UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-390/87-20 and 50-391/87-20

Licensee: Tennessee Valley Authority
6N38 A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Docket Nos.: 50-390 and 50-391 License Nos.: CPPR-91 and CPPR-92

Facility Name: Watts Bar 1 and 2

Inspection Conducted: November 23, 1987 - January 3, 1988

Inspectors: _____ 12 February 1988
G. A. Walton, Senior Resident Inspector Date Signed
Construction

_____ 12 February 1988
P. G. Humphrey, Resident Inspector Date Signed

_____ 12 February 1988
T. B. Powell, Resident Inspector Date Signed

Approved by: _____ 12 February 1988
S. A. Elrod, Section Chief Date Signed
Office of Special Projects

SUMMARY

Scope: This routine inspection was conducted in the areas of licensee action on inspector identified items, followup of licensee identified items, fire prevention and fire protection, preoperational test program implementation verification, testing of pipe support and restraint systems.

Results: One deviation involving qualification of Class 1E equipment, one URI involving material storage and handling and one URI involving meeting FSAR commitments associated with the fire protection system.

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## REPORT DETAILS

1. Persons Contacted

Licensee Employees

*G. Toto, Site Director
*E. Ennis, Plant Manager
R. Pedde, Nuclear Project Manager, Unit 2
*G. Atwood, Division of Nuclear Engineering
*H. Bounds, Division of Nuclear Engineering
*M. Brickey, Division of Nuclear Engineering
*G. Curtis, Assistant Project Engineer
*T. Horst, Office of Nuclear Power
*H. Johnson, Acting Site Quality Manager
*D. Kulisek, Site Licensing Manager
*P. Metcalf, Division of Nuclear Engineering
*R. Schulz, Compliance Manager
*M. Scruggs, Division of Nuclear Engineering
*J. Smith, Office of Nuclear Power
*J. Thompson, Division of Nuclear Construction
*R. Tolley, Project Manager's Office
*J. Wagner, Division of Nuclear Engineering

Other licensee employees contacted included engineers, technicians, nuclear power supervisors, and construction supervisors.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on January 4, 1988, with those persons indicated in paragraph one above. The inspectors described the areas inspected and discussed in detail the inspections findings listed below. Dissenting comments were not received from the licensee. Proprietary information is not contained in this report.

Note: A list of abbreviations used in this report is contained in paragraph 12.

| Item Number | Status | Description/Reference Paragraph |
|---|---|---|
| 390/87-20-01<br>391/87-20-01 | Open | Deviation - Failure to properly document Class 1E equipment qualification. (paragraph 3) |
| 390/87-20-02 | Open | URI - Material storage, handling, and shipping requirements for Watts Bar Nuclear Plant. (paragraph 10) |

| Item Number (cont'd) | Status | Description/Reference Paragraph |
|---|---|---|
| 390/87-20-03<br>391/87-20-02 | Open | URI - Meeting FSAR commitment associated with the Fire Protection System. (paragraph 11) |
| 390/87-17-01<br>391/87-17-01 | Closed | URI - Documentation of Class 1E equipment. (paragraph 3) |
| 390/85-57-07<br>391/85-46-03 | Closed | IFI - Inadequate review of Nonconformance Reports, Licensing Event Reports (LER) and NRC Violations. (paragraph 4.a) |
| 390/85-57-03<br>391/85-46-01 | Closed | IFI - Sensing line inspection not formally documented. (paragraph 4.b) |
| 390/86-04-01<br>391/86-04-01 | Closed | IFI - Review acceptability of mixing vendor lubricant in electric motors. (paragraph 4.c) |
| 390/85-13-02<br>391/85-13-02 | Closed | IFI - Key personnel qualification concerns. (paragraph 4.d) |
| 390/85-20-02 | Closed | IFI - Obtain implementing procedures for ALARA Program. (paragraph 4.e) |

3. Licensee Action on Previous Enforcement Items (92702)

(Closed) URI 390, 391/87-17-01, " Documentation of Class 1E Equipment".

