

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos: 50-528/85-04, 50-529/85-06  
Docket Nos: 50-528, 50-529  
License Nos: NPF-34; CPPR-142  
Licensee: Arizona Public Service Company  
P. O. Box 21666  
Phoenix, AZ. 85036  
Facility Name: Palo Verde Nuclear Generating Station  
Units 1 and 2

Inspection Conducted: February 11 - March 10, 1985

Inspectors:

R. Zimmerman for  
R. Zimmerman, Senior  
Resident Inspector

3/26/85  
Date/Signed

for

G. Fiorelli  
G. Fiorelli,  
Resident Inspector

3/26/85  
Date/Signed

for

C. Bosted  
C. Bosted,  
Resident Inspector

3/26/85  
Date/Signed

Approved By:

L. Miller, Jr. for  
L. Miller, Jr., Chief,  
Reactor Projects Section 2

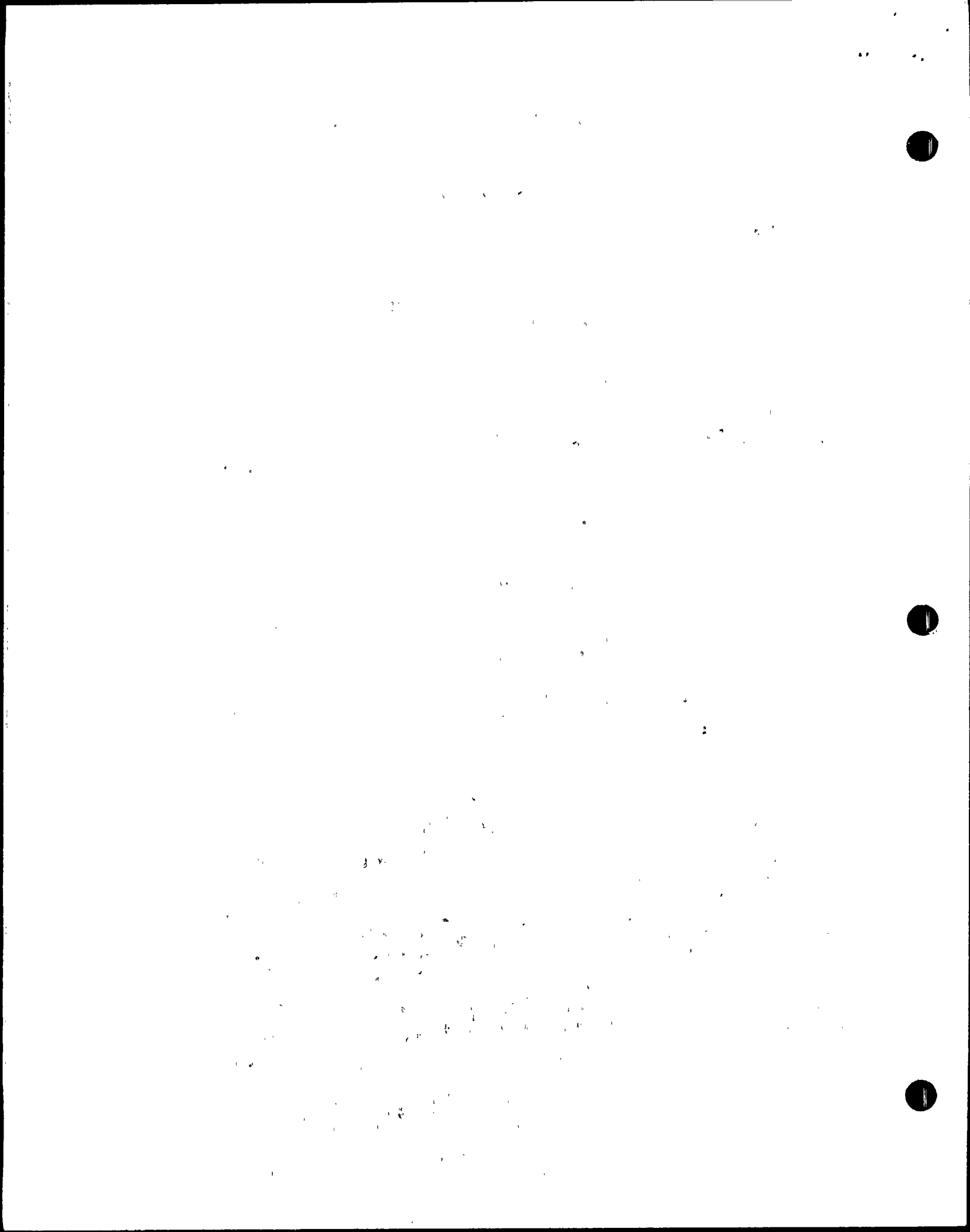
3/26/85  
Date/Signed

Summary:

Inspection on February 1 - March 10, 1985  
(Report Nos. 50-528/85-04 and 50-529/85-06)

Areas inspected: Routine, on site, regular and back shift inspection by the three resident inspectors (Unit 1 - 185 hours; Unit 2 - 100 hours). Areas inspected included: review of plant activities, surveillance testing, plant maintenance, preoperational testing activities, startup field reports, Engineered Safety Features configurations, Licensee Events Reports, review of periodic and special reports; followup of previously identified items; and plant tours.

Results: Of the ten areas inspected, one violation was identified in one area. (Failure to adhere to procedures governing the control of maintenance - paragraph 5)



## DETAILS

### 1. Persons Contacted:

The below listed technical and supervisory personnel were among those contacted:

#### Arizona Public Service Company (APS)

*R. Adney,	Operations Superintendent, Unit 2
*J. Allen,	Operations Manager
L. Auterino,	Nuclear Steam Supply System Test Supervisor, Unit 2
*R. Bernier,	Operations Support Supervisor
J. R. Bynum,	PVNGS Plant Manager
W. Fernow,	Plant Services Manager
*R. Gouge,	Operations Supervisor, Unit 1
K. Gross,	Compliance Supervisor
F. Hicks,	Training Manager
*W. E. Ide,	Corporate Quality Assurance Manager
D. Nelson,	Operations Security Manager
*R. Nelson,	Maintenance Manager
J. Pollard,	Operations Supervisor, Unit 2
*W. Quinn,	Licensing Manager
*C. Russo,	Quality Audits Manager
*E. E. Van Brunt, Jr.,	Vice President, Nuclear Production
R. Younger,	Operations Superintendent, Unit 1
O. Zeringue,	Technical Support Manager

The inspectors also talked with other licensee and contractor personnel during the course of the inspection.

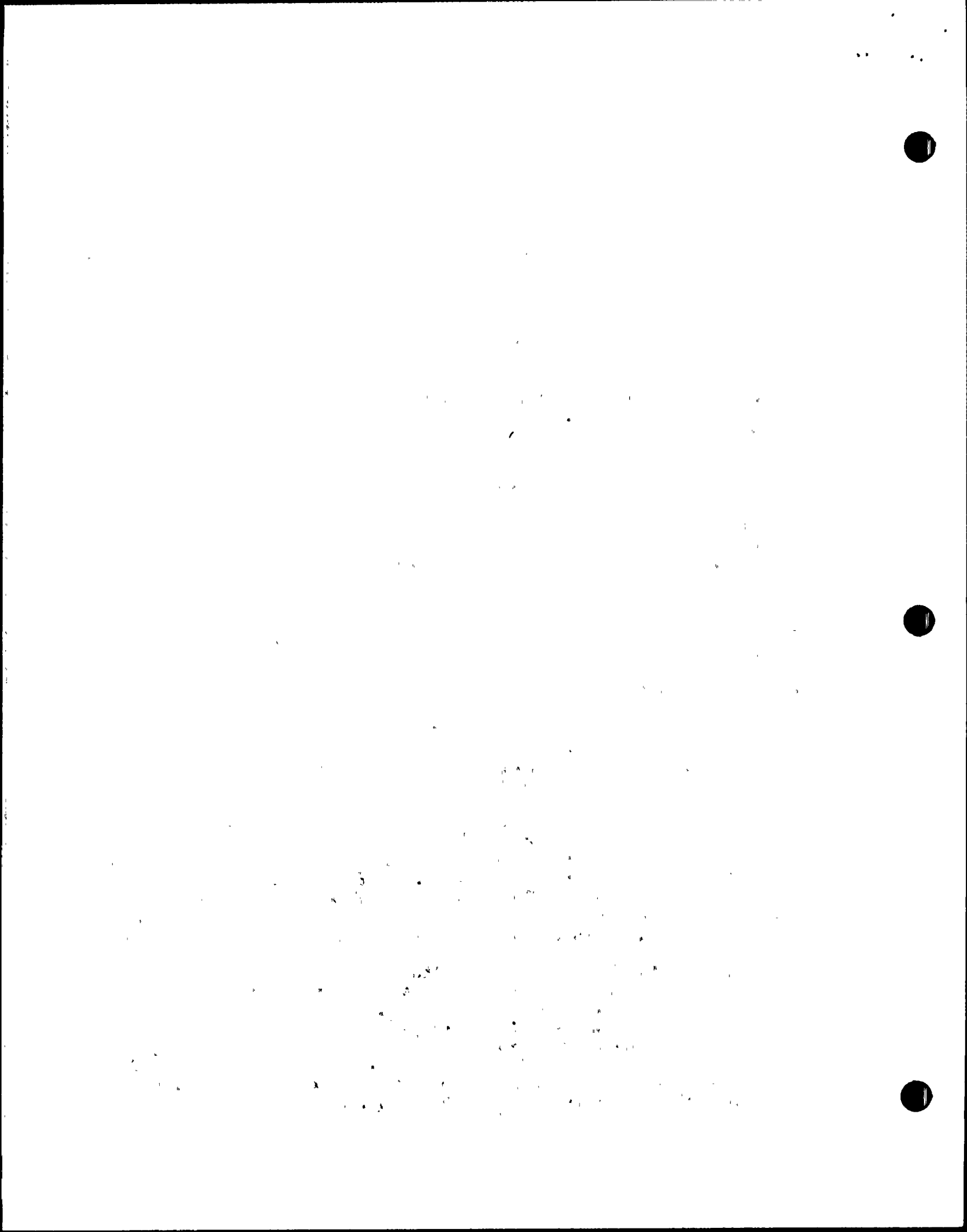
\*Attended the Exit Meeting on March 6, 1985.

