

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-315, 50-316

License Nos: DPR-58, DPR-74

Report No: 50-315/96015; 50-316/96015

Licensee: Indiana Michigan Power Company

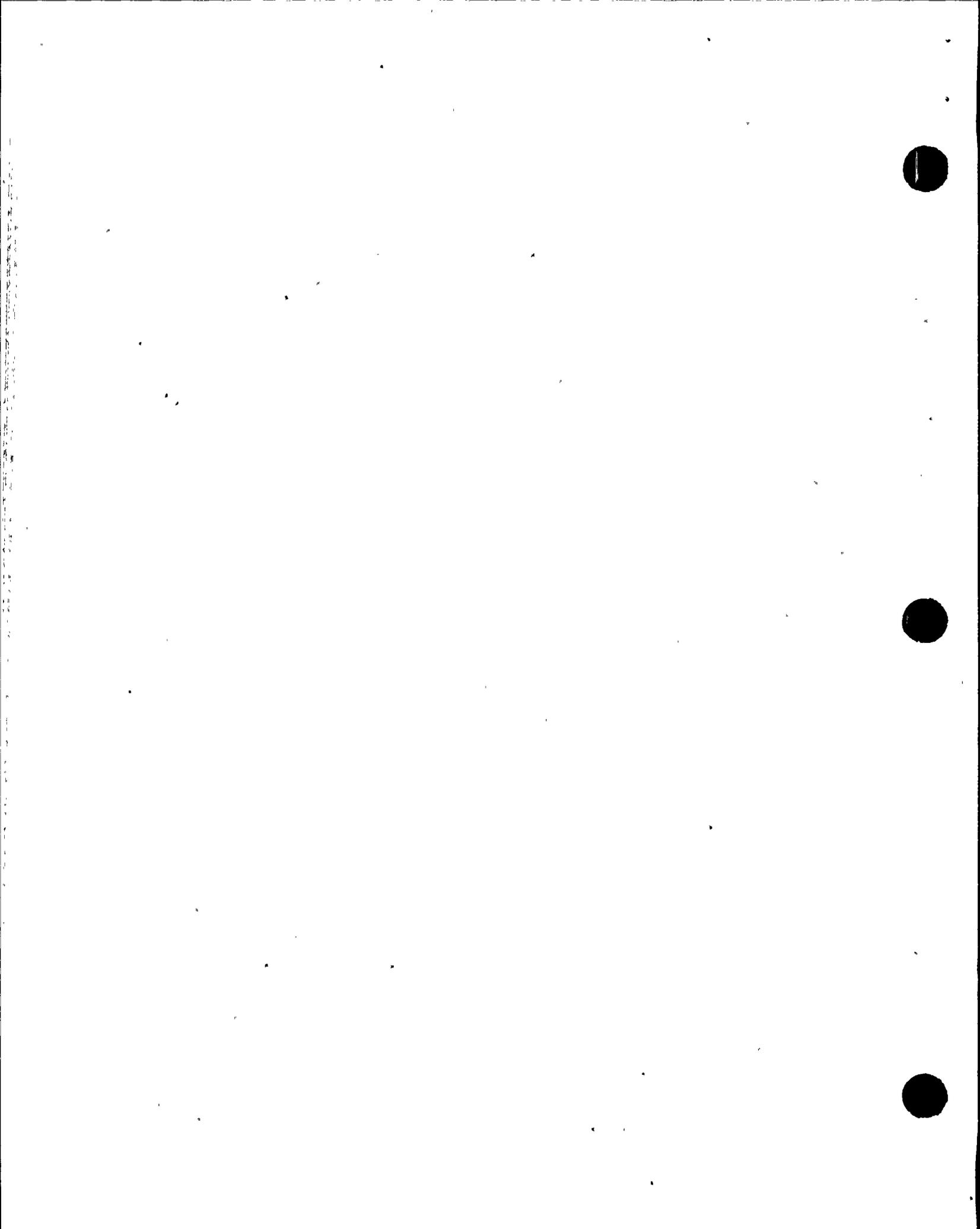
Facility: Donald C. Cook Nuclear Generating Plant

Location: 1 Cook Place
Bridgman, MI 49106

Dates: November 24, 1996 - January 5, 1997

Inspectors: B. L. Bartlett, Senior Resident Inspector
B. J. Fuller, Resident Inspector
J. D. Maynen, Resident Inspector

Approved by: Bruce L. Burgess, Chief
Reactor Projects Branch 6



Executive Summary

D. C. Cook Units 1 and 2 NRC Inspection Report 50-315/96015, 50-316/96015

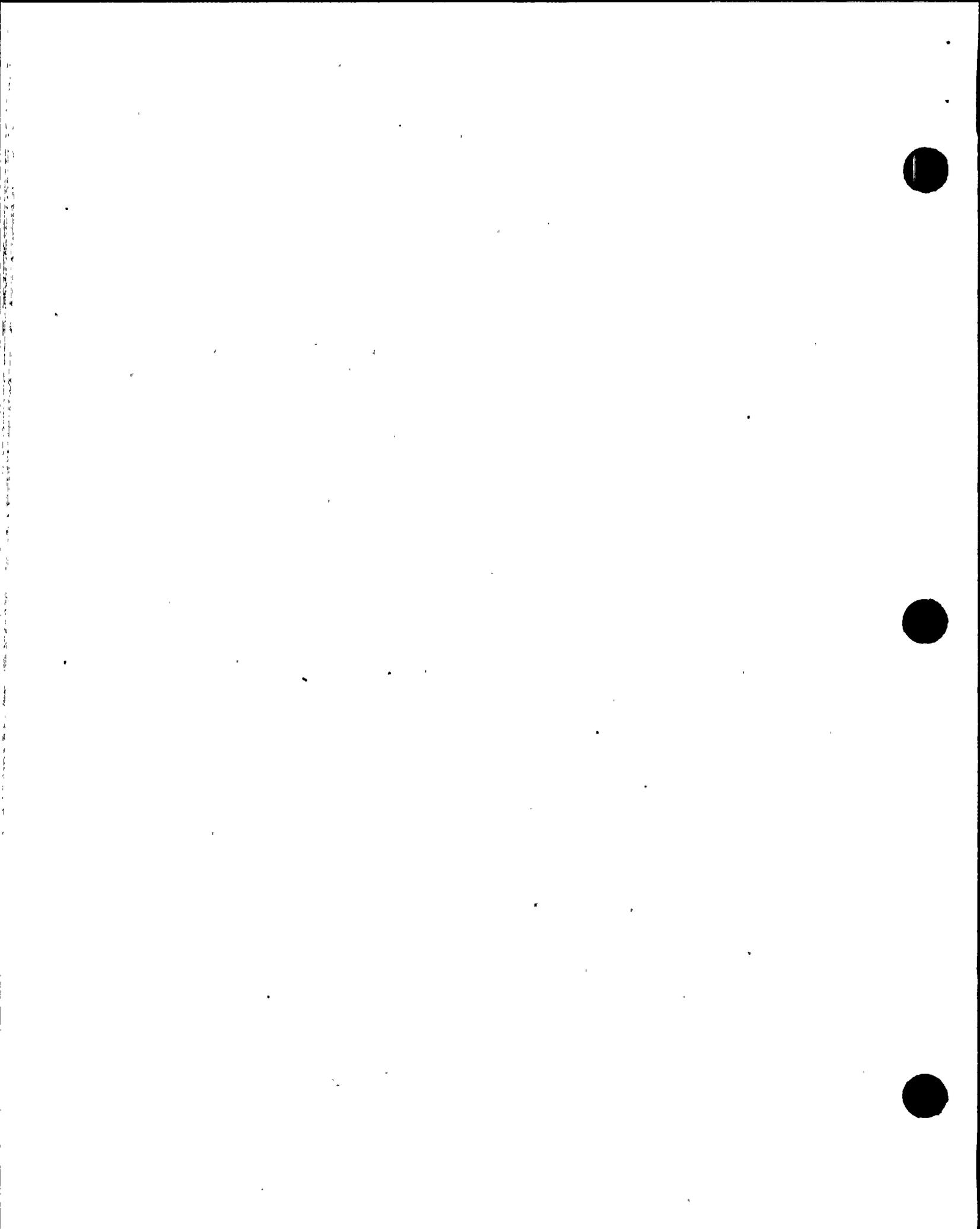
This inspection included aspects of licensee operations, maintenance, engineering, and plant support. The report covers a 6-week period of resident inspection and includes the follow-up to issues identified during previous inspection reports.

Operations

- The inspectors questioned the licensee's practice of performing Technical Specification 3.8.1.1 (A.C. Power) surveillances of breaker alignments prior to, rather than after rendering an A.C. power source inoperable. The licensee contacted NRR, and determined that TS 3.8.1.1 required that the surveillance be performed after removal of a power source from service. Eight examples of a violation of T.S. 3.8.1.1 were identified. Section O1.2
- The licensee failed to reinstall a safety-related fuse in a nonsafety-related breaker prior to returning the breaker to service. There was no safety consequence associated with this occurrence. Section O1.3
- The inspectors identified that plant staff was not controlling fuses in accordance with plant procedures. The licensee took appropriate corrective actions. Section O1.4
- The plant staff responded promptly to a fire alarm and subsequent Halon actuation in the Unit 2 process computer room. The root cause analysis and follow-up was thorough. Section O4.1

Maintenance

- The inspectors and the licensee simultaneously questioned the use of nonsafety grade pipe between the Trico oilers and the bearing housing of the Auxiliary Feedwater pumps. The installation of the nonsafety-related pipe was the result of inadequate design control. One violation of NRC requirements was identified. Section M1.2
- The inspectors witnessed Auxiliary Equipment Operators perform a valve position verification surveillance. The surveillance was performed in a thorough and careful manner. The licensee's procedures for checking the position of non-automatic valves was noted to be in compliance with technical specifications (TS); however, they contained inconsistencies that made it difficult to verify that all TS requirements were being met. Section M1.3



