U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-346/76-06

Licensee: Toledo Edison Company
Edison Plaza
300 Madison
Toledo, Ohio 43652

Davis-Besse Nuclear Power Station
Unit 1
Oak Harbor, Ohio

License No. CPPR-80
Category: B

Type of Licensee: PWR (B&W) 906 MWe

Type of Inspection: Routine, Announced

Dates of Inspection: April 26-29, 1976

Principal Inspector: R. D. Martin RC Knop for — 5/20/76 (Date)

Accompanying Inspector: R. C. Knop RC Knop — 5/20/76 (Date)

I. N. Jackiw CE Jackiw for — 5/20/76 (Date)

W. D. Shafer RC Knop for — 5/20/76 (Date)

D. R. Hunter RC Knop for — 5/20/76 (Date)

Other Accompanying Personnel: None

Reviewed By: G. Fiorelli, Chief
Reactor Operations and
Nuclear Support Branch
G Fiorelli — 5/20/76 (Date)

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SUMMARY OF FINDINGS

Inspection Summary

Inspection on April 26-29, (76-06): Inspection of the program development and implementation of the Quality Assurance Program for Station Operations of the licensee as described in Section 17.2 of the FSAR. Substantial program inadequacies were identified to the licensee which will require additional program development and reinspection.

Enforcement Action

No items of noncompliance with NRC requirements were identified during this inspection.

Licensee Action on Previously Identified Enforcement Items

Not within scope of this inspection.

Other Significant Findings

A. Systems and Components

None identified during this inspection.

B. Facility Items (Plans and Procedures)

None identified during this inspection.

C. Managerial Items

Additional developmental effort required of the licensee to bring their Quality Assurance Program for Station Operations into conformance with the program as described in Section 17.2 of the FSAR.

D. Noncompliance Identified and Corrected by Licensee

None identified during this inspection.

E. Deviations

None identified during this inspection.

F. Status of Previously Reported Unresolved Items

Not within the scope of this inspection.

Management Interview

A. The following persons attended the management interview at the conclusion of the inspection:

Toledo Edison Company

L. Roe, Vice President, Facilities Development
J. Grant, Vice President, Energy Supply
E. Novak, General Superintendent, Power Engineering and Construction
J. Evans, Station Superintendent
T. Murray, Operations Engineer
B. Beyer, Maintenance Engineer
L. Stalter, Technical Engineer
D. Briden, Chemist and Health Physicist
L. Grime, Inspection Engineer
J. Orkins, Instrument and Controls Engineer
J. Lingenfelter, Senior Assistant Engineer
J. Troknya, Office Supervisor
W. Green, Assistant to the Superintendent
R. Franklin, Training Supervisor
J. Lenardson, Manager of Quality Assurance
P. Narducci, Quality Control Engineer
K. Cantrell, Operations Quality Assurance Engineer
J. Buck, Operations Quality Assurance Engineer
C. Daft, Field Quality Assurance Engineer
J. Werner, Director of Purchasing
R. Vick, Manager of Purchasing

Consultants

F. Lobbin, General Physics Corporation

B. Matters discussed and comments were as follows:

1. The inspectors summarized the purpose of the inspection, and the general manner in which the inspection was handled with regard to the materials used as the basis for the inspection, and the documents and program implementation that were reviewed.

2. The inspectors reviewed their major findings as identified in the Report Details sections of this report:

Section 1 "Management"
Section 2 "Review"
Section 3 "Reportable Events"
Section 4 "Document Control"

Section 5 "Records Control"
Section 6 "Test and Measurement Equipment Control"
Section 7 "Control of Design Changes and Modification"
Section 8 "Maintenance"
Section 9 "Qualification of Personnel"
Section 10 "Training"
Section 11 "Inspections"
Section 12 "Audits"
Section 13 "Tests and Experiments"
Section 14 "Surveillance Testing"
Section 15 "Procurement Control"
Section 16 "Receipt, Storage, and Handling"

3. The inspectors noted that because of the large number, and, in some cases, the magnitude of the deficient areas, multiple reinspections may be necessary before a satisfactory finding can be made that the licensee's operational quality assurance program is fully developed and implemented.

4. The licensee was encouraged to:

   a. Keep the project inspector appraised of the status of program development.

   b. Concentrate on and complete functional areas.

   c. Establish their own priorities for program completion recognizing that the program must be implemented 90 days prior to fuel loading.