### 2. Followup of Previously Identified Items

- a. (Closed) 528/84-51-02 (Unresolved Item): Review of Quality Related Design Change Packages (DCPs) for proper closeout.

The inspector reviewed 30 safety related DCPs for the purpose of confirming that the work had been signed off as complete before the DCP was signed off as closed. This effort represented a followup to NRC Inspection Report 50-528/84-51 which documented a finding that two non-safety related DCPs were signed off as closed prior to the completion of work. In each case, the inspector noted that the work completion date was the same or earlier than the DCP close out date.

The inspector did note, however, that while all requested documents were located, several were not readily available, and considerable time was required to obtain some documents because of difficulty in compiling the records. This condition was primarily associated with Unit 1 DCPs issued prior to the Unit 1 work stoppage and startup recovery period of November, 1983 - February, 1984. The observation was communicated to APS management. The inspector was informed subsequent to discussions with APS management on this subject that



an APS organizational unit had already been tasked with the responsibility for compiling all Unit 2 and Unit 3 design change related documentation into individual DCP files as a final record to support the completed DCP.

The inspector does not anticipate this condition will recur in connection with DCPs controlled by APS following issuance of the Operating License, since the management of the configuration control program is more centralized and rigorous. This item is closed.

- b. (Closed) 528/84-63-02 (Inspector Followup Item): Effect of work activities on plant security.

Maintenance Control Center Directive - MCC/02, "Guide to SIMS Work Order Development", was revised on February 26, 1985, to require that during the preparation of a work order, the work activity be assessed to determine if it would compromise a security boundary. If an activity was determined to compromise a security boundary, the Security Department was to be notified prior to commencement of work.

This item is closed.

### 3. Review Of Plant Activities

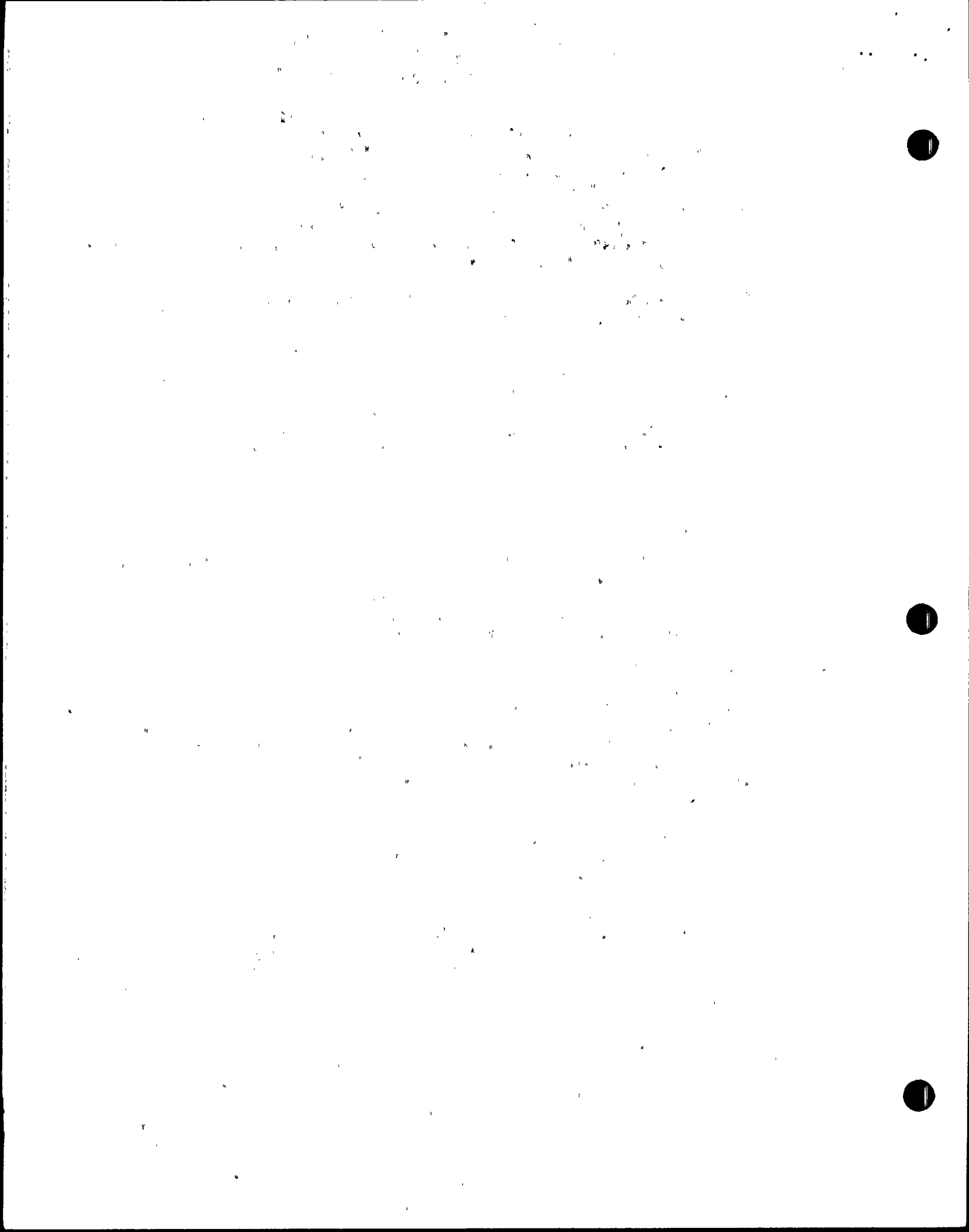
- a. Unit 1 remained in Mode 5 while licensee work continued on licensee commitments which are required to be completed prior to Mode 4 operation. Each electrical train was removed from service for separate, scheduled two week outages to perform preplanned maintenance and modifications.

Several spurious actuations of the Control Room Essential Filtration Actuation System (CREFAS) resulted from the Radiation Monitoring and Balance of Plant Engineered Safety Features (ESF) cabinets. These actuations were similar to those documented in NRC Inspection Report 50-528/84-63. Following consultation with the supplier, the licensee has implemented a temporary modification within the Radiation Monitoring System Remote Indicating Controller which removes the auxiliary equipment failure contacts from the circuitry which generates a CREFAS signal. A design change to make the modification permanent has been initiated. Although some minor problems continue to be evaluated, the licensee does not anticipate future spurious actuations of a similar nature.

- b. Unit 2 successfully completed its Integrated Leak Rate and Structural Integrity Tests on February 7. Preoperational testing of safety related systems continued to be preformed in preparation for the Hot Functional Test presently scheduled for mid-May.
- c. Plant Tours

The following plant areas at Units 1 and 2 were toured by the inspector during the course of the inspection:

- o Auxiliary Building



- o Containment Building
- o Control Complex Building
- o Diesel Generator Building
- o Radwaste Building
- o Technical Support Center
- o Turbine Building

The following areas were observed during the tours:

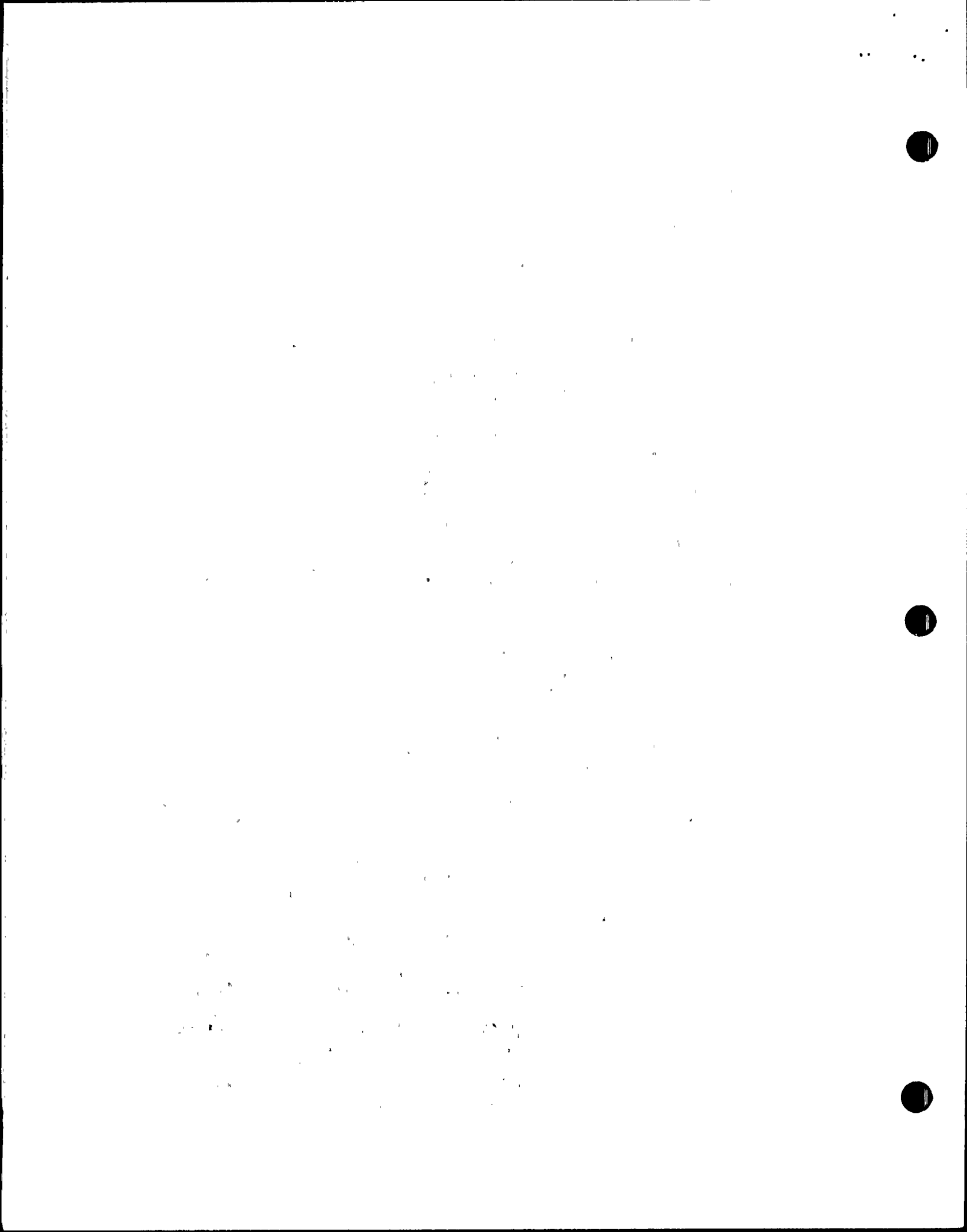
- 1) Operating logs and records. Records were reviewed against Technical Specification and administrative procedure requirements.