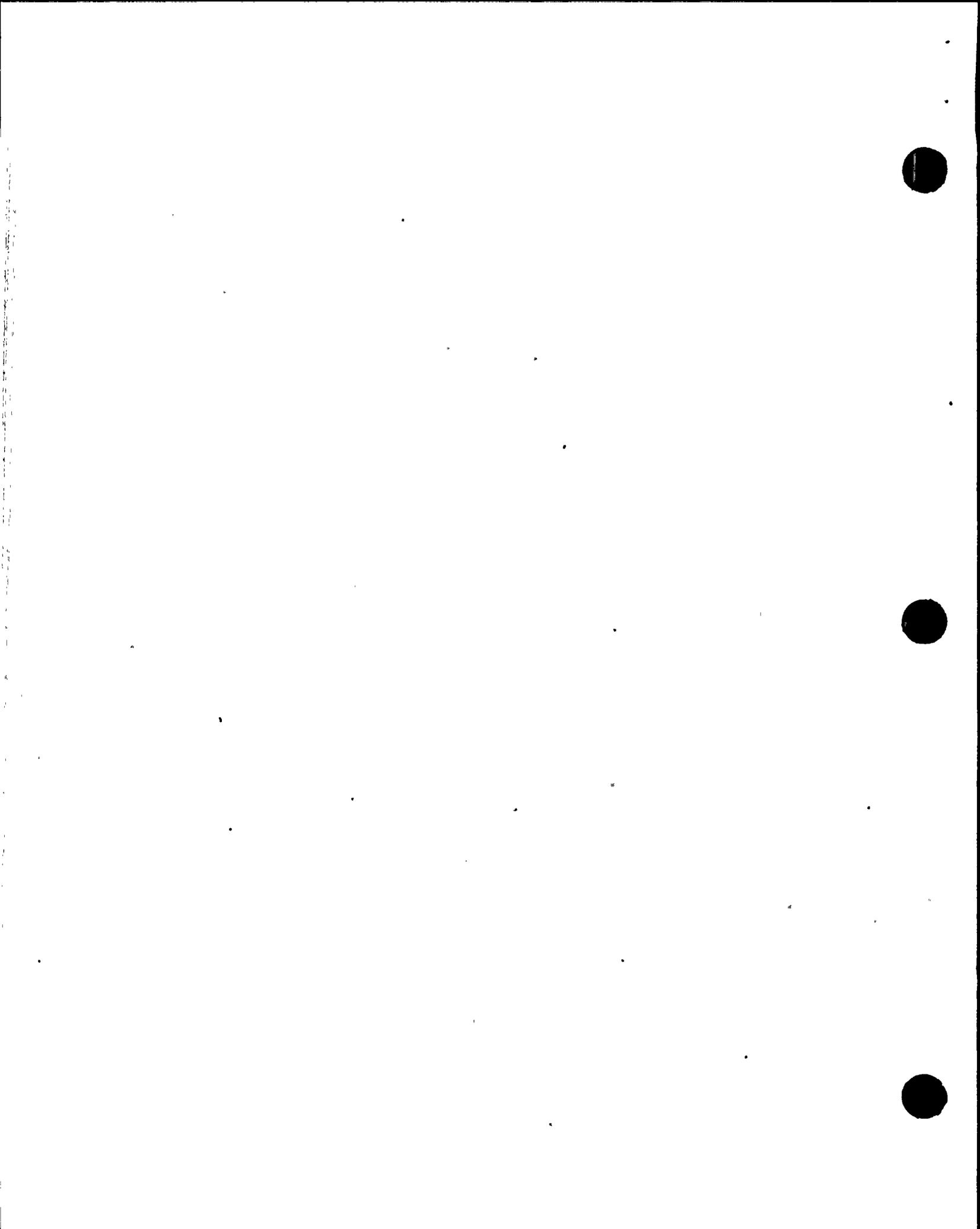
- The inspectors identified that licensee test personnel misread a spring scale and therefore, did not take accurate data during a TS required surveillance on the containment post loss of coolant accident fan dampers. This failure did not result in a TS non-compliance. Section M4.1

Engineering

- The licensee determined that nonsafety-related piping had been installed on a safety-related AFW pump. This was the result of inadequate design control. One violation of NRC requirements was identified. Section M1.2

Plant Support

- Routine observations were made by inspectors with no discrepancies noted.



Report Details

Summary of Plant Status

Unit 1 main transformer temperature limitations forced operation of the Unit at 92 percent to 94.7 percent power during the inspection period.

Unit 2 entered the inspection period at full power. On January 1, 1997, during a secondary side transient, power was reduced to 83 percent. The transient was caused by the failure of the master feedwater pump differential pressure recorder. Power was reduced to approximately 53 percent later that day in order to perform repairs of feedwater pump controllers. Power was restored to 100 percent on January 5, 1997.

I. Operations

01 Conduct of Operations

01.1 General Comments (71707)

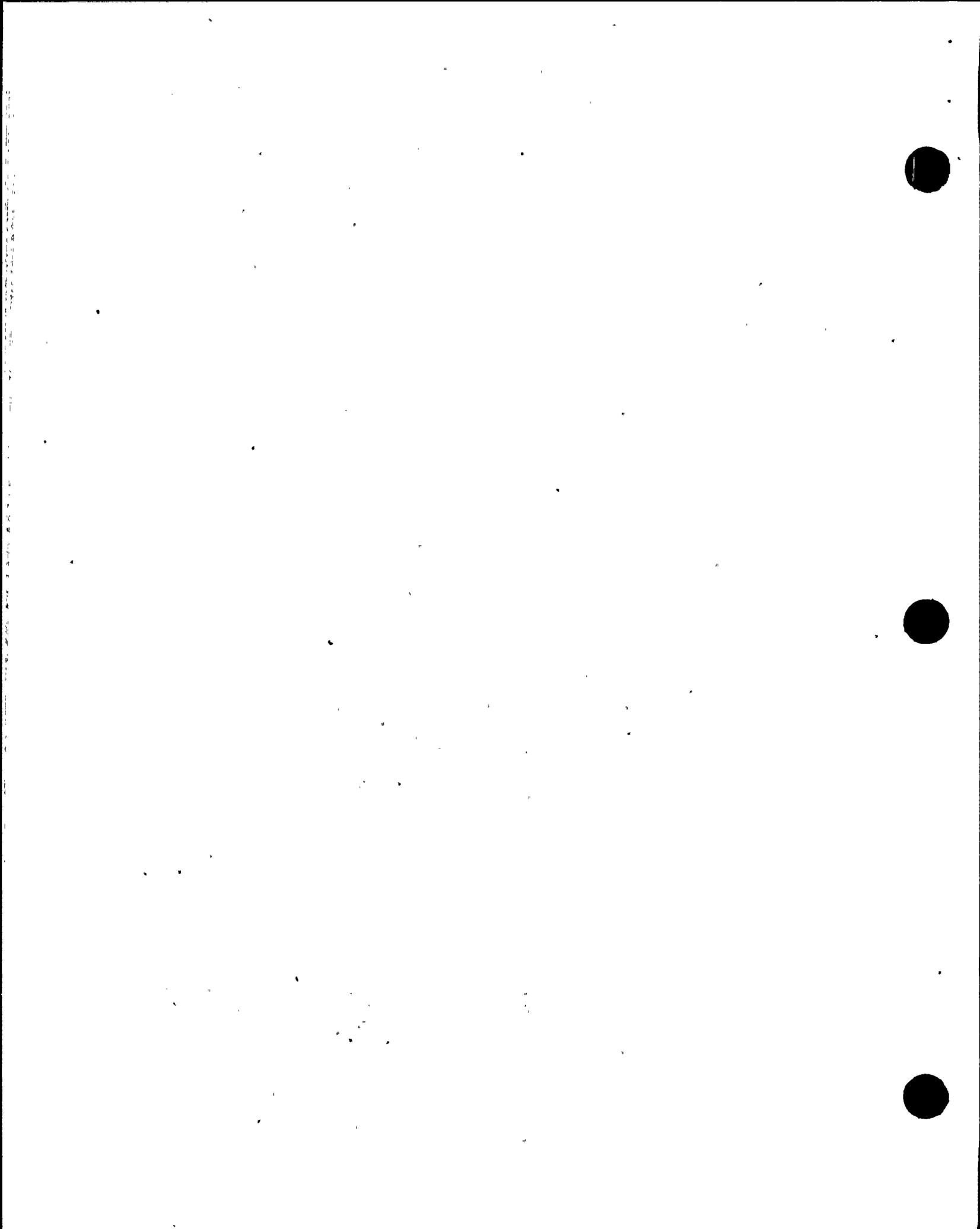
Using Inspection Procedure 71707, the inspectors conducted frequent reviews of ongoing plant operations. The conduct of operational activity that was observed was generally good. Specific events and noteworthy observations are detailed in the sections below.

01.2 Technical Specification Breaker Alignment Verification Not Performed Within 1 Hour of Removing AC Electrical Source From Service (Both Units)

a. Inspection Scope (71707)

On November 24, 1996, the 12 EP Bus (69 kV emergency power) was taken out of service for maintenance. Later on the same shift, the Unit 1 CD diesel generator was declared inoperable for surveillance testing. The inspectors reviewed the following documents:

- Control Room Logs (both units) between June 1, 1996 and December 15, 1996
- Operations Head Procedure (OHP) 4030.STP.031, "Operations Weekly Surveillance Checks," Data Sheet 1, "Breaker Alignment," between June 1, 1996, and December 15, 1996
- Condition Report (CR) 96-1964
- Licensee Event Report 50-315/96007-00, "One Hour Action Statement For Technical Specification 3.8.1.1.a Not Met Due to Incorrect Interpretation of Action Statement Wording"



- Licensee Event Report 50-316/96009-00, "Technical Specification Required Surveillance for Inoperable Emergency Diesel Generator Not Completed Due to Personnel Error"
- Operations Standing Order 125, "STP.031 Breaker Alignment for Preplanned Work on Electrical Power Sources"

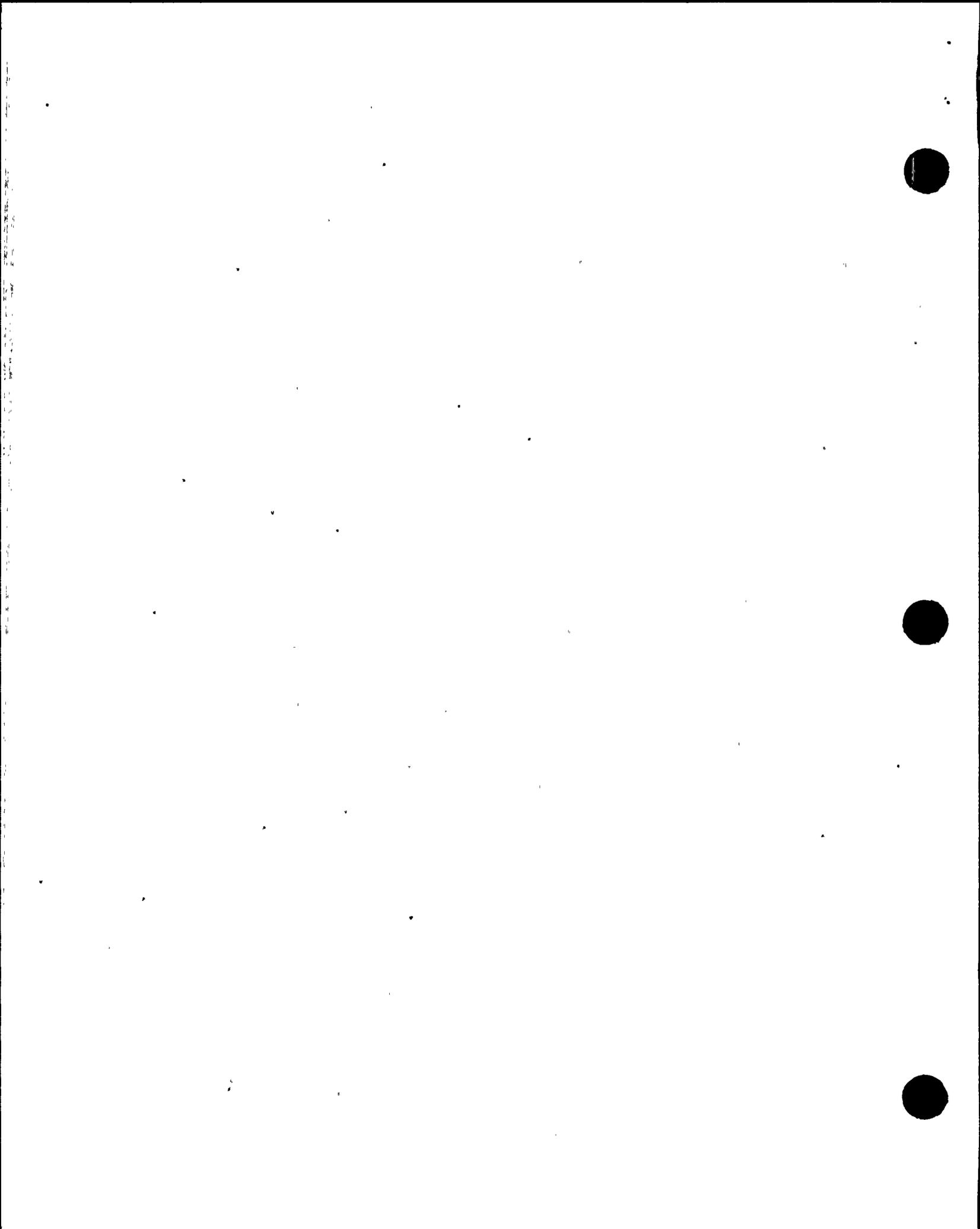
b. Observations and Findings

On November 24, 1996, at 1800, the licensee completed OHP-4030.STP.031, Data Sheet 1, "Breaker Alignment," in preparation for taking the 12 EP Bus out of service for maintenance. At 1855, the 12 EP Bus was declared inoperable. Technical Specification (TS) 3.8.1.1 required, in part, that, with an offsite circuit of the required AC electrical power sources inoperable, the operability of the remaining AC offsite sources to be demonstrated by performing a breaker alignment within 1 hour and at least once per 8 hours thereafter. The 12 EP Bus was declared operable 6 hours and 48 minutes later, but the TS required breaker alignment was not performed while the bus was out of service.