REPORT DETAILS

Persons Contacted

The following persons, in addition to those listed under the Management Interview section of this report, were contacted during this inspection:

R. Flood, Supervising Operator
R. Adney, Shift Foreman
F. Johnson, Maintenance Foreman
L. Kurfis, Instrument and Control Foreman
D. Dibert, Assistant Engineer
J. Hickey, Training Coordinator
C. Cousino, Nuclear Instrument Technician, Group Leader
D. Dean, Office Supervisor (previous incumbent)
C Hoffer, Reactor Operator
D. Thomas, I&C Technician
R. Cork, Storekeeper
D. Rollins, Stockman

1. Management (R. Knop)

a. The inspector reviewed the Davis-Besse Nuclear Quality Assurance Manual (NQAM) to determine if the licensee has developed a QA Program relating to Management Control Activities that is in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

b. The manual review indicated that:

(1) Formal requirements relating to authorities and responsibilities for the QA Program were in agreement with the requirements set forth in in the application.

(2) Responsibilities had been assigned for periodically reviewing the status and adequacies of the QA Program by the QA Manager and corporate management.

c. It appeared that further revising of the QA Manual is required to define formal controls defining responsibility for methods of review of significant deficiencies occurring after the plant was operational. (See Reportable Events, Section 3 of this report.)

It was not evident by the review of the NQAM that there was a formal method of assuring that appropriate management personnel received the following in a timely manner:

(1) NRC Enforcement Correspondence

(2) Inspection and Enforcement Bulletins

(3) Results of on site and offsite review board meeting minutes.

The inspector pointed out several areas where FSAR Section 13, Section 17, and the QA Manual do not agree on specific wording of requirements of review groups. The licensee stated that these variations would be resolved.

d. In reviewing the implementation of the management aspects of the NQAM, the inspector noted that the monthly QA reports generated by the QA Manager were not being transmitted to the Plant Superintendent as required, and also did not contain the required analysis on quality trends.

The inspector noted that there appeared to be a significant difference of opinion, between the QA department and other departments, as to the meaning of the terms used in the QA Manual. In addition it appears that a significant number of plant personnel were not sure of their QA responsibilities. The licensee stated that a general training session on the QA Program was scheduled for May 13, 1976. In addition, supplemental training would be provided in functional areas where required.

2. Review (R. Knop)

a. The inspector reviewed the Davis-Besse Nuclear Quality Assurance Manual (NQAM) to determine whether the licensee has developed and implemented a QA Program for review of facility activities that is in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

b. The inspector noted the following deficient areas:

(1) The charter for the Company Nuclear Review Board (CNRB) has not yet been approved. The inspector reviewed a draft charter that was currently under review by the CNRB. The inspector noted several omissions where the charter did not address requirements stated in ANSI N18.7 and Section 6 of the proposed Technical Specifications. The inspector verified that the CNRB had been formed as stated in the application, members had been appointed as required, and that meetings with the appropriate quorums are being conducted.

(2) The charter for the Station Review Board (SRB) has not yet been drafted nor does the NQAM address the QA aspects of the SRB function. The inspector verified that the SRB has been meeting in accordance with the application and that quorum requirements are being met. The inspector stated that further inspection of the SRB function would be conducted after the appropriate revisions to procedures are made. The inspector also noted the charter for the SRB should be consistent with the appropriate sections of the FSAR Section 13.

(3) The inspector stated that it appeared that the items to be reviewed in Administrative Procedure AD 1804 needed significant revision to include requirements for distribution of reports, timeliness of reviews, and addition of significant factors such as when restart of the reactor will be allowed.

3. Reportable Events (R. Knop)

a. The inspector reviewed the the Davis-Besse Nuclear Quality Assurance Manual (NQAM) to determine if the licensee had developed a QA Program relating to the review of reportable events, that is in conformance with regulatory requirements and commitments in the application.

b. The NQAM and Administrative (AD) procedures were found to be deficient in that:

(1) The program did not clearly state those methods and responsibilities for review of reportable events to insure that these methods were in accordance with the Technical Specifications. In particular it did not address: (a) methods of verifying that appropriate events are properly identified as reportable events; (b) method of promptly notifying appropriate personnel including NRC during off shift hours and weekends; and (c) assignment of responsibilities and a method of tracking event followup including methods for assuring completion of corrective actions relating to reportable events.

(2) The NQAM did not specifically address requirements for a Reportable Events system. Requirements for a Nonconforming Report (NCR) system were discussed, but it appears that there is some confusion as to when this system will be used. The procedure appears to center on QA aspects and does not adequately address operability and reportability aspects of an event.

