

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

APR 15 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of)	Docket Nos.	50-259
Tennessee Valley Authority)		50-260
)		50-296
)		50-390
)		50-391
)		50-438
)		50-439

NRC COMPLIANCE BULLETIN NO. 87-02 - FASTENER TESTING TO DETERMINE CONFORMANCE WITH APPLICABLE MATERIAL SPECIFICATIONS

Enclosures 1, 2, and 3 provide TVA's response to the subject bulletin for Browns Ferry Nuclear Plant (BFN), Bellefonte Nuclear Plant (BLN), and Watts Bar Nuclear Plant (WBN), respectively. Enclosure 4 identifies fasteners transferred from storage at the cancelled Hartsville Nuclear Plant site which were included in the fastener samples tested.

Enclosure 5 contains a list of commitments being made by TVA in this response. Subsequent actions taken by TVA to correct discrepant conditions cited in this response will be taken through the Condition Adverse to Quality Report (CAQR) process.

A 30-day extension of the reporting period to February 12, 1988, was coordinated with NRC as noted in my letter dated December 8, 1987. An extension to March 15, 1988, for the response to this bulletin for BFN, WBN, and BLN was discussed with J. T. Conway on February 5, 1988. A further extension to March 31, 1988, for this response was discussed with E. T. Baker on February 19, 1988.

This submittal completes the TVA response to the subject bulletin. If there are any questions concerning this response, please telephone D. L. Williams at (615) 632-7170.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley

R. Gridley, Director
Nuclear Licensing and
Regulatory Affairs

TELL
||

Enclosures
cc: See page 2

8804220032 880415
PDR ADOCK 05000259
Q DCD

U.S. Nuclear Regulatory Commission

APR 15 1988

Enclosures

cc (Enclosures):

Mr. K. P. Barr, Acting Assistant Director
for Inspection Programs
TVA Projects Division
U.S. Nuclear Regulatory Commission
Region II
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Atlanta, Georgia 30323

Mr. G. G. Zech, Assistant Director
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TVA Projects Division
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One White Flint, North
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Bellefonte Resident Inspector
Bellefonte Nuclear Plant
P.O. Box 2000
Hollywood, Alabama 35752

Browns Ferry Resident Inspector
Browns Ferry Nuclear Plant
Route 12, Box 637
Athens, Alabama 35611

Watts Bar Resident Inspector
Watts Bar Nuclear Plant
P.O. Box 700
Spring City, Tennessee 37381

Mr. Paul Courtland
Division of Engineering and System Technology
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852

ENCLOSURE 1

BROWNS FERRY NUCLEAR PLANT

BFN RESPONSE TO NRC COMPLIANCE BULLETIN NO. 87-02

ACTION ITEM 1

Describe (a) the characteristics currently examined during receipt inspection of fasteners (i.e., head markings for grade and manufacturer symbols, review of certified material test report or certificate of conformance) and (b) internal controls utilized during storage and issuance from stock to assure the appropriate use of fasteners.

Response

(a) Receipt Inspection

Receipt inspection of fasteners is addressed in site procedures. Engineering specifies the Quality Assurance (QA) and technical requirements for fasteners in procurement documents. The following are attributes of fasteners inspected during receipt inspection as appropriate for the applicable quality level: evidence of shipping or physical damage, identification/markings, manufacturing documentation, coatings/preservations/desiccants, cleanliness, dimensions, workmanship, and other special and source inspection requirements. When required by the purchase request, physical and chemical properties are verified by review of the material test report (MTR) or the certified material test report (CMTR) as applicable.

(b) Internal Controls

After the inspections have been completed, acceptable QA Level I, II, and III (see definitions below) items are marked with the procurement document and item number. Items are then appropriately tagged in accordance with site procedures. QA Levels I, II, and III are defined as follows at BFN.

- QA Level I - Those materials, components, and spare parts that are "basic components" and are not "commercial grade."
- QA Level II - Those materials, components, and spare parts that are "basic components" and are "commercial grade."
- QA Level III - Those materials, components, and spare parts for CSSC (CSSC = critical structures, systems, and components) items that are not "basic components."
- QA Level 0 - It should be noted that for the purpose of responding to this bulletin, non-QA, non-CSSC fasteners selected for testing are identified as "QA Level 0."

Nonconformances found during receipt inspection are identified and dispositioned in accordance with TVA site procedures. Nonconforming material is segregated until dispositioned in accordance with site procedures. Storage requirements for CSSC material are identified in site procedures. Power Stores maintains positive identification between the fasteners and contract documentation. For CSSC stocked material, its container or material tag has identification to show the following:

1. The material specification, grade/type, code class, manufacturer's heat code/number, and individual serial number as applicable.
2. The QA level of the material.
3. The TVA Item Identification Code (TIIC) number and contract documentation.