During Inspection 87-17, it was identified there was insufficient documentation to show qualification of the diesel generators, 125VDC vital batteries, 125VDC battery chargers, and 120V Vital A.C. inverters to IEEE-323, "Qualification of Class 1 Electric Equipment for Nuclear Power Generating Stations. This equipment is specified to be Class 1E in the following FSAR sections:

| Equipment | FSAR Section |
|---|---|
| Diesel Generators | 8.3.1 |
| 125VDC Vital Batteries | 8.3.2.1.1 |
| 125VDC Battery Chargers | 8.3.2.1.1 |
| 120V Vital A.C. Inverters | 8.3.1 |

The FSAR Section 8.1.5.3, "Compliance to Regulatory Guides and IEEE Standards", commits to Regulatory Guide 1.89, November 1974, "Qualification of Class 1E equipment for Nuclear Power Plants", and indicates (in note four of this FSAR Section) class 1E equipment was qualified in accordance with IEEE 323-1971. None of the contracts or

specifications, for the above equipment, reviewed by the inspector referenced IEEE 323-1971. The inspector could not find manufacturer's certificates of conformance or any other documentation that meets the intent of IEEE 323-1971, Section 5, "Method and Documentation".

Section 5 of IEEE 323-1971 indicates the qualification documentation for class 1E equipment shall include: the application requirements, the equipment specifications and data from the qualification method used. IEEE 323 describes the following qualification methods:

a. Type Test Data
b. Operating Experience Data
c. Analysis
d. Extrapolation

The licensee has reviewed this issue and prepared a matrix for the 125VDC Batteries, 125VDC Battery Chargers, and 120V Vital A.C. Inverters showing where the intent of IEEE 323 requirements are satisfied. The licensee has not used the matrix information to prepare qualification documents using the analysis method..

The licensee was unable to provide evidence that shows the diesel generators meet the intent of IEEE 323 requirements. Problem Identification Report (PIR) WBNWBP87167 has been issued by the licensee to address the deficiency in diesel generator qualification documents.

This failure to properly document qualification to IEEE 323 is identified as Deviation 390,391/87-20-01, "Failure to Properly Document Class 1E Equipment Qualification".

Subsequent to the inspection, the example equipment was researched by the Watts Bar Project Engineer's office. Data to support qualification was found and a matrix prepared correlating this data with qualification attributes from IEEE 323-1971. This effort appears to now demonstrate, by cross reference, that three of the four examples in this deviation could be qualified. However, this information has not yet been used to produce qualification documents (using the analysis method) required by IEEE 323-1971.

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.

Two Unresolved Items were identified during this inspection and are discussed in paragraphs 10 and 11.

5. Maintenance Program and Procedure Review (42451B)

a. (Closed) Inspector Followup Item (IFI) 390/85-57-07, 391/85-46-03, "Inadequate Review of Nonconformance Reports (NCR), Licensing Event Reports (LER), and NRC Violations".

During Inspection 390/85-57, 391/85-46, it was determined the licensee did not have an adequate program to address problems which may be common to several TVA sites. Because of many problems with the "Corrective Action" program, the subject of this IFI, the licensee changed the Corrective Action Program by rewriting the Nuclear Quality Assurance Manual (NQAM), Part I, Section 2.16, Rev. 0, "Corrective Action", on June 1, 1987. During inspection 259, 260, 296/86-35; 327, 328/86-56; 390/86-17; 391/86-26; 438, 439/86-08, the adequacy of the new corrective action program as specified by Rev. 1 to NQAM, Part 1, Section 2.16 was reviewed. During this inspection, the following items were reviewed:

- IFI 438, 439/86-11-01; 259, 260, 296/86-43-01; 327, 328/86-73-01; 390/86-27-01; and 391/86-26-01; "Evaluation of the Licensee's New Corrective Action Program".

- Unresolved Item (URI) 438, 439/86-11-02; 259, 260, 296/86-43-02; 327, 328/86-73-02; 390/86-27-02; and 391/86-26-02; "Adequacy of Conditions Adverse to Quality (CAQ) Review".

- Violation 438, 439/86-11-03; 259, 260, 296/86-43-03; 327, 328/86-73-03; 390/86-27-03; and 391/86-26-03; "Failure to Issue Potential Generic Condition Evaluation (PGCE) Reports and Untimely Response to Those Reports Issued by Other Plants".

