



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

Report Nos.: 50-438/84-17 and 50-439/84-17

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

Docket Nos.: 50-438 and 50-439

License Nos.: CPPR-122 and CPPR-123

Facility Name: Bellefonte

Inspection Conducted: August 27 - 31, 1984

Inspector: *C. M. Upright for* 9/20/84
 R. W. Wright Date Signed

Approved by: *C. M. Upright* 9/20/84
 C. M. Upright, Section Chief Date Signed
 Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection entailed 39 inspector-hours on site in the areas of procurement, receiving, and storage.

Results: Of the three areas inspected, no violations or deviations were identified.

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REPORT DETAILS

1. Licensee Employees Contacted

- L. S. Cox, Project Manager
- *R. E. Young, Construction Engineer
- *B. J. Thomas, Quality Manager
- *J. T. Barnes, Office of QA, Section Supervisor
- *P. C. Mann, Nuclear Licensing Unit Supervisor
- *H. C. Johnson, Assistant Quality Manager, Hanger, Mechanical, Welding
- *D. R. Bridges, Assistant Quality Manager, Electrical Instrumentation, Civil, Materials, Maintenance
- *D. C. Smith, Nuclear Power, Compliance
- *D. Maroney, Receiving Inspection Group Leader
- *J. E. Campbell, Materials - Receiving, Preventive Maintenance Unit Supervisor
- T. R. Bruce, Preventive Maintenance Group Leader
- J. T. Wright, Warehouse Services Unit Supervisor
- D. L. Taylor, Warehouse Services Unit Assistant Supervisor
- J. T. Turner, Independent Quality Reviewer, Procedures and Training Unit
- G. L. Drake, Mechanical and Welding Site Procurement Specialist, MEU/WEU
- M. C. Bedford, Engineering Associate, Site Electrical Procurement, EEU/IEU

NRC Resident Inspector

*J. W. York

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 31, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Procurement, Receiving, and Storage (35065B)

The licensee's QA program has committed to the criteria specified in Regulatory Guide 1.28 R0, Regulatory Guide 1.38 R2, Regulatory Guide 1.123 R1, and applicable ANSI Standards N45.2-1971, N45.2.2-1972, and N45.2.13-1976 for the control of procurement, receiving, and storage activities. The following procedures were reviewed to determine whether this criteria had been incorporated into Bellefonte's QA program:

BNP-QCP-1.1, R12	Receiving Inspection
BNP-QCP-1.2, R13	Storage
BNP-QCP-1.3, R6	Maintenance
BNP-QCP-10.3, RII, Add2	Preparation and Review of Field Procurement Documents
BNP-QCP-10.9, R10, Add1	Material Identification and Marking
BNP-QCP-10.22, R3	Transfer of Items
BNP-QCP-10.46, RO	Review and/or Approval of Instructions, Procedures, Test Documents, and Procurement Documents

The administrative controls established in the above procedures were found satisfactory for handling site related procurement, receiving, and maintenance activities.

a. Site Procurement

Requests for procurement of permanent items which do not have the EN DES Design Project Organization (DPO) approved specifications and/or QA requirements are made to the EN DES Design Project Manager. The onsite Construction Engineer's Organization (CEO) makes request for procurement of permanent or engineering controlled materials or services which have DPO approved technical specifications and QA requirements. Onsite procurement is made by using one of four methods: Request for Delivery (RD) from an indefinite quantity contract; Transfer of Items Request (TR) to BNP Construction from another TVA Division or job site; normal Purchase Requisition (PR); or by a Field Purchase Order (FPO) which is generally used for emergency purchases under one thousand dollars. All procurements are initiated, reviewed, and approved by the CEO. In addition, they are reviewed and approved by the Construction Quality Manager Organization. Approximately 18 PRs, 2 RDs, 1 TR, and 1 FPO have been generated monthly over the past six months. Design Engineering Quality Assurance provides an approved supplier index for use on the site. The index in use was Revision 18 dated July 30, 1984.