The TIIC number is an internal warehousing descriptor used in ordering stock replacement and establishing the appropriate storage bin. The storage bins are kept under "lock and key," with access to the storage bin area being controlled. It should be noted, bolting materials may be stored on open shelving within the controlled storage area, not under "lock and key," due to physical size or quantity of bolts.

Material issuance is controlled by requiring that a completed Material Issue Request (MIR) Form 575 be submitted to Power Stores by authorized personnel. The TVA Form 575 provides traceability from procurement documentation to point of installation. Power Stores verifies all pertinent information on TVA Form 575, then issues the material in accordance with site procedures.

ACTION ITEM 2

Select a minimum sample of 10 nonsafety-related fasteners (studs, bolts, and/or cap screws) and 10 safety-related fasteners (studs, bolts, and/or cap screws) from current, in use, stock. The sample is to be obtained by the licensee with the participation of an NRC inspector. Fasteners procured to meet the following chemical and mechanical properties are of interest: A-193 grades B7, B8, and B16; SAE J429 grades 5 and 8; A-449; A-325 Types 1, 2, or 3; A-354 grades BB, BC, BD; A-490; A320 L7M; A-307; A-563; or equivalent.

Response

The samples were selected for testing with the assistance of an NRC inspector as required by the compliance bulletin. The samples are listed in Appendix A. Appendix A is in the required format of Attachment 1 to Compliance Bulletin 87-02. These items were selected from Power Stores at BFN on December 16-17, 1987. The participating NRC inspector and TVA counterpart were Charlie Brooks and Steve N. Cato, respectively.

ACTION ITEM 3

For the selected sample of fasteners in item 2, include a sample of typical nuts that would be used with each fastener (one-for-one). In particular, nuts purchased to the chemical and mechanical specifications of A-194 are of interest.

Response

The nuts were selected for testing at the same time as the fasteners in item 2 with the assistance of the NRC inspector. The nuts are listed in Appendix A. Note that several A-194 nuts were tested.

ACTION ITEM 4

Chemical testing shall be performed on all samples. Mechanical testing shall be performed on each safety-related fastener. Hardness testing shall be performed on each nut and nonsafety-related fastener. All testing shall be performed by a laboratory which the licensee has qualified for this type of testing and appears on the licensee's approved vendor list. Testing performed shall be done in accordance with the requirements of the fastener's specification, grade, and class; and the tests shall evaluate the ultimate tensile strength, hardness, and chemical properties as required by the fastener's specification, grade, and class. Each sample shall be tagged with the sample's ID number.

Response

The fastener testing was performed by TVA's Singleton Materials Engineering Laboratory (SME) and TVA's Central Laboratory Systems Branch (CLSB). SME and CLSB are TVA laboratories qualified to perform the mechanical testing and chemical analysis specified in Compliance Bulletin 87-02. SME and CLSB are on the BFN approved vendor list. Fastener test results are reported in accordance with Action Item 5.

ACTION ITEM 5

The results of all tests, together with supporting information, are to be reported to the NRC utilizing the format shown in Attachments 1 and 2 of this bulletin. Include the names and addresses of suppliers and manufacturers of safety-related fasteners and, to the extent possible, of nonsafety-related fasteners. For any fastener found out of specification, provide an evaluation of the safety significance including consideration of the most limiting application.

Response

Appendices A and B report the data in the format as required by the NRC's Attachments 1 and 2, respectively. Fasteners with out-of-tolerance results, supporting technical evaluations, and required actions are listed in Appendix C. For fasteners with safety-related applications, three conditions adverse to quality reports (CAQRs) were initiated. Items were sampled from stock which had previously been segregated (CAQR BFQ870546D01). These items are not listed in Appendix C but are included in Appendix A and B. None of the CAQRs were deemed to be significant or to impact operability. CAQR corrective action resolution is still in progress and final engineering resolution will be documented with closure of the CAQR's.

ACTION ITEM 6

Based on the results of the testing and review of current procedures, describe any further actions being taken to ensure that fasteners used in the plant meet the requisite specifications and requirements and that the operability of safety-related plant components is not affected.

Response

Based on review of current procedures, TVA concludes that the current receipt inspection and internal control practices are acceptable. Descriptions of current fastener receipt and internal control requirements in the response to Action Item 1 indicate a logical and coherent approach to receipt, storage, issue, and use of fasteners.

An evaluation of in-stock safety-related bolting material will be completed by May 1, 1989 to verify acceptability of existing stock. A controlled release program has been implemented that provides for an evaluation of the acceptability of an item for its intended end use.