On November 25, 1996, at 0320, the same shift declared the Unit 1 CD Diesel Generator (DG) inoperable for maintenance. A breaker alignment was completed 10 minutes prior to taking the Unit 1 CD DG out of service. The next breaker alignment was completed at 0842 the same day.

In both cases, the breaker alignment was performed less than 1 hour prior to declaring the emergency power source inoperable; however, no breaker alignment was performed within 1 hour after declaring the power source inoperable. The subsequent breaker alignments performed within the 8 hour interval identified no breaker lineup discrepancies; therefore, the safety significance of the missed TS requirement was minimal. The operations supervisor stated that performing the breaker alignment prior to declaring an emergency power source inoperable for scheduled maintenance had been the normal licensee practice since 1991. The licensee explained that by performing the breaker alignment prior to removing a power source, they were confident that all power sources were operable prior to removing one from service. Additionally, the licensee interpreted the TS 3.8.1.1 statement "within one hour" to mean within one hour before or after removing the power source from service.

The inspectors reviewed the control room logs and breaker alignment records since June, 1996. The cases listed below, representing about 25 percent of the total cases reviewed when an emergency AC power source was declared inoperable, had a breaker alignment completed less than 1 hour prior to declaring the equipment inoperable. In the remaining cases reviewed, the TS required breaker alignment was completed within 1 hour following the removal of the equipment from service. The inspectors found no obvious pattern to whether the breaker alignment was completed prior to taking the power source out of service or after taking the power source out of service. Additionally, the inspectors found no instances where more than 8 hours elapsed between breaker alignments.



- On June 26, 1996, at 0356, the 12 AB Bus (69 kV emergency power) supply breaker was opened for maintenance; however the TS required breaker alignment was not completed until 0930.
- On August 13, 1996, the Unit 2 CD DG was declared inoperable at 0500; however, the TS required breaker alignment was not completed until 1036.
- On August 16, 1996, the Unit 2 CD DG was declared inoperable at 1032; however, the TS required breaker alignment was not completed until 1609.
- On August 18, 1996, the Unit 1 CD DG was declared inoperable at 1030; however, the TS required breaker alignment was not completed until 1552.
- On August 24, 1996, at 0520, the 12 AB Bus (69 kV emergency power) supply breaker was opened for maintenance; however, the TS required breaker alignment was not completed until 0955.

In addition to the above examples of a failure to perform the TS 3.8.1.1 required breaker alignment, on May 9, 1996, another example was identified by the licensee and documented in LER 50-316/96009-00. The root cause was identified as the failure to declare the Unit 2 AB Emergency Diesel Generator inoperable while it was paralleled to the grid; therefore, the action statement of TS 3.8.1.1 was not entered.

A Condition Report (CR 96-1964) was written to evaluate the TS Limiting Condition for Operation surveillance requirement, and on November 27, 1996, Operations Standing Order 125, "STP.031 Breaker Alignment for Preplanned Work on Electrical Power Sources," was issued to define "within one hour" as within one hour after declaring the equipment inoperable. LER 50-315/96007-00 was issued to document the missed TS Action Statement requirement.

c. Conclusions

Licensee personnel interpreted Technical Specification 3.8.1.1 "within one hour" to mean within one hour before or after removing an AC power source from service. Additionally, the inspectors noted inconsistent practice in performing the breaker alignment, with the alignment being performed correctly approximately three quarters of the time. The examples of a failure to perform a breaker alignment within 1 hour of removing a required AC electrical offsite power source from service were considered to be a violation of technical specification 3.8.1.1 (50-315/316/96015-01).



O1.3 Failure to Properly Return the Containment Lighting Transformer Supply Breaker to Service (Unit 2)

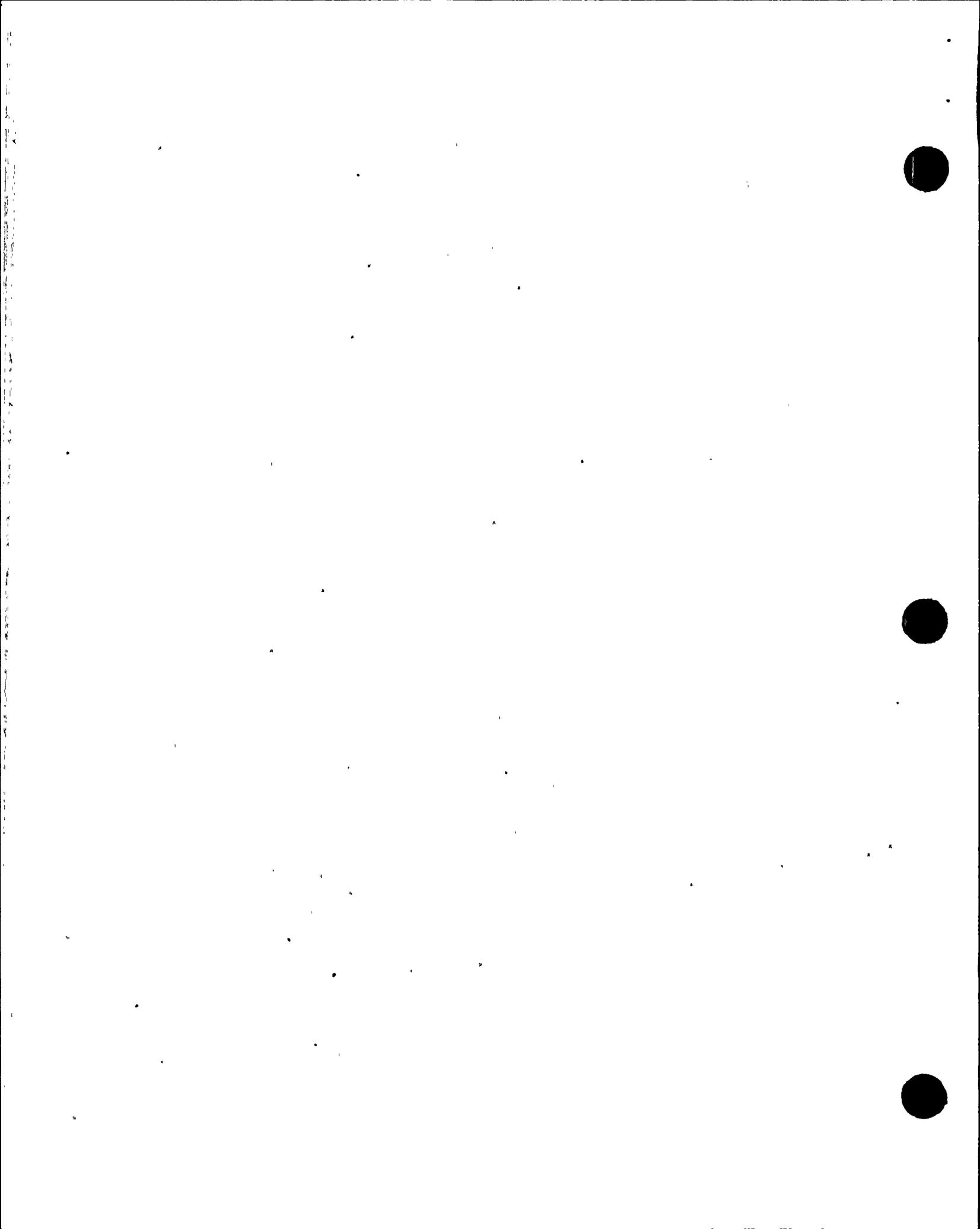
a. Inspection Scope (71707)

On December 29, 1996, during performance of OHP-4030 STP.031 data sheet 1, the Unit 2 Turbine Building Auxiliary Equipment Operator (AEO or non-licensed operator) observed breaker 2-21D3, the 600 VAC supply to containment lighting transformer 2-TR-LTG-10, to be in service with its control power fuses removed. The inspectors followed up on the licensee's response to this event.

b. Observations and Findings

Containment lighting, a non-safety related load, was designed to automatically shed from the bus supplying breaker 2-21D3 if plant conditions required an emergency start of the Emergency Diesel Generator (EDG). The licensee questioned the operability of the Unit 2 CD EDG because with the control power fuses removed, breaker 2-21D3 would not properly load shed on an automatic EDG start signal. The licensee reinstalled the control power fuses, and subsequently determined that the DG was operable due to the relatively small load (18 amps and 95 kW) added to the bus by the containment lighting transformer compared to the lowest single phase output of the DG (about 490 amps). The calculated DG load was determined to be 3310 kW. With the extra 95 kW from the containment lighting transformer, the load on the DG would be less than the maximum allowable load of 3500 kW. In addition, the licensee calculated the dynamic effects of maintaining a 95 kW load on the diesel generator during the initial loading of the bus and the loading on the diesel generator when large loads were being sequenced onto the bus. The Unit 2 CD DG was determined to be fully operable.

The licensee identified a routine cleaning of breaker 2-21D3 on November 1, 1996, as the most likely time when the control power fuses were removed. Because routine breaker cleaning was not normally accomplished under a clearance, the licensee speculated that the fuses were not reinstalled when breaker 2-21D3 was reinserted in its cubicle. Operations Head Procedure (OHP) 4021.082.009, "Racking In and Out 4kV, 600V, and 480 VAC Breakers," Revision 5, Change Sheet 1, Step 6.3.11 required the operator to insert the control power fuses after racking in the breaker. After identifying the procedural error, the licensee revised OHP-4021.082.009 (Revision 6) and added, in part, the requirement that the operator initial Data Sheet 1, "Breaker Configuration Tracking Sheet," whenever control power fuses are removed or reinstalled.



c. Conclusions

The failure to reinstall the control power fuses in breaker 2-21D3, as required by procedure OHP-4021.082.009, was a violation of T.S. 6.8.1. This licensee identified and corrected violation is being treated as a Non-Cited Violation, (50-316/96015-02) consistent with Section VII.B.1 of the NRC Enforcement Policy. The licensee's corrective actions were appropriate. There was no safety consequence associated with this issue.

