

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-275
50-323

License Nos.: DPR-80
DPR-82

Report No.: 50-275/97-016
50-323/97-016

Licensee: Pacific Gas and Electric Company

Facility: Diablo Canyon Nuclear Power Plant, Units 1 and 2

Location: 7 1/2 miles NW of Avila Beach
Avila Beach, California

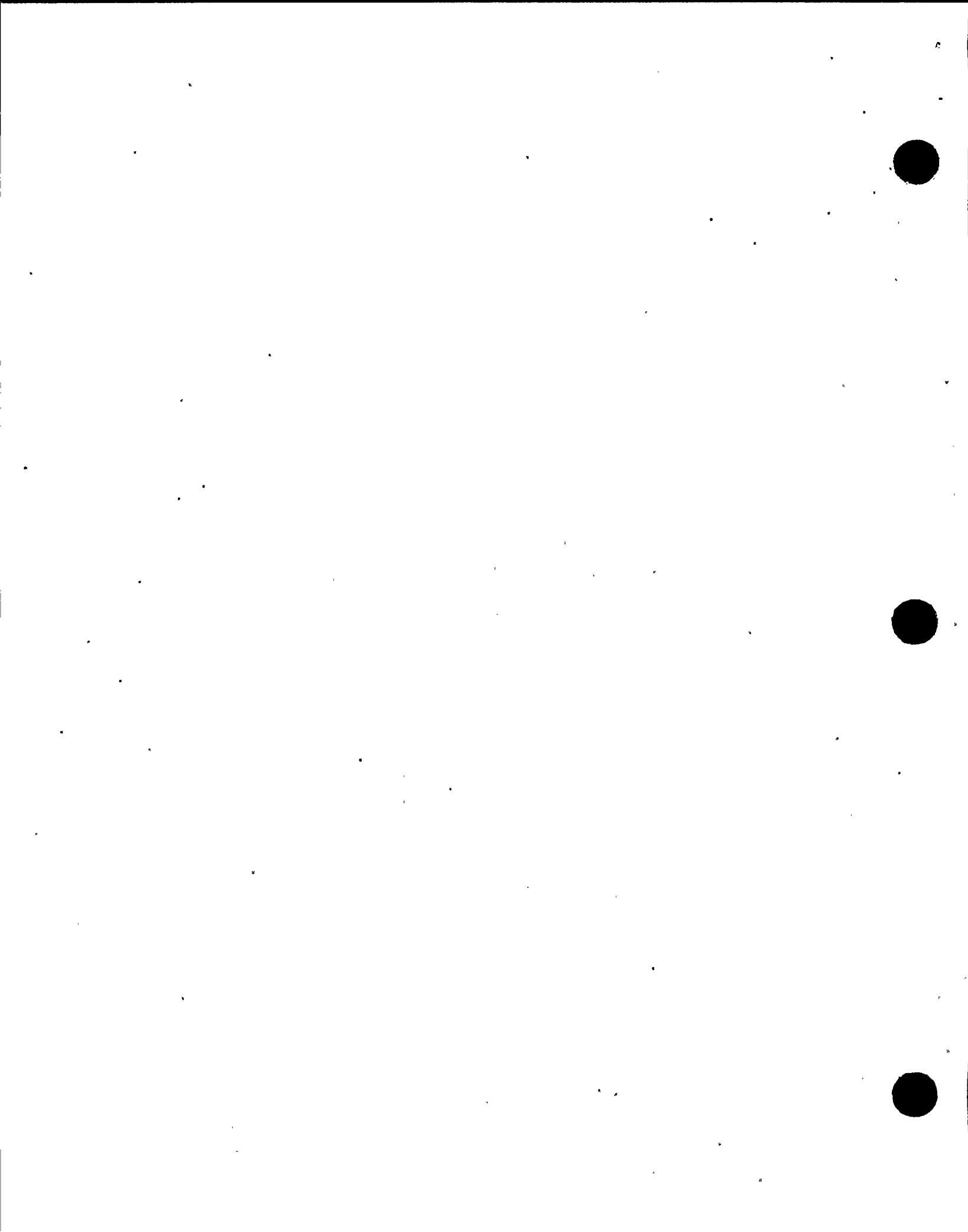
Dates: August 31 through October 11, 1997

Inspector: D. B. Allen, Resident Inspector

Approved By: H. J. Wong, Chief, Reactor Projects Branch E

Attachment: Supplemental Information

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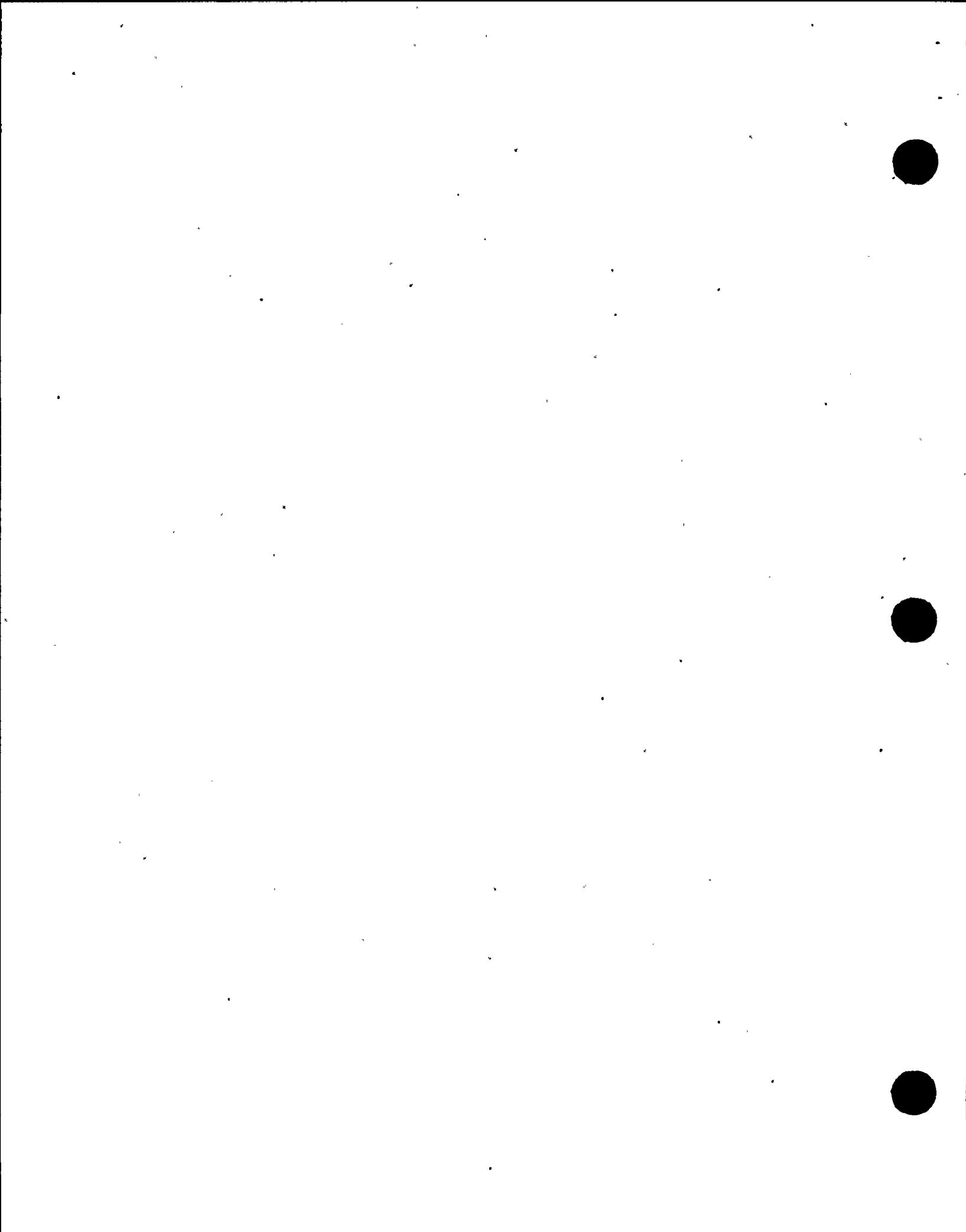
EXECUTIVE SUMMARY

Diablo Canyon Nuclear Power Plant, Units 1 and 2
NRC Inspection Report 50-275/97-016; 50-323/97-016

This inspection included aspects of licensee operations, maintenance, engineering and plant support. The report covers a 6-week period of resident inspection.

Operations

- In general, operations were conducted in a conscientious, competent, and professional manner, with focus on safety and procedural compliance. Operators were knowledgeable of plant conditions and activities, and responded quickly and properly to annunciators (Section O1.1).
- Observations were made which were indicative of a lack of attention to detail in log keeping in the control room. Operation logs in some instances lacked sufficient information, did not document why an action was taken or the outcome of the action, and clerical errors were found (Section O1.2).
- Operators demonstrated good performance in the October 3 decrease in Unit 1 turbine load from 50 percent to 38 percent to repair a steam leak. The down power was well coordinated, with continuous and diligent monitoring of the plant conditions, and timely response to alarms and indications. The shift foreman was clearly in control of the evolution and constantly aware of plant conditions (Section O1.3).
- Operations was effective in maintaining appropriate configuration control of the six emergency diesel generators and their subsystems and supporting systems. The systems were correctly aligned and in compliance with the Updated Final Safety Analysis Report (UFSAR), Technical Specifications (TS), and applicable plant procedures. The material condition of the equipment was good with only a few minor equipment problems, which were documented in Action Requests (AR) (Section O2.1).
- Quality assessments of operations during the Unit 1 refueling were effective. Improvements in control room formality were noted and the continuing problems with clearances were documented. Areas for improvements were identified, including performance of risk assessments, and operators understanding of the Maintenance Rule. These assessments were consistent with the findings of the NRC Maintenance Rule inspection (Section O7.1).



