



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30303

Report Nos.: 50-327/84-01 and 50-328/84-01

Licensee: Tennessee Valley Authority
 500A Chestnut Street
 Chattanooga, TN 37401

Docket Nos.: 50-327 and 50-328

License Nos.: DPR-77 and DPR-79

Facility Name: Sequoyah

Inspection at Sequoyah site near Chattanooga, Tennessee

Inspectors:	<u><i>C. Upright For</i></u>	<u><i>2/7/84</i></u>
	G. Belisle	Date Signed
	<u><i>C. Upright For</i></u>	<u><i>2/7/84</i></u>
	L. Foster	Date Signed
	<u><i>C. Upright For</i></u>	<u><i>2/7/84</i></u>
	C. Smith	Date Signed
Approved by:	<u><i>C. Upright</i></u>	<u><i>2/7/84</i></u>
	C. Upright, Section Chief	Date Signed
	Engineering Program Branch	
	Division of Engineering and Operational Programs	

SUMMARY

Inspection on January 16 - 20, 1984

Areas Inspected

This routine, unannounced inspection involved 102 inspector-hours on site in the areas of licensee action on previous enforcement matters; QA program review; non-licensed personnel training; licensed operator requalification training; procurement program; receipt, storage, and handling of equipment and materials; records; and document control.

Results

Of the eight areas inspected, no violations or deviations were identified in six areas; two apparent violations were found in two areas (Failure to Perform Required Abnormal and Emergency Procedure Review, paragraph 7.a, and Failure to Provide Proper Material Storage, paragraph 9).

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- G. Boles, General Foreman, Mechanical Maintenance
- *C. Brannon, Power Stores Supervisor
- C. Brewer, Training Unit Supervisor
- L. Bush, Shift Engineer, Training
- D. Conner, Supervisor, Technical & Craft Training Section, Nuclear Training Branch
- D. Craven, Electrical Maintenance Supervisor
- D. Cross, Outage Maintenance Coordinator
- D. Eggert, Quality Control Inspector
- J. Hamilton, QA Engineer
- *M. Harding, Compliance Supervisor
- B. Harris, Maintenance Training Unit Supervisor
- F. Higdon, Engineering Aide
- D. Jualds, Instrumentation Maintenance General Foreman
- J. Kabiri, Management Services Supervisor
- *G. Kirk, Compliance Mechanical Engineer
- E. Keyser, Assistant Shift Engineer
- *J. Krell, Assistant Plant Superintendent, Maintenance
- B. Lagergren, Supervisor, Engineering Training Section, Nuclear Training Branch
- L. Laney, Supervisor, Safety and GET Unit, Nuclear Training Branch
- *J. Law, Field Quality Engineering Supervisor
- A. Lehr, Assistant Maintenance Supervisor
- *C. Mason, Plant Manager
- N. Massingill, Information Systems Specialist
- *L. Miller, Plant Programs Section Supervisor
- *L. Nobles, Assistant Plant Superintendent, O&E
- B. Patterson, Instrument Maintenance Supervisor
- G. Petty, Materials Officer
- R. Poole, Instrumentation Instructor
- *J. Robinson, Field Services Group Supervisor and Assistant Plant Superintendent, OM & MMM
- L. Sain, Assistant Chief, Nuclear Training Branch
- N. Scott, Assistant Chief, Nuclear Training Branch
- L. Smith, Plant Training Officer
- C. Stutz, QA Engineer
- D. Tullis, Jr., Mechanical Maintenance Supervisor
- *J. Wills, Licensing Engineer

NRC Resident Inspector

- *E. Ford, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on January 20, 1984, with those persons indicated in paragraph 1 above. Additional clarification of identified items was discussed during a telephone conversation between G. Belisle and J. Hamilton, Field Quality Engineering, on January 26, 1984. The licensee acknowledged the following inspection findings:

Violation (327, 328/84-01-01): Failure to Perform Required Abnormal and Emergency Procedure Review, paragraph 7.a.

Violation (327, 328/84-01-02): Failure to Provide Proper Material Storage, paragraph 9.