(3) NQAM Procedure QAP 2150 comments:

(a) Section 7.1.5 needs to be clarified to define under what conditions items in a hold status will be used in an operating plant.

(b) Section 6.2.1 needs to be clarified as to when the NCR system will be used in an operating plant.

(c) Section 7.2.1 needs to be clarified as to who the "responsible reviewing authority" is for final disposition of an NCR.

(4) NQAM Procedure QAP 2160 (revised) comments:

(a) Section 7.2 does not adequately address followup requirements for single significant QA problems.

(b) Section 7.4 needs more specificity as to when the corrective action system is required.

(c) Section 7.5 needs to include methods for in progress followup of corrective actions that require a long term to fix or have significant milestones.

(5) Responsibilities and authorities for the interface between operations and Quality Assurance have not been defined adequately for reportable events.

c. The inspector stated that the implementation of the licensee's Reportable Events system would be reviewed after the necessary NQAM and AD sections were revised.

4. Document Control (I. Jackiw)

a. The inspector reviewed the licensee's Quality Assurance Program relating to document control to ascertain whether the program is in conformance with regulatory requirements, commitments in the FSAR, and industry guides and standards.

b. The following items were considered during this review: formal administrative controls established for review, approval and periodic updating for procedures; controls established for issuing and revising procedures, deleting procedures, controlling temporary changes to procedures, issuing standing and special orders, maintaining logs of operating information, and controlling shift turnovers; and that responsibilities have been assigned for control of the above items.

c. FSAR 17.2.6 states that procedures have been developed to ensure that only current and approved documents are being used. Also, QAP 2060, Revision 1, states that document control procedures shall include provisions to assure the proper identification of superseded documents and notification of this document status to affected individuals and organizations. QAP 2060 further states that individuals and organizations performing a quality related activity shall implement approved written procedures containing measures to assure that documents and changes being used are adequately controlled to preclude the possibility of use of outdated, superseded, and inappropriate documents.

The following program inadequacies were identified:

(1) During a review of procedures relating to the control of distribution of procedures, the inspector noted that no mechanism exists to remove deleted documents from controlled manuals.

(2) A number of outdated procedures were found in the control room Procedure Manual. These included:

(a) ST 5093.01, "Turbine Generator Overspeed Trip Calibration Test" - The approved procedure index listed this procedure as having been deleted. The inspector found a copy of this procedure in the controlled manuals in the control room and in the shift foreman's office.

(b) ST 5099.03 "Miscellaneous Instrument Shift Check" - This deleted procedure was still in the control room manual.

(c) PT 5105.01 "Cathodic Protection System Periodic Test" - No procedure in the control room manual. The approved procedure index lists this as an active procedure.

(d) PT 5191.01 "Turbine Generator Lube Oil Periodic Test" - The current revision of this procedure was not in the control room manual.

(e) SP 1106.21 "Condensate, Demineralizer and Primary Water Transfer" - The current revision of this procedure was not in the control room manual.

(f) SP 1104.0[illegible] "Control Room Emergency Ventilation" - The control room copy of this procedure was not current.

These six discrepant procedures were taken from a sampling of 48 procedures, and the inspector indicated that this discrepancy rate (greater than 12%) is excessive.

(3) The inspector observed that no one person is delegated the responsibility for inserting procedures into the control room Procedure Manual. Also, the shift foreman indicated that his Procedure Manual is maintained current by operations personnel. A number of different operating personnel make the insertion of procedures into the shift foreman's procedure manual.

(4) The inspector noted that no measures exist which provide for the removal of temporary modification request forms for procedures that had already been modified. A review of procedures in the control room revealed that a number of modified procedures still have a copy of the temporary modification request form in the manual.

d. The following program implementation inadequacies were identified:

(1) Administrative Procedure AD 1839.00, states in part, that the oncoming reactor operator should complete the following steps in the control room before relieving; Review the Tagging Log and review the Jumper and Lifted Wire Log. Discussions with control room personnel revealed that these required reviews are not being performed before shift relieving.

(2) In regard to procedure adherence, the inspector stated that discussions with the office supervisor indicate that he is not aware of his responsibility to review special and standing orders. AD 1839.00 requires that the office supervisor review special and standing orders at least annually.

