

TVA EMPLOYEE CONCERNS  
SPECIAL PROGRAM

REPORT NUMBER: 40200

REPORT TYPE: Watts Bar Nuclear Plant - Subcategory  
(Final)

REVISION NUMBER: 2

TITLE: Purchasing and Requisitioning

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REASON FOR REVISION:

Revision 1: Revised to incorporate Senior Review Panel (SRP) comments,  
Corrective Action Plan (CAP), and editorial changes.

Revision 2: Revised to incorporate SRP comments

IR2

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Preface, Glossary, and List of Acronyms  
for ECTG Subcategory Reports

HISTORY OF REVISION

<b>REV NUMBER</b>	<b>PAGES REVISED</b>	<b>REASON FOR CURRENT REVISION</b>
3	i	To clarify that one or more attachments will help the reader find where a particular concern is evaluated

### **Preface**

This subcategory report is one of a series of reports prepared for the Employee Concerns Special Program (ECSP) of the Tennessee Valley Authority (TVA). The ECSP and the organization which carried out the program, the Employee Concerns Task Group (ECTG), were established by TVA's Manager of Nuclear Power to evaluate and report on those Office of Nuclear Power (ONP) employee concerns filed before February 1, 1986. Concerns filed after that date are handled by the ongoing ONP Employee Concerns Program (ECP).

The ECSP addressed over 5800 employee concerns. Each of the concerns was a formal, written description of a circumstance or circumstances that an employee thought was unsafe, unjust, inefficient, or inappropriate. The mission of the Employee Concerns Special Program was to thoroughly investigate all issues presented in the concerns and to report the results of those investigations in a form accessible to ONP employees, the NRC, and the general public. The results of these investigations are communicated by four levels of ECSP reports: element, subcategory, category, and final.

Element reports, the lowest reporting level, will be published only for those concerns directly affecting the restart of Sequoyah Nuclear Plant's reactor unit 2. An element consists of one or more closely related issues. An issue is a potential problem identified by ECTG during the evaluation process as having been raised in one or more concerns. For efficient handling, what appeared to be similar concerns were grouped into elements early in the program, but issue definitions emerged from the evaluation process itself. Consequently, some elements did include only one issue, but often the ECTG evaluation found more than one issue per element.

Subcategory reports summarize the evaluation of a number of elements. However, the subcategory report does more than collect element level evaluations. The subcategory level overview of element findings leads to an integration of information that cannot take place at the element level. This integration of information reveals the extent to which problems overlap more than one element and will therefore require corrective action for underlying causes not fully apparent at the element level.

To make the subcategory reports easier to understand, three items have been placed at the front of each report: a preface, a glossary of the terminology unique to ECSP reports, and a list of acronyms.

Additionally, at the end of each subcategory report will be a Subcategory Summary Table that includes the concern numbers; identifies other subcategories that share a concern; designates nuclear safety-related, safety significant, or non-safety related concerns; designates generic applicability; and briefly states each concern.

Either the Subcategory Summary Table or another attachment or a combination of the two will enable the reader to find the report section or sections in which the issue raised by the concern is evaluated.

The subcategories are themselves summarized in a series of eight category reports. Each category report reviews the major findings and collective significance of the subcategory reports in one of the following areas:

- management and personnel relations
- industrial safety
- construction
- material control
- operations
- quality assurance/quality control
- welding
- engineering

A separate report on employee concerns dealing with specific contentions of intimidation, harassment, and wrongdoing will be released by the TVA Office of the Inspector General.

Just as the subcategory reports integrate the information collected at the element level, the category reports integrate the information assembled in all the subcategory reports within the category, addressing particularly the underlying causes of those problems that run across more than one subcategory.

A final report will integrate and assess the information collected by all of the lower level reports prepared for the ECSP, including the Inspector General's report.

For more detail on the methods by which ECTG employee concerns were evaluated and reported, consult the Tennessee Valley Authority Employee Concerns Task Group Program Manual. The Manual spells out the program's objectives, scope, organization, and responsibilities. It also specifies the procedures that were followed in the investigation, reporting, and closeout of the issues raised by employee concerns.

ECSP GLOSSARY OF REPORT TERMS\*

classification of evaluated issues the evaluation of an issue leads to one of the following determinations:

Class A: Issue cannot be verified as factual

Class B: Issue is factually accurate, but what is described is not a problem (i.e., not a condition requiring corrective action)

Class C: Issue is factual and identifies a problem, but corrective action for the problem was initiated before the evaluation of the issue was undertaken

Class D: Issue is factual and presents a problem for which corrective action has been, or is being, taken as a result of an evaluation

Class E: A problem, requiring corrective action, which was not identified by an employee concern, but was revealed during the ECTG evaluation of an issue raised by an employee concern.

collective significance an analysis which determines the importance and consequences of the findings in a particular ECSP report by putting those findings in the proper perspective.

concern (see "employee concern")

corrective action steps taken to fix specific deficiencies or discrepancies revealed by a negative finding and, when necessary, to correct causes in order to prevent recurrence.

criterion (plural: criteria) a basis for defining a performance, behavior, or quality which ONP imposes on itself (see also "requirement").

element or element report an optional level of ECSP report, below the subcategory level, that deals with one or more issues.

employee concern a formal, written description of a circumstance or circumstances that an employee thinks unsafe, unjust, inefficient or inappropriate; usually documented on a K-form or a form equivalent to the K-form.

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evaluator(s) the individual(s) assigned the responsibility to assess a specific grouping of employee concerns.

findings includes both statements of fact and the judgments made about those facts during the evaluation process; negative findings require corrective action.

issue a potential problem, as interpreted by the ECTG during the evaluation process, raised in one or more concerns.