During a review of Unit 1 auxiliary operator logs on February 14, the inspector observed that the readings logged for the starting air pressure to the "A" Diesel Generator (D/G) from the local D/G control panel were considerably below the low limit specification on the log sheet. A note by the entries indicated that the gages from which the readings were taken were isolated. Inspector followup determined that the gages were isolated pending an engineering evaluation into the qualification of the gages, and that the local gages on the starting air cylinders were to be used for indication. The inspector made the following comments to licensee management:

- the auxiliary operator log sheets, which indicated the isolated gages as the ones from which to log readings, apparently needed to be revised to accurately reflect which indicators were to be used for log entries.
- the actual air pressure from the local starting air cylinder gages would have provided useful information, rather than logging data from isolated gages.
- subsequent SRO review of the auxiliary operator logs apparently did not identify the low readings.

Discussion with Operations supervision determined that SRO review of the logs has not been occurring consistently. The licensee representative committed to ensuring that SRO review of the logs was conducted on a shift basis. The licensee acknowledged the inspector's other comments; however, added that the need to revise the log sheets was previously identified by an auxiliary operator and a change to the log sheet would shortly be considered. The licensee representative further stated that an existing block on the operator's check sheet, entitled "starting air package" should include the operator's checking of the starting air pressure locally, although it was not required to be logged.

Adequacy of auxiliary operator logs, including supervisory review, will continue to be evaluated during future inspections, as part of



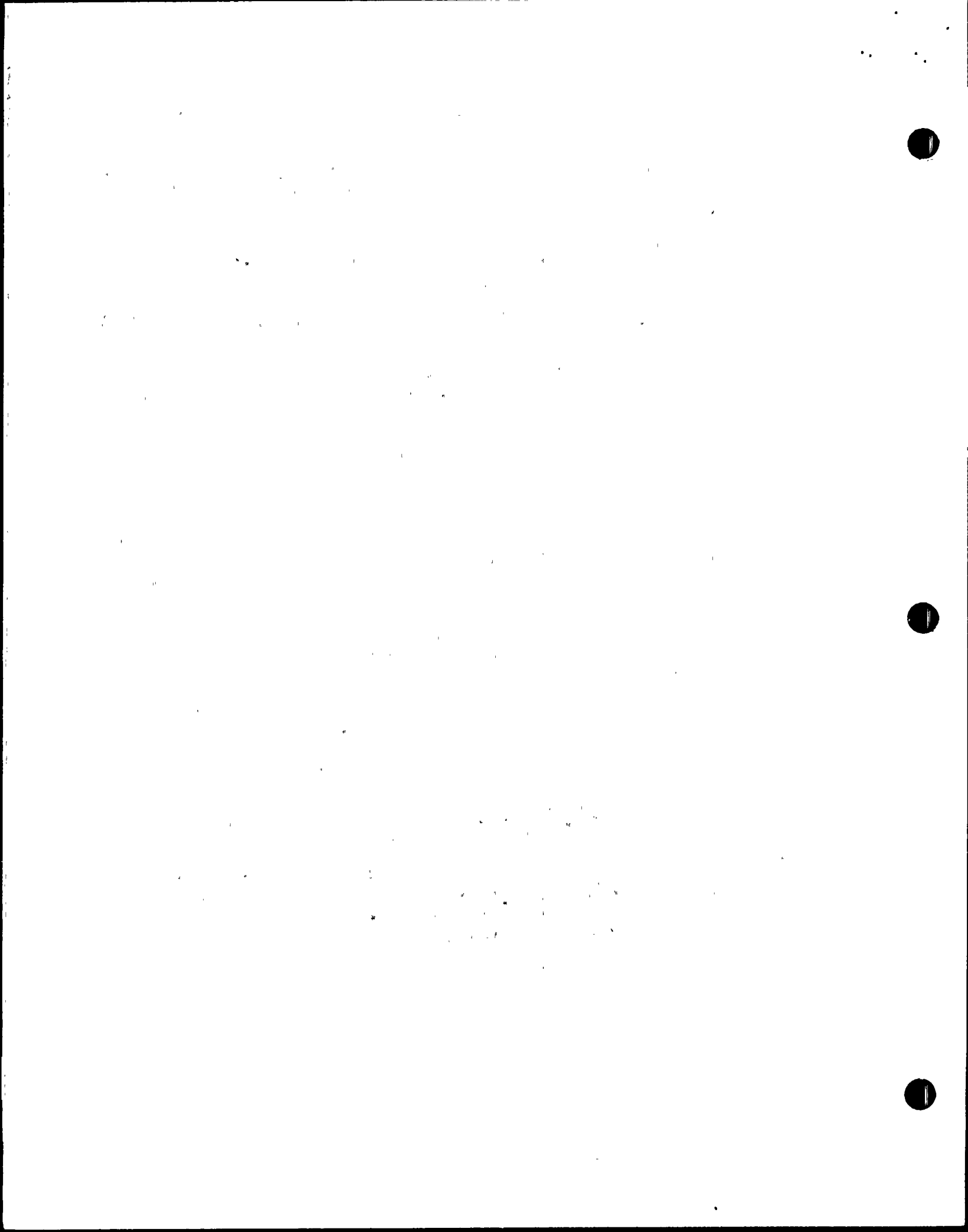


the routine inspection program. This is an inspector follow item (528/85-04-01).

- 2) Monitoring instrumentation. Process instruments were observed for correlation between channels and for conformance with Technical Specification requirements.
- 3) Shift manning. Control room and shift manning were observed for conformance with 10 CFR 50.54 (k), Technical Specifications, and administrative procedures.
- 4) Equipment lineups. Valve and electrical breakers were verified to be in the position or condition required by Technical Specifications and plant lineup procedures for the applicable plant mode. This verification included routine control board indication reviews and conduct of partial system lineups. Details are provided in paragraph 8.
- 5) Equipment tagging. Selected equipment, for which tagging requests had been initiated, was observed to verify that tags were in place and the equipment in the condition specified. Controls associated with "Equipment Maintenance Required" tags is documented in paragraph 5.c.
- 6) Fire protection. Fire fighting equipment and controls were observed for conformance with Technical Specifications and administrative procedures.
- 7) Plant chemistry. Chemical analysis results were reviewed for conformance with Technical Specifications and administrative procedures.
- 8) Security. Activities observed for conformance with regulatory requirements, implementation of the site security plan, and administrative procedures included vehicle access, personnel access, protected area integrity and vital area integrity.
- 9) Plant housekeeping. Plant conditions and material/equipment storage were observed to determine the general state of cleanliness, housekeeping, and adherence to fire protection requirements.

The housekeeping conditions in Unit Two have improved considerably since the last report period. This improvement is in part due to the increased attention of APS and Bechtel management through their scheduled weekly walkdowns of Unit Two areas.

No violations or deviations were identified.



4. Surveillance Testing - Unit 1

- a. Surveillance tests required to be performed by the Technical Specifications 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 performance of the surveillance tests; 3) the surveillance tests had been performed at the frequency specified in the Technical Specifications; and, 4) test results satisfied acceptance criteria or were properly dispositioned.

The following completed surveillance tests were reviewed:

- 14ST-1ZZ24 Unlocked Fire Door Position Verification, performed February 8.
- 14ST-1ZZ25 Automatic Fire Door Inspection, performed February 8.
- 41ST-1SE01 Source Range Flux Monitor Channel Checks, performed February 1-15.
- 41ST-1ZZ16 Routine Surveillance Daily Midnight Log, performed February 1-15.
- 41ST-1ZZ09 Routine Surveillance Mode 5-6 Logs, performed February 1-15, and February 25-28.
- 77ST-9SB05 CEAC #1 Calibration, performed February 14.
- 72ST-1RX09 Shutdown Margin, performed February 8, 15.

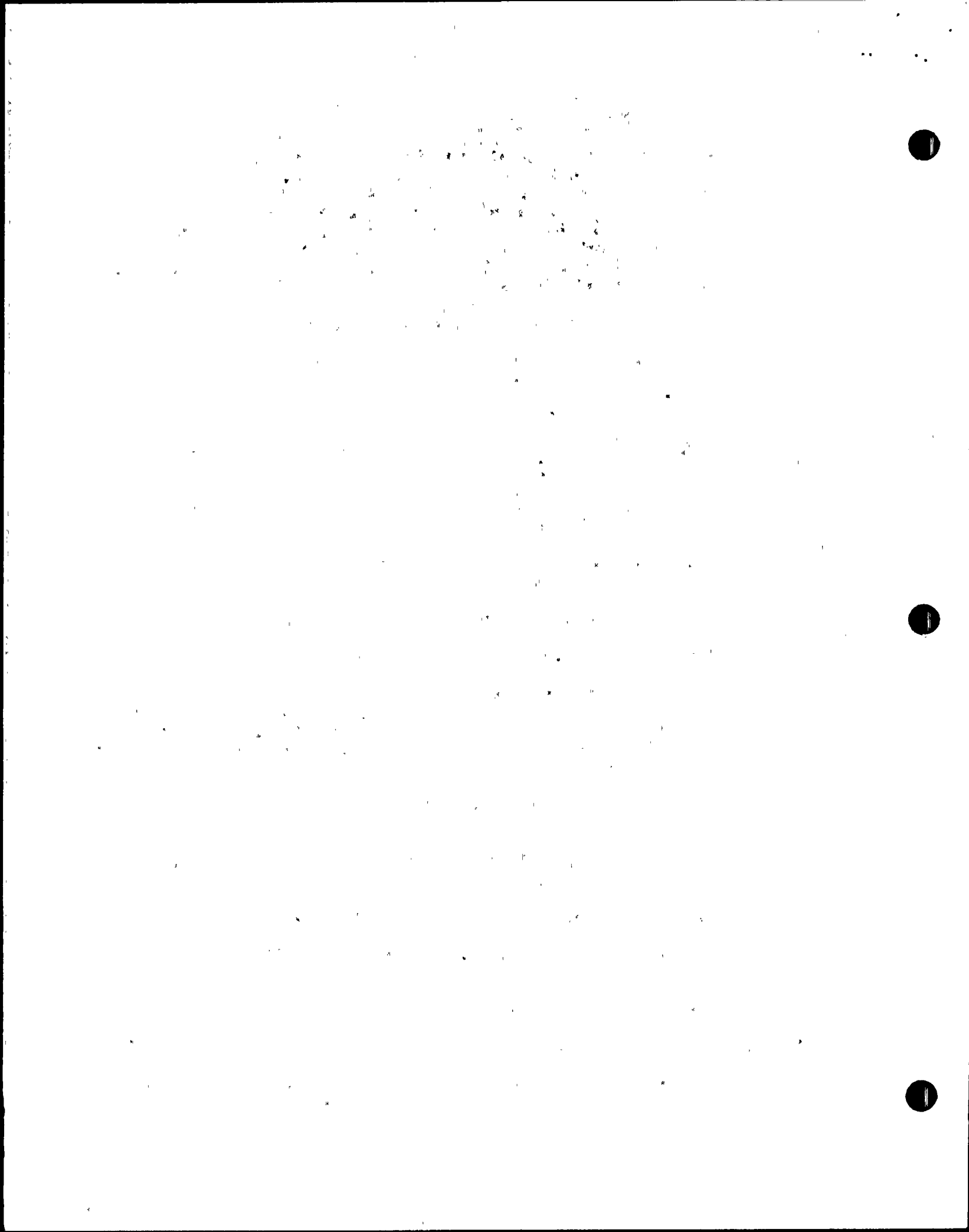
- b. Portions of the following surveillance tests were observed to verify that: 1) testing was being accomplished by qualified personnel in accordance with approved, technically adequate procedures; 2) the system was properly returned to service; and 3) measuring and test equipment satisfied calibration requirements.