5. Records Control (I. Jackiw)

a. The licensee's Quality Assurance Program relating to the control of records was reviewed to ascertain whether it is in conformance with regulatory requirements, commitments in the FSAR, and industry guides and standards.

b. The following were considered during this review: administrative controls established for control of the generation and custody of records; establishment of record storage controls including controls for receipt, storage, safekeeping, retention, retrieval, and disposition of records; and assignment of responsibilities for control of the above.

c. The following program implementation inadequacies were identified:

(1) The draft copy of the Administrative Procedure AD 1848.04 "Operation of the Station Central Files" established

controls for and describes the operation of the Central Files. However, the inspector noted that these controls over access to the Central Files, and measures employed during receipt, indexing, and filing of records are inadequate to permit verification of the completness of the records already in the Central Files. Indexes of records in the files are incomplete, and central file personnel were unable to determine fully what records presently exist in the files.

The licensee's representative did state however, that the master file of station procedures in the Central Files has been verified to be complete and current. The inspector stated that the licensee will have to assure himself that all other quality assurance records in the Central Files are complete and current.

(2) Section control procedures for the preparation, collection, filing, storage, maintenance, and disposition of records have been written and are awaiting final approvals. Since these controls have not been fully implemented, the inspector was unable to measure the effectiveness of control of the records systems for each section. Also, quality assurance records associated with the design, procurement, manufacture, and construction activities of the Davis-Besse Nuclear Power Station have not been turned over to the Operations Quality Assurance Engineer, and the inspector was not able to determine the Quality Assurance Department's implementation of controls of the records system.

The area of the control of records will be reinspected after the licensee's program is approved and implemented.

6. Test and Measurement Equipment Control (I. Jackiw)

a. The licensee's Quality Assurance program relating to the control of test and measurement equipment was reviewed to ascertain whether it is in conformance with regulatory requirements, commitments in the FSAR, and industry guides and standards.

b. The following items were considered during this review: established controls include frequency of calibration, identification of calibration standards, and specification of required calibration procedures; requirements for identifying the status of calibration; a system for assuring calibration of equipment prior to use; and controls for handling out-of-calibration equipment.

c. The following program implementation inadequacies were identified:

(1) Instrument Calibration and Testing Procedure IC 2100.00 requires that I&C Calibration Standards are to be recertified at least at the frequency stated in attachment No. 1 of that procedure. It further requires that prior to use the test equipment listed in attachment No. 2 shall be verified that it is not past the due date for calibration, and if it is past due, the equipment is to be recalibrated prior to use.

A review of records and discussions with I&C personnel indicates that test equipment calibration frequencies as listed in attachment No. 2 of Procedure IC 2100.00 are not always adhered to. The licensee's representative stated that this equipment gets calibrated prior to use. The inspector noted that while this conforms with ANSI N45.2-1971, which states that test equipment shall be calibrated at prescribed intervals or prior to use, it is not in accordance with the program as stated in the FSAR and the applicable QAP. FSAR 17.2.12.c and QAP 2122, Section 7.3.4 both require that measuring and test instruments be calibrated and maintained at specified intervals.

(2) In regard to past due test equipment, the licensee's representative stated that when test equipment listed in attachment No. 2 of IC 2100.00 is found past due for calibration, a yellow "information" tag is attached to the instrument. Depending on the need of the instrument, it is then immediately recalibrated or is left to be recalibrated prior to its use.

The inspector noted that IC 2100.00 does not specify controls to handle test equipment from the time it is found past due for calibration to the time it is recalibrated.

(3) During review of I&C maintenance records, the inspector noted that the licensee failed to adhere to procedure IC 2100.00 in that a past due test gauge was used to calibrate the diesel generator fuel oil pump discharge pressure. The calibration activity was performed on January 31, 1976, and records show that the test gauge used was last calibrated on October 6, 1975. The frequency of calibration for this test gauge is every three months.

(4) Administrative Procedure AD 1849.00 requires that procedures shall include physical controls to segregate defective or out of calibration test equipment from serviceable and

calibrated test equipment. The inspector found that IC 2100.00 does not provide for this type of control.

7. Control of Design Changes and Modification (D. Hunter)

a. The inspector reviewed the design control measures established to meet the requirements of the FSAR, Section 17.2.3. The review included Administrative Procedure 1845 and 1823 and Quality Assurance Procedures 2030 through 2034.

b. The following major program inadequacies were identified:

(1) Administrative Procedure 1845, Changes, Tests and Experiments, is in preliminary form and not available for review by the inspector in the completed and approved condition.