- Violation 438, 439/86-11-04; 259, 260, 296/86-43-04; 327, 328/86-73-04; 390/86-27-04; and 391/86-26-04; "Adequacy of Engineering Evaluations Documented on Dispositioned CAQs".

Since the problems with the present Corrective Action Program are being tracked by the above items, continuing to track problems with the old program is not necessary, therefore, IFI 390/85-57-07; 391/85-46-03 is closed.

b. (Closed) IFI 390/85-57-03; 391/85-46-01, "Sensing Line Inspection Not Formally Documented".

During Inspection 390/85-57, 391/85-46, it was identified that discrepancies found during licensee informal inspections were not formally documented. The informal inspections were performed to determine the extent of the instrument line problem. The discrepancies were in the area of improper slope of instrument sensing lines. The instrument line slope problem has subsequently been addressed in Construction Deficiency Report (CDR) 390/85-50, 391/85-49. As stated in paragraph 5a above, the corrective action has been changed since the issue of this IFI. Under the present program, as specified by NQAM Part 1, Section 2.16, deficiencies in the approved design, such as instrument line slope, will be documented on a Condition Adverse to Quality Report (CAQR). Since this IFI was against the old corrective action program and the enforcement items referenced in paragraph 5a above are tracking the known problems in the new corrective action program. This item is closed.

c. (Closed) IFI 390, 391/86-04-01, "Review Acceptability of Mixing Vendor Lubricant in Electric Motors".

During Inspection 390, 391/86-04, it was identified there was a potential for power stores (the Operations Department warehouse) to substitute vendors for the different lubricant oils; therefore, mixing different vendor's oil in equipment. The licensee subsequently has changed the order ledger cards (an inventory control mechanism) to require any substitution to be approved by the appropriate maintenance supervisors. The maintenance supervisors have an approved lubricant standard specified by Engineering. The maintenance supervisors are also responsible to ensure the old oil is drained and the equipment oil sumps flushed, before the new vendor's oil is added. This item is closed.

d. (Closed) IFI 390, 391/85-13-02, "Key Personnel Qualification Concerns".

During Inspection 390, 391/85-13, it was identified that key management had not completed Standard Practice WB-2.2.12, Rev. 3, "Employment Processing Requirements", Attachment D (a personal history form) as required. The attachment D's on the key personnel have been completed and entered in personnel records. This item is closed.

e. (Closed) IFI 390/85-20-02, "Obtain Implementing Procedures for ALARA Program".

During Inspection 390/85-20, a condition was identified where the recommended elements of Regulatory Guide 8.8, "Information Relevant to Ensuring That Occupational Radiation Exposure at Nuclear Power Plants Will Be ALARA", and Regulatory Guide 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposure ALARA", were not implemented in site procedures. The Inspector reviewed (and received concurrence from the regional staff) the following instructions, which were issued as a result of this IFI, for compliance with Regulatory Guides 8.8 and 8.10:

| INST. NO. | TITLE | REV. NO. | EFFECTIVE DATE |
|---|---|---|---|
| AI-2.7.1 | Maintaining Occupational Radiation Exposure As Low As Reasonably Achievable (ALARA) | 6 | 2/27/87 |
| AI-2.7.3 | ALARA Preplanning | 1 | 6/18/86 |
| AI-2.7.4 | Control of Temporary Radiation Shielding | 1 | 3/11/87 |

| INST. NO. (cont'd) | TITLE | REV. NO. | EFFECTIVE DATE |
|---|---|---|---|
| AI-2.7.5 | Radiological Review of Facilities and Equipment Design and Modifications | 2 | 2/27/87 |
| AI-2.7.6 | Radiological Awareness Report | 1 | 7/9/86 |
| AI-2.7.7 | Radiological Incident Report | 1 | 7/9/86 |
| AI-2.7.8 | Diving Operation In Radiologically Controlled Environments | 0 | 10/25/85 |
| AI-2.7.9 | ALARA Committee | 0 | 3/26/86 |
| AI-2.7.10 | Exposure Management and ALARA Goals | 0 | 3/26/86 |

No deficiencies were identified and this item is considered closed.

