

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-528/84-53

Docket No. 50-528

License No. CPPR-141

Licensee: Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona 85036

Facility Name: Palo Verde Nuclear Generating Station - Unit 1

Inspection at: Palo Verde Site, Wintersburg, Arizona

Inspection conducted: October 31 - November 8, 1984, November 28 and
December 19, 1984

Inspectors:

J. L. Crews

J. L. Crews, Senior Nuclear Engineer

11/3/85
Date Signed

A. D. Johnson

A. D. Johnson, Enforcement Officer

11/3/85
Date Signed

A. E. Chaffee

A. E. Chaffee, Chief, Reactor Projects Branch

11/3/85
Date Signed

Approved By:

L. F. Miller

L. F. Miller, Chief, Reactor Projects Section 2

1/4/85
Date Signed

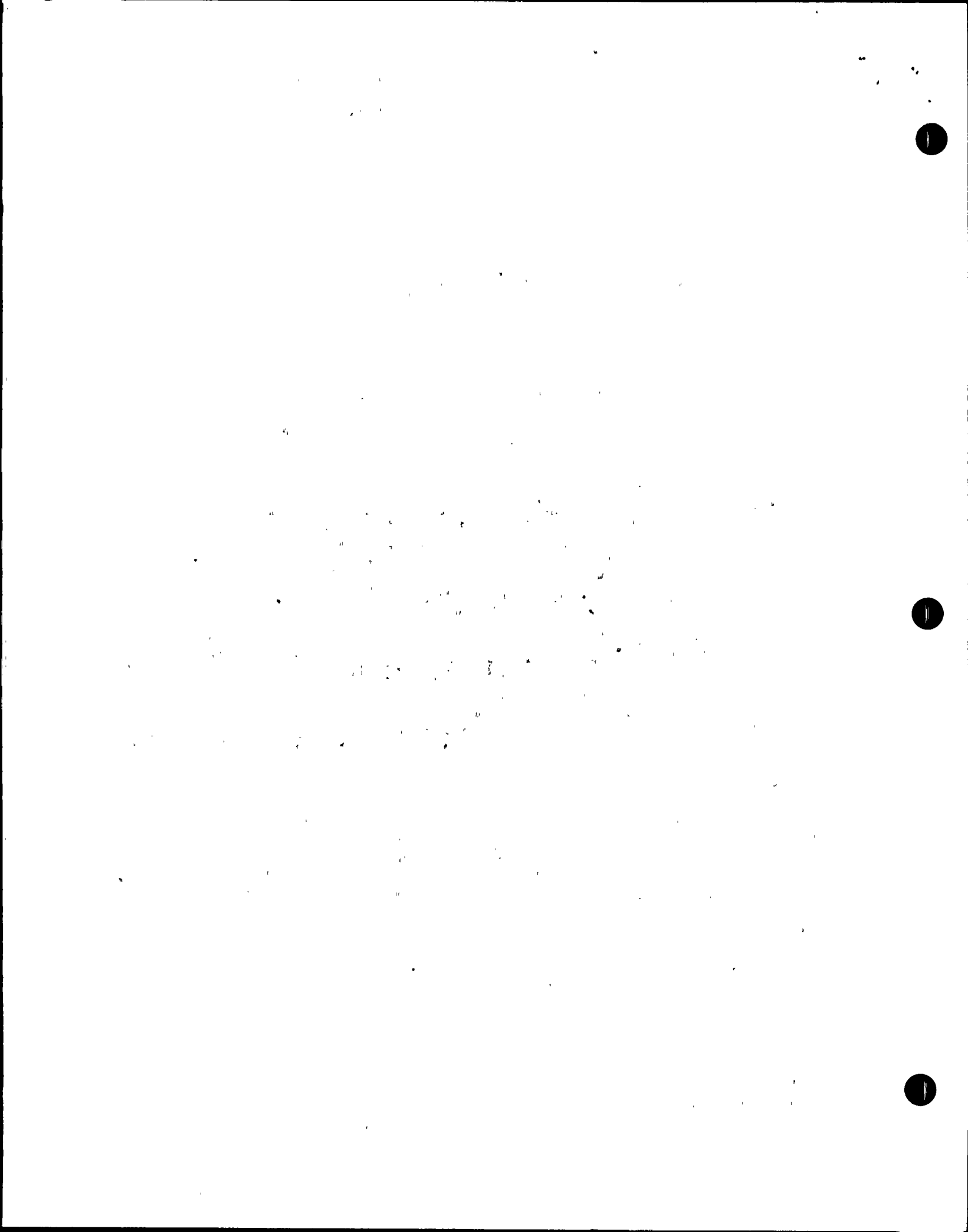
Summary:

Inspection on October 31 - November 8, November 28 and December 19, 1984
(Report No. 50-528/84-53)

Areas Inspected: Routine unannounced inspection by regional based inspectors of technical specification comparison to as-built plant features and administrative controls for plant equipment/configuration. The inspection involved 98 inspector-hours onsite by three NRC inspectors.

Results: No violations or deviations were identified within the areas examined.

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DETAILS

1. Persons Contacted

- +E. E. Van Brunt, Jr., Vice President Nuclear Production
- *W. E. Ide, Director, Corporate Quality Assurance
- +*D. B. Karner, Assistant Vice President, Nuclear Production
- +J. R. Bynum, Plant Manager/Director, Nuclear Operations
- +*J. M. Allen, Manager Operations
- +R. J. Adney, Unit Superintendent (Unit 2)
- R. E. Younger, Unit Superintendent (Unit 1)
- +*R. A. Bernier, Operations Administrative Supervisor
- *C. N. Russo, Quality Audits and Monitoring Supervisor
- *R. L. Hamilton, Quality Monitoring Supervisor
- V. S. Karmarkar, Systems Engineer - Mechanical
- R. Buzard, Assistant Shift Supervisor
- D. Callaghan, Shift Supervisor
- J. R. Niedermeyer, Shift Supervisor
- R. Hopkins, Quality Engineer
- M. Bimson, Quality Engineer

*Attended exit interview on November 6, 1984.

+Attended exit interview on November 8, 1984.

2. Licensee Development of Technical Specifications

At the time of the current inspection the licensee was in the process of the final review and comment phase of the Technical Specifications for Palo Verde Unit 1.