(2) Quality Assurance Procedure 2030, Design Control, is under revision to incorporate the Quality Assurance Procedures concerning design control into one major document.

(3) Administrative Procedure 1823, Jumper and Lifted Wire Control, provides control of temporary systems modification by use of jumpers, lifted leads, or process bypasses.

The procedure does not limit the use of temporary modifications (jumpers/lifted leads) to systems which are out of service. The use of temporary modifications on in-service (operable) systems requires prior approval and subsequent review in accordance with Technical Specification 6.8 since a temporary modification (jumper or bypass) could substantially alter the system function.

The specific definition of the word "critical" as used in steps 12.1.4 and 12.2.4 of AD 1823 is not provided to insure uniform implementation of the "critical jumpers/ lifted wires."

Moreover the method of identification of "critical jumpers/lifted wires" is not provided by AD 1823. A review of the jumper/lifted wire log revealed the lack of identification or discrimination between "critical" and "noncritical" jumpers/lifted wires.

c. This area will be inspected when the licensee completes his program development.

8. Maintenance (D. Hunter)

a. The inspector reviewed the maintenance program established to meet the requirements of the FSAR, Section 17.2.2.2 and 13.1; Section I of Appendix A to RG 1.33; and Sections 5.1.6 and 5.3.5 of ANSI-N 18.7-1971. The review included Administrative Procedure 1844 and Quality Assurance Procedure 5130 to assure adequate program control and implementation.

b. The following major program inadequacies were identified.

(1) The maintenance activities are classified as routine or nonroutine by the Maintenance Engineer or the I and C Engineer in accordance with AD 1844, Section 4.0. The Administrative Procedure does not provide adequate guidelines and instructions to insure proper and uniform classification of maintenance activities. In specific maintenance activities the actual maintenance work may be routine (skill-of-the-craft), but the overall maintenance activity may be nonroutine or routine requiring an approved maintenance procedure.

(2) The Administrative Procedures, 1844 and 1839, do not provide adequate guidelines and instructions concerning removal of equipment for service for maintenance and returning equipment to service after maintenance. The maintenance procedures/instructions do not provide control of these interface areas. The inspector reviewed the interface areas with the maintenance engineer and the operations engineer and determined that certain major equipment maintenance interface activities are covered in the System Procedures. The inspector determined that selected portions of a valve lineup and selected testing to establish operability are being utilized by station operations routinely, but the procedural guidelines and instructions to provide control of these activities are not provided.

Items which are not covered in specific written instructions include: testing requirements of redundant equipment; Technical Specifications applicable to the equipment outage (note on MWO); detailed written procedures/instructions for removing the equipment from service (including draining, valving, etc.); detailed written procedures for returning the equipment to service (including filling and venting, valve lineups, etc.); and specific testing requirements to determine "operability" after the maintenance activity.

(3) The classification of maintenance is required to be reviewed by the Station Review Board (SRB) periodically by AD 1844, Sections 4.1 and 10.4. No specific guidelines are apparent to establish the SRB review method.

c. The following minor program inadequacies were identified.

(1) The Maintenance Work Order (MWO) form does not provide the space for, nor does Administrative Procedure 1844 (Section 6.2) require, the signature of the man who performs the work in order to provide tracking of worker qualifications.

(2) Administrative Procedure 1844.01, Preventative Maintenance, does not contain adequate instructions to assure the timely completion of all preventative maintenance in accordance with the schedule. The clerk issues a MWO in accordance with the established schedule, but no mechanism is provided to track the completion of the item.

(3) The Routine Maintenance Flow Chart associated with AD 1844 indicates that the Station Superintendent reviews the maintenance classifications routinely, but the Administrative Procedure does not reflect this requirement.

d. The following major implementation inadequacies were identified.

(1) Maintenance Work Order No. 903, 250/125 vs DC System, completed on April 2, 1976:

The inspection engineer did not review the safety related activity, as indicated by the lack of his initials on the MWO. The inspection engineer sign-off was marked as "not applicable", contrary to AD 1844 (MWO form - item 11) for Safety related maintenance activities.

(2) Maintenance Work Order No. 911, Emergency Diesel Generator, completed on March 16, 1976:

The alignment data sheet was provided in the package, but the data was not complete. The data taken was not within the acceptance criteria of the procedure. The maintenance activity required inspection by the designated inspector, but no inspection data sheet was included in the package.

e. The following minor implementation inadequacies were identified.

(1) Maintenance Work Order No. 753, Emergency Diesel Generator, completed on January 23, 1976.