- 77ST-9SB05 CEAC Calibration Channel "A", performed February 11, and 12.
- 77ST-9SB05 CEAC Calibration Channel "B", performed February 12, 13, and 14.
- 36ST-9SV05 Vibration and Loose Parts Monitor, performed February 15.
- 36ST-9SE01 Nuclear Instrument Safety Channel "D" Calibration, performed February 25.

No violations or deviations were identified.

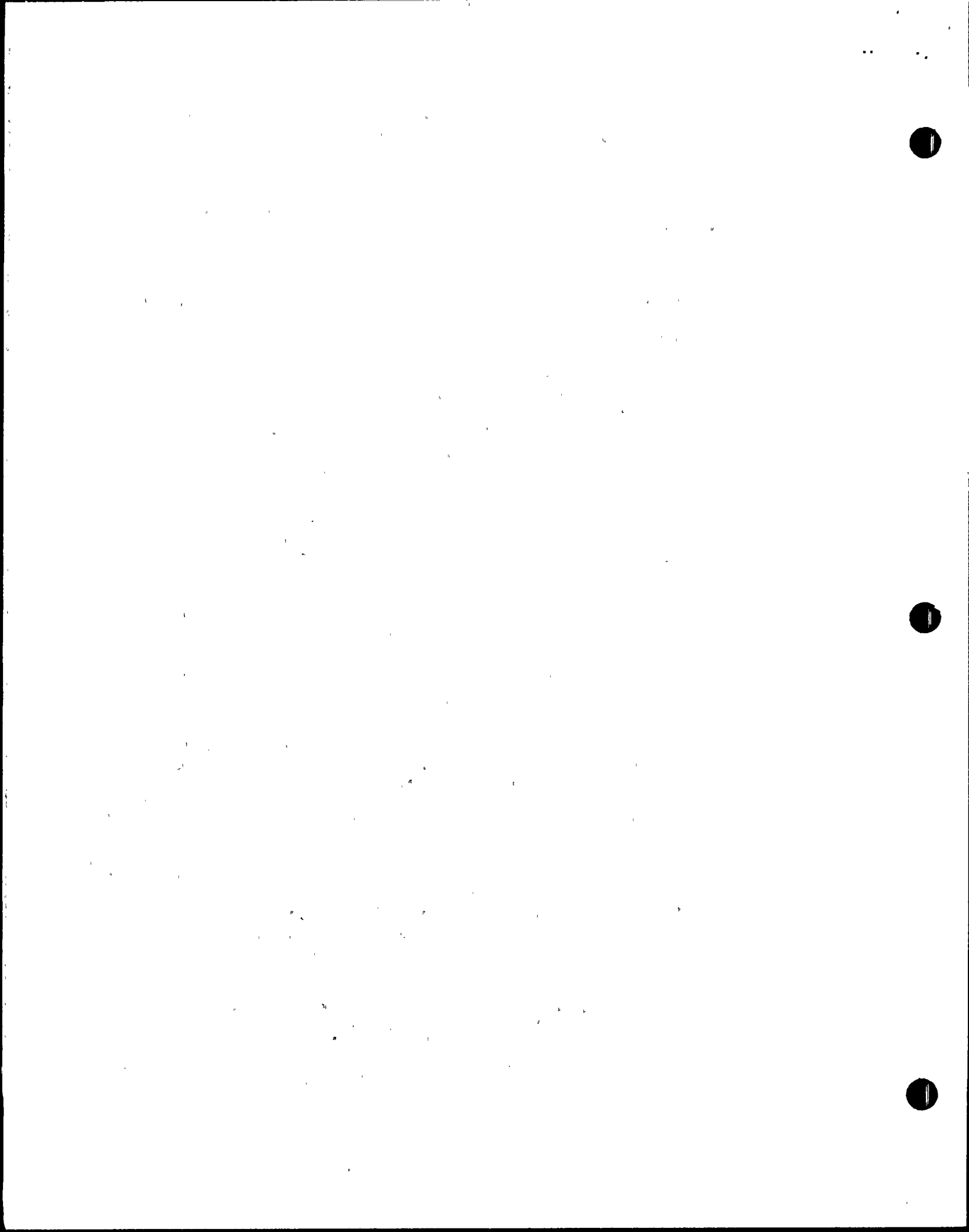
5. Work Control - Unit 1

- a) The inspector evaluated several aspects of the work control process in an attempt to verify: 1) equipment requiring repair was identified



on a work request form to permit generation of a work order, 2) defective equipment was tagged to identify that a work request had been submitted, 3) the duration of time between submittal of a work request and the repair of the component was not excessive, and 4) the effectiveness of the Station Information Management System (SIMS) as a tracking mechanism of outstanding and completed work requests, and work orders.

- b) The inspector made the following general observations:
- o Based on a review of a small sample of work requests logged in SIMS, no excessive time delays were evident in dispositioning the requests and implementing work orders.
  - o A substantial amount of corrective maintenance work orders were presently outstanding at Unit 1; however, based on discussions with Maintenance supervision the priority work activities were being performed as fast or faster than new work requests were being submitted. The inspector will continue to monitor the status of outstanding work activities as part of the routine inspection program.
  - o SIMS was found to be an effective method of logging, tracking, and maintaining historical files on a component basis, provided administrative control procedures which implement work control practices were followed.
- c) The following items were identified during a review of the implementation of administrative controls governing work activities:
- o On February 27, the inspector noted an "Equipment Maintenance Required" tag identifying a packing leak on High Pressure Safety Injection valve 616, which was leaking at the time. The tag referencing Work Request 072935 was affixed to the valve on January 13. Inspector review determined that the work request was not entered in SIMS. The inspector further determined that a large number of Train "B" motor operated valves were inspected during the Train "B" outage in early February to ensure that their stuffing boxes were full prior to unit startup. Specifically, under Work Order 68458 performed on February 3, no additional packing was found necessary; valve 616 was cleaned, its packing was adjusted, and it was stroke tested with satisfactory results. The maintenance crew did not remove the existing "Equipment Maintenance Required" tag following completion of work. The valve subsequently began to leak again, and since the original tag was not removed, the tag served to "mask" the fact that no documentation was logged in SIMS to initiate repair.
  - o As of February 27, 1985, the maintenance crew which completed repairs on the "B" Essential Spray Pond Pump breaker on January 8, 1985, had not removed the "Equipment Maintenance Required" tag affixed to the pump breaker.