01.4 Control of Breaker Fuses (Both Units)

a. Inspection Scope (71707)

The inspectors reviewed the implementation of the licensee's fuse control plan.

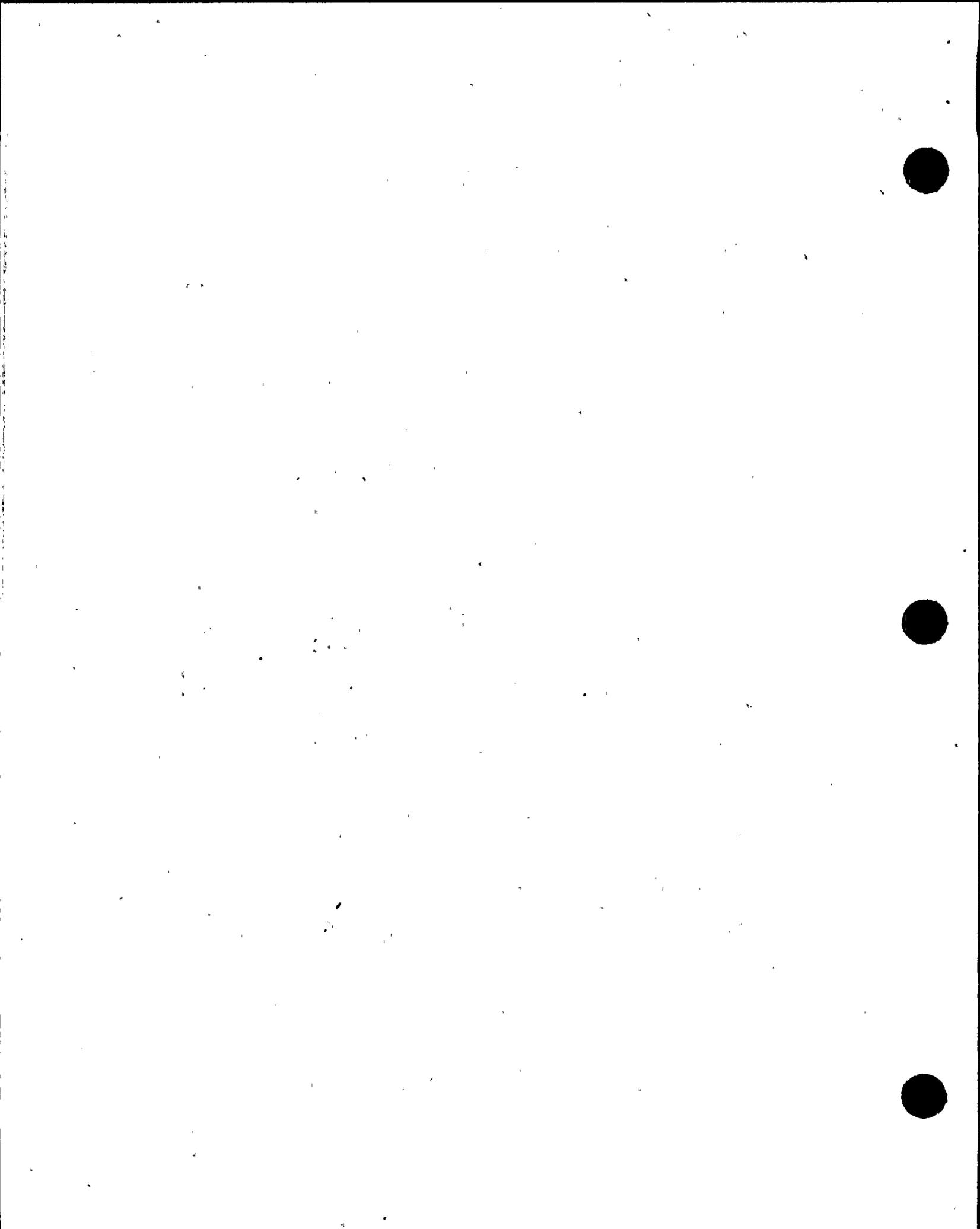
b. Observations and Findings

The inspectors questioned the maintenance staff about current practices for controlling fuses. The licensee replied that fuses were normally controlled by hanging removed fuse blocks on hangers attached to the breaker panel near the breaker location.

Step 3.8.1 of Plant Manager Procedure (PMP) 6065.FUS.001, "Fuse Control," Revision 0, states, in part, "whenever fuses, individual fuses or fuse blocks, are removed which are to be reinserted, the fuses will be placed in a plastic bag and labeled with the component, panel, and circuit from which they were removed. The bagged fuses will be stored in a manner to maintain accountability." After the inspectors discussed the discrepancy between the procedure and hanging the fuse blocks on the hangers with the licensee, all removed fuses and fuse blocks were bagged, labeled, and stored in a locker in the Shift Supervisor's office. The licensee planned to continue to control fuses in accordance with the current revision of PMP-6065.FUS.001 until a procedure change was approved.

c. Conclusions

The inspectors identified that plant staff was not controlling removed fuses in accordance with plant procedures. The safety significance was minor and the licensee took prompt corrective actions. The failure to reinstall the control power fuses in accordance with Plant Manager Procedure (PMP) 6065.FUS.001, was a violation of TS 6.8.1. This failure constituted a violation of a minor significance and is being treated as a Non-Cited Violation, (50-316/96015-03) consistent with Section IV of the NRC Enforcement Policy.



O4 Operator Knowledge and Performance

O4.1 Halon Actuation in the Process Computer Room (Unit 2)

a. Inspection Scope

On December 4, 1996, an unexpected Halon actuation occurred in the Unit 2 Process Computer Room (PCR). Through direct observation, log review, and personnel interviews, the inspectors assessed plant response, including control room, fire brigade, and security force actions.

b. Observation and Findings

On December 4, 1996, the licensee was swapping the in-service Unit 2 Control Room HVAC train which required both trains to be in service simultaneously for a short period of time. As a result, the temperature in the Unit 2 PCR dropped. The licensee's evaluation determined that the lowering temperature caused a heater strip in the ventilation duct to energize. When the heater strip energized, accumulated dust which had settled out in the ductwork was baked off and sensed by the fire detection system as a fire. A Halon initiation occurred, as designed. The PCR was unoccupied at the time, and no injuries were reported. Fire brigade personnel entered and inspected the Unit 2 PCR and the Control Room HVAC units but found no evidence of damage or fire. Unit 2 remained at full power throughout the event, with no effects noted on the reactor plant. The licensee cleaned and inspected both Unit 1 and Unit 2 Control Room HVAC systems in order to prevent further spurious Halon actuations, and a routine fire watch was established until the Unit 2 PCR Halon bottle was recharged.

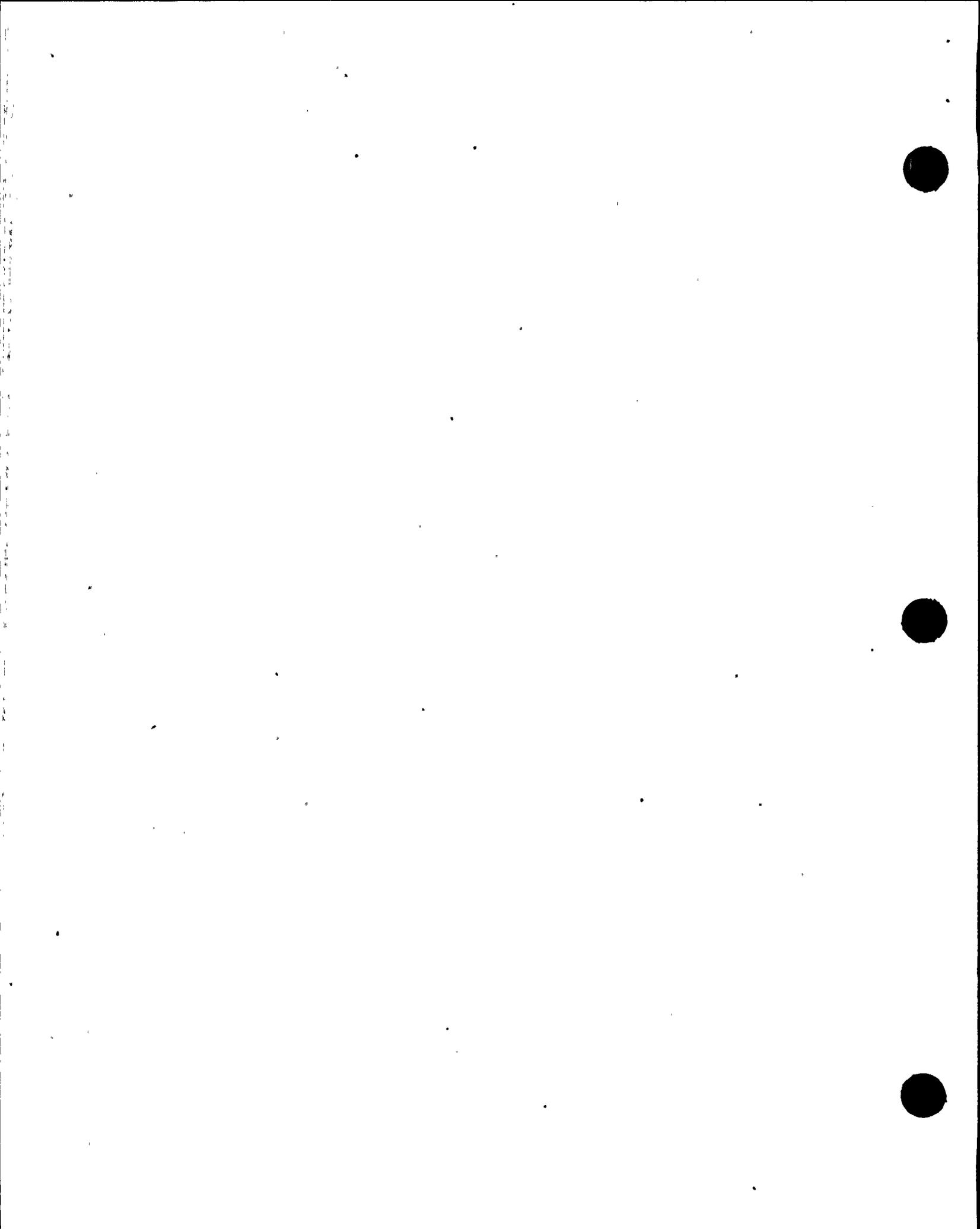
c. Conclusions

The plant staff responded promptly to the false fire indication and subsequent Halon actuation in the Unit 2 process computer room. The root cause analysis and follow-up was thorough.

O8 Miscellaneous Operations Issues

O8.1 (Closed) LER 50-315/96007-00: One Hour Action Statement For Technical Specification 3.8.1.1.a Not Met Due to Incorrect Interpretation of Action Statement Wording. This LER was issued to report the condition discussed above in paragraph O1.2. The corrective actions documented in the LER will be tracked under violation (50-315/316-96015-01). No additional instances were noted, and the inspectors had no further concerns. This LER is closed.