Maintenance

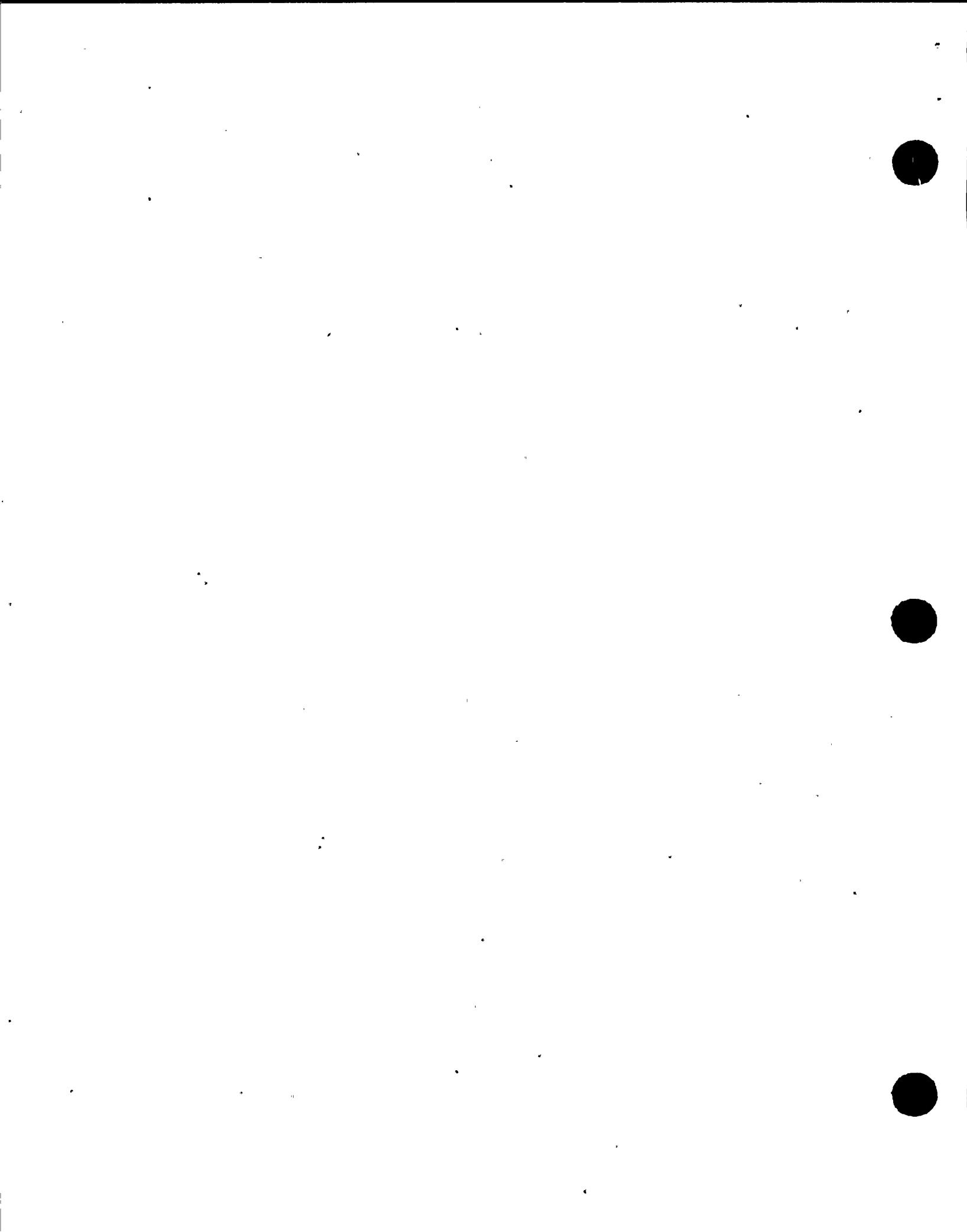
- Maintenance personnel were effective in the performance of maintenance activities. Personnel were knowledgeable of the equipment, procedure, and tasks to be performed, the work documents and procedures were in use at the work site, and required clearance tags were hung (Section M1.1).
- A special surveillance test was conducted in a high quality manner. Procedure Surveillance Test Procedure (STP) M-75, "4KV Vital Bus Undervoltage Relay Calibration," previously performed only during shutdown, was performed at power. The management briefing covered management's expectations, such as the need to exercise caution and conservatism. The procedure had been thoroughly reviewed to ensure the test had no unexpected impact on the plant (Section M1.2).
- The plant equipment was well maintained, with an appropriate focus on deficient conditions. Existing equipment problems were identified by AR tags and new problems were reviewed daily and priorities set to ensure quick response to those problems that could degrade safety-related equipment. The priorities were generally based on sound conservative judgement (Section M2.1).

Engineering

- The Engineering backlog continued to be a challenge for the licensee. Although the licensee's efforts had not reduced the number of open items as much as desired, there was increased confidence that quality issues had been identified and a clearer understanding of the priority of the individual issues (Section E6.1).

Plant Support

- Radiation protection technicians provided high quality support to operations personnel in performance of the venting of the emergency core cooling system (ECCS). The radiation protection technicians were knowledgeable of radiological protective measures, proficient in handling the vent bottle, hoses, gloves, rags and waste water, and performed numerous radiation and contamination surveys (Section R4.1).



Report Details

Summary of Plant Status

Unit 1 began this inspection period at 100 percent power. On October 3, the unit was reduced to 38 percent power to repair a leaking flange on an extraction steam line to moisture separator Reheater 1-2B. On October 5, the unit was returned to 100 percent power and remained at 100 percent power for the remainder of the inspection period.

Unit 2 began this inspection period at 100 percent power. On September 5, the unit was reduced to 50 percent power to clean the circulating water intake flow path. The unit was returned to 100 percent power on September 10. On September 12, the unit power was reduced to 50 percent to remove Main Feedwater Pump 2-1 from service to repair a pump casing drain line. The unit was returned to 100 percent power on September 15 and remained at 100 percent power for the remainder of the inspection period.

I. Operations

O1 Conduct of Operations

O1.1 General Comments (71707)

Using Inspection Procedure 71707, the inspectors conducted frequent reviews of ongoing plant operations. In general, operations were conducted in a conscientious, competent, and professional manner, with focus on safety and procedural compliance. Operators were knowledgeable of plant conditions and aware of plant activities that impacted their work station. Operators responded quickly and properly to annunciators.

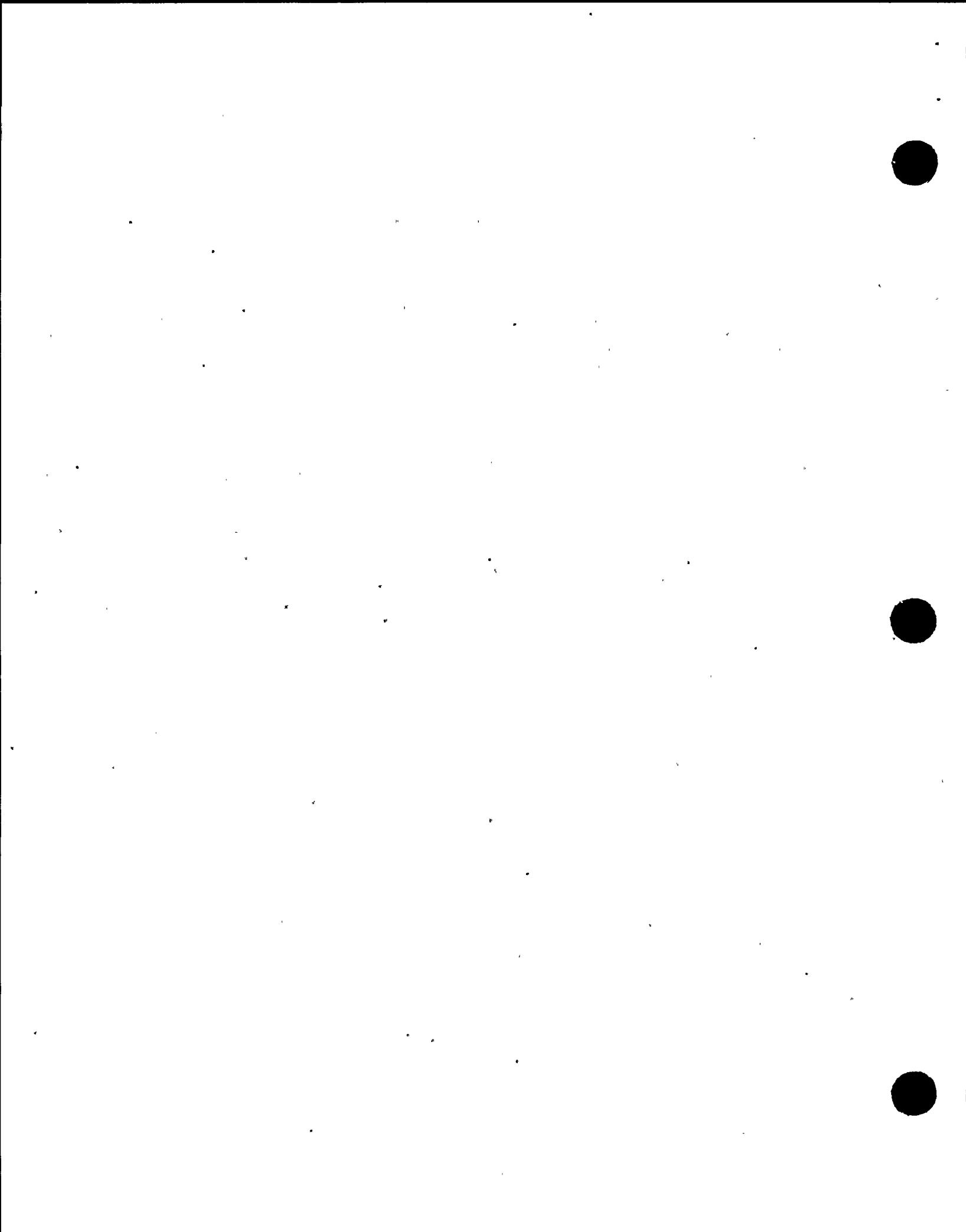
O1.2 Review of Operations Logs

a. Inspection Scope (71707)

The inspector reviewed Units 1 and 2 Shift Foreman's Log, Control Operator's Log, and Nuclear Operator's Log for compliance with Administrative Procedure Operating Procedure (OP) 1.DC37, "Plant Logs," Revision 4B.

b. Observations and Findings

Most logs reviewed contained at least the minimum information specified in Procedure OP1.DC37. However, some entries were so brief as to not meet the intent as described in the scope section of the procedure. The procedure stated that the log should preserve the actions and events of the day and document what was done, why it was done, and the outcome of what was done. For example, on October 1, the TS 3.7.12 limit on inlet water temperature was exceeded and both units entered the Action Statement, which is to place a second vital component cooling water heat exchanger in service within 8 hours. The actions of placing the second train in service were delayed for over 6 hours, in part due to questions related to chlorination of the associated auxiliary saltwater trains. Neither



Unit 1 nor Unit 2 Shift Foreman's Logs, nor Unit 1 or Unit 2 Control Operator's logs documented the reason for the delay.