**APPENDIX A
BELLEFONTE NUCLEAR PLANT**

Data Summary

Appendix A contains data sheets formatted by the NRC and identified as "Attachment 1 Fastener Testing Data Sheet." These data sheets carry the signature of TVA's representatives that participated in sampling of the fasteners.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-1

Fastener Description: HEX HEAD CAPSCREW 1/4-20 x 1"

Description of Sample Stock Location: B4 OFG 20

Material Specification as Documented by Licensee Records:

~~UNKNOWN~~ A 307 GRADE A

△ MFG MARK

Head Marking (Specification and Manufacturer):

**Class/Procurement Level:

QA 2

General Plant Application (e.g., Pressure Boundary, Structural)

INSTRUMENTS SUPPORTS, DOOR SEAL KEEPER

Vendor: FPO-G 388038

METAL FASTENER SUPPLY Co.
Rt 1, Box 56
Decatur, AL 35601

QA Requirements Imposed on Vendor: UNKNOWN

Licensee Representative:

Signature

S. N. Cote

Date

12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-2

Fastener Description: HEX HEAD CAPSCREW 1/4-20 x 1"

Description of Sample Stock Location: B4 OFG 20

Material Specification as Documented by Licensee Records: UNKNOWN
A 307 GRADE A

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level: QA 2

General Plant Application (e.g., Pressure Boundary, Structural)
INSTRUMENT SUPPORTS, DOOR SEAL KEEPER

Vendor: FPO G38803B METAL FASTENER SUPPLY CO.
REI Box 56
DECATUR, AL 35601

QA Requirements Imposed on Vendor: UNKNOWN

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-3

Fastener Description: HEX HEAD CAPSCREW 3/8 x 1 1/4

Description of Sample Stock Location: B4 OF 86

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): Δ MFG MARK-

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
CONDUIT SUPPORT, INSTRUMENT LINES SUPPORT

Vendor: 85 PK 3 - 349738 CHALLENGE SUPPLY CO.
PO BOX 3126
CHATTANOOGA, TN 37404

QA Requirements Imposed on Vendor: Appendix E, Art. 6, NQAM III, sec 7.1
App. D, NQAM III, Sec. 2.1

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-4

Fastener Description: HEX HEAD CAPSCREW 3/8" x 1 1/4"

Description of Sample Stock Location: BF OFB 6

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
CONDUIT SUPPORT, INSTRUMENT LINES SUPPORT

Vendor: 85 PK 3 - 349738 CHALLENGE SUPPLY CO.
PO BOX 3126
CHATTANOOGA, TN 37404

QA Requirements Imposed on Vendor: Appendix E, Att. 6, NQAM III, sec. 2.1
App D, NQAM III, sec. 2.1

Licensee Representative:

Signature S.N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFN-5

Fastener Description: HEX HEAD CAPSCREW 1/2" 13 x 1 1/4"

Description of Sample Stock Location: B4 OFB 9

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL

Vendor: BSPK3-349738 CHALLENGE SUPPLY CO.
BOX 3126
CHATTANOOGA, TN 37404

QA Requirements Imposed on Vendor: Appendix E, Acc. 6, NQAM III, Sec. 2.1
Appendix D, NQAM III, Sec. 2.1

Licensee Representative:

Signature S. N. Cato

Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-6

Fastener Description: HEX HEAD CAPSCREW 1/2" 13 X 1 1/4"

Description of Sample Stock Location: B4 OFB 9

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)

STRUCTURAL

Vendor: 85 PK3-349738 CHALLENGE SUPPLY CO.
PO BOX 3126
CHATTANOOGA, TN 37404

QA Requirements Imposed on Vendor: Appendix D, NQAM III, SEC. 2.1 Appendix E, Art. 6, NQAM III, SEC 2.1

Licensee Representative:

Signature S.N. Cato

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# BFN-7

Fastener Description: HEX HEAD CAPSCREW 5/8" -11 X 2"

Description of Sample Stock Location: B4 OFB 9

Material Specification as Documented by Licensee Records: ASTM A354 BD

Head Marking (Specification and Manufacturer): 6 RADIAL 60° APART 
Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL

Vendor: OS PK 3-349738

CHALLENGE SUPPLY CO
BOX 3126
CANTANOGA, TN 37404

QA Requirements Imposed on Vendor: APPENDIX E, APP. 6, NQAM III Sec 2.1
APPENDIX D, NQAM, PART III, SEC. 2.1

Licensee Representative:

Signature S. N. Cato

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# *BFN-8*

Fastener Description: *HEX HEAD CAPSCREW 5/8" - 11 X 2"*

Description of Sample Stock Location: *B4 OFB 9*

Material Specification as Documented by Licensee Records: *ASTM A354 B D*

Head Marking (Specification and Manufacturer): *6 RADIAL LINES 60° APART* 
A MIG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)

STRUCTURAL

Vendor: *BS PK3 - 349738*

*CHALLENGE SUPPLY CO.
PO BOX 3126
CHATTANOOGA, TN 37464*

QA Requirements Imposed on Vendor: *APPENDIX E, A66 6, NQAM III, SEC. 2.1
APPENDIX D, NRAM III, SEC. 2.1.*

Licensee Representative:

Signature

S. N. Coto

Date

12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BF1U-9

Fastener Description: 1/4"-20 X 2 1/4" HEX HEAD CAP SCREW

Description of Sample Stock Location: B4 OF 10 5

Material Specification as Documented by Licensee Records: SAE 5429 Gr 8

Head Marking (Specification and Manufacturer): 6 RADIAL LINE 60° APART
LE 2.1 CENTER

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
GENERAL PLANT USE

Vendor: 86 PCA-370379 METAL FASTENER SUPPLY CO.
P.O. 1 BOX 36
DECATUR, AL 35801 205-353-0751

QA Requirements Imposed on Vendor: COC

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

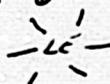
TVA
*Sample ID# BFN-10

Fastener Description: 1/4 20 x 2 1/4 HEX HEAD CAPSCREW

Description of Sample Stock Location: B4 OF 10 5

Material Specification as Documented by Licensee Records: SAE J429 Gr 8

Head Marking (Specification and Manufacturer): 6 RADIAL LINES 60° APART
LE IN CENTER



**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
GENERAL PLANT USE

Vendor: SG PCA - 370379 METAL FASTENER SUPPLY CO.
RE. 1 BOX 36
DECATUR, AL 35801 205-353-0871

QA Requirements Imposed on Vendor: C.O.C

Licensee Representative:

Signature S.N. C. [initials]

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-11

Fastener Description: HEX HEAD CAP SCREW 1" 8 x 4 1/2"

Description of Sample Stock Location: B4 OF 2 10

Material Specification as Documented by Licensee Records: J 429 G25

Head Marking (Specification and Manufacturer): 3 RADIAL LINES 120° APART

**Class/Procurement Level:

QA LEVEL III II

EVID
1/18
UNC

General Plant Application (e.g., Pressure Boundary, Structural)

GENERAL PLANT USE

Vendor: 86PCA - 370378 METAL FASTENER SUPPLY 205-353-0251
Rt. #1, Box 36
Decatur, AL 35601

QA Requirements Imposed on Vendor:

COC

Licensee Representative:

Signature S. N. Cato

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-12

Fastener Description: HEX HEAD CAP SCREW 1"-8 x 4 1/2"

Description of Sample Stock Location: B4 OF 2 10

Material Specification as Documented by Licensee Records: J429 Gc 5

Head Marking (Specification and Manufacturer): 3 RADIAL LINES 120° APART

**Class/Procurement Level:

QA LEVEL ~~III~~ II

BUFD 1 EB
B/JNL

General Plant Application (e.g., Pressure Boundary, Structural)

GENERAL PLANT USE

Vendor: 86 PCA - 370378 METAL FASTENER SUPPLY 205-353-0251
RT #1, BOX 36
DECATUR, AL 35601

QA Requirements Imposed on Vendor:

COC

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-13

Fastener Description: HEX HEAD CAP SCREW 0.875" x 2.25"

Description of Sample Stock Location: B4 OF B 5

Material Specification as Documented by Licensee Records: ASTM A307 Gr A

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)

STRUCTURAL

Vendor: 86 PCE-349887 SOUTHEASTERN BOLT & SCREW 615-265-0273
P.O. Box 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor:

COC

Licensee Representative:

Signature

S.N. Cato

Date

12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-14

Fastener Description: HEX HEAD CAPSCREW 0.875" - 1 x 2.25"

Description of Sample Stock Location: B4 OFB 5

Material Specification as Documented by Licensee Records: ASTM A307 Gr A

Head Marking (Specification and Manufacturer): Δ MFG MARK

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)

STRUCTURAL

Vendor: 867E-349887 SOUTHEASTERN BOLT & SCREW 615-265-0273
PO BOX 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor:

COC

Licensee Representative:

Signature S. N. Cato Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-15

Fastener Description: 3/8" NUT

Description of Sample Stock Location: B4 C672 E2

Material Specification as Documented by Licensee Records: ASTM A 307 GRA

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

Q A I

General Plant Application (e.g., Pressure Boundary, Structural)
SEISMIC CONDUIT SUPPORTS

Vendor: BEA-6846 344784

SUR LOC INC
3346 PELTON ST.
CHARLOTTE, NC

QA Requirements Imposed on Vendor: N76A10, Appendix 1, Att. 3
APPENDIX E, ATT 8, PART III, SEC. 2.1

Licensee Representative:

Signature

S. N. Cato

Date

12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

•Sample ID# ^{TVA} BFN-16

Fastener Description: 3/8" NUT

Description of Sample Stock Location: B4 C672 E2

Material Specification as Documented by Licensee Records: ASTM A307 GRA

Head Marking (Specification and Manufacturer): NONE

••Class/Procurement Level:

QA I

General Plant Application (e.g., Pressure Boundary, Structural)
SEISMIC CONDUIT SUPPORTS