O8.2 (Closed) LER 50-316/96009-00: Technical Specification Required Surveillance for Inoperable Emergency Diesel Generator Not Completed Due to Personnel Error. On May 9, 1996, during routine surveillance testing, the Unit 2 AB Emergency Diesel Generator became inoperable. Due to a misinterpretation of the Technical Specification for running an Emergency Diesel Generator (EDG) paralleled to the



grid, the operators did not declare the Unit 2 AB EDG inoperable. As a result, the breaker alignment required by TS 3.8.1.1 was not performed. The failure to perform a breaker alignment within 1 hour of removing a required AC electrical offsite power source from service was an additional example of a violation of technical specification 3.8.1.1 (50-315/316/96015-01) discussed above in paragraph O1.2. The corrective actions documented in the LER will be tracked under this violation. This LER is closed.

II. Maintenance

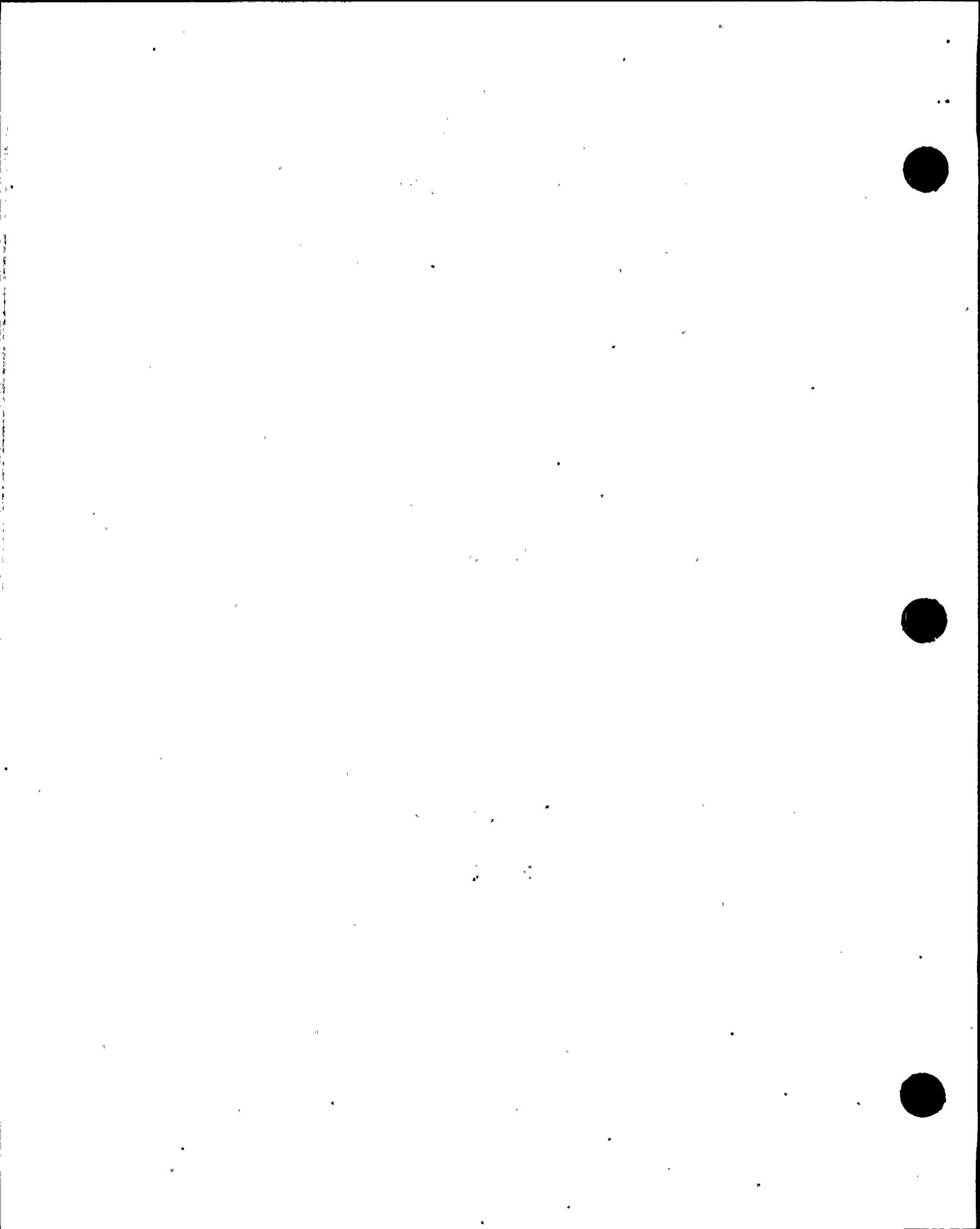
M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (62703 and 61726)

Portions of the following maintenance job orders, action requests, and surveillance activities were observed or reviewed by the inspectors:

- C0037975 Recorder 1-SG-10 replacement, including the planned de-energization of Unit 1 Control Room Annunciator Panel 104
- C0039177 Repair oil leaks from the inboard and outboard bearings of the Unit 2 West Motor Driven Auxiliary Feedwater Pump (MDAFWP)
- C0039224 Replace portions of the bearing oil piping to the Unit 1 West MDAFWP
- 02 EHP-4030.STP.203 Unit 2 Type B & C Leak Rate, Revision 2, on 2-VCR-204, Lower Containment Purge Outboard Isolation Valve
- 12 EHP-4030.STP.209 Test of containment hydrogen skimmer ventilation, Revision 0
- 01 OHP-4030.STP.035 Controlled valve position logging, Revision 18
- 01 OHP-4030.STP.017E East motor driven auxiliary feedwater system test, Revision 7
- 01 OHP-4030.STP.017T Turbine driven auxiliary feedwater system test, Revision 11
- 01 OHP-4030.STP.053A Emergency core cooling system valve operability test - Train A, Revision 9



- 01 OHP-4030.STP.053B Emergency core cooling system valve operability test - Train B, Revision 9
- 12 OHP-4030.STP.031 Operations Weekly Surveillance Checks, Data Sheet 1, "Breaker Alignment," Revision 7

b. Observations and Findings

The inspectors found the work performed under these activities to be generally of good quality with procedures present and in use. Comments for specific work activities are discussed in further detail below.

M1.2 Oil Leaks on the Auxiliary Feedwater Pumps and Quality Level of the Piping to the Trico Oilers (Both Units)

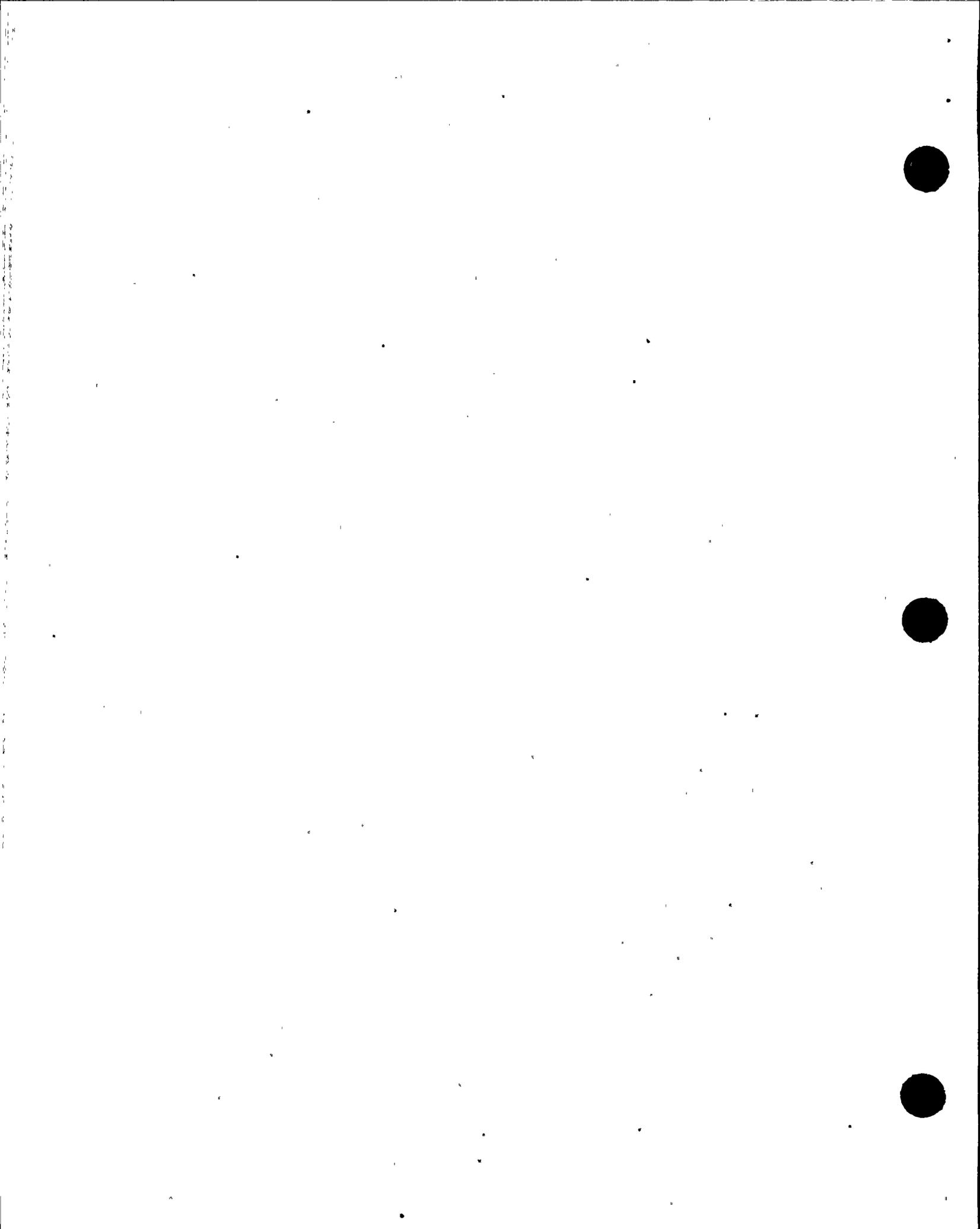
a. Inspection Scope (71707)

During the observations of the work being performed under job order C0039177, the inspectors developed several questions. The questions centered on whether the piping between the bearing housing and the oiler needed to be safety grade and on whether the oil levels of the other auxiliary feedwater pumps were appropriate. However, licensee personnel developed the same questions independently of and about the same time as the inspectors. Therefore the inspectors observed the licensee's investigation, short term corrective actions, and long term corrective actions.

b. Observations and Findings

During the repair of three oil leaks on the Unit 2 West MDAFWP, the inspectors observed the workers take height measurements for the Trico oilers. The workers determined that both the inboard and the outboard oilers were too high. The extra height would not damage the bearings but did contribute to the oil leaks. The inspectors questioned the workers, their supervisor, a system engineer and a component engineer as to why the oilers were set too high. None knew the cause. The inspectors questioned whether the setpoint of the oilers to the other auxiliary feedwater pumps (AFW) was appropriate but did not communicate this question immediately to the licensee.

During the work activities the workers decided they would have to replace certain portions of the piping connecting the Trico oilers to the bearing housings. Replacement of the piping would enable the workers to physically lower the oilers relative to their previous height above the bearing housings. The inspectors observed the mechanical planner prepare the paperwork that would enable the workers to get the necessary parts from the licensee's warehouse. The planner showed the inspectors that he could not find any safety related elbows, piping or Trico oilers but he had an engineering memo, dated April 1, 1991, which allowed him to utilize non-safety related components.



