that the job order form was not consistently used to document job completion and turnover as required by Section 7.7 and 7.8 of Procedure 1000.24. As examples, the NRC inspectors noted, on the dates listed, that Sections 4 and 5 on the original copy of the job orders listed below were not completed.

Date	Job Order	Subject
1/17/85	52486	Install DCP 82-2050, FCN-20, P7A steam piping
1/17/85	76916	Reassemble P7A after stress relief
1/17/85	74875	Install DCP 83-1106, pressurizer auxiliary spray
1/17/85	71822	Install DCP 83-1049, install new pressure transmitters (2405, 2406, 2407, 1020, 1022, 1040)
1/30/85	81080	Provide freeze seal on reactor coolant pump P32C seal injection line
1/30/85	81162	Perform DCP 83-1076A, FCN-4, reactor coolant system flow
1/30/85	74875	Install DCP 83-1106, pressurizer auxiliary spray (also noted as open on January 17/85)

Spot checks indicated the systems affected by these job orders were operable but that the job order had not been used to document the completion of the job and system turnover to operations. The licensee's failure to document job completion and system turnover as specified by an approved procedure is an apparent violation. (313/8501-03)

The NRC inspectors reviewed the means by which the various department managers and superintendents ensure that procedure changes and training related to design changes are accomplished. The NRC inspectors found that the requirements of Procedure 1000.13, "Control of Station Modifications," with respect to procedures and training were being met. However, one weakness was noted in the method used to track the development of operating procedure changes required for plant heatup. The NRC inspectors found that these procedure changes were tracked by operations department personnel up to the point of submittal to the Plant Safety Committee for approval. There was no further check to ensure that all of the required procedure changes actually were approved and delivered to the control room prior to plant heatup. Although a spot check by the NRC inspector identified no discrepancies, a concern for potential future problems in this area was discussed with the operations manager. This item will remain open pending licensee action to provide a method to ensure that procedure changes required to support plant heatup have been approved and issued to the control room prior to plant heatup. (Open Item 313/8501-04)

Several new indicating instruments were installed in the control room during this outage. Some of these were labeled only with an instrument number at the time of plant startup. These included:

FIS-1209	FIS-1230
FIS-1210	FIS 1228
FIS-2401	FIS-2400
FIS-1401	FIS-1402

These instruments provide indication of flow and an alarm function for the high pressure injection, low pressure injection, and reactor building spray systems. Discussions with licensee personnel indicated that the design change process does not generally include the provision of descriptive labels for control room instrumentation. This item will remain open pending licensee action to incorporate proper indicating instrument labels, with due consideration for human factors and uniformity, into the design change process.

(Open Item 313/8501-05)

12. Potential Overpressurization of Component Cooling Water System (Units 1 and 2)

In a letter dated July 13, 1984, the Westinghouse Electric Corporation informed the NRC of a potential overpressure condition in the component cooling water (CCW) systems designed by Westinghouse. In these systems, the surge tank vent valve was automatically closed on a high radiation signal from process radiation monitors in the CCW system. Overpressurization could result if the high radiation was caused by system leakage from a high pressure source such as the letdown heat exchanger.

In response to this item, the NRC inspectors conducted a limited review and partial system walkdown of the Unit 1 intermediate cooling water (ICW) system and the Unit 2 CCW system. The review indicated that these systems are not considered to be safety-related at ANO, except for their containment penetrations and the associated isolation valves. The systems could be subjected to inleakage from radioactive high pressure sources such as reactor coolant pump seal coolers, letdown heat exchangers, and sample coolers. For each of the systems, process radiation monitors in each loop provide an alarm in the control room as an indication of radioactive inleakage. The ICW surge tanks have a vent open to the atmosphere in the ventilation equipment room in the auxiliary building. There are no isolation valves on these vent lines, so system overpressurization due to inleakage did not appear to be a problem. The CCW surge tanks have an air-operated, three-way valve in their vent. This valve is normally positioned to vent the surge tank to the atmosphere in the ventilation equipment room in the auxiliary building. Upon receipt of a high CCW process monitor radiation alarm, the operator may reposition a handswitch in the control room to vent the CCW surge tank to the auxiliary building radwaste area ventilation system. Thus, the CCW system did not appear to be subject to potential overpressurization.

No violations or deviations were identified.

13. Exit Interview

The NRC inspectors met with Mr. J. M. Levine (ANO General Manager) and other members of the AP&L staff at the end of this inspection. At this meeting, the inspectors summarized the scope of the inspection and the findings.