Vendor: BEQ 6846-349784 SUR LOC INC.
3346 PELTON ST.
CHARLOTTE, NC

QA Requirements Imposed on Vendor: N76 A10, Appendix I, All. 3
Appendix E, All. B, Part III, Sec 21

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

••If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-17

Fastener Description: ~~5/8"~~ 3/4"-10 x 3 1/2" STUD

Description of Sample Stock Location: BZ R11 Z

Material Specification as Documented by Licensee Records: ASME SA 193 Gr B7

Head Marking (Specification and Manufacturer): B7
C

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RR SW PUMP

Vendor: 86 PK 3 363 191 GUYAN ALLOYS INC
5501 EXECUTIVE CT DR. #231
CHARLOTTE, NC 28212

QA Requirements Imposed on Vendor: N76 A10, APPENDIX I, ASME SA-193
N76 A10, APPENDIX E, Art. 6 PART III, SEC. 2.1
ASME III, CLASS 2

Licensee Representative:

Signature S. N. Cote Date 12/31/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

MA: CARDINAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1466

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFN-18

Fastener Description: $3/4$ "-10 x $3\frac{1}{2}$ STUD

Description of Sample Stock Location: B2 R11 Z

Material Specification as Documented by Licensee Records: ASME SA 193 Gr B7

Head Marking (Specification and Manufacturer): B7
C

**Class/Procurement Level:

QA I

General Plant Application (e.g., Pressure Boundary, Structural)

RHR SW PUMP

Vendor: 86 PK3 363191

GUYON ALLOYS INC
5501 EXECUTIVE CT DR. #231
CHARLOTTE, NC 28212

QA Requirements Imposed on Vendor: N76A10, Appendix I, ASME SA-193
N76A10, Appendix E, Acc. 6 PART III, sec. 2.1
ASME III, class 2

Licensee Representative:

Signature S. N. Cote

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

MAg: CARDINAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1966

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFN-19

Fastener Description: Hex Head CAPSCREW 3/4" X 4"

Description of Sample Stock Location: B³/₄ R19 1

Material Specification as Documented by Licensee Records: SA 193 B7

Head Marking (Specification and Manufacturer): B7
TB

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RHSW PUMP (SPARE)

Vendor: 86 PCB - 372233-01 HUB, INC. 404-934-3101
2146 FLINTSTONE DRIVE
TULSA, GEORGIA 30084

QA Requirements Imposed on Vendor:
ASME III, CLASS 2

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

My: TEXAS BOLT Co.
P.O. Box 1211
HOUSTON, TEXAS 77251

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-20

Fastener Description: HEX HEAD CAPSCREW 3/4" X 4"

Description of Sample Stock Location: B2 R19 1

Material Specification as Documented by Licensee Records: SA 193 B7

Head Marking (Specification and Manufacturer): B7
TB

**Class/Procurement Level:

QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RAR SW PUMP (SPARE)

Vendor: 86 PCB - 372233-01

HUB INC

2146 FLINTSTONE DRIVE
TUCKER, GEORGIA 30084

404-994-3101

QA Requirements Imposed on Vendor:
ASME III, CLASS 2

Licensee Representative:

Signature S. N. Cato

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

MAg : TEXAS BOLT CO.
P.O. Box 1211
HOUSTON, TEXAS 77251

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-21

Fastener Description: STUD 3/4" - 10 x 5"

Description of Sample Stock Location: BZ RSS 1

Material Specification as Documented by Licensee Records: ASME SA-193 B7

Head Marking (Specification and Manufacturer): V B7
C 21

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RHR PUMP

Vendor: 380606 FASTENER HOSE
1300 MARKET ST. P.O. Box 486
CARTERSVILLE, TN 37401

QA Requirements Imposed on Vendor: ASME III, CLASS 2

Licensee Representative:

Signature S. N. Cate Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-22

Fastener Description: STUD 3/4" - 10 - 5"

Description of Sample Stock Location: B2 R55 1

Material Specification as Documented by Licensee Records: ASME SA-193 B7

Head Marking (Specification and Manufacturer): B7
C21

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RHR PUMP

Vendor: 380606 FASTENER HOSE
1300 MARKET ST. PO BOX 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor: ASME III, CLASS 2

Licensee Representative:

Signature S.N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TUT} BFN-23

Fastener Description: NUT 3/4" - 10

Description of Sample Stock Location: BZ R55 1

Material Specification as Documented by Licensee Records: SA-194 Gr 2H

Head Marking (Specification and Manufacturer): 2HB
X52

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)
RHR Pump

Vendor: 380606 FASTENER HOUSE
1300 MARKET ST. P.O. BOX 406
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor: ASME III, CLASS 2

Licensee Representative:

Signature S.N. Cote

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-24

Fastener Description: NUT 3/4" -10

Description of Sample Stock Location: B2 RSS 1

Material Specification as Documented by Licensee Records: SA-194 Gr 2H

Head Marking (Specification and Manufacturer): \checkmark 2HB
X52

**Class/Procurement Level:
QA I

General Plant Application (e.g., Pressure Boundary, Structural)