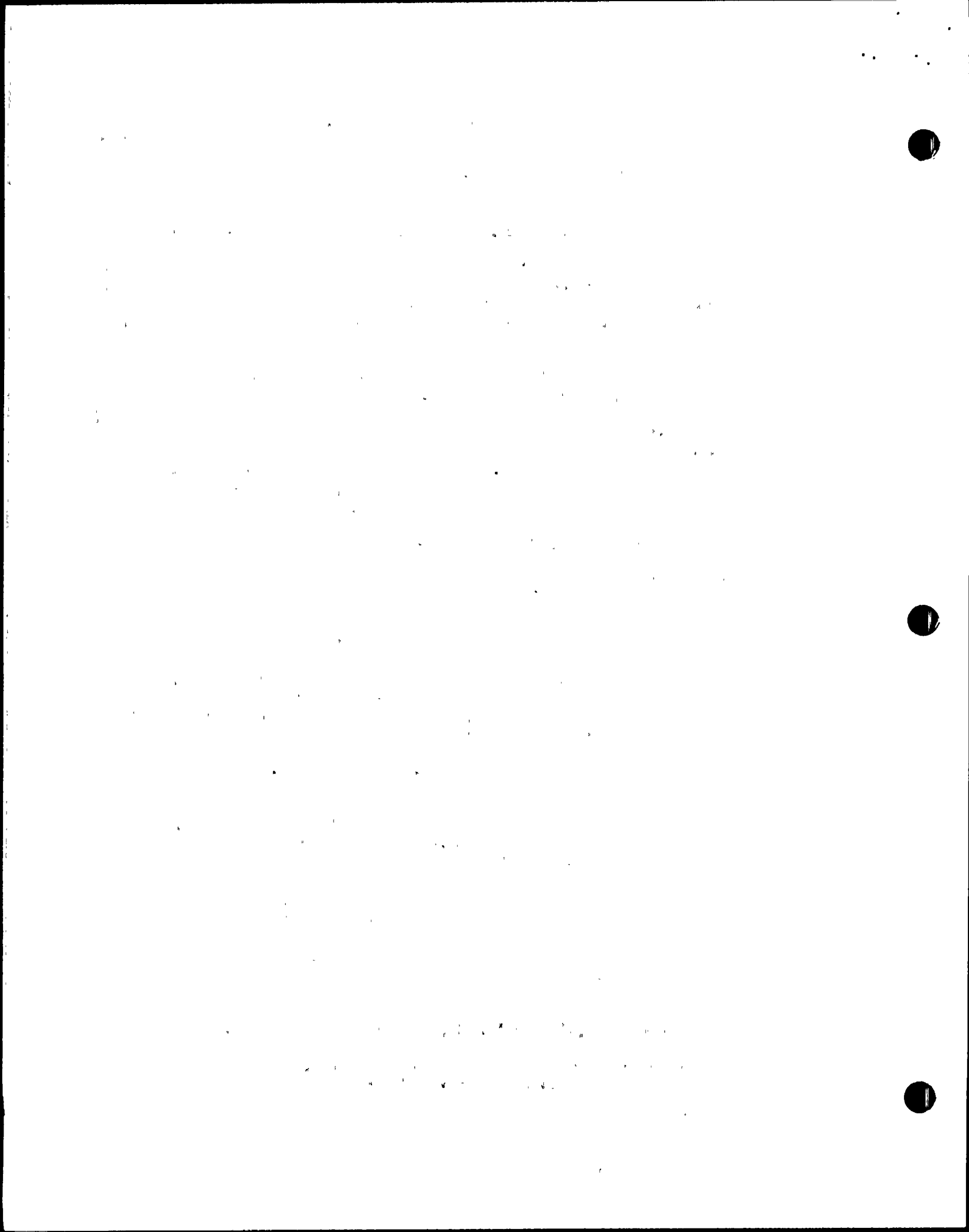


The above failures to: 1) log a work request in SIMS to allow for repair; and 2) control removal of "Equipment Maintenance Required" tags are contrary to Technical Specification 6.8.1, and PVNGS Procedures 30AC-9ZZ01, Work Control, and represent a Severity Level IV violation (528/84-04-02).

Additionally, on February 8, a control room operator performed a control board valve position verification to ensure Safety Injection Tank Motor Operated Discharge Valve 614 was closed as required by Operating Procedure 410P-1RC02, Reactor Coolant System Fill and Vent. The operator did not initiate a work request after observing an abnormal dual position indication (red and green lights lit) for valve 614. The inspector noted that procedure 30AC-9ZZ01, paragraph 5.2.1 states that work requests which document problems should be initiated within the shift on which they are identified. The inspector met with licensee management and discussed the need for work requests to be submitted timely in order to maintain the work control process dynamic. The licensee representative acknowledged the inspector's comment and reemphasized the importance of submitting work requests to the Operations staff. Further, the licensee is exploring the use of miniature "Equipment Maintenance Required" tags for control board instrumentation and components to signify the submittal of a work request. This area will continue to be evaluated as part of the routine inspection program.

6. Plant Maintenance - Units 1 and 2

- a. The inspector observed maintenance and problem investigation activities to verify: 1) compliance with regulatory requirements, and administrative and maintenance procedures; 2) required QA/QC involvement; 3) proper use of safety tags; 4) proper equipment alignment and use of jumpers; and 5) personnel qualifications. The inspector also verified reportability was evaluated, as required by Technical Specifications for these activities.
- b. The inspector witnessed portions of the following maintenance activities:
  - o Balance of Plant - Engineered Safety Feature Actuation System spurious trip troubleshooting, Unit 1, performed February 12 and 13.
  - o Removal of High Pressure Safety Injection (HPSI) Hot Leg Drain Valve SIV-853, Unit 1, performed February 12.
  - o Relapping Safety Injection Drain Valve SIE-V860, Unit 1 performed February 12.
  - o Replacement of Control Element Assembly System (CEAS) "B" Floating Point Board (WO 69530), Unit 1, performed February 14.
  - o Removal of HPSI to Low Pressure Safety Injection (LPSI) Recirculation Valve Motor Operator MOV-SI-331, Unit 1 performed February 12.





- o Troubleshooting of Channel "D" Nuclear Instrument Safety Channel, Unit 1 performed February 25.
- o Disassembly of a Back Pressure Valve in the Chemical and Volume Control System - Unit 2, performed February 26.
- o Disassembly of the Train "A" LPSI System Suction Valve - Unit 2, performed February 4.
- o Disassembly of the 1A loop Safety Injection Line Check Valve - Unit 2, performed February 8.

No violations or deviations were identified.

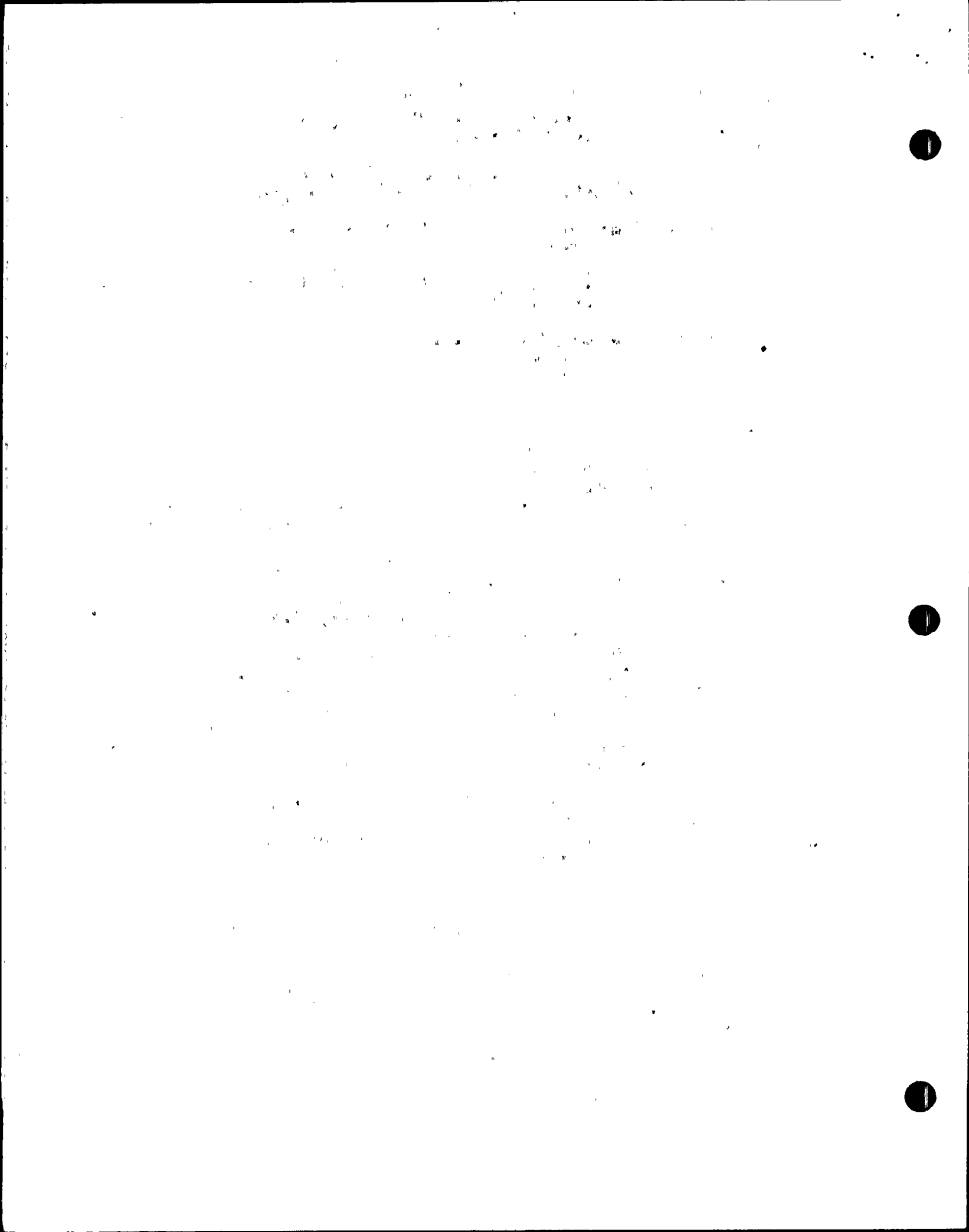
#### 7. Procedural Adherence

On February 8, the inspector witnessed performance at Unit 1 of portions of the primary system fill performed in accordance with Operating Procedure 410P-1RC02, Reactor Coolant System Fill and Vent, Revision 1. Based on the inspector's observations, several comments regarding procedure adherence were discussed with licensee management. One comment dealt with an instance where a step requiring placement of the reactor makeup water flow controller in automatic was checked off as complete when the controller was being maintained in manual. Discussion with control room operators at the time confirmed that the reason for maintaining the controller in manual was technically sound, and the evolution in progress was well thought out and understood by the operating shift. Although there was no safety significance associated with the controller position in this instance, the inspector expressed concern with the mechanics of checking off a step as complete, when in fact, the configuration differed from that specified in the procedure. Secondly, following a review of the completed portions of the procedure, the inspector emphasized that prior to the use of "not applicable" (N/A) on specific steps in the body of a procedure, sufficient consideration is necessary to assure that making a given procedural step not applicable does not represent a need for a procedure change.

The licensee representative acknowledged the inspector's comments, and was developing an Operating Department Guideline to formalize how procedural deviations will be made and documented in the future. The inspector will follow the implementation of the above guidelines for the Operations Department, and will continue to evaluate procedural adherence for all departments. This is an inspector follow item (85-04-03).

#### 8. Engineered Safety Features System Walk Down - Unit 1

The following Engineered Safety Feature systems were walked down by the inspector to confirm that the systems were aligned in accordance with 410P-1SI01, "Shutdown Cooling Initiation," 410P-1DG01, "Emergency Diesel Generator A," and 410P-1DG02, "Emergency Diesel Generator B". During the walkdown of the system, items such as hangers, supports, electrical cabinets, and cables were inspected to determine that they were operable, and in condition to perform their required functions. The inspector also verified that the system valves were in the required position and locked



as appropriate. The local and remote position indication and controls were also confirmed to be in the required position and operable. The systems that were walked down were:

High Pressure Safety Injection Trains "A" and "B"  
 Low Pressure Safety Injection Trains "A" and "B"  
 Containment Spray Systems Trains "A" and "B"  
 Diesel Generator Trains "A" and "B"

No violations or deviations were identified.

