

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-7851

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

James P. O'Reilly
Senior Vice President
Nuclear Operations

the southern electric system

SL-3962
0751U
X7GJ17-C110

January 18, 1988

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

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

Gentlemen:

By the subject letter dated November 6, 1987, NRC requested that Georgia Power Company submit information concerning inspection requirements and physical specification adherence for fasteners. The Georgia Power Company response is provided in the enclosure to this letter. If you have any questions in this regard, please contact this office at any time.

Mr. J. P. O'Reilly states that he is Senior Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and that to the best of his knowledge and belief the facts set forth in this letter are true.

GEORGIA POWER COMPANY

8801270385 880118
PDR ADOCK 05000321
G PDR

By: James P. O'Reilly
James P. O'Reilly

Sworn to and subscribed before me this 18th day of January, 1988.

Joyce H. Usher
Notary Public

Notary Public, Cobb County, Ga.
My Commission Expires May 5, 1990

MJB/ju

Enclosure 1: Specific NRC Bulletin 87-02 Information Requests
Enclosure 2: Fastener Testing Data Sheets - Plant Hatch Units 1 and 2
Enclosure 3: Fastener Testing Data Sheets - Plant Vogtle Unit 1
Enclosure 4: Fastener Testing Data Sheets - Plant Vogtle Unit 2
Enclosure 5: Data Summary Sheets - Plant Hatch Units 1 and 2
Enclosure 6: Data Summary Sheets - Plant Vogtle Unit 1
Enclosure 7: Data Summary Sheets - Plant Vogtle Unit 2
Enclosure 8: GPC Procurement Classification System

821, 366
929, 415

IE 11

U. S. Nuclear Regulatory Commission
January 18, 1988
Page Two

c: Georgia Power Company

Mr. J. P. O'Reilly, Sr. Vice President - Nuclear Operations
Mr. J. T. Beckham, Jr., Vice President - Plant Hatch
Mr. P. D. Rice, Vice President and Vogtle Project Director
Mr. G. Bockhold, Jr., General Manager - Plant Vogtle
Mr. C. W. Hayes, Vogtle Project Quality Assurance Manager
Mr. S. B. Tipps, Manager Nuclear Safety and Compliance - Hatch
Mr. J. E. Swartzwelder, Manager Nuclear Safety and Compliance - Vogtle
GO-NORMS

U. S. Nuclear Regulatory Commission, Washington, D. C.

Mr. L. P. Crocker, Licensing Project Manager - Hatch
Mr. J. B. Hopkins, Licensing Project Manager - Vogtle (2 copies)

U. S. Nuclear Regulatory Commission, Region II

Dr. J. N. Grace, Regional Administrator
Mr. P. Holmes-Ray, Senior Resident Inspector - Hatch
Mr. J. F. Rogge, Senior Resident Inspector, Operations - Vogtle
Mr. H. H. Livermore, Senior Resident Inspector, Construction - Vogtle

Southern Company Services

Mr. R. A. Thomas, Executive Consultant
Mr. J. A. Bailey, Vogtle Project Licensing Manager

Shaw, Pittman, Potts & Trowbridge

Mr. B. W. Churchill, Attorney-at-Law

Troutman, Sanders, Lockerman & Ashmore

Mr. A. H. Domby, Attorney-at-Law

ENCLOSURE 1

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

In this enclosure, Georgia Power Company (GPC) presents its response to NRC Bulletin 87-02 for Plants Hatch and Vogtle. Where the response differs from plant to plant it is separated by plant; otherwise, the response is joint. Receipt inspection, other than for damage in shipment, conformance of item received to item ordered, and quantity, is only performed for safety-related materials. A description of GPC's procurement level program is included in enclosure 8 since the data sheets (Enclosures 2 through 4) reference the procurement level.

SPECIFIC NRC BULLETIN 87-02 INFORMATION REQUESTS

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."

GPC's Response:

Plant Hatch:

- 1a: The Site Nuclear Procurement Review Group (NPRG) performs a review of Certified Material Test Reports (CMTR) or Certificates of Conformance (COC) against the requirements of the material specification (i.e. ASTM, ASME, etc.) and the purchase order (i.e. chemical composition, tensile strength, hardness requirements, heat treatment, etc.). The head markings are also inspected by the Quality Control (QC) Receipt Inspector to ensure the fasteners are in compliance with the applicable material grade and manufacturer's identification symbols. Bolts are also inspected to ensure the heat trace letter referenced on the CMTR is stamped on the fastener.
- 1b: Upon receipt a QC Material Conformance Tag (QC hold tag) is placed on the fasteners. Listed on this tag is the following information: purchase order number, item number, description of item, intended use, date received, level of storage, and quantity. This QC tag remains on the item during storage until the time of issue.

Also at receipt, a warehouse identification tag is placed on the fasteners as an added control measure. This tag duplicates some of the information on the QC tag, with supplemental inventory control data (warehouse stock number and location). This information with the description, intended use, purchase order number, item number and quantity are entered into a computer system for easy retrievability and tracking. When ordering a fastener, the computer can be used to identify the fastener

desired and its location. The warehouse storekeeper can then go to that location, verify the stock number, and assure fasteners are correct as ordered for issue to the plant, in accordance with the QC conformance tag.

Plant Vogtle Unit 1:

1a: The QC receipt inspection procedure is contained in procedure 85307-C. The receipt inspection plan for bolts, nuts and washers is controlled by QC Receipt Inspection Plan RM-H-01, Rev. 0. Under the receipt inspection plan, items checked are: heads (width across flats, head height), bolt or screw length, threads. In addition to the above, any inspection requirement referenced in the purchase order or the material specification is checked. Fasteners not covered by RM-H-01, such as studs, are receipt inspected per purchase order requirements and material specification. Inspections performed during receipt inspection are listed on the applicable Material Inspection Report (MIR).

Review of documentation is performed by the Procurement Document Analyst (PDA) per procedure 50021-C. The CMTRs and COCs, when required by the purchase order, are reviewed for acceptability by the PDA. This review compares the results on the CMTRs with the acceptance criteria as found in the material specification and purchase order.

1b: Storage and issuance controls are covered by procedure 00853-C. Storage controls include the following: 1) verify materials, parts and components are identified and marked in accordance with material specifications and purchase order requirements; 2) assure safety-related items are appropriately identified by purchase order number, item number, part number, systems tag number, MIR number, heat number, cable reel number or code number; 3) maintain the heat/control number log used to cross reference bulk materials and small items to procurement documents.

For the issue of safety-related materials, the Material/Equipment Request will contain, but not be limited to, the following items: a unique tracking number, tag number or system, design change number, material description, Q designation, Maintenance Work Order number, MIR number, purchase order number. In addition, for fasteners used in ASME Section XI repairs, the Maintenance Work Order procedure (00350-C) in conjunction with the Section XI repair program (procedure 20100-C) will control installation of fasteners.

Plant Vogtle Unit 2:

1a: It should be noted that Plant Vogtle Construction orders all fasteners and corresponding nuts as safety-related regardless of intended use. For this reason, there are no non-safety-related samples for Vogtle Unit 2. Receipt inspection is performed by Georgia Power Company (GPC) QC personnel in accordance with procedure GD-A-30 for safety-related fasteners except ASME Section III material. The selected samples are inspected for compliance to purchase order, required markings and traceability

of certification. The GPC Receipt Inspection QC Group forwards the completed receipt inspection report and the vendor documentation to the GPC Document Review Section. Document Review Section personnel review the vendor documentation for compliance to the purchase order, procurement specification, and applicable standards.

Pullman Power Products (PPP) performs receipt inspection and vendor documentation review of ASME fasteners in accordance with procedure X-5. During this receipt inspection 100% of the fasteners are inspected for proper markings (grade, manufacturer symbols and heat code) as required by purchase order, material specification and ASME Code. The CMTRs are reviewed in detail to verify that recorded test data are within acceptable parameters. GPC's ASME "NA" program allows us to take credit for the PPP receipt inspection. NISCO, the other ASME "NA" certificate holder, performs receipt inspections per their program upon requisition of the material from the warehouse.

- 1b: Fasteners in the GPC warehouse are stored in a manner that insures traceability to the purchase order and item number, stock number and heat number (for ASME fasteners). At issue all traceability information is recorded on the requisition form.

For fastener installations other than ASME the traceability is maintained as described above until they are released to the contractor. The contractors are required to maintain control of the fasteners but are not required to maintain material traceability to the final installed location. Drawings, specifications and procedures determine the type fastener to be used for each application. QC inspectors verify that the type fastener used is acceptable for the installation.

2. "Select a minimum sample of ten (10) non-safety related fasteners (studs, bolts, and/or cap screws), and ten (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 Types 1,2 or 3; A-354 grades BB, BC, BD; A-490; A-320 LTM; A-307; A-563; or equivalent."

GPC's Response:

Plant Hatch:

Samples of fasteners with corresponding nuts were taken on December 4, 1987, by two members of the plant staff with the NRC Site Resident Inspector in attendance. Copies of the sample data sheets are included as Enclosure 2 to this letter.

Plant Vogtle Unit 1:

Samples of fasteners with corresponding nuts were taken by two members of the plant staff on December 7, 1987, with the NRC Senior Resident Inspector - Operations in attendance. Copies of the sample data sheets are included as Enclosure 3 to this letter.

Plant Vogtle Unit 2:

On December 8, 1987, samples of fasteners with corresponding nuts were taken by two members of the field operations staff with the NRC Site Resident Inspector - Construction in attendance. Copies of the sample data sheets are included as Enclosure 4 to this letter.

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."

GPC's Response:

See response to question number 2 above.

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 non-safety-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 test 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."

GPC's Response:

The testing was performed through Law Engineering who has been qualified for this type of testing and appears on the GPC Qualified Suppliers List (QSL).

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 non-safety-related fasteners. For any fastener found out of specification, provide an evaluation of the safety significance including consideration of the most limiting application."

GPC's Response:

For samples too short to tensile test (about 2 1/2-inch and shorter) an alternative Uniform Hardness Method as outlined in Section 3.2.5 of ASTM F606-85a was used to evaluate the strength properties. The applicable samples are marked with an "A" in the UTS column. The supplemental hardness data are listed in a supplement to the appropriate enclosure. Although not required by the bulletin, GPC requested data be taken on the percent elongation during UTS testing. The supplemental elongation data are also listed in a supplement to the appropriate enclosure.

Plant Hatch:

Copies of the testing results are tabulated in Enclosure 5 of this letter. Analysis of the results indicate no failures for the tested samples.

Plant Vogtle Unit 1:

Copies of the results are tabulated in Enclosure 6 of this letter.

Sample VEGP-027 (safety-related) did not meet the specified percent elongation value. Elongation was not among the requested data. Sample VEGP-027 had tension test results of 145 ksi tensile strength, 132 ksi yield strength and 14% elongation in 2 inches. Minimum standard specification values for A-193 grade B7 are 125 ksi tensile strength, 105 ksi yield strength and 16% elongation in 2 inches. Evaluation of the actual elongation of VEGP-027 does not indicate any safety significance. Elongation is an indirect measure of the ductility of a material, and not a true strain measurement. Minimum values of elongation are listed in standard specifications, but these values are seldom used in design. Instead design uses impact data to determine whether a material fails in a ductile or brittle manner. Therefore, the minus 2% difference in elongation coupled with the 27 ksi higher than minimum yield strength indicates that the stud, VEGP-027, will fulfill its required safety functions. For the above reasons, we have determined that the failure of this bolt to meet the elongation criterion while meeting the other applicable criteria from the bulletin to be non-significant.

There was one failure in a non-safety-related application in the chemical analysis for Molybdenum and Vanadium (VEGP-029). The sample was ordered as A-193 grade B16. The test results indicated the material meets the requirements of A-193 grade B7. Plant application for the bolt is non-nuclear safety pressure boundary. Mechanical testing of non-nuclear safety bolts was not required by the subject bulletin, but VEGP-029 should meet A-193 grade B7 mechanical requirements which are approximately the same as A-193 grade B16. The difference between grades B7 and B16 is related to the expected temperature of the application. Grades B7 and B16 bolts have the same allowable stress up to 700 degrees F., which exceeds the service temperature. Therefore, the VEGP-029 bolt could be used in the non-nuclear safety pressure boundary without any safety significance and this finding is not considered significant.

Plant Vogtle Unit 2:

Copies of the results are tabulated in Enclosure 7 of this letter. The results indicate no failures for the tested samples.

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

GPC's Response:

We at GPC are constantly looking for ways to improve the safe operation of our plants. At this time, however, based on the results of the testing and a review of current procedures, we are not planning any major changes in the receipt inspection procedures. One change being considered, by Plant Vogtle - Operations, to promote consistency is to include other common fastener forms such as studs, cap screws, etc. in the receipt inspection plan (RM-H-01). Should additional information become available which would indicate an augmented receipt program; we would implement the changes necessary.

ENCLOSURE 2

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

FASTENER TESTING DATA SHEETS - PLANT HATCH UNITS 1 and 2

Attachment 1

Fastener Testing Data Sheet

Sample # 1

*Sample ID# 53020-000 ~~45735~~
47458

Fastener Description: 5/8" - 11 x 4" CS A307 Hex Bolt

Description of Sample Stock Location: 2B-034-C

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): NONE (ASTM A307 AND UNKNOWN)

**Class/Procurement Level: NON-Q/7

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

Vendor: GRAVEL WARE

QA Requirements Imposed on Vendor: NONE

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-52797

Quantity on Hand 8

Attachment 1

Fastener Testing Data Sheet

Sample #1

*Sample ID# 53040-00037106

Fastener Description: 5/8"-11 CS A307 Nut, Hex

Description of Sample Stock Location: 2B-034-C

Material Specification as Documented by Licensee Records: ASTM A307

Head Marking (Specification and Manufacturer): NONE (ASTM A307 AND UNKNOWN)

**Class/Procurement Level: NON-Q/7

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

Vendor: GRAVER WATER

QA Requirements Imposed on Vendor: NONE

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/89

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

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

P.O. # A-52797

Quantity 32

Attachment 1

Fastener Testing Data Sheet

Sample # 2

*Sample ID#

53020-00053423

Fastener Description: 1/4"-20 X 1" CS A320 GR B8 Hex Bolt

Description of Sample Stock Location: 1E-012-A

Material Specification as Documented by Licensee Records: ASTM A320 GR B8

Head Marking (Specification and Manufacturer): C (ASTM A320 GR. B8 AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/3B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH HUB'S QUALITY ASSURANCE PROGRAM MANUAL REV. 9 DATED 5-31-85

Licensee Representative: KENNETH T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # E-05146

Quantity 100

Attachment 1

Fastener Testing Data Sheet

Sample # 2

*Sample ID# 53040-00045997

Fastener Description: 1/4"-20 CS SA194 GR 2H NUTS.