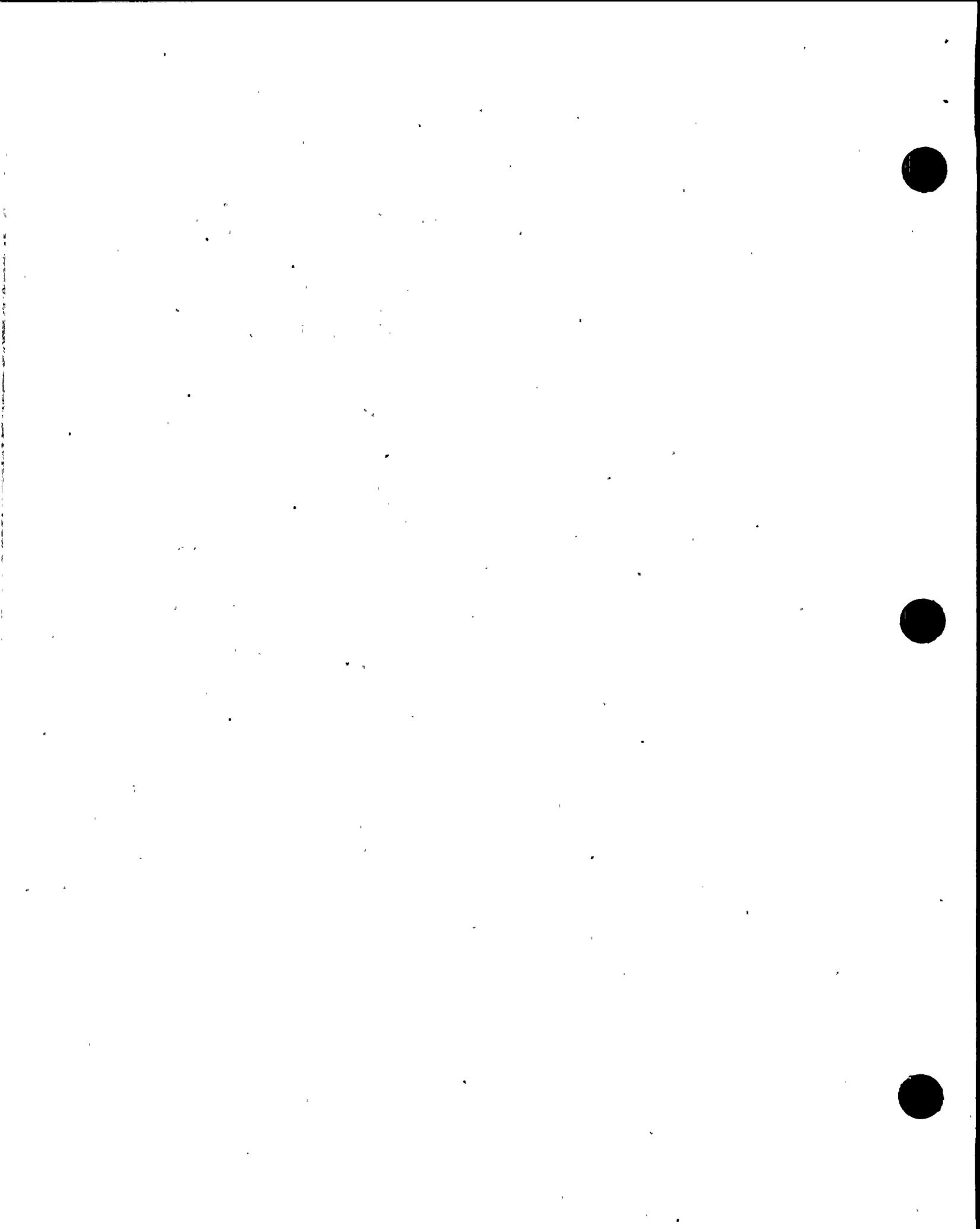
The inspectors reviewed the memorandum and found that it stated that the failure of both the Trico oilers and the connecting pipe would not affect the safety function of the AFW pumps. The inspectors disagreed with the memo, as failure of the connecting piping would allow the oil in the bearing housing to drain and the bearings would fail. Failure of the Trico oiler would not cause the bearing housing to drain. The inspectors needed to perform additional inspection of this issue, so questions of the memo were not immediately communicated to the licensee.

Approximately one hour later, the licensee developed both of the above concerns (oil level setpoint of other AFW pumps and quality level of the connecting piping) independently of the inspectors. The component engineer and the AFW system engineer had performed measurements of some of the other AFW pumps oil level setpoints and determined additional immediate followup was required. During a licensee meeting to discuss these concerns, the appropriateness of allowing non-safety related components to be used in the piping to the oilers was questioned. As the licensee identified these concerns in a timely manner, separate from and independent of the inspectors, these items were considered to be licensee identified.

The licensee initiated condition reports and began immediate operability assessments. Initially, the operability assessments of the AFW pumps due to the oil level and the quality level of the piping concerns were determined to be performed promptly with the exception of the performance of the dynamic loads on one oiler. One of the oilers was measured to be 5 and 3/8 inches away from the pump instead of the expected 5 inches. The extra length would cause the loads experienced by the connected piping to be greater than expected. The licensee performed a static load assessment but did not perform a prompt dynamic load assessment until requested by the NRC inspectors. The licensee later informed the inspectors that the dynamic load assessment was not immediately performed, as the static load calculations showed a factor of 37 safety margin and that the dynamic loads would be no more than a factor of 5 to 10 more than the static loading.

10 CFR 50, Appendix B, Criterion III, "Design Control," requires that measures be established for the selection and review of parts for suitability of application that are essential to the safety-related functions of structures, systems and components. The use of an April 1, 1991, engineering memorandum to authorize the selection of non-safety grade pipe on a safety related AFW system was considered by the inspectors to be a violation of Criterion III (50-316/96015-04(DRP)).

The licensee performed additional work on the AFW pump oilers to ensure they were installed in a consistent manner and in accordance with vendor recommendations. These efforts consisted of ensuring that all oilers were at the proper setpoint and that all piping was schedule 80. One pipe piece was found to



be schedule 40 while all others were found to be schedule 80. Schedule 40 was found to be in accordance with the vendor manual recommendations. However, the pipe was replaced with schedule 80 piping to make it consistent with the other AFW pump oilers.

c. Conclusions

The licensee determined in conjunction with the inspectors that nonsafety-related piping had been installed on a safety-related AFW pump. This was the result of inadequate design control. One violation of NRC requirements was identified.

M1.3 Observations of a Valve Lineup Surveillance (Unit 1)

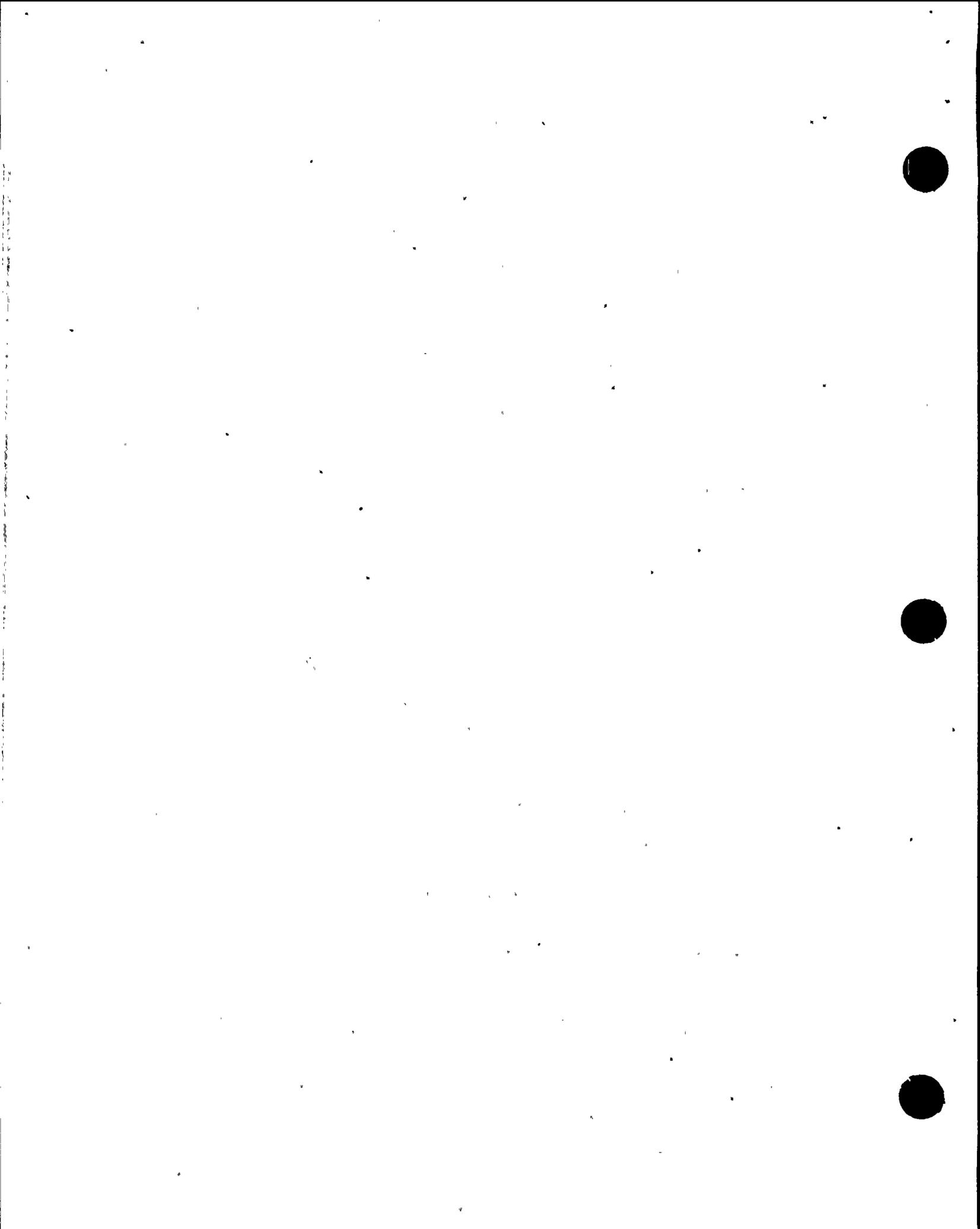
a. Inspection Scope (61723)

During observations of a routine valve lineup surveillance, the NRC inspectors had several comments and questions. No operability questions or concerns were raised.

b. Observations and Findings

During observations of surveillance test 01 OHP-4030.STP.035, the inspectors had the following comments/questions:

- The AEOs who performed the valve lineup procedure were noted to carefully check both the presence of the seal and the valve position on each valve.
- The inspectors had observed that due to equipment lineup changes, the procedure as written would need to be modified. One of the AEOs had already observed this difference and noted it in the procedure. The AEO notified the Unit Supervisor prior to completing the valve check list and the check list was appropriately modified.
- Due to a commitment, the licensee was verifying all manual valves in the flow paths of certain systems, not just those required by TSs. The TS requirement typically would be stated as "...by verifying once per 31 days that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position." However, during a review of the TSs, the NRC inspectors observed that TS surveillance requirement 4.7.1.2.c for the auxiliary feedwater pumps did not have the requirement to be performed once per 31 days. The licensee agreed to request a TS change to add the requirement in order to be consistent with the standard TS.
- Some suction pressure gage isolation valves that were not in the flow path were checked in the surveillance procedure. However, this was inconsistent in that discharge pressure gages were not checked.