9. Review of Preoperational Testing Activities - Unit 2

a. Major Test Activities

The major preoperational test activities in progress during the reporting period were the Structural Integrity and Integrated Leak Rate Tests, which were both successfully completed on February 7, 1985. Other tests conducted were associated with the Essential Cooling Water System, Balance of Plant Engineered Safety Features, Control Room Emergency Lighting System, and Spent Fuel Handling System.

b. Preoperational Test Procedure Review

The inspector reviewed the following preoperational test procedures:

92PE-2SB10 - Plant Protection System Train A (other trains similar)

91PE-2SG01 - Main Steam Isolation Valves and Bypass Valves

The inspector verified the procedures were formally reviewed, approved, formatted, and contained the information required by Administrative Control Procedure 90AC-0ZZ14, "PVNGS Startup Procedures, Preparation, Review and Approval". A sample of acceptance criteria contained in the procedures was compared with design documents. The inspector verified that the design values and required equipment performance were consistent.

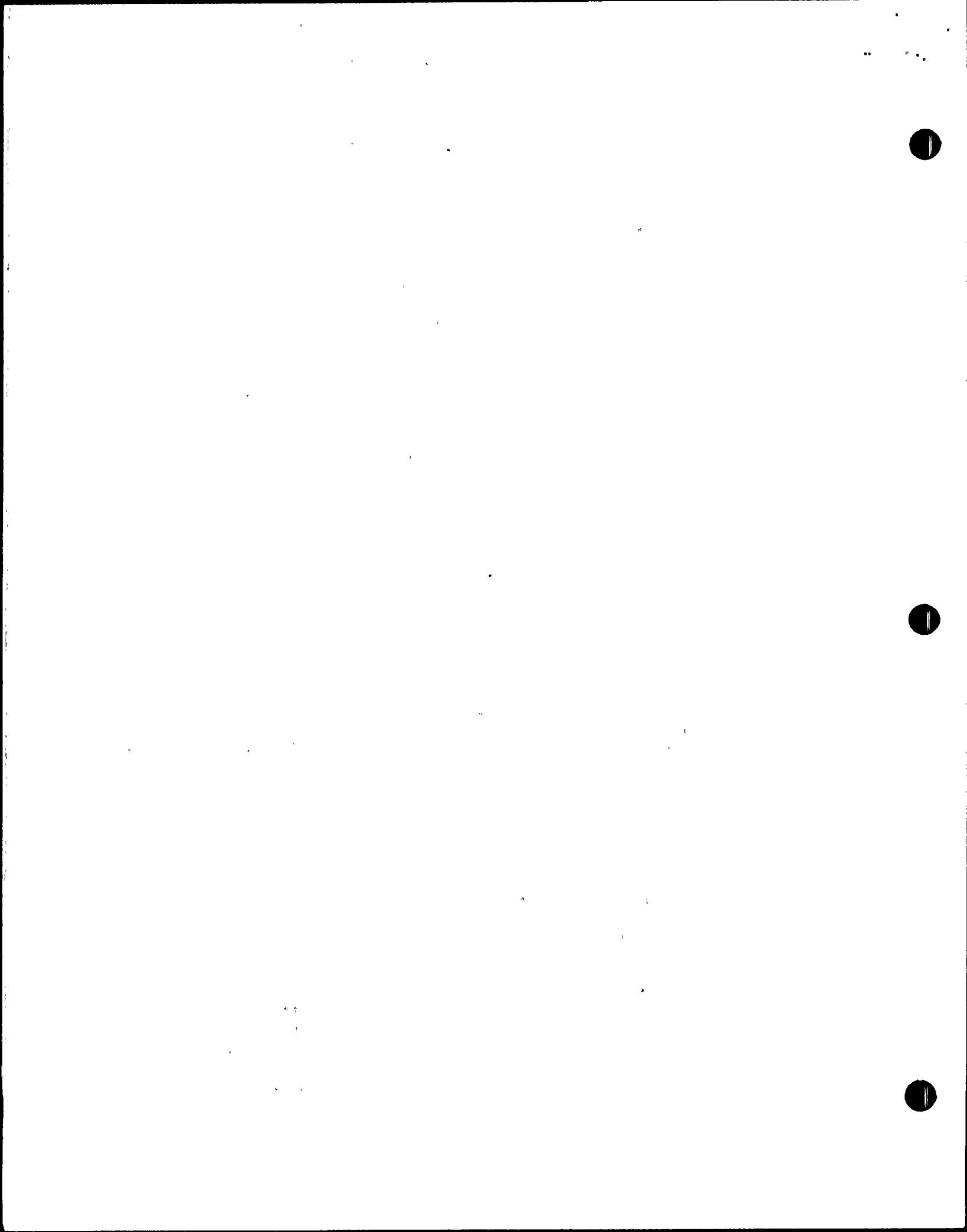
c) Preoperational Test Witnessing

The inspector witnessed portions of the following tests:

91PE-2FH04 - Spent Fuel Handling System

93PE-2QD01 - Control Room Emergency Lighting

The inspector verified that approved procedures were used, test personnel were knowledgeable of the test requirements, and data was properly collected. Procedure changes and test exceptions were identified and significant events were recorded in the test log. Other test related activities such as the use of calibrated M&TE and



completion of test prerequisites were also verified to have been accomplished in accordance with administrative control procedures.

No violations or deviations were identified.

10. Startup Field Reports - Unit 2

The inspector reviewed twenty-five Startup Field Reports (SFR) to assess the quality of the technical resolutions of problems identified by Startup engineers. The SFRs were randomly selected from twelve quality related plant systems. In each case, the inspector concluded the resolution was reasonable, and would technically correct the problem. Startup Field Reports which involved Combustion Engineering (CE) equipment were evaluated by CE as well as Bechtel.

No violations or deviations were identified.

11. Allegation and Inspection Finding (RV-85-A-002)

CHARACTERIZATION

The switches in the Limitorque valve operators were not checked for gap size and do not make contact all the time. A backfit inspection of the switches for proper gap should be made.

IMPLIED SIGNIFICANCE TO PLANT DESIGN, CONSTRUCTION AND OPERATION

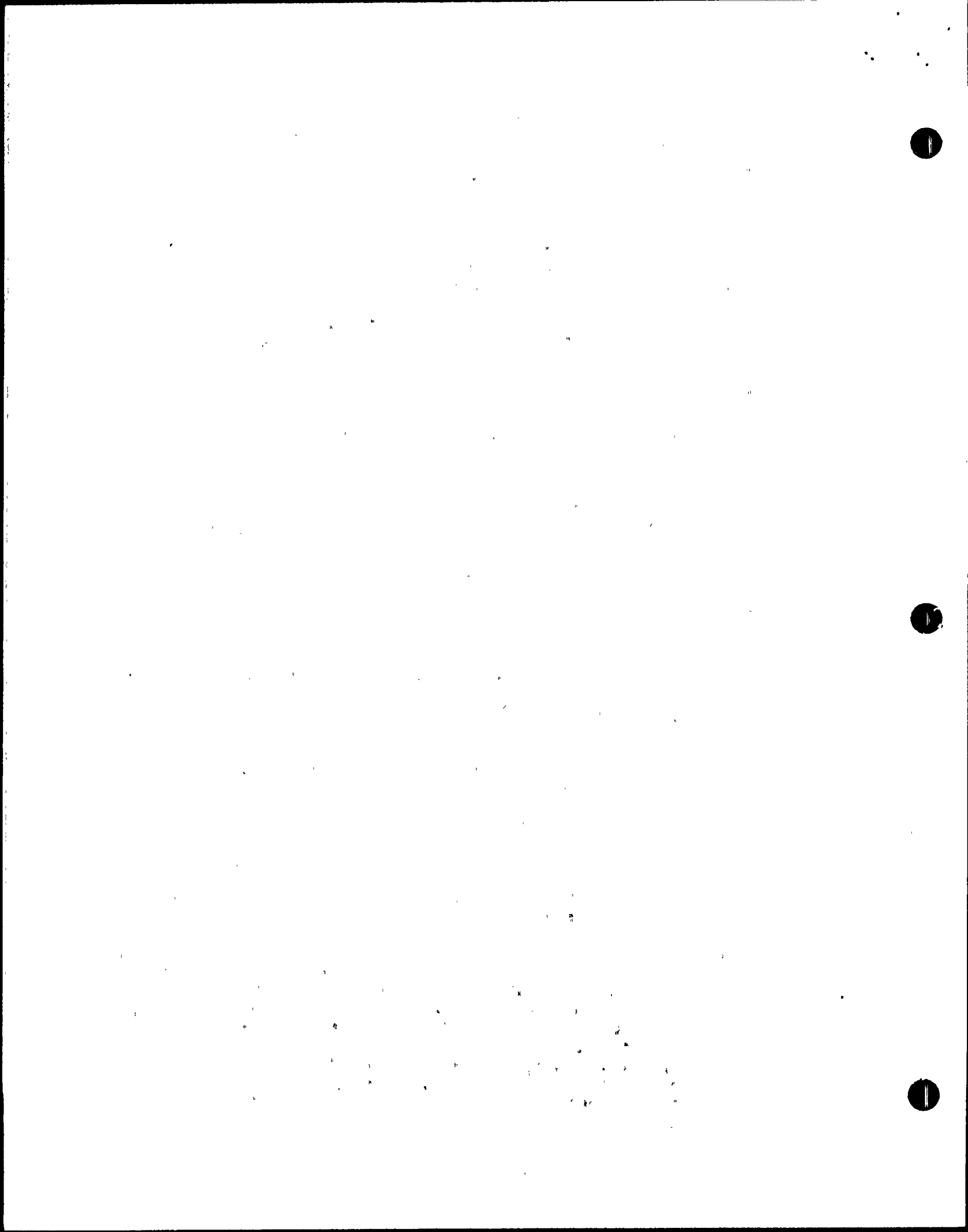
Valve operator switches that do not make proper contact could render the valve inoperable and cause a failure of the system in which it is installed to meet its designed function. The switches were designed to limit valve travel, provide position indication and bypass torque switches.

ASSESSMENT OF SAFETY SIGNIFICANCE

On December 27, 1984 one of the resident inspectors at the Palo Verde Nuclear Generating Station (PVNGS) received a telephone call from a former Bechtel PVNGS employee who expressed dissatisfaction with the efforts of Bechtel Construction and APS Quality Assurance in following up his concern related to the testing of Limitorque valve operators.