K-form (see "employee concern")

requirement a standard of performance, behavior, or quality on which an evaluation judgment or decision may be based.

root cause the underlying reason for a problem.

\*Terms essential to the program but which require detailed definition have been defined in the ECTG Procedure Manual (e.g., generic, specific, nuclear safety-related, unreviewed safety-significant question).

**Acronyms**

<b>AI</b>	<b>Administrative Instruction</b>
<b>AISC</b>	<b>American Institute of Steel Construction</b>
<b>ALARA</b>	<b>As Low As Reasonably Achievable</b>
<b>ANS</b>	<b>American Nuclear Society</b>
<b>ANSI</b>	<b>American National Standards Institute</b>
<b>ASME</b>	<b>American Society of Mechanical Engineers</b>
<b>ASTM</b>	<b>American Society for Testing and Materials</b>
<b>AWS</b>	<b>American Welding Society</b>
<b>BFN</b>	<b>Browns Ferry Nuclear Plant</b>
<b>BLN</b>	<b>Bellefonte Nuclear Plant</b>
<b>CAQ</b>	<b>Condition Adverse to Quality</b>
<b>CAR</b>	<b>Corrective Action Report</b>
<b>CATD</b>	<b>Corrective Action Tracking Document</b>
<b>CCTS</b>	<b>Corporate Commitment Tracking System</b>
<b>CEG-H</b>	<b>Category Evaluation Group Head</b>
<b>CFR</b>	<b>Code of Federal Regulations</b>
<b>CI</b>	<b>Concerned Individual</b>
<b>CMTR</b>	<b>Certified Material Test Report</b>
<b>COC</b>	<b>Certificate of Conformance/Compliance</b>
<b>DCR</b>	<b>Design Change Request</b>
<b>DNC</b>	<b>Division of Nuclear Construction (see also NU CON)</b>

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**DNE**        **Division of Nuclear Engineering**

**DNQA**      **Division of Nuclear Quality Assurance**

**DNT**        **Division of Nuclear Training**

**DOE**        **Department of Energy**

**DPO**        **Division Personnel Officer**

**DR**         **Discrepancy Report or Deviation Report**

**ECN**        **Engineering Change Notice**

**ECP**        **Employee Concerns Program**

**ECP-SR**    **Employee Concerns Program-Site Representative**

**ECSP**      **Employee Concerns Special Program**

**ECTG**      **Employee Concerns Task Group**

**EEOC**      **Equal Employment Opportunity Commission**

**EQ**         **Environmental Qualification**

**EMRT**      **Emergency Medical Response Team**

**EN DES**    **Engineering Design**

**ERT**        **Employee Response Team or Emergency Response Team**

**FCR**        **Field Change Request**

**FSAR**      **Final Safety Analysis Report**

**FY**         **Fiscal Year**

**GET**        **General Employee Training**

**HCI**        **Hazard Control Instruction**

**HVAC**      **Heating, Ventilating, Air Conditioning**

**II**         **Installation Instruction**

**INPO**      **Institute of Nuclear Power Operations**

**IRN**        **Inspection Rejection Notice**

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<b>L/R</b>	<b>Labor Relations Staff</b>
<b>M&amp;AI</b>	<b>Modifications and Additions Instruction</b>
<b>MI</b>	<b>Maintenance Instruction</b>
<b>MSPB</b>	<b>Merit Systems Protection Board</b>
<b>MT</b>	<b>Magnetic Particle Testing</b>
<b>NCR</b>	<b>Nonconforming Condition Report</b>
<b>NDE</b>	<b>Nondestructive Examination</b>
<b>NPP</b>	<b>Nuclear Performance Plan</b>
<b>NPS</b>	<b>Non-plant Specific or Nuclear Procedures System</b>
<b>NQAM</b>	<b>Nuclear Quality Assurance Manual</b>
<b>NRC</b>	<b>Nuclear Regulatory Commission</b>
<b>NSB</b>	<b>Nuclear Services Branch</b>
<b>NSRS</b>	<b>Nuclear Safety Review Staff</b>
<b>NU CON</b>	<b>Division of Nuclear Construction (obsolete abbreviation, see DNC)</b>
<b>NUMARC</b>	<b>Nuclear Utility Management and Resources Committee</b>
<b>OSHA</b>	<b>Occupational Safety and Health Administration (or Act)</b>
<b>ONP</b>	<b>Office of Nuclear Power</b>
<b>OWCP</b>	<b>Office of Workers Compensation Program</b>
<b>PHR</b>	<b>Personal History Record</b>
<b>PT</b>	<b>Liquid Penetrant Testing</b>
<b>QA</b>	<b>Quality Assurance</b>
<b>QAP</b>	<b>Quality Assurance Procedures</b>
<b>QC</b>	<b>Quality Control</b>
<b>QCI</b>	<b>Quality Control Instruction</b>

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**QCP**      **Quality Control Procedure**  
**QTC**      **Quality Technology Company**  
**RIF**      **Reduction in Force**  
**RT**        **Radiographic Testing**  
**SQN**      **Sequoyah Nuclear Plant**  
**SI**        **Surveillance Instruction**  
**SOP**      **Standard Operating Procedure**  
**SRP**      **Senior Review Panel**  
**SWEC**     **Stone and Webster Engineering Corporation**  
**TAS**      **Technical Assistance Staff**  
**T&L**      **Trades and Labor**  
**TVA**      **Tennessee Valley Authority**  
**TVTLC**    **Tennessee Valley Trades and Labor Council**  
**UT**        **Ultrasonic Testing**  
**VT**        **Visual Testing**  
**WBECSP**   **Watts Bar Employee Concern Special Program**  
**WBN**      **Watts Bar Nuclear Plant**  
**WR**        **Work Request or Work Rules**  
**WP**        **Workplans**

## EXECUTIVE SUMMARY

### MATERIAL CONTROL CATEGORY

#### Subcategory Report 40200 "Purchasing and Requisitioning"

#### SUMMARY OF THE ISSUES

There are eleven concerns in this subcategory. The eleven concerns were grouped into eight issues to facilitate effective evaluation of similar concerns. These issues addressed (1) components/materials being procured for one plant, unit, system, etc., and used elsewhere without proper documentation; (2) code material was supplied by an uncertified vendor; (3) materials requisitions were improperly prepared; (4) vendor (Westinghouse) items were removed from site and altered without documentation; (5) questionable quality of materials were being purchased; (6) TVA sites were not approved to supply materials to one another; (7) NDE materials were not being procured to safety-related requirements; and (8) fire protection equipment was being procured without documentation.