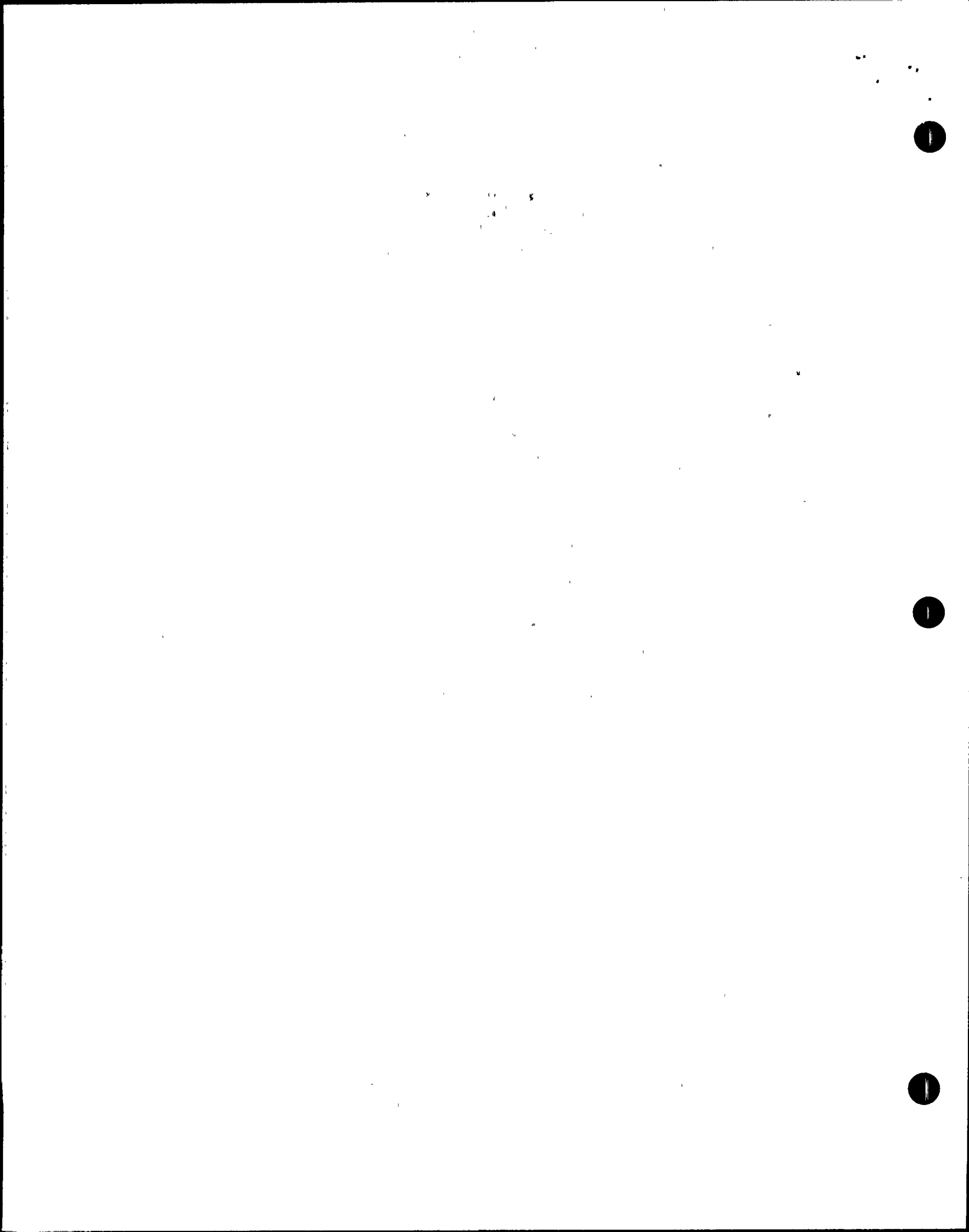
Discussions were held with licensee representatives directly involved in the licensee's effort over the past approximately two years to insure the accuracy and validity of technical specification conformance to the as-built systems, components and design features of the facility.

In general, licensee representatives described the ongoing effort to include reviews and comments by all Arizona Public Service Company (APS) departments and applicable staff involved in design, construction and operational activities as well as the principal contractual participants in such activities, e.g., Bechtel Power Company (Bechtel) and Combustion Engineering Corporation (CE).

Records of a series of meetings between various intra-company participants as well as Bechtel and CE have been maintained, and were made available for the NRC inspector's examination.

The licensee's effort was to culminate in the written certification by all parties to the preparation and review effort during the week of November 26, 1984, and subsequent certification by the licensee to NRC that same week.

Based upon their examination of records and discussion with licensee representatives it was concluded that the licensee had established and



implemented a comprehensive effort involving the principal licensee staff as well as contract participants in ensuring the accuracy and validity of the technical specifications for Palo Verde, Unit 1.

3. Technical Specification Verification - Conformance to As-Built Plant Systems

A review was conducted to verify that the as-built systems of the facility were consistent in terms of equipment components and design features with the selected Limiting Conditions for Operation (LCO) and Surveillance Requirements of the Appendix A Technical Specifications (Proof and Review copy). The review was accomplished on a sampling basis through a combination of (a) examining official plant drawings, (b) system walkdowns to verify equipment and component installation, (c) review of plant procedures including surveillance test procedures and (d) discussions with licensee personnel.

The following findings resulted:

A. 3.5.2 ECCS SUBSYSTEMS

An apparent discrepancy was observed in that the surveillance requirements indicated that flow balance in the ECCS system would be verified by verification of specified throttle valves being in the proper position. In fact flow orifices were installed for this purpose in some locations.

On December 19, 1984, this discrepancy was observed to have been corrected by a revision to the draft technical specifications.