The following site-initiated procurements were examined to determine whether applicable technical and quality assurance requirements were specified, the recommended supplier was on the approved supplier index, documents imposed the requirements of 10 CFR 21 where applicable, the vendors' QA programs had been audited by the TVA, the licensee had placed appropriate requirements on suppliers to ensure satisfactory certificates of conformance (COC) were obtained when used for documentation and acceptance of an item, the type of inspection (source/site) was specified, and the licensee had right of access to the supplier facilities.

<u>Procurement</u>	<u>Contract/TVA 421</u>	<u>Item</u>
PR 792602	84KK1-792602	Rework Solenoid Valves
PR 792638	84KK1-792638	Structural Steel
PR 792641	84KL8-792641	Epoxy Adhesive
ETR 792656	-	Kerotest Valve Parts
TR 792782	-	Weld Filler Material
RD 920902	82K39-787371	Oil Pump
RD 943541	79K8-825348	Heat Shrinkable Cable Sleeves
FP 0857227	G857227	Thermal Overload Heater Element
FP 0848492	G848492	Fuse

Since 1975, TVA has used nine constructors to perform safety-related activities during the construction of BNP. Thirty audits (14 supplier and 16 Bellefonte site) and four OQA surveillances have been performed on these contractor activities. The inspector examined a summary of these various onsite contractor/suppliers activities and an evaluation of their performance which is contained in Bellefonte's response to OQA Quality Problem 83-28.

In addition to the above, the inspector reviewed the following QA surveillance reports performed by TVA of onsite procurement activities: Surveillance Report Nos. C04-S-84-0205, 0425, 0426, 0446, 0495, 0504, 0523, 0545 and 0564.

Within this area, no violations or deviations were identified.

b. Receiving Inspection

The Warehouse Services Unit (WSU) and the Materials Services Unit (MSU - Receiving QC Unit) are jointly responsible for the receipt inspection of permanent material arriving onsite with one exception. The Civil QC Unit B (CQCB) personnel are responsible for receiving concrete materials and the CQCA personnel are responsible for obtaining samples of paints and safety-related protective coatings for evaluation. Currently, the MSU receiving group consists of six QC inspectors and one group leader. This group conducts approximately 70 receiving (includes safety and nonsafety) inspections per week, witnesses approximately 300 issues of material per week, and will conduct about 55 storage inspections per month after August 1, 1984.

Material is receipt inspected at Bellefonte in accordance with BNP-QCP-1.1, R12. Review of this procedure and examination of various procurement documents and receiving inspection records disclosed that the extent of onsite receiving inspection conducted depends on whether the item has been source inspected or not. When source verification is specified for the acceptance of an item, the site receiving inspection unit is aware of this requirement and expects documentary evidence of a satisfactory TVA source inspection to accompany the shipment of that item. Examination of the onsite receiving inspection checklist (RIC) requirements used to determine material acceptability for both source inspected and nonsource inspected items found these checklist items to be satisfactory.

For Quality Level II materials not requiring source inspection, a certificate of conformance (COC) which is a statement that the material complies with specifications or is in conformance with some specified requirement is expected with shipment. Procurement documentation continuation sheets depicted in BNP-QCP-10.3, R11, require that the individual authorized to sign the certification should be on file with TVA DED, Knoxville, Tennessee. If the individual is not on file, the prospective supplier must complete attachment Q and submit it with his bid. Attachment Q, entitled "Procedure for Certificate of Conformance," requires the prospective supplier to describe his COC program and procedures and to provide the name and function of the person authorized to sign the certificate.

The inspector examined Bellefonte's receiving inspection facilities and selected the following items that had already been receipt inspected and placed in storage to:

- ° Determine through a review of related documentation whether procurement requirements, codes, standards, and other applicable specifications were met for the purchased material or equipment.
- ° Verify by inspection of the purchase items that selected material and physical requirements in the procurement documents were met.
- ° Verify that test, material, and inspection data presented with COCs was reviewed by capable personnel.
- ° Determine whether nonconforming items were properly tagged and segregated.