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASME SA194 GR2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR-2H AND
CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF THE AEG ENGINEERING QUALITY ASSURANCE PROGRAM MANUAL
REV. F DATED 4/31/85 CONFORMING TO ASME III SUBSECTION NCA 3100 AND ALSO...
MEETS THE APPLICABLE PORTIONS OF ANSI N45.2 (1971).
Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # ~~D-11703~~ D16929

Quantity 196

Attachment 1

Fastener Testing Data Sheet

Sample # 3

*Sample ID# 53050-00040953

Fastener Description: 5/8"-11 TPI x 3 1/2" Lg ASME SA193 GR. B8 304 SS.
STD BOLT

Description of Sample Stock Location: 1D-056-C

Material Specification as Documented by Licensee Records: ASME SA193 GR. B8

Head Marking (Specification and Manufacturer): C (ASME SA193 GR. B8 AND CARDINAL PRODUCTS)

**Class/Procurement Level P/28

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: IN ACCORDANCE TO VENDOR'S QA MANUAL
REV. 8 DATED 5/31/85 CONFORMING TO ASME B31-3
SUBSECTION NCA 3800 AND APPLICABLE PORTIONS OF
ANSI NAS. 2 (1971).

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # E-4276

QUANTITY 28 EA.

Attachment 1

Fastener Testing Data Sheet

Sample # 3

KTW

*Sample ID# ~~53040-00046002~~ / 53040-00046002

Fastener Description: 5/8"-11 SA194 GR.2H HEAVY HEX NUT

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASME SA194 GR.2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR.2H AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB, INC QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 5/30/85 CONFORMING TO ASME III SUBSECTION NCA 3800 AND ALSO APPLICABLE PORTIONS OF ANSI NBS. 2 (1971.)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-17521

QUANTITY 20EA.

Attachment 1

Fastener Testing Data Sheet

Sample # 4

*Sample ID# 53020-00030300

Fastener Description: 1/4"-20 X 1" CS A449 HEX BOLT

Description of Sample Stock Location: 1C-034-F

Material Specification as Documented by Licensee Records: ASTM A449

Head Marking (Specification and Manufacturer): LE (ASTM A449 AND LAKE ERIE SCREW CORP.)

**Class/Procurement Level: Q/3B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: IN ACCORDANCE WITH HUB'S QA PROGRAM MANUAL REV. 7 DATED 2/28/84 AND CONFORMING TO APPLICABLE PORTIONS OF ANST N4.5, 2 (1971)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-15033

Quantity 388

Attachment 1

Fastener Testing Data Sheet

Sample # 4

*Sample ID# 53040-00046907

Fastener Description: 1/4" - 20 CS A563 GR BD HEX NUT

Description of Sample Stock Location: ~~15-010-2E~~

19-010-E

Material Specification as Documented by Licensee Records: ASTM A563 GR BD

Head Marking (Specification and Manufacturer): (ASTM A563 GR. DH AND NOVA MACHIN PRODUCTS)

**Class/Procurement Level: Q/3A

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

Vendor: Hub Inc.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB, INC. QUALITY ASSURANCE PROGRAM MANUAL - REV. 8 DATED 5/85.

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-57360

Quantity 40

Attachment 1

Fastener Testing Data Sheet

Sample # 5

*Sample ID# 53020-00036210

Fastener Description: 1 1/8" - 8 X 4" CS A490 Hex Bolt

Description of Sample Stock Location: 1J-047-D

Material Specification as Documented by Licensee Records: ASTM A490

Head Marking (Specification and Manufacturer): BS (ASTM A490 AND BETHLEHEM STEEL)

**Class/Procurement Level: Q/3A

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

Vendor: STEEL City Bolt & SCREW

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO VENDOR'S QUALITY ASSURANCE MANUAL REVISION 0. --

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-58233

Quantity 4

Attachment 1

Fastener Testing Data Sheet

Sample # 5

*Sample ID#

53040 - 00046005

Fastener Description:

1 1/8" - 8 CS SA194 GR2H Hex Nut

Description of Sample Stock Location:

1C - 058 - B

Material Specification as Documented by Licensee Records:

ASTM SA194 GR 2H

Head Marking (Specification and Manufacturer):

2H-C (ASME SA194 GR 2H
CARDINAL PRODUCTS

**Class/Procurement Level:

Q/B-B

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

Pressure Boundary

Vendor:

Hub INC.

QA Requirements Imposed on Vendor:

MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF HUB, INC.'S QUALITY ASSURANCE PROGRAM MANUAL REV-8
DATED 5/31/85.

Licensee Representative: K. T. WILLIAMS

Signature

Kenneth T. Williams

Date

12/4/87

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

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

P.O. #

~~E-0558~~ D-14490

Quantity

172

Attachment 1

Fastener Testing Data Sheet

Sample # 6

*Sample ID# 53050-00034577

Fastener Description: 3/4" - 10 x 3 1/4" CS SA193 B7 Stud Bolt

Description of Sample Stock Location: 1F-033-C

Material Specification as Documented by Licensee Records: ASME SA193 B7

Head Marking (Specification and Manufacturer): C (ASME SA193 GR. B7 AND
CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2A

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

Vendor: Hub Inc.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF HUB INC. QUALITY ASSURANCE PROGRAM MANUAL REV. 7 DATED
02/84 CONFORMING TO ASME III SUBSECTION NCA 3800 AND ALSO MEETS APPLICABLE
PORTIONS OF ANSI N45.2 (1971)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-57740

Quantity 200

Attachment 1

Fastener Testing Data Sheet

Sample # 6

*Sample ID# 53040 - 00046003

Fastener Description: 3/4" - 10X CS SA194 GR2H Nut

Description of Sample Stock Location: 1C - 058 - C

Material Specification as Documented by Licensee Records: ASME SA194 GR2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR2H AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF HUB, INC'S QUALITY ASSURANCE PROGRAM MANUAL - REV. 8 DATED 5/31/85

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-14490

Quantity 802

Attachment 1

Fastener Testing Data Sheet

Sample # 7

*Sample ID#

53020-00048838

Fastener Description:

$\frac{1}{2}$ " - 13 x $3\frac{1}{2}$ " CS ^{SAE} J429 G5 Capping Bolt

Description of Sample Stock Location:

1C-042-D

Material Specification as Documented by Licensee Records:

~~A574~~ ^{SAE} J429 G5

Head Marking (Specification and Manufacturer):

M (SAE J429 GR. 5 AND AEG ENGINEERING)

**Class/Procurement Level:

Q/5B

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

Vendor:

A + G Engineering

QA Requirements Imposed on Vendor:

NONE

Licensee Representative:

K. T. WILLIAMS

Signature

Kenneth T. Williams

Date

12/4/87

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

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

P.O. # D-17562

Quantity

200

Attachment 1

Fastener Testing Data Sheet

Sample # 7

*Sample ID# 53040-00046001

Fastener Description: 1/2" - 13 CS A194 GR 2H NUTS

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASTM A194 GR 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR. 2H AND
CARDINAL INDUSTRIES)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED TO THE REQUIREMENTS
OF HUB, INC'S QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 5/31/85

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-14490

Qty. 856

Attachment 1

Fastener Testing Data Sheet

Sample # 8

*Sample ID# 53050-00046939

Fastener Description: 1/2"-13 X 2 3/4" CS SA193 B7 Stud Bolt

Description of Sample Stock Location: 1D-056-E

Material Specification as Documented by Licensee Records: ~~ASME~~ SA193 B7

Head Marking (Specification and Manufacturer): C (ASME SA193 GR. B7) (MEDICAL PRODUCT)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH HUB, INC.'S QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 05/05 CONFORMING TO ASME III - SUBSECTION NCA 310 AND ALSO MEETS APPLICABLE PORTIONS OF ANSI NAS. 2 (1997)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/89

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

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

P.O. # D-56666

Quantity 68

Attachment 1

Fastener Testing Data Sheet

Sample # 8

*Sample ID# 53040-00046001

Fastener Description: 1/2" - 13 CS A194 GR 2H NUTS

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASTM A194 GR 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR 2H AND CARDINAL PRODUC.)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF HUB, INC'S QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 5/31/85

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-14490

Qty. 856

Attachment 1

Fastener Testing Data Sheet

Sample # 9

*Sample ID# 53020-00029637

Fastener Description: 1/2-13 x 1" CS A325 TYPE1 HEX BOLT

Description of Sample Stock Location: 1C-036-F

Material Specification as Documented by Licensee Records: ASTM A325 GR. TYPE1

Head Marking (Specification and Manufacturer): C (ASTM A325 TYPE1 AND CARDINAL INDUSTRIES)

**Class/Procurement Level: Q/3B -

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

Vendor: A & G ENGINEERING

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO THE REQUIREMENTS OF A & G ENGINEERING'S QUALITY INSURANCE PROGRAM MANUAL - REV. F DATED 4/30/85

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # E-01562

Quantity 244

Attachment 1

Fastener Testing Data Sheet

Sample # 9

*Sample ID# 53040-00016001

Fastener Description: 1/2" - 13 CS A194 GR 2H NUTS

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASTM A194 GR 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR. 2H AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2P

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB, INC. QUALITY ASSURANCE PROGRAM MANUAL -- REV. 8 DATED 5/31/85

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-14490

Qty. 856

Attachment 1

Fastener Testing Data Sheet

Sample #10

*Sample ID# 53050-00029300

Fastener Description: 1 1/4" - 8 TPI X 6 3/4" LG ASTM A193 GR. B7 STUD BOLT

Description of Sample Stock Location: 1J-018-A

Material Specification as Documented by Licensee Records: ASTM A193 GR B7

Head Marking (Specification and Manufacturer): Δ (ASTM A193 GR. B7 AND ~~K~~)
CARDINAL INDUSTRIES

**Class/Procurement Level: Non-Q/7

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

Vendor: CARDINAL INDUSTRIES

QA Requirements Imposed on Vendor: NONE

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # B38199 RELEASE # 134
QUANTITY 60 EA

Attachment 1

Fastener Testing Data Sheet

Sample #10

*Sample ID# 53040 - 00001155

Fastener Description: 1 1/4"-8 TPI ASTM A194 GR. 2H HEX NUT

Description of Sample Stock Location: 1J-018-A

Material Specification as Documented by Licensee Records: ASTM A194 GR. 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR. 2H AND
CARDINAL INDUSTRIES)

**Class/Procurement Level: NON-8/7

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

Vendor: CARDINAL INDUSTRIES

QA Requirements Imposed on Vendor: NONE

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # B38199 RELEASE # 134
QUANTITY 60 EA.

Attachment 1

Fastener Testing Data Sheet

Sample 11

*Sample ID# 53020-00000584

Fastener Description: 3/8"-16 X 1 1/2" Lg. ASTM A325 HEX BOLT

Description of Sample Stock Location: 1J-057-B

Material Specification as Documented by Licensee Records: ASTM A325

Head Marking (Specification and Manufacturer):

**Class/Procurement Level: NON-Q/7

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

Vendor: STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor: NONE

Licensee Representative: KENNETH T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # B-38212 RELEASE 573

QUANTITY - 25 EA.

Attachment 1

Fastener Testing Data Sheet

Sample # 11

*Sample ID# 53040 - 0000 1154

Fastener Description: 3/8"-16 HEX NUT A194

Description of Sample Stock Location: 1C-054-H/1J-029-A

Material Specification as Documented by Licensee Records: ASTM A194

Head Marking (Specification and Manufacturer):

**Class/Procurement Level: NON-Q / 7

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

Vendor: STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor: NONE

Licensee Representative: KENNETH T. WILLIAMS

Signature Kenneth T. Williams Date 12-4-87

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

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

P.O. # B38196 RELEASE # 4377

QUANTITY 172 EA

Attachment 1

Fastener Testing Data Sheet

Sample # 12

*Sample ID# 53020-00048790

Fastener Description: 1/2"-13 X 3" CS A354 GRBD Hex Bolt

Description of Sample Stock Location: 1C-022-E

Material Specification as Documented by Licensee Records: ASTM A354 GRBD

Head Marking (Specification and Manufacturer): LE (ASTM A354 AND LAKE ERIE SCREW CORP)

**Class/Procurement Level: Q/3B

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

Vendor: A+G Engineering

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO A+G ENGINEERING'S QUALITY ASSURANCE PROGRAM MANUAL REV F DATED 4/30/83

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-58039

Quantity 432

Attachment 1

Fastener Testing Data Sheet

Sample # 52

*Sample ID# 53040-00046001

Fastener Description: 1/2" - 13 CS A194 Gr 2H NUTS

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASTM A194 Gr 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 Gr. 2H AND
CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: Hub Inc.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF HUB, INC'S QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 5/31/85

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

PL # D-14490

Qty. 856

Attachment 1

Fastener Testing Data Sheet

Sample # 13

*Sample ID# 53020-00048659

Fastener Description: 1/2"-13TPI x 5"lg ASTM A 354 GR. BD HEX BOL.

Description of Sample Stock Location: 1C-022-D

Material Specification as Documented by Licensee Records: ASTM A 354 GR. BD

Head Marking (Specification and Manufacturer): LE (ASTM A 354 AND LAKE ERIE
SCREW CORP.)

**Class/Procurement Level: Q/3B

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

Vendor: A & G ENGINEERING

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO A & G
ENGINEERING'S QUALITY ASSURANCE PROGRAM MANUAL REV. F DATED 4/30/85

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-58039
QUANTITY 492 EA.

Attachment 1

Fastener Testing Data Sheet

Sample # 13

*Sample ID# 53040-00046001

Fastener Description: 1/2" - 13 CS A194 GR 2H NUTS

Description of Sample Stock Location: 1C-058-D

Material Specification as Documented by Licensee Records: ASTM A194 GR 2H

Head Marking (Specification and Manufacturer): 2H ASTM A194 GR. 2H AND
CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF HUB, INC'S QUALITY ASSURANCE PROGRAM MANUAL REV. 8 DATED 5/31/86.

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-14490

Qty. 856

Attachment 1

Fastener Testing Data Sheet

Sample # 14

*Sample ID# 53020-00038303

Fastener Description: 1/4" x 6 3/4" CS A307 GR B Hex Bolt

Description of Sample Stock Location: 1J-033-B

Material Specification as Documented by Licensee Records: ASTM A307 GR B

Head Marking (Specification and Manufacturer): C (ASTM A307 GR. B AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2A

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB QUALITY ASSURANCE PROGRAM MANUAL REV. 7 DATED 2/84 CONFORMING TO ASME III SUBSECTION NCA 3800 AND ALSO MEETS THE APPLICABLE PORTIONS OF ANSI NQ5.2 (1971)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-50733

Quantity 20

Attachment 1

Fastener Testing Data Sheet

Sample # 14

*Sample ID# 53040-00038128

Fastener Description: 1/4"-8 CS A307 GRB Hex Nut

Description of Sample Stock Location: 1J-033-D

Material Specification as Documented by Licensee Records: ASTM A307 GRB

Head Marking (Specification and Manufacturer): (ASTM A307 GR.B AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2A

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

Vendor: Hub INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB, INC. QUALITY ASSURANCE PROGRAM MANUAL REV. 7 DATED 2/84 CONFORMING TO ASME III SUBSECTION NCA 3810 AND ALSO MEETS THE

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # D-50733

Quantity 20

Attachment 1

Fastener Testing Data Sheet

Sample # 15

*Sample ID# 53050-00045412

Fastener Description: 7/8"-9 x 9" Long ASME SA193 GR. B7 Stud Bolt

Description of Sample Stock Location: ID-058J / ~~16-058J~~

Material Specification as Documented by Licensee Records: ASME SA193 GR. B7

Head Marking (Specification and Manufacturer): C (ASME SA193 GR. B7 AND CARDINAL PRODUCTS)

**Class/Procurement Level: 8/2B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL WAS PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE QUALITY ASSURANCE PROGRAM HUB MANUAL REV. 8 DATED 5/85 CONFORMING TO ASME III SUBSECTION NCA 3810 AND ALSO MEETING THE APPLICABLE PORTIONS OF ANSI N 45.2 (1970).