B. 3.6.1.3 CONTAINMENT AIRLOCKS

No discrepancies were identified.

C. 3.7.1.2 AUXILIARY FEEDWATER SYSTEM

No discrepancies were identified.

D. 3.7.1.3 CONDENSATE STORAGE TANK

No discrepancies were identified.

E. 3.7.3 ESSENTIAL COOLING WATER

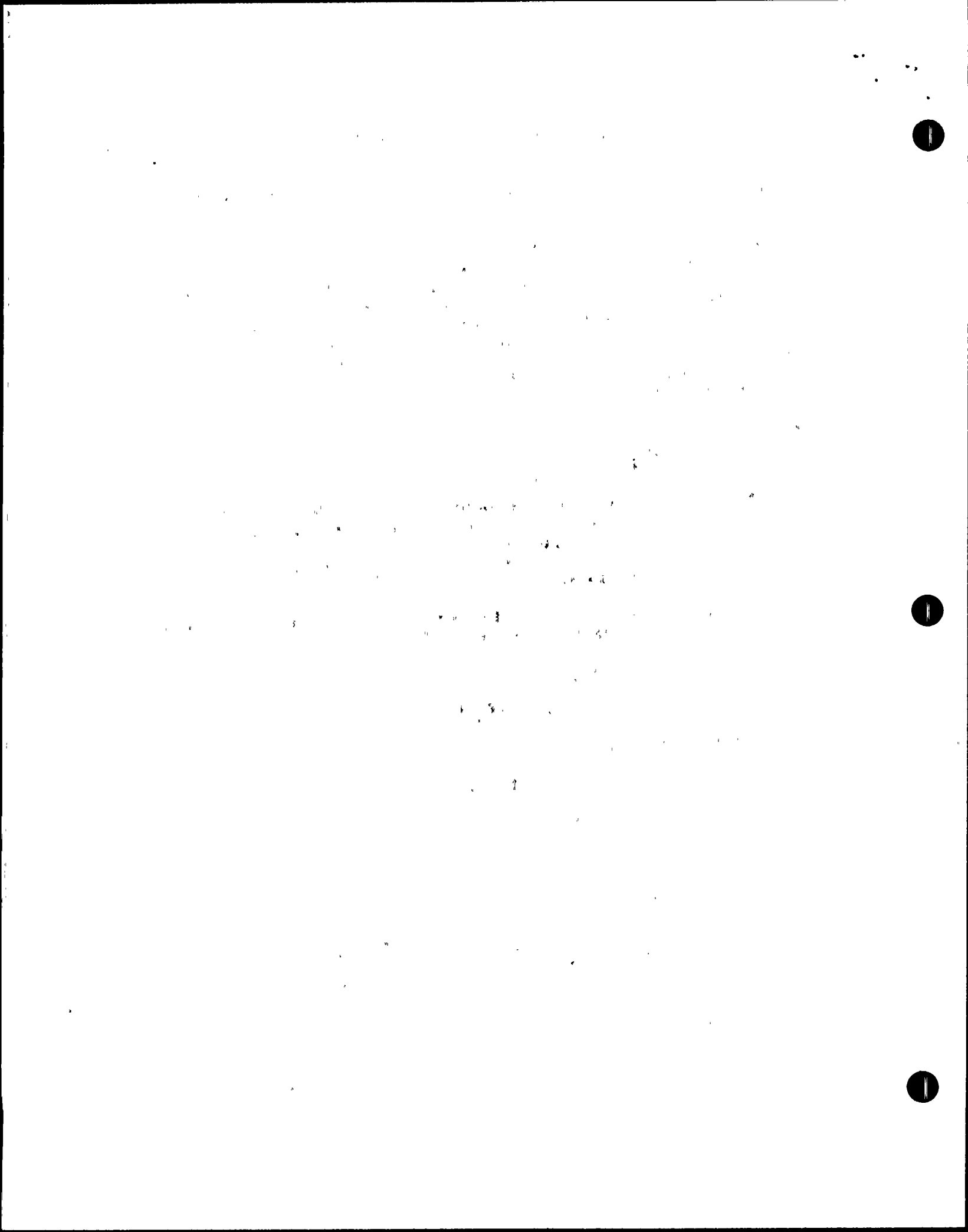
No discrepancies were identified. (See paragraph 4, regarding controls over sealed, locked or otherwise secured valves)

F. 3.7.4 ESSENTIAL SPRAY POND SYSTEM

No discrepancies were identified.