#### MAJOR FINDINGS

None of the eight issues were determined to present a current problem, with respect to the perceived problem, during the evaluation. One side issue (problem) was identified.

|R2  
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1. Documentation was not being maintained for material transferred to SQN in accordance with the site procedure. This was a side issue resulting from a previous evaluation, by SQN, for one of the issues.
2. The issues evaluated were not a problem because existing corporate and site procedures were adequate to control the issue and detect deficiencies at the time of occurrence, which were followed by appropriate corrective action.

|R2  
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#### COLLECTIVE SIGNIFICANCE OF MAJOR FINDINGS

1. Due to a failure to follow procedure, SQN had not been maintaining all required documentation for material transferred to SQN. This could raise questions, during subsequent reviews, with respect to the capabilities of these items to perform a safety-related function if required. Some of this impact was minimized by the fact that the documentation had been required for receipt inspection. This finding was site-specific to SQN as a side issue resulting from other site evaluations.

|R2  
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2. Several of the issues evaluated were determined not to be a problem. This was a result of the programs and procedural controls that both TVA corporate and site organizations had developed and implemented. Although these measures were not always apparent to all individuals during the performance of their respective duties, this evaluation identified that effective, functioning programs were generally in place to ensure the adequacy of and detect deficiencies in purchasing and requisitioning activities.

#### CAUSES OF THE MAJOR FINDINGS

The causes for finding 1 was lack of management attention to procedural control development and implementation.

#### CORRECTIVE ACTION ON MAJOR FINDINGS

1. All requisitions for transfer of material to SQN are being reviewed. This deficiency has been documented and is being corrected on corrective action report SQ-CAR-86-04-23. Any item for which the required documentation cannot be found will have a nonconformance investigation report issued. The item will be evaluated for the "installed" use, or replaced as necessary. Also, procedure SQA-45 has been revised to disallow transfers to or from SQN for any QA material that cannot be traced to it's original procurement document. This action is being tracked by CATD 40201-SQN-01.

EXECUTIVE SUMMARY  
 SUBCATEGORY 40200  
 SUMMARY TABLE

ISSUES	SR	NS	FINDINGS	CAUSE	CORR ACT.	SIGNIFICANCE	COLLECTIVE SIGN.
Transfers	X		Pressure transmitters were properly documented and transferred from WBN to SQN.	N/A	None	N/A	Collectively, there were no problems identified with respect to technical, management or employee effectiveness. It was determined that TVA sites did have in place adequate systems and procedures to identify and resolve deficiencies. One corrective action for a side issue at SQN was due to failure to follow procedures.
			A side issue at SQN was the failure to maintain documentation for transferred material. Reference CAR SQ-CAR-86-04-023 issued by SQN. Reference CATD number 40201-SQN-01.	Inadequate Procedure	Procedure has been revised. All previous transfers are being reviewed and documentation filed. Items for which documentation cannot be found will be corrected through issuance of a CAQ.	N/A	
Uncertified Vendors	X		Steam Generator Blowdown system materials in question had been removed, replaced or qualified in 1983 at WBN.	N/A	None	N/A	
Requisitions	X		Requisitions were being properly prepared and processed at WBN. No evidence of procedural deviation was determined.	N/A	None	N/A	
Equipment Changes	X		No evidence could be found to indicate that vendor items were removed from WBN site, modified, and returned without documentation. Normal warehouse procedures would	N/A	None	N/A	

**EXECUTIVE SUMMARY  
SUBCATEGORY 40200  
SUMMARY TABLE**

ISSUES	SR	NS	FINDINGS	CAUSE	CORR ACT.	SIGNIFICANCE	COLLECTIVE SIGN.
Equipment Changes (con't)			catch the items upon return to site.				
Questionable Qua- lity Materials	X		Proper procedures were in place at WBN to implement adequate methods for the procurement of foreign steel and for procurement of chemical reagents. No evidence of improper re- quisitioning or receiving of these items was found. The WBN procedures re- flected upper-tier guidance.	N/A	None	N/A	
TVA Sites Unapproved Vendors	X		All sites had adequate procedures in place to control the transfer of materials from one TVA site to another. TVA sites are not considered to be vendors for each other. All sites re- quisition through the cor- porate system of approved vendors. One TVA site supplying another is con- sidered as an in-house transfer.	N/A	None	N/A	

EXECUTIVE SUMMARY  
 SUBCATEGORY 40200  
 SUMMARY TABLE

ISSUES	SR	NS	FINDINGS	CAUSE	CORR ACT.	SIGNIFICANCE	COLLECTIVE SIGN.
NDE Materials	X		Site procedures at BLN did not adequately implement upper-tier criteria to control the procurement of NDE materials. A review of all NDE materials requisitions revealed all requisitions had been to safety-related requirements except one. NCR 4487 was issued. Problems were identified and corrected prior to the ECTG evaluation.	N/A	None	N/A	
Fire Protection	X		No deficiencies involving certification of fire protection equipment were found. The contract in question was for non-QA structures which do not contain safety-related equipment. The specifications in question had nothing to do with fire protection.	N/A	None	N/A	