Licensee Representative: K.T. WILLIAMS

Signature

Kenneth T. Williams

Date

12/4/87

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

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

P.O. # D-56666

QUANTITY 30EA

Attachment 1

Fastener Testing Data Sheet

Sample # 15

*Sample ID# 53040-000 46934

Fastener Description: 7/8"-9 ASME SA194 GR. 2H HEX NUT

Description of Sample Stock Location: 1C-058-C

Material Specification as Documented by Licensee Records: ASME SA194 GR. 2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR. 2H AND
CARDINAL INDUSTRIES

**Class/Procurement Level: Q/2B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL WAS PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE QUALITY ASSURANCE PROGRAM HUB MANUAL REV. 8 DATED 5/85 CONFORMING TO ASME III SUBSECTION NCA 3800 AND ALSO MEETS THE APPLICABLE PORTIONS OF ANSI N45.2 (1971).
Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-56666

QUANTITY 299 EA.

Attachment 1

Fastener Testing Data Sheet

Sample # 16

*Sample ID# 53050-000 30494

Fastener Description: 1"-8 TPI x 5 1/4" Lg ASTM A193 GR. B7 STUD BOLT

Description of Sample Stock Location: 1J-002-B

Material Specification as Documented by Licensee Records: ASTM A193 GR. B7

Head Marking (Specification and Manufacturer): C (ASTM A193 GR. B7 AND
CARDINAL PRODUCTS)

**Class/Procurement Level): Q/3A

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE
REQUIREMENTS OF THE HUB QUALITY ASSURANCE PROGRAM MANUAL REV. ...
7 DATED 2/84.

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-55071

QTY . 80 EA

Attachment 1

Fastener Testing Data Sheet

Sample #16

*Sample ID# 53040 - 00046004

Fastener Description: 1"-8 TPI ASME SA194 GR. 2H HEX NUT

Description of Sample Stock Location: 1C-058-B

Material Specification as Documented by Licensee Records: ASME SA194 GR. 2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR. 2H AND CARDINAL PRODUCTS)

**Class/Procurement Level: Q/2B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDE IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB, INC. QUALITY ASSURANCE PROGRAM IN ANNUAL REV 8 DATED 5/30/85 (AFFIRMING TO ASME III SUBSECTION NCA 3800 AND ALSO MEETS THE APPLICABLE PORTIONS OF ANSI NAS. 2 (1971).

Licensee Representative: K.T. WILLIAMS

Signature

Kenneth T. Williams

Date

12/4/87

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

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

P.O. # D-17521

QUANTITY 526 EA

Attachment 1

Fastener Testing Data Sheet

Sample # 17

*Sample ID#

53020-00048658

Fastener Description:

5/8" - 11 x 1" CS A354 GR BDHE,
Bolt

Description of Sample Stock Location:

1C-022-C

Material Specification as Documented by Licensee Records:

ASTM A354 GR BD

Head Marking (Specification and Manufacturer):

LE (ASTM A354 GR. BD AND
LAKE ERIE SCREW CORP.)

**Class/Procurement Level:

Q/3B

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

Structural

Vendor:

A & G Engineering

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO A & G - ...
ENGINEERING'S QUALITY ASSURANCE PROGRAM MANUAL REV. F DATED 4/30/85.

Licensee Representative:

K. T. WILLIAMS

Signature

Kenneth T. Williams

Date

12/4/87

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

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

P.O. # D-58039

Quantity 496

Attachment 1

Fastener Testing Data Sheet

Sample # 17

*Sample ID# 53040 - 000 48701

Fastener Description: 5/8" - 11 CS A194 GR 2H Nut, Hex

Description of Sample Stock Location: 1C-026-E

Material Specification as Documented by Licensee Records: ASTM A194 GR 2H

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR. 2H AND TEXAS BOLT COMPANY)

**Class/Procurement Level: Q/3B

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

Vendor: A+G Engineering

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO THE REQUIREMENTS OF THE A+G ENGINEERING QUALITY ASSURANCE PROGRAM MANUAL REV. F DATED 4/30/85.

Licensee Representative: K.T. WILLIAMS

Signature KENNETH T. WILLIAMS Date 12/4/87

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

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

P.O. # D-58039

Quantity 1602

Attachment 1

Fastener Testing Data Sheet

Sample # 18

*Sample ID# 53020-00029594

Fastener Description: 5/8" - 11 x 3 1/2" Lg ASTM A 325 ~~Grade~~ TYPE 1
HEX BOLT

Description of Sample Stock Location: 1C-036-B

Material Specification as Documented by Licensee Records: ASTM A325 TYPE 1

Head Marking (Specification and Manufacturer): C (ASTM A325 AND CARDINAL INDUSTRIES)

**Class/Procurement Level: Q/3B

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

Vendor: HUB, INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB QUALITY ASSURANCE PROGRAM MANUAL REV. 7 AND ... CONFIRMING TO APPLICABLE PORTIONS OF ANSI N45.2 (1971)

Licensee Representative: K-T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-15033

Qty. 33

Attachment 1

Fastener Testing Data Sheet

Sample # 18

*Sample ID# 53040 - 00048701

Fastener Description: 5/8" - 11 CS A194 GR 2H Nut, Hex

Description of Sample Stock Location: 1C-026-E

Material Specification as Documented by Licensee Records: ASTM A194 GR 2.

Head Marking (Specification and Manufacturer): 2H (ASTM A194 GR. 2H AND TEXAS BOLT COMPANY)

**Class/Procurement Level: Q/3E

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

Vendor: A + G Engineering

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE TO A + G ENGINEERING'S QUALITY ASSURANCE PROGRAM MANUAL REV F DATED 4/30/85

Licensee Representative: K. T. Williams

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-58039

Quantity 1602

Attachment 1

Fastener Testing Data Sheet

Sample #19

*Sample ID# 53050-00005605

Fastener Description: 1 1/2" - 8 TPI X 6 5/8" ASTM A193 GR. B7^{STND} BOLT

Description of Sample Stock Location: ID-058-E

Material Specification as Documented by Licensee Records: ASTM A193 GR. B7

Head Marking (Specification and Manufacturer): T (ASTM A193 AND TEXAS BOLT CO.)

**Class/Procurement Level: Q/2B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AIG ENGINEERING CO. QUALITY ASSURANCE PROGRAM MANUAL REV. F DATED 4/19/85 CONTAINING ASME III SUB-SECTION NCA 3800 AND ALSO MEETS THE APPLICABLE PORTIONS OF ANSI HAS. 2 (1971)

Licensee Representative: K.T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O.# E-06917

QUANTITY 23

Attachment 1

Fastener Testing Data Sheet

Sample #19

*Sample ID# 53040-00040635

Fastener Description: 1/8"-8 ASME SA194 GR. 2H HEX NUTS

Description of Sample Stock Location: 1C-058-E

Material Specification as Documented by Licensee Records: ASME SA194 GR. 2H

Head Marking (Specification and Manufacturer): 2H (ASME SA194 GR. 2H AND CARDINAL INDUSTRIES)

**Class/Procurement Level: Q/2B

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

Vendor: HUB, INC.

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF HUB QUALITY ASSURANCE PROGRAM MANUAL REV 7 DATED 7/84 AND CONFORMING TO ASME III SUBSECTION NCA 3300 ALSO MEETS APPLICABLE PARTS OF ANSI NAS. 2 (1971).

Licensee Representative: K-T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # D-03223

QUANTITY 212

Attachment 1

Fastener Testing Data Sheet

SAMPLE #20

*Sample ID# 53020-00038322

Fastener Description: 1/8" - 8 TPI X 2" Lg ASTM A325 TYPE 1

Description of Sample Stock Location: 1C-038-H

Material Specification as Documented by Licensee Records: ASTM A325 TYPE 1

Head Marking (Specification and Manufacturer): C (ASTM A325 CARDINAL IND)

**Class/Procurement Level: Q/3B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HUB QUALITY ASSURANCE PROGRAM MANUAL REV. 7 DATED ... 2/21/87 CONFORMING TO APPLICABLE PORTIONS OF ANSI N45.2 (1971)

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams Date 12/4/87

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

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

P.O. # A-15033

QUANTITY 50EA

Attachment 1

Fastener Testing Data Sheet

SAMPLE #20

*Sample ID# 53040 -000 46005

Fastener Description: 1/8" - 8 ASME SA194 GR. 2H HEX NUT

Description of Sample Stock Location: 1C-058-B

Material Specification as Documented by Licensee Records: ASME SA194 GR. 2H

Head Marking (Specification and Manufacturer):

**Class/Procurement Level: Q/3B

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

Vendor: HUB, INC

QA Requirements Imposed on Vendor: MATERIAL PROVIDED TO THE REQUIREMENTS OF HUB INC QUALITY ASSURANCE MANUAL REV. 8 DATED 5/31/85

Licensee Representative: K. T. WILLIAMS

Signature Kenneth T. Williams

Date 12/4/87

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

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

P.O. # ~~ED558~~ D-14490

QUANTITY 172

ENCLOSURE 3

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

FASTENER TESTING DATA SHEETS - PLANT VOGTLE UNIT 1

Attachment 1

Fastener Testing Data Sheet

*Sample ID# *VEGP-001 (NO)*
(53050-00022249)

Fastener Description: *STUD W/ TWO NUTS* { *STUD 1"-8 x 15"*
ASTM A193, B7
NUT 1"-8
ASTM A194, 2H

Description of Sample Stock Location: *C-62-H*

Material Specification as Documented by Licensee Records:

Head Marking (Specification and Manufacturer): *D J3 > STUD*
B7
2H 9BJ - NUTS

**Class Procurement Level: *3B*

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

Vendor: *Whse. Electric*
PAV-27380, #625

QA Requirements Imposed on Vendor: *Original Equipment Supplier,*
Equipment Specification, CMTR

Licensee Representative:

Signature *W. B. Gabel* Date *12/7/97*

*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# *VEGP-002 (ND)*
(53050-00019018)

Fastener Description: *STUD, 1.625 - 8 x 10.5 Lg.*

Description of Sample Stock Location: *H-71-F*

Material Specification as Documented by Licensee Records: *SA 453, Gr. 660B*

Head Marking (Specification and Manufacturer): *660B \square CM91*
HT. 24292 6

*Class. Procurement Level: *1B*

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

Vendor: *Whse. Corp.*
PAV-10387, #120

QA Requirements Imposed on Vendor: *Specification, Certificate, NCA 3800*
Supplier, CMTR

Licensee Representative:

Signature *W.F. Greub*

Date *12/7/87*

*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# *VEGP-003 (NO)*
(53040-00012097)

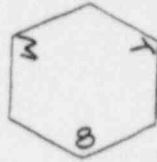
Fastener Description: *NUT, 1/2"-13*

Description of Sample Stock Location: *D-71-M*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 8M*

Head Marking (Specification and Manufacturer):

SIDE ENTW 21/87



*Class. Procurement Level: *IB*

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

Vendor: *A & G Engineering*

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Supplier*
CMTR

Licensee Representative:

Signature *W. G. Gabel*

Date *12/7/87*

*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# *VEGP-004 (NO)*
(53050-00010622)

Fastener Description: *NUT, 5/8"*

Description of Sample Stock Location: *D-67-I*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H T*
SIDE FBT

*Class Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAV-27167, #46

QA Requirements Imposed on Vendor: *ASME Sect. III, Class 2*
NCA 3800 program, specification

Licensee Representative:

Signature *W. B. Gresham* Date *12/7/97*

*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# *VEGP-005 (NO)*
(53050-00010623)

Fastener Description: *NUT, 3/4"*

Description of Sample Stock Location: *D-67-1*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H T*
SIDE 61Q

*Class Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAV-27167, # 47

QA Requirements Imposed on Vendor: *ASME SECT. III, Class 2*
NCA 3800 Program, Specification

Licensee Representative:

Signature *W. B. Ayres* Date *12/7/97*

*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# *VEGP-006 (NO)*
(S3050-00010624)

Fastener Description: *NUT, 7/8"*

Description of Sample Stock Location: *D-67-J*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H (-)*

SIDE: AMD

*Class. Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAV-27167, #48

QA Requirements Imposed on Vendor: *ASME SECT. III, Class 2*
NCA 3800 Program, Specification

Licensee Representative:

Signature *W. B. Greebel* Date *12/7/87*

*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# *VEGP-007 (NO)*
(53040-00012100)

Fastener Description: *NUT, 7/8" - 9*

Description of Sample Stock Location: *O-71-N*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 8M*

Head Marking (Specification and Manufacturer): *8MT*

*Class Procurement Level: *1B*

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

Vendor: *A & G Engineering*
PAV-27170, # 37

QA Requirements Imposed on Vendor: *ASME SECT. III, Class 1*
NCA 3800 Program, Specification

Licensee Representative:

Signature *W. G. Gabel* Date *12/7/97*

*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# *VEGP-008 (NO)*
(53050-00010625)

Fastener Description: *NUT, 1"*

Description of Sample Stock Location: *D-67-J*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H T*
SIDE: AME

*Class/Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAU-27167, #49

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W. S. [unclear]* Date *12/7/07*

*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# *VEGP-009 (NO)*
(53050-00010627)

Fastener Description: *NUT, 1/4" Dia.*

Description of Sample Stock Location: *D-67-K*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H T PH 49*

**Class Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAV-27167, #51

QA Requirements Imposed on Vendor: *ASME SECT. III, Class 2,*
NCA 3800 Program, Specification

Licensee Representative:

Signature *W. B. Copeland* Date *12/7/97*

*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# *VEGP-010 (NO)*
(53050-00010687)

Fastener Description: *STUD, 5/8" x 10 1/2" (CONTINUOUS THREAD)*

Description of Sample Stock Location: *D-69-I*

Material Specification as Documented by Licensee Records: *SA 193, Gr. B7*

Head Marking (Specification and Manufacturer):
Ht.# (-)
SAE B7

*Class Procurement Level: *2B*

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

Vendor: *A & G Engineering*
PAV-27167, #15

QA Requirements Imposed on Vendor: *ASME SECT. III, Class 2*
NCA 3800 Program, Specification

Licensee Representative:

Signature *W.B. Gabel* Date *12/7/87*

*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# *VEGR - 011 (NO)*
(48100 - 00024715)

Fastener Description: *STUD, 3/4" - 10 UNC - 2A x 3 1/4"*

Description of Sample Stock Location: *C-62-F-8*

Material Specification as Documented by Licensee Records: *SA 453, Gr. 660B*

Head Marking (Specification and Manufacturer): *K 49, V, 660 B*

*Class/Procurement Level: *3B*

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

Vendor: *Anchor/Darling*
PAV-28734, #59

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W. S. Copeland* Date *12/7/87*

*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# *VEGP-012 (NO)*
(53020-00024385)