The inspector discussed the matter with APS Quality Assurance staff members and APS Engineering personnel, reviewed documents related to the APS's followup of the matter, and inspected several Limitorque operators. The findings are discussed in the following paragraphs.

On August 28, 1984, APS received a call on its QA "Hot Line" from an electrician who related a concern that Limitorque rotary switches were not making contact 100% of the time. The caller worked in Unit 2, providing electrical craft support to Startup testing. Subsequent calls made to the electrician by APS QA clarified his concerns as being related to the need to retrofit a check of the gap between the stationary and moveable portion of the switch finger assembly when the switch contacts of the Limitorque valve operators were closed, to ensure a closed contact and circuit continuity.



The problem was assigned to the APS QA field staff on August 31, 1984, for followup. The initial portion of the review effort was compiled and documented in a report dated September 26, 1984. The review included recontacting the electrician for clarification of his concern, as well as contacting several Startup Test engineers and Limatorque representatives. The report findings were inconclusive and raised several questions regarding the matter. The QA engineer following the matter issued a Startup Field Report (SFR) documenting his observations and forwarded it to Resident Engineering for evaluation and response.

The SFR characterization of the problem included the QA engineer's findings that no procedures or documented action exists to perform an adjustment of the gap between the switch finger assembly, nor was there a specific gap check on test procedures or maintenance procedures. Interim recommendations made by the QA engineer in the SFR were to have: a) Limatorque document the importance of the "gap", and specify requirements if necessary; b) inspect a representative sample of Limatorque switches; and c) write guidelines to perform limit switch gap adjustments since Limatorque Technical Manuals do not address gap adjustments.

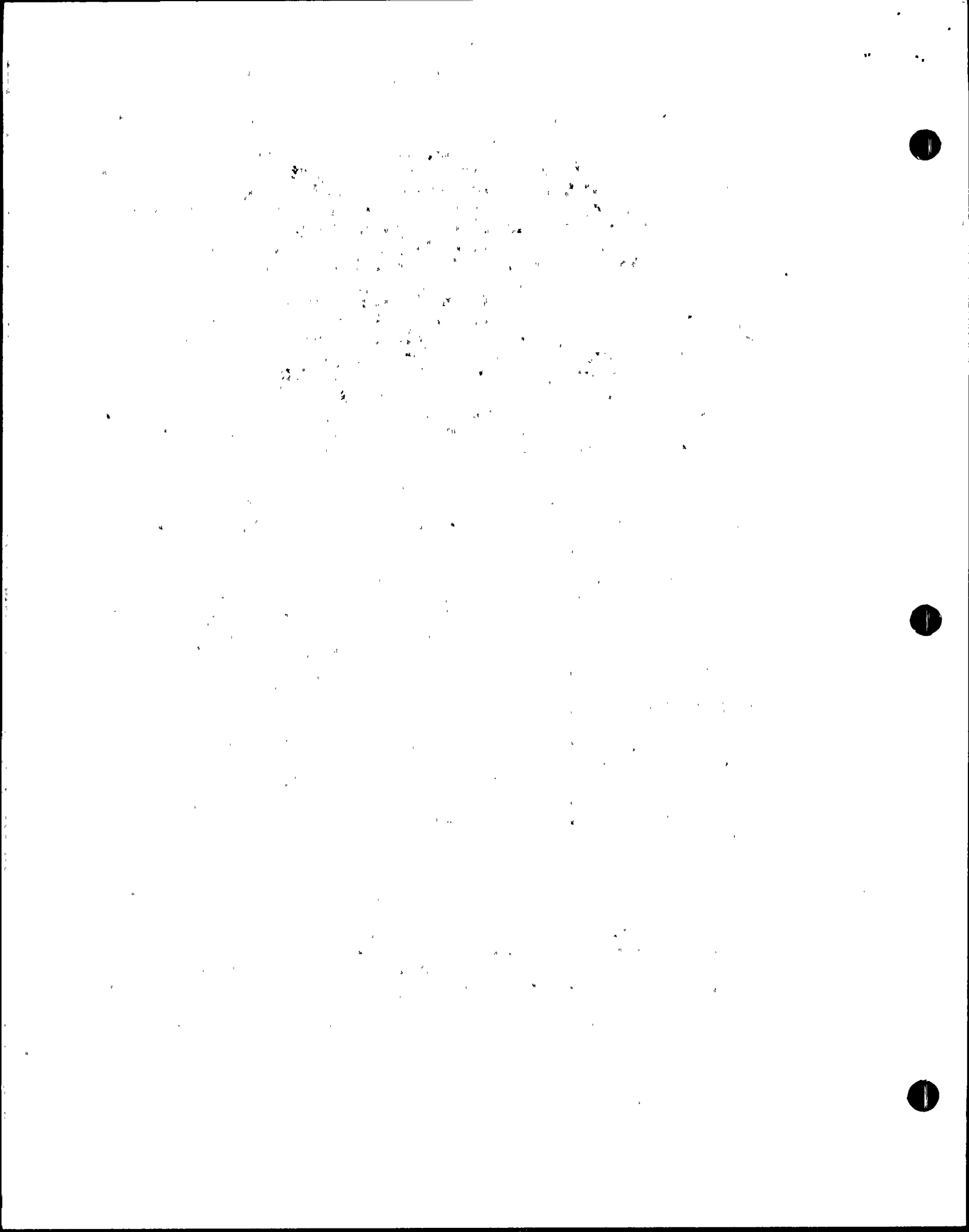
Since the initial SFR which was issued on September 24, 1984, was not received by Resident Engineering due to an administrative error, the SFR was reissued and dispositioned by Resident Engineering on October 30, 1984.

The response to the SFR, which was provided by CE with telecon confirmation from Limatorque, stated that the gap setting is factory set and not considered a field adjustment. However, if through mishandling or otherwise, this setting needs to be adjusted or verified, all that is necessary is for there to be a "visual gap" between the "L" bracket and the contact arm when the contact position is open. This gap must be under the point of the spring and continue to the end of the "L" bracket towards the contact.

Since Resident Engineering had not responded to all of the QA engineer's comments, a second SFR was issued on November 2, 1984. This SFR requested responses to questions related to the reliability of safety related valves if the finger assembly gap was not checked, gap size specification, and whether a specific check for control pressure or visible gap of assembly should be included in Startup/Maintenance procedures.

Resident Engineering response to the SFR was summarized as follows:

1. In addition to factory tests, Startup tests include checks and adjustments to confirm relay operation, limit switch operation and indication, and torque bypass function for each Limatorque valve operation. These checks are conducted to verify design requirements.
2. Actual measurement of switch gap is not necessary nor are field modifications recommended since the adjustment is made at the factory.
3. Contact pressure is verified through the testing noted above.





These conclusions were supported by APS's Nuclear Engineering, as well as its Maintenance Engineering organizations.

Upon receipt of the SFR response, the engineer contacted the electrician to relay to him the engineering disposition of the matter. At that time, the electrician identified a valve by number which he recalled did not have proper contact pressure and recommended that the QA engineer inspect it. As part of the inspection of that valve operator, the QA engineer held additional discussions with test directors and learned that out of approximately 80 Limitorque operated valves which they had tested, two required finger assembly adjustments. The need for these adjustments were based on the failure of the required generic tests which Startup personnel performed on the Limitorque valve operators.

The QA engineer's check of the finger assembly of the valve identified by the electrician confirmed that switch contact pressure did exist. His observation was that even without a gap in one of the switches, the contact pressure was sufficient to ensure reliable operation.

A return call was made to the electrician by the QA engineer. The QA engineer asked if he had knowledge of any valves that he felt were still unsatisfactory. The electrician replied he did not know of any but did inform the QA inspector that of approximately thirty valves he had worked on, five required gap adjustments. The one that the QA engineer had inspected was one of the five.

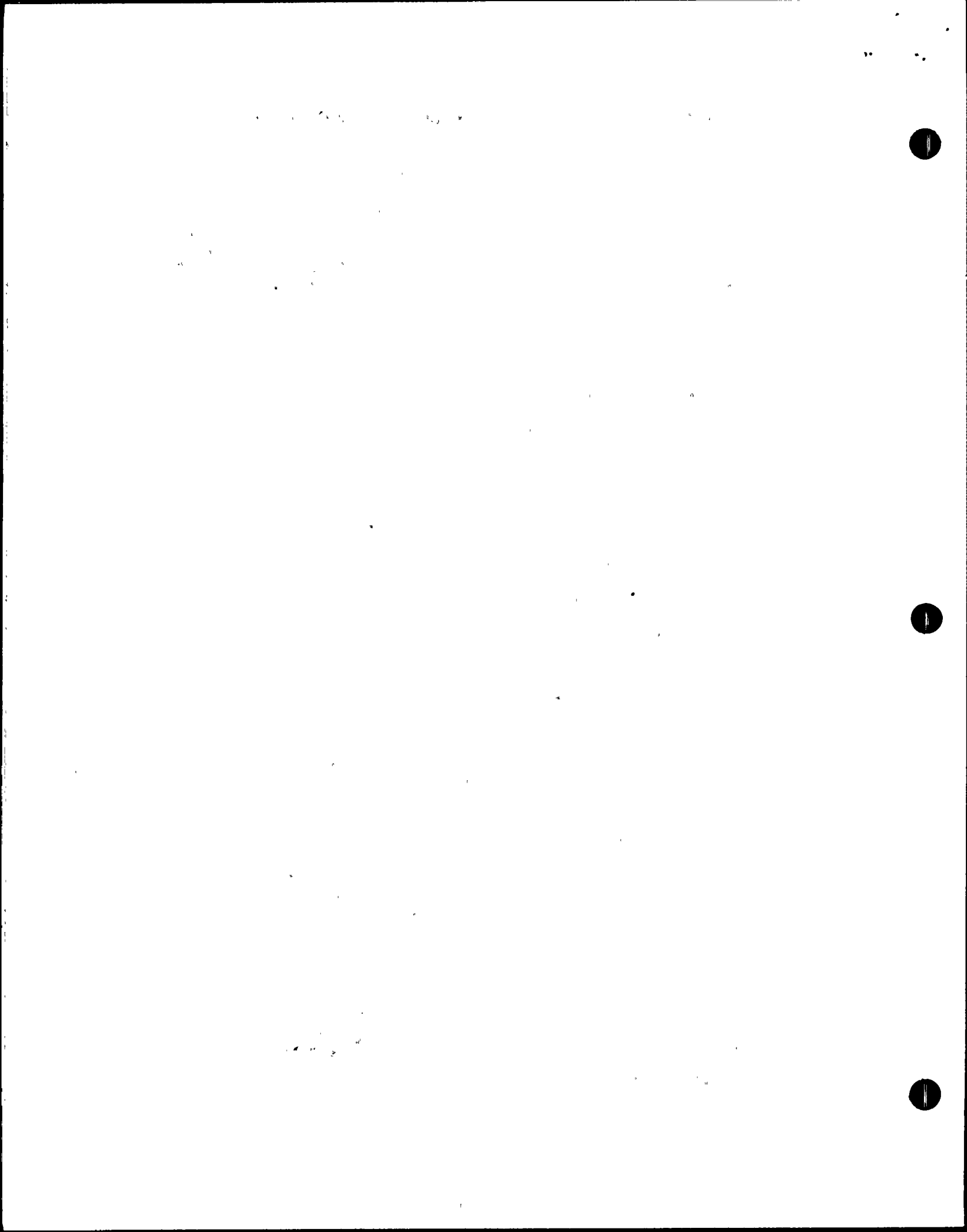
Based on the technical information that the QA engineer had received from APS Maintenance Engineering, APS Corporate Nuclear Engineering, Bechtel, Combustion Engineering and Limitorque representatives, as well as his own inspection of this Limitorque valve switch configuration, the QA engineer concluded it was not necessary to reinspect any of the valves which had successfully passed its generic tests and that the present program of testing ensures reliable valve operation. This conclusion was also supported by APS management.