The maintenance activity was performed in accordance with a Maintenance Instruction (MI) and Quality Control inspected the activity, but no inspection data sheets were attached to indicate the inspection hold points or inspection requirements.

(2) An inspector interview of selected plant personnel revealed that more training is needed at the foreman level to increase the familiarization and knowledge level of the individuals to the job-related administrative procedures. Two work areas which were identified concern the handling of procedure changes and emergency maintenance activities.

9. Qualification of Personnel (R. Martin)

a. The inspector reviewed selected licensee documents to ascertain whether the licensee has developed and implemented a QA Program relating to qualification of personnel that is in conformance with regulatory requirements, commitments in the application of the licensee, and industry guides and standards.

The inspector based his review on:

(1) Section 13 of the FSAR "Conduct of Operations"

(2) Section 17.2 of the FSAR "Quality Assurance Program for Station Operation"

(3) ANSI N18.1-1971 "Selection and Training of Nuclear Power Plant Personnel"

(4) ANSI N45.2.6 "Qualifications of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants"

The materials reviewed by the inspector included:

(1) QAP 1030 "Training and Qualification of QA Personnel"

(2) QAP 1040 "Training and Qualification of Non-QA Personnel"

(3) Section 4 of Davis-Besse Administration Manual (the licensee has incorporated Section 13 of FSAR in its entirety into their Administration Manual).

(4) Qualification records of selected licensee personnel:

b. The following program inadequacies were identified as a result of this review:

(1) The program (including the FSAR description) does not address the qualification requirements of the training staff.

(2) The qualification records for craft personnel trained and qualified as "designated inspectors" do not address limits on the areas of their competence as designated inspectors.

(3) The qualification system (QCI 3020) used by the QCE to assign inspection level certifications does not provide adequate assurance that level assignments are appropriate.

c. The following implementation inadequacy was identified as a result of this review:

(1) The present incumbent of the QCE position does not satisfy the qualfication requirements of the position as described in the FSAR.

10. Training (R. Martin)

a. The inspector reviewed selected licensee documents to ascertain whether the licensee has developed and implemented a QA Program relating to training activities that is in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

The inspector based his review on:

(1) Section 13 of the FSAR "Conduct of Operations"

(2) Section 17.2 of the FSAR "Quality Assurance Program for Station Operation"

(3) ANSI N18.1-1971 "Selection and Training of Nuclear Power Plant Personnel".

The materials reviewed by the inspector included:

(1) QAP 1030 "Training and Qualification of QA Personnel"

(2) QAP 1040 "Training and Qualification of Non-QA Personnel"

(3) Section 4 of Davis-Besse Administration Manual (the licensee has incorporated Section 13 of FSAR in its entirety into their Administrative Manual)

(4) AD 1828 Series of Procedures "Personnel Training Program"

(5) QAP 5160 "Personnel Training"

b. The following program inadequacies were identified as a result of this review:

(1) The program does not provide a method which assures that design change information is factored into personnel training programs.

(2) The program does not provide criteria which guides the training staff as to the priority they should assign various changes (procedures, FSAR, etc.) when they disseminate the changes to the staff.

11. Inspections (R. Martin)

a. The inspector reviewed the inspection programs of the Quality Control Engineer (QCE) and the Inspection Engineer to ascertain whether the licensee has developed and implemented a QA Program relating to inspections of ongoing activities that is in conformance with regulatory requirements, commitments in the application, and industry guides or standards.

The inspector based his review on:

(1) Section 17.2.10 of FSAR "Inspections"

(3) ANSI N45.2-1971 "QA Program Requirements for Nuclear Power Plants"

The material reviewed by the inspector included:

(1) AD 1831.00 "Quality Verification by Station Personnel" (not yet fully approved)

(2) QAP 2100-2102 "Inspection", etc.

(3) QAP 2140-2142 "Inspection, Test, and Operating Status", etc.

b. The following program inadequacies were identified as a result of the review:

(1) Criteria do not exist in controlled documents which establish when inspections will be conducted of activities controlled by the Maintenance Work Order (MWO) system.

(2) Criteria do not exist in controlled documents which establish criteria for the selection of the "designation inspector" conducting inspection activities.

(3) The inspection categories assigned to surveillance tests are not reflected in controlled documents.