Fastener Description: *STUD, 7/8" - 9 x 6"*

Description of Sample Stock Location: *D-65-0*

Material Specification as Documented by Licensee Records: *SA-193, Gr. 8M*

Head Marking (Specification and Manufacturer): *B 8 M (-)*

*Class. Procurement Level: *1B*

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

Vendor: *A & G Engineering*
PAU-27164, #62

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W. B. G... ..* Date *12/7/87*

*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# *VEGP-013 (NO)*
(70020-0002348E)

Fastener Description: *STUD, 1 7/8" - 8 UN - 2A X 14.81"*

Description of Sample Stock Location: *C-56-A*

Material Specification as Documented by Licensee Records: *SA 193, B7*

Head Marking (Specification and Manufacturer): *V SA 193 B7 CB5*

*Class Procurement Level: *1B*

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

Vendor: *EG & G Sealol*
PAV-29532, #1

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W. B. Gopald* Date *12/7/87*

*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# *VEGP-014 (NO)*
(70020-00023486)

Fastener Description: *NUT-1 7/8"-8UN-2B*

Description of Sample Stock Location: *C-56-A*

Material Specification as Documented by Licensee Records: *SA 194, Gr. 7*

Head Marking (Specification and Manufacturer): *V SA-194-7B AB9-1*

**Class Procurement Level: *1B*

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

Vendor: *EG & G Sealed*
PAV-29532, #2

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W. B. Corbett* Date *12-7-87*

*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# *VEGP-015 (NO)*
(53050-00019027)

Fastener Description: *STUD, 1 5/8" x 10 1/2" Long*

Description of Sample Stock Location: *H-71-D*

Material Specification as Documented by Licensee Records: *SA 453, Gr. 660B*

Head Marking (Specification and Manufacturer): *D660B R56 W79*

**Class/Procurement Level: *2B*

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

Vendor: *Whse. Corp.*
PAV-10387

QA Requirements Imposed on Vendor: *specification, original supplier*
CMTR

Licensee Representative:

Signature *W. S. Lynch* Date *12/7/87*

*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# *VEGP-016 (NO)*
(53040-00019012)

Fastener Description: *NUT, 1 5/8" - 8*

Description of Sample Stock Location: *H-71-D*

Material Specification as Documented by Licensee Records: *SA 453 GR. 660A*
~~*SA 194, Gr. 6-WBC*~~
(2/7/87)

Head Marking (Specification and Manufacturer): *A 660A*
20292-1

*Class/Procurement Level: *1B*

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

Vendor: *Whse. Corp.*
PAV-10387

QA Requirements Imposed on Vendor: *Specification, Original Supplier,*
CMTR

Licensee Representative:

Signature *W. B. Gabel* Date *12/7/87*

*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# *VEGP-017 (NO)*
53020-00015988

Fastener Description: *BOLT, 1/2"-13 x 4"*

Description of Sample Stock Location: *D-73-H*

Material Specification as Documented by Licensee Records: *A 449, (Gr. 5)* ^{SAE}

Head Marking (Specification and Manufacturer): *15*

*Class/Procurement Level: *4B*

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

Vendor: *STEEL CITY*

QA Requirements Imposed on Vendor: *Specification, Material Spec.
C of C.*

Licensee Representative:

Signature *W.E. Gopalakrishnan* Date *12/7/97*

*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# *VEGP-018 (NO)*
(53020-00016009)

Fastener Description: *STUD, 7/8" - 9 x 2 1/2"*

Description of Sample Stock Location: *D-73-2*

Material Specification as Documented by Licensee Records: *A 449, (SAE Gr. 5)*

Head Marking (Specification and Manufacturer): *1 S*

*Class Procurement Level: *4B*

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

Vendor: *STEEL CITY*

QA Requirements Imposed on Vendor: *Specification, Material Spec. C of C.*

Licensee Representative:

Signature *W. E. Gabel* Date *12/7/87*

*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# *VEGP-019 (NO)*
(53030-00016015)

Fastener Description: *STUD, 1"-8 x 2 1/2"*

Description of Sample Stock Location: *O-73-J*

Material Specification as Documented by Licensee Records: *A 449, (SAE Gr. 5)*

Head Marking (Specification and Manufacturer): *1*
(NF)

*Class Procurement Level: *4B*

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

Vendor: *STEEL CITY*

QA Requirements Imposed on Vendor: *specification, Material Spec.*
C of C.

Licensee Representative:

Signature *W. B. Campbell* Date *12/7/97*

*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# *VEGP-020 (ND)*
(53010-20657)

Fastener Description: *CAPSCREW, 5/8" - 11 x 2"*

Description of Sample Stock Location: *C-52-C-6*

Material Specification as Documented by Licensee Records: *A108*

Head Marking (Specification and Manufacturer):

BUFO
UNC 1/8"

*Class Procurement Level: *G*

General Plant Application (e.g., Pressure Boundary, Structural) *NON-NUCLEAR SAFETY Pressure Boundary*

Vendor: *Ametek*
PAV-28113, #68

QA Requirements Imposed on Vendor: *Specification*

Licensee Representative:

Signature *W. E. Gabel*

Date *12-7-87*

*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# *VEGP-021 (NO)*
(53020-00027301)

Fastener Description: *BOLT, 1 3/4" - 8 x 7 1/4"*

Description of Sample Stock Location: *H-67-H*

Material Specification as Documented by Licensee Records: *A 354*

Head Marking (Specification and Manufacturer):

F
C 80 S

*Class/Procurement Level: *6*

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

NON-NUCLEAR safety
Pressure Boundary

Vendor: *Groven*
E-54259, #1

QA Requirements Imposed on Vendor: *Part Number, Original Equipt Supplier*

Licensee Representative:

Signature *W.S. Greber*

Date *12/7/87*

*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# *VEGP-022 (NO)*
(53040-00020598)

Fastener Description: *NUT, 1 3/4" - 8*

Description of Sample Stock Location: *C-34-D-9*

Material Specification as Documented by Licensee Records: *A 194, Gr. 4*

Head Marking (Specification and Manufacturer): *YJ 4*

*Class Procurement Level: *6*

General Plant Application (e.g., Pressure Boundary, Structural) *NON-NUCLEAR SAFETY*
Pressure Boundary

Vendor: *Ametek*
PAV-28113, #10

QA Requirements Imposed on Vendor: *Part Number, Original Equipmt. Supplies.*

Licensee Representative:

Signature *W. B. Gysel* Date *12/7/87*

*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# *VEGP-023 (NO)*
(53040-00018378)

Fastener Description: *NUT, 1"-8*

Description of Sample Stock Location: *C-28-E-8*

Material Specification as Documented by Licensee Records: *A 194, Gr. 4*

Head Marking (Specification and Manufacturer): *N L 4*

*Class Procurement Level: *6*

Non-Nuclear safety

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

Vendor: *PAV-28113, #14*

QA Requirements Imposed on Vendor: *Part Number*

Licensee Representative:

Signature *W. E. [Signature]* Date *12/7/87*

*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# *VEGP-024 (NO)*
(28060-00021323)

Fastener Description: *NUT, 5/8" w/ STUD 5/8" x 6"*

Description of Sample Stock Location: *D-79-B-5*

Material Specification as Documented by Licensee Records: *A 193, Gr. B7 - STUD*
A 194, Gr. 2H - NUT

Head Marking (Specification and Manufacturer): *CB7 - STUD*
2H - (-) - NUT

*Class Procurement Level: *6*

General Plant Application (e.g., Pressure Boundary, Structural) *NON-NUCLEAR SAFETY /*
Pressure Boundary

Vendor: *STRUTHERS*
PAVN-1195

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature *W. G. Gysel* Date *12/7/97*

*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# *VEGP-025 (NO)*
(48100-00020603)

Fastener Description: *STUD, 1"-8 x 3 3/4"*

Description of Sample Stock Location: *C-52-C-4*

Material Specification as Documented by Licensee Records: *A 193, Gr. B16*

Head Marking (Specification and Manufacturer): *JB16*

*Class Procurement Level: *6*

General Plant Application (e.g., Pressure Boundary, Structural) *NON-NUCLEAR SAFETY*
Pressure Boundary

Vendor: *Ametek*
PAV-28113, #15

QA Requirements Imposed on Vendor: *NONE*

Licensee Representative:

Signature *W.S. Goodland* Date *12/7/87*

*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# *VEGR-026 (NO)*
(28060-00021321)

Fastener Description: *STUD W/NUT, 5/8" x 4 3/4"*

Description of Sample Stock Location: *D-79-B-3*

Material Specification as Documented by Licensee Records: *A193-Gr. B7-STUD*
A194-Gr. 2H-NUT

Head Marking (Specification and Manufacturer): *B7 - STUD*
2H (-) - NUT

*Class Procurement Level: *6*

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

Vendor: *STRUTHERS*
PAVN-1195, #2

QA Requirements Imposed on Vendor: *NONE*

Licensee Representative:

Signature *W. S. Copeland* Date *12/7/87*

*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# *VEGP-027 (NO)*
(48100 - 00024724)

Fastener Description: *STUD, 5/8" - UNC 11 - 2A x 2 3/4"*

Description of Sample Stock Location: *C-62-F-18*

Material Specification as Documented by Licensee Records: *SA 193, Gr. B7*

Head Marking (Specification and Manufacturer): *V, B7, C1*

*Class Procurement Level: *2B*

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

Vendor: *Anchor/Darling*
PAV-28734, #84

QA Requirements Imposed on Vendor: *Specification, NCA 3800 Program,*
CMTR

Licensee Representative:

Signature *W.E. Gyselard* Date *12/7/87*

*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# *VEGP-028 (NO)*
(43080-00028221) stud 43080-28220 Nut
Fastener Description: *STUD, 1 3/4" - 12 X 10"*

Description of Sample Stock Location: *0-57-A stud*
0-57-A Nut

*Material Specification as Documented by Licensee Records: *SA-193, Gr. B7 STUD*

*Lead Marking (Specification and Manufacturer): *NR46240 ~~HT 888 94 58~~ STUD*
HT 888 94 58 B7
AV

*Class Procurement Level: *2B*

NUT NR-46240-ET 29538
HT 8067811-AN 2B

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

Vendor: *Westinghouse*
PAV-27380

QA Requirements Imposed on Vendor: *Specification, Original Equipmt. Supplier,*
CMATR

Licensee Representative:

Signature *W. F. Gabel* Date *12/7/87*

*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# *VEGP - 029 (No)*
(53050 - 00018397)

Fastener Description: *STUD, 5/8" - 11 x 2 1/2"*

Description of Sample Stock Location: *C-28-E-22*

Material Specification as Documented by Licensee Records: *A 193, Gr. B16*

Head Marking (Specification and Manufacturer): *JB16*

*Class Procurement Level: *6*

General Plant Application (e.g., Pressure Boundary, Structural) *NON - NUCLEAR SAFETY*
PRESSURE BOUNDARY

Vendor: *Ametek*
PAV-28114, #27

QA Requirements Imposed on Vendor: *NONE*

Licensee Representative:

Signature *W.E. Gyzelod* Date *12/7/07*

*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# *VEGP-030 (NO)*
(53040-00018382)

Fastener Description: *NUT, 3/4"-10*

Description of Sample Stock Location: *C-28-E10*

Material Specification as Documented by Licensee Records: *A194, Gr. 2H*

Head Marking (Specification and Manufacturer): *2H (-)*

*Class/Procurement Level: *6*

General Plant Application (e.g., Pressure Boundary, Structural) *NON-NUCLEAR SAFETY / Pressure Boundary*

Vendor: *Ametek*
PAV-28113, #54

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature *W.E. Gresh* Date *12/7/87*

*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# VEGP-031 (NO)
(53050-00018389)

Fastener Description: STUD, 3/4"-10 x 3 3/4" Long

Description of Sample Stock Location: C-28-E-16

Material Specification as Documented by Licensee Records: A193, Gr. B16

Head Marking (Specification and Manufacturer): JB16

*Class/Procurement Level: 6

General Plant Application (e.g., Pressure Boundary, Structural) non-nuclear safety
Pressure Boundary

Vendor: Ametek
PAV-28114, #13

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature W. E. Campbell Date 12/7/87

*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# *VEGP-032 (NO)* ^{WAC} *12/7/87*
(53020-00019332) UG019832)

Fastener Description: *BOLT, 1 7/8" - 8 UN - 2A x 7 1/2"*

Description of Sample Stock Location: *H-51-F*

Material Specification as Documented by Licensee Records: *SA 193, Gr. B7*

Head Marking (Specification and Manufacturer): *Σ B714106*

*Class/Procurement Level: *1B*

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

Vendor: *Westinghouse*
PAV-27380, #455

QA Requirements Imposed on Vendor: *specification, certificate holder,*
CMTR

Licensee Representative:

Signature *W. E. Grehel* Date *12/7/87*

*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# *VEGP-033 (NO)*
(53020-00013966)

Fastener Description: *BOLT, 1/4" - 8UN - 2A X 5"*

Description of Sample Stock Location: *C-26-V*

Material Specification as Documented by Licensee Records: *SA 193, Gr. B7*

Head Marking (Specification and Manufacturer): *DB7R74*

**Class/Procurement Level: *1B*

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

Vendor: *Westinghouse*
PAV-27380, #456

QA Requirements Imposed on Vendor: *specification, certificate holder*
CMTR

Licensee Representative:

Signature *W.B. Gzelad* Date *12/7/87*

*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# *VEGR - 034 (ND)*
(53020 - 00013968)

Fastener Description: *BOLT, 1" x 3/4"*

Description of Sample Stock Location: *C-26-V*

Material Specification as Documented by Licensee Records: *SA 193, Gr. B7*

Head Marking (Specification and Manufacturer): *S B7 13914*

*Class, Procurement Level: *1B*

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

Vendor: *Westinghouse*
PAV-27380, #458

QA Requirements Imposed on Vendor: *specification, Certificate Holder*
CMTR

Licensee Representative:

Signature *W. A. Gmelch* Date *12/7/87*

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

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

ENCLOSURE 4

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

FASTENER TESTING DATA SHEETS - PLANT VOGTLE UNIT 2

Fastener Testing Data Sheet

*Sample ID# PAYZ-PBTS0799

Fastener Description: STUD BOLT, CONTINUOUS THREAD, 7/8" X 17"

Description of Sample Stock Location:

BIN PHHOIA

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2 SA-193 GRADE B7 (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. B7 TRACE CODE: EBD MANUFACTURER T

**Class/Procurement Level: CLASS ASME CLASS 2
PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A & G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, 10 CFR PART 21
Licensee Representative:

Signature

John A. McCarty

Date 12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAYZ-PNUT007-2

NOTE: SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975, SIZE EXCLUSION OF ASME III 1974 EDITION WINTER 1975 ADDENDA FOR NC-2210. PROCEDURE AND ACCEPTANCE SUBARTICLE NC-2550, TEST TEMPERATURE 40° F OR LESS

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAYZ-PNUT0007-2

Fastener Description: NUT, HEAVY HEX, SEMI-FINISHED, 7/8"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC - 2H, TRACE CODE AND MANUFACTURER $\text{\textcircled{C}}$

**Class/Procurement Level: CLASS ASME SECTION III CLASS 2
PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A & G ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

NCA-3500, ANSI N45.2, 10 CFR PART 21

Licensee Representative:

Signature

Blair A. McCarty

Date 12-3-87

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

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

TO BE WORKED WITH SAMPLE ID # PAYZ PBTS0799

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THROUGH SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDENDA FOR NC-2610, PROCEDURE AND ACCEPTANCE SUBARTICLE NC-2560, TEST TEMPERATURE 40°F OR LESS IMPACT TESTING IS REQUIRED.