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8.0 ATTACHMENTS

8.1 Attachment A - Subcategory Summary Table (Computer Printout)  
List of 37 Concerns By Concern Number Indicating  
Safety Relationship And Generic Applicability

8.2 Attachment B - Summary of Issues and Problems Identified

8.3 Attachment C - List of Concerns by Issue/Element

## 1.0 CHARACTERIZATION OF ISSUES

### 1.1 Introduction

This subcategory report addresses eleven concerns relating to purchasing and requisitioning policies, practices and procedures. These concerns were grouped into eight issues to aid in the evaluation effort. The eight issues were as follows:

- 1.1.1 Transfers
- 1.1.2 Uncertified Vendor
- 1.1.3 Requisitions
- 1.1.4 Equipment Changes
- 1.1.5 Questionable Quality Materials
- 1.1.6 TVA Sites Unapproved Suppliers
- 1.1.7 NDE Materials
- 1.1.8 Fire Protection

### 1.2 Description of Issues

#### 1.2.1 Transfers

There were three concerns generated specific to Watts Bar Nuclear Plant (WBN) dealing with perceived problems in the area of transfers.

Concern IN-85-463-007 stated that instruments dedicated for a unit or system are frequently sent to another unit, system or even plant and documentation is not revised.

Concern IN-85-463-008 stated that four unit 2 pressure differential transmitters were sent to Sequoyah Nuclear Plant (SQN) from WBN and documentation was not generated to reflect this occurrence.

Concern IN-85-964-003 stated that material/equipment was ordered dedicated to a specific system, unit, etc., and frequently sent/used elsewhere and it was unknown if documentation was ever revised to reflect this.

The issue raised by these concerns was that instruments, materials and equipment were procured for use at one plant, unit, system, etc., and were used in another plant, unit, system, etc., without proper documentation for substitution/replacement or were not what existing documentation called for in the application where they were used.

**1.2.2 Uncertified Vendor**

There was one concern generated specific to WBN dealing with Steam Generator Blowdown (SGB) materials being procured from an uncertified vendor.

Concern IN-85-086-001 stated that Steam Generator Blowdown materials were purchased from an uncertified vendor in the summer of 1983.

The issue raised by this concern was that materials were purchased from a vendor who could not supply code material and that the non-code material was installed and never removed.

**1.2.3 Requisitions**

There was one concern specific to WBN dealing with requisitions not being filled out per procedure.

Concern WI-85-036-002 stated that material requisitions were not being filled out according to procedure.

The issue raised by this concern was that materials requisitions were filled out improperly and possibly the wrong material could be ordered.

**1.2.4 Equipment Changes**

There was one concern specific to WBN dealing with Westinghouse equipment being changed and not receiving any receipt inspection.

Concern IN-85-336-003 stated that Westinghouse equipment was being sent off-site for design changes without documentation. The lack of documentation allowed the material to be received back on-site without having a receipt inspection performed.

The issue raised by this concern was that Westinghouse equipment was being sent off-site for design changes without documentation. Because of this, the equipment could be received back on-site without notifying the Quality Engineering Branch (QEB), and subsequently no receipt inspection was performed.

#### 1.2.5 Questionable Quality Materials

There were two concerns specific to WBN concerning materials being procured that were of questionable quality.

Concern IN-86-124-001 stated that foreign steel used at WBN has a low grade of quality.

Concern IN-85-190-001 stated that Plant Operations receives materials (e.g., chemical reagents) of questionable quality. Substitution and low bid policy may be the cause of the problem.

The issue raised by these concerns was that foreign steel and chemical reagents were being purchased inadequately. Subsequently, TVA was getting questionable quality material.

#### 1.2.6 TVA Sites Unapproved Suppliers

There was one concern specific to WBN dealing with TVA sites not being on the Approved Suppliers List.

Concern WI-85-053-011 states that materials were received at WBN from other TVA sites with complete documentation. However, these other sites are not on the Approved Suppliers List.

The issue raised by this concern was that TVA sites could not supply materials to each other since they were not approved suppliers.

#### 1.2.7 NDE Materials

There was one concern specific to Bellefonte Nuclear Plant (BLN) dealing with NDE material not being procured as safety-related material.

Concern BNP-QCP-10.35-2 states that purchase and control of NDE materials appeared to be inadequate.

The issue raised by this concern was that nondestructive examination (NDE) materials (cleaner, developer and penetrant) were not being procured as safety-related items at BLN. Also, subsequent control of records documenting certification of the NDE materials were not being kept.

### 1.2.8 Fire Protection

There was one concern specific to Bellefonte Nuclear Plant (BLN) concerning fire protection equipment.

Concern I-85-105-BLN stated that fire protection equipment received on Form G-53 and PF-1060 required this material to be furnished with Certificate of Conformance and the Office of Engineering was not including this as an addition to the contract.

The issue raised by this concern was that fire protection equipment was furnished without a Certificate of Conformance (COC).

## 2.0 SUMMARY

### 2.1 Summary of Issues

This subcategory report addressed eight areas of perceived problems pertaining to purchasing and requisitioning practices, policies and procedures. The issues were (1) transferred items were not documented properly or were not what documents called for, (2) vendor for SGB material could not supply code material, (3) requisitions were not being filled out properly, (4) Westinghouse equipment was sent off-site and received back on-site without documentation or inspections, (5) low quality material procurement, (6) TVA sites not approved suppliers, (7) NDE material being procured as nonsafety-related, and (8) fire protection equipment being procured without COC's.