Unresolved Item (327, 328/84-01-03): Adequacy of Two Year Review Cycle for Procedure Review, paragraph 7.b.

Unresolved Item (327, 328/84-01-04): Lack of Aerosol Control, paragraph 8.a.

Unresolved Item (327, 328/84-01-05): Lack of Shaft Key Control, paragraph 8.b.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation (327, 328/82-05-01): Failure to Conduct Training and Replacement Training. TVA's responses dated June 1, June 25, and August 30, 1982, are considered acceptable by Region II. The licensee had made modifications to the General Employee Training (GET) program in August of 1982 in that the previous GET program which consisted of 20 courses was reduced to six courses. Course contents are now more closely aligned to requirements of ANSI 3.1-1978. In addition the licensee has prepared plant procedure SQA-129, Objectives in Plant Operation, which delineates licensee full support and commitment to a GET program for all employees. The inspector reviewed the TRAIN computer printout and training records of twelve employees to verify implementation of the GET program. This review verified that the GET program, as modified, is being implemented.

(Closed) Violation (327, 328/82-05-02): Failure to Follow Procedures. TVA's responses dated June 1, June 25, and August 30, 1982, are considered acceptable by Region II. This violation was denied by the licensee and upon subsequent review by Region II management, it was concluded that this violation should be withdrawn and designated an unresolved item. Based on the following, this unresolved item is closed. The inspector discussed the restructuring of the GET program with Nuclear Training Branch personnel at the Power Operations Training Center, and reviewed DPM No. N79A7, Nuclear Plant General Employee Training Program, revised August 23, 1983. This procedure delineates the GET program presently being implemented, and Appendix D to this procedure makes provision for credit to be given for

courses previously taken under the old GET program. Specifically, if an employee had the former GET-5, GET-6, GET-7, GET-11, GET-12, and GET-14 A and B (inclusive), that employee is given credit for the new GET-6, titled, Plant Procedures and Instructions. The inspector reviewed the monthly training report of December 1983 for GET-4, titled, Introduction to Quality Assurance/Quality Control, and the new GET-6 and determined that the program is being implemented. In addition, a further review of training records of twelve employees verified that the other GET courses are being taught.

(Closed) Violation (327, 328/82-05-03): Failure to Training Outage Craftsmen in the Quality Assurance Program. TVA's responses dated June 1, June 25, and August 30, 1982, are considered acceptable by Region II. Procedure No. N79A7 revised August 23, 1983, delineates the GET program that is presently being implemented and requires all plant personnel to be trained in GET-4, Introduction to Quality Assurance/Quality Control. The inspector reviewed a total of twelve site personnel training records, of which six were personnel in the Field Services Group. The inspector verified that all Field Services Group personnel included in the sample were being trained in GET-4 as required.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraph 7.b, 8.a, and 8.b.

5. QA Program Review (35701)

Reference: (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

The inspector reviewed the licensee's QA Program required by reference (a) and verified that administrative controls are in accordance with regulatory requirements. The QA Program review was partially performed as part of TVA's assessment during an inspection conducted in December 1983 and documented in Inspection Report Nos. 50-259/83-53, 50-260/83-53, 50-296/83-53, 50-327/83-27, 50-328/83-27, 50-390/83-49, 50-391/83-38, 50-438/83-30, and 50-439/83-30. This assessment reviewed, in depth, the licensee's ongoing efforts to implement Office of Quality Assurance (OQA) policies and procedures. Numerous interviews were conducted with OQA personnel to verify that they understood OQA policies and procedures and if these policies and procedures were in accordance with regulatory requirements.

The inspectors reviewed QA program implementation in procurement; receipt, storage, and handling of equipment and materials; records; and document control. Each specific area is detailed in other paragraphs in this report. Problem areas, if identified, are detailed in the specific functional areas inspected.

Within this area, no violations or deviations were identified.