(4) The involvement of the Project Engineer in inspection activities referred to in QAP 2051 are not reflected in station Administrative Procedures. Sufficient instances were noted of activities of Inspection Engineer personnel and QC personnel not addressing QAP requirements which leads the inspectors to conclude that the Administrative Procedures and the Quality Control Instructions must be reviewed by the licensee against the requirements of the Quality Assurance Procedures to assure uniformity of the program.

(5) No management control method exists which will provide assurance that the activities of the Quality Control Engineer will provide assurance as to the adequacy of the activities of the Inspection Engineer and his staff.

(6) The management control method for inspection (tours, equipment observation, and data taking) of equipment performance inside and outside the control room is understood to be under development. Inspection of this activity will have to be deferred until these controls are developed.

(7) The inspector understands that the inservice inspection program is under development. Inspection of this program will have to be deferred until these controls are developed.

c. The following implementation inadequacies were identified as a result of this review:

(1) The use of inspection checklists as called for QAP 2101 is not consistently implemented by the Quality Control Engineer in his activities.

(2) The licensee is understood to be considering a revision to QAP 2100 and 2101 to clarify the use of inspection checklists and procedures. The present activities of the Inspection Engineer appear to use a combination of both systems.

(3) The inspector found no evidence of inspection method prequalification or evidence that the method had been demonstrated as adequate prior to its implementation as called for in QAP 2102.

(4) Original component inspection activities are not necessarily reviewed when preparing to inspect a replacement component as described in Section 17.2.10, Item "i" of the FSAR.

(5) Inspection records are not necessarily made a part of the records of the activity being inspected as called for QAP 2100.

12. Audits (R. Martin)

a. The inspector reviewed the audit program of the licensee to ascertain whether the licensee has developed and implemented a QA Program relating to audits of activities that is in conformance with regulatory requirements, commitments in the application, and industry guides or standards.

The inspector based his review on:

(1) Section 17.2.18 of the FSAR "Audits"

(2) ANSI N45.2-1971 "QA Program Requirements for Nuclear Power Plants"

(3) Section 6.5.2 of the proposed Technical Specifications "Company Nuclear Review Board"

The material reviewed by the inspector included:

(1) QAP 2180-2184 "Audits", etc.,

(2) QAP 5020 "Preoperational and Initial Start-up Test"

(3) Draft Charter for Company Nuclear Review Board.

b. The following program inadequacies were identified as a result of this review:

(1) The QAP's and the FSAR are not in agreement with respect to establishing the independence of Audit personnel (Pages 17-77 of FSAR vs QAP 2181). Moreover, the interpretation and understanding of the QA staff of these issues is not uniform.

(2) Distribution of AFR's as described in the FSAR are not similarly reflected in QAP's (Pages 17-78 of FSAR vs QAP 2183).

(3) The QAP's do not reflect the method of handling AFRR's currently in use by QA Department in that the use of followup reports as described in QAP 2184 are not utilized.

(4) Audit activity scheduling is not yet part of a controlled document.

(5) Assignment of a second Operations Quality Assurance Engineer (OQAE) suggests that the FSAR should reflect the use of multiple OQAE's with suitable assignment of responsibilities to asure coverage of commitments.

(6) The Administrative controls over the Audit functions of the CNRB are in an intermediate stage of development, thus requiring review at a future date when the CNRB program is developed.

13. Tests and Experiments (R. Martin)

a. The inspector reviewed the present test and experiment control programs of the licensee to ascertain whether the licensee has developed and implemented a QA Program relating to the control of test and experiments that is in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

b. The inspector determined that QAP 5140 and AD 1845 (draft) are insufficiently specific to provide adequate control to assure that the commitments regarding tests and experiments are adequately satisfied. Moreover, the initial preparation of test and experiment packages up to the point of initiating the review process are not addressed.

c. This matter, in its entirety, will have to be reviewed after further program development takes place.

14. Surveillance Testing (W. Shafer and R. Martin)

a. An inspection of the licensee's QA Program relating to the control and evaluation of surveillance testing activities was conducted to determine whether the program is in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

b. The following major inadequacies were identified.

(1) The effectiveness of the Surveillance and Periodic Test Program has not been verified by the Quality Assurance Department as required by Quality Assurance Procedure (QAP 5050, Section 7.0). The need for an audit has been identified by the Operational QA Engineer; however, only a few actual surveillance tests have been performed. The licensee stated that the audit would be conducted when sufficient information is available to make the audit meaningful.

(2) The licensee has not defined the frequency of inspection of surveillance tests as required in AD 1838.00.0, Section 5.1.