<u>Item Inspected</u>	<u>Contract</u>	<u>Receiving Rpt #/ Date Inspected</u>
Reactor Building Coolant Fans 2RBC3, 2RBC2	71C62-054114-2	77-109
Failed Fuel Detection Panel INF-MMEI-009	71C62-054114-2	4/19/77
Power Distribution/Control/Alarm Panel 2MC-EAP-12	80K5-827801	82-3472
In Plant Radiation Monitoring Panel 2IR-ILPA-970B	77K64-821696	83-1019
10" Gate Valve SS 3001b Motor Operated DRWG# 3AW0412-ND-5	86163-8	84-1973
A36 Plate 6" x 72" x 96" MK PL-19, HT421A 2261	84K70-792564	84-2336

Electrode Welding Steel Type E7018, HT 8215	RD896384 (83X71-661784-2)	83-2495
Cable, 400 MCM 1/C PXJ 600 Volt, WDO-1, Tag 11031 Reel #14	79K08-825668-1	-

Within this area, no violations or deviations were identified.

c. Storage, Maintenance

Procedures BNP-QCP-1.1, R12; QCP-1.2, R13; and QCP-1.3, R6, establish the storage and maintenance requirements for safety-related items at the Bellefonte facility. All warehouse facilities storing material and equipment for construction of BNP exist on site. The following warehouses, shed, and laydown area were inspected to verify that equipment/material remaining in storage was stored in its properly controlled environment, protected from damage, items were properly marked, access to storage areas was controlled, that storage facilities were inspected, and records of storage conditions were being maintained.

<u>Stored Level</u>	<u>Stored Facility</u>
A	Warehouses B-46, HK, HM
B	Warehouses HR, HS, HU
C	Warehouse A, HD
D	Shed U and the piping and structural steel laydown area

The inspector examined the storage facility inspection records for the month of August 1984. Discussions revealed that TVA management has placed greater emphasis on the control of stored equipment/materials. Prior to August 1984, the licensee inspected storage facilities on a six-month frequency, except for Level A areas which were inspected weekly and for Level B areas where temperatures were recorded on a weekly basis. However, after a nonconforming condition identified several unacceptable storage conditions and failure to maintain Level B storage warehouses above 40°F temperature, TVA management increased the storage inspection frequency for all B, C, and D level areas to once per month. Additionally, faulty Level B warehouses have received additional insulation to preclude recurring temperature problems.

The maintenance storage requirements for the reactor building coolant fans, item (1), and the power distribution/control/alarm panel, item (3) (identified in paragraph 5b) were examined and their required maintenance was performed for July 1984.

Within this area, no violations or deviations were identified.

d. Inplace/Inplant Storage

The inspector conducted a walk-through of reactor building Unit 2 and the auxiliary building selecting the below listed items to verify that:

- ° Equipment stored inplace/inplant met the storage requirements specified by the engineer or supplier.
- ° Equipment stored inplace/inplant was protected from construction debris and damage.
- ° Maintenance requirements for stored equipment had been performed where applicable.
- ° Periodic inspections of these items in storage had been performed.

<u>Inspected Items</u>	<u>Inspection, Storage and Preventative Maintenance No.</u>
14" Motor Operated Valve (MOV) 2NL-IFCV-079-8	ISPM-E1287
3" MOV (2KD-IFCV-53B)	ISPM-E1082
6" MOV (2WL-IFCV-90B)	ISPM-E78
Spent Resin Transfer Pump Motor OWL-EMOT-016	ISPM-E78
Titrated Waste Transfer Pump Motor OWL-EMOT-005	ISPM-E74
Horizontal Reactor Building Sump Pump 2WL-EMOT-002	ISPM-E01115

Within this area, no violations or deviations were identified.