6. Non-Licensed Personnel Training (41700)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.8, Revision 1, Personnel Selection and Training
 - (c) ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel
 - (d) Regulatory Guide 8.13, Instruction Concerning Prenatal Radiation Exposure
 - (e) Technical Specification, Section 6.4

The inspector reviewed the licensee's training program required by references (a) through (e), and verified that these activities are conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- The program complies with regulatory requirements and licensee commitments.
- The program covers training in the areas of administrative controls and procedures, radiological health and safety, industrial safety, security procedures, the emergency plan, quality assurance, fire fighting, and prenatal radiation exposure.
- Non-licensed operators are trained in functions they perform including related technical and on-the-job training to applicable personnel where required.

The documents listed below were reviewed to verify that previously listed criteria had been incorporated into the licensee's training program.

- Topical QA Program (TVA-TR75-1) Revision 5
- N-OQAM Part III, Section 6.1, General Employee Training and Replacement Training

- DPM No. N79A7, Nuclear Plant General Employee Training Program, revised August 23, 1983
- AI-14, Plant Training, Revision 22
- RCI-2, Radiological Hygiene Training, Revision 11
- Memorandum from T. G. Campbell, Manager Nuclear Production to W. T. Cottle, Plant Superintendent, Watts Bar and C. C. Mason Plant Superintendent, Sequoyah, dated January 6, 1984, Subject: Health Physics Orientation for Nuclear Production Workers - GET Level 0 for Power Block Plants.

Consequent to the review of these documents the inspector determined that the licensee had made modifications to the GET program in August of 1982. Prior to this time, the GET program consisted of 20 courses. In restructuring the TVA GET program, the licensee reduced the number of courses to six and the course contents are now more closely aligned to the guidance of ANSI 3.1-1978. This represents a significant improvement in TVA GET program, over and above that required by reference (c).

The inspector also determined that further modifications to the GET program are anticipated by the licensee. These modifications concern the health physics training provided to personnel requiring unescorted plant access. The health physics training presently provided to personnel requiring unescorted plant access consists of two levels with the additional requirement for retraining. Level 1 is mandatory for all personnel. Level 2 is additional training provided to personnel who frequently enter regulated areas. Additional program revisions are planned which will be used to train personnel not requiring access to protected areas of the plant. This new concept involves security for plant equipment and systems necessary to protect public health through strict access control procedures. This new program has not been implemented.

The inspector verified that the GET program as structured (Levels 1 and 2) is presently being implemented. This verification consisted of a review of TRAIN computer printout sheets which list the status of the GET for personnel on site, along with a review of training records for twelve onsite personnel.

The inspector conducted interviews with licensee training personnel at the Power Operations Training Center to review training provided to Shift Technical Advisors (STAs), specialized training provided to craft workers, and training provided to managers, engineers, and Instrument Maintenance Section personnel.

The inspector reviewed the training program for STAs. The review consisted of an examination of training records of four STAs, the Mitigating Core Damage Training Manual, examinations taken, and examination results. The inspector determined that the acceptance criteria for completion of the STA training program will be upgraded in the future, in that failure to achieve 70% on two consecutive examination will result in displacement from the program. Additionally, a comprehensive final written and oral examination (preferably on the simulator) will be required for certification.

The inspector reviewed the training program for specialized training provided to craft workers, as outlined on the Maintenance Training Planner Form for 1984. The courses available consists of systems training, equipment (generic) both electrical and mechanical, equipment (specific), and specialized courses requested by the plant. Licensee training personnel at the Power Operations Training Center stated that a formal training program exists for presentation of specialized training to craft workers. Further discussions with various craft personnel confirmed implementation of this training program.

The inspector also reviewed the managers and engineers training program, in addition to the Instrument Maintenance Section (IMS) training program. IMS letter number IMSA2 delineates the training program conducted by IMS. This program consists of two parts, namely time spent at the Power Operations Training Center and time spent at the plant for on-the-job training (OJT). Courses available are presented in eight phases of training. Each phase consists of subject matter of increasing difficulty, with time devoted to classroom and laboratory hours.

The inspector conducted interviews with various craft and Field Service Group personnel to determine the extent of the training provided to these workers. The inspector determined that a formalized training program for apprentice training is presently being implemented for craft workers. In addition, specialized training as described above is provided for craft and IMS workers. The inspector verified that the program is being implemented for IMS workers by a records review of personnel presently enrolled in the program.