- The work documentation accompanying the surveillance test stated that the surveillance test was being performed as required by TS. However, no such TS requirements existed. Licensee personnel informed the inspectors that a commitment existed in a letter dated December 11, 1979. In this letter, and in response to a NRC request, the licensee committed to check the position of both the controlled and uncontrolled non-automatic valves. Licensee personnel also informed the inspectors that to ensure that the commitment was met, it was treated as an internal TS requirement.

c. Conclusions

The inspectors witnessed AEOs perform a valve position verification surveillance. The surveillance was performed in a thorough and careful manner. The licensee's procedures for checking the position of non-automatic valves was noted to be in compliance with TSs however, they contained inconsistencies which made it difficult to verify that all TS requirements were being met.

M4.1 Misreading of Test Instrumentation During A Ventilation Test (Unit 2)

a. Inspection Scope (61723)

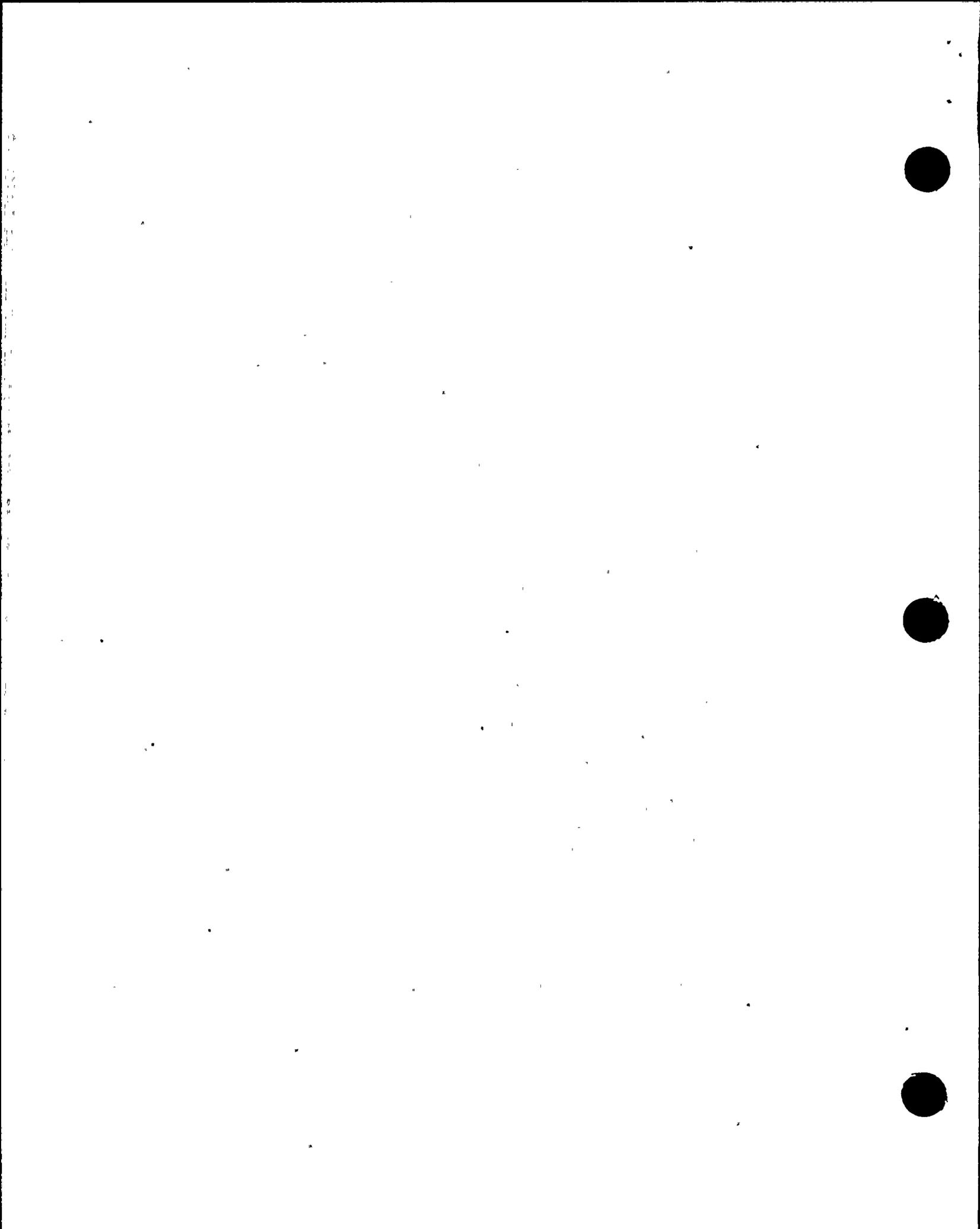
During the routine review of the test results for one surveillance, the inspectors observed that the results recorded for one value did not match the scale of the test instrumentation. The inspectors informed licensee personnel, performed additional followup, and observed the licensee's corrective actions.

b. Observations and Findings

During the review of the test documentation for the Unit 2, number 1 containment hydrogen skimmer fan surveillance, the inspectors observed that the test performers had recorded an opening force of 9.2 lbs for the backdraft damper. However, during the inspection of the test instrumentation that was used, the inspectors observed that the calibrated spring scale (CNP-791) was marked in increments of 0.25 lbs force.

The inspectors informed the test engineer of the discrepancy and he began an immediate evaluation. During his review the test engineer identified that test personnel had misread the scale of the test instrument. Instead of noticing it was divided into increments of 0.25 lbs force they thought it was divided into increments of 0.10 lbs force. Thus when they recorded a value of 9.2 lbs force it was actually reading 9.5 lbs force.

The technical specification requirement specified that the opening force must be less than or equal to 11.0 lbs force. Therefore, the misreading, in this instance, did not result in a TS violation. However if the test data had been closer to the TS limit, then the TS limit could have been exceeded accidentally. The licensee began a review of test data for the last two years in an effort to ensure that no TS limits had been exceeded.



The results of the data review showed that at no time had the TS limits been exceeded with the as-found or as-left data although other examples of misreading the test instrumentation were identified. A condition report was issued by the licensee and the test performers cautioned to more carefully read their test instruments.

c. Conclusions

The failure of licensee test personnel to be observant to detail resulted in the failure to take accurate data during a TS required surveillance on the containment post loss of coolant accident fan dampers. This failure did not result in a TS non-compliance. The failure of the test personnel to properly record data in accordance with surveillance procedure 12 EHP-4030.STP.209, "Test of Containment Hydrogen Skimmer Ventilation," Revision 0, was a violation of TS 6.8.1. This failure constituted a violation of minor significance and is being treated as a Non-Cited Violation, (50-315/316/96015-05) consistent with Section IV of the NRC Enforcement Policy.

III. Engineering

E1 Conduct of Engineering

During the resident inspection activities, routine observations were conducted in the areas of engineering using Inspection Procedure 37551. No discrepancies were noted. Engineering involvement in the auxiliary feedwater pump oiler issues discussed in Section M1.2 was noted to be prompt, thorough, and timely.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls (71750)

During the resident inspection activities, routine observations were conducted in the areas of radiological protection and chemistry controls using Inspection Procedure 71750. No discrepancies were noted.

S1 Conduct of Security and Safeguards Activities (71750)

During normal resident inspection activities, routine observations were conducted in the areas of security and safeguards activities using Inspection Procedure 71750. No discrepancies were noted.

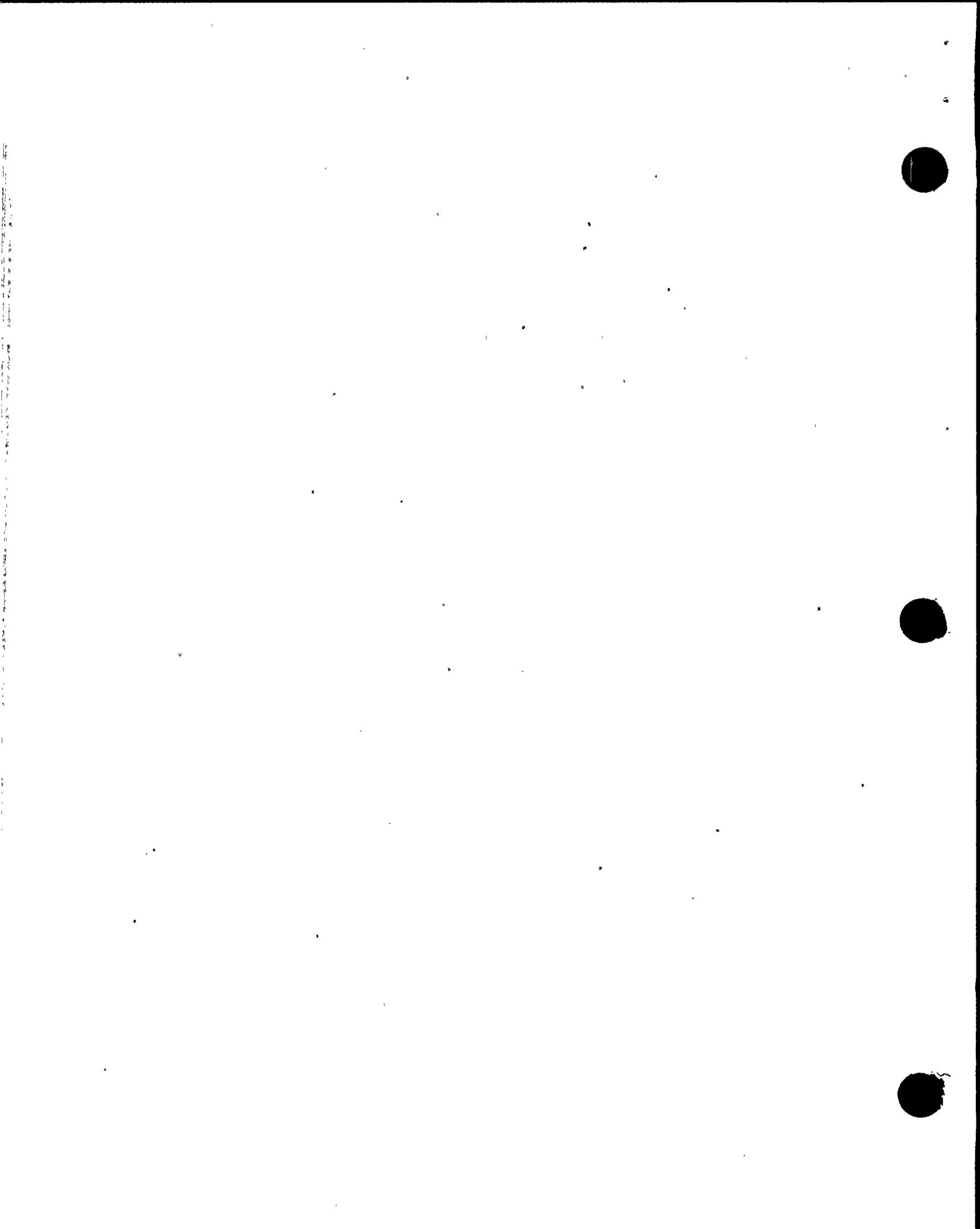
F1 Control of Fire Protection Activities (71750)

During normal resident inspection activities, routine observations were conducted in the area of fire protection activities using Inspection Procedure 71750. No discrepancies were noted.



X1 Exit Meeting

The inspectors presented the inspection results to members of the licensee management at the conclusion of the inspection on January 10, 1997. The licensee acknowledged the findings presented.