6. Fire Prevention and Fire Protection - Unit 2 (42051)

During plant tours, the inspectors conducted observations of fire prevention and protection activities in areas containing combustible materials where ignition of these materials could damage safety - related structures, systems or components. The observations included verification that applicable requirements of Administrative Instruction (AI) 9.9, Rev. 14 ,"Torch Cutting, Welding, and Open Flame Work Permit", Security Procedure 2, Rev. 27, "Fire Protection Plan", AI 1.8, Rev. 12, "Plant Housekeeping" and WBNP Construction Engineering Procedure (CEP) 1.36, Rev. 1, "Housekeeping" were being implemented with regards to fire prevention and protection.

Within this area, no violations or deviations were identified.

7. Preoperational Test Program Implementation Verification - Unit 1 (71302)

The inspectors conducted routine tours of the facility to make an independent assessment of equipment conditions, plant conditions, security, and adherence to regulatory requirements. The tours included a general observation of plant areas to determine if fire hazards existed and observation of other activities in progress, e.g., maintenance and preoperational testing, to determine if they were being conducted in accordance with approved procedures. Also observed were other activities which could damage installed equipment or instrumentation. The tours included evaluation of system cleanliness controls and a review of logs maintained by test groups to identify problems that may be appropriate for additional followup.

Within this area no violations or deviations were identified.

8. Testing of Pipe Supports and Restraint Systems - Unit 1 (70370C)

The inspector toured areas of the Unit 1 auxiliary building and reactor building. Numerous snubbers and restraints were observed. Visual examinations were conducted to check for deterioration and physical damage of mechanical snubbers. Visual examinations were also conducted to check for damage of base support plates, fasteners, locknuts, brackets, and clamps associated with these installed pipe supports.

Within this area, no violations or deviations were identified.

9. Mechanical Components - Work Observation (50073)

The inspector accompanied Mechanical Quality Control (QC) inspectors on QC inspections. The following observations were made during these inspections. Some of the items were identified by the NRC inspector independent of the QC Inspectors:

a. Laundry and Hot Shower Tank "13" Closeout

This tank close out was being made in accordance with Maintenance Request (MR) 617401 to ensure the tank met Class "B" cleanliness standards. Class "B" cleanliness is defined in Technical Instruction (TI) 27, Part III, Rev. 27, "Visual and Chemical Specifications (cleanliness criteria for piping system)". The tank was inspected and closed. There were no deficiencies identified.

b. Safety Injection System (SIS) Pumps 90 Day Preventive Maintenance (PM) Checks

This PM item involved removing bearing covers on SIS pumps 2-063-PMP-10A and 2-063-PMP-15B and pouring oil over the bearings to ensure the bearing did not dry out during "in-place" storage. During the PM the following deficiencies were identified:

- Oil leak on 2-063-PMP-10A. PM Deficiency Report (DR) 52-Q-1187-06 was written.

- Thermocouple wires on 2-063-PMP-10A were bare inside connector. DR 52-Q-1187-07 was written.

c. Area Inspection of Unit 2 Reactor Building

An Area inspection of Unit 2 Reactor building was conducted in accordance with Site Quality Assurance Staff Instruction Letter (SQA-SIL) 5.6, Rev. 1, "Monitoring Activities". A SQA-SIL 5.6 Attachment B, "Observation Sheet", was filled out documenting the following deficiencies:

- Disconnected instrument tubing at valve 2-151V-68-433C needs to be retaped to prevent dirt from entering the system.

- Blind flanges at valves 2-DRV-63-652, 2-DRV-63-650, 2-DRV-63-658, and 2-DRV-63-655 are installed without gaskets.

- Conduit to 2-FCV-62-72A is loose

- Damaged flex conduit to limit switch on valve 2-FCV-62-74

- Valves 2-15V-32-1432 and 2-ISV-32-1331 open to atmosphere and needs tape over opening to protect.

d. Area Inspection of Auxiliary Building Elevation 737:

An area inspection of Auxiliary Building Elevation 737 was conducted in accordance with SQA-SIL 5.6 and an observation sheet was completed on the following deficiencies:

- Spent Fuel Pit Pump A has no identification tag.