### 2.2 Summary of Evaluation Process

Approximately 90 individuals knowledgeable in the area of metallurgy/welding, materials inspection, and materials procurement were interviewed. Procurement and inspection procedures and audit reports for WBN, BLN, Browns Ferry Nuclear Plant (BFN), and SQN were reviewed. Also, nonconforming conditions reports (NCRs) and reports made by others in the area of purchasing and requisitioning were reviewed.

## 2.3 Summary of Findings

### 2.3.1 Transfers

This was determined to be a Class A issue at WBN and a Class E issue at SQN.

It was found that the required documentation (e.g. Transfer Requisition Number 970095 & Shipping Ticket Number G279463) was generated as required by the procedures [Interdivisional Quality Assurance Procedure (ID-QAP-4.3) and WBN QCI-1.20] to ensure proper transfer of the transmitters in concern IN-85-463-008. From a review of the ECTG expurgated QTC files, it was found that the concerned individual stated that WBN had received permanent replacement instruments and that his concern had been resolved. No problems were found to exist on concerns IN-85-463-007 and IN-85-964-003 at WBN.

However, these concerns were evaluated at SQN and a side issue was identified. It was discovered that some documentation was not being maintained for material transferred to SQN as required by SQN AI-7. A Corrective Action Report (CAR) was generated to track and resolve this problem (SQ-CAR-86-04-023). (Reference CATD No. 40201-SQN-01)

### 2.3.2 Uncertified Vendor

This was determined to be a Class C issue at WBN.

It was found that concern IN-85-086-001 was factual. However, SGB materials had been replaced at WBN in 1983 due to a NRC Inspection and Enforcement (IE) Bulletin.

### 2.3.3 Requisitions

This was determined to be a Class A issue at WBN.

It was found that concern WI-85-036-002 was not factual in the area of requisitions not being prepared per procedure.

2.3.4 Equipment Changes

This was determined to be a Class B issue at WBN.

It was found that concern IN-85-336-003 was partially factual but not a problem. The portion of the concern dealing with Westinghouse material being sent off site without documentation (TVA documentation) occurred because Westinghouse shipped material back to their shops per Field Deficiency Reports. The TVA documentation however, would not have been QA documentation but would have caused inventory records to have been changed showing the material had been returned. To this extent, this portion of the concern in this issue is factual. However, no evidence was found to indicate that QEB was not informed or that receipt inspections were not properly performed.

2.3.5 Questionable Quality Materials

This was determined to be a Class A issue at WBN.

It was found that concerns IN-86-124-001 and IN-85-190-001 were not factual.

There are procedures in place for procurement of foreign steel and for chemical reagents. No problems were identified during this evaluation with regard to either of these areas of concern.

2.3.6 TVA Sites Unapproved Vendors

This was determined to be a Class B issue at WBN.

It was found that concern WI-85-053-011 was factual. However, there are procedures in place at all plant sites to evaluate procurements from other TVA sites. This issue is factually accurate, but is not a problem.

### 2.3.7 NDE Materials

This was determined to be a Class C issue at BLN.

It was found that concern BNP-QCP-10.35-2 was factual. However, all records were found except one for which an NCR was issued as a result of a BLN site personnel evaluation. It was determined that all the NDE procurements had been made as safety-related except one case in which it was found that the supplier was capable of fulfilling the QA requirements of the procurement. All NDE materials will be procured as safety-related in the future per a revision to Quality Assurance Program Procedure (QAPP) 7. All corrective actions were accomplished prior to the ECTG evaluation. The corrective actions for this issue resulted from a concern generated prior to the ECSP.

### 2.3.8 Fire Protection

This was determined to be a Class A issue at BLN.

It was found that concern I-85-105-BLN was not factual. G-53 is not a form but is a Construction Specification on bolting material. PF-1060 concerning gasket materials is a portion of a Construction Specification dealing with NDE and allied field operations. This evaluation found no Fire Protection equipment procurements to be deficient.

## 2.4 Summary of Collective Significance

It was found that two concerns (IN-85-086-001 and IN-85-336-003) of the four concerns identified as being factual had been addressed previously, through other systems, and had been resolved prior to the concern evaluations. The third factual concern (BNP-QCP-10.35-2) was due to a procedural deficiency which was corrected as a result of BLN site personnel evaluating this employee concern prior to the ECTG evaluation. The fourth factual concern (WI-85-053-011) was not a problem and required no corrective action. |R2

The significance of these issues at the subcategory level was that no problems existed in the procurement area which could have affected plant safety or the public. No problems were identified relating to management or employee effectiveness, or technical adequacy of equipment/materials.

The collective significance gained from this evaluation was that systems and procedures are in place to identify and resolve deficiencies. This is reinforced particularly by the fact that the fourth factual concern noted above was voiced and corrective action initiated before the ECSP.

### **2.5 Summary of Causes**

No existing problems were identified relative to the perceived problems of the concerns in this subcategory.

However, a side issue was discovered at SQN in the area of transfers. The documentation on some transferred items was not retrievable. The root cause of this side issue was that there were no requirements to ensure that the documentation received was microfilmed.

### **2.6 Summary of Corrective Actions Taken**

For the side issue at SQN, all records were found and microfilmed except for two QA level III items (not all QA Level III items require documentation/certification or record retention of such as was the case for these two items). Power Stores Section Instruction Letter (SIL) Number 9 was issued requiring a review to insure that QA records conform to existing procedures and that all required documentation is properly microfilmed to maintain record traceability.