According to Procedure OP1.DC37, the control operator's log should include starting and stopping of plant equipment, and the reason. The reason was not always clearly documented. Several clerical errors, such as checking the incorrect shift or entering an incomplete date, were identified to the licensee personnel and corrected.

c. Conclusions

In general, the logs contained the minimum information required by the licensee's administrative procedure. In many cases the logs did not document why an action was taken nor the outcome of the action. The clerical errors noted were indicative of a lack of attention to detail in maintaining the plant logs.

O1.3 Conduct of Unit 1 Load Changes For Steam Leak Repairs

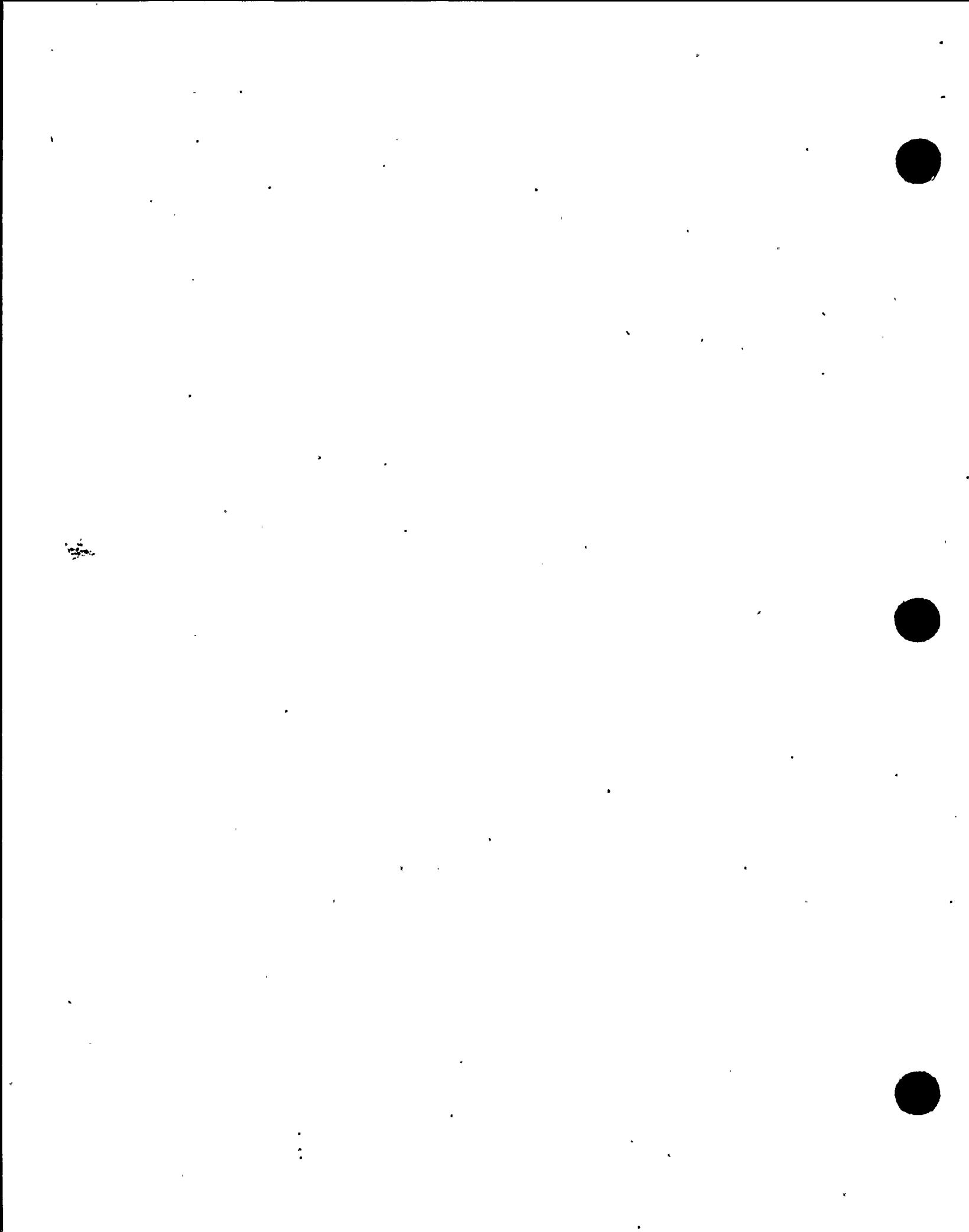
a. Inspection Scope (71707)

On October 3, the inspector observed control room activities during load reduction from 50 percent to 38 percent and return to 50 percent to support repair of an unisolable leak on an extraction steam line flange.

b. Observations and Findings

Operators performed the load changes in accordance with Procedure OP L-4, "Normal Operations at Power," Revision 37. The procedure provided the necessary directions to perform the required activities. An additional control operator was assigned to assist in the control room during this activity. This was especially useful to facilitate compliance with the licensee's policy of peer checking each operation of a plant control. The additional operator facilitated frequent operation of the boration and dilution controls, in addition to operation of rod and turbine controls.

The low value of moderator temperature coefficient at this time in core life made reactivity control during the resultant Xenon transient more difficult than usual. The control operator was diligent in monitoring and controlling the reactor while remaining in control of the load change activities. The unloading of Main Feedwater Pump 1-1 was well coordinated and minimized the effects on the reactor temperature and steam generator levels. The operators had reviewed the steps in the procedure, discussed the expected response, and planned the coordination of their actions. The shift foreman initiated each major evolution and was constantly aware of plant conditions.



The operators' response to alarms and annunciators was timely and in accordance with their annunciator response procedures. Communications with personnel outside the control room was quickly initiated to ensure the necessary actions were taken to respond to each new alarm. In general, the shift foreman and control operators were well informed of activities in the plant and the effects of those activities on the control room indications.

c. Conclusions

The conduct of operations during the load change was well coordinated, with continuous and diligent monitoring of the plant conditions and timely response to each alarm and indication. The shift foreman was clearly in control of the unit and always aware of plant conditions. The control operator continuously monitored plant parameters and maintained those parameters well within acceptable limits.

02 Operational Status of Facilities and Equipment

O2.1 Emergency Diesel Generator Walkdown

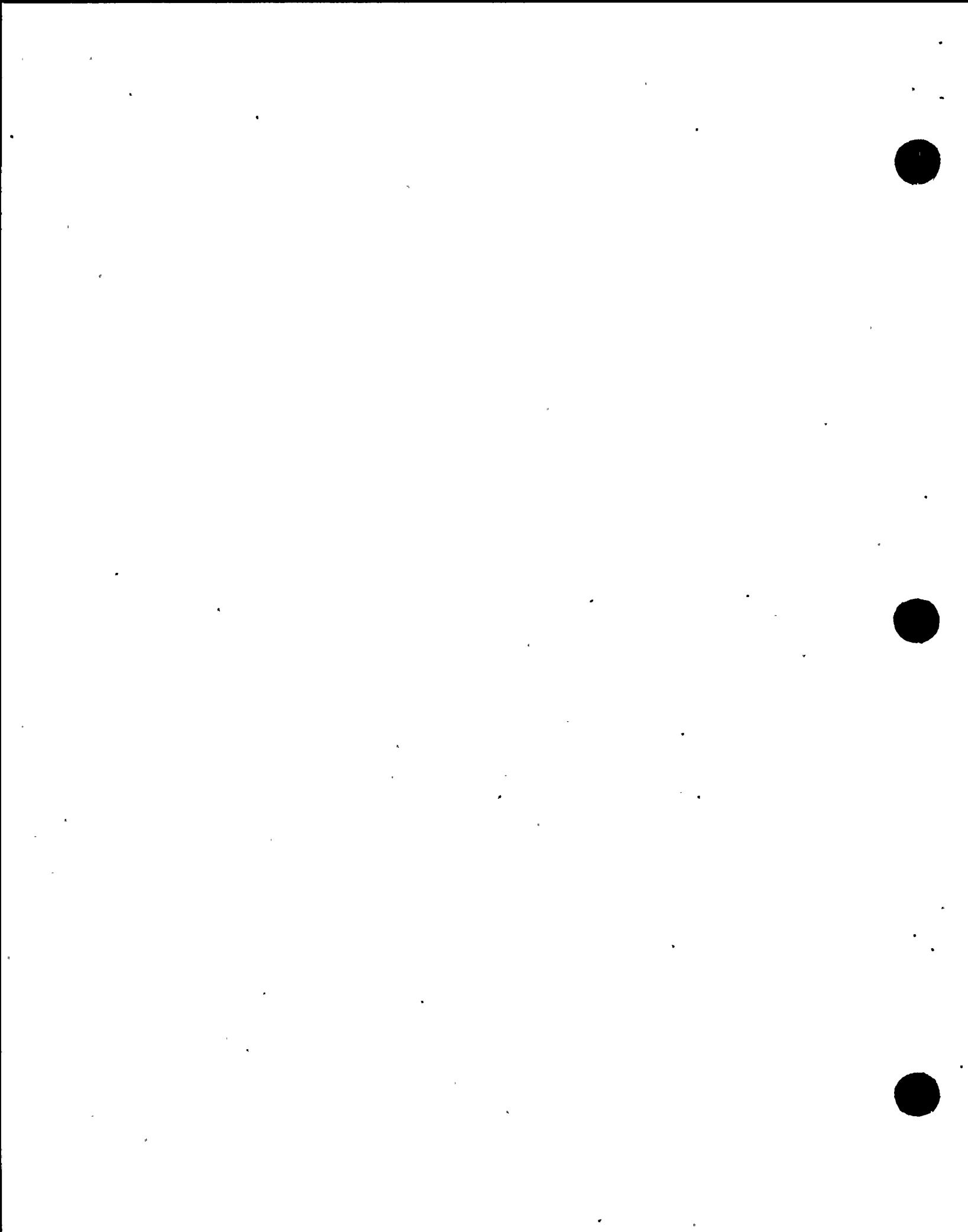
a. Inspection Scope (71707)

The inspector performed a walkdown of the six emergency diesel generators to verify proper system configuration and equipment condition to support operability. Procedure OP J-6B:I, "Diesel Generator 2-1 Make Available," Revision 12, was reviewed for technical adequacy and used during the walkdown. Applicable sections of the TS and UFSAR were used to assure consistency with plant design and operation.

b. Observations and Findings

The system was aligned in accordance with operation procedures and consistent with the UFSAR and TS. The general condition of the equipment was acceptable, with minor discrepancies noted, such as minor lubricant leaks. Relief Valve DEG-2-RV-274 on the discharge line of Air Dryer 2-3B for a starting air compressor was noted to be missing a lead seal. This was identified to the licensee, who promptly documented the condition, evaluated it for impact on the plant equipment, and identified corrective actions.