RHR PUMP

Vendor: 380606

FASTENER HQSE
1300 MARKET ST PO Box 48
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor: ASME III, CLASS 2

Licensee Representative:

Signature S. N. Cato

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-25

Fastener Description: HEX HEAD CAPSCREW 3/4" X 3 1/2

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: NO RECORDS FOUND

Head Marking (Specification and Manufacturer): 6 RADIAL LINES 60° APART

**Class/Procurement Level: ~~UNKNOWN~~ NOW QA



General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: UNKNOWN

QA Requirements Imposed on Vendor: ~~UNKNOWN~~ NOW QA

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{JVA}
*Sample ID# BFN - 26

Fastener Description: HEX HEAD CAPSCREW 3/4" x 3 1/2

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN
(GRADE C)

Head Marking (Specification and Manufacturer): 6 RADIAL LINES 60° ANGLE

**Class/Procurement Level: ~~UNKNOWN~~ NON QA



General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: UNKNOWN

QA Requirements Imposed on Vendor: UNKNOWN

Licensee Representative:

Signature S. N. Cato

Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFIN-27

Fastener Description: HEX HEAD CAPSCREW 3/8-16 X 3"

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN
(SS 18-8)

Head Marking (Specification and Manufacturer):

**Class/Procurement Level: UNKNOWN

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: UNKNOWN

QA Requirements Imposed on Vendor: UNKNOWN

Licensee Representative:

Signature S. N. Cote

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-28

Fastener Description: HEX HEAD CAPSCREW 3/8-16 X 3"

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN
(SS 18-8)

Head Marking (Specification and Manufacturer): _ 1 _

**Class/Procurement Level: UNKNOWN

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: UNKNOWN

QA Requirements Imposed on Vendor: UNKNOWN

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-29

Fastener Description: HEX HEAD BOLT WITH NUT
1/2" - 13 x 4" 1/2" NUT

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: NOT SPECIFIED

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

General Plant Application (e.g., Pressure Boundary, Structural)

GENERAL

Vendor: SSPK3 - 361192 BB BOLT & SCREW CO.
P.O. BOX 847
SHEFFIELD, AL 35660

QA Requirements Imposed on Vendor: NO QA

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-30

Fastener Description: HEX HEAD BOLT WITH NUT
1/2" - B X 4" BOLT 1/2" NUT

Description of Sample Stock Location: K21

Material Specification as Documented by Licensee Records: NOT SPECIFIED

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

General Plant Application (e.g., Pressure Boundary, Structural) ~~BB~~
GENERAL

Vendor: 85 PK3 - 361192 BB BOLT & SCREEN CO.
P.O. BOX 847
SHEFFIELD, AL 35660

QA Requirements Imposed on Vendor: NON QA

Licensee Representative:

Signature S. N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-31

Fastener Description: $\frac{3}{8}$ " x 2" SOCKET HEAD CAPSCREW

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: 84 PK3 - 351027

QA Requirements Imposed on Vendor: NON QA ~~SURE LOC INC~~

Licensee Representative:

Signature S. N. Cat Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-32

Fastener Description: 3/8" x 2" SOCKET HEAD CAPSCREW

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: 84 PK3 - 351.027

QA Requirements Imposed on Vendor: No QA

Licensee Representative:

Signature S. N. Coats Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-33

Fastener Description: $\frac{7}{8}$ x $2\frac{1}{2}$ SOCKET HEAD CAPSCREW

Description of Sample Stock Location: K21

Material Specification as Documented by Licensee Records: UNKNOWN

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level: UNKNOWN

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: ROCKFORD

QA Requirements Imposed on Vendor: No QA

Licensee Representative:

Signature S. N. Cat Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# BFN-34

Fastener Description: $\frac{7}{8}$ " x $2\frac{1}{2}$ SOCKET HEAD CAPSCREW

Description of Sample Stock Location: K 21

Material Specification as Documented by Licensee Records: UNKNOWN

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level: UNKNOWN

General Plant Application (e.g., Pressure Boundary, Structural)
UNKNOWN

Vendor: ROCKFORD

QA Requirements Imposed on Vendor: NO QA

Licensee Representative:

Signature S.N. Cato Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-35

Fastener Description: HEX HEAD CAP SCREW ~~1"-14 x 6"~~
5"-13 x 1"

Description of Sample Stock Location: WAREHOUSE 10

Material Specification as Documented by Licensee Records: NOT SPECIFIED
(A 307 Gr A)

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
GENERAL PLANT USE

Vendor: 84PK3-349706 SOUTHEASTERN BOLT & SCREW
P.O. BOX 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor: NONE

Licensee Representative:

Signature S.N. Cate Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN 36

Fastener Description: HEX HEAD CAPSCREW 1/2" x 1"