To enhance valve operation, APS maintenance procedures for the operational phase will incorporate checks for gap size following maintenance on Limitorque valve operators.

#### STAFF POSITION

The allegation was partially substantiated, in that the valve operators were not checked for gap size. This check appeared to be unnecessary, as did a backfit inspection for it. The gap between the 'L' bracket and the contact arm was factory set, and field adjustment or verification was not routinely required. If improper gap size or insufficient contact pressure existed which could have prevented the valve from performing its intended function, the valve testing program, which verified valve operability, would have identified the deficiency, and the need for a corrective adjustment. As documented above, on two occasions, the need for corrective adjustments were identified by the valve testing program.

#### ACTION REQUIRED



None.

12. Licensee Event Reports (LERs)

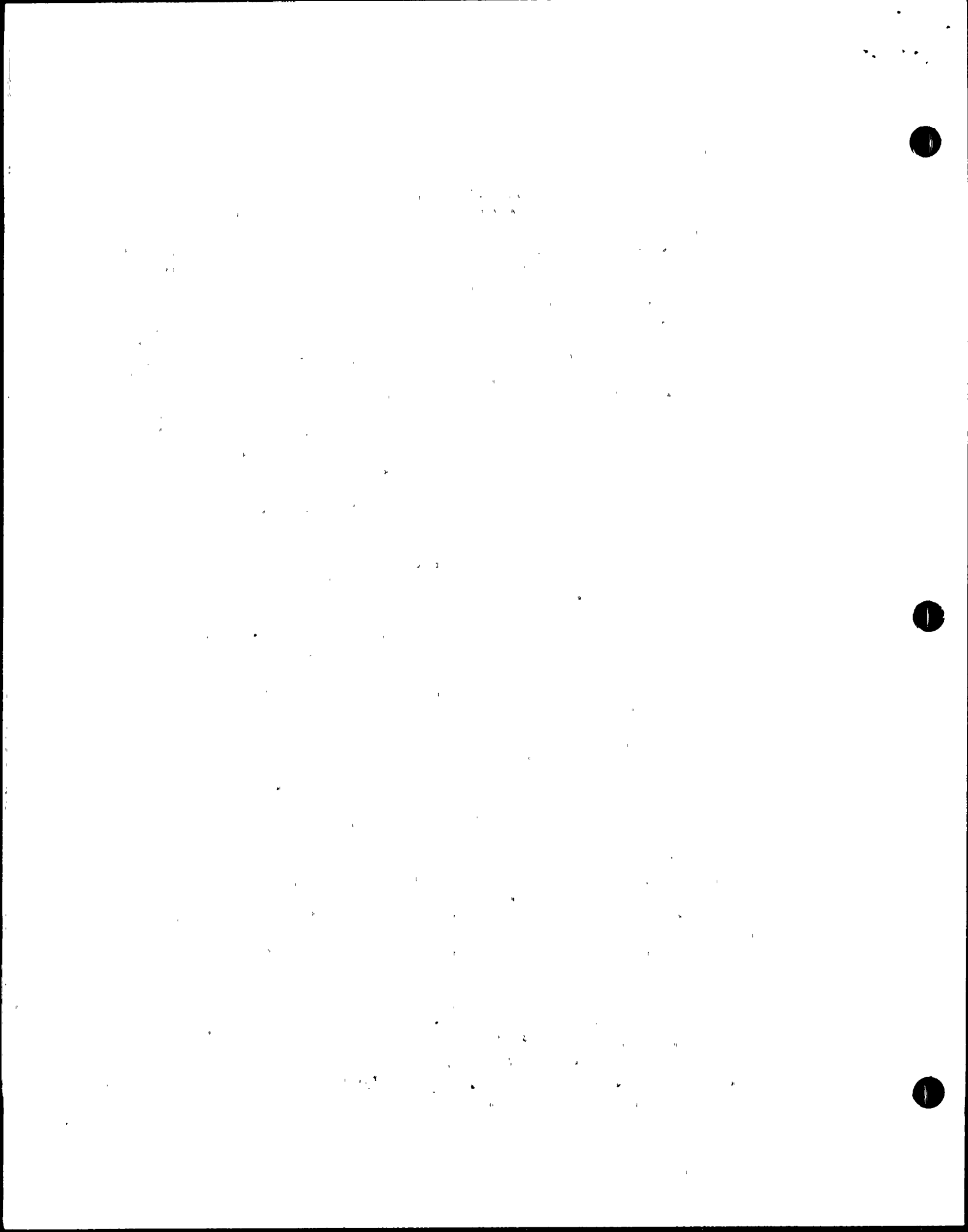
The inspector reviewed the following LERs to verify that the details of the events were clearly reported, the description of the cause was accurate, and adequate corrective action was taken. The inspector also determined whether further information was required, and whether generic implications were involved. The inspector further verified that the reporting requirements of Technical Specifications had been met; and that continued operation of the facility was conducted within Technical Specification limits.

LER 85-01 (Closed): Inadvertent Control Room Essential Filtration Actuation Systems (CREFAS) Actuation - January 13, 1985. With the plant in Mode 5 during surveillance testing of the containment purge valves in accordance with procedure 41ST-1ZZ21, the procedure required the operator to reset a Containment Purge Isolation Actuation Signal (CPIAS) which was actuated as part of the surveillance. The procedure did not clearly specify which reset button to push. The operator pressed the wrong reset button and the actuation of CREFAS occurred. The CPIAS and CREFAS circuitry was functionally tested and the surveillance procedure was revised to provide specific instructions on resetting action signals.

The Unit 1 operators were retrained on the procedure to reset the BOP ESFAS systems. After the close of the report period, a memorandum was sent from the Operations Manager to all operators asking them to identify components or systems that they felt could be a problem in the operation of the power plant. The identified components or systems will be scheduled for additional training in the future. A similar memorandum to station personnel is planned by the Plant Manager which will include a statement that plant personnel should not operate equipment if they are unsure or unfamiliar with the expected equipment response. Review of this LER is complete.

LER 85-02 (Closed): Loss of DC Control Power for the Essential "A" Spray Pond Pump - January 13, 1985. A loss of control room indication on Essential Spray Pond Pump SPA-P01 was traced to blown DC Control Power fuses for control power for the pump breaker. The cause of blown fuses was determined to be a loose 7/16" washer that had fallen on one of the controlling relays. The "A" Spray Pond Pump was declared inoperable. Electricians located and removed the short, which was attributed to the washer being left on the relay during construction. Normal equipment vibration caused it to fall between the two leads, and blow the fuses. After the washer was removed and the fuses replaced, the pump was tested, and was declared operable. Technical review of this LER is complete. However, the licensee intends to submit a revision to complete the LER reporting requirement.

LER 85-03 (Closed): Automatic Actuation of Balance of Plant Engineered Safety Features Actuation System (BOP ESFAS) - January 19, 1985. Automatic actuation of the Control Room Essential Filtration Actuation System (CREFAS) occurred due to a spurious high radiation alarm on the radiation monitoring unit. The CREFAS actuated the BOP ESFAS, and all equipment functioned as required. The spurious signal was traced to a



defective control processing unit board on the Radiation Monitoring System Remote Indicating Controller. The board was replaced with one from spares; a functional test of the radiation monitoring unit was satisfactorily performed, and the unit was returned to operation. The inspector reviewed the Radiation Monitoring System alarm print out from January 25 to February 5, 1985, and verified that no spurious alarms were received. Review of this LER is complete.

No violations or deviations were identified.

### 13. Review of Periodic and Special Reports

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specification 6.9.1 and 6.9.2 were reviewed by the inspector. This review included the following considerations: the report contained the information required to be reported by NRC requirements; planned corrective action was adequate for resolution of identified problems; and the reported information appeared valid. Within the scope of the above, the following reports were reviewed by the inspector;

- Monthly Operating Report for January, 1985.
- In accordance with Technical Specification 3.3.3.3.a, a special report was submitted detailing the inoperability of the seismic monitors.

The seismic monitoring system power supply failed on December 29, 1984. During installation of a new power supply on January 28, 1985, a wiring error resulted in the failure of three circuit cards. One of the cards was replaced with a spare, and the remaining cards were returned to the vendor for repair. Repair was expected to take several weeks. Three of the six triaxial accelerometers are inoperable; however, the remainder of the seismic monitoring system remained in operation. Review of this special report remains open pending followup of the licensee's repair efforts (85-04-04).

No violations or deviations were identified.

### 14. Exit Meeting

The inspector met with licensee management representatives periodically during the inspection and held an exit meeting on March 6, 1985. The scope of the inspection and the inspector's findings, as noted in this report, were discussed and acknowledged by the licensee representatives.