Consequent to discussions with licensee Field Services Group personnel, the inspector determined that other than the GET, a formalized training program does not exist to meet the needs of this group of workers. The inspector reviewed a listing of training that is presently being given to personnel within this group. Typical examples are systems training for engineers; management training for engineers, managers, and some foremen; classes on certain procedures; and weekly meetings with electrical foremen and electrical engineers. The Field Services Group has recently been incorporated with the plant onsite personnel. This change was effective the week of January 9th. Prior to this time the Field Services Group was considered offsite personnel and were provided the GET required for unescorted plant access. The inspector determined that with the change in status from offsite to onsite personnel, the formalization of a training program for the Field Services Group is presently in progress.

Within this area, no deviations or violations were identified.

7. Licensed Operator Requalification Training (41701)

- References:
- (a) 10 CFR 55, Appendix A, Requalification Programs for Licensed Operators for Production and Utilization Facilities
 - (b) NUREG-0737, Clarification of TMI Action Plan Requirements
 - (c) Technical Specifications
 - (d) Regulatory Guide 1.8, Personnel Selection and Training
 - (e) ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel
 - (f) Letter from H. R. Denton, Director NRR, to All Power Reactor Applicants and Licensees, Subject: Qualifications of Reactor Operators, dated March 28, 1980

The inspector reviewed the licensee requalification training program required by references (a) through (f) to verify that activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- Determination that changes to the requalification training program were in conformance with NRC requirements
- Documentation that required procedure reviews were performed
- Preparation of lesson plans for subject matter presented during the requalification program
- Determination that all aspects of the requalification program were being adequately addressed

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee requalification training activities:

- OSLT-1, Training, dated 8/1/83
- 1707.01.01, Review Reporting and Feedback of Operating Experience Items, dated 4/5/83

The inspector reviewed these documents to determine adherence to requirements. The inspector reviewed documentation concerning the following areas: retraining conducted in 1983 and to date in 1984; annual written examinations and individual responses; documentation of required control manipulations; schedules for conducting lectures; and participation in an accelerated training program when applicable.

The inspector interviewed previous and present training personnel on site and the Training Unit Supervisor at the training center off site. The inspector reviewed the training records for four SRO and RO personnel.

The inspector reviewed the results of two Quality Engineering Surveillances (2a-81-2, SRO and RO Candidate Training, issued 12/4/81 and 2-82-Surveillance 1, Training and Qualification, issued 7/1/82) performed in the training area and reviewed the findings and corrective actions taken to resolve these findings.

Within this area, one violation and one unresolved item were identified and are discussed in the following paragraphs.

a. Failure to Perform Required Abnormal (AOI) and Emergency (EOI) Procedure Review

The inspector reviewed required reading documentation from 1981 to present in an attempt to determine if Reference (a) Section 3.d requirements were being adhered to. The licensee has approximately 56 AOIs and EOIs that require review. For the four operators selected, the required reading was approximately 50% completed. Additional information was requested and further documentation was reviewed; however, not all personnel completed this review as required. The licensee's record retrieval capability in this area is somewhat limited in that all documentation sheets could not be found. Many AOIs and EOIs are reviewed during simulator training; however, this review is limited to accident conditions being simulated and no assurance could be given by the licensee that all procedures are reviewed. Failure of licensed personnel to perform all required AOI and EOI reviews constitutes a violation (327, 328/84-01-01).

b. Adequacy of Two Year Review Cycle for Procedure Review

OSLT-1, Section 11.2, requires reviews of AOIs and EOIs on a monthly schedule. The scheduling is based on a 24-month review cycle. Current NRC policy requires this review to be performed annually. Until the adequacy of a 24-month review cycle can be reviewed by NRC licensing personnel, this item is unresolved (327, 328/84-01-03).