Fastener Testing Data Sheet

*Sample ID# PAY2-QBLT1031-1

Fastener Description: BOLT, HEX, ZINC PLATED, 1/2 X 1-1/2

Description of Sample Stock Location:

BIN AB06C

Material Specification as Documented by Licensee Records:

ASTM A-449 OR SAE J429 GRADE 5

Head Marking (Specification and Manufacturer):

3 lines spec
Manufacturer's Marking



**Class/Procurement Level: CLASS 01C

PROC LEVEL 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS (SAFETY RELATED, SEISMIC, STRUCTURAL)

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

STRUCTURAL ELECTRICAL ; HVAC GENERAL USE FASTENER

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 ; 10CFR PART 21

Licensee Representative:

Signature

Glenn A. McCarty

Date

12-6-87

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

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

SAMPLE ID# PAY2

TO BE WORKED WITH A Q NUT 0080-L

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0080-6

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCEK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS A/C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC. LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2 10 CFR PART 21
Licensee Representative:

Signature Alan A. McCarty

Date 12-3-87

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

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

FOR USE WITH SAMPLE ID # PAVZ-QBLTID31-1

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAVZ-DBLT2055

Fastener Description: BOLT, HEX, 7/8 x 2-3/4

Description of Sample Stock Location:

BIN ABO1B

Material Specification as Documented by Licensee Records:

FSTM A-325 TYPE 1

Head Marking (Specification and Manufacturer):

SPEC A325 MANUFACTURER MD

**Class/Procurement Level: CLASS OIC (SAFETY RELATED SEISMIC STRUCTURAL)

PROCURE-LEVEL NONE

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

STRUCTURAL

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

POUCHED AS "Q". ANSI N45.2 ? 10 CRIT PART 21

Licensee Representative:

Signature

Glenn A. McFarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID # PAVZ-PN5T0007-1

Fastener Testing Data Sheet

*Sample ID# PAYZ-PNLT0007-1

Fastener Description: NUT, HEAVY HEX, SEMI-FINISHED, 7/8"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC - 2H, TRACE CODE AND MANUFACTURER \oplus

**Class/Procurement Level: CLASS ASME SECTION III CLASS 2
PROC LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A I G ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, IDCFE PART 21

Licensee Representative:

Signature

Shirley A. McFarley

Date

12-3-87

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

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

TO BE WORKED WITH SAMPLE ID # PAYZ-QBLT2055

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDENDA RE NC-2610, PROCEDURE AND ACCEPTANCE SUBARTICLE - NC-2560, TEST TEMPERATURE 40°F OR LESS IMPACT TESTING IS REQUIRED.

Fastener Testing Data Sheet

*Sample ID# PAY2-QBLTD115-2

Fastener Description: BOLT HEX ZINC PLATED 1/2 X 2 1/4


Description of Sample Stock Location:

BIN CCRK73A

Material Specification as Documented by Licensee Records:

ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER 

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS) STRUCTURAL
Proc. Level 4A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 & 10 CFR PART 21

Licensee Representative:

Signature

John A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH ID# ^{PAY2-} QNUT 0080-3

Fastener Testing Data Sheet

*Sample ID# PAYZ-QNUT0080-3

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS DC (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 1 W CER PART 21
Licensee Representative:

Signature Shawn A. McCaskey Date 12-8-47

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

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

FOR USE WITH SAMPLE ID# PAYZ-QBLT0115-2

Fastener Testing Data Sheet

*Sample ID# PAVZ-PBTS04216

Fastener Description: STUD BOLT CONTINUOUS THREAD 1/2" x 2-3/4"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2 SA-193 GRADE B7 (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC: B7 TRACE CODE: KZ MANUFACTURER C

**Class/Procurement Level: ASME ^{Sec III} CLASS 2

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

PRESSURE BOUNDARY

Vendor:

HUB, INC.

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, 10 CFR PART 21
Licensee Representative:

Signature

Alexander A. McCauley

Date

12-3-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-PNUT0004-3

NOTE: SPECIAL REQUIREMENTS - ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SEE EXCLUSION OF ASME III 1974 EDITION WINTER 1975 ADDENDA FOR NC-2010. PROCEDURE AND ACCEPTANCE - SUBARTICLE NC.2580. TEST TEMPERATURE 40°F OR LESS.

Fastener Testing Data Sheet

*Sample ID# PAYZ-PNUT0004-3

Fastener Description: NUT HEAVY HEX SEMI FINISH 1/2"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. 2 H MANUFACTURER T

**Class/Procurement Level: ASME CLASS 2
PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A?G ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

NCA-3800, AWSI N45.2, 10CFR PART 21

Licensee Representative:

Signature Ken G. McCarty

Date 12-5-87

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

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

TO BE WIPED WITH SAMPLE ID# PAYZ-PBTS0426

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDEND. FOR NC-2610. PROC AND ACCEPTANCE SUBARTICLE NC-2580 TEST TEMPERAT. 40°F OR LESS IMPACT TESTING IS REQUIRED.

Fastener Testing Data Sheet

*Sample ID# PAYZ-QBLT0054-3

Fastener Description: BOLT, HEX, ZINC PLATED, 3/8 X 1-1/2

Description of Sample Stock Location: BIN CCRK35B

Material Specification as Documented by Licensee Records: ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer): MANUFACTURER'S Ⓢ

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL
PROC. LEVEL 4A. COMMERCIAL GRADE ~~IS~~ MANUFACTURED TO INDUSTRY STANDARD

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

STRUCTURAL; ELECTRICAL ? HVAC GENERAL USE FASTENER

Vendor: STEEL CITY BOLT AND SCREW

QA Requirements Imposed on Vendor: PURCHASED AS "Q" ANSI N45.2 ? 10 CFIF PART 21

Licensee Representative:

Signature William A. McCarty Date 12-3-87

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

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

TO BE WORKED WITH ID# QNLT0060-3

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAYZ-DBNUT0060-3

Fastener Description: NUT HEX ZINC PLATED 3/8"-16

Description of Sample Stock Location: BN AB09D

Material Specification as Documented by Licensee Records: ASTM A 563 GRADE A

Head Marking (Specification and Manufacturer): MANUFACTURER'S T

**Class/Procurement Level: CLASS OIC (SAFETY RELATED SEISMIC STRUCTURAL)
PROC. LEVEL 4A (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)

General Plant Application (e.g., Pressure Boundary, Structural) ^{JAC 4/8/87}
STRUCTURAL ELECTRICAL HVAC GENERAL USE FASTENER

Vendor: A & G ENGINEERING CO. II INC.

QA Requirements Imposed on Vendor:
PURCHASED AS "C" ANSI NAS. 2 10 CFE PART 21

Licensee Representative:

Signature Glenn A. McFarley Date 12-5-87

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

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

TO BE WORKED WITH SAMPLE ID# PAYZ-DBNUT0054-3

Fastener Testing Data Sheet

*Sample ID# PAV2-QBLT0054-1

Fastener Description: BOLT HEX ZINC PLATED 3/8 X 1-1/2

Description of Sample Stock Location:

BIN CCRK35B

Material Specification as Documented by Licensee Records:

ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S ID

**Class/Procurement Level: PROCUREMENT LEVEL 4A (COMMERCIAL GRADE MANUF. TO INDUSTRY STANDARDS); PROJECT CLASS DIC (SAFETY RELATED, SEMIC, STRUCTURAL)

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

ELECTRICAL, HVAC GENERAL USE FASTENER (STRUCTURAL)

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2; NDCFR PART 21

Licensee Representative:

Signature

John C. McCarty

Date

12-6-87

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

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

TO BE WORKED WITH SAMPLE ID# ^{PAV2-} QNUT0060-1

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0060-1

Fastener Description: NUT HEX ZINC PLATED 3/8" - 16

Description of Sample Stock Location:

BIN ABO9D

Material Specification as Documented by Licensee Records:

ASTM A 563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS D1C (SAFETY RELATED SEISMIC STRUCTURAL)
PRDC. LEVEL 4A. COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARD

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

STRUCTURAL ELECTRICAL ? HVAC GENERAL USE FASTENER

Vendor:

A & G ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 ? 10 CFR PART 21

Licensee Representative:

Signature

Glen G. McCarty

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-QBLT0054-1

Fastener Testing Data Sheet

*Sample ID# PA12-QNUTO100

Fastener Description: NUT, HEX, ZINC PLATED, 3/4" Dia. ^{W/Label}

Description of Sample Stock Location: BIN CCRK50D

Material Specification as Documented by Licensee Records:
A563 GRA 8633

Head Marking (Specification and Manufacturer): Manufacture MK * C
UNC THREAD A563 GRA 8633

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC STRUCTURAL)
Proc 4A Commercial Grade Manufactured to Industry Standards

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL ELECTRICAL * HVAC USE FASTENER

Vendor:
A & G ENGINEERING CO. II INC.

QA Requirements Imposed on Vendor:
PURCHASE AS "Q" ANSI N45.2 & 10CFR PART 21

Licensee Representative:

Signature Glen A. McCarley Date 12-6-67

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

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

SAMPLE ID # PA12-
TO BE USED WITH A QBLT0171

Fastener Testing Data Sheet

*Sample ID# FAV2-QBLT0171

Fastener Description: BOLT, HEX, ZINC PLATED, 3/4" X 2 1/2"

Description of Sample Stock Location: BIN CCRK22A

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

Head Marking (Specification and Manufacturer):

Manufacturer: ^{AREA C}ASTM-A-307 GRADE A**Class/Procurement Level: CLASS OIC (SAFETY RELATED), SEISMIC STRUCTU.
Proc. Level 4A Commercial Grade Manufactured to Industry StandardsGeneral Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL ELECTRICAL ; HVAC GENERAL USE FASTENER

Vendor: Hub, INC

QA Requirements Imposed on Vendor:

PURCHASE AS "Q" ANSI N45.2 ; 10 CFR PART 21

Licensee Representative:

Signature Glenn A. McCaskey Date 12-8-87

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

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

TO BE USED WITH QNUT 0100

Fastener Testing Data Sheet

*Sample ID# PAVZ-OBLT10ZZ-Z

Fastener Description: BOLT, HEX, ZINC PLATED, 3/8-1-1/2

Description of Sample Stock Location: BIN ABOIC

Material Specification as Documented by Licensee Records:

SAE J429 GRADE 5

Head Marking (Specification and Manufacturer):

SPEC 1 MANUFACTURED MD

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL)
PRC. LEVEL 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A & G ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2 & 10 CFR PART 21

Licensee Representative:

Signature Glen A. McCaskey Date 12-6-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-OBLT0000-5

Fastener Testing Data Sheet

*Sample ID# PAV2-QNUT0060-5

Fastener Description: NUT HEX ZINC PLATED 3/8"-16

Description of Sample Stock Location:

BIN AB09D

Material Specification as Documented by Licensee Records:

ASTM A563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S ^{MRT}

**Class/Procurement Level: CLASS OIC (SAFETY RELATED SEISMIC STRUCTURAL)
Proc. LEVEL 4A (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARD)

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor:

A & G ENGINEERING CO. II INC.

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 & 10 CFR PART 21

Licensee Representative:

Signature

Glenn A. McCaskey

Date

12-8-87

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

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

TO BE WORKED WITH ID# QBLT1022-2

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAVZ-QBLT0112

Fastener Description: BOLT, HEX, ZINC PLATED, 1/2 x 1-1/2

Description of Sample Stock Location:

BIN 2CRK87B

Material Specification as Documented by Licensee Records:

ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S ^{ML} MD

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURE)
Proc. LEVEL 4A COMMERCIAL GRADE MANUFACTURED

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

STRUCTURAL ELECTRICAL ? HVAC GENERAL USE FASTENER

Vendor:

A S B ENGINEERING CO INC.

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 ; 10CFR PART 21
Licensee Representative:

Signature

Glenn C. McCarty

Date

12-3-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-QNUT0000-1

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAYZ-QNUT0080-1

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS A/C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2 I 10 CFR PART 21
Licensee Representative:

Signature

Blair A. McCarty

Date

12-3-87

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

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

FOR USE WITH SAMPLE ID# PAYZ-QBLT011Z

Fastener Testing Data Sheet

*Sample ID# PAVA-QBLT0115-3

Fastener Description: BOLT HEX ZINC PLATED 1/2 X 2 1/4

Description of Sample Stock Location: BIN CCRK 73A

Material Specification as Documented by Licensee Records:
SAE 429 GRADE 2 OR ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

NONE PER SAE 429 GRADE 2

**Class/Procurement Level: CLASS OR (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC. LEVEL 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARD

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSIN 45.2 & 10 CFR PART 21

Licensee Representative:

Signature

Dennis A. McCaskey

Date

12-8-47

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

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

SAMPLE ID# PAVA-
TO BE WORKED WITH A NUT 0080-4

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0080-4

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS A/C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC. LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2 1/2" DIA PART 21
Licensee Representative:

Signature

Shawn A. McCaskey

Date

12-4-87

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

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

FOR USE WITH SAMPLE ID# PAVZ-QBLT0115-3

Fastener Testing Data Sheet

*Sample ID# *PAV2 - PBYS 0675*

Fastener Description: *BOLT, STUD, continuous thread 3/4 X 8"*

Description of Sample Stock Location: *BIN PW02C*

Material Specification as Documented by Licensee Records:

SA-193 GRADE B7 ASME III CLASS 2

Head Marking (Specification and Manufacturer): *MANUFACTURE'S HT# V6 MK# B7 C*

**Class/Procurement Level: *ASME SEC III CLASS 2*

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

PRESSURE BOUNDARY

Vendor:

Hub, INC.

(A) Requirements Imposed on Vendor:

ANSI N45.2, 10 CFR PART 21, NCA-3800

Licensee Representative:

Signature

Glen A. McCaley

Date

12-3-57

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

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

*SAMPLE ID# PAV2 -
TO BE USED WITH ~~PNUT~~ 0006*

12/8/87

Special Requirements: Article NC-2000 OF ASME SECTION III 1974 EDITION with Addenda thru summer 1975. Size exclusion of ASME III 1974 Edition, winter 1975 Addend for NC-2610. procedure and acceptance subarticle NC-2580 Test Temperature 40°F or less

Fastener Testing Data Sheet

*Sample ID# PAV2-PNUT0006

Fastener Description: NUT, Hex, Semi-FINISHED, 3/4"

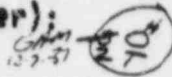
Description of Sample Stock Location: BIN PHH01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (see notes below)

Head Marking (Specification and Manufacturer):

SPECH 2H, HT * ELC



**Class/Procurement Level: Proc. level 2A

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

Pressure Boundary

Vendor:

A & G ENGINEERING CO. II INC.

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, 10 CFR PART 21

Licensee Representative:

Signature

Alexander McCarley

Date

12-4-87

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

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

TO BE USED WITH PBT50675

Special Requirements Article NC-2000 of ASME Section III 1974 Edition
with Addenda thru Summer 1975. See exclusion of ASME III 1975
Edition winter 1975 addenda for NC-2610. Procedure and acceptance
sub-article NC-2580. NC-2530 test temperature 40°F or less
impact testing is required.