(3) A master surveillance test schedule or other appropriate management control system has not been prepared by the licensee as required by AD 1838.01.0, Section 4.4, to incorporate the surveillance requirements of the proposed Technical Specifications.

c. In reviewing the implementation of the Surveillance and Test Program, the inspector determined that the program has been functioning for too short a time to permit an in depth inspection. The licensee was notified that the surveillance test program will be re-inspected at a future inspection.

15. Procurement Control (W. Shafer)

a. The licensee's Quality Assurance Program for procurement control was reviewed to determine whether the licensee's control of procurement activities are in conformance with regulatory requirements, commitments in the application, and industry guides and standards.

b. The following major program inadequacies were identified:

(1) The Quality Assurance Department failed to conduct periodic reviews and audits of the licensee's procurement program for spare parts as described in the Final Safety Analysis Report, Section 17.2.4.

(2) Changes to procurement documents, with respect to substitution of material or parts, have been implemented without subjecting the procurement document to additional review. This additional review is described in Section 17.2.4 of the FSAR.

(3) The licensee has inadequate record keeping and control of procurement documents. Documents pertaining to one package were misfiled making the tracking of the Certifications of Conformance time consuming and difficult. One certificate was located in the storekeepers file instead of with the procurement package. Document control is required by Section 17.2.6 of the licensee's FSAR.

(4) The licensee has not made proper reviews of their supplier's QA Program prior to initiating procurement activities. In one instance, the inspector noted that the licensee's QA review of a supplier was conducted two months after the purchase order was issued. Review of the supplier contractors QA Program prior to purchasing is described in Section 17.2.4 of the licensee's FSAR.

c. A licensee representative stated that the Quality Assurance Procedures governing procurement documents is presently under revision. The inspector informed the licensee that the procurement program will be re-inspected at a future date.

16. Receipt Storage and Handling (W. Shafer)

a. An inspection was made to determine if the licensee has developed and implemented a QA Program relating to the control of receipt, storage and handling of equipment and material, and to establish if this program is in conformance with regulatory requirements, commitments in the application and industry guides and standards.

b. The following major program inadequacies were identified.

(1) The licensee has not included provisions for the storage, handling and preservation of perishable material and equipment in their program as described in Section 17.2.13 of the Final Safety Analysis Report (FSAR).

(2) The licensee's Quality Assurance and Quality Control Departments have not performed audit functions as described in the FSAR, Section 17.2.13.

c. In reviewing the implementation of the licensee's program, the following major inadequacies were identified:

(1) The Central File records of material received and stored on site is inadequate in that: (a) QA control sheets are missing or incomplete; (b) there exists on file reproductions of incomplete documents such as purchase requisitions and receipt inspections; and (c) the material inspection

reports are not being place in the file when completed. Material records control is required by AD 1848, Station Records Management.

(2) Designated Inspectors are required by Section 5.3 of AD 1847.01.2 to review prints and vendor manuals prior to inspecting incoming material. This is not being regularly accomplished.

(3) Records of inspections relating to partial shipments are inadequate. When partial shipments are received onsite, the QA Control Sheets do not identify any inspections or reviews made on the partial shipment. Control of partial shipments is identified in AD 1847.01.2, Sections 5.1.1.

(4) The inspector reviewed the audit program relating to receiving, storage and handling and determined that: (a) the Inspection Engineer has made no quarterly surveillance of the items in storage as required by AD 1847.03.0, Section 6.5.1, and (b) there was no evidence of an equipment and rigging inspection program as required by AD 1847.03, Section 6.3.3.

d. Additional minor concerns relating to the receipt storage and handling program were identified by the inspector and are as follows:

(1) The space available for storage of incoming equipment and material appears to be inadequate for the licensee's future needs. The inspector noted that while Q-list items were being segregated, the storage space is already becoming quite limiting.

(2) Section 5.3.1 of AD 1847.04.1 allows the use of Q-list material in a "hold" status; however, there are no instructions on the control of this material once it is issued. There is no record in the storeroom to identify which material has been released, the authorization and the quantity taken.

(3) Section 5.5 of AD 1847.04.1 permits the Station Superintendent, under certain circumstances to substitute an alternate item for a Q-list item that is not in stock. The inspector informed the licensee that the term "interchangeable" does not refer to the physical dimensions of the item and

that any decision to use a non-Q-list item must be approached with careful consideration of the Quality Assurance requirements.

e. The inspector informed the licensee that the implementation of the receipt, storage and handling program was inadequate, and that the program will be re-inspected at a future date.