- Spent Fuel Pit Pump B-B oil bowl is empty.

- Spent Fuel Pit Skimmer Pump has no identification tag.

- Component Booster Pump 2A has no identification tag.

- Inspection plate missing from air duct over Spent Fuel Pit Pump

- Water on floor around Spent Fuel Pit Cooling System Heat Exchanger "A" and "B".

- Spent Fuel Pit Cooling Heat Exchanger "A" and "B" drain valves 0-DRV-70-526 A and B have:

  - Indication of leakage past seat

  - No provisions to connect a hose. (Valve is a socket valve with no outlet nipple- craftsman had duct-taped a nipple in the "A" valve jacket to connect a hose)

- Flex conduit was laying on fan drive shaft cover for fan 2-FAN-30-157-B (Elevation 737.0 Coordinates A9).

- Rags, trash, dirt, etc. on floor (Elevation 737.0 - Coordinates A9)

- Valves 2-FCV-70-133A and 2-FCV-70-134B exteriors were oily and dirty. These valves do not appear to be in the limitorque Preventive Maintenance (PM) program (Elevation 737.0 Coordinate A9)

- Four inch blind flange (approximately 6 inches from hanger # A492-2-18) was installed without a gasket. (Elevation 737.0 Coordinate A9)

The licensee has subsequently reviewed this installation and determined it was not in accordance with the drawing. A valve had been removed and a required spool piece not installed. Maintenance Request A 621C27 was issued against this deficiency.

- Gross Failed Fuel Detector Sampling Analyzer Panel (2-PNL-92-L-203) in Failed Fuel Detector Room, Elevation 737.0 Coordinate A16

  - Unit dirty

  - Threaded electrical connectors were not properly protected and showed signs of corrosion

  - Wire connectors were not protected from deterioration

- Vent on top of Elevation 737.0 Coordinate A16 contained a glass bottle, piece of rubber hose, string, etc.

- Hardware, a cloth, grinding wheels, trash, dirt, etc. were laying on top of Elevation 737.0 Coordinate A16

- One inch cooper air line open to atmosphere (located under valve 2-FCV-30-216 at Elevation 737.0 coordinate A9)

The deficiencies identified in paragraphs c and d above are similar to the examples of the failure to preserve equipment identified in previously issued Violation 391/87-19-02, "Failure to Preserve Equipment Installed in the North and South Valve Rooms" and were handled in accordance with the licensee's observation process.

10. Fastener Testing - NRC Compliance Bulletin 87-02 (TI 2500/26)

The inspector participated with the licensee in the selection of nuts and bolts for testing. This testing is being performed since fasteners previously tested from several nuclear plants failed to meet specification requirements for mechanical and/or chemical properties. Licensee's have been directed to provide information concerning their receipt inspection and internal control procedures for fasteners. In addition, the Bulletin requires a sample of nuts and bolts to be tested by a qualified laboratory. This testing shall be done in accordance with the requirements of the fastener's specification, grade, and class, and the test shall evaluate the ultimate tensile strength, hardness, and chemical properties as required by the fastener's specification, grade, class.

Samples were selected at the Watts Bar plant from the operations department warehouses (Power Stores) and the construction department warehouses. The samples selected included A693, A193 Gr. B, SA193 Gr 7, SA193 Gr. 8, SA J429 Gr. 2, A307 Gr. A, SAE J429 Gr. 5, SAE J429 Gr. 8, SA194 Gr. 2, 6, 7, 8, J995 Gr. 2, A490, A325, and A320 L7 materials.

The inspector requested the licensee to supply receipt inspection documents and storage area inspection documents for the samples selected. This item will be further reviewed pending receipt of the inspection records, area inspection records, and the licensee's laboratory reports. This Bulletin remains open pending the licensee's response to the Bulletin and review by the NRC.