The control switches in the control room and in the plant were properly aligned. Local and remote indications were within acceptable bands. Subsystems, such as fuel oil, lubricating oil, starting and turbocharger air, as well as AC and DC electrical systems, were also reviewed and found to be properly aligned. Sealed valves were confirmed to have their seals intact. Tank levels were verified within acceptable ranges.



c. Conclusions

The six emergency diesel generators and their subsystems and supporting systems were correctly aligned and in compliance with the UFSAR, TS, and applicable plant procedures. The material condition of the equipment was good with only a few minor equipment problems, which were documented in AR.

O2.2 Walkdown of ECCS Valve Alignment

a. Inspection Scope (71707)

The inspector reviewed the position of the Unit 2 ECCS valves listed in Surveillance Requirement (SR) 4.5.2 and the status of power to the valves. Surveillance Procedure, STP I-1A, "Routine Shift Checks Required By Licenses," Revision 67, was reviewed.

b. Observations and Findings

The valve were found to be in their required positions as determined by control room indications or local observation. The power to the valves was verified to be removed either by the associated 480 volt supply breaker checked in the open position, or for six valves, by their series contactor cutout switches verified to be in the open position. The shift surveillance procedure contained steps to verify the position of the valves, the position of the associated 480 volt breakers and the position of the cutout switches.

c. Conclusions

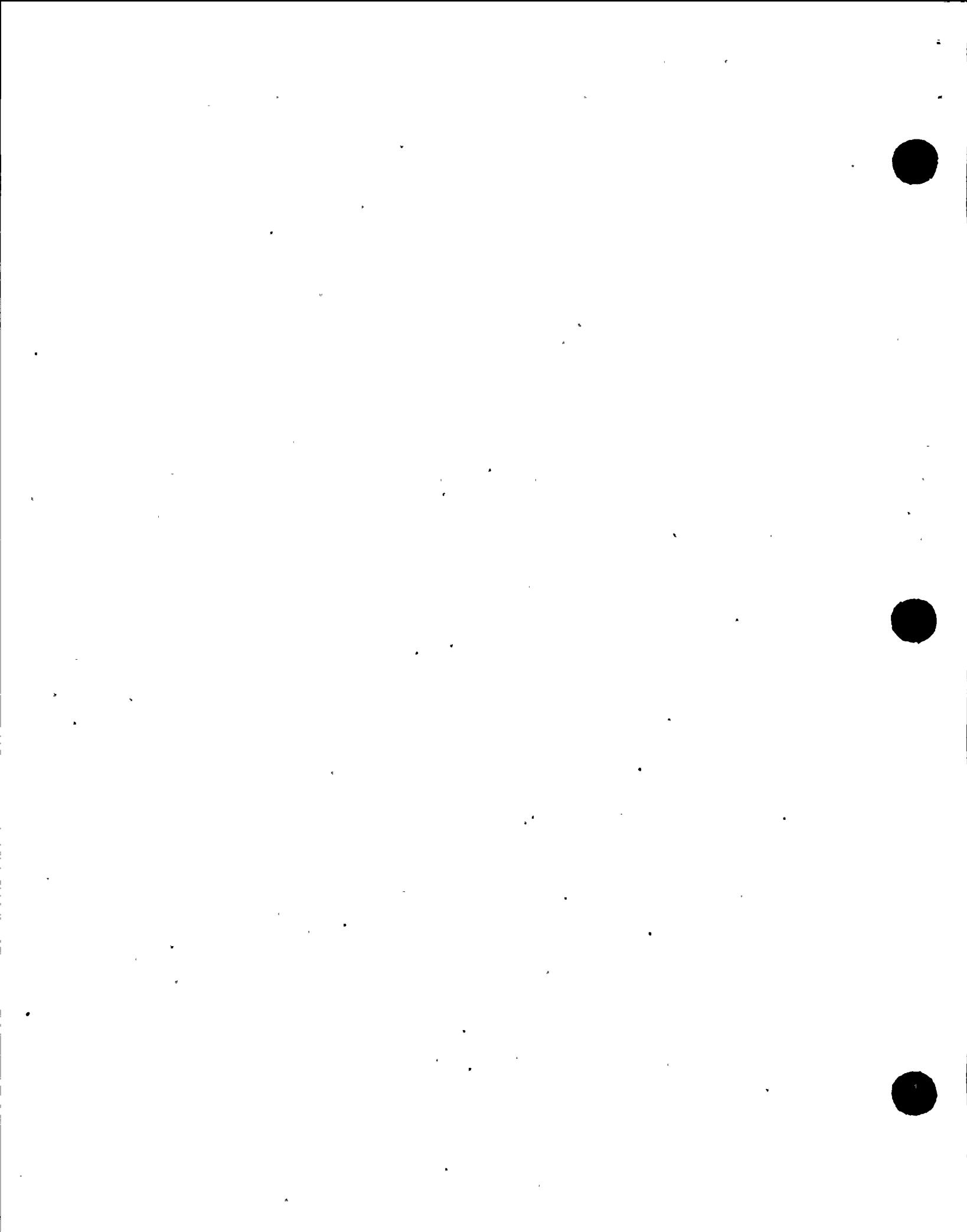
Those valves specified in SR 4.5.2.a were in their required position and power was removed. The shift surveillance procedure contained steps to meet the SR requirement to verify these conditions at least every 12 hours.

O7 Quality Assurance in Operations

O7.1 Licensee Quality Assessment of Operations Refueling Outage 1R8 Activities and in Implementation of the Maintenance Rule

a. Inspection Scope (71707)

The inspector reviewed the licensee's self-assessment of operations performance during the Unit 1 eighth refueling Outage 1R8 and operations role in implementing the Maintenance Rule, which were documented in Nuclear Quality Services (NQS) Audit 970850023. This audit was conducted from April 1 to June 30, 1997.



b. Observations and Findings

Operations Refueling Outage 1R8 Activities

NQS assessment of operations activities during Refueling Outage 1R8 were focused on conduct of operations and command and control of operations. The assessment was performed by observing the conduct of operations and comparing it to written policy and procedure guidance.

Under conduct of operations, NQS assessed control room formality, communications, tailboards (preactivity briefings), self-verification, and peer checking. A notable improvement in control room atmosphere (i.e., stress and congestion) was attributed to changes implemented by operations in control room formality.

NQS assessed procedural adherence by operations, with particular interest in how operators responded to unexpected situations or steps that could not be performed. Overall, NQS found the procedures to be adhered to and discrepancies handled appropriately.

NQS focused on clearance related errors due to previous problems in this area. Despite efforts to enhance the clearance process, clearance related events remained at a significantly high number.

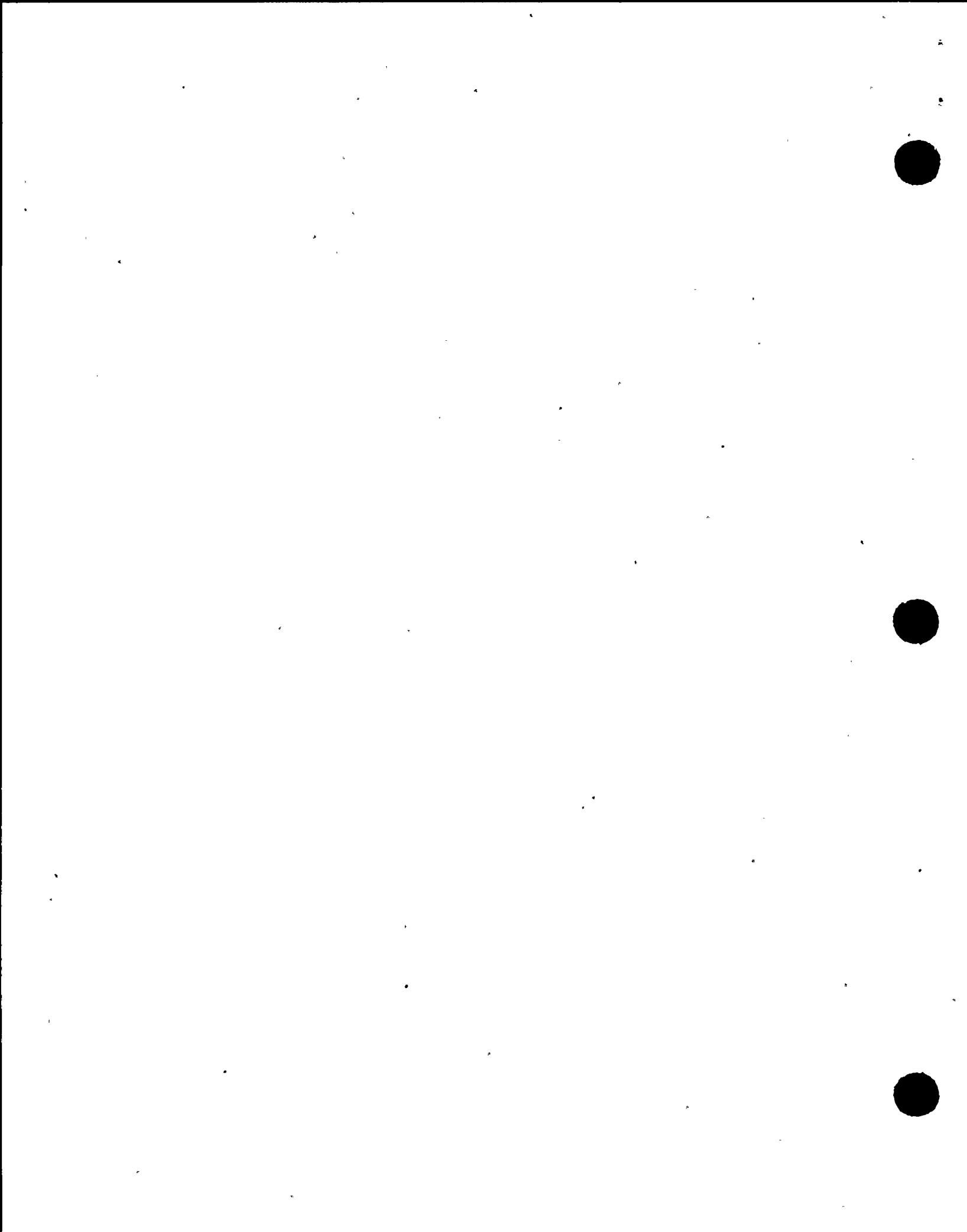
Operations Role in Implementing the Maintenance Rule