Fastener Testing Data Sheet

*Sample ID# PAVZ-QBLTZ004

Fastener Description: BOLT, HEX, H.S., 1/2"-13 X 3-1/2"

Description of Sample Stock Location:

BIN CCEK59C

Material Specification as Documented by Licensee Records:

FBTM A-325 TYPE 1

Head Marking (Specification and Manufacturer):

SPEC. A-325

MANUFACTURER ND

**Class/Procurement Level: CLASS C/C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PRC. LEVEL 3A.

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

STRUCTURAL

Vendor:

HARDWARE SPECIALTIES

QA Requirements Imposed on Vendor:

QUALIFIED AS "Q" ANSI NAS.2 § 10 (P2 PART 2)

Licensee Representative:

Signature

Ann A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-PNUT004-1

Fastener Testing Data Sheet

*Sample ID# PAVZ-PNUT0004-1

Fastener Description: NUT HEAVY HEX SEMI FINISH 1/2"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. 2 H MANUFACTURER T

**Class/Procurement Level: ASME CLASS 2
PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A ? G ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

NCA-3800, AWSI N45.2, 10 CFR PART 21

Licensee Representative:

Signature

Shen A. McCarty

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID # PAVZ-QBLT2004

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDENDUM FOR NC-2610. PROC AND ACCEPTANCE SUBARTICLE NC-2580 TEST TEMPERATURE 40°F OR LESS IMPACT TESTING IS REQUIRED.

TO BE USED WITH QBLT 2004

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAYZ-QBLT005A-2

Fastener Description: BOLT, HEX, ZINC PLATED, 7/8 x 1-1/2

Description of Sample Stock Location: BIN CCEK35B

Material Specification as Documented by Licensee Records:

ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S - J

**Class/Procurement Level: CLASS OIL (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC LEVEL AA (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: STEEL CITY BOLT AND SCREW

QA Requirements Imposed on Vendor:

PURCHASED "Q" ANSI N45.2 ? 10 CFR PART 21

Licensee Representative:

Signature

Glen A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID* PAYZ-QNUT0060-2

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0060-2

Fastener Description: NUT, HEX, ZINC PLATED, 3/8"-16

Description of Sample Stock Location:

BIN ABC09D

Material Specification as Documented by Licensee Records:

ASTM A 563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS 4L (SAFETY RELATED, SEISMIC, STRUCTURAL)
PRC. LEVEL 4A (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A & B ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI NAS.2 ? 10 CFR PART 21
Licensee Representative:

Signature Glenn A. McLain

Date 12.3.87

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

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

TO BE WORKED WITH SAMPLE ID # PAVZ-QBLT0054-2

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAV2-QBLT0142-1

Fastener Description: BOLT, HEX, ZINC PLATED, 5/8 X 2

Description of Sample Stock Location:

BN ABOIF

Material Specification as Documented by Licensee Records:

ASTM A 307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURED TB

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC. LEVEL 3A.

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE

Vendor:

TEXAS BOLT COMPANY

QA Requirements Imposed on Vendor:

POURCHASED AS "D" ANSI NAS. 2 & ID CAP-PART 21

Licensee Representative:

Signature

Gene A. McFarley

Date

12-3-87

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

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

TO BE WORKED WITH SAMPLE ID. # PAV2-QNUT009D-1

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0090-1

Fastener Description: NUT, HEX, 5/8", UNC THREAD, ZINC PLATED

Description of Sample Stock Location:

BIN AB09A

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

NONE

**Class/Procurement Level: CLASS D1C (SAFETY RELATED SEISMIC, STRUCTURAL)
PROC. LEVEL 3 AA (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE

Vendor:

A & G ENGINEERING CO. II INC.

QA Requirements Imposed on Vendor:

12/8/87
PURCHASED AS "D" ANSI NAS.2 § 10 CFR PART 21
Licensee Representative:

Signature

Alan A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID. # PAVZ-QBLT0142-1

*Sample ID# PAV2 - QBLT0115 - 4

Fastener Description: BOLT HEX BWC

Description of Sample Stock Location: BIN CCRK 737

Material Specification as Documented by Licensee Records:
SAE 429 GRADE 2 OR ASTM A 307 GRADE A

Head Marking (Specification and Manufacturer):
NONE PER SAE 429 GRADE 2

**Class/Procurement Level: CLASS OR (SAFETY RELATED, SERVIC, STRUCTURAL)
PROC. LEVEL 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARD

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor:
STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:
PURCHASED AS "Q" ANSIN 45.2 & 10 CFR PART 21

Licensee Representative:

Signature Glenn A. McLaughlin Date 12-8-87

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

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

TO BE WORKED WITH A QNUT00805
SAMPLE ID# PA12

Fastener Testing Data Sheet

*Sample ID# PAVZ-QNUT0080-5

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS A/C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "G" ANSI N45.2 IF 10 CFR PART 21
Licensee Representative:

Signature Shirley A. Casley

Date 12-8-87

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

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

FOR USE WITH SAMPLE ID# PAVZ-QBLT0115-4

Fastener Testing Data Sheet

*Sample ID# PAY2-0BLT0115-E

Fastener Description: BOLT HEX ZINC PLATED 1/2 X 2 1/4

Description of Sample Stock Location:

BIN CCRK73A

Material Specification as Documented by Licensee Records:

ASTM A-307 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTUREE S

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL)
Proc. Level 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS

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

STRUCTURAL ELECTRICAL HVAC GENERAL USE FASTENER

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 & 10 CFR PART 21

Licensee Representative:

Signature

Shawn A. McCarley

Date

12-3-87

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

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

TO BE WORKED WITH ID# ^{PAY2-} QNUT0080-2

Fastener Testing Data Sheet

*Sample ID# PAVZ-0NUT0080-1

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location:

BIN CCK72D

Material Specification as Documented by Licensee Records:

ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer):

MANUFACTURER'S T

**Class/Procurement Level: CLASS DC (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROC LEVEL 3A

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 10 CFR PART 21
Licensee Representative:

Signature Glenn A. McCarty Date 12-8-37

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

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

FOR USE WITH SAMPLE ID# PAVZ-0BLT0115-1

Fastener Testing Data Sheet

*Sample ID# PAYZ-PBTS1060

Fastener Description: STUD BOLT, CONTINUOUS THREAD, 1" x 6"

Description of Sample Stock Location:

BIN PSS02A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2 SA-193 GRADE B7 (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. B7 TRACE CODE EGJ MANUFACTURER T

**Class/Procurement Level: CLASS-ASME CLASS 2 (ASME SECTION III)
PROCUREMENT LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

L.F.G. ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

NCA-3800 ANSI N45.2 1D CR2 PART 2/

Licensee Representative:

Signature

Glen A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID # PAYZ-PNUT0010

Special Requirements: Article NC-2000 of ASME Section III 1974 Edition with Addenda thru Summer 1975. Size exclusion of ASME III 1974 Edition, under 1975 addenda for NC-2610.

Procedure and acceptance subarticle NC-2580, Test Temperature 40° F unless.

Fastener Testing Data Sheet

*Sample ID# PAVZ-PNUT0010

Fastener Description: NUT, HEAVY HEX, SEMI FINISH, 1"

Description of Sample Stock Location:

BIN PRO1A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2 SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC 2 H TRACE CODE EGK MANUFACTURER T

**Class/Procurement Level: ASME CLASS 2

PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, 10 CFR PART 21

Licensee Representative:

Signature Allen A. McCarley

Date 12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-PBTS1060

NOTE: SPECIAL REQUIREMENTS - ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU 1975 SUMMER. SIZE EXCLUSION OF ASME III 1974 EDITION WINTER 1975 ADDENDA FOR NC-2610. PROCEDURE AND ACCEPTANCE SUBARTICLE NC-2580 TEST TEMPERATURE 40° FOR LESS. IMPACT TESTING IS REQUIRED.

Fastener Testing Data Sheet

*Sample ID# PAVZ-PBTS0535

Fastener Description: BOLT STUD 5/8"-11 X 3-3/4"

Description of Sample Stock Location:

BIN PAA01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-193 GRADE BB (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC 88 TRACE CODE DEJ MANUFACTURER

**Class/Procurement Level: ASME III CLASS 2

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

PRESSURE BOUNDARY

Vendor:

A & G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

NCA-3800 ANSI NAS. 2 IDCFR PART 2.1

Licensee Representative:

Signature

Alan A. McCarty

Date

12-3-87

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

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

TO BE MARKED WITH ID # PAVZ-PBUT0005

NOTE: SPECIAL REQUIREMENTS ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THROUGH SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION WINTER 1975 ADDENDA FOR NC-2610 PROCEDURE AND ACCEPTANCE SUBARTICLE NC.2586. TEST TEMPERATURE 40° F. OR LESS.

Fastener Testing Data Sheet

*Sample ID# PAV2-PNUTC005

Fastener Description: NUT, HEX, SEMI-FINISHED, 5/8"

Description of Sample Stock Location: BIN LOC. PGG02A

Material Specification as Documented by Licensee Records:

SA-194 GRADE 2H ASME SEC. III CLASS 2

Head Marking (Specification and Manufacturer):

MANUFACTURE MK# $\begin{matrix} 10 \\ 72 \end{matrix}$ AT# ERS

**Class/Procurement Level:

CLASS 2 ASME SEC. III

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

PRESSURE BOUNDARY

Vendor:

A & G ENGINEERING Co. II INC.

QA Requirements Imposed on Vendor:

Purchase as "Q" ANSI N45.2 ; 10 CFR, Part 21

Licensee Representative:

Signature

Blair A. McCarley

Date

12-3-37

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

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

TO BE USED WITH ID# PBYS 0535

Special Requirements: Article NC-2000 of ASME Section III 1974 Edition with ADDENDA June Summer 1975. See discussion of ASME III 1974 edition, winter 1975 addenda for NC-2610 Procedure and acceptance subarticle NC-2580 Test temperature 40°F or less. IMPACT TEST IS REQUIRED

Fastener Testing Data Sheet

*Sample ID# PAVZ-QBLT1022-1

Fastener Description: BOLT, HEX, ZINC PLATED, 3/8 x 1-1/2

Description of Sample Stock Location:

BIN ~~ABD1C~~ ^{ABD1C} ~~12/18/87~~ ^{12/18/87}

Material Specification as Documented by Licensee Records:

~~SAE J 429~~ ^{SAE J 429} GRADE 5

Head Marking (Specification and Manufacturer):

SPEC - 1 MANUFACTURER NO

**Class/Procurement Level: CLASS D1C (SAFETY RELATED SEISMIC STRUCTURAL)
PEC LEVEL 4A COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS

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

STRUCTURAL ELECTRICAL ? ~~WAS~~ GENERAL USE FASTENER

Vendor: AFG ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

PURCHASED AS "B" ANSI A45.2 ? ID CASE-PART 21
Licensee Representative:

Signature Steven A. McCauley

Date 12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-QNUT0060-4

Fastener Testing Data Sheet

*Sample ID# PAV2-QNUT0060-4

Fastener Description: NUX HEX ZINC PLATED 3/8"-16

Description of Sample Stock Location: BIN ABO9D

Material Specification as Documented by Licensee Records:
ASTM A563 GRADE AHead Marking (Specification and Manufacturer):
MANUFACTURER'S T**Class/Procurement Level: CLASS OIC (SAFETY RELATED SEISMIC STRUCTURAL)
Proc. LEVEL 4A (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL ELECTRICAL; HVAC GENERAL USE FASTENER

Vendor: A F G ENGINEERING Co., II INC.

QA Requirements Imposed on Vendor:
PURCHASED AS "Q" ANSI N45.2 ; 10 CFR PART 21

Licensee Representative:

Signature

Gene A. McCarty

Date

12.8.87

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

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

TO BE WORKED WITH ID# QBLT1082-1

Fastener Testing Data Sheet

*Sample ID# *PAV2-QBLT2054*

Fastener Description: *BOLT, HEX, 7/8 X 2-1/2*

Description of Sample Stock Location:

BIN CCRK57B

Material Specification as Documented by Licensee Records:

ASTM A-325 TYPE 1

Head Marking (Specification and Manufacturer):

SPEC A325 MANUFACTURER MD

**Class/Procurement Level: *CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL)*
PROC LEVEL AA (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARD)

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

STRUCTURAL

Vendor: *A & G ENGINEERING CO II INC*

QA Requirements Imposed on Vendor:

PURCHASED AS "D" ANSI N45.2 ? 10 CFR PART 21

Licensee Representative:

Signature *Glenn A. McCaskey*

Date *12-3-37*

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

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

TO BE WORK WITH SAMPLE ID # PAV2-PAUT0007-2

Fastener Testing Data Sheet

*Sample ID# PAYZ-PNUT0007-2

Fastener Description: NUT, HEAVY HEX, SEMI-FINISHED, 7/8"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. 2H, TRACE CODE AMD MANUFACTURER $\text{\textcircled{A}}$

**Class/Procurement Level: CLASS ASME SECTION III CLASS 2
PROC LEVEL 2A

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

PRESSURE BOUNDARY ~~W/12/87~~

Vendor:

A & G ENGINEERING CO. II INC

QA Requirements Imposed on Vendor:

NCA-3800, ANSI N45.2, 10 CFR PART 21

Licensee Representative:

Signature

Henry A. McCarty

Date

12-3-87

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

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

TO BE WORKED WITH SAMPLE ID # PAYZ-0BLTZ05A

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDENDA FOR NC-2610, PER AND ACCEPTANCE SUBARTICLE NC-2550, TEST TEMPERATURE 40°F OR LESS. IMPACT TESTING IS REQUIRED.