8. Procurement Program (38701)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.123, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants
 - (c) ANSI N45.2.13, Quality Assurance Requirements for Control of Procurement of Items for Nuclear Power Plants
 - (d) ANSI N45.2, Quality Assurance Program Requirements for Nuclear Power Plants
 - (e) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations)
 - (f) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
 - (g) 10 CFR 50, Part 21, Reporting of Defects and Non-compliance
 - (h) TVA Topical Report (TVA-TR75-1) Revision 5, Quality Assurance Program Description

The inspector reviewed the licensee's procurement program required by references (a) through (h) and verified that procurement activities are being conducted in accordance with regulatory requirements, industry guides and standards, and commitments made in the accepted QA program. The following criteria were used during this review:

- Administrative controls have been established to assign departmental responsibilities for procurement activities.
- Administrative controls have been established to identify safety related equipment, supplies, consumables, and services to be procured under the licensee's QA program.
- Procedures have been established to control the preparation, review, approval, and changes to procurement documents.
- Procedures have been established for qualifying and maintaining a current list of approved vendors, suppliers, and contractors.

- Procedures have been established to assure that vendors conform to procurement document requirements, industry standards and codes, and that nonconformances are reported and corrected.

The following documents were reviewed to verify that these criteria had been incorporated into the licensee program for procurement of safety related items and services.

- N-OQAM, Part III, Section 2.1, Procurement of Materials, Components, Spare Parts, and Services dated March 5, 1982
- SQA-45, Quality Control of Materials, Parts, and Services, Revision 6
- SQA-134, Critical Structures, Systems, and Components (CSSC) List, Revision 2
- AI-23, Vendor Manual Control, Revision 17
- AI-11, Receiving Inspection, Nonconforming Items, Substitutions, QA Level/Description Changes, Revision 26

The inspector examined the following procurement documents to determine if requirements specified in the above procedures had been implemented during the initiation, review, approval, and processing of purchase requisitions (including vendor surveys, processing nonconformances, and certificates of conformances).

- Purchase Requisition Nos.

284293	144930	595799	266680
282590	284121	23409	

- Nonconforming Item Report Nos. 76-4 and 80-978.76-4
- Quality Release No. 15509 from Westinghouse (W)
- TVA Inspection and Test Report (Source Inspection) for Purchase Order 195957
- Certificates of Compliance Nos.
 - N-936-3 from Capitol Pipe Co.
 - 59610 from Bonney Forge Co.
- Material Certification No. N-934-2 from Guyon Alloys
- TVA Specification No. 1425, Containment Penetrations

- Invitation, Bid, and Acceptance for Contract 74P63-6558 with Westinghouse Corporation
- Certified Test Report No. 5929 from the Okonite Company
- Materials Receipt Inspection Report Nos.
 - 72-00514 for Contract 79P13 - 266680
 - 75-676 for W Control Rods
 - 79 P84-284293 for Valve Parts from Atwood and Morrill Co.
- Over, Short, Substitution, Damage, or Defective Report Nos. A117877, and 117839 concerning W CRM parts
- W letter dated 6/27/79 justifying the part number changes for O.S.S.D or D Report 117839.
- Change of Contract for Contract 79P13-266680
- Change Notice No. 001 for P. O. 546-CXD-195957

Within this area, two unresolved items were identified and are discussed in the following paragraphs.

a. Lack of Aerosol Control

During inspection of material storage areas (Outside Building 1 and the Power Storeroom), the inspector identified several cans of aerosol products which did not have the ingredients specified; therefore, it is not known whether these cans contain halogens (fluorines, chlorines, etc.) which are prohibited for use around safety related equipment or systems. Trade names of these products were: Superior Sheen, Spray Clean, Johnson Shineup, R&V Spray Spotter, and OSBORN OM C/4. Other aerosols not identified at Sequoyah but frequently used include mosquito and bug spray, hair spray, metal cleaners, lubricants, and detergents.

Use of uncontrolled consumables such as aerosol products could result in inadvertent damage to stainless steel, plastics, or electrical insulation. Until the licensee establishes controls for the procurement and usage of these types of consumables, this is identified as unresolved item (327, 328/84-01-04).

b. Lack of Shaft Keys Control

The licensee could not produce objective any evidence that shaft keys were being adequately controlled, except that standard key stock could be requisitioned from the storeroom. The lack of control of shaft keys could result in the incorrect use of low strength keys in applications

where high strength (hard) keys were designed and vice versa for a particular application (torque and impact requirements). One example was discussed in IE Information Notice 81-08 concerning the use of incorrect keys in Limitorque Valve Motors. Until the licensee assesses the control of shaft keys, this is identified as unresolved item (327, 328/84-01-05).