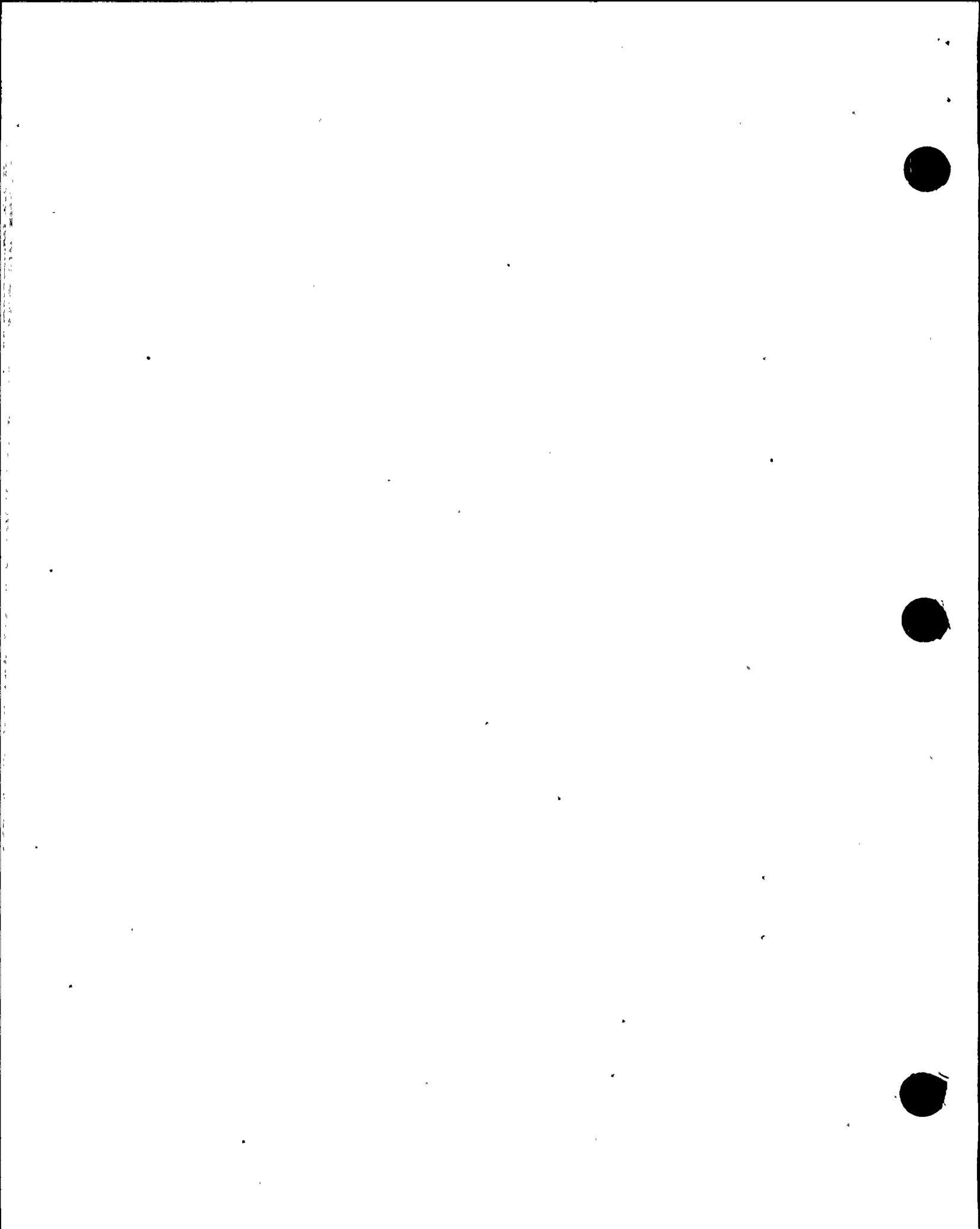


PARTIAL LIST OF PERSONS CONTACTED

Licensee

#J. Allard, Maintenance Superintendent
T. Andert, Chemistry Supervisor
M. Ackerman, Manager Nuclear Licensing
M. Barfelz, NUC Licensing
#A. Blind, Site Vice President
S. Brewer, Manager Regulatory Affairs
M. Depuydt, Licensing Coordinator
E. Fitzpatrick, Senior Vice President Nuclear Generation Group
S. Foley, Senior Engineer
R. Gillespie, Operations Superintendent
J. Kingseed, Manager Nuclear Safety and Analysis
#J. Kobyra, Manager Nuclear Engineering
#D. Hafer, Manager Plant Engineering
M. Horvath, Plant Performance Assurance
#A. Lotfi, Performance Engineer
#D. Morey, Chemistry Superintendent
D. Noble, Radiation Protection Superintendent
T. Postlewait, Site Engineering Support Manager
#R. Ptacek, Licensing Coordinator
T. Quaka, Project Management & Inst. Services
P. Russell, Plant Protection Superintendent
#J. Sampson, Plant Manager
#P. Schoepf, Manager Safety-Related Systems
#L. Smart, Nuclear Licensing
#G. Tollas, Acting Operations Superintendent

#Denotes those present at the January 10, 1997 exit meeting.



INSPECTION PROCEDURES USED

IP 37551 On-site Engineering
IP 61726 Surveillance Observations
IP 62703 Maintenance Observation
IP 71707 Plant Operations
IP 71750 Plant Support Activities

ITEMS OPENED and CLOSED

Opened

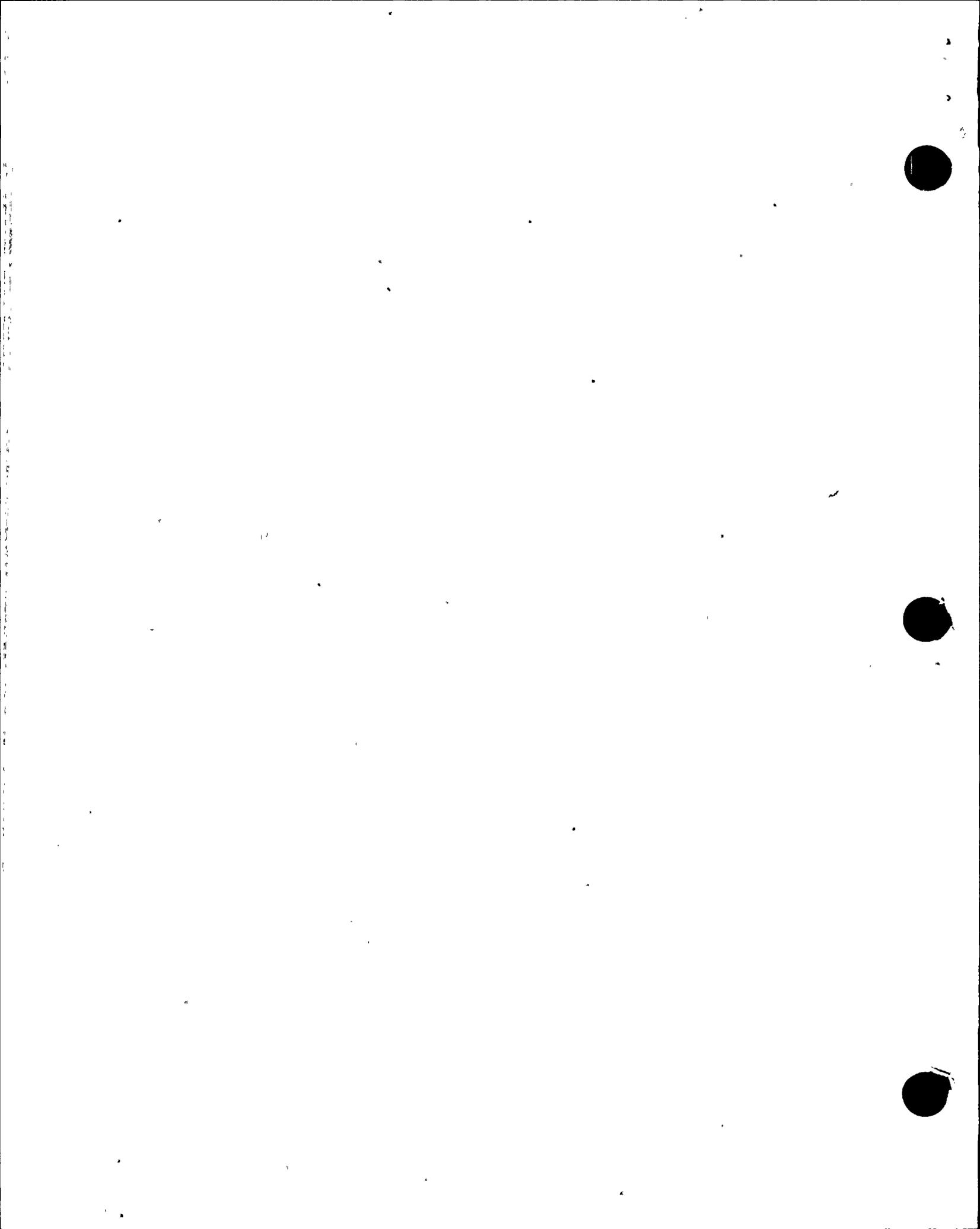
50-315/316/96015-01(DRP)	VIO	Failure to Perform Technical Specification 3.8.1.1 Breaker Alignment (Eight examples)
50-316/96015-02(DRP)	NCV	Failure to Reinstall Control Power Fuses In Accordance With OHP-4021.082.009, "Racking In and Out 4kV, 600V, and 480VAC Breakers"
50-315/316/96015-03(DRP)	NCV	Failure to Control Fuses In Accordance With PMP-6065.FUS.001, "Fuse Control"
50-316/96015-04(DRP)	VIO	Failure of Design Control Measures to Adequately Review For Suitability Non-Safety Related Piping on The AFW Pumps
50-315/316/96015-05(DRP)	NCV	Failure to Properly Record Data In Accordance With 12 EHP-4030.STP.209, "Test of Containment Hydrogen Skimmer Ventilation"

Closed

50-315/96007-00	LER	One Hour Action Statement For Technical Specification 3.8.1.1.a Not Met Due to Incorrect Interpretation of Action Statement Wording
50-316/96009-00	LER	Technical Specification Required Surveillance for Inoperable Emergency Diesel Generator Not Completed Due to Personnel Error
50-316/96015-02(DRP)	NCV	Failure to Reinstall Control Power Fuses In Accordance With OHP-4021.082.009, "Racking In and Out 4kV, 600V, and 480VAC Breakers"
50-315/316/96015-03(DRP)	NCV	Failure to Control Fuses In Accordance With PMP-6065.FUS.001, "Fuse Control"

50-315/316/96015-05(DRP)

NCV Failure to Properly Record Data In Accordance
With 12 EHP-4030.STP.209,"Test of
Containment Hydrogen Skimmer Ventilation"



List of Acronyms

AC	Alternating Current
AEO	Auxiliary Equipment Operator
AFW	Auxiliary Feedwater
CFR	Code of Federal Regulations
CR	Condition Report
DG	Diesel Generator
DRP	Division of Reactor Projects
HVAC	Heating, Ventilation, and Air Conditioning
LER	Licensee Event Report
MDAFWP	Motor Driven Auxiliary Feedwater Pump
NRC	Nuclear Regulatory Commission
OHP	Operations Head Procedure
PCR	Process Computer Room
PDR	Public Document Room
TS	Technical Specification