## **3.0 EVALUATION PROCESS**

### **3.1 General Method of Evaluation**

This evaluation included a review of QTC expurgated files for any additional specific information, interviews of knowledgeable individuals in each of the areas of concern as well as others with interaction in the areas of concern, reviews of Office of Nuclear Power (ONP) and Division of Nuclear Construction (DNC) procedures and documentation, reviews of NCR and Audit Logs, and reviews of responses and reports from other groups/units.

**3.2 Requirements or Criteria Established for Individual Issues**

**3.2.1 Transfers**

- 1a. Interdivisional (ID) Quality Assurance Procedure (QAP) 4.3, Transfer of Items (Dated December 31, 1984)--This procedure defines the responsibilities and procedures used for transfer of nuclear safety-related items.
- 1b. WBN Quality Control Instruction (QCI) 1.20, Site Control of Procurement (Revision 10, dated October 25, 1985)--This instruction establishes the methods, assigns responsibilities, and defines the sequence of actions to be accomplished in controlling procurement, including transfers, of permanent and non-permanent plant quality assurance (QA) items.
- 1c. WBN Administrative Instruction (AI) 5.1, Material Procurement and Control (Revision 19, dated March 26, 1986)--This instruction provides instructions and supplementary information for the procurement, including transfers, of materials, components, and spare parts for use at WBN.
- 1d. Quality Bulletin number 85-03, Transfer of CSSC Parts and Materials (Revision 0, dated August 16, 1985)--This bulletin gives clarification of transfer requirements.
- 1e. SQN Standard Practice SQA45, Quality Control for Materials, Parts and Services (Revision 21, dated June 23, 1986)--This practice describes methods and requirements for procurement of materials, components, and spare parts for use at SQN.
- 1f. SQN Standard Practice SQA134, Critical Structures, Systems, and Components (CSSC) List (Revision 8, dated January 27, 1986)--This procedure lists all the safety-related items at SQN.

- 1g. SQN Standard Practice SQA159, Standards and Guides for Quality Assurance Level III Items (Revision 2, dated February 3, 1986)--This practice establishes the standards and cross-reference substitution guides for QA level III purchases.
- 1h. SQN Standard Practice SQA161, Procurement of 10 CFR 50.49 Equipment (Revision 2, dated February 13, 1986)--This practice establishes plant requirements for assuring that the unique technical requirements are met for procurement of electrical equipment included under 10 CFR 50.49.
- 1i. SQN Standard Practice SQA162, Purchase Specification for CSSC Materials (Revision 3, dated August 26, 1986)--This practice establishes standard purchase specifications for the purchase of materials and spare parts.
- 1j. SQN Standard Practice SQM2, Maintenance Management System (Revision 19, dated August 5, 1986)--This practice establishes the methods and responsibilities for managing the initiation, planning, scheduling, execution, status, tracking and documentation of corrective maintenance and repair work at SQN.
- 1k. SQN AI-11, Receipt Inspection, Nonconforming Items, QA Level/Description Changes and Substitutions (Revision 37, dated June 20, 1986)--This instruction defines the responsibilities and establishes controls for receiving inspection of materials, components, and spare parts procured for the critical structures, systems, and components identified in SQA134.
- 1l. SQN AI-19 (Part III), Plant Modifications: Modification Requests (Revision 13, dated June 3, 1986)--This instruction describes the methods of processing, approving, and scheduling all plant modifications to the physical facilities of SQN.
- 1m. SQN AI-19 (Part IV), Plant Modifications: After Licensing (Revision 18, dated July 7, 1986)--This instruction describes the methods for implementing all modifications to the physical facilities of SQN.

- 1n. SQN AI-36, Storage, Handling and Shipping of QA Material (Revision 9, dated March 7, 1986)--This instruction defines the storage requirements and recommended practices for safety-related material and equipment to ensure that the quality of items is not degraded as a result of improper storage.
- 1o. Browns Ferry Nuclear Plant (BFN) Standard Practice BF16.2, Procurement (Revision 1, dated February 20, 1986)--This practice establishes the methods of procurement of material, components, and spare parts for BFN.
- 1p. BFN Standard Practice BF16.3, Quality Control of Material Components, Spare Parts, and Services (Revision 0, dated February 20, 1986)--This practice establishes the quality levels for the procurement of material, components, and spare parts that may affect CSSC.
- 1q. BFN Standard Practice BF16.4, Material, Components and Spare Parts. Receipt, Handling, Storage, Issuing, Return to Storeroom, and Transfer (Revision 2, dated February 20, 1986)--This practice establishes the methods of receipt, handling, storage, issuing, return to storeroom, and transfer of material, components and spare parts.
- 1r. WBN Standard Operating Procedure (SOP) 32, Administrative Control of Unit 2 Material (Revision 1, dated March 31, 1986)--This procedure establishes guidelines and assigns administrative responsibilities for the WBN procurement of unit 2 material.

**3.2.2 Uncertified Vendor**

- 2a. TVA Topical Report (TVA-TR75-1A), Quality Assurance Program Description for Design, Construction, and Operation (Revision 8, undated)--This report gives audit requirements for internal and supplier audits.
- 2b. Division of Quality Assurance Instruction (DQAI) 401, Supplier Audit Program (Revision 0, dated March 28, 1985)--This instruction gives responsibilities and procedures for supplier audits.