NQS assessed operations activities related to 10CFR50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." NQS evaluated adequacy of procedures, procedural compliance, operator knowledge of the rule and their responsibilities, and the training program.

NQS found operations to be complying with the regulatory requirements of the Maintenance Rule. They also identified the need for improvements in the procedure which specifies the requirements to perform a risk assessment prior to removal from service of risk significant equipment.

c. Conclusions

NQS assessments of operations during Refueling Outage 1R8 were effective. Improvements in control room formality were noted and the continuing problems with clearances were documented. Observations of clearance problems during Refueling Outage 1R8 were previously documented in NRC Inspection Report 50-275;323/97-06. Needed improvements were identified in the areas of performing risk assessments and operations understanding of the Maintenance Rule. Operations response to the audit includes continued training of operators on the Maintenance Rule and revision to the administrative procedure to clarify the



requirements for performing risk assessments prior to removing structures, systems, or components from service. The licensee's assessment is consistent with the findings of Maintenance Rule inspection documented in NRC Inspection Report 50-275;323/97-04.

II. Maintenance

M1 Conduct of Maintenance

M1.1 Maintenance Observations

a. Inspection Scope (62707)

The inspectors observed all or portions of the following work activities:

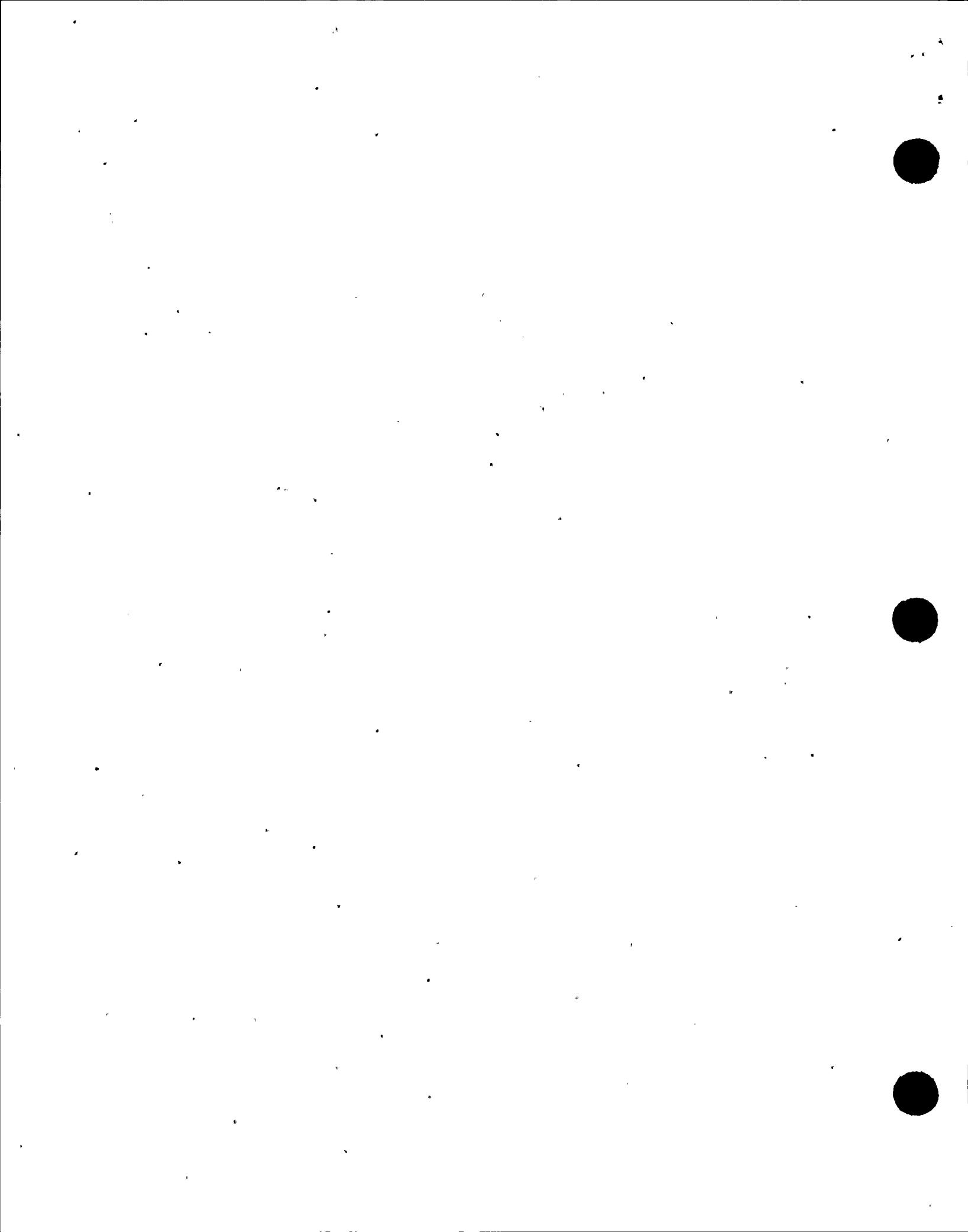
- Sample Turbine Bearing and Governor Oil, Auxiliary Feedwater (AFW) Pump 1-1, Work Order (WO) R00172202
- Unit 2 Control Room Ventilation, Bus H, Preventative Maintenance on various dampers, fans, and associated components
- Verify Benchset/Calibration of PCV-22/PO-546, WO C0154576
- Maintenance Procedure E-50.33A, Westinghouse Type SSV-T Relay Maintenance, on Second Level Undervoltage Relay 27HGB3, WO R0158503

b. Observations and Findings

Maintenance personnel were knowledgeable of the equipment, procedure, and tasks to be performed. The work documents and applicable procedures were at the work site, and were used and signed as the work progressed. Clearance tags were hung to protect the equipment and personnel.

The calibration and benchset of PCV-22 were performed per Appendix 10.1 of STP I-4-PCV22, "10 Percent Steam Dump Valve PCV-22 Calibration," Revision 3A. The required caution tags and Man-On-Line tags were hung, the test equipment was within calibration interval, the procedure steps were signed as they were performed, and the as-left data was within procedural desired values. Operations performed postmaintenance test per STP V-3R1, "Exercising 10 Percent Atmospheric Dump Valves PCV-19, 20, 21, 22."

The inspections and maintenance of the second level undervoltage relays were performed in a meticulous manner with close attention to the details. The test requirements were well understood by the technicians and carefully observed.



c. Conclusions

The maintenance activities were performed in accordance with the procedural requirements. The personnel performing the activity were knowledgeable of the equipment, procedures, tools, and methods used. The results of the maintenance appeared to be effective in ensuring the components will function as designed.

M1.2 Surveillance Observations

a. Inspection Scope (61726)

Selected surveillance tests required to be performed by the TS were reviewed on a sampling basis to verify that: (1) the surveillance tests were correctly included on the facility schedule; (2) a technically adequate procedure existed for the performance of the surveillance tests; (3) the surveillance tests had been performed at a frequency specified in the TS; and (4) test results satisfied acceptance criteria or were properly dispositioned.