9. Receipt, Storage, and Handling of Equipment and Materials (38702)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) TVA Topical Report (TVA-TR75-1) Revision 5, Quality Assurance Program Description
 - (c) Regulatory Guide 1.38, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants
 - (d) ANSI N45.2.2-1972, Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants
 - (e) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations)
 - (f) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

The inspector reviewed the licensee's program and procedures required by references (a) through (f) and verified that controls have been established and were being implemented for receipt inspections, initiation of non-conforming reports, disposition of nonconformances, handling, storage, and issue of safety related equipment.

The following criteria were used during this review:

- Administrative Controls have been established for conducting and documenting receipt inspections and reporting nonconformances.
- Administrative controls have been established for disposition of items, marking, storing, and protection during storage.
- Administrative controls have been established for limited shelf life items and for performing audits and surveys of storeroom activities.

The following documents were examined to verify that the receipt inspections, handling, storage, maintenance, and protection of reactor plant items were being implemented as specified by procedures.

- AI-36, Storage, Handling and Shipping of QA Material, Revision 0
- AI-11, Receiving Inspection, Nonconforming Items, Substitutions, QA Level/Description Changes, Revision 26
- SQA-45, Quality Control of Materials, Parts, and Services, Revision 6
- AI-32, QA Surveys, Revision 0
- Receiving Inspection Report Nos. 209, 75-676, 80-00002, and 79-00514
- Purchase Requisition Nos. 284239, 266680, 284121, and 144930
- Shelf Life Control Cards for "O" rings stored in Bin 8377-7
- Preventive Maintenance Report PM-0471-302 concerning containment electrical penetrations
- Surveys of Procurement Activities dated 12/20/81, 8/3/81, 5/13/82, 3/1/83, 9/7/83, and 9/15/83
- Corrective Action Report Nos. CAR 83-08-026, 83-04-14, and 83-04-015
- Nonconforming Report No. N2-80-978

The inspector performed a physical inspection of the Power Storeroom and Outside Building 1 to observe implementation of the licensee's handling and storage activities.

Within this area, one violation was identified. Reference (b) commits TVA to Regulatory Guide 1.38, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants. This Regulatory Guide endorses ANSI N45.2.2-1972 which specifies handling and storage requirements. Section 6.3.2, Arrangement of Items, specifies that items stacked for storage shall be arranged so that the racks, cribbing, or crates are bearing the full weight without distortion of the items. Several boxes of reactor plant equipment, located in Bay 8 of Outside Building 1, were stacked and supported in such a manner that one box (container) 20 feet long had deflected 1-3/4 inches in a 10-foot length. This box was identified as Control Rod Drive Spares, TIC No. AMF 495X, W P/N 115E600G01-4. Other boxes identified as Head Screw Assembly, TIC AHF-596G, TIC AYB-422N, plus several other containers were stacked on top of each other without proper support. A top box (24 feet long) was unsupported in the center and other boxes in the rack were cantilevered (unsupported) for

distances up to 10 feet. The licensee rearranged the boxes to provide proper support and stated that they opened the distorted box and examined the contents for damage. They stated that the contents were rubber seals which were not damaged due to the distortion. Failure to adequately arrange and support these containers so they bear the full weight and prevent excessive distortion constitutes a violation (327, 328/84-01-02).

10. Records (39701)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.88, Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records, Revision 2
 - (c) ANSI N45.2.9-1974, Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants
 - (d) Technical Specifications Section 6.10, Record Retention

The inspector reviewed the licensee records program required by references (a)-(d) to verify that activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- Administrative controls have been established and responsibilities delineated for identifying different types of QA records, maintaining these types of records, and transfer and retention of construction phase records.
- Administrative controls have been established and responsibilities delineated for record storage, record custodian identification, record filing and retrieval, record received documentation, record file access, record correction, and record disposal.
- Administrative controls have been established and responsibilities delineated to determine retention times for various records.