Description of Sample Stock Location: WAREHOUSE 10

Material Specification as Documented by Licensee Records: NOT SPECIFIED
(A307 GRA)

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
GENERAL PLANT USE

Vendor: 94 PK 3 - 349706 SOUTHEASTERN BOLT & SCREW
P.O. BOX 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor: NONE

Licensee Representative:

Signature S.N. Cato

Date 12/21/81

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

TVA
*Sample ID# BFN-37

Fastener Description: 1/2"-13 x 1 1/2" Hex Head Bolt

Description of Sample Stock Location: Warehouse 10

Material Specification as Documented by Licensee Records: ASTM A307 Gr A

Head Marking (Specification and Manufacturer):

V

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)

STRUCTURAL

Vendor: 349887 SOUTHEASTERN BOLT & SCREEN 615-265-0273
PO Box 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor:

COC

Licensee Representative:

Signature

S.N. Cuts

Date

12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-38

Fastener Description: 1/2" - 13 X 1 1/2" HEX HEAD BOLT

Description of Sample Stock Location: WAREHOUSE 10

Material Specification as Documented by Licensee Records: ASTM A307 Gr A

Head Marking (Specification and Manufacturer): V

**Class/Procurement Level:

QA II

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL

Vendor: 349887 SOUTHEASTERN BOLT & SCREW 615-265-0273
PO BOX 486
CHATTANOOGA, TN 37401

QA Requirements Imposed on Vendor:
COC

Licensee Representative:

Signature

S. N. [Signature]

Date

12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFN-39

Fastener Description: 7/8 -9 X 5 1/2 STUD

Description of Sample Stock Location: WAREHOUSE 10

Material Specification as Documented by Licensee Records: ASTM A 307 Gr A

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL

Vendor: 451023 . ECN P0268 METAL FASTENER SUPPLY CO.
RT 1 BOX 36
DECATUR, AL 35601

QA Requirements Imposed on Vendor: COC

Licensee Representative:

Signature S. N. Cate Date 10/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-40

Fastener Description: $\frac{7}{8}$ " - 9 X $5\frac{1}{2}$ " STUD

Description of Sample Stock Location: WAREHOUSE 10

Material Specification as Documented by Licensee Records: ASTM A307 Gr A

Head Marking (Specification and Manufacturer): NONE

**Class/Procurement Level:

QA III

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL

Vendor: 451023 · ECN P0268 METAL FASTENER SUPPLY CO.
RT. 1 Box 36
DECATUR, AL 35601

QA Requirements Imposed on Vendor: COC

Licensee Representative:

Signature S.N. COT Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} ^{FA} BFN - 41

Fastener Description: 3/4" - 10 NUT

Description of Sample Stock Location: Power Steels C 32 - 510

Material Specification as Documented by Licensee Records:
SA - 194 GRADE 2 H

Head Marking (Specification and Manufacturer):

0
DH-2H
AB

**Class/Procurement Level: QA LEVEL I

General Plant Application (e.g., Pressure Boundary, Structural)
CRD SCRAM HEADER PIPE SUPPORT

Vendor: 86 PCB - 376685
CARDINAL

HUB INC 404-934-3101
PO BOX 125
TUCKER, GEORGIA 30084

QA Requirements Imposed on Vendor: ASME III CLASS I
Appendix E, Sec. 6 NQAM, PART III SEC. 2.1
DPM-N76N10 Appendix 1

Licensee Representative:

Signature S.N. Co

Date 12/21/07

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Mfg: CALU-NAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1966

Attachment 1

Fastener Testing Data Sheet

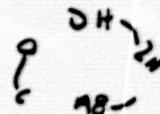
^{TVA}
*Sample ID# BFN-42

Fastener Description: 3/4" - 10 NUT

Description of Sample Stock Location: Power Streets C 32 - J 10

Material Specification as Documented by Licensee Records: SA-194 Gr 2H

Head Marking (Specification and Manufacturer):



**Class/Procurement Level:
QA LEVEL I

General Plant Application (e.g., Pressure Boundary, Structural)
CRD SCRAM HEADER PIPE SUPPORT

Vendor: 86 PCB-376685 HUB, INC PO BOX 125 404-934-3101
Appendix E, Act. 6 NQAM, Part III, Sec 7.1 TUCKER, GEORGIA 30084
2011-N2A10 Appendix 1

QA Requirements Imposed on Vendor: ASME III, CLASS I

Licensee Representative:

Signature SN. [Signature] Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

MAg: CARDINAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1966

Attachment 1

Fastener Testing Data Sheet

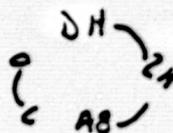
TVA
*Sample ID# BFN-43

Fastener Description: 3/4" - 10 NUT

Description of Sample Stock Location: POWER STORES C 32 - J10

Material Specification as Documented by Licensee Records: SA-194 GR 2H

Head Marking (Specification and Manufacturer):