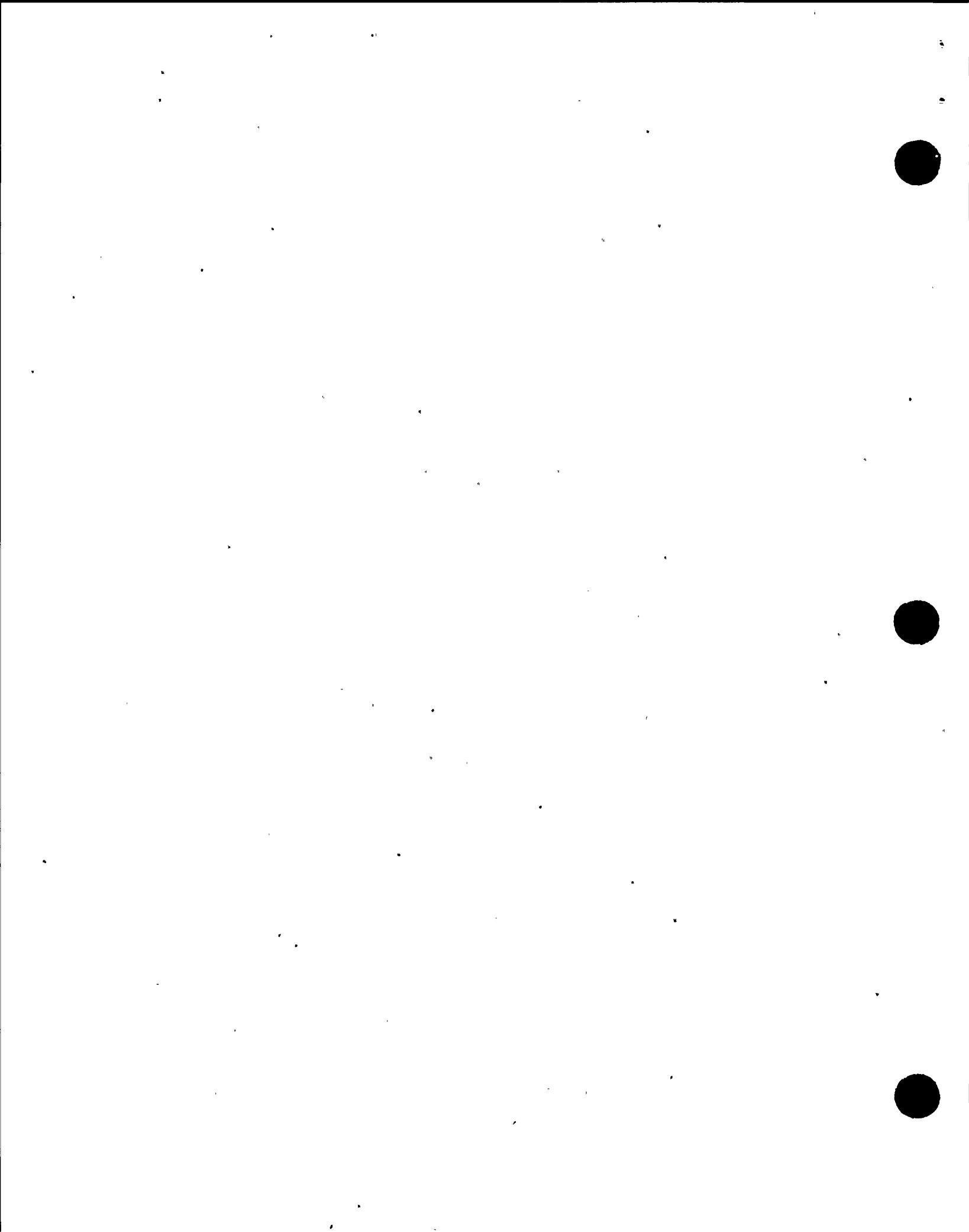
The inspectors observed all or portions of the following surveillances:

- STP M-89 ECCS System Venting, Revision 23
- STP V-3R1 Exercising 10 Percent Atmospheric Dump Valves PCV-19, 20, 21, 22, Revision 14
- STP P-AFW-11 Routine Surveillance Test of Turbine-Driven AFW Pump 1-1, Revision 4
- STP R-3D Routine Monthly Flux Map, Revision 16
- STP M-75 4KV Vital Bus Undervoltage Relay Calibration, Revision 18

b. Observations and Findings

Prior to the performance of STP M-89, "ECCS System Venting," operations performed a briefing in the control room. The briefing was thorough, covering the scope, responsibilities, interface with radiation protection and control room operator, precautions and limitations, as well as the significant procedural steps. The operator performed the venting per the procedure, signing the steps as they were completed. The operator used good work practices to prevent spilling of water, to contain potential contamination, and to carefully remove and reinstall the pipe caps to protect the pipe threads. The venting was successful with little air found.

Procedure STP V-3R1 was appropriately used as postmaintenance test for 10 percent dump Valve PCV-22. The procedure satisfied the TS requirements to



demonstrate operability and complied with the Inservice Test Program, Second 10-Year Interval requirements for stroke timing. The operators performing the test were knowledgeable of the equipment operation and procedural requirements. The operators used peer checking and three-way communications. The operators properly documented the test results, showing that the valve stroke times met the TS requirement and were within the procedure's ACTION values.

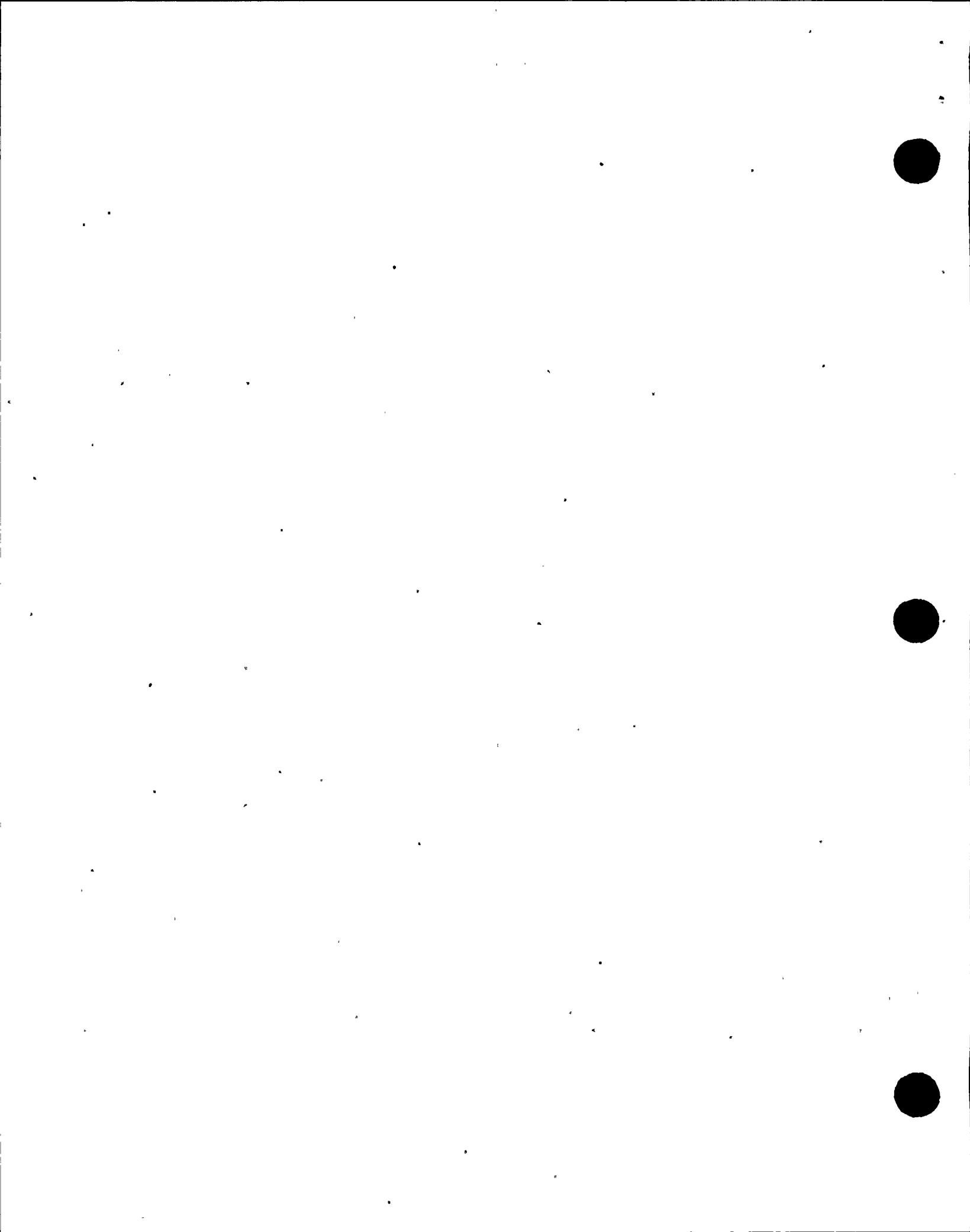
Procedure STP P-AFW-11 was performed to satisfy the quarterly testing requirements of TS and the Inservice Test Program. Operators performing the test were knowledgeable and signed the procedure steps as they were completed. The system engineer was present and assisted. A small leak was identified in a coupling in the cooling water line to the turbine bearing. Maintenance personnel tightened the coupling, reducing the leak to 1 drop every 2 minutes, and installed a catch bag to direct the leakoff to a drain. An AR was written to repair the coupling at a later time. The test instruments were within their calibration frequency. The test results satisfied the TS and procedural requirements.

Procedure PEP R-3A, "Use of Flux Mapping Equipment," Revision OA, was performed by Reactor Engineering to obtain a Unit 2 full core flux map to satisfy the monthly SR. The engineers had identified detector drives and paths, which had previously been difficult to access, and confirmed that no new problems with drives were identified.

Procedure STP M-75, "4KV Vital Bus Undervoltage Relay Calibration," had previously been performed only during outages. Its performance at power was treated as special test in accordance with AD13.ID1, "Conduct of Plant and Equipment Tests." This required a pretest briefing by management and Section Director oversight. The briefing contained the required information including management's expectations, such as the need to exercise caution and conservatism during the test. The test procedure had been thoroughly reviewed to ensure it could be performed at power. The test procedure contained an attachment to track the TS actions entered and exited during the test. This was beneficial to operations, as the test required numerous entries into several TS actions. One first level undervoltage relay was found out of tolerance and was replaced. The testing progressed well with no unexpected impact on the plant.

c. Conclusions

The inspectors found that the surveillances observed were being scheduled and performed at the required frequency. The procedures governing the surveillance tests were technically adequate and personnel performing the surveillance demonstrated an adequate level of knowledge. The inspectors noted that test results appeared to have been appropriately dispositioned.