While selecting the samples in Power Stores Storage Hut 22, it was noted that Hut 22 was very dirty and parts appeared to be poorly controlled. Many boxes contained rusty bolts. Bolts found in a box marked "Hut 22-19T/BFH-476M were particularly bad. Many boxes of bolts were missing their stock control tags. Some boxes had the stock control tags laying loose on the boxes. Large springs, also stored in this hut for use in valve operators, were rusty.

The inspector requested inspection records of Hut 22 inspections as required by procedure AI-5.6, Rev. 15, "Material storage, Handling, and Shipping Requirements for Watts Bar Nuclear Plant".

This is Unresolved Item (URI) 390/87-20-02, "Storage of Materials In Warehouse Storage", pending review of the licensee's explanation of this hut's condition and review of the hut inspection records.

11. Allegations (92701)

a. Portion of Allegation OSP-86-A-0056 at Watts Bar

CONCERN:

The inspectors reviewed a concern that relates to fire protection and separation. The fire protection concern referenced areas where the licensee failed to meet the requirements set forth in the Code of Federal Regulations, 10 CFR Part 50, Appendix R, as it relates to fire suppression and minimum separation criteria for structures, systems and components important to safe shutdown of the plant. In addition, discrepancies were identified to exist between the as-built condition and the commitments made in the FSAR.

DISCUSSION:

The various deficiencies identified at the Watts Bar Nuclear Plant were reviewed. The licensee has documented these deficiencies utilizing CDRs, NCRs, and CAQRs.

A sample of the CDRs that appear on the TROI as of December 29, 1987, associated with the fire protection system is listed as follows: (1) CDR 85-15 identified failure to document design basis changes for fire dampers. (2) CDR 85-39 identified inadequate separation of trained electrical cables. (3) CDR 86-03 identified a deficiency of unacceptable Appendix R interaction of the Auxiliary Feedwater System. (4) CDR 86-36 documented a deficiency in that the discharge relief valves on the high pressure fire pump were oversized. (5) CDR 86-60 identified that plant doors in fire rated barriers were not listed as fire doors.

Various CAQRs have been initiated by the licensee that document deficiencies in the fire protection and detection system. The sample of the issues identified are as follows: (1) Lack of vendor supplied documentation with fire pump no. 324777. (2) Temporary record storage does not meet the two hour fire rating requirement. (3) Inadequate fire dampers for ducts penetrating fire barriers in the cable spreading room. (4) Fire hose system does not conform to the National Fire Protection Association (NFPA) Standard No. 14. (5) Quality Assurance (QA) Program not provided for TVA Class H fire protection piping. (6) Inadequate fire protection coverage. (7) Fire protection system not installed per design.

Various other items and subjects are listed on the licensee's tracking. system.

CORRECTIVE ACTIONS:

The licensee has identified and reported all known deficient items and had informed the inspector that a contract will be awarded to an on-site engineering contractor to re-evaluate the fire protection and detection system. Disposition of the above items will result in corrective actions being taken to reconcile the identified deficiencies. However, the inspector was advised by the licensee's management that changes to the FSAR would be submitted to the NRC for review to make several needed corrections.

CONCLUSION:

The concern that the licensee failed to meet the requirements of the 10 CFR, Part 50, Appendix R and the requirements specified in the FSAR has been substantiated. However, FSAR changes necessary to make needed corrections have not been verified as being submitted to the NRC for review and/or approval. Therefore, this will be tracked by the inspectors as URI 390/87-20-03, 391/87-20-02, "Meeting of FSAR Commitments Associated With the Fire Protection system".

b. Portion of Allegation OSP-86-A-0058 at Watts Bar.

CONCERN:

The inspectors reviewed the concern that relates to maintenance and storage of equipment. The included adequacy of storage of materials and equipment, maintenance of records for this equipment, and maintaining equipment and material identification.

DISCUSSION:

The inspectors reviewed the licensee's findings and corrective actions pertaining to storage of materials and equipment. The licensee's findings in this area identified many deficiencies as stated in the concern, determined that some areas of the concern had been evaluated prior to performance of the activity, and some areas of the concern were not substantiated.