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee record activities:

- Quality Assurance Program Description for Design, Construction, and Operation, Topical Report (TVA-TR75-1) Revision 5
- N-OQAM, Part III, Section 4.1, Plant Records, dated 5/3/83

- N-OQAM, Part III, Section 4.2, Transfer of Quality Assurance Records from OEDC, dated 10/22/80
- AI-7, Recorder Charts and Quality Assurance Records, Revision 29
- MS/DCU6, Changes, Corrections and Supplements to QA Records, Revision 0
- 1707.01.01, Program Manual, dated 9/20/83

The inspector selected the following records for review:

<u>DEPARTMENT</u>	<u>RECORDS</u>
Quality Engineering	Surveillances 1C-83-1, 1d-83-S004, 1a-83-P-003, 1b-82-2, 2a-81-2, 2-82-Surveillance 1, 1d-83-S-007, and 1d-83-S-005 NCRs and CARs generated from these surveillance activities
Health Physics	Shift Daily Journal 1/1/84 - 1/15/84, Radiological Surveys 1-84-0001 - 1-84-0071, DSIL-3 Whole Body Urine Analysis Worksheets for 3rd and 4th quarter 1981, and DSIL-4 HP Orientation Attendance Rosters
Power Stores Records	Various procurement documentation
Operations	SOI 15A, 1/03/84 SOI 14.3, 1/09/84 SOI 28.1B, 1/13/84 SOI 77.1C2, 1/09/84 Outage Coordinators Log 9/19/83 - 9/30/83 Various operator logs 1/01/84 to 1/14/84
I&C	SI 99, Revision 5 SI 95, Revision 2 SI 209, Revision 7 SI 301, Revision 0 Calibration data for instruments 41B929, 318800, 317189, and 418992

The inspector toured the vault facility and various departmental record storage areas (those previously listed and Public Safety). The inspector verified storage in 1-hour fire cabinets and questioned personnel at each location about access requirements to these records.

The inspector reviewed a fire load survey of QA records storage locations conducted in June 1983. This survey assessed satellite record storage adequacy in 19 various plant areas. Based on this fire load survey, 11 areas were deficient with recommendations to either reduce fire loading, relocate existing cabinets or provide 2-hour fire rated (with impact) cabinets. Corrective actions are in progress to resolve these deficient record storage areas.

The inspector reviewed two Quality Engineering Surveillances conducted on records (1d-83-S-005, Receipt and Storage of QA Records in Remote Storage Facilities and 1d-83-S-007, QA Recorder Charts). Both audits identified deficient areas and CARs 83-10-033 and 83-11-035 were written to resolve these deficiencies. Upon completion of the CARs, corrective action will be verified by quality engineering staff personnel.

Within this area, no violations or deviations were identified.

11. Document Control (39702)

- References:
- (a) 10 CFR 40, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.33, Quality Assurance Program Requirements
 - (c) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

The inspector reviewed the licensee document control program required by References (a) - (c) to verify that activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- Administrative controls have been established for issuing new drawings, recalling obsolete drawings, and verifying accuracy of drawings currently in use.
- Responsibilities have been delineated for drawing control.
- Administrative controls have been established for maintaining documents such as vendor manuals, FSARs, and Technical Specifications.
- Administrative controls have been established for issuance and periodic review of documents and maintaining indices of these documents.

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee document control activities.