- 2c. **DQAI-404, Preparation and Maintenance of Supplier Performance History (Revision 0, dated March 28, 1985)--This instruction describes the method used by DQA Procurement Evaluation Branch to systematically and periodically evaluate the QA programs of TVA's external suppliers that supply safety-related equipment.**

**3.2.3 Requisitions**

- 3a. **Nuclear Components Manual (NCM) Section 3.1, Control of Purchase Requisitions (Revision 7, dated May 8, 1979)--This section of the NCM defines the requirements for Purchase Requisitions for procurement of components, appurtenances, material, and parts in compliance with the code.**
- 3b. **Office of Engineering Procedure (OEP) 9, Procurement (Revision 0, dated April 26, 1985)--This procedure defines the procurement requirements and policies used by the Division of Nuclear Engineering (DNE).**
- 3c. **Power Services Shops (PSS) QAP-5.1, Procurement Document Control (Revision 1, dated May 16, 1985)--This procedure describes the requirements, methods, and responsibilities for the preparation and processing of procurement documents.**
- 3d. **Office of Construction (OC) QAP-4.1, Procurement Document Control (Revision 12, dated March 31, 1986)--This procedure establishes methods and defines responsibilities for the control of (OC) originated procurement documents for safety-related items.**
- 3e. **DQAI-322, Standard Audit Module Scoping Document - Preparation and Control (Revision 1, dated March 17, 1986)--This instruction give verification methods for verifying that verifies adequate programs have been established for control of activities related to the procurement of items which could affect safety and that it meets the requirements of 10 CFR 50, Appendix B.**
- 3f. **WBN QCI-1.20, Site Control of Procurement (Revision 10, dated October 25, 1985)--See 3.2.1.b.**
- 3g. **WBN AI-5.1, Material Procurement and Control (Revision 19, dated March 26, 1986)--See 3.2.1.c.**

**3.2.4 Equipment Changes**

- 4a. WBN AI-5.2, Receipt Inspection of Materials, Components and Spare Parts (Revision 10, dated October 24, 1985)--This instruction defines the responsibilities and establishes controls for receiving inspection of those materials, components and spare parts procured for the critical structures, systems, and components.
- 4b. WBN Quality Control Procedure (QCP) 1.06, Receipt Inspection of Safety-Related Items (Revision 18, dated November 29, 1985)--This procedure describes the manner in which safety-related items are inspected upon receipt.

**3.2.5 Questionable Quality Materials**

- 5a. TVA-TR75-1A, Quality Assurance Program Description for Design, Construction, and Operation (Revision 8, undated)--See 3.2.2.a.
- 5b. Nuclear Quality Assurance Manual (NQAM) Part III Section 2.1, Procurement of Material, Components, Spare Parts, and Services (dated December 23, 1985)--This section of the NQAM describes supplier selection, evaluation, and audit programs and procedures.
- 5c. DQAI-322, Standard Audit Module Scoping Document - Preparation and Control (Revision 1, dated March 17, 1986)--See 3.2.3.e.
- 5d. DQAI-401, Supplier Audit Program (Revision 0, dated March 28, 1985)--See 3.2.2.b.
- 5e. Attachment FS, Special Requirements for Steel Produced in a Foreign Country (Part of NCR GENMEB 8301 generated in 1983)--This document gives guidelines for acceptability of steel produced in a foreign country. This document was incorporated and issued as a procedural requirement in MEB-EP-23.3, Preparation of Requisitions (Revision 0, dated October 24, 1985).
- 5f. NCM 3.3, Evaluation and Selection of Suppliers (Revision 13)--This section of the NCM defines the methods of evaluating bidders to determine their acceptability to supply code material and items.
- 5g. NCM 3.8, Material Certification and Supply (Revision 6)--This section of the NCM defines the QA requirements for material certification and supply in accordance with NCA-3800 of the code.

- 5h. WBN Standard Practice WB6.1.10, Water Quality Manual (Revision 2, dated November 12, 1985)--This practice gives acceptable reagent grade chemicals which can be purchased and degrees of purity.

**3.2.6 TVA Sites Unapproved Suppliers**

- 6a. ID-QAP-4.3, Transfer of Items (dated December 31, 1984)--See 3.2.1.a.
- 6b. WBN QCI-1.20, Site Control of Procurement (Revision 10, dated October 25, 1985)--See 3.2.1.b.
- 6c. WBN AI-5.1, Material Procurement and Control (Revision 19, dated March 26, 1986)--See 3.2.1.c.
- 6d. WBN AI-5.4, Material Issue, Transfer and Traceability (Revision 14, dated May 2, 1986)--This instruction provides instructions and establishes controls for the issuance of materials, components and spare parts from WBN Power Stores Unit.
- 6e. Quality Bulletin number 85-03, Transfer of CSSC Parts and Materials (Revision 0, dated August 16, 1985)--See 3.2.1.d.
- 6f. SQN AI-11, Receipt Inspection, Nonconforming Items, QA Level/Description Changes and Substitutions (Revision 37, dated June 20, 1986)--See 3.2.1.k.
- 6g. SQN Standard Practice SQA45, Quality Control of Materials, Parts, and Services (Revision 21, dated June 23, 1986)--See 3.2.1.e.
- 6h. BFN Standard Practice BF 16.4, Material, Components and Spare Parts - Receipt, Handling, Storage, Issuing, Return to Storeroom, and Transfer (Revision 2, dated February 20, 1986)--See 3.2.1.q.
- 6i. OC-QAP-7.3, Determining Acceptability of Suppliers (Revision 7, dated January 27, 1986)--This procedure establishes methods and defines responsibilities for the evaluation and selection of suppliers.

- 6j. BLN Power Stores (PS) Section Instruction Letter (SIL) 1, Receipt Inspection (dated December 11, 1979)--This instruction letter establishes the method of receipt of all materials, components and spare parts for CSSC items, including transfers.
- 6k. BLN QCP-10.22, Transfer of Items (Revision 4, dated May 1, 1985)--This procedure assigns responsibilities and defines actions to be accomplished when transferring items.

3.2.7 NDE Materials

- 7a. QA Program Procedure (QAPP) 7, Control of Purchased Items and Services (Revision 4, dated October 1, 1984)--This procedure assigns responsibilities and establishes requirements to provide assurance that purchased items and services conform to procurement documents.
- 7b. OC-QAP-4.1, Procurement Document Control (Revision 12, dated March 31, 1986)--See 3.2.3.d.