M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Plant Material Condition

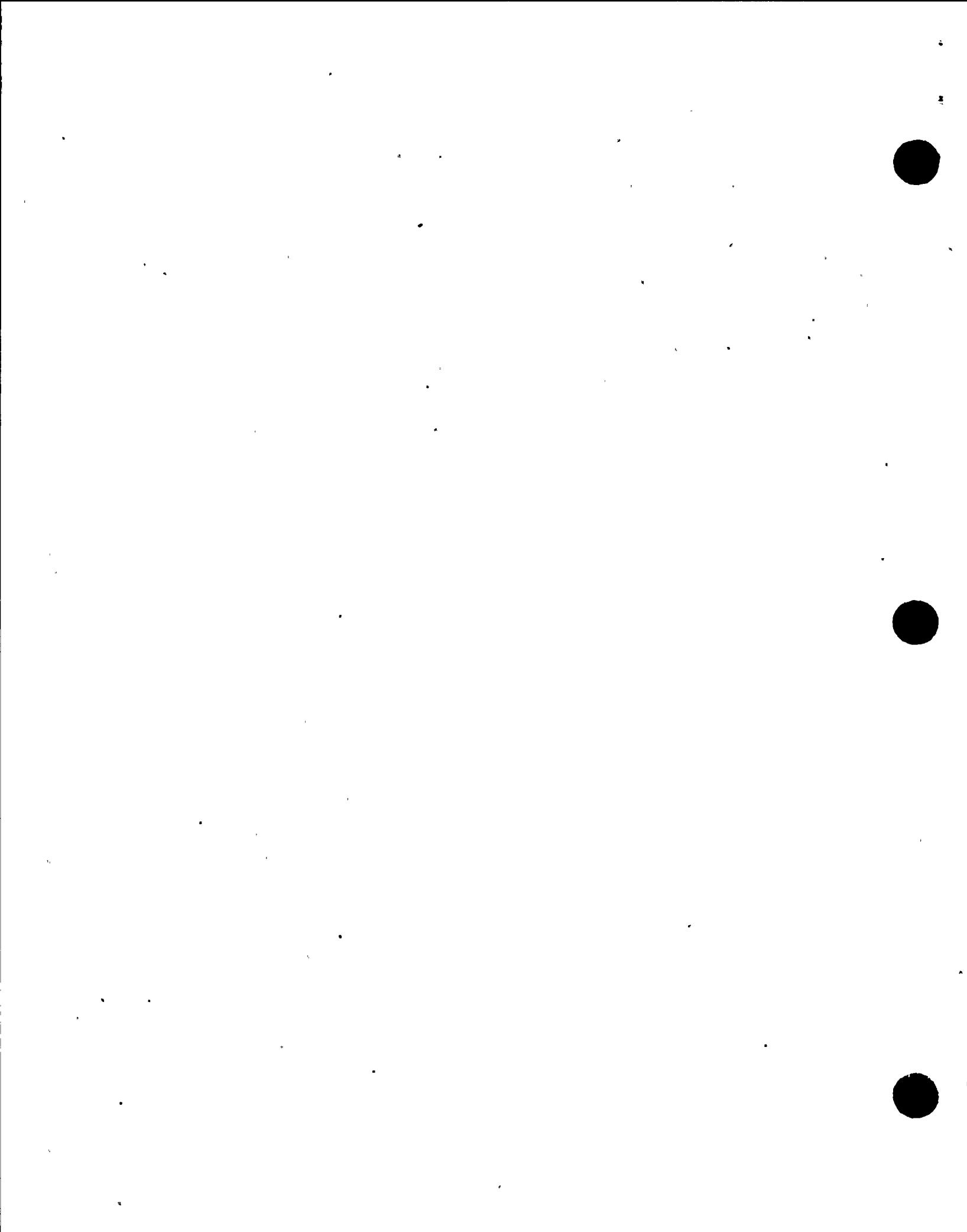
During routine plant tours, the inspector noted plant equipment to be well maintained, with minor equipment problems such as minor lubricant leaks to be identified with a corrective maintenance AR tag. Specific equipment inspected, at least in part, included emergency diesel generators, 480 volt vital switchgear, 4160 volt vital switchgear, AFW pumps and associated valves, ECCS valves identified in TS 4.5.2, and control room ventilation equipment.

Corrective maintenance ARs were reviewed in daily meetings where priorities were set to ensure quick response to those problems that could degrade safety-related equipment or equipment needed for continued electrical generation. The priorities were generally based on sound conservative judgement, considering both impact of removing equipment from service and potential for deteriorating condition.

M8 Miscellaneous Maintenance Issues (92902)

- M8.1 (Closed) Unresolved Item (URI) 50-275;323/97012-01: failure to review and evaluate previous battery operated light (BOL) failures as maintenance preventable functional failures (MPFF). The BOLs were included in the licensee's Maintenance Rule program in February. Three BOL failures, which occurred in May 1995, March 1996, and January 1997, were documented on ARs, but the ARs did not include an evaluation of the failures as MPFFs. The failure to include the BOLs in the scope of the Maintenance Rule from July 10, 1996, until February 1997 has been addressed in a separate Maintenance Rule NRC Inspection Report (50-275;323/97-04).

The BOL system engineer had been reviewing and trending the results of the maintenance and surveillance tests on this system to identify performance problems that may result from service life, maintenance performance, or BOL environment. Upon review of the type and number of equipment problems and the system engineer's monitoring of the system performance, the inspector concluded that the system engineer had reviewed the previous failures and had concluded that the failures were not maintenance preventable. The licensee had demonstrated effective control through maintenance such that the BOLs would perform their intended function and placing the system under (a)(2) of the Maintenance Rule was appropriate. Based upon this analysis, this URI is closed.



III. Engineering

E6 Engineering Organization and Administration

E6.1 Workload Management

a. Inspection Scope (37551)

The inspector reviewed status reports depicting Nuclear Technical Services' (NTS) backlog of engineering assigned ARs and Action Evaluations (AE).

b. Observations and Findings

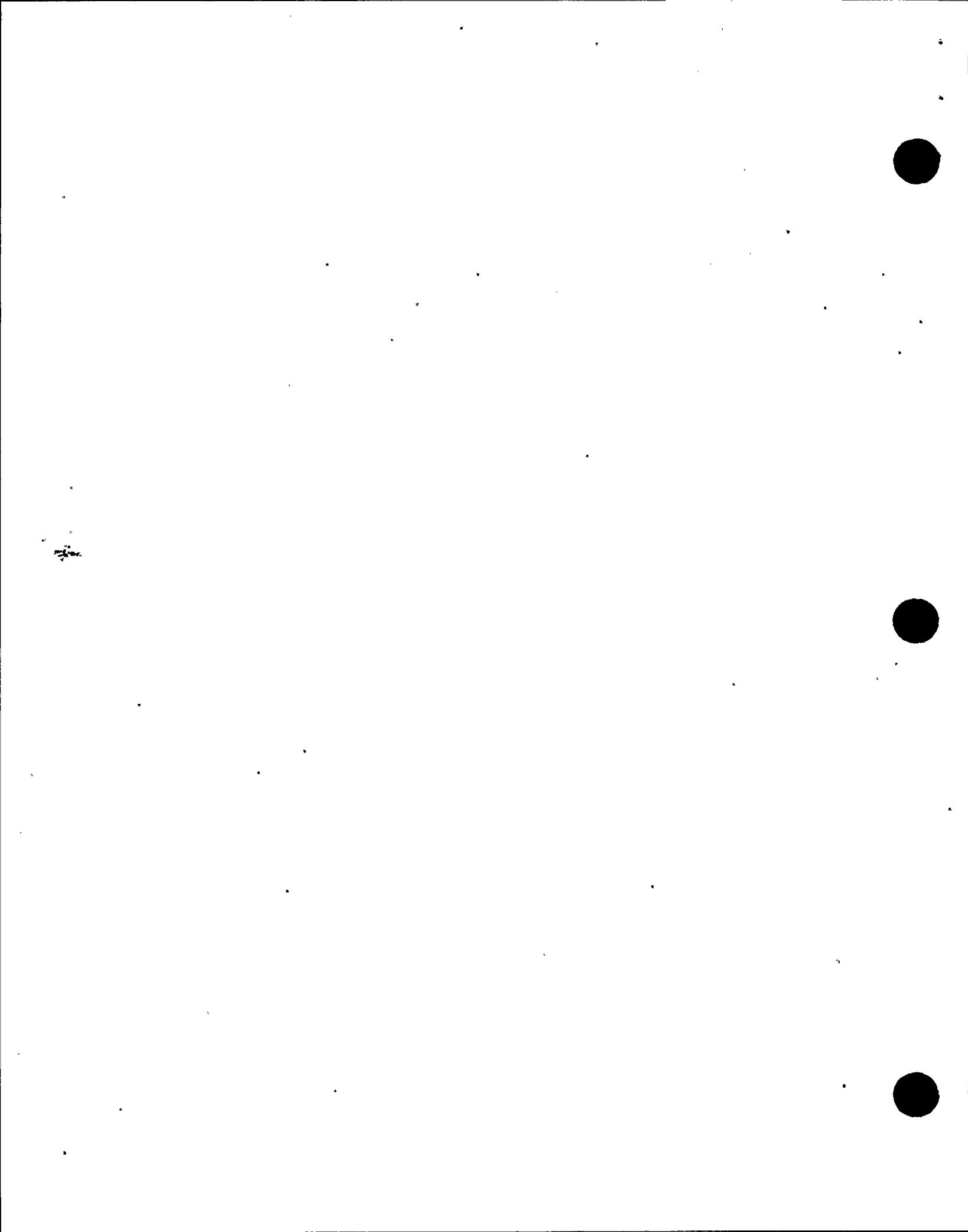
The licensee trended the NTS AR and AE workload. As of September 22, 1997, approximately 5000 open AR and AE items were assigned to NTS. This was approximately four percent more items than in August. Efforts to reduce the backlog have had limited success in reducing total open items. The licensee reviewed the ARs and AEs in the backlog to verify the correct identification and coding of quality issues. Since quality issues receive quicker attention, this review was performed to ensure the backlog did not contain misidentified quality issues. The number of open quality issues have remained a small percentage of the total open workload, and the number of overdue quality issues have remained small.

The ARs and AEs in the backlog were also prioritized for importance (required versus discretionary items) and the distribution in each priority trended. A large number of items were considered discretionary and the licensee initiated an effort to review and work off this burden. This effort resulted in many items being more correctly identified as higher priority.

The items in the backlog were also reviewed for assignment of due dates consistent with each item's importance. Additional effort by NTS has resulted in a significant reduction in overdue work, dropping from 40 percent of AR/AE in overdue status in March to 6 percent overdue status in September.

c. Conclusions

The NTS backlog of ARs and AEs continued to be a challenge for the licensee. Although the licensee's efforts had not reduced the number of open NTS' ARs and AEs as much as desired, they had resulted in increased confidence that quality issues had been identified and a clearer understanding of the priority of the individual issues. The reduction in overdue items and the small number of overdue quality issues indicated a better focus of the work effort.