- Quality Assurance Program Description for Design, Construction, and Operation, Topical Report (TVA-TR75-1) Revision 5
- N-OQAM, Part III, Section 1.1, Document Control, dated 6/2/83
- AI-4, Plant Instructions - Document Control, Revision 44
- N-OQAM, Part II, Section 1.1, Plant Operating Instructions, dated 2/25/83
- AI-23, Vendor Manual Control, Revision 17
- SQA-125, Controlled Documents, Revision 1
- AI-25, Drawing Control After Unit Licensing, Revision 7
- AI-7, Recorder Charts and Quality Assurance Records, Revision 29
- ID-QAP-6.1, Configuration Control, dated 8/9/82
- M&AI-3, Revision of As Constructed Drawings, Revision 4
- 1707.03.01, Controlled Documents, dated 12/2/83
- 1707.01.01, Program Manual, dated 9/20/83
- 1707.03.04, Vendor Manual Program, dated 9/14/83
- MS/DCU1, Document Receipt Control and Receiving File Operation, Revision 0
- MS/DCU2, Drawing Control Procedure - Update of Drawing Information System, Revision 0
- MS/DCU4, Receipt and Control of Recorder Charts, Revision 0
- MS/DCU5, Document Microfilming, Revision 0
- MS/DCU7, Vendor Manual Control, Revision 7
- MS/DCU8, Preparation for Microfilming, Revision 0
- MS/DCU9, Controls for Master Files, Revision 0

The inspector selected the following documents to verify proper handling, accuracy of master index, and updating of controlled drawings.

<u>MANUALS</u>	<u>COPY NUMBERS</u>
Technical Specifications	61, 71, 75, 97, 108
Quality Engineering Manual	38, 39, 41
Performance Improvement Manual	22, 23
Fire Protection Manual	21, 22
Radioactive Material Shipment Manual	54
Operational Quality Assurance Manual	62, 68, 75, 80, 114
Radiological Emergency Plan	81, 92, 102, 103, 107, 206, 207, 208
M&TE Specification Manual	26, 28
FSAR	19, 28, 29, 32, 35
Technical Specification Interpretations	4, 5, 8

<u>DRAWINGS UNIT 1</u>	<u>LOCATION</u>
47W809-1 R22, R, AC1	Control Room, Shift Engineers Office, Mechanical Maintenance, and Field Services Director for all copies
47W809-2 R4, G, AD1	
47W809-3 R10, O, AD1	
47W809-4 R6, H, AD1	
47W810-1, R10, G, AD1	
47W814-1 R10, E, AD1	
47W814-2 R11, M, AC1	
47W845-1, R18, J, AD1	
47W845-2, R16, S, AC1	
47W845-3 R15, G, AC1	
47W845-4 R13, J, AC1	

<u>DRAWINGS UNIT 2</u>	<u>LOCATION</u>
47W809-1 R20, T, AC2	Control Room, Shift Engineers Office, Mechanical Maintenance, Field Services Director for all drawings
47W809-2 R4, I, AD2	
47W809-3 R10, L, AD2	
47W809-4 R6, G, AD2	
47W810-1 R11, G, AC2	
47W814-1 R10, F, AD2	
47W814-2 R13, J, AD2	
47W845-1 R18, E, AD2	
47W845-2 R16, V, AD2	
47W845-3 R14, H, AD2	
47W845-4 R16, M, AD2	

Prior to this inspection the Field Service Director notified drawing control that their Unit 1 drawing stick file had been lost. Drawing control was in the process of generating a new Unit 1 stick file. Drawing control was in the process of reviewing drawings throughout locations on a set priority.

The control rooms and shift engineers office were the top priority. Previously, paper drawings were being used and they are now being replaced with mylar drawings.

During this drawing review the inspector identified that a Unit 2 mechanical maintenance drawing 47W809-1 was the wrong revision. The inspector also identified that several Field Services Director Unit 2 drawings were either missing or the wrong revision. The specific drawings were 47W809-3, 47W814-1, 47W845-1, and 47W845-3. The Field Service Director's drawings were a lower priority drawing set but had been scheduled to receive new drawings. The individual drawing discrepancies were immediately corrected. The mechanical maintenance drawing was immediately replaced. The wrong revision in the mechanical maintenance section appears to be an anomaly.

The inspector reviewed the following Field Quality Engineering Surveillances performed relative to document control.

<u>SURVEILLANCE</u>	<u>DATE ISSUED</u>
1C-83-1, Drawing Control	2/14/83
1d-83-S004, Document Control Files	9/01/83
1a-83-P-003, Document Control - Plant Instructions	3/24/83
1b-82-2, Vendor Manuals	9/30/82

The inspector reviewed corrective actions to any discrepancies identified during these audits.

Within this area, no violations or deviations were identified.