G. 3.7.5 ULTIMATE HEAT SINK

No discrepancies were identified.



H. 3.7.7 CONTROL ROOM ESSENTIAL FILTRATION SYSTEM

No discrepancies were identified.

I. 3.7.9 SNUBBERS

No discrepancies were identified.

J. 3.8.1 A. C. SOURCES

An apparent discrepancy was observed regarding the surveillance test requirement (4.8.1.1.2.d.6.c) to verify automatic diesel generator trip bypass. Whereas the draft technical specifications indicated that non-essential trips were bypassed with concurrent loss of offsite power and safety injection actuation signal, in fact a design change had been implemented such that each signal by itself would cause the nonessential trip to be bypassed.

A subsequent change in the draft technical specifications was verified by NRC inspectors on December 19, 1984. This change corrected the discrepancy discussed above.

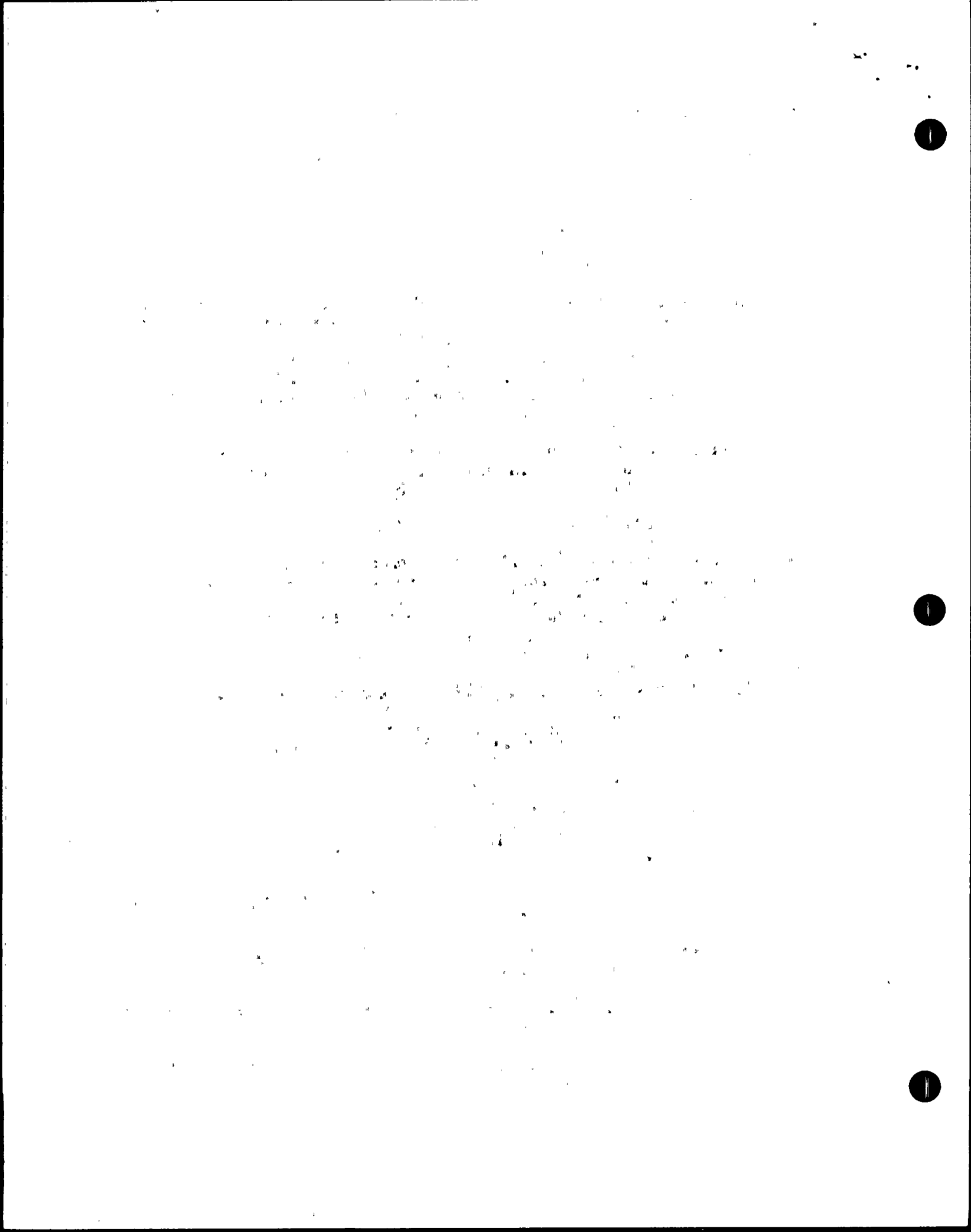
4. Configuration Control

An assessment was made of the licensee's administrative controls to insure proper plant configuration (i.e., system alignments) associated with maintenance or operational activities. The assessment consisted of a review of station procedures and discussions with licensee personnel.

a. Documents Reviewed

The following procedures and related documents were reviewed.

- Procedure 73AC-92204, Surveillance Testing, Rev. 0, dated February 15, 1984, including PCN 1, dated July 17, 1984.
- Proposed Procedure 40AC-92215, Station Tagging and Clearances (Operating License), Rev. 0.
- Procedure 41OP-12211, Mode Change Check-List, Rev. 0, dated October 23, 1984.
- Procedure 73AC-92205, Temporary Modification Control, Rev. 2, dated October 31, 1984.
- Procedure 40AC-92202, Conduct of Shift Operations, Rev. 2, dated October 19, 1984.
- Procedure 40AC-02206, Locked Valve and Breaker Control, Rev. 2, dated October 22, 1984.
- Operating Department Instruction 17, System Status Control, Rev. 3, dated October 30, 1984.



- ° Procedure 30AC-92201, Work Control, Rev. 6, dated February 8, 1984, including PCN8 dated October 8, 1984.