**Class/Procurement Level:
QA LEVEL I

General Plant Application (e.g., Pressure Boundary, Structural)
CRD SCRAM HEADER PIPE SUPPORT

Vendor: 86 PCB - 376685
CARDINAL

HUB INC
P.O. Box 125
TUCKER, GEORGIA 30004

404-934-3101

QA Requirements Imposed on Vendor: ASME III, CLASS I
Appendix E, ATT 6 NQAM III, PART III, SEC. 21
DPM N76410, Appendix I

Licensee Representative:

Signature S.N. Cat

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Mfg: CARDINAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1966

Attachment 1

Fastener Testing Data Sheet

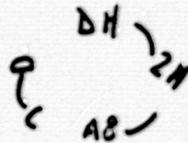
TVH
*Sample ID# BFN-44

Fastener Description: 3/4" - 10 NUT

Description of Sample Stock Location: *Pressure Stress* C 32 - J10

Material Specification as Documented by Licensee Records: SA-194 Gr 2H

Head Marking (Specification and Manufacturer):



**Class/Procurement Level:
QA LEVEL I

General Plant Application (e.g., Pressure Boundary, Structural)
CRD SCRAM HEADER PIPE SUPPORT

Vendor: 86 PCB - ~~37668~~ 376685

HUB, INC 404-934-3101
P.O. BOX 125
TUCKER, GEORGIA 30084

QA Requirements Imposed on Vendor: ASME III, CLASS I
Appendix E, atc. G NQAM III sec 2.1
DPM N% A10, Appendix I

Licensee Representative:

Signature S.N. Cito

Date 10/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Mfg: CARMINAL
3873 W. OQUENDO
LAS VEGAS, NEVADA 89118
702-739-1966

Attachment 1

Fastener Testing Data Sheet

TVA

*Sample ID# BFN-45

Fastener Description: 7/8" - 9 NUT

Description of Sample Stock Location: B4 DC 87NJR-31999A ITEM 6

Material Specification as Documented by Licensee Records: ASTM A563 Gr A

Head Marking (Specification and Manufacturer):

T

**Class/Procurement Level:

QA LEVEL II

General Plant Application (e.g., Pressure Boundary, Structural)

HPCI ELECTRICAL & MECHANICAL

Vendor: 87NJR-31999A SOUTHERN BOLT & FASTENER
PO Box 7196
SHREVEPORT, LA 71107

QA Requirements Imposed on Vendor: Appendix D, NQAM III, sec 2.1
Appendix E, Acc. 6 NQAM III, sec 2.1

Licensee Representative:

Signature

S.N. Bts

Date

12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for : or classification system.

MAg: TEXAS BOLT CO.
P.O. Box 1211
HOUSTON, TEXAS 77251

Attachment 1

Fastener Testing Data Sheet

^{TVA}
*Sample ID# BFN-46

Fastener Description: $\frac{7}{8}$ " - 9 NUT

Description of Sample Stock Location: B4 DC 87NSR-31999A ITEM 6

Material Specification as Documented by Licensee Records: ASTM A563 GRA A

Head Marking (Specification and Manufacturer):

T

**Class/Procurement Level:

QA LEVEL II

General Plant Application (e.g., Pressure Boundary, Structural)

NPCI ELECTRICAL ; MECHANICAL

Vendor: 87NSR-31999A

SOUTHERN BOLT ; FASTENER
PO BOX 7146
SARVENPORT, LA 7107

QA Requirements Imposed on Vendor: Appendix D, NQAM III, sec. 2.1
Appendix E, Acc. 6, NQAM III, sec. 2.1

Licensee Representative:

Signature S.N. Cots

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

Mag: TEXAS BOLT CO.
P.O. Box 1211
HOUSTON, TEXAS 77251

Attachment 1

Fastener Testing Data Sheet

*Sample ID# ^{TVA} BFN-47

Fastener Description: 5/8" - 11 NUT

Description of Sample Stock Location: B4 DC B7NJR-31999A ITEM 11

Material Specification as Documented by Licensee Records: ASTM A563 Gr A

Head Marking (Specification and Manufacturer):

T

**Class/Procurement Level:

QA LEVEL II

General Plant Application (e.g., Pressure Boundary, Structural)

HPCI ELECTRICAL & MECHANICAL

Vendor: B7NJR-31999A SOUTHERN BOLT & FASTENER
PO BOX 7146
SHREVEPORT, LA 71107

QA Requirements Imposed on Vendor: Appendix D, NQAM III, sec. 2.1
Appendix E, ATT. 6, NQAM III; sec 2.1

Licensee Representative:

Signature S.N. Cuts

Date 12/21/87

*The sample ID# shall have a prefix that contains the licensee facility initials.

**If applicable, please provide an explanation for your classification system.

MAJ: TEXAS BOLT CO
P.O. Box 1211
HOUSTON, TEXAS 77251