Fastener Testing Data Sheet

*Sample ID# PAVZ-QBLT1033-1

Fastener Description: BOLT, HEX, ZINC PLATED, 1/2 x 2

Description of Sample Stock Location:

BIN ABD4B

Material Specification as Documented by Licensee Records:

ASTM A449 or SAE J429 GRADE 5

Head Marking (Specification and Manufacturer):

SPEC 1 MANUFACTURER LE

**Class/Procurement Level: CLASS A/C (SAFETY CRATED, SEISMIC, STRUCTURAL) PROCURE. LEVEL 3A.

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

STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor:

A & G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 ? 10 CPF PART 21

Licensee Representative:

Signature

Glenn A. McCarley

Date

12-8-87

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

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

TO BE WORKED WITH SAMPLE ID # PAVZ-LWNU70080-7

Fastener Testing Data Sheet

*Sample ID# PAYZ-QNUT0080-7

Fastener Description: NUT, HEX, ZINC PLATED, 1/2"-13

Description of Sample Stock Location: BIN CCK72D

Material Specification as Documented by Licensee Records: ASTM A-563 GRADE A

Head Marking (Specification and Manufacturer): MANUFACTURER'S T

**Class/Procurement Level: CLASS OIC (SAFETY RELATED, SEISMIC, STRUCTURAL)
PRDC LEVEL 3A

General Plant Application (e.g., Pressure Boundary, Structural)
STRUCTURAL ELECTRICAL & HVAC GENERAL USE FASTENER

Vendor: A I G ENGINEERING CO II INC

QA Requirements Imposed on Vendor:
PURCHASE AS "D" ANSI NAS.2 & ID CFR PART 21

Licensee Representative:

Signature Henry C. McCaskey Date 12-3-87

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

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

TO BE WORKED WITH SAMPLE ID # PAYZ-DBLTID33-1

Fastener Testing Data Sheet

*Sample ID# - PAVZ-QBLT3012

Fastener Description: BOLT, HEAVY HEX, 1/2 X 3

Description of Sample Stock Location:

BIN AAO6E
Material Specification as Documented by Licensee Records:

ASTM A-490
Head Marking (Specification and Manufacturer):

SPEC A490 MANUFACTURED MD

**Class/Procurement Level: CLASS OIL (SAFETY RELATED, SEISMIC, STRUCTURAL)
PEOL LEVEL 4A (COMMERCIAL GRADE MANUFACTURED TO INDUSTRY STANDARDS)

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

STRUCTURAL

Vendor:

STEEL CITY BOLT & SCREW

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 ? ID CF. ? PAVZ 21
Licensee Representative:

Signature

Glenn A. McCarley

Date 12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-F1UT0004-7

Fastener Testing Data Sheet

*Sample ID# PAVZ-PNUT0004-2

Fastener Description: NUT HEAVY HEX SEMI FINISH 1/2"

Description of Sample Stock Location:

BIN PGG01A

Material Specification as Documented by Licensee Records:

ASME SECTION III CLASS 2, SA-194 GRADE 2H (SEE NOTE BELOW)

Head Marking (Specification and Manufacturer):

SPEC. 2 H MANUFACTURER T

**Class/Procurement Level: ASME CLASS 2
PROC. LEVEL 2A

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

PRESSURE BOUNDARY

Vendor:

A ? G ENGINEERING CO II INC.

QA Requirements Imposed on Vendor:

NCA-3800, WSI N45.2, IDCFIL PART 21

Licensee Representative:

Signature

Gene A. McCartyDate 12-8-87

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

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

TO BE WORKED WITH SAMPLE ID# PAVZ-OBLT301Z

SPECIAL REQUIREMENTS: ARTICLE NC-2000 OF ASME SECTION III 1974 EDITION WITH ADDENDA THRU SUMMER 1975. SIZE EXCLUSION OF ASME III 1974 EDITION, WINTER 1975 ADDENDA FOR NC-2610. PROC AND ACCEPTANCE SUBARTICLE NC-2580 TEST TEMPERATURE 40°F OR LESS IMPACT TESTING IS REQUIRED.

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAV 2-2

Fastener Description: BOLT, HEAVY HEX, 1 1/2 x 3

Description of Sample Stock Location: INGALL'S BOLT SHED, CONTAINMENT
BOLT SECTION

Material Specification as Documented by Licensee Records:

ASTM A490

Head Marking (Specification and Manufacturer):

SPEC. A490 MANUFACTURER LE

**Class/Procurement Level: CLASS D1C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROCUREMENT LEVEL SYSTEM NOT ESTABLISHED AS OF PURCHASE DATE.

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

CONTAINMENT BUILDING STRUCTURAL

Vendor:

MOSHER INGALL'S

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI W45.2 & 10 CFR PART 21

Licensee Representative:

Signature Glenn A. McCaskey Date 12-10-87

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

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

TO BE WORKED WITH SAMPLE ID # PAV 2-1

Attachment 1

Fastener Testing Data Sheet

*Sample ID# PAV 2 - 1

Fastener Description: NUT, HEAVY HEX, SEMI FINISH, 1/8


Description of Sample Stock Location:

INGALL'S SHOP BOLT STORAGE

Material Specification as Documented by Licensee Records:

ASTM A 194

Head Marking (Specification and Manufacturer):

SPECIFICATION 2H MANUFACTURER 

**Class/Procurement Level: CLASS D1C (SAFETY RELATED, SEISMIC, STRUCTURAL)
PROCUREMENT LEVEL SYSTEM NOT ESTABLISHED AS OF PURCHASE DATE.

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

STRUCTURAL

Vendor:

TRIANGLE FASTENER

QA Requirements Imposed on Vendor:

PURCHASED AS "Q" ANSI N45.2 & 10 CFR PART 21

Licensee Representative:

Signature

Alan A. McCarty

Date

12-10-87

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

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

TO BE WORKED WITH SAMPLE ID# PAV 2-2.

ENCLOSURE 5

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

DATA SUMMARY SHEETS - PLANT HATCH UNITS 1 and 2

TABLE I - RESULTS OF HARDNESS, TENSILE, AND CHEMICAL TESTING OF FASTENER COMPONENTS FROM PLANT HATCH.

GPC SAMPLE I.D.	HARDNESS VALUES	U.T.S. (KSI)	0.2% Y.S. (KSI)	CHEMICAL ANALYSES								
				C	Mn	P	S	Si	Mo	Cr	OTHER	
53020 - 00047458 (1)	85, 87 RB			.101		.024	.016					
53040 - 00037106 (1)	75, 76 RB			.309		.027	.013					
53020 - 00053423 (2)	88, 86 RB	A		.063	.843	.009	.018	.537			18.35	8.34 Ni
53040 - 00045997 (2)	30, 29 RC			.414		.019	.015					
53050 - 00040953 (3)	85, 87 RB	104	69.5	.067	1.70	.013	.022	.395			18.57	8.21 Ni
53040 - 00046002 (3)	34, 32 RC			.431		.024	.019					
53020 - 00030300 (4)	28, 29 RC	A		.383	1.86	.026	.013					
53040 - 00046907 (4)	31, 32 RC			.389	.937	.021	.022					

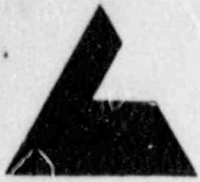
LAW ENGINEERING

JOB NO. AH11327 SHEET 1 OF 7

JOB NAME GPC-PLANT HATCH

BY _____ DATE _____

CHECKED BY _____ DATE _____



LAW ENGINEERING

JOB NO. AM11327 SHEET 2 OF 7
 JOB NAME GPC - PLANT HATCH
 BY _____ DATE _____
 CHECKED BY _____ DATE _____

I.V.	HARNNESS	U.T.S.	0.2%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
53040- 00046005 (5)	29,30RC			.446		.025	.023				
53020- 00036210 (5)	33,35RC	167	156	.511	.916	.019	.010		.254	1.05	
53050- 00034577 (6)	25,27RC	135	117	.433	.887	.009	.011	.226	.187	.912	
53040- 00046003 (6)	26,27RC			.432		.025	.028				
53020- 00048838 (7)	31,32RC	140	112	.310		.019	.017				
53040- 00046001 (7)	29,30RC			.421		.019	.028				
53050- 00046939 (8)	20,20RC	153	132	.425	.884	.023	.014	.265	.201	.963	
53040- 00046001 (8)	30,30RC			.453		.025	.019				
53020- 00029637 (9)	28,28RC	A		.401	.786	.028	.024				

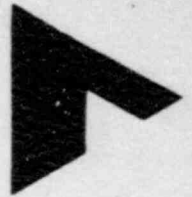
I.D.	HARDNESS	U.T.S.	0.2%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
53040- 00046001 (9)	29,30RC			.444		.024	.014				
53050- 00029300 (10)	20,20RC			.422	.877	.019	.017	.211	.204	.925	
53040- 00001155 (10)	25,27RC			.433		.026	.022				
53020- 00000584 (11)	29,30RC			.338	1.06	.026	.011				
53040- 00001154 (11)	27,26RC			.449		.019	.023				
53020- 00048790 (12)	37,37RC	180	167	.363	.961	.017	.008	.216	.505	.513	
53040- 00046001 (12)	27,30RC			.421		.023	.021				
53020- 00048659 (13)	35,35RC	172	168	.385	.580	.022	.018	.204	.170	.249	
53040- 00046001 (13)	30,30RC			.419		.022	.028				



LAW ENGINEERING

JOB NO AM11327 SHEET 3 OF 7
 JOB NAME GPC-RANT HAIR
 BY _____ DATE _____
 CHECKED BY _____ DATE _____

I.D.	HARDNESS	U.T.S.	B.Z.%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
53020 - 00038303 (14)	88,91 RB	95.5	49.7	.419		.030	.026				
53040 - 00038128 (14)	92,94 RB			.239		.022	.017				
53050 - 00045412 (15)	23,24 RC	143	125	.421	.882	.023	.020	.262	.197	.957	
53040 - 00046934 (15)	30,30 RC			.449		.026	.016				
53050 - 00030494 (16)	25,25 RC	147	136	.403	.765	.026	.008	.225	.207	1.07	
53040 - 00046004 (16)	30,30 RC			.454		.023	.016				
53020 - 00048658 (17)	35,35 RC	A		.448	.594	.021	.011	.243	.181	.324	
53040 - 00048701 (17)	29,30 RC			.432		.024	.017				
53020 - 00029594 (18)	28,30 RC	168	158	.409	1.35	.030	.011				



LAW ENGINEERING

JOB NO. AM11327 SHEET 4 OF 7
 JOB NAME GPC-RANT HATCH
 BY _____ DATE _____
 CHECKED BY _____ DATE _____

I.D.	HARDNESS	U.T.S.	0.2%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
53040- 00048701 (18)	32,33RC			.420		.021	.014				
53050- 00005605 (19)	24,24RC	147	126	.461	.708	.022	.010	.265	.233	.805	
53040- 00040635 (19)	29,31RC			.429		.024	.023				
53020- 00038322 (20)	28,30RC	131	85	.423	.659	.024	.021				
53040- 00046005 (20)	27,30RC			.439		.025	.023				



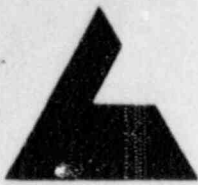
LAW ENGINEERING

JOB NO AM11327 SHEET 5 OF 7

JOB NAME GPC-RAST HATCH

BY _____ DATE _____

CHECKED BY _____ DATE _____



LAW ENGINEERING

JOB NO AM11327 SHEET 6 OF 7

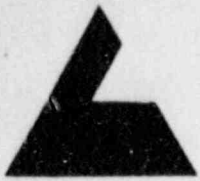
JOB NAME GPC-PLANT HATCH

BY _____ DATE _____

CHECKED BY _____ DATE _____

TABLE I (SUPPLEMENT A) - RESULTS OF ALTERNATE METHOD OF TENSILE TESTING: CORE HARDNESS

SAMPLE IDENTIFICATION	HARDNESS	
	MID-RADIUS	CORE
53020-00053423 (2)	86, 88, 87, 87 RB	86 RB
53020-00030300 (4)	27, 27, 28, 27 RC	27 RC
53020-00029637 (9)	27, 28, 28, 29 RC	27 RC
53020-00048658 (17)	33, 34, 34, 33 RC	33 RC



LAW ENGINEERING

JOB NO AM11327 SHEET 7 OF 7

JOB NAME GPC-PLANT HATCH

BY _____ DATE _____

CHECKED BY _____ DATE _____

TABLE I (SUPPLEMENT B) - ELONGATION VALUES OF SAMPLE FASTENERS FROM PLANT HATCH.

GPC SAMPLE IDENTIFICATION	PERCENT ELONGATION
53050 - 00040953 (3)	41
53020 - 00036210 (5)	16
53050 - 00034577 (6)	20
53020 - 00048838 (7)	16
53050 - 00046939 (8)	21
53020 - 00048790 (12)	15
53020 - 00048659 (13)	15
53020 - 00038303 (14)	22
53050 - 00045412 (15)	18
53050 - 00030494 (16)	18
53020 - 00029594 (18)	14
53050 - 00005605 (19)	16
53020 - 00038322 (20)	14

ENCLOSURE 6

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

DATA SUMMARY SHEETS - PLANT VOGTLE UNIT 1

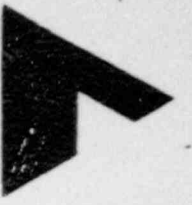
TABLE III - RESULTS OF HARDNESS, TENSILE, AND CHEMICAL TESTING OF FASTENER COMPONENTS FROM PLANT VOGTLE OPERATIONS.

GPC SAMPLE I.D.	HARDNESS VALUES	U.T.S. (Ksi)	0.2% Y.S. (Ksi)	CHEMICAL ANALYSES										
				C	Mn	P	S	Si	Mo	Cr	OTHER			
VEGP-001 (STUD)	25, 26 RC	139	119	.412	1.00	.025	.011	.293	.224	1.05				
VEGP-001 (NUT A)	29, 30 RC			.433		.024	.017							
VEGP-001 (NUT B)	27, 30 RC			.447		.021	.012							
VEGP-002	30, 33 RC	164	123	.060	.269	.017	.014	.207	1.24	14.01	24.48 Ni, 2.07 Ti			
VEGP-003	89, 90 RB			.058	1.59	.009	.017	.543	2.30	16.54	.171 V, .0011 B, 12.14 Ni			
VEGP-004	29, 32 RC			.419		.023	.023							
VEGP-005	28, 30 RC			.430		.016	.017							
VEGP-006	30, 30 RC			.423		.021	.025							
VEGP-007	95, 98 RB			.073	1.51	.011	.019	.391	2.54	16.90	10.73 Ni			
VEGP-008	29, 29 RC			.453	.027	.027								
VEGP-009	26, 29 RC			.436	.025	.023								
VEGP-010	24, 25 RC	152	131	.399	.067	.023	.019	.254	.163	.899				
VEGP-011	25, 27 RC	A		.056	.579	.019	.021	.273	1.43	15.20	24.61 Ni, 2.07 Ti, .211 V, .0013 B, .196 Al			

LAW ENGINEERING

JOB NO AM11327 SHEET 1 OF 5
 JOB NAME GPC - VOGTLE OPERATIONS
 BY RKA DATE 1/5/87
 CHECKED BY _____ DATE _____

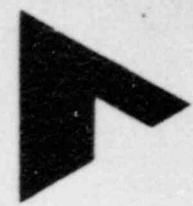
I.D.	HARDNESS	U.T.S.	QT%YS	C	Mn	P	S	Si	Mo	Cr	OTHER
VEGP-012	90,90RB	83.5	36.5	.069	1.49	.010	.023	.491	2.12	17.35	12.92 Ni
VEGP-013	23,24RC	146	132	.428	.836	.025	.019	.239	.167	.908	
VEGP-014	98,99RB			.410	.865	.026	.019	.265	.209	.847	
VEGP-015	35,35 RC	160	108	.068	.196	.013	.010	.149	1.29	14.19	24.09 Ni, 2.06 Ti .226 V, .0011 B
VEGP-016	29,32 RC			.059	1.18	.023	.012	.454	1.21	15.53	26.17 Ni, 2.97 Ti .164 V, .0014 B
VEGP-017	28,30 RC	155	146	.309	.782	.021	.016				
VEGP-018	30,30 RC	125	95.5	.377	.739	.023	.019				
VEGP-019	27,29 RC	137	124	.344	.841	.019	.017				
VEGP-020	28, 30 RC			.389	.994	.027	.013				
VEGP-021	35,36 RC			.391	.841	.019	.027	.350	.193	.969	
VEGP-022	27,29 RC			.411	.729	.019	.017	.274	.286		
VEGP-023	28,30 RC			.429	.788	.023	.022	.256	.247		
VEGP-024 (STUD)	23,25 RC			.396	.771	.023	.014	.279	.186	.993	
VEGP-024 (NUT)	29,29 RC			.441		.026	.017				
VEGP-025	26,26 RC			.411	.603	.025	.018	.335	.632	.967	.143 Ni; .287 V
VEGP-026 (STUD)	24,26 RC			.390	.901	.020	.015	.229	.172	.871	