Findings included: (1) Instruments were stored in "gang boxes" in locations having no class of storage. (2) A shipment of thermo lag material was not stored in the proper temperature environment. (3) Snubber handling was inadequate. (4) Austenitic stainless steel fittings were not stored properly for approximately 50% to 75% of the time and, for a small percentage of the time, the other valves and fittings were not stored properly. (5) Safety and non-safety equipment was not kept separated during the storage in a storage trailer and in the field. In addition, miscellaneous pipe fittings were received with identical heat numbers and identification markings - which compounded the separation problem. (6) It was suspected that material at WBN was not handled in proper manner to prevent damage. However, this area of the concern was not substantiated. (7) The allegation that material was not properly documented as received and in storage was not substantiated. Based on interviews conducted by the licensee with cognizant Warehouse and Material Services personnel, no significant problems were revealed with the warehouse document inaccurately listing material as received and in storage. Through interviews and program evaluation, it was determined the documents in question were the ledger cards. It was determined that the only problem that could result would be in the location of an item and this would not be a safety-related issue. Only a small percentage of ledger cards were determined to be inaccurate. (8) The concern that QA material was not being received by the Material Services Unit (MSU) prior to being sent to the field shacks was not confirmed based on interviews by the licensee with the cognizant clerks, Material Services Unit, and craft personnel. (9) The concern was raised that fire protection for warehouses was inadequate. The ECTG findings revealed that this lack of fire protection was an economic consideration and not a nuclear safety consideration. The warehouses were protected by a fire hydrant system and portable extinguishers as a minimum and that ANSI N45.2.2-1972, requires that fire protection shall commensurate with the type of storage area.

CORRECTIVE ACTIONS:

Based on the licensee findings as stated above, the following steps have been initiated by the licensee to make the necessary corrective action and to track the issue until implementation is completed: (1) The instrument storage will be upgraded to a level B storage facility. This corrective action is tracked by the CATD 40400-WBN-01. (2) Department of Nuclear Construction (DNC) will write a Quality Control Instruction (QCI) on handling and installation of snubbers. This action will be tracked by CATD 10400 WBN 02. (3) The corrective actions associated with the protection and storage of austenitic stainless steel fittings and other valve and fittings will be provided by line management and tracked on CATD 40400 WBN-03 and 40400-WBN-04. (4) The provision for providing corrective actions for segregation and maintaining the identity of safety related materials and equipment has been assigned to line management. This issue has been identified on Nonconformance Report (NCR) 6843 and corrective action will be tracked by CATD 40400 WBN-02.

CONCLUSION:

The allegation in part has been substantiated. However, for the most part, the licensee has identified and incorporated corrective actions into its program. In view of the items identified, opened, and tracked by the licensee, the inspectors will not separately track these items other than by routine inspector activities.

12. List of Abbreviations - Unit 1 and 2

| | |
|---|---|
| ALARA | As Low As Reasonably Achievable |
| CAQR | Condition Adverse to Quality Report |
| CATD | Corrective Action Tracking Document |
| CDR | Construction Deficiency Report |
| CEP | Construction Engineering Procedure |
| CI | Concerned Individual |
| DNC | Department of Nuclear Construction |
| DNE | Division of Nuclear Engineering |
| DNQA | Department of Nuclear Quality Assurance |
| FSAR | Final Safety Analysis Report |
| EQ | Environmental Qualification |
| ECTG | Employee Concern Task Group |
| IEEE | Institute of Electrical & Electronic Engineering |
| LER | Licensee Event Report |
| MSU | Material Services Unit |
| NCR | NonConformance Report |
| NFPA | National Fire Protection Association |
| NQAM | Nuclear Quality Assurance Manual |
| OSP | Office of Special Projects |
| PGCE | Potential Generic Condition Evaluation |

| | |
|---|---|
| PIR | Problem Identification Report |
| PM | Preventive Maintenance |
| QCI | Quality Control Instruction |
| SIS | Safety Injection System |
| SQA-SIL | Sequoyah Quality Assurance - Staff Instruction Letter |
| SQN | Sequoyah Nuclear Plant |
| TI | Temporary Instruction |
| TROI | Tracking and Reporting of Open Items Report |
| WBN | Watts Bar Nuclear Plant |