IV. Plant Support

R4 Staff Knowledge and Performance in Radiological Protection & Chemistry

R4.1 Radiological Controls During Venting of ECCS Systems

a. Inspection Scope (71750)

The inspector observed Radiological Protection technicians supporting an operator during the ECCS venting.

b. Observations and Findings

The radiation protection technicians provided high quality support, in addition to performing numerous radiation and contamination surveys. The results of the surveys were documented by the technicians. The technicians assisting with the handling of the vent hose and bottle and the disposal of the waste water, and in general, assuring good radiological measures were taken to contain the potential contamination. The technicians assisted with clean gloves each time the operator changed activities from a contaminated component to a clean component.

c. Conclusions

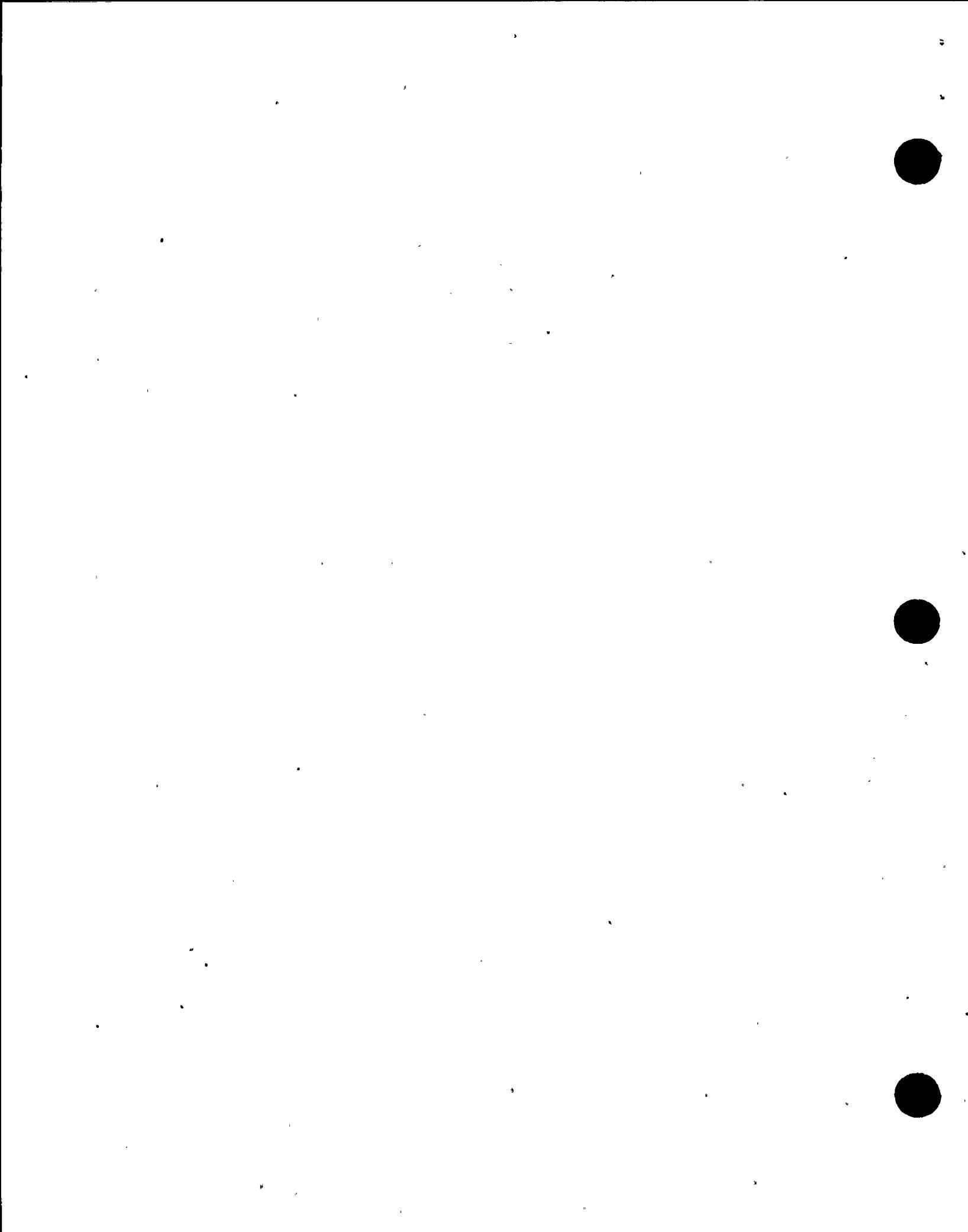
The technicians were knowledgeable of the necessary radiological protective measures and proficient in handling the potentially contaminated material, including the vent bottle and hoses, gloves, rags, and waste water.

V. Management Meetings

X1 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on October 10, 1997. In the meeting the licensee acknowledged the findings presented.

The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified..



ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee

D. R. Adams, Supervisor, Nuclear Quality Services
R. Cheney, Engineer, Nuclear Quality Services
W. G. Crockett, Manager, Nuclear Quality Services
T. L. Grebel, Director, Regulatory Services
B. C. Hinds, Director, Scheduling and Outage Planning
S. C. Ketelsen, Supervisor, Regulatory Services
T. King, Director, Technical Maintenance
D. B. Miklush, Manager, Engineering Services
R. P. Powers, Vice President and Plant Manager
D. A. Taggart, Director, Nuclear Quality Services, Engineering and Procedures

INSPECTION PROCEDURES USED

IP 37551: Onsite Engineering

IP 61726: Surveillance Observations

IP 62707: Maintenance Observations

IP 71707: Plant Operations

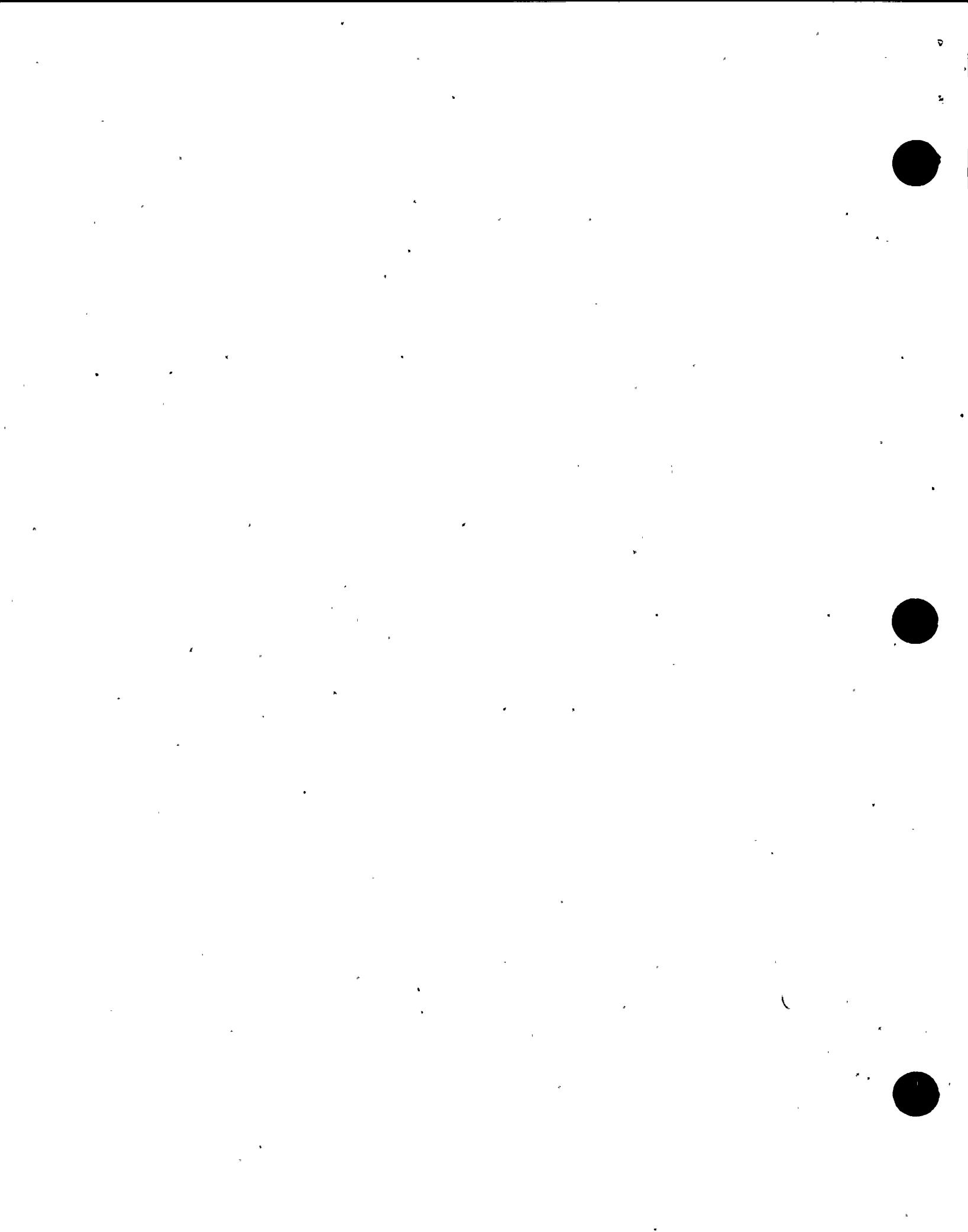
IP 71750: Plant Support

IP 92902: Followup - Maintenance

ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

50-275;323/97012-01 URI Failure to review previous BOL equipment failure for MPFF is an unresolved item pending NRC review



LIST OF ACRONYMS USED

AE	action evaluation
AFW	auxiliary feedwater
AR	action request
BOL	battery operated light
ECCS	emergency core cooling system
IFI	inspection followup item
LER	Licensee Event Report
MP	Maintenance Procedure
MPFF	maintenance preventable functional failure
NTS	Nuclear Technical Services
NQS	Nuclear Quality Services
OP	operating procedure
PDR	Public Document Room
SR	surveillance requirement
STP	surveillance test procedure
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
URI	unresolved item
WO	work order
1R8	Unit 1 eighth refueling