LAW ENGINEERING

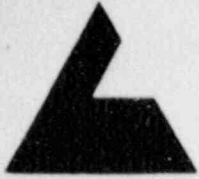
JOB NO. AM11327 SHEET 2 OF 5
 JOB NAME GPC - VOLTAGE OPERATIONS
 BY RRY DATE 1/5/87
 CHECKED BY _____ DATE _____

I.V.	HARDNESS	U.T.S	0.2%YS	C	Mn	P	S	Si	Mo	Cr	OTHER
VEGP-026 (Nut)	29,30RC			.452		.020	.014				
VEGP-027	22,23RC	145	132	.410	.975	.021	.019	.229	.192	1.06	
VEGP-028 (Stud)	25,25RC	160	142	.411	.998	.021	.023	.333	.240	1.03	
VEGP-028 (Nut)	26,27RC			.432	.927	.023	.021	.282	.239	.946	
VEGP-029	23,23RC			.421	.689	.023	.020	.341	.231*	.935	<.05V*
VEGP-030	27,30RC			.461		.027	.026				
VEGP-031	23,23RC			.398	.631	.019	.017	.349	.594	.961	.282 V
VEGP-032	20,23RC	126	107	.410	.967	.026	.018	.273	.216	1.04	
VEGP-033	25,25RC	127	109	.395	.908	.022	.015	.341	.200	1.05	
VEGP-034	24,26RC	145	130	.390	.989	.021	.022	.315	.206	1.03	



LAW ENGINEERING

JOB NO AM11327 SHEET 3 OF 5
 JOB NAME GPC-Vogtle OPERATIONS
 BY RKV DATE 1/5/87
 CHECKED BY _____ DATE _____



LAW ENGINEERING

JOB NO. AM11327 SHEET 4 OF 5

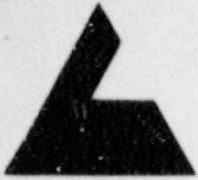
JOB NAME GRC-VOETLE OPERATIONS

BY _____ DATE _____

CHECKED BY _____ DATE _____

TABLE III (SUPPLEMENT A) - RESULTS OF ALTERNATE METHOD OF TENSILE TESTING: CORE HARDNESS

SAMPLE IDENTIFICATION	CORE HARDNESS	
	MID-RADIUS	CORE
VEGP-011	26, 26, 25, 26 (RC)	27 RC



LAW ENGINEERING

JOB NO. AM11327 SHEET 5 OF 5
JOB NAME GFC-VOGTLER OPERATIONS
BY _____ DATE _____
CHECKED BY _____ DATE _____

TABLE III (SUPPLEMENT B) - ELONGATION VALUES OF SAMPLE FASTENERS FROM PLANT VOGTLER OPERATIONS TESTED IN TENSION.

GFC SAMPLE IDENTIFICATION	PERCENT ELONGATION
VEGP-001 (STUD)	18
VEGP-002	20
VEGP-010	15
VEGP-012	47
VEGP-013	18
VEGP-015	23
VEGP-017	15
VEGP-018	19
VEGP-019	17
VEGP-027	14*
VEGP-028 (STUD)	17
VEGP-032	21
VEGP-033	19
VEGP-034	17

ENCLOSURE 7

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

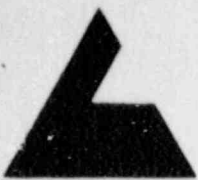
DATA SUMMARY SHEETS - PLANT VOGTLE UNIT 2

TABLE II - RESULTS OF HARDNESS, TENSILE, AND CHEMICAL TESTING OF FASTENER COMPONENTS FROM PLANT VOGTLE CONSTRUCTION

GPC SAMPLE I.D.	HARDNESS VALUES	U.T.S. (Ksi)	0.2% Y.S. (Ksi)	C	Mn	P	S	Si	Mo	Cr	OTHER	CHEMICAL ANALYSES												
PAV-QBLT 1022-2	30,30 RC	A		.388		.029	.010																	
PAVZ-QNUT 0060-5	98,98 RB			.452		.029																		
PAVZ-QBLT 0054-1	94,97 RB	A		.241		.016	.013																	
PAVZ-QNUT 0060-1	98,99 RB			.491		.031																		
PAVZ-QBLT 0142-1	96,98 RB	A		.187		.023	.009																	
PAVZ-QNUT 0090-1	97,97 RB			.472		.026																		
PAVZ-PBT 50535	90,92 RB	103	82.5	.073	1.35	.009	.013	.463				18.85	0.97N;											
PAVZ-PNUT 0005	a) 29,30 RC b) 28,30 RC			.424		.022	.026																	
PAVZ-PBTS 0675	25,27 RC	146	137	.431	.721	.021	.014	.271	.177	.922														

LAW ENGINEERING

JOB NO AM11327 SHEET 1 OF 7
 JOB NAME GPC - PLANT VOGTLE CONST.
 BY _____ DATE _____
 CHECKED BY _____ DATE _____



LAW ENGINEERING

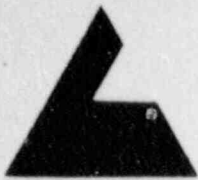
JOB NO AM11327 SHEET 2 OF 7

JOB NAME GPC - PANT VENT CONST.

BY _____ DATE _____

CHECKED BY _____ DATE _____

I.D.	HARNNESS	U.T.S.	0.2%Y.S.	C	M _N	P	S	Si	Mo	Cr	OTHER
PAVZ-PNUT 0006	a) 31,32 RC b) 29,32 RC			.457 .428		.024 .017	.023 .020				
PAVZ-QBLT 0054-2	95,97 RB A			.240		.026	.010				
PAVZ-QNUT 0060-2	95,95 RB			.459		.023					
PAVZ-QBLT 301Z	35,37 RC 164		153	.411	.827	.019	.011		.169	.876	
PAVZ-PNUT 0004-2	29,31 RC			.420		.026	.028				
PAVZ-PBTS 1060	25,27 RC 155		136	.433	.927	.022	.013	.255	.212	.943	
PAVZ-PNUT 0010	a) 31,31 RC b) 32,34 RC			.434 .426		.026 .027	.016 .019				
PAVZ-QBLT 0115-4	90,92 RB A			.232		.024	.024				
PAVZ-QNUT 0080-5	88,91 RB			.452		.019					
PAVZ-QBLT 0115-2	98,99 RB A			.202		.019	.015				
PAVZ-PNUT 0080-3	93,94 RB			.448		.028					



LAW ENGINEERING

JOB NO AM11327 SHEET 3 OF 7

JOB NAME GPC-PLANT VEHICLE CONST

BY _____ DATE _____

CHECKED BY _____ DATE _____

I.V.	HARDNESS	U.T.S.	0.2%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
PAVZ-PBTS 0426	25,25 RC	145	138	.422	.929	.017	.020	.245	.198	.881	
PAVZ-PNUT 0004-3	a) 28,29 RC b) 30,30 RC			.436 .436		.021 .021	.023 .027				
PAVZ-QBLT 1033-1	27,28 RC	A		.386	.999	.023	.013				
PAVZ-QNUT 0080-7	93,93 RB			.438		.027					
PAVZ-QBLT 0054-3	96,96 RB	A		.217		.016	.011				
PAVZ-QNUT 0060-3	95,98 RB			.463		.024					
PAVZ-QBLT 1031-1	28,28 RC	A		.365	.849	.022	.019				
PAVZ-QNUT 0080-6	90,93 RB			.451		.023					
PAVZ-QBLT 2055	30,31 RC	121	85	.420	.880	.028	.014				
PAVZ-PNUT 0007-1	30,31 RC			.414		.025	.026				
PAVZ-QBLT 2054	30,32 RC	121	82.5	.420	.835	.028	.013				
PAVZ-PNUT 0007-2	29,31 RC			.413		.026	.029				



LAW ENGINEERING

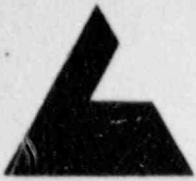
JOB NO AM11327 SHEET 4 OF 7

JOB NAME GPC-Plant VEGTLE CONST.

BY _____ DATE _____

CHECKED BY _____ DATE _____

I.D.	Harness	U.T.S.	0.2% Y.S.	C	M _A	P	S	S:	M _b	C _r	OTHER
PAVZ-QBLT 1022-1	26,28 RC	A		.388		.019	.019				
PAVZ-QNUT 0060-4	91,94 RB			.481		.026					
PAVZ-QBLT 0115-1	94,97 RB	A		.223		.020	.017				
PAVZ-QNUT 0080-2	93,95 RB			.518		.019					
PAVZ-QBLT 0115-3	95,97 RB	A		.289		.020	.023				
PAVZ-QNUT 0080-4	90,91 RB			.452		.022					
PAVZ-QBLT 0112	96,98 RB	A		.199		.023	.013				
PAVZ-QNUT 0080-1	89,89 RB			.439		.017					
PAVZ-QBLT 2004	27,30 RC	144	117	.369	.856	.021	.014				
PAVZ-FNUT 0004-1	30,31 RC			.427		.028	.022				
PAVZ-QNUT 0100	91,93 RB			.463		.026					
PAVZ-QBLT 0171	97,99 RB	B1	72	.279		.027	.022				



LAW ENGINEERING

JOB NO AM11327 SHEET 5 OF 7

JOB NAME GPC-PLANT VEHICLE CONST

BY _____ DATE _____

CHECKED BY _____ DATE _____

I.P.	HARDNESS	U.T.S.	0.2%Y.S.	C	Mn	P	S	Si	Mo	Cr	OTHER
PAVZ-PBTS 0799	24,26 RC	137	107	.404	.871	.019	.018	.253	.190	.890	
PAVZ-PHNT 0007-2	a) 27,30 RC b) 25,27 RC			.417 .439		.026 .020	.019 .022				
PAVZ-2	33,33 RC	160	152	.373	.895	.023	.014	.261	.199	.769	
PAVZ-1	25,26 RC			.426		.023	.029				



LAW ENGINEERING

JOB NO AM11327 SHEET 6 OF 7

JOB NAME GPC PLANT VOLTILE CONST.

BY _____ DATE _____

CHECKED BY _____ DATE _____

TABLE II (SUPPLEMENT A) - RESULTS OF ALTERNATE METHOD OF TENSILE TESTING: CORE HARDNESS

SAMPLE IDENTIFICATION	HARDNESS	
	MID-RADIUS	CORE
PAV-QBLT 1022-2	29, 29, 29, 30 RC	30 RC
PAVZ-QBLT 0142-1	95, 97, 97, 96 RB	96 RB
PAVZ-QBLT 0054-1	95, 95, 95, 96 RB	94 RB
PAVZ-QBLT 0054-2	94, 94, 95, 96 RB	95 RB
PAVZ-QBLT 0115-4	91, 91, 92, 93 RB	91 RB
PAVZ-QBLT 0115-2	97, 97, 99, 98 RB	97 RB
PAVZ-QBLT 1033-1	26, 27, 27, 26 RC	26 RC
PAVZ-QBLT 0054-3	94, 94, 95, 93 RB	94 RB
PAVZ-QBLT 1031-1	26, 27, 28, 28 RC	26 RC
PAVZ-QBLT 1022-1	25, 25, 27, 27 RC	26 RC
PAVZ-QBLT 0155 ^{0115-1 (915 RKO)} (1/13/88)	94, 94, 96, 97 RB	95 RB
PAVZ-QBLT 0115-3	95, 97, 97, 96 RB	95 RB
PAVZ-QBLT 0112	95, 96, 97, 97 RB	95 RB



LAW ENGINEERING

JOB NO AM11327 SHEET 7 OF 7

JOB NAME GPC-PLANT VOGTLE CONST.

BY _____ DATE _____

CHECKED BY _____ DATE _____

TABLE II (SUPPLEMENT B) - ELONGATION VALUES OF SAMPLE FASTENERS FROM PLANT VOGTLE CONSTRUCTION

GPC SAMPLE IDENTIFICATION	PERCENT ELONGATION
PAVZ-PBTS0535	32
PAVZ-PBTS0675	17
PAVZ-QBLT3012	15
PAVZ-PBTS1060	17
PAVZ-PBTS04.26	17
PAVZ-QBLT2055	19
PAVZ-QBLT2054	20
PAVZ-QBLT2004	17
PAVZ-QBLT0171	18
PAVZ-PBTS0799	17
PAVZ-2	16

ENCLOSURE 8

GEORGIA POWER COMPANY
RESPONSE TO NRC BULLETIN NO. 87-02
"FASTENER TESTING TO DETERMINE CONFORMANCE WITH
APPLICABLE MATERIAL SPECIFICATIONS"

GPC PROCUREMENT CLASSIFICATION SYSTEM

GPC PROCUREMENT CLASSIFICATION SYSTEM

The System Consists of Seven Levels:

- Procurement Level 1
- Procurement Level 2
- Procurement Level 3
- Procurement Level 4
- Procurement Level 5
- Procurement Level 6
- Procurement Level 7

And Four Suffixes Applicable to Levels
1 Through 5 Only:

- Suffix A
- Suffix B
- Suffix C
- Suffix D

PROCUREMENT LEVELS

- PL-1: Items Designated ASME Section III, Code Class 1; or Safety Class 1, Excluding Class 1E.
- PL-2: Items Designated ASME Section III, Code Class 2; or Safety Class 2.
- PL-3: Items Designated ASME Section III, Code Class 3; or Safety Class 3. Also Applies to Remaining Nuclear Safety Items Which Do Not Fall Into PL-1 or PL-2, Including Class 1E Items and ASME Section VIII Division 1 Components.
- PL-4: Commercial Grade Items to be Used as Basic Components. Also Applies to Non-Nuclear Safety Items (Fire Protection, Rad. Waste, etc.) and Calibration Services of M&TE.

PL-5: Commercial Grade Items to Be Used As Basic Components and Non-Nuclear Safety Items which are:

- Simple and Standard in Manufacture Design and Test;
- Adaptable to Standard or Automated Inspections;
- Receiving Inspection Does Not Affect the Function of the Item.

PL-6: BOP Items Which do not Perform a Safety Related Function and are not Designated Non-Nuclear Safety Items, but Technical and/or Quality Documentation is Specified.

PL-7: BOP Items Which do not Perform a Safety Related Function and are not Designated Non-Nuclear Safety Items and for Which Technical and/or Quality Documentation is not Specified.

NON PLANT ITEMS

Items not Used Within the Power Plant
Structure, System, Component or Part Such
as Grass Seed, Auto Parts, Furniture, etc.

PROCUREMENT LEVEL SUFFIXES

- Applies to PL-1,2,3,4, and 5 Only
- Suffix "A" - New Design or New Application for Existing Items.
- Suffix "B" - Identical Replacement.
- Suffix "C" - Like Kind Replacement.
- Suffix "D" - Services

CLASSIFICATION OF SERVICES

- Services Under Supplier QA Program;
Same as Associated Equipment
- Services Under GPC QA Program; PL-5
- Calibration Services; PL-4