3.2.8 Fire Protection

- 8a. TVA, General Construction Specification G-53, ASME Section III and Non-ASME Section III (including AISC, ANSI/ASME B31.1 and ANSI B31.5) Bolting Material (Revision 5, dated October 10, 1985)--This specification defines requirements for bolting materials.
- 8b. TVA, General Construction Specification G-29M, Process Specification P.S.7.M.1.1, PF Specification PF 1060; Asbestos Filled Spiral Wound Gaskets (Revision 0, dated December 29, 1980)--This specification defines requirements for asbestos-filled spiral wound gaskets.
- 8c. TVA, General Construction Specification G-73, Inspection, Testing, and Documentation Requirements for Fire Protection Systems and Features (Revision 1, dated March 14, 1984)--This specification establishes minimum requirements for fire protection systems and features.

### 3.3 Justification of Evaluation Process

Since the issues in this subcategory dealt with procedures and practices for procurement, receipt, transfer and substitution of items it was necessary to evaluate these procedures and practices used in the procurement, receipt, transfer and substitution of items. Interviews with individuals provided information on how well the systems in place worked, as well as how things could or could not happen. Through interviews it was found that programs were in place to ensure that items are sent and received properly.

## 4.0 FINDINGS

### 4.1 Transfers

The central issue raised by the concerns in this issue was that instruments, materials and equipment were procured for use at one plant, unit, system, etc., and were used in another plant, unit, system, etc., without proper documentation for substitution/replacement or were not what existing documentation called for in the application where they were used.

Two NSRS Reports were issued which addressed this issue. NSRS Report I-85-172-WBN addressed concern IN-85-463-007 and found no area of deficiency and made no recommendations. NSRS Report I-85-720-WBN addressed concern IN-85-964-003 and referenced the above NSRS Report for conclusions and recommendations. This ECTG evaluation found no area of deficiency relative to the issue and agrees with the NSRS Reports.

Based on the following findings, the concerns in this issue are not factual.

#### 4.1.1 Generic (Watts Bar/Sequoyah Nuclear Plants)

Purchase Requisition 970095 was written to transfer four Bartonpressure transmitters (PDTs 2-30-42, -43, -44 and -45) from WBN to SQN. The appropriate documentation was requested, generated, and transmitted for this transfer. Also, a review of the QTC expurgated files revealed that the concerned individual had withdrawn his concern.

4.1.2 Site Specific - Watts Bar Nuclear Plant

It was found that all the documentation was completed according to the required procedures in Subsection 3.2.1 to transfer the transmitters in concern IN-85-463-008. It was further found that the replacement transmitters had been procured from Westinghouse and were installed in mid-1985. The drawings had not been changed since the new transmitters were identical to the transferred transmitters and all TVA identifiers remained the same.

A review of Division of Nuclear Power (DNP) and DNC audit reports revealed no areas of deficiencies on transferred items.

It was found that ID-QAP 4.3 (Transfer of Items) was the procedure which addressed the transfer of items between organizations and plants. AI-5.1 and QCI-1.20 are the implementing procedures used at WBN. Both procedures addressed transfers of items and were followed correctly.

Personnel interviewed in DNC and DNP said that items were often taken from one place and used in another. They indicated that this would have to be done on a Transfer Requisition. The engineer who needed the item had to give all the requirements, for the application intended, on the transfer requisition. The requisitions were reviewed by the requesting organization for adequacy for purpose.

For instruments only, a Missing Instruments List (MIL) was used in construction for identifying and procuring instruments.

Personnel interviewed stated either that they knew of no items which were used in a different application or the items they knew of, which were used in a different application, were found to be technically and functionally identical to the item it replaced.

Interviews with supervisors in the Nuclear Services Branch (NSB) and Modifications Section revealed that their sections had not experienced problems with transferred items, from other sites, being suitable for the intended function.

#### 4.1.3 Site Specific - Sequoyah Nuclear Plant

A review of audit reports revealed an area of deficiency on transferred items at SQN. A Corrective Action Report (CAR), SQ-CAR-86-04-023, was written at SQN that dealt with documentation retrievability. There were thirty-four transfers evaluated at SQN for adequacy. Out of the thirty-four transfers, thirteen were found to have missing documentation. SQN has procedures in place for receipt inspection to ensure all documentation is done correctly.

A review of the records at WBN showed that all but two of the missing documents for these items transferred to SQN are retrievable through the Records Information Management System (RIMS). SQN has initiated a search for all missing documentation on transfers, including those documents listed in the CAR. This was identified as a side issue and not directly related to the perceived problem since none of the concerns indicated documentation was not being received with equipment.

Reference: Corrective Action Tracking Document  
(CATD) 40201-SQN-01.

It was found that SQA45 and AI-11 are the implementing procedures of ID-QAP-4.3 for the transfers of items for Sequoyah.

The conclusion in the SQN Generic Concern Task Force (GCTF) Report was that these concerns were not valid. One exception was taken to the conclusions of the SQN GCTF Report. The report stated that "Watts Bar may have a breakdown in the storage of transferred documentation." No evidence could be found to support that conclusion.

#### Conclusions:

Instruments, materials, and equipment were procured for a specific plant, unit, system or application and used in a different plant, unit, system, or application. In the specific instances/examples given, the documentation for the installed equipment relative to the perceived problems was found to be complete. The individuals interviewed indicated that when items were substituted, the proper procedure for transferring items was correctly followed. Therefore, the concerns were found to be not factual although a side issue was identified at SQN. This was determined to be a Class A issue at WBN and a Class E issue at SQN.