b. Findings

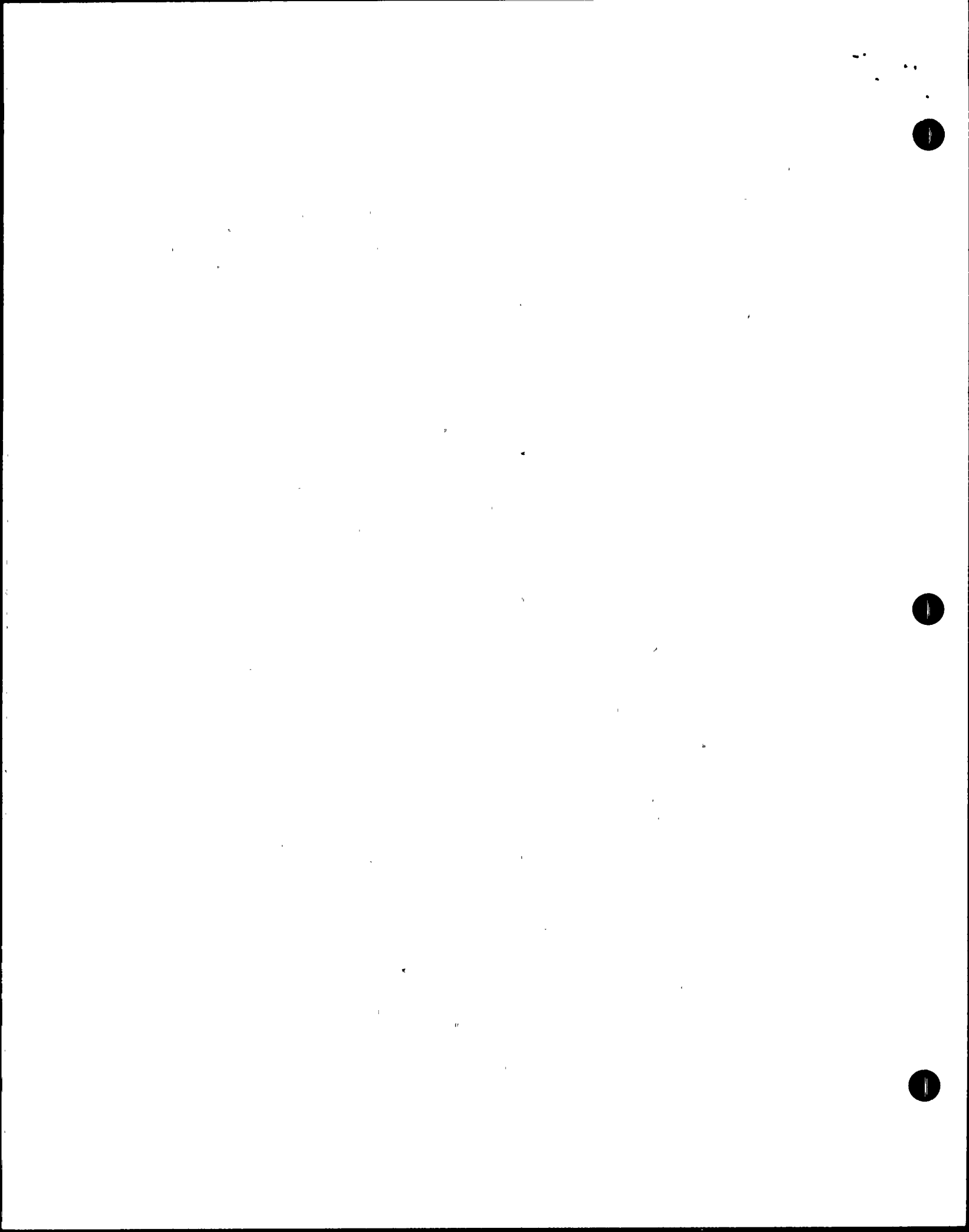
Overall the configuration control program, as defined by the procedures reviewed, appeared to reflect considerable effort on the part of the licensee. Significant guidance was contained in these procedures. It was observed by the NRC inspector that many of the procedures in this area are either in the process of being issued or have undergone recent revision. Licensee representatives stated that operator training on these procedures would be held shortly, and in any event prior to operating license issuance.

With the exception of the following, no significant weaknesses were observed by the NRC inspector.

- ° The licensee has no apparent administrative control over control room key lock valves.
- ° The licensee does not have provisions in administrative procedures for independent verification of the completeness of return to service partial system alignments.
- ° The licensee's current controls may allow the position of certain critical valves (e.g., V478, V476 [HPSI pump discharge valves] and V435, V447 [LPSI pump discharge valves]) to go unverified for as long as 18 months.

In response to the above observations, the licensee representatives committed to the following actions.

- ° An administrative procedure will be developed prior to initial criticality to require Senior Licensed Operator (SRO) approval of key locked valve operation in the Control Room.
- ° Procedure ODI-27, System Status, will be revised to require a two-party system to verify proper partial system alignments. This procedure revision will require one individual to prepare a partial system alignment, and an independent SRO to approve the proposed alignment prior to implementation. This revision will be implemented prior to initial criticality.
- ° Procedures will be developed, prior to initial criticality, to require that a portion of critical locked valves be verified each month, such that all will be verified every 18 months. In addition, these procedures will be "fine tuned" such that certain high risk valves will be checked first (e.g., valves with no monthly Technical Specification surveillance, valves with no remote indication and no system operability functional check which shows conclusively based on system flow that the valves are properly positioned).



The licensee actions appear to be acceptable. These items are closed.

5. Exit Interview

Meetings were held with those persons indicated in paragraph 1 at the conclusion of the inspection, during which inspection findings as discussed above were discussed.

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